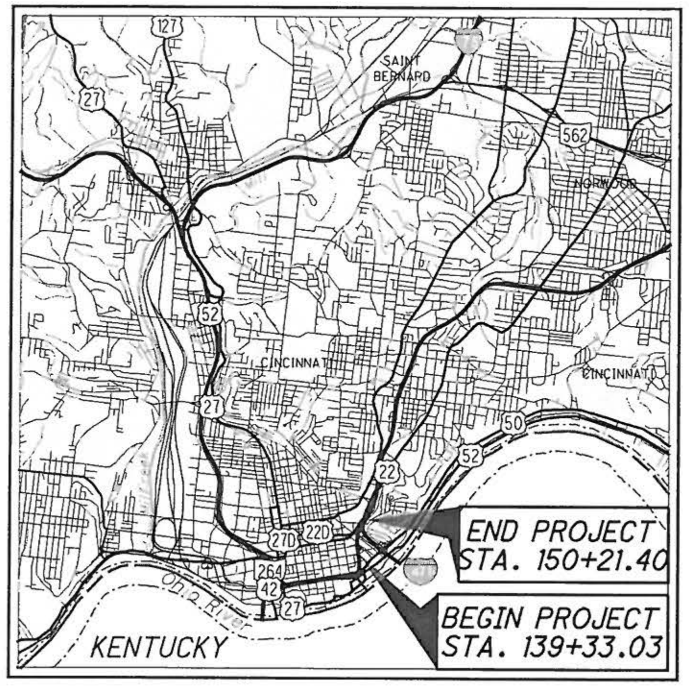
160392 Conformed Set
Dist 8

O:\ODOT\HAM\101939_HAM-71-1.59\Design\Roadway\Sheets\101939_GT001.dgn Sheet 3/1/2016 5:26:50 PM dan-f

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION

HAM-71-1.59

CITY OF CINCINNATI
HAMILTON COUNTY



LOCATION MAP

LATITUDE: 39 °6 '17" LONGITUDE: 84 °30'16"

SCALE IN MILES
0 1 2 3 4

N

- PORTION TO BE IMPROVED
- INTERSTATE HIGHWAY
- FEDERAL ROUTES
- STATE ROUTES
- COUNTY & TOWNSHIP ROADS
- OTHER ROADS

DESIGN DESIGNATION (I-71)

	(I-71)	(RAMP B)
CURRENT ADT (2017)	65,640	4,260
DESIGN YEAR ADT (2037)	90,170	5,060
DESIGN HOURLY VOLUME (2037)	9,617	506
DIRECTIONAL DISTRIBUTION	0.51	1.00
TRUCKS (24 HOUR B&C)	0.11	0.02
DESIGN SPEED	60 MPH	45 MPH
LEGAL SPEED	55 MPH	
DESIGN FUNCTIONAL CLASSIFICATION: 11 - INTERSTATE (URBAN)		
NHS PROJECT	YES	

DESIGN EXCEPTIONS

NONE REQUIRED

UNDERGROUND UTILITIES

CONTACT BOTH SERVICES TWO WORKING DAYS BEFORE YOU DIG.

OHIO Utilities Protection SERVICE — Call Before You Dig 1-800-362-2764
(Non-members must be called directly)

OIL & GAS PRODUCERS UNDERGROUND PROTECTION SERVICE
1-800-925-0988

PLAN PREPARED BY:

Palmer ENGINEERING
PALMER ENGINEERING
8350 EAST KEMPER ROAD - SUITE B
CINCINNATI, OH 45249
WINCHESTER • NASHVILLE • LOUISVILLE • CINCINNATI • AKRON • TALLAHASSEE • ORLANDO

ENGINEERS SEAL:

STATE OF OHIO
DANIEL P. FICKER
E-63816
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Dan Ficker
DATE: 3/1/16

ENGINEERS SEAL:
STRUCTURES (OVER 20FT SPAN)

STATE OF OHIO
BRONSON J. FUNKE
E-61/00
REGISTERED PROFESSIONAL ENGINEER

SIGNED: Bronson Funke
DATE: 3/1/16

INDEX OF SHEETS:

STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS		SPECIAL PROVISIONS
BP-3.1	7/18/14	MT-95.30	7/18/14	MT-104.10	10/16/15	TC-12.30	10/18/13	AS-1-15	7/17/15	800-2013	4/15/16	
		MT-95.40	7/18/14	MT-105.10	7/19/13	TC-21.20	1/15/16	BR-1-13	1/17/14	821	4/20/12	
MGS-1.1	7/19/13	MT-95.50	10/16/15	MT-110.10	7/19/13	TC-22.20	1/17/14	EXJ-4-87	7/19/02	832	1/17/14	
MGS-2.1	7/19/13	MT-95.71	7/19/13			TC-41.10	7/19/13	GSD-1-96	7/19/02	848	7/17/15	
MGS-3.1	7/18/14	MT-98.10	7/18/14	HL-10.11	1/15/16	TC-41.20	10/18/13	VPF-1-90	7/17/15	902	12/31/12	
		MT-98.11	7/18/14	HL-10.12	1/15/16	TC-41.30	10/18/13			921	4/20/12	
RM-4.1	7/19/13	MT-98.29	7/19/13	HL-10.13	1/15/16	TC-42.10	10/18/13					
RM-4.2	4/18/14	MT-99.30	1/16/15	HL-20.14	1/16/15	TC-42.20	10/18/13					
RM-4.6	7/19/13	MT-100.00	1/15/16	HL-30.31	1/17/14	TC-51.11	1/15/16					
		MT-101.60	7/19/13	HL-30.32	1/17/14	TC-52.10	10/18/13					
CB-1.1	1/15/16	MT-101.70	1/17/14	HL-30.33	1/17/14	TC-52.20	7/18/14					
CB-2.3	1/15/16	MT-101.80	1/16/15	HL-30.41	7/18/14	TC-65.10	1/17/14					
I-2.3	1/15/16	MT-101.90	7/17/15	HL-50.21	1/16/15	TC-65.11	7/18/14					
DM-4.3	1/15/16	MT-102.10	7/18/14	HL-60.11	1/15/16	TC-72.20	7/18/14					
DM-4.4	1/15/16	MT-102.30	10/16/15	HL-60.12	1/17/14	TC-71.10	1/17/14					

PROJECT DESCRIPTION

MAJOR REHABILITATION OF BRIDGE HAM-71-0159 BY DECK REMOVAL AND REPLACEMENT. WORK INCLUDES MINOR SUPERSTRUCTURE REPAIRS AND MINIMAL APPROACH WORK. MINOR REHAB. OF BRIDGE HAM-71-0154E BY DECK OVERLAY; REBUILDING PARAPETS.

EARTH DISTURBED AREAS

PROJECT EARTH DISTURBED AREA:	0.6 ACRES
ESTIMATED CONTRACTOR EARTH DISTURBED AREA:	1.6 ACRES
NOTICE OF INTENT EARTH DISTURBED AREA:	N/A ACRES

(NOI NOT REQUIRED)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2013 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

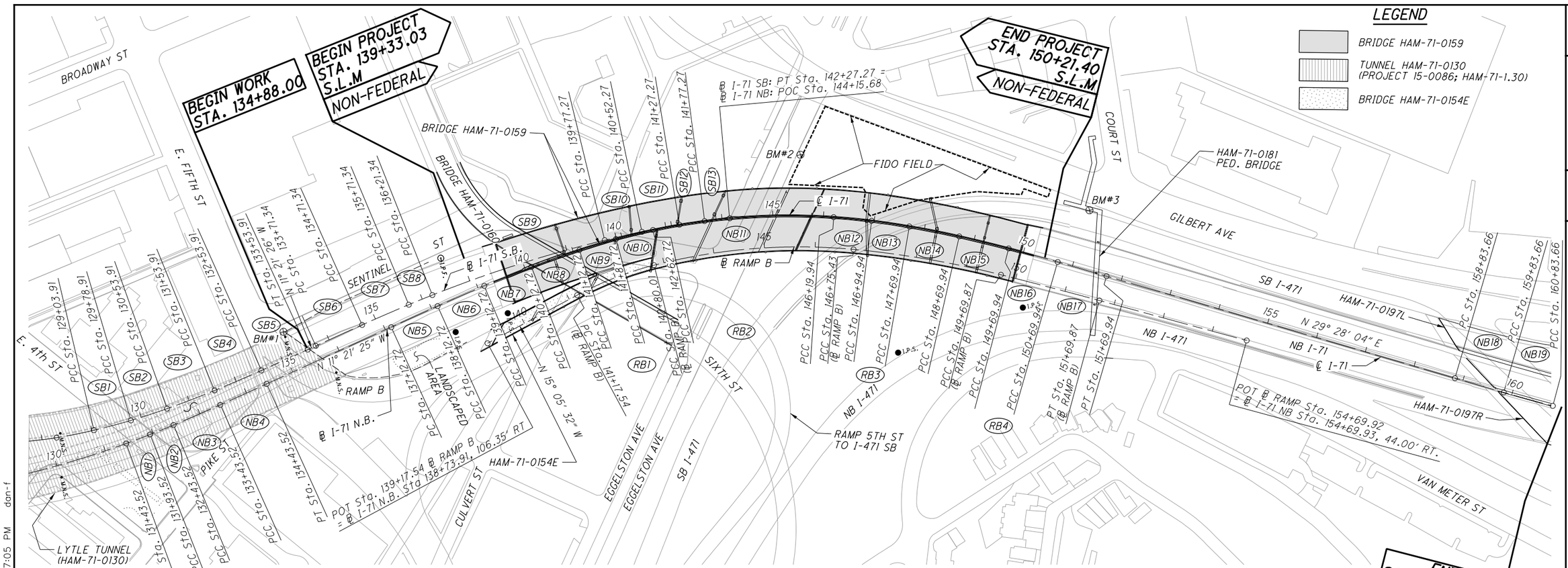
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY EXCEPT FOR RAMPS AS NOTED ON SHEETS 33-36, AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES.

APPROVED Tary K Cipbell
DATE 3/17/2016 DISTRICT DEPUTY DIRECTOR

APPROVED ______
DATE ______ DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.	E160(378)
PID NO.	101939
CONSTRUCTION PROJECT NO.	-
RAILROAD INVOLVEMENT	NONE

HAM-71-1.59



CURVE DATA

NB1
P.I. Sta. 131+68.52
Δ= 1° 25' 00" (LT)
Dc = 2° 50' 00"
R = 2,022.20'
T = 25.00'
L = 50.00'
E = 0.15'

NB2
P.I. Sta. 132+18.52
Δ= 1° 05' 00" (LT)
Dc = 2° 10' 00"
R = 2,644.42'
T = 25.00'
L = 50.00'
E = 0.12'

NB3
P.I. Sta. 132+93.52
Δ= 1° 40' 00" (LT)
Dc = 1° 40' 00"
R = 3,437.75'
T = 50.00'
L = 100.00'
E = 0.36'

NB4
P.I. Sta. 133+93.52
Δ= 0° 20' 00" (LT)
Dc = 0° 20' 00"
R = 17,188.76'
T = 50.00'
L = 100.00'
E = 0.07'

NB5
P.I. Sta. 137+62.72
Δ= 0° 16' 23" (RT)
Dc = 0° 16' 23"
R = 20,983.20'
T = 50.00'
L = 100.00'
E = 0.06'

NB6
P.I. Sta. 138+62.72
Δ= 1° 21' 45" (RT)
Dc = 1° 21' 45"
R = 4,205.20'
T = 50.00'
L = 100.00'
E = 0.30'

NB7
P.I. Sta. 139+62.72
Δ= 1° 54' 41" (RT)
Dc = 1° 54' 41"
R = 2,997.60'
T = 50.00'
L = 100.00'
E = 0.42'

NB8
P.I. Sta. 140+62.73
Δ= 2° 59' 41" (RT)
Dc = 2° 59' 41"
R = 1,913.23'
T = 50.01'
L = 100.00'
E = 0.65'

NB9
P.I. Sta. 141+50.23
Δ= 2° 36' 48" (RT)
Dc = 3° 29' 04"
R = 1,644.33'
T = 37.51'
L = 75.00'
E = 0.43'

NB10
P.I. Sta. 142+25.23
Δ= 3° 13' 12" (RT)
Dc = 4° 17' 35"
R = 1,334.58'
T = 37.51'
L = 75.00'
E = 0.53'

NB11
P.I. Sta. 144+42.51
Δ= 16° 04' 30" (RT)
Dc = 4° 30' 00"
R = 1,273.24'
T = 179.79'
L = 357.22'
E = 12.63'

NB12
P.I. Sta. 146+57.45
Δ= 3° 13' 12" (RT)
Dc = 4° 17' 36"
R = 1,334.52'
T = 37.51'
L = 75.00'
E = 0.53'

NB13
P.I. Sta. 147+32.45
Δ= 2° 36' 48" (RT)
Dc = 3° 29' 04"
R = 1,644.34'
T = 37.51'
L = 75.00'
E = 0.43'

NB14
P.I. Sta. 148+19.95
Δ= 2° 59' 41" (RT)
Dc = 2° 59' 41"
R = 1,913.22'
T = 50.01'
L = 100.00'
E = 0.65'

NB15
P.I. Sta. 149+19.94
Δ= 1° 54' 41" (RT)
Dc = 1° 54' 41"
R = 2,997.62'
T = 50.00'
L = 100.00'
E = 0.42'

NB16
P.I. Sta. 150+19.94
Δ= 1° 21' 45" (RT)
Dc = 1° 21' 45"
R = 4,205.17'
T = 50.00'
L = 100.00'
E = 0.30'

NB17
P.I. Sta. 151+19.94
Δ= 0° 16' 23" (RT)
Dc = 0° 16' 23"
R = 20,983.34'
T = 50.00'
L = 100.00'
E = 0.06'

NB18
P.I. Sta. 159+33.66
Δ= 0° 15' 01" (LT)
Dc = 0° 15' 01"
R = 22,892.88'
T = 50.00'
L = 100.00'
E = 0.05'

NB19
P.I. Sta. 160+33.66
Δ= 1° 14' 59" (LT)
Dc = 1° 14' 59"
R = 4,584.68'
T = 50.00'
L = 100.00'
E = 0.27'

SB1
P.I. Sta. 129+41.42
Δ = 3° 12' 36" (LT)
Dc = 4° 16' 48"
R = 1,338.65'
T = 37.51'
L = 75.00'
E = 0.53'

SB2
P.I. Sta. 130+16.42
Δ = 3° 07' 24" (LT)
Dc = 4° 09' 52"
R = 1,375.87'
T = 37.51'
L = 75.00'
E = 0.51'

SB3
P.I. Sta. 131+03.92
Δ= 2° 37' 31" (LT)
Dc = 2° 37' 31"
R = 2,182.42'
T = 50.01'
L = 100.00'
E = 0.57'

SB4
P.I. Sta. 132+03.92
Δ= 1° 52' 22" (LT)
Dc = 1° 52' 22"
R = 3,059.46'
T = 50.01'
L = 100.00'
E = 0.41'

SB5
P.I. Sta. 133+03.91
Δ= 0° 22' 33" (LT)
Dc = 0° 22' 33"
R = 15,244.65'
T = 50.00'
L = 100.00'
E = 0.08'

SB6
P.I. Sta. 134+21.34
Δ = 0° 18' 01" (RT)
Dc = 0° 18' 01"
R = 19,080.93'
T = 50.00'
L = 100.00'
E = 0.07'

SB7
P.I. Sta. 135+21.34
Δ = 1° 29' 56" (RT)
Dc = 1° 29' 56"
R = 3,822.55'
T = 50.00'
L = 100.00'
E = 0.33'

SB8
P.I. Sta. 135+96.34
Δ = 1° 00' 48" (RT)
Dc = 2° 01' 36"
R = 2,827.10'
T = 25.00'
L = 50.00'
E = 0.11'

SB9
P.I. Sta. 137+99.60
Δ = 8° 00' 30" (RT)
Dc = 2° 15' 00"
R = 2,546.48'
T = 178.26'
L = 355.93'
E = 6.23'

SB10
P.I. Sta. 140+14.77
Δ = 1° 51' 24" (RT)
Dc = 2° 28' 32"
R = 2,314.43'
T = 37.50'
L = 75.00'
E = 0.30'

SB11
P.I. Sta. 140+89.78
Δ = 2° 31' 42" (RT)
Dc = 3° 22' 15"
R = 1,699.70'
T = 37.51'
L = 75.00'
E = 0.41'

SB12
P.I. Sta. 141+52.27
Δ = 1° 52' 41" (RT)
Dc = 3° 45' 23"
R = 1,525.28'
T = 25.00'
L = 50.00'
E = 0.20'

SB13
P.I. Sta. 142+02.27
Δ = 2° 10' 28" (RT)
Dc = 4° 20' 55"
R = 1,317.58'
T = 25.00'
L = 50.00'
E = 0.24'

RB1
P.I.Sta. 141+99.17
Δ = 13° 48' 36" (RT)
Dc = 8° 30' 00"
R = 674.07'
T = 81.63'
L = 162.47'
E = 4.92'

RB2
P.I.Sta. 144+79.71
Δ = 19° 46' 15" (RT)
Dc = 5° 00' 00"
R = 1,145.92'
T = 199.70'
L = 395.42'
E = 17.27'

RB3
P.I.Sta. 148+22.94
Δ = 8° 50' 00" (RT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 147.51'
L = 294.44'
E = 5.69'

RB4
P.I.Sta. 150+69.87
Δ = 1° 00' 00" (RT)
Dc = 0° 30' 00"
R = 11,459.16'
T = 100.00'
L = 200.00'
E = 0.44'

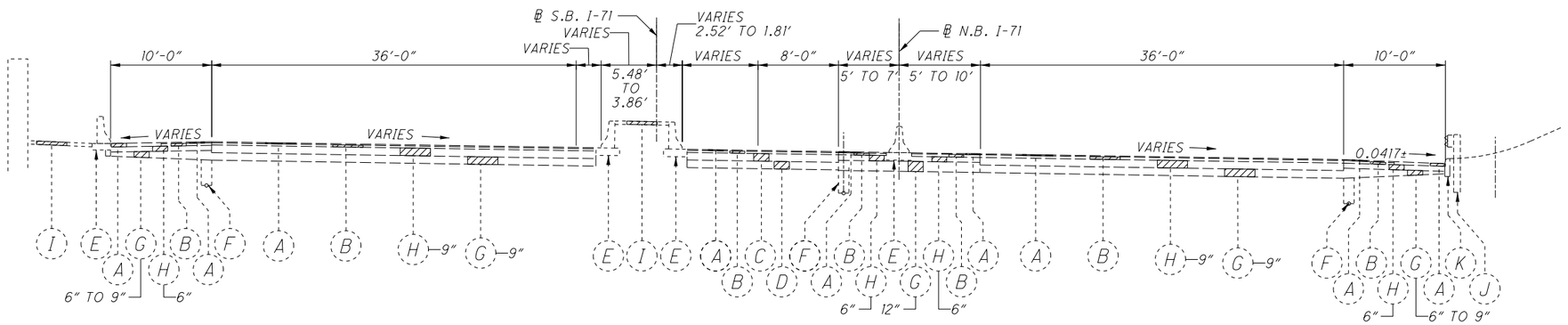
CONTROL POINTS

BENCHMARKS				
NO#	DESCRIPTION	STATION	OFFSET	ELEV
BM#1	CHISELED SQUARE IN TOP WALL - TUNNEL PORTAL	135+16.08	79.54 LT	540.97
BM#2	CHISELED SQUARE IN WALK	145+52.60	119.87 LT	521.91
BM#3	CHISELED SQUARE IN WALK LANDING	135+16.08	79.54 LT	567.33

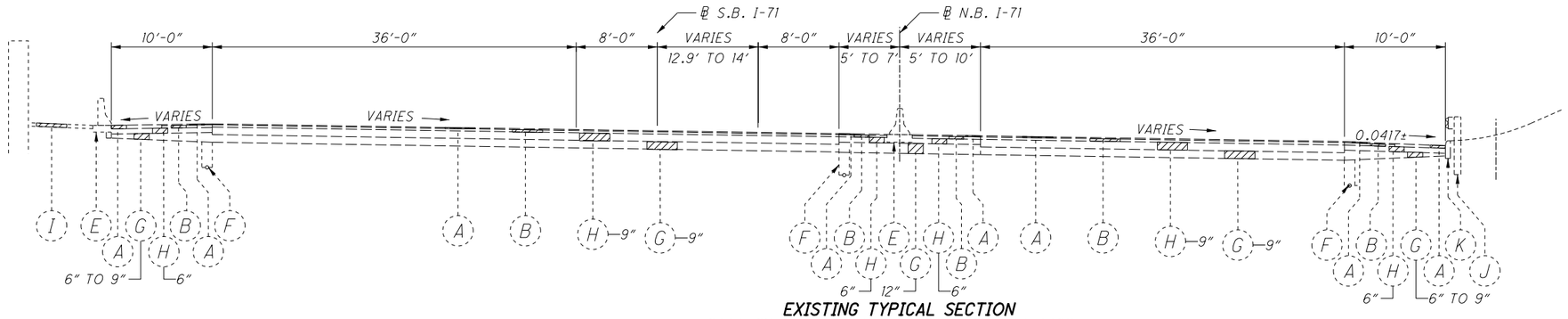
HORIZONTAL CONTROL POINTS - STATION-OFFSET FROM ℄ I-71 N.B. UNLESS NOTED OTHERWISE					
POINT NUMBER	GRID COORDINATES (U.S. SURVEY FOOT)		STATION	OFFSET	DESCRIPTION
	NORTHING	EASTING			
	408,236.051	1,399,678.901	138+56.26	83.71 LT	IRON PIN FOUND - ODOT (TUNNEL)
	408,231.535	1,399,826.972	138+24.40	60.94 RT	IRON PIN FOUND - ODOT (TUNNEL)
	408,339.722	1,399,814.192	139+34.98	67.45 RT	IRON PIN SET
	410,997.028	1,400,805.316	168+56.44	57.87 RT	IRON PIN FOUND - ODOT
	410,723.841	1,400,720.152	165+74.76	63.74 RT	IRON PIN SET
	409,328.237	1,400,033.517	150+27.84	104.99 RT	IRON PIN SET
	409,069.338	1,400,064.130	147+93.40	248.24 RT	IRON PIN SET

SCHEMATIC PLAN

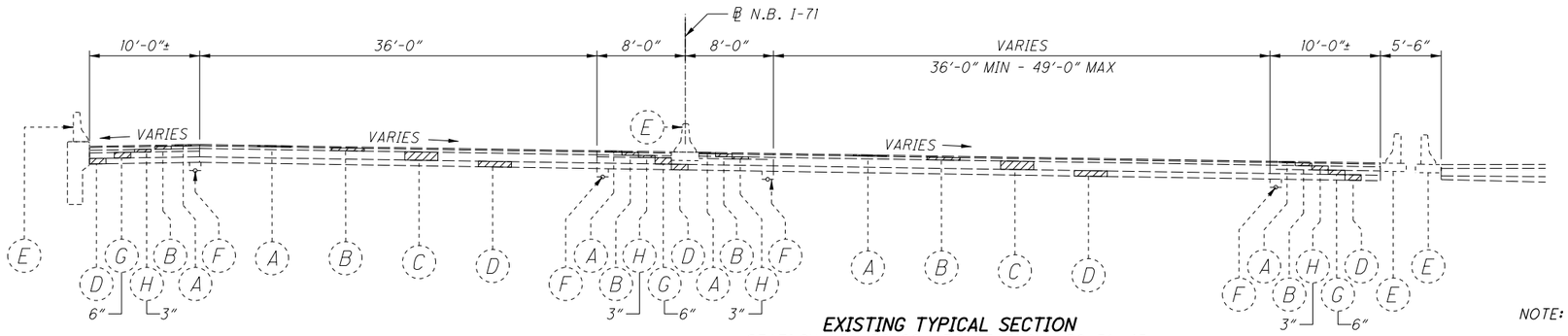
HAM-71-1.59



EXISTING TYPICAL SECTION
STATION 133+56SB TO STATION 134+48.43SB



EXISTING TYPICAL SECTION
STATION 134+48.43SB TO STATION 137+44SB



EXISTING TYPICAL SECTION
STATION 151+59.22± TO STATION 158+51.45±

NOTE:

1. STATIONS BASED ON ℄ N.B. I-71 UNLESS OTHERWISE NOTED

EXISTING ITEM LEGEND

- (A) DEPTH AS NOTED ASPHALT CONCRETE SURFACE COURSE
- (B) DEPTH AS NOTED ASPHALT CONCRETE INTERMEDIATE COURSE
- (C) 9" REINFORCED CONCRETE PAVEMENT
- (D) 6" SUBBASE
- (E) CONCRETE BARRIER
- (F) UNDERDRAIN
- (G) DEPTH AS NOTED AGGREGATE BASE
- (H) DEPTH AS NOTED BITUMINOUS BASE
- (I) PLAIN CONCRETE
- (J) GUARDRAIL
- (K) CONCRETE CURB

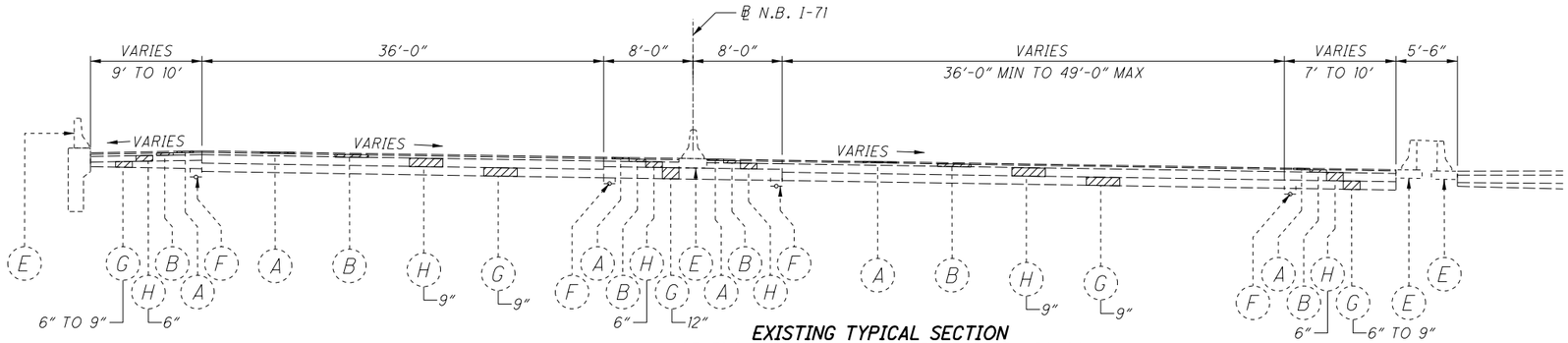
PROPOSED ITEM LEGEND

1. ITEM 442 - 1½" ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)
2. ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
3. ITEM 442 - 2¾" ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (446)
4. ITEM 407 - TACK COAT
5. ITEM 254 - PAVEMENT PLANING, ASPHALT CONCRETE, 4¼"
6. ITEM 302 - 9" ASPHALT CONCRETE BASE, PG 64-22
7. ITEM 304 - 6" AGGREGATE BASE (OR THICKNESS NOTED)
8. ITEM 526 - REINFORCED CONCRETE APPROACH SLAB (T=17")
9. ITEM 204 - SUBGRADE COMPACTION
10. ITEM 606 - GUARDRAIL, TYPE MGS
11. ITEM 622 - CONCRETE BARRIER (NJ TYPE B50), AS PER PLAN
12. ITEM 601 - 4" CONCRETE SLOPE PROTECTION
13. ITEM 204 - 14" EXCAVATION OF SUBGRADE
14. ITEM 204 - 14" GRANULAR MATERIAL TYPE C
15. ITEM 204 - GEOTEXTILE FABRIC
16. ITEM 622 - CONCRETE BARRIER SINGLE SLOPE, TYPE D

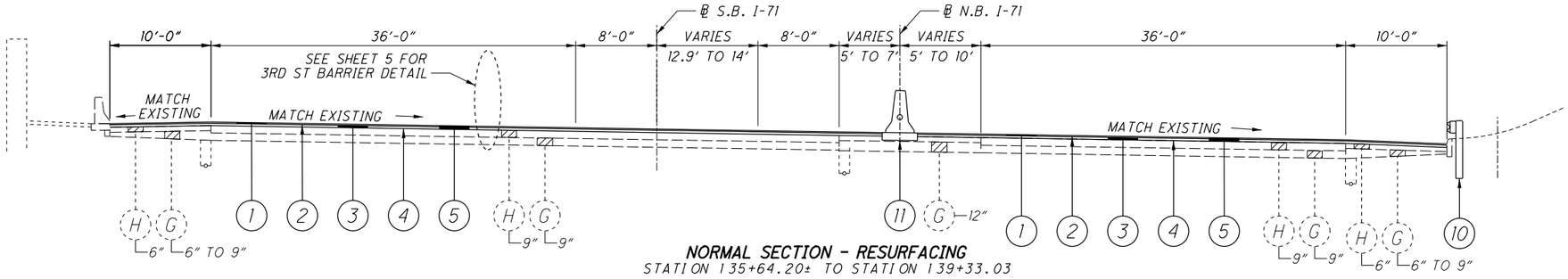
TYPICAL SECTIONS

HAM-71-1.59

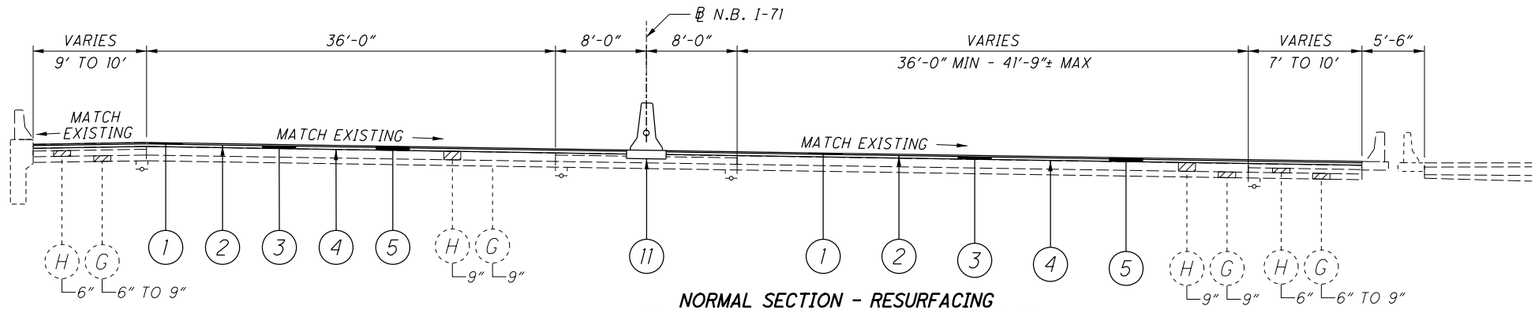
3
176



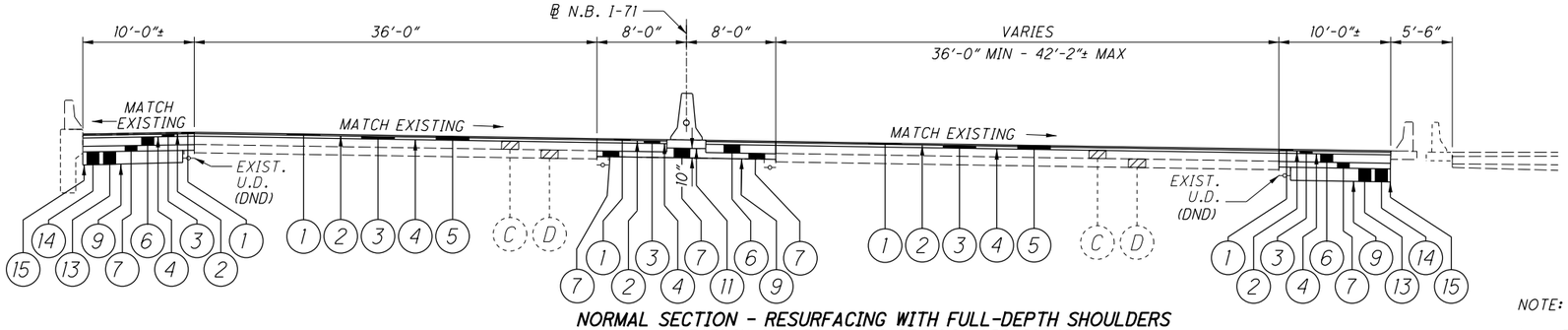
EXISTING TYPICAL SECTION
STATION 150+21.40 TO STATION 151+59.22
STATION 158+51.45± TO STATION 159+41.52



NORMAL SECTION - RESURFACING
STATION 135+64.20± TO STATION 139+33.03



NORMAL SECTION - RESURFACING
STATION 150+21.40 TO STATION 151+59.22
STATION 158+51.45 TO STATION 159+41.52



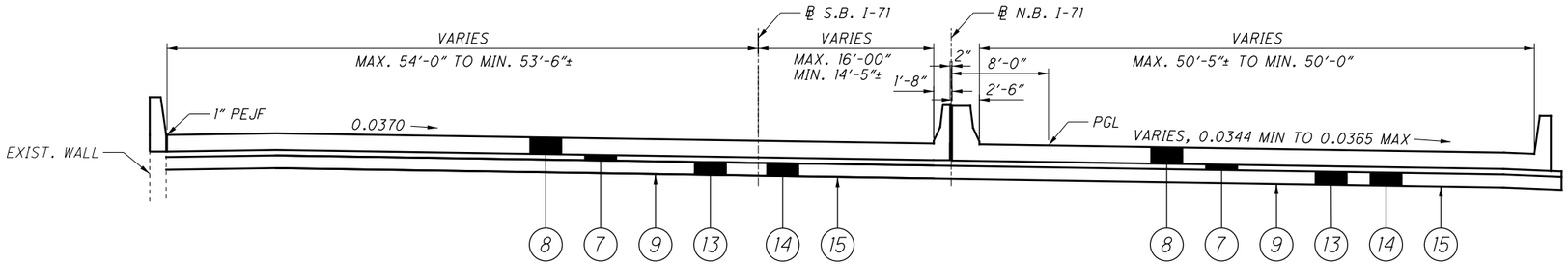
NORMAL SECTION - RESURFACING WITH FULL-DEPTH SHOULDERS
STATION 151+59.22 TO STATION 158+51.45

NOTE:

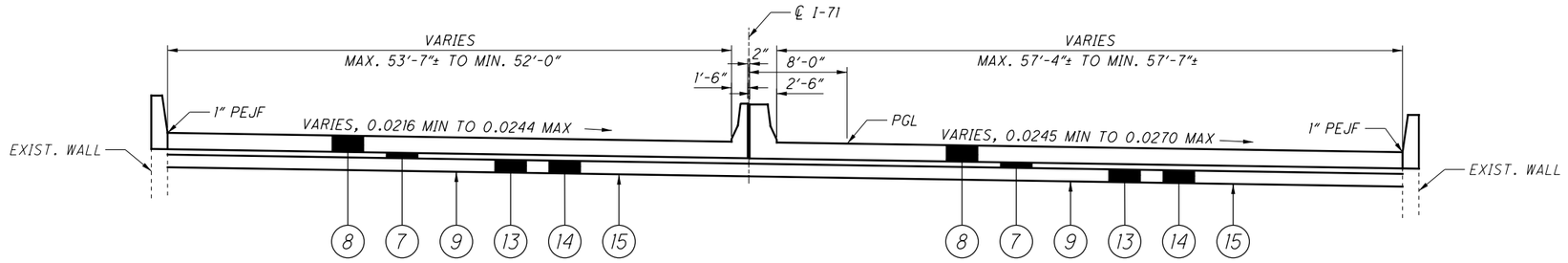
1. FOR LEGEND, SEE SHEET 3
2. FOR SLOPE & WIDTH VARIATIONS, SEE PLANS.
3. STATIONS BASED ON ℄ N.B. I-71 UNLESS OTHERWISE NOTED

TYPICAL SECTIONS

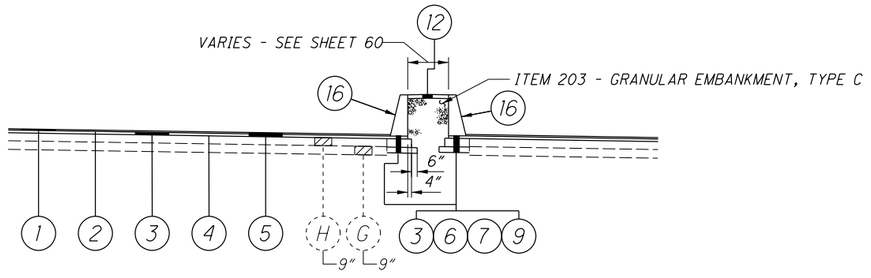
HAM-71-1.59



APPROACH SLAB SECTION
STATION 139+33.03 TO STATION 139+58.03



APPROACH SLAB SECTION
STATION 149+96.40 TO STATION 150+21.40



BARRIER DETAIL
3RD STREET RAMP & I-71 SOUTH
(SEE SHEET 60)

NOTE:

1. FOR LEGEND, SEE SHEET 3
2. FOR SLOPE & WIDTH VARIATIONS, SEE PLANS.
3. STATIONS BASED ON ℄ N.B. I-71 UNLESS OTHERWISE NOTED

TYPICAL SECTIONS

HAM-71-1.59

UTILITIES

LISTED BELOW ARE ALL UTILITIES LOCATED WITHIN THE PROJECT CONSTRUCTION LIMITS TOGETHER WITH THEIR RESPECTIVE OWNERS:

ELECTRIC:
DUKE ENGERGY
139 EAST 4TH STREET
ROOM 467A
CINCINNATI, OH 45202
(513) 287-3674
AARON WRIGHT

GAS:
DUKE ENERGY
139 EAST 4TH STREET
ROOM 460A
CINCINNATI, OH 45202
(513) 287-1205
KELSEY PACE

TELECOM:
CINCINNATI BELL
221 EAST 4TH STREET
BLDG 343
CINCINNATI, OH 45201
(513) 565-7043
MARK CONNER

CINCINNATI BELL-
AERIAL & PLACING
209 W. 7TH ST-
BUILDING 121-900
(513) 565-1296
SEAN FLORA

TIME WARNER
11252 CORNELL PARK DRIVE
CINCINNATI, OH 45242
(513) 386-5499
KENT RIEGER

SANITARY SEWER:
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1600 GEST STREET
CINCINNATI, OH 45204
(513) 557-7188
ROB FRANKLIN

WATER:
CINCINNATI WATER WORKS
4747 SPRING GROVE AVENUE
CINCINNATI, OHIO 45232
(513) 591-6856
JON HUNSEDER

TRAFFIC SURVEILLANCE:
ODOT OFFICE OF TRAFFIC OPERATIONS
1980 WEST BROAD STREET
MAIL STOP 5160
COLUMBUS, OH 43223
(614) 466-2168
JASON VERAY

TRAFFIC SIGNALS:
CITY HALL
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801 PLUM STREET, SUITE 320
CINCINNATI, OH 45202
(513) 352-5272
ANDY CARTER

PARKING COORDINATION:
PROCTOR & GAMBLE - (JLL)
(513) 983-0097
MICHELLE HENKE

LIGHTING:
CITY OF CINCINNATI
CITY HALL
DIVISION OF TRAFFIC ENGINEERING
801 PLUM STREET, SUITE 320
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(513) 352-4318
JOHNSON HILL

EXISTING PLANS

EXISTING PLANS ENTITLED HAM-71-1.30 (2015) PID 87268; HAM-71-1.30-9.00 (1995); HAM-71-1.30 (1965) AND HAM-71-1.56-2.51 (1965) MAY BE INSPECTED IN THE ODOT DISTRICT 8 OFFICE IN LEBANON.

SURVEYING PARAMETERS

PRIMARY PROJECT CONTROL MONUMENTS GOVERN ALL POSITIONING ON ODOT PROJECTS. SEE SHEET 2 OF THE PLANS FOR A TABLE CONTAINING PROJECT CONTROL INFORMATION.

USE THE FOLLOWING PROJECT CONTROL, VERTICAL POSITIONING, AND HORIZONTAL POSITIONING PARAMETERS FOR ALL SURVEYING:

PROJECT CONTROL

POSITIONING METHOD: ODOT VRS
MONUMENT TYPE: TYPE B

VERTICAL POSITIONING

ORTHOMETRIC HEIGHT DATUM: NAVD 88
GEOID: GEOID 12A

HORIZONTAL POSITIONING

REFERENCE FRAME: NAD83
ELLIPSOID: GRS80
MAP PROJECTION: LAMBERT CONFORMAL CONIC
COORDINATE SYSTEM: OHIO STATE PLANE - SOUTH ZONE
COMBINED SCALE FACTOR: 1.0000000 (GRID)
ORIGIN OF COORDINATE
SYSTEM: 0,0

USE THE POSITIONING METHODS AND MONUMENT TYPE USED IN THE ORIGINAL SURVEY TO RESTORE ALL MONUMENTS RELATED TO PRIMARY PROJECT CONTROL THAT ARE DAMAGED OR DESTROYED BY CONSTRUCTION ACTIVITIES. RESTORE THE DAMAGED OR DESTROYED MONUMENTS IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 823.

UNITS ARE IN U.S. SURVEY FEET. USE THE FOLLOWING CONVERSION FACTOR: 1 METER = 3.280833333 U.S. SURVEY FEET.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE TRAFFIC CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PROTECTION OF RIGHT-OF-WAY LANDSCAPING

PRIOR TO BEGINNING WORK, THE CONTRACTOR, THE PROJECT ENGINEER, AND A REPRESENTATIVE OF THE MAINTAINING AGENCY WILL REVIEW AND RECORD ALL LANDSCAPING ITEMS WITHIN THE RIGHT OF WAY (BOTH WITHIN AND OUTSIDE THE CONSTRUCTION LIMITS) A RECORD OF THIS REVIEW WILL BE KEPT IN THE PROJECT ENGINEER'S FILES. PRIOR TO FINAL ACCEPTANCE, A FINAL REVIEW OF LANDSCAPING ITEMS WILL BE MADE.

CONSTRICT ALL ACTIVITIES, EQUIPMENT STORAGE, AND STAGING TO WITHIN THE CONSTRUCTION LIMITS. UNLESS OTHERWISE IDENTIFIED IN THE PLANS OR PROPOSAL, THE CONSTRUCTION LIMITS ARE IDENTIFIED AS 30 FEET FROM THE EDGE OF PAVEMENT.

SUBMIT A WRITTEN REQUEST TO THE PROJECT ENGINEER TO USE ANY AREA OUTSIDE THESE LIMITS. THE DOCUMENT SUBMITTED MUST CLEARLY IDENTIFY THE AREA AND EXPLAIN THE PROPOSED USE AND RESTORATION OF THE AREA. USE OF THESE AREAS FOR DISPOSAL OF WASTE MATERIAL AND CONSTRUCTION DEBRIS, EXCAVATION OF BORROW MATERIAL AND PLACEMENT OF PORTABLE PLANTS IS PROHIBITED. THE REQUEST MUST BE APPROVED, IN WRITING, BEFORE THE CONTRACTOR HAS PERMISSION TO USE THE AREA.

ANY ITEMS DAMAGED BEYOND THE CONSTRUCTION LIMITS AS DEFINED ABOVE WILL BE REPLACED IN KIND OR AS APPROVED BY THE PROJECT ENGINEER.

ITEM 204 - SUBGRADE COMPACTION AND PROOF ROLLING

CONSTRUCT THE SUBGRADE AS FOLLOWS AND IN THE FOLLOWING SEQUENCE:

1. SHAPE THE SUBGRADE TO WITHIN 0.2 FEET OF THE PLAN SUBGRADE ELEVATION.

2. EXCAVATE AND REPLACE UNSUITABLE SUBGRADE BEFORE PROOF ROLLING. THE EXCAVATION LIMITS ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSUITABLE SUBGRADE. UNSUITABLE SUBGRADE INCLUDES UNSUITABLE SOIL (A-4B, A-2-5, A-5, A-7-5, AND SOIL WITH A LIQUID LIMIT GREATER THAN 65) AND ANY COAL, SHALE, OR ROCK WHICH NEEDS TO BE REMOVED ACCORDING TO 204.05.

   IF THERE IS UNSUITABLE SUBGRADE IN A SHALLOW FILL LOCATION, EXCAVATE AND REPLACE THE UNSUITABLE SUBGRADE BEFORE CONSTRUCTING THE SHALLOW FILL AND SHAPING THE SUBGRADE.

3. COMPACT THE SUBGRADE ACCORDING TO 204.03.

4. APPROXIMATE LIMITS FOR EXCAVATION OF UNSTABLE SUBGRADE ARE SHOWN AND LABELED ON THE CROSS SECTIONS AS UNSTABLE SUBGRADE. THE ENGINEER WILL IDENTIFY THE ACTUAL LIMITS OF EXCAVATION FOR UNSTABLE SUBGRADE BASED ON THE PROOF ROLLING RESULTS AND VISUAL OBSERVATIONS.

   PROOF ROLL THE COMPACTED SUBGRADE ACCORDING TO 204.06.

5. EXCAVATE UNSTABLE SUBGRADE AS DIRECTED BY THE ENGINEER AND STABILIZE BY REPLACING WITH THE SPECIFIED MATERIALS ACCORDING TO 204.07. EXCAVATIONS WILL EXTEND 18 INCHES BEYOND THE EDGE OF THE SURFACE OF THE PAVEMENT, PAVED SHOULDERS, OR PAVED MEDIANS.

6. PROOF ROLL THE STABILIZED AREAS ACCORDING TO 204.06 TO VERIFY STABILITY.

7. FINE GRADE THE SUBGRADE TO THE SPECIFIED GRADE.

THE QUANTITIES FOR EXCAVATING THE UNSUITABLE SUBGRADE AND UNSTABLE SUBGRADE ARE BOTH PAID UNDER ITEM 204 EXCAVATION OF SUBGRADE.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE STATE, REPRESENTATIVES OF THE STATE AND THE CONTRACTOR, ALONG WITH LOCAL REPRESENTATIVES, SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE STATE.

ALL NEW CONDUITS, INLETS, CATCH BASINS, AND MANHOLES CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE STATE.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR$'_{32}$S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE PERTINENT 611 CONDUIT ITEMS.

TEMPORARY DRAINAGE ITEMS

TEMPORARY DRAINAGE ITEMS LABELED ON THE MAINTENANCE OF TRAFFIC PLAN ARE ITEMIZED ON THE MOT PLANS. PAYMENT FOR THE TEMPORARY DRAINAGE ITEMS ARE ITEMIZED AND CARRIED TO THE GENERAL SUMMARY.

ITEM SPECIAL - PIPE CLEANOUT

THIS WORK SHALL CONSIST OF REMOVING SEDIMENT AND DEBRIS FROM THE EXISTING DRAINAGE CONDUITS SPECIFIED IN THE PLANS. ALL MATERIAL REMOVED SHALL BE DISPOSED OF AS PER 105.16 AND 105.17. ALL SEWERS SHALL BE CLEANED OUT TO THE SATISFACTION OF THE ENGINEER.

CLEANOUT OF THE PIPE SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ITEM SPECIAL - PIPE CLEANOUT. THIS PRICE SHALL INCLUDE THE COST FOR MATERIAL, EQUIPMENT, LABOR, AND ALL INCIDENTALS REQUIRED TO COMPLETE THE CLEANOUT.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE ABOVE NOTED WORK:

SPECIAL, PIPE CLEANOUT , 24" AND UNDER - 830 FT.

MEDIAN AND/OR CURBING ON APPROACH SLABS

WITHIN THE LIMITS OF THE APPROACH SLAB, TRANSITION THE SHAPE OF THE MEDIAN AND/OR CURBING ON APPROACH SLABS FROM THE STANDARD SECTION ON THE APPROACHES TO THE SECTION USED ON THE BRIDGE.

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

CALCULATED DPF
CHECKED BJF

GENERAL NOTES

HAM-71-1.59

PART-WIDTH CONSTRUCTION

BECAUSE OF THE NECESSITY TO BUILD THIS PROJECT UNDER TRAFFIC AND TO CONSTRUCT THE FULL PAVEMENT WIDTH IN STAGES, EXERCISE CARE TO PREVENT THE CONSTRUCTION OF A BUTT JOINT IN THE BASE COURSES. LAP LONGITUDINAL JOINTS AS SHOWN ON STANDARD CONSTRUCTION DRAWING BP-3.1.

ITEM 622 - CONCRETE BARRIER TYPE B1, AS PER PLAN (B50)

THIS ITEM SHALL CONSIST OF CONSTRUCTION OF A 50" TALL JERSEY SHAPED MEDIAN BARRIER (TYPE B50) AS PER THE DETAILS SHOWN ON SHEETS 60-62

ITEM 611 - INLET MISC.: BARRIER INLET I-3B TYPE B1

THIS ITEM SHALL CONSIST OF CONSTRUCTION OF AN INLET FOR JERSEY SHAPED TYPE B50 BARRIER AS PER THE DETAILS FOR CONCRETE BARRIER INLET I-3B TYPE B1 SHOWN ON SHEETS 63-64

ITEM 606 - IMPACT ATTENUATOR, TYPE 3, (UNIDIRECTIONAL OR BIDIRECTIONAL)]

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING ANY OF THE TYPE 3 IMPACT ATTENUATORS AS LISTED ON THE OFFICE OF ROADWAY ENGINEERING'S WEB PAGE (REFER TO THE POSTED SHOP DRAWINGS FOR THE MOST CURRENT APPROVED PRODUCT MODELS). WHEN BI-DIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS. THE FACE OF THE IMPACT HEAD SHALL BE COVERED WITH TYPE G REFLECTIVE SHEETING, PER CMS 730.19.

PAYMENT FORTHE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, IMPACT ATTENUATOR, TYPE 3 [(SPEED (IN MPH), HAZARD WIDTH (IN INCHES)), (UNIDIRECTIONAL OR BIDIRECTIONAL)], EACH, AND SHALL INCLUDE ALL LABOR,TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS/BACKSTOPS, TRANSITIONS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

ITEM 253 - PAVEMENT REPAIR

A QUANTITY OF THIS ITEM IS PROVIDED FOR USE AS DIRECTED BY THE ENGINEER. THIS ITEM SHALL CONSIST OF CUTTING AND REMOVING DETERIORATED CONCRETE PAVEMENT AND PLACING PAVEMENT REPAIR AS DETAILED ON THIS SHEET. THIS ITEM SHALL COMMENCE WITHIN 7 DAYS OF THE COMPLETION OF MAINLINE PAVEMENT PLANING.

IT IS NOT THE INTENT TO REPAIR EVERY DETERIORATED AREA WITHIN THE PROJECT. THE ENGINEER SHALL DETERMINE WHICH AREAS ARE TO BE REPAIRED.

PAYMENT SHALL BE BASED ON THE ACTUAL NUMBER OF SQUARE YARDS OF PAVEMENT REMOVED AND REPLACED TO THE LIMITS DESIGNATED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY:

253, PAVEMENT REPAIR, 390 SQ YD

ITEM 254 - PAVEMENT PLANING

NO TRAFFIC IS ALLOWED ON A PLANED SURFACE, PLACE INTERMEDIATE COURSE OVER PAVEMENT PLANING PRIOR TO OPENING TO TRAFFIC.

ITEM SPECIAL - MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION

ALL CONCRETE SHALL BE TESTED. ALL TESTING, INSPECTION AND QUALITY CONTROL FOR CONCRETE, NOT INCLUDED UNDER SUPPLEMENTAL SPECIFICATIONS 888 AND 898, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE A CONCRETE TESTING CONSULTANT WITH PREVIOUS EXPERIENCE AND FAMILIARITY IN ODOT PROCEDURES, CONCRETE TESTING REQUIREMENTS AND CONCRETE TESTING DOCUMENTATION. AT LEAST 30 DAYS PRIOR TO CONCRETE PLACEMENT, SUBMIT TO THE ENGINEER FOR APPROVAL, THE PROPOSED CONCRETE TESTING CONSULTANT ALONG WITH THE RESUMES OF THE PROPOSED TESTING PERSONNEL.

TESTING CONCRETE FOR STRUCTURES AND PORTLAND CEMENT CONCRETE PAVEMENT SHALL BE PERFORMED AS OUTLINED IN SUPPLEMENTAL SPECIFICATIONS 898 AND 888 RESPECTIVELY.

THROUGH THE CONTRACTOR, THE CONSULTANT SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONCRETE PLACED IS IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH WORK SHALL BE IN ACCORDANCE WITH THE APPLICABLE CONSTRUCTION AND MATERIAL SPECIFICATIONS AND THE ODOT CONSTRUCTION INSPECTION MANUAL OF PROCEDURES FOR CONCRETE. THE CONCRETE CONSULTANT SHALL PROVIDE THE NECESSARY TRAINED TECHNICIANS AND EQUIPMENT AND SHALL FURNISH THE PROJECT ENGINEER WITH TWO (2) COPIES OF ALL TEST RESULTS WITHIN 24 HOURS AFTER COMPLETION OF CONCRETE PLACEMENT.

THE TECHNICIANS SHALL BE ACI LEVEL I CERTIFIED AND WILL BE REQUIRED TO DEMONSTRATE HIS/HER COMPETENCE AND EXPERIENCE LEVELS TO THE ENGINEER PRIOR TO BEGINNING WORK. THE ENGINEER WILL ORDER THE CONTRACTOR TO REPLACE ANY TECHNICIAN THAT IS NOT VERSED IN THE REQUIRED TESTING PROCEDURE.

THE TECHNICIAN SHALL VERBALLY NOTIFY THE ODOT PROJECT ENGINEER OF ANY FAILING TESTS AND SHALL SUBMITFOLLOW-UP WRITTEN NOTIFICATION TO THE PROJECT ENGINEER OF REMEDIAL ACTION(S) TAKEN TESTS SHALL BE TAKEN AS SPECIFIED WITHIN THE CONSTRUCTION AND MATERIAL SPECIFICATIONS, CONCRETE MANUAL OR APPROPRIATE SUPPLEMENTAL SPECIFICATION AS LISTED IN THE PROPOSAL GOVERNING THE PROJECT. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO MAKE IMMEDIATE CORRECTIONS OR ADJUSTMENTS TO THE CONCRETE MIX VIA DIRECT COMMUNICATION WITH THE CONCRETE SUPPLIER'S PLANT PERSONNEL TO MAINTAIN UNINTERRUPTED COMPLIANCE WITH THE SPECIFICATIONS UPON NOTIFICATION OF CONCRETE MIX NON-COMPLIANCE BY THE CONSULTANT TECHNICIAN. THE PROJECT ENGINEER MAY REQUIRE MORE FREQUENT TESTING AS CONDITIONS WARRANT.

UPON COMPLETION OF DAILY CONCRETE PLACEMENT(S), THE CONCRETE CONSULTANT SHALL PROVIDE THE PROJECT ENGINEER WITH DAILY TEST REPORTS, TE-45'S, INSPECTORS DAILY REPORT AND SUPPORTING DOCUMENTATION FOR EACH ITEM OF CONCRETE WORK PERFORMED SEPARATED BY MIX DESIGN. SUBSEQUENTLY, UPON COMPLETION OF AN ENTIRE CONCRETE SPECIFICATION ITEM, THE CONCRETE CONSULTANT SHALL ALSO PROVIDE THE PROJECT ENGINEER WITH TWO (2) COPIES OF AN ADDITIONAL INSPECTION REPORT BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHICH CONTAINS THE TESTING- RESULTS SUMMARY FOR EACH ITEM BY CONTRACT REFERENCE NUMBER AND THE CONSULTANT'S CONCLUSIONS RELATIVE TO SPECIFICATION COMPLIANCE FOR ALL CONCRETE TESTING WORK.

THE ODOT PROJECT ENGINEER RESERVES THE RIGHT TO MAKE UNANNOUNCED QUALITY-CONTROL TESTS TO VERIFY PROCEDURES USED AND RESULTS BEING OBTAINED BY THE CONTRACTOR. THE CONCRETE TECHNICIAN SHALL WORK UNDER THE DIRECTION OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, WHO WILL MONITOR THE CONCRETE TEST RESULTS. THE FINAL INSPECTION REPORTS FOR EACH COMPLETED ITEM SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO, CERTIFYING THAT ALL CONCRETE TESTS PROVIDED BY THE CONTRACTOR MET APPLICABLE CONTRACT REQUIREMENTS. A FINAL REPORT ISSUED BY THE CONSULTING FIRM SHALL CONTAIN A CERTIFIED STATEMENT OF COMPLIANCE WITH ODOT SPECIFICATIONS AND ANY OTHER CONCLUSIONS REGARDING THE CONCRETE MATERIALS INCORPORATED INTO THE PROJECT. SUCH STATEMENT SHALL BE SIGNED BY A REGISTERED PROFESSIONAL ENGINEER, STATE OF OHIO. AND, THE CONCRETE CONSULTANT SHALL BE REQUIRED TO ATTEND MONTHLY PROGRESS MEETINGS AS REQUIRED BY THE PROJECT ENGINEER.

ADDITIONALLY, THE CONTRACTOR SHALL BE REQUIRED TO KEEP A POSTED LIST OF BEAM AND CYLINDER IDENTIFICATION NUMBERS FOR THE PURPOSE OF IDENTIFYING THE CORRESPONDING PLACEMENT LOCATION AND CONCRETE SPECIFICATION ITEM.

PAYMENT SHALL BE BID AS LUMP SUM FOR ITEM SPECIAL MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION. THE ITEM WILL BE PAID FOR AS FOLLOWS:

UPON APPROVAL OF CONSULTANT 20%
PROGRESSIVE EQUIVALENT PAYMENTS 50%
UPON SUBMISSION OF FINAL REPORT 30%

PAYMENT FOR TESTING, INSPECTION AND QUALITY CONTROL WILL BE INCLUDED WITH THE APPROPRIATE LUMP-SUM CONCRETE ITEM.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR USE TO COMPLETE THE WORK NOTED ABOVE:

690, SPECIAL - MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION - LUMP SUM

THE TECHNICIAN SHALL HAVE THE FULL EFFECT AND AUTHORITY OF AN ODOT PROJECT INSPECTOR IN DETERMINING ACCEPTABILITY OF MATERIAL AND CONCRETE PLACEMENT PRACTICES.

ENVIRONMENTAL COMMITMENT NOTES

SECTION 4 (F) PARK ADJACENT TO PROJECT SITE - FIDO FIELD

CONTRACTOR SHALL AVOID PARKLAND KNOWN AS FIDO FIELD ADJACENT THE PROJECT SITE; SEE SCHEMATIC PLAN, SHEET 2, FOR LIMITS OF PARK. ACCESS TO FIDO FIELD WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES. TEMPORARY CONSTRUCTION FENCING WILL BE INSTALLED ALONG THE PARK LIMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES TO PROTECT THE EXISTING 4(F) PROPERTY AND THE PUBLIC. IF REQUIRED, APPROPRIATE SIGNAGE WILL BE INSTALLED TO ALERT USERS OF CONSTRUCTION ACTIVITIES, IF IN PROXIMITY TO THE PARK. PROPOSED CONSTRUCTION LIMITS SHOWN ON THE PLAN ARE AERIAL LIMITS OF BRIDGE CONSTRUCTION. CONTRACTOR SHALL TAKE MEASURES TO PROTECT PARK USERS FROM CONSTRUCTION ACTIVITIES OVEREHAD IN AND NEAR THE PARK LIMITS. THE STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT SHALL NOT TAKE PLACE IN OR NEAR THE LIMITS OF THE PARK.

(FOR ACCESS RESTRICTIONS ON OTHER AREAS AND PARKING LOTS UNDER THE BRIDGE, SEE MAINTENANCE OF TRAFFIC NOTES, SHEETS 8-9).

CONSTRUCTION NOTIFICATION

THE CONTRACTOR WILL ADVISE THE PROJECT ENGINEER A MINIMUM OF:

- FOURTEEN (14) DAYS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES AND/OR ROAD CLOSURES.

- SEVEN (7) DAYS PRIOR TO LANE CLOSURES AND/OR SHIFTS IN TRAFFIC PATTERNS.

THE PROJECT ENGINEER WILL FORWARD THIS INFORMATION TO THE FOLLOWING:

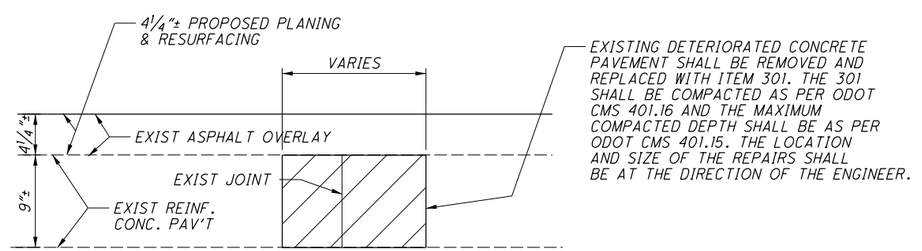
- DISTRICT PUBLIC INFORMATION OFFICER (PIO) BY FAX AT (513) 933-9472 OR EMAIL AT D08.PIO@dot.ohio.gov

- DISTRICT PERMIT SECTION BY FAX AT (513) 933-9472 OR EMAIL AT tom.makris@dot.ohio.gov

- CENTRAL OFFICE SPECIAL HAUL PERMITS SECTION BY FAX AT (614) 728-4099 OR EMAIL AT hauling.permits@dot.ohio.gov

THE PIO WILL, IN TURN, NOTIFY THE PUBLIC, THE LOCAL EMERGENCY SERVICES, AFFECTED SCHOOLS AND BUSINESSES, AND ANY OTHER IMPACTED LOCAL PUBLIC AGENCY OF ANY OF THE ABOVE MENTIONED ITEMS, VIA MEDIA SOURCES.

ITEM 253 PAVEMENT REPAIR



TYPICAL CROSS SECTION

CALCULATED DPF CHECKED BJF

GENERAL NOTES

HAM-71-1.59

ITEM 614, MAINTAINING TRAFFIC (I-71)

MAINTAIN ALL EXISTING LANES OF TRAFFIC IN EACH DIRECTION EXCEPT IN ACCORDANCE WITH THE PERMITTED LANE CLOSURE TIMES NOTE, AT ALL TIMES.

PHASE 1

CONSTRUCT THE MEDIAN CROSSOVERS FOR USE IN PHASE 2 AND 3 BY REMOVING THE CONCRETE BARRIER, DRAINAGE, LIGHTS ETC. PLACE ASPHALT WEDGING AND RESURFACING FOR THE TRANSITION ON THE REAR APPROACH. CONSTRUCT FULL DEPTH MEDIAN AND OUTSIDE SHOULDER REPLACEMENT ON THE FORWARD APPROACH (SEE CROSSOVER DETAILS ON SHEETS 42-43).

LANE AND RAMP CLOSURES ON I-71 SHALL BE PER THE PERMITTED LANE CLOSURE TIMES NOTE.

FOR THE SOUTH CROSSOVER LOCATION IN THE SOUTHBOUND DIRECTION, CLOSE LEFT LANE PER S.C.D. 95.30, AND THE OFF-RAMP TO THIRD STREET. CLOSE THE LEFT LANE PRIOR TO THE SIGNAGE FOR THE RAMP CLOSURE PER S.C.D. MT-98.29. IN THE NORTHBOUND DIRECTION, CLOSE THE RIGHT LANE PRIOR TO THE TUNNEL AND SHIFT LANE OVER FOR THE WORK ZONE; COORDINATE WITH TUNNEL PROJECT 15-0085 PHASE 3A FOR DETAILS SEE SHEETS 17-18.

FOR THE NORTH CROSSOVER AND SHOULDER REBUILD LOCATIONS USE S.C.D. 95.30 FOR RIGHT AND LEFT LANE CLOSURES. MAINTAIN RAMP FROM I-71 TO I-471 SOUTH USING SCD MT-98.50. MAINTAIN THE ON-RAMP FROM FIFTH STREET USING S.C.D. MT-98.10 WITH EXISTING RAMP D.S.D. MAINTAINED.

IN BOTH LOCATIONS, AFTER THE MEDIAN BARRIER IS REMOVED, PLACE PORTABLE BARRIER ALONG THE MEDIAN EDGE LINE AT A MINIMUM OF 1'-0" OFFSET. TRANSITION BARRIER PER S.C.D. MT-102.10 AND DELINEATE PER S.C.D. MT-101.70. PORTABLE BARRIER SHALL REMAIN IN PLACE UNTIL SUCH TIME THAT THE CROSSOVER IS USED IN PHASE 2.

PHASE 2

CLOSE THE ON-RAMP FROM SECOND STREET TO I-71 NORTHBOUND AND SHIFT NORTHBOUND I-71 TRAFFIC TO THE RIGHT SIDE OF THE BRIDGE HAM-71-0159 AND SHIFT THE SOUTH BOUND LANES VIA CROSSOVER TO THE LEFT (MEDIAN) SIDE OF THE NORTHBOUND BRIDGE. RAMP E, THE OFF-RAMP FROM I-71 SOUTHBOUND TO THIRD STREET, IS CLOSED. REMOVE THE EXISTING DECK ON THE SOUTHBOUND BRIDGE AND CONSTRUCT THE NEW DECK AND PARAPETS. DEFER MEDIAN BARRIER CONSTRUCTION ON REAR APPROACH SLAB.

SEE SHEETS 19-20 FOR SUBBPHASE 2 (3A); COORDINATED WITH PROJECT 15-0085 NORTHBOUND TUNNEL PHASE 3A:
SCHEDULED DATES 7/06/16 THRU 8/01/16.

SEE SHEETS 21-22 FOR SUBBPHASE 2 (3B); COORDINATED WITH PROJECT 15-0085 NORTHBOUND TUNNEL PHASE 3B:
SCHEDULED DATES 8/02/16 THRU 8/11/16.

SEE SHEETS 23-24 FOR SUBBPHASE 2 (3C); COORDINATED WITH PROJECT 15-0085 NORTHBOUND TUNNEL PHASE 3C:
SCHEDULED DATES 8/16/16 THRU 9/01/16.

SEE SHEETS 25-28 FOR PHASE 2 - WHEN NO WORK IS OCCURRING IN THE NORTHBOUND TUNNEL ON PROJECT 15-0085
8/01/16 THRU BALANCE OF PHASE 1

SEE SHEETS 33-34 FOR RAMP CLOSURE DETOUR SIGNAGE FOR ON-RAMP FROM SECOND STREET TO I-71 NORTHBOUND AND THE OFF-RAMP FROM I-71 SOUTHBOUND TO THIRD STREET

POST PHASE 2

FOR THE DURATION OF PROJECT 15-0085 SOUTHBOUND TUNNEL PHASE 5B (10/16/16 THRU 11/16/16), RETURN SOUTH BOUND TRAFFIC TO PRECONSTRUCTION POSITION ON THE SOUTHBOUND BRIDGE CONSTRUCTED IN PHASE 2. RETURN NORTHBOUND TRAFFIC TO PRECONSTRUCTION POSITION ON THE NORTHBOUND BRIDGE. LANE CLOSURES OR RAMP RESTRICTIONS WILL NOT BE PERMITTED DURING THIS TIME UNLESS COORDINATED WITH PROJECT 15-0085.

PHASE 3

SHIFT SOUTHBOUND I-71 TRAFFIC TO THE LEFT SIDE OF THE SOUTHBOUND BRIDGE CONSTRUCTED IN PHASE 2. CLOSE THE ON-RAMP FROM FIFTH STREET TO I-71 NORTHBOUND AND SHIFT THE NORTH BOUND LANES VIA CROSSOVER TO THE RIGHT (MEDIAN) SIDE OF THE SOUTHBOUND BRIDGE. DETOUR TRUCKS FROM NORTHBOUND I-71. REMOVE THE EXISTING DECK ON THE NORTHBOUND BRIDGE AND CONSTRUCT THE NEW DECK AND PARAPETS. OVERLAY THE EXISTING DECK ON THE RAMP B BRIDGE (HAM-71-0154E) AND REBUILD THE PARAPETS. DEFER MEDIAN BARRIER CONSTRUCTION ON REAR APPROACH SLAB.

SEE SHEETS 29-32 FOR PHASE 3; SHOWN COORDINATED WITH PROJECT 15-0085 SOUTHBOUND TUNNEL PHASE 5C:
SCHEDULED DATES 11/17/16 THRU 7/20/17.

IF REQUIRED, FOR THE BALANCE OF PHASE 3 PAST 7/20/17, THE RECONFIGURATION OF TRANSITION TO THE SOUTH BOUND TUNNEL FINAL LANE CONFIGURATION WILL BE PERFORMED BY THE CONTRACTOR FOR PROJECT 15-0085.

SEE SHEET 35 FOR RAMP CLOSURE DETOUR SIGNAGE FOR ON-RAMP FROM FIFTH STREET TO I-71 NORTHBOUND.

SEE SHEET 36 FOR I-71 NORTHBOUND TRUCK DETOUR SIGNAGE.

PHASE 4

RE-CONSTRUCT WHAT WAS REMOVED FOR THE MEDIAN CROSSOVERS; MEDIAN CONCRETE BARRIER, DRAINAGE INLETS, ETC. COMPLETE MEDIAN BARRIERS ON REAR APPROACH SLAB DEFERRED FROM PHASE 3. PLACE PORTABLE BARRIER ALONG THE MEDIAN EDGE LINE AT A MINIMUM OF 1'-0" OFFSET. TRANSITION BARRIER PER S.C.D. MT-102.10 AND DELINEATE PER S.C.D. MT-101.70. PORTABLE BARRIER SHALL REMAIN IN PLACE UNTIL SUCH TIME MEDIAN BARRIER IS REBUILT. RESURFACE THE ROADWAY APPROACHES AND COMPLETE INCIDENTAL WORK. LANE CLOSURES ON I-71 SHALL BE PER THE PERMITTED LANE CLOSURE NOTE AND PERTINENT S.C.D.'S

MAINTAINING TRAFFIC (CITY STREETS)

NO LANE CLOSURES ON SENTINEL ST., CULVERT ST., AND EGGLESTON AVE. ARE PERMITTED BETWEEN THE HOURS OF 6AM - 9AM AND 3PM - 6 PM. ONE LANE OF EGGLESTON IN EACH DIRECTION SHALL BE OPEN AT ALL TIMES. THE CONTRACTOR SHALL NOTIFY THE CITY OF CINCINNATI, RIGHT OF WAY PERMITS - SHAWN PATTON; PHONE; 513-352-5287 AT LEAST 72 HOURS IN ADVANCE OF REQUIRED LANE CLOSURES ON CITY STREETS.

