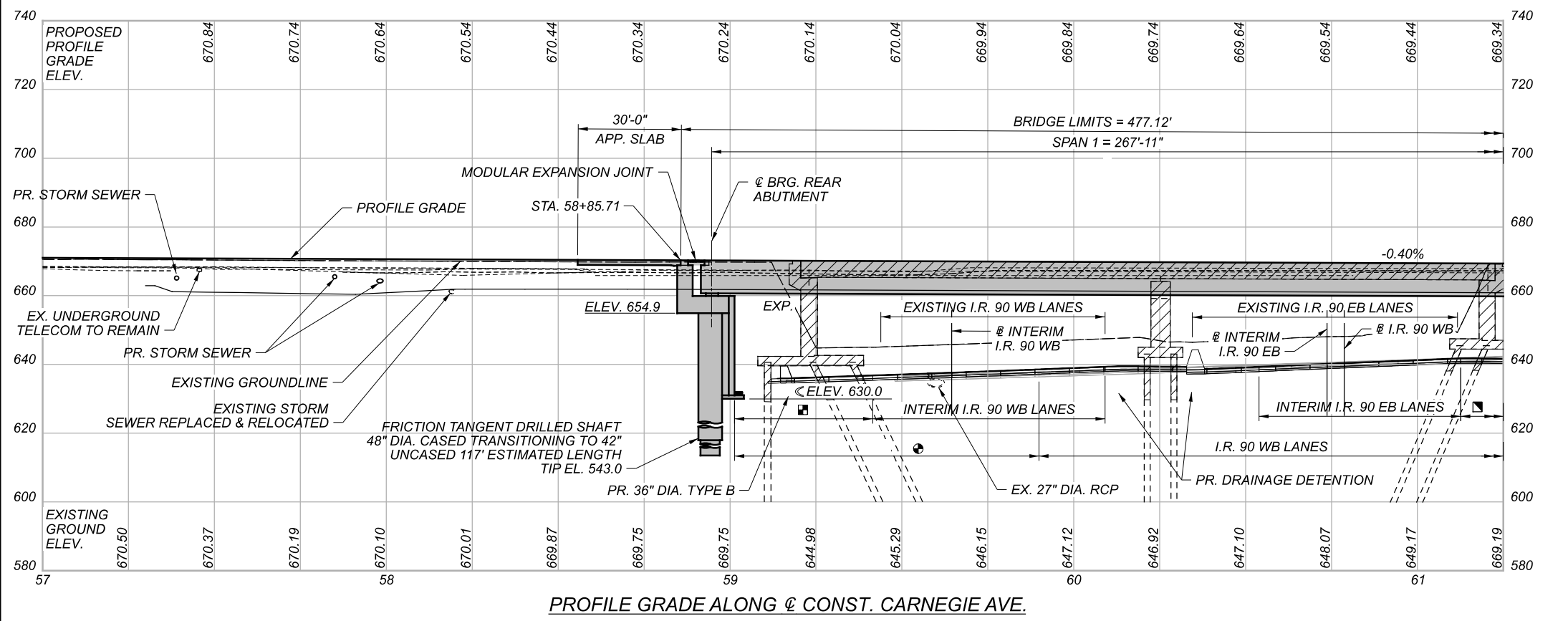
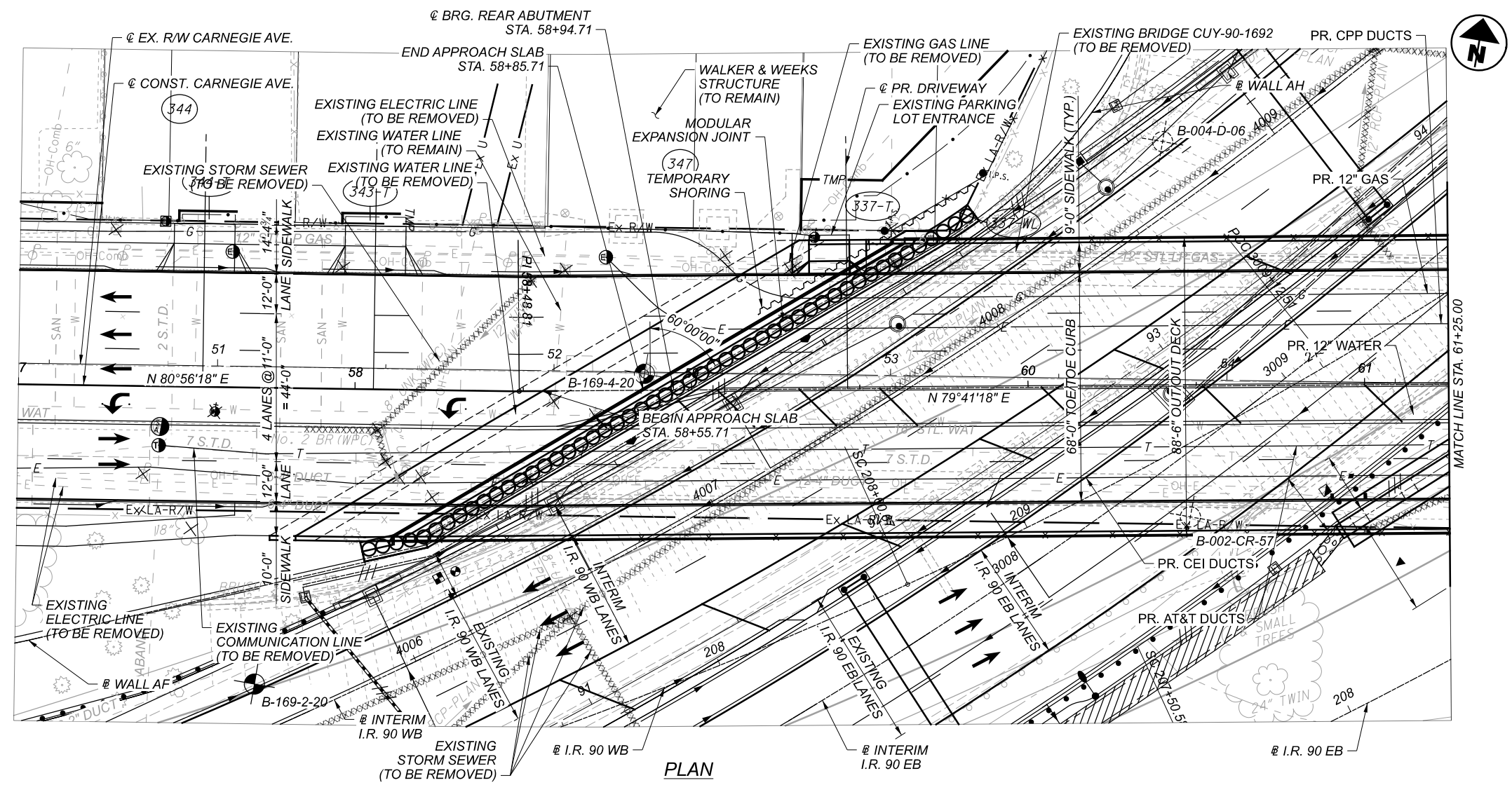


CUY-90-16.28 (CCG3A)

MODEL: 82382_SFN_000014_SFN001 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:24:32 PM USER: Mala.Gallagher
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BENCHMARK DATA

BM #62 STA. 41+38.42, ELEV. 672.11, OFFSET 75.42 LT., RR SPIKE
BM #64 STA. 58+35.86, ELEV. 671.25, OFFSET 47.90 LT., RR SPIKE
BM #65 STA. 66+35.73, ELEV. 668.92, OFFSET 38.62 RT., RR SPIKE
BM #73 STA. 49+25.90, ELEV. 671.90, OFFSET 31.86 LT., CUT CROSS

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET

NOTES

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

DESIGN TRAFFIC:
 2015 ADT = 25,700 2015 ADTT = TBD
 2035 ADT = 30,500 2035 ADTT = TBD
 DIRECTIONAL DISTRIBUTION = 0.56

LEGEND

- TO BE REMOVED
- HISTORIC BORING LOCATION
- INSTRUMENTED BORING LOCATION
- PROJECT BORING LOCATION
- FOR MINIMUM VERTICAL CLEARANCE LOCATION, SEE SITE PLAN 2 OF 2
- FOR MINIMUM HORIZONTAL CLEARANCE LOCATION, SEE SITE PLAN 2 OF 2
- FOR PROFILE LOCATIONS OF AND SEE SITE PLAN 2 OF 2

EXISTING STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL PLATE GIRDER BRIDGE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 98'-0 1/2"± AND 92'-4 3/8"± C/C BEARINGS ALONG @ CARNEGIE AVE.

ROADWAY: 56'-0"± TOE/TOE CURB WITH TWO 8'-3"± SIDEWALKS

LOADING: CF = 2000 (51)

SKEW: VARIES

WEARING SURFACE: LATEX MODIFIED CONCRETE OVERLAY

APPROACH SLABS: 25'-0"± (AS-1-54)

ALIGNMENT: TANGENT

CROWN: 0.016± FT/FT

STRUCTURE FILE NUMBER: 1807897

DATE BUILT: 1958 (OVERLAY 1987)

DISPOSITION: TO BE REPLACED

PROPOSED STRUCTURE

TYPE: TWO SPAN CONTINUOUS STEEL PLATE GIRDER, WITH COMPOSITE REINFORCED CONCRETE DECK, SUPPORTED ON TANGENT DRILLED SHAFT ABUTMENTS AND CAP AND COLUMN PIER

SPANS: 267'-11" & 192'-8 5/8" C/C BRGS. ALONG @ CONST. CARNEGIE AVE.

ROADWAY: 68'-0" TOE/TOE CURB WITH TWO 9'-0" SIDEWALKS

LOADING: HL93 AND 60 PSF FUTURE WEARING SURFACE (FWS)

SKEW: VARIES LEFT FORWARD

WEARING SURFACE: 1" MONOLITHIC CONCRETE

APPROACH SLABS: 30'-0" LONG (AS-1-15) TYPE B INSTALLATION

ALIGNMENT: TANGENT

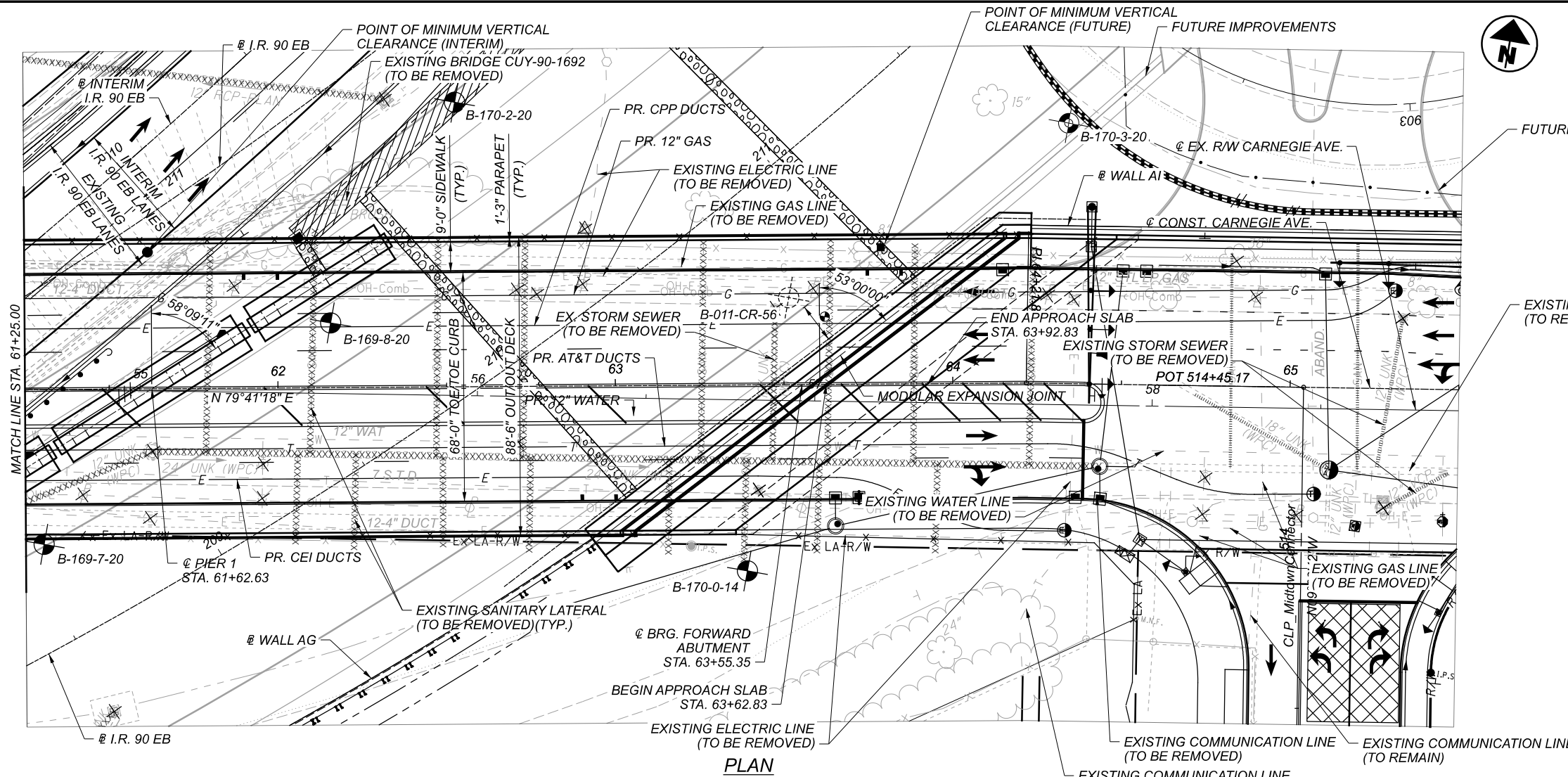
CROWN: 0.02 FT/FT

DECK AREA: 41,987 SF

COORDINATES: LATITUDE 41°29'57.98" N
 LONGITUDE 81°40'17.91" W

SITE PLAN (1 OF 2)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER/CHECKER	ABC MKB
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
1	72
SHEET	TOTAL
1821	2339



PLAN

LEGEND

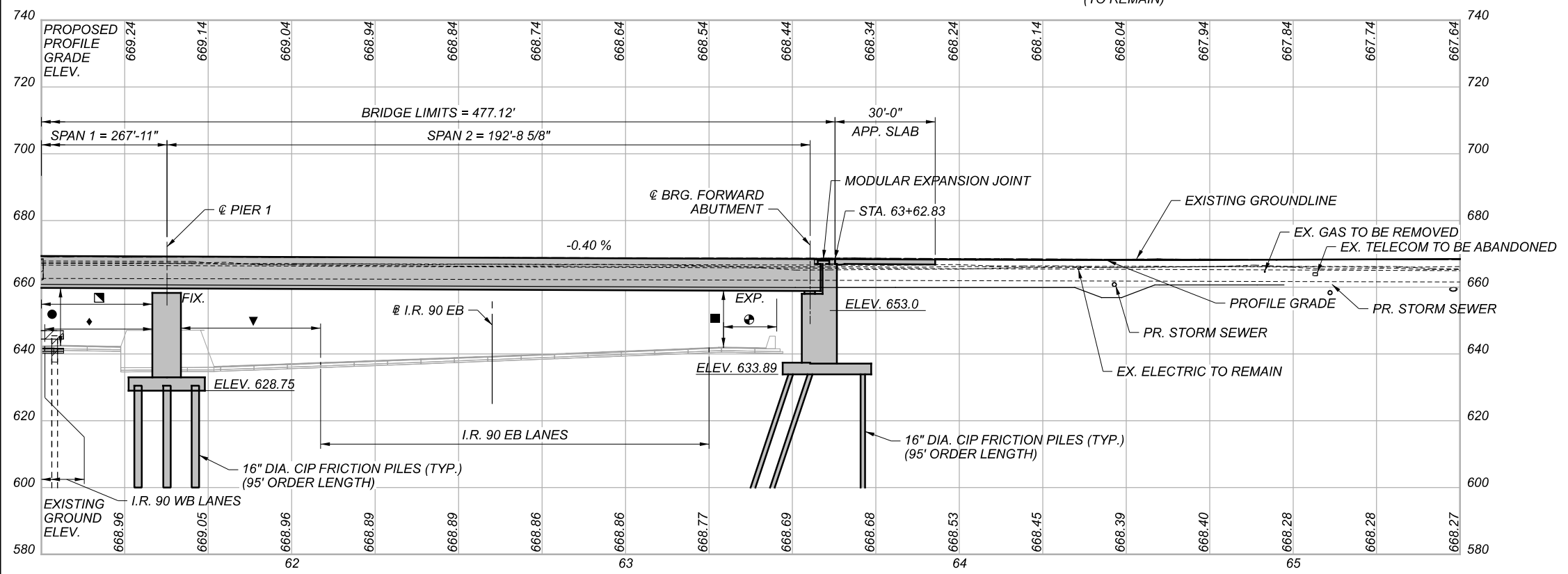
- TO BE REMOVED
- HISTORIC BORING LOCATION
- INSTRUMENTED BORING LOCATION
- PROJECT BORING LOCATION
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 16'-0" PREFERRED MINIMUM VERTICAL CLEARANCE
- 15'-7" ACTUAL MINIMUM VERTICAL CLEARANCE (INTERIM)
- 15'-6" REQUIRED MINIMUM VERTICAL CLEARANCE
- 16'-0" PREFERRED MINIMUM VERTICAL CLEARANCE
- 16'-0" ACTUAL MINIMUM VERTICAL CLEARANCE (FUTURE)

HORIZONTAL CLEARANCES			
LOCATION	REQUIRED	ACTUAL	PHASE
	11'-8"	11'-9"	FUTURE
	13'-8"	18'-3"	FUTURE
	13'-8"	18'-6"	FUTURE
	13'-8"	20'-1"	INTERIM

FOR PLAN LOCATIONS OF , AND SEE SITE PLAN 1 OF 2

MINIMUM HORIZONTAL CLEARANCES			
LOCATION	REQUIRED CLEAR ZONE	ACTUAL	PHASE
	30'-0"	20'-8" *	FUTURE
	30'-0"	14'-1" *	INTERIM
	30'-0"	18'-3" *	FUTURE
	30'-0"	18'-6" *	FUTURE
	30'-0"	20'-1" *	INTERIM

* BARRIER PROTECTION REQUIRED FOR PLAN LOCATIONS OF , AND SEE SITE PLAN 1 OF 2



PROFILE GRADE ALONG @ CONST. CARNEGIE AVE.

SITE PLAN (2 OF 2)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER/CHECKER	ABC MKB
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
2	72
SHEET	TOTAL
1822	2339

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

- AS-1-15 DATED (REVISED) 7/17/2015
- AS-2-15 DATED (REVISED) 1/18/2019
- BR-2-15 DATED (REVISED) 1/21/2022
- GSD-1-19 DATED (REVISED) 1/15/2021
- HL-50.21 DATED (REVISED) 1/15/21
- VPF-1-90 DATED (REVISED) 7/20/2018

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

- 800 DATED 1/21/2022
- 869 DATED 10/17/2014

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 TWO DIMENSIONAL MODEL TO ANALYZE THE STRUCTURE. THE COMPLETED STRUCTURE WAS MODELED USING THE PLATE-AND-ECCENTRIC-BEAM METHOD, AND CONCRETE DECK POURING ANALYSIS USED THE GRILLAGE METHOD. THE COMPUTER PROGRAM USED FOR STRUCTURAL ANALYSIS WAS MDX. THE BRIDGE COMPONENTS DESIGNED BY THESE METHODS WERE THE LONGITUDINAL STEEL PLATE GIRDERS, INTERMEDIATE CROSSFRAMES AND SUBSTRUCTURE DIAPHRAGMS

DEAD LOAD DISTRIBUTION: SUPERSTRUCTURE DEAD LOADS WERE COMPUTED FOR EACH GIRDER LINE.

NONCOMPOSITE DEAD LOADS (DC1) INCLUDED STEEL GIRDER SELF-WEIGHTS, WEIGHTS OF CROSSFRAMES, DIAPHRAGMS, STIFFENERS, CONNECTION PLATES, PROPOSED UTILITY SUPPORT MATERIAL AND WEIGHT OF WET CONCRETE DECK SLAB AND HAUNCHES.

COMPOSITE DEAD LOADS (DC2) INCLUDED WEIGHTS OF SIDEWALKS, MODIFIED BR-2-15 RAILINGS, FENCES AND PROPOSED UTILITY CONDUITS AND CONTENTS. UTILITY LOADS WERE FACTORED TO ACCOUNT FOR THE DIFFERENCE BETWEEN DC AND DW LOAD LRFD STRENGTH LOAD FACTORS.

DW LOADS INCLUDED THE WEIGHT OF FUTURE WEARING SURFACE.

LIVE LOAD DISTRIBUTION: LIVE LOADS WERE CONSIDERED BOTH WITH AND WITHOUT SIDEWALKS PRESENT. WHERE SIDEWALKS WERE CONSIDERED, THE GOVERNING EFFECTS OF UP TO FIVE (5) DESIGN LANES OF HL-93 LIVE LOAD WERE COMBINED WITH TWO (2) DISTRIBUTED SIDEWALK LOADS OF 0.075 KSF. WHERE SIDEWALKS WERE NOT CONSIDERED, THE GOVERNING EFFECTS OF UP TO SEVEN (7) DESIGN LANES OF HL-93 LIVE LOAD WERE ANALYZED.

OPERATIONAL IMPORTANCE

A LOAD MODIFIER OF 1.00 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.

DESIGN LOADING

DESIGN LOADING INCLUDES:
 VEHICULAR LIVE LOAD: HL-93
 SIDEWALK PEDESTRIAN LIVE LOAD: 0.090 KIPS/SQ.FT
 FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ.FT

DESIGN DATA

CONCRETE CLASS QC2:
 COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)

CONCRETE CLASS QC1:
 COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE CLASS QC5, WITH ¾ IN MAX AGGREGATE SIZE:
 COMPRESSIVE STRENGTH 4.5 KSI (DRILLED SHAFT)

REINFORCING STEEL MINIMUM YIELD STRENGTH 60 KSI

STRUCTURAL STEEL - ASTM A709 GRADE 50:
 YIELD STRENGTH = 50 KSI

MONOLITHIC WEARING SURFACE

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

PILE DESIGN LOADS (ULTIMATE BEARING VALUE)

THE ULTIMATE BEARING VALUE IS 249 KIPS PER PILE FOR THE FORWARD ABUTMENT PILES. THE ULTIMATE BEARING VALUE IS 266 KIPS PER PILE FOR THE PIER PILES.

FORWARD ABUTMENT PILES:
 16" Ø PILES 95 FEET LONG, ORDER LENGTH
 1 DYNAMIC LOAD TESTING ITEMS

PIER PILES:
 16" Ø PILES 95 FEET LONG, ORDER LENGTH
 1 DYNAMIC LOAD TESTING ITEMS

ITEM SPECIAL - STRUCTURE MISC.: VIBRATION MONITORING

MONITOR GROUND VIBRATIONS CAUSED BY PILE DRIVING AND DRILLED SHAFT INSTALLATION TO MINIMIZE THE POTENTIAL DAMAGE TO EXISTING STRUCTURES.

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 EXISTING STRUCTURES BEFORE PILE DRIVING BEGINS.
2. ESTABLISH VIBRATION LIMITS TO MINIMIZE POTENTIAL DAMAGE TO EXISTING STRUCTURES AND EXPLAIN WHY THEY ARE BEING USED TO THE ENGINEER BEFORE DRIVING PILES NEAR EXISTING STRUCTURES.
3. MONITOR GROUND VIBRATIONS DURING PILE DRIVING.
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 PILE DRIVING.
 - C. START TIME AND DURATION OF PILE DRIVING.
 - D. LIST OF PILES DRIVEN DURING EACH MONITORING INTERVAL.

IMMEDIATELY SUSPEND ALL PILE DRIVING OR DRILLED SHAFT INSTALLATION OF THE VIBRATION LIMITS ARE REACHED OR EXCEEDED. EVALUATE ALTERNATIVE CONSTRUCTION PROCEDURES, SUCH AS PREBORED HOLES, 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.

THIS PAY ITEM IS SPECIFICALLY INTENDED FOR THE PROTECTION OF THE WALKER WEEKS BUILDING, 2351 CARNEGIE AVENUE, CLEVELAND OH, 44115.

ITEM SPECIAL - STRUCTURE MISC.: PRECONSTRUCTION CONDITION SURVEY

BEFORE FOUNDATION CONSTRUCTION BEGINS, CONDUCT A CONDITION SURVEY OF ALL EXISTING BUILDINGS, STRUCTURES, AND UTILITIES WITHIN 200-FT OF THE DEEP FOUNDATION WORK. THE PURPOSE OF THE SURVEY IS TO DOCUMENT THE CONDITION OF THE BUILDINGS, STRUCTURES, OR UTILITIES PRIOR TO DEEP FOUNDATION INSTALLATION, SO THAT CLAIMS OF DAMAGE CAUSED BY DRILLED SHAFT INSTALLATION OR PILE DRIVING 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 EXISTING STRUCTURES AND BUILDING MATERIALS, USING WRITTEN TEXT, PHOTOGRAPHS, AND VIDEO RECORDINGS. INSPECT INTERIOR WALLS, CEILINGS, AND FLOORS THAT ARE ACCESSIBLE. INSPECT THE EXTERIOR OF THE BUILDING THAT IS VISIBLE FROM GROUND LEVEL. ALSO RECORD THE LOCATION, SIZE, AND TYPE OF ALL CRACKS AND OTHER STRUCTURAL DEFICIENCIES.

IF OWNERS, OR OCCUPANTS, 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 THE REPORT TO THE ENGINEER THAT SUMMARIZES THE PRECONSTRUCTION CONDITION OF THE BUILDINGS, STRUCTURES, AND UTILITIES, 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.

THIS PAY ITEM IS SPECIFICALLY INTENDED FOR THE PROTECTION OF THE WALKER WEEKS BUILDING, 2351 CARNEGIE AVENUE, CLEVELAND OH, 44115.

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
ABC	MKB
REVIEWER	
LPC 06-23-22	
PROJECT ID	
82382	
SUBSET	TOTAL
3	72
SHEET	
TOTAL	
1823	2339

DRILLED SHAFT LENGTH

THE OVERALL LENGTH OF THE DRILLED SHAFTS IS CONTROLLED BY REQUIRED EMBEDMENT LENGTH TO PROVIDE LATERAL STABILITY FOR THE DRILLED SHAFT WALL.

FRICTION DRILLED SHAFTS

THE MAXIMUM FACTORED LOAD TO BE SUPPORTED BY EACH DRILLED SHAFT IS 434 KIPS AT THE REAR ABUTMENT. THE LOAD IS RESISTED BY FRICTIONAL SIDE RESISTANCE ALONG THE LENGTH OF THE DRILLED SHAFT AND BY TIP RESISTANCE. AT THE ABUTMENTS, THE FACTORED SIDE RESISTANCE IS 572 KIPS, ASSUMED TO ACT ALONG THE BOTTOM 87 FEET OF THE DRILLED SHAFT, AND THE FACTORED TIP RESISTANCE IS 58 KIPS.

LATERALLY LOADED DRILLED SHAFTS

THE MAXIMUM FACTORED INTERNAL LOAD AND BENDING MOMENT TO BE SUPPORTED BY EACH DRILLED SHAFT WITHIN THE CASED LENGTH ARE 371 KIPS, AND 7454 KIP-FEET, RESPECTIVELY. THESE LOADS PRODUCE A MAXIMUM FACTORED BENDING MOMENT OF 7454 KIP-FEET, AND A MAXIMUM FACTORED SHEAR OF 362 KIPS, WITHIN THE DRILLED SHAFT.

THE MAXIMUM FACTORED INTERNAL LOAD AND BENDING MOMENT TO BE SUPPORTED BY EACH DRILLED SHAFT WITHIN THE CASED LENGTH ARE 156 KIPS, AND 1216 KIP-FEET, RESPECTIVELY. THESE LOADS PRODUCE A MAXIMUM FACTORED BENDING MOMENT OF 1216 KIP-FEET, AND A MAXIMUM FACTORED SHEAR OF 208 KIPS, WITHIN THE DRILLED SHAFT.

**ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN
 ITEM 524 - DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN**

GENERAL:

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO INSTALL DRILLED SHAFTS AS DETAILED IN THE PLANS IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT C&MS SECTION 524, AND WITH THE ADDITIONAL REQUIREMENTS DEFINED BELOW.

ANTICIPATED DRILLED SHAFT DEFLECTIONS:

TANGENT DRILLED SHAFTS ("SHAFT", "SHAFTS") ARE INCORPORATED AS WALLS IN VARIOUS STRUCTURAL ELEMENTS FOR THIS BRIDGE. AS DESIGNED AND DETAILED THE SHAFTS ARE EXPECTED TO DEFLECT UNDER THE APPLIED PERMANENT LOADS (DC, DW, EP, WA) AND TRANSIENT LOADS (LL, LS, TU) AT THE SERVICE LIMIT STATE. MEASURES FOR ACCOMODATING THESE DEFLECTIONS ARE DETAILED BELOW.

THE SHAFT HEAD IS CONSIDERED TO BE THE DESIGN BEAM SEAT ELEVATION FOR SHAFTS INCORPORATED IN ABUTMENTS. THE SHAFT HEAD IS CONSIDERED TO BE THE DESIGN TOP OF CAP ELEVATION FOR SHAFTS INCORPORATED IN RETAINING WALLS. IN BOTH CASES THE FINISHED TOP OF SHAFT IS LOWER THAN THE SHAFT HEAD ELEVATION.

THE ANTICIPATED DEFLECTION AT THE SHAFT HEAD ELEVATION RELATIVE TO THE SHAFT TIP ELEVATION DUE TO PERMANENT LOADS ARE AS FOLLOWS:

REAR ABUTMENT 7/4 INCHES

ANTICIPATED DRILLED SHAFT DEFLECTIONS (CONT.):

TO MITIGATE THE EFFECTS OF ANTICIPATED PERMANENT LOAD DEFLECTIONS THE INSTALLED LOCATION OF THE SHAFTS MUST BE ADJUSTED BY OFFSETTING THE CENTERLINE OF SHAFT LOCATION DURING INSTALLATION. THE REQUIRED OFFSET IS DETAILED IN THE FOUNDATION PLANS FOR EACH STRUCTURAL ELEMENT.

ANTICIPATED TRANSIENT LOAD DEFLECTIONS ARE ACCOMODATED BY ADDITIONAL MOVEMENT CAPACITY IN THE ABUTMENT EXPANSION JOINTS AND BEARINGS.

DESIGN ASSUMPTIONS:

BEHAVIOR OF THE DRILLED SHAFTS AS DESCRIBED ABOVE IS PREDICATED UPON THE FOLOWING DESIGN ASSUMPTIONS:

1. DESIGN HEIGHT OF DRILLED SHAFT IS THE DISTANCE FROM THE SHAFT HEAD ELEVATION TO THE DREDGE LINE ELEVATION
2. PERMANENT LOAD DEFLECTIONS ARE ASSUMED TO OCCUR FOLLOWING REMOVAL OF SOIL IN FRONT OF THE TANGENT SHAFT WALLS
3. ADDITIONAL ASSUMPTIONS AND CONSTRAINTS ARE DETAILED IN THE PLANS.

DREDGE LINE ELEVATIONS:

REAR ABUTMENT ELEV. 630.00
 FOR DRAINAGE STRUCTURE EXCAVATION

DRILLED SHAFT LOCATION SURVEY:

THE CORRECT LOCATION OF SHAFT IS CRITICAL TO ESTABLISHING AND MAINTAINING THE STRUCTURE GEOMETRY. THE CONTRACTOR SHALL EMPLOY THE SERVICES OF AN OHIO REGISTERED PROFESSIONAL SURVEYOR ("THE SURVEYOR") TO ESTABLISH, MAINTAIN AND VERIFY HORIZONTAL AND VERTICAL SHAFT GEOMETRY. THE SURVEYOR SHALL BE READILY AVAILABLE TO ESTABLISH GEOMETRIC CONTROL AND PERFORM THE SURVEYS REQUIRED BELOW.

THE SURVEYOR SHALL ESTABLISH THE LOCATION OF THE CENTER OF EACH DRILLED SHAFT FOR INSTALLATION AND VERIFY PLUMBNESS OF THE DRILLING RIG PRIOR TO COMMENCING DRILLING OPERATIONS. THE SURVEYOR SHALL LOCATE AND ALIGN THE DRILLING TEMPLATES USED TO ENSURE PROPER SHAFT LOCATION AND ALIGNMENT.

THE CONTRACTOR SHALL SURVEY AND DOCUMENT THE AS-INSTALLED LOCATION AND PLUMBNESS (HORIZONTAL AND VERTICAL ALIGNMENT) OF EACH SHAFT IMMEDIATELY FOLLOWING COMPLETION OF THE SHAFT INSTALLATION. THE CONTRACTOR AND SURVEYOR SHALL COMPARE AS-BUILT LOCATION TO PLAN LOCATION SO THAT THE NEED FOR REMIDIAL ACTION CAN BE ASSESSED BY THE ENGINEER. WORK ON ADDITIONAL SHAFTS IN THE INSTALLATION SHALL NOT PROCEED UNTIL THE ENGINEER HAS COMPLETED THIS ASSESSMENT.

THE CONTRACTOR SHALL PERFORM AN INITIAL SHAFT BASELINE SURVEY OF THE AS-INSTALLED LOCATION OF THE SHAFTS IMMEDIATELY FOLLOWING COMPLETION OF ALL SHAFT INSTALLATIONS. THE INITIAL SHAFT BASELINE SURVEY WILL ESTABLISH THE SHAFT LOCATION BASELINE. THE SHAFT LOCATION BASELINE WILL BE ESTABLISHED FOR ALL SHAFTS IDENTIFIED IN THE SUGGESTED SEQUENCE OF OPERATIONS.

DRILLED SHAFT LOCATION SURVEY (CONT.):

THE CONTRACTOR SHALL PERFORM A SECOND SHAFT BASELINE SURVEY AFTER INSTALLATION AND EXCAVATION TO DREDGE LINE ELEVATION TO CONFIRM THAT ANTICIPATED PERMANENT LOAD DEFLECTION HAS OCCURED. A MINIMUM PERIOD OF 30 DAYS MUST ELAPSE BETWEEN THE INITIAL AND FINAL SHAFT BASELINE SURVEY.

THE CONTRACTOR SHALL PROVIDE THE RESULTS OF THE INDIVIDUAL SHAFT LOCATION SURVEY; AND INITIAL AND SECOND SHAFT BASELINE SURVEYS IN REPORT FORM TO THE ENGINEER WITHIN TWO (2) WORKING DAYS OF COMPLETION. EACH SURVEY REPORT SHALL INCLUDE THE FOLLOWING INFORMATION PROVIDED IN ELECTRONIC FORMAT:

1. X, Y COORDINATES OF EACH SHAFT IN ODOT STATE PLANE COORDINATE SYSTEM TABULATED IN EXCEL SPREADSHEET
2. ALIGNMENT OF SHAFT LOCATION BASELINE ESTABLISHED BETWEEN SHAFTS XX AND YY
3. A NARRATIVE COMPARISON OF THE SURVEYED BASELINE TO THE PLAN BASELINE
4. LISTING OF ALL SHAFT LOCATION DEVIATIONS FROM BASELINE

THE SECOND SHAFT BASELINE SURVEY SHALL ALSO INCLUDE:

5. A NARRATIVE COMPARISON OF THE SECOND SURVEYED SHAFT BASELINE TO THE INITIAL SHAFT BASELINE
6. THE CONTRACTOR SHALL IDENTIFY THE POTENTIAL NEED FOR MITIGATION MEASURES TO MAINTAIN THE PLAN CENTERLINE OF BEARING LOCATION

THE ENGINEER WILL REVIEW THE RESULTS OF EACH SURVEY REPORT TO DETERMINE WHAT MITIGATION MEASURES, IF ANY, ARE REQUIRED TO MAINTAIN THE REQUIRED CENTERLINE OF BEARING LOCATIONS.

THE ENGINEER WILL PROVIDE APPROVAL OF THE SURVEYS AND REQUIRED MITIGATION MEASURES WITHIN THREE (3) WORKING DAYS OF RECEIPT OF THE SURVEYS. SURVEYS SHALL BE PERFORMED BY A SURVEYOR LICENSED IN THE STATE OF OHIO. CONTRACTOR'S SURVEY SUBMITTAL SHALL CONFORM TO THE SUBMITTAL REQUIREMENTS OF C&MS 105.02

CONSTRUCTION TOLERANCES:

DRILLED SHAFTS SHALL BE INSTALLED TO THE TOLERANCES SPECIFIED IN ODOT C&MS SECTION 524.14 EXCEPT AS MODIFIED BELOW. ADDITIONAL CONSTRUCTION TOLERANCE REQUIREMENTS ARE AS FOLLOWS:

POSITION EACH DRILLED SHAFT WITHIN 1" OF THE PLAN LOCATION IN THE HORIZONTAL PLANE AT THE PLAN ELEVATION FOR THE TOP OF SHAFT.

VERTICAL TOLERANCE SHALL CONFORM TO ODOT C&MS SECTION 524.14.

THE USE OF A DRILLING TEMPLATE IS REQUIRED TO ESTABLISH AND MAINTAIN DRILLED SHAFT LOCATIONS. THE CONTRACTOR'S ON-SITE SURVEYOR SHALL BE RESPONSIBLE FOR VERIFYING AND MAINTAINING ADHERENCE TO THE REQUISITE CONSTRUCTION TOLERANCES.

MITIGATION MEASURES:

IN THE EVENT THAT THE SECOND SHAFT BASELINE SURVEY INDICATES THAT THE SHAFTS HAVE NOT DEFLECTED THE ANTICIPATED AMOUNTS, THE ENGINEER WILL PROVIDE RECOMMENDED MITIGATION MEASURES TO MAINTAIN THE PLAN CENTERLINE OF BEARING LOCATION AND LOCATION. IT IS ANTICIPATED THAT THE MITIGATION MEASURES MAY CONSIST OF ADJUSTING THE PLAN DIMENSIONS OF THE ABUTMENT SEAT AND BACKWALL LOCATIONS. THE CONTRACTOR WILL CONSTRUCT THE ABUTMENT SEAT AND BACKWALL IN THE LOCATION AND WITH THE DIMENSIONS NECESSARY TO MAINTAIN THE PLAN CENTERLINE OF BEARING LOCATION AND ALIGNMENT.

ADDITIONAL CONCRETE AND REINFORCING STEEL REQUIRED BY MITIGATION WILL BE PAID FOR VIA CHANGE ORDER AT THE CONTRACT UNIT PRICE BID FOR THESE ITEMS. ADDITIONAL COMPENSATION WILL NOT BE MADE FOR THESE MITIGATION MEASURES IF THE SHAFTS WERE NOT INSTALLED WITHIN THE REQUIRED CONSTRUCTION TOLERANCES.

CONTRACTOR'S INSTALLATION PLAN:

THE CONTRACTOR SHALL PROVIDE AN INSTALLATION PLAN AS REQUIRED BY ODOT C&MS SECTION 524.03. THE INSTALLATION PLAN SHALL ALSO INCLUDE:

1. CONTRACTOR'S PROPOSED METHODS TO MAINTAIN LOCATION AND ALIGNMENT OF SHAFTS
2. CONTRACTOR'S PROPOSED METHODS FOR PERFORMING THE DRILLED SHAFT LOCATION SURVEY

CONSTRUCTION CONSTRAINTS:

THE CONTRACTOR IS ADVISED THAT THE PROPOSED DRILLED SHAFT INSTALLATIONS MAY REQUIRING ADVANCING SHAFTS THROUGH EXISTING PILES. ADDITIONAL INFORMATION AND NOTES REGARDING POSSIBLE CONFLICTS ARE PROVIDED IN THE PLANS.

MATERIALS:

CONCRETE AND REINFORCING STEEL FOR DRILLED SHAFTS SHALL CONFORM TO ODOT C&MS SECTION 524.02.

A SELF-CONSOLIDATING CONCRETE MIX SHALL BE INCORPORATED

THE MAXIMUM COARSE AGGREGATE SIZE SHALL BE:

3/4"

PERMANENT STEEL CASINGS SHALL BE ASTM A252 GRADE 3 WITH A MINIMUM YIELD STRESS OF 45 KSI. CASING SECTION LENGTHS SHALL BE MAXIMIZED TO MINIMIZE THE NUMBER OF FIELD SPLICE LOCATIONS. FIELD SPLICE LOCATIONS SHALL BE AS REQUIRED BY THE PLAN DETAILS. THE USE OF SPIRAL WELDED PIPE IS PERMITTED.

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
ABC	MKB
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
4	72
SHEET	TOTAL
1824	2339

MEASUREMENT AND PAYMENT:

MEASUREMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS WILL BE MADE IN ACCORDANCE WITH THE PROVISIONS OF ODOT C&MS SECTION 524.16.

PAYMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS WILL BE MADE IN ACCORDANCE WITH PROVISIONS OF ODOT C&MS SECTION 524.17.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
524	FOOT	DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN
524	FOOT	DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN

ITEM 524 DRILLED SHAFTS, 48" DIAMETER, THROUGH OBSTRUCTIONS, AS PER PLAN

GENERAL:

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT TO INSTALL DRILLED SHAFTS AS DETAILED IN THE PLANS IN ACCORDANCE WITH THE REQUIREMENTS OF ODOT C&MS SECTION 524, AND WITH THE ADDITIONAL REQUIREMENTS DEFINED BELOW.

CONSTRUCTION CONSTRAINTS:

THE CONTRACTOR IS ADVISED THAT THE PROPOSED DRILLED SHAFT INSTALLATIONS MAY REQUIRE ADVANCING SHAFTS THROUGH OBSTRUCTIONS SUCH AS EXISTING FOUNDATIONS AND PILES. EXISTING FOUNDATION AND PILE LOCATIONS ARE DEPICTED IN ACCORDANCE WITH AVAILABLE EXISTING PLAN INFORMATION.

THE PROPOSED DRILLED SHAFT ARRANGEMENT WAS DEVELOPED WITH THE INTENT TO ELIMINATE OR MINIMIZE CONFLICTS BETWEEN THE PROPOSED DRILLED SHAFTS AND IDENTIFIED OBSTRUCTIONS. COMPLETE ELIMINATION OF ALL CONFLICTS BETWEEN THE PROPOSED DRILLED SHAFTS AND OBSTRUCTIONS WAS NOT POSSIBLE.

THE CONTRACTOR IS ADVISED THAT THEY MUST ADAPT THEIR PROPOSED MEANS AND METHODS FOR INSTALLING DRILLED SHAFTS IN CONFLICT WITH OBSTRUCTIONS. SUCH MEANS AND METHODS MAY INCLUDE, BUT ARE NOT LIMITED TO, SPECIALIZED CUTTING HEADS, DOWN DRIVE HAMMERS, ETC.

DRILLED SHAFTS IN CONFLICT WITH EXISTING PILES ARE AS FOLLOWS:

NONE IDENTIFIED
 A CONTINGENCY VALUE OF 2 EACH IS INCLUDED

THE CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING PILES FOLLOWING REMOVAL OF EXISTING PILE CAP. NO DRILLED SHAFTS SHALL BE INSTALLED UNTIL NUMBER AND LOCATION OF CONFLICTS WITH THE PROPOSED DRILLED SHAFTS IS VERIFIED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL VERIFIED CONFLICTS AND IDENTIFY ANY ADDITIONAL CONFLICTS. THE CONTRACTOR SHALL PROVIDE A MARKED-UP PLAN SHEET DEPICTING ALL CONFLICTS.

BASIS FOR CLAIMS:

THE CONTRACTOR IS ADVISED THAT IDENTIFICATION OF ADDITIONAL PILES IN CONFLICT WITH PROPOSED DRILLED SHAFTS WILL NOT BE CONSIDERED AS BASIS FOR DELAY OR CHANGED CONDITION CLAIMS.

CONTRACTOR'S INSTALLATION PLAN:

THE CONTRACTOR SHALL PROVIDE AN INSTALLATION PLAN AS REQUIRED BY ODOT C&MS SECTION 524.03. THE INSTALLATION PLAN SHALL ALSO INCLUDE:

1. CONTRACTOR'S PROPOSED METHODS TO ADVANCE DRILLED SHAFTS THROUGH OBSTRUCTIONS (CONFLICTING PILES, EXISTING FOUNDATIONS, ETC.)

MEASUREMENT AND PAYMENT:

MEASUREMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS WILL BE MADE ON A PER EACH BASIS.

PAYMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THESE SPECIFICATIONS WILL BE CONSIDERED COMPLETE COMPENSATION FOR ADDITIONAL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO ADVANCE DRILLED SHAFTS THROUGH OBSTRUCTIONS BEYOND THAT REQUIRED FOR NORMAL INSTALLATIONS.

PAYMENT FOR ACCEPTED QUANTITIES WILL BE MADE AT THE CONTRACT UNIT PRICE BID FOR:

ITEM	UNIT	DESCRIPTION
524	EACH	DRILLED SHAFTS, 48" DIAMETER, THROUGH OBSTRUCTIONS, AS PER PLAN

MAINTENANCE OF TRAFFIC

MAINTENANCE OF TRAFFIC FOR THE STRUCTURE WORK SHALL BE COORDINATED WITH THE OVERALL PROJECT. REFER TO MAINTENANCE OF TRAFFIC NOTES AND DETAILS ELSEWHERE IN PLANS.

UTILITY LINES

THE UTILITIES SHALL BEAR ALL EXPENSE INVOLVED IN RELOCATING (INSTALLING) THE AFFECTED UTILITY LINES. THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER PARTY WILL BE HELD TO A MINIMUM.

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.

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 EXCAVATION. 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 511 - CLASS QC2 CONCRETE, SUPERSTRUCTURE, AS PER PLAN

LOCATE THE LOWER CONTACT POINT OF THE OVERHANG FALSEWORK AT LEAST 18 INCHES ± 2 INCHES ABOVE THE TOP OF THE GIRDER'S BOTTOM FLANGE. THE BRACING CONTACT POINT REQUIREMENTS OF C&MS 508 DO NOT APPLY.

DECK PLACEMENT DESIGN 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 2.84 KIPS.

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

A MAXIMUM SPACING OF OVERHANG BRACKETS OF 18 INCHES.

A MAXIMUM DISTANCE FROM THE CENTERLINE OF FASCIA GIRDER TO THE FACE OF THE SAFETY HANDRAIL OF 66 1/4 INCHES.

CONCRETE SHALL BE PLACED PARALLEL TO THE SKEW OF THE NEAREST SUBSTRUCTURE AND SHALL BE PLACED AND FINISHED FULL-WIDTH. DO NOT PERMIT A DIFFERENCE OF MORE THAN TEN (10) FEET LONGITUDINALLY IN PLACEMENT OF CONCRETE FROM ONE SIDE OF THE BRIDGE TO THE OTHER AT ANY TIME. FINISHING OF THE CONCRETE SHALL BE PERPENDICULAR TO THE CARNEGIE AVENUE CONSTRUCTION CENTERLINE.

GIRDER ERECTION AND FIT-UP:

GIRDERS, CROSSFRAMES, DIAPHRAGMS AND CONNECTION PLATES SHALL BE DETAILED FOR THE "STEEL DEAD LOAD FIT" (SDLF) OR "ERECTED FIT" CONDITION. GIRDER WEBS SHALL BE PLUMB AFTER ERECTION OF STRUCTURAL STEEL IS COMPLETE. HLMR BEARINGS SHALL BE DESIGNED TO ACCOMMODATE GIRDER ROLL AND LAYOVER DURING THE ERECTION PROCESS AND PLACEMENT OF COMPOSITE DEAD LOADS.-

FINISH COLORS:

THE FOLLOWING COLORS SHALL BE USED FOR PAINTING AND SEALING STRUCTURAL ELEMENTS:

PARAPET SEALER:	"DOVETAIL"	7018
STEEL SUPERSTRUCTURE:	"ALPACA"	7022
SUBSTRUCTURE SEALER:	"ALABASTER"	7008

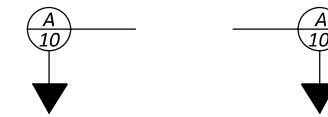
ALL COLOR NAME AND NUMBER REFERENCES ARE TAKEN FROM THE SHERWIN WILLIAMS COLOR PALATE. THE CONTRACTOR MAY SUBSTITUTE SIMILAR COLORS FROM ALTERNATIVE SUPPLIER'S COLOR PALATE.

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	
PROJECT ID	82382
SUBSET	TOTAL
5	72
SHEET	TOTAL
1825	2339

ABBREVIATIONS

- BOT. = BOTTOM
- BRGS. = BEARINGS
- C.J. = CONSTRUCTION JOINT
- CLR. = CLEAR
- CONST. = CONSTRUCTION
- DIA. = DIAMETER
- E.F. = EACH FACE
- ELEV. = ELEVATION
- EX. = EXISTING
- F.A. = FORWARD ABUTMENT
- F.F. = FAR FACE
- HORIZ. = HORIZONTAL
- I.R. = INTERSTATE ROUTE
- LT = LEFT
- MAX. = MAXIMUM
- MIN. = MINIMUM
- N.F. = NEAR FACE
- PR. = PROPOSED
- R.A. = REAR ABUTMENT
- RT = RIGHT
- SPA. = SPACED / SPACING / SPACES
- S.R. = STATE ROUTE
- TYP. = TYPICAL
- VERT. = VERTICAL
- W.W. = WING WALL

SECTION / DETAIL / VIEW CALLOUTS



(SEE SECTION A ON SHEET 10)



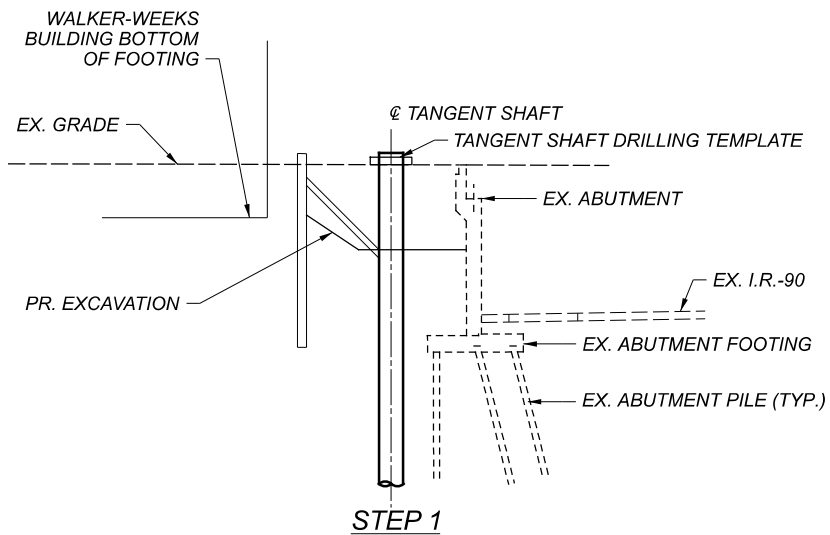
(SECTION A CUT FROM SHEET 9)

SFN		1807898
DESIGN AGENCY		
DESIGNER	CHECKER	
ABC	MKB	
REVIEWER		
LPC 06-23-22		
PROJECT ID		
82382		
SUBSET	TOTAL	
6	72	
SHEET	TOTAL	
1826	2339	

ITEM NO.	EXT.	TOTAL	UNIT	DESCRIPTION	ABUT	PIERS	SUPER	GEN	AS PER PLAN SHEET
202	11003	1	LS	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				1	12
208	14001	1	LS	PILE DRIVING EQUIPMENT MOBILIZATION				1	
503	11100	1	LS	COFFERDAMS AND EXCAVATION BRACING				1	5
505	00200	1	LS	SPECIAL - STRUCTURES - VIBRATION MONITORING				1	3
505	00200	1	LS	SPECIAL - STRUCTURES - PRECONSTRUCTION CONDITION SURVEY				1	3
507	00700	17730	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	7740	9990			
507	00750	18715	FT	16" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	8170	10545			
509	10000	611359	LB	EPOXY COATED REINFORCING STEEL	133360	91470	386529		
511	34446	1223	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			1223		
511	34450	118	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			118		
511	42012	300	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		300			
511	44112	609	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	609				
511	45602	764	CY	CLASS QC4 MASS CONCRETE, SUBSTRUCTURE WITH QC/QA	764				
511	46512	595	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	311	284			
511	51512	242	CY	CLASS QC2 CONCRETE WITH QC/QA, SIDEWALK			242		
511	53010	339	CY	CLASS QC1 CONCRETE, MISC.: CONCRETE FACING	339				
512	10001	615	SY	SEALING OF CONCRETE SURFACES, AS PER PLAN (PERMANENT GRAFFITI PROTECTION)	415	200			
512	10050	1076	SY	SEALING OF CONCRETE SURFACES (NON-EPOXY)			1076		
512	10100	2993	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	1638	570	786		
513	10280	3825000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4			3825000		
513	20000	10022	EA	WELDED STUD SHEAR CONNECTORS	1150		8872		
514	00060	152193	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT SYSTEM OZEU			152193		
514	00066	152193	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			152193		
516	11210	144	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL				144	
516	12400	175	FT	SPECIAL - MODULAR EXPANSION JOINT				175	
518	12200	8	EA	SCUPPERS, INCLUDING SUPPORTS			8		
518	20000	888	SY	PREFABRICATED GEOCOMPOSITE DRAIN	888				
518	21200	460	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	460				
518	40000	628	FT	6" PERFORATED CORRUGATED PLASTIC PIPE			628		
518	40010	120	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS			120		
518	43300	185	FT	6" PIPE DOWNSPOUT, INCLUDING SPECIALS				185	
524	94801	1550	FT	DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN	1550				4
524	94901	4200	FT	DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN	4200				4
524	95100	2	EACH	DRILLED SHAFTS, MISC.: 48" DIAMETER, THROUGH OBSTRUCTIONS, AS PER PLAN	2				5
526	30010	592	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				592	
607	39910	1070	FT	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC			1070		
869	00100	30	EACH	HIGH LOAD MULTI-ROTATIONAL (HLMR) BEARINGS			30		

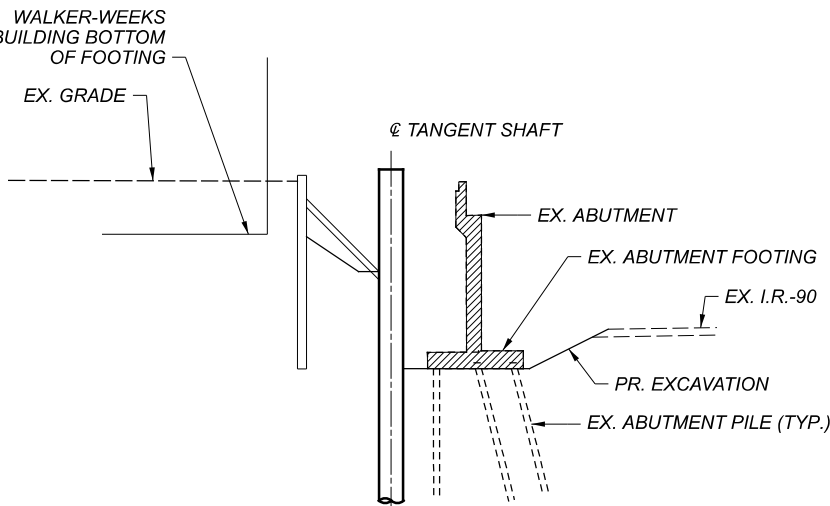
ESTIMATED QUANTITIES
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER CHECKER	--
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
7	72
SHEET	TOTAL
1827	2339



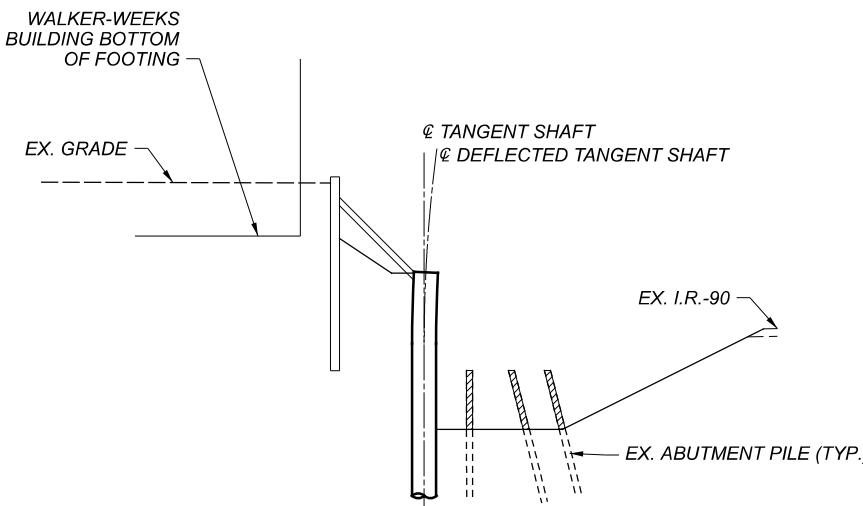
STEP 1

PERFORM PRECONSTRUCTION CONDITION SURVEY. CLOSE CARNEGIE AVE. REMOVE EXISTING APPROACH SLAB. INSTALL TANGENT SHAFTS AT LOCATIONS SHOWN IN THE FOUNDATION PLAN USING DRILLING TEMPLATE. INSTALL TEMPORARY SHORING AND BRACING. EXCAVATE TO BOTTOM OF TANGENT SHAFT CAP. MONITOR VIBRATIONS, MOVEMENT, ETC.



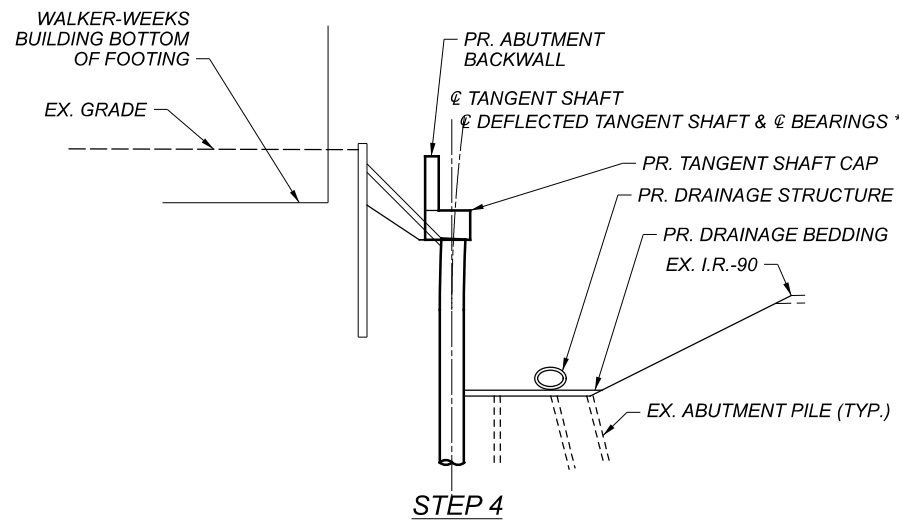
STEP 2

PERFORM I.R.-90 MOT OPERATIONS, EXCAVATE TO BOTTOM OF EX. FOOTING, AND REMOVE EXISTING ABUTMENT TO BOTTOM OF FOOTING ELEVATION. TRIM DRILLED SHAFTS TO FINAL TOP OF SHAFT ELEVATION. MONITOR VIBRATIONS, MOVEMENT, ETC.



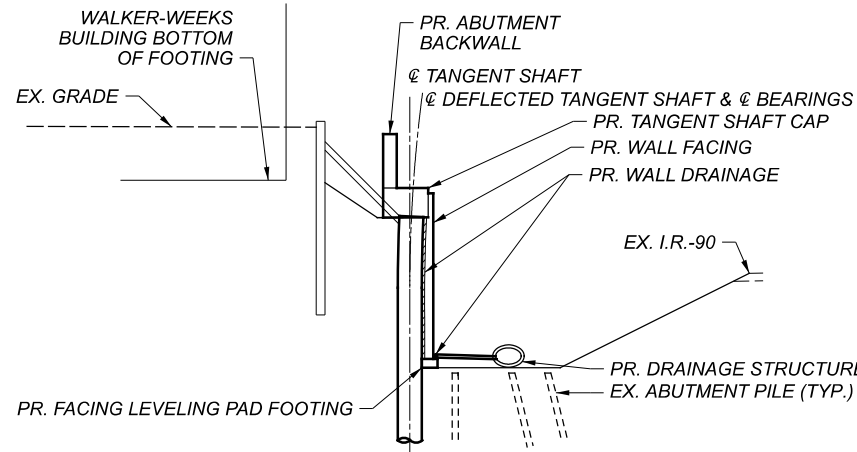
STEP 3

EXCAVATE TO PR. DRAINAGE BEDDING ELEVATION, REMOVE PORTIONS OF EXISTING PILES. MEASURE AND DOCUMENT TANGENT SHAFT DEFLECTION. MONITOR VIBRATIONS, MOVEMENT, ETC.



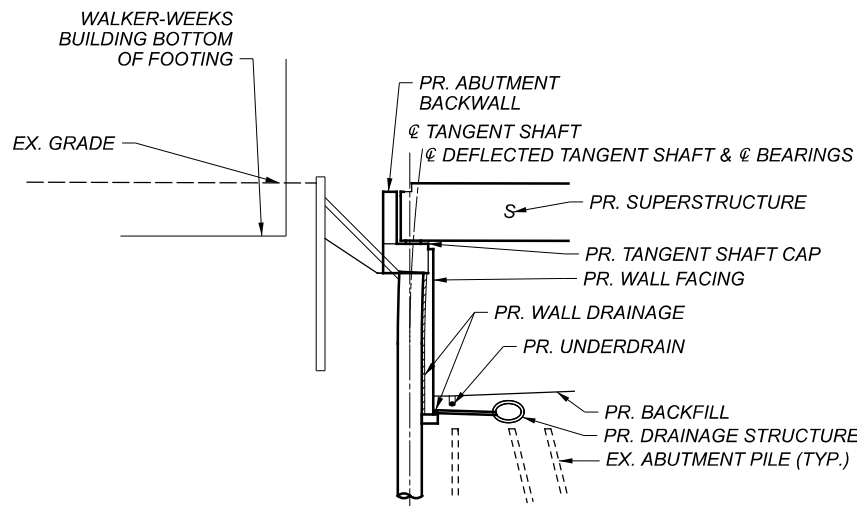
STEP 4

INSTALL PR. DRAINAGE BEDDING AND DRAINAGE STRUCTURES. * ESTABLISH PLAN ϕ BEARINGS LOCATION WITH RESPECT TO ϕ DEFLECTED TANGENT SHAFTS. IF SHAFTS DEFLECT MORE OR LESS THAN ANTICIPATED, ADJUST TANGENT SHAFT CAP AND ABUTMENT BACKWALL AS NECESSARY TO ENSURE ϕ BEARINGS PLAN LOCATION. INSTALL TANGENT SHAFT CAP AND PR. ABUTMENT BACKWALL. MONITOR VIBRATIONS, MOVEMENT, ETC.



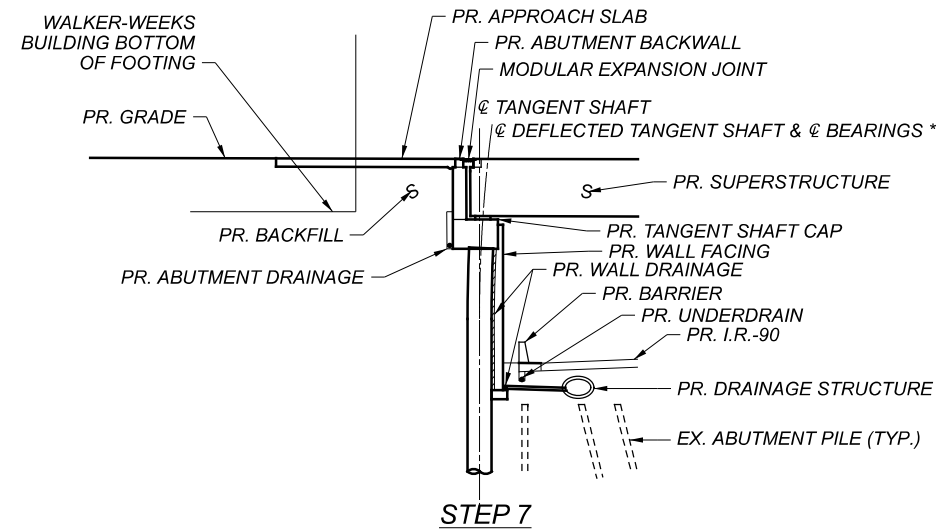
STEP 5

INSTALL PR. WALL FACING LEVELING PAD FOOTING, PR. WALL FACING, AND PR. WALL DRAINAGE. MONITOR VIBRATIONS, MOVEMENT, ETC.



STEP 6

BACKFILL & COMPACT TO BOTTOM OF PROPOSED ROADWAY SUBGRADE ELEVATION. INSTALL ROADWAY UNDERDRAIN AND BRIDGE 14 SUPERSTRUCTURE. MONITOR VIBRATIONS, MOVEMENT, ETC.



STEP 7

INSTALL ABUTMENT DRAINAGE AND BACKFILL BEHIND ABUTMENT. INSTALL APPROACH SLABS, MODULAR EXPANSION JOINT, AND REMAINING PORTION OF ABUTMENT BACKWALL. INSTALL I.R.-90 SUBGRADE, ROADWAY & BARRIER.

NOTES:

1. STAGED CONSTRUCTION DETAILS SHOWN HERE-IN ARE A SUGGESTED SEQUENCE BASED ON THE ANALYSIS AND DESIGN APPROACH OF THE TANGENT SHAFT ABUTMENT. ADDITIONAL STEPS MAY BE NECESSARY TO COMPLETE THE WORK.
2. DEFLECTED SHAFTS SHOWN ARE EXAGGERATED FOR CLARITY.
3. SEE ROADWAY AND DRAINAGE PLANS FOR ADDITIONAL DETAILS.

LEGEND:

= PORTIONS OF EXISTING STRUCTURE REMOVED

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
DRG	
REVIEWER	
PROJECT ID	82382
SUBSET	8
TOTAL	72
SHEET	1828
TOTAL	2339

CUY-90-16.28 (CCG3A)

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SHEET RESERVED FOR FUTURE USE

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
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REVIEWER	
LPC	06-23-22
PROJECT ID	
82382	
SUBSET	TOTAL
9	72
SHEET	TOTAL
1829	2339

REAR ABUTMENT STAGED CONSTRUCTION DETAILS (2 OF 2)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90

CUY-90-16.28 (CCG3A)

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SHEET RESERVED FOR FUTURE USE

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
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REVIEWER	
LPC	06-23-22
PROJECT ID	
82382	
SUBSET	TOTAL
10	72
SHEET	TOTAL
1830	2339

TEMPORARY SHORING DETAILS (1 OF 2)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90

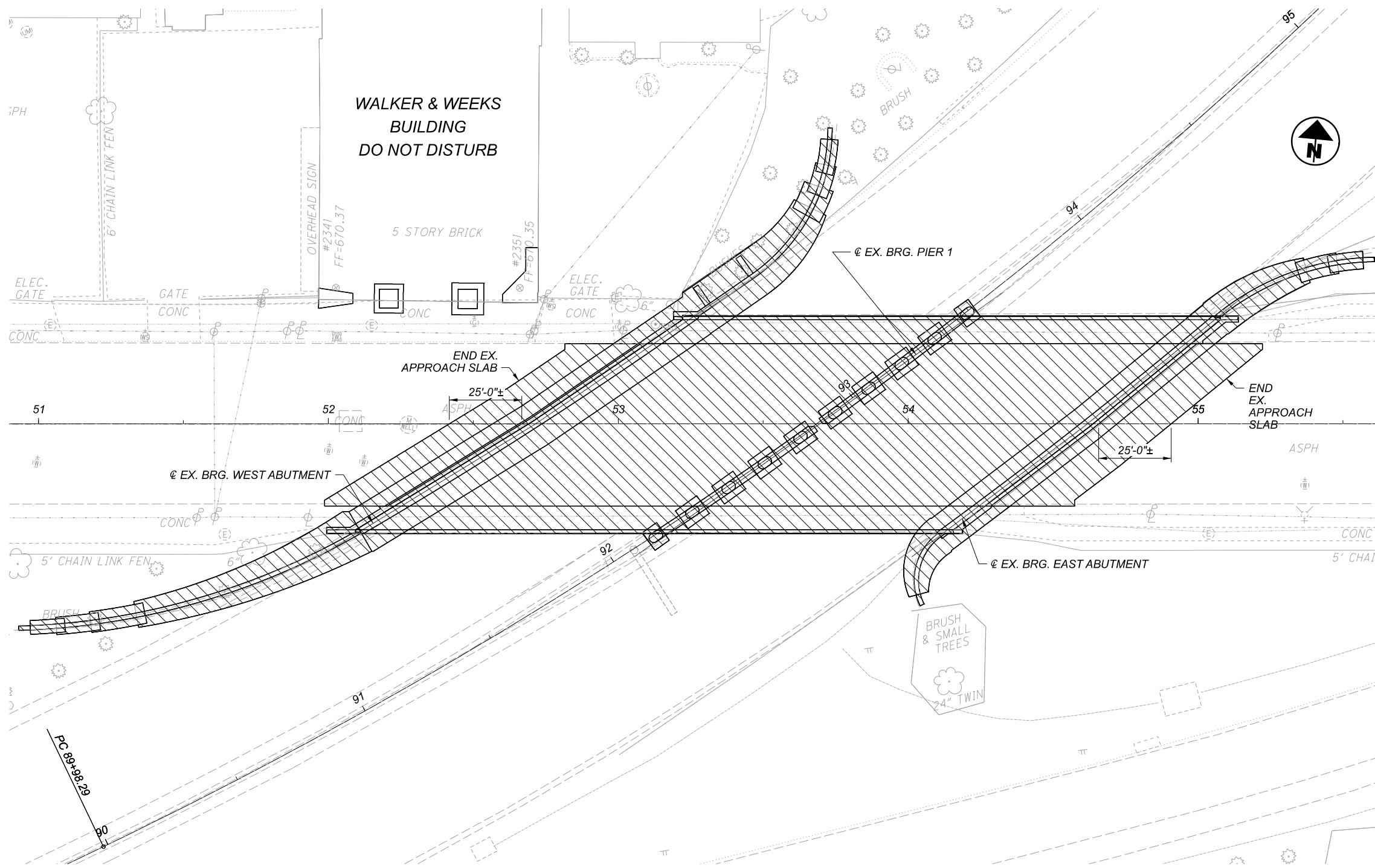
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SHEET RESERVED FOR FUTURE USE

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
--	--
REVIEWER	
LPC	06-23-22
PROJECT ID	
82382	
SUBSET	TOTAL
11	72
SHEET	TOTAL
1831	2339

TEMPORARY SHORING DETAILS (2 OF 2)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90



REMOVAL PLAN

STRUCTURE GENERAL NOTES:

MAINTENANCE OF TRAFFIC:
 SEE THE ROADWAY PLANS FOR MAINTENANCE OF TRAFFIC REQUIREMENTS.

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/OR FIELD MEASUREMENTS. THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND PROPOSED WORK, BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTION 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 STRUCTURES. HOWEVER, THE DEPARTMENT WILL PAY FOR ALL PROJECT WORK BASED UPON ACTUAL DETAILS AND DIMENSIONS THAT HAVE BEEN VERIFIED IN THE FIELD.

EXISTING STRUCTURE PLANS:
 CONSTRUCTION PLANS FOR EXISTING STRUCTURES ARE ON FILE AT THE DEPARTMENT OF TRANSPORTATION DISTRICT 12 OFFICE, 5500 E. 98TH ST., GARFIELD HEIGHTS, OHIO AND ARE AVAILABLE FOR REFERENCE.

SEQUENCE OF CONSTRUCTION:
 SEE MOT NOTES IN ROADWAY PLANS.

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN:
 THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES AND THAT ARE NOT SEPARATELY LISTED FOR PAYMENT. LIMITS OF REMOVAL SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. ITEMS TO BE REMOVED INCLUDE THE SUBSTRUCTURE FOUNDATION PILES THAT INTERFERE WITH NEW CONSTRUCTION AND MISCELLANEOUS ITEMS THAT ARE NOT SHOWN TO BE INCORPORATED INTO THE FINAL CONSTRUCTION AND ARE DIRECTED TO BE REMOVED BY THE ENGINEER. SUBMIT WORKING DRAWINGS AND CALCULATIONS IN ACCORDANCE WITH CMS 501.55.

ALL CONCRETE, REINFORCING STEEL, ASPHALT, ETC. REMOVED FROM THE STRUCTURE AND NOT REUSED SHALL, UNLESS OTHERWISE SPECIFIED, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED BY HIM/HER FROM THE SITE. THE MATERIALS SHALL NOT BE PERMITTED TO REMAIN ON SITE, WITHIN THE RIGHT-OF-WAY OR ELSEWHERE UNLESS SPECIFIED BY THE ENGINEER.

THE USE OF EXPLOSIVES AND HEADACHE BALLS WILL NOT BE PERMITTED. THE METHOD OF REMOVAL AND THE WEIGHT OF HAMMER SHALL BE APPROVED BY THE ENGINEER. PERFORM ALL WORK IN A MANNER THAT WILL NOT CUT, ELONGATE, OR DAMAGE THE EXISTING REINFORCING STEEL TO BE PRESERVED.

A LUMP SUM QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

THIS STRUCTURE TO BE REMOVED DURING MOT PHASE 3.

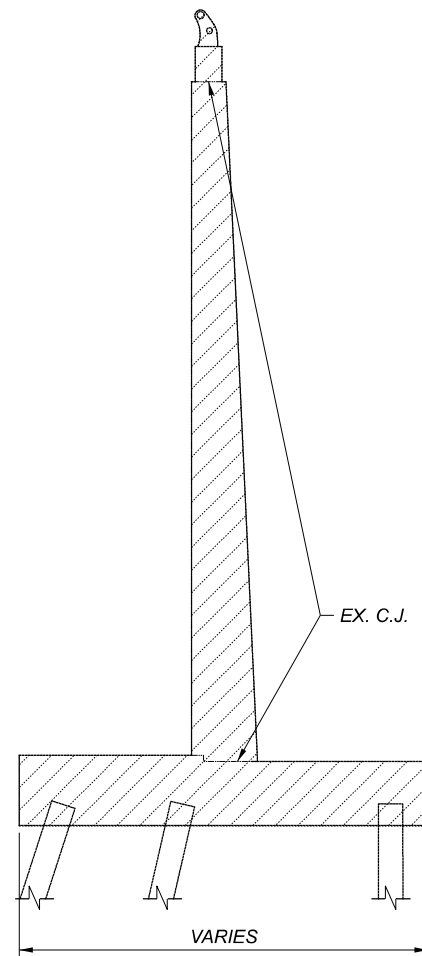
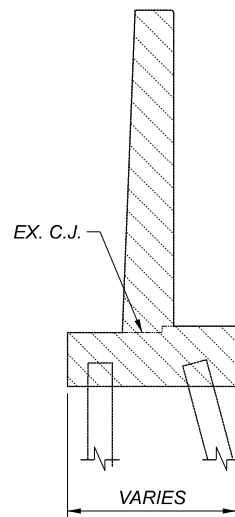
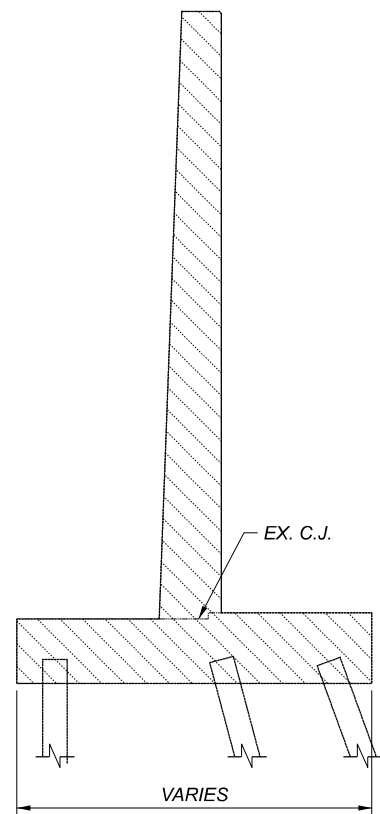
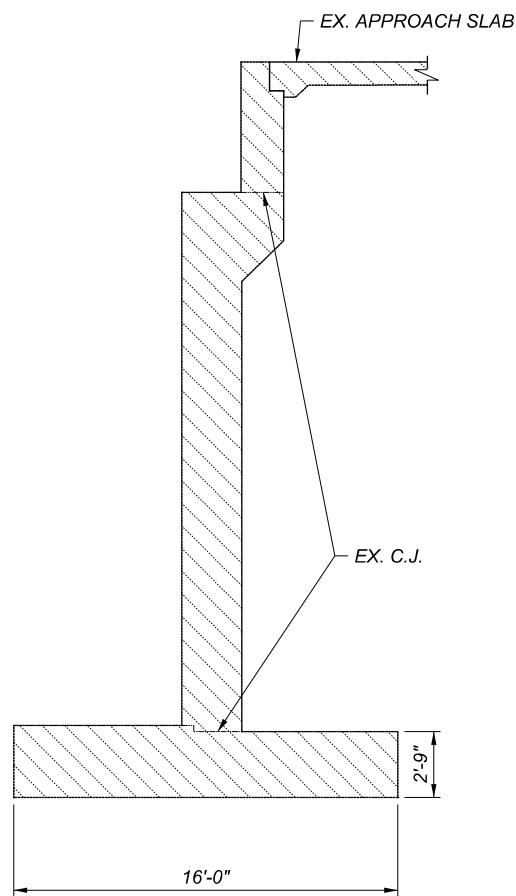
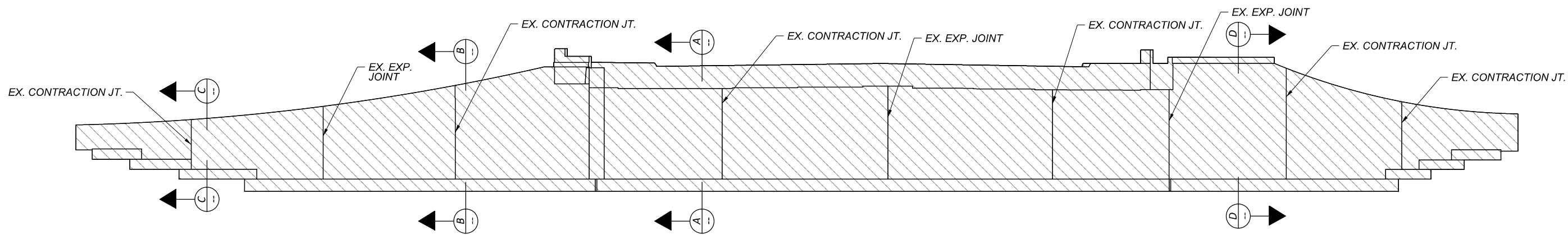
LEGEND:
 = REMOVAL

NOTES:
 1. SEE SHEET 11/63 FOR ABUTMENT AND PIER REMOVAL DETAILS.

EXISTING STRUCTURE	
TYPE:	TWO SPAN CONTINUOUS STEEL PLATE GIRDER BRIDGE WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
SPANS:	98'-0 1/2"± AND 92'-4 3/8"± C/C BEARINGS ALONG CARNEGIE AVE.
ROADWAY:	56'-0"± TOE/TOE CURB WITH TWO 8'-3"± SIDEWALKS
LOADING:	CF = 2000 (51)
SKEW:	VARIABLES
WEARING SURFACE:	LATEX MODIFIED CONCRETE OVERLAY
APPROACH SLABS:	25'-0"± (AS-1-54)
ALIGNMENT:	TANGENT
CROWN:	0.016± FT/FT
STRUCTURE FILE NUMBER:	1807897
DATE BUILT:	1958 (OVERLAY 1987)
DISPOSITION:	TO BE REPLACED

STRUCTURE REMOVAL DETAILS (1 OF 4)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER/CHECKER	---
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
12	72
SHEET	TOTAL
1832	2339



NOTES:

1. THIS STRUCTURE TO BE REMOVED DURING MOT PHASE 3.

LEGEND:

= REMOVAL

SFN
1807898

DESIGN AGENCY

Michael Baker
INTERNATIONAL

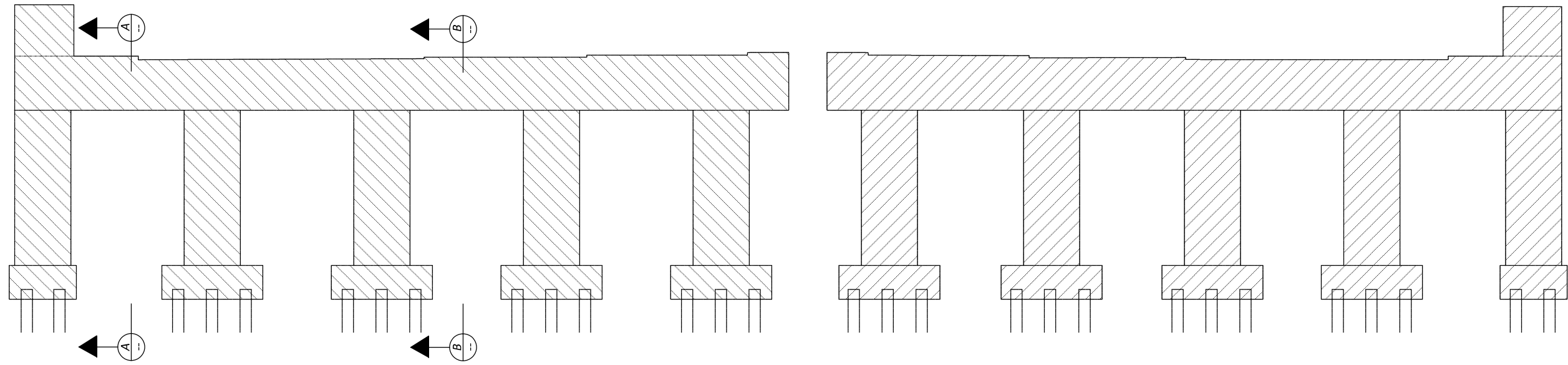
DESIGNER CHECKER
CEM MDM

REVIEWER
LPC 06-23-22

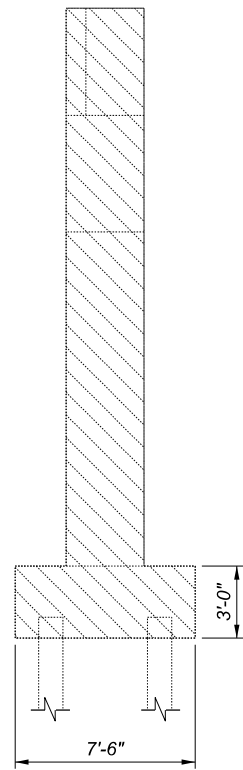
PROJECT ID
82382

SUBSET	TOTAL
13	72

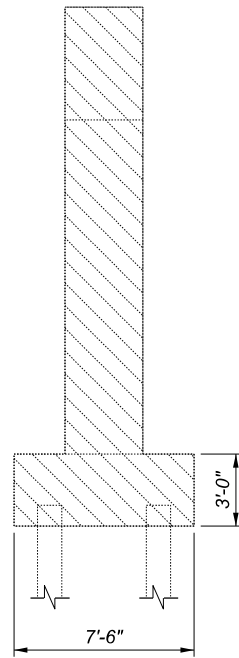
SHEET	TOTAL
1833	2339



PIER REMOVAL ELEVATION



SECTION A-A



SECTION B-B

NOTES:

1. THIS STRUCTURE TO BE REMOVED DURING MOT PHASE 3.

LEGEND:

= REMOVAL

SFN
1807898

DESIGN AGENCY

Michael Baker
INTERNATIONAL

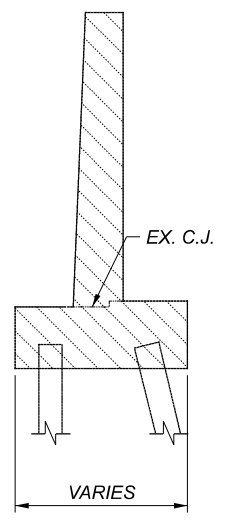
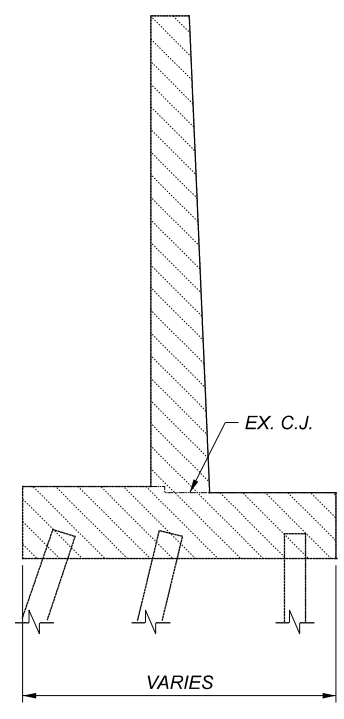
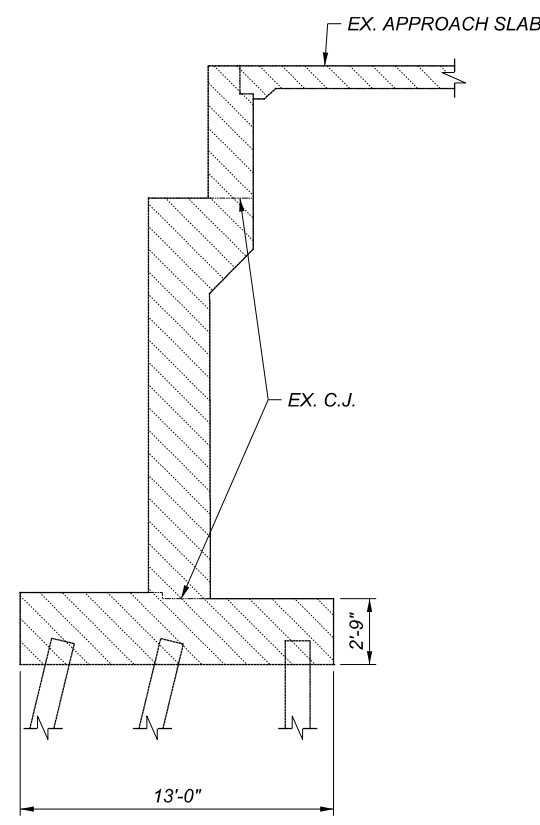
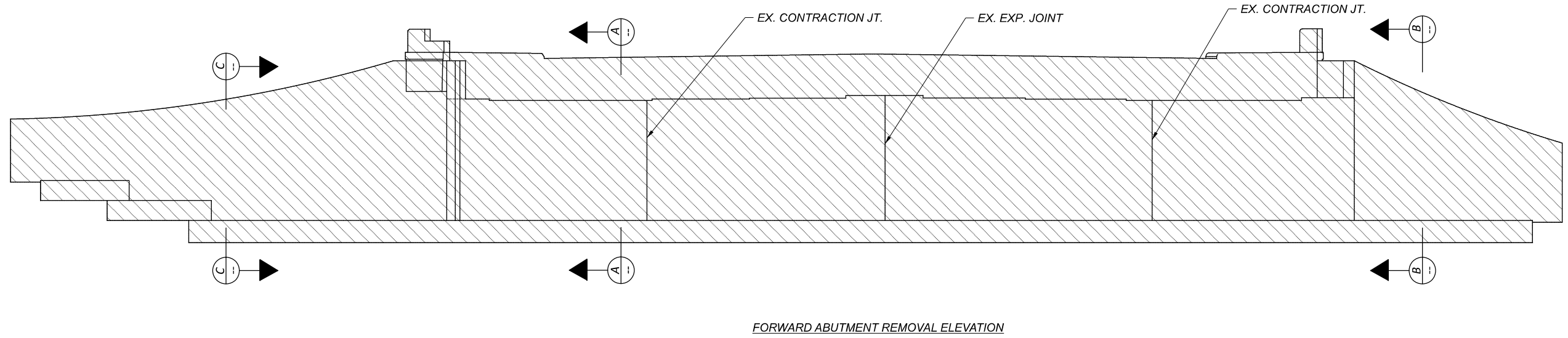
DESIGNER	CHECKER
CEM	MDM

REVIEWER
LPC 06-23-22

PROJECT ID
82382

SUBSET	TOTAL
14	72

SHEET	TOTAL
1834	2339



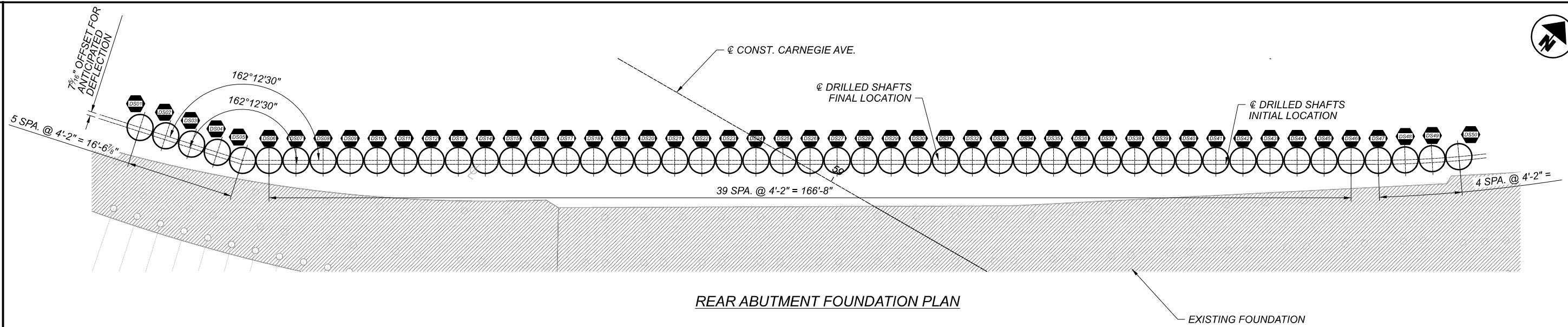
NOTES:

1. THIS STRUCTURE TO BE REMOVED DURING MOT PHASE 3.

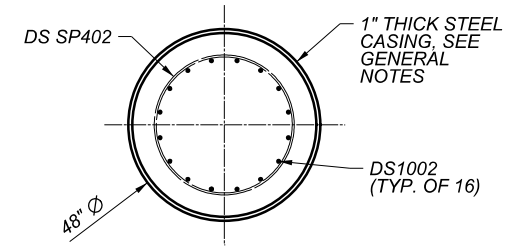
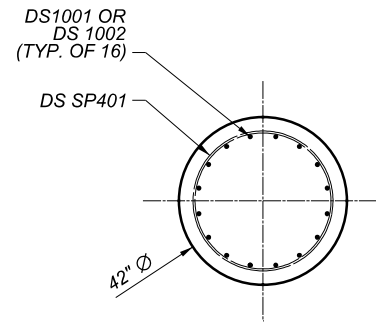
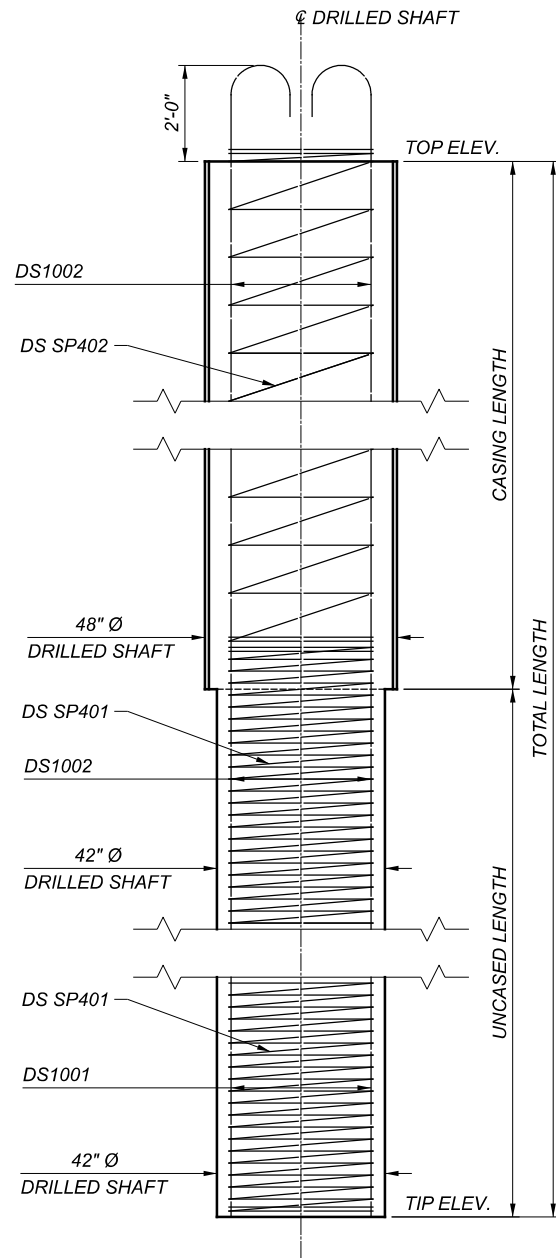
LEGEND:

= REMOVAL

SFN	1807898
DESIGN AGENCY	
DESIGNER	CHECKER
CEM	MDM
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
15	72
SHEET	TOTAL
1835	2339



REAR ABUTMENT FOUNDATION PLAN



NOTES

- DRILLED SHAFTS ARE TO BE INSTALLED IN THE INITIAL POSITION INDICATED IN THE FOUNDATION PLAN. REFER TO THE GENERAL NOTES FOR DETAILS.
- THE CONTRACTOR IS ADVISED THAT THE PROPOSED DRILLED SHAFT INSTALLATIONS MAY REQUIRE ADVANCING SHAFTS THROUGH OBSTRUCTIONS SUCH AS EXISTING FOUNDATIONS AND PILES. EXISTING FOUNDATION AND PILE LOCATIONS ARE DEPICTED IN ACCORDANCE WITH AVAILABLE EXISTING PLAN INFORMATION.
- PAYMENT FOR DRILLED SHAFTS INSTALLED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS SHALL BE MADE UNDER ITEM 524-DRILLED SHAFTS, 42" DIAMETER, AS PER PLAN AND ITEM 524-DRILLED SHAFTS, 48" DIAMETER, AS PER PLAN. REFER TO GENERAL NOTES.

LEGEND

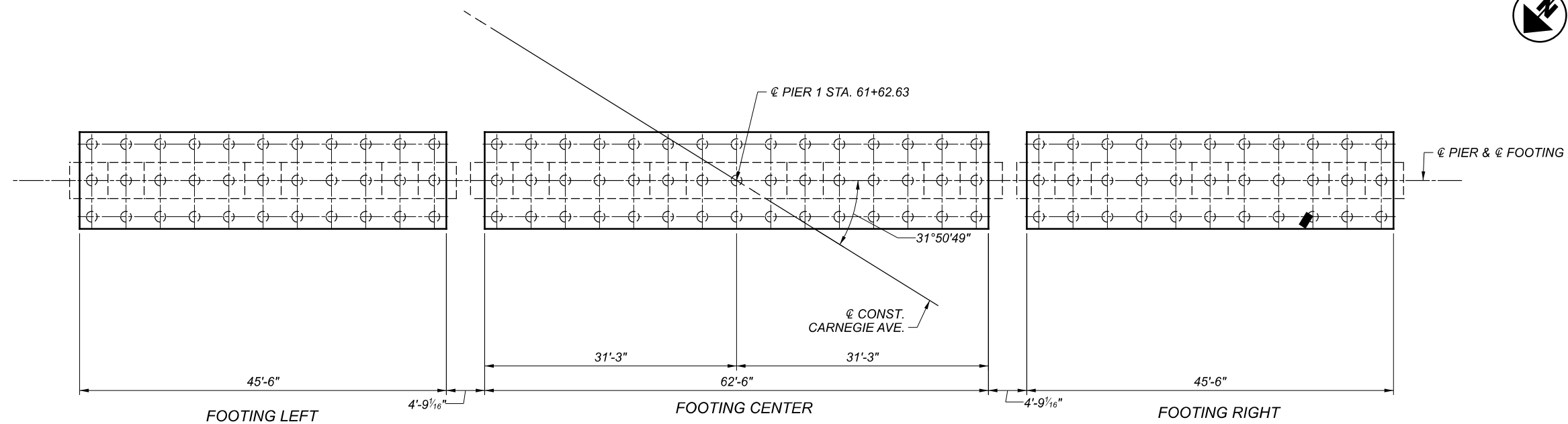
INDICATES PROPOSED DRILLED SHAFT NUMBER.

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	GZ JML
PROJECT ID	LPC 06-23-22
SUBSET	82382
TOTAL	
SHEET	16 72
TOTAL	1836 2339

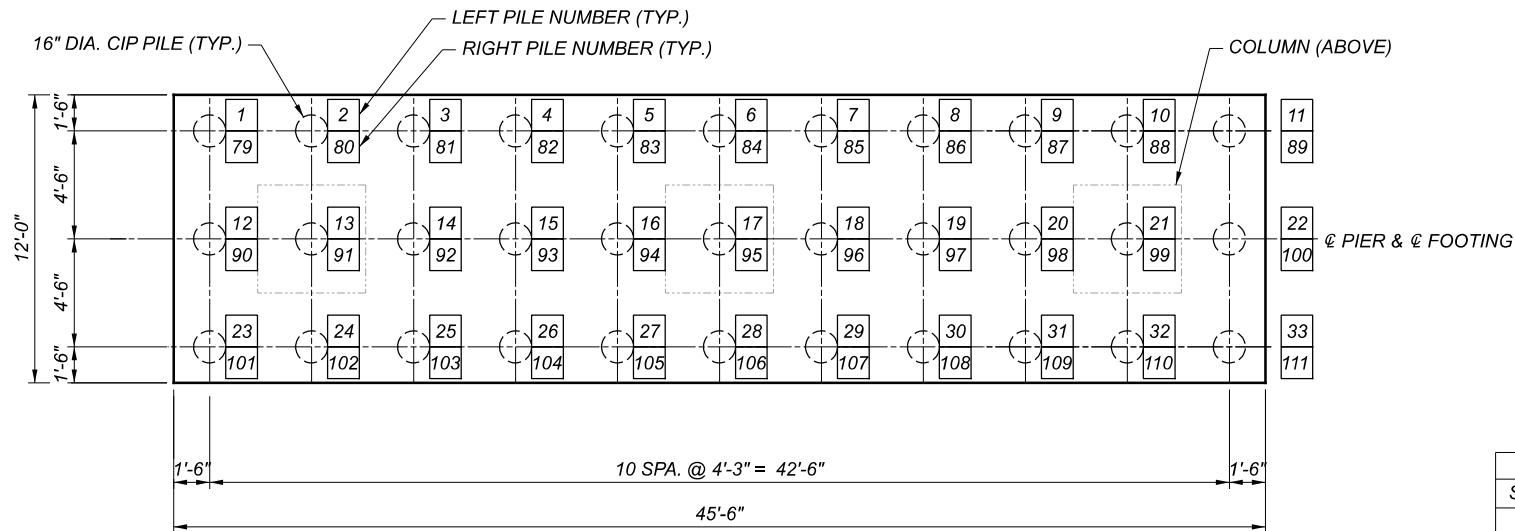


DRILLED SHAFT SCHEDULE													
DESIGNATION	INITIAL NORTHING	INITIAL EASTING	DIAMETER	TOP ELEV.	TIP ELEV.	TOTAL LENGTH (FT.)	D.S. BAR MARK	NO. OF D.S. LONG. BARS	SPIRAL MARK	CASING LENGTH	CASING THICKNESS	DEFLECTED NORTHING	DEFLECTED EASTING
DS01			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS02			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS03			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS04			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS05			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS06			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS07			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS08			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS09			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS10			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS11			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS12			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS13			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS14			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS15			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS16			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS17			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS18			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS19			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS20			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS21			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS22			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS23			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS24			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS25			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS26			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS27			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS28			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS29			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS30			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS31			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS32			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS33			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS34			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS35			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS36			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS37			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS38			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS39			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS40			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS41			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS42			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS43			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS44			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS45			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS46			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS47			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS48			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS49			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401 & DS402	81.0	1.00"		
DS50			48"	654.96	543.00	112.0	DS1001 & DS1002	5-S.O. 16- DS1001 & 1-DS1002	DS401	81.0	1.00"		

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
GZ	MKB
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
17	72
SHEET	TOTAL
1837	2339

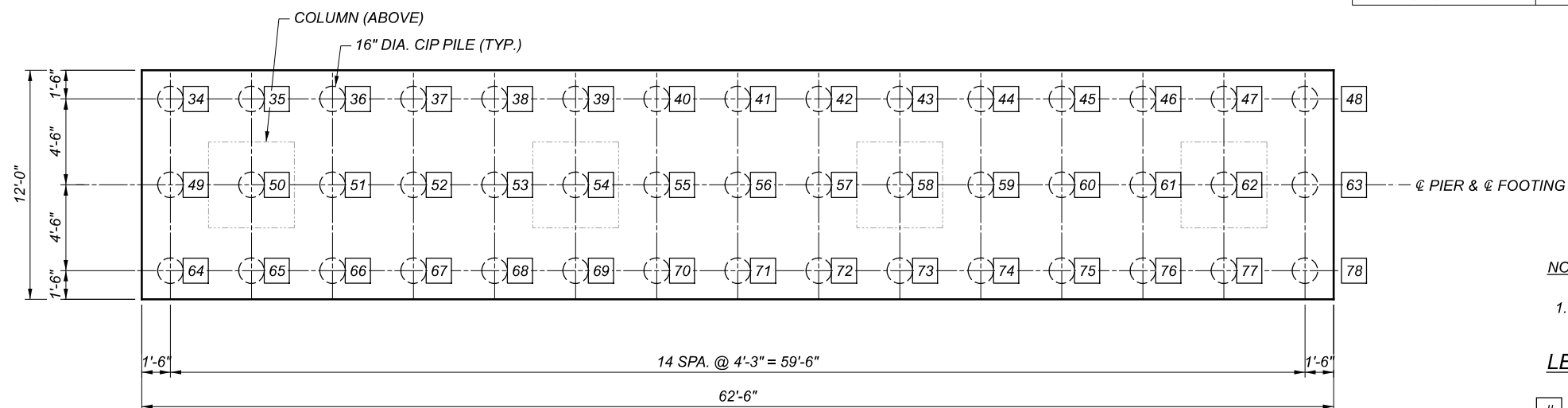


PLAN



FOOTING LEFT & RIGHT SECTION

PILE SCHEDULE			
SUBSTRUCTURE UNIT	PILE DIAMETER	ORDER LENGTH	CUTOFF ELEVATION
FTG. LEFT PILES 1 THRU 33	16"	95.00	629.75
FTG. CENTER PILES 34-78	16"	95.00	629.75
FTG. RIGHT PILES 79 THRU 111	16"	95.00	629.75



FOOTING CENTER SECTION

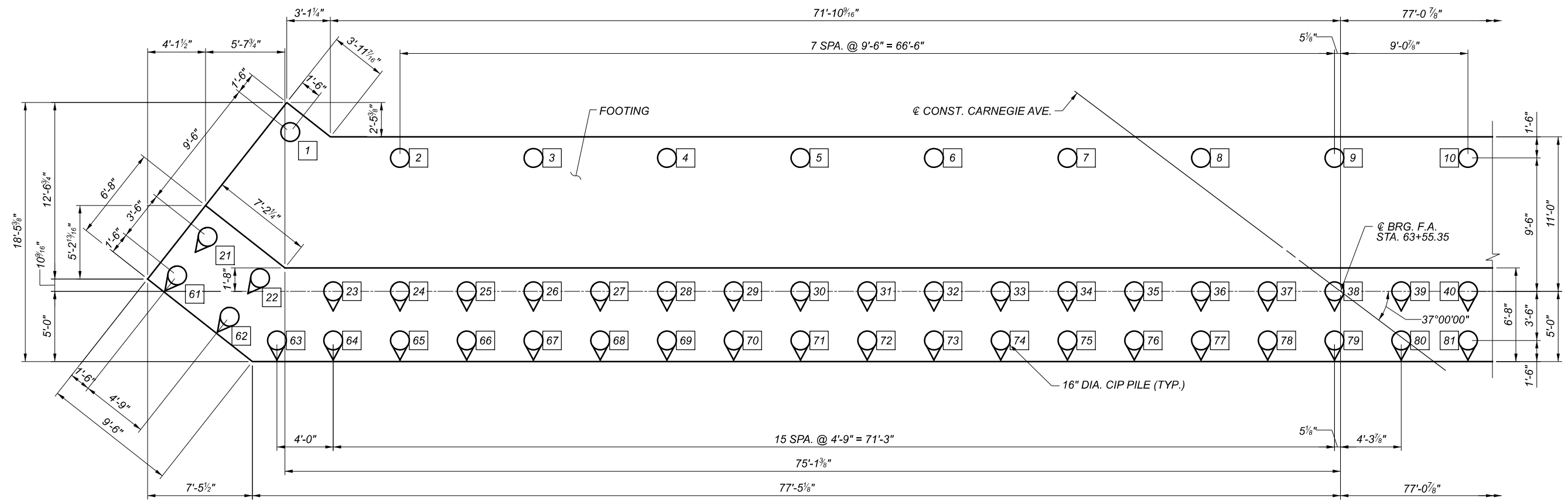
NOTES:

- SEE SHEETS ##### THROUGH ##### FOR GENERAL NOTES.

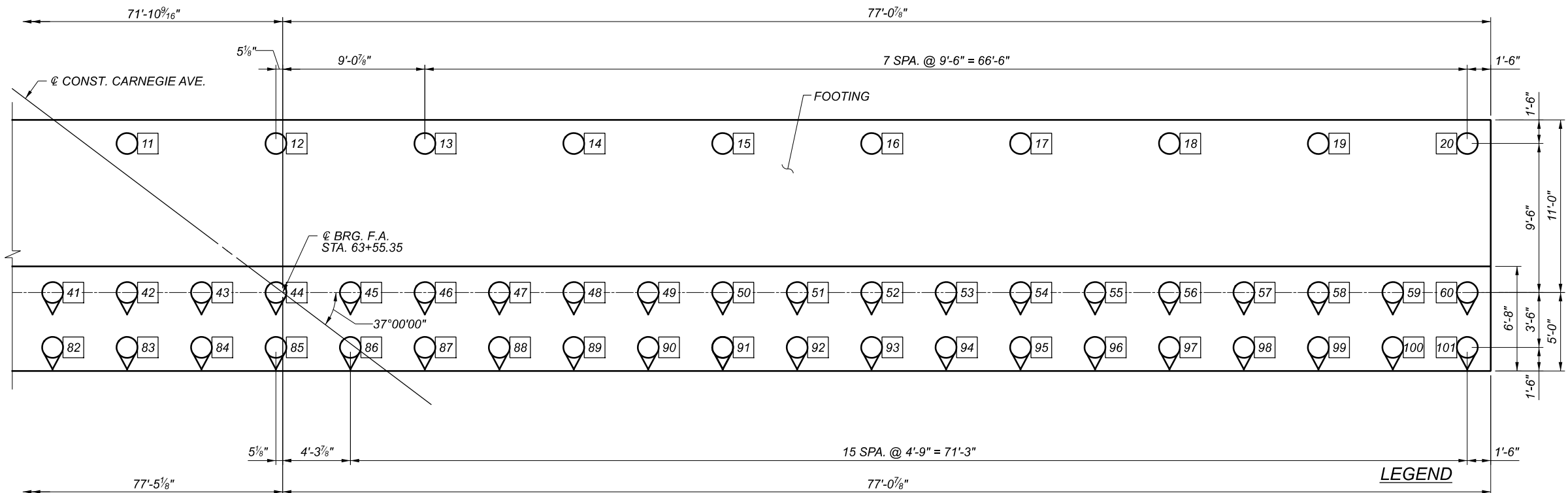
LEGEND

INDICATES PROPOSED PILE NUMBER

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	AHS TAG
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
18	72
SHEET	TOTAL
1838	2339



PILE SCHEDULE			
SUBSTRUCTURE UNIT	PILE DIAMETER	ORDER LENGTH	CUTOFF ELEVATION
FORWARD ABUTMENT FOOTING (1 THRU 101)	16"	95.00	634.89

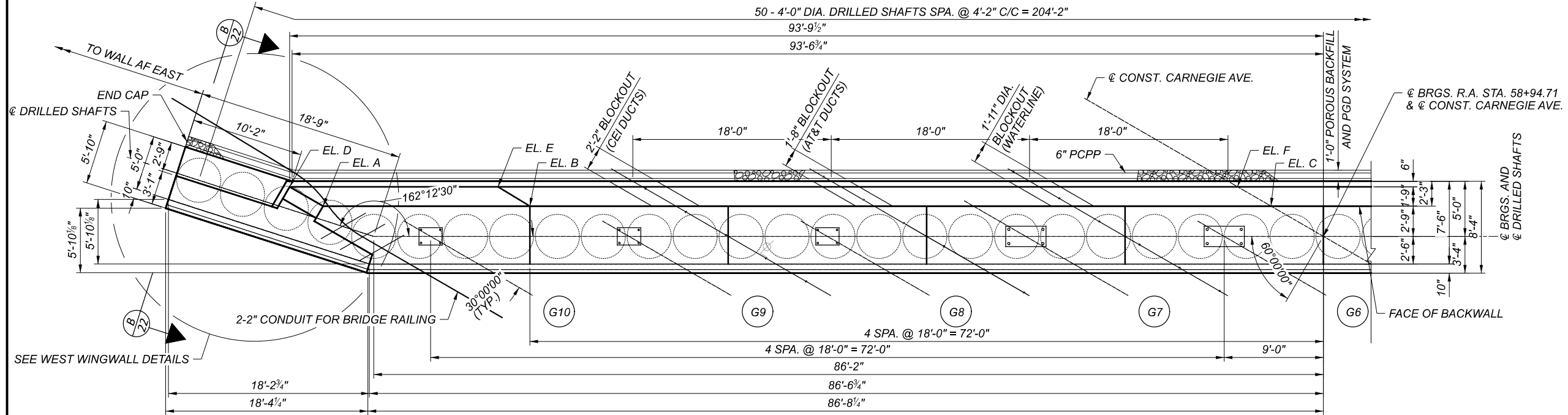


LEGEND
 # INDICATES PROPOSED PILE NUMBER



FORWARD ABUTMENT FOUNDATION PLAN
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	CHECKER
TAG	AHS
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
19	72
SHEET	TOTAL
1839	2339

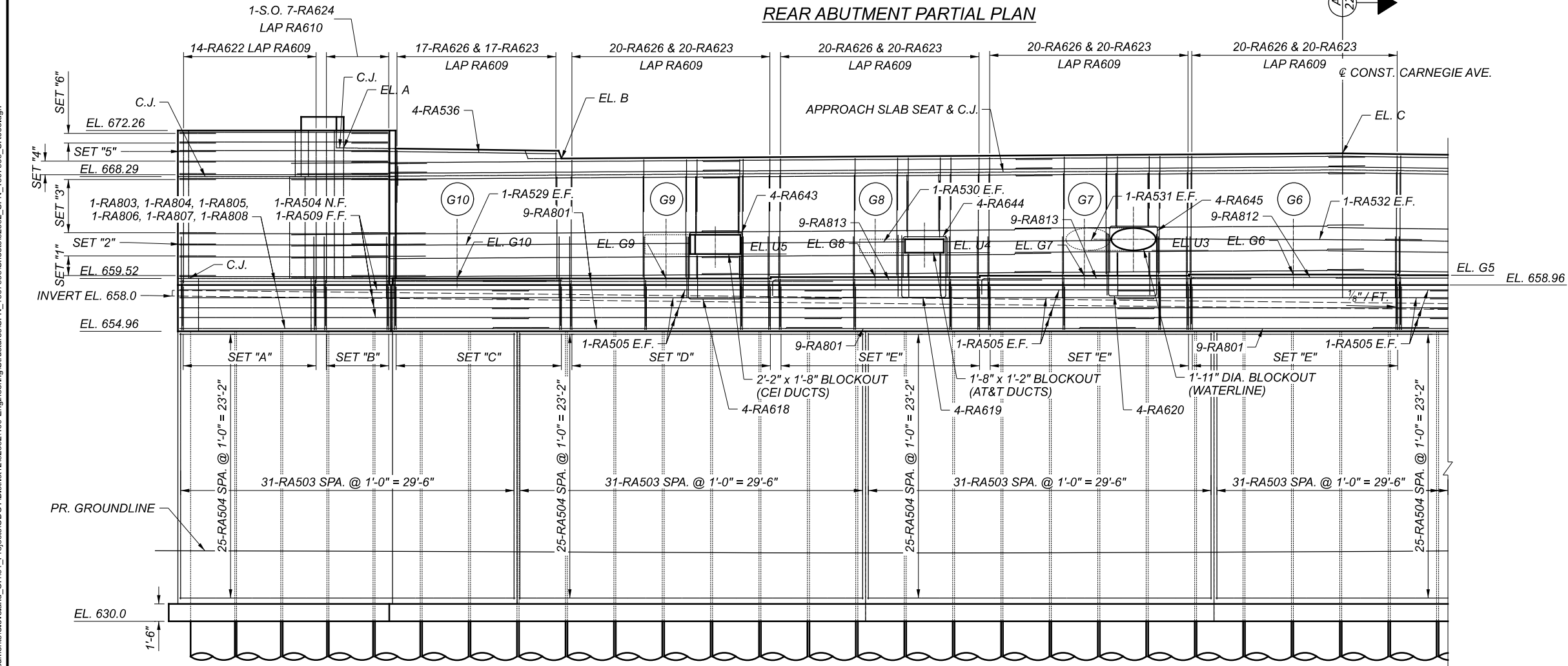


REAR ABUTMENT PARTIAL PLAN

ABUTMENT BACKWALL ELEVATIONS (FT.)	
LOCATION	ELEVATION
A	670.76
B	669.84
C	670.29
D	670.77
E	669.85
F	670.30

ABUTMENT BEAM SEAT ELEVATIONS (FT.)	
LOCATION	ELEVATION
G10	659.52
G9	659.51
G8	659.63
G7	659.75
G6	659.86
G5	659.80

UTILITY BLOCKOUT ELEVATIONS (FT.)	
LOCATION	ELEVATION
U3	661.94
U4	661.74
U5	661.62



REAR ABUTMENT PARTIAL ELEVATION

- SET "A" = 14-SETS OF 1-RA501, 2-RA601 & 1-RA609 SPA. @ 11"
- SET "B" = 7-SETS OF 1-RA501, 2-RA601 & 1-RA609 SPA. @ 11" & 1 S.O. 7-RA610 SPA. @ 11"
- SET "C" = 17-SETS OF 1-RA501, 2-RA602 & 1-RA609 SPA. @ 11"
- SET "D" = 20-SETS OF 1-RA501, 2-RA602 & 1-RA609 SPA. @ 11"
- SET "E" = 20-SETS OF 1-RA501, 2-RA603 & 1-RA609 SPA. @ 11"

BACKWALL SETS TO SPLICE AT @ CONST. CARNEGIE AVE.:

- SET "1" = 3 SETS OF 1-RA511, 1-RA515, 1-RA516, 1-RA518, 1-RA513, 1-RA517, 3-RA505 E.F.
- SET "2" = 1 SET OF 1-RA511, 1-RA515, 1-RA516, 1-RA518, 1-RA513, 1-RA517, 1-RA529 E.F., 1-RA530 E.F., 1-RA531 E.F., 1-RA532 E.F.
- SET "3" = 6 SETS OF 1-RA511, 1-RA515, 1-RA516, 1-RA518, 1-RA513, 1-RA517, 3-RA505 E.F.
- SET "4" = 2 SETS OF 1-RA511, 1-RA515, 1-RA516, 1-RA518, 1-RA514, 1-RA517, 3-RA505 E.F.
- SET "5" = 1 SET OF 1-RA511, 1-RA515, 1-RA516, 1-RA518, 1-RA514, 1-RA517, 4-RA536
- SET "6" = 2 SETS OF 1-RA511, 1-RA515, 1-RA516, 1-RA518, 1-RA514, 1-RA517, 1-RA510

MIN. LAP LENGTHS:

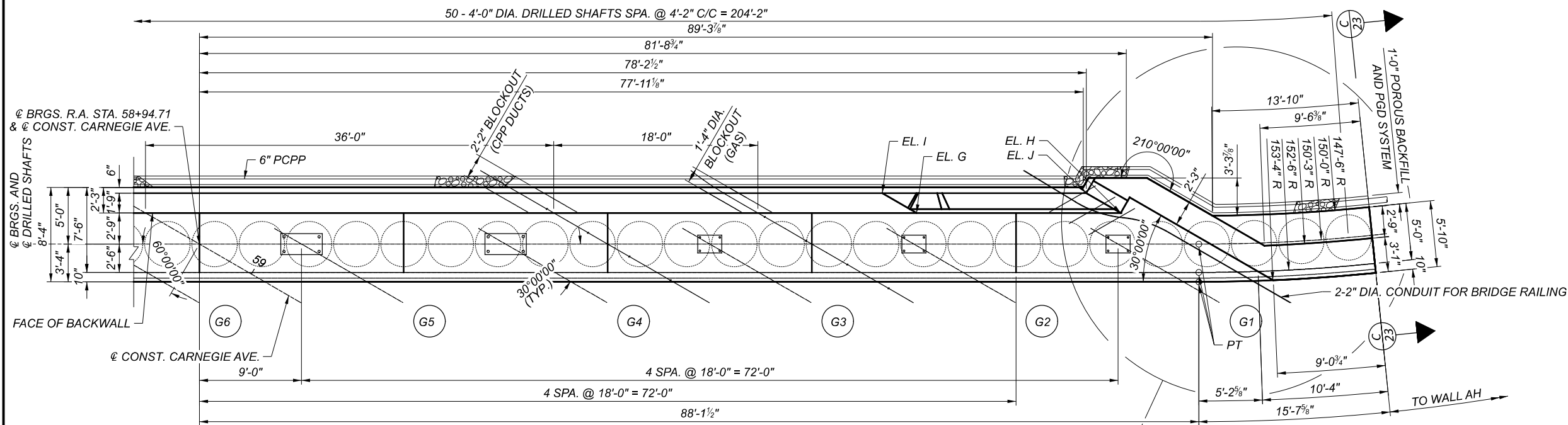
- #5 - 3'-1"
- #6 - 3'-7"
- #8 - 5'-4"

NOTES:

- SEE SHEET XX OR XX FOR ADDITIONAL NOTES.
- SEE FOUNDATION PLAN FOR DRILLED SHAFT LAYOUT.
- SEE WALL AF EAST PLANS FOR AF BASELINE AND WALL DETAILS.