MAINTAINING PEDESTRIAN TRAFFIC (CITY STREETS)

MAINTAIN PEDESTRIAN TRAFFIC AT ALL TIMES ON SENTINEL ST., CULVERT ST., AND EGGLESTON AVE. WHEN OVERHEAD WORK IS DEEMED UNSAFE FOR PEDESTRIAN TRAFFIC UNDERNEATH, DETOUR PEDESTRIANS AS PER S.C.D MT-110.10. NOTIFY THE CITY OF CINCINNATI, SHAWN PATTON PHONE: 513-352-5287 AT LEAST 72 HOURS IN ADVANCE OF ESTABLISHING PEDESTRIAN DETOURS

LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS (I-71 & RAMPS)

NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES SHALL BE OPEN TO TRAFFIC DURING THE FOLLOWING DESIGNATED HOLIDAYS OR EVENTS:

CHRISTMAS	FOURTH OF JULY
NEW YEARS	LABOR DAY
MEMORIAL DAY	THANKSGIVING
EASTER	

THE PERIOD OF TIME THAT THE LANES ARE TO BE OPEN DEPENDS ON THE DAY OF THE WEEK ON WHICH THE HOLIDAY OR EVENT FALLS. THE FOLLOWING SCHEDULE SHALL BE USED TO DETERMINE THIS PERIOD:

DAY OF HOLIDAY OR EVENT	TIME ALL LANES MUST BE OPEN TO TRAFFIC
SUNDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY
MONDAY	12:00N FRIDAY THROUGH 6:00 AM TUESDAY
TUESDAY	12:00N MONDAY THROUGH 6:00 AM WEDNESDAY
WEDNESDAY	12:00N TUESDAY THROUGH 6:00 AM THURSDAY
THURSDAY	12:00N WEDNESDAY THROUGH 6:00 AM FRIDAY
THURSDAY (THANKSGIVING ONLY)	6:00 AM WEDNESDAY THROUGH 6:00 AM MONDAY
FRIDAY	12:00N THURSDAY THROUGH 6:00 AM MONDAY
SATURDAY	12:00N FRIDAY THROUGH 6:00 AM MONDAY

SHOULD THE CONTRACTOR FAIL TO MEET ANY OF THESE REQUIREMENTS, THE CONTRACTOR SHALL BE ASSESSED A DISINCENTIVE IN THE AMOUNT OF $125 FOR EACH MINUTE THE ABOVE DESCRIBED LANE CLOSURE RESTRICTIONS ARE VIOLATED.

LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS (CITY STREETS)

IN ADDITION TO THE HOLIDAYS LISTED ABOVE, NO WORK SHALL BE PERFORMED AND ALL EXISTING LANES ON CITY STREETS SHALL BE OPENED TO TRAFFIC AND PEDESTRIANS DURING THE FOLLOWING DESIGNATED EVENTS:

RIVERFEST (LABOR DAY FIREWORKS)
ST PATRICK'S DAY PARADE
RED'S OPENING DAY AND OPENING DAY PARADE

BOCKFEST 5K	WRANGLER RUN
HEART MINI MARATHON	SUPER HERO 5K
MS WALK	QUEEN BEE HALF MARATHON
FLYING PIG MARATHON WEEKEND	THANKSGIVING DAY RUN

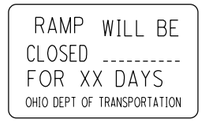
DATES OF THE ABOVE EVENS WILL BE SUPPLIED AT THE PRE-CONSTRUCTION MEETING. REMAINDER OF THE REQUIREMENTS OF THE "LANES OPEN DURING HOLIDAYS OR SPECIAL EVENTS (I-71 & RAMPS)" NOTE APPLIES.

LANE CLOSURE/REDUCTION REQUIRED

LENGTH AND DURATION OF LANE CLOSURES AND RESTRICTIONS SHALL BE AT THE APPROVAL OF THE ENGINEER. IT IS THE INTENT TO MINIMIZE THE IMPACT TO THE TRAVELING PUBLIC. LANE CLOSURES OR RESTRICTIONS OVER SEGMENTS OF THE PROJECT IN WHICH NO WORK IS ANTICIPATED WITHIN A REASONABLE TIME FRAME, AS DETERMINED BY THE ENGINEER, SHALL NOT BE PERMITTED. THE LEVEL OF UTILIZATION OF MAINTENANCE OF TRAFFIC DEVICES SHALL BE COMMENSURATE WITH THE WORK IN PROGRESS.

NOTICE OF CLOSURE SIGN

NOTICE OF CLOSURE SIGNS, AS DETAILED IN THESE PLANS, SHALL BE ERECTED BY THE CONTRACTOR AT LEAST TWO WEEKS IN ADVANCE OF THE SCHEDULED ROAD OR RAMP CLOSURE. THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.



W20-H14-60

ROAD CLOSED SIGN

THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN STANDARD 48 X 30 INCH ROAD CLOSED SIGNS, SIGN SUPPORTS, BARRICADES AND LIGHTS, AS DETAILED IN SCD MT-101.60 AT THE FOLLOWING LOCATIONS DURING PERIODS IN WHICH THE AFFECTED ROADS ARE CLOSED TO TRAFFIC.

ON-RAMP FROM SECOND STREET TO I-71 NORTHBOUND
ON SECOND ST. NEAR MAIN ST.
RAMP B - ON-RAMP FROM FIFTH STREET TO I-71 NORTHBOUND
ON FIFTH STREET AT SPLIT FROM I-471 RAMP

ALL WORK AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH C&MS 614 AND OTHER APPLICABLE PORTIONS OF THE SPECIFICATIONS, AS WELL AS THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC, UNLESS SEPARATELY ITEMIZED IN THE PLAN.

PARKING AREAS BELOW BRIDGES

ALL PARKING SPACES BELOW AND WITHIN 10' OF THE OUTSIDE FASCIA OF BOTH THE HAM-71-0154 AND HAM-71-0159 BRIDGES WILL BE CLOSED FOR THE DURATION OF CONSTRUCTION. CONTACT TOM KLUMB (513-352-1571), CITY OF CINCINNATI REAL ESTATE MANAGER, 30 DAYS IN ADVANCE OF ANY PARKING SPACE CLOSURES. THE PARKING LOT KNOWN AS "LOT A" BELOW THE HAM-71-0159 BRIDGE NORTH OF EGGLESTON AVENUE AND EXTENDING TO THE FENCE ALONG THE I-471 SOUTHBOUND RAMP IS AVAILABLE FOR CONTRACTOR USE; THIS LOT IS OWNED BY ODOT. ALL OTHER REQUESTS FOR USE OF PARKING LOTS AS STAGING AREAS ARE TO BE COORDINATED WITH ODOT AND THE CITY OF CINCINNATI REAL ESTATE MANAGER. CONTRACTOR SHALL RESTORE ALL PARKING AREAS TO THE SAME CONDITION AS PRIOR TO CONSTRUCTION AT THE EXPENSE OF THE CONTRACTOR. ALL LOT COORDINATION COSTS ARE TO BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614-MAINTAINING TRAFFIC.

CALCULATED DPF CHECKED BJF

MAINTENANCE OF TRAFFIC GENERAL NOTES

HAM-71-1.59

PERMITTED LANE CLOSURE TIMES

SHORT TERM LANE CLOSURES ARE THOSE WHICH ARE PERMITTED BY THE PERMITTED LANE CLOSURE NOTE. THESE TIMES SHALL NOT BE REVISED WITHOUT PRIOR APPROVAL FROM THE DISTRICT 8 WORK ZONE TRAFFIC CONTROL MANAGER. SHORT TERM LANE CLOSURES SHALL ONLY BE IMPLEMENTED WHEN WORK IS BEING CONTINUOUSLY PERFORMED IN THE LANE. THE CLOSURE SHALL BE REMOVED AS SOON AS POSSIBLE AFTER WORK HAS STOPPED. PERMITTED LANE CLOSURES SHALL ONLY BE ALLOWED DURING THE TIMES SPECIFIED IN THE LANE VALUE CONTRACT TABLE AND THE MAINTAINING TRAFFIC (CITY STREETS) NOTE INCLUDED IN THESE PLANS. NO LANE OR SHOULDER CLOSURE SHALL BE IN PLACE WHEN NO WORK IS BEING PERFORMED.

LANE VALUE CLOSURE TABLE

DESCRIPTION OF CRITICAL LANE/RAMP TO BE MAINTAINED	RESTRICTED TIME PERIOD	TIME UNIT	DISINCENTIVE $ PER TIME UNIT
2 LANES OPEN I-71 N.B.	5AM - 10PM	15 MIN	$1,875
2 LANES OPEN I-71 S.B.	5AM - 10PM	15 MIN	$1,875
ON-RAMP - SECOND STREET TO I-71 N.B.	5AM-10PM	15 MIN	$1,875
ON-RAMP - FIFTH STREET TO I-71 N.B.	5AM-10PM	15 MIN	$1,875
OFF-RAMP - I-71 S.B. TO THIRD ST.	5AM-10PM	15 MIN	$1,875
ON-RAMP - READING RD./FLORENCE AVE. TO I-71 S.B.	5AM-10PM	15 MIN	$1,875
2-LANES OPEN I-471 RAMP FROM I-71 S.B.	6AM - 10PM	15 MIN	$1,875

ON-RAMPS FROM SECOND STREET TO I-71 N.B & FROM FIFTH STREET TO I-71 N.B. ARE NOT TO BE CLOSED AT THE SAME TIME

**NO CLOSURES 2 HOURS BEFORE TO 2 HOURS AFTER EVENTS AT GREAT AMERICAN BALLPARK, US BANK ARENA, AND PAUL BROWN STADIUM. THIS RESTRICTION APPLIES TO ANY OTHER LOCAL VENUE GENERATING AN EVENT ATTENDANCE OF 10,000+

**NO SHOULDER CLOSURES BETWEEN THE HOURS OF 6AM-9AM AND 3PM-7PM MONDAY THRU FRIDAY

ACCESS RESTRICTIONS - FIDO FIELD

CONTRACTOR SHALL AVOID PARKLAND KNOWN AS FIDO FIELD ADJACENT THE PROJECT SITE; SEE MOT PLANS FOR LIMITS OF PARK. CONTRACTOR SHALL TAKE MEASURES TO PROTECT PARK USERS FROM CONSTRUCTION ACTIVITIES OVEREHAD IN AND NEAR THE PARK LIMITS. THE STAGING AND/OR STORAGE OF CONSTRUCTION EQUIPMENT SHALL NOT TAKE PLACE IN OR NEAR THE LIMITS OF THE PARK.

COOPERATION WITH ADJACENT PROJECT - TUNNEL (HAM-71-1.34)

NOTE THAT THE CONTRACT TO REHABILITATE THE LYTLE TUNNEL (PROJECT 15-0085 HAM-71-1.34) IS ONGOING DURING THE ENTIRE DURATION FOR THIS PROJECT. PHASING HAS BEEN COORDINATED WITH THE APPLICABLE PHASES FOR THE TUNNEL REHABILITATION CONSIDERING THE SCHEDULE OF THAT PROJECT AND THE ANTICIPATED DURATIONS AND PHASING AS DETAILED ON THESE PLANS. MAINTENANCE OF TRAFFIC WORK IS NOTED ON THE PHASE DETAIL SHEETS AS "BY OTHERS" THAT IS PART OF THE 15-0085 PROJECT AND IS THE RESPONSIBILITY OF THE CONTRACTOR FOR THAT PROJECT.

SINCE THE MAINTENANCE OF TRAFFIC SCHEME SHOWN HEREON HAS BEEN DESIGNED IN COORDINATION WITH THE CONSTRUCTION PHASING AND DURATIONS FOR THE TUNNEL PROJECT 15-0085, ANY CONTRACTOR CHANGES TO THE MAINTENANCE OF TRAFFIC SCHEME, AS DETAILED IN THESE PLANS, ARE SUBJECT TO RE-COORDINATION AND RE-DESIGN TO BE COMPATIBLE WITH THE TUNNEL PROJECT 15-0085. THESE COSTS ARE TO BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614-MAINTAINING TRAFFIC

COORDINATION BETWEEN CONTRACTORS

THE CONTRACTOR MUST COORDINATE WITH THE CITY OF CINCINNATI'S CONTRACTOR DURING CONSTRUCTION. THE EGGLESTON SHARED USE PATH PROJECT WILL CONSTRUCT A 10 5/32 WIDE PATH ON THE EAST SIDE OF EGGLESTON FROM PETE ROSE WAY TO BROADWAY. THE CONTRACT HAS AN ANTICIPATED NOTICE TO PROCEED OF JULY 2016 AND COMPLETION BY OCTOBER 2016.

THE CONTRACTOR MUST MAINTAIN ACCESS TO THE TRAIL ONCE THE TRAIL IS BUILT.

ITEM 615 - PAVEMENT FOR MAINTAINING TRAFFIC, TYPE A, AS PER PLAN

THIS ITEM SHALL CONSIST OF PLANING AND RESURFACING THE MEDIAN AND BARRIER BASE AFTER REMOVAL OF THE EXISTING MEDIAN BARRIER TO THE GRADES AND LIMITS INDICATED ON THE PLAN FOR A SMOOTH TRANSITION FOR THE MEDIAN CROSSOVER. MINIMUM PLANING AND RESURFACING DEPTH SHALL BE 1½". SURFACE COURSE SHALL 1½" 448, TYPE 1. PLACE 9" ITEM 302 ASPHALT CONCETE BASE IN VOID LEFT FROM REMOVAL OF EXISTING MEDIAN BARRIER AND FOOTING.

ITEM 614, REPLACEMENT SIGN

FLATSHEET SIGNS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT SIGNS SHALL BE NEW. OTHER MATERIALS MAY BE IN USED, BUT GOOD, CONDITION SUBJECT TO APPROVAL BY THE ENGINEER.

PAYMENT FOR THE NEW SIGNS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT SIGN, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF DAMAGED SIGNS, HARDWARE AND SUPPORTS, AND PROVIDING THE NECESSARY REPLACEMENT HARDWARE, SUPPORTS, ETC.

AN ESTIMATED QUANTITY OF 10 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

DRUM REQUIREMENTS

IN ADDITION TO THE REQUIREMENTS OF THE PLANS, SPECIFICATION AND PROPOSAL, DRUMS FURNISHED BY THE CONTRACTOR SHALL BE NEW AND UNUSED AT THE TIME OF ARRIVAL ON THE PROJECT. ANY DRUMS BROUGHT ON THE PROJECT, WHICH HAVE PREVIOUSLY BEEN USED ELSEWHERE, WILL NOT BE ACCEPTED.

PAYMENT FOR DRUMS SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR MAINTAINING TRAFFIC UNLESS SEPARATELY ITEMIZED.

ITEM 614, REPLACEMENT DRUM

DRUMS FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS, SPECIFICATIONS AND PROPOSAL WHICH BECOME DAMAGED BY TRAFFIC FOR REASONS BEYOND THE CONTROL OF THE CONTRACTOR SHALL BE REPLACED IN KIND WHEN ORDERED BY THE ENGINEER. REPLACEMENT DRUMS SHALL BE NEW.

PAYMENT FOR THE NEW DRUMS SHALL BE MADE AT THE CONTRACT PRICE PER EACH FOR ITEM 614, REPLACEMENT DRUM, AND SHALL INCLUDE THE COST OF REMOVING AND DISPOSING OF THE DAMAGED DRUM, AND PROVIDING AND MAINTAINING THE REPLACEMENT DRUM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS FOR THE ORIGINAL DRUM.

AN ESTIMATED QUANTITY OF 100 EACH HAS BEEN PROVIDED IN THE GENERAL SUMMARY.

ITEM 614, MAINTAINING TRAFFIC, MISC.: PEDESTRIAN PROTECTION CANOPY.

THIS ITEM SHALL BE A CONTRACTOR DESIGNED AND SUPPLIED PEDESTRIAN PROTECTION CANOPY ("SIDEWALK SHED") FOR PROTECTION OF THE SIDEWALK ON EGGLESTON AND AS DIRECTED BY THE ENGINEER. THE CANOPY SHALL BE CONSTRUCTED WITH A MINIMUM WIDTH AND HEIGHT OF 8 FEET AND BE CONSTRUCTED MATERIALS THAT MEET ALL APPLICABLE OHSAA AND CITY OF CINCINNATI MUNICIPAL CODES FOR PEDESTRIAN PROTECTION.

PER CMS 107.02, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SUBMITTALS AND APPROVALS; INCLUDING SHOP DRAWINGS. ALL WOOD, FASTENERS, AND SUBMITTALS REQUIRED TO CONSTRUCT THE CANOPY AND RESTORATION OF THE AREA AFTER CANOPY REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 614, MAINTAINING TRAFFIC, MISC.: PEDESTRIAN PROTECTION CANOPY.

AN ESTIMATED QUANTITY OF 300 FEET HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR ITEM 614, MAINTAINING TRAFFIC, MISC.: PEDESTRIAN PROTECTION CANOPY.

ITEM 614 - WORK ZONE SPEED LIMIT SIGN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN, COVER DURING SUSPENSION OF WORK, AND SUBSEQUENTLY REMOVE WORK ZONE SPEED LIMIT (R2-1) (45 SPEED LIMIT) SIGNS AND SUPPORTS WITHIN THE WORK LIMITS IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:

THE CONTRACTOR SHALL COVER OR REMOVE ANY EXISTING SPEED LIMIT SIGNS WITHIN THE REDUCED SPEED ZONE(S). THESE SIGNS SHALL BE RESTORED DURING SUSPENSION OR TERMINATION OF THE REDUCED SPEED LIMIT. THE EXPENSE OF COVERING OR REMOVAL AND RESTORATION OF EXISTING SPEED LIMIT OR MINIMUM SPEED LIMIT SIGNS SHALL BE INCLUDED IN THE PAY ITEM FOR THE WORK ZONE SPEED LIMIT SIGNS.

THE WORK ZONE SPEED LIMIT SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK THAT CAUSES THE WARRANTING CONDITION(S) TO OCCUR. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING REMOVAL OF THE WARRANTING CONDITION(S), OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY REMOVAL OF WARRANTING CONDITION(S) SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE.

CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 614, PARAGRAPH 614.02(B), INDICATES THAT THE TWO DIRECTIONS OF A DIVIDED HIGHWAY ARE CONSIDERED SEPARATE HIGHWAY SECTIONS. THEREFORE, IF THE WORK ON A MULTI-LANE DIVIDED HIGHWAY IS LIMITED TO ONLY ONE DIRECTION, A SPEED REDUCTION IN THE DIRECTION OF THE WORK DOES NOT AUTOMATICALLY CONSTITUTE A SPEED REDUCTION IN THE OPPOSITE DIRECTION. A SPEED LIMIT REDUCTION IN THE OPPOSITE DIRECTION, IN SUCH CASE, IS APPROPRIATE ONLY IF CONDITIONS ARE EXPECTED TO HAVE AN IMPACT ON THE DIRECTIONAL TRAFFIC FLOW, AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR SHALL ERECT A WORK ZONE SPEED LIMIT SIGN IN ADVANCE OF THE WARRANTING CONDITION, AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE MOUNTED ON BOTH SIDES OF A DIRECTIONAL ROADWAY OF DIVIDED HIGHWAYS. THE FIRST WORK ZONE SPEED LIMIT SIGN SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF THE LANE REDUCTION, SHIFT TAPER, OR OTHER ROADWAY OR SHOULDER RESTRICTION THAT WARRANTED THE WORK ZONE SPEED ZONE. ON UNDIVIDED HIGHWAYS THE SIGN SHALL BE MOUNTED ON THE RIGHT SIDE, APPROXIMATELY 250 FEET IN ADVANCE OF SUCH RESTRICTIONS. THE SIGN SHALL BE REPEATED EVERY 1 MILE FOR 60 AND 55 MPH ZONES AND EVERY ONE-HALF MILE FOR 50 MPH AND 45 MPH ZONES. THESE SIGNS SHALL ALSO BE ERECTED IMMEDIATELY AFTER EACH OPEN ENTRANCE RAMP WITHIN THE ZONE.

THE SPEED LIMIT REDUCTION SHALL BE LIMITED TO ONLY THE PORTION OF THE PROJECT AND THE WORK THAT WARRANTED THE WORK ZONE SPEED LIMIT REDUCTION.

SPEED REDUCTION (SPEED ZONE AHEAD SYMBOL) SIGNS (W3-5) SHALL BE ERECTED IN ADVANCE OF THE SPEED REDUCTION, APPROXIMATELY 1250 FEET ON MULTI-LANE HIGHWAYS AND 500 FEET ON TWO-LANE HIGHWAYS.

A SIGN(S) TO INDICATE THE RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE ERECTED AT THE END OF ANY REDUCED SPEED ZONE. THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD CONDITION, PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE SPEED LIMIT SIGNS SHALL BE MOUNTED ON TWO ITEM 630, GROUND MOUNTED SUPPORTS, NO. 3 POSTS, UNLESS MOUNTED ON A TEMPORARY SIGN SUPPORT PER SCD MT 105.10.

WORK ZONE SPEED LIMIT AND RELATED SIGN SIZES, PLACEMENT, SUPPORTS, ETC. SHALL BE PER THE OMUTCD, WITH TWO EXCEPTIONS: 1) EXPRESSWAY SIZE SPEED LIMIT SIGNS MAY BE USED ON FREEWAYS AND EXPRESSWAYS, IF NECESSARY; 2) THE HEIGHT OF SIGNS MOUNTED ON PORTABLE SUPPORTS SHOULD BE THE HEIGHT REQUIRED FOR GROUND-MOUNTED SIGNS BUT SHALL NOT BE MORE THAN 1 FOOT LOWER THAN THE HEIGHT REQUIRED BY THE OMUTCD, OR AS DIRECTED BY THE ENGINEER. PORTABLE SUPPORTS SHOULD NOT BE USED FOR A DURATION OF MORE THAN 3 DAYS.

(WORK ZONE SPEED LIMIT SIGN NOTE CONTINUED NEXT SHEET)

CALCULATED DPF CHECKED BJF

GENERAL NOTES

OF TRAFFIC

MAINTENANCE

HAM-71-1.59

WORK ZONE SPEED LIMIT SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGNS AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION WITHIN THE PROJECT DUE TO CHANGES IN THE SPEED ZONE AS DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE IN PLACE, WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVING THE SIGNS AND SUPPORTS. SPEED LIMIT SIGNING FOR THE POINT OF RESUMPTION OF THE STATUTORY SPEED LIMIT SHALL BE PAID FOR AS WORK ZONE SPEED LIMIT SIGNS. THE FOLLOWING ESTIMATED QUANTITY HAS BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, WORK ZONE SPEED LIMIT SIGN 13 EACH
ITEM 614, SPEED ZONE AHEAD SYMBOL SIGN 8 EACH

THE FOLLOWING TABLE PROVIDES DETAILS ON WORK ZONE SPEED ZONES APPROVED FOR USE ON THIS PROJECT:

WZSZ	APPROVED
WZ-45046 HAM-71 SLM: 1.34 TO SLM: 1.97 - 45MPH	2/26/16

WORK ZONE INCREASED PENALTIES SIGN (R11-H5A)

R11-H5A-48 SIGNS SHALL BE FURNISHED, ERECTED, AND MAINTAINED IN GOOD CONDITION AND/OR REPLACED AS NECESSARY AND SUBSEQUENTLY REMOVED BY THE CONTRACTOR. SIGNS SHALL BE MOUNTED AT THE APPROPRIATE OFFSETS AND ELEVATIONS AS PRESCRIBED BY THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. THEY SHALL BE MAINTAINED ON SUPPORTS MEETING CURRENT SAFETY CRITERIA.

THE SIGNS MAY BE ERECTED OR UNCOVERED NO MORE THAN FOUR HOURS BEFORE THE ACTUAL START OF WORK. THE SIGNS SHALL BE REMOVED OR COVERED NO LATER THAN FOUR HOURS FOLLOWING RESTORATION OF ALL LANES TO TRAFFIC WITH NO RESTRICTIONS, OR SOONER AS DIRECTED BY THE ENGINEER. TEMPORARY SIGN COVERING AND UNCOVERING DUE TO TEMPORARY LANE RESTORATIONS SHALL BE GUIDED BY THE FOUR-HOUR LIMITATIONS STATED ABOVE. SUCH LANE RESTORATIONS SHOULD BE EXPECTED TO REMAIN IN EFFECT FOR 30 OR MORE CONSECUTIVE CALENDAR DAYS, SUCH AS DURING WINTER SHUTDOWNS.

(THE SIGNS ON THE MAINLINE SHALL BE DUAL MOUNTED UNLESS NOT PHYSICALLY POSSIBLE. THE FIRST SIGN SHALL BE PLACED BETWEEN THE ROAD WORK AHEAD (W20-1)SIGN AND THE NEXT SIGN IN THE SEQUENCE. SIGNS SHALL BE ERECTED ON EACH ENTRANCE RAMP AND EVERY 2 MILES THROUGH THE CONSTRUCTION WORK LIMITS. SIGNS ON THE MAINLINE SHALL BE R11-H5A-48. SIGNS USED ON THE RAMPS SHALL BE R11-H5A-24. R11-H5A-24 SIGNS MAY BE USED IN THE MEDIAN IN LIEU OF R11-H5A-48 SIGNS IF IT IS NOT PHYSICALLY POSSIBLE TO PROVIDE R11-H5A-48 SIGNS IN THE MEDIAN.)

THE CONTRACTOR MAY USE SIGNS AND SUPPORTS IN USED, BUT GOOD, CONDITION PROVIDED THE SIGNS MEET CURRENT ODOT SPECIFICATIONS. SIGN FACES SHALL BE RETROREFLECTORIZED WITH TYPE G SHEETING COMPLYING WITH THE REQUIREMENTS OF C&MS 730.19.

WORK ZONE INCREASED PENALITIES SIGNS AND SUPPORTS WILL BE MEASURED AS THE NUMBER OF SIGN INSTALLATIONS, INCLUDING THE SIGN AND NECESSARY SUPPORTS. IF A SIGN AND SUPPORT COMBINATION IS REMOVED AND REERECTED AT ANOTHER LOCATION AS DIRECTED BY THE ENGINEER, IT SHALL BE CONSIDERED ANOTHER UNIT.

PAYMENT FOR ACCEPTED QUANTITIES, COMPLETE, IN PLACE WILL BE MADE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIALS, LABOR, INCIDENTALS AND EQUIPMENT FOR FURNISHING, ERECTING, MAINTAINING, COVERING DURING SUSPENSION OF WORK, AND REMOVAL OF THE SIGN AND SUPPORT.

ITEM 614, WORK ZONE INCREASED PENALITIES SIGN 11 EACH

ITEM 622, PORTABLE BARRIER, 50", AS PER PLAN

THIS WORK SHALL CONSIST OF FURNISHING, MAINTAINING, AND SUBSEQUENTLY REMOVING A 50-INCH PORTABLE BARRIER AT THE LOCATIONS SHOWN ON THE PLANS. FOR DETAILS, SEE SCD RM-4.1.

PORTABLE STEEL BARRIER IS AN APPROVED ALTERNATIVE TO PORTABLE CONCRETE BARRIER. FOR INFORMATION ON APPROVED VENDORS, SEE THE APPROVED PRODUCTS LIST MAINTAINED BY ROADWAY ENGINEERING.

PORTABLE BARRIER, 32 INCHES HIGH WITH AN 18-INCH MINIMUM HEIGHT GLARE SCREEN MAY BE USED AT THE OPTION OF THE CONTRACTOR. THE GLARE SCREEN SHALL BE CONSTRUCTED USING ONE OF THE SCREENS PROVIDED ON THE APPROVED LIST, AVAILABLE ON THE OFFICE OF ROADWAY ENIGNEERING WEBSITE.

PADDLE OR INTERMITTENT TYPE GLARE SCREENS SHALL BE DESIGNED USING A 20 DEGREE CUT-OFF ANGLE BASED ON TANGENT ALIGNMENT. THAT SPACING SHALL BE USED THROUGHOUT THE BARRIER LENGTH WITHOUT REGARD TO BARRIER CURVATURE.

THE GLARE SCREEN SYSTEM SHALL BE SECURELY FASTENED TO THE 32-INCH PORTABLE BARRIER USING THE HARDWARE AND PROCEDURES SPECIFIED BY THE MANUFACTURER.

FOR DIRECTIONS ON HOW TO INSTALL THE GLARE SCREEN AND THE BARRIER, SEE THE MANUFACTURER'S INSTRUCTIONS.

PAYMENT SHALL INCLUDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND SHALL BE PAID FOR AT THE CONTRACT PRICE PER FOOT FOR ITEM 622, PORTABLE BARRIER, 50". AS PER PLAN

ITEM 614, WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING A NON-GATING IMPACT ATTENUATOR. FURNISH AN IMPACT ATTENUATOR FROM THE OFFICE OF ROADWAY ENGINEERING'S APPROVED LIST FOR WORK ZONE IMPACT ATTENUATORS, FROM THE ROADWAY STANDARDS WEB PAGE FOR ROADWAY STANDARDS WEB PAGE.

INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

THE CONTRACTOR SHALL REPAIR OR REPLACE A DAMAGED UNIT WITHIN 24 HOURS OF A DAMAGING IMPACT.

WHEN BIDIRECTIONAL DESIGNS ARE SPECIFIED, THE CONTRACTOR SHALL SUPPLY APPROPRIATE TRANSITIONS.

WHEN GATING IMPACT ATTENUATORS ARE DESIRED, THE CONTRACTOR SHALL SUBMIT DOCUMENTATION TO THE ENGINEER FOR ACCEPTANCE.

THE COST FOR THE ADDITIONAL BARRIER REQUIRED FOR A GATING IMPACT ATTENUATOR SHALL BE INCLUDED IN THE COST OF THE GATING IMPACT ATTENUATOR.

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT AND MAINTAIN A COMPLETE AND FUNCTIONAL IMPACT ATTENUATOR SYSTEM, INCLUDING ALL RELATED BACKUPS, TRANSITIONS, LEVELING PADS, HARDWARE AND GRADING, NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGNS, AS PER PLAN

THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN AND REMOVE, WHEN NO LONGER NEEDED, A CHANGEABLE MESSAGE SIGN. THE SIGN SHALL BE OF A TYPE SHOWN ON A LIST OF APPROVED PCMS UNITS AVAILABLE ON THE (OFFICE OF MATERIALS MANAGEMENT WEB PAGE). THE LIST CONTAINS CLASS A AND B UNITS WITH MINIMUM LEGIBILITY DISTANCES OF 800 FEET AND 650 FEET, RESPECTIVELY.

EACH SIGN SHALL BE TRAILER-MOUNTED AND EQUIPPED WITH A FUNCTIONAL DIMMING MECHANISM, TO DIM THE SIGN DURING DARKNESS, AND A TAMPER AND VANDAL PROOF ENCLOSURE. EACH SIGN SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ON-SITE PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT. THE SIGN SHALL ALSO BE CAPABLE OF BEING POWERED BY AN ELECTRICAL SERVICE DROP FROM A LOCAL UTILITY COMPANY. THE PCMS SHALL BE DELINEATED IN ACCORDANCE WITH C&MS 614.03.

THE PROBABLE PCMS LOCATIONS AND WORK LIMITS FOR THOSE LOCATIONS ARE SHOWN ON SHEET(S) OF THE PLAN. PLACEMENT, OPERATION, MAINTENANCE AND ALL ACTIVATION OF THE SIGNS BY THE CONTRACTOR SHALL BE AS DIRECTED BY THE ENGINEER. THE PCMS SHALL BE LOCATED IN A HIGHLY VISIBLE POSITION YET PROTECTED FROM TRAFFIC. THE CONTRACTOR SHALL, AT THE DIRECTION OF THE ENGINEER, RELOCATE THE PCMS TO IMPROVE VISIBILITY OR ACCOMMODATE CHANGED CONDITIONS. WHEN NOT IN USE, THE PCMS SHALL BE TURNED OFF. ADDITIONALLY, WHEN NOT IN USE FOR EXTENDED PERIODS OF TIME, THE PCMS SHALL BE TURNED AWAY FROM ALL TRAFFIC.

THE ENGINEER SHALL BE PROVIDED ACCESS TO EACH SIGN UNIT AND SHALL BE PROVIDED WITH APPROPRIATE TRAINING AND OPERATION INSTRUCTIONS TO ENABLE ODOT PERSONNEL TO OPERATE AND TROUBLESHOOT THE UNIT, AND TO REVISE SIGN MESSAGES, IF NECESSARY.

ALL MESSAGES TO BE DISPLAYED ON THE SIGN WILL BE PROVIDED BY THE ENGINEER. A LIST OF ALL REQUIRED PRE-PROGRAMMED MESSAGES WILL BE GIVEN TO THE CONTRACTOR AT THE PROJECT PRECONSTRUCTION CONFERENCE. THE SIGN SHALL HAVE THE CAPABILITY TO STORE UP TO 99 MESSAGES. MESSAGE MEMORY OR PRE-PROGRAMMED DISPLAYS SHALL NOT BE LOST AS A RESULT OF POWER FAILURES TO THE ON-BOARD COMPUTER. THE SIGN LEGEND SHALL BE CAPABLE OF BEING CHANGED IN THE FIELD. THREE-LINE PRESENTATION FORMATS WITH UP TO SIX MESSAGE PHASES SHALL BE SUPPORTED. PCMS FORMAT SHALL PERMIT THE COMPLETE MESSAGE FOR EACH PHASE TO BE READ AT LEAST TWICE. THE PCMS SHALL CONTAIN AN ACCURATE CLOCK AND PROGRAMMING LOGIC WHICH WILL ALLOW THE SIGN TO BE ACTIVATED, DEACTIVATED OR MESSAGES CHANGED AUTOMATICALLY AT DIFFERENT TIMES OF THE DAY FOR DIFFERENT DAYS OF THE WEEK.

THE PCMS UNIT SHALL BE MAINTAINED IN GOOD WORKING ORDER BY THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF C&MS 614.07. THE CONTRACTOR SHALL, PRIOR TO ACTIVATING THE UNIT, MAKE ARRANGEMENTS, WITH AN AUTHORIZED SERVICE AGENT FOR THE PCMS, TO ASSURE PROMPT SERVICE IN THE EVENT OF FAILURE. ANY FAILURE SHALL NOT RESULT IN THE SIGN BEING OUT OF SERVICE FOR MORE THAN 12 HOURS, INCLUDING WEEKENDS. FAILURE TO COMPLY MAY RESULT IN AN ORDER TO STOP WORK AND OPEN ALL TRAFFIC LANES AND/OR IN THE DEPARTMENT TAKING APPROPRIATE ACTION TO SAFELY CONTROL TRAFFIC. THE ENTIRE COST TO CONTROL TRAFFIC, ACCRUED BY THE DEPARTMENT DUE TO THE CONTRACTOR'S NONCOMPLIANCE, WILL BE DEDUCTED FROM MONEYS DUE, OR TO BECOME DUE THE CONTRACTOR ON HIS CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR 24-HOUR-PER-DAY OPERATION AND MAINTENANCE OF THESE SIGNS ON THE PROJECT FOR THE DURATION OF THE PHASES WHEN THE PLAN REQUIRES THEIR USE.

PAYMENT FOR THE ABOVE DESCRIBED ITEM SHALL BE AT THE CONTRACT UNIT PRICE. PAYMENT SHALL INCLUDE ALL LABOR, MATERIALS, EQUIPMENT, FUELS, LUBRICATING OILS, SOFTWARE, HARDWARE AND INCIDENTALS TO PERFORM THE ABOVE DESCRIBED WORK.

ITEM 614, PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN 48 SIGN MONTH

ASSUMING 4 PCMS SIGN(S) FOR 12 MONTH(S)

DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL AND ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

THE FOLLOWING ESTIMATED QUANITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE A - 4 EACH
ITEM 614, OBJECT MARKER, ONE WAY - 4 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

FLOODLIGHTING

FLOODLIGHTING OF THE WORK SITE FOR OPERATIONS CONDUCTED DURING NIGHTTIME PERIODS SHALL BE ACCOMPLISHED SO THAT THE LIGHTS DO NOT CAUSE GLARE TO THE DRIVERS ON THE ROADWAY. TO ENSURE THE ADEQUACY OF THE FLOODLIGHT PLACEMENT, THE CONTRACTOR AND THE ENGINEER SHALL DRIVE THROUGH THE WORK SITE EACH NIGHT WHEN THE LIGHTING IS IN PLACE AND OPERATIVE PRIOR TO COMMENCING ANY WORK. IF GLARE IS DETECTED, THE LIGHT PLACEMENT AND SHIELDING SHALL BE ADJUSTED TO THE SATISFACTION OF THE ENGINEER BEFORE WORK PROCEEDS.

PAYMENT FOR ALL LABOR, EQUIPMENT AND MATERIALS SHALL BE INCLUDED IN THE LUMP SUM CONTRACT PRICE FOR ITEM 614, MAINTAINING TRAFFIC.

REDUCED VERTICAL CLEARANCE - HAM-71-0181 PEDESTRIAN BRIDGE

THE PROPOSED MAINTENANCE OF TRAFFIC SCHEME WILL PLACE TRAFFIC ON THE SHOULDER UNDER THE HAM-71-0181 OVERHEAD PEDESTRIAN BRIDGE. IT IS ANTICIPATED THAT THIS WILL REDUCE THE VERTICAL CLEARANCE OVER LIVE TRAFFIC TO APPROXIMATELY 14.70 FEET. NOTIFY THE ODOT OFFICE OF PERMITS (614-351-2300) 30 DAYS PRIOR TO MOVING TRAFFIC TO THE SHOULDER. DO NOT PLACE TRAFFIC ON THE SHOULDER UNTIL WRITTEN CONFIRMATION IS RECEIVED FROM THE OFFICE OF PERMITS INDICATING ALL ANNUAL AND INDIVIDUAL PERMITS HAVE EXPIRED OR BEEN CANCELLED. ERECT NEW VERTICAL CLEARANCE SIGNS AND NEW ADVANCED WARNING SIGNS AT LEAST 2 WEEKS PRIOR TO PLACING TRAFFIC ON THE SHOULDER. THE VERTICAL CLEARANCE SHALL BE MEASURED BY A REGISTERED SURVEYOR. THE POSTED VERTICAL CLEARANCE SIGN SHALL BE 3" LESS THAN THE ACTUAL MEASURED VERTICAL CLEARANCE AND IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND THE "TRAFFIC ENGINEERING MANUAL".

DELINEATION OF PORTABLE AND PERMANENT BARRIER

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL AND ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND CONCRETE PERMANENT BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE ALONG TAPERS AND TRANSITION AREAS AND ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE B - 361 EACH
ITEM 614, OBJECT MARKER, ONE-WAY - 205 EACH
ITEM 614, INCREASED BARRIER DELINEATION - 5,130 FEET

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.

ALONG RUNS OF INCREASED BARRIER DELINEATION WHERE THIS ITEM IS PROVIDED, THE QUANTITY SHALL BE MEASURED AS THE ENTIRE LENGTH OF THE RUN OF INCREASED BARRIER DELINEATION, INCLUDING THE SPACES BETWEEN THE INDIVIDUAL DELINEATION PANELS OR STACKS OF BARRIER REFLECTORS.

ITEM 614 - LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMUTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

- DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMUTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

- FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP). IN GENERAL, LEOS SHOULD BE POSITIONED AT THE POINT OF LANE RESTRICTION OR ROAD CLOSURE AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH INTERSECTIONS IN WORK ZONES.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION OR AT THE POINT OF ROAD CLOSURE, AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. ONCE THE LEO HAS COMPLETED THE DUTIES DESCRIBED ABOVE AND STILL HAS TIME REMAINING ON HIS/HER SHIFT, THE LEO MAY BE ASKED TO PATROL THROUGH THE WORK ZONE (WITH FLASHING LIGHTS OFF) OR BE PLACED AT A LOCATION TO DETER MOTORISTS FROM SPEEDING. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE WHICH SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 1,500 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF AN LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN

WORK ZONE RAISED PAVEMENT MARKERS, AS PER PLAN, AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614 OR C&MS 621 AS SPECIFIED HEREIN.

- RAISED PAVEMENT MARKERS IN USE DURING THE SNOW-PLOWING SEASON SHALL CONFORM TO 621.

- RAISED PAVEMENT MARKERS IN USE DURING THE NON-SNOW-PLOW SEASON SHALL CONFORM TO EITHER 614 OR TO 621.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15TH THROUGH APRIL 1ST

IF PROJECT DELAYS, NOT THE FAULT OF ODOT, CAUSE THE WORK TO EXTEND INTO THE SNOW-PLOWING SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WORK ZONE RAISED PAVEMENT MARKERS (WZRPMS) CONFORMING TO C&MS 614, WITH RAISED PAVEMENT MARKERS CONFORMING TO 621, AS DETERMINED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN, INCLUDING FILLING OF ANY DEPRESSIONS CREATED IN THE PAVEMENT AS PER C&MS 621.08.

RESURFACING OF THE TRANSITION AREAS SHALL BE PERFORMED AT THE TIME THAT THE SURFACE COURSE IS BEING APPLIED TO THE ENTIRE PROJECT. PRIOR TO APPLICATION OF THE SURFACE COURSE ON THE PROJECT, THE EXISTING PAVEMENT WITHIN THE TRANSITION AREA SHALL BE REMOVED TO A DEPTH NECESSARY TO REACH THE LEVEL OF THE INTERMEDIATE COURSE OF THE PAVEMENT, AS DETERMINED BY THE ENGINEER.

THE FOLLOWING BID ITEMS SHOULD BE INCLUDED IN THE PLANS:

ITEM 614 WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN
1,424 EACH

PAYMENT FOR RESURFACING WITHIN THE TRANSITION AREA SHALL BE PAID FOR UNDER THE APPROPRIATE BID ITEMS FOR THE WORK REQUIRED, AS PROVIDED FOR IN THE PLANS.

ITEM 614 - WORK ZONE RAISED PAVEMENT MARKERS ON CONCRETE SURFACES

RAISED PAVEMENT MARKERS IN WORK ZONES, INSTALLED ON TO CONCRETE SURFACES, SHALL BE ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS. WZRPMS ARE INTENDED FOR USE ONLY DURING THE NON-SNOW-PLOWING SEASON. WZRPMS SHALL NOT BE PROVIDED DURING THE SNOW-PLOWING SEASON.

THE SNOW-PLOWING SEASON SHALL RUN FROM OCTOBER 15TH THROUGH APRIL 1ST

WHERE A TEMPORARY ALIGNMENT WILL REMAIN IN USE THROUGH THE WINTER, THE WZRPMS SHALL BE REMOVED PRIOR TO THE BEGINNING OF THE SNOW-PLOWING SEASON AND REPLACED APPROXIMATELY APRIL 1, OR AS OTHERWISE DETERMINED BY THE ENGINEER.

THIS ITEM SHALL INCLUDE PURCHASE, INSTALLATION AND REMOVAL OF ITEM 614 WORK ZONE RAISED PAVEMENT MARKERS.

TRUCK MOUNTED ATTENUATOR

WHEN THE CONTRACTOR IS SETTING/REMOVING SHORT TERM WORK ZONES, A TRUCK MOUNTED ATTENUATOR (TMA) MUST TRAIL THE OPERATION, INCLUDING SETTING THE ADVANCE WARNING SIGNS UP OR TAKING THEM DOWN. THIS SAME TRUCK MUST HAVE A TYPE B FLASHING ARROW PANEL MOUNTED ON IT FACING THE REAR OF THE TRUCK. THE CONTRACTOR SHALL USE A TMA FOR ANY APPLICATION WHERE THE OMUTCD OR STANDARD CONSTRUCTION DRAWING USES THE PHRASE "OPTIONAL" OR "WHEN SPECIFIED IN THE PLAN".

SPEEDINFO DEVICES WITHIN PROJECT LIMITS

THE CONTRACTOR SHALL TAKE MEASURES TO MAINTAIN THE PROPER OPERATION OF ANY SPEEDINFO DEVICES WITHIN THE PROJECT LIMITS. THE DEVICES ARE DOPPLER RADAR UNITS WHICH LOOK LIKE CYLINDRICAL TUBES WITH SOLAR PANELS ATTACHED TO THEM. THE SENSORS ARE IMPLEMENTED ON ALL INTERSTATES STATEWIDE AND OTHER MAJOR US AND STATE ROUTES IN URBAN AREAS, GENERALLY SPACED BETWEEN 1 TO 2 MILES APART, AND INSTALLED ON ANY EXISTING ODOT INFRASTRUCTURE (TYPICALLY OVERHEAD TRUSSES, CANTILEVERS, GROUND-MOUNTED SIGN SUPPORTS, OR LIGHT POLES). ODOT WILL COORDINATE THE RELOCATION OF ANY DEVICES THAT MAY BE AFFECTED BY THE CONTRACTOR'S OPERATION. THE CONTRACTOR SHALL NOT REMOVE THE DEVICES THEMSELVES. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER A MINIMUM OF TEN CALENDAR DAYS PRIOR TO PERFORMING ANY WORK WHICH REQUIRES DEVICE RELOCATION. THE PROJECT ENGINEER SHALL THEN NOTIFY SPEEDINFO, INC. AND THE ODOT OFFICE OF TRAFFIC OPERATIONS OF ANY DEVICES THAT REQUIRE RELOCATION. THE CONTRACTOR SHOULD BE AWARE THAT SINCE SPEED DATA IS STILL DESIRABLE TO ODOT, THE PROJECT ENGINEER WILL ATTEMPT TO INFORM SPEEDINFO, INC. OF NEWLY AVAILABLE INSTALL LOCATIONS FOR THE SENSORS TO BE RELOCATED TO, WITH MINIMAL DOWNTIME.

IF IMMEDIATE ATTENTION TO A SPEEDINFO SENSOR IS REQUIRED, THE CONTRACTOR MAY DIRECTLY CONTACT THE REGIONAL INSTALLER FOR SPEEDINFO, INC. FROM THE PROVIDED CONTACT INFORMATION. THE REGIONAL INSTALLER WOULD BE ABLE TO PROVIDE THE QUICKEST POSSIBLE ATTENTION TO THE SITUATION. IF THE REGIONAL INSTALLER CANNOT BE REACHED, THE LIST OF STATEWIDE CONTACTS SHOULD BE USED IN THE ORDER IT IS PRESENTED. AN EMAIL INFORMING ALL PARTIES OF THE SITUATION SHOULD ALSO BE SENT AT THE EARLIEST CONVENIENCE.

STATEWIDE CONTACTS:
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CALCULATED DPF CHECKED BJF

MAINTENANCE OF TRAFFIC GENERAL NOTES

HAM-71-1.59

WORKSITE TRAFFIC SUPERVISOR

SUBJECT TO APPROVAL OF THE ENGINEER, THE CONTRACTOR SHALL EMPLOY AND IDENTIFY (SOMEONE OTHER THAN THE SUPERINTENDENT) A CERTIFIED WORKSITE TRAFFIC SUPERVISOR (WTS) BEFORE STARTING WORK IN THE FIELD. THE WTS SHALL BE CERTIFIED FROM ONE OF THE FOLLOWING ORGANIZATIONS:

1. AMERICAN TRAFFIC SAFETY SERVICE ASSOCIATION (ATSSA), PHONE NUMBER 1-800-272-8772, CERTIFIED TRAFFIC CONTROL SUPERVISOR (TCS).

2. NATIONAL HIGHWAY INSTITUTE, DESIGN AND OPERATION OF WORK ZONE TRAFFIC CONTROL, PHONE NUMBER 1-703-235-0500.

3. THE OHIO CONTRACTORS ASSOCIATION, TRAFFIC CONTROL SUPERVISOR (OCA/TCS) WORK ZONE CLASS, ONLY IF TAKEN AFTER MAY 5, 2004, PHONE NUMBER 1-800-229-1388.

4. OHIO LABORERS TRAINING, TRAFFIC CONTROL SUPERVISORS CLASS, PHONE NUMBER 1-740-599-7915.

A COPY OF EACH WTSS CERTIFICATION AND 24-HOUR CONTACT INFORMATION SHALL BE PROVIDED TO THE ENGINEER AT THE PRECONSTRUCTION CONFERENCE. IF THE DESIGNATED WTS WILL NOT BE AVAILABLE FULL TIME (24/7), THE CONTRACTOR MAY DESIGNATE AN ALTERNATE WTS TO BE AVAILABLE WHEN THE PRIMARY IS OFF DUTY. EACH WTS SHALL HAVE A WTS CERTIFICATION CONTAINING THE DATE OF ISSUE AND SHALL BE FROM ANY OF THE APPROVED ORGANIZATIONS. AT THE TIME OF THE PRECONSTRUCTION, THE WTS CERTIFICATION DATE OF ISSUE SHALL BE WITHIN 5 YEARS PRIOR TO THE ORIGINAL COMPLETETION DATE OF THE PROJECT.

THE WTS POSITION HAS THE RESPONSIBILITY OF MONITORING TRAFFIC CONTROL DEFICIENCIES FOR THE ENTIRE WORK ZONE. THE DUTIES OF THE WTS ARE AS FOLLOWS:

1. BE AVAILABLE ON A 24-HOUR PER DAY BASIS, AND BE ABLE TO BE ON SITE FOR ALL EMERGENCY TRAFFIC CONTROL NEEDS WITHIN ONE HOUR OF NOTIFICATION BY POLICE OR PROJECT STAFF AND BE PREPARED TO EFFECT CORRECTIVE MEASURES IMMEDIATELY ON EXISTING WORK ZONE TRAFFIC CONTROL DEVICES.

2. ATTEND PRECONSTRUCTION MEETING AND ALL PROJECT MEETINGS WHERE TRAFFIC CONTROL MANAGEMENT IS DISCUSSED.

3. BE AVAILABLE FOR MEETINGS OR DISCUSSIONS WITH THE ENGINEER UPON REQUEST OR WITHIN 36 HOURS.

4. Coordinate a Traffic Incident Management meeting each year before construction work begins with ODOT and the Safety Forces that will respond to incidents on the project. Items to be discussed will be the:

   a. Traffic Incident Management Plan (TIMP);

   b. Emergency Response and Notification;

   c. Project work/phasing concerns (e.g., ramp closures); and

   d. Responders concerns.

5. BE AWARE OF, AND COORDINATE IF NECESSARY, ALL TRAFFIC CONTROL OPERATIONS, INCLUDING THOSE OF SUBCONTRACTORS AND SUPPLIERS.

6. COORDINATE PROJECT ACTIVITIES WITH ALL LAW ENFORCEMENT OFFICERS (LEOS). A WTS SHALL ALSO BE THE MAIN CONTACT PERSON WITH THE LEOS WHILE THEY ARE ON THE PROJECT.

7. COORDINATE MEETINGS WITH ODOT PERSONNEL, LEOS AND OTHER APPLICABLE ENTITIES BEFORE EACH PLAN PHASE SWITCH TO DISCUSS WORK ZONE TRAFFIC CONTROL.

8. ENSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS FOR SIGNS, BARRICADES, TEMPORARY CONCRETE BARRIER, PAVEMENT MARKINGS, PORTABLE MESSAGE SIGNS, AND OTHER TRAFFIC CONTROL DEVICES ON A DAILY BASIS; AND FACILITATE ANY CORRECTIVE ACTION NECESSARY.

9. NOTIFY THE CONTRACTOR OF THE NEED FOR CLEANING AND MAINTENANCE OF ALL TRAFFIC CONTROL DEVICES, INCLUDING THE COVERING AND REMOVAL OF INAPPLICABLE SIGNS.

10. INSPECT, EVALUATE, PROPOSE NECESSARY MODIFICATIONS TO, AND DOCUMENT THE EFFECTIVENESS OF, THE TRAFFIC CONTROL DEVICES AND/OR TRAFFIC OPERATIONS ON A DAILY BASIS (7 DAYS A WEEK). IN ADDITION, A WEEKLY NIGHT INSPECTION OF THE WORK ZONE SETUP FOR DAYTIME WORK OPERATIONS; AND ONE DAYTIME INSPECTION PER WEEK FOR NIGHTTIME PROJECTS. THIS SHALL INCLUDE (BUT NOT BE LIMITED TO) DOCUMENTATION ON THE FOLLOWING PROJECT EVENTS:

    A. INITIAL TRAFFIC CONTROL SETUP (DAY AND NIGHT REVIEW).

    B. DAILY TRAFFIC CONTROL SETUP AND REMOVAL.

    C. WHEN CONSTRUCTION STAGING CAUSES A CHANGE IN THE TRAFFIC CONTROL SETUP.

    D. CRASH OCCURRENCES WITHIN THE CONSTRUCTION AREA.

    E. REMOVAL OF TRAFFIC CONTROL DEVICES AT THE END OF A PHASE OR PROJECT.

    F. ALL OTHER EMERGENCY TRAFFIC CONTROL NEEDS.

11. COMPLETE THE DEPARTMENT APPROVED LONG TERM INSPECTION FORM (CA-D-8) AFTER EACH INSPECTION AS REQUIRED IN # 10 AND SUBMIT IT TO THE ENGINEER THE FOLLOWING WORK DAY. THESE REPORTS SHALL INCLUDE A CHECKLIST OF ALL TRAFFIC CONTROL MAINTENANCE ITEMS TO BE REVIEWED. A COPY OF THE FORM WILL BE PROVIDED AT THE PRE-CONSTRUCTION MEETING. ANY DEFICIENCIES OBSERVED SHALL BE NOTED, ALONG WITH RECOMMENDED CORRECTIVE ACTIONS AND THE DATES BY WHICH SUCH CORRECTIONS WERE, OR WILL BE, COMPLETED. A COPY OF THIS DOCUMENT CAN BE FOUND IN THE CURRENT REVISION OF THE DEPARTMENT OF TRANSPORTATION CONSTRUCTION INSPECTION FORMS MANUAL.

12. VERIFY THAT ALL FLAGGING OPERATIONS ARE BEING CONDUCTED PER THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

13. HAVE COPIES OF THE ODOT TEMPORARY TRAFFIC CONTROL MANUAL AND APPLICABLE STANDARDS AND SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS AVAILABLE AT ALL TIMES ON THE PROJECT.

14. IDENTIFY AND CONTACT ALL POSSIBLE RESPONSE PERSONNEL; PREPLAN AND KEEP AN UPDATED ROSTER WITH PHONE NUMBERS:

    A. FEDERAL, STATE, AND LOCAL TRANSPORTATION AGENCIES (TRAFFIC MANAGEMENT CENTER);

    B. REGIONAL, COUNTY OR LOCAL 911 DISPATCH; AND

    C. TOWING AND RECOVERY PROVIDERS.

15. COMPLY WITH THE PROVISIONS OF OMUTCD CHAPTER 6I, CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS.

16. PROPOSE A RESPONSE/ACTION PLAN TO:

    A. ESTABLISH ALTERNATE ROUTE PLANS PER THE PROVIDED ODOT PLAYBOOK;

    B. REMOVE TRAFFIC DEMAND FROM IMPACTED ROADWAY(S);

    C. DIVERT TRAFFIC TO ROUTES THAT CAN ACCOMMODATE DEMANDS;

    D. DETOUR TRAFFIC AWAY FROM SENSITIVE AREAS (SUCH AS SCHOOLS, HOSPITALS, ETC.);

    E. DISCUSS METHODS OF DETERMINING A STAGING AREA FOR RESPONDERS WITHIN OR NEAR THE CONSTRUCTION ZONE; AND

    F. DISCUSS METHODS OF DEVELOPING INGRESS AND EGRESS SITES WITHIN THE CONSTRUCTION ZONE.

    THE RESPONSE/ACTION PLAN SHALL BE SUBMITTED TO ODOT FOR ACCEPTANCE BEFORE THE CONTRACTOR S FIRST DAY OF WORK.

17. PERFORM, AT A MINIMUM, THE FOLLOWING FUNCTIONS IN INCIDENT DETECTION AND VERIFICATION:

    A. CALL 911/ NOTIFY TRAFFIC MANAAGEMENT CENTER AND PROVIDE THE FOLLOWING:

        I. LOCATION INCLUDING MILEPOST NUMBER AND DIRECTION OF TRAVEL.
        II. NUMBER AND TYPE OF VEHICLES INVOLVED.
        III. ESTIMATED EXTENT OF DAMAGE OR INJURY.
        IV. ESTIMATED NUMBER OF PATIENTS INVOLVED.
        V. ANY POTENTIAL HAZARDOUS CONDITIONS.
        VI. THE PLACARD NUMBER ON ANY HAZARDOUS MATERIALS PLACARD FROM A SAFE DISTANCE.

    B. INITIATE TRAFFIC MANAGEMENT / PROVIDE TRAFFIC CONTROL.

    C. ASSIST MOTORIST WITH DISABLED VEHICLES.

    D. RECOMMEND ROADWAY REPAIR NEEDS.

    E. PROVIDE REPAIR RESOURCES.

18. ATTEND POST-INCIDENT DEBRIEFINGS IF REQUIRED.

THE DEPARTMENT WILL DEDUCT THE PRORATED DAILY AMOUNT OF THE UNIT PRICE BID FOR THE WTS FOR ANY DAY ON WHICH THE CONTRACTOR FAILS TO PERFORM THE DUTIES SET FORTH ABOVE. SHOULD THE CONTRACTOR'S FAILURE TO PERFORM ANY OF THE DUTIES DESCRIBED ABOVE RESULT IN A MAINTENANCE OF TRAFFIC SAFETY ISSUE, THE DEPARTMENT WILL DEDUCT THE PRORATED DAILY AMOUNT FOR ITEM 614 MAINTENANCE OF TRAFFIC FROM THE CONTRACTOR'S NEXT SCHEDULED ESTIMATE.

IF THREE OR MORE FAILURES TO PERFORM THE DUTIES SET FORTH ABOVE OCCUR, THE WTS SHALL BE IMMEDIATELY REMOVED FROM THE WORK IN ACCORDANCE WITH C&MS 108.05.

THE FOLLOWING ESTIMATED QUANTITY HAS BEEN INCLUDED FOR THE WORKSITE TRAFFIC SUPERVISOR:

ITEM 614 WORKSITE TRAFFIC SUPERVISOR 12 MONTHS

ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM

THIS WORK SHALL CONSIST OF FURNISHING, ERECTING, OPERATING, MAINTAINING AND REMOVING A WORK ZONE LIGHTING SYSTEM FOR A SINGLE CROSSOVER, OR OVERLAPPING A PAIR OF CROSSOVERS. THE SYSTEM SHALL BE AS SHOWN ON TRAFFIC SCD MT-100.00. THE CONTRACTOR SHALL ARRANGE FOR AND PAY FOR POWER. ALL MATERIALS AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE PORTIONS OF 625 AND 725 EXCEPT: THE PERFORMANCE TEST OF 625.19F, AND CERTIFIED DRAWING REQUIREMENT OF 625.04, ARE WAIVED AND USED MATERIALS IN GOOD CONDITION ARE ACCEPTABLE.

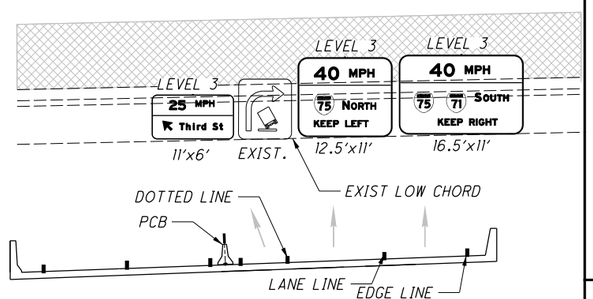
POLES WHICH ARE NOT PROTECTED BY GUARDRAIL OR PORTABLE BARRIER SHALL BE LOCATED OUTSIDE THE CLEAR ZONE, AND SHOULD BE LOCATED AT LEAST 30 FT (PREFERABLY 40 FEET) FROM THE EDGE OF PAVEMENT WHEN POSSIBLE. ADDITIONAL POLE LINES, CABLES AND APPURTENANCES NECESSARY TO FURNISH POWER TO THE LIGHTING SYSTEM SHALL BE INCLUDED IN THIS ITEM. SERVICE POLES SHALL BE POSITIONED WITH THE SAME CONSTRAINTS AS THE LIGHTING POLES AS A MINIMUM.

PAYMENT WILL BE MADE AT THE UNIT PRICE PER EACH FOR ITEM 614, WORK ZONE CROSSOVER LIGHTING SYSTEM THROUGHOUT ALL PHASES OF WORK WHEN THE CROSSOVER ROADWAYS ARE USED. AN ESTIMATED QUANTITY OF 2 EACH HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 614 WORK ZONE CROSSOVER LIGHTING SYSTEM.

ITEM 614 - MAINTAINING TRAFFIC, MISC.: MAINTENANCE OF MAJOR GUIDE SIGNS

THE CONTRACTOR SHALL MAINTAIN THE SAME NUMBER OF GUIDE SIGNS AS CURRENTLY EXIST FOR EACH FREEWAY EXIT/ENTRANCE WHICH IS TO REMAIN OPEN DURING EACH PHASE OF CONSTRUCTION IN ORDER TO ALLOW MOTORISTS TO FIND THEIR DESTINATIONS SAFELY. ERECTION/DISMANTLING OF THE OVERHEAD SIGN SUPPORTS WHICH WILL BE AFFECTED BY THE PROPOSED CONSTRUCTION SHALL BE COMPLETED PRIOR TO THAT PHASE OF CONSTRUCTION. NO MORE THAN ONE SIGN FOR ANY EXIT OR ENTRANCE RAMP MAY BE REMOVED AT ANY TIME. IN INSTANCES WHERE THE COPY ON THE REPLACEMENT SIGN IS SUBSTANTIALLY DIFFERENT FROM THE COPY ON THE EXISTING SIGNS FOR A PARTICULAR EXIT OR ENTRANCE RAMP, ALL OF THE SIGNS IN THE SEQUENCE FOR THAT RAMP SHALL BE CHANGED WITHIN ONE CALENDAR DAY. SPECIFIC TREATMENT/RELOCATION OF SIGNS ARE NOTED AND DETAILED ON THE MAINTENANCE OF TRAFFIC PLANS; HOWEVER THIS DOES NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENT TO MAINTAIN THE OTHER SIGNAGE AS COVERED BY THIS ITEM. IN SOME CASES IT SHALL BE NECESSARY TO SUPPLY AND INSTALL TEMPORARY SUPPORTS TO MEET THE REQUIREMENTS OF THIS ITEM.

PAYMENT FOR ALL THE MATERIALS, INSTALLATION AND WORK DESCRIBED ABOVE SHALL BE INCLUDED IN THE LUMP SUM UNIT BID PRICE FOR ITEM 614, MAINTAINING TRAFFIC, MISC.: MAINTENANCE OF MAJOR GUIDE SIGNS.