SFN	1807898
DESIGN AGENCY	
DESIGNER	GZ
CHECKER	JML
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	20
TOTAL	72
SHEET	1840
TOTAL	2339

Michael Baker INTERNATIONAL



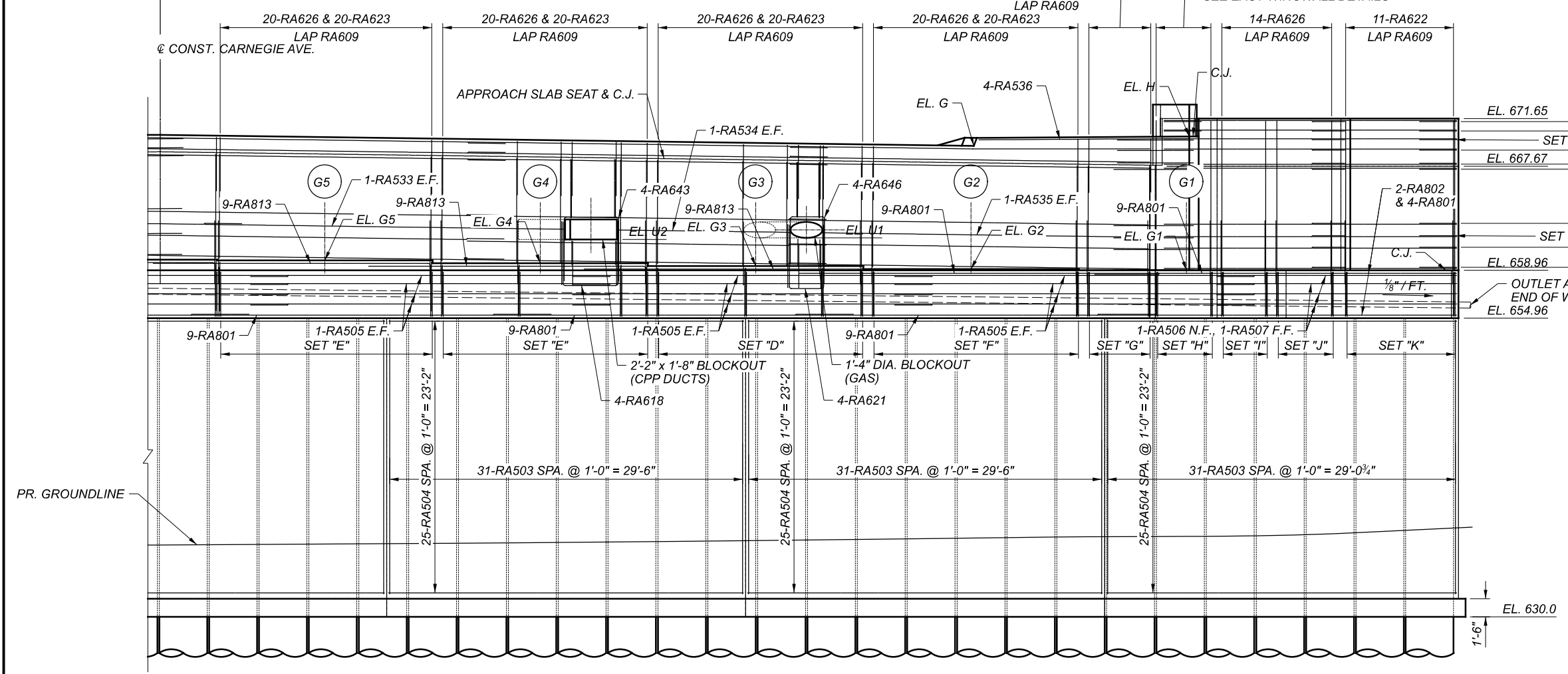
ABUTMENT BACKWALL ELEVATIONS (FT.)	
LOCATION	ELEVATION
G	669.37
H	670.15
I	669.38
J	TBD

ABUTMENT BEAM SEAT ELEVATIONS (FT.)	
LOCATION	ELEVATION
G5	659.80
G4	659.56
G3	659.32
G2	659.07
G1	658.96

UTILITY BLOCKOUT ELEVATIONS (FT.)	
LOCATION	ELEVATION
U1	661.67
U2	661.55

REAR ABUTMENT PARTIAL PLAN

SEE EAST WINGWALL DETAILS
 8-RA626 & 8-RA623
 LAP RA609



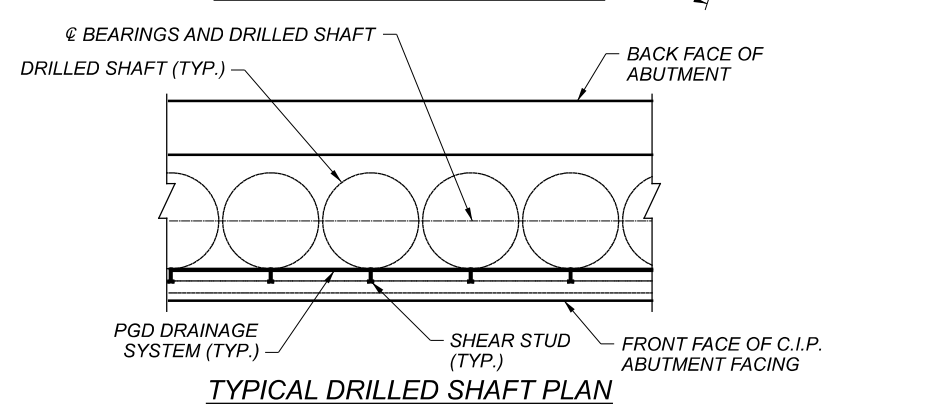
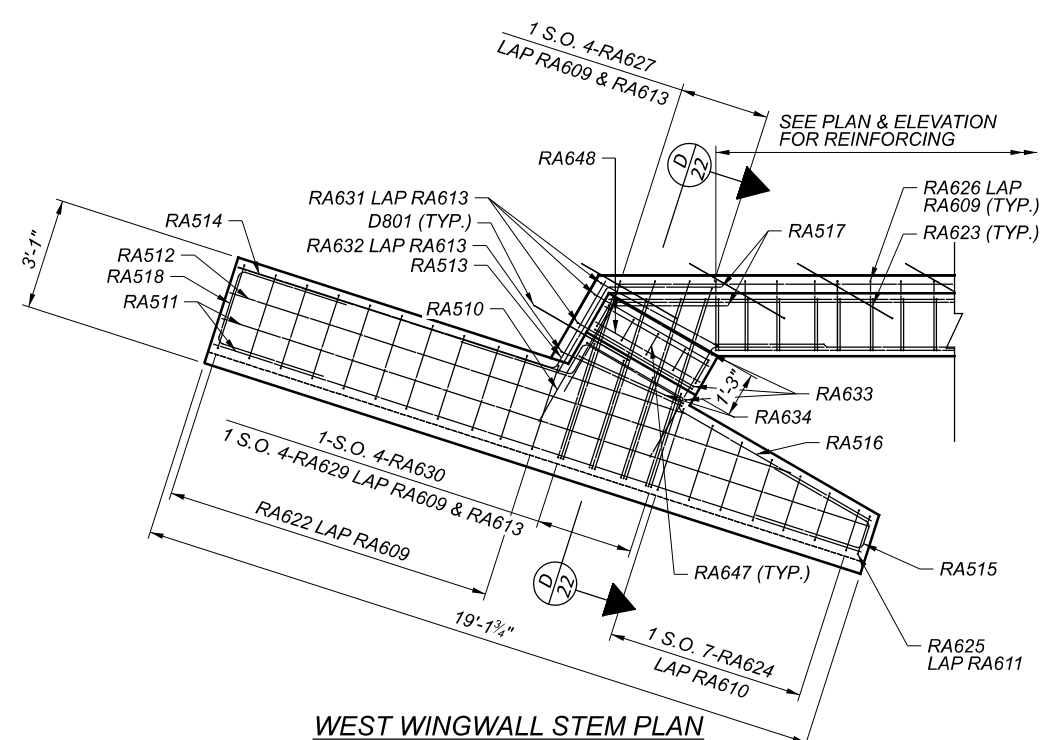
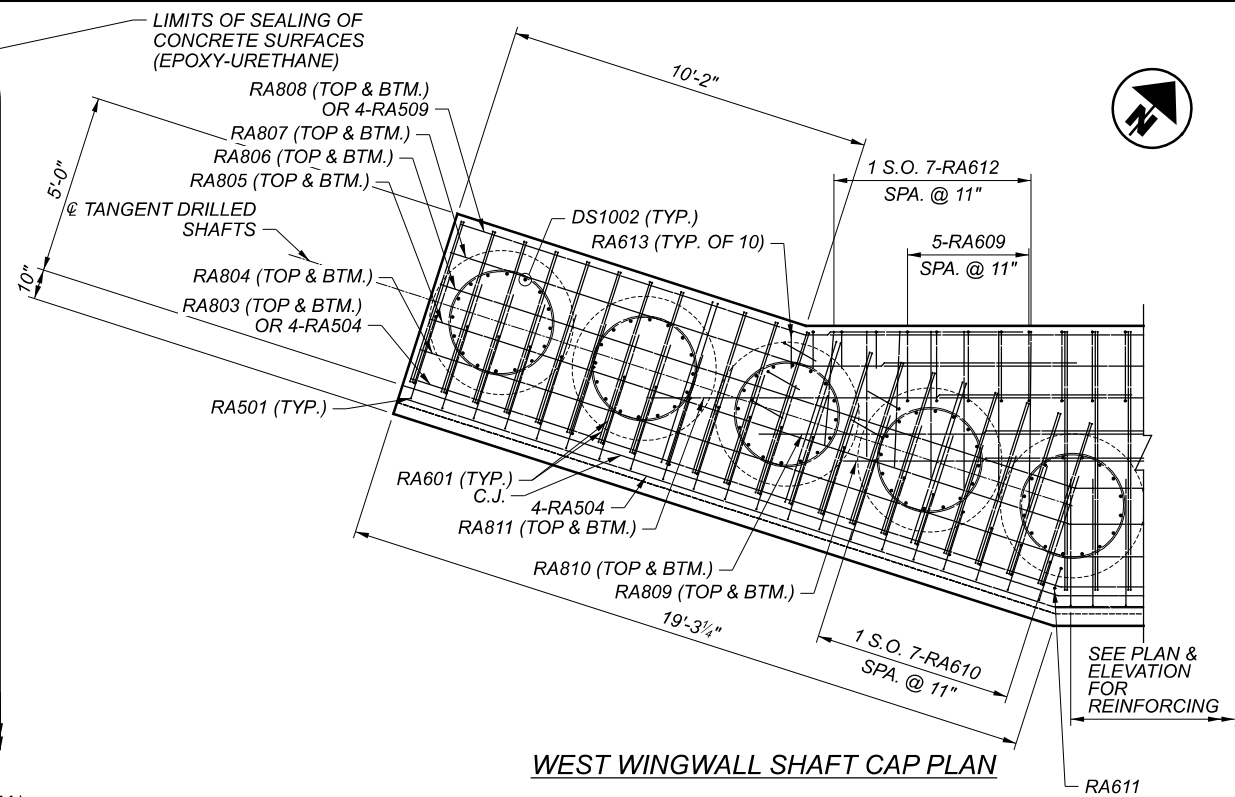
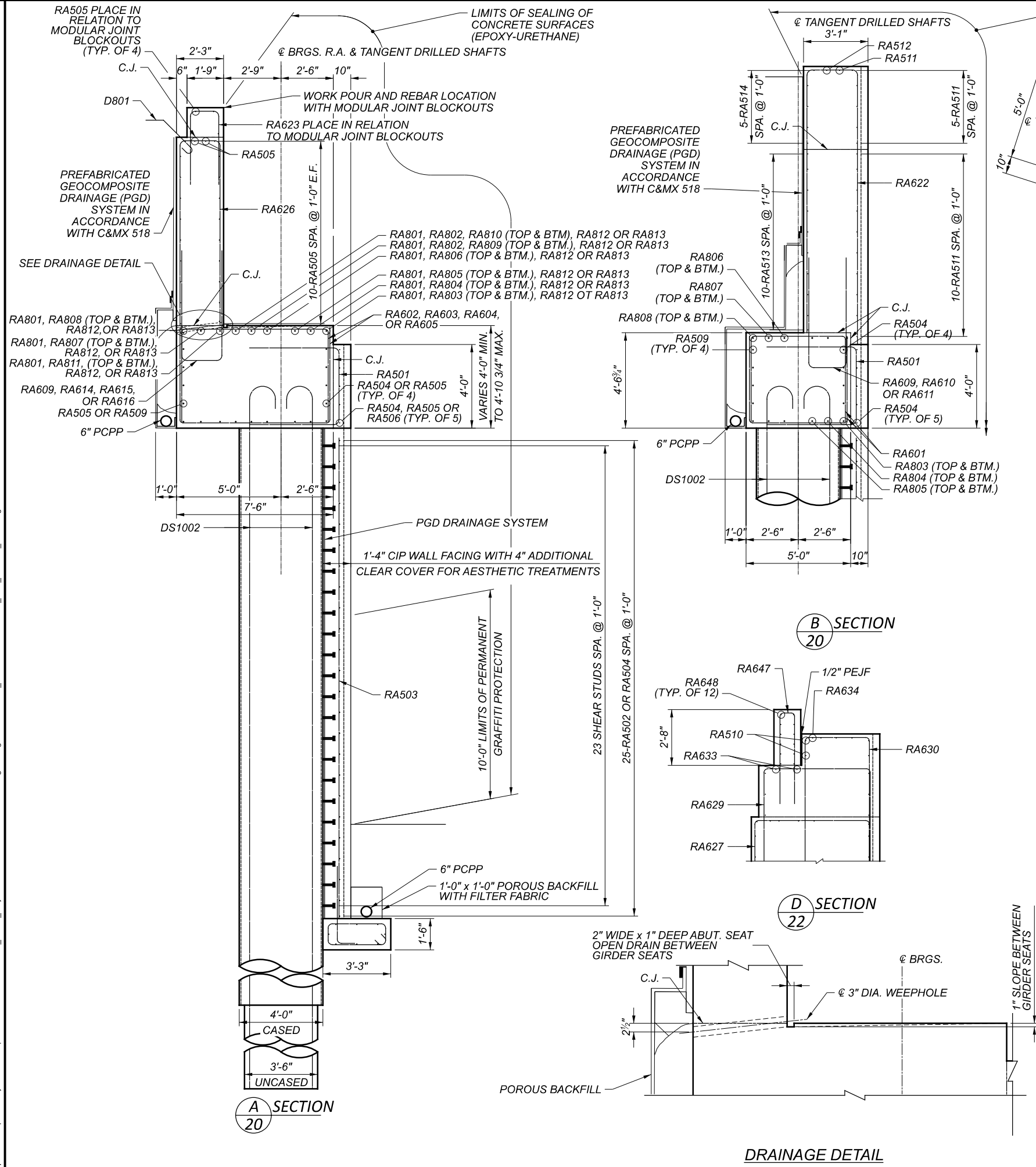
- SET "E" = 20-SETS OF 1-RA501, 2-RA603 & 1-RA609 SPA. @ 11"
- SET "D" = 20-SETS OF 1-RA501, 2-RA602 & 1-RA609 SPA. @ 11"
- SET "F" = 20-SETS OF 1-RA501, 2-RA604 & 1-RA609 SPA. @ 11"
- SET "G" = 8-SETS OF 1-RA501, 2-RA605 & 1-RA609 SPA. @ 11"
- SET "H" = 6-SETS OF 1-RA501, 2-RA606 & SPA. @ 11"
- SET "I" = 5-SETS OF 1-RA501 SPA. @ 11" & 2 S.O. 5-RA607
- SET "J" = 6-SETS OF 1-RA501, 2-RA608 & SPA. @ 11"
- SET "K" = 11-SETS OF 1-RA501, 2-RA608 & 1-RA609 SPA. @ 11"

- BACKWALL SETS TO SPLICE AT
 @ CONST. CARNEGIE AVE.:
- SET "1" = 3 SETS 3-RA505 E.F., 1-RA525, 1-RA523, 1-RA519, 1-RA518, 1-RA522, 1-RA524, 1-RA526
 - SET "2" = 1 SET OF 1-RA533 E.F., 1-RA534 E.F., 1-RA535 E.F., 1-RA525, 1-RA523, 1-RA519, 1-RA518, 1-RA522, 1-RA524, 1-RA526
 - SET "3" = 6 SETS OF 3-RA505 E.F., 1-RA525, 1-RA523, 1-RA519, 1-RA518, 1-RA522, 1-RA524, 1-RA526
 - SET "4" = 2 SETS OF 3-RA505 E.F., 1-RA525, 1-RA523, 1-RA519, 1-RA518, 1-RA522, 1-RA524, 1-RA526
 - SET "5" = 1 SET OF 3-RA505 E.F., 1-RA525, 1-RA523, 1-RA519, 1-RA518, 1-RA522, 1-RA524, 1-RA526, 4-RA536
 - SET "6" = 2 SETS OF 3-RA505 E.F., 1-RA525, 1-RA523, 1-RA519, 1-RA518, 1-RA522, 1-RA524, 1-RA526, 1-RA528
- MIN. LAP LENGTHS:
- #5 - 3'-1"
 - #6 - 3'-7"
 - #8 - 5'-4"

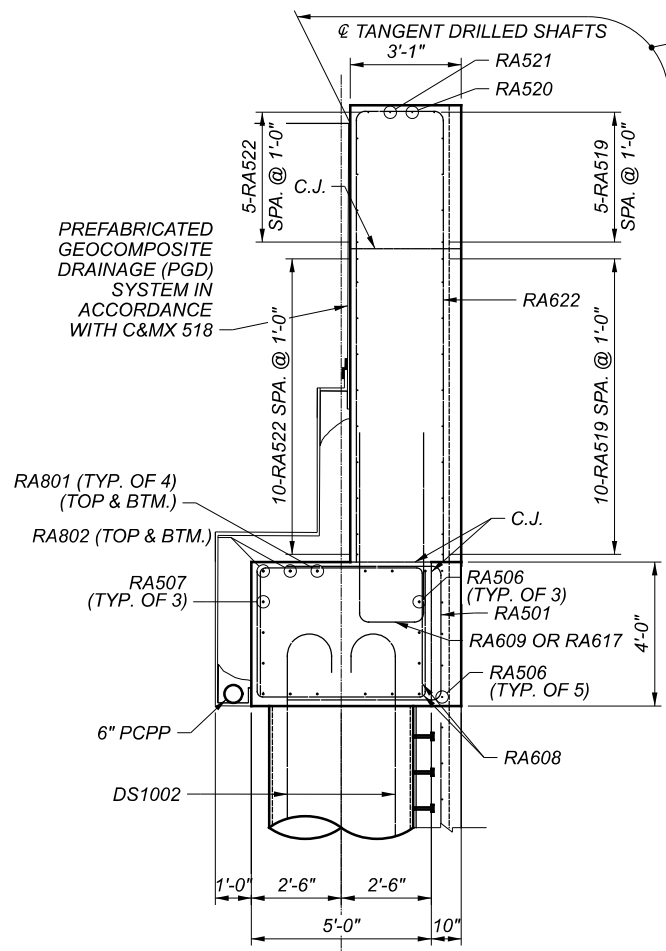
REAR ABUTMENT PARTIAL ELEVATION

- NOTES:**
- SEE SHEET XX OR XX FOR ADDITIONAL NOTES.
 - SEE FOUNDATION PLAN FOR DRILLED SHAFT LAYOUT.
 - SEE WALL AH PLANS FOR AH BASELINE GEOMETRY AND WALL DETAILS.

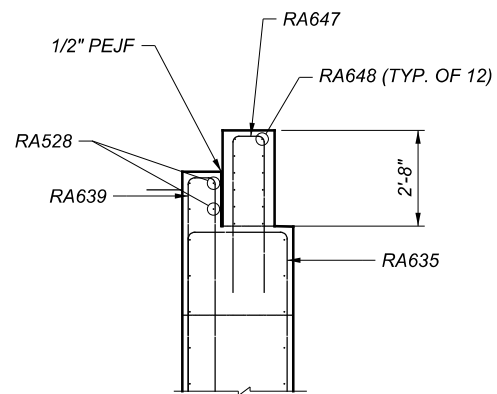
SFN	1807898
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER/CHECKER	GZ JML
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	21 TOTAL 72
SHEET	1841 TOTAL 2339



SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER/CHECKER	MKB/JCC
REVIEWER	LPC
PROJECT ID	82382
SUBSET	22
TOTAL	72
SHEET	1842
TOTAL	2339

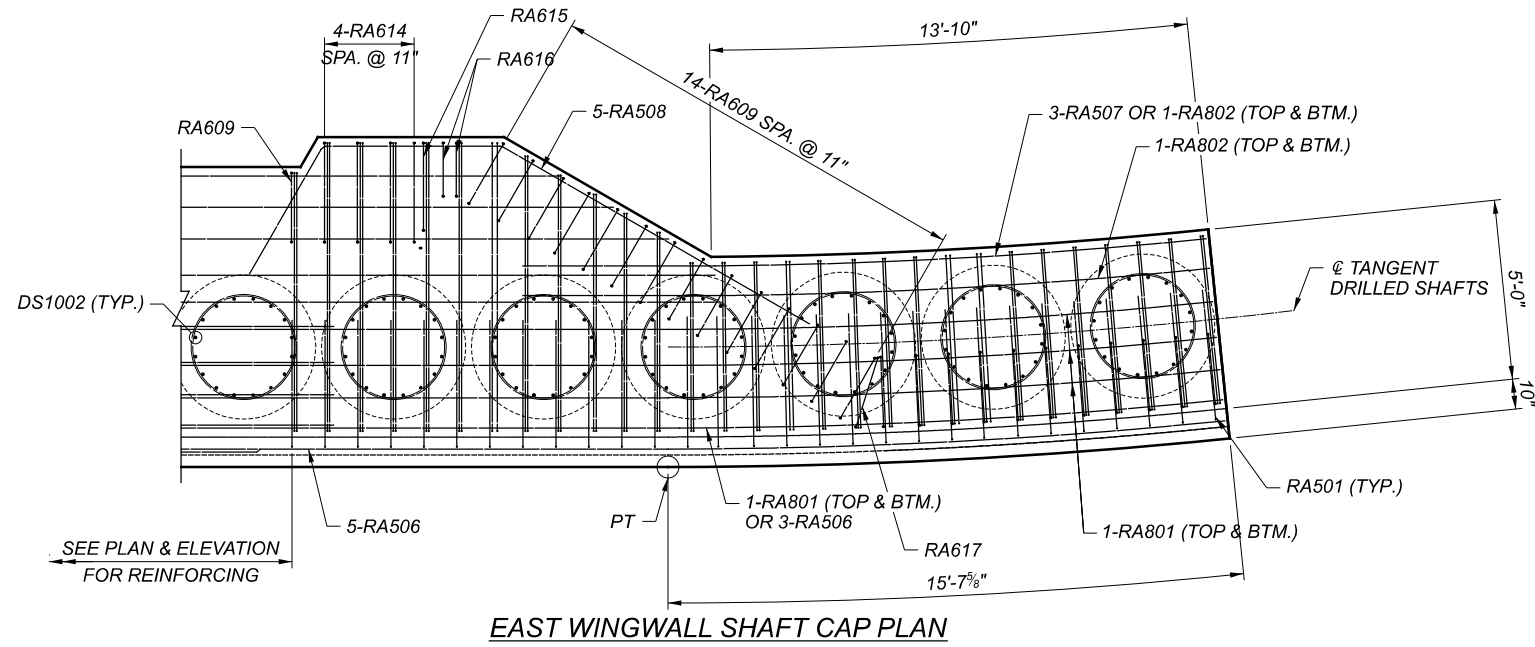


C SECTION 21

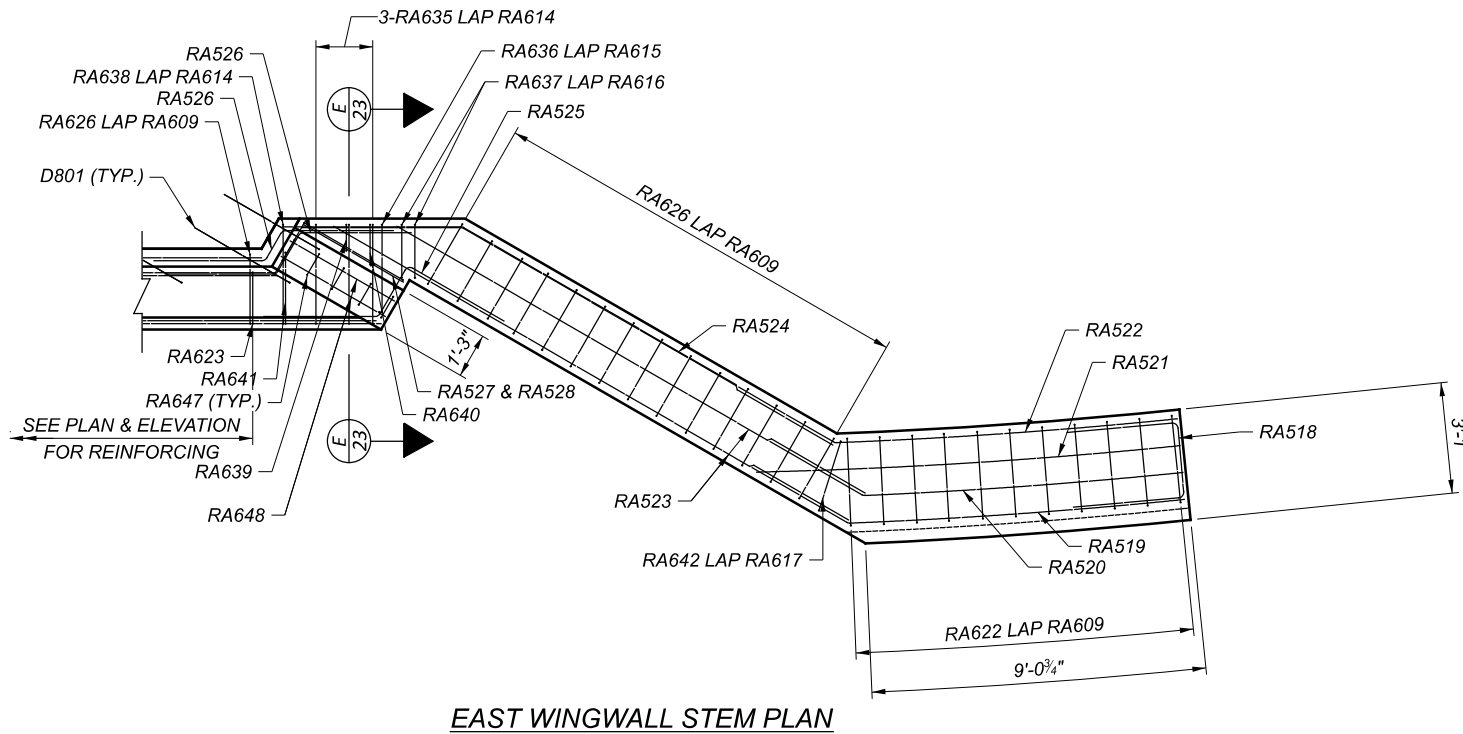


E SECTION 23

LIMITS OF SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)



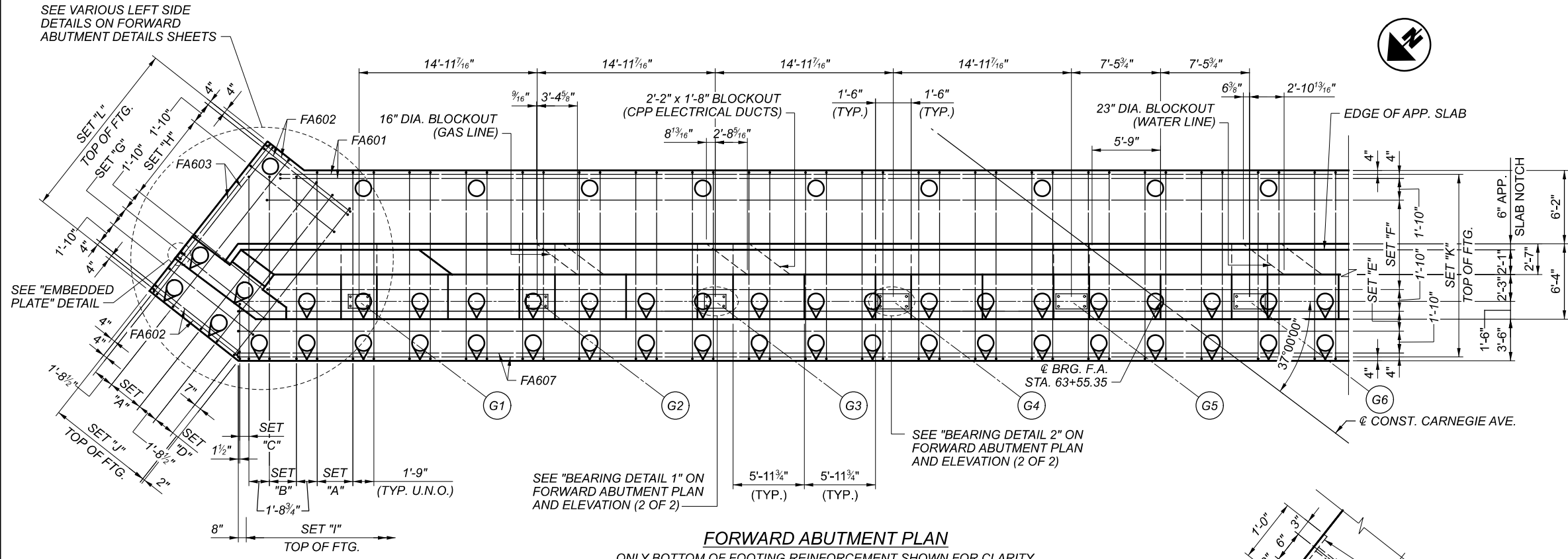
EAST WINGWALL SHAFT CAP PLAN



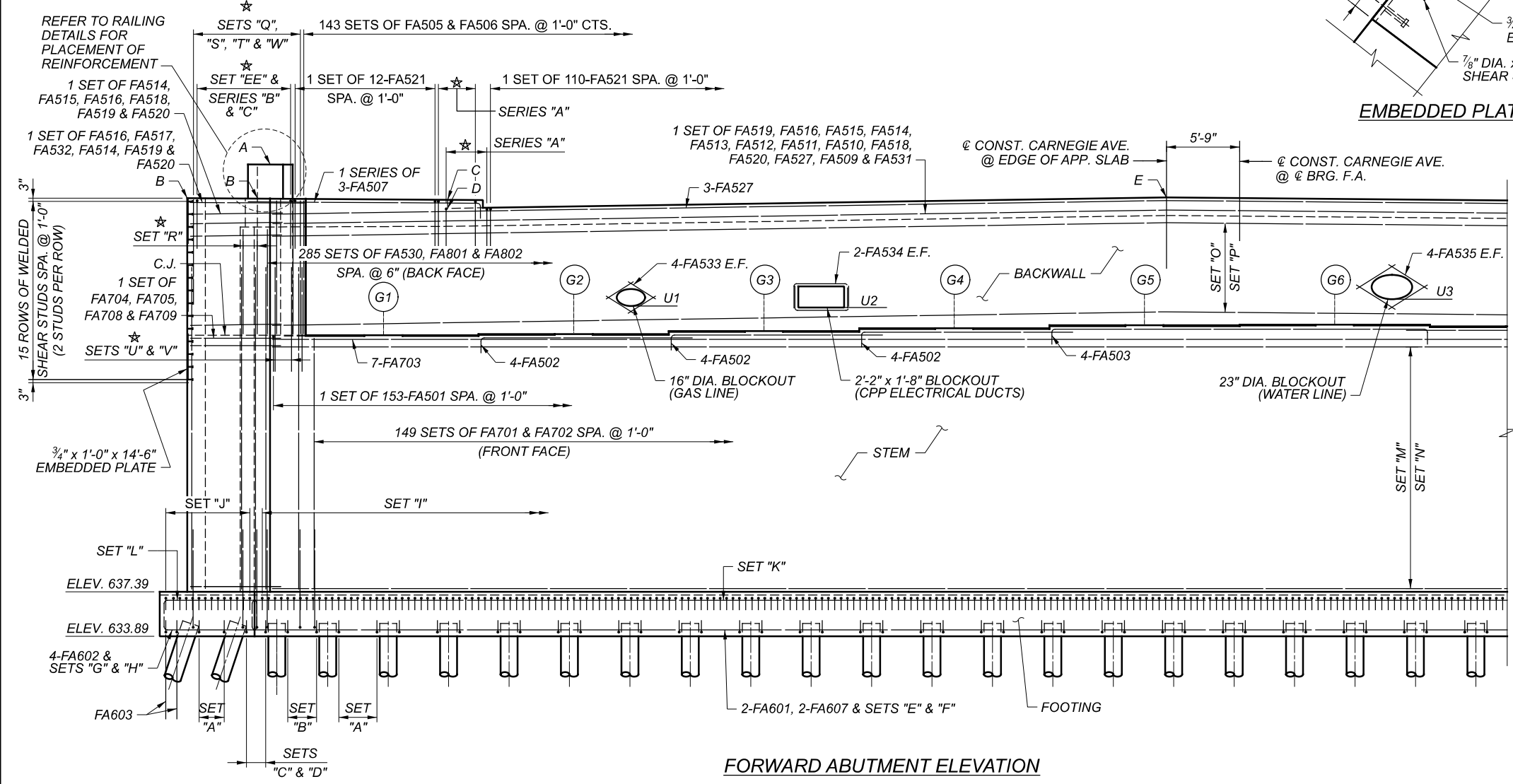
EAST WINGWALL STEM PLAN

SFN	1807898
DESIGN AGENCY	
DESIGNER/CHECKER	Michael Baker INTERNATIONAL
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	23
TOTAL	72
SHEET	1843
TOTAL	2339

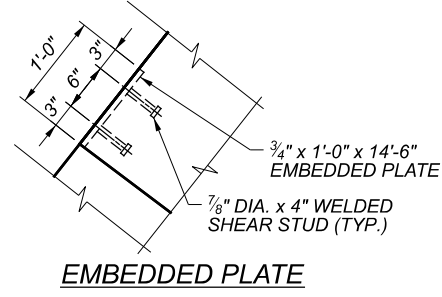
MODEL: Sheet PAPER: 17x11 (in.) DATE: 6/23/2022 TIME: 5:31:38 PM USER: Malia.Gallagher
 p:\b-us-pw-bentley.com-us-pw-03\Documents\Cleveland_OH101_Projects\ODOT\Dist12\23232400-Engineering\Structures\SFN_1807898_SFN_SF002.dgn



FORWARD ABUTMENT PLAN
 ONLY BOTTOM OF FOOTING REINFORCEMENT SHOWN FOR CLARITY



FORWARD ABUTMENT ELEVATION



EMBEDDED PLATE

FORWARD ABUTMENT	
POINT	ELEVATION
A	670.99
B	668.32
C	668.19
D	667.53
E	668.39
G1	657.55
G2	657.65
G3	657.88
G4	658.11
G5	658.33
G6	658.38

UTILITIES	
POINT	ELEVATION
U1	659.86
U2	659.73
U3	660.09

BOTTOM OF FOOTING REINFORCEMENT SETS:

- SET "A" = 1 SET OF 7-FA603 SPA. @ 6" (TYP. BETWEEN PILES UNLESS NOTED OTHERWISE, 32 SETS TOTAL)
- SET "B" = 1 SET OF 6-FA605 SPA. @ 5 1/2"
- SET "C" = 1 SET OF 3-FA604 SPA. @ 4 1/2"
- SET "D" = 1 SET OF 5-FA603 SPA. @ 5 1/2"
- SET "E" = 1 SET OF 3-FA607 SPA. @ 10"
- SET "F" = 1 SET OF 10-FA606 SPA. @ 10"
- SET "G" = 1 SET OF 3-FA602 SPA. @ 10"
- SET "H" = 1 SET OF 10-FA602 SPA. @ 10"

TOP OF FOOTING REINFORCEMENT SETS:

- SET "I" = 1 SET OF 308-FA603 SPA. @ 6"
- SET "J" = 1 SET OF 19-FA603 SPA. @ 6"
- SET "K" = 1 SET OF 17-FA608 SPA. @ 11 1/2"
- SET "L" = 1 SET OF 17-FA602 SPA. @ 11 1/2"

STEM REINFORCEMENT SETS:

- SET "M" = 20 SETS OF FA704, FA705, FA706 & FA707 SPA. @ 1'-0" (SIDE & FRONT FACES OF STEM)
- SET "N" = 20 SETS OF FA708, FA709, FA710, FA711 & FA712 SPA. @ 1'-0" (BACK FACE OF STEM)

BACKWALL REINFORCEMENT SETS:

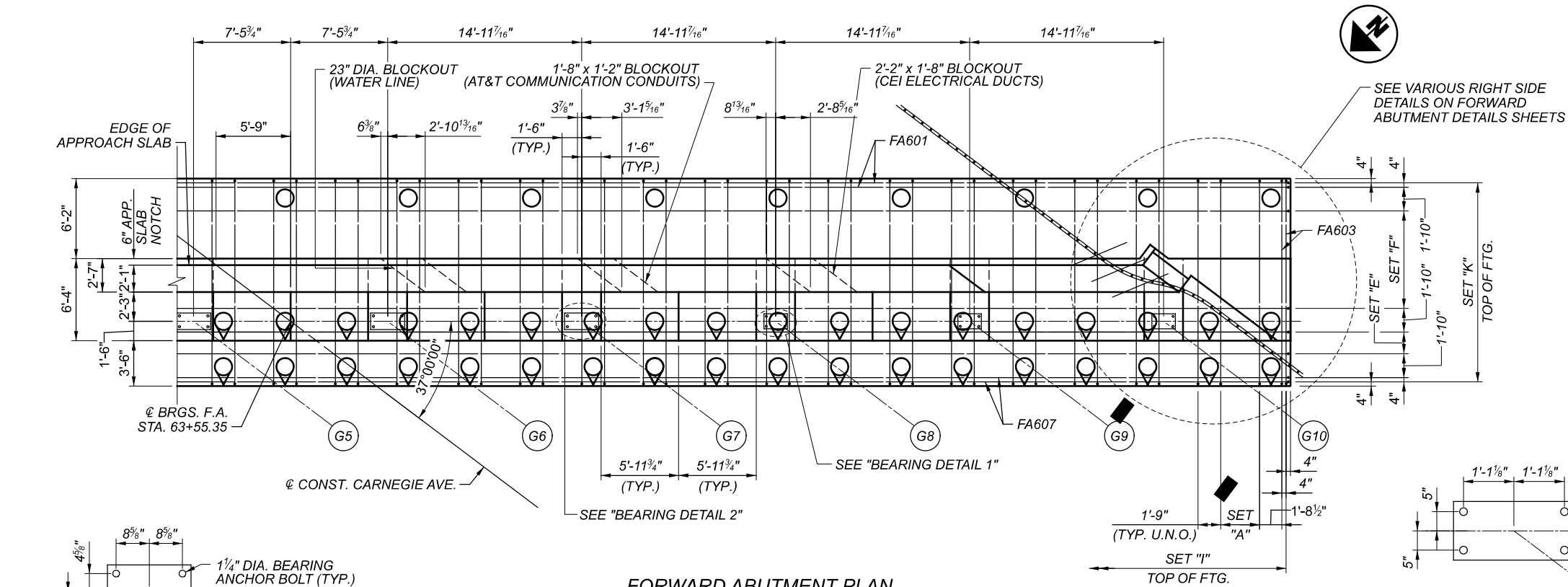
- SET "O" = 8 SETS OF FA519, FA516, FA515, FA514, FA513, FA512, FA511 & FA510 SPA. @ 1'-0" (SIDE & FRONT FACES OF BACKWALL)
- SET "P" = 8 SETS OF FA518, FA520, FA508 & FA509 SPA. @ 1'-0" (BACK FACE OF BACKWALL)

★ SEE REINFORCEMENT SETS AND SERIES ON FORWARD ABUTMENT DETAILS SHEET (2 OF 2)

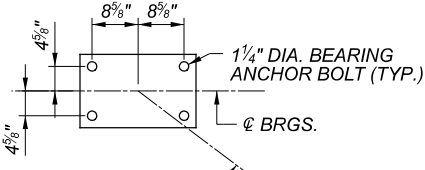
BRIDGE SEAT REINFORCING, SETTING ANCHORS

ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE SETTING OF BEARING ANCHORS.

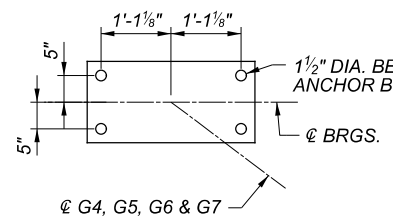
SFN	1807898
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER/CHECKER	TAG AHS
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	24
TOTAL	72
SHEET	1844
TOTAL	2339



BEARING DETAIL 1



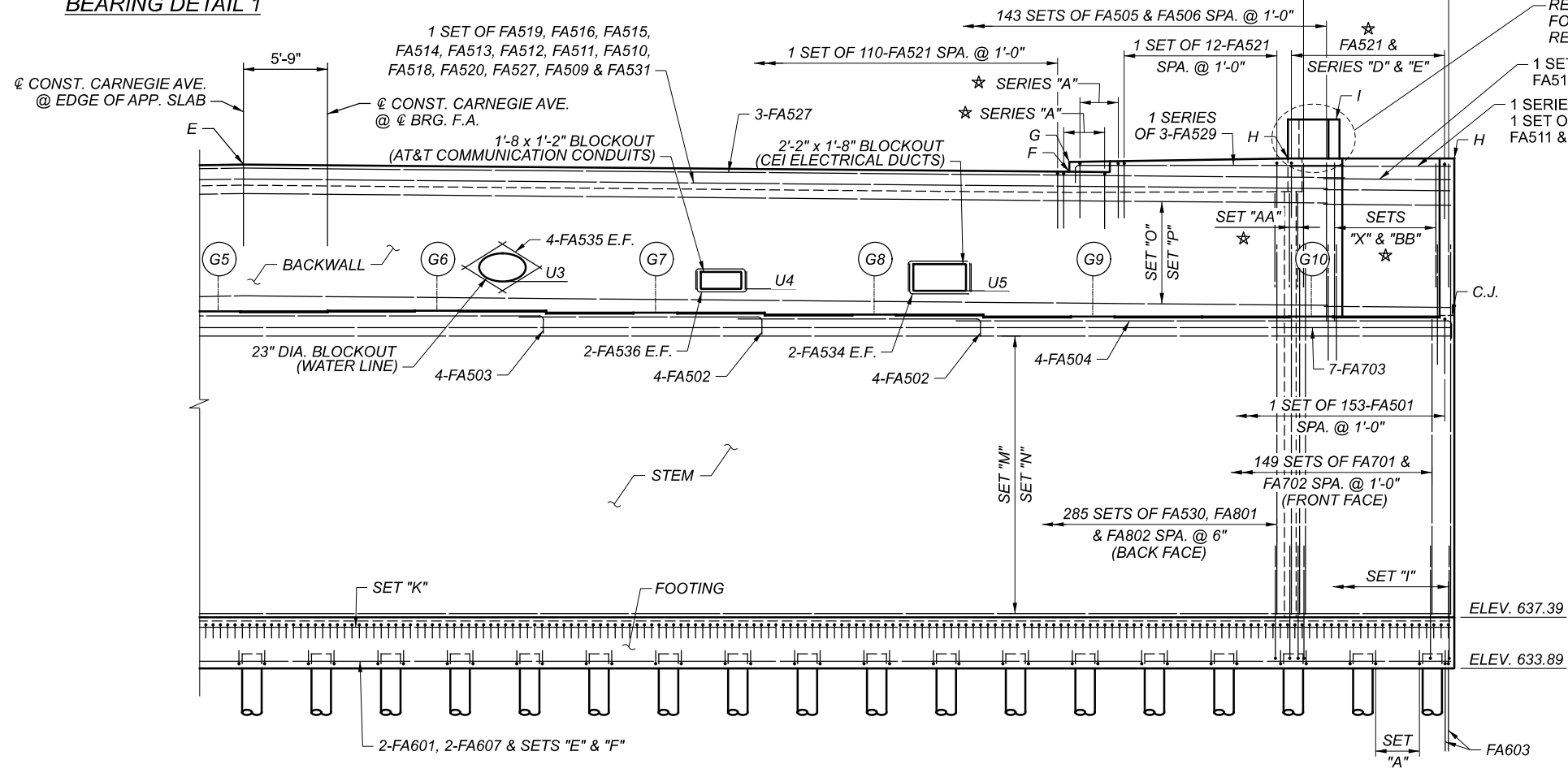
BEARING DETAIL 2



FORWARD ABUTMENT	
POINT	ELEVATION
E	668.39
F	667.89
G	668.56
H	668.79
I	671.46
G5	658.33
G6	658.38
G7	658.25
G8	658.12
G9	657.98
G10	657.98

UTILITIES	
POINT	ELEVATION
U3	660.09
U4	659.87
U5	659.74

- BOTTOM OF FOOTING REINFORCEMENT SETS:**
- SET "A" = 1 SET OF 7-FA603 SPA. @ 6" (TYP. BETWEEN PILES UNLESS NOTED OTHERWISE, 32 SETS TOTAL)
 - SET "B" = 1 SET OF 6-FA605 SPA. @ 5 1/2"
 - SET "C" = 1 SET OF 3-FA604 SPA. @ 4 1/2"
 - SET "D" = 1 SET OF 5-FA603 SPA. @ 5 1/2"
 - SET "E" = 1 SET OF 3-FA607 SPA. @ 10"
 - SET "F" = 1 SET OF 10-FA606 SPA. @ 10"
 - SET "G" = 1 SET OF 3-FA602 SPA. @ 10"
 - SET "H" = 1 SET OF 10-FA602 SPA. @ 10"
- TOP OF FOOTING REINFORCEMENT SETS:**
- SET "I" = 1 SET OF 308-FA603 SPA. @ 6"
 - SET "J" = 1 SET OF 19-FA603 SPA. @ 6"
 - SET "K" = 1 SET OF 17-FA608 SPA. @ 11 1/2"
 - SET "L" = 1 SET OF 17-FA602 SPA. @ 11 1/2"



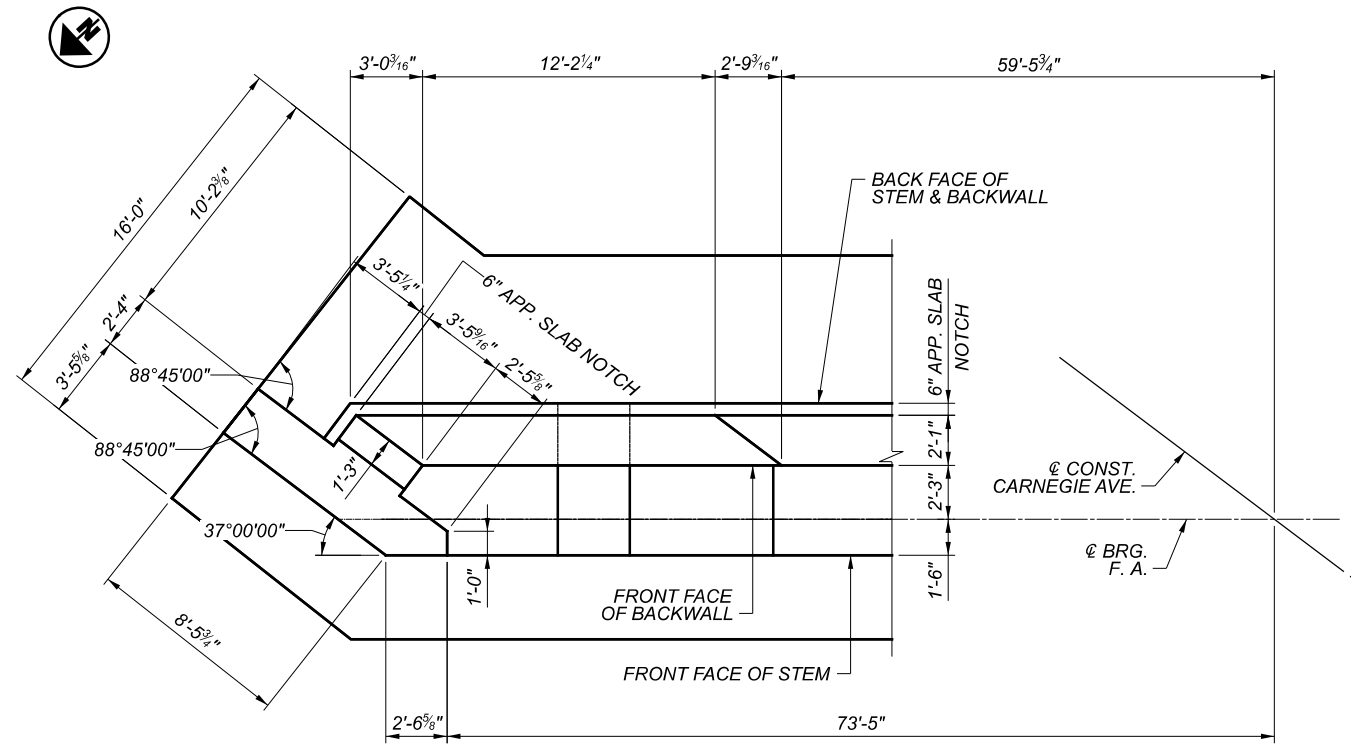
FORWARD ABUTMENT ELEVATION

BRIDGE SEAT REINFORCING, SETTING ANCHORS

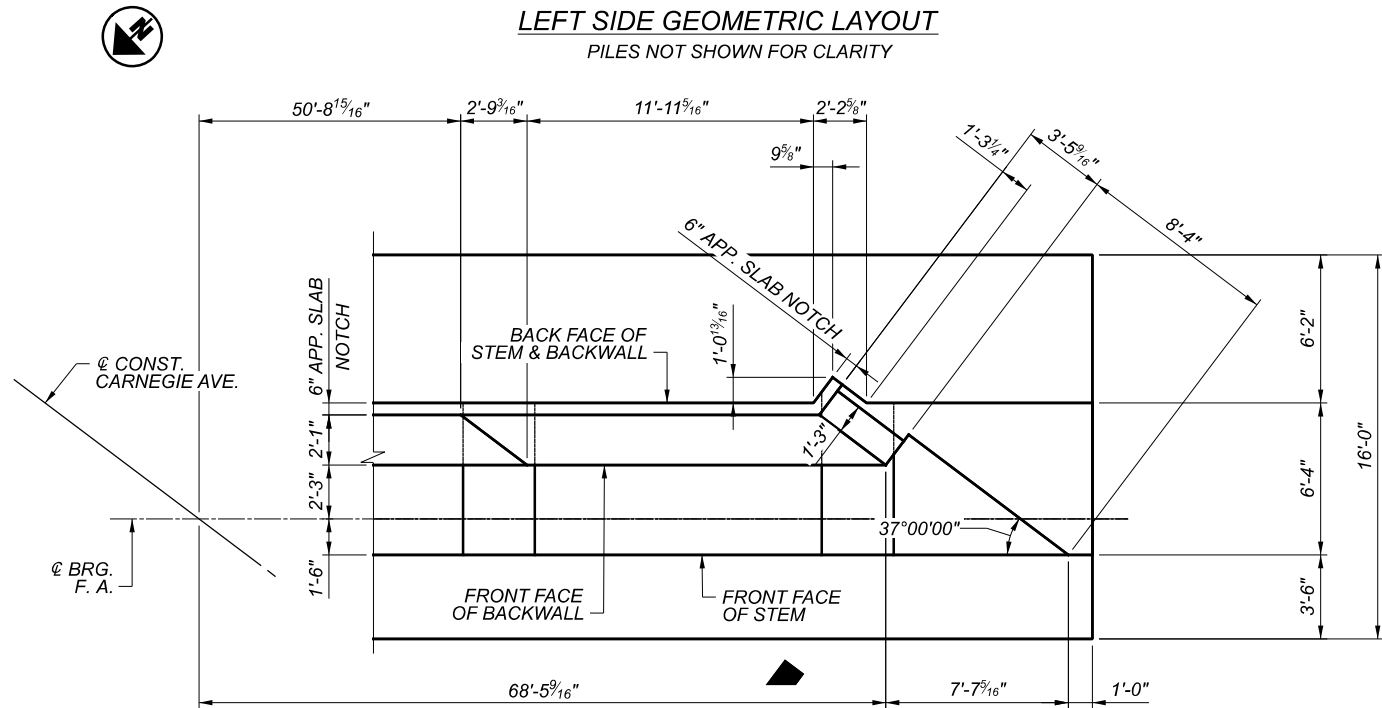
ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE SETTING OF BEARING ANCHORS.

★ SEE REINFORCEMENT SETS AND SERIES ON FORWARD ABUTMENT DETAILS SHEET (2 OF 2)

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
TAG	AHS
REVIEWER	
PROJECT ID	82382
SUBSET	25
TOTAL	72
SHEET	1845
TOTAL	2339



LEFT SIDE GEOMETRIC LAYOUT
 PILES NOT SHOWN FOR CLARITY



RIGHT SIDE GEOMETRIC LAYOUT
 PILES NOT SHOWN FOR CLARITY

NOTES:

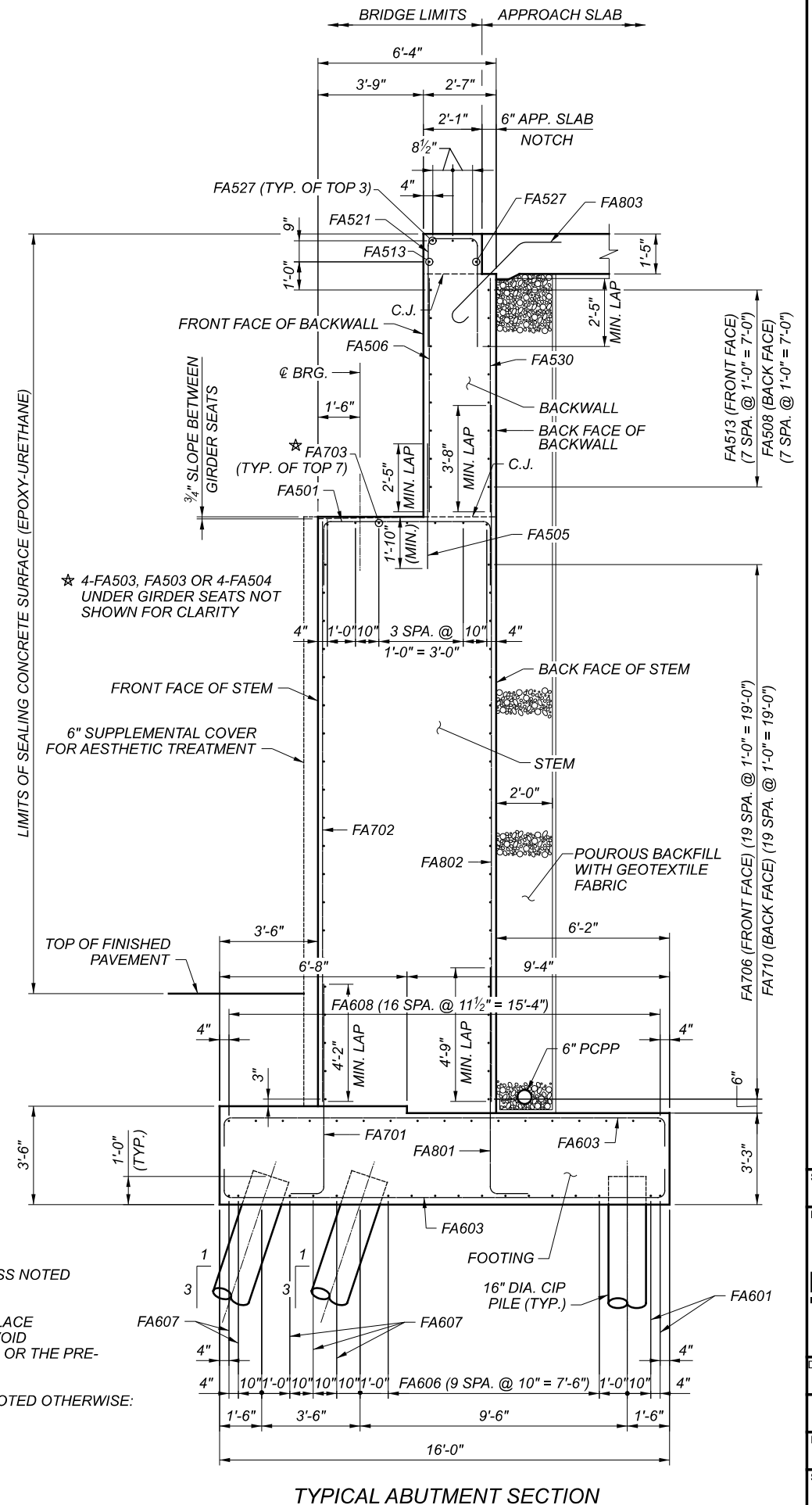
PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS UNLESS NOTED OTHERWISE.

BRIDGE SEAT REINFORCING, SETTING ANCHORS: ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR THE PRE-SETTING OF BEARING ANCHORS.

MINIMUM REBAR LAP SPLICES SHALL BE AS FOLLOWS, UNLESS NOTED OTHERWISE:

- #5 LAP SPLICE: 2'-5"
- #6 LAP SPLICE (IN TOP OF FOOTING): 3'-8"
- #6 LAP SPLICE (IN BOTTOM OF FOOTING): 2'-10"
- #7 LAP SPLICE: 4'-2"
- #8 LAP SPLICE: 4'-9"

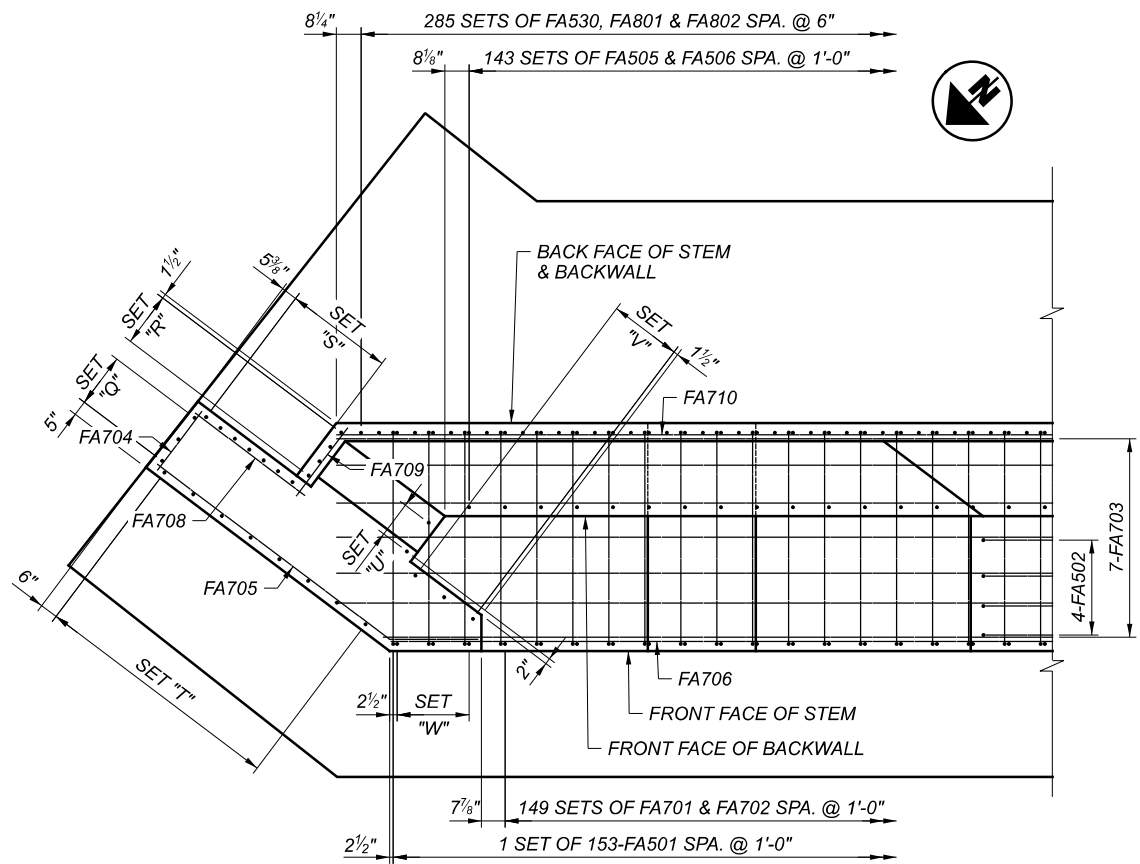
SEE WALL AI SHEETS FOR WALL DETAILS.



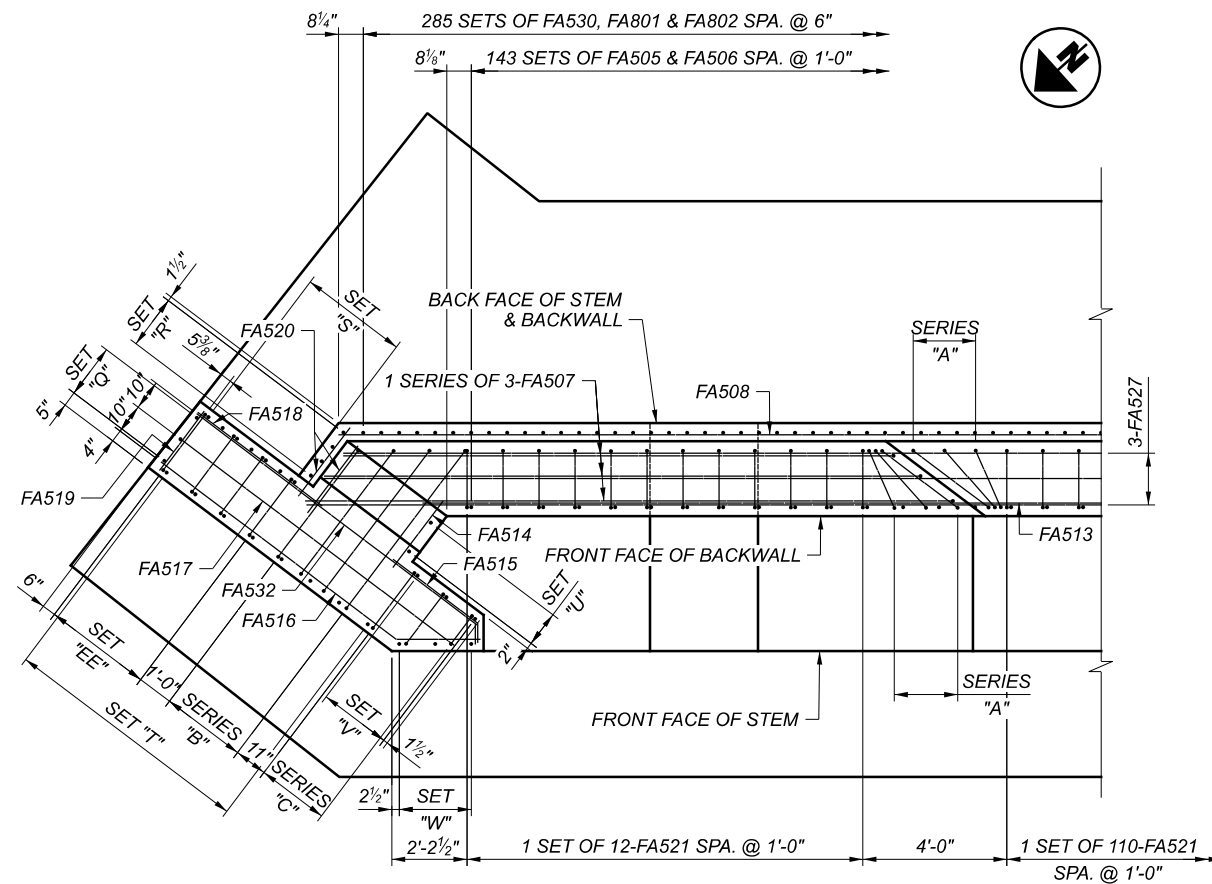
TYPICAL ABUTMENT SECTION

FORWARD ABUTMENT DETAILS (1 OF 2)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER/CHECKER	
TAG	AHS
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
26	72
SHEET	TOTAL
1846	2339



LEFT SIDE STEM REINFORCEMENT DETAIL
 PILES NOT SHOWN FOR CLARITY



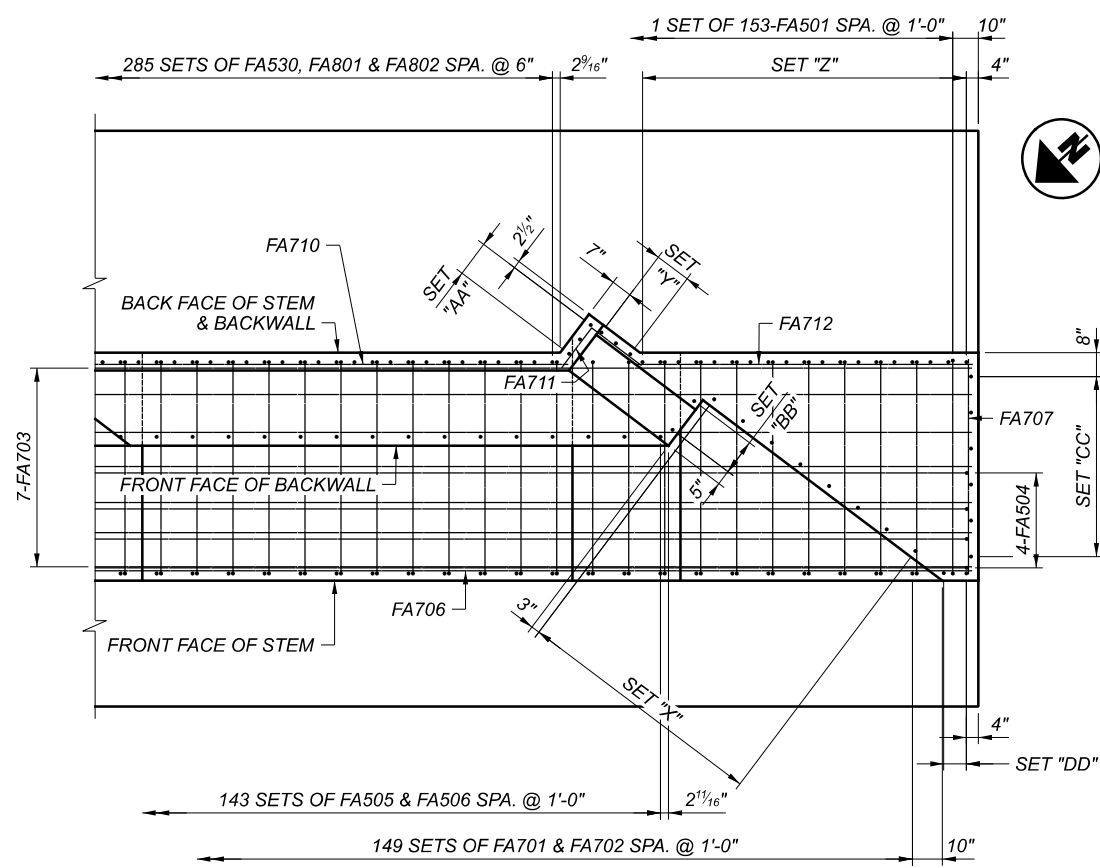
LEFT SIDE BACKWALL REINFORCEMENT DETAIL
 PILES NOT SHOWN FOR CLARITY

- STEM & BACKWALL REINFORCEMENT SETS:**
- SET "Q" = 3 SETS OF FA530, FA701 & FA713 SPA. @ 9"
 - SET "R" = 4 SETS OF FA530, FA801 & FA802 SPA. @ 6"
 - SET "S" = 7 SETS OF FA530, FA801 & FA802 SPA. @ 6"
 - SET "T" = 8 SETS OF FA530, FA701 & FA713 SPA. @ 1'-0"
 - SET "U" = 2 SETS OF FA505 & FA506 SPA. @ 1'-0"
 - SET "V" = 3 SETS OF FA505 & FA506 SPA. @ 1'-0"
 - SET "W" = 3 SETS OF FA530, FA701 & FA713 SPA. @ 1'-0"
 - SET "X" = 8 SETS OF FA505 & FA506 SPA. @ 1'-0"
 - SET "Y" = 3 SETS OF FA530, FA801 & FA802 SPA. @ 6"
 - SET "Z" = 19 SETS OF FA530, FA801 & FA802 SPA. @ 6"
 - SET "AA" = 3 SETS OF FA530, FA801 & FA802 SPA. @ 6"
 - SET "BB" = 2 SETS OF FA505 & FA506 SPA. @ 1'-0"
 - SET "CC" = 6 SETS OF FA530, FA701 & FA713 SPA. @ 1'-0"
 - SET "DD" = 2 SETS OF FA530, FA701 & FA713 SPA. @ 6"

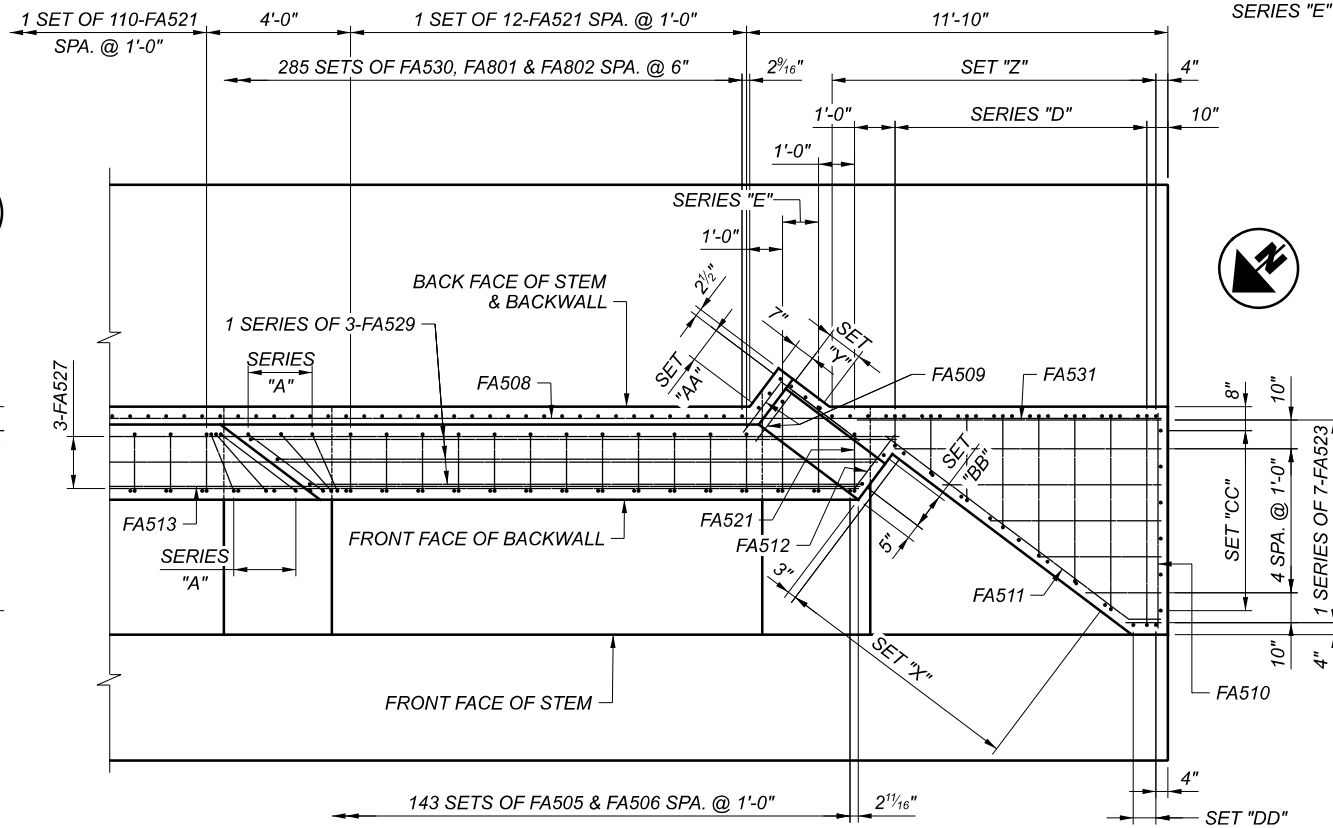
- TOP OF BACKWALL REINFORCEMENT SETS:**
- SET "EE" = 1 SET OF 4-FA524 SPA. @ 1'-0"

- TOP OF BACKWALL REINFORCEMENT SERIES:**
- SERIES "A" = 1 SERIES OF 3-FA522 (FANNED) (4 SERIES TOTAL)

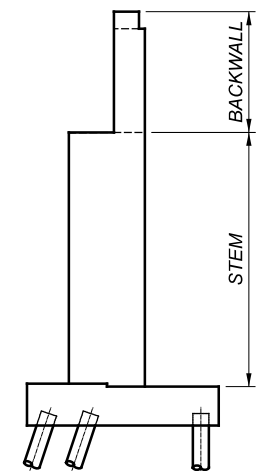
- SERIES "B" = 1 SERIES OF 4-FA525 SPA. @ 9 1/2"
- SERIES "C" = 1 SERIES OF 3-FA526 SPA. @ 1'-0"
- SERIES "D" = 1 SERIES OF 8-FA527 SPA. @ 1'-0"
- SERIES "E" = 1 SERIES OF 2-FA528 SPA. @ 1'-0"



RIGHT SIDE STEM REINFORCEMENT DETAIL
 PILES NOT SHOWN FOR CLARITY

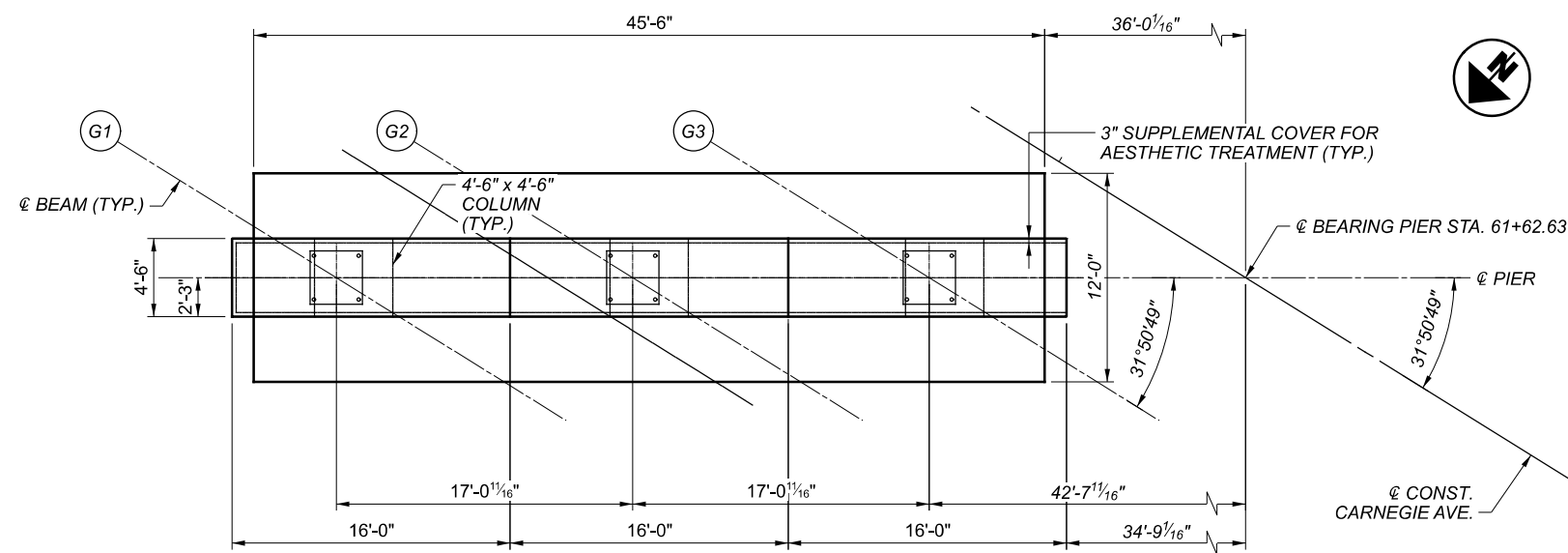


RIGHT SIDE BACKWALL REINFORCEMENT DETAIL
 PILES NOT SHOWN FOR CLARITY

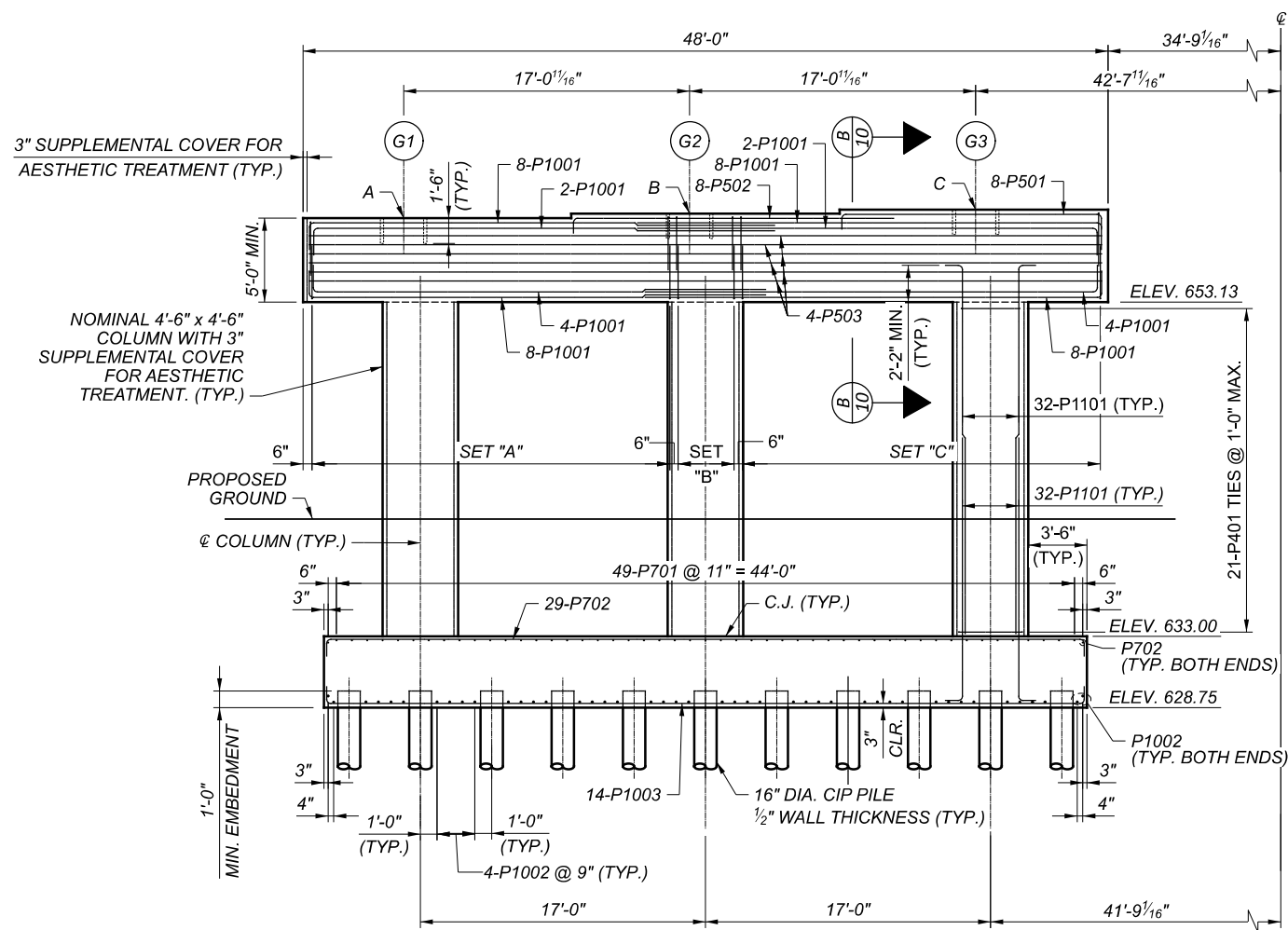


KEY

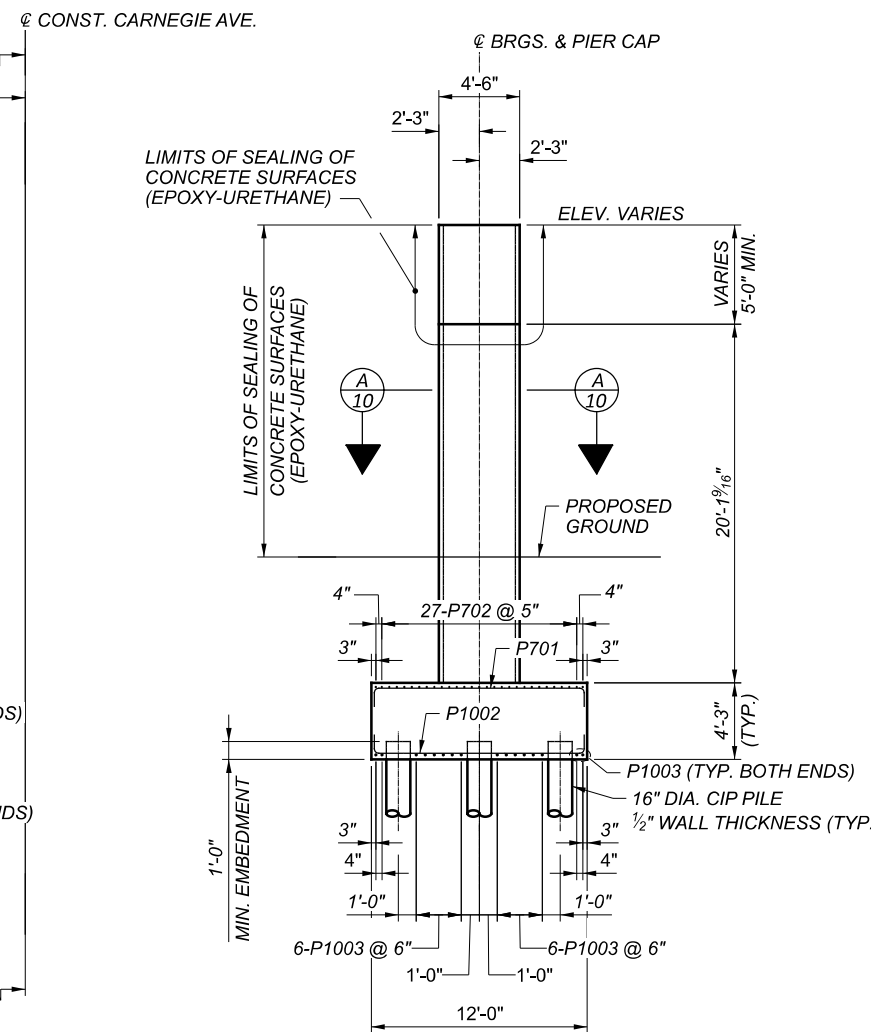
SFN	1807898
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER/CHECKER	TAG AHS
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	TOTAL
27	72
SHEET	TOTAL
1847	2339



PIER LEFT PLAN
PILES NOT SHOWN FOR CLARITY



PIER LEFT ELEVATION



PIER END ELEVATION
COL. & CAP REINFORCEMENT NOT SHOWN FOR CLARITY

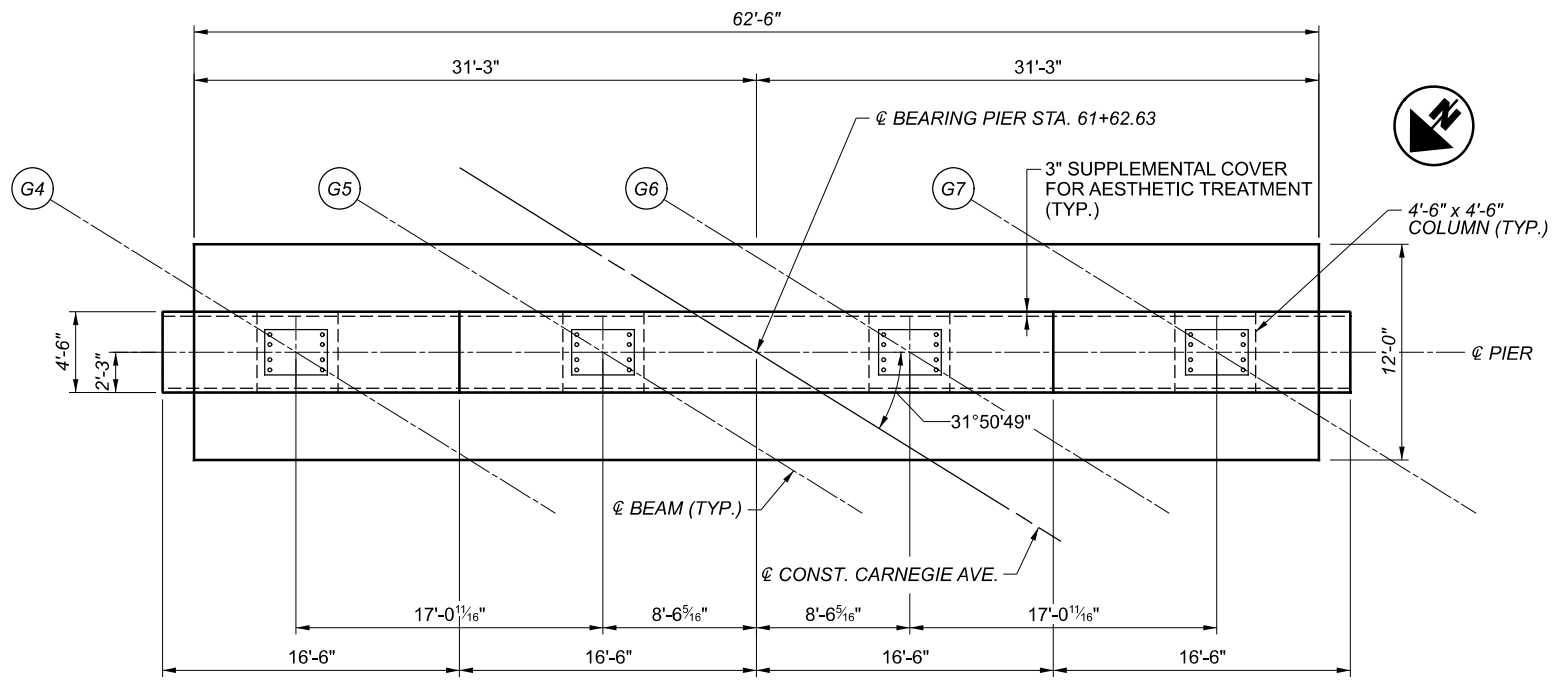
PIER CAP SHEAR STIRRUP SETS:
 SET "A" = 33 SETS OF 4-P504 SPA. @ 8"
 SET "B" = 7 SETS OF 4-P504 SPA. @ 8"
 SET "C" = 33 SETS OF 4-P504 SPA. @ 8"

MIN. SPLICE LENGTHS

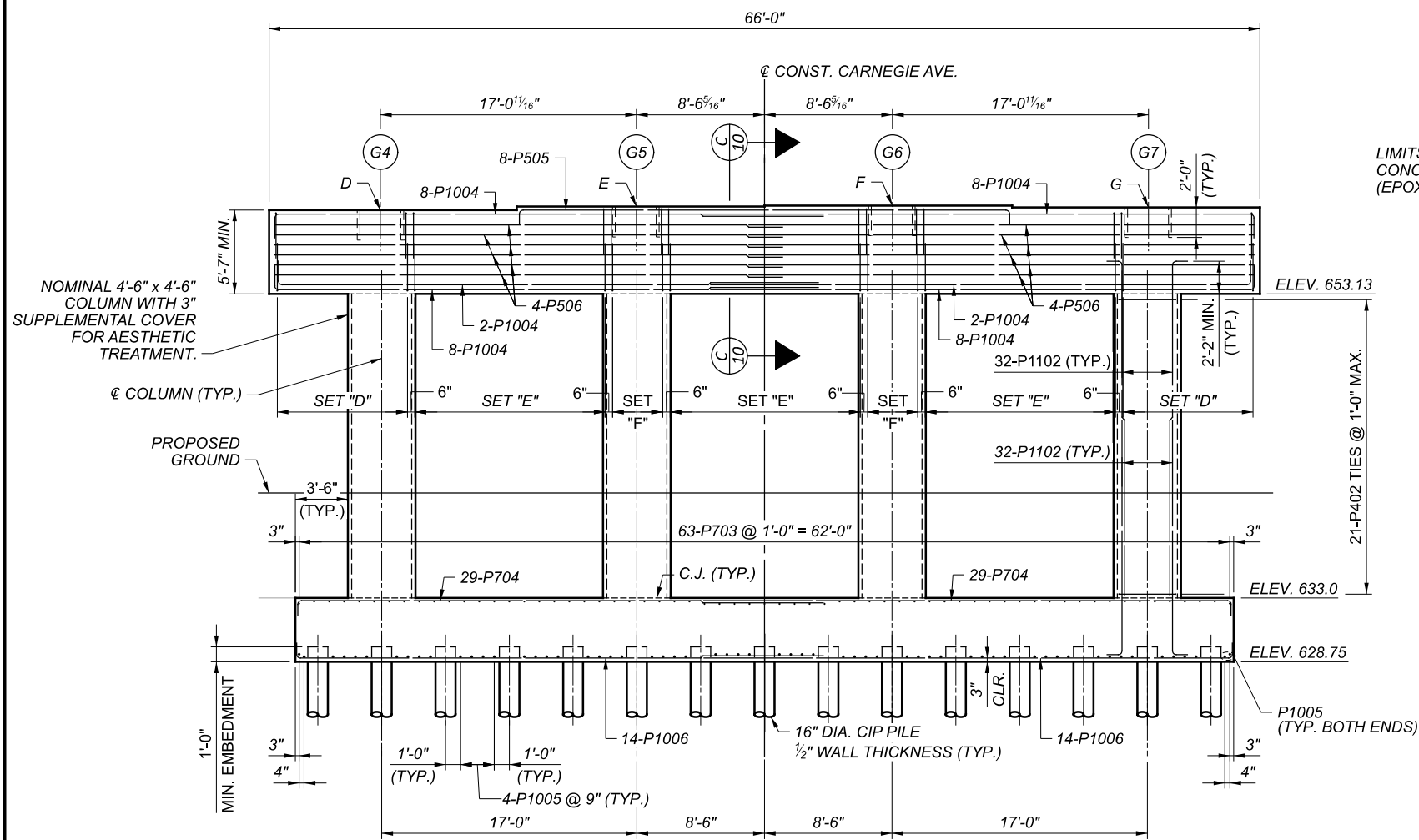
BAR	LENGTH
5	2'-5"
10	7'-2"
11	11'-8"

PIER - LEFT	
POINT	ELEVATION
A	658.13
B	658.24
C	658.47

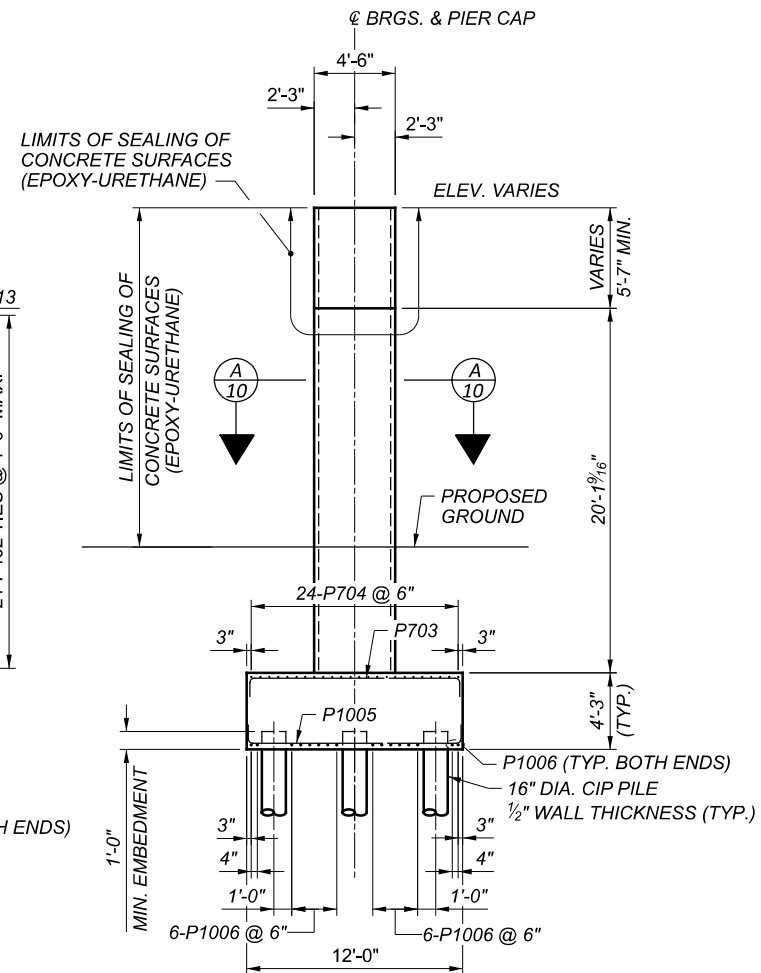
- NOTES:**
- INTERIM PROPOSED GROUND SHOWN. PROPOSED GROUND TO BE LOWERED AND TYPE C1 SINGLE SLOPE BARRIER TO BE ADDED AROUND PIER IN FUTURE I-90.



PIER CENTER PLAN
 PILES NOT SHOWN FOR CLARITY



PIER CENTER ELEVATION



PIER END ELEVATION
 COL. & CAP REINFORCEMENT NOT SHOWN FOR CLARITY

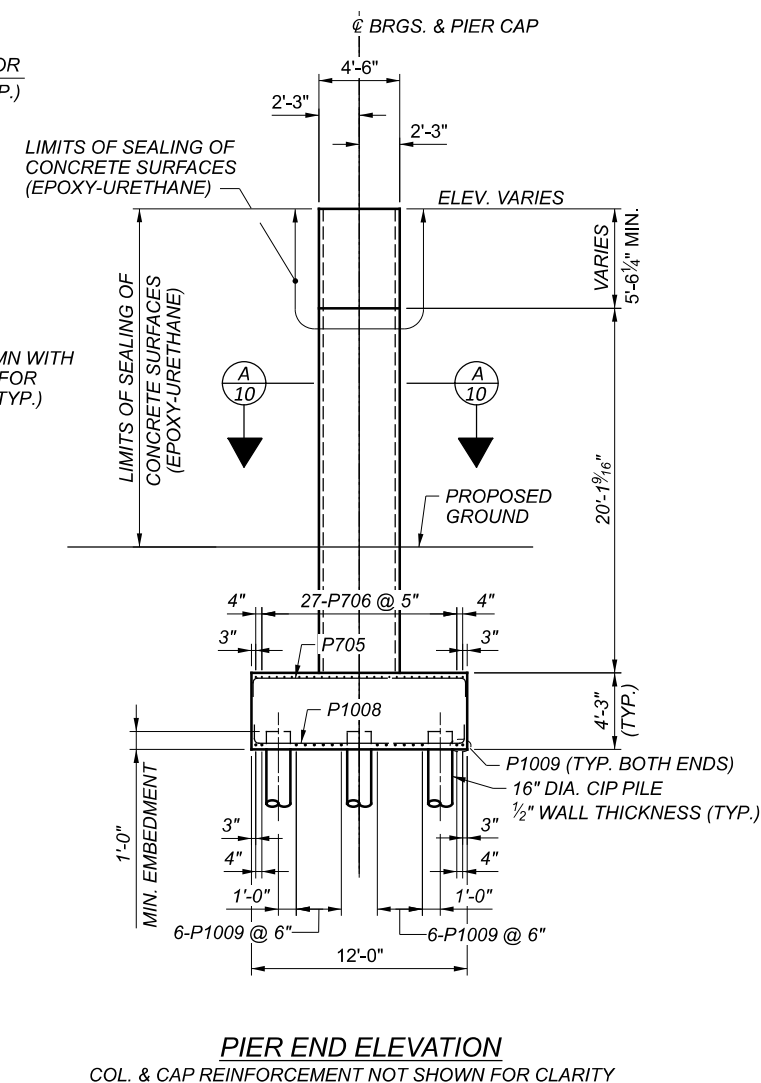
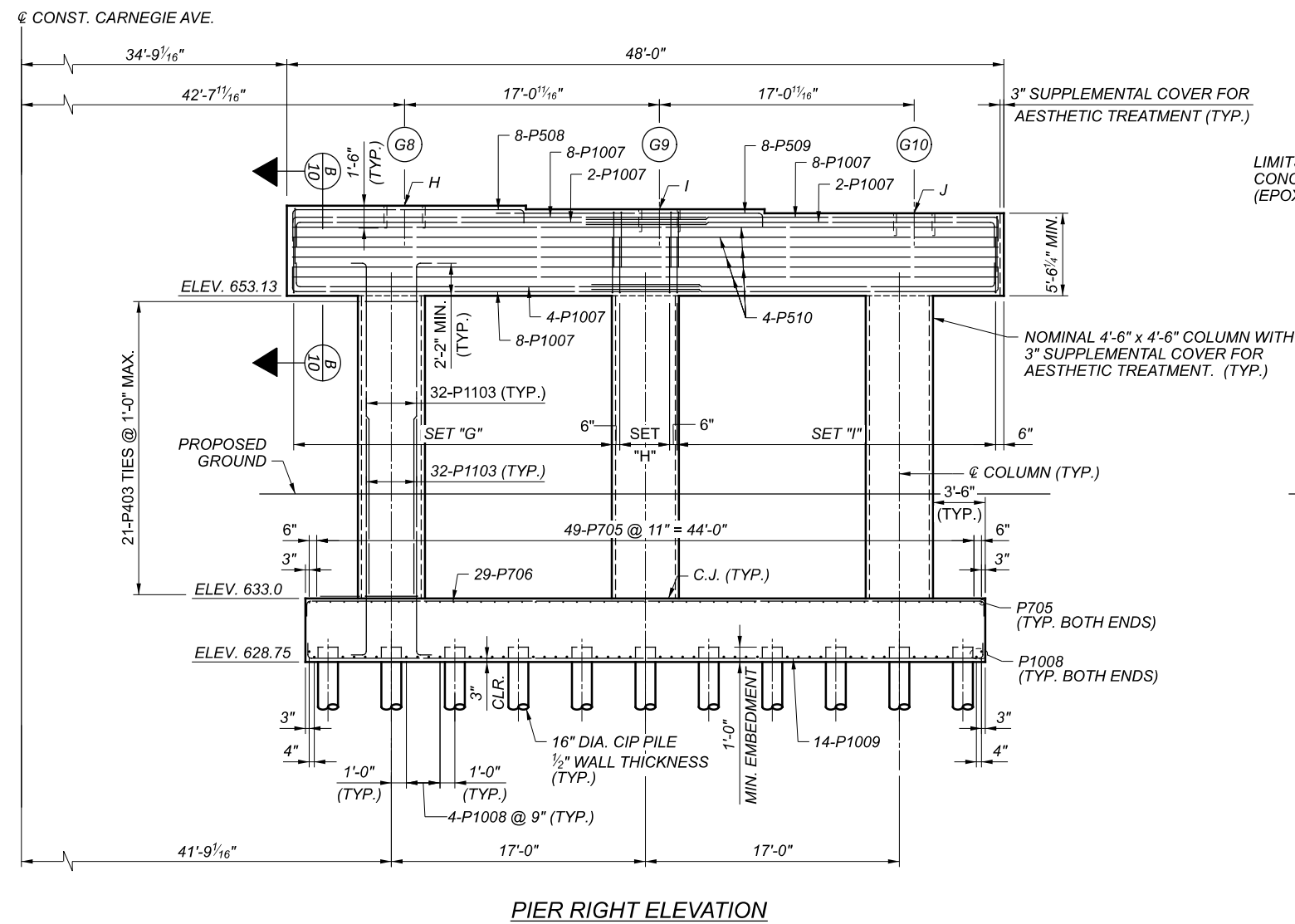
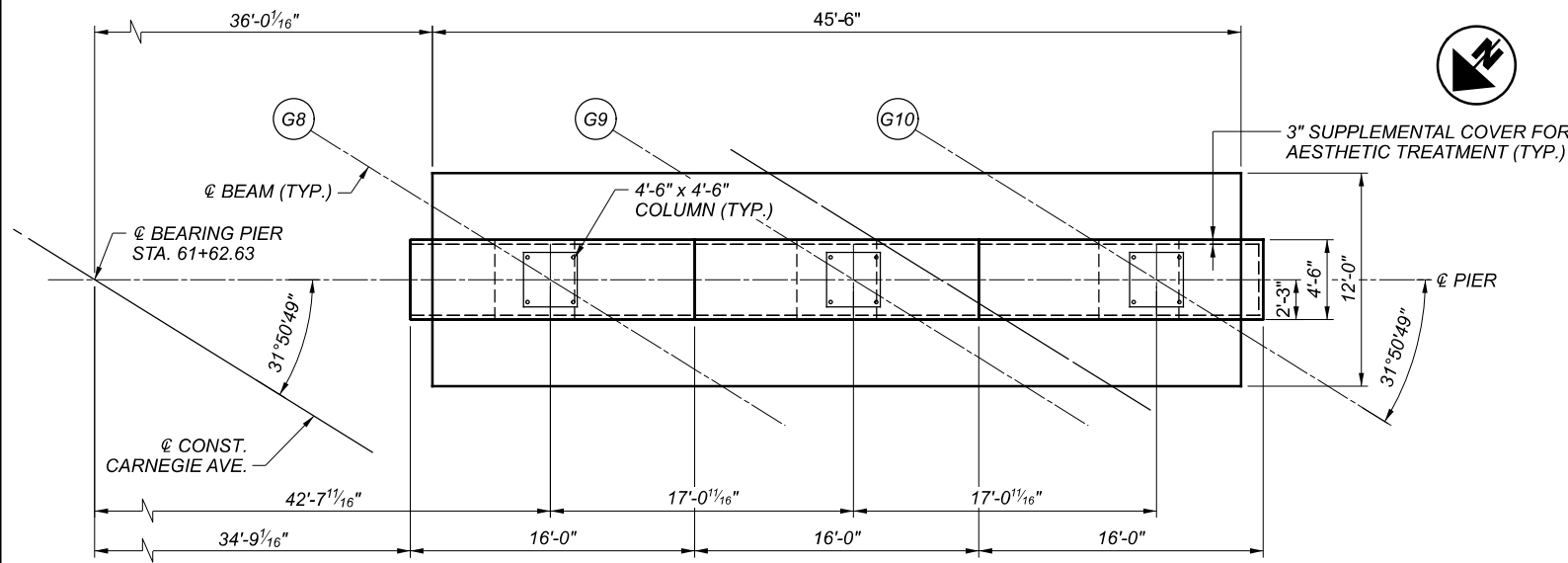
PIER CAP SHEAR STIRRUP SETS:
 SET "D" = 14 SETS OF 4-P507 SPA. @ 8"
 SET "E" = 20 SETS OF 4-P507 SPA. @ 8"
 SET "F" = 6 SETS OF 4-P507 SPA. @ 8"

MIN. SPLICE LENGTHS

BAR	LENGTH
5	2'-5"
7	4'-8"
10	7'-2"
11	11'-8"

PIER - CENTER	
POINT	ELEVATION
D	658.71
E	658.95
F	659.01
G	658.89

- NOTES:**
- INTERIM PROPOSED GROUND SHOWN. PROPOSED GROUND TO BE LOWERED AND TYPE C1 SINGLE SLOPE BARRIER TO BE ADDED AROUND PIER IN FUTURE I-90.



PIER CAP SHEAR STIRRUP SETS:
 SET "G" = 33 SETS OF 4-P511 SPA. @ 8"
 SET "H" = 7 SETS OF 4-P511 SPA. @ 8"
 SET "I" = 33 SETS OF 4-P511 SPA. @ 8"

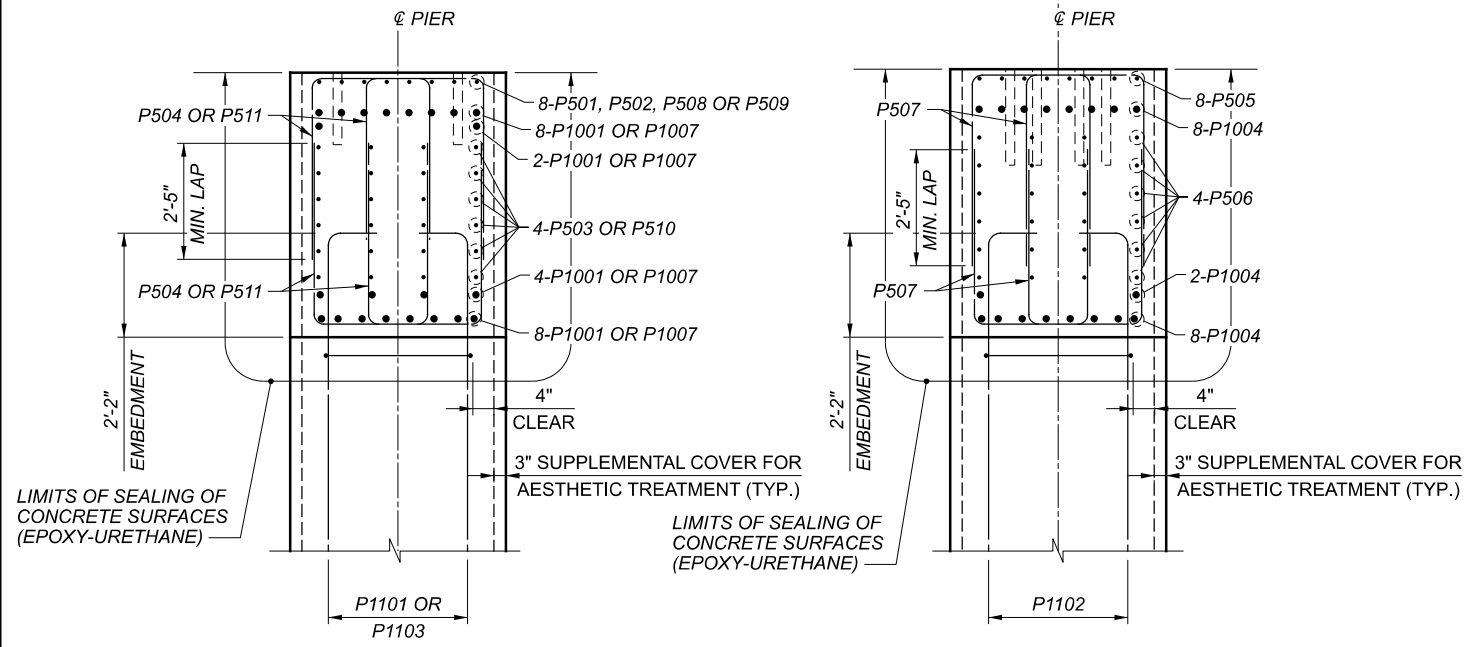
MIN. SPLICE LENGTHS

BAR	LENGTH
5	2'-5"
10	7'-2"
11	11'-8"

PIER - RIGHT	
POINT	ELEVATION
H	658.76
I	658.64
J	658.65

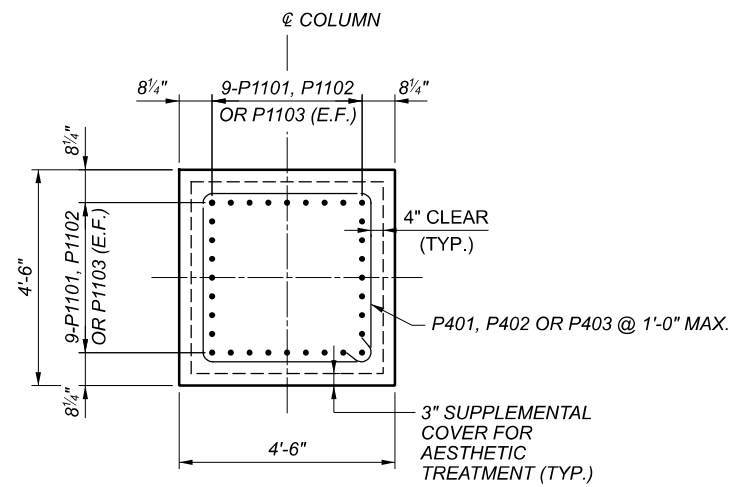
NOTES:

- INTERIM PROPOSED GROUND SHOWN. PROPOSED GROUND TO BE LOWERED AND TYPE C1 SINGLE SLOPE BARRIER TO BE ADDED AROUND PIER IN FUTURE I-90.



SECTION B-B

SECTION C-C



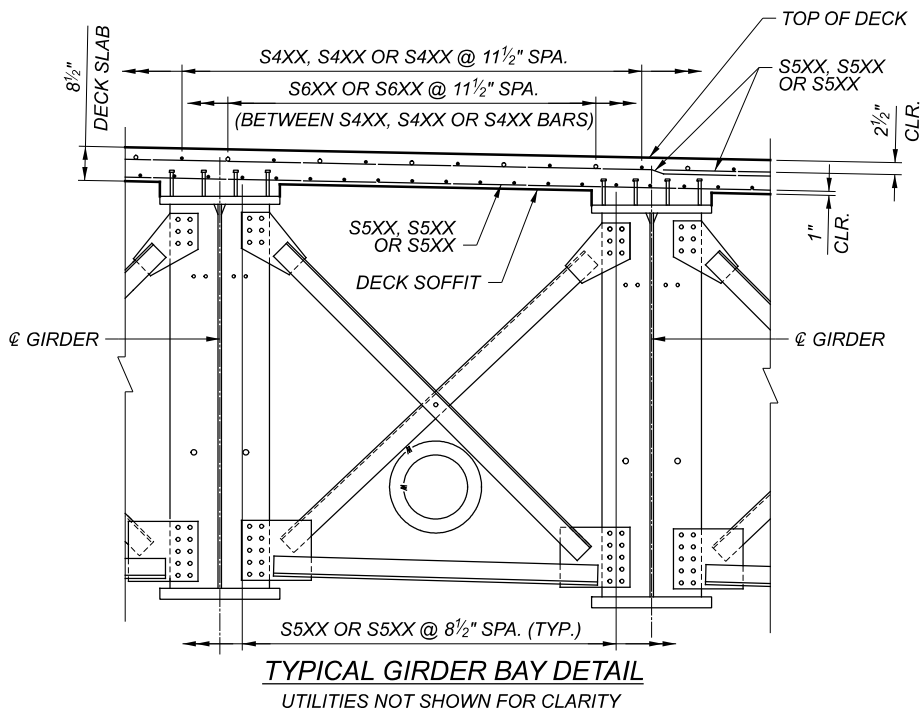
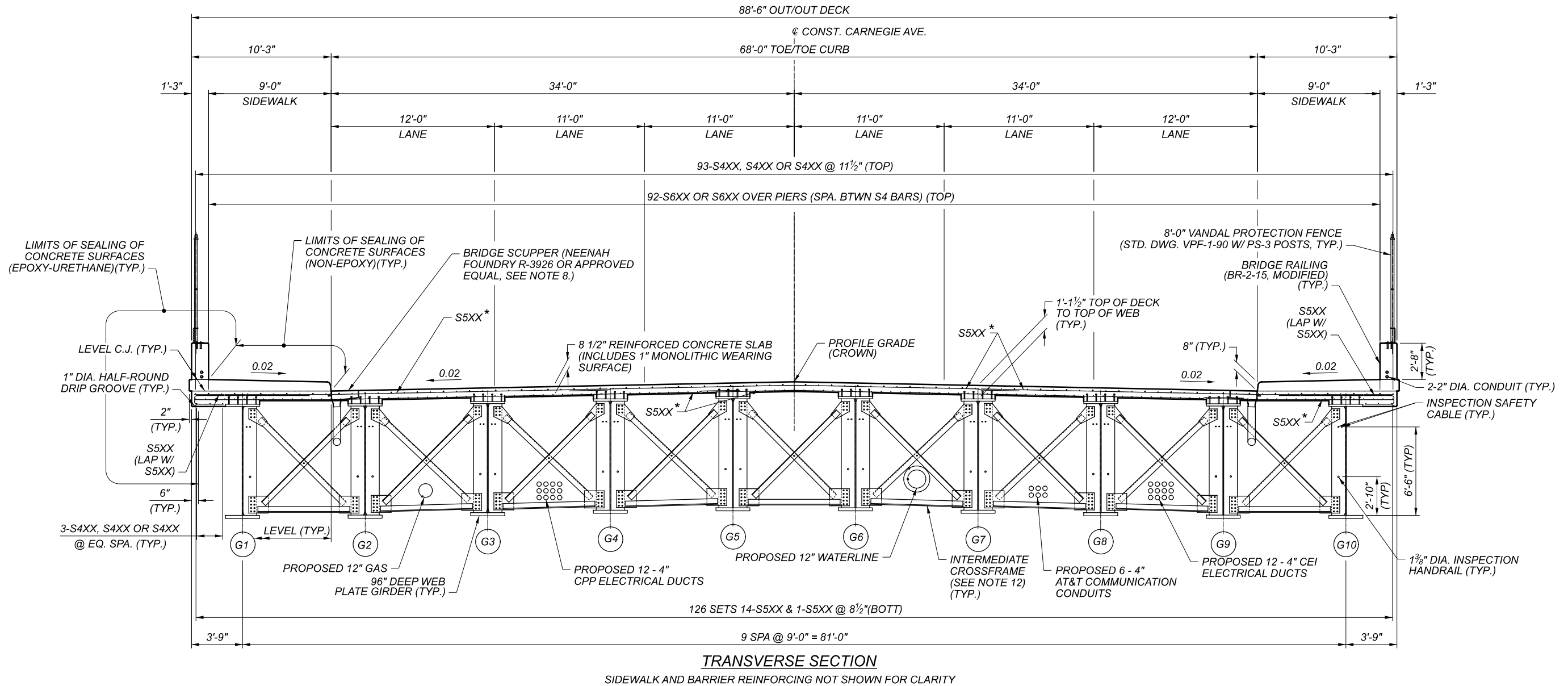
SECTION A-A

NOTES:

1. ACCURATELY PLACE REINFORCING STEEL IN THE VICINITY OF THE BRIDGE SEAT TO AVOID INTERFERENCE WITH THE DRILLING OF BEARING ANCHOR HOLES OR PRESETTING OF BEARING ANCHORS.
2. SEE SHEETS ##### FOR ADDITIONAL BEARING, AND ANCHOR ROD INFORMATION.
3. PROVIDE 2" CONCRETE COVER ON REINFORCEMENT BARS UNLESS NOTED OTHERWISE.

PIER SECTIONS
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN		1807898
DESIGN AGENCY		
Michael Baker INTERNATIONAL		
DESIGNER	CHECKER	
AHS	TAG	
REVIEWER		
LPC 06-23-22		
PROJECT ID		
82382		
SUBSET	TOTAL	
31	72	
SHEET		
TOTAL		
1851	2339	



LAP LENGTHS:

NO. 5 BARS = 3'-0"

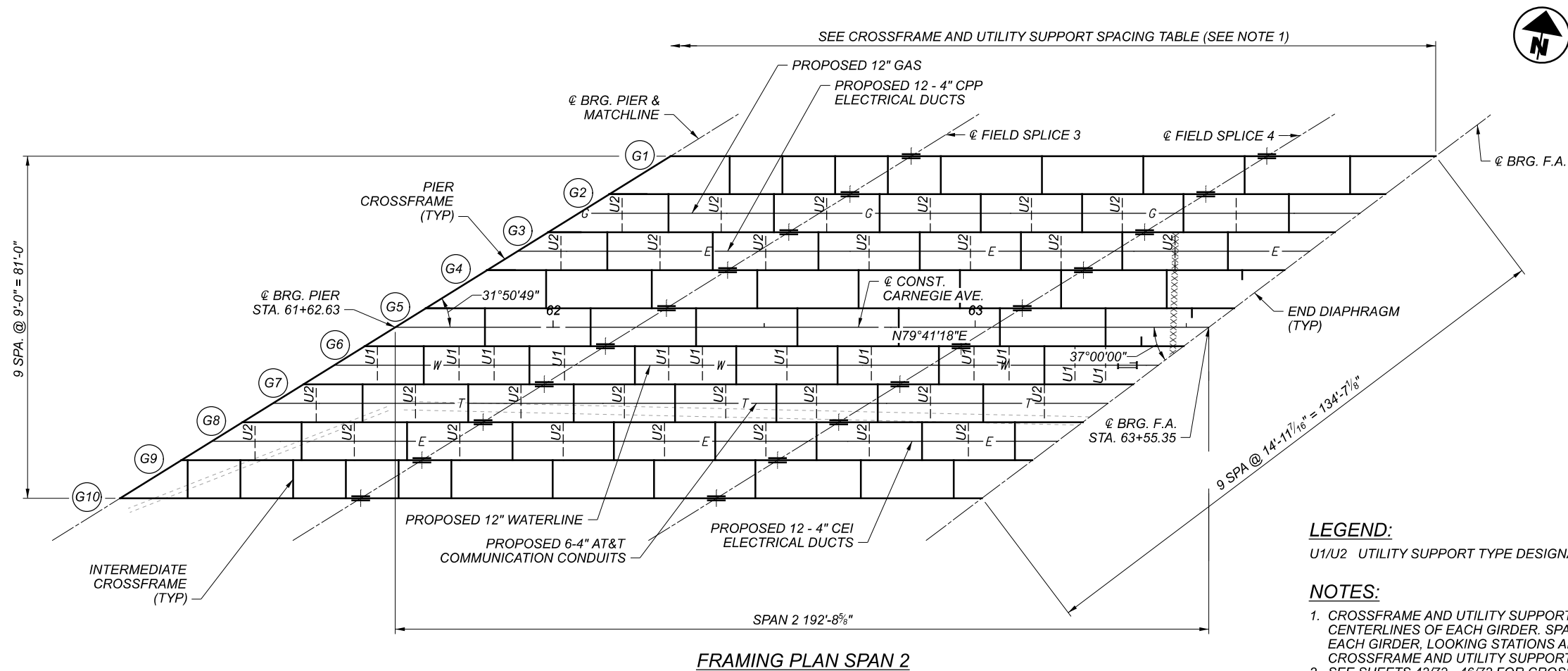
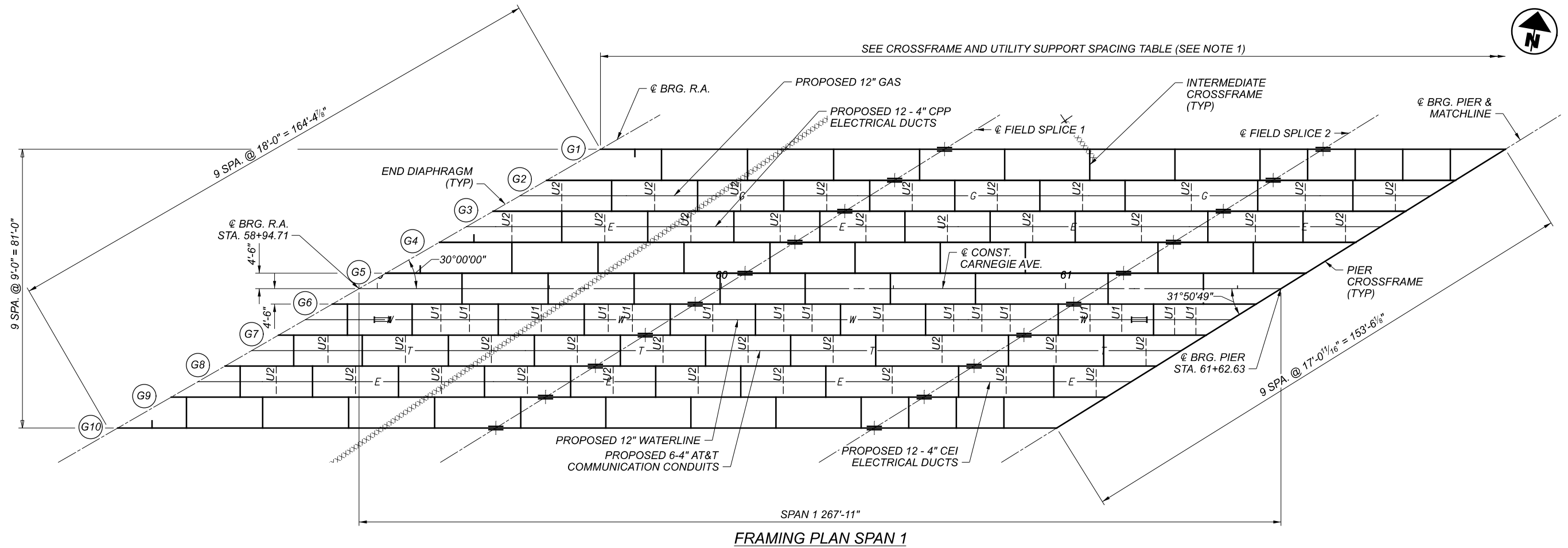
LEGEND:

* ALTERNATE LOCATIONS OF S5XX IN TOP & BOTTOM MATS

NOTES:

1. FOR DECK PLANS, SEE SHEETS 49/72 - 50/72.
2. FOR RAILING DETAILS, SEE SHEETS 59/72 - 60/72.
3. FOR FENCE DETAILS, SEE SHEET 61/72.
4. FOR FRAMING PLANS, SEE SHEETS 33/72 - 34/72.
5. REINFORCING MAY BE FIELD-BENT OR SHOP-BENT TO CONFORM TO DECK CROSS SLOPES. PAYMENT SHALL BE INCLUDED WITH ITEM 509, EPOXY COATED REINFORCING STEEL.
6. FOR GIRDER CAMBER DEFLECTION TABLES, SEE SHEETS 39/72 - 42/72.
7. FOR SIDEWALK DETAILS, SEE SHEETS 51/72 - 52/72.
8. FOR SCUPPER AND DOWNSPOUTING DETAILS, SEE SHEET 65/72.
9. ADJUST DECK REINFORCING TO CLEAR DECK SCUPPERS AND SHEAR STUDS. MAINTAIN A MINIMUM OF 2" CLEAR TO DECK OBSTRUCTIONS.
10. HAUNCH THICKNESSES ARE MEASURED AT THE GIRDER CENTERLINES, FROM THE DECK SOFFIT TO TOP OF GIRDER WEB (THICKNESS INCLUDES THE VARIABLE TOP FLANGE THICKNESSES).
11. FOR ADDITIONAL DECK PLACEMENT NOTES, SEE GENERAL NOTES AND DECK PLANS.
12. INTERMEDIATE CROSSFRAME MEMBERS VARY BY GIRDER BAY. SEE CROSSFRAME AND UTILITY SUPPORT DETAILS ON SHEETS 43/72 - 46/72.
13. DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 5 INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.
14. THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE 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.