SIGN MOUNTING ELEVATION - LOOKING SOUTH
SIXTH STREET OVERPASS - PHASE 3

CALCULATED DPF CHECKED BJF

TRAFFIC GENERAL NOTES

MAINTENANCE

HAM-71-1.59

REF. NO.	SHEET NO.	PHASE NO.	STATION FROM	STATION TO	SIDE	LENGTH	614 WORK ZONE EDGE LINE, CLASS 1 (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1 (YELLOW)	614 WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1 (WHITE)	614 WORK ZONE EDGE LINE, CLASS 1, 740.06, TYPE 1 (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS 1 (WHITE)	614 WORK ZONE CHANNELIZING LINE, CLASS 1, 740.06, TYPE 1 (WHITE)	614 WORK ZONE LANE LINE, CLASS 1 (WHITE)	614 WORK ZONE LANE LINE, CLASS 1, 740.06, TYPE 1 (WHITE)	614 WORK ZONE DOTTED LINE, CLASS 1, (WHITE)	614 WORK ZONE DOTTED LINE, CLASS 1, 740.06, TYPE 1 (WHITE)	614 OBJECT MARKER, ONE WAY	614 BARRIER REFLECTOR, TYPE B	614 INCREASED BARRIER DELINEATION	614 WORK ZONE IMPACT ATTENUATOR, UNIDIRECTIONAL	614 WORK ZONE RAISED PAVEMENT MARKERS (WHITE), AS PER PLAN	614 WORK ZONE RAISED PAVEMENT MARKERS (YELLOW), AS PER PLAN	622 PORTABLE BARRIER, 32"	622 PORTABLE BARRIER "Y" CONNECTOR	622 PORTABLE BARRIER, 50", AS PER PLAN
							MILE	MILE	MILE	MILE	FEET	FEET	MILE	MILE	FEET	FEET	EACH	EACH	FEET	EACH	EACH	EACH	FT	EACH	FT
PB1	20	2 (3A)	135+42.00	137+02.00	NB	160											5	5					160		
PB2	20, 22, 24, 26	2 (3A,B,C), 2	133+54.00 +	133+93.00 +	SB	50											3	3		1			50	1	
PB3	20, 22	2 (3A,B)	136+15.00	138+45.00	NB	230											6	6	230	1			230		
PB4	20, 22	2 (3A,B)	136+78.00	138+45.00	SB	170											5	5	170				170	1	
PB5	20, 22, 24, 26	2 (3A,B,C), 2	137+55.00	139+33.00	SB	180											5	5					180		
PG1	20, 22, 24, 26, 27	2 (3A,B,C), 2	138+55.00	157+00.00	℄	1830												76	1015						1830
CH1	20, 22, 24, 26	2 (3A,B,C), 2	129+50.00 +	142+65.00	SB	1165					1165										114	57			
CH2	20, 22, 24, 26	2 (3A,B,C), 2	135+42.00	141+44.00	NB	602					602										90	45			
CH3	20, 22, 24, 26	2 (3A,B,C), 2	141+19.00 ++	144+10.00 ++	NB RAMP	295					295														
CH4	20, 22, 24, 26, 27	2 (3A,B,C), 2	150+00.00	162+00.00	SB	1200					1200										120	60			
CH5	27	2 (3A)	154+00.00	165+25.00	NB	1125					1125										90	45			
EW1	20, 22, 24, 26, 27	2 (3A,B,C), 2	132+50.00 +	159+00.00	SB	2464	0.47																		
EW2	20, 22, 24, 26	2 (3A,B,C), 2	135+42.00	143+87.00	NB	845	0.16																		
EW3	20, 22, 24, 26, 27	2 (3A,B,C), 2	141+20.00 ++	162+25.00	NB RAMP	2105	0.40																		
EY1	20, 22, 24, 26, 27	2 (3A,B,C), 2	132+50.00 +	170+60.00	SB	3619		0.69																	
EY2	20, 22, 24, 26, 27	2 (3A,B,C), 2	135+42.00	162+25.00	NB	2683		0.51																	
LL1	20, 22, 24, 26, 27	2 (3A,B,C), 2	141+44.00	154+00.00	NB	1256							0.24								12				
LL2	20, 22, 24, 26	2 (3A,B,C), 2	142+65.00	150+00.00	SB	735							0.14								8				
DL1	20, 22, 24, 26	2 (3A,B,C), 2	132+50.00 +	151+70.00	NB / NB RAMP	614									614										
DL2	27	2 (3A)	164+00.00	170+60.00	SB	660									660										
PB6	22	2 (3B)	135+42.00	136+42.00	NB	100											3	3					100		
CH6	22	2 (3B)	135+75.00	138+44.00	NB	270					270										28				
EW4	22	2 (3B)	135+75.00	138+44.00	NB	270	0.05																		
PB7	24	2 (3C)	136+83.00	139+23.00	NB	240											6	6					240	1	
PB8	24	2 (3C)	138+15.00	138+85.00	SB	70											3	3	70				70		
EY3	24	2 (3C)	135+75.00	139+05.00	NB	330		0.06														17			
PB9	26	2	136+35.00	138+45.00	NB	210											6	6	210				210	1	
PB10	26	2	136+78.00	138+45.00	SB	170											5	5	170	1			170		
PB11	26	2	158+00.00	-																1					
PG2	26	2	138+55.00	139+65.00		110																			110
EW5	26	2	127+30.00	138+95.00	NB	1165	0.22																		
CH7	26	2	132+62.00	139+13.00	NB	651					651										66	33			
EY4	26	2	135+62.00	139+07.00	NB	345		0.07																	
PB*		1	135+00.00	140+00.00	NB	500											11	11		1			500		
PB*		1	136+00.00	141+00.00	SB	500											11	11		1			500		
PB*		1	151+00.00	158+50.00	NB	750											16	16		1			750		
PB*		1	152+50.00	160+00.00	SB	750											16	16		1			750		
PB*		4	135+00.00	140+00.00	NB	500											11	11		1			500		
PB*		4	136+00.00	141+00.00	SB	500											11	11		1			500		
PB*		4	151+00.00	158+50.00	NB	750											16	16		1			750		
PB*		4	152+50.00	160+00.00	SB	750											16	16		1			750		
SUBTOTALS 100% OI/IMS/BR							2.63				5308		0.38	0.00	1274		155	231	1865	12	785		6580	4	1940
TOTALS CARRIED TO GENERAL SUMMARY							2.63				5308		0.38	0.00	1274		155	231	1865	12	785		6580	4	1940

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED CML
CHECKED DPF

HAM-71-1.59

NOTE:

ALL STATIONS ARE BASED ON ℄ I-71 N.B.
UNLESS OTHERWISE NOTED

\+ = STATIONS BASED ON ℄ I-71 S.B.
++ = STATIONS BASED ON ℄ RAMP
* = ITEMS NOT REFERENCED BY BALLOONS IN PLANS

MAINTENANCE OF TRAFFIC SUBSUMMARY

CALCULATED CML
CHECKED DPF

REF. NO.	SHEET NO.	PHASE NO.	STATION FROM	STATION TO	SIDE	LENGTH	614 WORK ZONE EDGE LINE, CLASS I (WHITE)	614 WORK ZONE EDGE LINE, CLASS I (YELLOW)	614 WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (WHITE)	614 WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I (YELLOW)	614 WORK ZONE CHANNELIZING LINE, CLASS I (WHITE)	614 WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I (WHITE)	614 WORK ZONE LANE LINE, CLASS I (WHITE)	614 WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I (WHITE)	614 WORK ZONE DOTTED LINE, CLASS I, (WHITE)	614 WORK ZONE DOTTED LINE, CLASS I, 740.06, TYPE I (WHITE)	614 WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I	614 OBJECT MARKER, ONE WAY	614 BARRIER REFLECTOR, TYPE B	614 BARRIER REFLECTOR, TYPE A	614 INCREASED BARRIER DELINEATION	614 WORK ZONE IMPACT ATTENUATOR, UNIDIRECTIONAL	614 WORK ZONE RAISED PAVEMENT MARKERS (WHITE), AS PER PLAN	614 WORK ZONE RAISED PAVEMENT MARKERS (YELLOW), AS PER PLAN	622 PORTABLE BARRIER, 32"	622 PORTABLE BARRIER "Y" CONNECTOR	622 PORTABLE BARRIER, 50", AS PER PLAN
							MILE	MILE	MILE	MILE	FEET	FEET	MILE	MILE	FEET	FEET	FEET	EACH	EACH	EACH	FEET	EACH	EACH	EACH	FT	EACH	FT
PB12	30	3	135+45.00 +	135+84.00 +	SB /SB RAMP	50												3	3			1			50	1	
PB13	30	3	137+03.00	139+33.00	NB	230												6	6		230	1			230		
PB14	31	3	154+70.00	159+20.00	SB	450												10	10		100	1			450		
PB15	31	3	155+62.00	157+42.00	SB	180												5	5		180				180		
PG3	30-31	3	136+22.00	155+62.00	℄	1940													80		1015						1940
CH8	30	3	131+93.00	143+00.00	NB	1113					743	370												112	56		
CH9	30	3	133+37.00 +	137+00.00	SB RAMP	363					363																
CH10	30	3	133+48.00 +	142+77.00	SB	929					400	529												93	47		
CH11	30-31	3	150+00.00	160+00.00	NB	1000					1000													100	50		
CH12	31	3	154+00.00	165+00.00	NB	1100					1100													110	55		
EW6	30-31	3	129+53.00	158+16.00	NB	2863	0.33		0.21																		
EW7	30-31	3	133+48.00 +	161+95.00	SB	2656	0.29		0.21																		
EY5	30-31	3	134+93.00	158+16.00	NB	2323		0.23		0.21																	
EY6	30-31	3	133+37.00 +	171+84.00	SB	3656		0.48		0.21																	
EY7	30	3	133+48.00 +	137+00.00 +	NB	352		0.07																			
LL3	30	3	143+00.00	150+00.00	SB	700								0.13										7			
LL4	30-31	3	144+65.00	154+00.00	NB	935							0.07	0.11										9			
DL3	30	3	127+30.00	134+93.00	NB	763									763												
DL4	30	3	137+00.00 +	140+00.00 +	SB ℄ SB RAMP	300										300											
DL5	31	3	165+25.00	171+85.00	SB	660									660												
TW1		3	134+00.00	138+50.00	SB	-											108										
BR**	-	2	138+24.00	139+52.00	RT	128												4		4							
BR**	-	2	139+50.00	152+84.00	RT	1334												28	28								
BR**	-	2	139+50.00	158+50.00	LT	1900												39	39		870						
BR**	-	3	139+50.00	152+84.00	RT	1334												28	28								
BR**	-	3	139+50.00	158+50.00	LT	1900												39	39		870						
SUBTOTALS 100% 01/IMS/BR							1.40		0.84		3606	899	0.07	0.24	1423	300	108	162	242		3265	3		639	910	1	1940
TOTALS CARRIED TO GENERAL SUMMARY							1.40		0.84		3606	899	0.07	0.24	1423	300	108	162	242		3265	3		639	910	1	1940

PHASE NO.	SIDE	LENGTH	614 CLASS III - PAINT WORK ZONE EDGE LINE, CLASS III PAINT (WHITE)	614 CLASS III - PAINT WORK ZONE EDGE LINE, CLASS III PAINT (YELLOW)	614 CLASS III - PAINT WORK ZONE CHANNELIZING LINE, CLASS III PAINT (WHITE)	614 CLASS III - PAINT WORK ZONE LANE LINE, CLASS III PAINT (WHITE)	614 CLASS III - PAINT WORK ZONE DOTTED LINE, CLASS III PAINT (WHITE)	614 CLASS III - PAINT WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III PAINT
			MILE	MILE	FEET	MILE	FEET	FEET
PREMARKING	SEE SHEET 66		1.03	1.03	2039	1.40	3565	113
SUBTOTALS 100% 01/IMS/BR			2.06		2039	1.40	3565	113
TOTALS CARRIED TO GENERAL SUMMARY			2.06		2039	1.40	3565	113

PAVEMENT FOT M.O.T

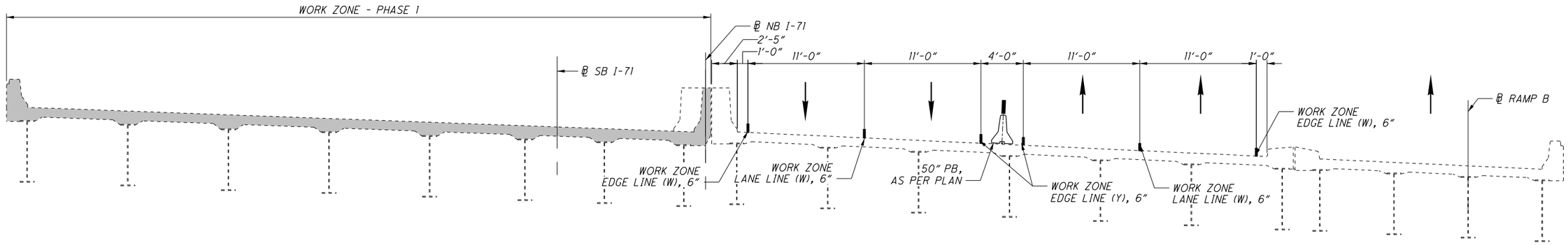
PHASE NO.	STATION FROM	STATION TO	AVG WIDTH	LENGTH	615 PAVEMENT FOR M.O.T., CLASS A	615 PAVEMENT FOR M.O.T., CLASS A, AS PER PLAN
			FT	FT	SY	SY
2/3	133+55.64 +	134+27.60 +	8.3	72	66	
2/3	134+27.60 +	134+73.66 +	5.5	46	28	
2/3	134+31.45	137+43.93	15.1	312		524
2/3	152+84.00	157+27.00	3.5	443		172
SUBTOTALS 100% 01/IMS/BR					94	696
TOTALS CARRIED TO GENERAL SUMMARY					94	696

NOTE:

ALL STATIONS ARE BASED ON ℄ I-71 N.B. UNLESS OTHERWISE NOTED

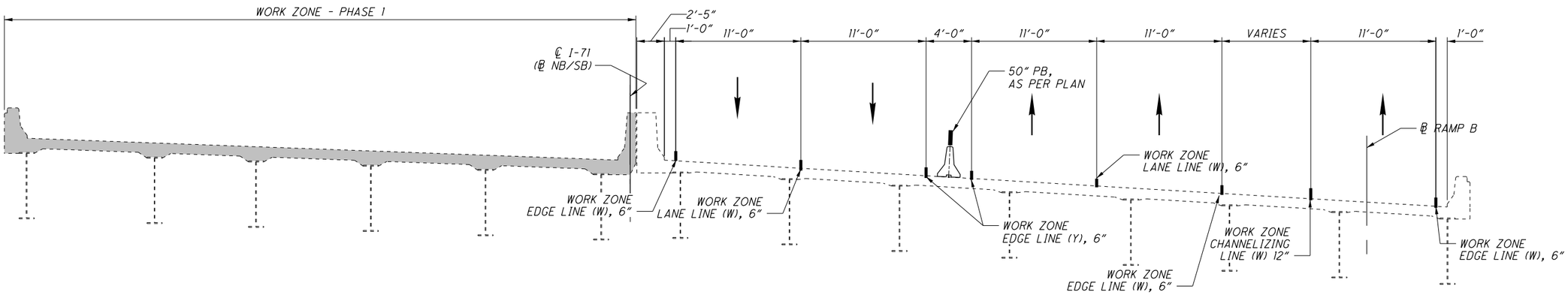
\+ = STATIONS BASED ON ℄ I-71 S.B.
++ = STATIONS BASED ON ℄ RAMP
** = BARRIER REFLECTORS PLACED ON EXISTING BARRIERS

HAM-71-1.59



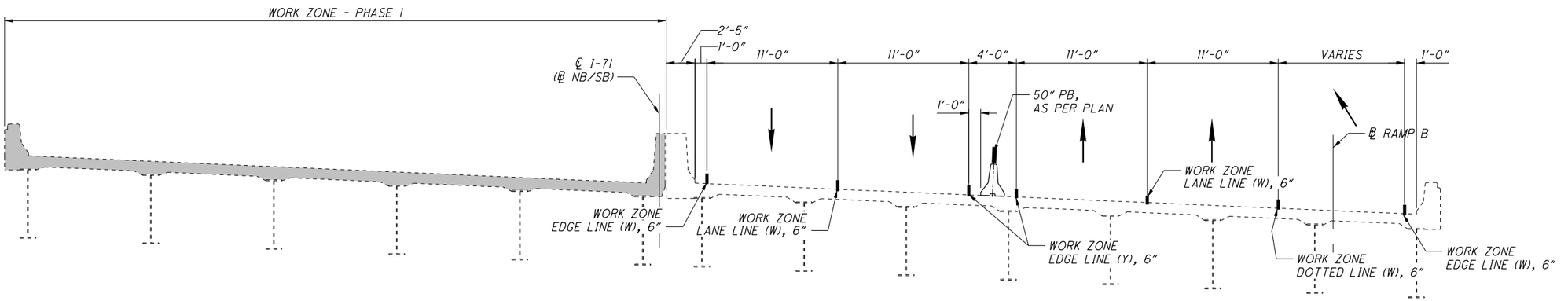
UNIT 1

UNIT 3



UNIT 1

UNIT 4



UNIT 2

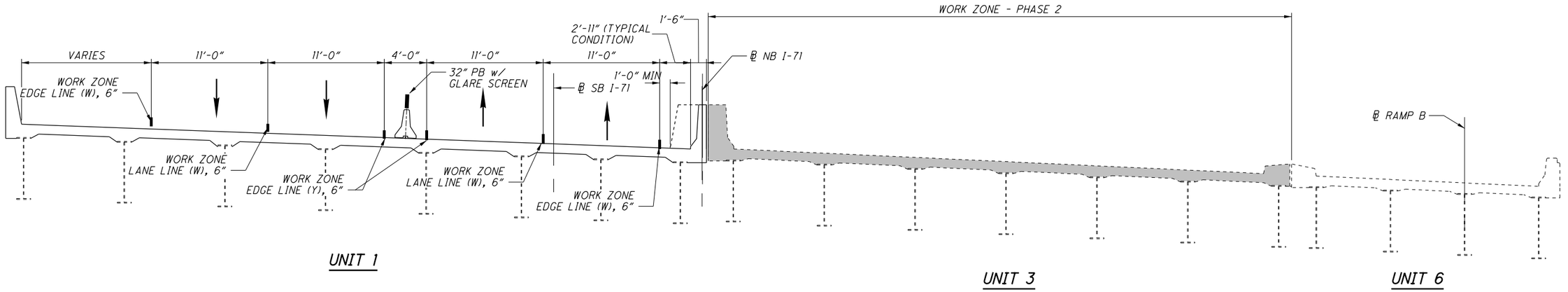
UNIT 5

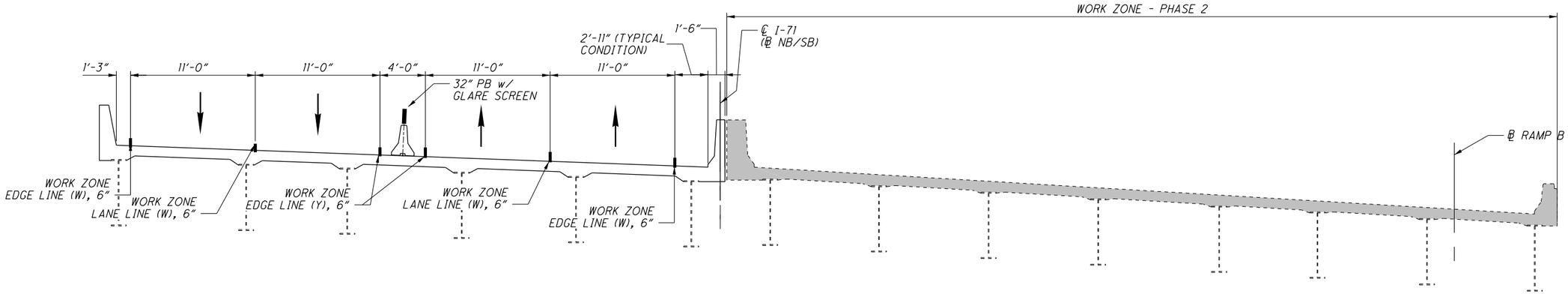
CALCULATED DPF
CHECKED BJF

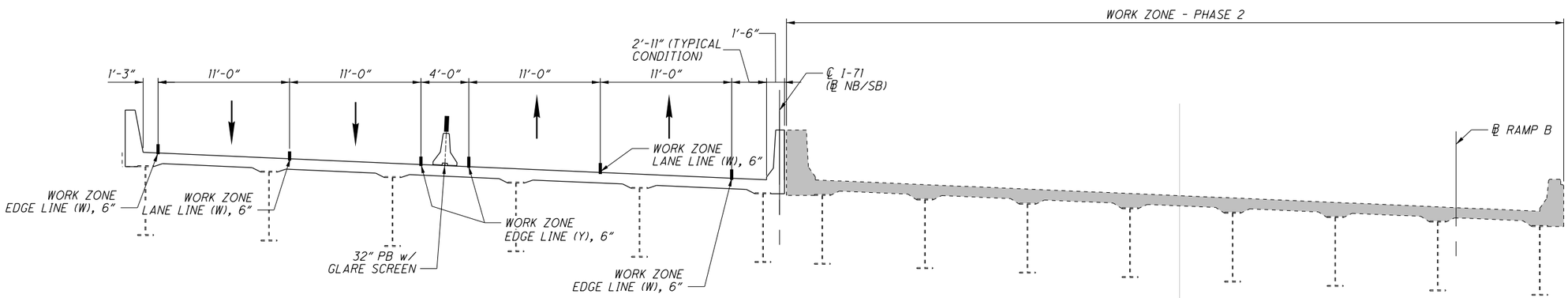
TYPICAL SECTIONS
MAINTENANCE OF TRAFFIC - PHASE 2

HAM-71-1.59

15
176



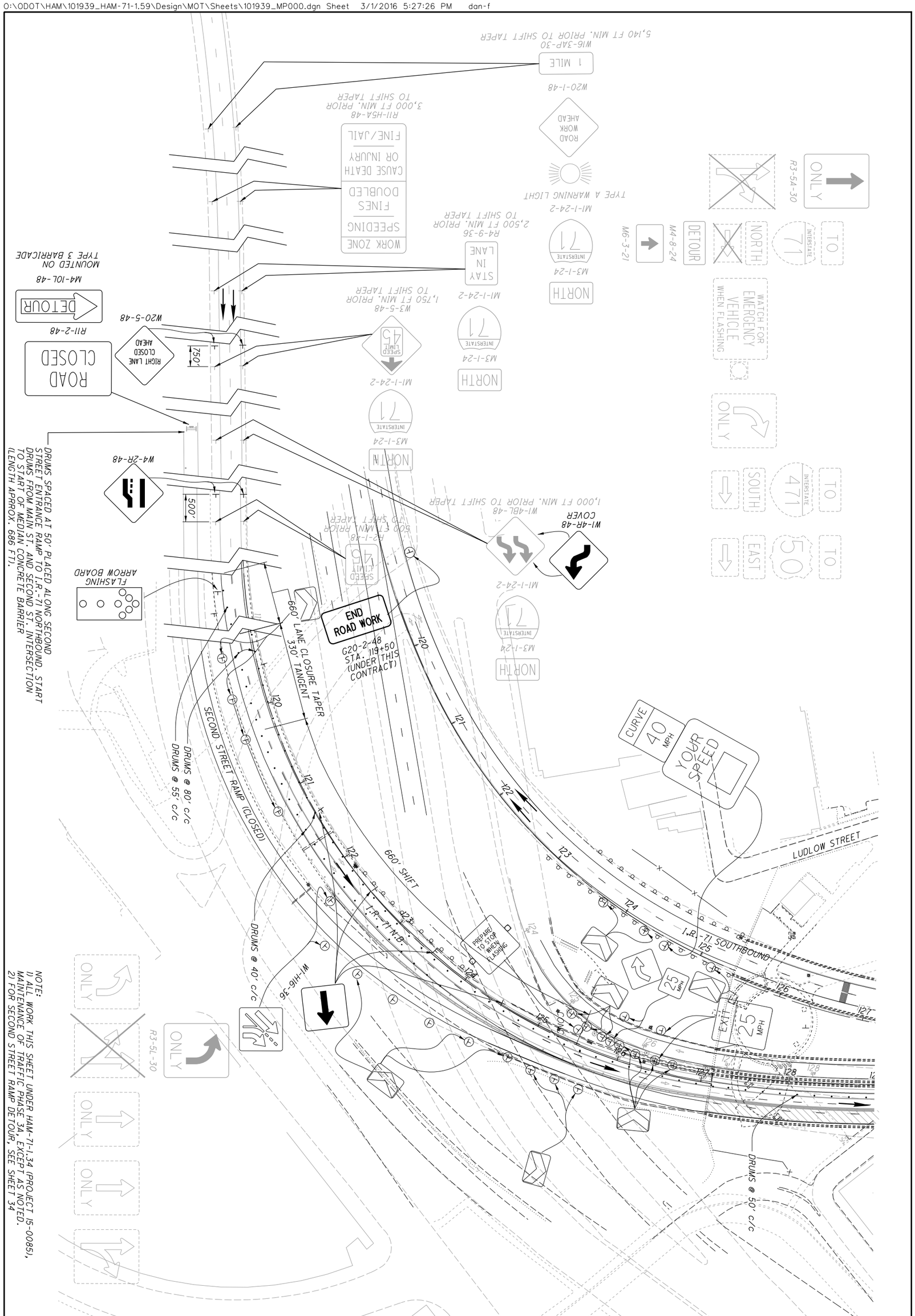




CALCULATED DPF
CHECKED BJF

TYPICAL SECTIONS MAINTENANCE OF TRAFFIC - PHASE 3

HAM-71-1.59

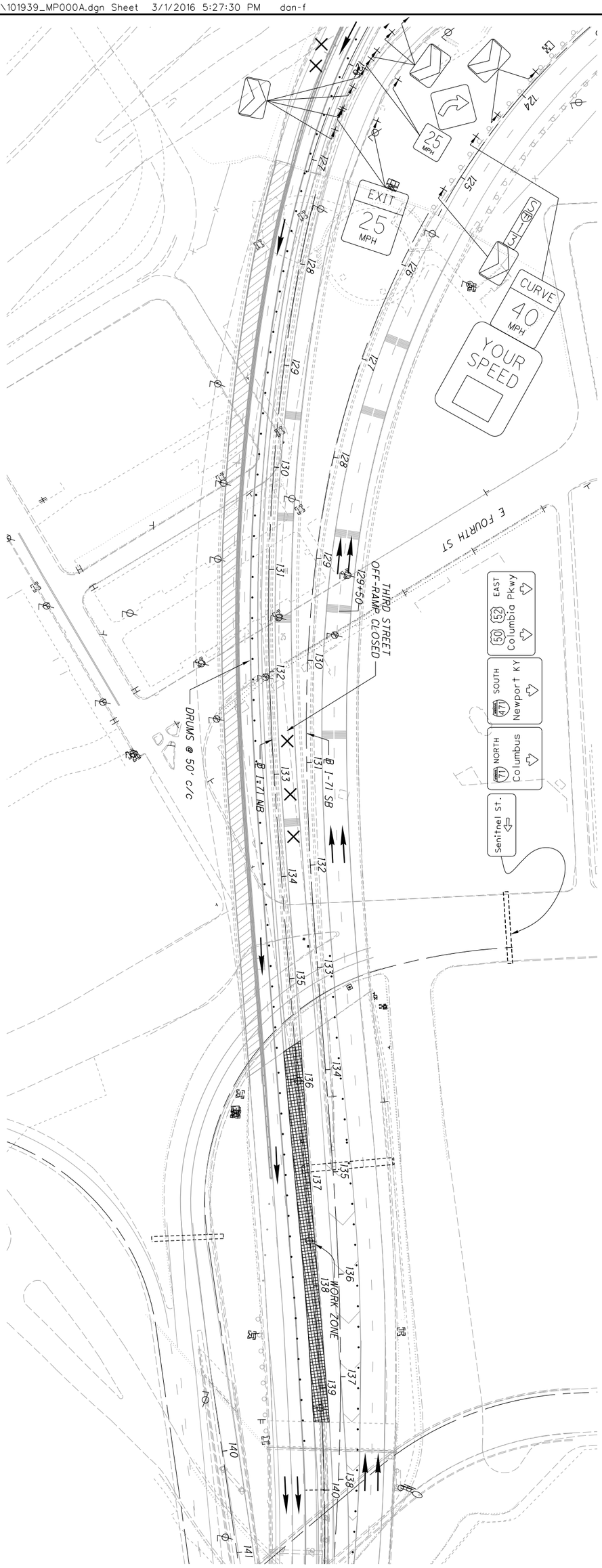


HAM-71-1.59

MAINTENANCE OF TRAFFIC
PHASE 1 - LEAD IN SIGNAGE

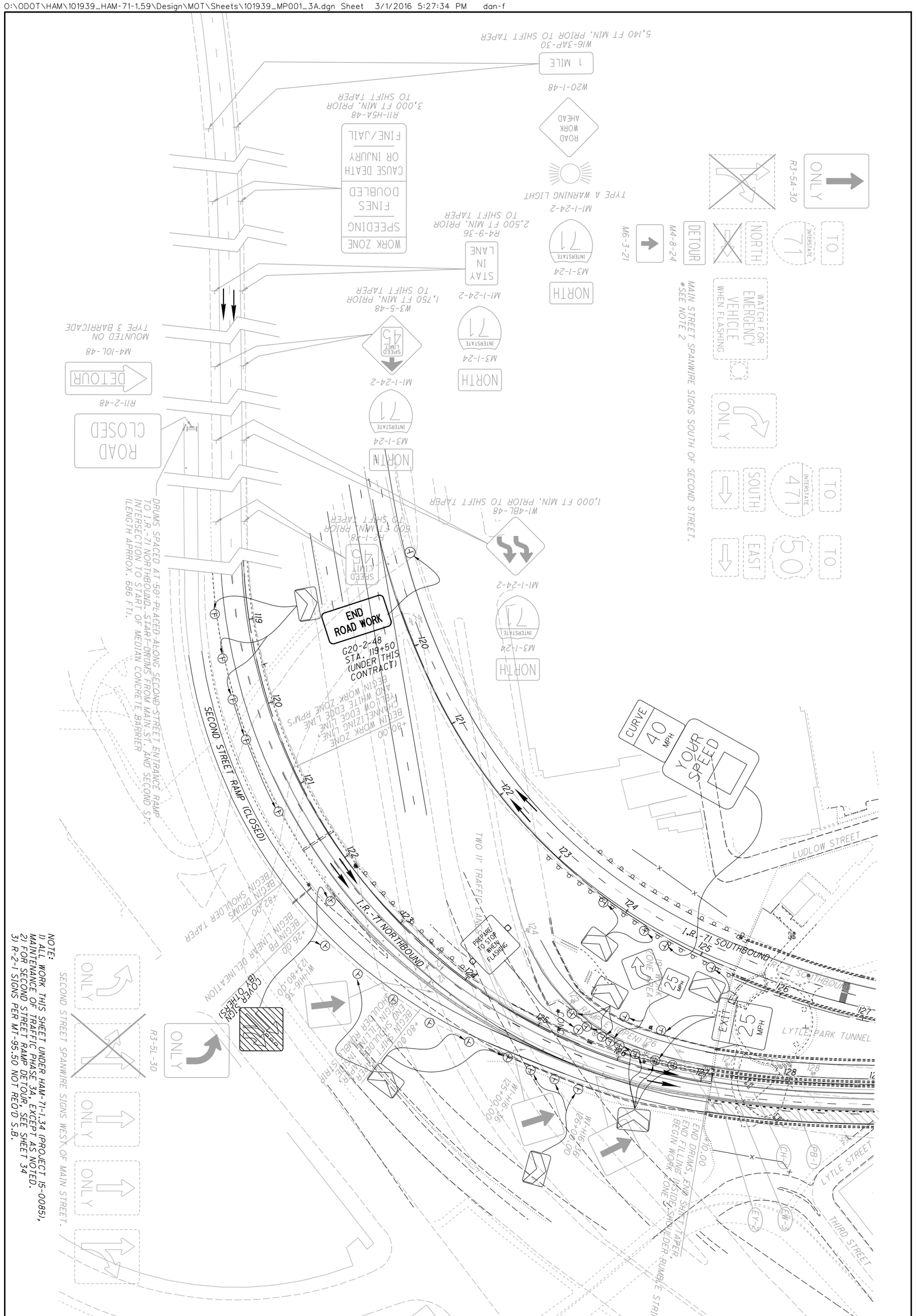
CALCULATED DPF
CHECKED BJF

0 50
25 100
HORIZONTAL SCALE IN FEET

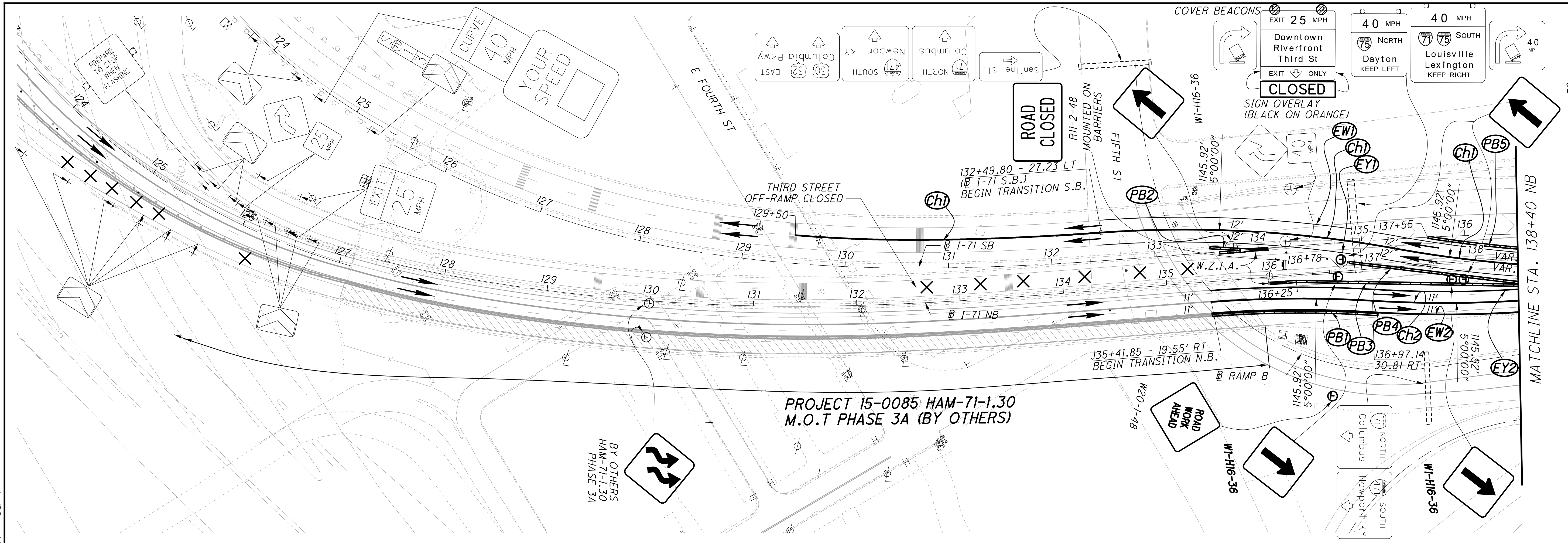


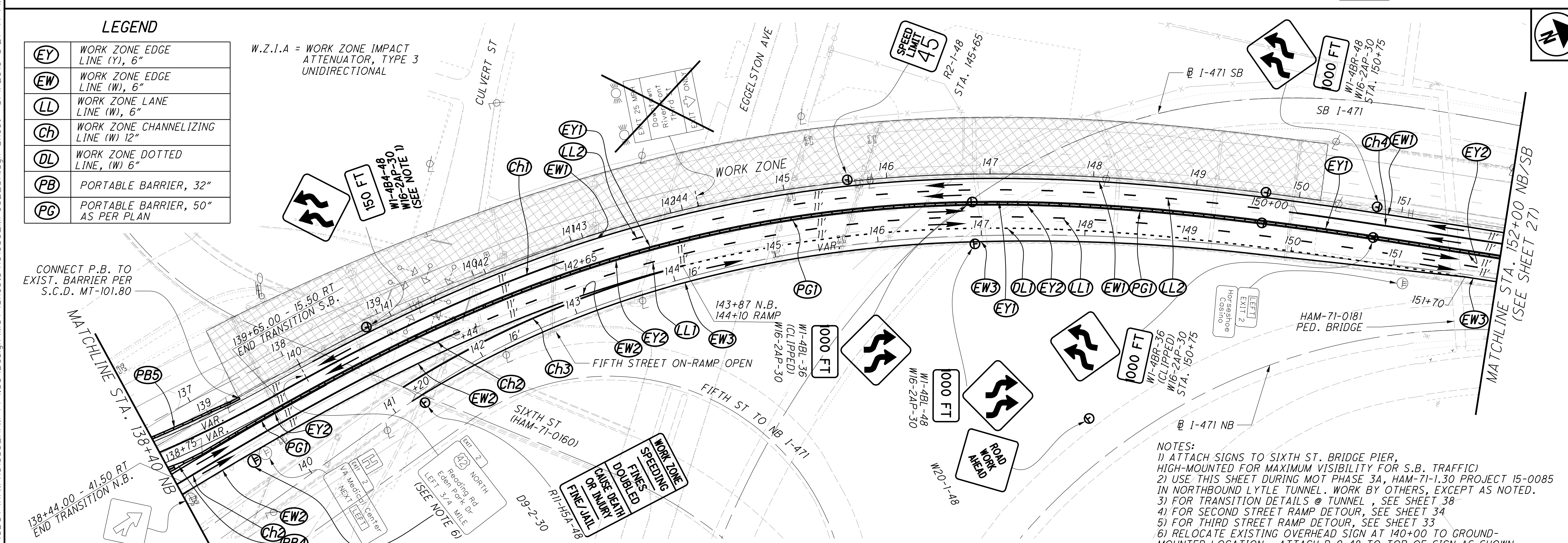
NOTE:
1) WORK THIS SHEET WITH HAM-71-1.34 (PROJECT 15-0085), MAINTENANCE OF TRAFFIC PHASE 3A.
2) FOR SECOND STREET RAMP DETOUR, SEE SHEET 34

18 / 176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 1 - N.B. - STA. 124+00 TO STA. 152+00	CALCULATED DPF CHECKED BJF	0 50 25 100 HORIZONTAL SCALE IN FEET



19 / 176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 2 (3A) - LEAD IN SIGNAGE	CALCULATED DPF CHECKED BJF	0 25 50 100 HORIZONTAL SCALE IN FEET





LEGEND

EY	WORK ZONE EDGE LINE (Y), 6"
EW	WORK ZONE EDGE LINE (W), 6"
LL	WORK ZONE LANE LINE (W), 6"
Ch	WORK ZONE CHANNELIZING LINE (W) 12"
DL	WORK ZONE DOTTED LINE, (W) 6"
PB	PORTABLE BARRIER, 32"
PG	PORTABLE BARRIER, 50" AS PER PLAN

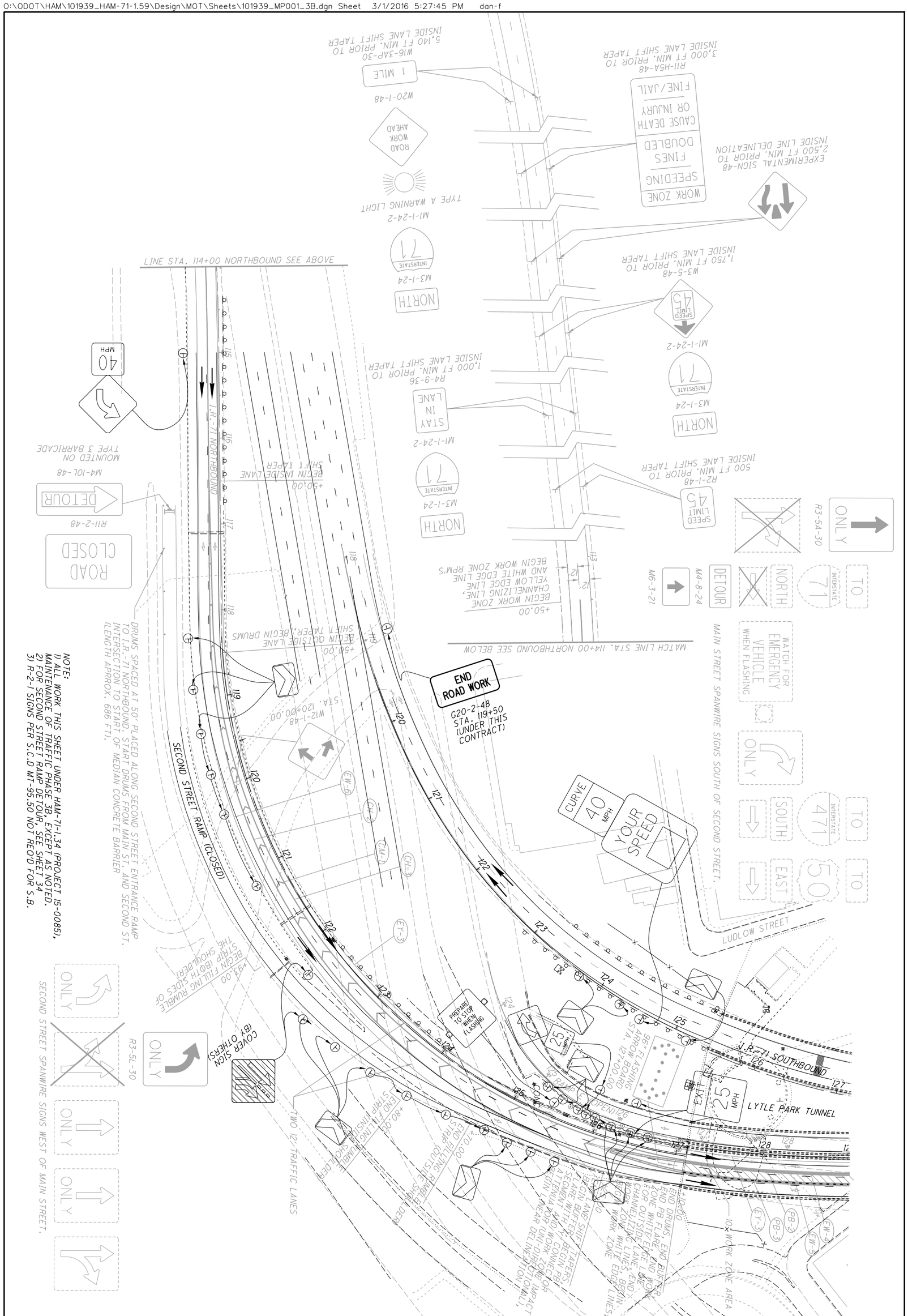
W.Z.I.A = WORK ZONE IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL

NOTES:
1) ATTACH SIGNS TO SIXTH ST. BRIDGE PIER, HIGH-MOUNTED FOR MAXIMUM VISIBILITY FOR S.B. TRAFFIC)
2) USE THIS SHEET DURING MOT PHASE 3A, HAM-71-1.30 PROJECT 15-0085 IN NORTHBOUND LYTLE TUNNEL. WORK BY OTHERS, EXCEPT AS NOTED.
3) FOR TRANSITION DETAILS @ TUNNEL , SEE SHEET 38
4) FOR SECOND STREET RAMP DETOUR, SEE SHEET 34
5) FOR THIRD STREET RAMP DETOUR, SEE SHEET 33
6) RELOCATE EXISTING OVERHEAD SIGN AT 140+00 TO GROUND-MOUNTED LOCATION, ATTACH D-9-48 TO TOP OF SIGN AS SHOWN

MAINTENANCE OF TRAFFIC
PHASE 2 (3A) - STA. 124+00 TO STA. 152+00

CALCULATED DPF
CHECKED BJF

HAM-71-1.59



21/176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 2 (3B) - LEAD IN SIGNAGE	CALCULATED DPF CHECKED BJF	0 50 25 100 HORIZONTAL SCALE IN FEET	N

MAINTENANCE OF TRAFFIC
PHASE 2 (3B) - STA. 124+00 TO STA. 152+00
HAM-71-1.59

CALCULATED DPF | CHECKED BJF

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

22 / 176

PROJECT 15-0085 HAM-71-1.30
M.O.T PHASE 3B (BY OTHERS)

MATCHLINE STA. 138+40 NB

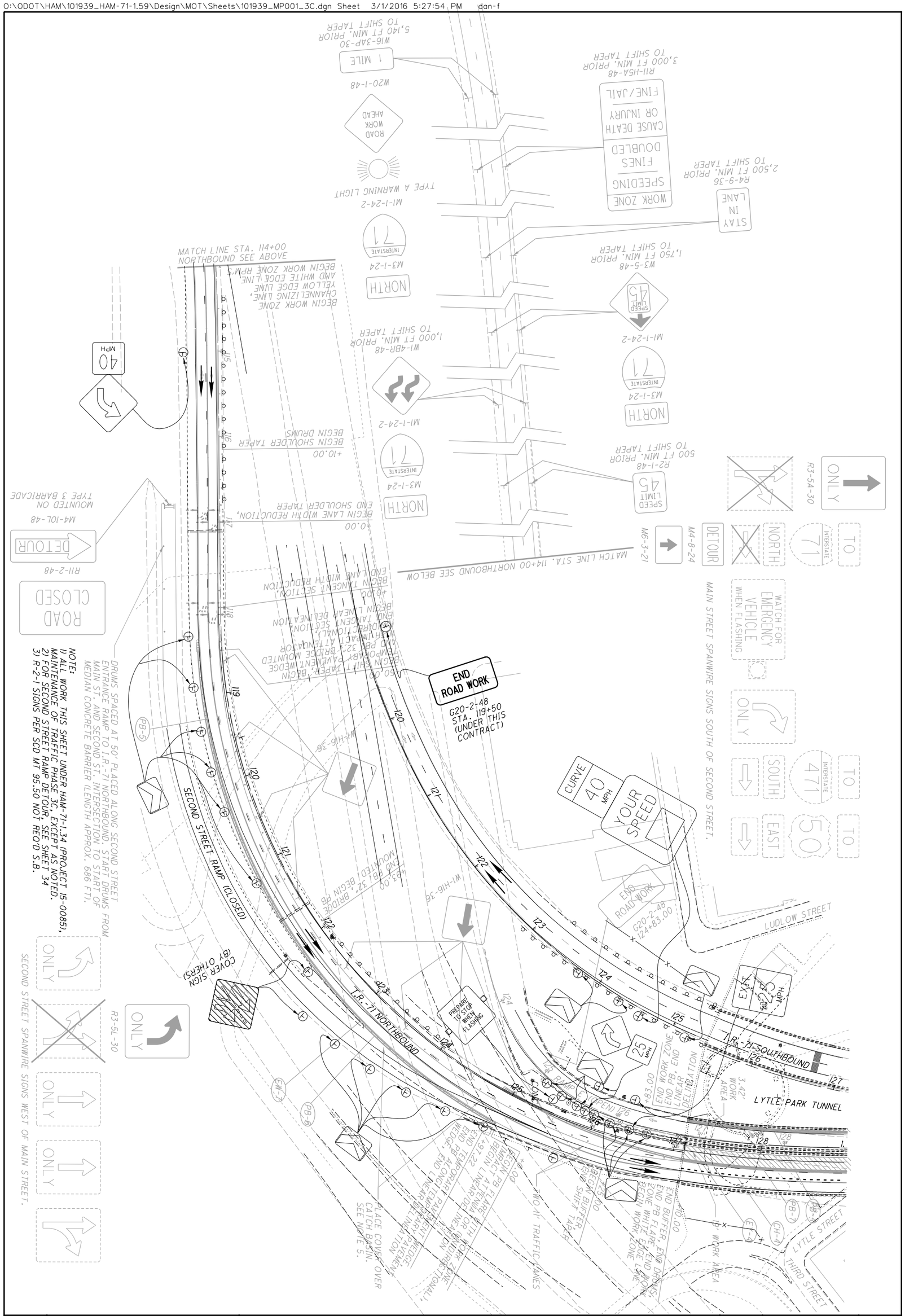
MATCHLINE STA. 152+00 NB/SB (SEE SHEET 27)

W.Z.I.A = WORK ZONE IMPACT ATTENUATOR, TYPE 3

LEGEND

(EY)	WORK ZONE EDGE LINE (Y), 6"
(EW)	WORK ZONE EDGE LINE (W), 6"
(LL)	WORK ZONE LANE LINE (W), 6"
(Ch)	WORK ZONE CHANNELIZING LINE (W) 12"
(DL)	WORK ZONE DOTTED LINE, (W) 6"
(PB)	PORTABLE BARRIER, 32"
(PG)	PORTABLE BARRIER, 50" AS PER PLAN

NOTES:
1) ATTACH SIGNS TO SIXTH ST. BRIDGE PIER, HIGH-MOUNTED FOR MAXIMUM VISIBILITY FOR S.B. TRAFFIC)
2) USE THIS SHEET DURING MOT PHASE 3A, HAM-71-1.30 PROJECT 15-0085 IN NORTHBOUND LYTLE TUNNEL. WORK BY OTHERS, EXCEPT AS NOTED.
3) FOR TRANSITION DETAILS @ TUNNEL , SEE SHEET 39
4) FOR SECOND STREET RAMP DETOUR, SEE SHEET 34
5) FOR THIRD STREET RAMP DETOUR, SEE SHEET 33
6) RELOCATE EXISTING OVERHEAD SIGN AT 140+00 TO GROUND- MOUNTED LOCATION, ATTACH D-9-48 TO TOP OF SIGN AS SHOWN.



23 / 176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 2 (3C) - LEAD IN SIGNAGE	CALCULATED DPF CHECKED BJF	0 50 25 100 HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC
PHASE 2 (3C) - STA. 124+00 TO STA. 152+00
HAM-71-1.59

CALCULATED DPF | CHECKED BJF

HORIZONTAL SCALE IN FEET: 0, 25, 50, 100

PROJECT 15-0085 HAM-71-1.30
M.O.T PHASE 3C (BY OTHERS)

E FOURTH ST
FIFTH ST
THIRD STREET OFF-RAMP CLOSED
ROAD CLOSED
R11-2-48 ON BARRICADES
COVER BEACONS
SIGN OVERLAY (BLACK ON ORANGE)
CLOSED
EXIT 25 MPH Downtown Riverfront Third St EXIT ONLY
40 MPH NORTH 75 Dayton KEEP LEFT
40 MPH 71 75 SOUTH Louisville Lexington KEEP RIGHT
Sentinel St. 71 NORTH Columbus 471 SOUTH Newport KY 50 52 EAST Columbia Pkwy
PREPARE TO STOP WHEN FLASHING
CURVE 40 MPH
YOUR SPEED
EXIT 25 MPH
132+49.80 - 27.23 LT (℄ I-71 S.B.) BEGIN TRANSITION S.B.
℄ I-71 SB
℄ I-71 NB
W.Z.I.A.
132+62
136+78
136+83
135+75.00 - 34.50' RT BEGIN SHIFT N.B.
℄ RAMP B
1145.92' 5°00'00"
MATCHLINE STA. 138+40 NB
W1-H16-36
W20-1-48 ROAD WORK AHEAD
NORTH Columbus
SOUTH Newport KY
HAM-71-0181 PED. BRIDGE
Horseshoe Casino LEFT EXIT 2

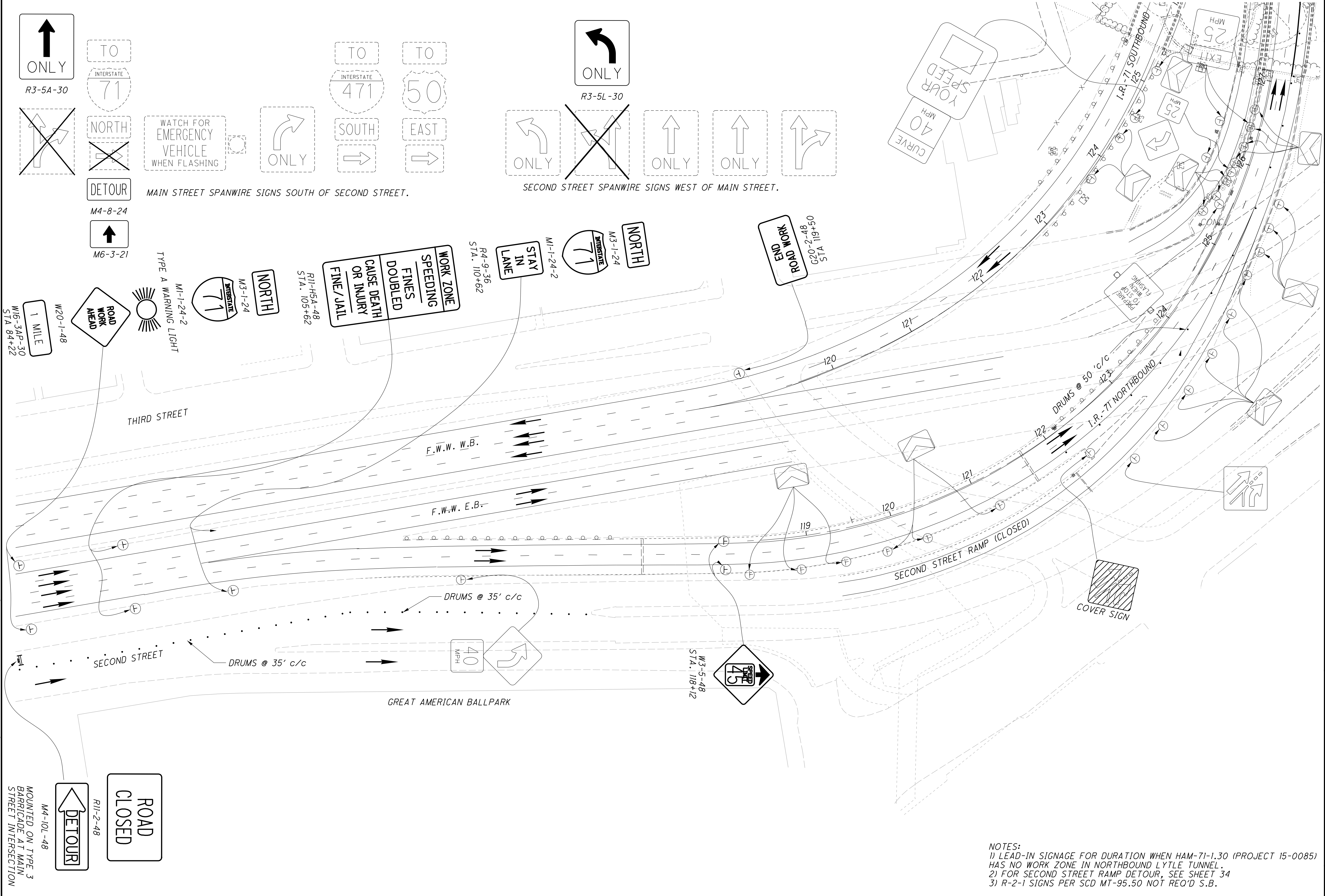
LEGEND

EY	WORK ZONE EDGE LINE (Y), 6"
EW	WORK ZONE EDGE LINE (W), 6"
LL	WORK ZONE LANE LINE (W), 6"
Ch	WORK ZONE CHANNELIZING LINE (W) 12"
DL	WORK ZONE DOTTED LINE, (W) 6"
PB	PORTABLE BARRIER, 32"
PG	PORTABLE BARRIER, 50" AS PER PLAN

W.Z.I.A = WORK ZONE IMPACT ATTENUATOR, TYPE 3

CULVERT ST
EGGELSTON AVE
SPEED LIMIT 45
R2-1-48 STA. 145+65
EXIT 25 MPH Downtown Riverfront Third St EXIT ONLY
℄ I-471 SB
SB I-471
1000 FT W1-4BR-48 W16-2AP-30 STA. 150+75
150 FT W1-4B4-48 W16-2AP-30 (SEE NOTE 1)
WORK ZONE
139+65.00 - 15.50 RT END TRANSITION S.B.
CONNECT P.B. TO EXIST. BARRIER PER S.C.D. MT-101.80
MATCHLINE STA. 138+40 NB
138+44.00 - 41.50 RT END TRANSITION N.B.
143+87 N.B. 144+10 RAMP
FIFTH STREET ON-RAMP OPEN
SIXTH ST (HAM-71-0160)
FIFTH ST TO NB I-471
W1-4BL-48 (CLIPPED) W16-2AP-30 STA. 147+00
W1-4BR-36 (CLIPPED) W16-2AP-30 STA. 150+75
WORK ZONE SPEEDING FINES DOUBLED CAUSE DEATH OR INJURY FINE/JAIL
R11-H5A-48
D9-2-30
EXIT 2 NORTH 42 Reading Rd Eden Park Dr LEFT 3/4 MILE (SEE NOTE 6)
EXIT 2 H VA Medical Center NEXT LEFT
W20-1-48 ROAD WORK AHEAD
MATCHLINE STA. 152+00 NB/SB (SEE SHEET 27)
HAM-71-0181 PED. BRIDGE

NOTES:
1) ATTACH SIGNS TO SIXTH ST. BRIDGE PIER, HIGH-MOUNTED FOR MAXIMUM VISIBILITY FOR S.B. TRAFFIC)
2) USE THIS SHEET DURING MOT PHASE 3A, HAM-71-1.30 PROJECT 15-0085 IN NORTHBOUND LYTLE TUNNEL. WORK BY OTHERS, EXCEPT AS NOTED.
3) FOR TRANSITION DETAILS @ TUNNEL , SEE SHEET 40
4) FOR SECOND STREET RAMP DETOUR, SEE SHEET 34
5) FOR THIRD STREET RAMP DETOUR, SEE SHEET 33
6) RELOCATE EXISTING OVERHEAD SIGN AT 140+00 TO GROUND-MOUNTED LOCATION, ATTACH D-9-48 TO TOP OF SIGN AS SHOWN



ONLY
R3-5A-30
TO
71
NORTH
DETOUR
M4-8-24
M6-3-21
WATCH FOR EMERGENCY VEHICLE WHEN FLASHING
ONLY
TO
471
SOUTH
TO
50
EAST
MAIN STREET SPANWIRE SIGNS SOUTH OF SECOND STREET.
ONLY
R3-5L-30
SECOND STREET SPANWIRE SIGNS WEST OF MAIN STREET.
1 MILE
W20-1-48
W16-3AP-30
STA 84+22
ROAD WORK AHEAD
TYPE A WARNING LIGHT
M1-1-24-2
NORTH
M3-1-24
WORK ZONE SPEEDING FINES DOUBLED CAUSE DEATH OR INJURY FINE/JAIL
R11-H5A-48
STA. 105+62
STAY IN LANE
R4-9-36
STA. 110+62
M1-1-24-2
NORTH
M3-1-24
END ROAD WORK
G20-2-48
STA 119+50
THIRD STREET
F.W.W. W.B.
F.W.W. E.B.
DRUMS @ 35' c/c
SECOND STREET
DRUMS @ 35' c/c
GREAT AMERICAN BALLPARK
W3-5-48
STA. 118+12
SECOND STREET RAMP (CLOSED)
COVER SIGN
DRUMS @ 50' c/c
I.R.-71 NORTHBOUND
I.R.-71 SOUTHBOUND
YOUR SPEED
CURVE 40 MPH
EXIT 25 MPH
ROAD CLOSED
R11-2-48
DETOUR
M4-10L-48
MOUNTED ON TYPE 3 BARRICADE AT MAIN STREET INTERSECTION

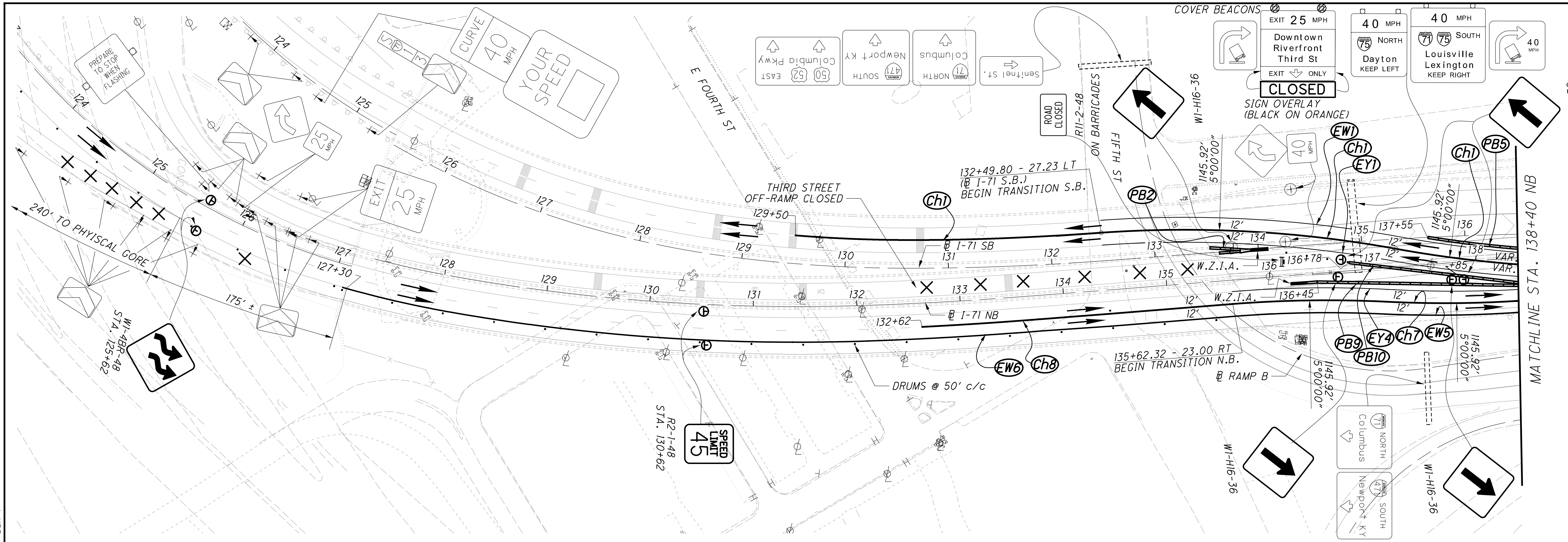
NOTES:
1) LEAD-IN SIGNAGE FOR DURATION WHEN HAM-71-1.30 (PROJECT 15-0085) HAS NO WORK ZONE IN NORTHBOUND LYTLE TUNNEL.
2) FOR SECOND STREET RAMP DETOUR, SEE SHEET 34
3) R-2-1 SIGNS PER SCD MT-95.50 NOT REQ'D S.B.

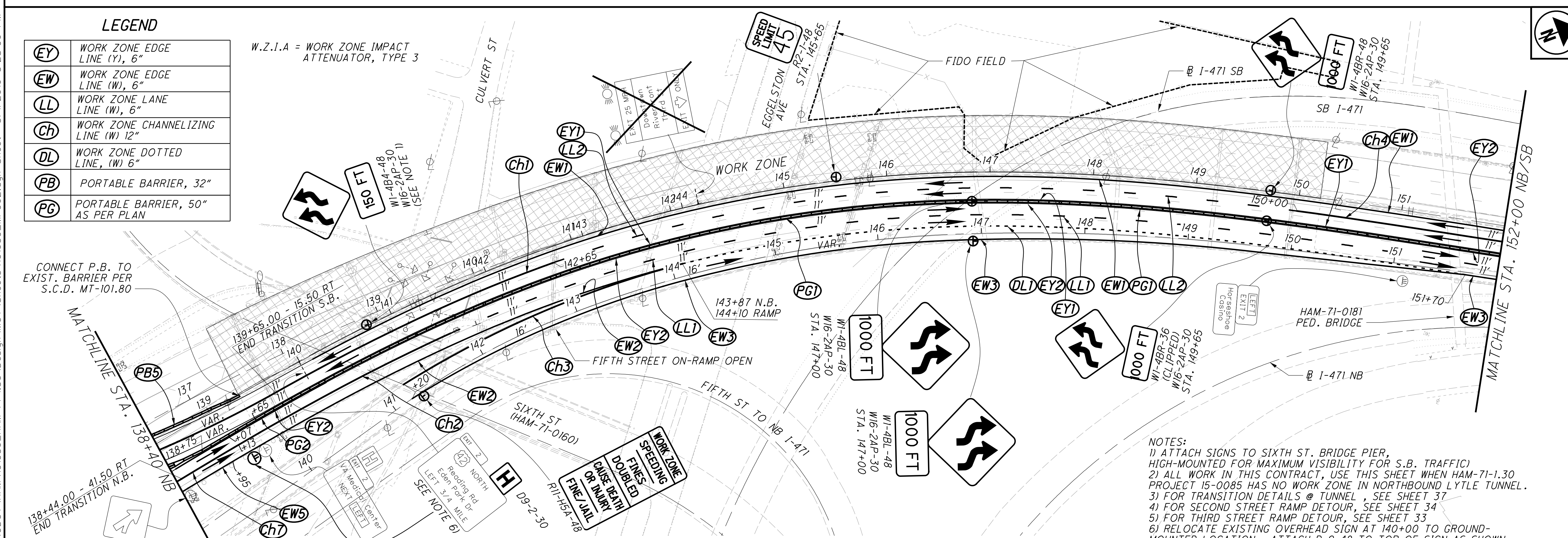
HORIZONTAL SCALE IN FEET
0 25 50 100

CALCULATED DPF
CHECKED BJF

MAINTENANCE OF TRAFFIC PHASE 2 - LEAD IN SIGNAGE

HAM-71-1.59





LEGEND

EY	WORK ZONE EDGE LINE (Y), 6"
EW	WORK ZONE EDGE LINE (W), 6"
LL	WORK ZONE LANE LINE (W), 6"
Ch	WORK ZONE CHANNELIZING LINE (W) 12"
DL	WORK ZONE DOTTED LINE, (W) 6"
PB	PORTABLE BARRIER, 32"
PG	PORTABLE BARRIER, 50" AS PER PLAN

NOTES:
1) ATTACH SIGNS TO SIXTH ST. BRIDGE PIER, HIGH-MOUNTED FOR MAXIMUM VISIBILITY FOR S.B. TRAFFIC)
2) ALL WORK IN THIS CONTRACT, USE THIS SHEET WHEN HAM-71-1.30 PROJECT 15-0085 HAS NO WORK ZONE IN NORTHBOUND LYTLE TUNNEL.
3) FOR TRANSITION DETAILS @ TUNNEL , SEE SHEET 37
4) FOR SECOND STREET RAMP DETOUR, SEE SHEET 34
5) FOR THIRD STREET RAMP DETOUR, SEE SHEET 33
6) RELOCATE EXISTING OVERHEAD SIGN AT 140+00 TO GROUND-MOUNTED LOCATION, ATTACH D-9-48 TO TOP OF SIGN AS SHOWN

0 25 50 100
HORIZONTAL SCALE IN FEET

CALCULATED DPF
CHECKED BJF

MAINTENANCE OF TRAFFIC
PHASE 2 - STA. 124+00 TO STA. 152+00

HAM-71-1.59

MAINTENANCE OF TRAFFIC
PHASE 2 - STA. 152+00 TO STA. 179+50
HAM-71-1.59

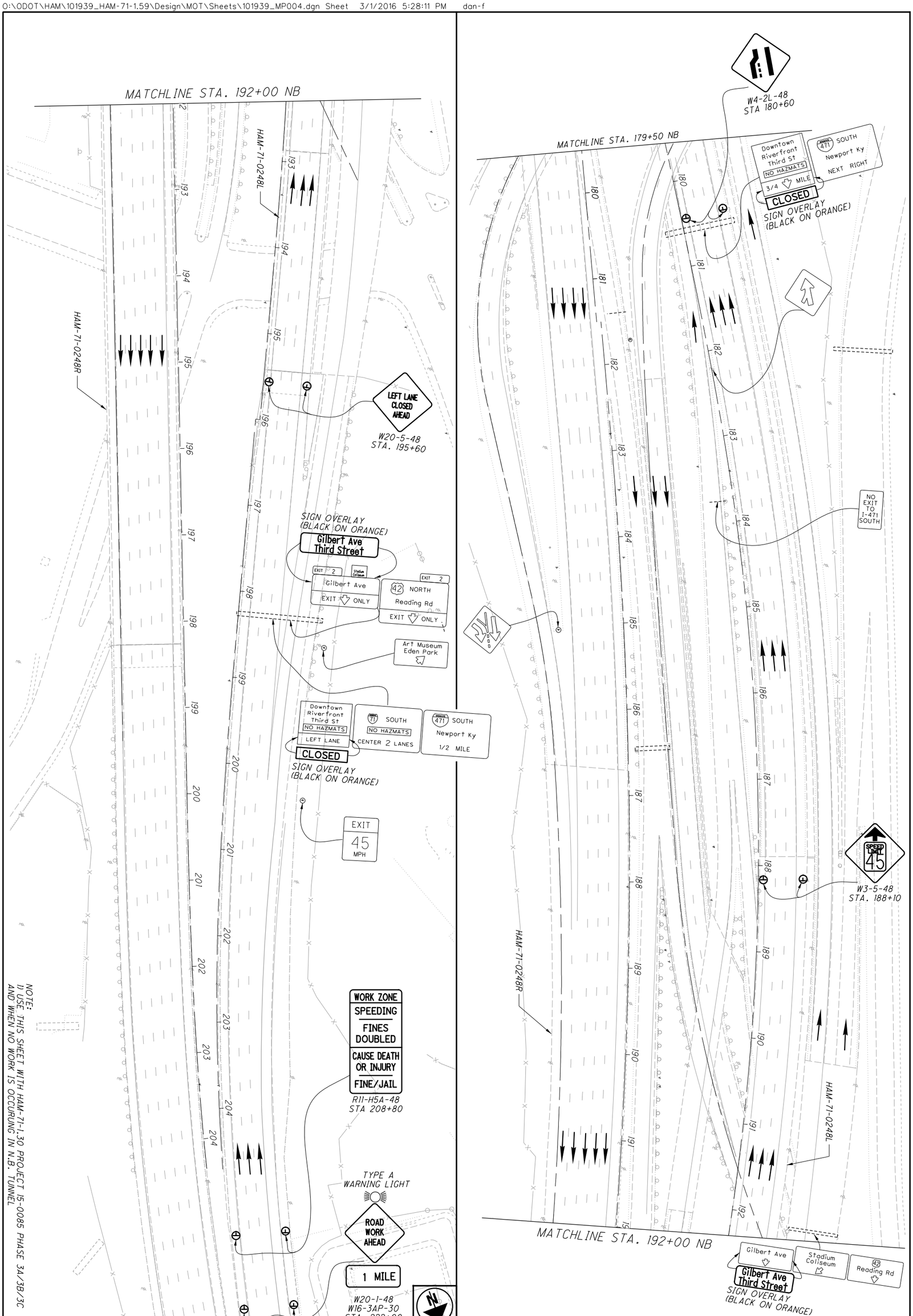
CALCULATED DPF
CHECKED BJF

0 25 50 100
HORIZONTAL SCALE IN FEET

MATCHLINE STA. 152+00 NB/SB
MATCHLINE STA. 166+00 NB/SB
MATCHLINE STA. 179+50 NB
40 MPH
JUNCTION I-75 1 1/2 MILES
Downtown Riverfront Third St EXIT ONLY
CLOSED
SIGN OVERLAY (BLACK ON ORANGE)
ROAD CLOSED
R11-2-48 MOUNTED ON TYPE 3 BARRICADES
TYPE B WARNING LIGHTS
W1-6L-72
ROAD WORK AHEAD
W20-1-48
℄ I-471 SB
DRUMS @ 20 ' c/c
3000.00'
3000.00'
152+00 BEGIN WIDTH TRANS. W.Z.I.A.
153+00.00 - 15.50 RT BEGIN TRANSITION S.B.
152+84 BEGIN MEDIAN BARRIER REMOVAL
154+00
153+62
157+27 END MEDIAN BARRIER REMOVAL
157+00.00 - 41.50 RT BEGIN TRANSITION N.B.
158+99.27 - 32.00 LT END TRANSITION S.B.
DRUMS @ 55 ' c/c
℄ I-71
℄ I-471 NB
162+00
162+25.00 - 32.00 RT END TRANSITION N.B.
HAM-71-0197
HAM-71-0197W
HAM-71-0197N
W1-4BL-48 STA. 161+50
℄ RAMP GF
℄ RAMP GG
HAM-71-0207
164+00 BEGIN TAPER
165+25
R2-1-48 SPEED LIMIT 55
SPEED LIMIT 55 EXISTING
Downtown Riverfront Third St NO HAZMATS 1/2 MILE CLOSED
SIGN OVERLAY (BLACK ON ORANGE)
Newport Ky SOUTH 471
Columbus NORTH
Liberty Street EXIT ONLY
EXIT 7
EXIT 2 NORTH 42 Reading Rd Eden Park Dr LEFT 1/2 MILE
RELOCATE SIGN TO STA. 158+00 ON PERMANENT SUPPORT (SEE TRAFFIC CONTROL PLANS)
W1-H16-36 SPACED @ 100' ALONG SHIFT
PB1 EY1 Ch4 EW1 EY2 Ch5 EW3 PG1 LL1 DL2

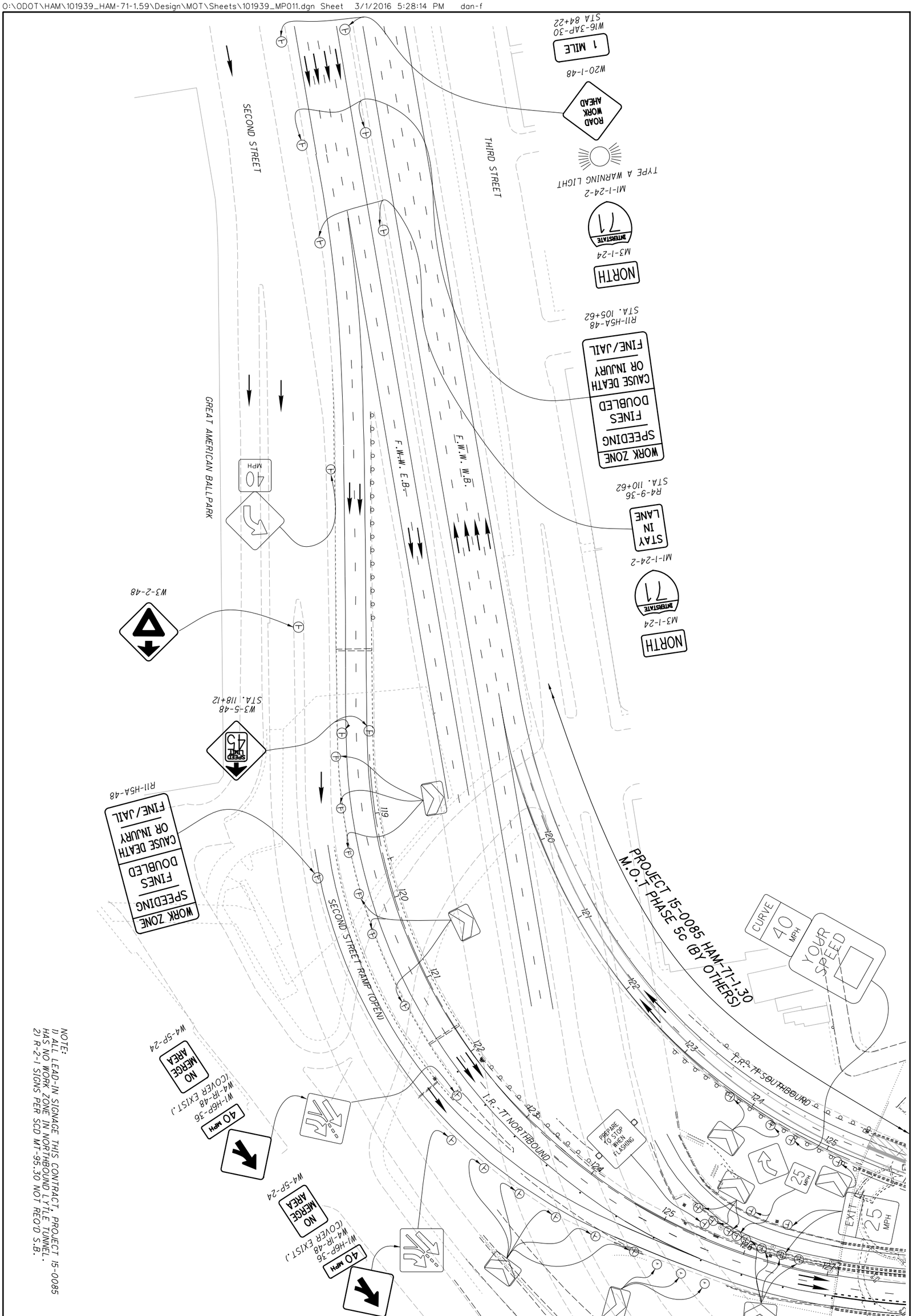
MATCHLINE STA. 166+00 NB/SB
MATCHLINE STA. 179+50 NB
2 MILE
GREEN SIGNAL COVER
DRUMS @ 55 ' c/c
170+60 END TAPER
FLASHING ARROW PANEL
℄ RAMP GA
℄ RAMP GD
HAM-22-0145
HAM-71-0226
℄ I-71 SB
℄ I-71 NB
EDEN PARK DR RAMP OPEN
HAM-71-0233
HAM-71-0231
℄ RAMP RD
℄ READING RD NB
HAM-42-0233R
R2-1-48 STA. 175+60
SPEED LIMIT 45
Downtown Riverfront Third St KEEP LEFT CLOSED
SIGN OVERLAY (BLACK ON ORANGE)
Newport Ky SOUTH 471
EXIT 2 NORTH 42 Reading Rd Eden Park Dr
END ROAD WORK G20-2-48 STA 174+00

NOTE:
1) USE THIS SHEET WITH HAM-71-1.30 PROJECT 15-0085 PHASE 3A/3B/3C AND WHEN NO WORK IS OCCURUNG IN N.B. TUNNEL
2) COVER OR REMOVE EXISTING END WORK (620-2) AND SPEED LIMIT (R-2-1) SIGNAGE IN NORTHBOUND DIRECTION INSTALLED BY PROJECT 15-0085



NOTE:
1) USE THIS SHEET WITH HAM-71-1.30 PROJECT 15-0085 PHASE 3A/3B/3C AND WHEN NO WORK IS OCCURING IN N.B. TUNNEL

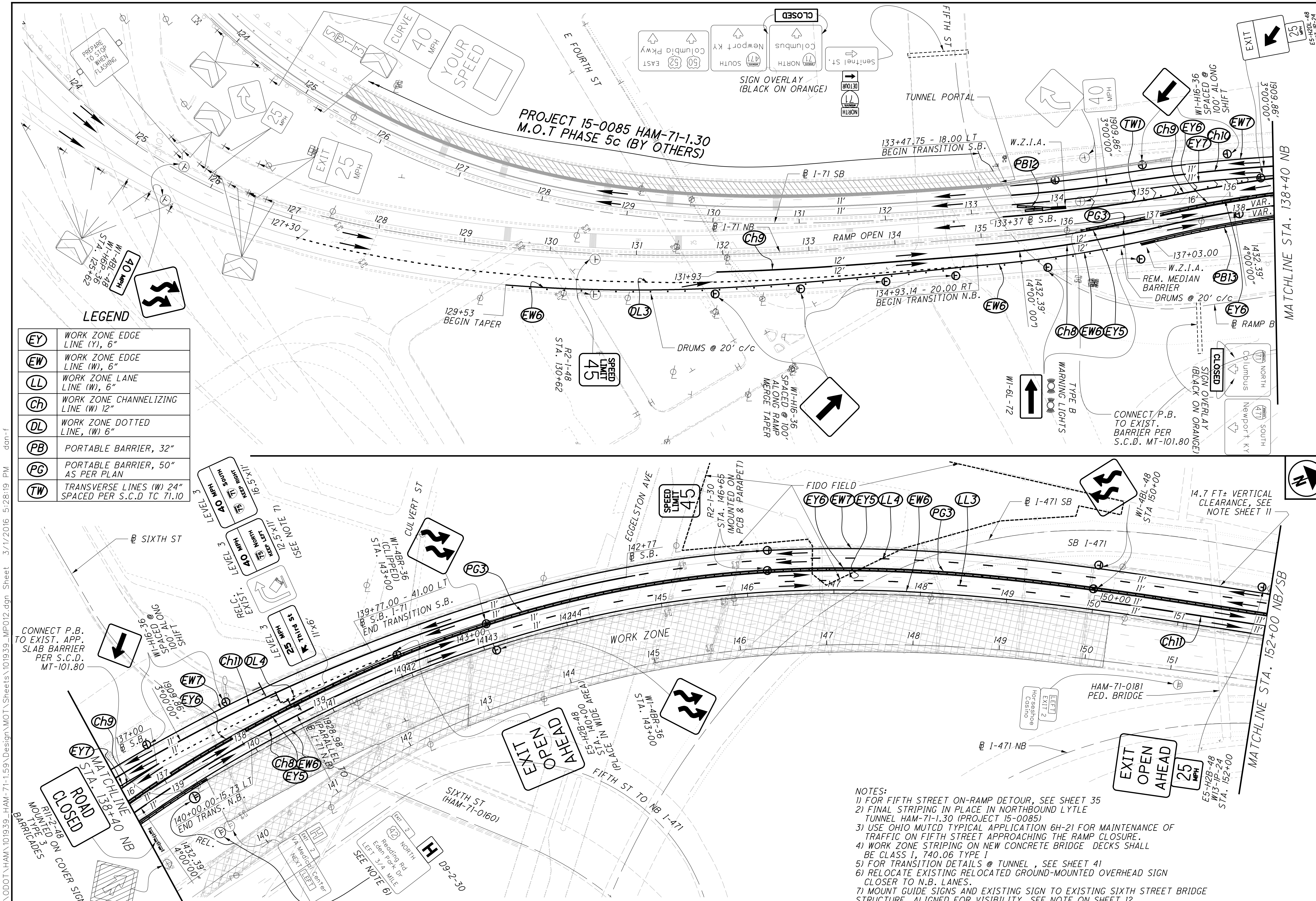
28/176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 2 - STA. 179+50 NB TO STA. 205+00 NB	CALCULATED DPF CHECKED BJF	0 50 25 100 HORIZONTAL SCALE IN FEET



NOTE:
1) ALL LEAD-IN SIGNAGE THIS CONTRACT, PROJECT 15-0085 HAS NO WORK ZONE IN NORTHBOUND LYTLE TUNNEL.
2) R-2-1 SIGNS PER SCD MT-96.30 NOT REQ'D S.B.

29 / 176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 3 - LEAD IN SIGNAGE	CALCULATED DPF CHECKED BJF	0 50 25 100 HORIZONTAL SCALE IN FEET

MAINTENANCE OF TRAFFIC
PHASE 3 - STA. 124+00 TO STA. 152+00



LEGEND

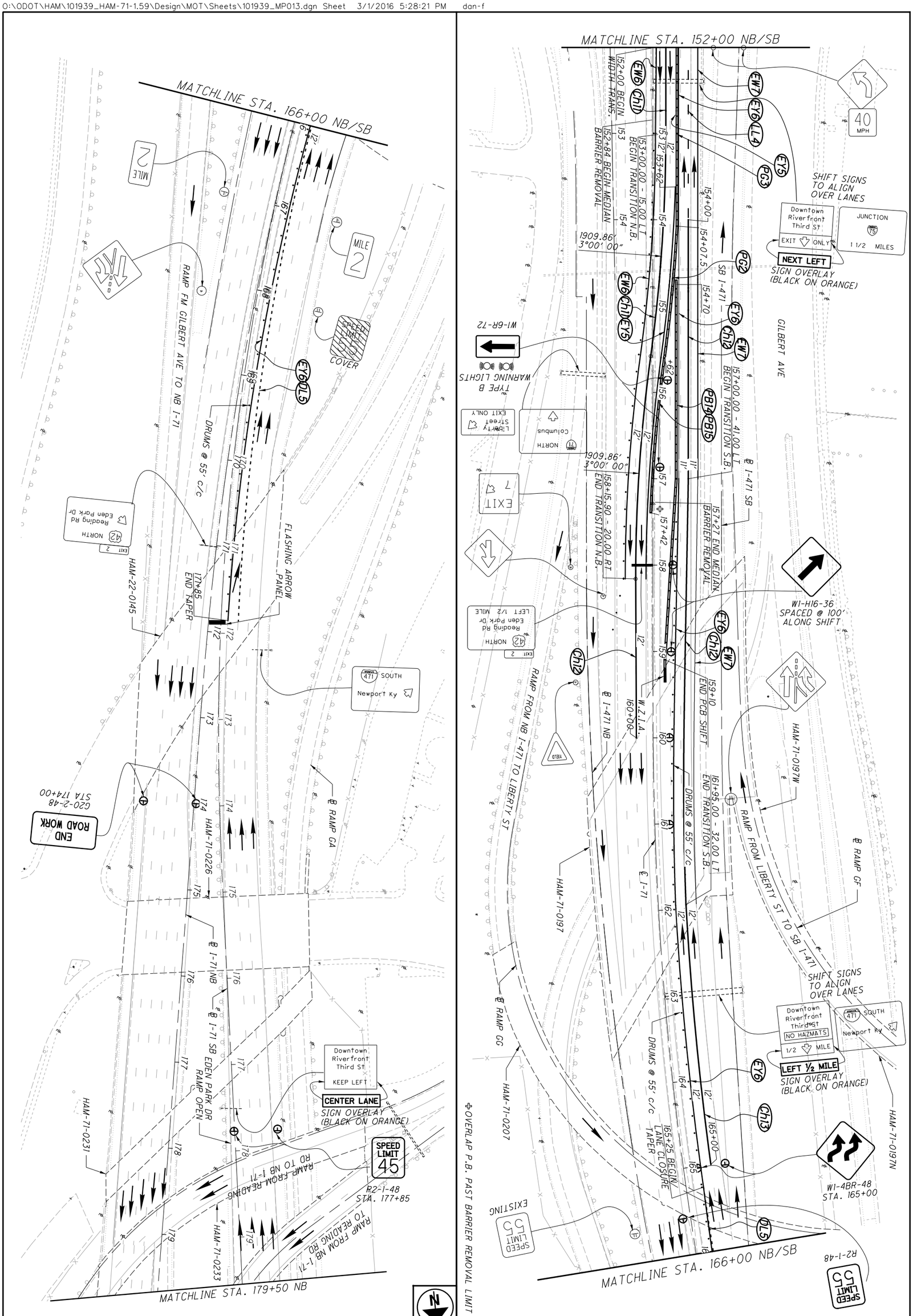
Symbol	Description
EY	WORK ZONE EDGE LINE (Y), 6"
EW	WORK ZONE EDGE LINE (W), 6"
LL	WORK ZONE LANE LINE (W), 6"
Ch	WORK ZONE CHANNELIZING LINE (W) 12"
DL	WORK ZONE DOTTED LINE, (W) 6"
PB	PORTABLE BARRIER, 32"
PG	PORTABLE BARRIER, 50" AS PER PLAN
TW	TRANSVERSE LINES (W) 24" SPACED PER S.C.D TC 71.10

NOTES:
1) FOR FIFTH STREET ON-RAMP DETOUR, SEE SHEET 35
2) FINAL STRIPING IN PLACE IN NORTHBOUND LYTLE TUNNEL HAM-71-1.30 (PROJECT 15-0085)
3) USE OHIO MUTCD TYPICAL APPLICATION 6H-21 FOR MAINTENANCE OF TRAFFIC ON FIFTH STREET APPROACHING THE RAMP CLOSURE.
4) WORK ZONE STRIPING ON NEW CONCRETE BRIDGE DECKS SHALL BE CLASS I, 740.06 TYPE I
5) FOR TRANSITION DETAILS @ TUNNEL , SEE SHEET 41
6) RELOCATE EXISTING RELOCATED GROUND-MOUNTED OVERHEAD SIGN CLOSER TO N.B. LANES.
7) MOUNT GUIDE SIGNS AND EXISTING SIGN TO EXISTING SIXTH STREET BRIDGE STRUCTURE, ALIGNED FOR VISIBILITY. SEE NOTE ON SHEET 12.

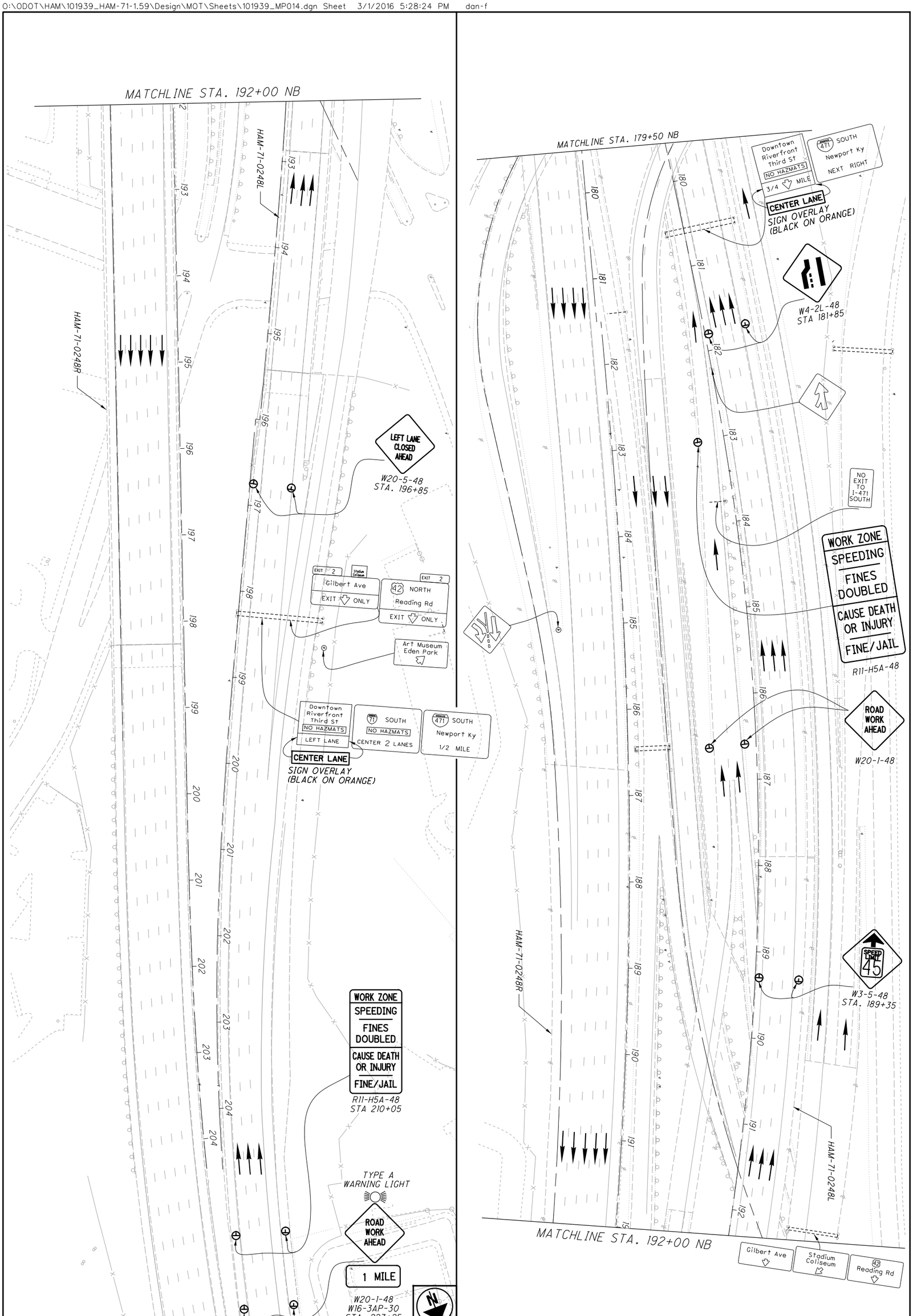
HORIZONTAL SCALE IN FEET: 0 25 50 100

CALCULATED DPF
CHECKED BJF

HAM-71-1.59

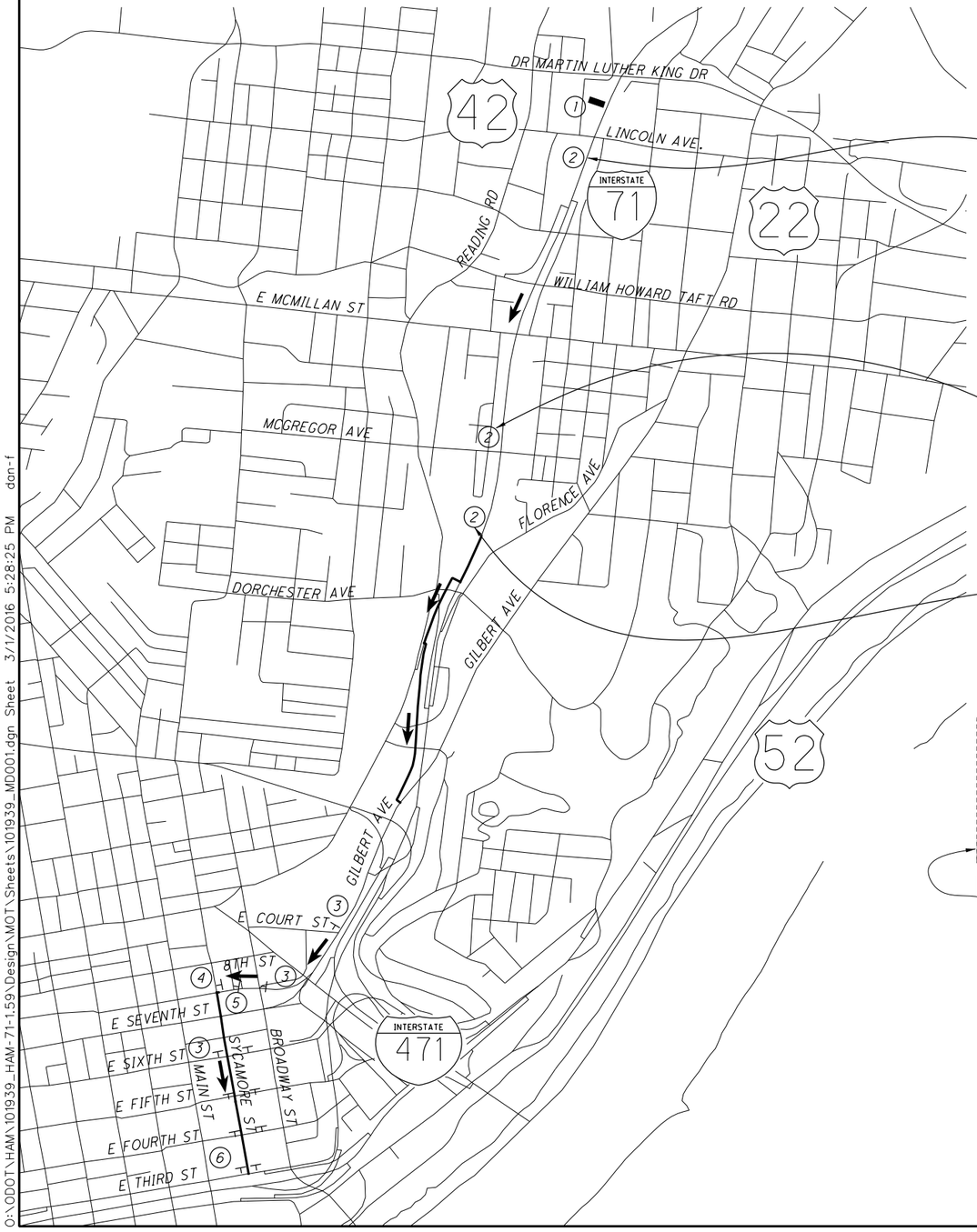


31/176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 3 - STA. 152+00 TO STA. 179+50	CALCULATED DPF CHECKED BJF	0 50 25 100 HORIZONTAL SCALE IN FEET



32 / 176	HAM-71-1.59	MAINTENANCE OF TRAFFIC PHASE 3 - STA. 179+50 NB TO STA. 205+00 NB	CALCULATED DPF CHECKED BJF	0 50 100 25 HORIZONTAL SCALE IN FEET

DETOUR NO. 1
I-71 SOUTHBOUND TO THIRD STREET
PHASE 1



(1)

RAMP TO THIRD ST. CLOSED (A)

USE EXIT 2 GILBERT AV. (B)

PORTABLE CHANGABLE MESSAGE SIGN (ITEM 605-9) DISPLAY MESSAGES AS SHOWN

(2) Third St / DETOUR — *W16-8P M4-8-30*

(3) Third St / DETOUR ↑ — *W16-8P M4-8-24 M6-3-21*

(4) Third St / DETOUR ← — *W16-8P M4-9L-30*

(5) Third St / DETOUR ↰ — *W16-8P M4-8-24 M5-1-21*

(6) Third St → — *W16-8P M6-1-21*

INTERSTATE 71 SOUTH ⇩ ⇩

42 Reading Rd Gilbert Ave ⇩ 3/4 MILE ⇩

EXIT 2 | EXIT 3 Taft Rd

EXIT ⇩ ONLY

Gilbert Ave Third Street

SIGN OVERLAY - COVER EXISTING MESSAGE AS INDICATED (BLACK ON ORANGE)

OVERHEAD SIGNS - SOUTHBOUND

INTERSTATE 71 SOUTH CENTER 2 LANES

EXIT 2 — Stadium Coliseum

Gilbert Ave ⇩ 1/4 MILE

Gilbert Ave Third Street

42 SOUTH Reading Rd

EXIT 2

EXIT ⇩ ONLY

SIGN OVERLAY - COVER EXISTING MESSAGE AS INDICATED (BLACK ON ORANGE)

OVERHEAD SIGNS - SOUTHBOUND

Riverfront Cincinnati Covington

LEFT LANE

EXIT CLOSED

SIGN OVERLAY (BLACK ON ORANGE)

INTERSTATE 71 SOUTH ⇩ ⇩

INTERSTATE 471 SOUTH Newport KY ½ MILE

EXIT 2 — Stadium Coliseum

Gilbert Ave ⇩ EXIT ONLY

Gilbert Ave Third Street

42 SOUTH Reading Rd

EXIT 2

EXIT ⇩ ONLY

SIGN OVERLAY - COVER EXISTING MESSAGE AS INDICATED (BLACK ON ORANGE)

OVERHEAD SIGNS - SOUTHBOUND

14.5′ × 5′

Gilbert Ave
Third Street

LEVEL 1 BLACK ON ORANGE

NOTES:

1. *ALL SIGN OVERLAYS TO BE BLACK ON ORANGE, AND EXISTING SIGN MESSAGE TO BE COVERED COMPLETELY AS SHOWN.*
2. *CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS.*
3. *PORTABLE CHANGEABLE MESSAGE SIGN (S) WILL BE PLACED IN ADVANCE OF THE DETOUR SIGNS, WITH THE MESSAGES AS INDICATED AT AN APPROPRIATE LOCATION AS DETERMINED BY THE ENGINEER.*
4. *ALL WORK THIS SHEET TO BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNAGE.*

CALCULATED DPF
CHECKED BJF

DETOUR PLAN - THIRD ST S.B. OFF RAMP

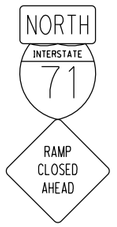
HAM-71-1.59

DETOUR NO. 2
SECOND ST. E. TO I-71 NORTHBOUND
PHASE 1, 2A, 2B, AND 2C

(1)

M3-1-24
M1-1-24-2
W20-1-36

(2)



M3-1-24
M1-1-24-2
W20-3-36

(3)

M3-1-24
M1-1-24-2
W20-2-36

(4)

M3-1-24
M1-1-24-2
M4-8-24
M6-3-21

(5)

M3-1-24
M1-1-24-2
M4-8-24
M5-1-21

(6)

M3-1-24
M1-1-24-2
M4-8-24
M6-1-21

(7)

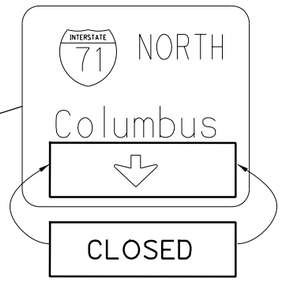
M3-1-24
M1-1-24-2
R11-2-48
M4-10L-48

(8)

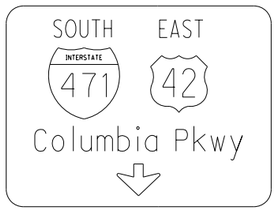
M3-1-24
M1-1-24-2
M4-8-24
M5-1-21

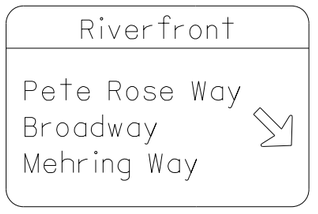
(9)

R11-2-48



SIGN OVERLAY
(BLACK ON ORANGE)





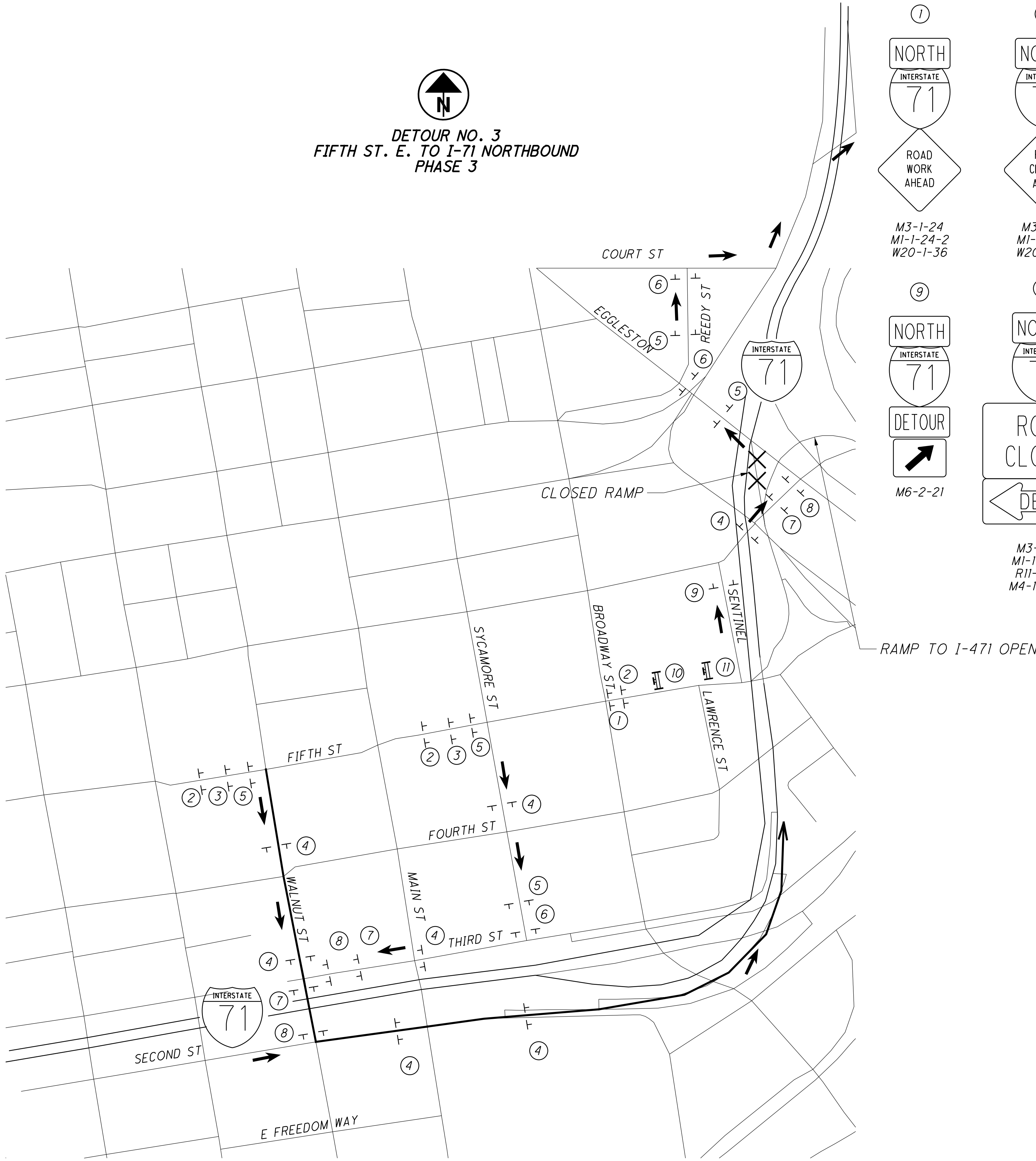
NOTES:

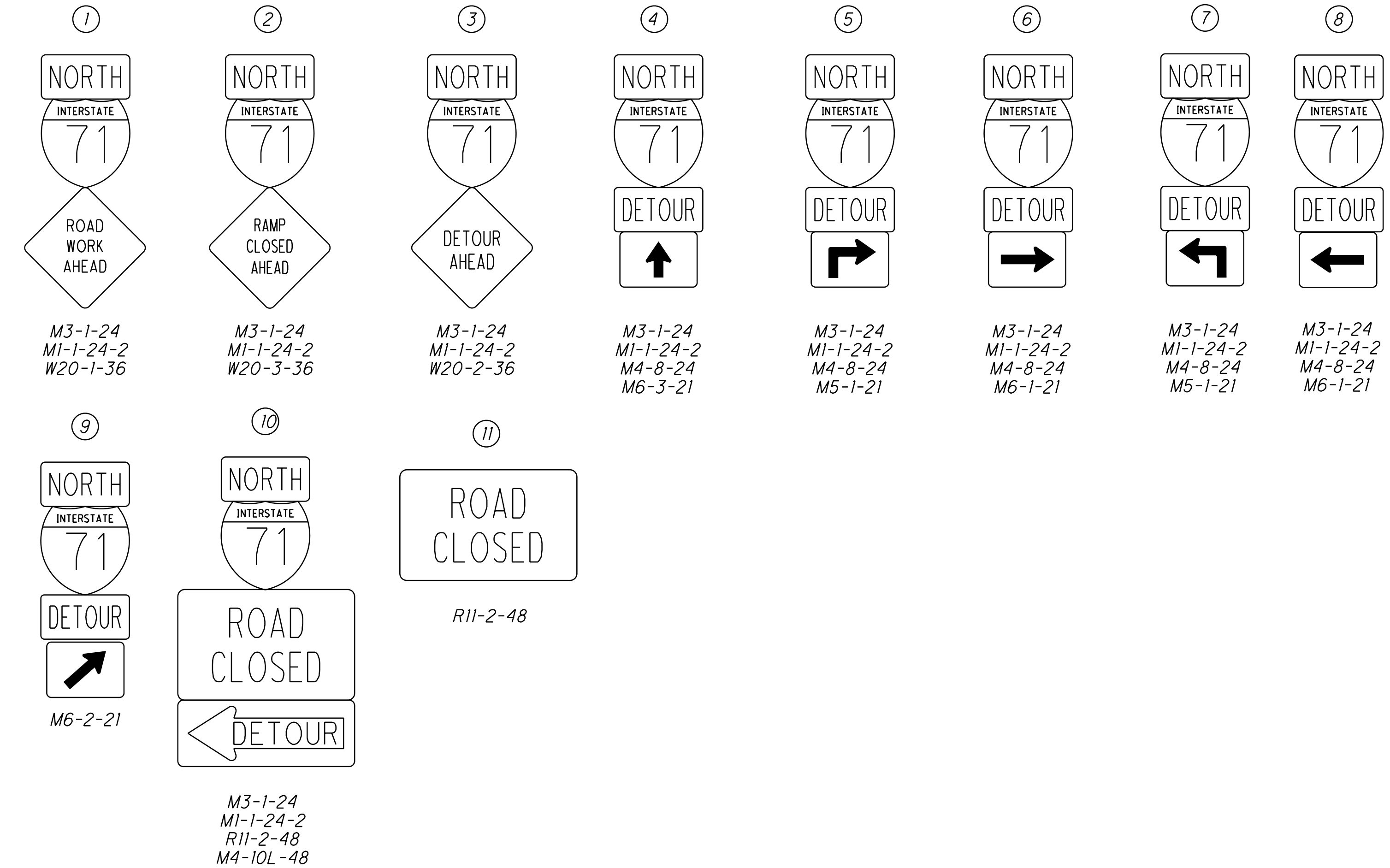
1. ALL SIGN OVERLAYS TO BE BLACK ON ORANGE.
2. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS.
3. PORTABLE CHANGEABLE MESSAGE SIGN (S) WILL BE PLACED IN ADVANCE OF THE DETOUR SIGNS, WITH THE MESSAGES AS INDICATED AT AN APPROPRIATE LOCATION AS DETERMINED BY THE ENGINEER.
4. ALL WORK THIS SHEET TO BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNAGE.

CALCULATED DPF
CHECKED BJF

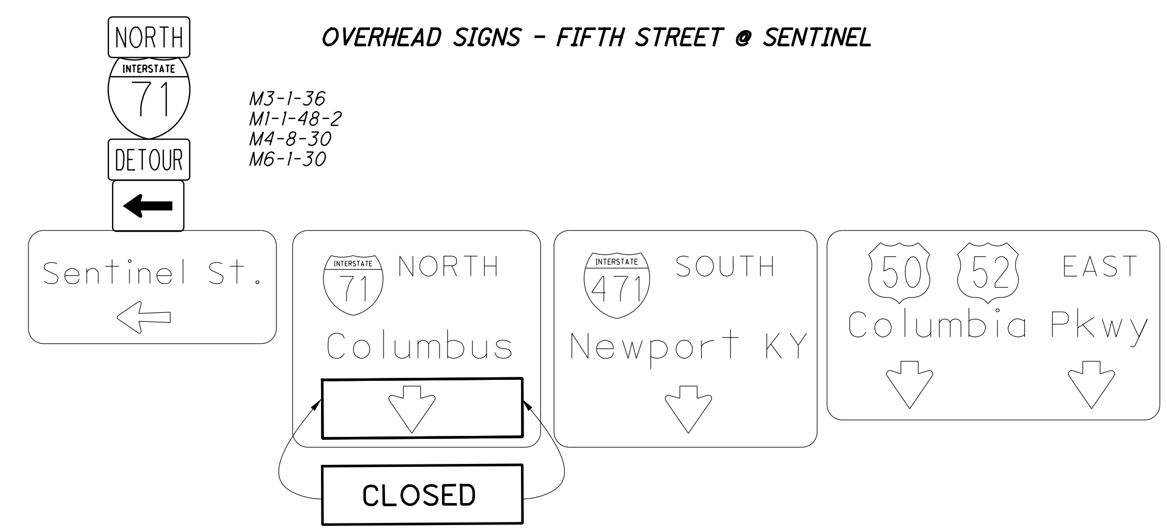
DETOUR PLAN - SECOND ST N.B. ON RAMP

HAM-71-1.59




1
NORTH
INTERSTATE 71
ROAD WORK AHEAD
M3-1-24
M1-1-24-2
W20-1-36
2
NORTH
INTERSTATE 71
RAMP CLOSED AHEAD
M3-1-24
M1-1-24-2
W20-3-36
3
NORTH
INTERSTATE 71
DETOUR AHEAD
M3-1-24
M1-1-24-2
W20-2-36
4
NORTH
INTERSTATE 71
DETOUR
M3-1-24
M1-1-24-2
M4-8-24
M6-3-21
5
NORTH
INTERSTATE 71
DETOUR
M3-1-24
M1-1-24-2
M4-8-24
M5-1-21
6
NORTH
INTERSTATE 71
DETOUR
M3-1-24
M1-1-24-2
M4-8-24
M6-1-21
7
NORTH
INTERSTATE 71
DETOUR
M3-1-24
M1-1-24-2
M4-8-24
M5-1-21
8
NORTH
INTERSTATE 71
DETOUR
M3-1-24
M1-1-24-2
M4-8-24
M6-1-21
9
NORTH
INTERSTATE 71
DETOUR
M6-2-21
10
NORTH
INTERSTATE 71
ROAD CLOSED
DETOUR
M3-1-24
M1-1-24-2
R11-2-48
M4-10L-48
11
ROAD CLOSED
R11-2-48

OVERHEAD SIGNS - FIFTH STREET @ SENTINEL



SIGN OVERLAY
(BLACK ON ORANGE)

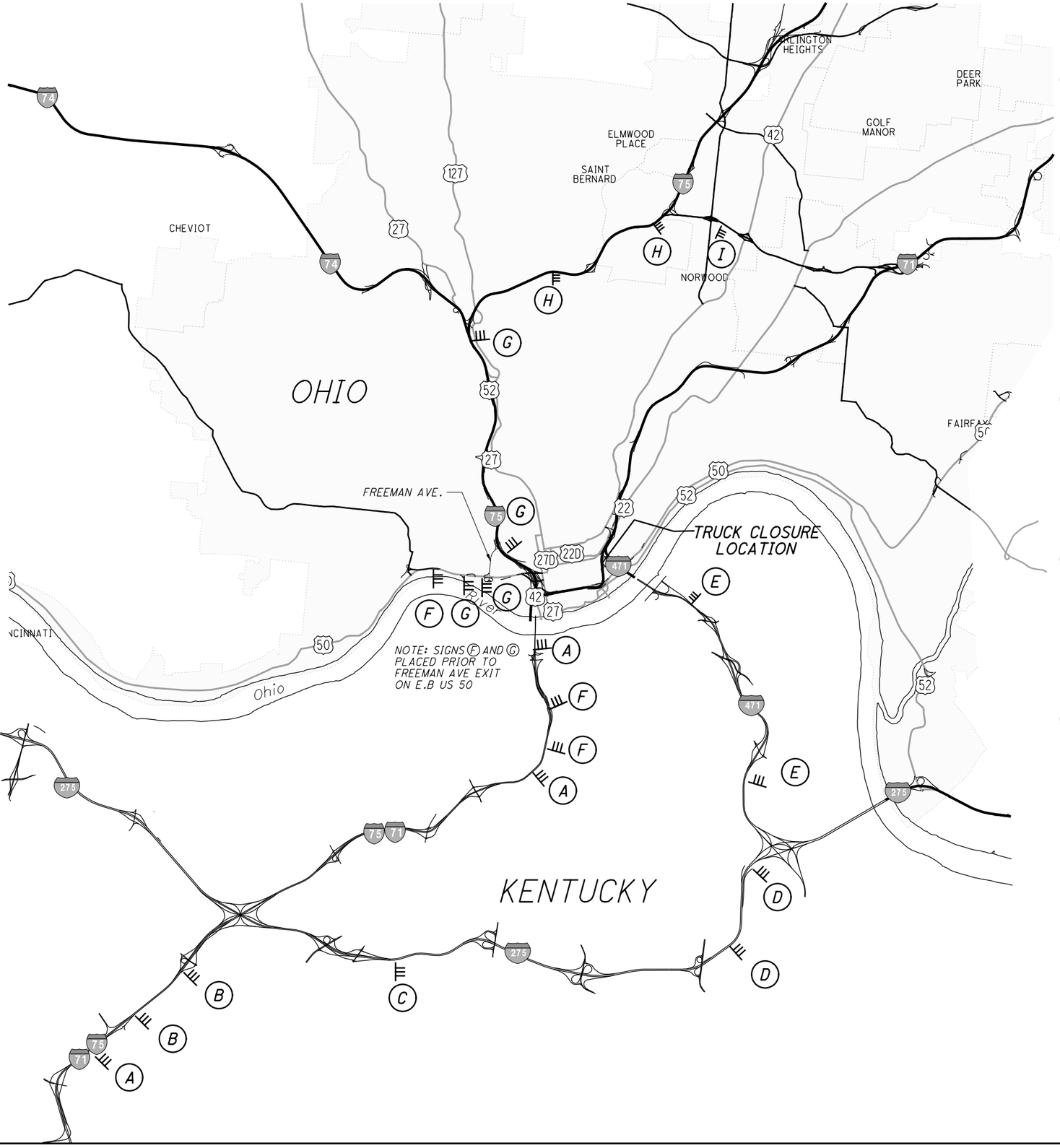
NOTES:

1. ALL SIGN OVERLAYS TO BE BLACK ON ORANGE.
2. CONTRACTOR TO COVER EXISTING CONFLICTING SIGNS.
3. PORTABLE CHANGEABLE MESSAGE SIGN (S) WILL BE PLACED IN ADVANCE OF THE DETOUR SIGNS, WITH THE MESSAGES AS INDICATED AT AN APPROPRIATE LOCATION AS DETERMINED BY THE ENGINEER.
4. USE OHIO MUTCD TYPICAL APPLICATION 6H-21 FOR FIFTH STREET WEST OF SENTINEL APPROACHING THE RAMP CLOSURE
5. ALL WORK THIS SHEET TO BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNAGE.

CALCULATED DPF
CHECKED BJF

DETOUR PLAN - FIFTH ST N.B. ON RAMP

HAM-71-1.59



(A) INTERSTATE 71 NORTH
OHIO
TRUCKS PROHIBITED
(WHITE ON BLACK)

(B) INTERSTATE 71 NORTH
TRUCK DETOUR
USE INTERSTATE 275 EAST
EXIT 185

(C) TRUCK DETOUR
FOLLOW INTERSTATE 275 EAST
TO INTERSTATE 471 NORTH
EXIT 74B

(D) INTERSTATE 71 NORTH
TRUCK DETOUR
USE INTERSTATE 471 NORTH
EXIT 74B

(E) TRUCK DETOUR
FOLLOW INTERSTATE 471 NORTH
TO INTERSTATE 71 NORTH

(F) INTERSTATE 71 NORTH
TRUCK DETOUR
USE INTERSTATE 75 NORTH

(G) TRUCK DETOUR
FOLLOW INTERSTATE 75 NORTH
TO 562 EAST
EXIT 7

(H) INTERSTATE 71 NORTH
TRUCK DETOUR
USE 562 EAST
EXIT 7

(I) TRUCK DETOUR
FOLLOW 562 EAST
TO INTERSTATE 71 NORTH

NOTES:

1. ALL SIGNS TO BE BLACK ON ORANGE, EXCEPT SIGN (A) WHICH SHALL BE BLACK ON WHITE. LEVEL 1 DESIGN ROUTE SHIELDS TO BE STANDARD COLORS.
2. GROUND MOUNT SIGNS SHALL BE PLACED SUCH THAT THEY HAVE MAXIMUM VISIBILITY TO TRUCK TRAFFIC, LOCATIONS TO BE APPROVED BY THE ENGINEER.
3. ALL WORK THIS SHEET TO BE INCLUDED IN THE LUMP SUM BID FOR ITEM 614 - DETOUR SIGNAGE.

N

0 2000 4000 8000 HORIZONTAL SCALE IN FEET

CALCULATED DPF CHECKED BJF

DETOUR PLAN
NORTH BOUND I-71 TRUCK DETOUR

HAM-71-1.59

LYTLE TUNNEL (HAM-71-0130L)

134+41.10
55.60 LT

℄ I-71 S.B.

℄ I-71 N.B.

℄ RAMP B

LYTLE TUNNEL (HAM-71-0130R)

EXIST 12" STORM

EXIST 15" STORM

EXIST 12" STORM

EXIST 12" STORM

EXIST 12" STORM

EXIST 12" STORM

EXIST 12" STORM

O/H SIGN
(MAINTAIN IN
PHASE 1)

O/H SIGN

1145.92'
(5°00' 00")

1145.92'
(5°00' 00")

1145.92'
(5°00' 00")

1145.92'
(5°00' 00")

OVERLAP P.B. PAST
MEDIAN REMOVAL LIMITS

MEDIAN REMOVAL LIMITS

CONNECT P.B. TO EXISTING
BARRIER PER S.C.D. MT-101.80

FLARE PCB AWAY FROM EDGE LINE
TO 3'-0" (TYPICAL SHEETS 35,36,37)

3'-0"

137+23.88
17.55 LT

137+09.90
32.54 RT

135+62.32
23.00 RT

139+65.00
15.50 RT

138+75.00
28.50 RT

138+44.00
41.50 RT

VARIES

12'

11'

134 135 136 137 138 139 140

MOT TRANSITION DETAILS
PHASE 2 - SOUTH END

HAM-71-1.59

37
176

CALCULATED DPF
CHECKED BJF

HORIZONTAL
SCALE IN FEET
0 10 20 40

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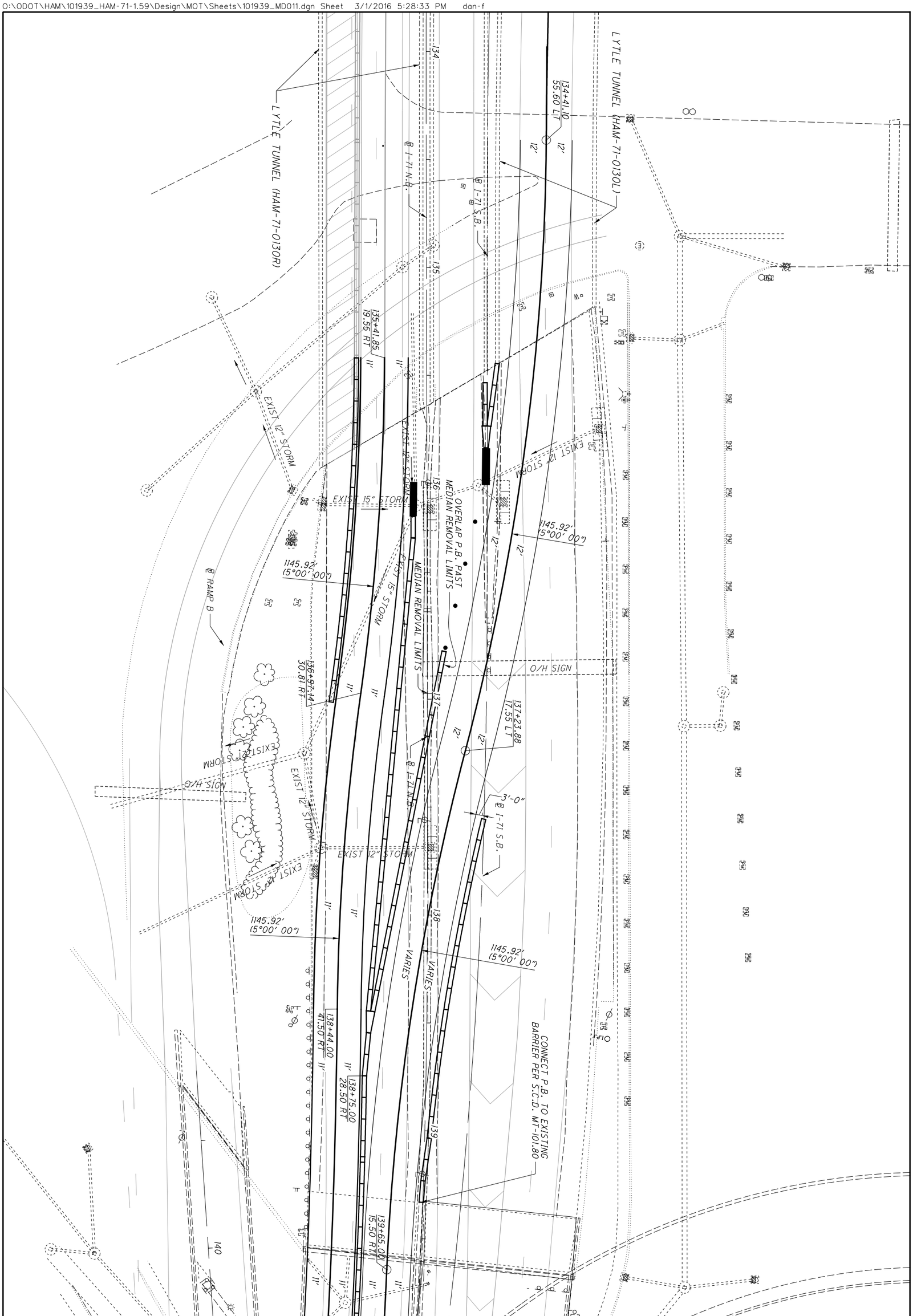
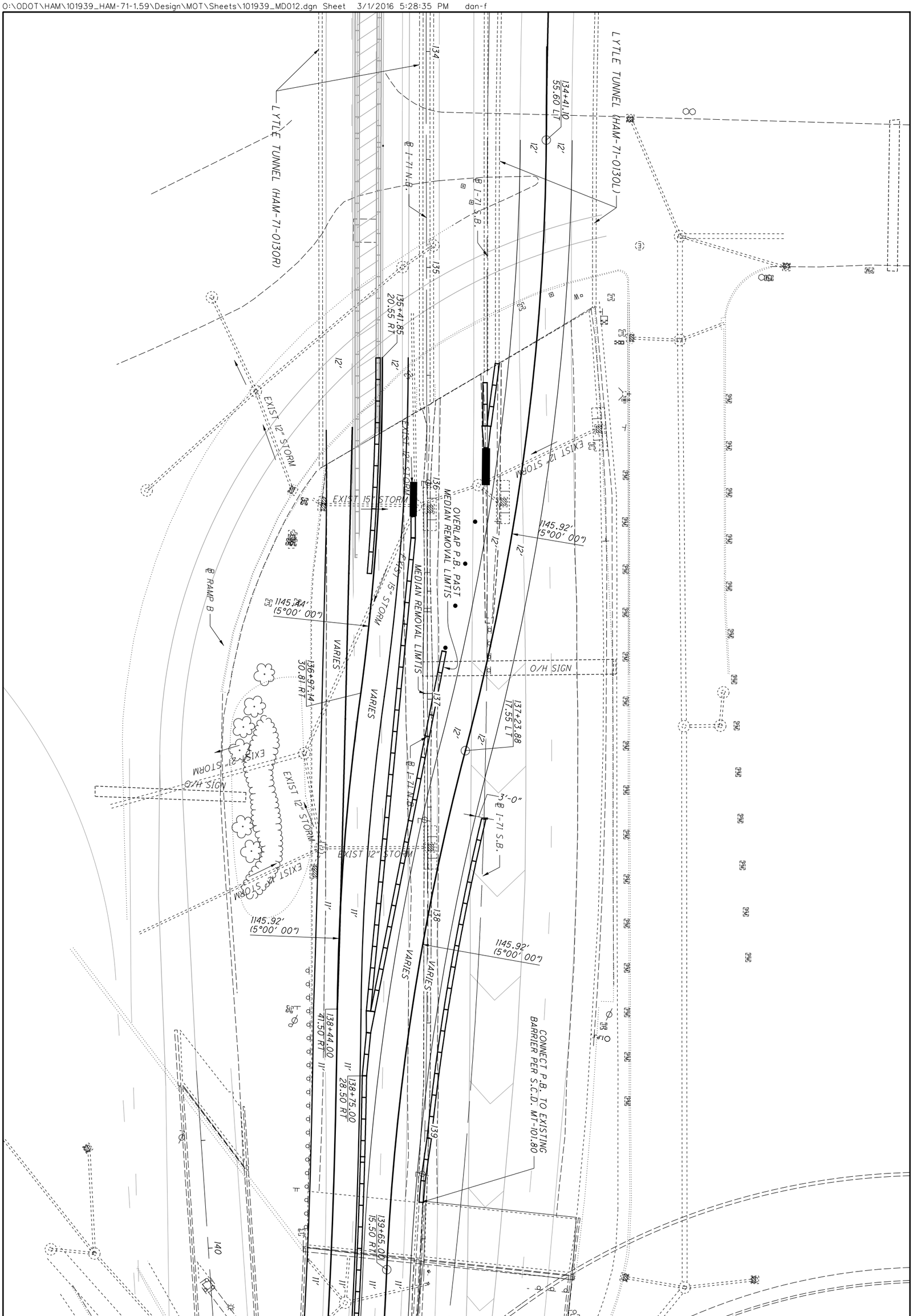
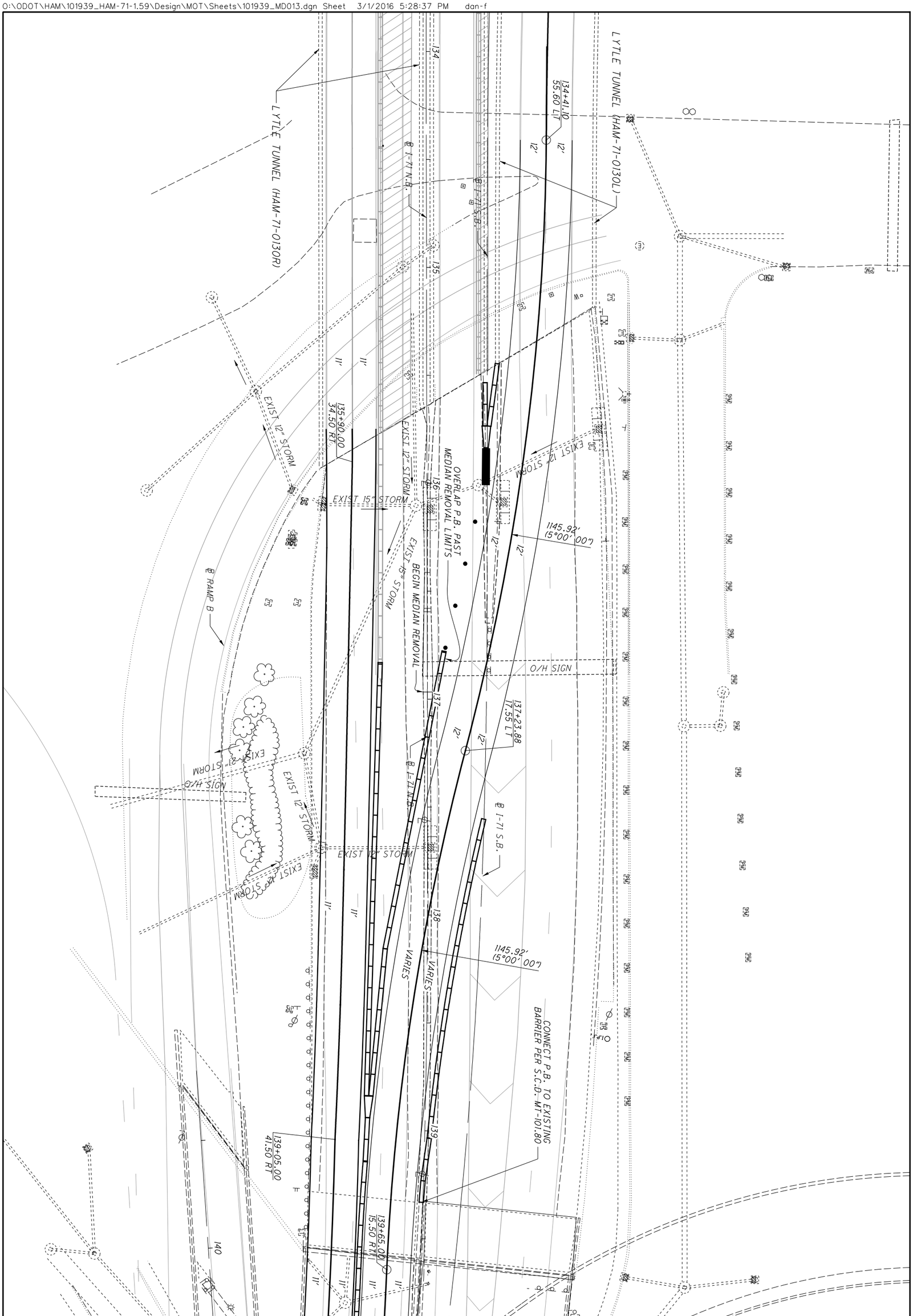


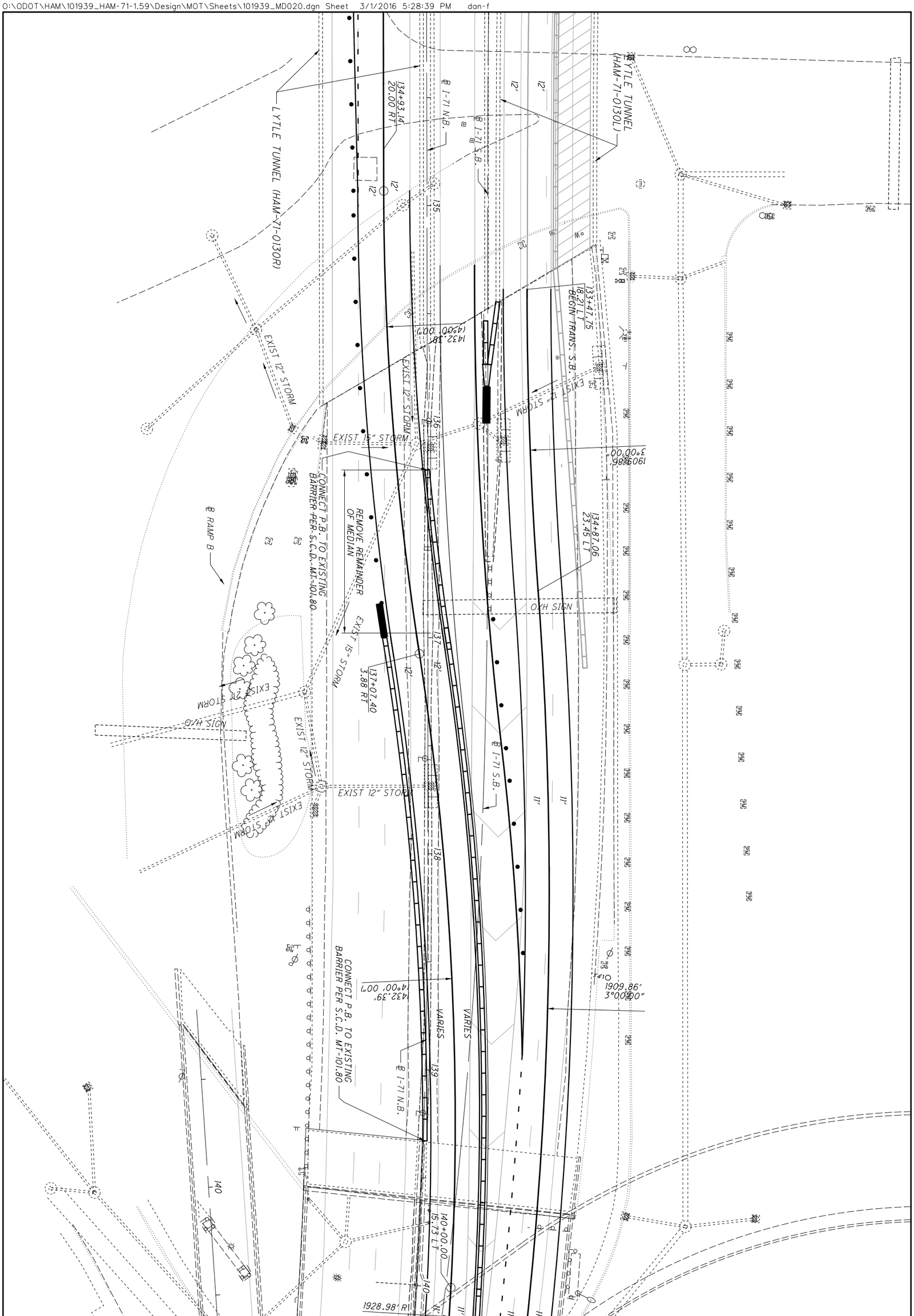
38 / 176	HAM-71-1.59	MOT TRANSITION DETAILS PHASE 2 (3A) - SOUTH END	CALCULATED DPF CHECKED BJF	0 10 20 40 HORIZONTAL SCALE IN FEET



39/176	HAM-71-1.59	MOT TRANSITION DETAILS PHASE 2 (3B) - SOUTH END	CALCULATED DPF CHECKED BJF	0 10 20 40 HORIZONTAL SCALE IN FEET



40 / 176	HAM-71-1.59	MOT TRANSITION DETAILS PHASE 2 (3C) - SOUTH END	CALCULATED DPF CHECKED BJF	0 20 10 40 HORIZONTAL SCALE IN FEET



41 / 176	HAM-71-1.59	MOT TRANSITION DETAILS PHASE 3 - SOUTH END	CALCULATED DPF CHECKED BJF	0 10 20 40 HORIZONTAL SCALE IN FEET

S.B. CURVE #1
P.I. Sta. 51+43.78
= 14° 18' 13" (RT)
Dc = 5° 00' 00"
R = 1,145.92'
T = 143.78'
L = 286.07'
E = 8.99'

S.B. CURVE #2
P.I. Sta. 54+08.34
= 12° 10' 51" (LT)
Dc = 5° 00' 00"
R = 1,145.92'
T = 122.27'
L = 243.62'
E = 6.50'

N.B. CURVE #1
P.I. Sta. 51+07.74
Δ = 8° 36' 10" (LT)
Dc = 4° 00' 00"
R = 1,432.39'
T = 107.74'
L = 215.07'
E = 4.05'

N.B. CURVE #2
P.I. Sta. 53+62.72
Δ = 11° 46' 12" (RT)
Dc = 4° 00' 00"
R = 1,432.39'
T = 147.64'
L = 294.25'
E = 7.59'

N.B. CURVE #3
P.I. Sta. 55+66.14
Δ = 3° 22' 28" (RT)
Dc = 2° 58' 13"
R = 1,928.98'
T = 56.82'
L = 113.61'
E = 0.84'

NOTES:

1) REMOVE EXISTING MEDIAN BARRIER AND FOOTING FROM STA. 136+22.90 N.B. I-71 TO BRIDGE APPROACH SLAB, PLACE 9" ASPHALT CONCETE BASE IN VOID FROM FOOTING REMOVAL, PLANE AND RESURFACE MEDIAN SHOULDER FOR SMOOTH TRANSITION TO THE GRADES INDICATED (PAVEMENT FOR M.O.T., AS PER PLAN)

2) REMOVE MEDIAN FOR PHASE 1 BEGINNING AT STA 136+95± TO MAINTAIN EXISTING SIGN TRUSS (SEE SHEETS 37-41)

LEGEND

PAVEMENT FOR M.O.T., CLASS A

PAVEMENT FOR M.O.T., CLASS A, AS PER PLAN

SOUTHBOUND CROSSOVER PROFILE

NORTHBOUND CROSSOVER PROFILE

HORIZONTAL SCALE IN FEET

CALCULATED DPF | CHECKED BJF

PLAN AND PROFILE
CROSSOVERS - SOUTH END

HAM-71-1.59

N.B. CURVE #4
P.I. Sta. 51+29.57
Δ = 7° 45' 44" (RT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 129.57'
L = 258.74'
E = 4.39'

N.B. CURVE #5
P.I. Sta. 53+88.31
Δ = 7° 45' 44" (LT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 129.57'
L = 258.74'
E = 4.39'

S.B. CURVE #3
P.I. Sta. 51+51.08
Δ = 9° 02' 45" (LT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 151.08'
L = 301.53'
E = 5.97'

S.B. CURVE #4
P.I. Sta. 54+51.95
Δ = 9° 00' 24" (RT)
Dc = 3° 00' 00"
R = 1,909.86'
T = 150.42'
L = 300.22'
E = 5.91'

LEGEND

SHOULDER REBUILD, AS PER TYPICAL SECTION, SHEET 3.

PAVEMENT FOR M.O.T., CLASS A, AS PER PLAN

I-471 S.B.

I-471 N.B.

EXIST SIGN TRUSS (TO REMAIN)

151+99.22 BEGIN SHOULDER REBUILD

152+84.00 BEGIN MEDIAN BARRIER REMOVAL

PC STA. 50+00.00 = STA. 153+00.00 ℄ I-71 - 15.00 LT

REMOVE MEDIAN INLET, PLUG 12"

EXIST 18" COMB.

EXIST 12" STM.

PRC STA. 53+01.53

STA. 52+41.51 ℄ N.B. X-OVER=
STA. 52+41.51 ℄ S.B. X-OVER=
℄ N.B. CROSSOVER (NORTH)

51+63.57

53+01.05 TEMP C.B. & 12", TYPE B

157+05.13 END SHOULDER REBUILD

S.B. CURVE #4

157+27.00 END MEDIAN BARRIER REMOVAL

157+64.99 END SHOULDER REBUILD

PT STA. 56+01.75 = STA. 158+99.27 ℄ I-71 - 32.00 LT

PC STA. 158+83.68

PCC STA. 159+83.86

℄ I-71

℄ I-71 N.B.

N.B. CURVE #4

S.B. CURVE #3

EXIST 18" STM.

PT STA. 151+69.94

151+59.22 BEGIN SHOULDER REBUILD

PC STA. 50+00.00 = STA 153+00.00 ℄ I-71 -15.50 RT

51+69.31 EXIST 18" STM. ℄ S.B. CROSSOVER (NORTH)

EXIST 15" STM.

EXIST 12" STM.