SFN	1807898
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER	CHECKER
ABC	BWC
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
32	72
SHEET	TOTAL
1852	2339



LEGEND:

U1/U2 UTILITY SUPPORT TYPE DESIGNATION

NOTES:

- CROSSFRAME AND UTILITY SUPPORT SPACINGS GIVEN ALONG THE CENTERLINES OF EACH GIRDER. SPACINGS GIVEN ON THE RIGHT SIDE OF EACH GIRDER, LOOKING STATIONS AHEAD. SEE SHEET 34/72 FOR CROSSFRAME AND UTILITY SUPPORT SPACING TABLE.
- SEE SHEETS 43/72 - 46/72 FOR CROSSFRAME AND UTILITY SUPPORT DETAILS.

INTERMEDIATE CROSSFRAME AND UTILITY SUPPORT LOCATIONS

GIRDER NO.	LOCATIONS, SPACINGS, AND TYPES																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
G1	0'-0"	17'-8 13/16"	25'-0"	25'-0"	25'-0"	24'-8 3/4"	24'-8 3/4"	24'-8 3/4"	24'-8 3/4"	13'-10"	13'-10"	13'-10"	13'-10"	15'-11 7/8"	14'-0"	12'-6"	12'-6"	12'-6"	12'-6"	24'-0"	24'-0"	24'-0"	25'-0"	20'-3 3/16"	---
	CL BRG.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	PIER DIA.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	CL BRG.	---
G2	0'-0"	4'-4 1/8"	14'-5 7/8"	12'-6"	12'-6"	12'-6"	12'-6"	12'-6"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	19'-3 3/8"	19'-3 3/8"	13'-10"	13'-10"	17'-5 7/8"	3'-0"	11'-0"	12'-6"	12'-6"	
	CL BRG.	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	PIER DIA.	U2	XFRAME	U2	XFRAME
G3	0'-0"	5'-5 5/16"	14'-5 7/8"	12'-6"	12'-6"	12'-6"	12'-6"	13'-5 15/16"	11'-6 1/16"	13'-4 5/16"	11'-4 7/16"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	19'-3 3/8"	19'-3 3/8"	13'-10"	13'-10"	12'-4"	17'-5 7/8"	3'-0"	11'-0"	12'-6"	12'-6"
	CL BRG.	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	PIER DIA.	U2	XFRAME	U2	XFRAME
G4	0'-0"	21'-0 3/8"	25'-0"	25'-0"	25'-0"	24'-8 3/4"	24'-8 3/4"	24'-8 3/4"	38'-6 3/4"	27'-8"	29'-9 7/8"	14'-0"	25'-0"	25'-0"	24'-0"	24'-0"	24'-0"	25'-0"	27'-10"	---	---	---	---	---	---
	CL BRG.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	PIER DIA.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	CL BRG.	---	---	---	---	---
G5	0'-0"	22'-19/16"	25'-0"	25'-0"	25'-0"	24'-8 3/4"	24'-8 3/4"	24'-8 3/4"	38'-6 3/4"	27'-8"	29'-9 7/8"	14'-0"	25'-0"	25'-0"	24'-0"	24'-0"	24'-0"	25'-0"	30'-5 3/8"	---	---	---	---	---	---
	CL BRG.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	PIER DIA.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	CL BRG.	---	---	---	---	---
G6	0'-0"	4'-5"	18'-9 3/4"	8'-4"	8'-4"	8'-4"	12'-6"	12'-6"	7'-0"	7'-0"	11'-0"	12'-4 3/8"	12'-4 3/8"	8'-2 15/16"	8'-2 15/16"	8'-2 15/16"	12'-4 3/8"	12'-4 3/8"	8'-2 1/4"	8'-2 1/4"	8'-2 1/4"	14'-0"	9'-2 11/16"	9'-2 11/16"	9'-2 11/16"
	CL BRG.	XFRAME	XFRAME	U1	U1	XFRAME	U1	XFRAME	U1	XFRAME	U1	XFRAME	U1	U1	XFRAME	U1	XFRAME	U1	XFRAME	U1	U1	XFRAME	U1	U1	XFRAME
G7	0'-0"	4'-4 15/16"	9'-11 1/2"	9'-11 1/2"	12'-6"	12'-6"	12'-6"	12'-6"	12'-6"	12'-6"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	19'-3 3/8"	19'-3 3/8"	13'-10"	13'-10"	12'-4"	17'-5 7/8"	3'-0"	11'-0"	12'-6"
	CL BRG.	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	PIER DIA.	U2	XFRAME	U2
G8	0'-0"	4'-4 15/16"	10'-6 1/8"	10'-6 1/8"	12'-6"	12'-6"	12'-6"	12'-6"	12'-6"	12'-6"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	12'-4 3/8"	19'-3 3/8"	19'-3 3/8"	13'-10"	13'-10"	12'-4"	17'-5 7/8"	3'-0"	11'-0"	12'-6"
	CL BRG.	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	PIER DIA.	U2	XFRAME	U2
G9	0'-0"	4'-4 15/16"	22'-17/16"	25'-0"	25'-0"	25'-0"	24'-8 3/4"	24'-8 3/4"	24'-8 3/4"	24'-8 3/4"	13'-10"	13'-10"	13'-10"	29'-9 7/8"	1'-6"	12'-6"	12'-6"	12'-6"	12'-6"	24'-0"	24'-0"	24'-0"	25'-0"	22'-0"	
	CL BRG.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	PIER DIA.	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	XFRAME	

INTERMEDIATE CROSSFRAME AND UTILITY SUPPORT LOCATIONS

GIRDER NO.	LOCATIONS, SPACINGS, AND TYPES																									
	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	
G1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
G2	12'-6"	12'-6"	12'-0"	12'-0"	12'-0"	12'-0"	9'-6 1/8"	14'-5 7/8"	12'-6"	12'-6"	22'-9 3/4"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	CL BRG.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
G3	12'-6"	12'-6"	12'-0"	12'-0"	12'-0"	12'-0"	9'-6 1/8"	14'-5 7/8"	12'-6"	12'-6"	25'-4 5/16"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	CL BRG.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
G4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
G5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
G6	6'-2"	6'-2"	17'-5 7/8"	3'-0"	11'-0"	8'-4"	8'-4"	8'-4"	8'-4"	16'-8"	8'-0"	8'-0"	8'-0"	12'-0"	12'-0"	8'-0"	16'-0"	8'-4"	8'-4"	8'-4"	7'-2 15/16"	7'-2 15/16"	18'-6 1/16"	---	---	
	U1	U1	PIER DIA.	U1	XFRAME	U1	U1	XFRAME	U1	XFRAME	U1	U1	XFRAME	U1	XFRAME	U1	XFRAME	U1	U1	XFRAME	U1	U1	CL BRG.	---	---	
G7	12'-6"	12'-6"	12'-6"	12'-0"	12'-0"	12'-0"	12'-0"	9'-6 1/8"	14'-5 7/8"	12'-6"	12'-6"	14'-5 7/8"	21'-0 5/8"	---	---	---	---	---	---	---	---	---	---	---	---	
	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	CL BRG.	---	---	---	---	---	---	---	---	---	---	---	---	
G8	12'-6"	12'-6"	12'-6"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	11'-0"	16'-1"	---	---	---	---	---	---	---	---	---	---	---	---	
	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	U2	XFRAME	CL BRG.	---	---	---	---	---	---	---	---	---	---	---	
G9	18'-7 9/16"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	CL BRG.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

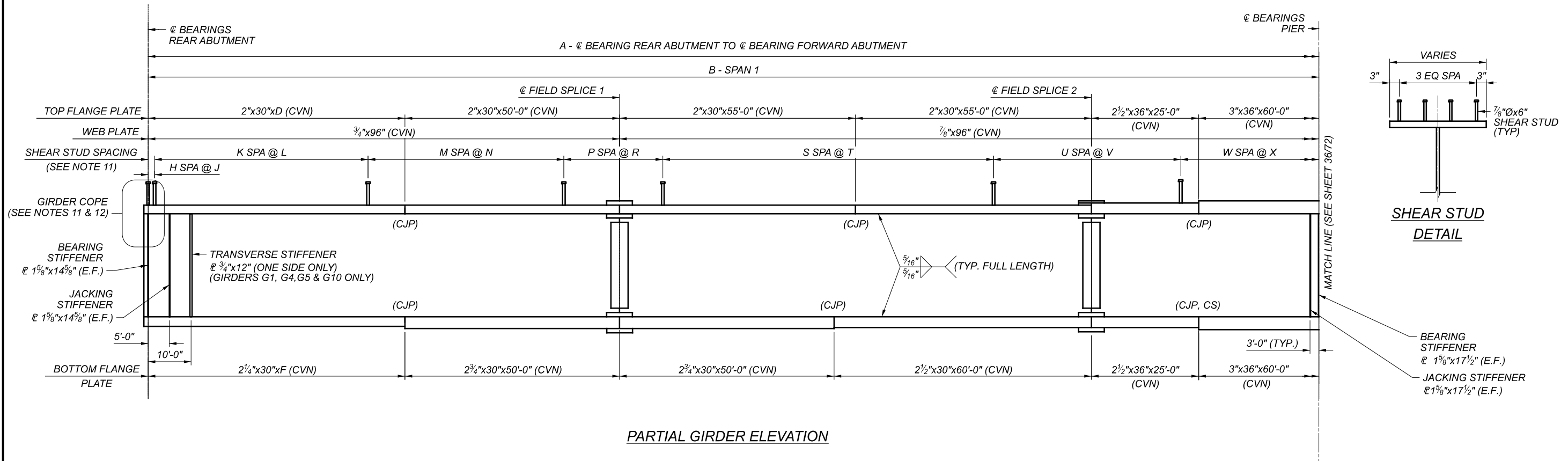
LEGEND:

- CL BRG. CENTERLINE OF ABUTMENT BEARINGS
- XFRAME INTERMEDIATE CROSSFRAME
- PIER DIA. PIER DIAPHRAGM
- U1 UTILITY SUPPORT TYPE 1
- U2 UTILITY SUPPORT TYPE 2

NOTES:

1. CROSSFRAME AND UTILITY SUPPORT SPACINGS GIVEN ALONG THE CENTERLINES OF EACH GIRDER. SPACINGS GIVEN ON THE RIGHT SIDE OF EACH GIRDER, LOOKING STATIONS AHEAD.
2. PROVIDE END DIAPHRAGMS ALONG EACH ABUTMENT CENTERLINE OF BEARING. SPACINGS GIVEN IN TABLES ARE GIVEN TO CENTERLINES OF ABUTMENT BEARINGS. SEE SHEET 43/72 FOR RELATION BETWEEN LOCATIONS OF END DIAPHRAGM CONNECTION PLATES AND ABUTMENT CENTERLINES OF BEARING.
3. SEE SHEET 33/72 FOR FRAMING PLAN.
4. SEE SHEETS 43/72 - 46/72 FOR CROSSFRAME AND UTILITY SUPPORT DETAILS.

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	MEM
PROJECT ID	LPC 06-23-22
SUBSET	82382
TOTAL	
SHEET	34
TOTAL	72
	1854
	2339



PARTIAL GIRDER ELEVATION

WELDED STEEL PLATE GIRDER DESIGN DATA

GIRDER	A	B	C	D	E	F	G
G1	444'-2 7/8"	262'-11 11/16"	181'-3 3/16"	49'-11 11/16"	40'-0"	49'-11 11/16"	40'-0"
G2	447'-10 5/8"	264'-0 7/8"	183'-9 3/4"	51'-0 7/8"	42'-6 9/16"	51'-0 7/8"	42'-6 9/16"
G3	451'-6 5/16"	265'-2"	186'-4 5/16"	52'-2 1/16"	45'-1 1/8"	52'-2 1/16"	45'-1 1/8"
G4	455'-2 1/16"	266'-3 1/4"	188'-10 13/16"	53'-3 1/4"	47'-7 5/8"	53'-3 1/4"	47'-7 5/8"
G5	458'-9 13/16"	267'-4 7/16"	191'-5 3/8"	54'-4 7/16"	50'-2 3/16"	54'-4 7/16"	50'-2 3/16"
G6	462'-5 9/16"	268'-5 5/8"	193'-11 15/16"	55'-5 5/8"	52'-8 3/4"	55'-5 5/8"	52'-8 3/4"
G7	466'-15/16"	269'-6 13/16"	196'-6 1/2"	56'-6 13/16"	55'-3 5/16"	56'-6 13/16"	55'-3 5/16"
G8	469'-9 1/16"	270'-8"	199'-1 1/16"	57'-8"	57'-9 13/16"	57'-8"	57'-9 13/16"
G9	473'-4 13/16"	271'-9 3/16"	201'-7 9/16"	58'-9 3/16"	60'-4 3/8"	58'-9 3/16"	60'-4 3/8"
G10	477'-0 1/2"	272'-10 3/8"	204'-2 1/8"	59'-10 7/16"	62'-10 15/16"	59'-10 7/16"	62'-10 15/16"

WELDED SHEAR STUD LAYOUT DATA

GIRDER	H	J	K	L	M	N	P	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH
G1	1	1'-2 1/4"	31	1'-3"	26	2'-0"	14	2'-11"	31	1'-8"	28	1'-5"	56	1'-10"	24	1'-6"	18	2'-0"	18	2'-0"	7	1'-3"	1	8 5/8"
G2	1	1'-2"	31	1'-3"	26	2'-0"	14	2'-11"	31	1'-8"	28	1'-5"	57	1'-10"	24	1'-6"	19	2'-0"	19	2'-0"	5	1'-3"	1	1'-0 5/8"
G3	1	1'-2"	31	1'-3"	26	2'-0"	14	2'-11"	32	1'-8"	28	1'-5"	57	1'-10"	25	1'-6"	19	2'-0"	18	2'-0"	7	1'-3"	1	1'-0 5/16"
G4	1	1'-8"	18	2'-2"	16	3'-4"	12	3'-4"	20	2'-8"	14	2'-8"	27	4'-0"	16	2'-5"	13	2'-8"	12	3'-4"	3	2'-4"	1	2'-2 1/16"
G5	1	1'-8"	18	2'-2"	16	3'-4"	12	3'-4"	20	2'-8"	15	2'-8"	27	4'-0"	15	2'-5"	14	2'-8"	9	3'-4"	8	2'-4"	1	1'-2 13/16"
G6	1	1'-8"	18	2'-2"	16	3'-4"	12	3'-4"	17	2'-8"	18	2'-8"	27	4'-0"	17	2'-5"	14	2'-8"	10	3'-4"	6	2'-4"	1	1'-4 9/16"
G7	1	1'-8"	18	2'-2"	16	3'-4"	13	3'-4"	19	2'-8"	16	2'-8"	27	4'-0"	16	2'-5"	15	2'-8"	12	3'-4"	3	2'-4"	1	1'-9 5/16"
G8	1	1'-2 1/2"	32	1'-3"	27	2'-0"	14	2'-11"	32	1'-8"	29	1'-5"	60	1'-10"	27	1'-6"	20	2'-0"	20	2'-0"	6	1'-3"	1	1'-3 9/16"
G9	1	9 3/16"	32	1'-3"	27	2'-0"	14	2'-11"	33	1'-8"	29	1'-5"	60	1'-10"	27	1'-6"	20	2'-0"	20	2'-0"	8	1'-3"	1	1'-2 5/8"
G10	1	10 3/8"	32	1'-3"	28	2'-0"	14	2'-11"	32	1'-8"	29	1'-5"	62	1'-10"	27	1'-6"	20	2'-0"	20	2'-0"	8	1'-3"	1	9 1/8"

LEGEND:

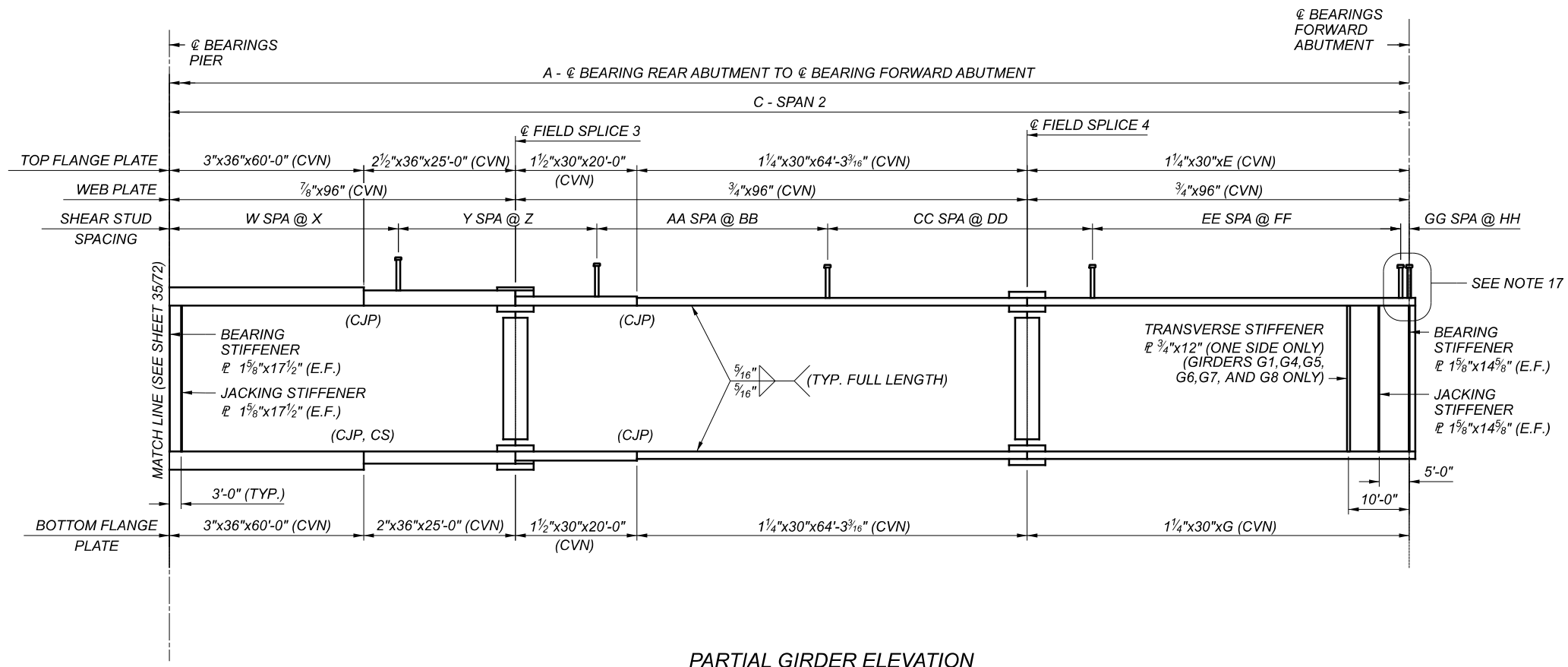
- CJP COMPLETE JOINT PENETRATION WELD (SEE NOTES 13 & 14)
- CS INDICATES A BUTT WELD SUBJECT TO COMPRESSIVE STRESSES ONLY

NOTES:

- SEE SHEET 36/72 FOR SPAN 2 GIRDER ELEVATION.
- ALL GIRDER MATERIAL SHALL CONFORM TO ASTM A709 GRADE 50, UNLESS NOTED OTHERWISE.
- CROSSFRAME CONNECTION PLATES NOT SHOWN FOR CLARITY. SEE FRAMING PLAN FOR CROSSFRAME LOCATIONS.
- GIRDER INSPECTION HARDWARE NOT SHOWN FOR CLARITY. SEE SHEET XX FOR MISCELLANEOUS GIRDER DETAILS.
- WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01. ALL INTERMEDIATE STIFFENERS, JACKING STIFFENERS, BEARING STIFFENERS, AND CONNECTION PLATE MATERIAL SHALL BE DESIGNATED (CVN).
- FOR FRAMING PLANS AND TABLES, SEE SHEETS 33/72 - 34/72.
- FOR DEFLECTION AND CAMBER TABLES, SEE SHEETS 39/72 - 42/72.
- FOR FIELD SPLICE DETAILS, SEE SHEET 38/72.
- FOR CROSSFRAME AND UTILITY SUPPORT DETAILS, SEE SHEETS 43/72 - 46/72.

NOTES (CONT'D):

- DO NOT WELD ATTACHMENTS TO GIRDER FLANGES MARKED "TENSION". FILLET WELDS ON COMPRESSION FLANGES SHALL BE AT LEAST 1 INCH FROM THE EDGE OF THE FLANGE, BE NO MORE THAN 2 INCHES LONG AND BE A MINIMUM OF 1/4 INCH FOR FLANGES UP TO 3/4 INCH THICK AND A MINIMUM OF 3/16 INCH FOR FLANGES GREATER THAN 3/4 INCH THICK.
- ADJUST SPACING OF SHEAR STUDS AROUND GIRDER COPES, EXPANSION JOINT SUPPORT MATERIAL AND FIELD SPLICES AS REQUIRED TO PROVIDE THE REQUIRED NUMBER OF SHEAR STUDS IN THE RANGES INDICATED.
- GIRDERS MUST BE COPE AT REAR ABUTMENT TO ACCOMMODATE THE MODULAR EXPANSION JOINT. SEE SHEETS 62/72 - 64/72 FOR EXPANSION JOINT AND GIRDER COPE DETAILS.
- COMPLETE JOINT PENETRATION WELDS SHALL BE GROUND SMOOTH IN THE LONGITUDINAL GIRDER DIRECTION TO REMOVE WELD REINFORCEMENT.
- SEE FLANGE TRANSITION DETAIL ON SHEET 37/72.
- SEE SHEET 36/72 FOR NOTES 16-18.



PARTIAL GIRDER ELEVATION

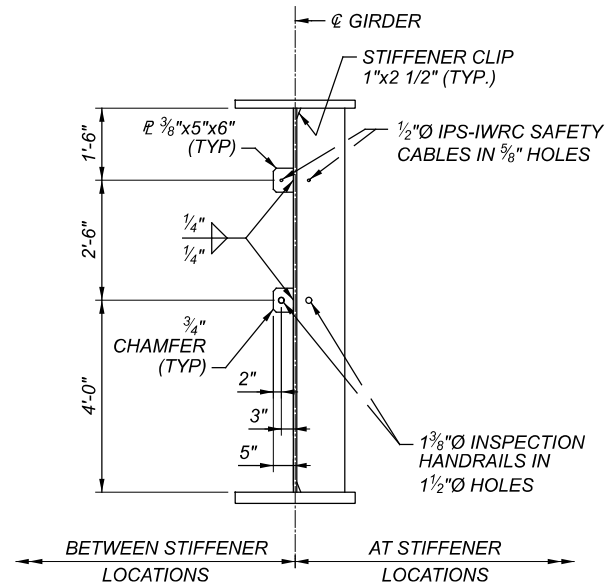
LEGEND:

- CJP COMPLETE JOINT PENETRATION WELD (SEE NOTES 13 & 14 ON SHEET 35/72).
- CS INDICATES A BUTT WELD SUBJECT TO COMPRESSIVE STRESSES ONLY

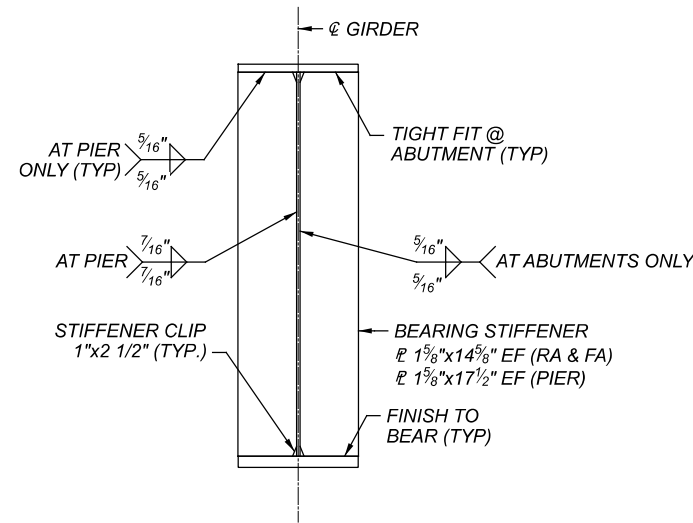
NOTES:

- 16. SEE SHEET 35/72 FOR GIRDER ELEVATION NOTES 1-15.
- 17. ADJUST SPACING OF SHEAR STUDS AROUND GIRDER COPES, EXPANSION JOINT SUPPORT MATERIAL AND FIELD SPLICES AS REQUIRED TO PROVIDE THE REQUIRED NUMBER OF SHEAR STUDS WITHIN EACH RANGE INDICATED. SEE SHEETS 62/72 - 64/72 AND STANDARD DRAWING EX-J-4-87 FOR EXPANSION JOINT DETAILS.
- 18.

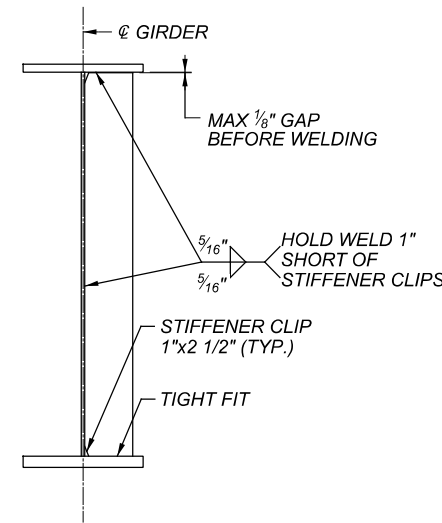
SFN	
1807898	
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
ABC	BWC
REVIEWER	
LPC 06-23-22	
PROJECT ID	
82382	
SUBSET	TOTAL
36	72
SHEET	TOTAL
1856	2339



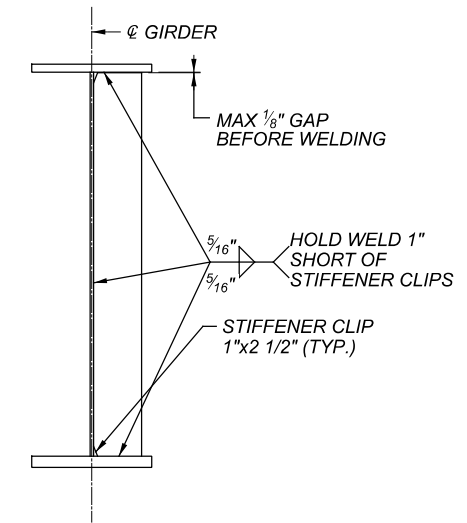
TYPICAL SECTION - INSPECTION HARDWARE
 (NO HARDWARE ON OUTSIDE OF FASCIA GIRDER)



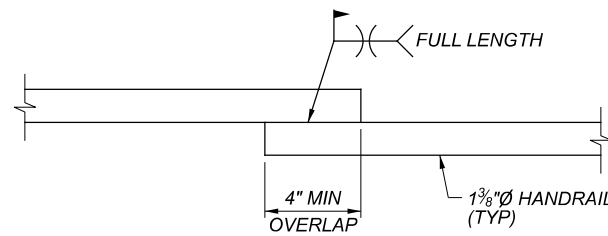
BEARING & JACKING STIFFENER DETAIL



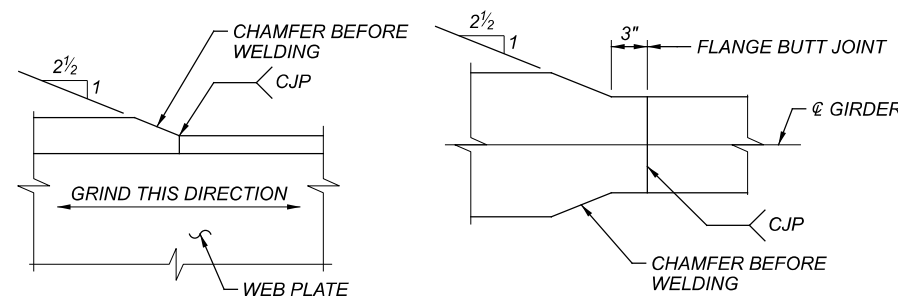
TRANSVERSE STIFFENER DETAIL



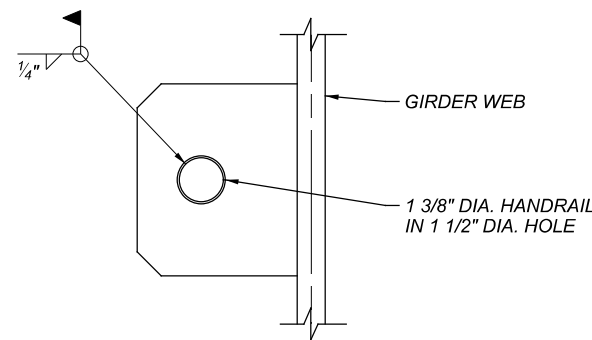
CROSSFRAME CONNECTION PLATE DETAIL



WELDED HANDRAIL SPLICE DETAIL



WELDED FLANGE SPLICE DETAILS



INSPECTION HANDRAIL CONNECTION PLATE DETAIL
 (SHOWN AT SUPPORT BETWEEN STIFFENERS, DETAIL AT STIFFENERS SIMILAR)

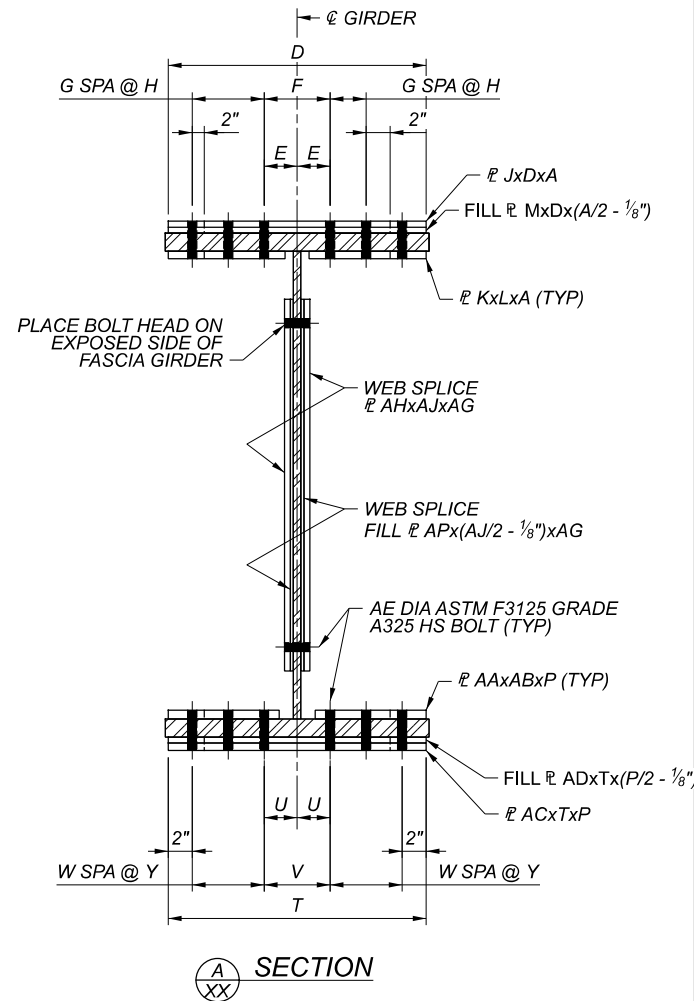
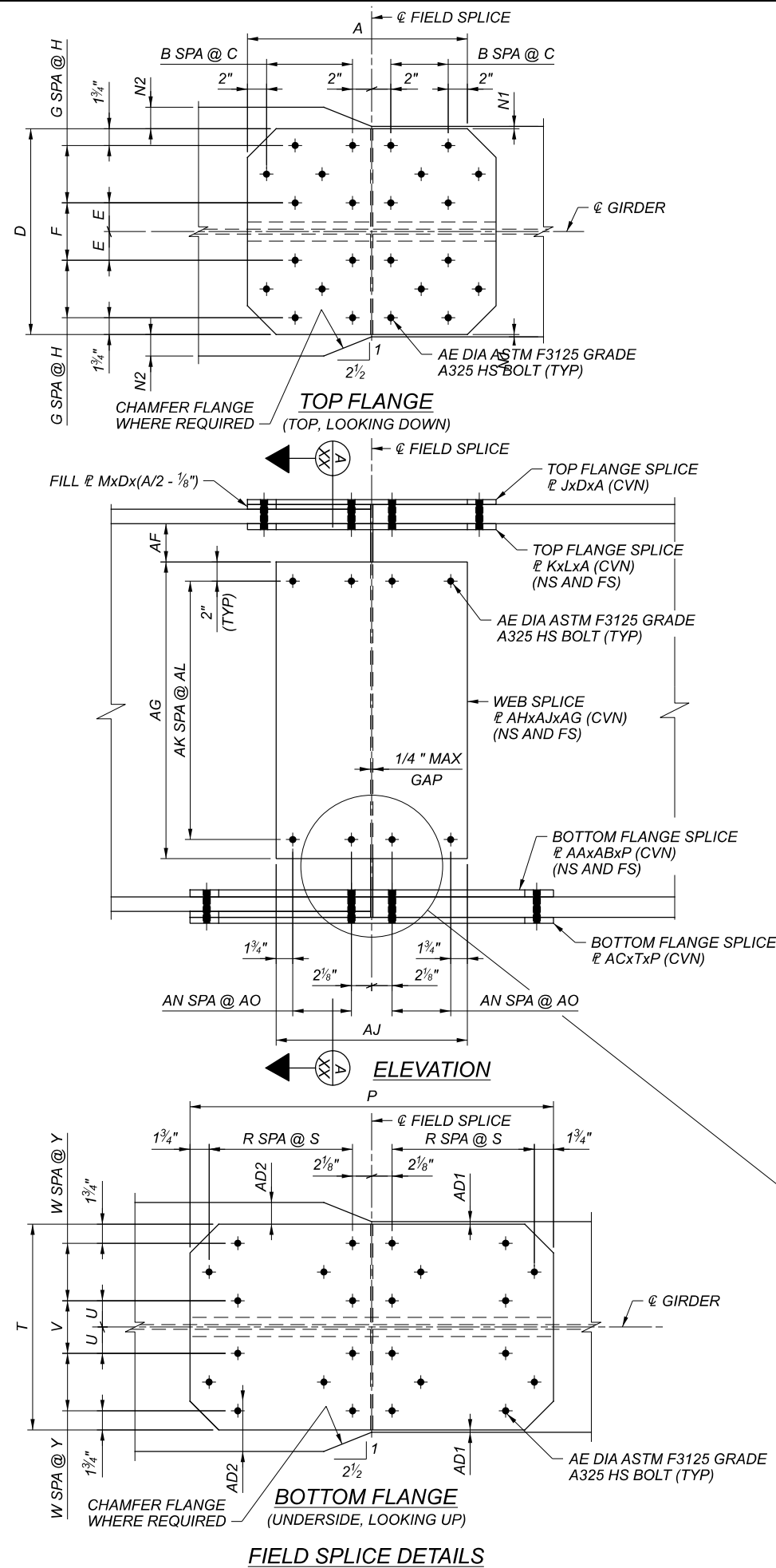
NOTES:

1. FOR GIRDER ELEVATIONS, SEE SHEETS 35/72 & 36/72.
2. FOR CROSSFRAME AND UTILITY SUPPORT DETAILS, SEE SHEETS 43/72 - 46/72.
3. STIFFENER MATERIAL SHALL CONFORM TO ASTM A709 GRADE 50.
4. BAR AND PLATE MATERIAL FOR INSPECTION HARDWARE SHALL CONFORM TO ASTM A709 GRADE 50.
5. WIRE ROPE FOR INSPECTION SAFETY CABLES SHALL BE IMPROVED FLOW STEEL (IPS), 6x19 CONSTRUCTION, INDEPENDENT WIRE ROPE CORE (IWRC) WIRE ROPE, GALVANIZED. PROVIDE WIRE ROPE HARDWARE, INCLUDING TERMINATIONS, SPLICES, WIRE ROPE SLEEVES, WIRE ROPE CLIPS, ETC., CAPABLE OF DEVELOPING THE BREAKING LOAD OF THE INSPECTION SAFETY CABLE.
6. PROVIDE WIRE ROPE SUPPORTS AT A MAXIMUM OF 6'-3" CENTERS ALONG EACH GIRDER.

LEGEND:

CJP COMPLETE JOINT PENETRATION WELD

DESIGNER	CHECKER
ABC	KTS
PROJECT ID	
82382	
SUBSET	TOTAL
37	72
SHEET TOTAL	
1867 2339	



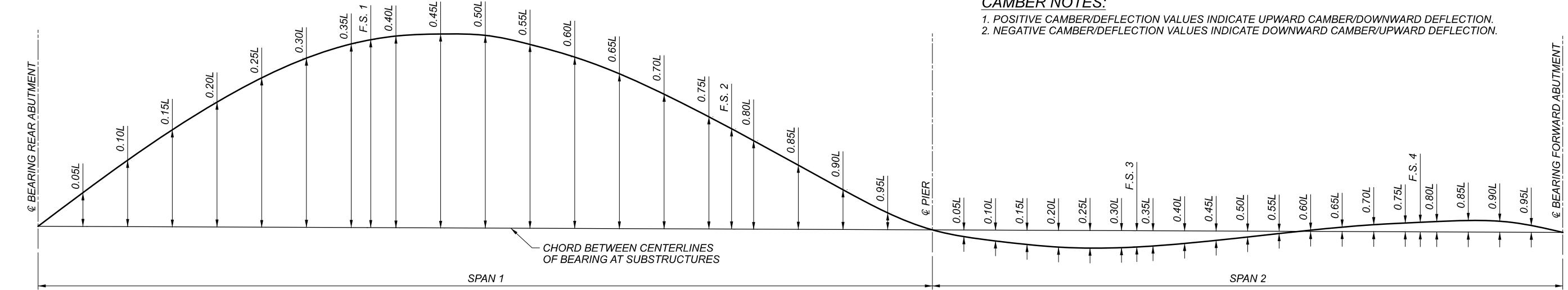
FIELD SPLICE DIMENSIONS					
LOCATION	VALUE	FIELD SPLICE 1	FIELD SPLICE 2	FIELD SPLICE 3	FIELD SPLICE 4
TOP FLANGE	A	61 3/4"	49 3/4"	43 3/4"	31 3/4"
	B	8	6	5	3
	C	3"	3"	3"	3"
	D	30"	30"	30"	30"
	E	2 7/8"	2 7/8"	2 7/8"	2 7/8"
	F	5 3/4"	5 3/4"	5 3/4"	5 3/4"
	G	2	2	2	2
	H	5 3/16"	5 3/16"	5 3/16"	5 3/16"
	J	1 1/8"	1 1/8"	7/8"	7/8"
	K	1 1/4"	1 1/4"	1"	1"
	L	13 7/8"	13 7/8"	13 7/8"	14"
	M	--	--	--	--
	N1	--	--	--	--
	N2	--	--	--	--
BOTTOM FLANGE	P	61 3/4"	49 3/4"	43 3/4"	31 3/4"
	R	8	6	5	3
	S	3"	3"	3"	3"
	T	13 7/8"	13 7/8"	13 7/8"	14"
	U	2 7/8"	2 7/8"	2 7/8"	2 7/8"
	V	5 3/4"	5 3/4"	5 3/4"	5 3/4"
	W	2	2	2	2
	Y	5 3/16"	5 3/16"	5 3/16"	5 3/16"
	AA	15/8"	15/8"	1"	1"
	AB	1 1/2"	1 1/2"	7/8"	7/8"
	AC	30"	30"	30"	30"
	AD	--	--	--	--
	AE1	--	--	--	--
	AE2	--	--	--	--
BOLTS	AF	1"	1"	1"	1"
	AG	4"	5 3/4"	6 1/2"	4 7/8"
	AH	88"	90 1/4"	89 1/2"	91 1/8"
	AJ	1/2"	1/2"	1/2"	1/2"
	AK	19 3/4"	13 3/4"	13 3/4"	13 3/4"
	AL	24	15	19	17
	AM	3 1/2"	3 3/4"	4 1/4"	4 1/4"
WEB	AN	2	1	1	1
	AO	3"	3"	3"	3"
	AP	3"	3"	1/16"	3"

NOTES:

1. ALL SPLICE MATERIAL SHALL CONFORM TO ASTM A709 GRADE 50.
2. ALL BOLTS SHALL CONFORM TO ASTM F3125 GRADE A325 AND BE OF THE DIAMETER(S) INDICATED.
3. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN). PROVIDE MATERIAL MEETINGS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS SPECIFIED IN 711.01.
4. FOR SPLICE LOCATIONS, SEE FRAMING PLAN SHEETS 33/72 - 34/72.
5. FOR MISCELLANEOUS GIRDER DETAILS, SEE SHEET 37/72.

CUY-90-16.28 (CCG3A)

MODEL: deflect and camber table 1 PAPER: SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:36:05 PM USER: Mala.Gallagher
 p:\cib-us-pw-bentley.com-us-pw-03\Documents\Cleveland_OH101_Projects\ODOT\Deflect12823240-Engineering\Structures\SFN_1807898_SS004.dgn



CAMBER NOTES:

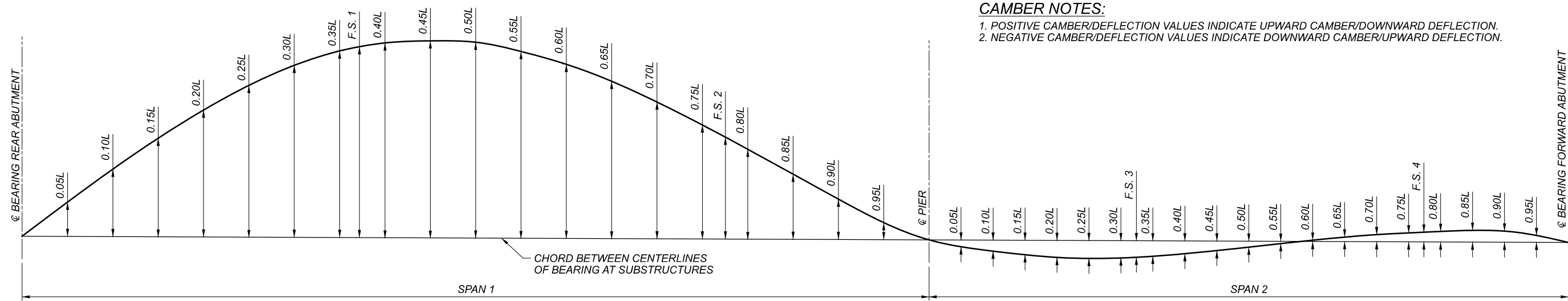
- 1. POSITIVE CAMBER/DEFLECTION VALUES INDICATE UPWARD CAMBER/DOWNWARD DEFLECTION.
- 2. NEGATIVE CAMBER/DEFLECTION VALUES INDICATE DOWNWARD CAMBER/UPWARD DEFLECTION.

CAMBER DIAGRAM

GIRDER G1																								
DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																					C.L. PIER	
		0.05L	0.10L	0.15L	0.20L	0.25L	0.30L	0.35L	F.S. 1	0.40L	0.45L	0.50L	0.55L	0.60L	0.65L	0.70L	0.75L	F.S. 2	0.80L	0.85L	0.90L	0.95L		
STEEL DEAD LOAD ONLY	0	3/4	1 7/16	2 1/8	2 11/16	3 3/16	3 5/8	3 7/8	4	4 1/16	4 1/8	4 1/16	3 7/8	3 5/8	3 1/4	2 13/16	2 5/16	1 13/16	1 13/16	1 5/16	1 3/16	3/8	0	
SLAB AND HAUNCH DEAD LOAD	0	1 1/16	2 1/16	2 15/16	3 13/16	4 9/16	5 1/8	5 9/16	5 3/4	5 7/8	5 15/16	5 7/8	5 9/16	5 3/16	4 5/8	4	3 1/4	2 1/2	2 1/2	1 3/4	1 1/16	1/2	0	
COMPOSITE DEAD LOAD	0	9/16	1 1/16	1 9/16	1 15/16	2 5/16	2 9/16	2 3/4	2 7/8	2 7/8	2 7/8	2 13/16	2 11/16	2 7/16	2 3/16	1 7/8	1 1/2	1 1/8	1 1/8	13/16	7/16	3/16	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CAMBER	0	2 3/8	4 9/16	6 5/8	8 1/2	10 1/8	11 5/16	12 1/4	12 5/8	12 13/16	12 15/16	12 3/4	12 1/8	11 1/4	10 1/16	8 5/8	7	5 7/16	5 3/8	3 7/8	2 5/16	1 1/16	0	
DEFLECTION COMPONENT	C.L. PIER	SPAN 2																					C.L. BRG. FWD. ABUT.	
STEEL DEAD LOAD ONLY	- 3/16	- 5/16	- 7/16	- 1/2	- 9/16	- 9/16	- 9/16	- 9/16	- 1/2	- 1/2	- 7/16	- 3/8	- 5/16	- 1/4	- 3/16	- 1/8	- 1/16	- 1/8	- 1/16	0	0	0	0	
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 7/16	- 1/2	- 9/16	- 5/8	- 9/16	- 9/16	- 9/16	- 7/16	- 3/8	- 1/4	- 3/16	- 1/8	- 1/16	1/16	1/16	1/16	1/8	1/8	1/16	1/16	0	
COMPOSITE DEAD LOAD	0	- 1/16	- 1/8	- 1/8	- 1/8	- 1/8	- 1/16	- 1/16	0	1/16	1/8	3/16	1/4	5/16	5/16	5/16	5/16	5/16	1/4	1/4	3/16	1/16	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CAMBER	0	- 1/2	- 7/8	- 1 1/8	- 1 1/4	- 1 1/4	- 1 3/16	- 1 3/16	- 1 1/16	- 15/16	- 3/4	- 1/2	- 5/16	- 1/8	1/16	3/16	1/4	5/16	5/16	1/4	3/16	1/8	0	
GIRDER G2																								
DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																					C.L. PIER	
		0.05L	0.10L	0.15L	0.20L	0.25L	0.30L	0.35L	F.S. 1	0.40L	0.45L	0.50L	0.55L	0.60L	0.65L	0.70L	0.75L	F.S. 2	0.80L	0.85L	0.90L	0.95L		
STEEL DEAD LOAD ONLY	0	3/4	1 1/2	2 3/16	2 3/4	3 1/4	3 11/16	3 15/16	4 1/16	4 1/8	4 3/16	4 1/8	3 15/16	3 5/8	3 5/16	2 13/16	2 5/16	1 13/16	1 13/16	1 5/16	1 3/16	3/8	0	
SLAB AND HAUNCH DEAD LOAD	0	1	1 15/16	2 13/16	3 9/16	4 1/4	4 3/4	5 3/16	5 3/8	5 7/16	5 9/16	5 1/2	5 1/4	4 7/8	4 5/16	3 3/4	3 1/16	2 3/8	2 3/8	1 11/16	1	1/2	0	
COMPOSITE DEAD LOAD	0	7/16	13/16	1 3/16	1 1/2	1 3/4	2	2 3/16	2 1/4	2 1/4	2 5/16	2 1/4	2 3/16	2 1/16	1 13/16	1 9/16	1 5/16	1	1	11/16	7/16	3/16	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CAMBER	0	2 3/16	4 3/16	6 1/8	7 13/16	9 5/16	10 7/16	11 5/16	11 11/16	11 7/8	12	11 7/8	11 3/8	10 9/16	9 7/16	8 3/16	6 11/16	5 3/16	5 3/16	3 11/16	2 1/4	1 1/16	0	
DEFLECTION COMPONENT	C.L. PIER	SPAN 2																					C.L. BRG. FWD. ABUT.	
STEEL DEAD LOAD ONLY	0	- 3/16	- 5/16	- 7/16	- 1/2	- 1/2	- 1/2	- 1/2	- 1/2	- 1/2	- 7/16	- 3/8	- 5/16	- 1/4	- 3/16	- 1/8	- 1/16	- 1/16	0	0	0	0	0	
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 3/8	- 1/2	- 9/16	- 9/16	- 9/16	- 9/16	- 1/2	- 7/16	- 5/16	- 1/4	- 1/8	- 1/16	0	1/16	1/16	1/8	1/8	1/8	1/16	1/16	0	
COMPOSITE DEAD LOAD	0	- 1/16	- 1/8	- 3/16	- 3/16	- 1/8	- 1/8	- 1/8	- 1/16	0	0	1/16	1/8	3/16	3/16	3/16	3/16	3/16	3/16	3/16	1/8	1/16	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CAMBER	0	- 1/2	- 7/8	- 1 1/16	- 1 1/4	- 1 1/4	- 1 3/16	- 1 3/16	- 1 1/16	- 15/16	- 3/4	- 1/2	- 5/16	- 1/8	1/16	3/16	1/4	1/4	1/4	1/4	3/16	1/8	0	
GIRDER G3																								
DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																					C.L. PIER	
		0.05L	0.10L	0.15L	0.20L	0.25L	0.30L	0.35L	F.S. 1	0.40L	0.45L	0.50L	0.55L	0.60L	0.65L	0.70L	0.75L	F.S. 2	0.80L	0.85L	0.90L	0.95L		
STEEL DEAD LOAD ONLY	0	13/16	1 1/2	2 1/4	2 13/16	3 3/8	3 3/4	4 1/16	4 3/16	4 3/16	4 1/4	4 3/16	4	3 11/16	3 5/16	2 7/8	2 3/8	1 13/16	1 13/16	1 5/16	1 3/16	3/8	0	
SLAB AND HAUNCH DEAD LOAD	0	1	1 7/8	2 3/4	3 1/2	4 3/16	4 11/16	5 1/8	5 5/16	5 3/8	5 7/16	5 3/8	5 1/8	4 3/4	4 1/4	3 5/8	2 15/16	2 1/4	2 1/4	1 9/16	1	7/16	0	
COMPOSITE DEAD LOAD	0	5/16	9/16	1 3/16	1 1/16	1 5/16	1 7/16	1 9/16	1 5/8	1 11/16	1 11/16	1 11/16	1 5/8	1 1/2	1 3/8	1 3/16	1	3/4	3/4	9/16	5/16	3/16	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CAMBER	0	2 1/16	4	5 13/16	7 3/8	8 13/16	9 7/8	10 3/4	11 1/8	11 1/4	11 3/8	11 1/4	10 3/4	9 15/16	8 7/8	7 11/16	6 1/4	4 7/8	4 7/8	3 7/16	2 1/8	1	0	
DEFLECTION COMPONENT	C.L. PIER	SPAN 2																					C.L. BRG. FWD. ABUT.	
STEEL DEAD LOAD ONLY	0	- 3/16	- 5/16	- 7/16	- 1/2	- 1/2	- 1/2	- 1/2	- 1/2	- 7/16	- 3/8	- 5/16	- 1/4	- 3/16	- 1/8	- 1/16	- 1/16	0	0	0	0	0	0	
SLAB AND HAUNCH DEAD LOAD	0	- 3/16	- 3/8	- 7/16	- 1/2	- 1/2	- 1/2	- 1/2	- 7/16	- 5/16	- 1/4	- 1/8	- 1/16	0	1/16	1/8	1/8	3/16	3/16	1/8	1/8	1/16	0	
COMPOSITE DEAD LOAD	0	- 1/16	- 1/8	- 3/16	- 3/16	- 3/16	- 3/16	- 3/16	- 3/16	- 1/8	- 1/8	- 1/16	0	0	1/16	1/16	1/16	1/16	1/16	1/16	1/16	0	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL CAMBER	0	- 1/2	- 13/16	- 1 1/16	- 1 3/16	- 1 3/16	- 1 3/16	- 1 3/16	- 1 1/16	- 15/16	- 3/4	- 9/16	- 5/16	- 3/16	0	1/8	3/16	3/16	1/4	1/4	3/16	1/8	0	

DEFLECTION AND CAMBER TABLES (1 OF 4)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	Michael Baker International
DESIGNER	ABC
CHECKER	MEM
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	39
TOTAL	72
SHEET	1859
TOTAL	2339



CAMBER DIAGRAM

GIRDER G4

DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	F.S. 1	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	F.S. 2	0.80 L	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	13/16	1 9/16	2 1/4	2 7/8	3 7/16	3 13/16	4 1/8	4 1/4	4 5/16	4 3/8	4 1/4	4 1/16	3 13/16	3 3/8	2 15/16	2 3/8	1 7/8	1 7/8	1 5/16	13/16	3/8	0
SLAB AND HAUNCH DEAD LOAD	0	1	1 15/16	2 3/4	3 9/16	4 3/16	4 3/4	5 3/16	5 3/8	5 3/8	5 1/2	5 3/8	5 1/8	4 3/4	4 1/4	3 11/16	3	2 5/16	2 5/16	1 9/16	1	7/16	0
COMPOSITE DEAD LOAD	0	3/16	7/16	5/8	3/4	15/16	1 1/16	1 1/8	1 3/16	1 3/16	1 3/16	1 3/16	1 1/8	1 1/16	1	7/8	11/16	9/16	9/16	7/16	1/4	1/8	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2	3 7/8	5 5/8	7 1/4	8 9/16	9 5/8	10 7/16	10 13/16	10 7/8	11 1/16	10 7/8	10 3/8	9 5/8	8 5/8	7 7/16	6 1/16	4 11/16	4 3/4	3 5/16	2 1/16	15/16	0

DEFLECTION COMPONENT	C.L. PIER	SPAN 2																			C.L. BRG. FWD. ABUT.		
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	F.S. 3	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	F.S. 4	0.80 L	0.85 L		0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 3/16	- 5/16	- 7/16	- 1/2	- 1/2	- 1/2	- 1/2	- 1/2	- 7/16	- 3/8	- 5/16	- 1/4	- 3/16	- 1/8	- 1/16	0	0	0	0	0	0	0
SLAB AND HAUNCH DEAD LOAD	0	- 3/16	- 3/8	- 7/16	- 1/2	- 1/2	- 7/16	- 7/16	- 3/8	- 5/16	- 3/16	- 1/16	0	1/16	1/8	3/16	3/16	3/16	3/16	1/8	1/16	1/16	0
COMPOSITE DEAD LOAD	0	- 1/16	- 1/8	- 1/8	- 3/16	- 3/16	- 3/16	- 3/16	- 3/16	- 3/16	- 1/8	- 1/8	- 1/8	- 1/16	- 1/16	- 1/16	0	0	0	0	0	0	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 7/16	- 13/16	- 1 1/16	- 1 3/16	- 1 3/16	- 1 3/16	- 1 3/16	- 1 1/16	- 15/16	- 3/4	- 9/16	- 3/8	- 3/16	0	1/8	3/16	3/16	3/16	3/16	3/16	1/8	0

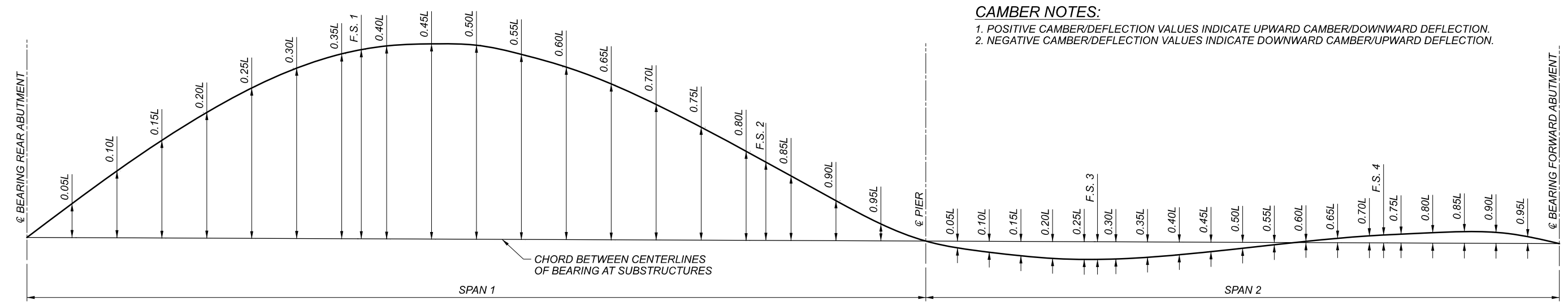
GIRDER G5

DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	F.S. 1	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	F.S. 2	0.80 L	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	13/16	1 5/8	2 5/16	2 15/16	3 1/2	3 15/16	4 1/4	4 3/8	4 7/16	4 7/16	4 3/8	4 3/16	3 7/8	3 1/2	3	2 1/2	1 15/16	1 15/16	1 3/8	7/8	3/8	0
SLAB AND HAUNCH DEAD LOAD	0	1	1 15/16	2 13/16	3 5/8	4 5/16	4 13/16	5 1/4	5 1/2	5 1/2	5 9/16	5 1/2	5 1/4	4 7/8	4 3/8	3 3/4	3 1/16	2 5/16	2 3/8	1 11/16	1	7/16	0
COMPOSITE DEAD LOAD	0	3/16	5/16	1/2	5/8	3/4	13/16	7/8	7/8	7/8	15/16	7/8	7/8	13/16	11/16	5/8	1/2	3/8	3/8	5/16	3/16	1/16	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2	3 7/8	5 5/8	7 3/16	8 1/2	9 9/16	10 3/8	10 3/4	10 13/16	10 15/16	10 13/16	10 5/16	9 9/16	8 5/8	7 3/8	6 1/8	4 5/8	4 11/16	3 3/8	2 1/16	15/16	0

DEFLECTION COMPONENT	C.L. PIER	SPAN 2																			C.L. BRG. FWD. ABUT.		
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	F.S. 3	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	F.S. 4	0.75 L	0.80 L	0.85 L		0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 3/16	- 3/8	- 1/2	- 9/16	- 5/8	- 5/8	- 5/8	- 9/16	- 1/2	- 7/16	- 3/8	- 5/16	- 3/16	- 1/8	- 1/16	- 1/16	0	0	0	0	0	0
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 3/8	- 1/2	- 1/2	- 1/2	- 1/2	- 1/2	- 3/8	- 5/16	- 3/16	- 1/16	1/16	1/8	3/16	1/4	1/4	1/4	1/4	1/4	3/16	1/16	0
COMPOSITE DEAD LOAD	0	- 1/16	- 1/16	- 1/8	- 1/8	- 3/16	- 3/16	- 3/16	- 3/16	- 3/16	- 3/16	- 1/8	- 1/8	- 1/8	- 1/16	- 1/16	- 1/16	- 1/16	- 1/16	0	0	0	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 1/2	- 7/8	- 1 1/8	- 1 1/4	- 1 5/16	- 1 1/4	- 1 1/4	- 1 3/16	- 1	- 13/16	- 9/16	- 3/8	- 3/16	0	1/16	3/16	3/16	3/16	3/16	3/16	1/8	0

CUY-90-16.28 (CCG3A)

MODEL: deflct and camber table 3 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:36:07 PM USER: Mala.Gallagher
 p:\mb-pw\benley.com\mb-us-pw-03\Documents\Cleveland_OH101_P\Projects\ODOT\Deflct128232404-Engineering\Structures\SFN_1807898_SS004.dgn



CAMBER NOTES:
 1. POSITIVE CAMBER/DEFLECTION VALUES INDICATE UPWARD CAMBER/DOWNWARD DEFLECTION.
 2. NEGATIVE CAMBER/DEFLECTION VALUES INDICATE DOWNWARD CAMBER/UPWARD DEFLECTION.

CAMBER DIAGRAM

GIRDER G6

DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	F.S. 1	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	0.80 L	F.S. 2	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	7/8	1 5/8	2 3/8	3	3 9/16	4	4 5/16	4 1/2	4 1/2	4 9/16	4 1/2	4 1/4	4	3 9/16	3 1/16	2 1/2	2	115/16	1 3/8	7/8	7/16	0
SLAB AND HAUNCH DEAD LOAD	0	1	2	2 7/8	3 11/16	4 3/8	4 7/8	5 5/16	5 9/16	5 9/16	5 11/16	5 9/16	5 5/16	4 15/16	4 7/16	3 13/16	3 1/16	2 3/8	2 3/8	1 3/4	1	7/16	0
COMPOSITE DEAD LOAD	0	3/16	3/8	9/16	11/16	3/4	7/8	15/16	15/16	15/16	15/16	7/8	7/8	3/4	11/16	9/16	7/16	3/8	3/8	1/4	1/8	1/16	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2 1/16	4	5 13/16	7 3/8	8 11/16	9 3/4	10 9/16	10 15/16	11	11 1/8	10 15/16	10 7/16	9 11/16	8 5/8	7 7/16	6 1/16	4 11/16	4 5/8	3 3/8	2 1/16	15/16	0
DEFLECTION COMPONENT	C.L. PIER	SPAN 2														C.L. BRG. FWD. ABUT.							
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	F.S. 3	0.30 L	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L		0.70 L	F.S. 4	0.75 L	0.80 L	0.85 L	0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 3/16	- 3/8	- 1/2	- 9/16	- 5/8	- 5/8	- 5/8	- 5/8	- 9/16	- 1/2	- 3/8	- 5/16	- 3/16	- 1/8	- 1/16	- 1/16	0	0	0	0	0	0
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 3/8	- 1/2	- 9/16	- 1/2	- 1/2	- 1/2	- 3/8	- 1/4	- 1/8	0	1/16	3/16	1/4	5/16	5/16	5/16	1/4	3/16	1/8	0	0
COMPOSITE DEAD LOAD	0	- 1/16	- 1/16	- 1/16	- 1/8	- 1/8	- 1/8	- 1/8	- 1/8	- 1/8	- 1/16	- 1/16	- 1/16	0	0	0	0	0	0	0	0	0	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 1/2	- 7/8	- 1 1/16	- 1 1/4	- 1 1/4	- 1 1/4	- 1 1/4	- 1 1/16	- 15/16	- 11/16	- 1/2	- 5/16	- 1/16	1/16	3/16	1/4	1/4	5/16	1/4	3/16	1/8	0

GIRDER G7

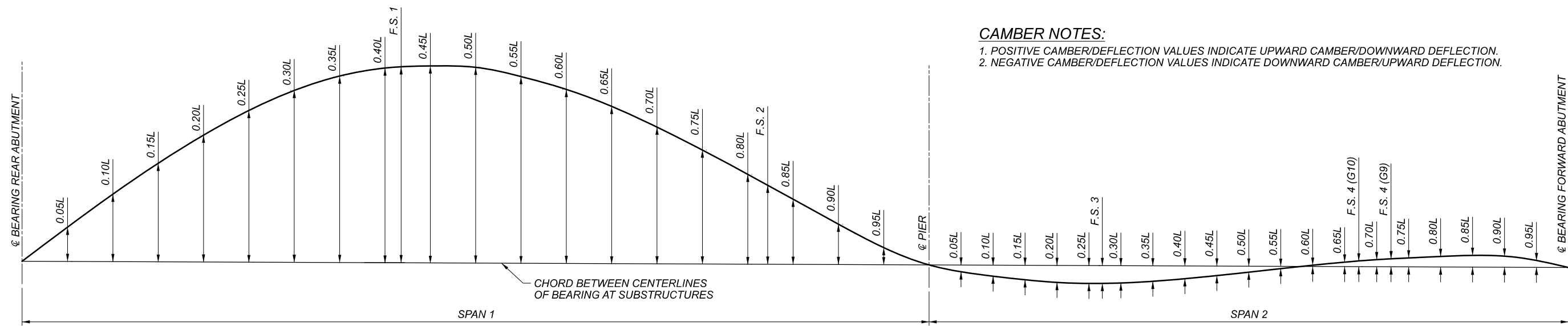
DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	F.S. 1	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	0.80 L	F.S. 2	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	7/8	1 5/8	2 7/16	3 1/16	3 5/8	4 1/16	4 3/8	4 1/2	4 9/16	4 9/16	4 1/2	4 5/16	4	3 5/8	3 1/8	2 9/16	2	115/16	1 3/8	7/8	3/8	0
SLAB AND HAUNCH DEAD LOAD	0	1 1/16	2	2 15/16	3 11/16	4 3/8	4 15/16	5 3/8	5 5/8	5 5/8	5 3/4	5 5/8	5 3/8	5	4 7/16	3 13/16	3 1/8	2 3/8	2 3/8	111/16	1	7/16	0
COMPOSITE DEAD LOAD	0	1/4	1/2	3/4	15/16	1 1/8	1 1/4	1 5/16	1 5/16	1 5/16	1 1/4	1 3/16	1 1/16	15/16	3/4	5/8	7/16	7/16	5/16	3/16	1/16	0	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2 3/16	4 3/16	6 1/16	7 3/4	9 1/8	10 1/4	11	11 7/16	11 1/2	11 5/8	11 7/16	10 7/8	10 1/16	8 15/16	7 11/16	6 1/4	4 13/16	4 3/4	3 3/8	2 1/16	15/16	0
DEFLECTION COMPONENT	C.L. PIER	SPAN 2														C.L. BRG. FWD. ABUT.							
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	F.S. 3	0.30 L	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L		0.70 L	F.S. 4	0.75 L	0.80 L	0.85 L	0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 3/16	- 3/8	- 1/2	- 9/16	- 5/8	- 5/8	- 5/8	- 9/16	- 9/16	- 7/16	- 3/8	- 5/16	- 3/16	- 1/8	- 1/16	- 1/16	0	0	1/16	1/16	0	0
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 3/8	- 1/2	- 1/2	- 1/2	- 7/16	- 7/16	- 3/8	- 1/4	- 1/8	0	1/8	3/16	1/4	5/16	5/16	5/16	5/16	1/4	3/16	1/8	0
COMPOSITE DEAD LOAD	0	- 1/16	- 1/16	- 1/16	- 1/16	- 1/16	0	0	0	1/16	1/16	1/16	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/16	1/16	0	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 7/16	- 13/16	- 1	- 1 1/8	- 1 1/8	- 1 1/8	- 1 1/16	- 15/16	- 3/4	- 1/2	- 1/4	- 1/16	1/8	1/4	3/8	7/16	7/16	7/16	3/8	5/16	3/16	0

GIRDER G8

DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	F.S. 1	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	0.80 L	F.S. 2	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	7/8	111/16	2 7/16	3 1/16	3 5/8	4 1/16	4 3/8	4 9/16	4 9/16	4 5/8	4 9/16	4 3/8	4 1/16	3 5/8	3 1/8	2 9/16	2	115/16	1 3/8	7/8	3/8	0
SLAB AND HAUNCH DEAD LOAD	0	1 1/16	2 1/16	3	3 13/16	4 1/2	5 1/16	5 1/2	5 3/4	5 3/4	5 7/8	5 3/4	5 1/2	5 1/8	4 9/16	3 15/16	3 3/16	2 7/16	2 3/8	1 3/4	1 1/16	1/2	0
COMPOSITE DEAD LOAD	0	7/16	13/16	1 1/8	1 7/16	111/16	113/16	115/16	2	2	2	1 7/8	1 3/4	1 5/8	1 3/8	1 3/16	15/16	11/16	11/16	7/16	1/4	1/8	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2 5/16	4 1/2	6 9/16	8 5/16	9 13/16	11	11 13/16	12 5/16	12 5/16	12 7/16	12 1/4	11 5/8	10 3/4	9 9/16	8 3/16	6 3/4	5 1/8	5	3 5/8	2 3/16	1	0
DEFLECTION COMPONENT	C.L. PIER	SPAN 2														C.L. BRG. FWD. ABUT.							
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	F.S. 3	0.30 L	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L		0.70 L	F.S. 4	0.75 L	0.80 L	0.85 L	0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 3/16	- 3/8	- 1/2	- 9/16	- 5/8	- 5/8	- 5/8	- 9/16	- 1/2	- 7/16	- 5/16	- 1/4	- 1/8	- 1/16	0	0	1/16	1/16	1/16	1/16	1/16	0
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 3/8	- 1/2	- 1/2	- 1/2	- 7/16	- 7/16	- 3/8	- 1/4	- 1/8	0	1/8	3/16	5/16	5/16	5/16	5/16	5/16	1/4	3/16	1/8	0
COMPOSITE DEAD LOAD	0	- 1/16	- 1/16	- 1/16	0	0	1/16	1/16	1/8	3/16	1/4	5/16	3/8	3/8	3/8	3/8	3/8	5/16	5/16	1/4	1/8	1/16	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 1/2	- 13/16	- 1	- 1 1/16	- 1 1/16	- 1	- 15/16	- 3/4	- 1/2	- 1/4	0	1/4	7/16	9/16	11/16	11/16	11/16	11/16	9/16	7/16	1/4	0

DEFLECTION AND CAMBER TABLES (3 OF 4)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	ABC
CHECKER	MEM
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	41
TOTAL	72
SHEET	1861
TOTAL	2339



CAMBER DIAGRAM

GIRDER G9

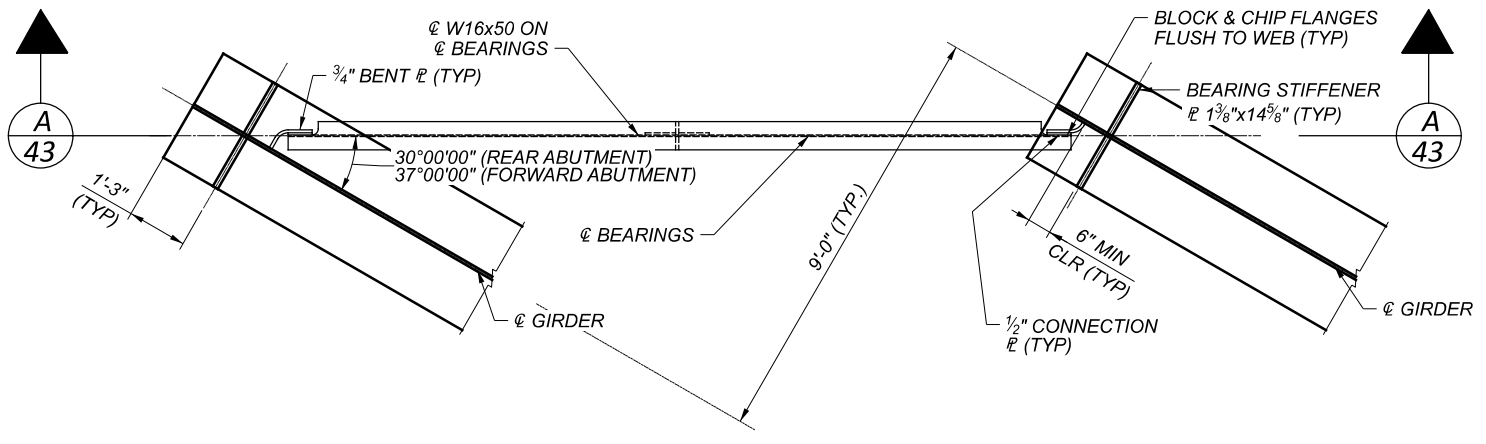
DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	0.40 L	F.S. 1	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	0.80 L	F.S. 2	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	7/8	111/16	2 7/16	3 1/8	3 11/16	4 1/8	4 7/16	4 5/8	4 5/8	4 11/16	4 9/16	4 3/8	4 1/16	3 5/8	3 1/8	2 9/16	2	115/16	1 7/16	7/8	7/16	0
SLAB AND HAUNCH DEAD LOAD	0	1 1/8	2 3/16	3 3/16	4	4 3/4	5 3/8	5 13/16	6 1/8	6 1/8	6 3/16	6 1/8	5 13/16	5 3/8	4 13/16	4 1/8	3 3/8	2 9/16	2 1/2	113/16	1 1/8	1/2	0
COMPOSITE DEAD LOAD	0	9/16	1 1/16	1 9/16	2	2 5/16	2 9/16	2 3/4	2 13/16	2 13/16	2 13/16	2 3/4	2 9/16	2 5/16	2 1/16	1 3/4	1 3/8	1 1/16	1	11/16	7/16	3/16	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2 9/16	4 15/16	7 3/16	9 1/8	10 3/4	12 1/16	13	13 9/16	13 9/16	13 11/16	13 7/16	12 3/4	11 13/16	10 1/2	9	7 5/16	5 5/8	5 7/16	3 7/8	2 3/8	1 1/16	0

DEFLECTION COMPONENT	C.L. PIER	SPAN 2																			C.L. BRG. FWD. ABUT.		
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	F.S. 3	0.30 L	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	F.S. 4	0.75 L	0.80 L	0.85 L		0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 3/16	- 3/8	- 1/2	- 9/16	- 5/8	- 5/8	- 5/8	- 9/16	- 1/2	- 3/8	- 5/16	- 3/16	- 1/8	0	0	0	1/16	1/16	1/16	1/16	1/16	0
SLAB AND HAUNCH DEAD LOAD	0	- 1/4	- 7/16	- 1/2	- 9/16	- 9/16	- 1/2	- 1/2	- 3/8	- 1/4	- 1/8	0	1/8	3/16	5/16	5/16	5/16	5/16	5/16	5/16	3/16	1/8	0
COMPOSITE DEAD LOAD	0	- 1/16	- 1/16	- 1/16	0	1/16	1/8	1/8	1/4	5/16	7/16	1/2	9/16	5/8	5/8	5/8	5/8	9/16	1/2	3/8	1/4	1/8	0
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 1/2	- 7/8	- 1 1/16	- 1 1/8	- 1 1/8	- 1	- 15/16	- 11/16	- 7/16	- 1/8	3/16	1/2	11/16	7/8	15/16	1	7/8	3/4	9/16	5/16	0	0

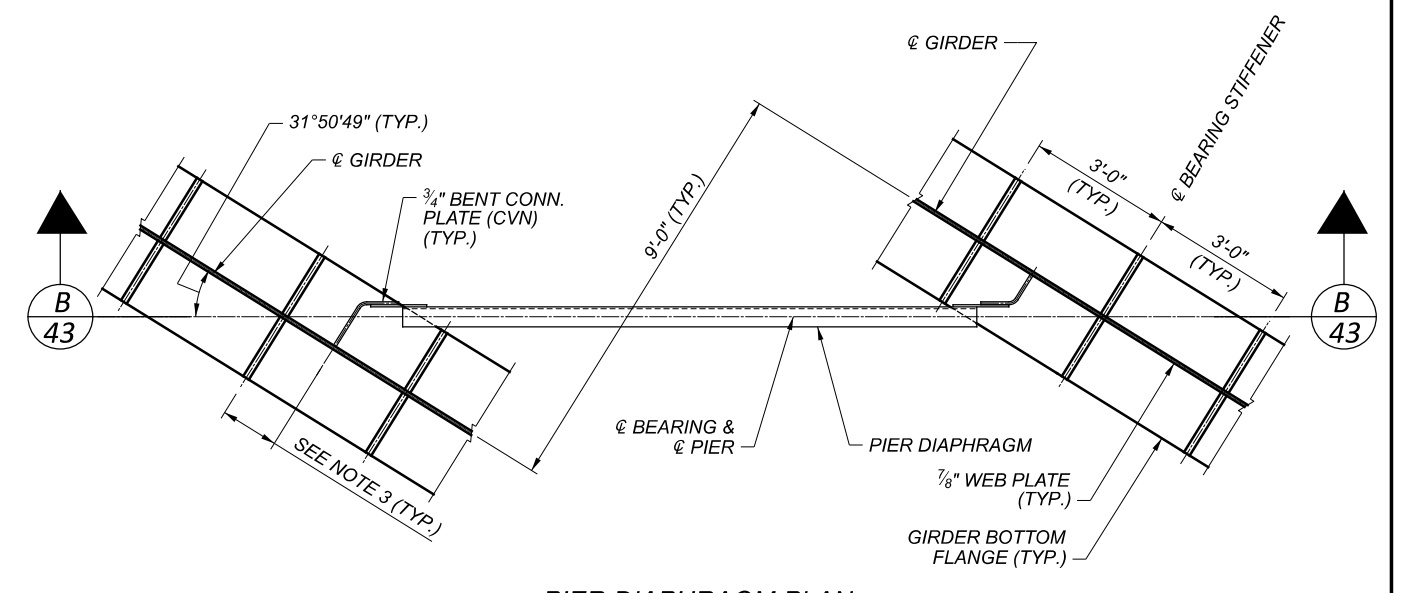
GIRDER G10

DEFLECTION COMPONENT	C.L. BRG. REAR ABUT.	SPAN 1																				C.L. PIER	
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	0.30 L	0.35 L	0.40 L	F.S. 1	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	0.70 L	0.75 L	0.80 L	F.S. 2	0.85 L	0.90 L		0.95 L
STEEL DEAD LOAD ONLY	0	7/8	111/16	2 7/16	3 1/8	3 11/16	4 1/8	4 1/2	4 11/16	4 11/16	4 3/4	4 5/8	4 7/16	4 1/8	3 3/4	3 3/16	2 11/16	2 1/16	2	1 7/16	15/16	7/16	0
SLAB AND HAUNCH DEAD LOAD	0	1 1/4	2 7/16	3 1/2	4 1/2	5 5/16	6	6 9/16	6 13/16	6 13/16	6 15/16	6 13/16	6 1/2	6	5 3/8	4 5/8	3 11/16	2 7/8	2 3/4	2	1 1/4	9/16	0
COMPOSITE DEAD LOAD	0	11/16	1 5/16	1 7/8	2 3/8	2 13/16	3 3/16	3 7/16	3 9/16	3 9/16	3 1/2	3 5/16	3 1/16	2 3/4	2 3/8	1 15/16	1 7/16	1 7/16	1	5/8	1/4	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	2 13/16	5 3/8	7 7/8	10	11 7/8	13 3/8	14 7/16	15 1/16	15 1/16	15 1/4	15	14 5/16	13 1/4	11 7/8	10 3/16	8 5/16	6 3/8	6 3/16	4 7/16	2 3/4	1 1/4	0

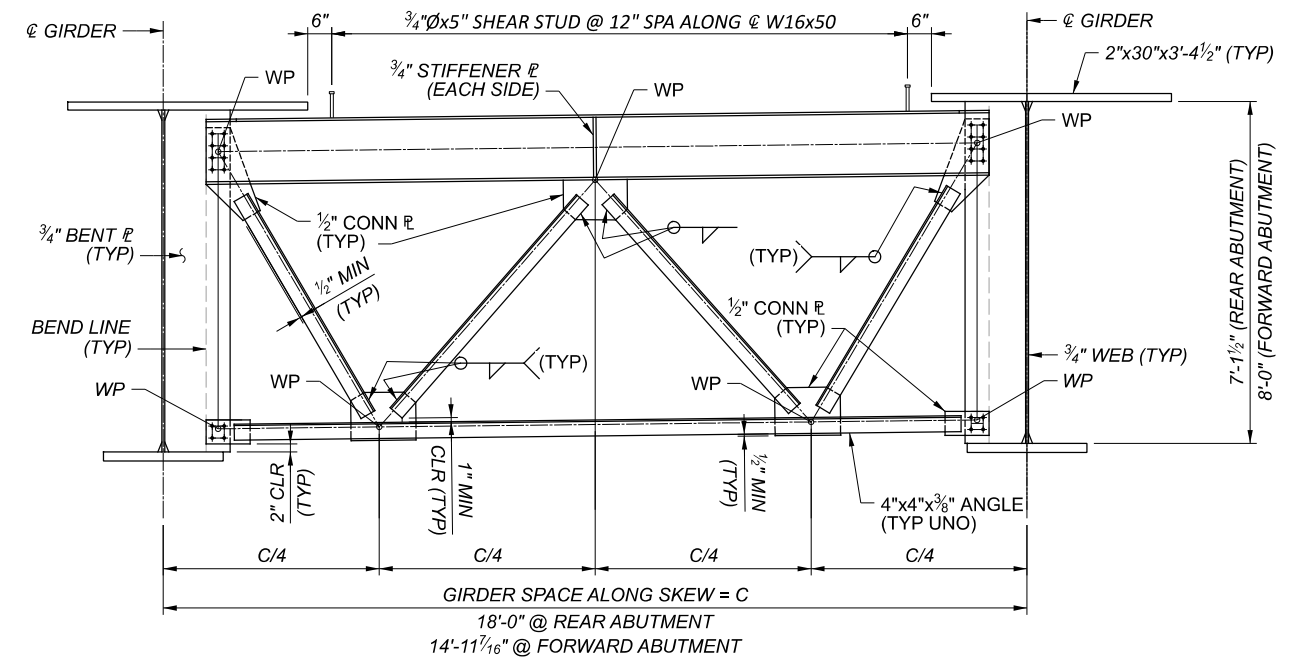
DEFLECTION COMPONENT	C.L. PIER	SPAN 2																			C.L. BRG. FWD. ABUT.		
		0.05 L	0.10 L	0.15 L	0.20 L	0.25 L	F.S. 3	0.30 L	0.35 L	0.40 L	0.45 L	0.50 L	0.55 L	0.60 L	0.65 L	F.S. 4	0.70 L	0.75 L	0.80 L	0.85 L		0.90 L	0.95 L
STEEL DEAD LOAD ONLY	0	- 1/4	- 7/16	- 9/16	- 5/8	- 5/8	- 5/8	- 5/8	- 5/8	- 9/16	- 7/16	- 5/16	- 1/4	- 1/8	- 1/16	0	0	1/16	1/16	1/16	1/16	1/16	0
SLAB AND HAUNCH DEAD LOAD	0	- 5/16	- 1/2	- 5/8	- 11/16	- 5/8	- 5/8	- 9/16	- 1/2	- 5/16	- 3/16	0	1/8	3/16	5/16	3/8	3/8	3/8	3/8	5/16	1/4	1/8	0
COMPOSITE DEAD LOAD	0	- 1/8	- 3/16	- 3/16	- 3/16	- 1/8	- 1/16	0	1/8	1/4	3/8	1/2	5/8	11/16	11/16	11/16	11/16	9/16	1/2	5/16	3/16	0	
GEOMETRIC CORRECTION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL CAMBER	0	- 5/8	- 1 1/16	- 1 3/8	- 1 7/16	- 1 3/8	- 1 5/16	- 1 1/4	- 15/16	- 5/8	- 3/16	1/8	7/16	3/4	15/16	1 1/16	1 1/16	1 1/8	1 1/16	7/8	5/8	3/8	0



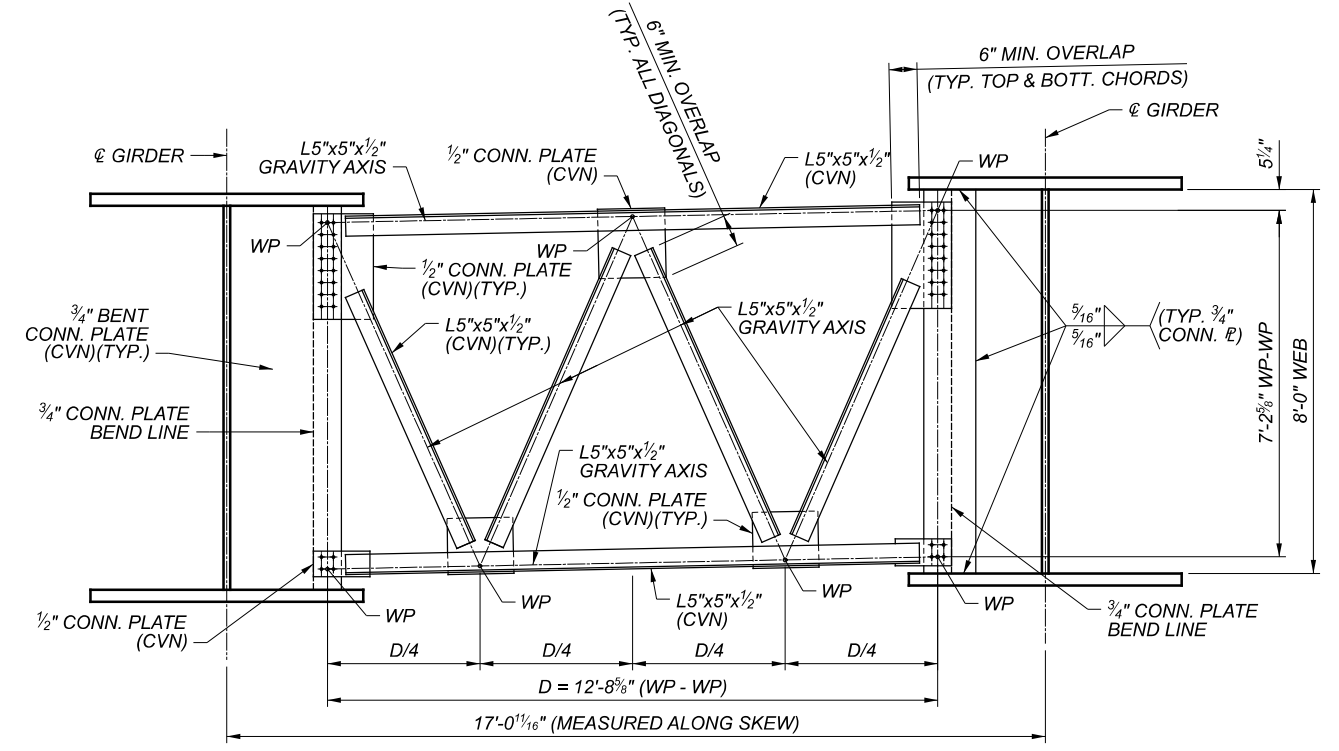
ABUTMENT END DIAPHRAGM PLAN
 (REAR ABUTMENT SHOWN, FORWARD ABUTMENT SIMILAR)



PIER DIAPHRAGM PLAN



SECTION A-10



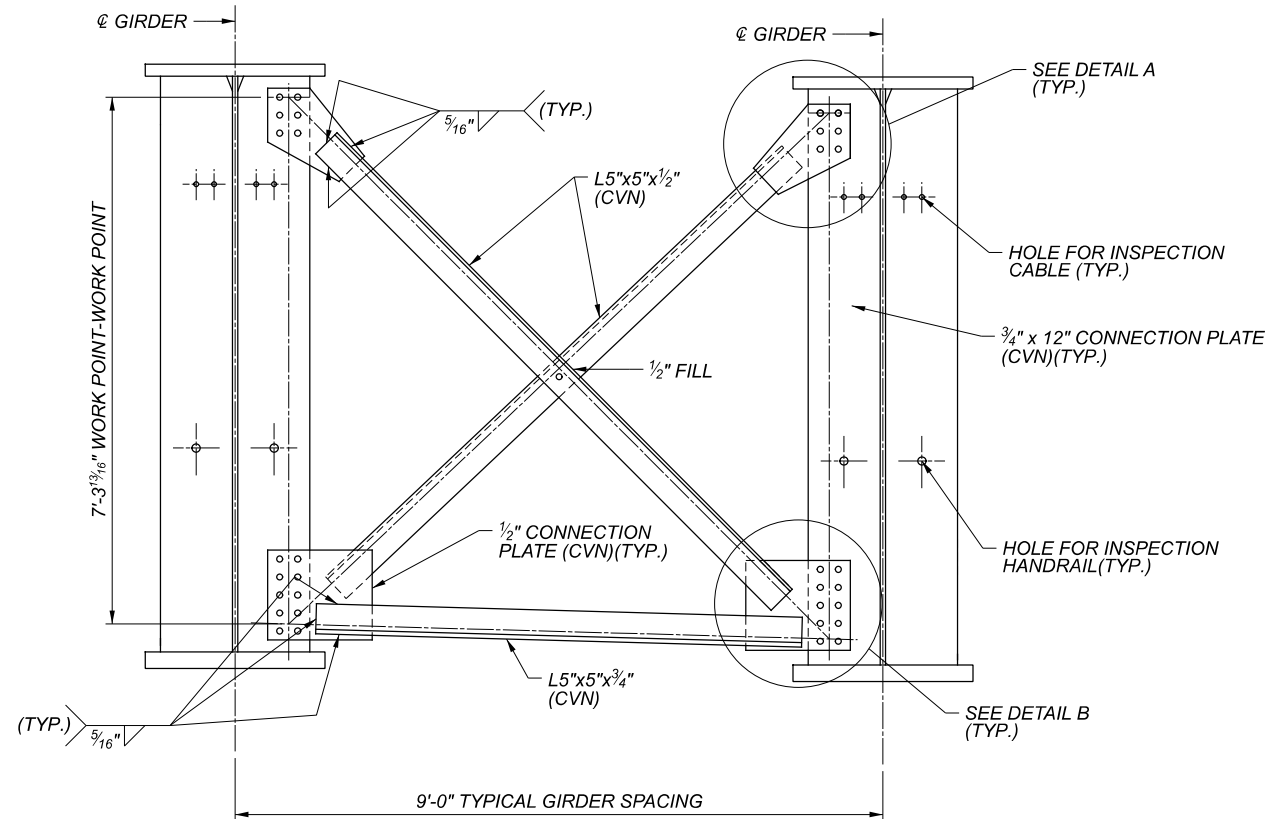
SECTION B-43
PIER DIAPHRAGM TYPICAL SECTION
 (SECTION ALONG CENTERLINE OF PIER)

NOTES:

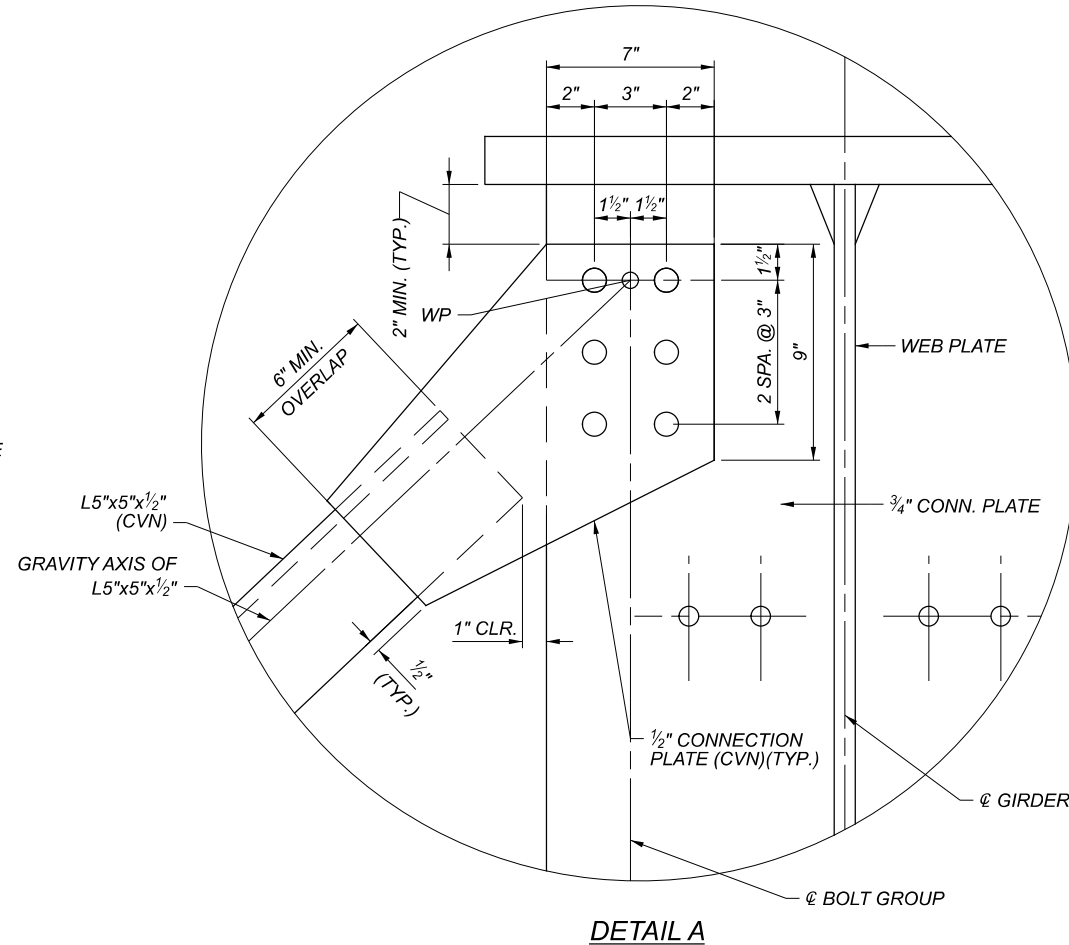
1. WORK THIS SHEET WITH SHEET 44/72.
2. FOR EXPANSION JOINT DETAILS, SEE SHEETS 62/72 - 64/72.
3. THIS DIMENSION VARIES. ALIGN THE CENTERLINE OF THE PIER DIAPHRAGM CHORDS AND DIAGONALS WITH THE CENTERLINE OF BEARINGS AT THE PIER.
4. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.
5. HIGH STRENGTH BOLTS SHALL BE 1" DIA. A325 UNLESS OTHERWISE NOTED.

SFN	1807898
DESIGN AGENCY	
DESIGNER	ABC
CHECKER	MEM
REVIEWER	LPC
PROJECT ID	82382
SUBSET	43
TOTAL	72
SHEET	1863
TOTAL	2339

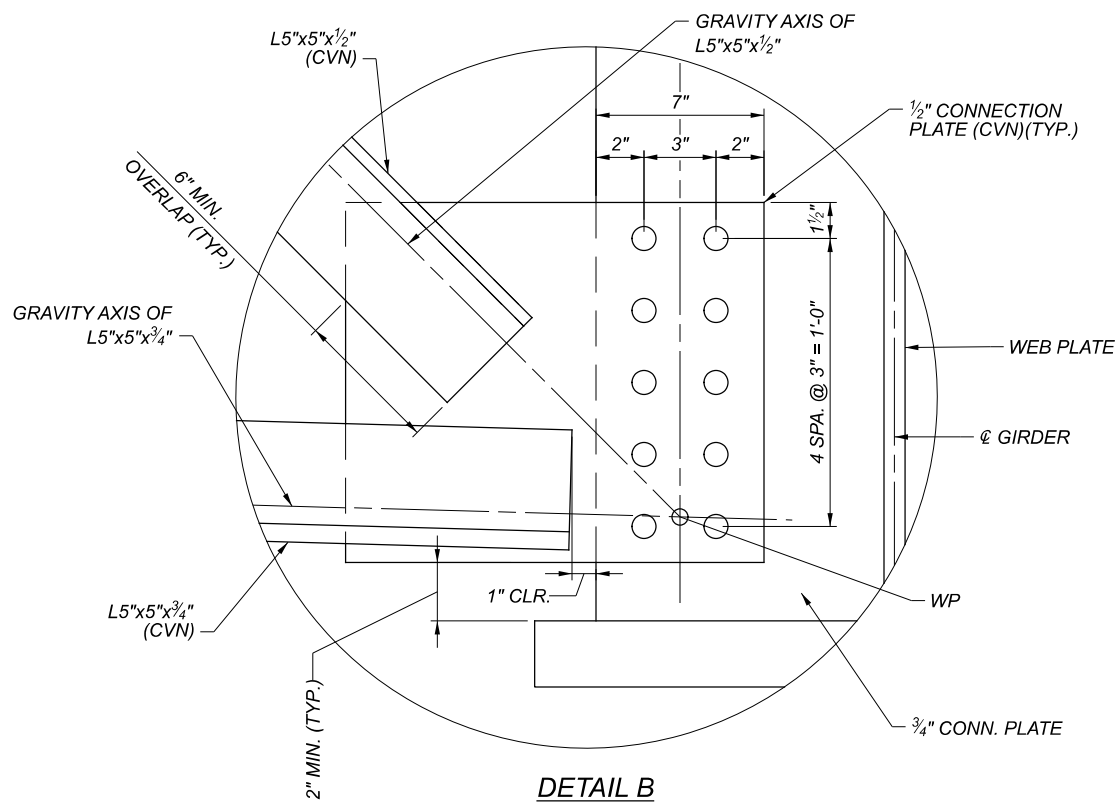
Michael Baker INTERNATIONAL



**TYPICAL INTERMEDIATE CROSSFRAME
(NO UTILITY SUPPORT)**
(SEE NOTE 8)



DETAIL A

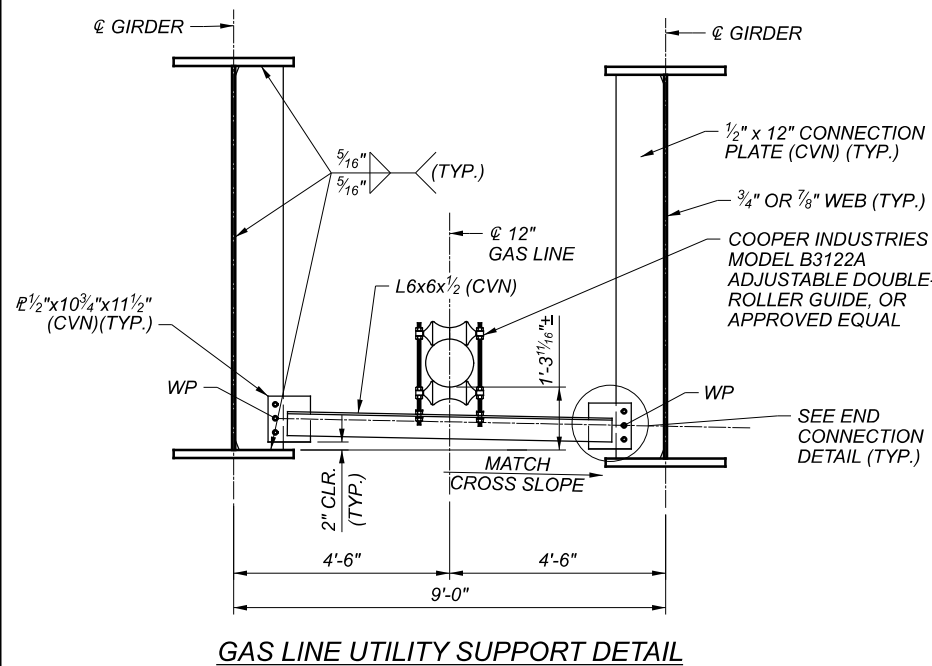


DETAIL B

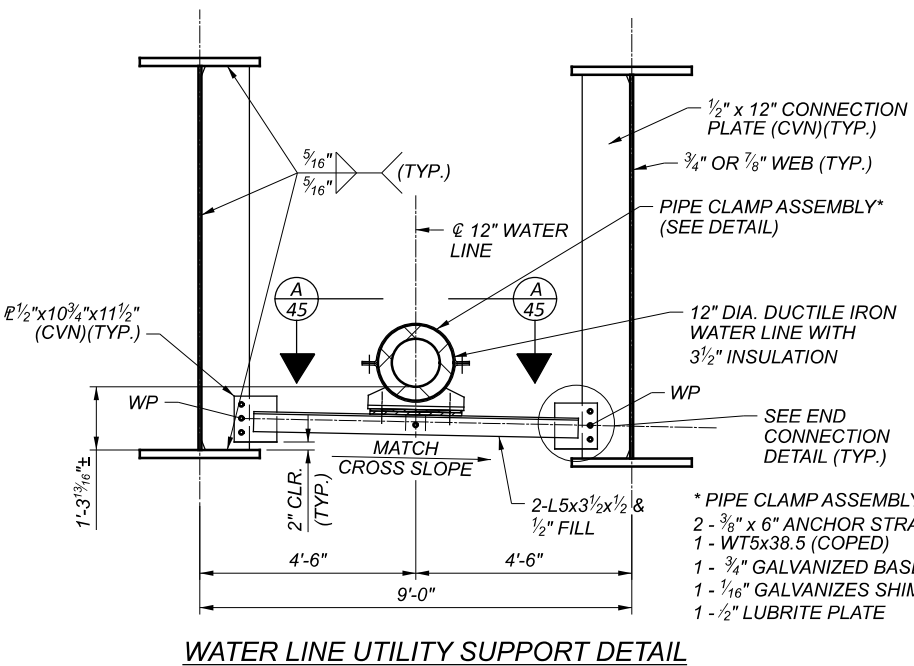
NOTES:

1. WORK THIS SHEET WITH SHEET 43/72.
2. FOR INSPECTION ACCESS DETAILS, SEE SHEET 37/72.
3. ALL CROSSFRAME MATERIAL SHALL CONFORM TO ASTM A709 GRADE 50.
4. ALL FASTENERS SHALL BE 1" DIAMETER ASTM F3125 GRADE A325 BOLTS. EXCLUDE ALL THREADS FROM THE SHEAR PLANES.
5. ALL BOLT HOLES SHALL BE 1 1/8" DIAMETER. INTERMEDIATE CROSSFRAMES AND GIRDERS SHALL BE SHOP-ASSEMBLED TO VERIFY FIT, UNLESS OTHER METHODS OF CHECKING HOLE ALIGNMENT ARE APPROVED BY THE ODOT OFFICE OF MATERIAL MANAGEMENT, IN ACCORDANCE WITH CMS 513.19 AND 513.24.
6. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.
7. PREPARE FAYING SURFACES FOR INTERMEDIATE CROSSFRAME BOLTED CONNECTIONS TO PROVIDE CLASS B SURFACE CONDITIONS.
8. USE THE CROSSFRAME DETAILS ON THIS SHEET IN GIRDER BAYS WHERE NO UTILITIES ARE PRESENT. SEE SHEETS 45/72 & 46/72 FOR CROSSFRAME DETAILS IN GIRDER BAYS WHERE UTILITIES ARE PRESENT.
9. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.

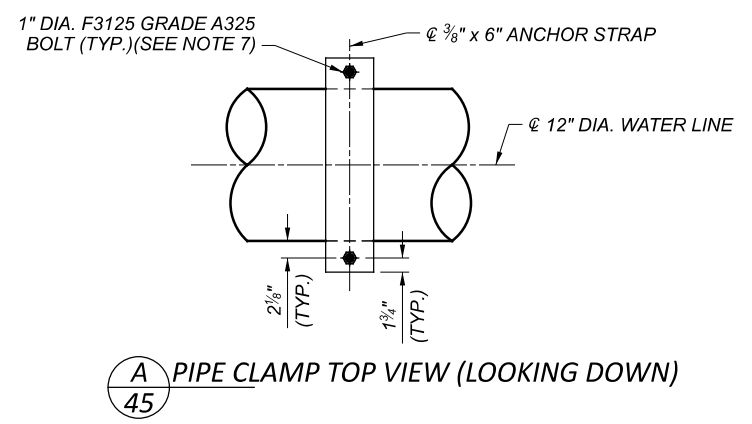
SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
ABC	MEM
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
44	72
SHEET	TOTAL
1864	2339



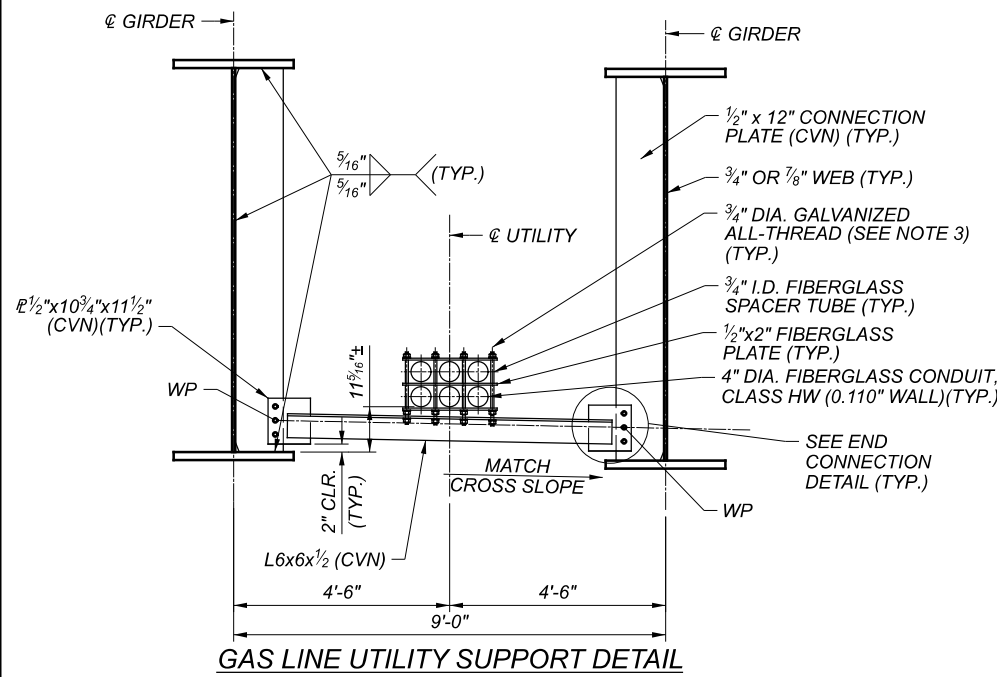
GAS LINE UTILITY SUPPORT DETAIL



WATER LINE UTILITY SUPPORT DETAIL

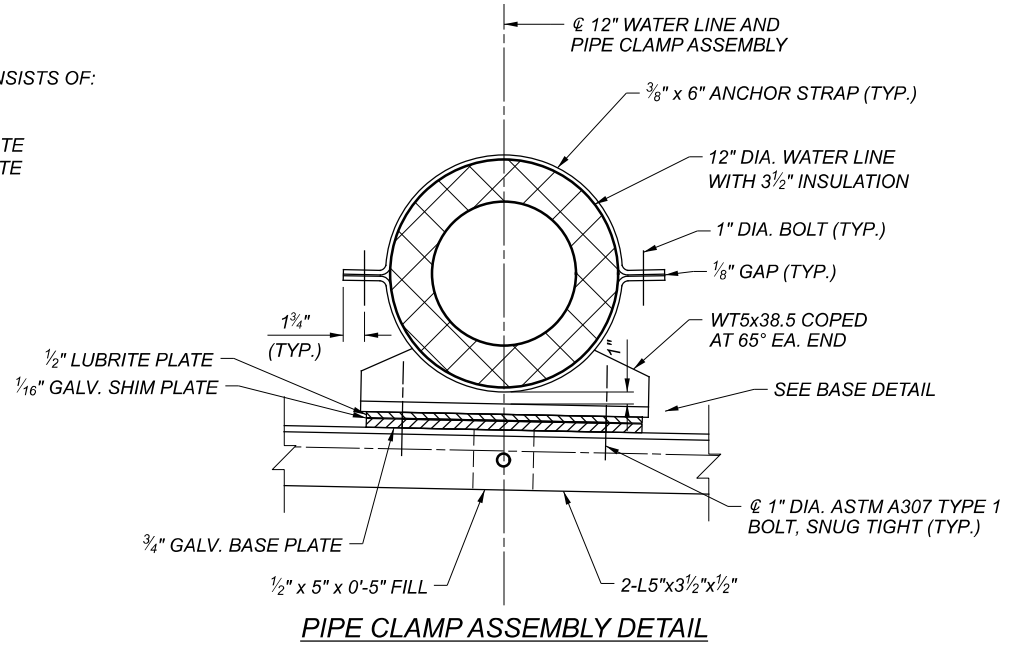


A 45 PIPE CLAMP TOP VIEW (LOOKING DOWN)

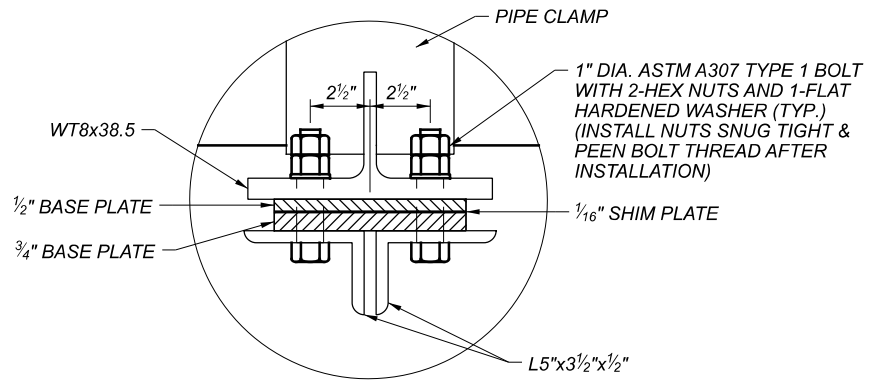


GAS LINE UTILITY SUPPORT DETAIL

- * PIPE CLAMP ASSEMBLY CONSISTS OF:
 2 - 3/8" x 6" ANCHOR STRAPS
 1 - WT5x38.5 (COPED)
 1 - 3/4" GALVANIZED BASE PLATE
 1 - 1/16" GALVANIZED SHIM PLATE
 1 - 1/2" LUBRITE PLATE



PIPE CLAMP ASSEMBLY DETAIL

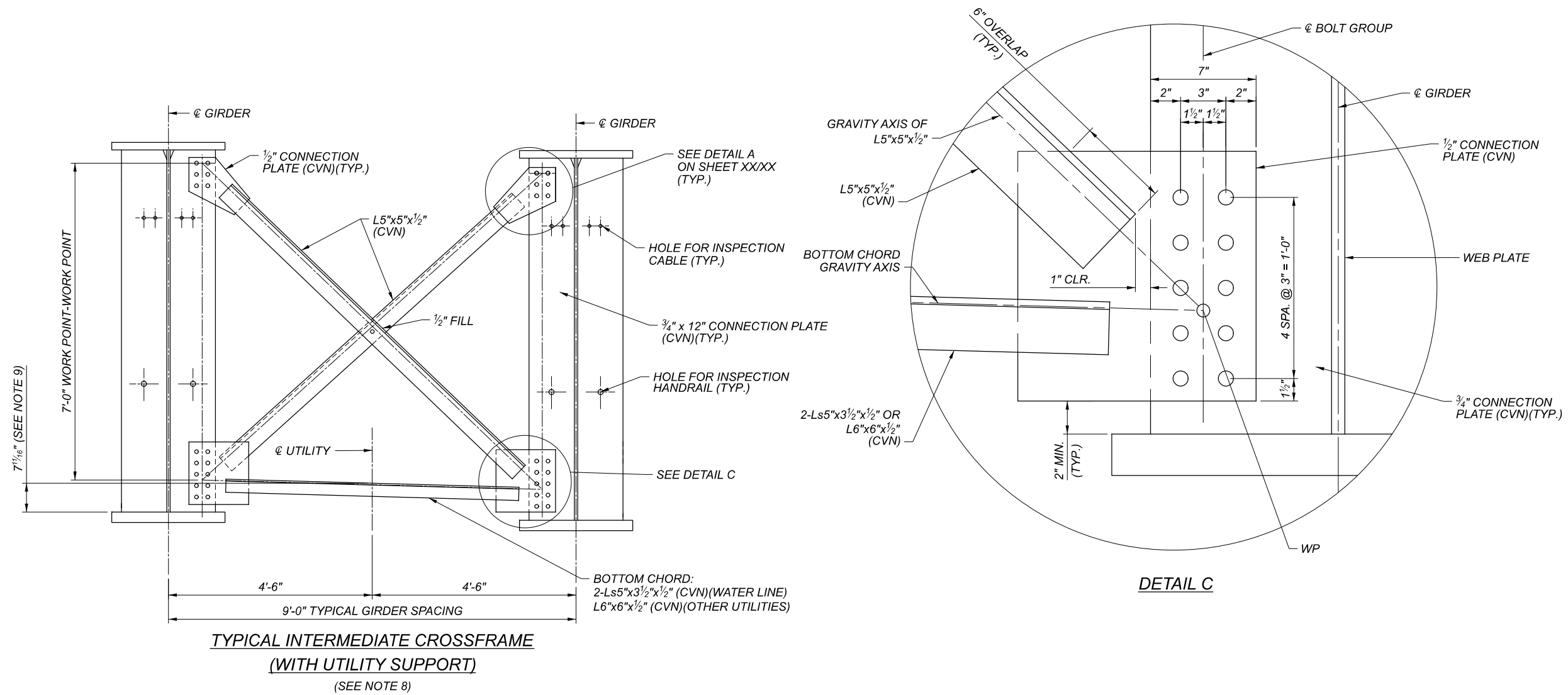


PIPE CLAMP ASSEMBLY BASE DETAIL

NOTES:

1. WORK THIS SHEET WITH SHEET 46/72.
2. ALL UTILITY SUPPORT MATERIAL SHALL CONFORM TO ASTM A709 GRADE 50, UNLESS NOTED OTHERWISE.
3. ALL FASTENERS SHALL CONFORM TO ASTM F3125 GRADE A325, 1" DIAMETER. EXCLUDE ALL THREADS FROM THE SHEAR PLANES.
4. ALL BOLT HOLES SHALL BE 1/8" DIAMETER.
5. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS OF 711.01.
6. PROVIDE 3/4" DIA. HOT-DIPPED GALVANIZED THREADED RODS WITH GALVANIZED NUTS, 2" DIA. FLAT WASHERS AND LOCK WASHERS. TIGHTEN NUTS TO WASHERS AND FIBERGLASS SPACER TUBES WITHOUT CRUSHING OR DISTORTING THE FIBERGLASS TUBES.
7. DO NOT TIGHTEN ANCHOR STRAP BOLTS UNTIL AFTER CONCRETE DECK HAS BEEN PLACED AND FULLY CURED.
8. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	ABC MEM
PROJECT ID	LPC 06-23-22
SUBSET	82382
SHEET	45 TOTAL 72
	1865 TOTAL 2339



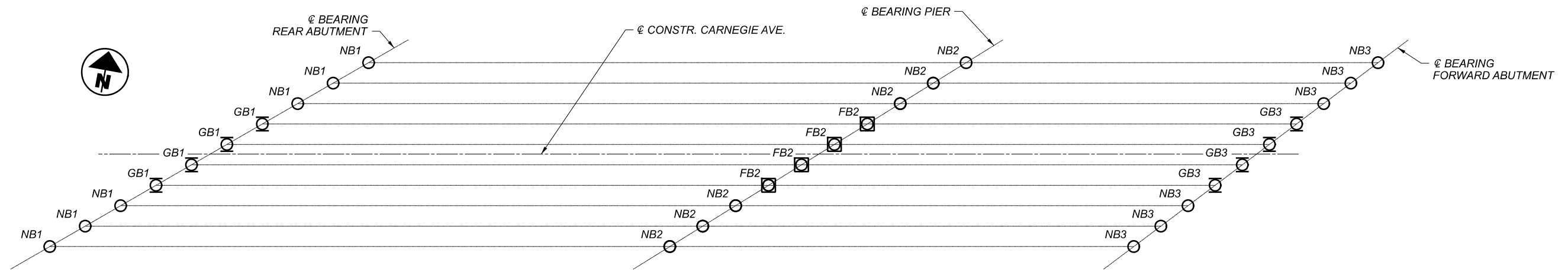
**TYPICAL INTERMEDIATE CROSSFRAME
 (WITH UTILITY SUPPORT)**
 (SEE NOTE 8)

DETAIL C

NOTES:

1. WORK THIS SHEET WITH SHEET 45/72.
2. ALL UTILITY SUPPORT MATERIAL SHALL CONFORM TO ASTM A709 GRADE 50, UNLESS NOTED OTHERWISE.
3. ALL FASTENERS SHALL CONFORM TO ASTM F3125 GRADE A325, 1" DIAMETER. EXCLUDE ALL THREADS FROM THE SHEAR PLANES.
4. ALL BOLT HOLES SHALL BE 1 1/8" DIAMETER.
5. WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS OF 711.01.
6. PROVIDE 3/4" DIA. HOT-DIPPED GALVANIZED THREADED RODS WITH GALVANIZED NUTS, 2" DIA. FLAT WASHERS AND LOCK WASHERS. TIGHTEN NUTS TO WASHERS AND FIBERGLASS SPACER TUBES WITHOUT CRUSHING OR DISTORTING THE FIBERGLASS TUBES.
7. DO NOT TIGHTEN ANCHOR STRAP BOLTS UNTIL AFTER CONCRETE DECK HAS BEEN PLACED AND FULLY CURED.
8. IN GIRDER BAYS WHERE UTILITIES ARE PRESENT, PROVIDE THE INTERMEDIATE CROSSFRAME DETAILED ON THIS SHEET. WORK INDIVIDUAL UTILITY SUPPORT DETAILS ON SHEET 45/72 WITH THE CROSSFRAME DETAILS SHOWN ON THIS SHEET.
9. COORDINATE DIMENSION FROM TOP OF BOTTOM FLANGE TO TOP OF UTILITY SUPPORT WITH UTILITY SUPPORTS SHOWN IN SHEET 45/72. ADJUST AS REQUIRED PER THE INDIVIDUAL UTILITY TO MAINTAIN A CONSTANT DISTANCE FROM TOP OF BOTTOM FLANGE TO TOP OF UTILITY SUPPORT.
10. CVN: WHERE A SHAPE OR PLATE IS DESIGNATED (CVN), FURNISH MATERIAL THAT MEETS THE MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN C&MS 711.01.