PRC STA. 52+58.14

EXIST CANTILEVER SIGN (REMOVE)

N.B. CURVE #5 REMOVE MEDIAN INLET, PLUG 12"

157+91.59 END SHOULDER REBUILD

PT STA. 55+17.48= STA. 158+15.90 ℄ I-71 - 20.00 RT

158+51.45 END SHOULDER REBUILD

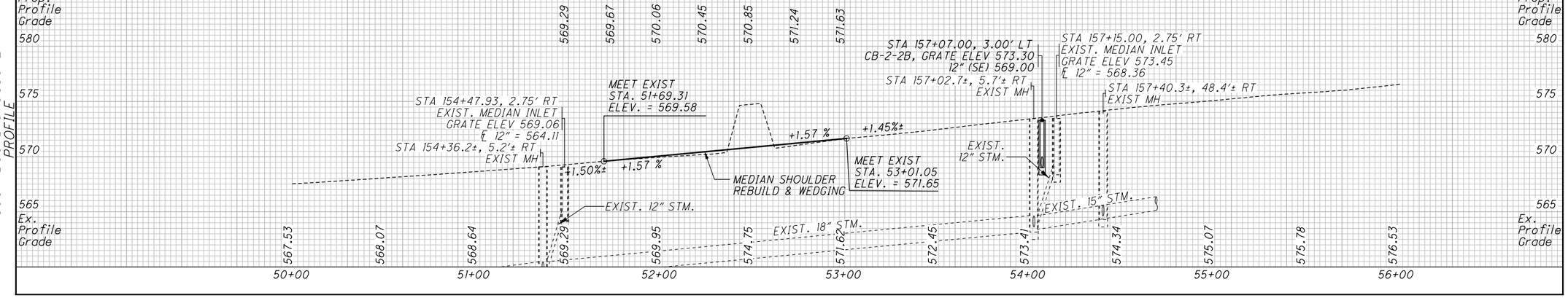
EXIST SIGN TRUSS (TO REMAIN)

NOTES:

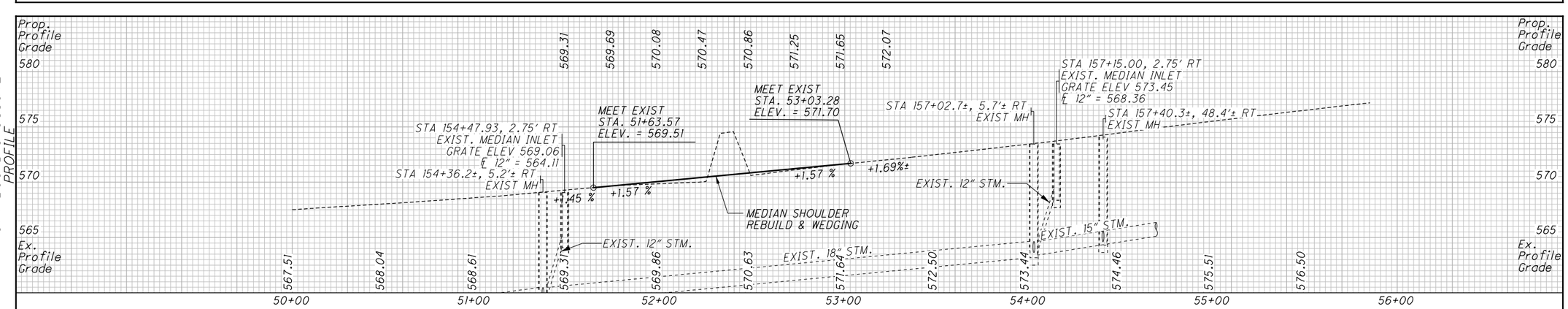
1) REMOVE EXISTING MEDIAN BARRIER AND FOOTING FROM STA. 152+84.00 TO STA. 157+27.00 REBUILD MEDIAN SHOULDERS AS PER TYPICAL SECTION, SHEET 3. PLACE 9" ASPHALT CONCETE BASE IN VOID FROM FOOTING REMOVAL. PROVIDE ADDITIONAL ASPHALT RESURFACING (TO BE REMOVED LATER) ON MEDIAN SHOULDER FOR SMOOTH TRANSITION TO THE GRADES INDICATED (PAVEMENT FOR M.O.T, AS PER PLAN)

2) SEE SHEET 47 FOR TEMP. DRAINAGE QUANTITIES

SOUTHBOUND CROSSOVER PROFILE



NORTHBOUND CROSSOVER PROFILE



HORIZONTAL SCALE IN FEET
0 15 30 60

CALCULATED DPF
CHECKED BJF

PLAN AND PROFILE CROSSOVERS - NORTH END

HAM-71-1.59

43
176

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SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
						6	7	46		OFFICE CALCS	01/IMS/BR	02/IMS/BR	03/IMS/PV						
																		ROADWAY	
											LS			201	11000	LS		CLEARING AND GRUBBING	
								980			980			202	30700	980	FT	CONCRETE BARRIER REMOVED	
								105			105			202	38000	105	FT	GUARDRAIL REMOVED	
								1			1			202	47000	1	EACH	BRIDGE TERMINAL ASSEMBLY REMOVED	
								1			1			202	47800	1	EACH	IMPACT ATTENUATOR REMOVED	
								4			4			202	58200	4	EACH	INLET REMOVED	
								41			41			202	35100	41	FT	PIPE REMOVED, 24" AND UNDER	
								3			3			202	58100	3	EACH	CATCH BASIN REMOVED	
						830							830	SPECIAL	20270110	830	FT	PIPE CLEANOUT, 24" AND UNDER	6
								69			69			203	35120	69	CY	GRANULAR MATERIAL, TYPE C	
										3,073	3,073			204	10000	3,073	SY	SUBGRADE COMPACTION	
										1,211	1,211			204	13000	1,211	CY	EXCAVATION OF SUBGRADE	
										1,211	1,211			204	30020	1,211	CY	GRANULAR MATERIAL, TYPE C	
										2,937	2,937			204	50000	2,937	SY	GEOTEXTILE FABRIC	
								26			26			601	21000	26	SY	CONCRETE SLOPE PROTECTION	
								162.5			162.5			606	15050	162.5	FT	GUARDRAIL, TYPE MGS	
								1			1			606	26100	1	EACH	ANCHOR ASSEMBLY, TYPE E	
								1			1			606	35002	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	
								1			1			606	60040	1	EACH	IMPACT ATTENUATOR, TYPE 3 UNIDIRECTIONAL	7
								152			152			622	10160	152	FT	CONCRETE BARRIER, SINGLE SLOPE, TYPE D	
								748			748			622	23405	748	FT	CONCRETE BARRIER, TYPE B1, AS PER PLAN	7
								1			1			622	24840	1	EACH	CONCRETE BARRIER END SECTION, TYPE B	
											LS			SPECIAL	69021000	LS		MISC.:CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION	7
																		EROSION CONTROL	
											5,000			832	30000	5,000	EACH	EROSION CONTROL	
																		DRAINAGE	
								41			41			611	04400	41	FT	12" CONDUIT, TYPE B	
								1			1			611	98370	1	EACH	CATCH BASIN, NO. 6	
								2			2			611	98470	2	EACH	CATCH BASIN, NO. 2-2B	
								1			1			611	98820	1	EACH	INLET, NO. 3D	
								3			3			611	99500	3	EACH	INLET, MISC.:BARRIER INLET 1-3B TYPE B1	7
																		PAVEMENT	
							390						390	253	01000	390	SY	PAVEMENT REPAIR	
										13,923	13,923			254	01000	13,923	SY	PAVEMENT PLANING, ASPHALT CONCRETE	
										1,392	1,392			254	01600	1,392	SY	PATCHING PLANED SURFACE	
										655	655			302	46000	655	CY	ASPHALT CONCRETE BASE, PG64-22	
										580	580			304	20000	580	CY	AGGREGATE BASE	
										1,044	1,044			407	10000	1,044	GAL	TACK COAT	
										823			823	407	14000	823	GAL	TACK COAT FOR INTERMEDIATE COURSE	
										685	685			442	10000	685	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5MM, TYPE A (446)	
										1,262			1,262	442	20200	1,262	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19MM, TYPE A (448)	

CALCULATED CML
CHECKED DPF

GENERAL SUMMARY

HAM-71-1.59

SHEET NUM.	PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
66	01/IMS/BR	02/IMS/BR	03/IMS/PV						
								TRAFFIC CONTROL	
121	116	5		621	00100	121	EACH	RPM	
1,730			1,730	625	23100	1,730	FT	NO. 2 AWG 600 VOLT DISTRIBUTION CABLE	
1,680			1,680	625	25300	1,680	FT	CONDUIT, 1-1/2", 725.04	
2	1		1	625	32000	2	EACH	GROUND ROD	
113	113			626	00100	113	EACH	BARRIER REFLECTOR	
59.7	49.6		10.1	630	02100	59.7	FT	GROUND MOUNTED SUPPORT, NO. 2 POST	
60			60	630	03100	60	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
32.7			32.7	630	04100	32.7	FT	GROUND MOUNTED SUPPORT, NO. 4 POST	
8	1		7	630	08600	8	EACH	SIGN POST REFLECTOR	
2	2			630	20900	2	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 9	
1	1			630	66501	1	EACH	OVERHEAD SIGN SUPPORT, TYPE TC-15.115, AS PER PLAN	65
7	6		1	630	79610	7	EACH	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED	
83.5	22.3		61.2	630	80100	83.5	SF	SIGN, FLAT SHEET	
3	3			630	84510	3	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
5	1		4	630	84900	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
5	5			630	85100	5	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
13	6		7	630	86002	13	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
2	2			630	87100	2	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	
5	5			630	87400	5	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
4	4			630	89702	4	EACH	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	
1			1	630	97700	1	EACH	SIGNING, MISC.:ERECTION OF STORED OVERHEAD SIGN AND FLASHING BEACONS	65
5	5			630	97700	5	EACH	SIGNING, MISC.:ERECTION OF STORED OVERHEAD SIGN	65
2	2			631	92001	2	EACH	SIGN FLASHER ASSEMBLY, AS PER PLAN	65
15	15			631	94250	15	EACH	REMOVAL OF LUMINAIRE	
4	4			631	94350	4	EACH	REMOVAL OF DISCONNECT SWITCH	
8	8			631	94406	8	EACH	REMOVAL OF SIGNS WIRED	
8	8			631	94450	8	EACH	REMOVAL OF BALLAST	
4	4			631	94470	4	EACH	REMOVAL OF SIGN SERVICE	
4	4			631	94480	4	EACH	REMOVAL OF PHOTOELECTRIC CONTROL	
1.08	1.08			644	00104	1.08	MILE	EDGE LINE, 6"	
0.77	0.77			644	00204	0.77	MILE	LANE LINE, 6"	
495	495			644	00404	495	FT	CHANNELIZING LINE, 12"	
163	163			644	00700	163	FT	TRANSVERSE/DIAGONAL LINE	
448	448			644	01510	448	FT	DOTTED LINE, 6"	
1,734	1,734			644	01514	1,734	FT	DOTTED LINE, 8"	
0.98	0.84	0.14		646	10010	0.98	MILE	EDGE LINE, 6"	
0.63	0.63			646	10110	0.63	MILE	LANE LINE, 6"	
1,544	1,544			646	10310	1,544	FT	CHANNELIZING LINE, 12"	
113	113			646	10600	113	FT	TRANSVERSE/DIAGONAL LINE	
472	472			646	20504	472	FT	DOTTED LINE, 6"	
911	911			646	20506	911	FT	DOTTED LINE, 8"	

CALCULATED CML
CHECKED DPF

GENERAL SUMMARY

HAM-71-1.59

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
9	10	11	12	13	14						01/IMS/BR	02/IMS/BR	03/IMS/PV						
																		MAINTENANCE OF TRAFFIC	
		1,500									1,500			614	11110	1,500	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
			12								12			614	11500	12	MNTH	WORKSITE TRAFFIC SUPERVISOR	12
				1,865	3,265						5,130			614	11630	5,130	FT	INCREASED BARRIER DELINEATION	
				12	3						15			614	12336	15	EACH	WORK ZONE IMPACT ATTENUATOR (UNIDIRECTIONAL)	
	8										8			614	12410	8	EACH	SPEED ZONE AHEAD SYMBOL SIGN	
											LS			614	12420	LS		DETOUR SIGNING	
	13										13			614	12470	13	EACH	WORK ZONE SPEED LIMIT SIGN	
	11										11			614	12484	11	EACH	WORK ZONE INCREASED PENALTIES SIGN	
10											10			614	12500	10	EACH	REPLACEMENT SIGN	
100											100			614	12600	100	EACH	REPLACEMENT DRUM	
			2								2			614	12756	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
				785	639						1,424			614	12801	1,424	EACH	WORK ZONE RAISED PAVEMENT MARKER, AS PER PLAN	11
				231	242						473			614	13100	473	EACH	BARRIER REFLECTOR	
				155	162						317			614	13350	317	EACH	OBJECT MARKER, ONE WAY	
			LS								LS			614	18002	LS		MAINTAINING TRAFFIC, MISC.:MAINTENANCE OF MAJOR GUIDE SIGNS	12
300											300			614	18030	300	FT	MAINTAINING TRAFFIC, MISC.:PEDESTRIAN PROTECTION CANOPY	9
	48										48			614	18601	48	SNMT	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	10
				0.38	0.07						0.45			614	20000	0.45	MILE	WORK ZONE LANE LINE, CLASS I	
					0.24						0.24			614	20200	0.24	MILE	WORK ZONE LANE LINE, CLASS I, 740.06, TYPE I	
					1.4						1.4			614	20550	1.40	MILE	WORK ZONE LANE LINE, CLASS III, 642 PAINT	
				2.63	1.4						4.03			614	22000	4.03	MILE	WORK ZONE EDGE LINE, CLASS I	
					0.84						0.84			614	22200	0.84	MILE	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	
					2.06						2.06			614	22350	2.06	MILE	WORK ZONE EDGE LINE, CLASS III, 642 PAINT	
				5,308	3,606						8,914			614	23000	8,914	FT	WORK ZONE CHANNELIZING LINE, CLASS I	
					899						899			614	23400	899	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 740.06, TYPE I	
					2,039						2,039			614	23680	2,039	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 642 PAINT	
				1,274	1,423						2,697			614	24000	2,697	FT	WORK ZONE DOTTED LINE, CLASS I	
					300						300			614	24400	300	FT	WORK ZONE DOTTED LINE, CLASS I, 740.06, TYPE I	
					3,565						3,565			614	24610	3,565	FT	WORK ZONE DOTTED LINE, CLASS III, 642 PAINT	
					108						108			614	25000	108	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS I	
					113						113			614	25620	113	FT	WORK ZONE TRANSVERSE/DIAGONAL LINE, CLASS III, 642 PAINT	
											LS			615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
					94						94			615	20000	94	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A	
					696						696			615	20001	696	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS A, AS PER PLAN	9
				6,580	910						7,490			622	41000	7,490	FT	PORTABLE BARRIER, 32"	
				1,940	1,940						3,880			622	41011	3,880	FT	PORTABLE BARRIER, 50", AS PER PLAN	9
				4	1						5			622	41050	5	EACH	PORTABLE BARRIER, "Y" CONNECTOR	
																		INCIDENTALS	
											LS			SPECIAL	10810000	LS		CPM PROGRESS SCHEDULE	
											LS			614	11000	LS		MAINTAINING TRAFFIC	
											12			619	16020	12	MNTH	FIELD OFFICE, TYPE C	
											LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS			624	10000	LS		MOBILIZATION	

CALCULATED CML
CHECKED DPF

GENERAL SUMMARY

HAM-71-1.59

ROADWAY SUBSUMMARY

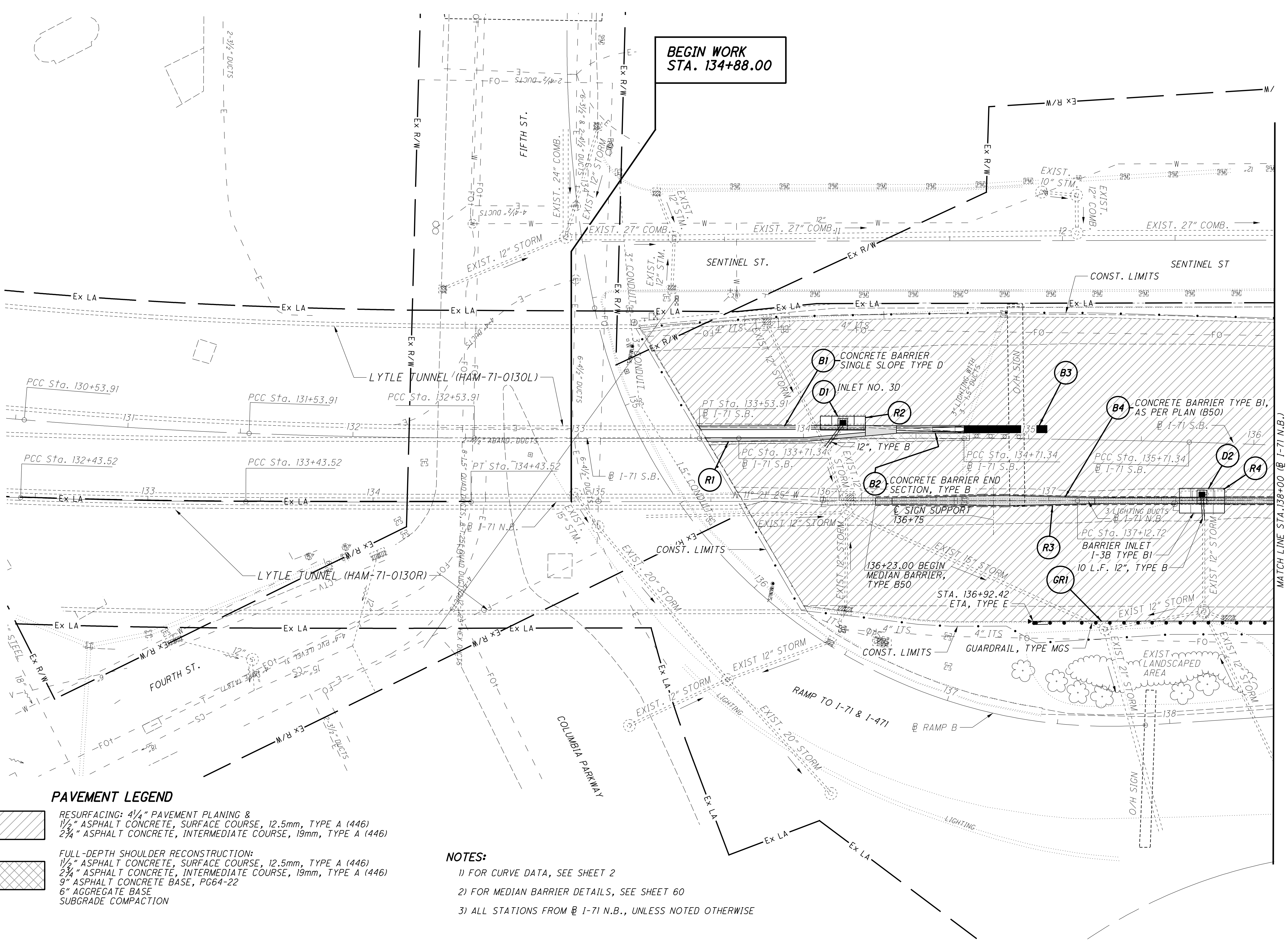
CALCULATED DPF
CHECKED BJF

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	611 - DRAINAGE: INLET, NO. 3D (EACH)	BARRIER INLET, I-3B TYPE B1 (EACH)	CB-6 (EACH)	CB 2-2B (EACH)	12", TYPE B (FT)
D1		134+17.5		LT	1				13
D2		137+66.99		℄		1			10
D3		154+80.0		℄		1			4
D4		157+15.0		℄		1			4
MOT	41	136+04.5		LT				1	
MOT	41	137+68.7		RT			1		
MOT	42	157+07.0		℄				1	10
TOTALS CARRIED TO GENERAL SUMMARY (01/IMS/BR)					1	3	1	2	41

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	202 - REMOVALS: GUARDRAIL (FT)	BRIDGE TERMINAL ASSEMBLY (EACH)	CONCRETE BARRIER (FT)	IMPACT ATTENUATOR (EACH)	INLET (EACH)	CATCH BASIN (EACH)	PIPE, 24" AND UNDER (FT)
R1		133+55.52	134+71.0	LT			231	1			
R2		134+17.5		LT					1		13
R3		136+23.00	139+33.03	℄			273				
R4		137+68.0		℄					1		10
R5		138+24.3	139+29.0	RT	105	1					
R6		152+84.0	157+27.0	℄			396				
R7		154+47.9		℄					1		4
R8		157+15.0		℄					1		4
R9		157+55.00	158+45.00	℄			80				
MOT	41	136+04.5		LT						1	
MOT	41	137+68.7		RT						1	
MOT	42	157+07.0		℄						1	10
TOTALS CARRIED TO GENERAL SUMMARY (01/IMS/BR)					105	1	980	1	4	3	41

REF. NO.	SHEET NO.	STATION FROM	STATION TO	SIDE	606: GUARDRAIL, TYPE MGS (FT)	MCS BRIDGE TERMINAL ASSEMBLY, TYPE 1 (EACH)	ANCHOR ASSEMBLY, MGS TYPE E (EACH)	IMPACT ATTENUATOR, TYPE 3 (EACH)	622: CONCRETE BARRIER SINGLE SLOPE, TYPE D (FT)	CONCRETE BARRIER TYPE B1, AS PER PLAN (FT)	CONCRETE BARRIER END SECTION, TYPE B (EACH)	203: GRANULAR MATERIAL, TYPE C (CY)	601: CONCRETE SLOPE PROTECTION (SY)
B1		133+55.52	134+41.35						152			69	26
B2		134+41.35	134+85.18								1		
B3		134+85.18						1					
B4		136+23.00	139+33.03							273			
B5		152+84.00	157+27.00							396			
B6		157+55.00	158+45.00							80			
GR1		136+92.42	139+29.92	RT	162.5	1	1						
TOTALS CARRIED TO GENERAL SUMMARY (01/IMS/BR)					162.5	1	1	1	152	748	1	69	26

HAM-71-1.59


BEGIN WORK
STA. 134+88.00
FIFTH ST.
SENTINEL ST.
SENTINEL ST
FOURTH ST.
COLUMBIA PARKWAY
RAMP TO I-71 & I-471
LYTLE TUNNEL (HAM-71-0130L)
LYTLE TUNNEL (HAM-71-0130R)
PCC Sta. 130+53.91
PCC Sta. 131+53.91
PCC Sta. 132+53.91
PCC Sta. 132+43.52
PCC Sta. 133+43.52
PT Sta. 134+43.52
PT Sta. 133+53.91
PC Sta. 133+71.34
PCC Sta. 134+71.34
PCC Sta. 135+71.34
PC Sta. 137+12.72
B1 CONCRETE BARRIER SINGLE SLOPE TYPE D
D1 INLET NO. 3D
R2
B3
B4 CONCRETE BARRIER TYPE B1, AS PER PLAN (B50)
D2
R4
R1
B2 CONCRETE BARRIER END SECTION, TYPE B
12", TYPE B
℄ SIGN SUPPORT 136+75
R3
BARRIER INLET I-3B TYPE B1
10 L.F. 12", TYPE B
GR1
136+23.00 BEGIN MEDIAN BARRIER, TYPE B50
STA. 136+92.42 ETA, TYPE E
GUARDRAIL, TYPE MGS
CONST. LIMITS
EXIST. LANDSCAPED AREA
MATCH LINE STA.138+00 (℄ I-71 N.B.)
℄ RAMP B
℄ I-71 S.B.
℄ I-71 N.B.
EXIST. 27" COMB.
EXIST. 12" STORM
EXIST. 20" STORM
EXIST. 15" STORM
EXIST. 24" COMB.
O/H SIGN
Ex R/W
Ex LA

PAVEMENT LEGEND

RESURFACING: 4¼" PAVEMENT PLANING &
1½" ASPHALT CONCRETE, SURFACE COURSE, 12.5mm, TYPE A (446)
2¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, 19mm, TYPE A (446)

FULL-DEPTH SHOULDER RECONSTRUCTION:
1½" ASPHALT CONCRETE, SURFACE COURSE, 12.5mm, TYPE A (446)
2¾" ASPHALT CONCRETE, INTERMEDIATE COURSE, 19mm, TYPE A (446)
9" ASPHALT CONCRETE BASE, PG64-22
6" AGGREGATE BASE
SUBGRADE COMPACTION

NOTES:

1) FOR CURVE DATA, SEE SHEET 2
2) FOR MEDIAN BARRIER DETAILS, SEE SHEET 60
3) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE

HORIZONTAL SCALE IN FEET (0, 10, 20, 40)

CALCULATED DPF
CHECKED BJF

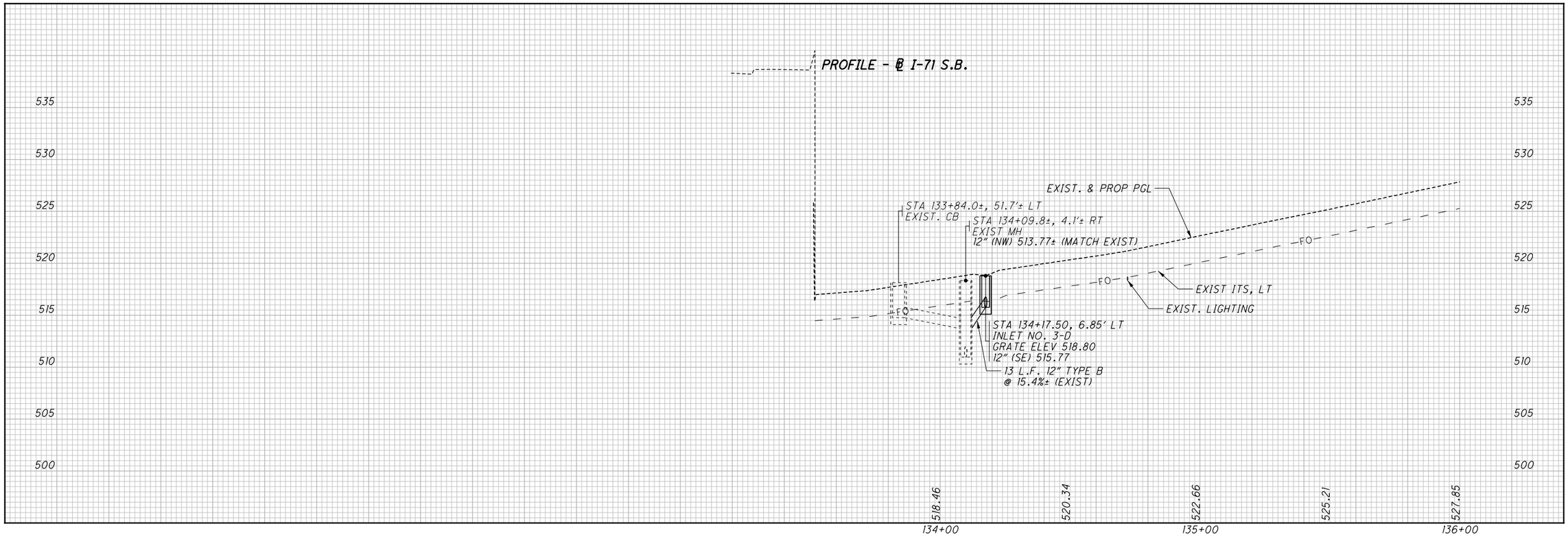
PLAN I-71
STA. 133+00 TO STA 138+00

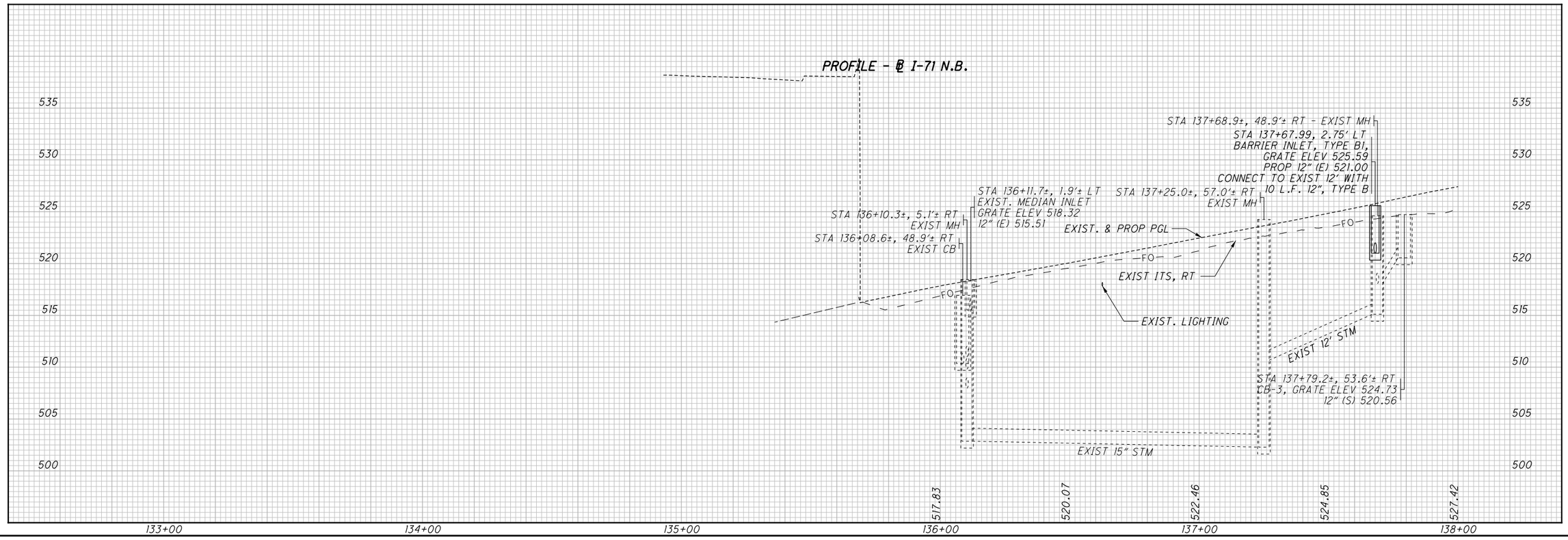
HAM-71-1.59

CALCULATED DPF
CHECKED BJF

PROFILE - STA. 133+00 TO STA 138+00

HAM-71-1.59





NOTES:

1) FOR CURVE DATA, SEE SHEET 2

2) ✣✣: DRAINAGE CLEANOUT LOCATIONS, BRIDGE DRAINAGE & DOWNSPOUT CONNECTIONS TO BE CLEANED/FLUSHED TO NEAREST MH. (SEE GENERAL NOTES, SHEET 6)

3) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE

4) FOR PAVEMENT LEGEND, SEE SHEET 48

5) FOR MEDIAN BARRIER DETAILS, SEE SHEET 60

PLAN - I-71

STA. 138+00 TO STA 143+00

HAM-71-1.59

HORIZONTAL SCALE IN FEET 0 10 20 40

CALCULATED DPF

CHECKED BJF

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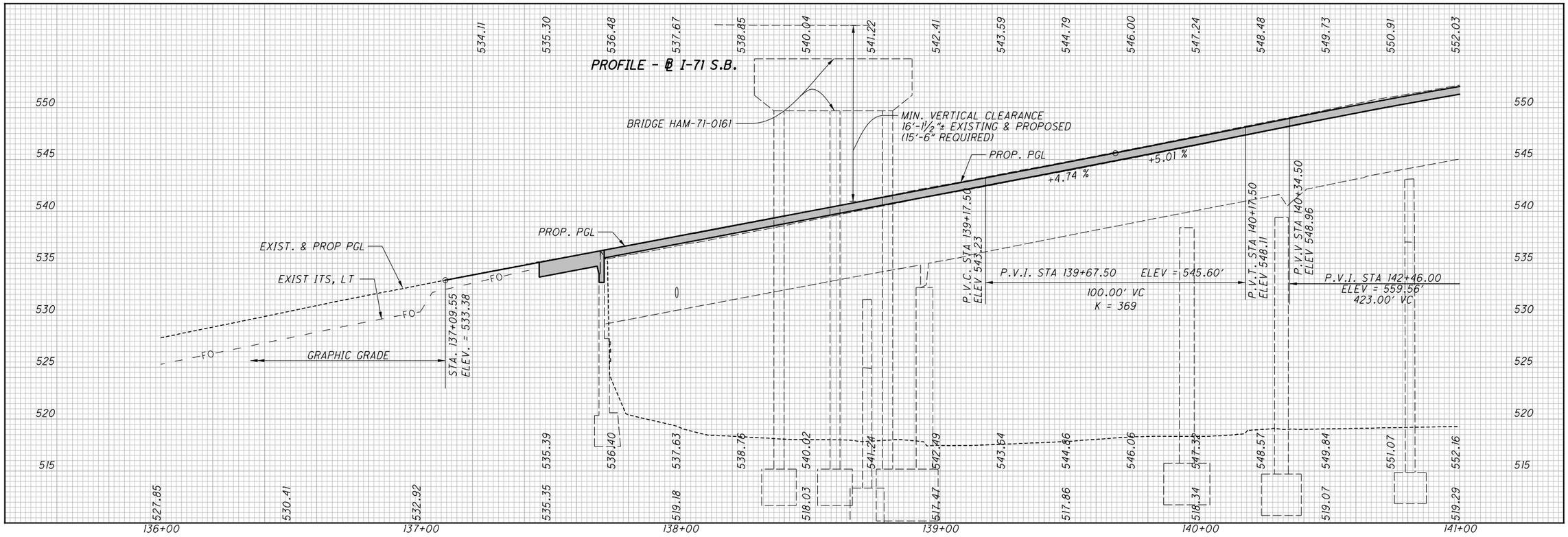
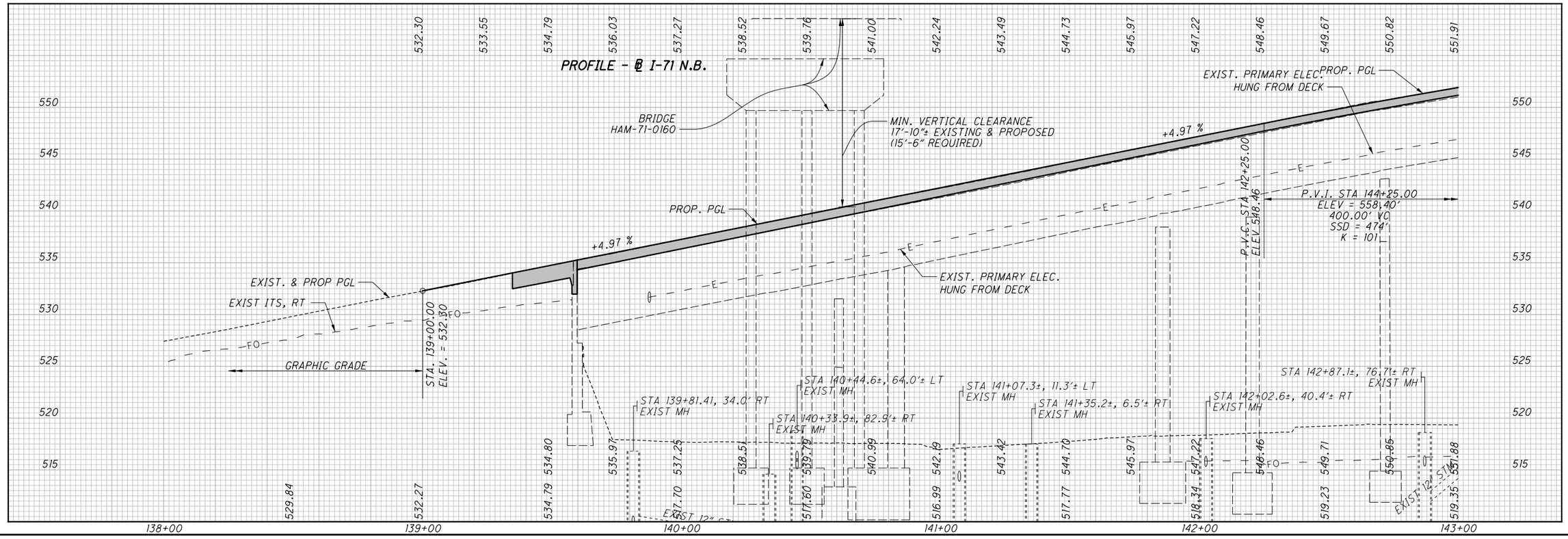


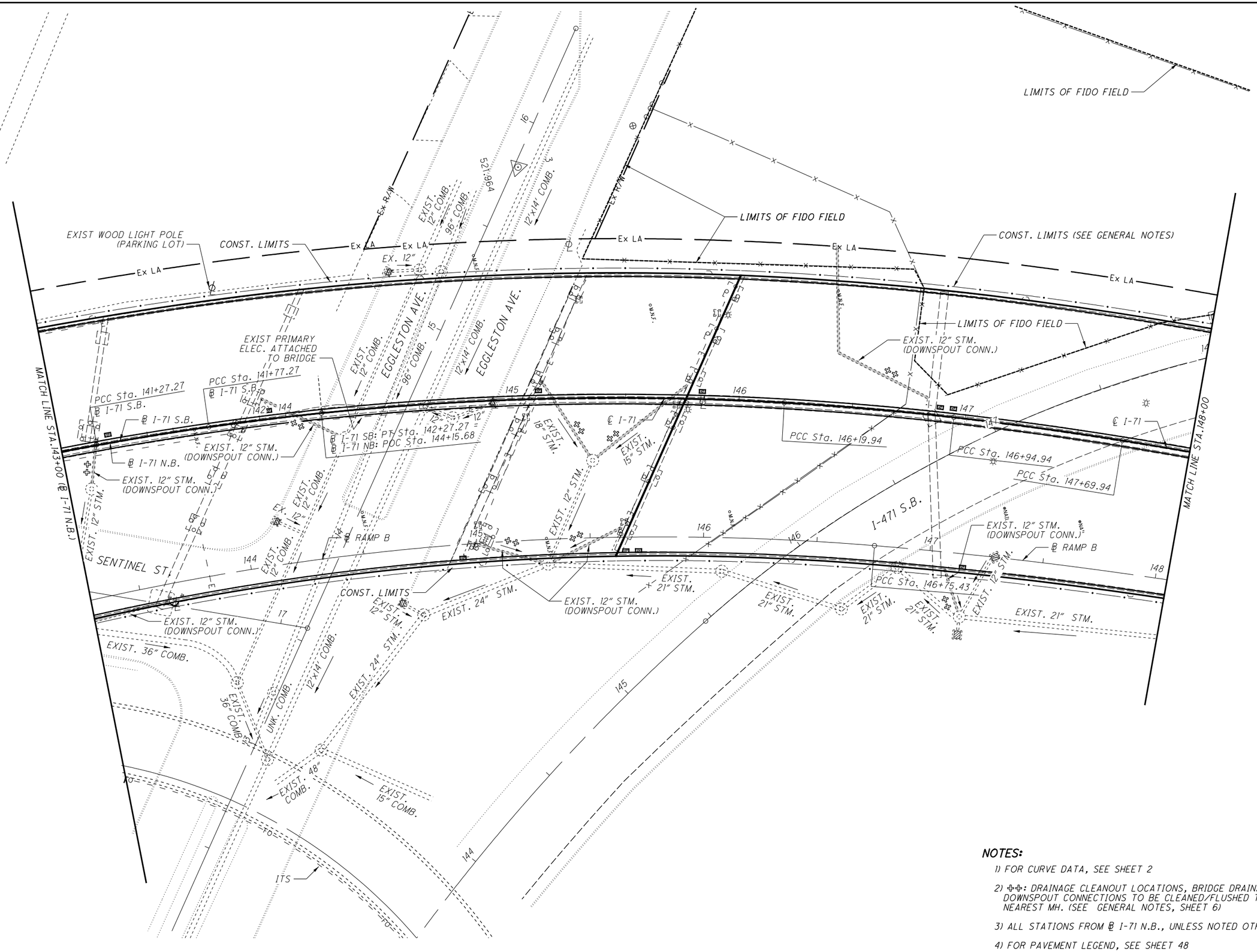


PROFILE - STA. 138+00 TO STA 143+00

HAM-71-1.59

CALCULATED DPF
CHECKED BJF

51
176



NOTES:

1) FOR CURVE DATA, SEE SHEET 2

2) ✣✣: DRAINAGE CLEANOUT LOCATIONS, BRIDGE DRAINAGE & DOWNSPOUT CONNECTIONS TO BE CLEANED/FLUSHED TO NEAREST MH. (SEE GENERAL NOTES, SHEET 6)

3) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE

4) FOR PAVEMENT LEGEND, SEE SHEET 48

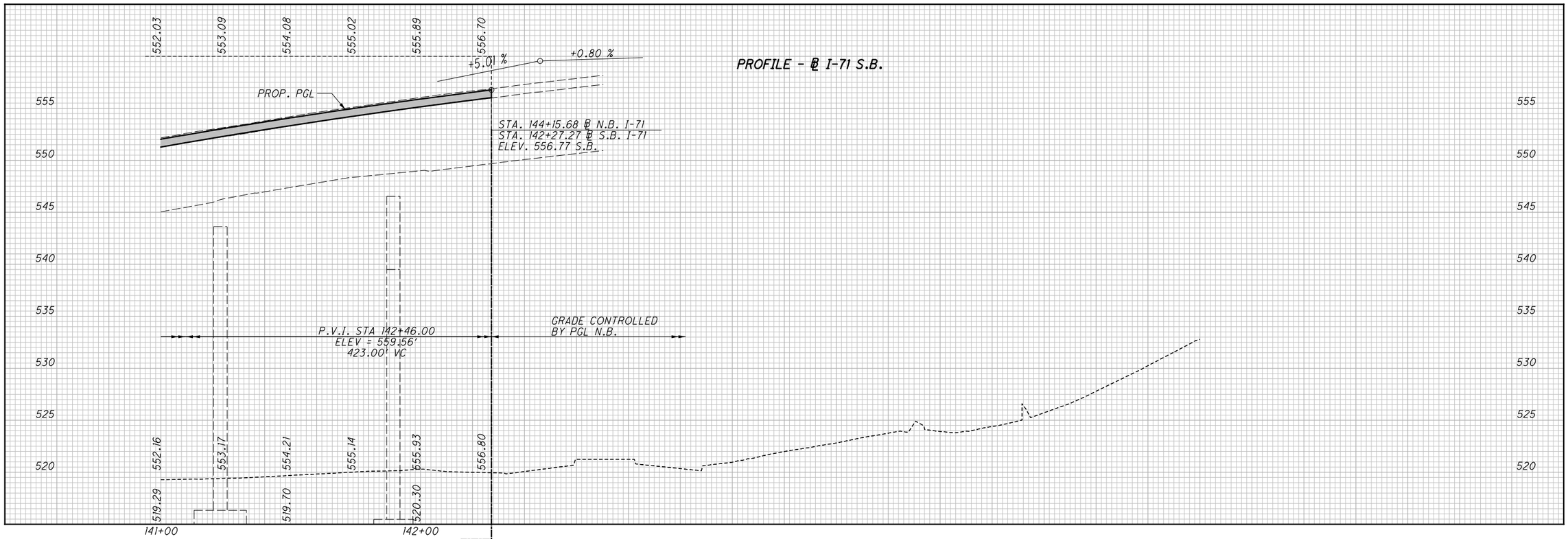
HORIZONTAL SCALE IN FEET
0 10 20 40

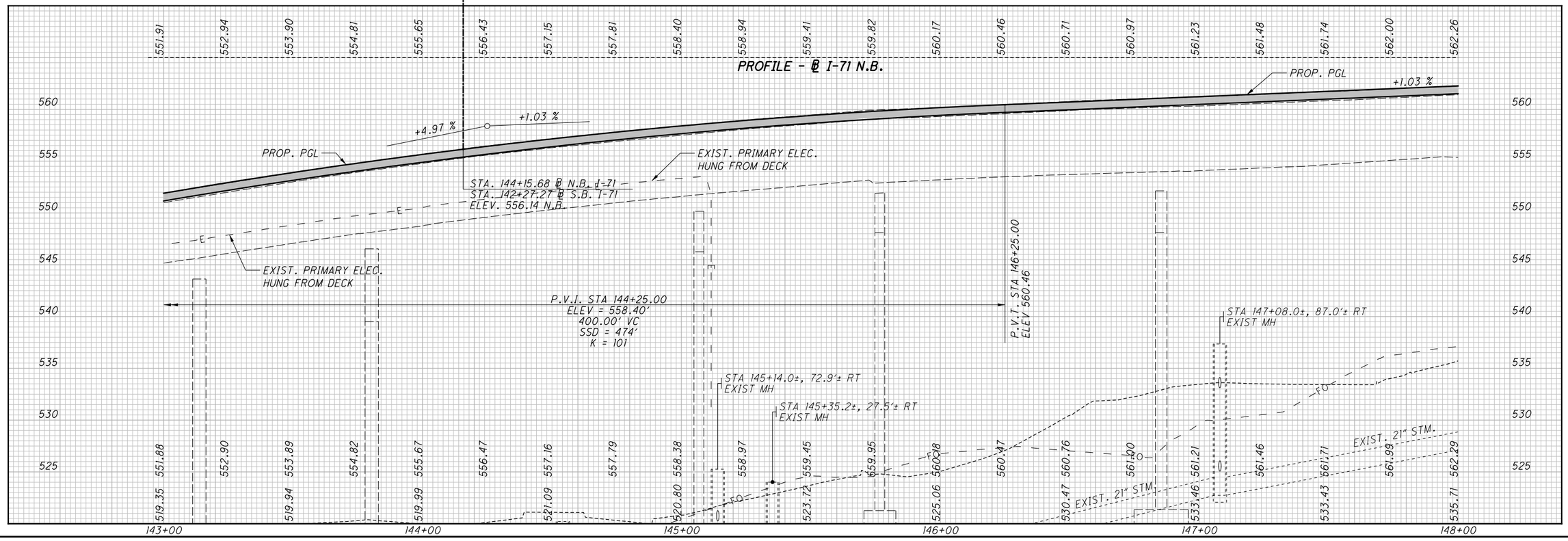
CALCULATED DPF
CHECKED BJF

PLAN - I-71
STA. 143+00 TO STA 148+00

HAM-71-1.59

52
176





PROFILE - STA. 143+00 TO STA 148+00

HAM-71-1.59

53
176

CALCULATED DPF
CHECKED BJF

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END PROJECT
STA. 150+21.40
S.L.M.

NON-FEDERAL

LIMITS OF FIDO FIELD

CONST. LIMITS
(SEE GENERAL NOTES)

℄ I-471 S.B.

I-471 S.B.

CONST. LIMITS

EXIST. 12" STORM

EXIST. 12" STORM

EXIST. 12" STM.

EXIST. 12" STM.

EXIST. 12" STM.

EXIST. 12" STM.
(DOWNSPOUT CONN.)

EXIST. 12" STM.
(DOWNSPOUT CONN.)

EXIST. APPR. SLAB

EXIST. APPR. SLAB

℄ I-71

PCC Sta. 148+69.94

PCC Sta. 149+69.94

PCC Sta. 150+69.94

PT Sta. 151+69.94

PT Sta. 151+69.87

BRIDGE HAM-71-0181

151+59.22 BEGIN
SHOULDER REBUILD

151+59.22 BEGIN
SHOULDER REBUILD

152+84.00 BEGIN
MEDIAN BARRIER,
TYPE B50

O/H SIGN

EXIST 12" STM.

EXIST 18" STM.

EXIST 18" STM.

PROP JERSEY
MEDIAN BARRIER, B50

R6

B5

N 29° 28' 04" E

MATCH LINE STA.148+00

MATCH LINE STA.153+00

EXIST. 15" STM.

EXIST. 15" STM.

EXIST. 12" STM.

EXIST. 12" STM.

EXIST. 12" STM.
(DOWNSPOUT CONN.)

EXIST 21" STM.

EXIST 18" STM.

EXIST 18" STM.

EXIST. 12" STM.

EXIST 18" STM.

EXIST. 15" STM.

℄ RAMP B

℄ RAMP B

CONST. LIMITS

CONST. LIMITS

ITS

ITS

℄ I-471 N.B.

FO

Ex LA

149

150

151

152

153

NOTES:

1) FOR CURVE DATA, SEE SHEET 2

2) ⊕⊕: DRAINAGE CLEANOUT LOCATIONS, BRIDGE DRAINAGE & DOWNSPOUT CONNECTIONS TO BE CLEANED/FLUSHED TO NEAREST MH. (SEE GENERAL NOTES, SHEET 6)

3) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE

4) FOR PAVEMENT LEGEND, SEE SHEET 48

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED DPF
CHECKED BJF

PLAN - I-71
STA. 148+00 TO STA 153+00

HAM-71-1.59

54
176

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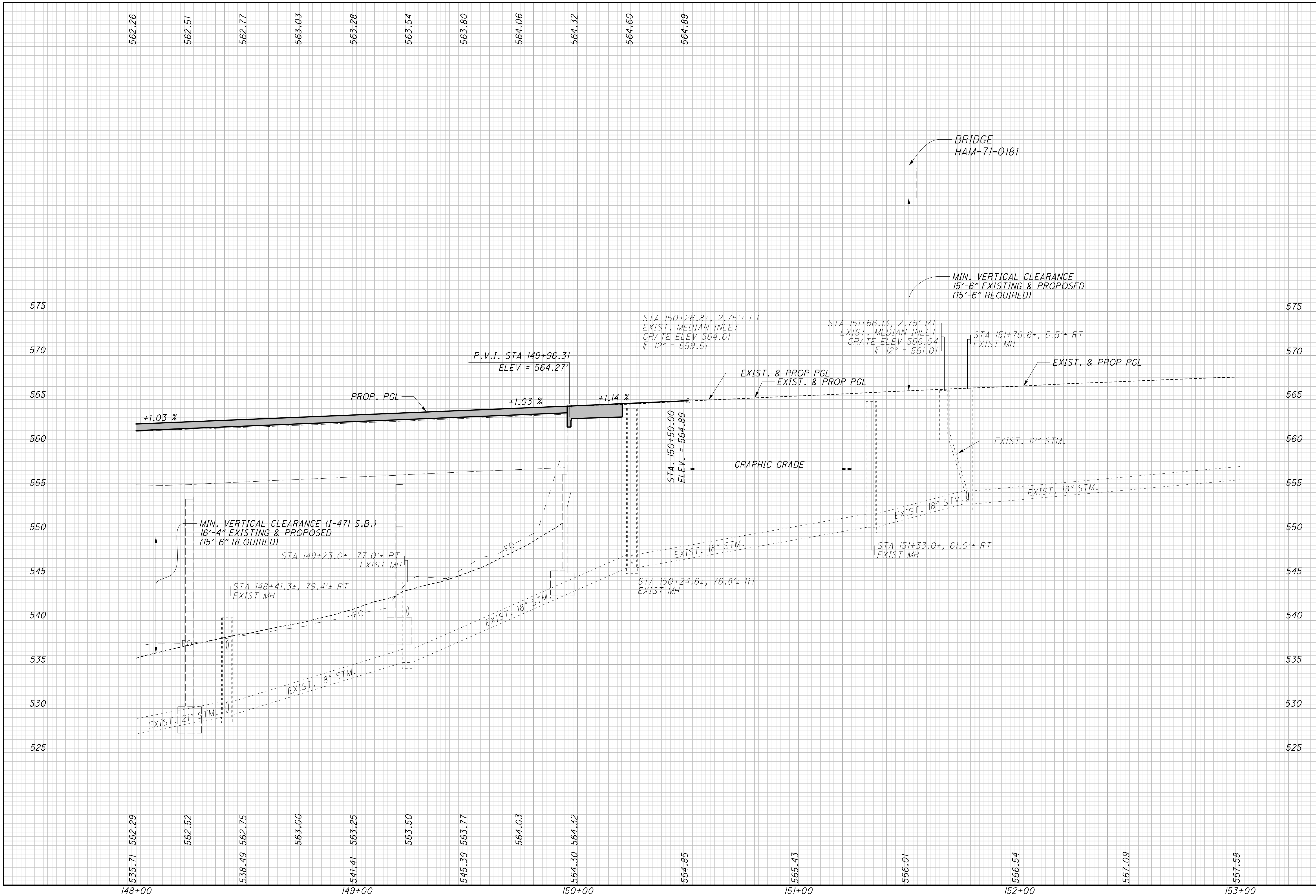
CALCULATED DPF
CHECKED BJF

PROFILE - STA. 148+00 TO STA 153+00



HAM-71-1.59

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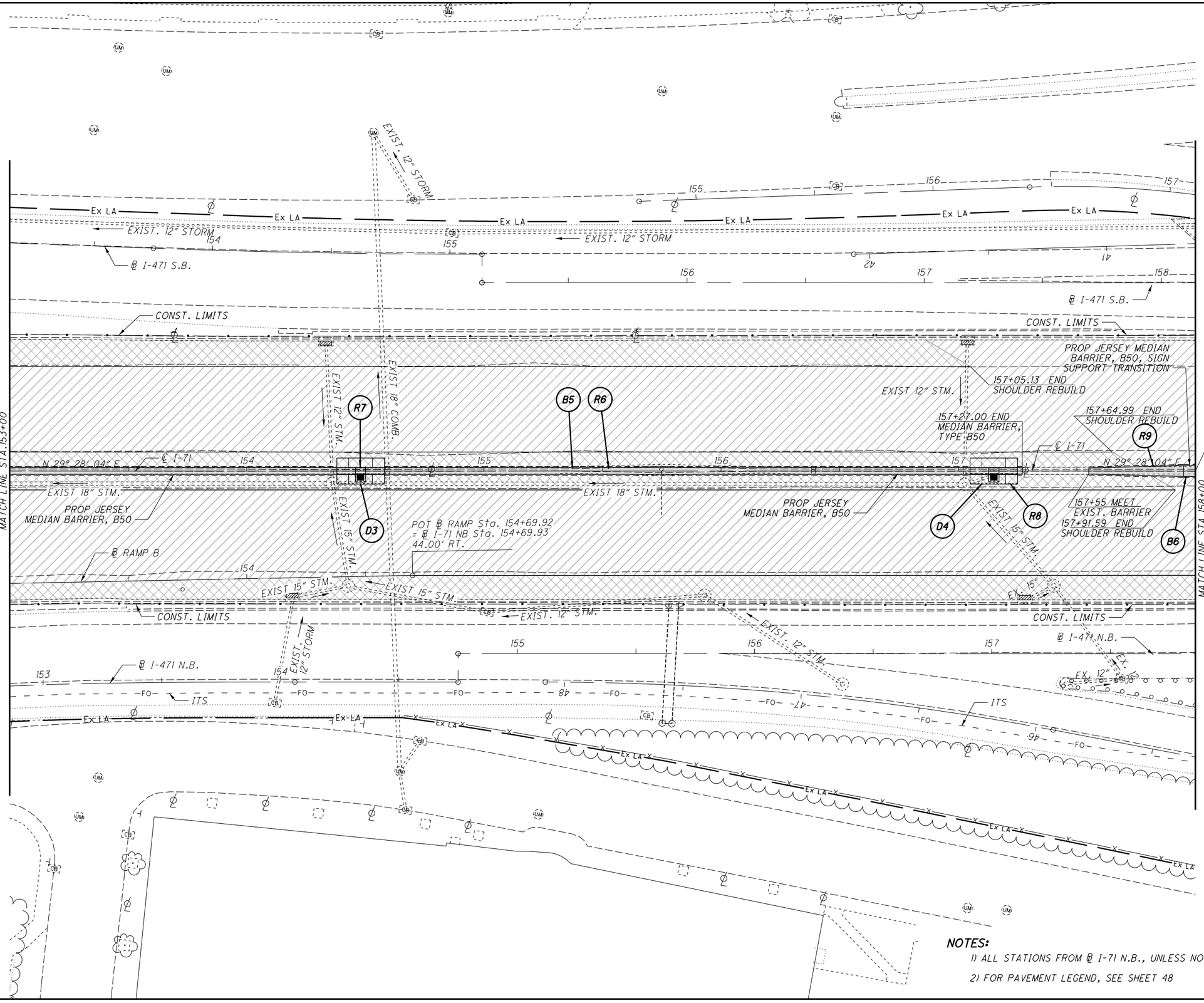

NOTES:

1) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE

2) FOR PAVEMENT LEGEND, SEE SHEET 48

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED DPF
CHECKED BJF

PLAN - I-71
STA. 153+00 TO STA 158+00

HAM-71-1.59

56
176

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CALCULATED DPF
CHECKED BJF

PROFILE - STA. 153+00 TO STA 158+00

HAM-71-1.59

END WORK
STA. 170+60.00

MATCH LINE STA.158+00

℄ SIGN SUPPORT
158+00

R9

158+45 MEET
EXIST BARRIER

N 29° 28' 04" E

B6 PROP JERSEY MEDIAN BARRIER, B50, SIGN SUPPORT TRANSITION

158+51.45 END
SHOULDER REBUILD

CONST. LIMITS

PC Sta. 158+83.66

PCC Sta. 159+83.66

PCC Sta. 160+83.66

EXIST. 15" STM.

EXIST. 12" STM.

EXIST. 48" COMB.

EXIST. 36" COMB.

℄ I-471 S.B.

℄ I-471 N.B.

℄ I-71

Ex LA

OMNF.

NOTES:

1) FOR CURVE DATA, SEE SHEET 2

2) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE

3) FOR PAVEMENT LEGEND, SEE SHEET 48

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED DPF
CHECKED BJF

PLAN - I-71
STA. 158+00 TO STA 163+00

HAM-71-1.59

58
176

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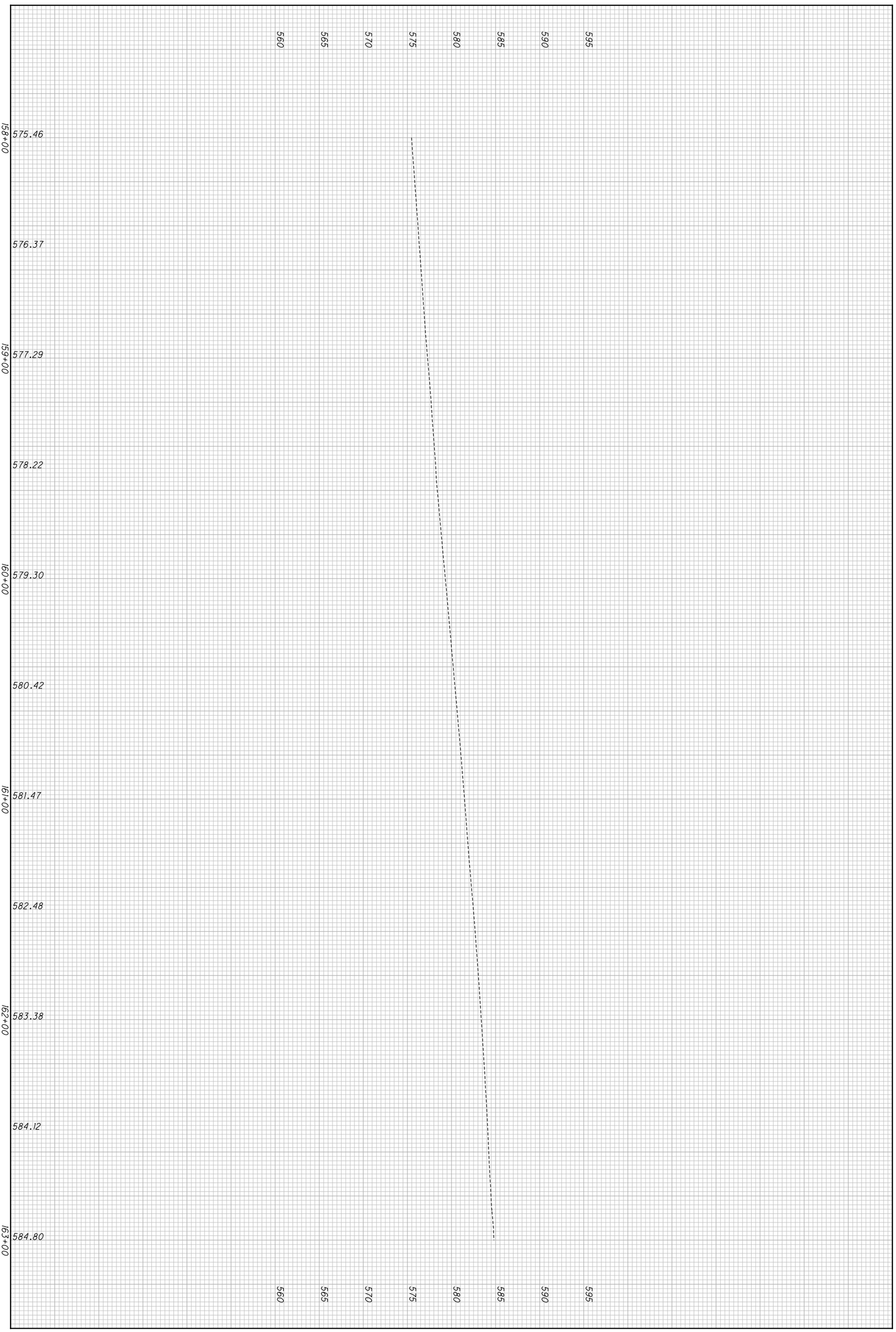
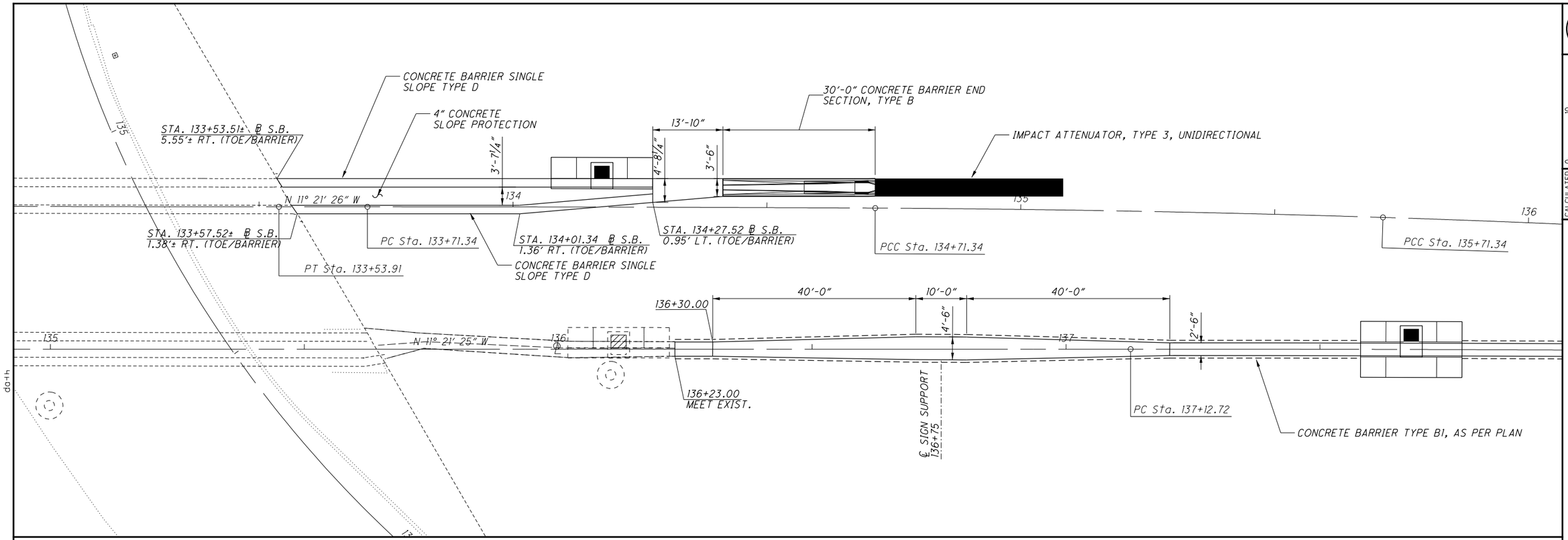


HAM-71-1.59

PROFILE STA. 158+00 TO STA 163+00

CALCULATED DPF
CHECKED BJF



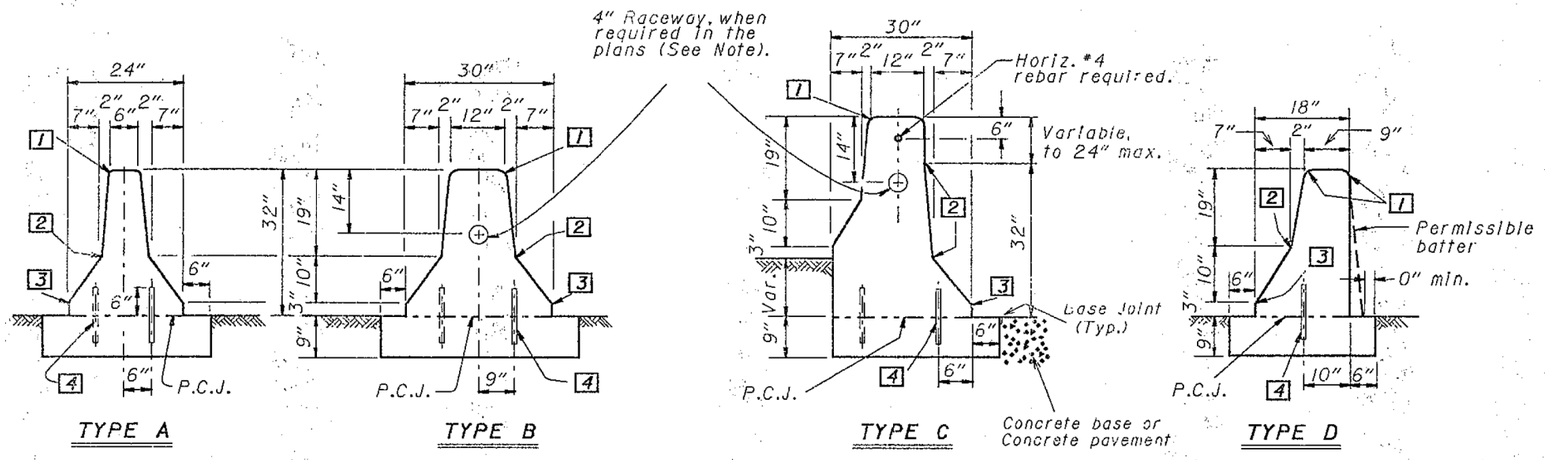
HORIZONTAL SCALE IN FEET
0 5 10 20

CALCULATED DPF
CHECKED BJF

BARRIER DETAILS

HAM-71-1.59

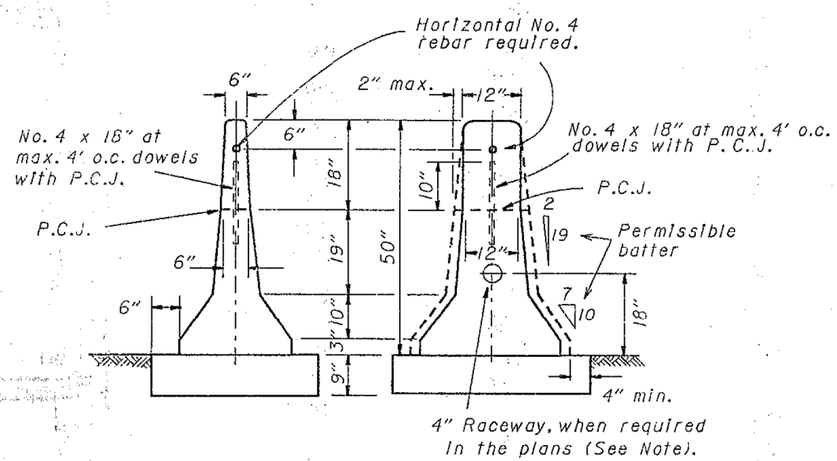
60
176



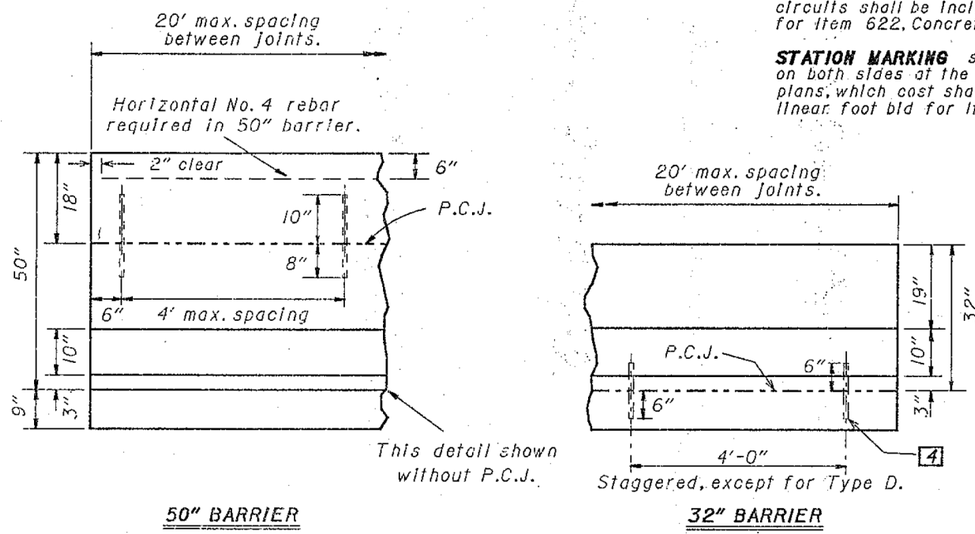
NORMAL SECTIONS

LEGEND

1. 1" Radius or 3/4" chamfer.
2. Permissible 10" radius.
3. Permissible 1" radius.
4. No. 8 epoxy coated deformed steel bars, 12" long, spaced 4' between successive bars on a staggered (except Type D) pattern. Omit dowels when top is constructed integral with the base.



50" BARRIERS - TYPICAL SECTIONS



BARRIER ELEVATIONS

NOTES

JOINTS: Unsealed contraction joints spaced at 20' max. shall be constructed throughout the run of Concrete Barrier except that expansion joints shall be used at the center line of and around each bridge pier column and on either side of overhead sign supports, inlets and light pole foundations. If inlet top is slip formed, the expansion joints adjacent to it may be omitted.

Contraction joints may be constructed with metal inserts inside the forms, preformed full width joint filler, a grooving tool, or by sawing. Inserts, tooled or sawed joints shall have a 3" minimum depth. All joints shall be constructed for the full height of the barrier including the base. Sawing shall be done as soon as curing will allow, to prevent spalling.

BASE JOINTS: The vertical walls between the barrier base and a concrete pavement or concrete base shall be provided with a sealed, grooved joint as shown on Std. Const. Dwg. BP-2.1. Sealing material shall conform with CMS 705.04.

P.C.J. = Permissible Construction Joint

MEASUREMENT: 622 Concrete Barrier, including transitions and pier sections as per Standard Const. Drawing MC-9.4, is paid for in linear feet as one of the four types (A,B,C or D) or as Type A50 and B50, (for 50" high barrier), with appropriate deductions for other items such as:

604 I-3 Median Inlet	20 Lin. Ft.
625 Light pole foundation or pullbox	2.5 Lin. Ft.
630 Overhead sign support foundation	10 Lin. Ft.
630 Barrier wall assembly	10 Lin. Ft.

50 INCH HIGH BARRIER shall be built in locations specified in the plans. Construct the lower 32" of the barrier and the barrier base using the same dimensions as shown in the corresponding Normal Section. The upper 18" may be constructed integral with the bottom, or separately with No. 4 rebar dowels at 4 foot maximum spacing. Start and end dowels 6" from barrier contraction joints.

RACEWAY: The contractor shall insure that the electrical raceway is clear of internal obstructions. Cost of the 4 inch polyvinyl chloride raceway and No. 10 AWG copper-clad or aluminum-clad wire if needed for future installation of circuits shall be included in the unit cost per lineal foot for Item 622, Concrete Barrier.

STATION MARKING shall be impressed in the "green" concrete on both sides at the top of the barrier if specified in the plans, which cost shall be incidental to the unit cost per lineal foot bid for Item 622, Concrete Barrier.

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF TRANSPORTATION

CONCRETE BARRIER

DATE 10-30-92

STANDARD CONSTRUCTION DRAWING **MC-9.3**

APPROVED E.K. Hildebrand ENGR., L & D

CALCULATED DPF CHECKED BJF

BARRIER DETAILS - NJ SHAPE

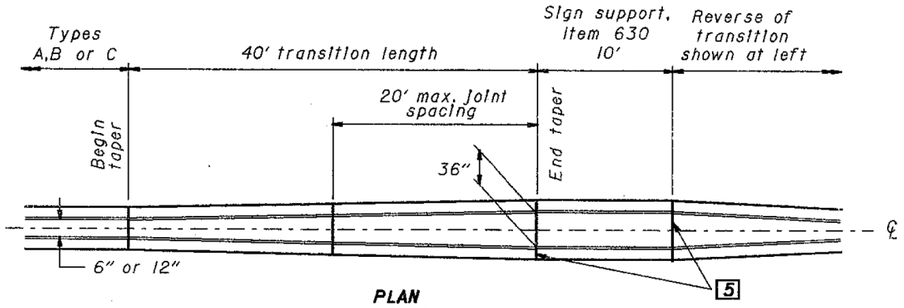
HAM-71-1.59

NOTE

STANDARD BARRIERS: Types A, B, or C concrete barriers shall be constructed as per Std. Const. Drwg. MC-9.3 or as detailed in the plans.

LEGEND

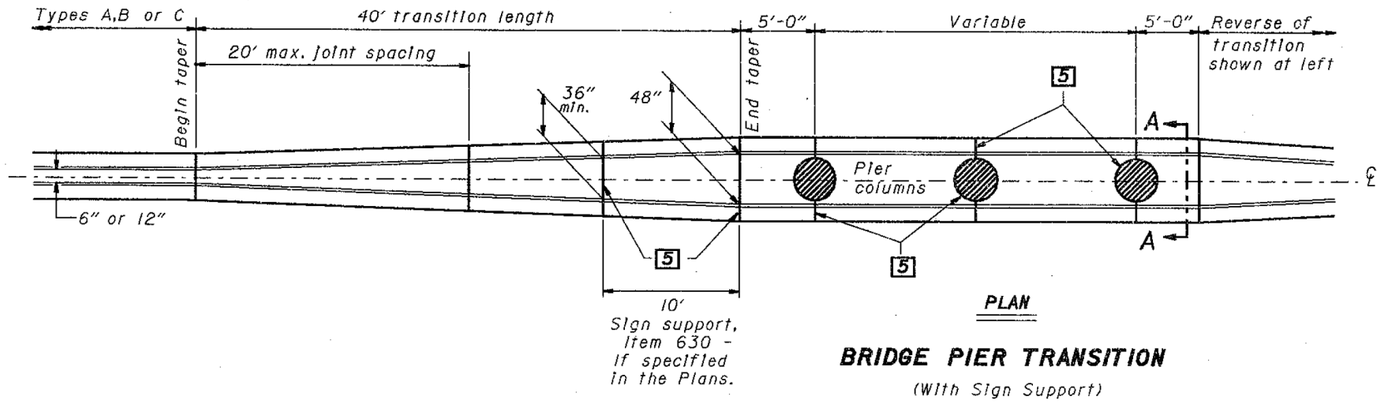
1. 1" Radius or 3/4" chamfer.
2. Permissible 10" radius.
3. Permissible 1" radius.
4. No. 8 epoxy coated deformed steel bars, 12" long, spaced 2' between successive bars on a staggered (except Type D) pattern. Dowel bars shall begin 4' from the leading edge of the End Terminal. Omit dowels when top is constructed integral with the base.
5. Expansion joint, 3/4" min. Preformed Filler 705.03.



PLAN

SIGN SUPPORT TRANSITION

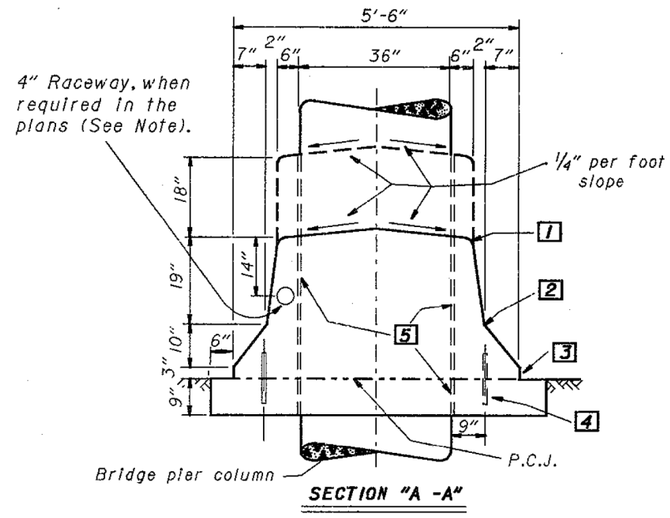
(For 50" barriers, the upper 18" varies from 6" or 12" width to 36" width.)



PLAN

BRIDGE PIER TRANSITION

(With Sign Support)



SECTION "A -A"

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF TRANSPORTATION

CONCRETE BARRIER TRANSITIONS

DATE 10-30-92

STANDARD CONSTRUCTION DRAWING **MC-9.4**

APPROVED D.K. Hillman ENGR., L & D

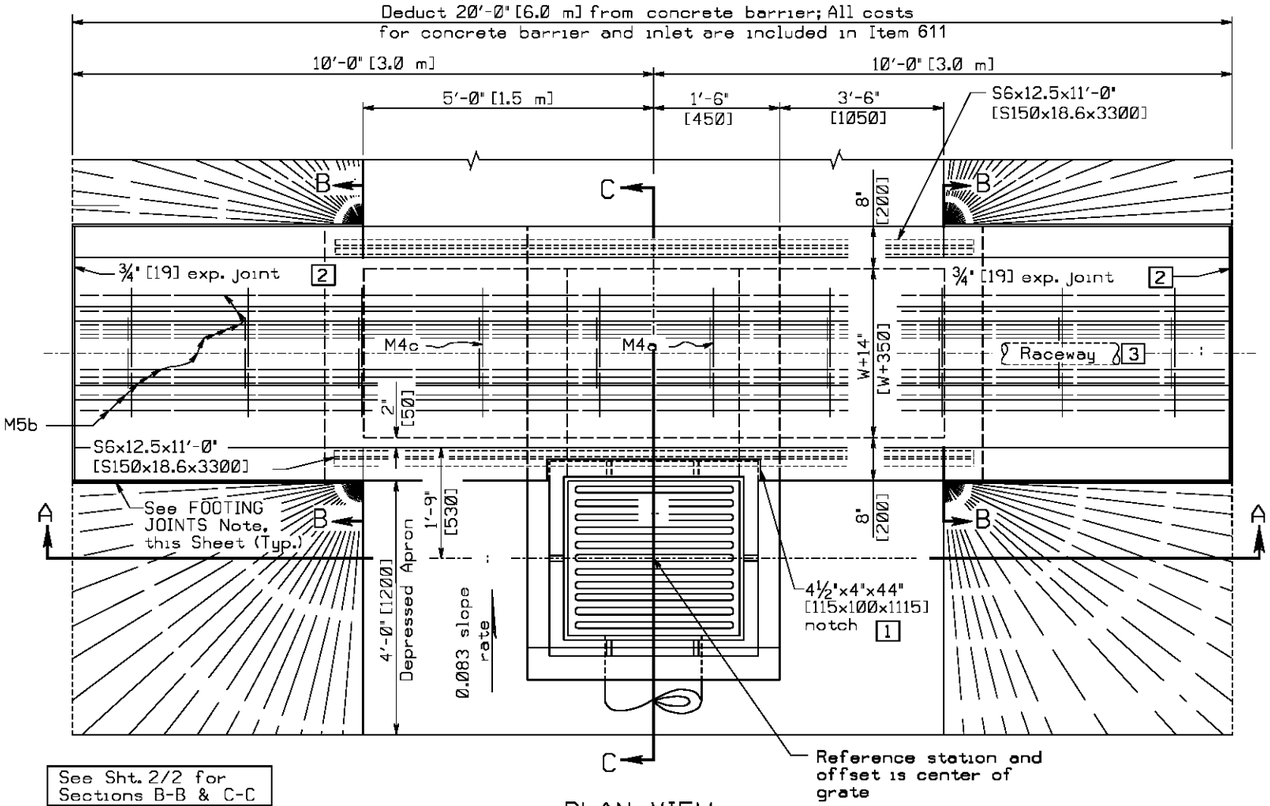
CALCULATED DPF
CHECKED BJF

BARRIER DETAILS - NJ SHAPE

HAM-71-1.59

62
176

O:\ODOT\HAM\101939_HAM-71-1.59\Design\Roadway\Sheets\101939_GM002.dgn Sheet 3/1/2016 5:29:21 PM dan-f



NOTES

GENERAL: For details of concrete barriers, see SHEET 61 . Minimum weight [mass] of frame and cover shall be 540 lbs. [245 kg].

WALLS: The walls between the bottom slab and the upper permissible construction joint may be built of brick, concrete block or cast-in-place concrete, 8" [200] nominal thickness for depths of 12' [3.5 m] or less. Precast walls shall have a minimum thickness of 6" [150] and be reinforced sufficiently to permit shipping and handling without damage. The unit above the permissible construction joint may be precast or cast-in-place.

HEIGHT: When placed in 50" [1270] high barrier the 30" [763] height shall be made 48" [1220].

CONCRETE: Cast-in-place concrete is to be Class C. All precast concrete shall meet the requirements of CMS 706.13. Required markings shall include the inlet number. Exposed concrete surfaces of the barrier shall be sealed with an approved sealer.

REINFORCING STEEL: Reinforcing steel shall be epoxy coated in accordance with CMS 509.09.

FOOTING JOINTS: The vertical walls between the barrier footing and a concrete pavement or concrete base shall be provided with a sealed joint as detailed on SCD RM-4.3.

STEPS: Steps shall be in accordance with SCD MH-1.1.

GRATE LOCATION: In superelevated curves or at other locations where there is unequal discharge from the directional roadways, the inlet grating shall be located in the roadway which discharges the major flow.

INLETS OVER 12 FEET [3.5 m] IN DEPTH: Such inlets shall be precast or cast-in-place concrete; reinforced with #4 [#13M] bars on 12" [300] centers both vertically and horizontally with 2" [50] clearance from the inside wall face.

OPENINGS: Pipe openings shall be the outside diameter of the pipe being supplied plus 2" [50] when fabricated or field cut. The interstitial space shall be filled with grout per CMS 601.

PCJ: Permissible Construction Joint

STANDARD INLET NUMBERS	
I-3A Type A	(32" [813] Barrier with W=6" [150])
I-3A Type A1	(50" [1270] Barrier with W=6" [150])
I-3B Type B	(32" [813] Barrier with W=12" [300])
I-3B Type B1	(50" [1270] Barrier with W=12" [300])

LEGEND

1. After casting is placed, fill notch with Class C concrete
2. A 1½" [38] minimum exp. joint shall be provided in concrete pavement or concrete shoulders.
3. 4" [100] Lighting raceway, if required elsewhere by the plans.
4. Barrier height equals either 32" [813] or 50" [1270].

OHIO DEPARTMENT OF TRANSPORTATION
ENGINEER OF BRIDGES

CALCULATED DPF
CHECKED BJF

DATE
7-20-01
7-19-02

HYDRAULIC ENGINEER D. Gruver

All metric dimensions (in brackets [ ]) are in millimeters unless otherwise noted.

OFFICE OF STRUCTURAL ENGINEERING

STANDARD HYDRAULIC CONSTRUCTION DRAWING
BARRIER MEDIAN INLETS 3A & 3B

NUMBER I-2.1

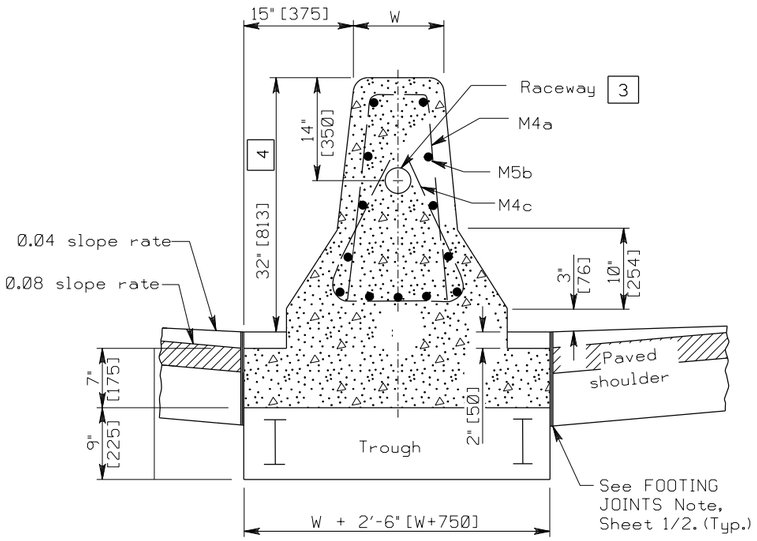
1/2

INLET DETAILS - BARRIER MEDIAN INLET (1/2)

HAM-71-1.59

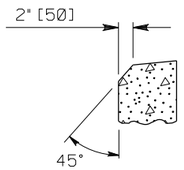
63/176

NOTE: ALL REFERENCES TO ITEM 604 AND CMS 604 SHALL READ ITEM 611 AND CMS 611

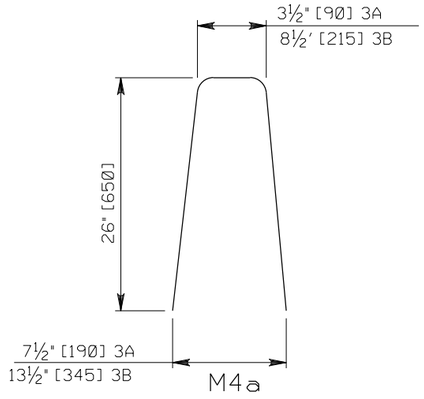


SECTION B-B
(See Sht. 1/2.)

See Sheet 1 of 2 for NOTES and LEGEND

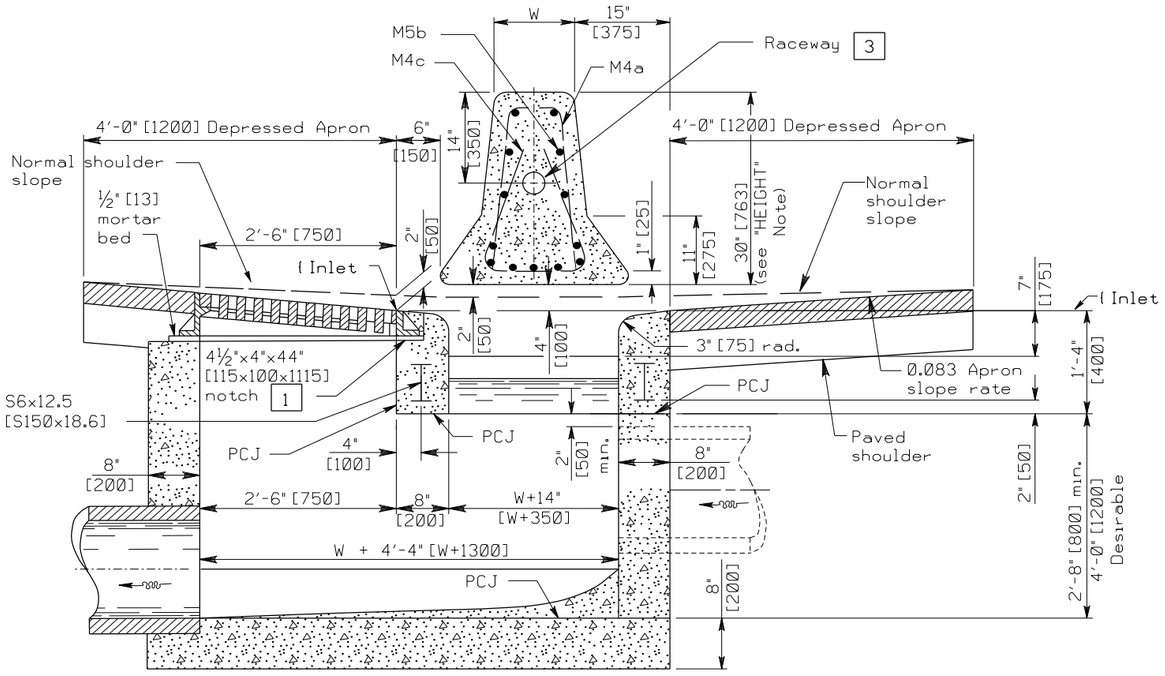


ALTERNATE SPILLWAY SHAPE

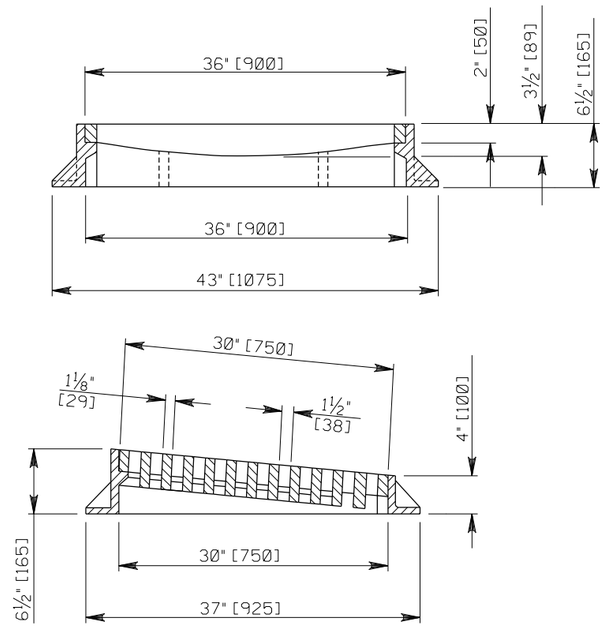


BENDING DIAGRAM

REINFORCING STEEL LIST									
INLET NO.	W	M4a #4 [#13M]		M5b #5 [#16M]		M4c #4 [#13M]		S6x12.5 [S150x18.6]	
		No.	Length	No.	Length	No.	Length	No.	Length
I-3A	6" [150]	10	4'-6" [1370]	13	19'-8" [5900]	10	3'-1" [940]	2	11'-0" [3300]
I-3B	12" [300]	10	5'-0" [1525]	13	19'-8" [5900]	10	4'-6" [1370]	2	11'-0" [3300]
Included for estimating purposes only. The cost of furnishing and placing all reinforcing steel shall be included in Item 604 for payment.									



SECTION C-C
(See Sht. 1/2.)



CASTING DETAILS

NOTE: ALL REFERENCES TO ITEM 604 AND CMS 604 SHALL READ ITEM 611 AND CMS 611

OHIO DEPARTMENT OF TRANSPORTATION
ENGINEER OF BRIDGES

CALCULATED DPF
CHECKED BJF

DATE
7-20-01
7-19-02

HYDRAULIC ENGINEER D. Gruver

All metric dimensions (in brackets []) are in millimeters unless otherwise noted.

OFFICE OF STRUCTURAL ENGINEERING

STANDARD HYDRAULIC CONSTRUCTION DRAWING
BARRIER MEDIAN INLETS 3A & 3B

NUMBER I-2.1

INLET DETAILS - BARRIER MEDIAN INLET (2/2)

HAM-71-1.59

2/2

64/176

ITEM 630 - SIGNING MISC, ERECTION OF STORED OVERHEAD SIGN AND FLASHING BEACONS

THIS ITEM SHALL INCLUDE ERECTING FURNISHED OVERHEAD EXTRUSHEET SIGNS "TUNNEL CLOSED DO NOT ENTER WHEN FLASHING" IN ACCORDANCE WITH ITEM 630. THE SIGN IS LEVEL 1, 216" X 96" AND WILL BE MOUNTED TO AN EXISTING TRUSS AT STATION 152+40.

THE SIGNS SHALL HAVE THREE (3) FLASHING RED BEACONS WHICH ARE CONNECTED AND ACTIVATED BY THE FIRE DETECTION SYSTEM IN THE LYTLE TUNNEL. THE SUPPLIED SIGN FLASHER ASSEMBLY, IN ACCORDANCE WITH ITEM 631, SHALL CONSIST OF FLASHING BEACONS, A FLASHER CONTROL UNIT WITH ENCLOSURE, AND MOUNTING HARDWARE. THREE BEACONS, WHICH FLASH SIMULTANEOUSLY WHEN ACTIVATED BY THE FIRE SUPPRESSION SYSTEM IN THE TUNNEL, SHALL BE MOUNTED ON TOP OF EACH SIGN.

THE BEACON SHALL BE A SINGLE TRAFFIC SIGNAL SECTION WITH A 12" LENS AND HIGH INTENSITY RED LIGHT EMITTING DIODE LAMP MODULES (LED). THE FLASHER CONTROL UNIT SHALL FLASH THE BEACON AT A RATE OF BETWEEN 50 TO 60 TIMES PER MINUTE WITH THE LIGHT PERIOD FROM ONE-HALF TO TWO-THIRDS OF THE TOTAL CYCLE. FLASHER CONTROL UNIT SHALL HAVE ALL SOLID STATE COMPONENTS AND SHALL MEET NEMA TS-1, PART 6. CONTROL UNIT SHALL BE HOUSED WITHIN A WEATHERPROOF CORROSION RESISTANT ENCLOSURE WITH A LOCKABLE DOOR. THE BEACONS SHALL FLASH AT ALL TIMES WHEN THIS ELECTRICAL SUPPLY IS ENERGIZED. DISCONNECT SWITCHES AND PADLOCKS SHALL BE PER 631.06.

POWER SHALL BE SUPPLIED FROM THE TUNNEL POWER SYSTEM. ALL POWER AND CABLE SHALL BE INSTALLED ACCORDING TO ITEM 631. THE FOLLOWING ITEMS HAVE BEEN INCLUDED ON SHEET 66 FOR THIS WORK; CONDUIT, 1½" 725.04 AND NO. 2 AWG 600 VOLT DISTRIBUTION CABLE. 1½" CONDUIT IS TO BE INSTALLED IN THE MEDIAN PARAPET ON THE BRIDGE AND APPROACH SLABS (SEE BRIDGE PLANS FOR DETAILS). QUANTITIES OF CONDUIT INCLUDE CONDUIT MOUNTED ON TOP OF EXISTING MEDIAN BARRIER TO REMAIN ON THE ROADWAY APPROACHES. IF THE EXISTING MEDIAN BARRIER HAS BEEN CONSTRUCTED WITH THE 4" DIAMETER RACEWAY, THE CONTRACTOR MAY ELECT TO PULL THE DISTRIBUTION CABLE THRU THE 4" RACEWAY IN THE EXISTING AND PROPOSED MEDIAN BARIERS IN LIEU OF MOUNTING THE CONDUIT ATOP THE MEDIAN BARRIERS.

SIGNS AND BEACONS ARE AVAILABLE FOR PICKUP AT:
CARTHAGE GARAGE
1400 EAST SEYMOUR AVE., CINCINNATI, OHIO 45237

PLEASE CONTACT MR. JUSTIN KEMP, HAMILTON COUNTY MANAGER, TO COORDINATE A PICKUP DATE AND TIME. 513-933-6120
Justin.Kemp@dot.ohio.gov

COST FOR THIS ITEM IS TO INCLUDE PICKUP AND DELIVERY OF STORED ITEMS AS WELL AS ALL INCIDENTAL ITEMS NOT PROVIDED REQUIRED TO INSTALL THE ITEM PER CMS 631.

ITEM 631 - SIGN FLASHER ASSEMBLY, AS PER PLAN

THIS ITEM SHALL INCLUDE THE INSTALLATION OF FURNIHSED BEACONS AND FLASHER CONTROL UNIT WITH ENCLOSURE, AND 12" LED LAMP MODULES IN ACCORDANCE WITH ITEM 631 AND ITEM 731.06. FLASHER CONTROL UNIT SHALL CONTROL TWO (2) PAIRS OF FLASHING YELLOW BEACONS, MOUNTED ON PROPOSED OVERHEAD SIGNS AS SHOWN ON THE PLANS.

FLASHER ASSEMBLIES ARE AVAILABLE FOR PICKUP AT:
CARTHAGE GARAGE
1400 EAST SEYMOUR AVE., CINCINNATI, OHIO 45237

PLEASE CONTACT MR. JUSTIN KEMP, HAMILTON COUNTY MANAGER, TO COORDINATE A PICKUP DATE AND TIME. 513-933-6120
Justin.Kemp@dot.ohio.gov

COST FOR THIS ITEM IS TO INCLUDE PICKUP AND DELIVERY OF STORED ITEMS AS WELL AS ALL INCIDENTAL ITEMS NOT PROVIDED REQUIRED TO INSTALL THE ITEM PER CMS 631.

ITEM 630 - OVERHEAD SIGN SUPPORT, TYPE TC-15.115, AS PER PLAN

THIS ITEM SHALL INCLUDE ERECTING OF A FURNISHED SPAN-TYPE SIGN SUPPORT, END FRAMES, AND FOUNDATIONS IN ACCORDANCE WITH ITEM 630 FOR THE OVERHEAD SIGN SUPPORT AT IR 71 SOUTHBOUND STA 136+75. THE EAST FOUNDATION IN THE MEDIAN BARRIER IS TO BE BUILT UNDER THIS ITEM OF WORK. THE WEST FOUNDATION NEXT TO SENTINEL STREET WILL BE BUILT WITH PROJECT 85(15); HAM-71-1.35 PID 87268. THE RESIDUAL HARDWARE OF THE WEST FOUNDATION (NUTS AND WASHERS) WILL BE IN STORAGE FOR PICKUP.

IN ADDITION, OTHERS SHALL PERFORM WORK SHALL INCLUDING REMOVAL OF CONCRETE BARRIER, AND BARRIER RAIL, AND FENCE AS NECESSARY TO INSTALL THE END FRAME ON THE WESTERN SIDE OF IR 71 NEAR SENTINEL STREET. FENCE SHALL BE REPLACED AS NECESSARY AND SHALL MATCH EXISTING. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN ITEM 630 - OVERHEAD SIGN SUPPORT, TYPE TC-15.115, AS PER PLAN.

SIGN SUPPORTS ARE AVAILABLE FOR PICKUP AT:
CARTHAGE GARAGE
1400 EAST SEYMOUR AVE., CINCINNATI, OHIO 45237

PLEASE CONTACT MR. JUSTIN KEMP, HAMILTON COUNTY MANAGER, TO COORDINATE A PICKUP DATE AND TIME. 513-933-6120
Justin.Kemp@dot.ohio.gov

COST FOR THIS ITEM IS TO INCLUDE PICKUP AND DELIVERY OF STORED ITEMS AS WELL AS ALL INCIDENTAL ITEMS NOT PROVIDED REQUIRED TO INSTALL THE ITEM PER CMS 631.

ITEM 630 - SIGNING MISC, ERECTION OF STORED OVERHEAD SIGNS

THIS ITEM SHALL INCLUDE ERECTING FURNISHED OVERHEAD EXTRUSHEET SIGNS AS INDICATED ON THE PLANS AT I-71 SOUTHBOUND STA 134+86.

SIGNS ARE AVAILABLE FOR PICKUP AT:
CARTHAGE GARAGE
1400 EAST SEYMOUR AVE., CINCINNATI, OHIO 45237

PLEASE CONTACT MR. JUSTIN KEMP, HAMILTON COUNTY MANAGER, TO COORDINATE A PICKUP DATE AND TIME. 513-933-6120
Justin.Kemp@dot.ohio.gov

COST FOR THIS ITEM IS TO INCLUDE PICKUP AND DELIVERY OF STORED ITEMS AS WELL AS ALL INCIDENTAL ITEMS NOT PROVIDED REQUIRED TO INSTALL THE ITEM PER CMS 631.

SIGNING SUMMARY

SHEET NO.	REFERENCE NO.	LOCATION	STATION	CODE	SIZE (INCHES)	625			630															631					
						GROUND ROD	CONDUIT, 1 1/2" 725.04	NO. 2 AWG 600 VOLT DISTRIBUTION CABLE	OVERHEAD SIGN SUPPORT, TYPE TC-12.30, DESIGN 9	OVERHEAD SIGN SUPPORT, TYPE TC-15.115, AS PER PLAN	SIGNING, MISC.: ERECTION OF STORED OVERHEAD SIGN	SIGN FLASHER ASSEMBLY, AS PER PLAN	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	SIGNING, MISC.: ERECTION OF STORED OVERHEAD SIGN & FLASHING BEACONS	REMOVAL OF OVERHEAD SIGN SUPPORT AND DISPOSAL	GROUND MOUNTED SUPPORT, NO. 2 POST	GROUND MOUNTED SUPPORT, NO. 3 POST	GROUND MOUNTED SUPPORT, NO. 4 POST	SIGN SUPPORT ASSEMBLY, BARRIER MOUNTED	SIGN, FLAT SHEET	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	REMOVAL OF GROUND MOUNTED SIGN & REERECTION	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	REMOVAL OF OVERHEAD MOUNTED SIGN AND REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	SIGN POST REFLECTOR	REMOVAL OF LUMINAIRE	REMOVAL OF SIGNS WIRED	REMOVAL OF SIGN SERVICE	REMOVAL OF DISCONNECT SWITCH	REMOVAL OF BALLAST	REMOVAL OF PHOTOELECTRIC CONTROL
						EA	FT	FT	EA	EA	FT	EA	EA	EA	EA	FT	FT	FT	EA	SQ FT	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
67	S1	SB LT	134+26.00 +	W1-2R-48 / W13-1P-30	48"x48" 30"x30"											10.1			1	22.3			1		1	1					
67	S2	SB RT	134+35.00 +	W1-2R-48 / W13-1P-30	48"x48" 30"x30"											10.1			1	22.3			1		1	1					
67	S3	℄	136+59.00													7.9			1			1			1						
67	S4	SB O/H	134+86.00 +			1				1	5	2	1		1						5					9	5	1	1	5	1
67	S5	NB RT	138+50.00	W4-1R-48	48 x 48													16.1 16.6		16.0			1		2	2					
67	S6	NB ℄	139+25.00						1				1		1									1			2	1	1	1	1	1
67	S7	℄	141+22.00													7.9			1			1			1						
67	S8	SB ℄	144+15.00												1											2	1	1	1	1	1
67	S9	℄	145+84.00													7.9			1			1			1						
68	S10	℄	151+08.00													7.9			1			1			1						
68	S11	SB O/H	152+44.00			1	1680	1730						1																	
68	S12	℄	156+39.00													7.9			1			1									
68, 69	S13	NB ℄	158+00.00						1				1		1									1	1		2	1	1	1	1	1
69	S14	NB RT	158+35.00	W4-1R-48	48 x 48												14.8 14.9			16.0			1		2	2					
69	S15	NB RT	159+35.00	R1-2-48	48 x 42												15.0 15.3			6.9			1		2	2					
SUBTOTALS 100% 01/IMS/BR						1			2	1	5	2	3		4	49.6			6	22.3	5	5	1	2	6	1	15	8	4	4	8	4
SUBTOTALS 100% 03/IMS/PV						1	1680	1730						1		10.1	60.0	32.7	1	61.2			4		7	7					
TOTALS CARRIED TO GENERAL SUMMARY						2	1680	1730	2	1	5	2	3	1	4	59.7	60.0	32.7	7	83.5	5	5	5	2	13	8	15	8	4	4	8	4

PAVEMENT MARKING SUMMARY

SHEET NO.	REFERENCE NO.	STATION FROM	STATION TO	LOCATION	LENGTH	644							646							RPM SPACING	621			
						EDGE LINE, 6" (W)	EDGE LINE, 6" (Y)	CHANNELIZING LINE, 12" (W)	LANE LINE, 6" (W)	DOTTED LINE, 6" (W)	DOTTED LINE 8" (W)	TRANSVERSE/DIAGONAL LINE	EDGE LINE, 6" (W)	EDGE LINE, 6" (Y)	CHANNELIZING LINE, 12" (W)	LANE LINE, 6" (W)	DOTTED LINE, 6" (W)	DOTTED LINE 8" (W)	TRANSVERSE/DIAGONAL LINE		RAISED PAVEMENT MARKER, ONE-WAY (W)	RAISED PAVEMENT MARKER, TWO-WAY (W/R)	RAISED PAVEMENT MARKER, TWO-WAY (W/R)	RAISED PAVEMENT MARKER, TWO-WAY (Y/R)
						MILE	MILE	FEET	MILE	FEET	FEET	FEET	MILE	MILE	FEET	MILE	FEET	FEET	FEET		EACH	EACH	EACH	EACH
67	CH1	135+00.00 +	144+15.00	SB	727			248							479					40		18		
67	CH2	135+00.00 +	144+15.00	SB RAMP	727			247							480					40		18		
67	CH3	142+80.00 ++	145+65.00 ++	NB RAMP	285										285					40		7		
67	CH4	142+50.00	145+50.00	NB	300										300					40		7		
67-68	DL1	145+50.00	154+69.90	NB / NB RAMP	920					448							472							
67-55	DLw1	144+15.00	170+60.00 +	SB	2645						1734							911						
67-69	LL1	133+00.00 +	159+50.00	SB	2461				0.26							0.21				120	21			
67-69	LL2	135+50.00	160+00.00	NB	2450				0.25							0.21				120	21			
67-69	LL3	135+50.00	160+25.00	NB	2475				0.26							0.21				120	21			
67	TW1	135+00.00 +	141+48.00	SB / SB RAMP	-							163							113					
67-69	WE1	133+00.00 +	159+50.00	SB	2462	0.26							0.21											
67	WE2	133+25.00 +	135+00.00 +	SB RAMP	175	0.03														80			3	
67	WE3	135+50.00	142+50.00	NB	700	0.06							0.07											
67-69	WE4	139+17.00 ++	160+25.00	NB / NB RAMP	2108	0.19							0.21											
67	YE1	133+00.00 +	135+00.00 +	SB	200		0.04																	
67-69	YE2	135+25.00	159+50.00	SB / SB RAMP	2425		0.25							0.21										
67-69	YE3	135+50.00	160+00.00	NB	2450		0.25							0.21										
67	YE4	139+17.00 ++	142+80.00 ++	NB RAMP	363									0.07						80				5
SUBTOTALS 100% 01/IMS/BR						1.08		495	0.77	448	1734	163	0.84		1544	0.63	472	911	113		116			
SUBTOTALS 100% 02/IMS/BR													0.14								5			
TOTALS CARRIED TO GENERAL SUMMARY						1.08		495	0.77	448	1734	163	0.98		1544	0.63	472	911	113		121			

BARRIER REFLECTOR SUMMARY

STATION FROM	STATION TO	LOCATION	LENGTH	SPACING	626 BARRIER REFLECTOR, TYPE B	626 BARRIER REFLECTOR, TYPE A
					EACH	EACH
133+53.00 +	134+28.00 +	SB LT	75	50	3	
133+58.00 +	134+28.00 +	SB RAMP RT	70	50	2	
139+33.00	150+21.00	SB LT	1088	50	23	
139+33.00	150+21.00	NB LT	1088	50	23	
139+38.00	150+24.00	SB RT	1086	50	23	
139+28.50	141+30.00	NB RT	202	50	5	
139+28.50 ++	141+70.00 ++	NB RAMP LT	242	50	6	
138+92.00 ++	150+16.00	NB / NB RAMP RT	1110	50	23	
136+92.00	139+04.00	G.R. NB RT	212	50		5
SUBTOTALS 100% 01/IMS/BR					113	
TOTALS CARRIED TO GENERAL SUMMARY					113	

NOTE:

STATIONS ARE BASED ON N.B. I-71 ℄ UNLESS OTHERWISE NOTED

+ = STATIONS BASED ON S.B. I-71 ℄
++ = STATIONS BASED ON RAMP ℄

CALCULATED CML
CHECKED DPF

ESTIMATED QUANTITIES - TRAFFIC CONTROL

HAM-71-1.59

ITEM 644/646	ODOT LINE SPECIFICATIONS						
LL	LANE LINE DASHED WHITE, 6"	CH	CHANNELIZING LINE, WHITE, 12"	DL	DOTTED LINE, WHITE, 6"	TW	TRANSVERSE LINE, WHITE, 24"
WE	EDGE LINE, WHITE, 6"	YE	EDGE LINE, YELLOW, 6"	DLw	DOTTED LINE, WHITE, 8"		

SIGN LEGEND

SPEED LIMIT 45 (crossed out)	REMOVE AND DISPOSE OF EXISTING SIGN	SPEED LIMIT 45	EXISTING SIGN TO REMAIN
SPEED LIMIT 45	PROPOSED SIGN	SPEED LIMIT 45	REMOVE & RESET SIGN ON NEW SUPPORTS

CONTRACTOR TO INSTALL STORED SIGN TRUSS AND SIGNS (SEE GENERAL NOTES, SHEET 65)

S1 W1-2R-48 W13-1P-30 40 MPH

S2 W1-2R-48 W13-1P-30 40 MPH

S4 40 MPH; 40 MPH SOUTH 75 71 Louisville Lexington KEEP RIGHT; 40 MPH NORTH 75 Dayton KEEP LEFT; EXIT 25 MPH Downtown Riverfront Third St EXIT ONLY

S7 I-75 SOUTH D10-5-18 81-5-D10

S8 EXIT 25 MPH Downtown Riverfront Third St EXIT ONLY

S3 I-71 NORTH I-71 SOUTH D10-5-18 81-5-D10

S5 W4-1R-48

S6 EXIT 2 42 NORTH Reading Rd Eden Park Dr LEFT 3/4 MILE

S9 I-471 SOUTH D10-5-18 81-5-D10

FIFTH ST.

SENTINEL ST.

CULVERT ST

EGGELSTON AVE

COLUMBIA PARKWAY

RAMP I-471 NORTH TO SIXTH ST

RAMP FIFTH ST TO I-471 SOUTH

I-471 S.B.

133+50.00 - 27.00' LT. Ⓒ S.B. I-71 BEGIN TRANS.

136+50.00 - 32.00' LT. Ⓒ S.B. I-71 END TRANSITION

134+35 Ⓒ S.B.

134+26 Ⓒ S.B.

134+86 Ⓒ S.B.

+00 Ⓒ I-71 S.B.

+00 Ⓒ S.B.

Ⓒ I-71 S.B.

Ⓒ I-71 N.B.

REL. 139+25 Ⓒ N.B.

+17 Ⓒ RAMP

140+80 Ⓒ RAMP

142+80 Ⓒ RAMP

141+22

144+15

146+00 MATCH LINE STA 146+00

145+84

136+59

138+50

SEE NOTE #3 (IN BARRIER)

SEE NOTE #3 MOUNTED TO TOP OF BARRIER

VA Medical Center NEXT LEFT (IND)

ITEM 644

ITEM 646

VAR.

VARIES

YE1 LL1 WE1 YE2 WE2 YE3 WE3 LL2 LL3 YE4 WE4 TW1 CH1 CH2 CH3 CH4 DL1 DLw1

NOTES:

1) ALL STATIONS FROM Ⓒ I-71 N.B., UNLESS NOTED OTHERWISE
2) ⌖ MEET EXISTING PAVEMENT MARKING
3) 1½" CONDUIT, 725.04 AND 2 CONDUCTOR # 12 AWG POWER CABLE TO PROPOSED "TUNNEL CLOSED" SIGN MOUNTED TO EXISTING TRUSS @ STATION 152+40±
4) USE ITEM 646 ON BRIDGE DECKS & APPROACHES

HORIZONTAL SCALE IN FEET 0 20 40 80

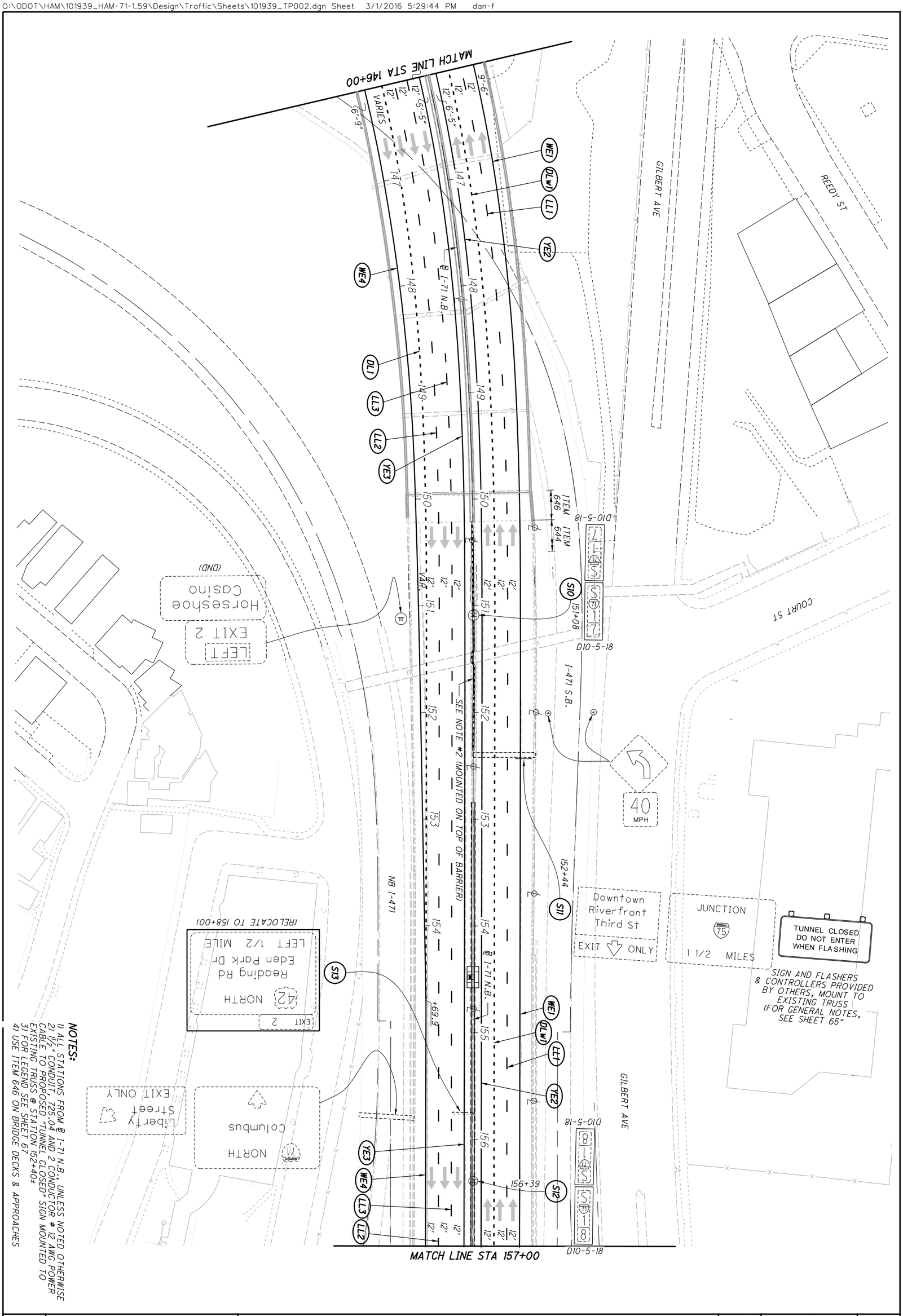
CALCULATED DPF CHECKED BJF

SIGNING AND PAVEMENT MARKING PLAN

HAM-71-1.59

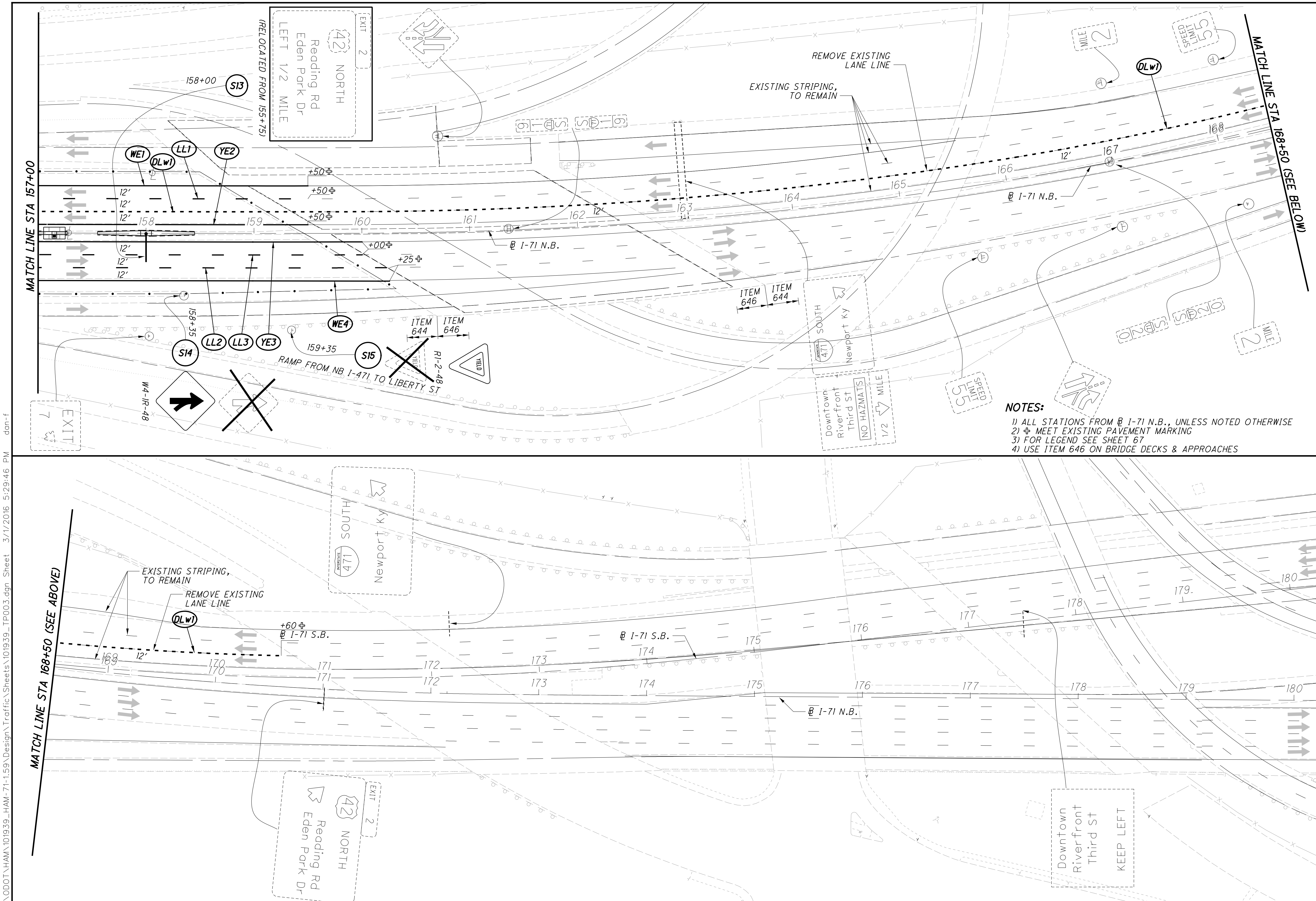
67 176

O:\ODOT\HAM\101939_HAM-71-1.59\Design\Traffic\Sheets\101939_TP001.dgn Sheet 3/1/2016 5:29:36 PM dan-f



NOTES:

1) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE
2) 1½" CONDUIT, 12S 04 AND 2 CONDUCTOR # 12 AWG POWER CABLE TO PROPOSED "TUNNEL CLOSED" SIGN MOUNTED TO EXISTING TRUSS @ STATION 152+40±
3) FOR LEGEND SEE SHEET 67
4) USE ITEM 646 ON BRIDGE DECKS & APPROACHES



NOTES:

1) ALL STATIONS FROM ℄ I-71 N.B., UNLESS NOTED OTHERWISE
2) ⊕ MEET EXISTING PAVEMENT MARKING
3) FOR LEGEND SEE SHEET 67
4) USE ITEM 646 ON BRIDGE DECKS & APPROACHES

HORIZONTAL SCALE IN FEET

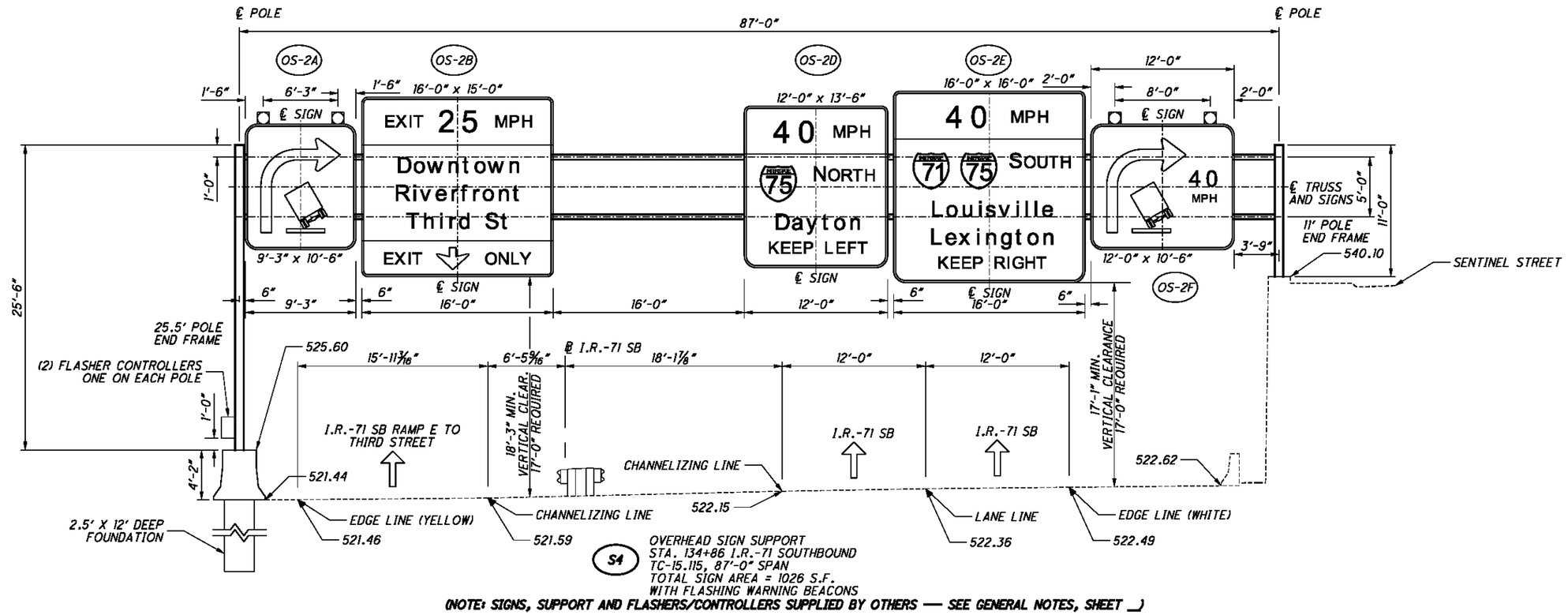
0 20 40 80

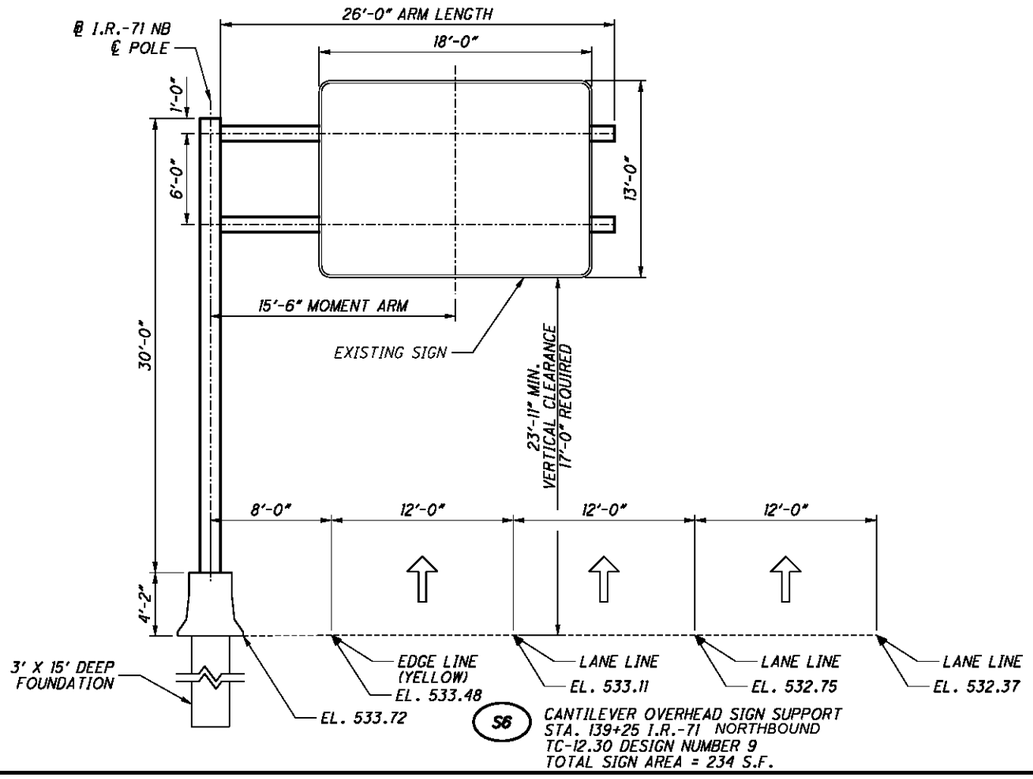
CALCULATED DPF

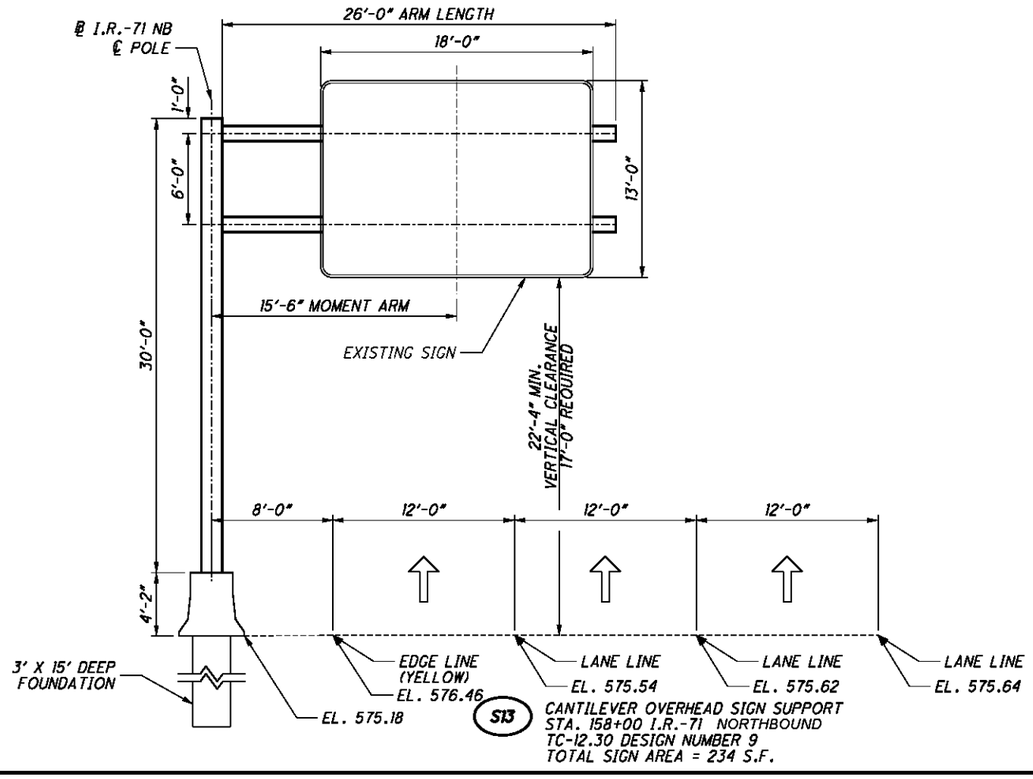
CHECKED BJF

SIGNING AND PAVEMENT MARKING PLAN

HAM-71-1.59





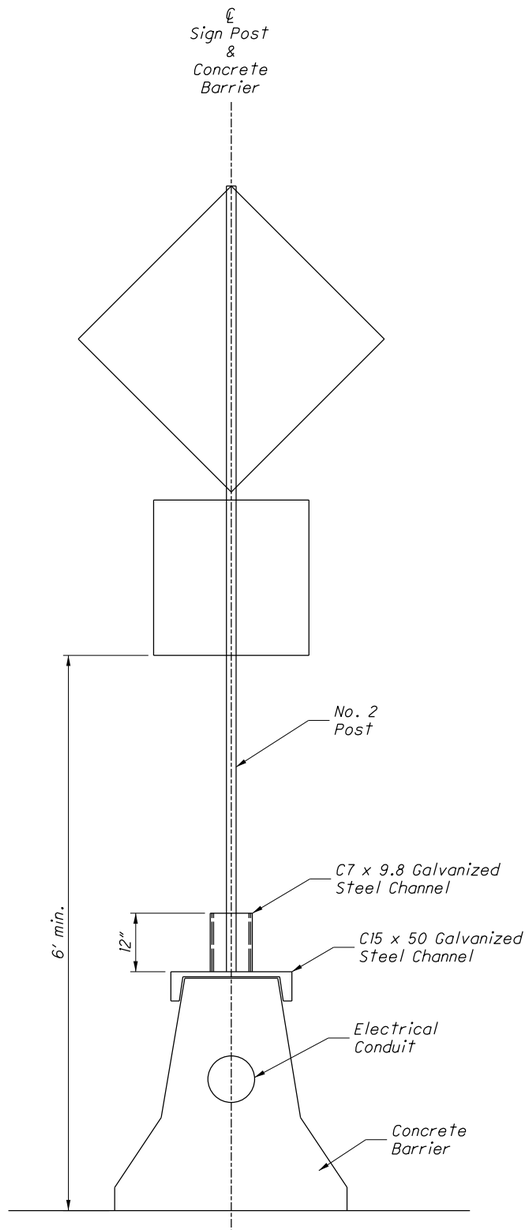


CALCULATED CML
CHECKED DPF

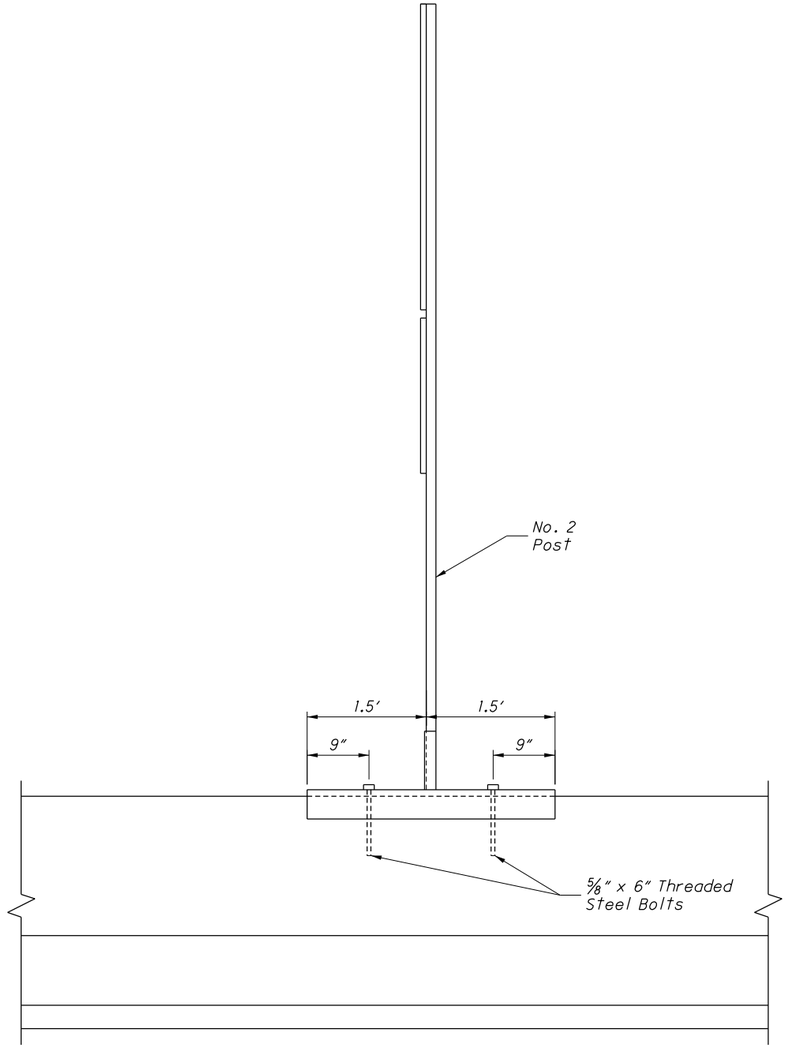
SIGN ELEVATION VIEWS

HAM-71-1.59

7.0
17.6



REAR VIEW



SIDE VIEW

NOTES:

1. The C7 x 9.8 galvanized steel channel shall be welded to the C15 x 50 galvanized steel channel.
2. The No. 2 post shall be attached to the C7 x 9.8 galavanized steel channel with two 5⁄8″ steel hex head bolts. The holes in the C7 x 9.8 steel channel shall be drilled before galvanizing. The holes shall be 9″ center to center.
3. The 5⁄8″ threaded steel bolts shall be attached to the concrete barrier with grout meeting the requirements of CMS 255.02.

OFFICE OF ROADWAY ENGINEERING

DESIGNED --NA-- REVIEWED 7/18/20

REVISION DATE ---NA--- CHECKED CHECKED

PLAN INSERT SHEET

CONCRETE BARRIER MOUNTED SIGN SUPPORT DETAIL, METHOD A

HAM-71-1.59

1 / 1

71
176

VERIFICATION OF EXISTING CONDITIONS

THE GENERAL LOCATION OF LIGHTING FACILITIES IS BASED ON INFORMATION FROM EXISTING PLANS ENTITLED: HAM-71-1.30/9.00 (1995) AND CITY OF CINCINNATI LIGHTING RECORDS. CONTRACTOR SHALL VERIFY ALL PLAN INFORMATION FOR ACCURACY.

VERIFICATION OF CITY OF CINCINNATI AND PRIVATE ELECTRIC SERVICES

CONTRACTOR SHALL VERIFY LOCATION OF LIGHTING, TRAFFIC SIGNALS, AND RELATED ELECTRICAL SERVICES OWNED AND OPERATED BY THE CITY OF CINCINNATI OR PRIVATE OWNERS IN THE PROJECT VICINITY AND PROTECT THESE FACILITIES AS REQUIRED DURING CONSTRUCTION.

LAMPS

HIGH PRESSURE SODIUM LAMPS SHALL BE GENERAL ELECTRIC, INCLUDING UNDERPASS LIGHTING, "LUCALOX," OSRAM SYLVANIA "LUMALUX," PHILIPS "CERAMALUX," OR EQUAL APPROVED BY THE ENGINEER.

ITEM 625 - LIGHTING, MISC :RELOCATION OF CONDUIT OR JUNCTION BOX SUPPORT SYSTEM

THIS ITEM SHALL INCLUDE RELOCATING AND REATTACHING UNDER DECK LIGHTING FACILITIES MOUNTED FROM THE BRIDGE DECK, AS PER THE DETAILS ON SHEET 85.

THE NUMBER OF BRACKETS SHOULD BE 60. THIS NUMBER IS BASED ON AN APPROXIMATE SPACING OF 10 FEET. THE ACTUAL SPACING OF CONDUIT BRACKETS WILL DEPEND ON STIFFENER SPACING, WHICH VARIES ON DIFFERENT SPANS. IT IS NOT REQUIRED TO INSTALL A BRACKET ON EACH STIFFENER.

THE 120 FEET OF CONDUIT IS TO BE USED AS NECESSARY TO REPLACE EXISTING UNDERDECK LIGHTING ATTACHED TO THE BEAMS, AS DIRECTED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR USE IN PREPARING THE CONTRACTORS BID.

ITEM 625 - CONDUIT, 2", 725.04 - 120 FEET

ITEM 625 - NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE - 450 FEET

ITEM 625 - JUNCTION BOX - 5 EACH

THE LUMP SUM PRICE BID FOR ITEM LIGHTING, MISC :RELOCATION OF CONDUIT OR JUNCTION BOX SUPPORT SYSTEM SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY AND AS DETAILED FOR THIS WORK.

625, LIGHT POLE ANCHOR L BOLTS, AS PER PLAN

THIS ITEM SHALL INCLUDE MATERIAL, LABOR, AND EQUIPMENT NECESSARY TO PROVIDE AND INSTALL LIGHT POLE BASE ANCHOR BOLTS AT THE FOLLOWING LOCATIONS:

ANCHOR BOLT A - 3 LOCATIONS - HAM-71-0154 LIGHT PILASTERS - SEE SHEET 93.
ANCHOR BOLT B - 5 LOCATIONS - HAM-71-0159 LIGHT PILASTER AND MEDIAN LIGHT POLE - SEE SHEET 133.

REFER TO BRIDGE PLAN SHEETS FOR DETAILS AND DIMENSIONS OF THE ANCHOR BOLTS. PROVIDE GALVANIZED WASHERS AND NUTS CONFORMING TO CMS 711.09 AS PART OF THIS PAY ITEM.

625, POWER SERVICE, AS PER PLAN

IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE FOLLOWING IS ADDED.

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

DUKE ENERGY

139 EAST 4TH STREET

513-287-3674

ATTN: AARON WRIGHT

THE ENGINEER SHALL ENSURE THAT EACH POWER SERVICE ELECTRICAL ENERGY ACCOUNT IS IN THE NAME OF AND THAT THE BILLING ADDRESS IS TO THE MAINTAINING AGENCY NOTED IN THE PLANS. THIS SHALL BE DONE NOT ONLY FOR EACH NEW POWER SERVICE ESTABLISHED BY THIS PROJECT BUT ALSO FOR EACH EXISTING POWER SERVICE, SINCE THERE MAY BE A REASSIGNMENT OF THE RESPONSIBILITY FOR AN EXISTING SERVICE AS A RESULT OF THE WORK PERFORMED BY THIS PROJECT.

PAYMENT WILL BE MADE AT THE UNIT BID PRICE FOR EACH C&MS ITEM 625, "POWER SERVICE, AS PER PLAN" WHICH SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS AND INCIDENTALS REQUIRED TO COMPLETE THIS ITEM IN A SATISFACTORY AND WORKMANLIKE MANNER.

SPECIAL, MAINTAIN EXISTING LIGHTING

EXISTING ROADWAYS WHICH ARE TO REMAIN OPEN TO TRAFFIC DURING CONSTRUCTION OF THIS PROJECT AND WHICH ARE LIGHTED, INCLUDING UNDERPASS LIGHTING, SHALL HAVE THE LIGHTING MAINTAINED AS DESCRIBED HEREIN.

BEFORE ANY WORK IS STARTED IN THE IMMEDIATE VICINITY OF THE EXISTING LIGHTING CIRCUITS, REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR SHALL MAKE A VISUAL INSPECTION OF THE EXISTING ROADWAY LIGHTING CIRCUITS TO BE MAINTAINED. DURING THIS INSPECTION, A WRITTEN RECORD OF THE CONDITION OF EXISTING LIGHTING SHALL BE MADE BY ODOT'S REPRESENTATIVE. THIS WRITTEN REPORT SHALL NOTE INDIVIDUAL LUMINAIRES WHICH ARE NOT IN WORKING ORDER, INDIVIDUAL POLES WHICH ARE NOT STANDING, AND INDIVIDUAL CIRCUITS WHICH ARE NOT IN WORKING ORDER. THE COMPLETED REPORT SHALL BE SIGNED BY THE REPRESENTATIVES OF ODOT, THE MAINTAINING AGENCY AND THE CONTRACTOR.

IF, AS A RESULT OF THIS INSPECTION, IT IS DETERMINED THAT THE CONDITION OF THE EXISTING SYSTEM IS BELOW THAT REQUIRED FOR THE SAFETY OF THE TRAVELING PUBLIC, THEN THE MAINTAINING AGENCY SHALL MAKE THE REPAIRS NECESSARY TO RETURN THE SYSTEM TO AN ACCEPTABLE CONDITION. FOLLOWING THESE REPAIRS, THE SYSTEM SHALL AGAIN BE INSPECTED AND A REPORT SHALL BE MADE AND SIGNED AS OUTLINED HEREIN.

WHEN THE EXISTING SYSTEM IS IN AN ACCEPTABLE CONDITION, IT SHALL BE TURNED OVER TO THE CONTRACTOR WHO SHALL THEN BE REQUIRED TO MAINTAIN THE EXISTING LIGHTING TO THE CONDITION OUTLINED IN THIS REPORT WITH THE EXCEPTION OF KNOCKDOWNS DUE TO TRAFFIC ACCIDENTS.

REPLACEMENT OF KNOCKED DOWNED UNITS SHALL BE DONE ONLY WHEN THE ENGINEER HAS DETERMINED THAT THE REPLACEMENT OF THE KNOCKED DOWN UNIT IS NECESSARY AND SHALL BE PAID SEPARATELY ON A UNIT BASIS.

BETTERMENTS SHALL BE COVERED IN ITEMS OF WORK PERTAINING TO THE CONSTRUCTION OF PERMANENT IMPROVEMENT.

WHEN THE SEQUENCE OF CONSTRUCTION ACTIVITIES REQUIRES, OR SHOULD THE CONTRACTOR DESIRE, THE REMOVAL OF THE EXISTING LIGHTING BEFORE THE NEW LIGHTING IS OPERATIONAL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY LIGHTING OF THIS PORTION OF THE ROADWAY.

PRIOR TO INSTALLING SUCH LIGHTING, THE CONTRACTOR SHALL PREPARE AND SUBMIT FOUR SETS OF THE TEMPORARY LIGHTING PLAN TO THE ENGINEER FOR REVIEW AND APPROVAL.

THIS PLAN SHALL SHOW LOCATIONS OF POLES, LENGTHS OF BRACKET ARMS, STYLES OF LUMINAIRES, MOUNTING HEIGHTS, WIRING METHODS AND OTHER PERTINENT INFORMATION. THE TEMPORARY LIGHTING SHALL PROVIDE AN AVERAGE INITIAL INTENSITY OF 1.2 FOOTCANDLES WITH AN AVERAGE TO MINIMUM UNIFORMITY NOT TO EXCEED 3:1. MOUNTING HEIGHT OF TEMPORARY LUMINAIRES SHALL NOT BE LESS THAN 30 FEET, AND THE MINIMUM OVERHEAD CONDUCTOR CLEARANCE SHALL BE 20 FEET. TEMPORARY OVERHEAD CONSTRUCTION SHALL NOT BE LESS THAN GRADE "A" FOR STRENGTH REQUIREMENTS AS DEFINED BY THE NATIONAL ELECTRIC SAFETY CODE. WOOD POLES WITH OVERHEAD WIRING MAY BE USED. HOWEVER, TEMPORARY LIGHTING SHALL MEET FEDERAL AND STATE SAFETY CRITERIA. IF BREAKAWAY POLES ARE USED TO MEET THESE CRITERIA, THEN UNDERGROUND WIRING SHALL BE USED. RECONDITIONED OR USED MATERIALS MAY BE FURNISHED FOR TEMPORARY LIGHTING.

ALL MATERIALS NECESSARY TO COMPLETE THE TEMPORARY LIGHTING SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. WHEN NO LONGER NEEDED, THE TEMPORARY LIGHTING INSTALLATION SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR.

THE MAINTAINING AGENCY WILL PAY FOR ELECTRICAL ENERGY CONSUMED BY EXISTING POWER SERVICES AND BY PROPOSED PERMANENT POWER SERVICES AFTER ACCEPTANCE OF THE LIGHTING WORK. THE CONTRACTOR WILL PAY FOR ELECTRICAL ENERGY, INSTALLATION, REMOVAL AND MAINTENANCE OF ANY TEMPORARY POWER SERVICES.

THE LUMP SUM PRICE BID FOR ITEM SPECIAL "MAINTAIN EXISTING LIGHTING" SHALL INCLUDE PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO MAINTAIN THE EXISTING LIGHTING AS SPECIFIED HEREIN.

THE UNIT PRICE BID FOR ITEM SPECIAL "REPLACEMENT OF EXISTING LIGHTING UNIT" SHALL BE FULL PAYMENT FOR THE REPLACEMENT OF AN EXISTING LIGHTING UNIT WHICH HAS BEEN KNOCKED DOWN AFTER THE AFOREMENTIONED INSPECTION AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS NECESSARY TO PROVIDE A REPLACEMENT FOR SUCH UNIT.

SHEET NUM.											PART.			ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
							72		74		01/IMS/BR	02/IMS/BR							
																		LIGHTING	
									30		24	6		625	00450	30	EACH	CONNECTION, FUSED PULL APART	
									4		1	3		625	10490	4	EACH	LIGHT POLE, CONVENTIONAL, DESIGN A10D40	
									11		11			625	10490	11	EACH	LIGHT POLE, CONVENTIONAL, DESIGN A12DD40	
									32		20	12		625	10601	32	EACH	LIGHT POLE ANCHOR L-BOLTS, AS PER PLAN	72
									7		7			625	14300	7	EACH	MEDIAN LIGHT POLE FOUNDATION, 8' DEEP	
									6,225		4,665	1,560		625	23200	6,225	FT	NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE	
									2,190		2,190			625	23300	2,190	FT	NO. 2 AWG 5000 VOLT DISTRIBUTION CABLE	
									1,608		1,458	150		625	23400	1,608	FT	NO. 10 AWG POLE AND BRACKET CABLE	
									1,297		940	357		625	25400	1,297	FT	CONDUIT, 2", 725.04	
									113			113		625	25500	113	FT	CONDUIT, 3", 725.04	
									1,300		1,300			625	25600	1,300	FT	CONDUIT, 4", 725.04	
									2			2		625	26250	2	EACH	LUMINAIRE, CONVENTIONAL, STYLE B, TYPE II, 200W, 240V HPS	
									24		23	1		625	26250	24	EACH	LUMINAIRE, CONVENTIONAL, STYLE B, TYPE III, 200W, 240V HPS	
									15		8	7		625	29900	15	EACH	JUNCTION BOX	
									1		1			625	29910	1	EACH	TRANSITION JUNCTION BOX	
									1		1			625	29930	1	EACH	MEDIAN JUNCTION BOX	
									7		7			625	32000	7	EACH	GROUND ROD	
									2		1	1		625	33000	2	EACH	STRUCTURE GROUNDING SYSTEM	
									1		1			625	34001	1	EACH	POWER SERVICE, AS PER PLAN	72
							LS				LS			SPECIAL	62540000	LS		MAINTAIN EXISTING LIGHTING	72
							1				1			SPECIAL	62540010	1	EACH	REPLACEMENT OF EXISTING LIGHTING UNIT	75
									15		12	3		625	75400	15	EACH	LIGHT POLE REMOVED	
									3		3			625	75500	3	EACH	LIGHT POLE FOUNDATION REMOVED	
									26		23	3		625	75506	26	EACH	LUMINAIRE REMOVED	
									7,476		6,315	1,161		625	75550	7,476	FT	DISTRIBUTION CABLE REMOVED	
									1		1			625	75800	1	EACH	DISCONNECT CIRCUIT	
							LS				LS			625	98200	LS		LIGHTING, MISC.:RELOCATION OF CONDUIT OR JUNCTION BOX SUPPORT SYSTEM	72

CALCULATED MAM
CHECKED BJF

GENERAL SUMMARY - LIGHTING

HAM-71-1.59

REFERENCE NUMBER	SHEET NUMBER	STATION FROM	STATION TO	LOCATION	CIRCUIT NODE	625 LIGHT POLE REMOVED EACH	625 LIGHT POLE FOUNDATION REMOVED EACH	625 LUMINAIRE REMOVED EACH	625 DISTRIBUTION CABLE REMOVED FEET	625 LUMINAIRE, CONVENTIONAL (STYLE B, TYPE III, 200W, 240V HPS) EACH	625 LIGHT POLE, DESIGN A12DD40 EACH	625 LIGHT POLE, DESIGN A10D40 EACH	625 LUMINAIRE, CONVENTIONAL (STYLE B, TYPE II, 200W, 240V HPS) EACH	625 MEDIAN LIGHT POLE FOUNDATION, 8' DEEP EACH	625 LIGHT POLE ANCHOR L-BOLTS, AS PER PLAN EACH	625 NO. 10 AWG POLE AND BRACKET CABLE FEET	625 CONNECTION, FUSED PULL APART EACH	625 GROUND ROD EACH	625 NO. 4 AWG 5000 VOLT DISTRIBUTION CABLE FEET	625 NO. 2 AWG 5000 VOLT DISTRIBUTION CABLE FEET	625 CONDUIT, 2", 725.04 FEET	625 CONDUIT, 3", 725.04 FEET	625 CONDUIT, 4", 725.04 FEET	625 JUNCTION BOX EACH	625 MEDIAN JUNCTION BOX EACH	625 TRANSITION JUNCTION BOX EACH	625 DISCONNECT CIRCUIT EACH	625 STRUCTURE GROUNDING SYSTEM EACH	625 POWER SERVICE, AS PER PLAN EACH	NOTES
L2 A1	76	136+00	137+55	℄ I-71 NB	L2A1 - L2A2	1	1	2	540	2	1			1		128	2	1	540						1					
L2 A2	76-77	137+55	139+20	℄ I-71 NB	L2A2 - L2A3	1	1	2	525	2	1			1		128	2	1	525											
L2 A3	77	139+20	141+28	℄ I-71 NB	L2A3 - L2A4	1	1	2	684	2	1			1		128	2	1	684		198				1		1			
L2 A4	77-78	141+28	143+56	℄ I-71 NB	L2A4 - L2A5	1		2	714	2	1				4	128	2		714		228									
L2 A5	78	143+56	145+84	℄ I-71 NB	L2A5 - L2A6	1		2	714	2	1				4	128	2		714		228									
CC L2	77	137+75	139+48	℄ I-71 SB/℄ RAMP B	CCL2 - L2B7	1		1				1	1		4	50	2		969			113		5				1		
L2 B7	77	139+48	140+84	℄ RAMP B	L2B7 - L2B8	1		1	438			1	1		4	50	2		438		136									
L2 B8	77	140+84	141+91	℄ RAMP B/℄ I-71 NB	L2B8 - L2B9	1		1	447	1		1			4	50	2		447		134			1						
L2 B9	77-78	141+91	143+36	℄ I-71 NB	L2B9 - L2B10	1		1	480	1		1			4	50	2		480		145			1			1	1		
L2 A6	78-79	145+84	148+12	℄ I-71 NB	L2A6 - L2A7	2		4	714	4	2				8	256	4		714		228							1		
L5 A1	79	150+40	152+50	℄ I-71 NB	L5A1 - L5A2	1		2	660	2	1			1		128	2	1		630										
L5 A2	79-80	152+50	154+90	℄ I-71 NB	L5A2 - L5A3	1		2	750	2	1			1		128	2	1		750										
L5 A3	80	154+90	157+40	℄ I-71 NB	L5A3 - L5A4	2		4	810	4	2			2		256	4	2		810										
C1	77-79	137+85	149+85	℄ I-71 SB	N/A																			1300	7					PROVIDED FOR FUTURE USE
TOTALS CARRIED TO GENERAL SUMMARY						15	3	26	7476	24	11	4	2	7	32	1608	30	7	6225	2190	1297	113	1300	15	1	1	1	2	1	

CALCULATED MAM
CHECKED BJF

ESTIMATED QUANTITIES - LIGHTING

HAM-71-1.59

74
176

LEGEND

77 — LIGHTING PLAN SHEET

82 — UNDERPASS LIGHTING PLAN SHEET

N

0 50 100 200
HORIZONTAL SCALE IN FEET

CALCULATED MAM
CHECKED BJF

LIGHTING SCHEMATIC PLAN

HAM-71-1.59

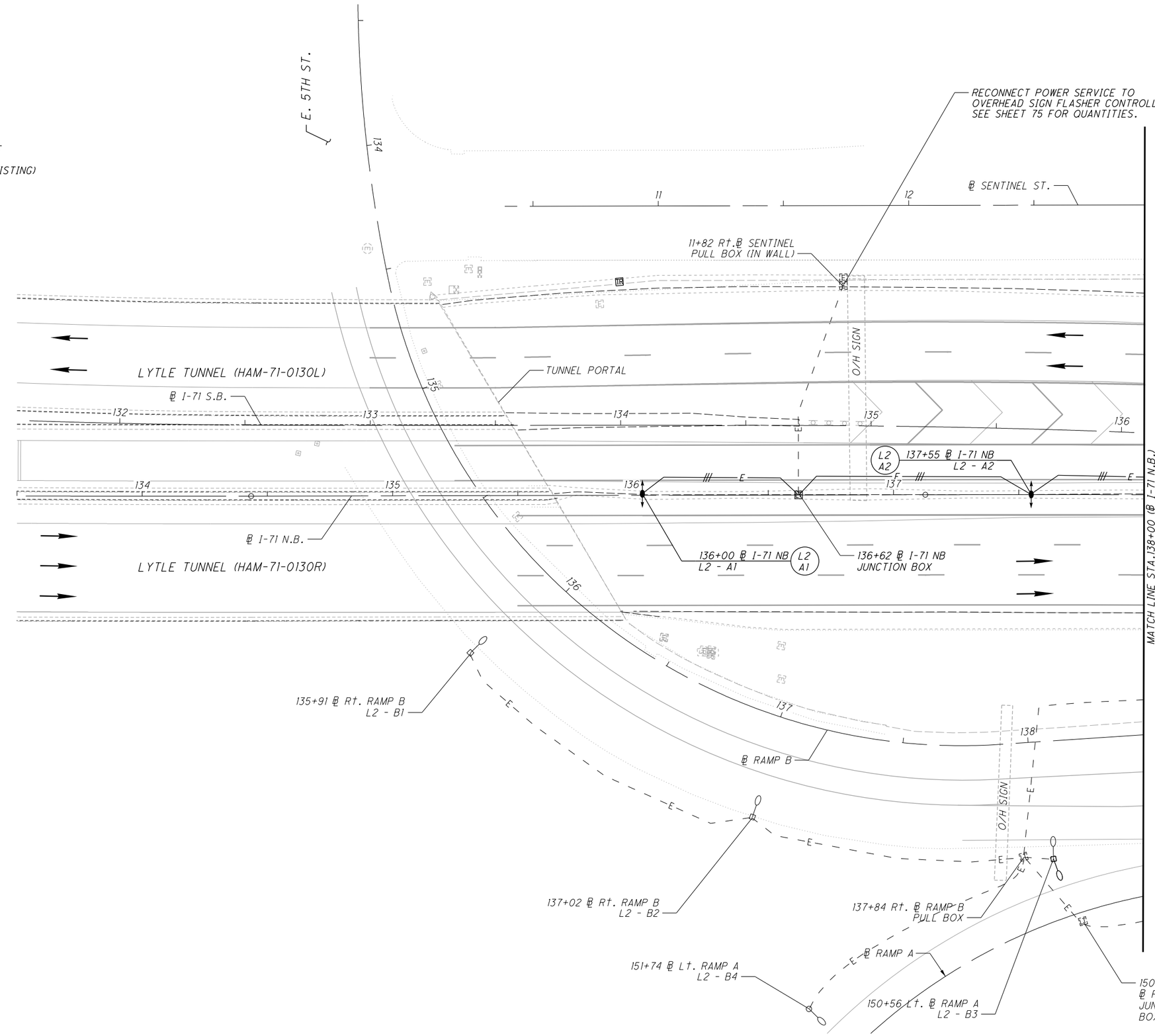
75
176

POLE LEGEND

STATION - OFFSET FROM ℄
CIRCUIT- LIGHT IDENTIFICATION

OVERHEAD LIGHTING LEGEND

- EXISTING MEDIAN BARRIER MOUNTED POLE & DUAL LUMINAIRE (DO NOT DISTURB)
- R EXISTING MEDIAN BARRIER MOUNTED POLE & DUAL LUMINAIRE (REMOVE)
- PROPOSED MEDIAN BARRIER MOUNTED TWIN DAVIT ARM POLE & DUAL CONVENTIONAL LUMINAIRES, STYLE B, TYPE III, 200W, 240V HPS (REMOVE EXISTING)
- EXISTING PARAPET MOUNTED LIGHT POLE & LUMINAIRE (DO NOT DISTURB)
- EXISTING PARAPET MOUNTED LIGHT POLE & LUMINAIRE (REMOVED AND REINSTALLED)
- EXISTING GROUND MOUNTED LIGHT POLE & LUMINAIRE (DO NOT DISTURB)
- EXISTING PULL BOX OR JUNCTION BOX (TO NOT DISTURB)
- PROPOSED PULL BOX OR JUNCTION BOX (REMOVE EXISTING)
- —E— EXISTING CIRCUIT CONDUCTORS (TO REMAIN)
- —E— PROPOSED CIRCUIT CONDUCTORS
- EXISTING CONTROL CENTER (TO REMAIN)
- EXISTING TRANSFORMER (TO REMAIN)
- EXISTING POWER POLE (TO REMAIN)
- EXP EXPANSION/DEFLECTION FITTING



HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

LIGHTING PLAN I-71
STA. 133+00 TO STA 138+00

HAM-71-1.59

76
176

O:\ODOT\HAM\101939_HAM-71-1.59\Design\Lighting\Sheets\101939_LP001.dgn Sheet 3/1/2016 5:29:53 PM don-f

TERMINATE 4" CONDUIT FOR FUTURE USE USING CONDUIT EXPANSION DEVICE. (DETAIL A, STD DWG HL-30.31)

SEE SHEET 86 FOR CONTROL CENTER L2 INFORMATION

℄ SENTINEL ST.