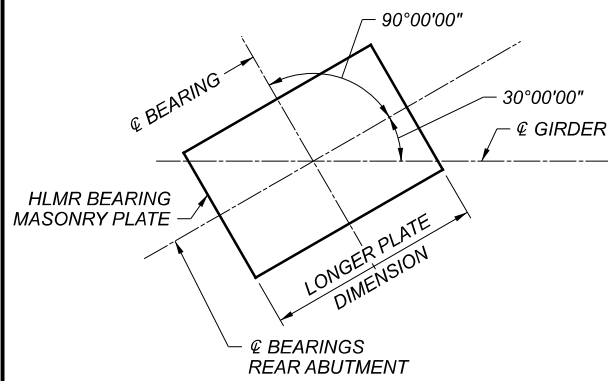
SFN	1807898
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER	CHECKER
ABC	MEM
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
46	72
SHEET	TOTAL
1866	2339



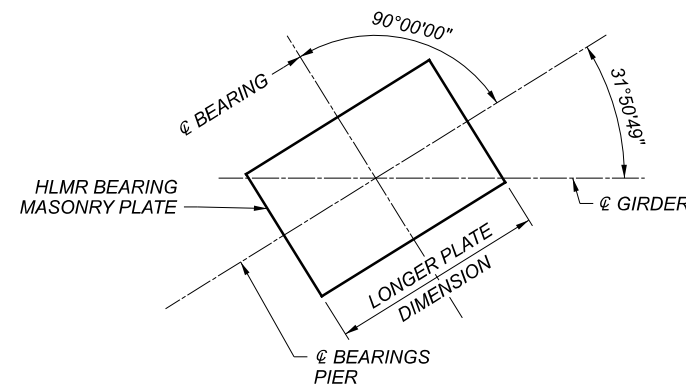
HLMR BEARING KEY PLAN

LEGEND:

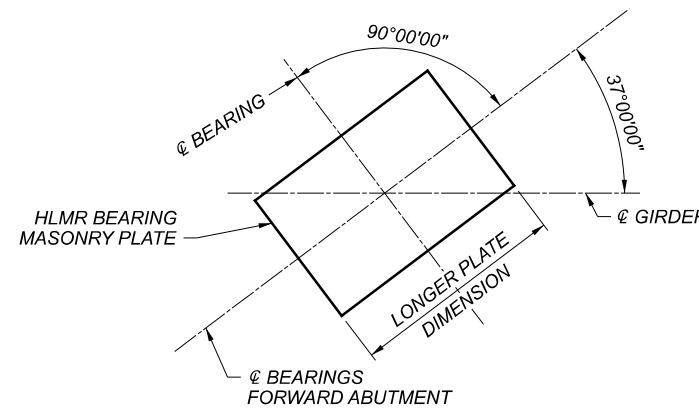
- NBx ○ NON-GUIDED HLMR BEARING
- GBx ◻ GUIDED HLMR BEARING
- FBx ◻ FIXED HLMR BEARING



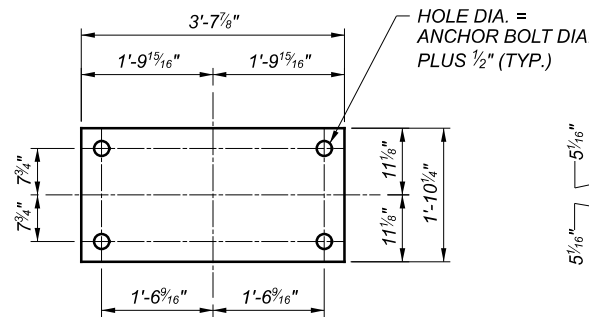
BEARING ORIENTATION PLAN
REAR ABUTMENT



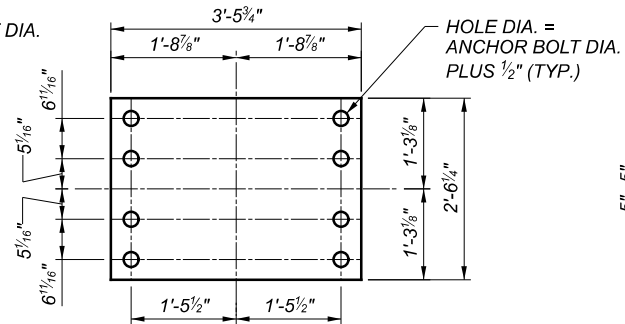
BEARING ORIENTATION PLAN
PIER



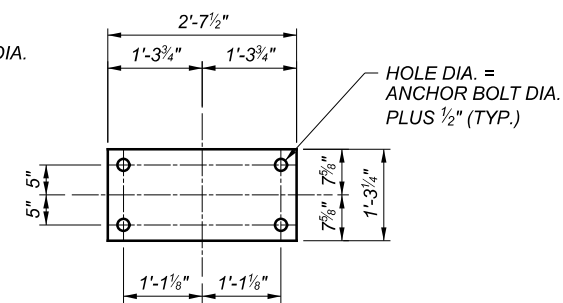
BEARING ORIENTATION PLAN
FORWARD ABUTMENT



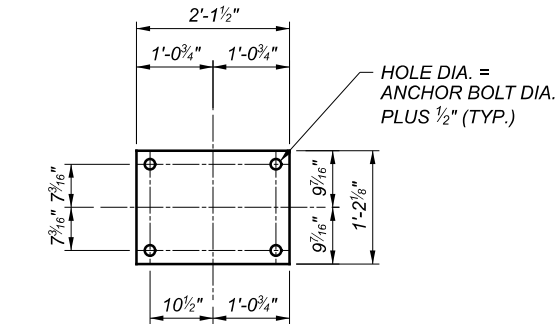
PROPOSED MASONRY PLATE
BEARING mk. GB1



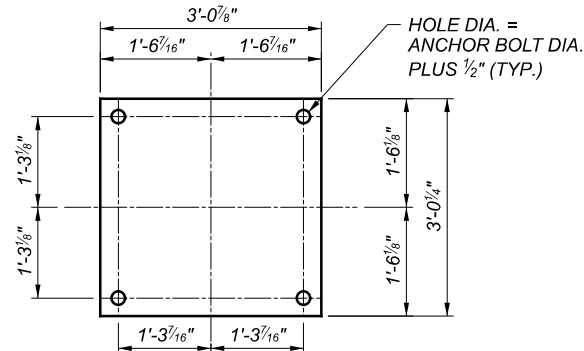
PROPOSED MASONRY PLATE
BEARING mk. FB2



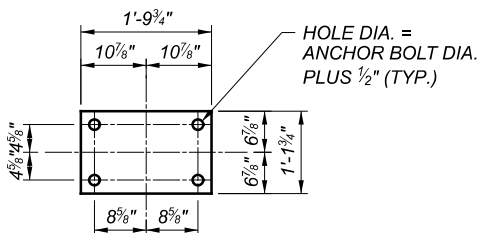
PROPOSED MASONRY PLATE
BEARING mk. GB3



PROPOSED MASONRY PLATE
BEARING mk. NB1



PROPOSED MASONRY PLATE
BEARING mk. NB2



PROPOSED MASONRY PLATE
BEARING mk. NB3

NOTES:

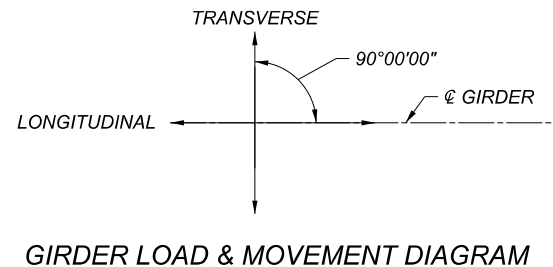
1. SEE SHEET 48/72 FOR HLMR BEARING DESIGN TABLES AND NOTES.
2. GUIDED BEARINGS SHALL BE GUIDED PARALLEL TO THE GIRDER CENTERLINE.

SFN	1807898
DESIGN AGENCY	
DESIGNER/CHECKER	MEM ABC
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	47
TOTAL	72
SHEET	1867
TOTAL	2339

HLMR BEARING DESIGN LOAD DATA

BEARING LOCATION	BEARING TYPE	BEARING MARK	QUANTITY	VERTICAL LOADS (KIPS)									HORIZONTAL LOADS (KIPS)				ASSUMED BEARING HEIGHT (IN)
				SERVICE						EXTREME EVENT**			SERVICE		EXTREME EVENT**		
				DL*		LL + IM***		HORIZONTAL****		DL*	LL + IM	HORIZ.****	LONG.	TRANS.	LONG.	TRANS.	
MAX	MIN	MAX	MIN	MAX	MIN	DL*	LL + IM	HORIZ.****	LONG.	TRANS.	LONG.	TRANS.					
REAR ABUT.	NON-GUIDED EXP.	NG1	6	361	237	129	-26	2	-2	361	0	0	20	20	20	20	12.3125
REAR ABUT.	GUIDED EXP.	GB1	4	281	205	122	-10	3	0	281	0	0	20	42	20	130	12.3125
PIER	NON-GUIDED EXP.	NG2	6	1047	693	279	-35	4	-4	1047	0	0	55	55	55	55	8.9375
PIER	FIXED	FB2	4	811	603	249	-10	5	-5	811	0	0	112	74	88	370	8.9375
FWD. ABUT.	NON-GUIDED EXP.	NG3	6	185	96	129	-32	2	-2	185	0	0	10	10	10	10	8.9063
FWD. ABUT.	GUIDED EXP.	GB3	4	131	92	110	-17	2	-2	131	0	0	10	32	10	60	8.9063

* DL VALUES INCLUDE DC1, DC2 AND DW LOAD EFFECTS.
 ** VALUES GIVEN IN THE "EXTREME EVENT" COLUMNS ARE DUE TO AASHTO LRFD LOAD COMBINATION EXT-I.
 *** LIVE LOAD VALUES INCLUDE EFFECTS OF VEHICULAR LOADS AND SIDEWALK LIVE LOADS.
 **** VERTICAL REACTIONS RESULTING FROM HORIZONTAL LOADS.



HLMR BEARING DESIGN MOVEMENT DATA

BEARING LOCATION	BEARING TYPE	BEARING MARK	SERVICE MOVEMENTS*		
			LONGITUDINAL		TRANS.
			THERMAL (IN)	LS** (IN)	THERMAL (IN)
REAR ABUT.	NON-GUIDED EXP.	NG1	4.75	3.25	1.00
REAR ABUT.	GUIDED EXP.	GB1	4.75	3.25	0.00
PIER	NON-GUIDED EXP.	NG2	0.00	0.00	0.56
PIER	FIXED	FB2	0.00	0.00	0.00
FWD. ABUT.	NON-GUIDED EXP.	NG3	3.69	0.00	1.00
FWD. ABUT.	GUIDED EXP.	GB3	3.69	0.00	0.00

* MOVEMENTS GIVEN ARE SUM OF EXPANSION AND CONTRACTION. MOVEMENTS ROUNDED UP TO THE NEXT 1/16".
 ** ADDITIONAL ONE-WAY MOVEMENT DUE TO ABUTMENT DEFLECTION. MOVEMENT IS IN ADDITION TO THERMAL MOVEMENTS AND ACTS IN THE STATIONS-AHEAD DIRECTION.

HLMR BEARING ROTATION DATA

BEARING LOCATION	GIRDER	BEARING MARK	SERVICE ROTATIONS (DEGREES)*							
			NON-COMPOSITE DEAD LOADS**		COMPOSITE DEAD LOADS***		LL+IM****			
			LONG.	TRANS.	LONG.	TRANS.	LONG.		TRANS.	
						MIN.	MAX.	MIN.	MAX.	
REAR ABUT.	G1	NG1	1.06	0.61	0.50	0.30	-0.19	0.06	-0.03	0.18
REAR ABUT.	G2	NG1	1.05	0.61	0.43	0.25	-0.20	0.06	-0.03	0.16
REAR ABUT.	G3	NG1	1.06	0.61	0.34	0.20	-0.21	0.05	-0.03	0.14
REAR ABUT.	G4	GB1	1.08	0.62	0.29	0.17	-0.20	0.05	-0.03	0.13
REAR ABUT.	G5	GB1	1.10	0.63	0.27	0.16	-0.21	0.05	-0.03	0.13
REAR ABUT.	G6	GB1	1.11	0.64	0.30	0.17	-0.21	0.04	-0.02	0.12
REAR ABUT.	G7	GB1	1.12	0.65	0.35	0.20	-0.22	0.04	-0.03	0.13
REAR ABUT.	G8	NG1	1.13	0.65	0.44	0.25	-0.21	0.04	-0.02	0.13
REAR ABUT.	G9	NG1	1.15	0.66	0.54	0.31	-0.20	0.04	-0.02	0.12
REAR ABUT.	G10	NG1	1.19	0.69	0.59	0.35	-0.19	0.04	-0.02	0.11
PIER	G1	NG2	-0.35	-0.22	-0.12	-0.08	-0.07	0.14	-0.05	0.06
PIER	G2	NG2	-0.37	-0.22	-0.15	-0.08	-0.07	0.15	-0.06	0.06
PIER	G3	NG2	-0.34	-0.21	-0.12	-0.08	-0.08	0.14	-0.07	0.06
PIER	G4	FB2	-0.35	-0.22	-0.11	-0.07	-0.08	0.12	-0.06	0.05
PIER	G5	FB2	-0.36	-0.23	-0.09	-0.06	-0.08	0.12	-0.07	0.05
PIER	G6	FB2	-0.37	-0.23	-0.08	-0.05	-0.08	0.12	-0.07	0.05
PIER	G7	FB2	-0.36	-0.22	-0.08	-0.05	-0.09	0.12	-0.08	0.06
PIER	G8	FB2	-0.36	-0.22	-0.09	-0.06	-0.09	0.13	-0.08	0.06
PIER	G9	NG2	-0.35	-0.22	-0.13	-0.08	-0.08	0.13	-0.08	0.05
PIER	G10	NG2	-0.39	-0.24	-0.18	-0.11	-0.07	0.14	-0.08	0.05
FWD. ABUT.	G1	NG3	-0.06	-0.05	-0.08	-0.06	-0.05	0.12	-0.05	0.06
FWD. ABUT.	G2	NG3	-0.07	-0.06	-0.07	-0.05	-0.05	0.13	-0.07	0.05
FWD. ABUT.	G3	NG3	-0.09	-0.07	-0.04	-0.03	-0.05	0.13	-0.08	0.05
FWD. ABUT.	G4	GB3	-0.10	-0.07	-0.03	-0.02	-0.05	0.12	-0.08	0.05
FWD. ABUT.	G5	GB3	-0.11	-0.08	-0.02	-0.01	-0.05	0.12	-0.09	0.05
FWD. ABUT.	G6	GB3	-0.12	-0.09	-0.03	-0.02	-0.06	0.12	-0.09	0.05
FWD. ABUT.	G7	GB3	-0.13	-0.10	-0.05	-0.04	-0.06	0.12	-0.09	0.05
FWD. ABUT.	G8	NG3	-0.14	-0.11	-0.08	-0.06	-0.06	0.13	-0.10	0.05
FWD. ABUT.	G9	NG3	-0.16	-0.12	-0.12	-0.09	-0.07	0.12	-0.09	0.05
FWD. ABUT.	G10	NG3	-0.17	-0.13	-0.15	-0.11	-0.08	0.11	-0.08	0.06

* SERVICE ROTATIONS ARE GIVEN ABOUT THE GIRDER LONGITUDINAL AXIS (LONG.) AND ABOUT AN AXIS TRANSVERSE TO THE GIRDER CENTERLINE (TRANS.) POSITIVE ROTATIONS ARE CLOCKWISE LOOKING STATIONS AHEAD ALONG THE GIRDER LONGITUDINAL AXIS.
 ** NONCOMPOSITE DEAD LOADS INCLUDE STEEL SELF WEIGHT AND WET CONCRETE DECK SLAB LOADS.
 *** COMPOSITE DEAD LOADS INCLUDE RAILING, FENCE AND SIDEWALK SELF WEIGHTS AND FUTURE WEARING SURFACE LOADS.
 **** LIVE LOAD EFFECTS INCLUDE VEHICULAR LIVE LOADS AND SIDEWALK LIVE LOADS.

HLMR BEARING WELD DATA

BEARING LOCATION	BEARING MARK	MIN. FILLET WELD SIZE (IN)	MIN. LENGTH OF WELD REQ'D. (IN)
REAR ABUT.	NG1	5/16	
REAR ABUT.	GB1	5/16	
PIER	NG2	5/16	
PIER	FB2	5/16	
FWD. ABUT.	NG3	5/16	
FWD. ABUT.	GB3	5/16	

HLMR BEARING ANCHOR BOLT DATA

BEARING LOCATION	BEARING MARK	NUMBER OF ANCHOR BOLTS REQUIRED	ANCHOR BOLT DIAMETER (IN)	MINIMUM EMBEDMENT LENGTH (IN)
REAR ABUT.	NG1	4	1.25	18.00
REAR ABUT.	GB1	4	2.00	18.00
PIER	NG2	4	1.75	18.00
PIER	FB2	8	2.00	24.00
FWD. ABUT.	NG3	4	1.25	18.00
FWD. ABUT.	GB3	4	1.50	18.00

BEARING GENERAL NOTES:

- BEARING SEAT ADJUSTMENTS: THE PIER AND ABUTMENT BEAM SEAT ELEVATIONS ARE BASED ON THE BEARING HEIGHTS PROVIDED IN THE TABLE ABOVE. 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 REDESIGN THE BEARINGS TO ACCOMMODATE AN ACCEPTABLE ANCHOR BOLT CONFIGURATION.
- PROVIDE BEVELED SOLE PLATES. GIRDERS WEBS SHALL BE PLUMB AFTER ALL STEEL HAS BEEN ERRECTED. GIRDERS SHALL BE DETAILED FOR THE "STEEL DEAD LOAD FIT" (SDLF) OR "ERECTED FIT" CONDITION. GIRDER WEBS SHALL BE PLUMB AFTER ERECTION IS COMPLETE. HLMR BEARINGS SHALL BE DESIGNED TO ACCOMMODATE GIRDER ROLL AND LAYOVER DURING THE ERECTION PROCESS AND PLACEMENT OF COMPOSITE DEAD LOADS.
- PROVIDE FILLET WELDS BETWEEN GIRDER BOTTOM FLANGES AND BEARING SOLE PLATES PER THE HLMR BEARING WELD DATA TABLE. USE LOW-HYDROGEN, GRADE E70XX ELECTRODES TO MAKE ALL WELDS. REPAIR GIRDER PRIMER DAMAGED BY WELDING AT NO ADDITIONAL COST TO THE STATE.
- FOR ADDITIONAL INFORMATION, SEE SUPPLEMENTAL SPECIFICATION 869: "HIGH LOAD MULTI ROTATIONAL (HLMR) BEARINGS".
- SANDBLAST IN ACCORDANCE WITH SSPC-SP10 TO REMOVE MILL SCALE FROM ALL BEARINGS.
- GRIND ALL STEEL SURFACES SMOOTH AND REMOVE ANY SHARPO PROTRUSIONS. FABRICATION TOLERANCES AND LIMITATIONS ON SURFACE FINISH SHALL BE IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 869.
- PAINT ALL STEEL SURFACES. DO NOT PAINT PTFE, STAINLESS STEEL, OR INNER SURFACES OF POT BEARINGS. APPLY ONLY PRIMER COATS TO STEEL SURFACES TO BE IN CONTACT WITH THE GIRDER BOTTOM FLANGE.
- ROUND ALL PTFE CORNERS TO ACCOMMODATE THE MACHINED RECESS IN STEEL GUIDE PLATES AND PISTONS (IF USED).
- ETCH PTFE ON ONE SIDE FOR BONDING INTO MACHINED RECESSES.
- PIGMENT THE PTFE ON THE SIDE OF GUIDE PLATES.
- PRIOR TO APPLICATION OF ADHESIVE, CLEAN ALL MATING STEEL AND PTFE SURFACES BY GRIT BLASTING AND DEGREASING. APPLY ADHESIVE PER THE MANUFACTURER'S RECOMMENDATIONS.
- POT BEARINGS: LUBRICATE ALL SURFACES OF NEOPRENE DISCS WITH SILICONE GREASE IN ACCORDANCE WITH MILITARY SPEC. SAE-AS8660. CUT CUT FLAT BRASS SEALING RING ENDS AT 45° WITH A MAXIMUM GAP OF 0.05". STAGGER OPENINGS IN THE BRASS RINGS 120° APART.
- MARK THE THICKER EDGES OF SOLE PLATES FOR IDENTIFICATION IN THE FIELD. PLACE MARKS SO THEY WILL BE VISIBLE AFTER INSTALLATION. MARK CENTERLINES OF GUIDED AND NONGUIDED BEARINGS ON THE SIDES OF THE MASONRY PLATE AND SOLE PLATE. THESE WILL BE USED TO SET OFFSET DISTANCES IN THE FIELD. USE INDELIBLE INK TO PLACE ALL MARKS. MARK EACH BEARING WITH THE NAME OF THE MANUFACTURER AND BEARING TYPE OR MODEL NUMBER. PLACE THE MARKS IN A PERMANENT MANNER AND IN A LOCATION VISIBLE AFTER INSTALLATION.

ANCHOR BOLT INSTALLATION NOTES:

- INSTALL ANCHOR BOLTS USING A METAL TEMPLATE OR OTHER METHOD TO POSITIVELY LOCATE ANCHOR BOLTS IN THE FIELD, OR DRILL AND GROUT.
- IF BLOCKOUTS ARE USED FOR ANCHOR BOLTS, REMOVE BLOCKOUT FORM AND DEBRIS FROM HOLE PRIOR TO GROUTING. DO NOT GROUT ANCHOR BOLT HOLES UNTIL ALL GIRDERS HAVE BEEN COMPLETELY PLACED.
- PREVENT WATER FROM ACCUMULATING IN PREFORMED ANCHOR BOLT HOLES AND ENSURE HOLES ARE COMPLETELY FILLED WITH GROUT.
- INSTALL ANCHOR BOTL HEX NUTS FINGER TIGHT, THEN BACK OFF ONE-QUARTER TURN. PEEN OR BURR THREADS AFTER NUT INSTALLATION.

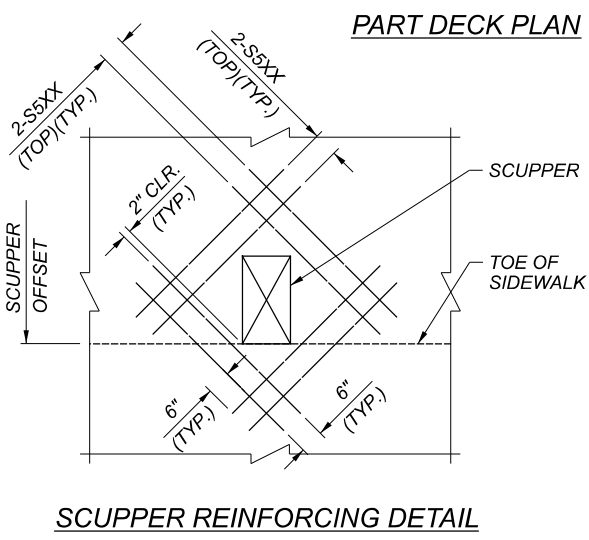
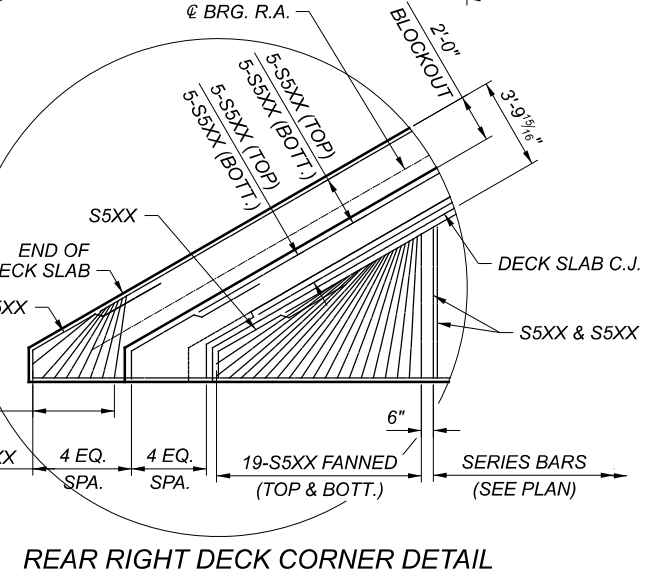
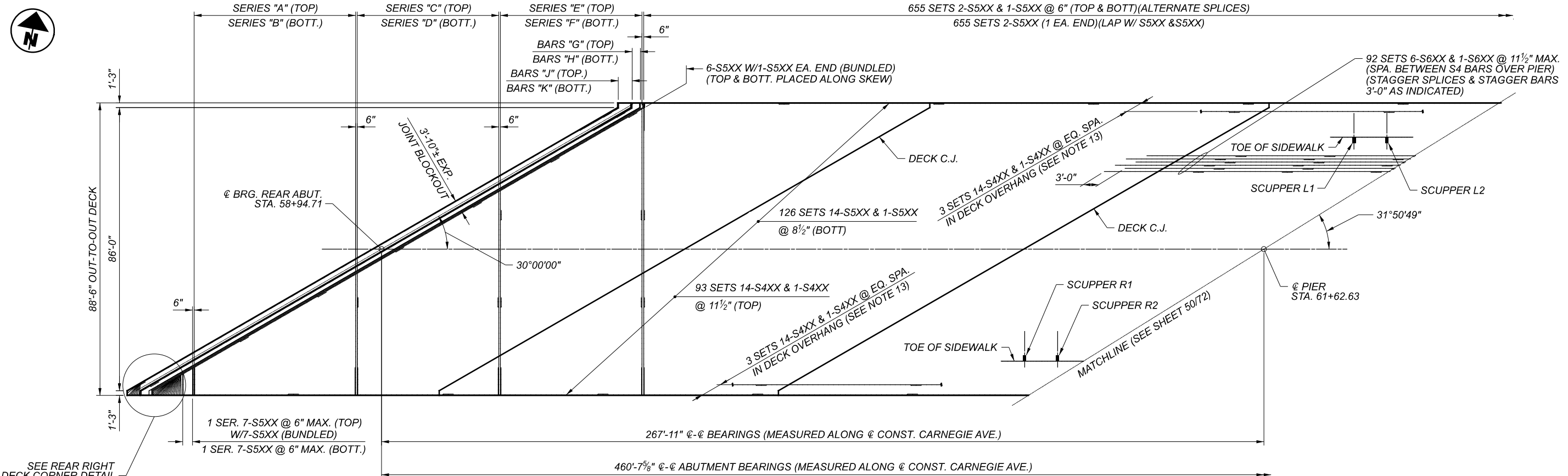
CUY-90-16-28 (CCG3A)

MODEL: Sheet PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:36:54 PM USER: Maia.Gallagher p:\v\p-w\benley.comb-us-pw-03\Documents\Cleveland_Oh101_P\Projects\ODOT\Distric12\23242404-Engineering\Structures\SFN_1807898_SB002.dgn

BEARING DETAILS (2 OF 2)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker	INTERNATIONAL
DESIGNER	CHECKER
MEM	ABC
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
48	72
SHEET	TOTAL
1868	2339

MODEL: deck plan 1 of 2 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:37:02 PM USER: Maia.Gallagher
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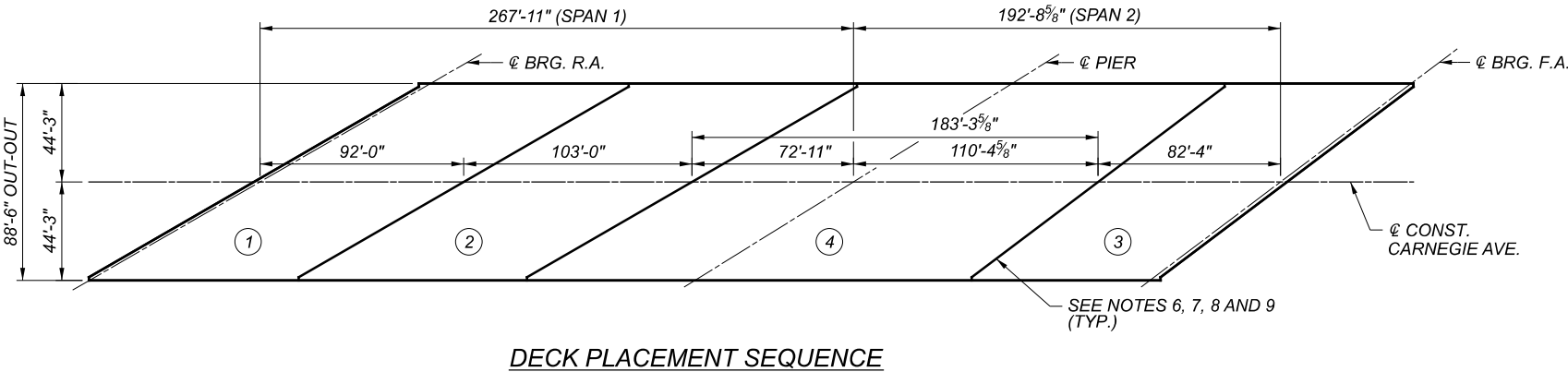


SCUPPER LOCATIONS			
SCUPPER NO.	STATION	OFFSET (FT)	
L1	61+90.00	34.00	LEFT
L2	62+00.00	34.00	LEFT
L3	63+75.00	34.00	LEFT
L4	63+85.00	34.00	LEFT
R1	60+90.00	34.00	RIGHT
R2	61+00.00	34.00	RIGHT
R3	62+90.00	34.00	RIGHT
R4	63+00.00	34.00	RIGHT

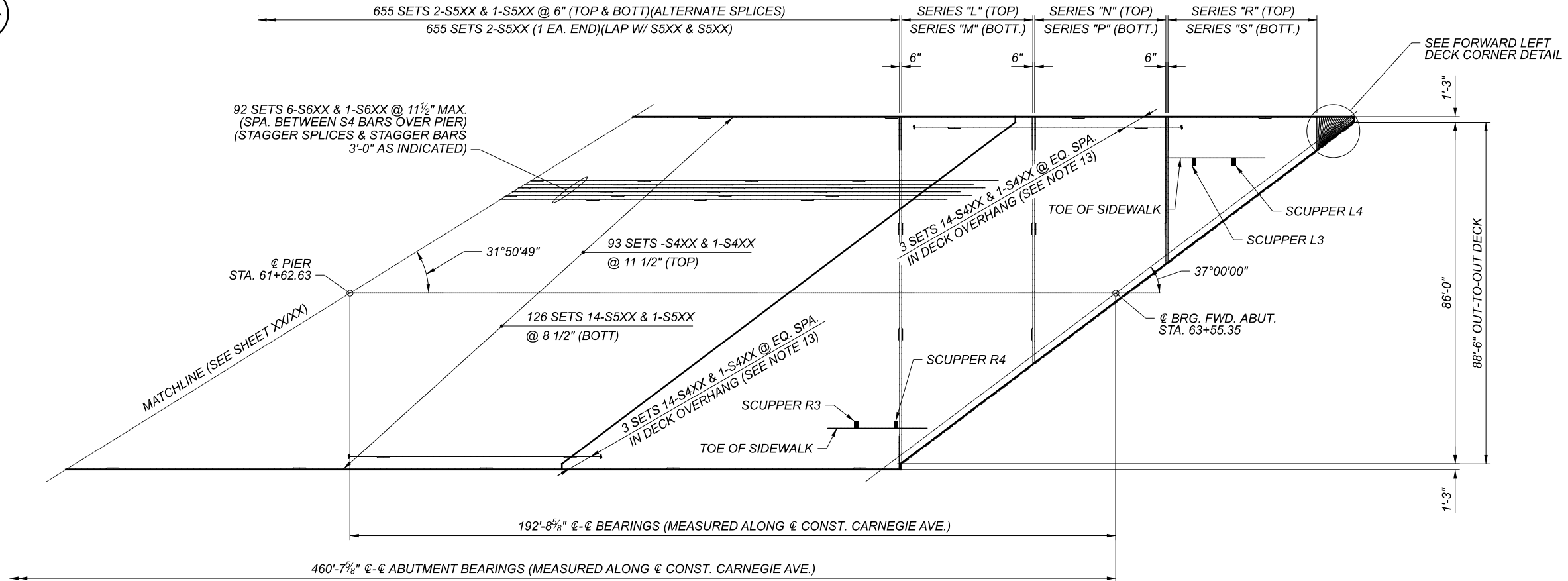
LAP LENGTHS

NO. 4 BARS	1'-11"
NO. 5 BARS	3'-0"
NO. 6 BARS	3'-7"

- NOTES:**
- ALL REINFORCING IS TO BE EPOXY-COATED.
 - WORK THIS SHEET WITH SHEET 50/72.
 - REINFORCING IN SIDEWALKS AND RAILINGS NOT SHOWN FOR CLARITY.
 - SEE SHEETS 51/72 - 52/72 FOR SIDEWALK DETAILS.
 - SEE SHEETS 59/72 - 60/72 FOR RAILING DETAILS.
 - PLACE DECK CONCRETE AND DECK CONSTRUCTION JOINTS PARALLEL TO THE SUBSTRUCTURE CENTERLINES OF BEARINGS AS INDICATED BELOW:
 BETWEEN POUR 1 & POUR 2: PARALLEL TO REAR ABUTMENT @ BEARING
 BETWEEN POUR 2 & POUR 3: PARALLEL TO REAR ABUTMENT @ BEARING
 BETWEEN POUR 3 & POUR 4: PARALLEL TO FWD. ABUTMENT @ BEARING
 - PLACE DECK CONCRETE IN THE SEQUENCE INDICATED IN THE DECK PLACEMENT SEQUENCE DETAIL. PLACE DECK CONCRETE FULL-WIDTH. SEE GENERAL NOTES FOR ADDITIONAL DECK CONCRETE PLACEMENT NOTES AND DESIGN ASSUMPTIONS.
 - CIRCLED NUMBERS IN THE DECK PLACEMENT SEQUENCE DETAIL INDICATE THE ORDER OF CONCRETE DECK PLACEMENTS.
 - PLACE CONCRETE IN POUR NUMBERS 1 AND 4 FROM THE ABUTMENT TOWARD THE PIER.
 - SEAL CONSTRUCTION JOINTS WITH A 2'-0" WIDE STRIP OF HIGH MOLECULAR WEIGHT METHACRYLATE RESIN ACCORDING TO 511.22.
 - FOR DECK REINFORCEMENT SCHEDULES, SEE SHEETS 69/72 - 72/72.
 - SEE EXPANSION JOINT DETAILS ON SHEETS 62/72 - 64/72 FOR REINFORCEMENT LAYOUT DETAILS. THE CONTRACTOR'S MODULAR JOINT ENGINEER IS RESPONSIBLE DESIGNING AND DETAILING REINFORCING WITHIN THE MODULAR EXPANSION JOINT BLOCKOUT.
 - SEE TYPICAL TRANSVERSE SECTION ON SHEET 32/72 FOR LOCATIONS OF S4 BARS.
 - DECK SLAB CONCRETE QUANTITY: THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE IS BASED ON THE CONSTANT DECK THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES A CONSTANT HAUNCH THICKNESS OF 5 INCHES AND A HAUNCH WIDTH EQUAL TO THE TOP FLANGE WIDTH. DEVIATE FROM THIS HAUNCH THICKNESS AS NECESSARY TO PLACE THE DECK SURFACE AT THE FINISHED GRADE.
 - THE HAUNCH THICKNESS WAS MEASURED AT THE CENTERLINE OF THE 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.



SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	ABC MEM
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	49
TOTAL	72
SHEET	1869
TOTAL	2339



PART DECK PLAN

REINFORCING BAR LEGEND:

SERIES "L" = 1 SER. 67-S5XX, S5XX & S5XX W/1-S5XX (BUNDLED) @ 6" MAX. SPA.
 SERIES "M" = 1 SER. 67-S5XX, S5XX & S5XX @ 6" MAX. SPA.
 SERIES "N" = 1 SER. 67-S5XX & S5XX W/1-S5XX (BUNDLED) @ 6" MAX. SPA.
 SERIES "P" = 1 SER. 67-S5XX & S5XX @ 6" MAX. SPA.
 SERIES "R" = 1 SER. 76-S5XX W/1-S5XX (BUNDLED) @ 6" MAX. SPA.
 SERIES "S" = 1 SER. 76-S5XX @ 6" MAX. SPA.

LAP LENGTHS

NO. 4 BARS 1'-11"
 NO. 5 BARS 3'-0"
 NO. 6 BARS 3'-7"

NOTES:

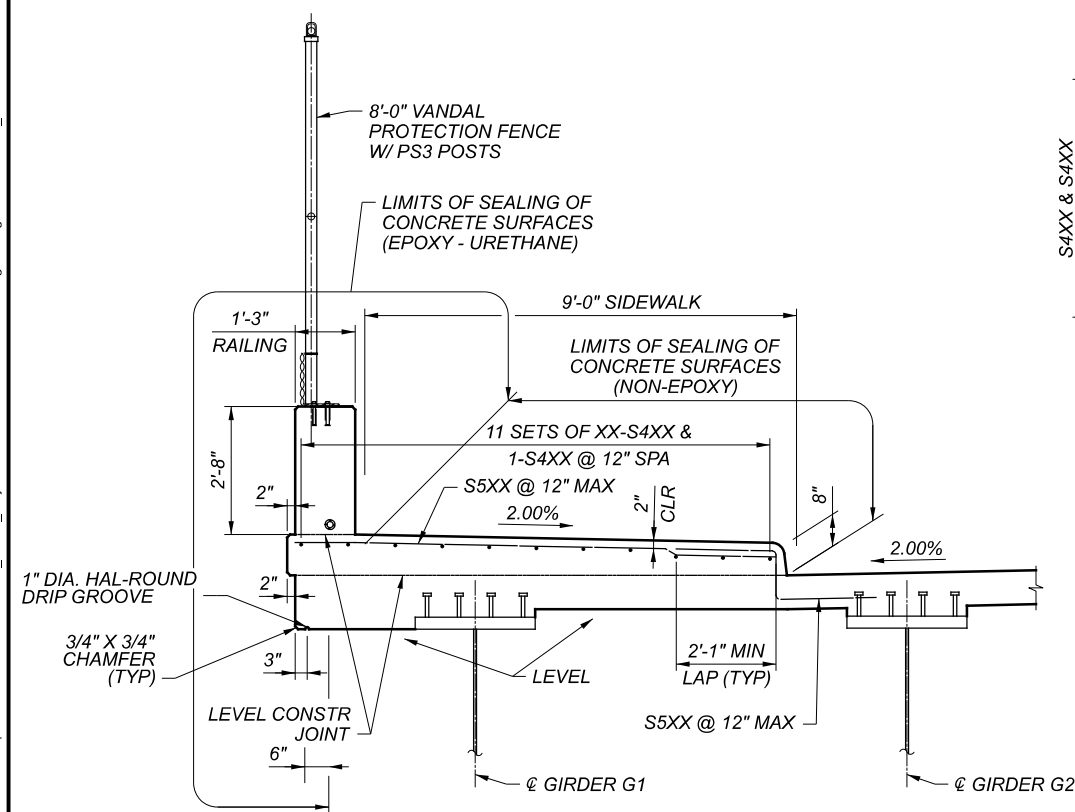
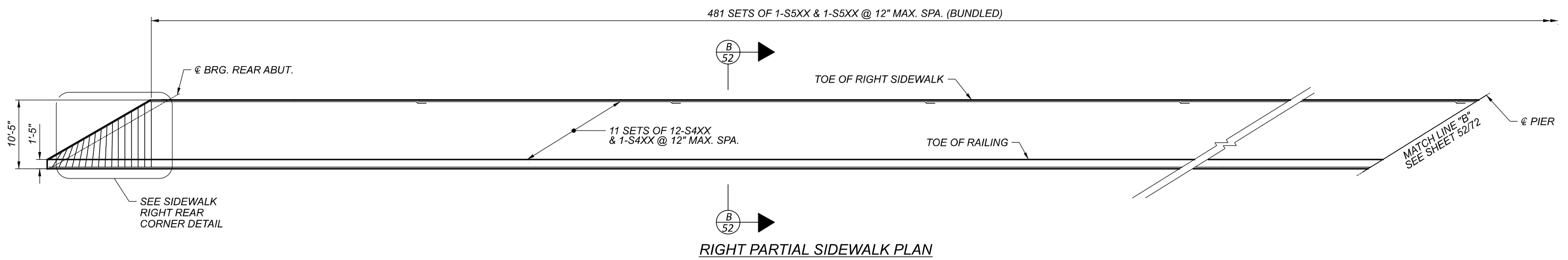
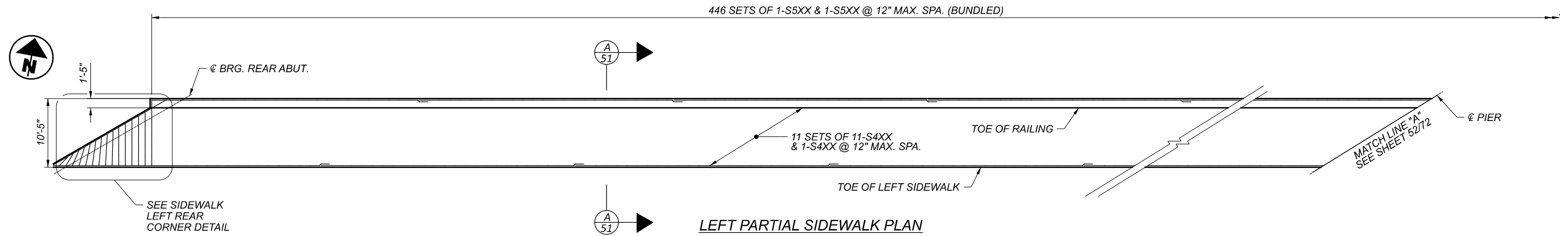
- ALL REINFORCING IS TO BE EPOXY-COATED.
- WORK THIS SHEET WITH SHEET 49/72.
- REINFORCING IN SIDEWALKS AND RAILINGS NOT SHOWN FOR CLARITY.
- SEE SHEETS 51/72 - 52/72 FOR SIDEWALK DETAILS.
- SEE SHEETS 59/72 - 60/72 FOR RAILING DETAILS.
- PLACE DECK CONCRETE AND DECK CONSTRUCTION JOINTS PARALLEL TO THE SUBSTRUCTURE CENTERLINES OF BEARINGS AS INDICATED BELOW:
 BETWEEN POUR 1 & POUR 2: PARALLEL TO REAR ABUTMENT @ BEARING
 BETWEEN POUR 2 & POUR 3: PARALLEL TO REAR ABUTMENT @ BEARING
 BETWEEN POUR 3 & POUR 4: PARALLEL TO FWD. ABUTMENT @ BEARING
- PLACE DECK CONCRETE IN THE SEQUENCE INDICATED IN THE DECK PLACEMENT SEQUENCE DETAIL. PLACE DECK CONCRETE FULL-WIDTH. SEE GENERAL NOTES FOR ADDITIONAL DECK CONCRETE PLACEMENT NOTES AND DESIGN ASSUMPTIONS.
- CIRCLED NUMBERS IN THE DECK PLACEMENT SEQUENCE DETAIL INDICATE THE ORDER OF CONCRETE DECK PLACEMENTS.
- PLACE CONCRETE IN POUR NUMBERS 1 AND 4 FROM THE ABUTMENT TOWARD THE PIER.
- SEAL CONSTRUCTION JOINTS WITH A 2'-0" WIDE STRIP OF HIGH MOLECULAR WEIGHT METHACRYLATE RESIN ACCORDING TO 511.22.
- FOR DECK REINFORCEMENT SCHEDULES, SEE SHEETS 69/72 - 72/72.
- SEE EXPANSION JOINT DETAILS ON SHEETS 62/72 - 64/72 FOR REINFORCEMENT LAYOUT DETAILS. THE CONTRACTOR'S MODULAR JOINT ENGINEER IS RESPONSIBLE DESIGNING AND DETAILING REINFORCING WITHIN THE MODULAR EXPANSION JOINT BLOCKOUT.

CUY-90-16.28 (CCG3A)

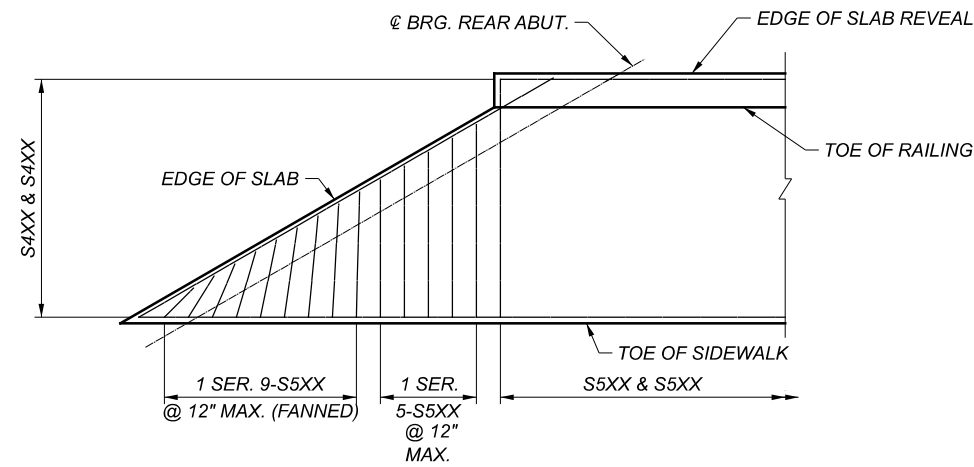
MODEL: deck plan 2 of 2 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:37:03 PM USER: Maia.Gallagher
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DECK PLAN (2 OF 2)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

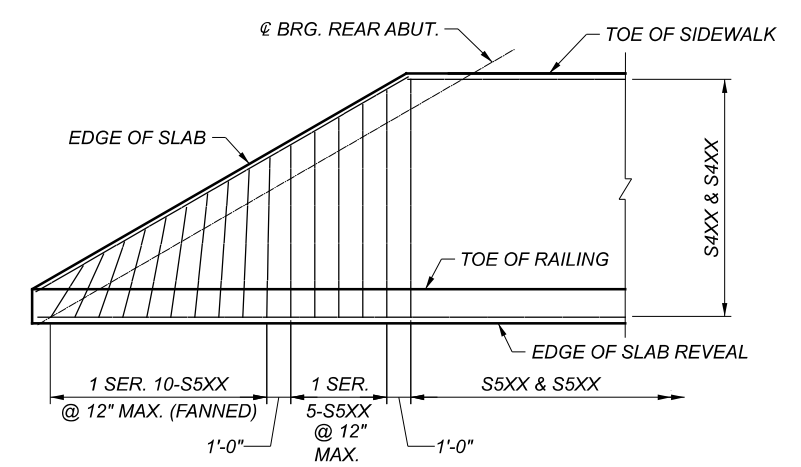
SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	
PROJECT ID	82382
SUBSET	TOTAL
50	72
SHEET	TOTAL
1870	2339



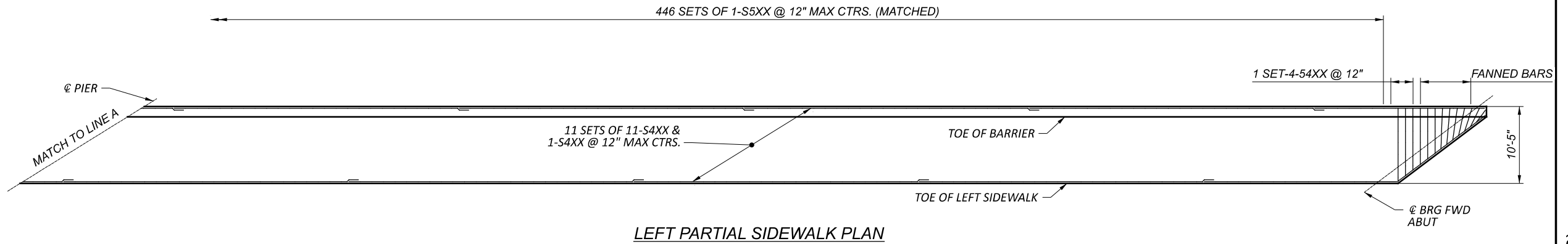
A SECTION
 51 TYPICAL LEFT SIDEWALK SECTION



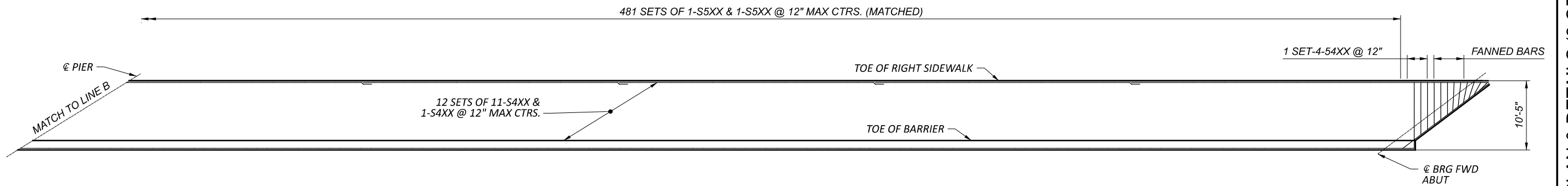
SIDEWALK LEFT REAR CORNER DETAIL



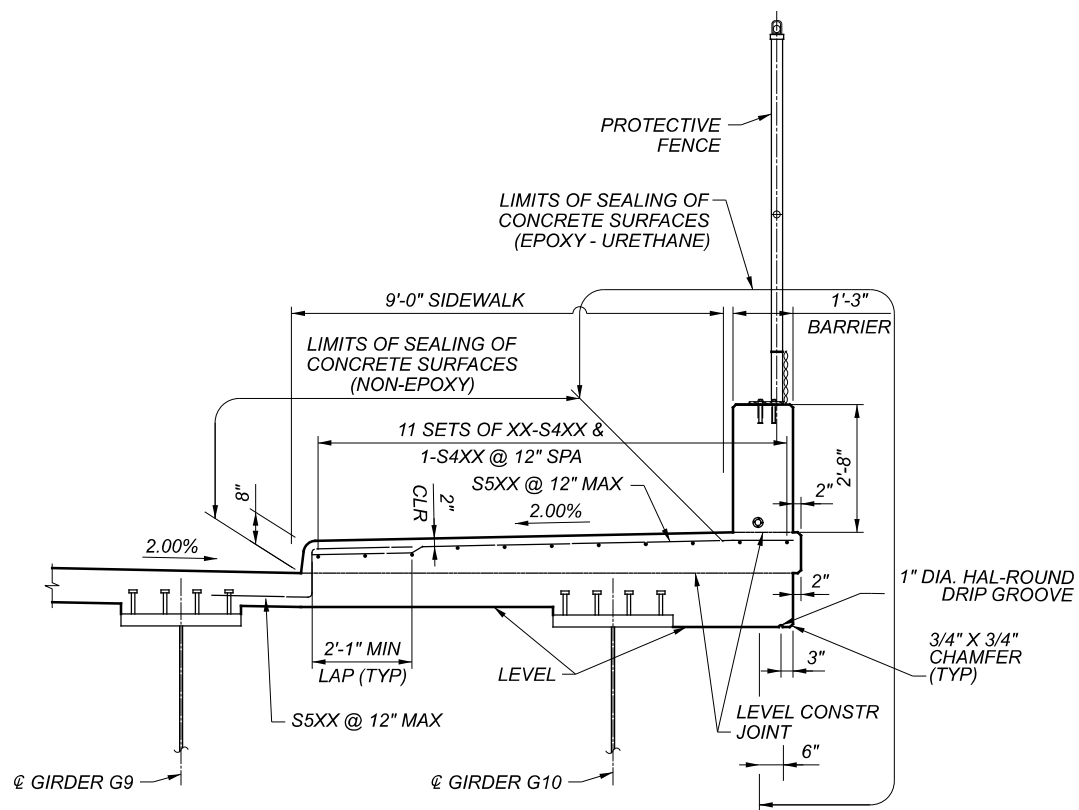
SIDEWALK RIGHT REAR CORNER DETAIL



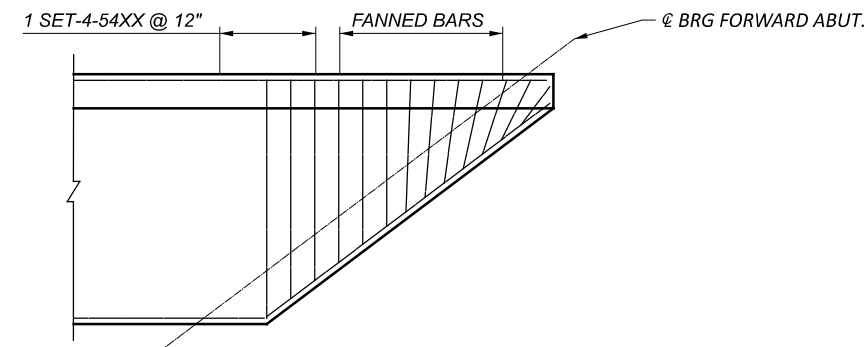
LEFT PARTIAL SIDEWALK PLAN



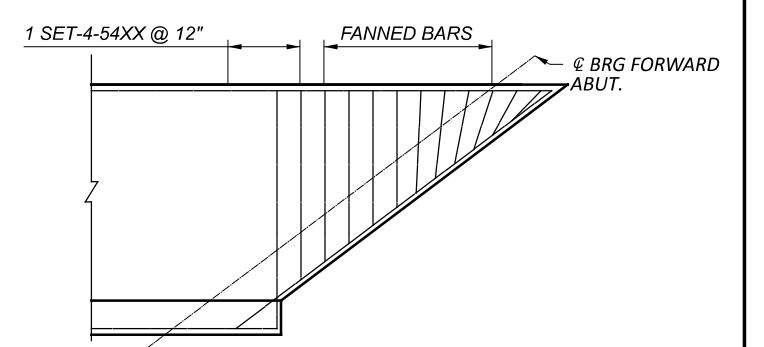
RIGHT PARTIAL SIDEWALK PLAN



B SECTION
52 TYPICAL LEFT SIDEWALK SECTION



SIDEWALK LEFT FORWARD CORNER DETAIL



SIDEWALK RIGHT FORWARD CORNER DETAIL

CUY-90-16.28 (CCG3A)

MODEL: sidewalk plan and details 2 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:37:12 PM USER: Mala.Gallagher
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SIDEWALK PLAN & DETAILS (2 OF 2)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	
PROJECT ID	82382
SUBSET	52
TOTAL	72
SHEET	1872
TOTAL	2339

CUY-90-16.28 (CCG3A)

MODEL: deck screed elev table 2 PAPER: 6/23/2022 TIME: 5:37:30 PM USER: Maia.Gallagher
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DECK SCREED ELEVATIONS, STATIONS AND OFFSETS

Table with columns for LT DECK EDGE, GIRDER G1 through G10, RT TOE/SIDEWALK, and RT DECK EDGE. Rows include C.L. PIER, 0.05 "B", 0.10 "B", 0.15 "B", 0.20 "B", 0.25 "B", 0.30 "B", 0.35 "B", 0.40 "B", 0.45 "B", 0.50 "B", 0.55 "B", 0.60 "B", 0.65 "B", F.S. 4, 0.70 "B", 0.75 "B", 0.80 "B", 0.85 "B", 0.90 "B", 0.95 "B", and C.L. BRG. F.A.

LEGEND:

"B" LENGTH OF SPAN 2 MEASURED ALONG G GIRDER OR DECK FEATURE

NOTES:

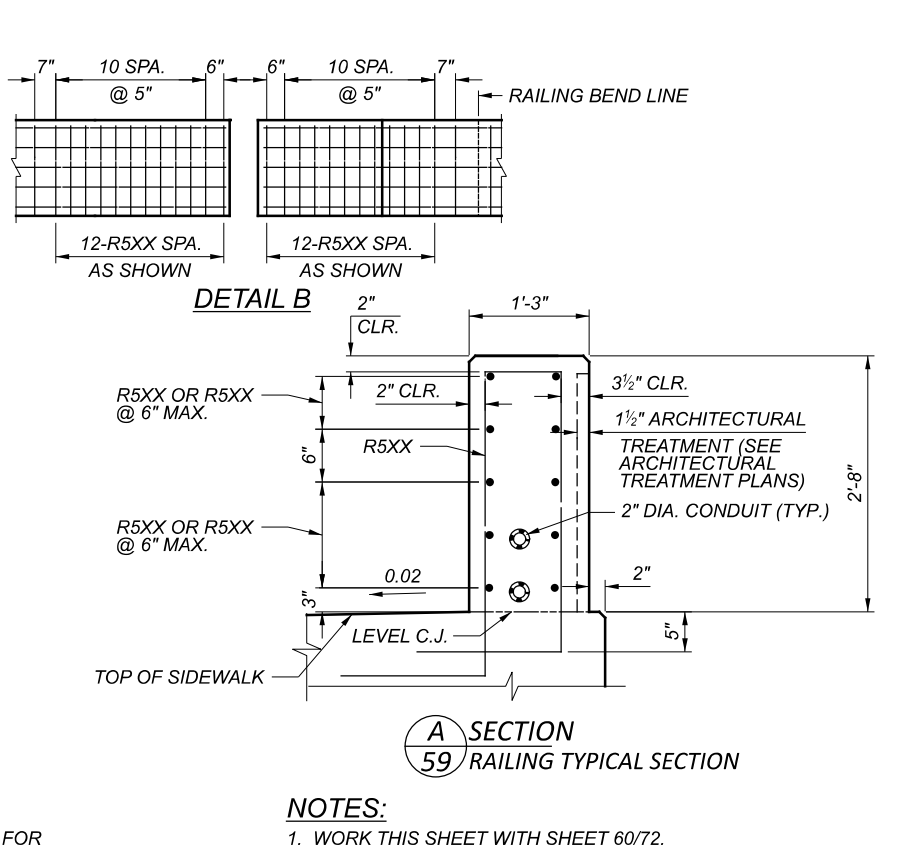
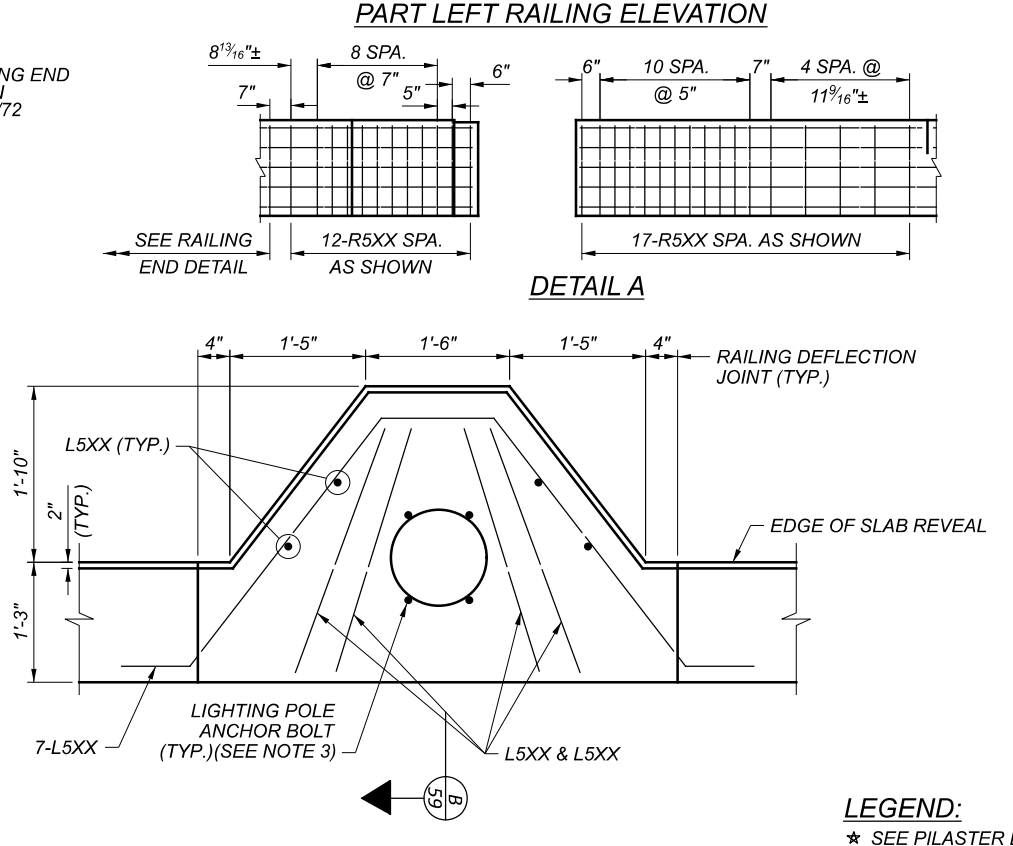
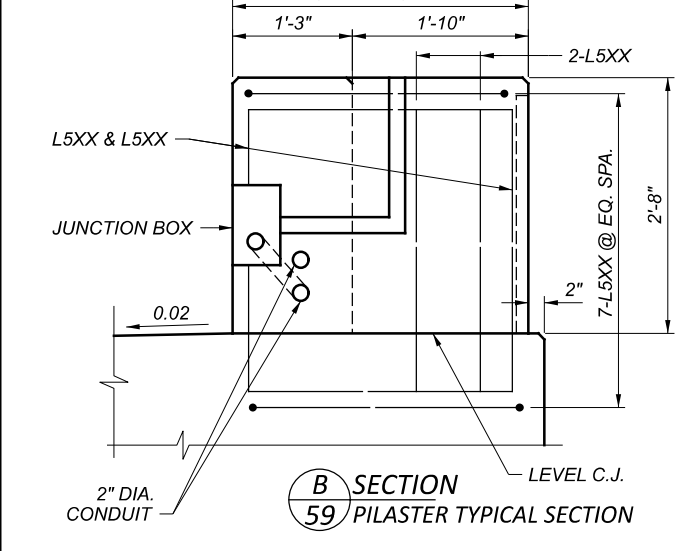
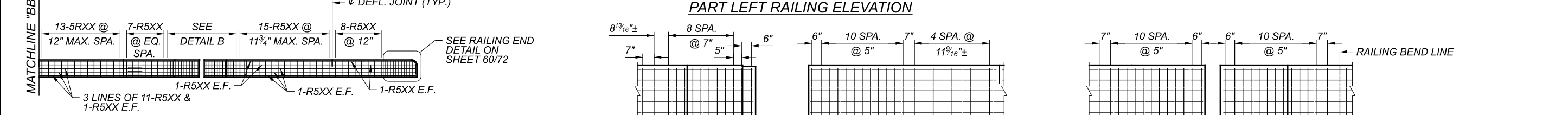
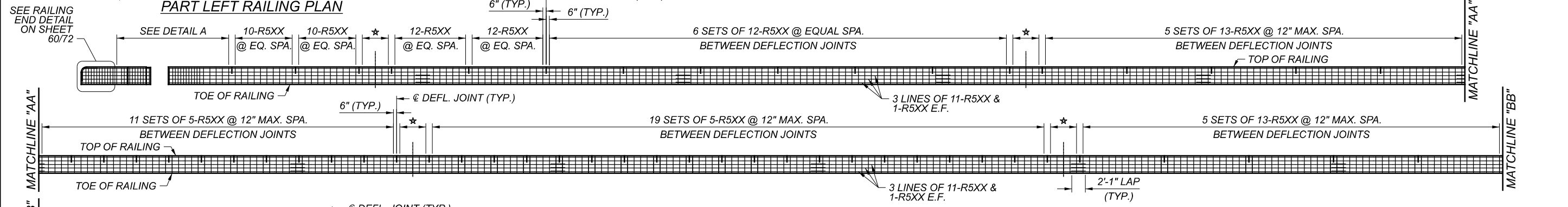
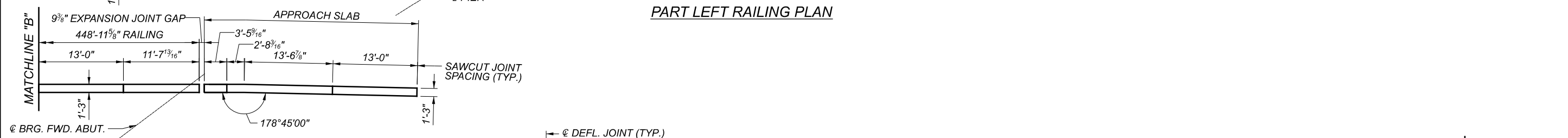
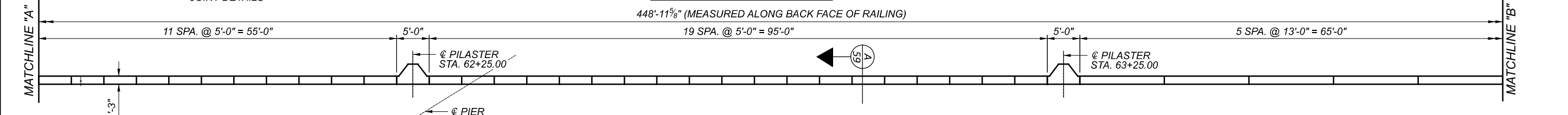
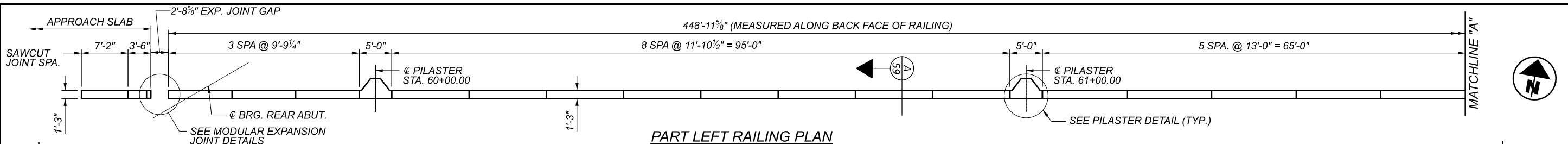
- 1. WORK THIS SHEET WITH SHEET 55/72.
2. SEE FRAMING PLAN SHEET 33/72 FOR GIRDER LENGTHS "B".
3. SEE SHEETS 51/72 & 52/72 FOR SIDEWALK DETAILS.
4. SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

DECK SCREED ELEVATION TABLE (2 OF 2)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90

Table with columns for SFN (1807898), DESIGN AGENCY (Michael Baker INTERNATIONAL), DESIGNER (ABC), CHECKER (MEM), REVIEWER (LPC), PROJECT ID (82382), SUBSET (56), TOTAL (72), SHEET (1876), TOTAL (2339).