SENTINEL ST.

CC L2 PROPOSED CONDUCTOR INSTALLED IN EXISTING 3" CONDUIT MOUNTED TO ABUTMENT WALL

137+85 Lt. ℄ I-71 SB PROPOSED JUNCTION BOX (FOR FUTURE USE)

138+10 Lt. ℄ I-71 SB ABANDONED JUNCTION BOX

CONDUIT TO BE ABANDONED

139+85 Lt. ℄ I-71 SB PROPOSED JUNCTION BOX (FOR FUTURE USE)

139+64 Lt. ℄ I-71 SB ABANDONED JUNCTION BOX

138+79 Lt. ℄ I-71 SB JUNCTION BOX

C1

139+18 Lt. ℄ I-71 SB JUNCTION BOX

140+45 Lt. ℄ I-71 SB JUNCTION BOX

140+00 Lt. ℄ I-71 SB JUNCTION BOX

℄ CULVERT ST.

CULVERT ST.

BRIDGE HAM-71-0160

BRIDGE HAM-71-0159

EXP

℄ I-71 S.B.

℄ I-71 N.B.

MATCH LINE STA.138+00 (℄ I-71 N.B.)

MATCH LINE STA.143+00 (℄ I-71 N.B.)

O/H SIGN

O/H SIGN TO BE RELOCATED

L2 A3 139+20 ℄ I-71 NB L2 - A3

139+30 ℄ I-71 NB TRANSITION JUNCTION BOX

139+60 ℄ I-71 NB JUNCTION BOX

141+28 ℄ I-71 NB L2 - A4 (L2 A4)

139+43 Rt. ℄ I-71 NB PULL BOX RELOCATE PULL BOX TO AVOID CONFLICT WITH PROPOSED BARRIER

℄ RAMP B

141+91 Rt. ℄ I-71 NB L2 - B9 (L2 B9)

140+84 ℄ Rt. RAMP B L2 - B8 (L2 B8)

141+78 ℄ Rt. RAMP B JUNCTION BOX

142+78 Rt. ℄ NB I-71 JUNCTION BOX

℄ RAMP A

147+75 ℄ Rt. RAMP A L2 - B6

142+02 ℄ Rt. RAMP A JUNCTION BOX

PROPOSED 3" CONDUIT MOUNTED TO ABUTMENT AND RETAINING WALL FACE

139+48 ℄ Rt. RAMP B L2 - B7 (L2 B7)

139+30 ℄ Rt. RAMP B 2-PROPOSED JUNCTION BOXES MOUNTED TO ABUTMENT WALL AND PARAPET. CONNECT SERVICE TO L2-B7

149+22 ℄ Rt. RAMP A L2 - B5

℄ CULVERT ST.

139+60 ℄ I-71 NB 2-EXISTING JUNCTION BOXES. REPLACE LOWER JUNCTION BOX WITH PROPOSED JUNCTION BOX MOUNTED TO ABUTMENT WALL AND CONNECT TO NEW SERVICE. ADD 2 NEW JUNCTION BOXES AS DETAILED ON SHEET 84.

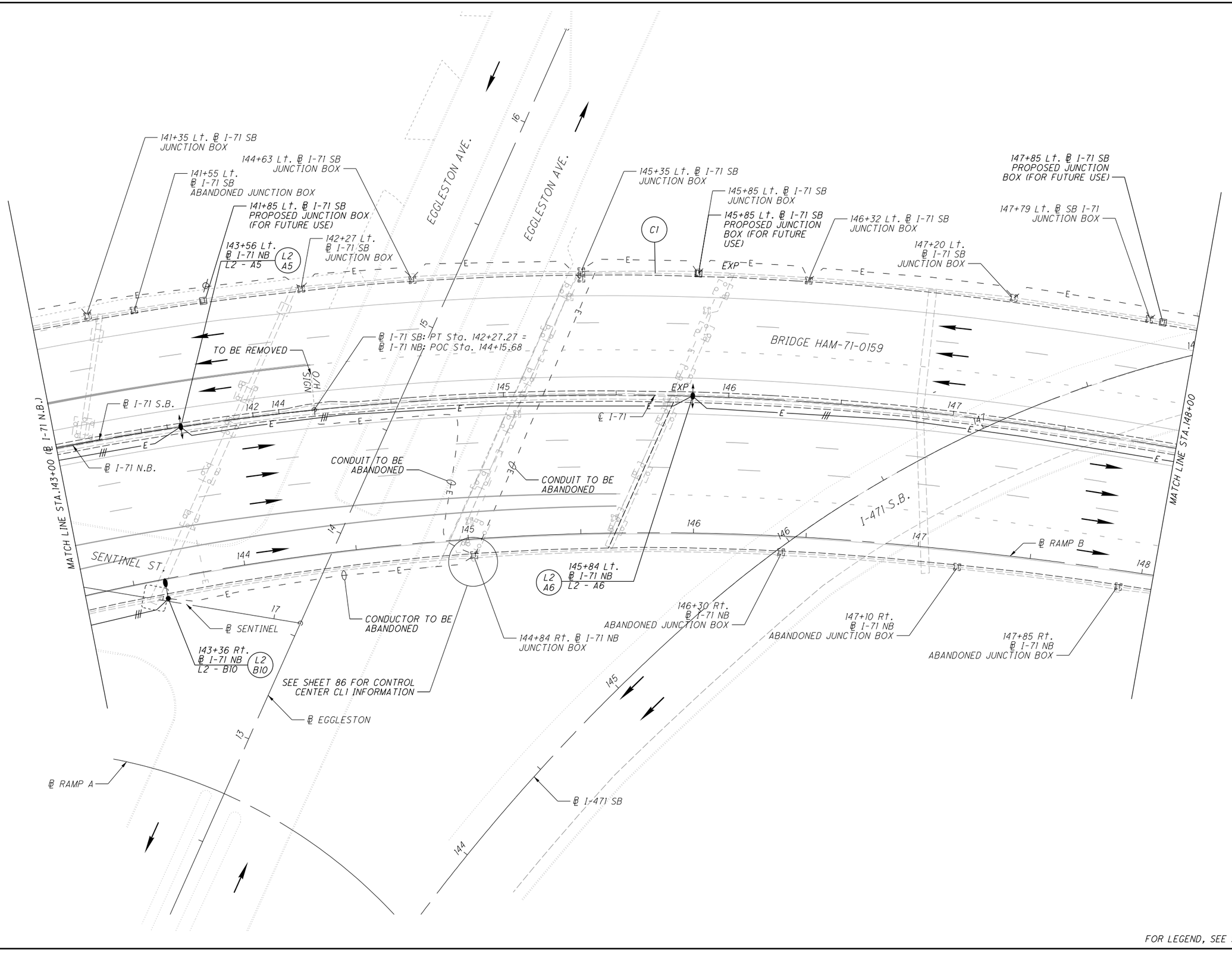
FOR REAR ABUTMENT AND RETAINING WALL DETAILS, SEE SHEET 84.
FOR LEGEND, SEE SHEET 76.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

LIGHTING PLAN - I-71
STA. 138+00 TO STA 143+00

HAM-71-1.59



FOR LEGEND, SEE SHEET 76.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

LIGHTING PLAN - I-71
STA. 143+00 TO STA. 148+00

HAM-71-1.59

78
176

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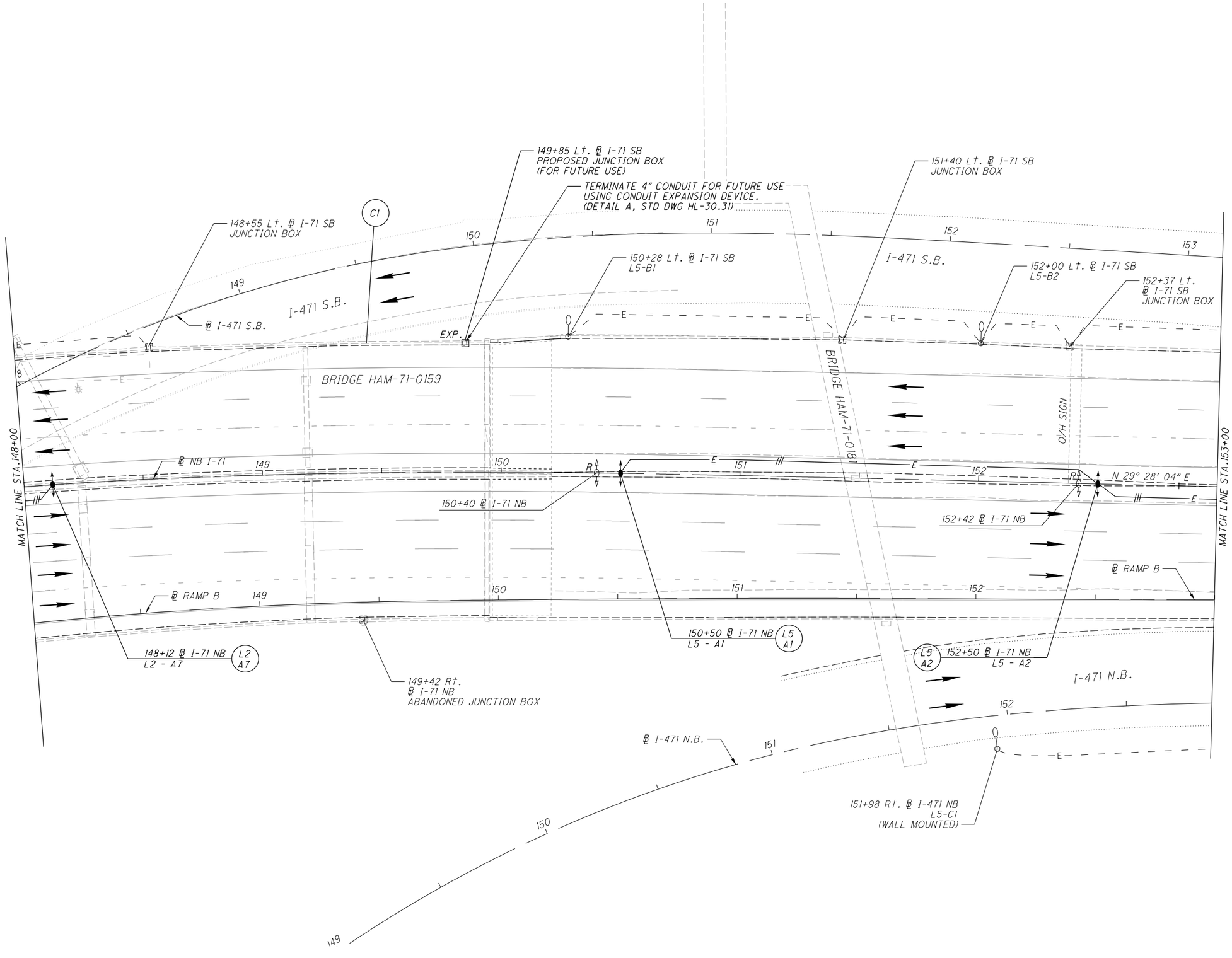

FOR LEGEND, SEE SHEET 76.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

LIGHTING PLAN - I-71
STA. 148+00 TO STA 153+00

HAM-71-1.59

79
176

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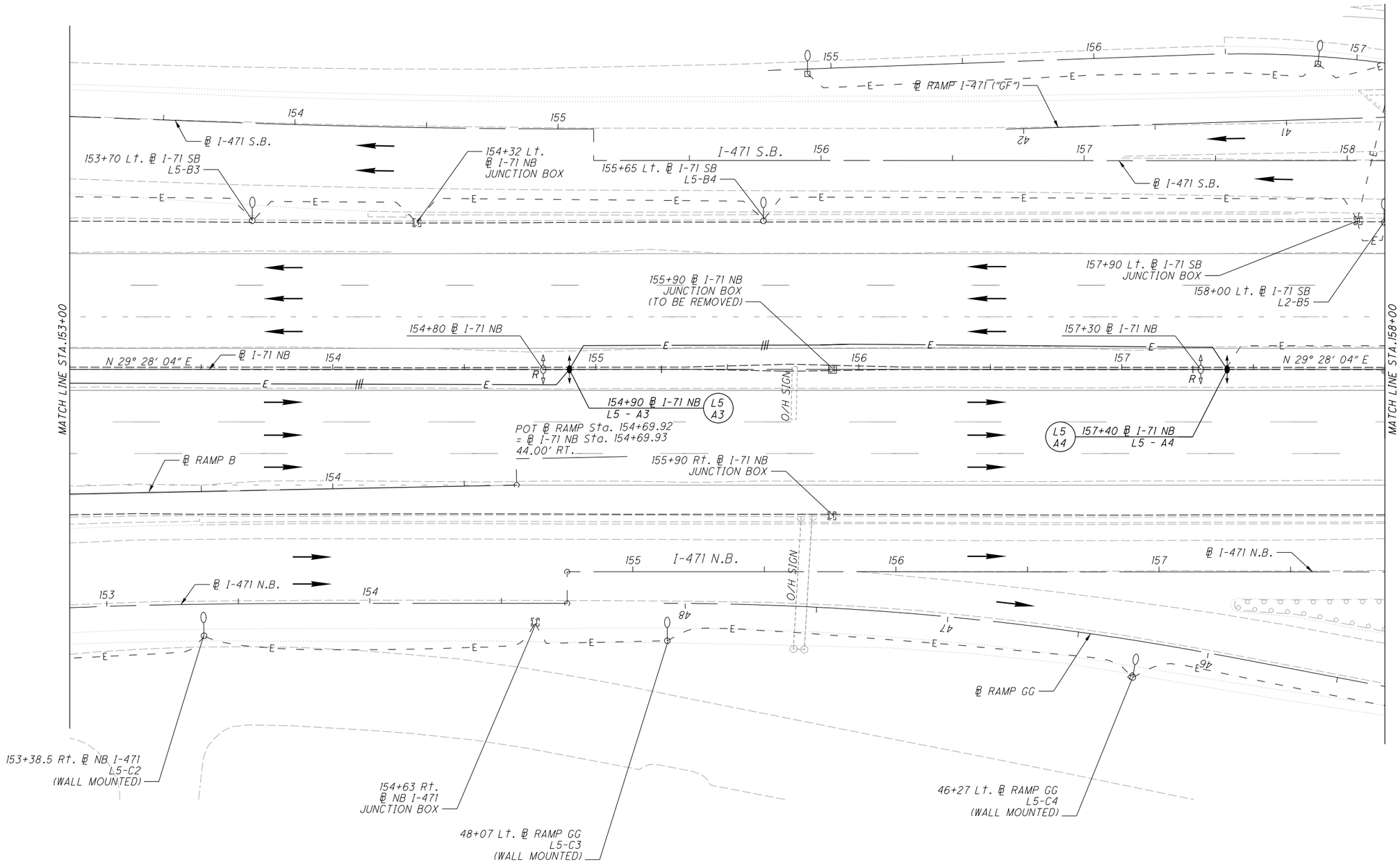

FOR LEGEND, SEE SHEET 76.

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

LIGHTING PLAN - I-71
STA. 153+00 TO STA 158+00

HAM-71-1.59

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

LIGHTING PLAN - I-71
STA. 158+00 TO STA 163+00

HAM-71-1.59

81
176

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UNDERPASS LIGHTING LEGEND

— E — EXISTING CIRCUIT CONDUCTORS TO BE MAINTAINED DURING BRIDGE DECK RECONSTRUCTION

EXISTING PULL BOX OR JUNCTION BOX

EXISTING LUMINAIRES

FACILITIES SUPPORTED BY UNDERDECK ANCHORS TO BE ATTACHED TO STRUCTURE IN ACCORDANCE WITH DETAILS ON SHEET 85. QUANTITIES INCLUDED FOR PAYMENT UNDER GENERAL NOTE "RELOCATION OF CONDUIT OR JUNCTION BOX SUPPORT SYSTEM" ON SHEET 72.

℄ CULVERT

℄ SENTINEL

℄ I-71 S.B.

℄ I-71 N.B.

℄ RAMP B

℄ EGGLESTON

℄ I-471 S.B.

℄ I-71|SB: PT Sta. 142+27.27 =
℄ I-71|NB: POC Sta. 144+15.68

139+62 ℄ I-71 NB JUNCTION BOX

138+79 Lt. ℄ I-71 SB JUNCTION BOX

139+18 Lt. ℄ I-71 SB JUNCTION BOX

140+00 Lt. ℄ I-71 SB JUNCTION BOX

140+45 Lt. ℄ I-71 SB JUNCTION BOX

140+84 Rt. ℄ RAMP B JUNCTION BOX

141+35 Lt. ℄ I-71 SB JUNCTION BOX

141+78 Rt. ℄ I-71 NB JUNCTION BOX

141+91 Rt. ℄ I-71 NB JUNCTION BOX

142+78 Rt. ℄ I-71 NB JUNCTION BOX

143+36 Rt. ℄ I-71 NB JUNCTION BOX

144+63 Lt. ℄ I-71 SB JUNCTION BOX

144+84 Rt. ℄ I-71 NB JUNCTION BOX

PIER 1E

PIER 1W

PIER 2E

PIER 2W

PIER 3E

PIER 3W

PIER 4E

PIER 4W

PIER 5E

PRIMARY ELECTRIC

SEE SHEET 88 FOR CONTROL CENTER CLI INFORMATION

MATCH LINE STA.145+00 (℄ I-71 N.B.)

HORIZONTAL SCALE IN FEET
0 10 20 40

CALCULATED MAM
CHECKED BJF

UNDERPASS LIGHTING PLAN I-71
STA. 139+00 TO STA 145+00

HAM-71-1.59

82
176

145+35 Lt. ℄ I-71 SB
JUNCTION BOX

145+85 Lt. ℄ I-71 SB
JUNCTION BOX

146+32 Lt. ℄ I-71 SB
JUNCTION BOX

147+20 Lt. ℄ I-71 SB
JUNCTION BOX

147+79 Lt. ℄ I-71 SB
JUNCTION BOX

148+55 Lt. ℄ I-71 SB
JUNCTION BOX

PIER 5W

PIER 6W

PIER 7W

PIER 8W

PIER 9W

PIER 6E

PIER 7E

PIER 8E

PIER 9E

PRIMARY ELECTRIC

℄ I-71 N.B.

℄ I-471 S.B.

MATCH LINE STA.145+00 ℄ I-71 N.B.

146+30 Rt. ℄ I-71 NB
ABANDONED JUNCTION BOX

147+10 Rt. ℄ I-71 NB
ABANDONED JUNCTION BOX

147+85 Rt. ℄ I-71 NB
ABANDONED JUNCTION BOX

149+42 Rt. ℄ I-71 NB
ABANDONED JUNCTION BOX

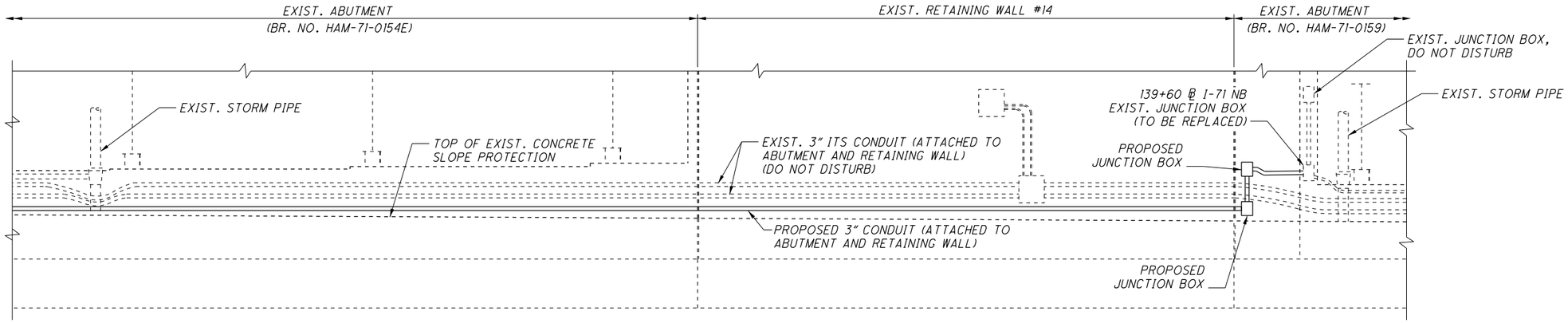
FOR LEGEND, SEE SHEET 82.

HORIZONTAL SCALE IN FEET
0 10 20 40

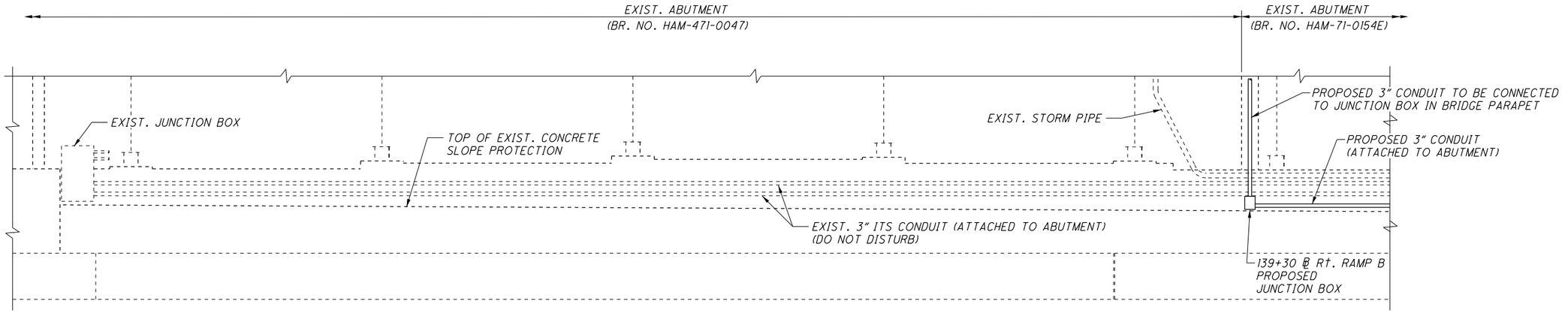
CALCULATED MAM
CHECKED BJF

UNDERPASS LIGHTING PLAN I-71
STA. 145+00 TO STA 150+50

HAM-71-1.59



SOUTH ABUTMENT AND RETAINING WALL ELEVATION



SOUTH ABUTMENT ELEVATION

NOTES

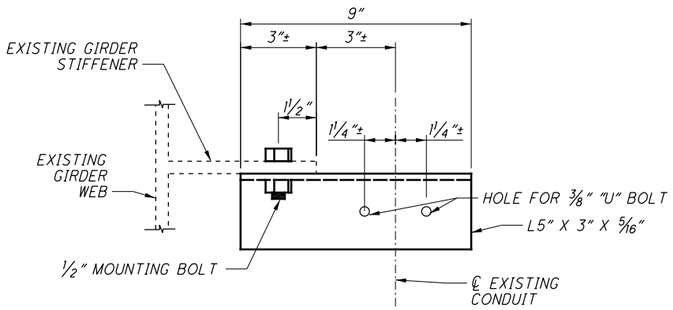
1. CONDUIT STRAPS SHALL BE INCIDENTAL AND INCLUDED WITH CONDUIT FOR PAYMENT.

2. FOR ADDITIONAL DETAILS, SEE SHEET 85.

CALCULATED MAM
CHECKED BJF

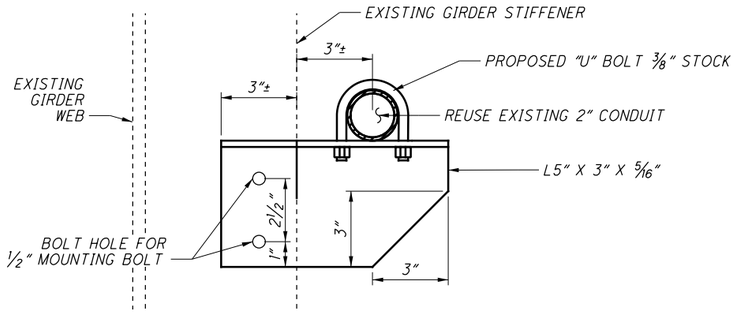
LIGHTING PLAN DETAILS

HAM-71-1.59



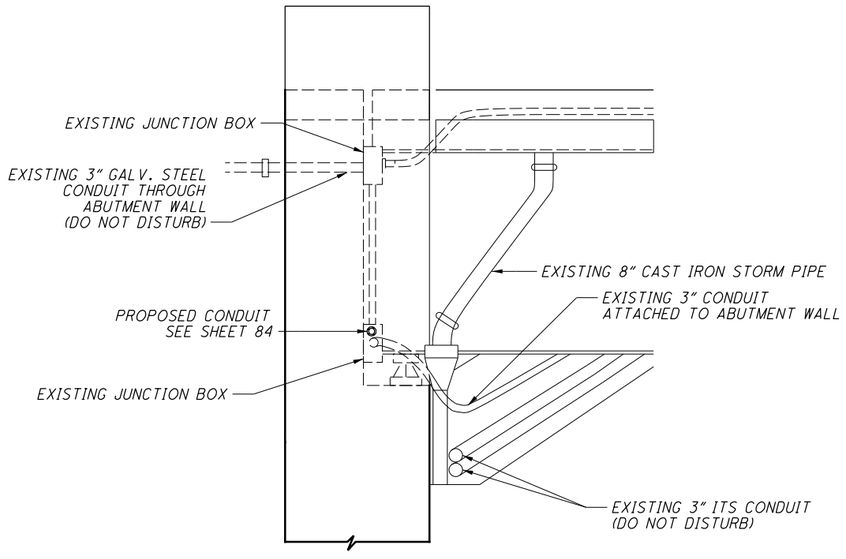
PLAN

PROPOSED CONDUIT SUPPORT
FOR PRIMARY ELECTRIC CONDUIT



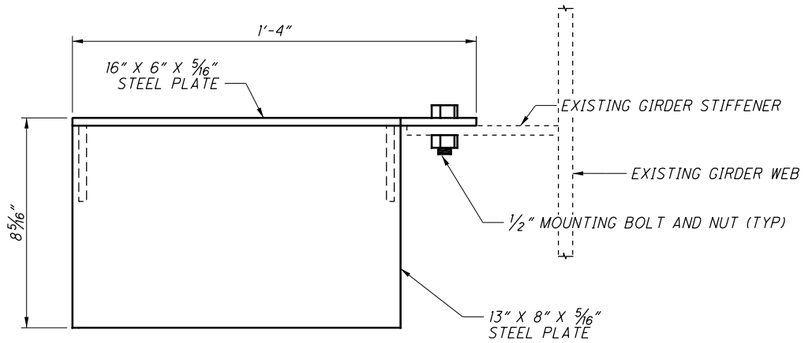
ELEVATION

PROPOSED CONDUIT SUPPORT
FOR PRIMARY ELECTRIC CONDUIT



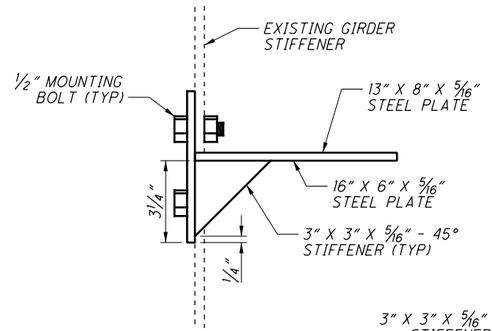
ELEVATION

SOUTH ABUTMENT HAM-71-0159 (RIGHT)
AND RETAINING WALL NO. 14

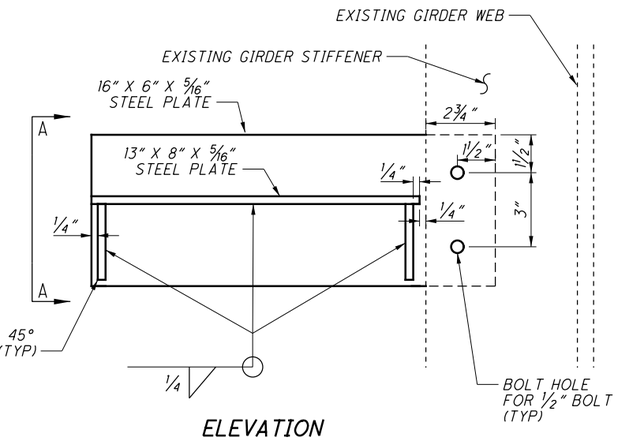


PLAN

STIFFENER MOUNTED JUNCTION
BOX SUPPORT PLATE



VIEW A-A



ELEVATION

STIFFENER MOUNTED JUNCTION
BOX SUPPORT PLATE

NOTES:

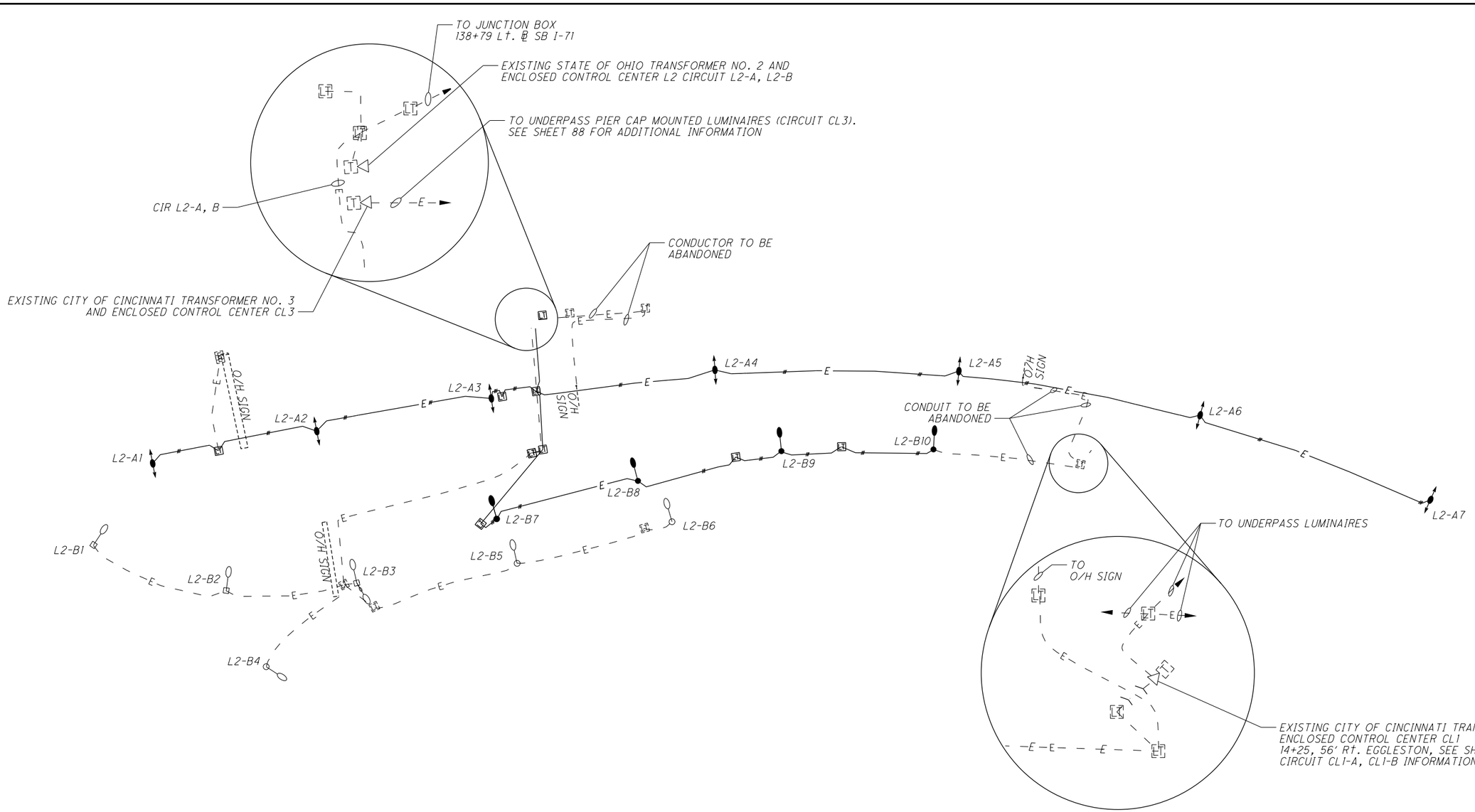
1) SEE SHEETS 82 AND 83 FOR JUNCTION BOX LOCATIONS AND PRIMARY ELECTRIC LOCATION.

2) CONDUIT AND JUNCTION BOX SUPPORTS ARE TO BE INCLUDED WITH ITEM 625 - LIGHTING, MISC: RELOCATION OF CONDUIT AND JUNCTION BOX SUPPORT SYSTEM.

CALCULATED SDW
CHECKED BJF

LIGHTING PLAN DETAILS

HAM-71-1.59



CONTROL CENTER L2

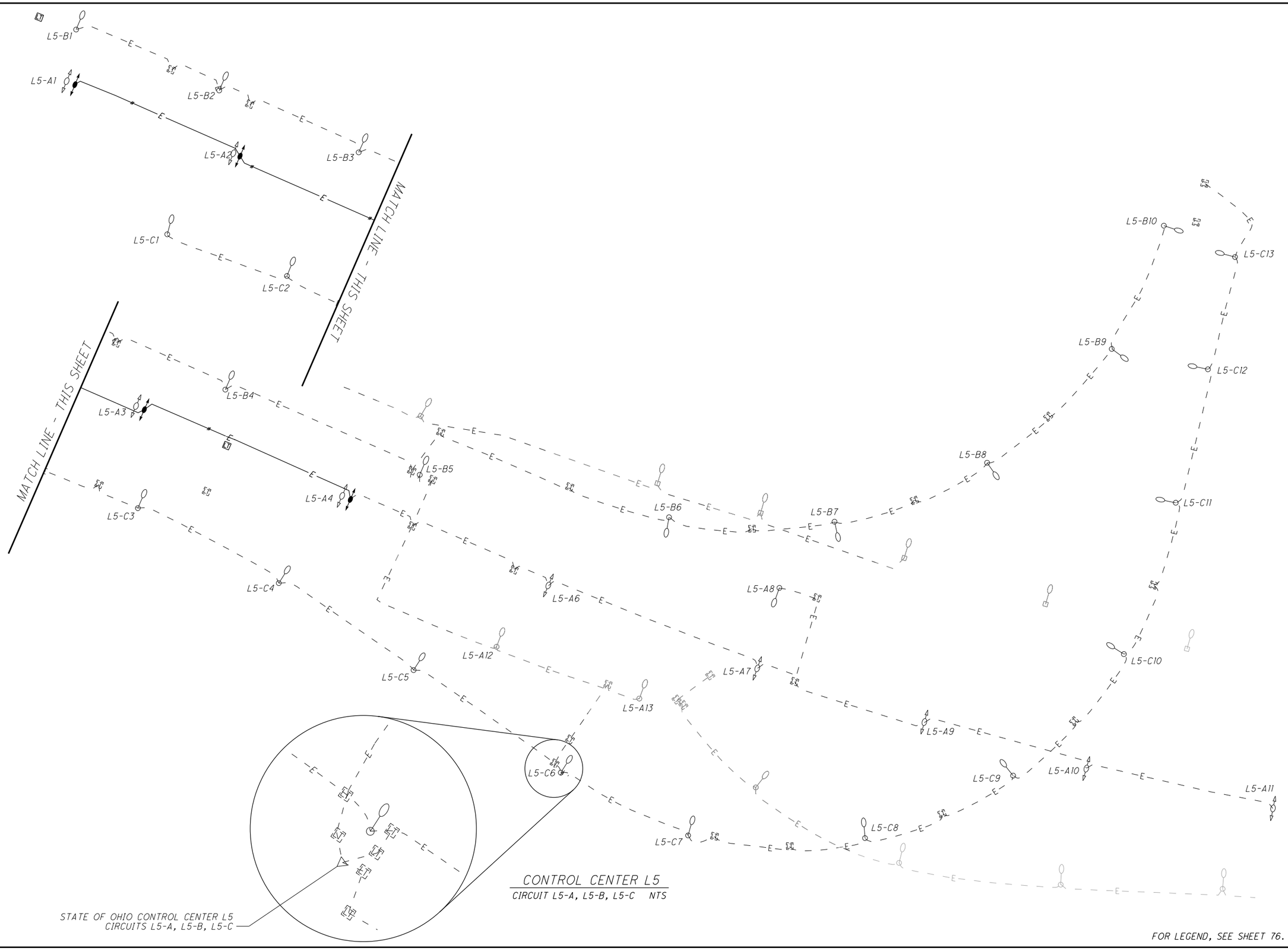
CIRCUIT L2-A, L2-B NTS

FOR LEGEND, SEE SHEET 76.

CALCULATED MAM
CHECKED BJF

CIRCUIT DIAGRAM

HAM-71-1.59

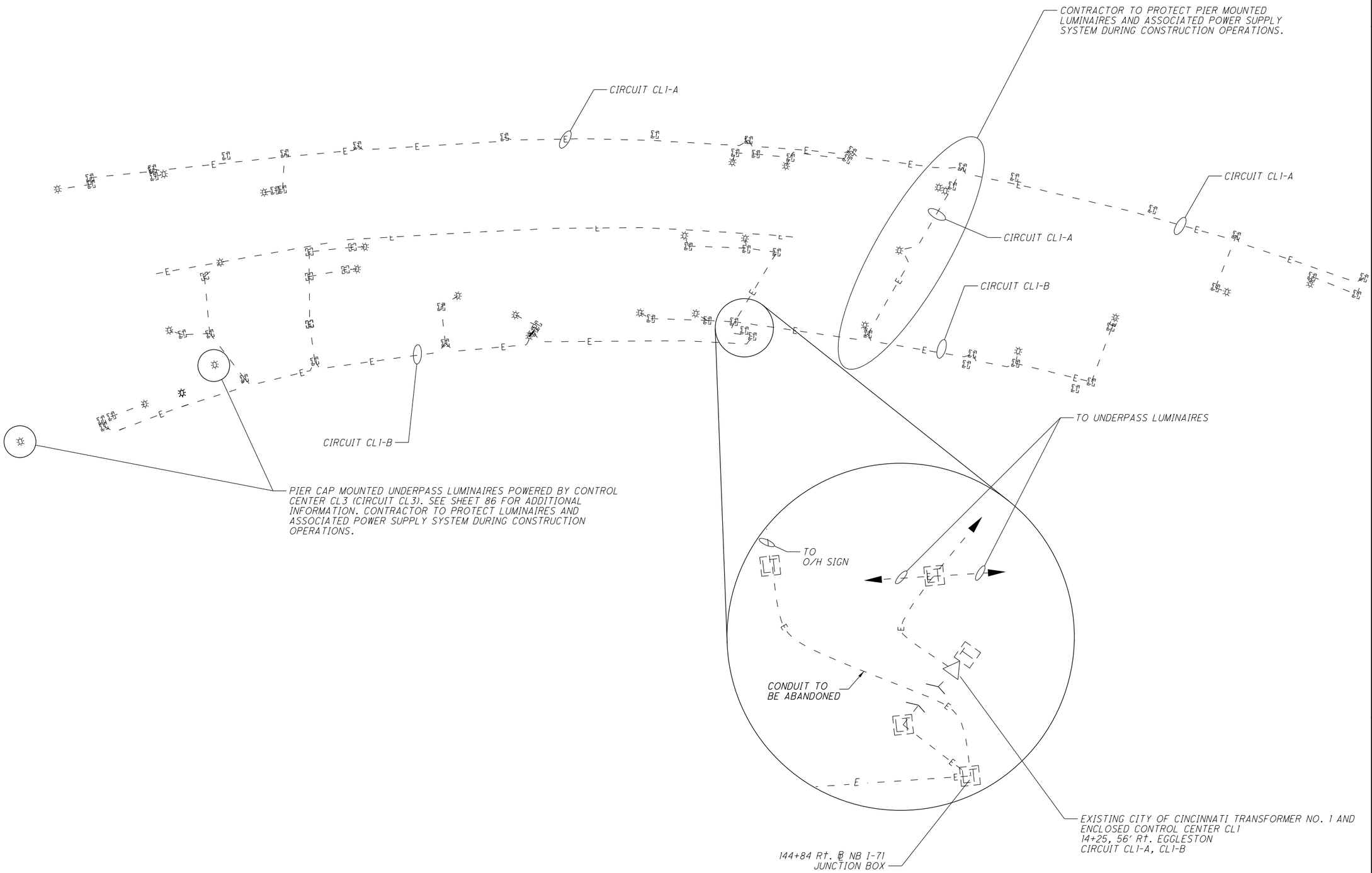


FOR LEGEND, SEE SHEET 76.

CALCULATED MAM
CHECKED BJF

CIRCUIT DIAGRAM

HAM-71-1.59



CONTROL CENTER CL1 AND CL3

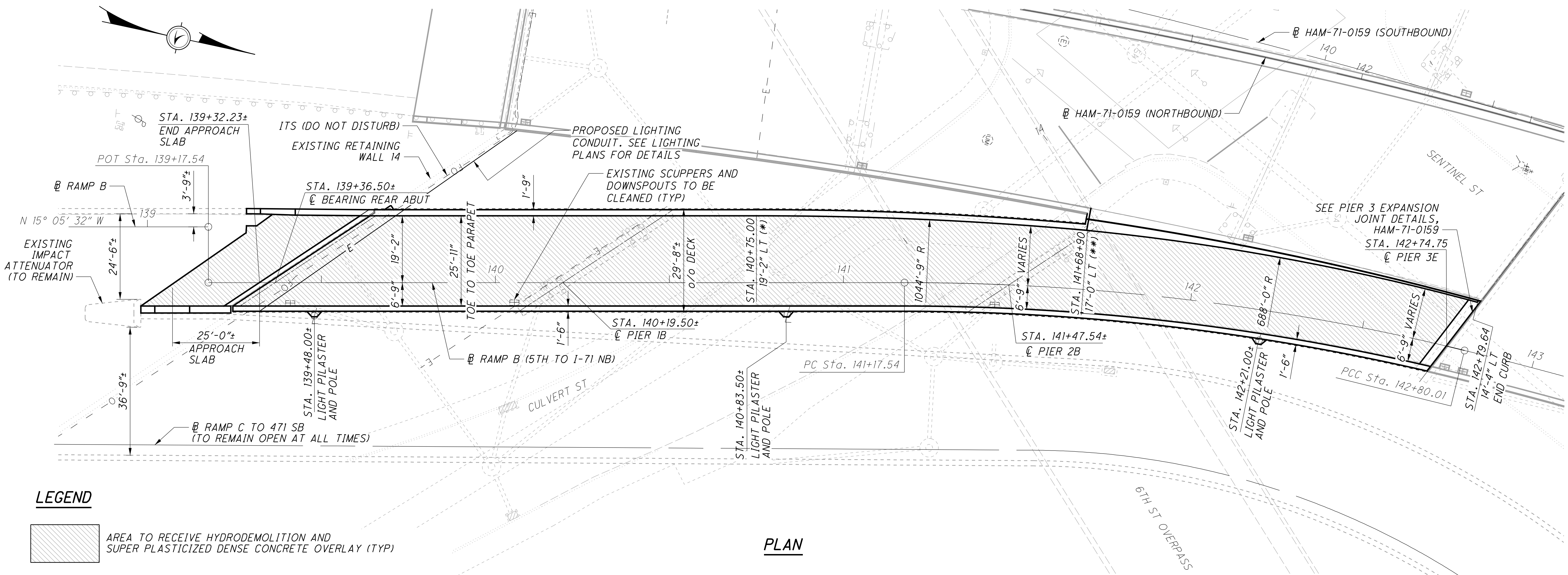
CIRCUIT CL1-A, CL1-B, CL3-A NTS

FOR LEGEND, SEE SHEET 82.

CALCULATED MAM
CHECKED BJF

CIRCUIT DIAGRAM

HAM-71-1.59



PLAN

LEGEND

AREA TO RECEIVE HYDRODEMOLITION AND SUPER PLASTICIZED DENSE CONCRETE OVERLAY (TYP)

(*) BEGIN STATION OF PARAPET CURVATURE (R = 1044'-9")

(**) BEGIN STATION OF CURB CURVATURE (R = 688'-0")

PROPOSED WORK

1) REMOVE 1¾" OF EXISTING WEARING SURFACE AND ONE INCH OF ORIGINAL CONCRETE ON THE BRIDGE DECK AND APPROACH SLABS USING HYDRODEMOLITION.

2) REMOVE EXISTING BARRIERS AND REPLACE WITH 42" BR-1-13 JERSEY SHAPED PARAPET.

3) APPLY 2¾" SUPER PLASTICIZED DENSE CONCRETE OVERLAY TO THE EXISTING DECK AND APPROACH SLAB.

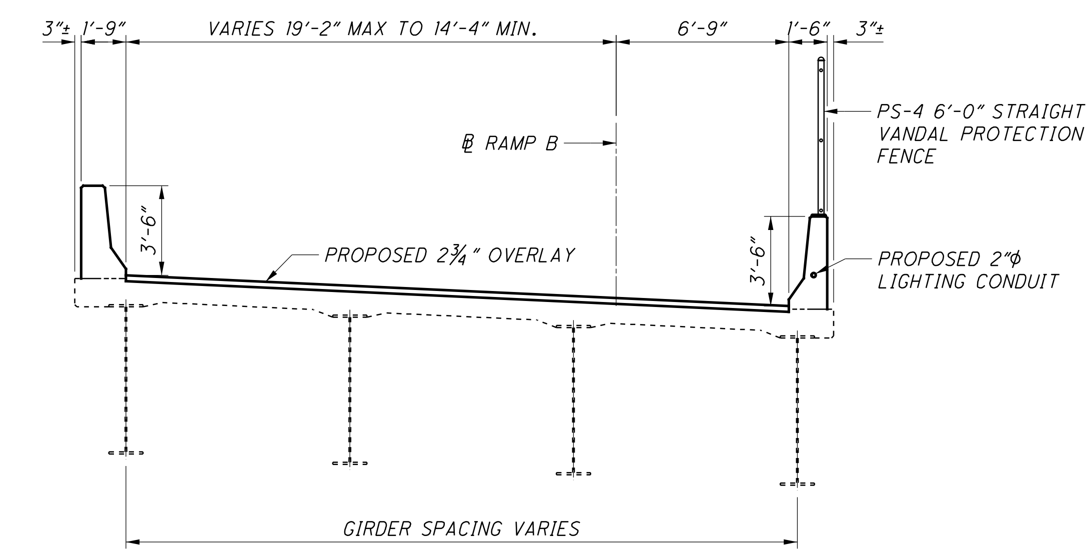
4) CONSTRUCT CURB TO MATCH TO PROPOSED CURB ON HAM-071-0159.

5) PRESSURE WASH BEAM SEATS, BACKWALLS AND STRUCTURAL STEEL WITHIN 10' OF REAR ABUTMENT AND FORWARD EXPANSION JOINT.

6) SEAL THE PARAPETS AND UNDERSIDE OF THE DECK TO THE FASCIA GIRDER FLANGE WITH EPOXY URETHANE SEALER, FEDERAL COLOR NO. 17778.

7) INSTALL VANDAL PROTECTION FENCE ON RIGHT PARAPET. SEE STANDARD CONSTRUCTION DRAWING VPF-1-90. VANDAL PROTECTION FENCE IS TO BE TYPE PS-4 WITH BP-5 BASEPLATES.

8) CLEAN THE ENTIRE BRIDGE DECK DRAINAGE SYSTEM FROM THE DOWNSPOUT INLET TO THE FIRST MANHOLE.



TYPICAL SECTION

NOTES

1) SEE LIGHTING PLANS FOR LIGHT POLE REMOVAL DETAILS AND NOTES. REFER TO STANDARD DRAWINGS HL-20.14 AND HL-50.21 FOR ADDITIONAL NOTES AND DETAILS.

2) SEE HAM-71-0159 SHEET 5/77 FOR RAMP B CURVE DATA.

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL GIRDER WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPANS: 83'-0"± - 128'-0"± - 127'-3"±

ROADWAY: VARIES T/T PARAPET

LOADING: HS 20-44

SKEW: VARIES

WEARING SURFACE: 1¾" LATEX MODIFIED CONCRETE OVERLAY

APPROACH SLABS: AS-1-54 (25'-0"± LONG)

ALIGNMENT: VARIES (SEE PLAN)

STRUCTURAL FILE NUMBER: 3106594

DATE BUILT: 1965

DISPOSITION: TO BE REHABILITATED

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

GENERAL PLAN
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939

1/11

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

BR-1-13 DATED/REVISED 01-17-14

VPF-1-90 DATED/REVISED 07-17-15

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

848 DATED 07/17/2015

DESIGN DATA

CONCRETE CLASS QC2 WITH QC/QA- (PARAPETS, BRIDGE DECK)
COMPRESSIVE STRENGTH 4.5 KSI

CONCRETE CLASS QC5 WITH QC/QA- (PATCHING)
COMPRESSIVE STRENGTH 4.5 KSI

REINFORCING STEEL - ASTM A615, OR A996; MINIMUM YIELD STRENGTH 60 KSI

DECK PROTECTION METHOD

SUPER PLASTICIZED DENSE CONCRETE OVERLAY, 2¾" THICK

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

THIS ITEM INCLUDES PRESSURE WASHING THE ABUTMENT AND PIER BEAM SEATS, REAR ABUTMENT BACKWALL, AND STRUCTURAL STEEL WITHIN 10 FEET OF THE REAR ABUTMENT AND FOR 10 FEET IN BOTH DIRECTIONS FROM THE EXPANSION JOINT AT PIER 3E OF HAM-71-0159.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN

THIS ITEM SHALL INCLUDE THE ELEMENTS INDICATED IN THE PLANS AND GENERAL NOTES THAT ARE NOT SEPARATELY LISTED FOR PAYMENT, EXCEPT FOR WEARING COURSE REMOVAL. ITEMS TO BE REMOVED INCLUDE ALL EXISTING MATERIALS BEING REPLACED BY 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.

THIS WORK ALSO CONSISTS OF THE REMOVAL OF A PORTION OF THE CONCRETE DECK INCLUDING PARAPETS AND DECK JOINT. THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE-RAMS 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. CHIPPING HAMMERS SHALL NOT BE HEAVIER THAN THE NOMINAL 90-POUND CLASS. PNEUMATIC HAMMERS SHALL NOT BE PLACED IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05.

DECK REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL GIRDER), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

ITEM 509 REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

AN ESTIMATED QUANTITY OF 200 LBS HAS BEEN CARRIED TO THE BRIDGE SUMMARY FOR THIS ITEM.

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

AN ESTIMATED QUANTITY OF 100 SQ FT , TO BE USED AS DIRECTED, HAS BEEN CARRIED TO THE BRIDGE SUMMARY FOR THIS ITEM.

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 CMS SECTIONS 102.05 AND 105.02.

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 WHICH HAVE BEEN VERIFIED IN THE FIELD.

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN

THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

THE CLASS QC2 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:

WATER/CEMENT RATIO = 0.40 MAXIMUM; MICRO-SILICA ADMIXTURE (7% BY WEIGHT OF CEMENT ADDED TO THE TOTAL CEMENTITIOUS CONTENT); 2 LBS./C. Y. POLYPROPYLENE FIBERS (1.25" MIN.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE CORROSION INHIBITOR DOSAGE RATE SHALL BE WITHIN THE MANUFACTURES RECOMMENDED LIMITS. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST NEED NOT APPLY.

THE FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, FIBERS AND MICRO-SILICA PRIOR TO THE ADDITION OF WATER AND ADMIXTURES.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED. THE TRANSIT MIXER CHARGE SHALL BE LIMITED TO ¾ OF ITS RATED CAPACITY OR 6 CUBIC YARDS, WHICHEVER IS SMALLER, UNLESS A LARGER SIZE IS APPROVED BY THE ENGINEER. CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AND EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CONCRETE SUPPLIERS CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS.

APPROACH SLABS AND BRIDGE RAILING CONCRETE (WHEN APPLICABLE) ARE TO USE THE SAME MIX DESIGN AS THE BRIDGE DECK. THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED.

THE CONTRACTOR SHALL PROVIDE TRADITIONAL BRIDGE DECK FORMS CONFORMING TO CMS 508. PERMANENT STAY-IN-PLACE (SIP) FORMS ARE NOT ALLOWED. THE PLACING OF THE DECK AND THE APPROACH SLABS IN THE SAME CONCRETE POUR IS NOT PERMITTED.

DESIGN AGENCY
PALMER ENGINEERING
7051 CORNELL PARK DR. - SUITE 200
CINCINNATI, OHIO 45242
CINCINNATI • AARON • WELLS • ASSOCIATES

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

GENERAL NOTES
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939

pw:\\PEWINPW2.pewin.private.palmernet.com:Palmer Engineering\Documents\Ohio\ODOT\D8\HAM\101939_HAM-71-1.59\Design\Structures\HAM071_0154\Sheets\071_0154_SQ001.dgn Sheet 5/20/2016 8:47:16 AM

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
							REAR ABUT.	FWD ABUT.	SUPER STR	GENERAL	02/IMS/BR							
																	STRUCTURE 20 FOOT SPAN AND OVER (HAM-71-0154E)	
											LS		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	2
										LS	LS		202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	2
									13,269	1,609	14,878		509	10001	14,878	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	2
									200		200		509	20001	200	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	2
							3		1,176	54	1,233		510	10000	1,233	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
									2		2		511	34447	2	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN	2
							1		86	11	98		511	34451	98	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	2
							2		669	51	722		512	10100	722	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
										46	46		516	10000	46	FT	PREFORMED ELASTOMERIC COMPRESSION JOINT SEAL	
									116		116		516	10900	116	FT	ELASTOMERIC COMPRESSION SEAL	
										35	35		516	13600	35	SF	1" PREFORMED EXPANSION JOINT FILLER	
									3		3		518	62200	3	EACH	STRUCTURE DRAINAGE, MISC.:CLEANING SCUPPERS AND DOWNSPOUTS	1
									343		343		607	39900	343	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	
									905	72	977		848	10200	977	SY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY USING HYDRODEMOLITION 2-3/4 INCH THICK	
									896	72	968		848	20000	968	SY	SURFACE PREPARATION USING HYDRODEMOLITION	
									31	2	33		848	30200	33	CY	SUPERPLASTICIZED DENSE CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY	
									6	1	7		848	50000	7	SY	HAND CHIPPING	
											LS		848	50100	LS		TEST SLAB	
									876	69	945		848	50320	945	SY	EXISTING CONCRETE OVERLAY REMOVED 1-3/4 INCH NOMINAL THICKNESS	
									64	11	75		848	50340	75	SY	REMOVAL OF DEBONDED OR DETERIORATED EXISTING VARIABLE THICKNESS CONCRETE OVERLAY	

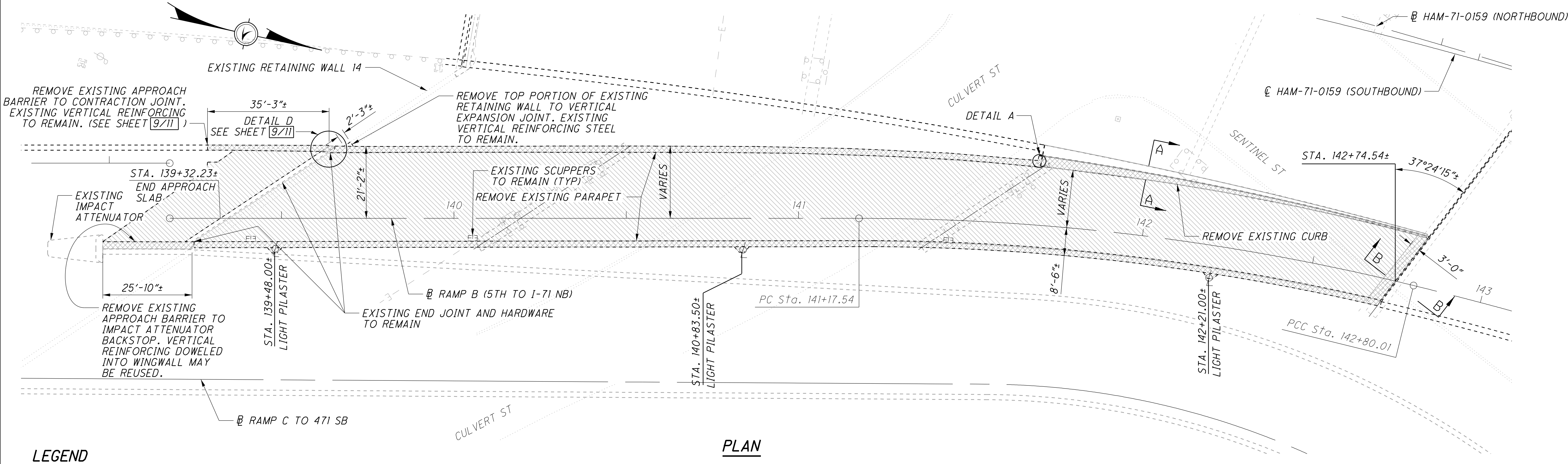
DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED CEJ | CHECKED JPR | DRAWN SDW | REVISED . | REVIEWED MLJ | DATE 02/26/16 | STRUCTURE FILE NUMBER 3106594

ESTIMATED QUANTITIES
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939

3/11

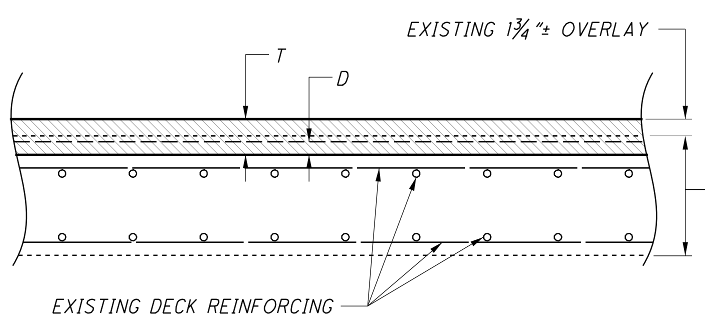


PLAN

LEGEND

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN

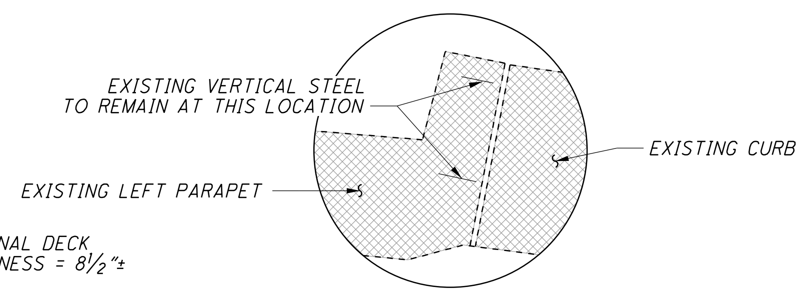
AREA OF OVERLAY REMOVAL



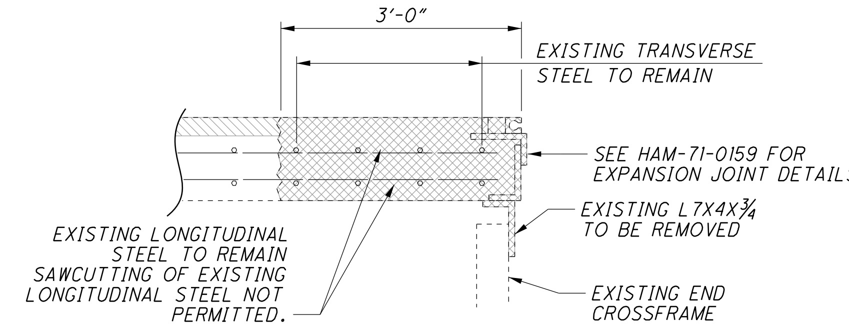
TYPICAL DECK SECTION

T = 2¾" PROPOSED OVERLAY

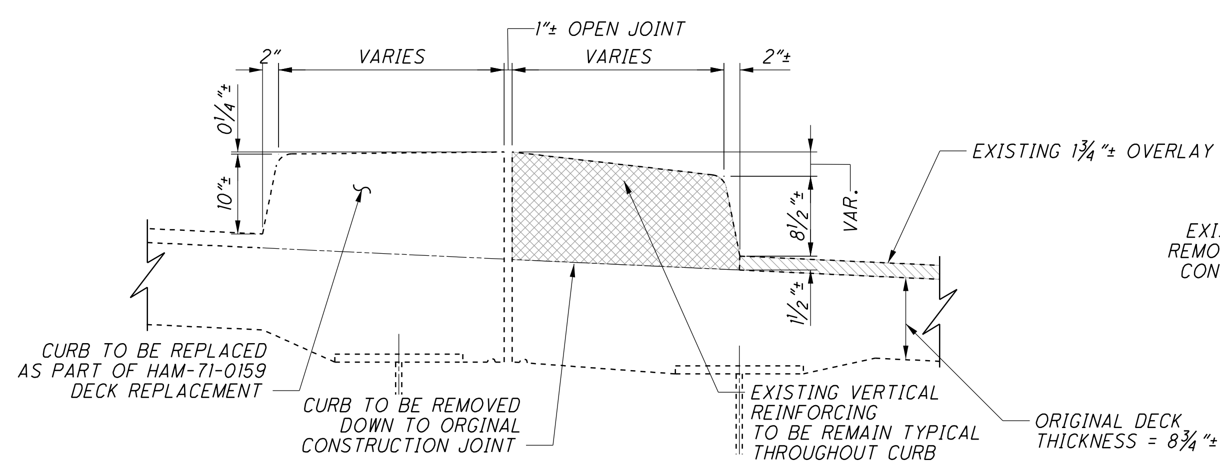
D = 1" UNIFORM REMOVAL DEPTH



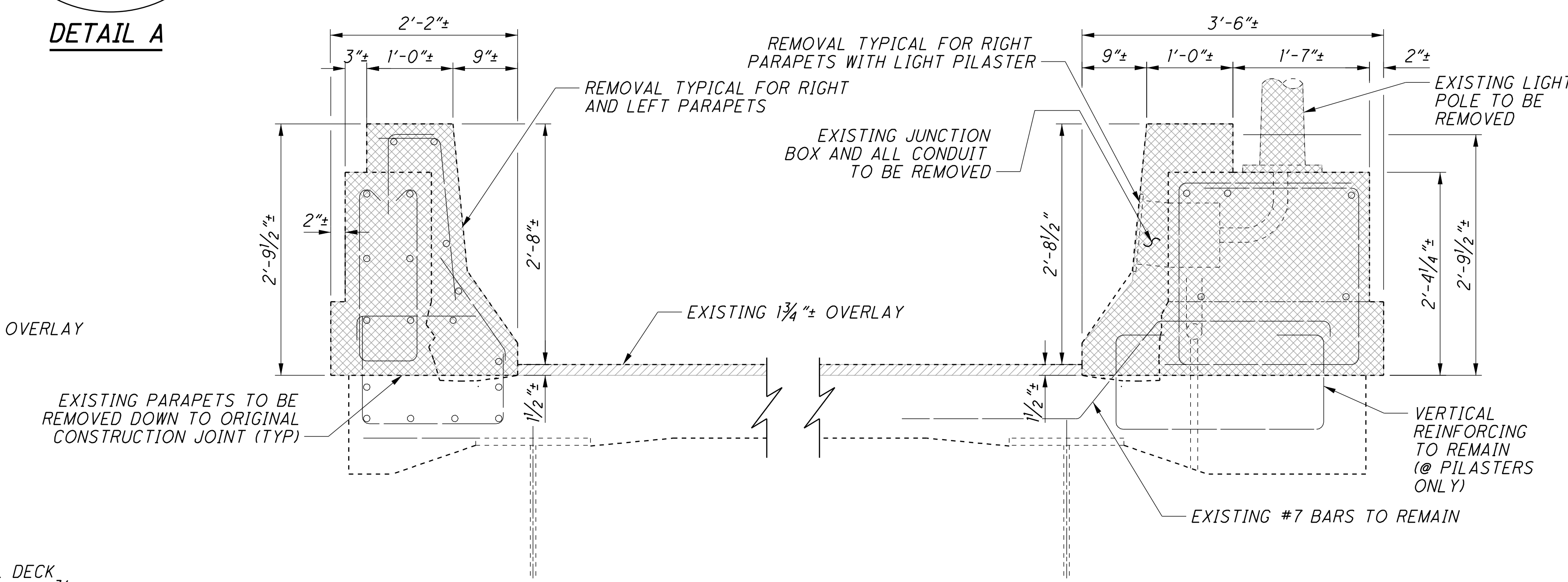
DETAIL A



SECTION B-B



SECTION A-A



TYPICAL REMOVAL DETAIL OF EXISTING PARAPETS

LOOKING AHEAD STATION

DESIGN AGENCY: PALMER ENGINEERING — CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

REMOVAL DETAILS

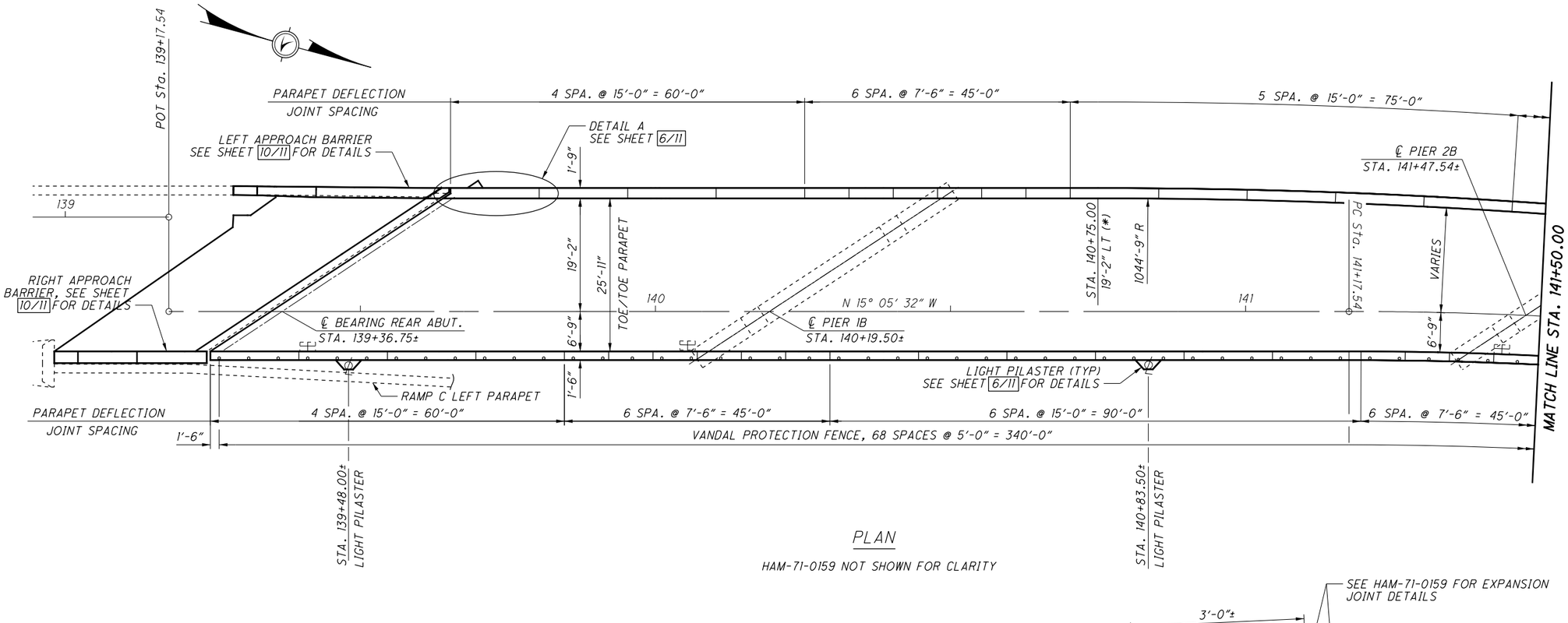
BRIDGE NO. HAM-71-0154E

RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59

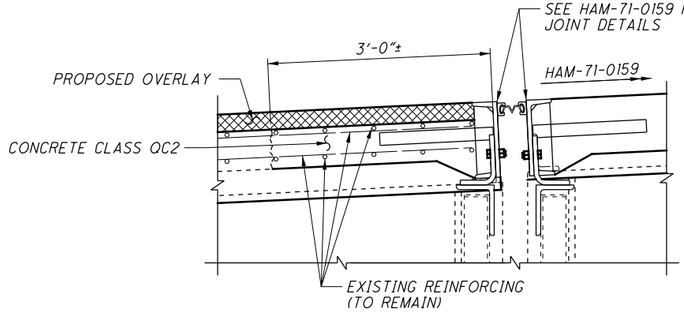
PID No. 101939

4 / 11

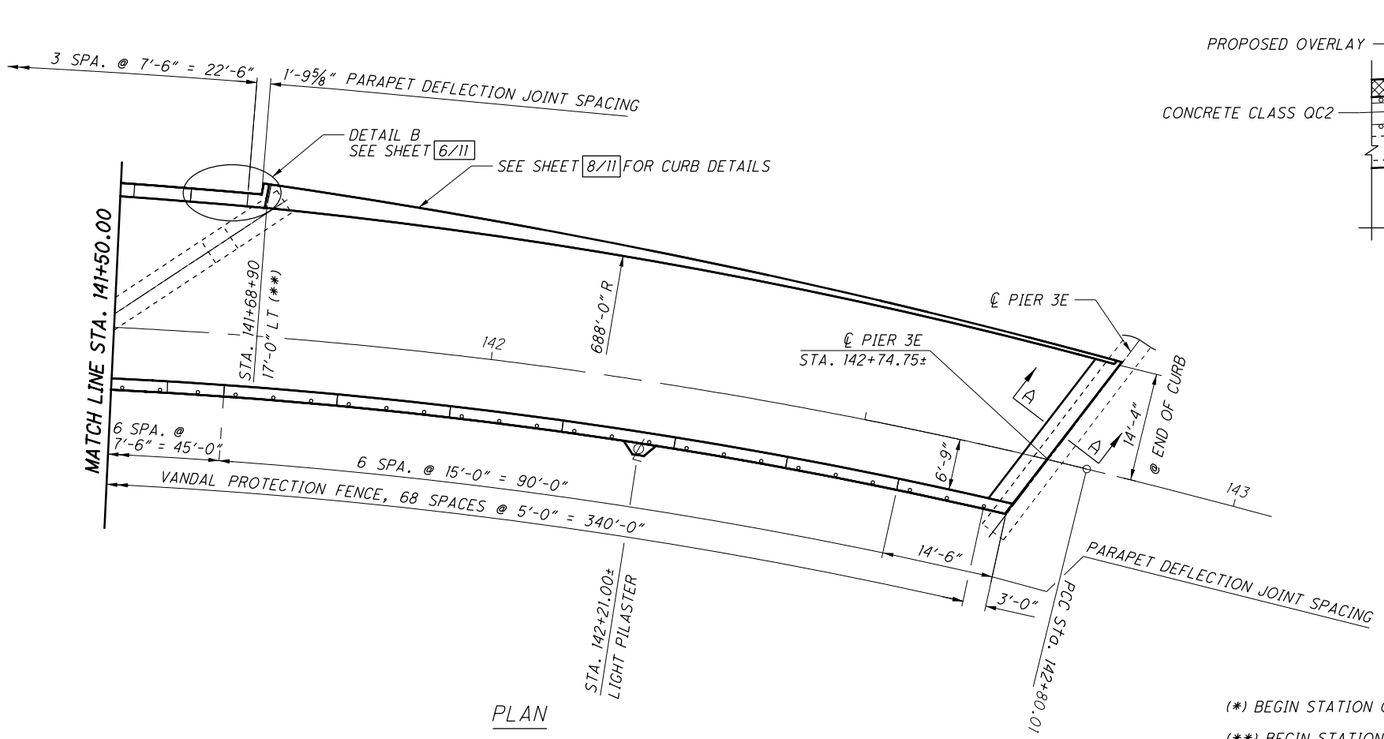


PLAN

HAM-71-0159 NOT SHOWN FOR CLARITY



SECTION A-A



PLAN

HAM-71-0159 NOT SHOWN FOR CLARITY

(*) BEGIN STATION OF PARAPET CURVATURE (R = 1044'-9")

(**) BEGIN STATION OF CURB CURVATURE (R = 688'-0")

NOTES:

1) FOR GENERAL NOTES SEE SHEET 2/11.