CUY-90-16.28 (CCG3A)

MODEL: railing plan and elevation 1 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:37:48 PM USER: Maia Gallagher
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LEGEND:
 * SEE PILASTER DETAIL FOR REINFORCING DETAILS

NOTES:
 1. WORK THIS SHEET WITH SHEET 60/72.
 2. FOR DETAILS NOT SHOWN, SEE STANDARD DRAWINGS BR-2-15 AND HL-20.14.
 3. FOR ANCHOR BOLT DETAILS, SEE STANDARD DRAWING HL-10.13.

RAILING PLAN & ELEVATION (1 OF 2)
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER/CHECKER	ABC MEM
REVIEWER	LPC 06-23-22
PROJECT ID	82382
SUBSET	59 TOTAL 72
SHEET	1879 TOTAL 2339

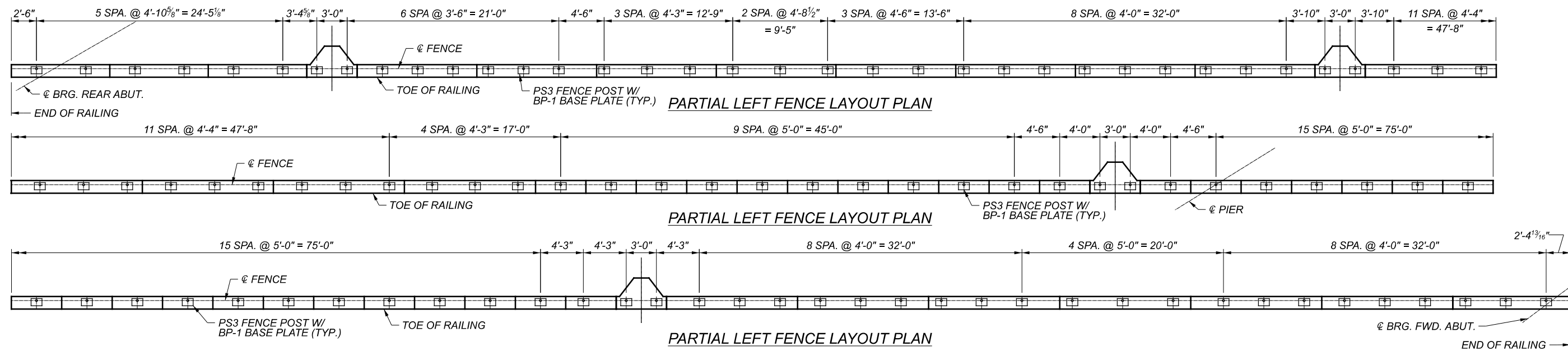
CUY-90-16.28 (CCG3A)

MODEL: railing plan and elevation 2 PAPER SIZE: 17x11 (in.) DATE: 6/23/2022 TIME: 5:37:49 PM USER: Maia.Gallagher
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SHEET RESERVED FOR FUTURE USE

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
ABC	MEM
REVIEWER	
LPC 06-23-22	
PROJECT ID	
82382	
SUBSET	TOTAL
60	72
SHEET	TOTAL
1880	2339

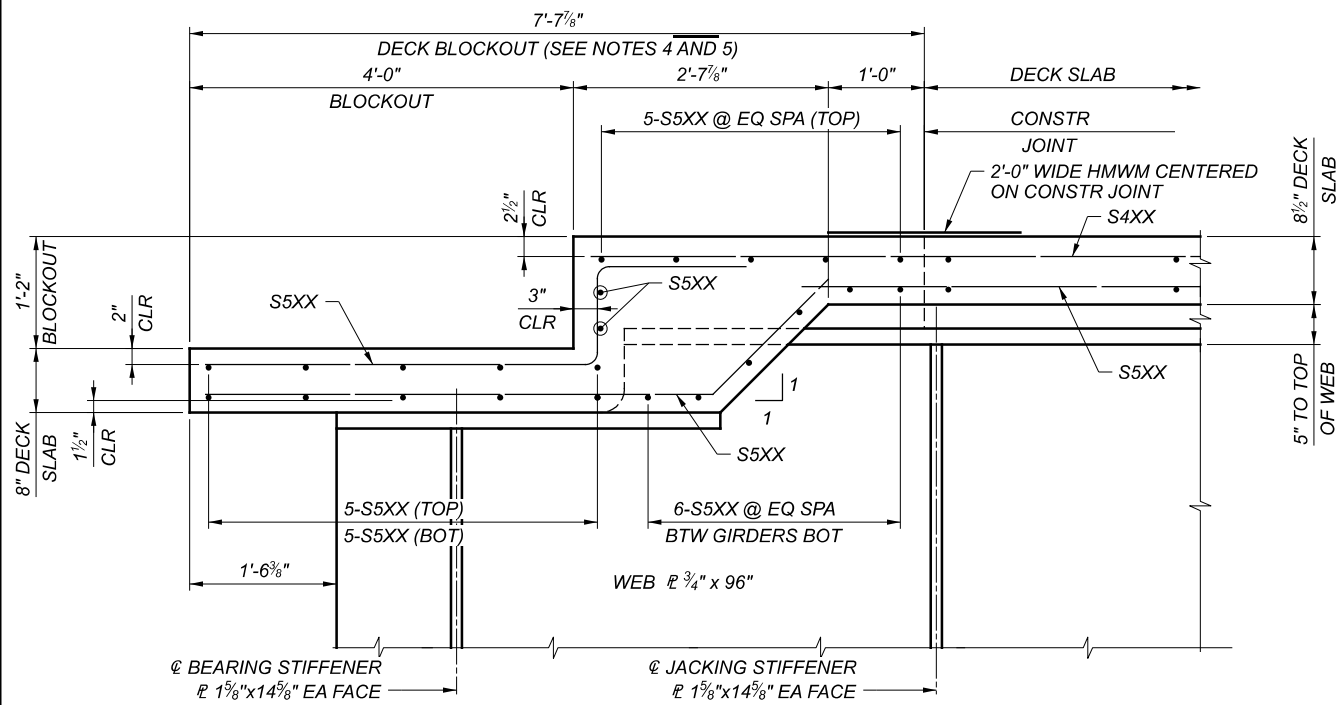
RAILING PLAN & ELEVATION (2 OF 2)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90



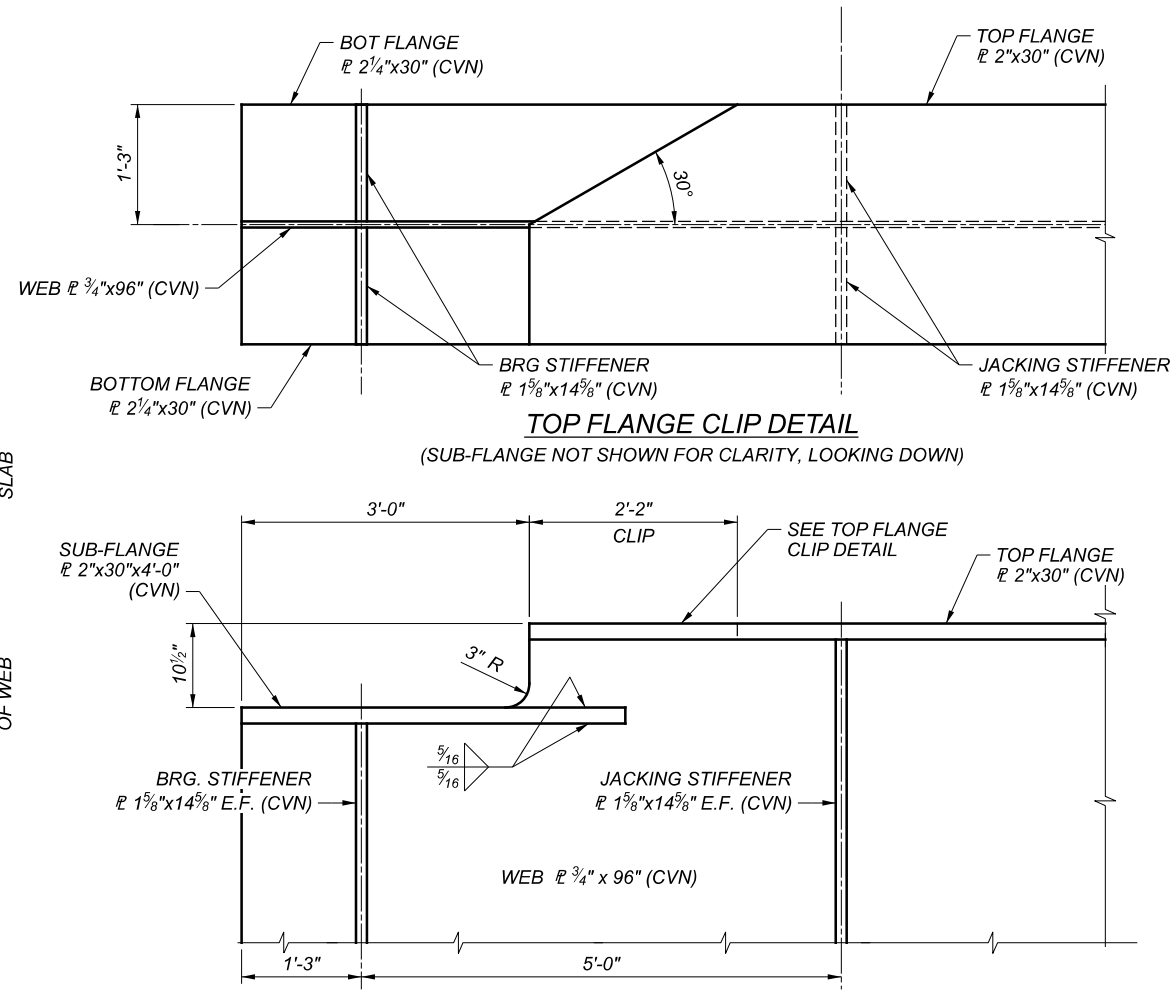
NOTES:

1. ONLY PROPOSED FENCE POST SPACING IS INDICATED ON THIS SHEET. FOR FENCE DETAILS NOT SHOWN, SEE STANDARD DRAWINGS VPF-1-90 AND BR-2-15.
2. PROVIDE BLACK VINYL COATED FENCE POSTS, RAILS, AND FABRIC.

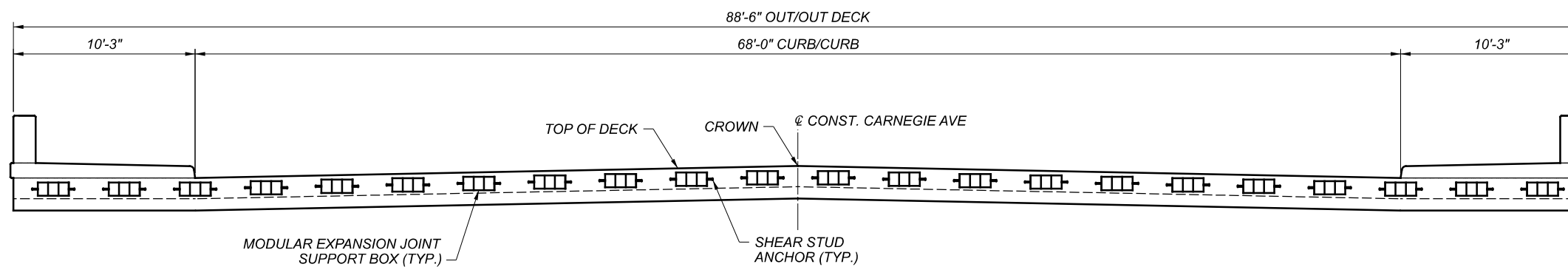
SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
REVIEWER	MEM
PROJECT ID	82382
SUBSET	TOTAL
61	72
SHEET	TOTAL
1881	2339



REAR ABUTMENT - TYPICAL SECTION THRU MODULAR EXPANSION JOINT
 (END DIAPHRAGM CONNECTION PLATES NOT SHOWN FOR CLARITY)
 (DETAIL SHOWN PARALLEL TO GIRDER CENTERLINE)



REAR ABUTMENT - GIRDER COPE DETAIL
 (END DIAPHRAGM CONNECTION PLATES NOT SHOWN FOR CLARITY)
 (DETAIL SHOWN PARALLEL TO GIRDER CENTERLINE)

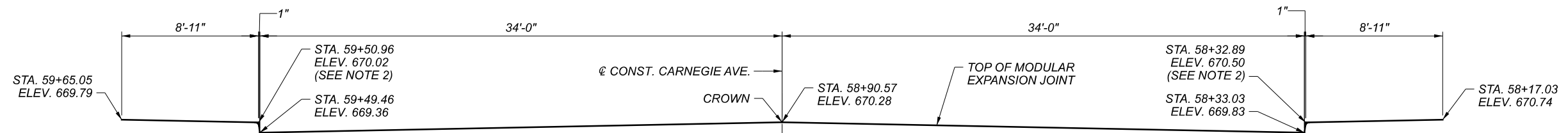


TYPICAL SECTION THROUGH REAR ABUTMENT MODULAR EXPANSION JOINT (SHOWN)
 (NORMAL TO @ CONST. CARNEGIE AVE)

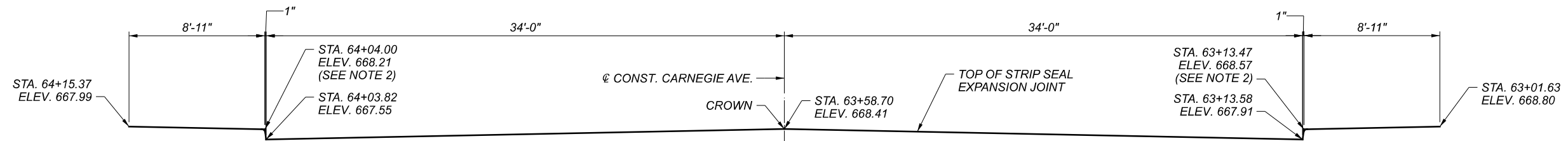
NOTES:

1. THE MODULAR EXPANSION JOINT SYSTEM AND BLOCKOUT DETAILS SHOWN ARE SUGGESTED CONCEPTUAL DETAILS FOR A "DUAL-SUPPORT BAR" MODULAR JOINT. DUE TO VARIATIONS IN MODULAR JOINTS BETWEEN MANUFACTURERS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL DESIGN AND DETAILING OF THE DECK SLAB BLOCKOUTS BASED ON THE SELECTED MODULAR JOINT. THIS DESIGN SHALL INCLUDE THE REINFORCING LAYOUT IN THE DECK SLAB BLOCKOUT.
2. MODULAR EXPANSION JOINT DESIGN SHOWN IS BASED ON A D.S. BROWN "STEELFLEX" D-320 MODULAR EXPANSION JOINT.
3. WORK THIS SHEET WITH SHEETS 63/72 AND 64/72.
4. THE CONTRACTOR SHALL COORDINATE DECK AND ABUTMENT BLOCKOUT DIMENSIONS FOR THE MODULAR EXPANSION JOINT SELECTED PRIOR TO POURING AND CASTING OF THE CONCRETE ABUTMENT BACKWALL, APPROACH SLABS AND DECK SLAB WITHIN THE BLOCKOUT AREA.
5. ADJUST BRIDGE RAILING, SIDEWALK AND DECK SLAB REINFORCEMENT TO CLEAR MODULAR EXPANSION JOINT.
6. MODULAR EXPANSION JOINTS SHALL FULLY COMPLY WITH "SPECIAL PROVISION: MODULAR EXPANSION JOINTS".

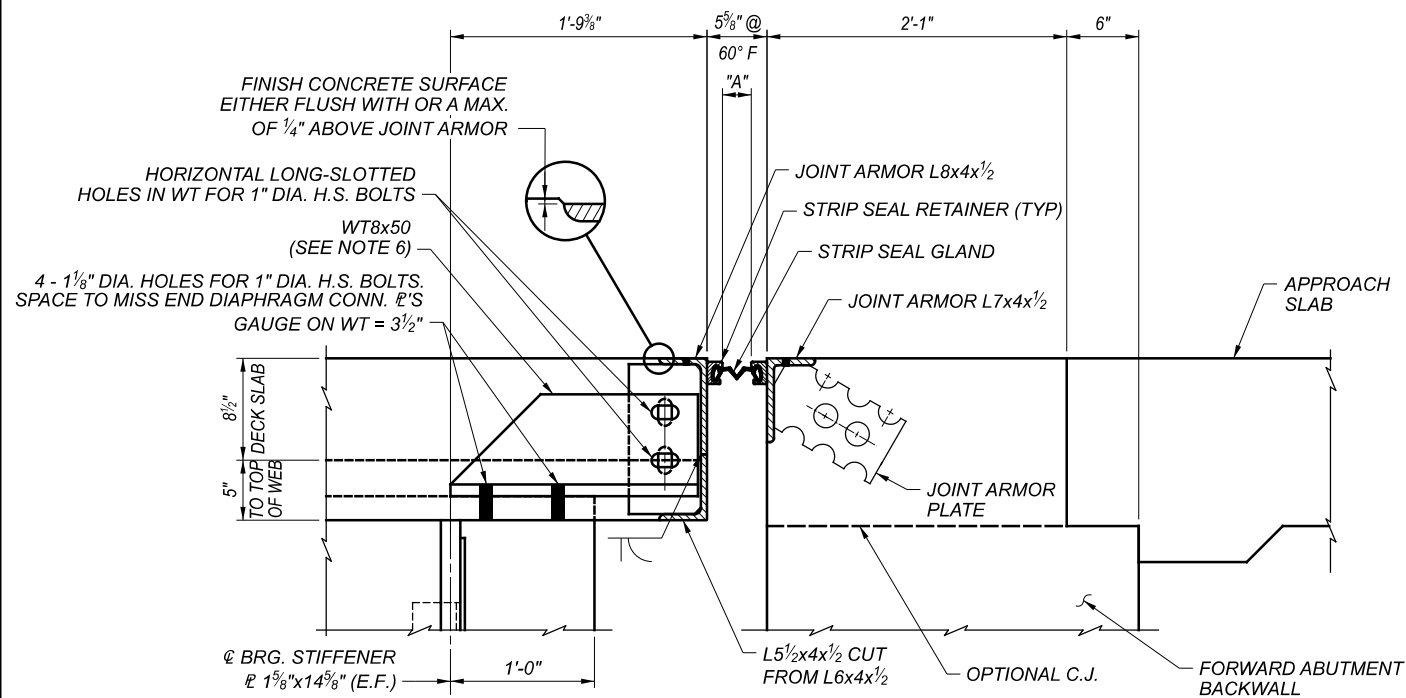
SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
ABC	MEM
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
62	72
SHEET	TOTAL
1882	2339



REAR ABUTMENT MODULAR EXPANSION JOINT PROFILE
 (PERPENDICULAR TO @ CONST. CARNEGIE AVE., LOOKING STATIONS AHEAD)



FORWARD ABUTMENT STRIP SEAL EXPANSION JOINT PROFILE
 (PERPENDICULAR TO @ CONST. CARNEGIE AVE., LOOKING STATIONS AHEAD)



TYPICAL SECTION THRU FORWARD ABUTMENT STRIP SEAL EXPANSION JOINT
 (DIMENSIONS GIVEN PERPENDICULAR TO @ EXPANSION JOINT)

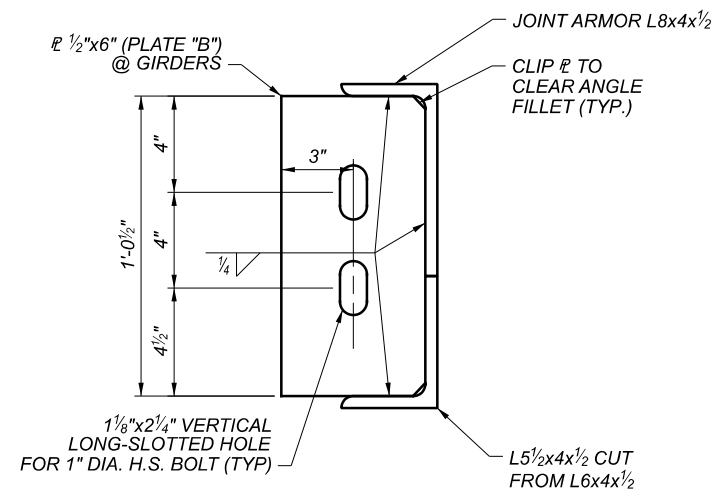


PLATE "B" DETAIL

STRIP SEAL JOINT SETTING DIM. "A"

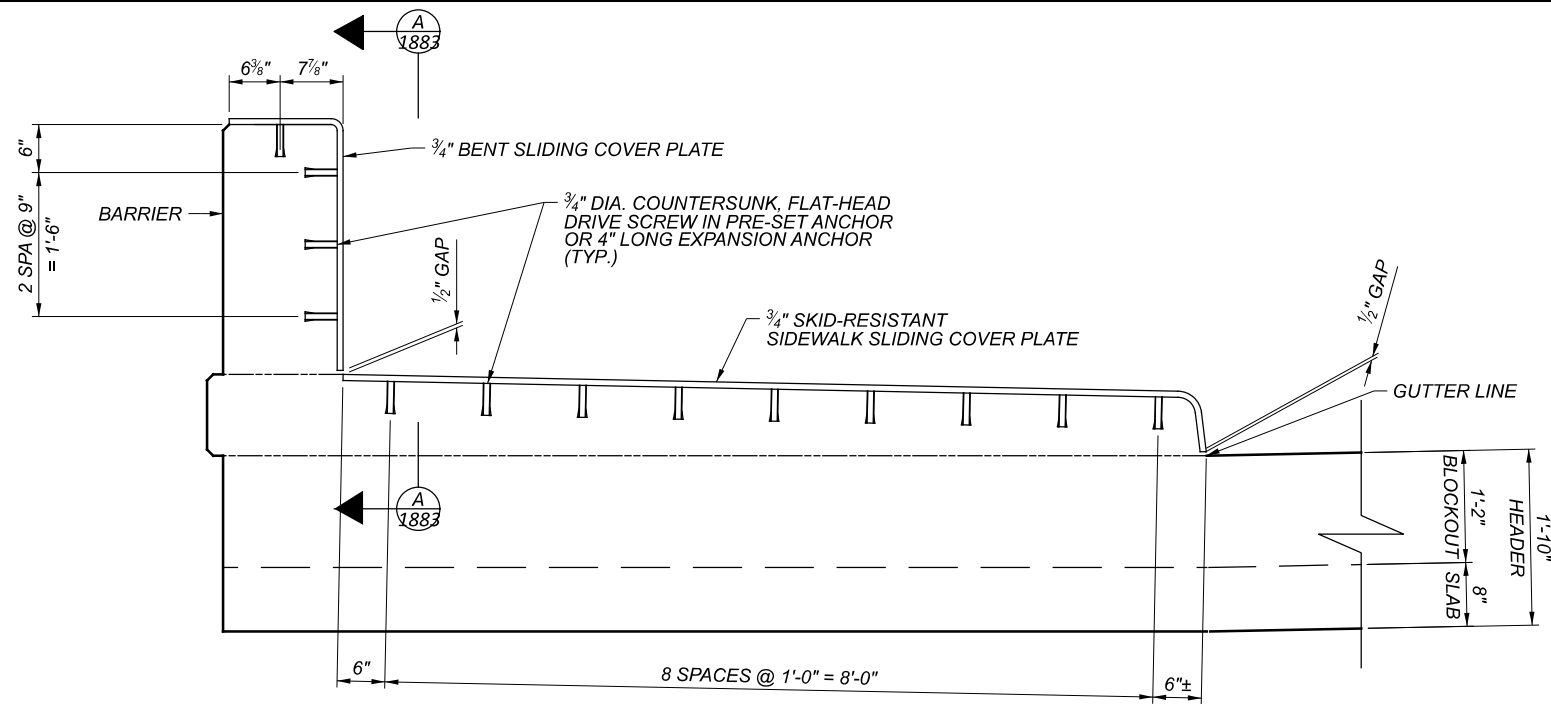
TEMPERATURE °F	DIM. "A" IN
30	2 15/16
40	
50	
60	
70	
80	
90	

NOTES:

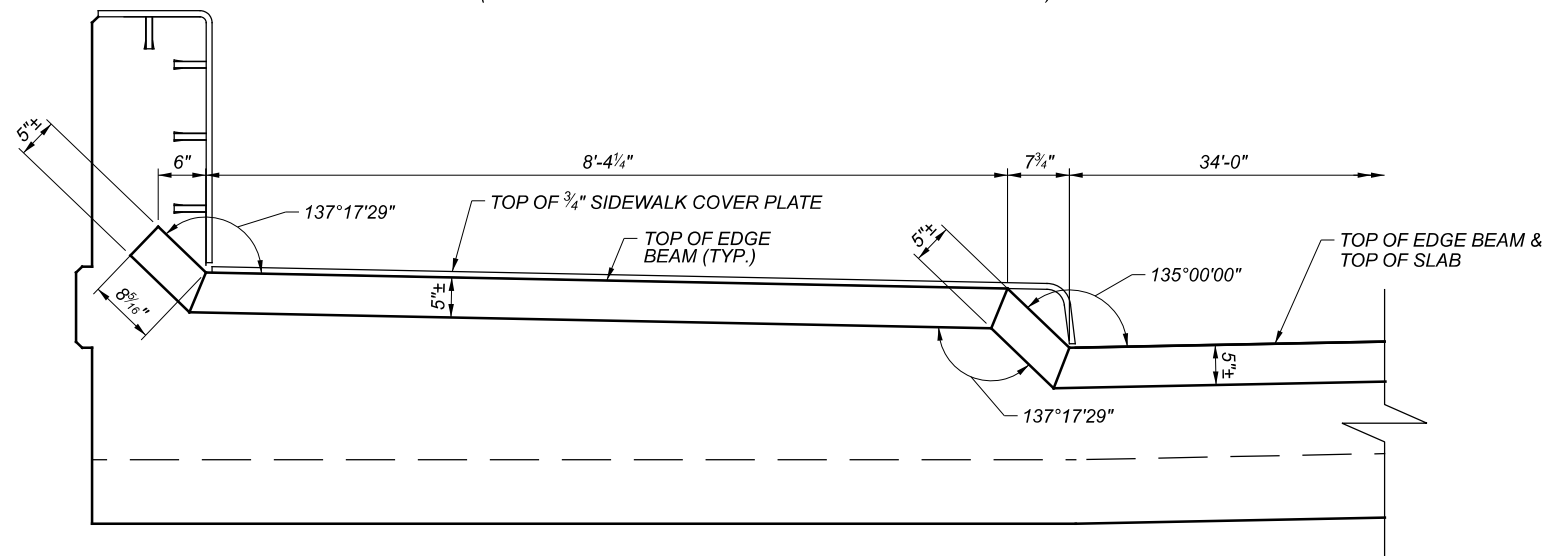
- WORK THIS SHEET WITH SHEETS 62/72 & 64/72.
- ELEVATIONS AT THE TOP OF CURB ARE THEORETICAL ELEVATIONS GIVEN AT THE INTERSECTION OF THE VERTICAL CURB AND THE HORIZONTAL SIDEWALK SLOPES.
- EXPANSION JOINT PROFILE STATIONS AND ELEVATIONS GIVEN ALONG PROPOSED CENTERLINES OF EXPANSION JOINTS. ADJUST EXPANSION JOINT ELEVATIONS AS REQUIRED IN THE SIDEWALK AND CURB AREAS TO ACCOMMODATE STEEL SLIDING COVER PLATES. SEE SHEET XX/XX AND STANDARD DRAWINGS EXJ-4-87 FOR ADDITIONAL DETAILS.
- FOR EXPANSION JOINT DETAILS NOT SHOWN, SEE STANDARD DRAWING EXJ-4-87.
- PROVIDE PLATES "B" AT GIRDER LOCATIONS FOR FIELD-ADJUSTMENT OF EXPANSION JOINT. PROVIDE PLATES "A" PER STANDARD DRAWINGS EXJ-4-87 ELSEWHERE.
- FIELD DRILL EXPANSION JOINT SUPPORT TEES (WTxxx) FOR DECK SLAB REINFORCING. HOLE DIAMETER SHALL EQUAL REINFORCING BAR DIAMETER + 1/4". BLOCK WT FLANGES AT PLATE "B" LOCATIONS TO FACILITATE INSTALLATION.

SFN	1807898
DESIGN AGENCY	
DESIGNER	ABC
CHECKER	MEM
REVIEWER	
PROJECT ID	82382
SUBSET	TOTAL
63	72
SHEET	TOTAL
1883	2339

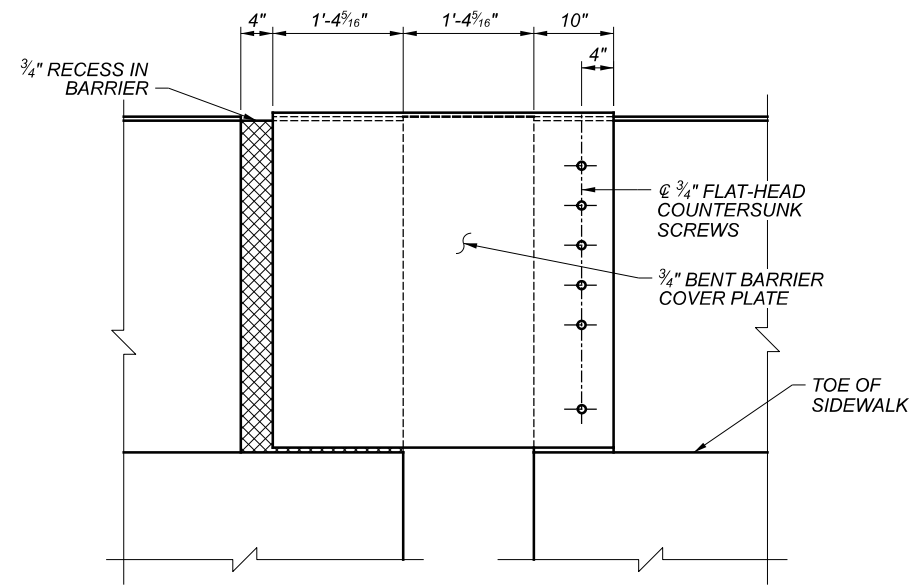
Michael Baker INTERNATIONAL



SECTION THRU BARRIER AND SIDEWALK COVER PLATES
 (DIMENSIONS PERPENDICULAR TO @ CONST. CARNEGIE AVE.)



MODULAR EXPANSION JOINT BEAM PROFILE AT SIDEWALK
 (DIMENSIONS PERPENDICULAR TO @ CONST. CARNEGIE AVE.)

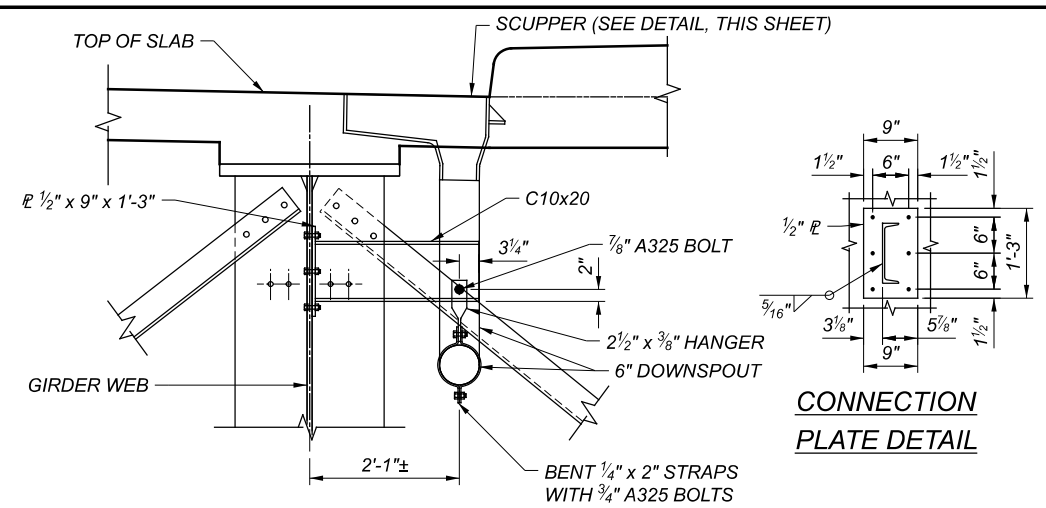
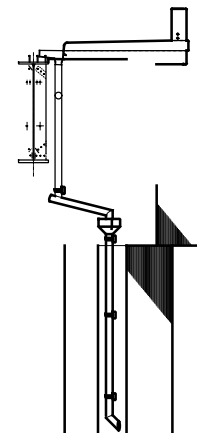
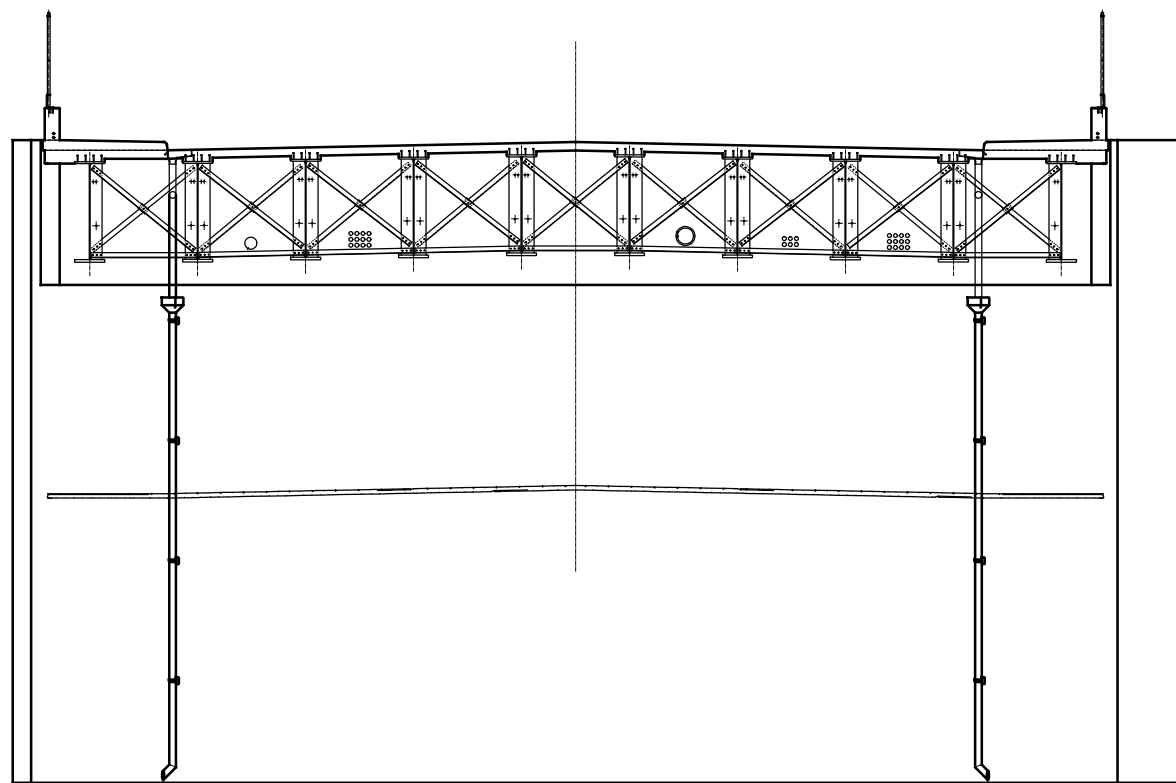
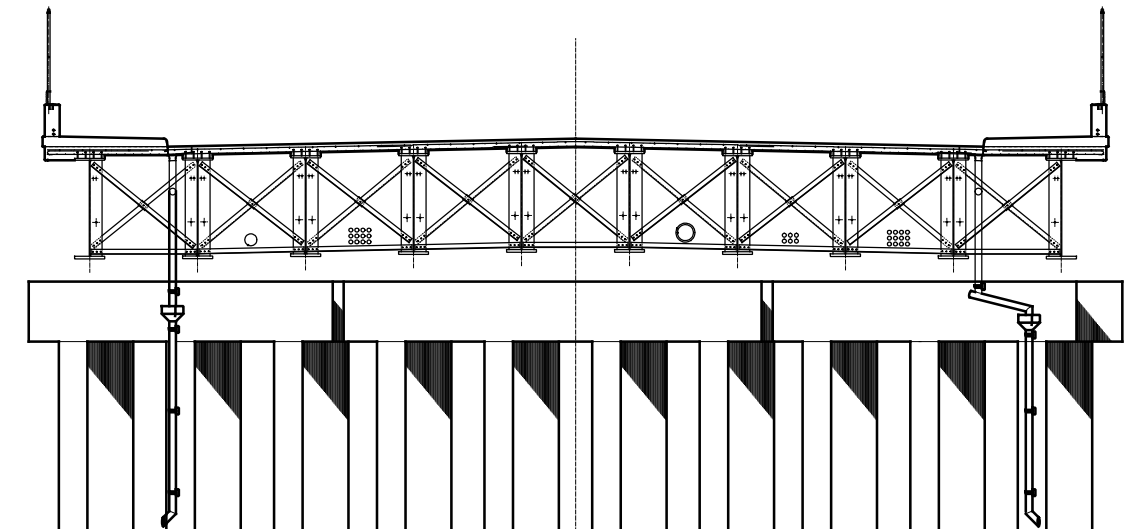


A BARRIER COVER PLATE ELEVATION
 1883

NOTES:

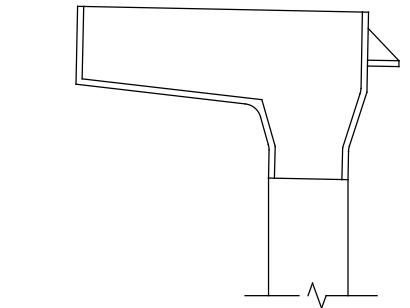
1. WORK THIS SHEET WITH SHEETS 62/72 & 63/72.
2. FOR EXPANSION JOINT DETAILS NOT SHOWN, SEE STANDARD DRAWING EX-J-4-87.
3. COORDINATE DEVELOPMENT OF MODULAR EXPANSION JOINT SHOP DRAWINGS WITH CURB, SIDEWALK AND BARRIER ARMOR DETAILS.
4. SIDEWALK AND BARRIER COVER PLATES SHALL BE INSTALLED FLUSH WITH ADJOINING CONCRETE SURFACES USING 3/4" DIA. COUNTERSUNK, FLAT-HEAD DRIVE SCREWS IN PRE-SET ANCHORS OR POST-INSTALLED, 4" LONG EXPANSION ANCHORS.
5. SIDEWALK COVER PLATES SHALL HAVE A SKID-RESISTANT SURFACE FINISH.

SFN	1807898
DESIGN AGENCY	
DESIGNER	Michael Baker INTERNATIONAL
CHECKER	
ABC	MEM
REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
64	72
SHEET	TOTAL
1884	2339



GIRDER DOWNSPOUT SUPPORT DETAIL

CONNECTION PLATE DETAIL



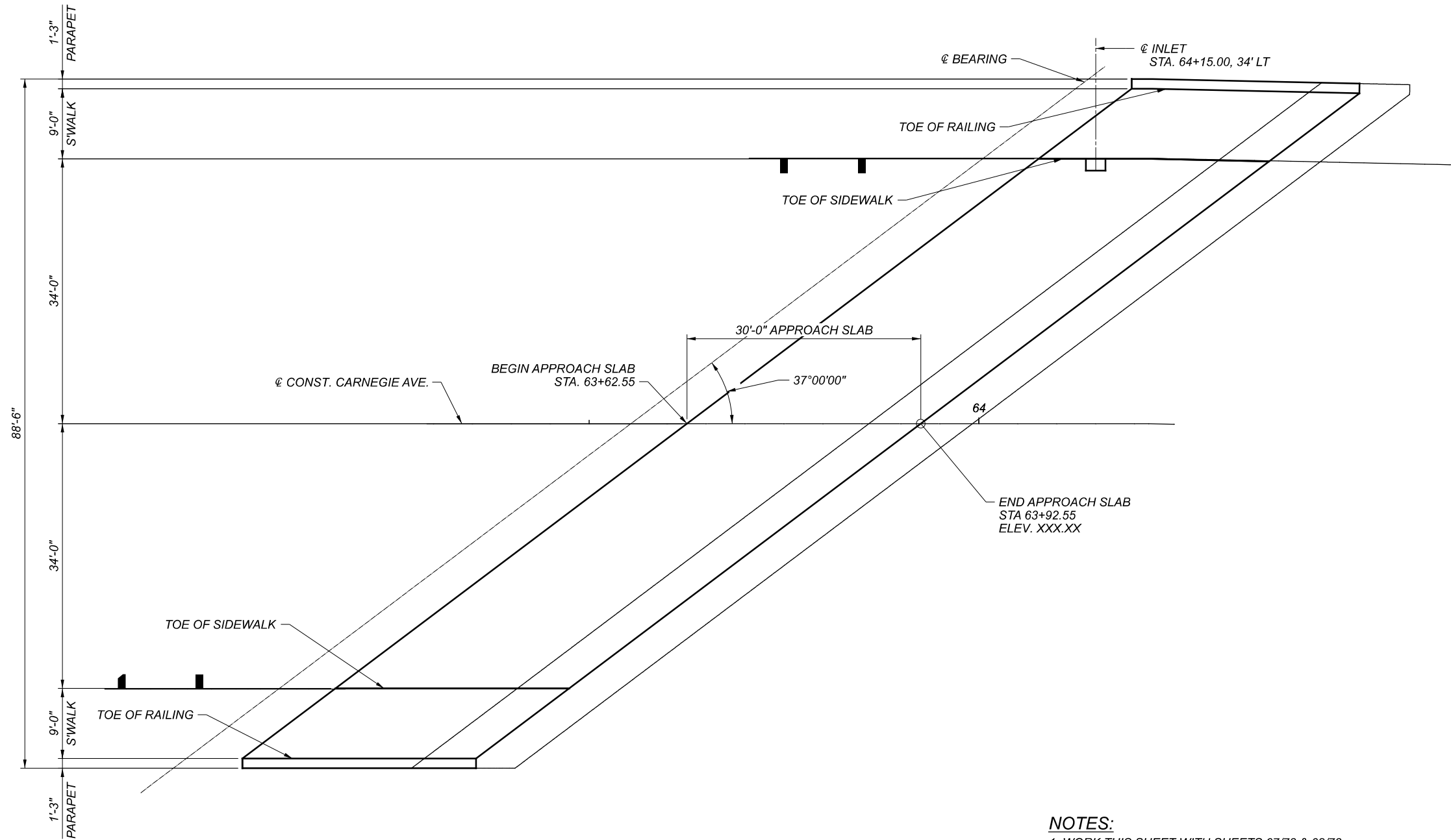
TYPICAL SCUPPER DETAIL

- NOTES:**
1. PROVIDE STRUCTURAL STEEL FOR DOWNSPOUT SUPPORTS CONFORMING TO ASTM A709 GRADE 36. GALVANIZE ALL MATERIAL AFTER FABRICATION ACCORDING TO ASTM A123.
 2. PROVIDE 6" DIAMETER DOWNSPOUT STEEL PIPE CONFORMING TO ASTM A53 WITH MECHANICAL FITTINGS RECOMMENDED BY THE SCUPPER AND DOWNSPOUT MANUFACTURER.
 3. PROVIDE FASTENERS CONFORMING TO ASTM F3125 GRADE A325 OF THE DIAMETERS NOTED.
 4. PROVIDE GIRDER- AND CONCRETE-MOUNTED DOWNSPOUT SUPPORT BRACKETS AT 10'-0" MAXIMUM CENTERS. INSTALL CONCRETE-MOUNTED DOWNSPOUT SUPPORTS USING 3/8" x 3 3/4" EXPANSION ANCHORS.
 5. TERMINATE DOWNSPOUT RUNS APPROXIMATELY 1'-0" ABOVE FINISHED GRADE USING A 45° ELBOW.

SCUPPER AND DOWNSPOUT DETAILS
 CUY-90-1696 (BRIDGE 14)
 CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
DESIGNER	ZRS
CHECKER	ABC
REVIEWER	LPC
PROJECT ID	82382
SUBSET	65
TOTAL	72
SHEET	1885
TOTAL	2339

Michael Baker INTERNATIONAL

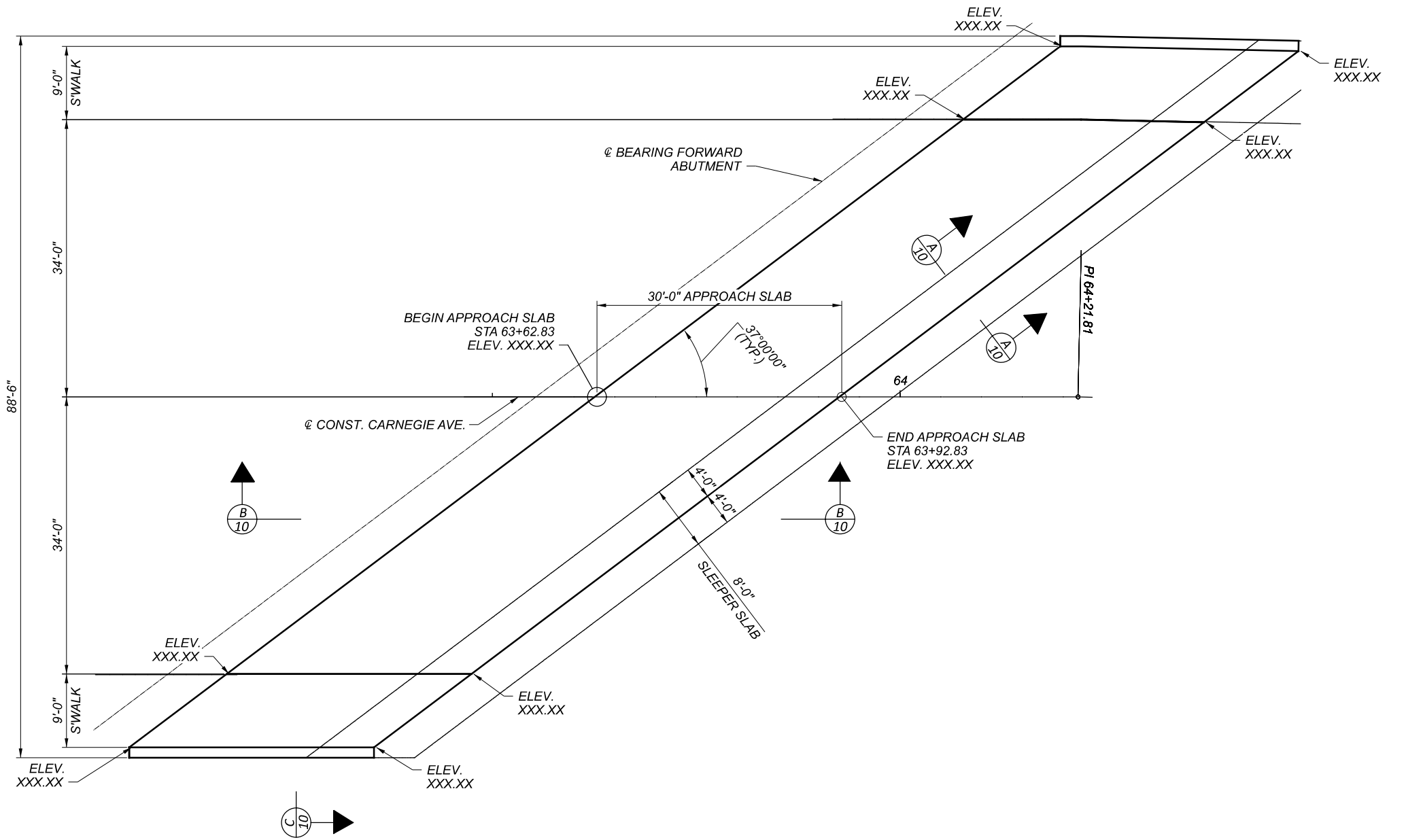


BRIDGE APPROACH SLAB PLAN

NOTES:

1. WORK THIS SHEET WITH SHEETS 67/72 & 68/72.
2. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15 AND AS-2-15, TYPE A INSTALLATION.
3. FOR RAILING ELEVATIONS AND DETAILS, SEE SHEETS 59/72 & 60/70.

SFN	1807898
DESIGN AGENCY	Michael Baker INTERNATIONAL
DESIGNER	ABC
CHECKER	MEM
REVIEWER	LPC
PROJECT ID	82382
SUBSET	66
TOTAL	72
SHEET	1886
TOTAL	2339



FORWARD APPROACH SLAB PLAN

NOTES:

1. WORK THIS SHEET WITH SHEETS 66/72 & 68/72.
2. FOR ADDITIONAL APPROACH SLAB DETAILS, SEE ODOT STANDARD DRAWINGS AS-1-15 AND AS-2-15, TYPE A INSTALLATION.

SFN
 1807898

DESIGN AGENCY

Michael Baker
 INTERNATIONAL

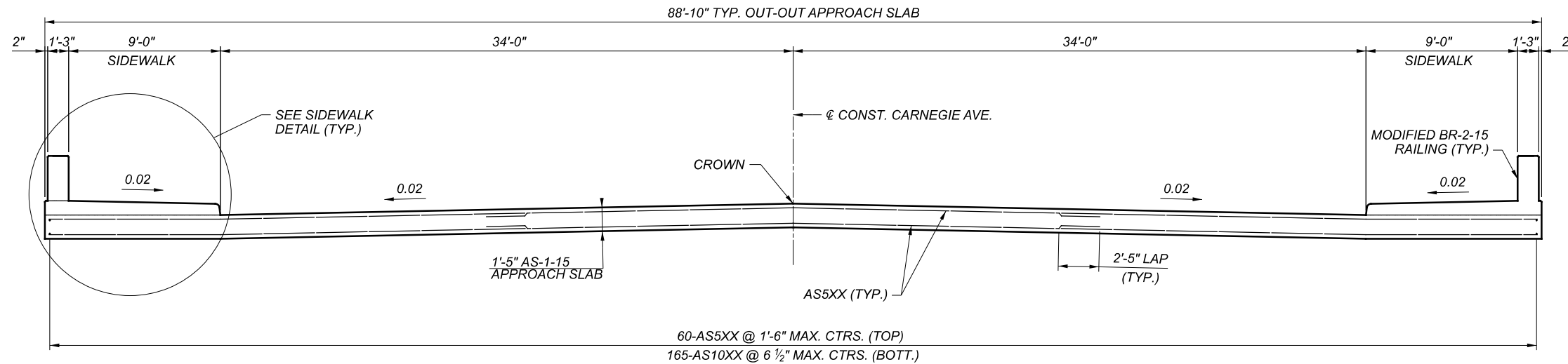
DESIGNER CHECKER
 ABC MEM

REVIEWER
 LPC 06-23-22

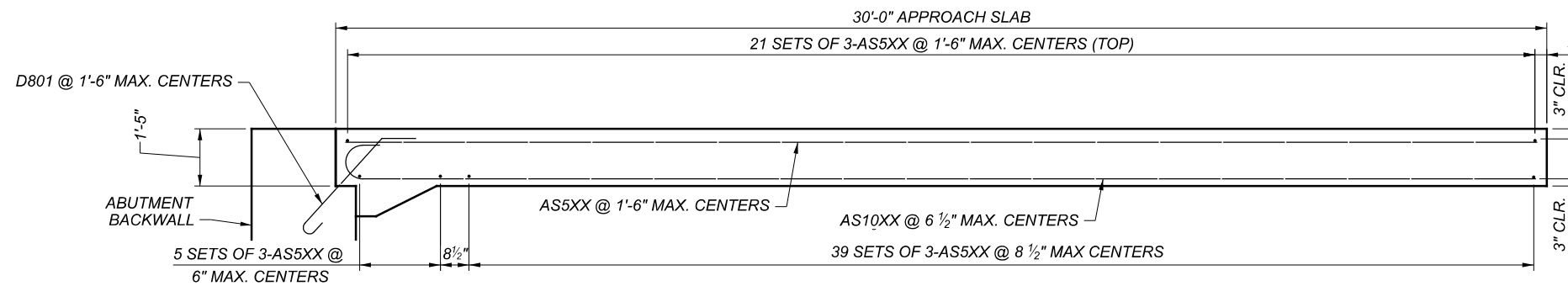
PROJECT ID
 82382

SUBSET	TOTAL
67	72

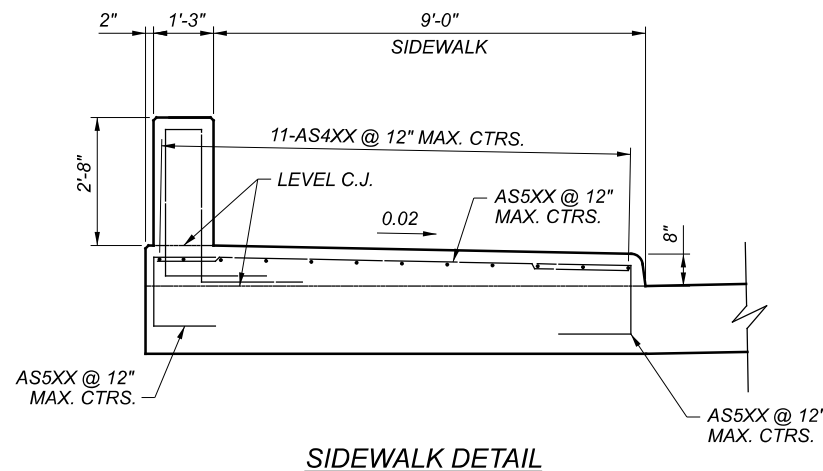
SHEET	TOTAL
1887	2339



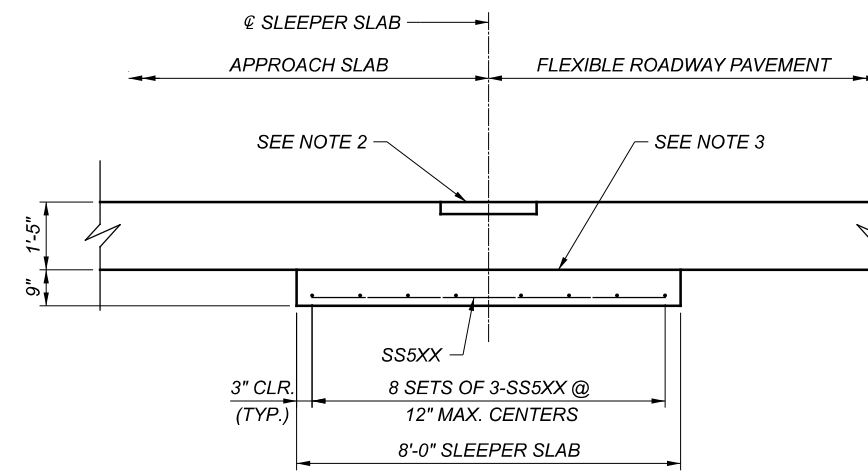
SECTION **C**
XX



SECTION **B**
XX



SIDEWALK DETAIL



SECTION **A**
XX

NOTES:

1. WORK THIS SHEET WITH SHEETS 66/72 & 67/72.
2. POLYMER MODIFIED ASPHALT JOINT SYSTEM (SEE SUPPLEMENTS SPECIFICATION 846) AND STD. DWG. AS-1-15 SHEET 2/2, DETAIL C.
3. APPLY BOND BREAKER TO THE ENTIRE TOP SURFACE OF THE CONCRETE SLEEPER SLAB. SEE "REINFORCED CONCRETE SLEEPER SLAB SURFACE FINISH AND BOND BREAKER" NOTES ON STD. DWG. AS-2-15 SHEET 14/14.

CUY-90-16.28 (CCG3A)

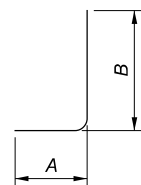
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REINFORCING SCHEDULE (1 OF 4) CUY-90-1696 (BRIDGE 14) CR-722 (CARNEGIE AVE.) OVER I.R. 90

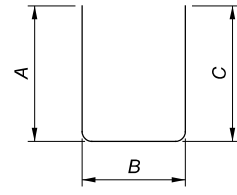
SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
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REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
69	72
SHEET	TOTAL
1889	2339

CUY-90-16.28 (CCG3A)

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TYPE-1



TYPE-2

REINFORCING SCHEDULE (2 OF 4)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN
1807898

DESIGN AGENCY

Michael Baker
INTERNATIONAL

DESIGNER CHECKER
— --NA—

REVIEWER
LPC 06-23-22

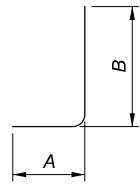
PROJECT ID
82382

SUBSET	TOTAL
70	72

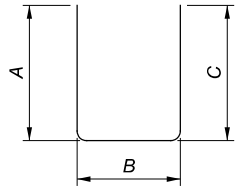
SHEET	TOTAL
1890	2339

CUY-90-16.28 (CCG3A)

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TYPE-1



TYPE-2

SFN	
1807898	
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
—	—NA—
REVIEWER	
LPC 06-23-22	
PROJECT ID	
82382	
SUBSET	TOTAL
71	72
SHEET	TOTAL
1891	2339

REINFORCING SCHEDULE (3 OF 4)
CUY-90-1696 (BRIDGE 14)
CR-722 (CARNEGIE AVE.) OVER I.R. 90

CUY-90-16.28 (CCG3A)

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REINFORCING SCHEDULE (4 OF 4) CUY-90-1696 (BRIDGE 14) CR-722 (CARNEGIE AVE.) OVER I.R. 90

SFN	1807898
DESIGN AGENCY	
Michael Baker INTERNATIONAL	
DESIGNER	CHECKER
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REVIEWER	
LPC	06-23-22
PROJECT ID	82382
SUBSET	TOTAL
72	72
SHEET	TOTAL
1892	2339