2) FOR LEFT PARAPET DETAILS SEE SHEET 6/11.

3) FOR RIGHT PARAPET DETAILS SEE SHEET 7/11.

4) FOR CURB DETAILS SEE SHEET 8/11.

5) FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, REFER TO STANDARD DRAWING VPF-1-90.

6) FOR ADDITIONAL PARAPET DETAILS, REFER TO STANDARD DRAWING BR-1-13.

7) VANDAL PROTECTION FENCE CONTINUES ON HAM-71-0159 NORTHBOUND RIGHT PARAPET.

8) SEE LIGHTING PLANS FOR LIGHTING DETAILS AND REFER TO STD. DWG HL-20.14 FOR ADDITIONAL DETAILS.

9) EXPANSION JOINT AT FORWARD END OF HAM-71-0154E IS INCLUDED WITH APPLICABLE PAY ITEMS FOR HAM-71-0159.

DESIGN AGENCY
PALMER ENGINEERING
10101 CORNELL PARK DR. - SUITE 200
CINCINNATI, OH. 45242

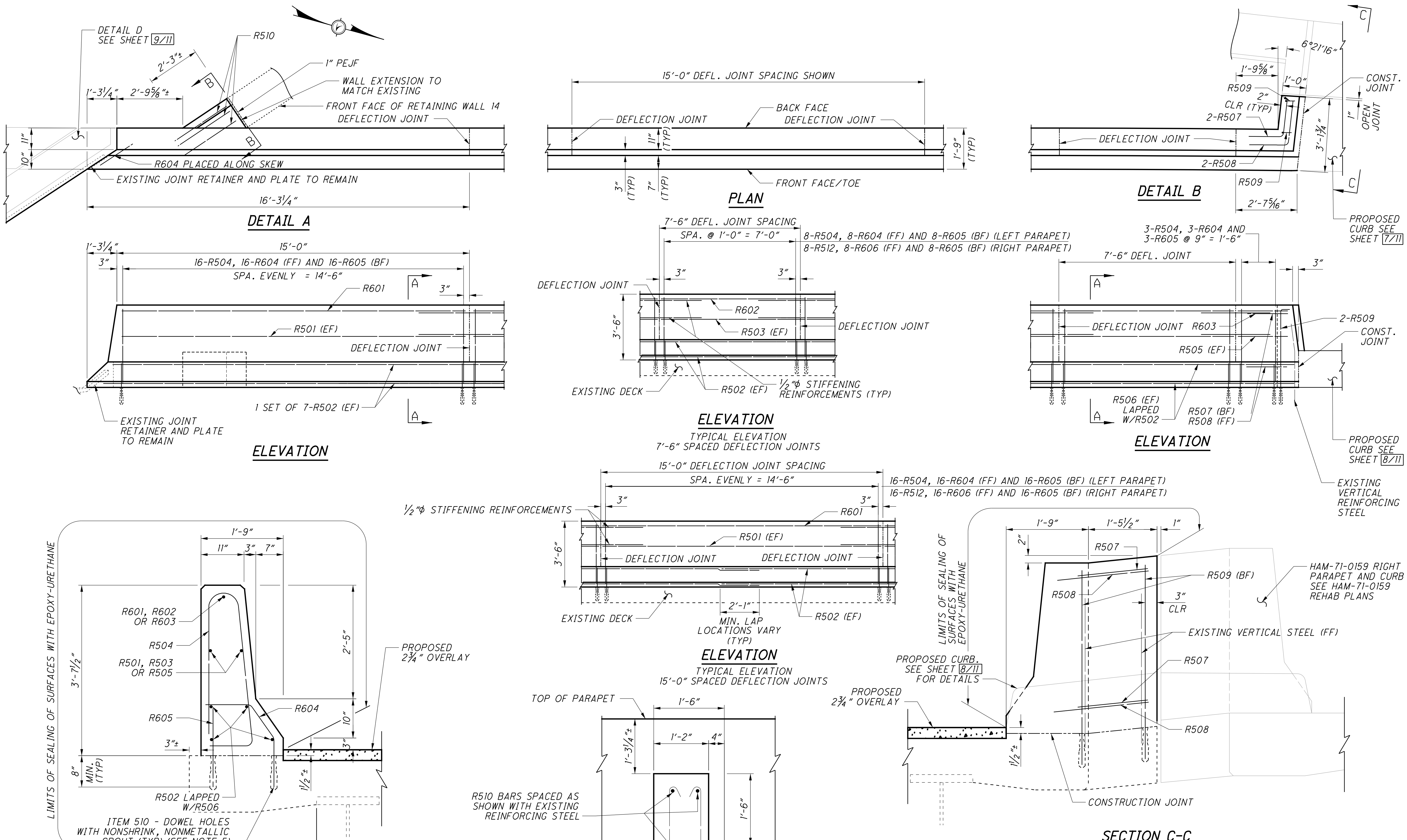
DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

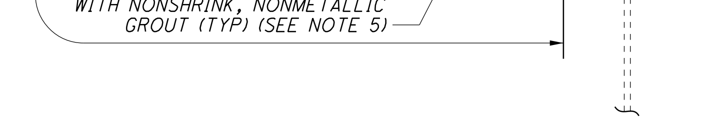
PARAPET DETAILS
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

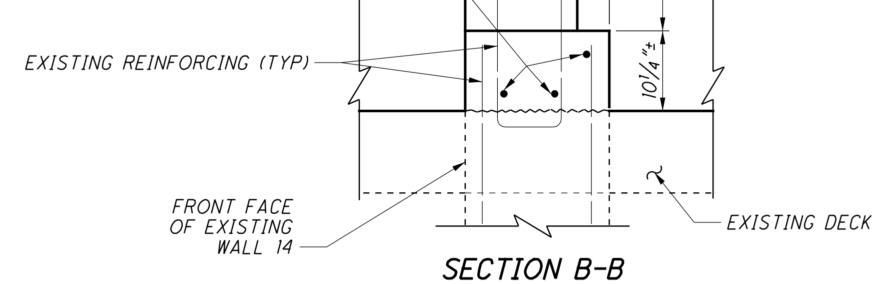
HAM-71-1.59
PID No. 101939

5 / 11

93 / 176







SECTION A-A

SECTION TYPICAL FOR LEFT PARAPET

SECTION B-B

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE
PEJF = PREFORMED EXPANSION JOINT

NOTES:

1) SEE SHEET 5/11 FOR GENERAL PLAN VIEW OF PARAPET.

2) SEE SHEET 2/11 FOR GENERAL NOTES.

3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL PARAPET DETAILS AND NOTES. NOTE LEFT PARAPET IS WIDER THAN STANDARD.

4) SEE SHEET 8/11 FOR CURB DETAILS.

5) GROUT SHALL BE EPOXY TYPE PER CMS 705.20.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

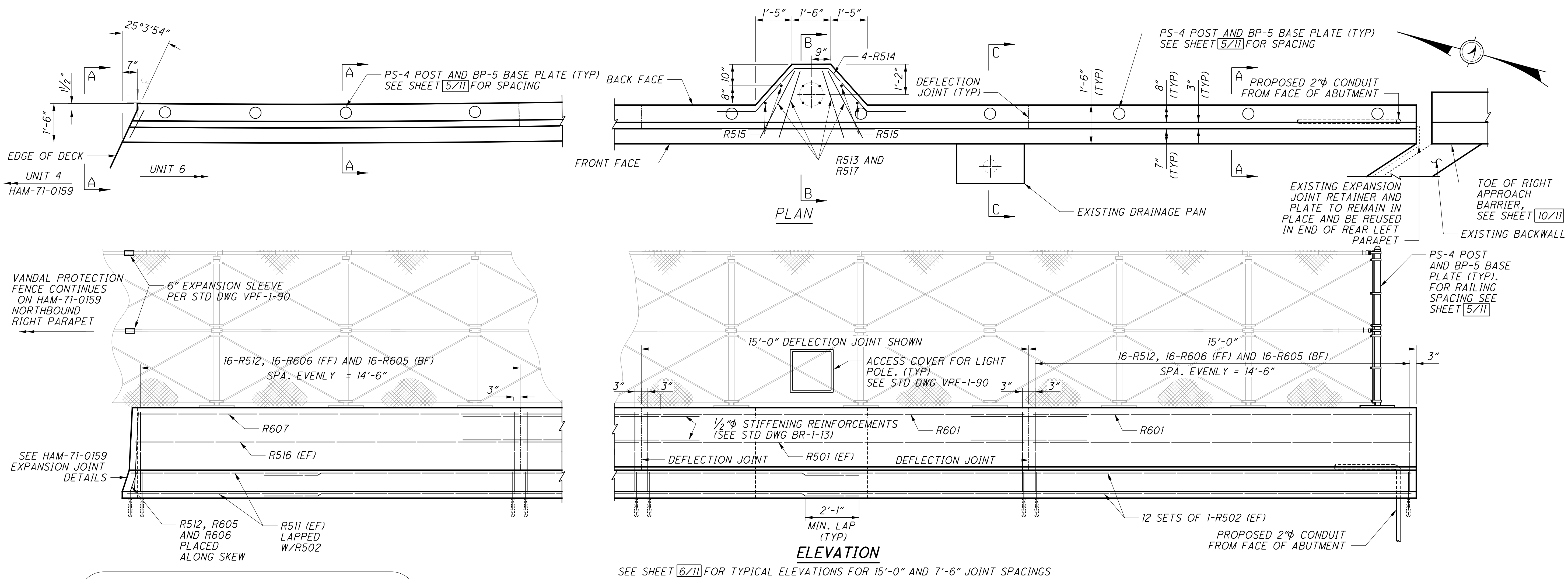
DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

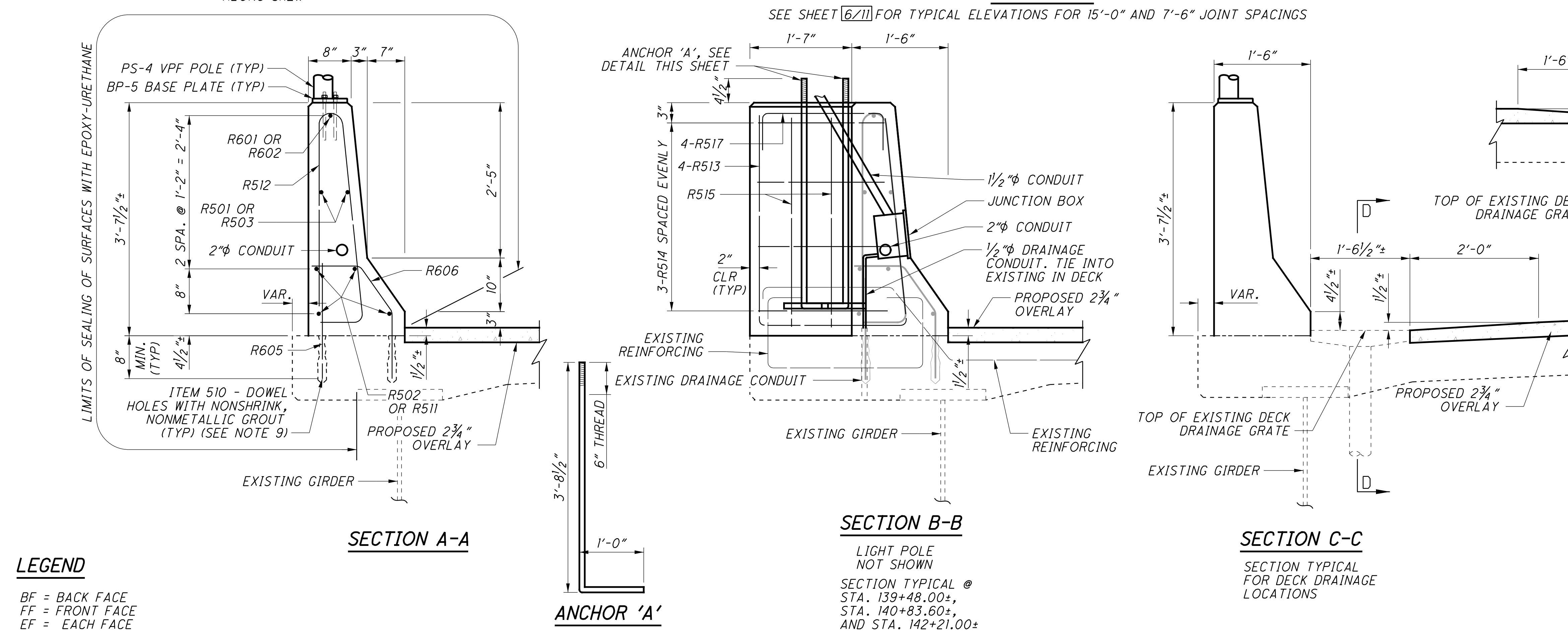
LEFT PARAPET DETAILS

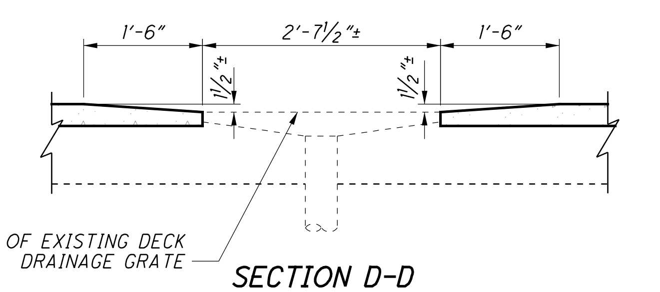
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939

6/11







LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE

NOTES:

1) SEE SHEET 5/11 FOR GENERAL PLAN VIEW OF PARAPET AND LIGHT PILASTER LOCATIONS
2) SEE SHEET 2/9 FOR GENERAL NOTES.
3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL RAILING DETAILS AND NOTES.
4) SEE HAM-71-0159 LIGHTING DETAILS AND STANDARD DRAWING HL-20.14 FOR ADDITIONAL STRUCTURE LIGHTING DETAILS.
5) SEE STANDARD DRAWING VPF-1-90 FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS.
6) SEE SHEET HAM-71-0159 EXPANSION JOINT DETAILS.
7) SEE LIGHTING PLANS FOR ANCHOR BOLTS AND PAYMENT.
8) REFER TO STANDARD DRAWING HL-20.14 FOR ANCHOR BOLT PATTERN.
9) GROUT SHALL BE EPOXY TYPE PER CMS 705.20.

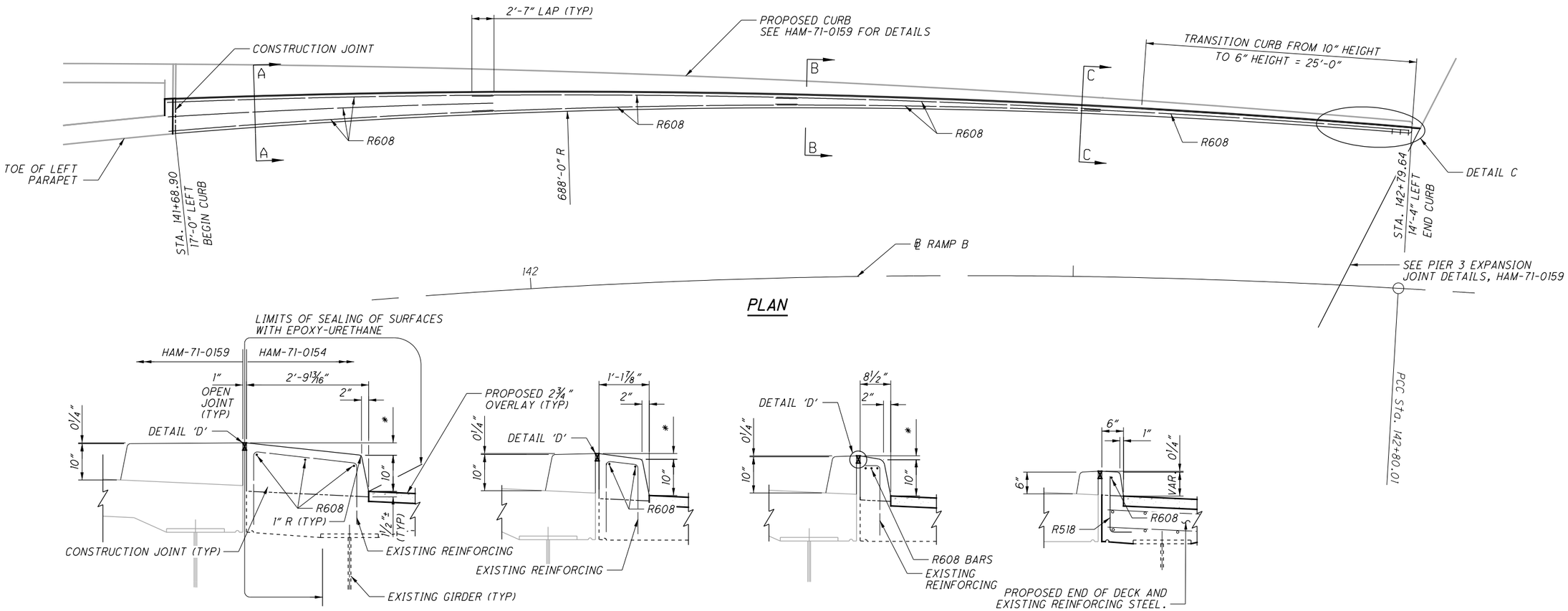
DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

RIGHT PARAPET DETAILS

BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939



PLAN

SECTION A-A

@ STA. 141+75.00

SECTION B-B

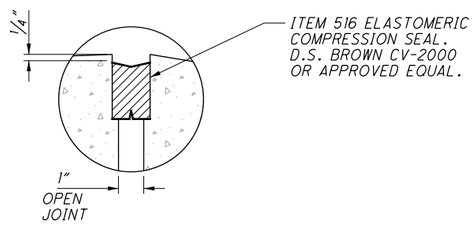
@ STA. 142+25.00

SECTION C-C

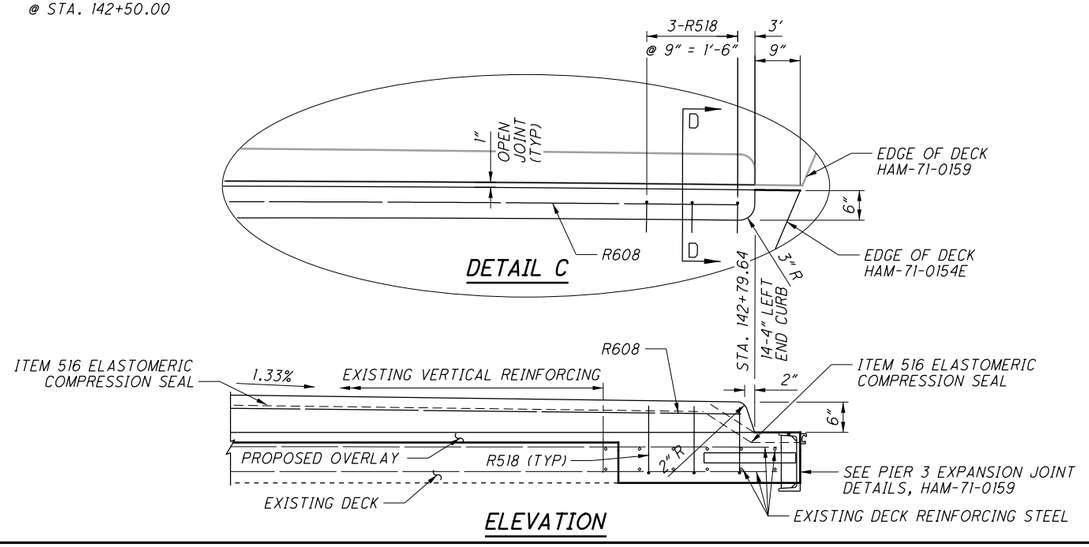
@ STA. 142+50.00

SECTION D-D

* MATCH ELEVATION OF CURB ON HAM-71-0159



DETAIL 'D'



DESIGN AGENCY
Palmer ENGINEERING
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG • LOUISVILLE

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
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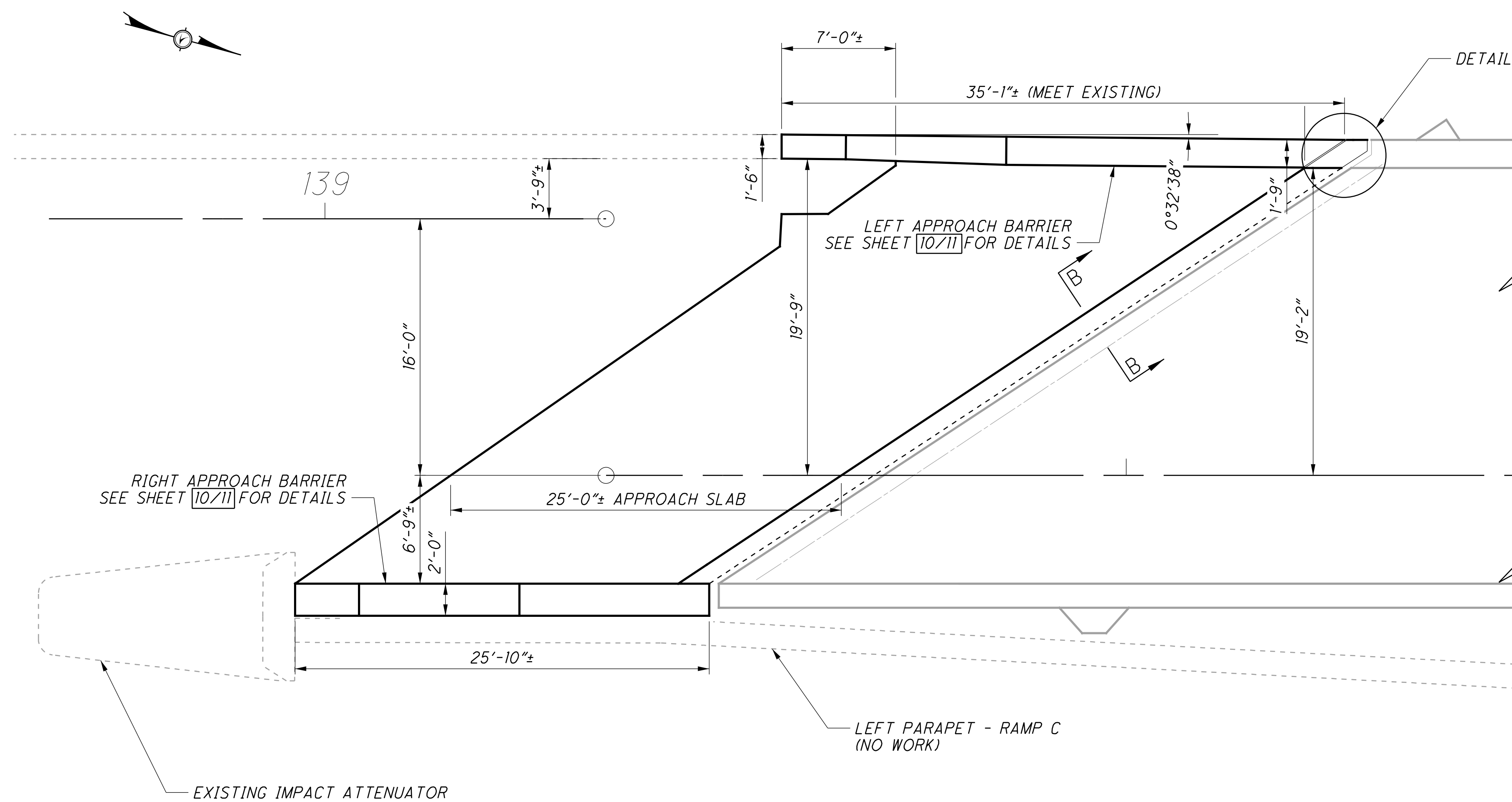
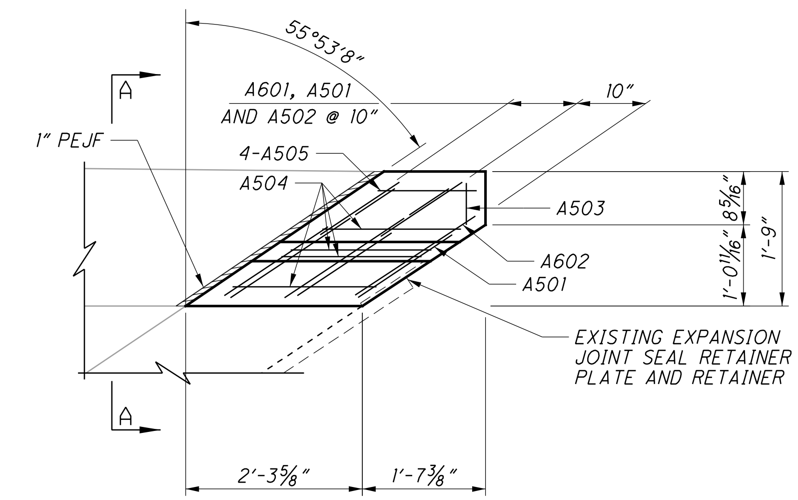
CURB DETAILS
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

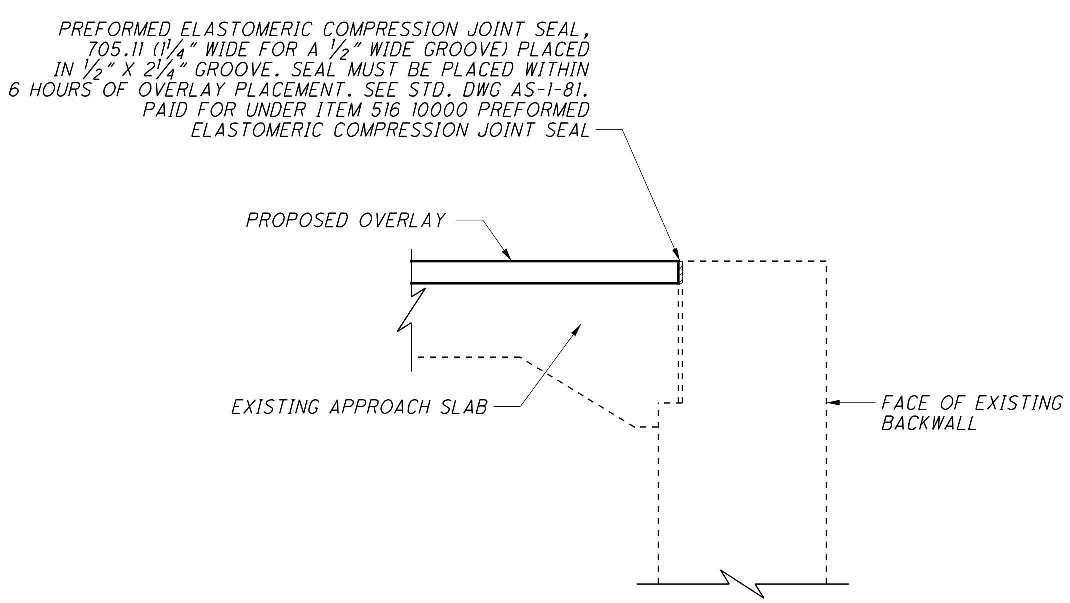
HAM-71-1.59
PID No. 101939



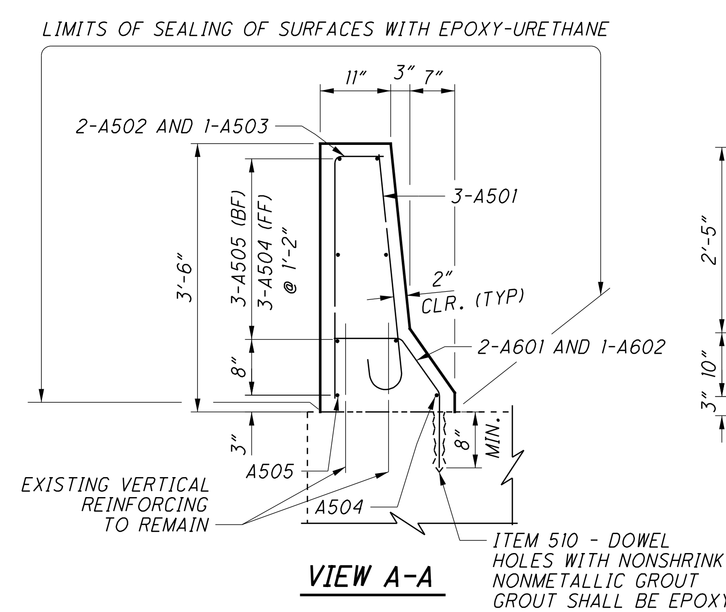
PLAN



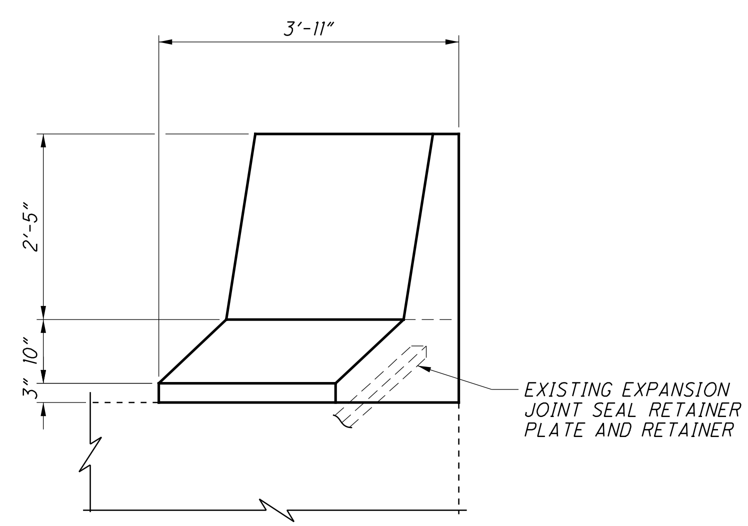
DETAIL 'D'



SECTION B-B



VIEW A-A



ELEVATION

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE
PEJF = PREFORMED EXPANSION JOINT FILLER

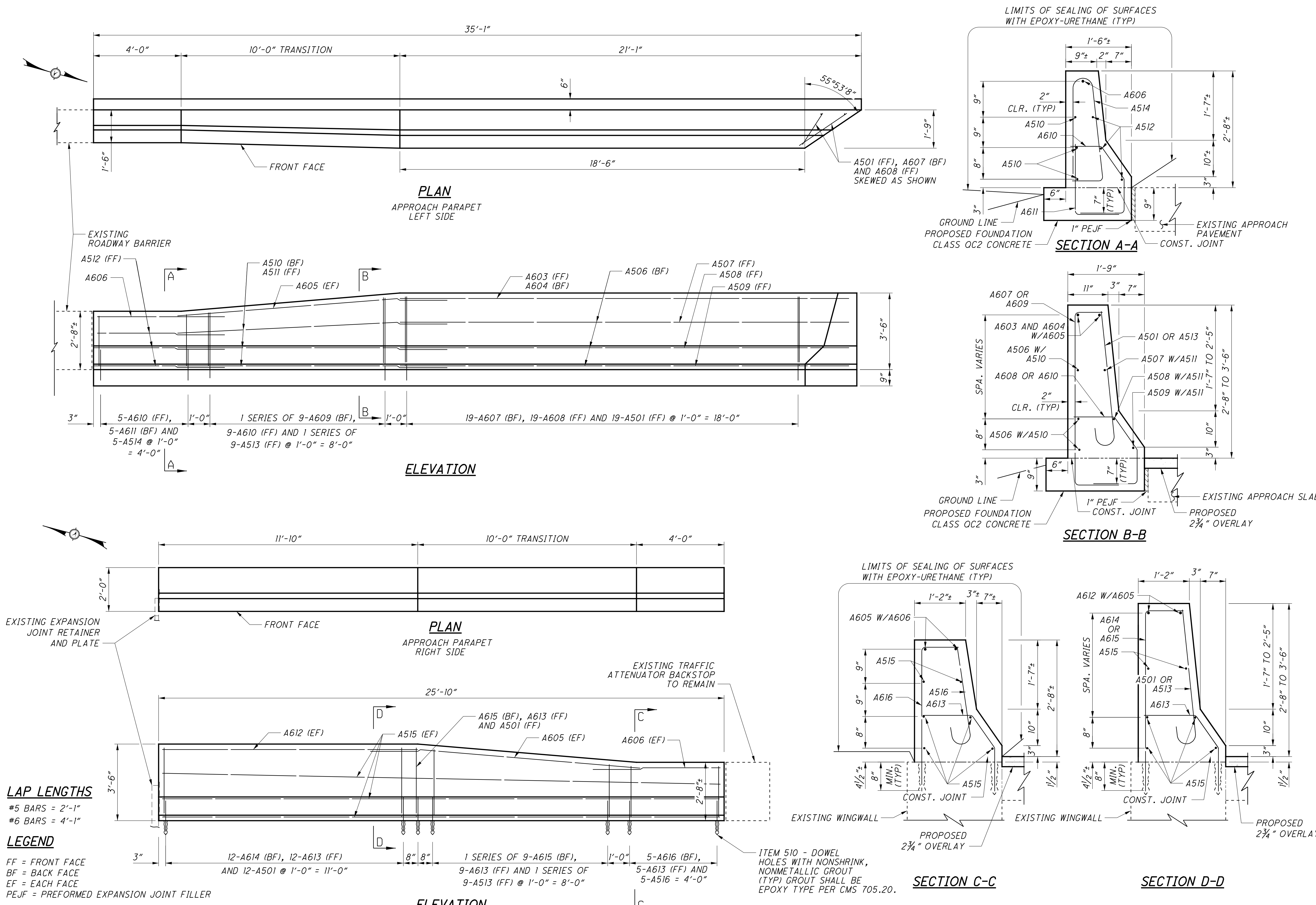
DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

REAR APPROACH DETAILS 1 OF 2

BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939



LAP LENGTHS

#5 BARS = 2'-1"
#6 BARS = 4'-1"

LEGEND

FF = FRONT FACE
BF = BACK FACE
EF = EACH FACE
PEJF = PREFORMED EXPANSION JOINT FILLER

DESIGN AGENCY: Palmer PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106594	

APPROACH DETAILS 2 OF 2

BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

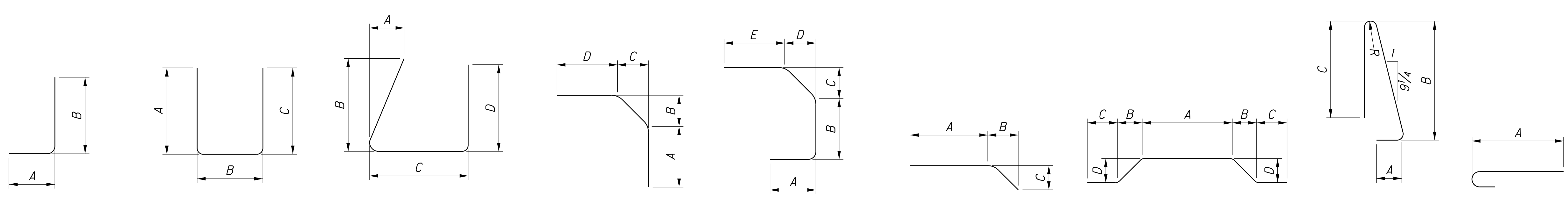
HAM-71-1.59
PID No. 101939

HAM-71-0154E REINFORCING STEEL LIST

MARK	NUMBER SUPERSTRUCTURE	LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
R501	50	14'-8"	765	STR							
R502	76	30'-0"	2,378	STR							
R503	42	7'-2"	314	STR							
R504	219	8'-2"	1,866	22	0'-10"	3'-3"	3'-0"			0'-3"	
R505	2	2'-0"	5	STR							
R506	4	8'-6"	36	STR							
R507	2	3'-0"	6	19	1'-7"	0'-2"	1'-6"				
R508	2	3'-6"	7	19	1'-11"	0'-2"	1'-8'				
R509	2	4'-5"	9	1	0'-5"	4'-1 1/2"					
R510	5	2'-8"	14	STR							
R511	4	10'-0'	42	STR							
R512	369	6'-11"	2,662	22	0'-8"	3'-3"	3'-0"			0'-1 1/2"	
R513	12	8'-6"	106	9	0'-4"	3'-3"	2'-3 1/2"	3'-3"			
R514	12	7'-5"	93	21	1'-4"	1'-10"	0'-6"	1'-10"			
R515	12	3'-5"	43	STR							
R516	2	14'-3"	30	STR							
R517	12	3'-3"	41	2	0'-10"	1'-10"	0'-10"				
R518	3	1'-10"	6	1	0'-10"	1'-2"					
R601	25	14'-8"	551	STR							
R602	21	7'-2"	226	STR							
R603	1	2'-0"	3	STR							
R604	220	2'-9"	872	13	1'-0 1/2"	0'-8 1/2"	0'-6"	0'-11"			
R605	588	1'-10"	1,472	STR							
R606	369	2'-5"	1,339	13	1'-0 1/2"	0'-8 1/2"	0'-6"	0'-7"			
R607	1	14'-3"	22	STR							
R608	8	30'-0"	361	STR							
		SUB TOTAL	13,269								

HAM-71-0154E REINFORCING STEEL LIST

MARK	NUMBER REAR APPROACH	LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS A	B	C	D	E	R	INC.
A501	37	3'-10"	148	16	3'-3"						
A502	2	4'-6"	10	1	1'-3"	3'-4"					
A503	1	3'-9"	4	1	0'-6"	3'-4"					
A504	4	1'-9"	8	STR							
A505	4	1'-3'	6	STR							
A506	3	20'-6"	64	STR							
A507	1	19'-8"	21	STR							
A508	1	19'-3"	20	STR							
A509	1	18'-6"	19	STR							
A510	3	16'-0"	50	STR							
A511	3	12'-4"	39	STR							
A512	3	5'-10"	18	STR							
	2	3'-0"			2'-5"						
A513	SERIES OF	TO	64	16	TO						0'-1 1/4"
	9	3'-10'			3'-3"						
A514	5	5'-4"	28	22	0'-8"	2'-5"	2'-2"			0'-1 1/2"	
A515	6	25'-6"	160	STR							
A516	5	3'-0"	16	16	2'-5"						
A601	2	3'-7"	11	13	0'-11"	0'-8 1/2"	1'-1"	1'-5"			
A602	1	2'-10"	4	13	0'-11"	0'-8 1/2"	1'-1"	0'-8"			
A603	1	19'-7"	29	STR							
A604	1	20'-5"	31	STR							
A605	4	14'-6"	88	STR							
A606	3	6'-0"	27	STR							
A607	21	5'-2"	163	2	0'-7"	3'-11"	1'-0"				
A608	21	3'-3"	103	14	1'-0"	0'-9 1/2"	0'-8 1/2"	0'-6"	0'-10"		
	1	4'-2"			0'-5"	3'-1"					
A609	SERIES OF	TO	64	2	TO	TO	1'-0"				0'-1 1/2"
	9	5'-2"			0'-7"	3'-11"					
A610	14	3'-0"	64	14	1'-0'	0'-9 1/2"	0'-8 1/2"	0'-6"	0'-7"		
A611	5	2'-2"	17	1	1'-0"	1'-4"					
A612	2	11'-8"	35	STR							
A613	27	3'-0"	121	13	1'-0"	0'-8 1/2"	0'-6"	1'-2"			
A614	12	4'-9"	87	1	0'-10"	4'-1 1/2"					
	1	4'-0"				3'-3 1/2"					
A615	SERIES OF	TO	60	1	0'-10"	TO					0'-1 1/4"
	9	4'-9"				4'-1 1/2"					
A616	5	4'-0"	30	1	0'-10"	3'-3 1/2"					
		SUB TOTAL	1,609								

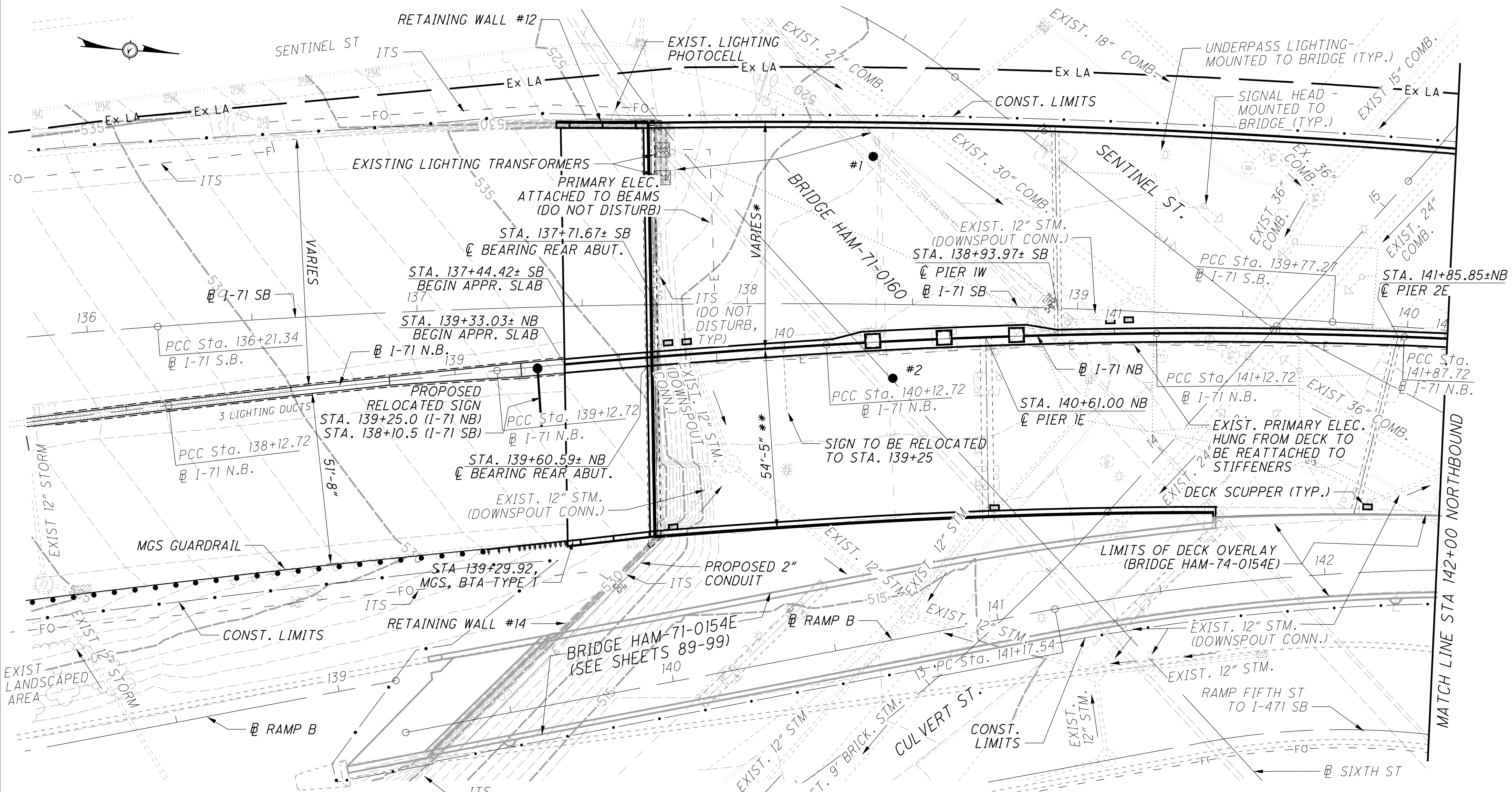


DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED BJF	DRAWN SDW	REVIEWED MLJ	DATE 02/26/16
CHECKED CEJ	REVISED	STRUCTURE FILE NUMBER 3106594	

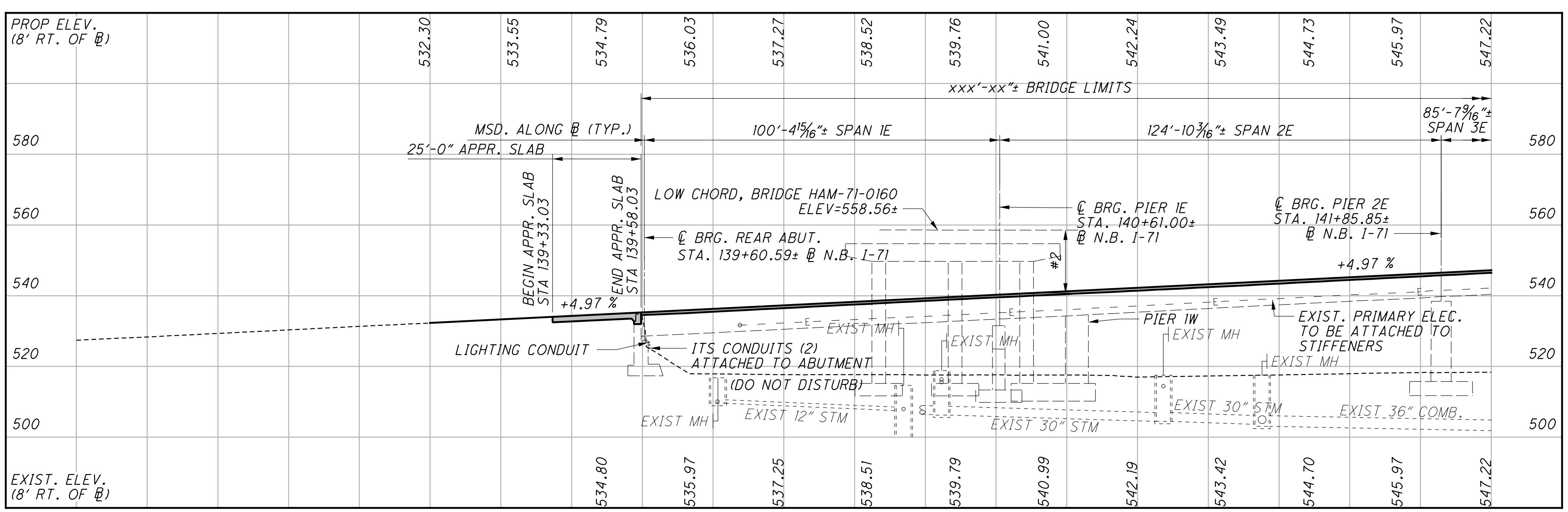
REINFORCING STEEL LIST
BRIDGE NO. HAM-71-0154E
RAMP B - 5TH ST TO I-71 NB OVER CULVERT ST.

HAM-71-1.59
PID No. 101939



PLAN

FOR CURVE DATA - SEE ROADWAY PLAN SHEET 2



PROFILE (℄ I-71 N.B.)

BENCHMARK DATA

BM #1 STA. 135+16.08, ELEV. 540.97, OFFSET 79.54' LT
BM #2 STA. 145+52.60, ELEV. 521.91, OFFSET 119.87' LT
BM #3 STA. 135+16.08, ELEV. 567.33, OFFSET 79.54' LT
BM #4 STA. , ELEV. , OFFSET ,

FOR ADDITIONAL BENCHMARK INFORMATION. SEE ROADWAY PLAN SHEET 2/176

NOTES

FOR LOCATION OF PROFILE GRADE LINE AND SUPERLEVATION LAYOUT, SEE GENERAL PLAN, SHEET 6/77

DESIGN TRAFFIC:
2017 ADT = 65,640 2017 ADTT = 7220
2037 ADT = 90,170 2037 ADTT = 9920
DIRECTIONAL DISTRIBUTION = 0.51

LEGEND

* - PHASE 2 CONSTRUCTION
** - PHASE 3 CONSTRUCTION
● #1; REQUIRED MINIMUM VERTICAL CLEARANCE: 15.50 FT
ACTUAL MINIMUM VERTICAL CLEARANCE (I-71 SB): 16.13 FT.
● #2; REQUIRED MINIMUM VERTICAL CLEARANCE: 15.50 FT
ACTUAL MINIMUM VERTICAL CLEARANCE (I-71 NB): 17.83 FT.
● #3; REQUIRED MINIMUM VERTICAL CLEARANCE: 15.50 FT
ACTUAL MINIMUM VERTICAL CLEARANCE (I-471 SB): 16.31 FT.

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL GIRDER WITH REINFORCED CONCRETE DECK AND REINFORCED CONCRETE SUBSTRUCTURE
SPANS: VARIES (SEE GENERAL PLAN)
ROADWAY: VARIES; N.B. MIN. 50'-0"±, S.B. MIN. 51'-11"±(T/T PARAPET)
LOADING: HS-20(44)
SKEW: VARIES (SEE GENERAL PLAN)
APPROACH SLABS: AS-1-54 (25'-0" LONG)
ALIGNMENT: 4°30' 00" CURVE RT.; w/ SIMPLE CURVES TRANSITION REPLACING 550 FOOT SPIRALS
SUPERELEVATION: VARIES 0.0625, '/'± MAX.
WEARING SURFACE: 1¾" LATEX MODIFIED CONCRETE OVERLAY (1996)
STRUCTURAL FILE NUMBER: 3106608
DATE BUILT: 1965; REHABILITATED IN 1995
DISPOSITION: MAJOR REHABILITATION

PROPOSED STRUCTURE

TYPE: CONTINUOUS STEEL GIRDER WITH COMPOSITE REINFORCED CONCRETE DECK AND REINFORCED CONCRETE SUBSTRUCTURE.
SPANS: VARIES (SEE GENERAL PLAN)
ROADWAY: VARIES; N.B. MIN. 50'-0", S.B. MIN. 51'-11" (T/T PARAPET)
LOADING: HS20
SKEW: VARIES (SEE GENERAL PLAN)
WEARING SURFACE: 1" MONLITHIC CONCRETE
APPROACH SLABS: 25'-0" LONG (AS-1-81) MODIFIED
ALIGNMENT: 4°30' 00" CURVE RT.; w/ SIMPLE CURVES TRANSITION REPLACING 550 FOOT SPIRALS
SUPERELEVATION: VARIES, 0.0625 FT/FT MAX.
COORDINATES: LATITUDE 39° 06' 17"
LONGITUDE 84° 30' 16"

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45249

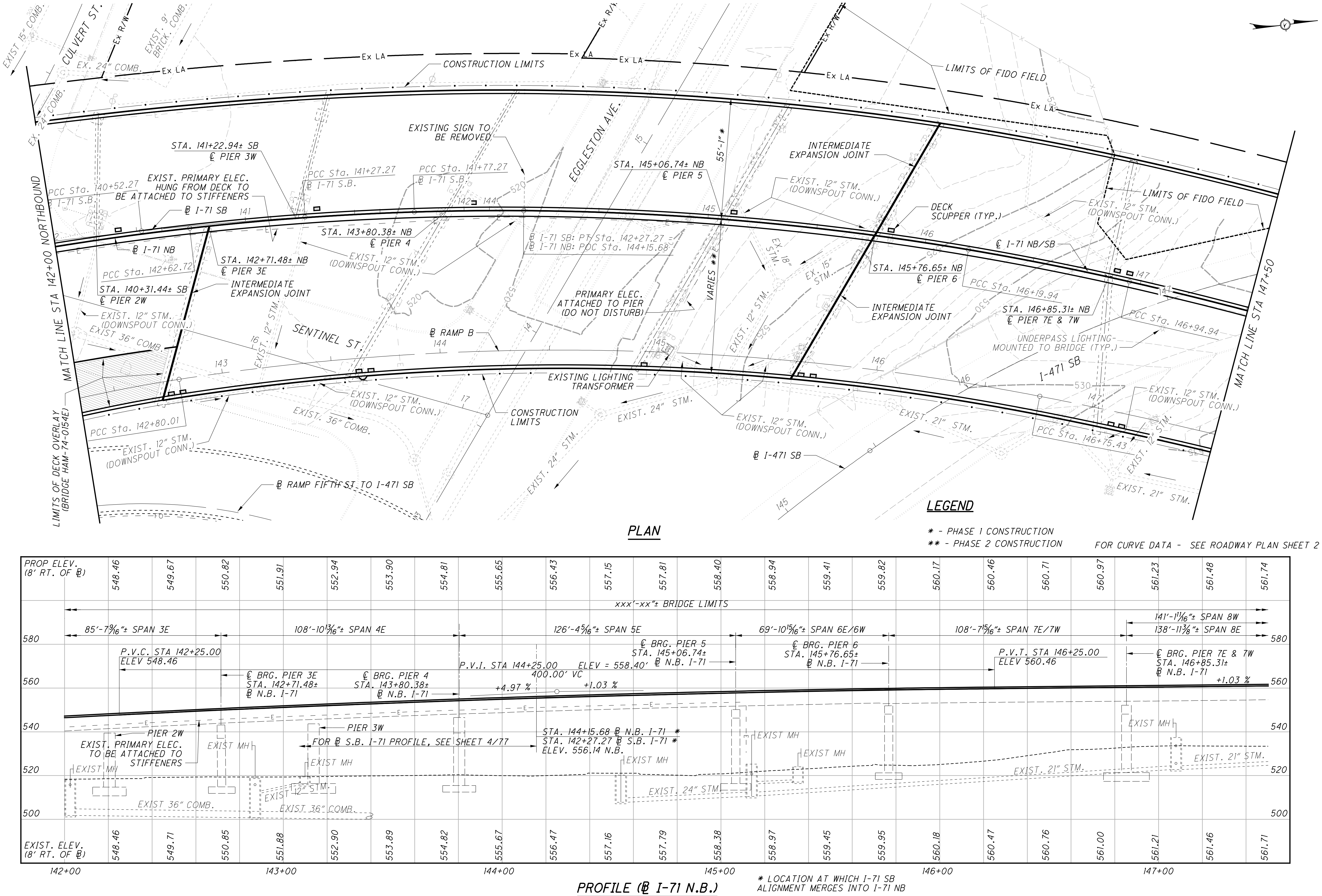
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

HAMILTON COUNTY
STA. 139+60.59
STA. 142+00

SITE PLAN
BRIDGE NO. HAM-71-0159 I-71 OVER I-471 SB,
EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

1/77



PROFILE (℄ I-71 N.B.)

* LOCATION AT WHICH I-71 SB ALIGNMENT MERGES INTO I-71 NB

LEGEND

* - PHASE 1 CONSTRUCTION
** - PHASE 2 CONSTRUCTION

FOR CURVE DATA - SEE ROADWAY PLAN SHEET 2

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45249

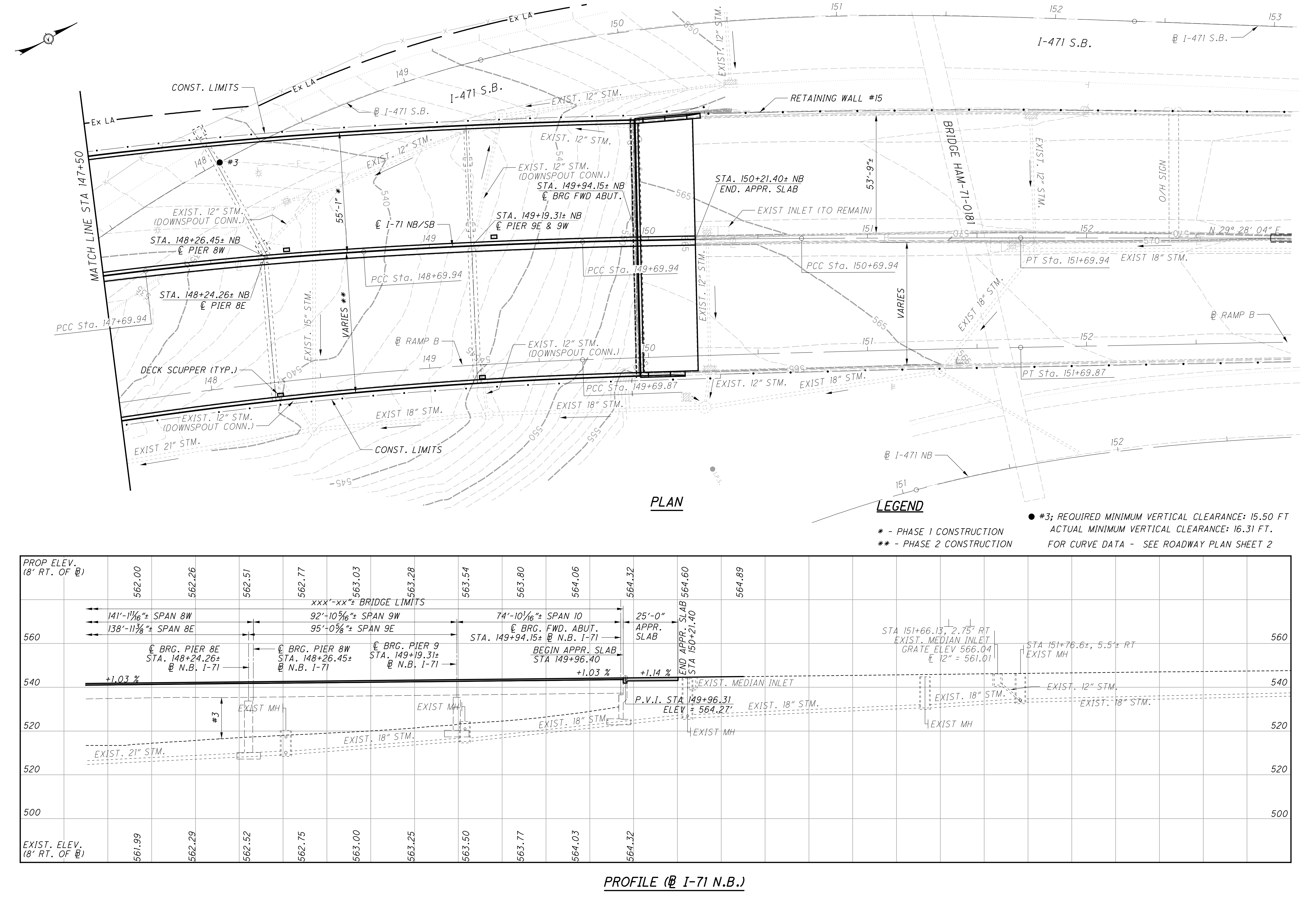
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	SDW	MLJ	01/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

HAMILTON COUNTY
STA. 142+00 NB
STA. 147+50 NB

SITE PLAN

BRIDGE NO. HAM-71-0159 I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



I-471 S.B.
Ex LA
CONST. LIMITS
MATCH LINE STA 147+50
℄ I-471 S.B.
RETAINING WALL #15
BRIDGE HAM-71-0181
53'-9"±
55'-1"±
EXIST. 12" STM.
EXIST. 12" STM. (DOWNSPOUT CONN.)
STA. 149+94.15± NB
℄ BRG FWD ABUT.
STA. 150+21.40± NB
END. APPR. SLAB
EXIST INLET (TO REMAIN)
N 29° 28' 04" E
STA. 149+19.31± NB
℄ PIER 9E & 9W
℄ I-71 NB/SB
STA. 148+26.45± NB
℄ PIER 8W
STA. 148+24.26± NB
℄ PIER 8E
PCC Sta. 147+69.94
PCC Sta. 148+69.94
PCC Sta. 149+69.94
PCC Sta. 150+69.94
PT Sta. 151+69.94
PT Sta. 151+69.87
PCC Sta. 149+69.87
EXIST 18" STM.
EXIST. 15" STM.
VARIES **
VARIES
℄ RAMP B
DECK SCUPPER (TYP.)
EXIST 21" STM.
O/H SIGN
℄ I-471 NB
PLAN
LEGEND
* - PHASE 1 CONSTRUCTION
** - PHASE 2 CONSTRUCTION
● #3; REQUIRED MINIMUM VERTICAL CLEARANCE: 15.50 FT
ACTUAL MINIMUM VERTICAL CLEARANCE: 16.31 FT.
FOR CURVE DATA - SEE ROADWAY PLAN SHEET 2
PROP ELEV. (8' RT. OF ℄)
562.00 562.26 562.51 562.77 563.03 563.28 563.54 563.80 564.06 564.32 564.60 564.89
xxx'-xx"± BRIDGE LIMITS
141'-1 11/16"± SPAN 8W
138'-11 3/8"± SPAN 8E
92'-10 5/16"± SPAN 9W
95'-0 5/8"± SPAN 9E
74'-10 1/16"± SPAN 10
25'-0" APPR. SLAB
℄ BRG. FWD. ABUT.
STA. 149+94.15± ℄ N.B. I-71
℄ BRG. PIER 8E
STA. 148+24.26±
℄ N.B. I-71
℄ BRG. PIER 8W
STA. 148+26.45±
℄ N.B. I-71
℄ BRG. PIER 9
STA. 149+19.31±
℄ N.B. I-71
BEGIN APPR. SLAB
STA 149+96.40
END APPR. SLAB STA 150+21.40
+1.03 %
+1.14 %
P.V.I. STA 149+96.31
ELEV = 564.27'
EXIST MH
EXIST. MEDIAN INLET
EXIST. 18" STM.
EXIST. 21" STM.
EXIST. 12" STM.
STA 151+66.13, 2.75' RT
EXIST. MEDIAN INLET
GRATE ELEV 566.04
℄ 12" = 561.01
STA 151+76.6±, 5.5± RT
EXIST MH
560 540 520 500
EXIST. ELEV. (8' RT. OF ℄)
561.99 562.29 562.52 562.75 563.00 563.25 563.50 563.77 564.03 564.32
PROFILE (℄ I-71 N.B.)

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45249

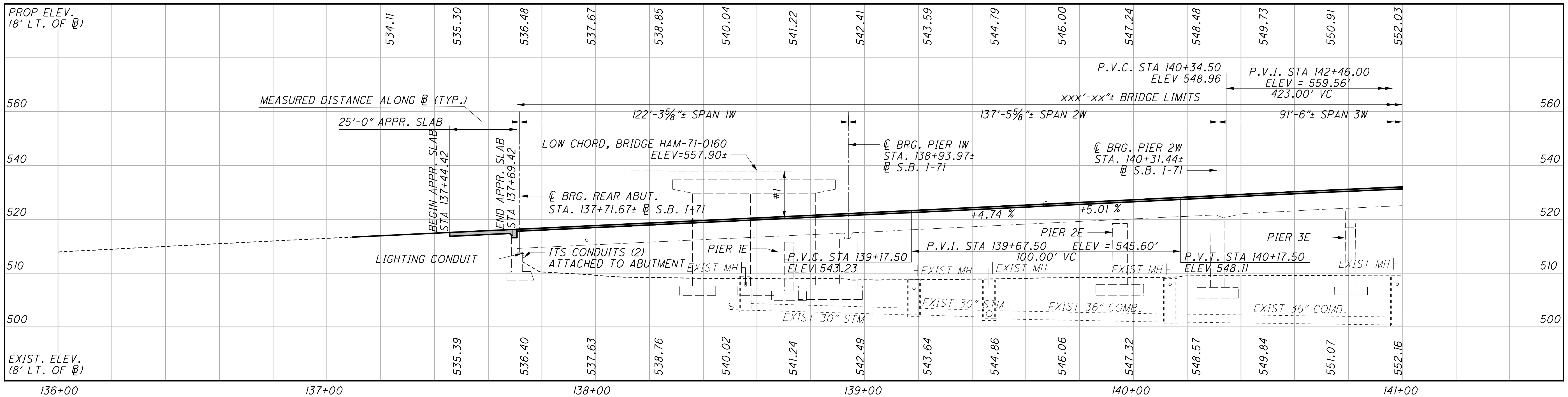
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

HAMILTON COUNTY
STA. 147+50
STA. 149+94.15

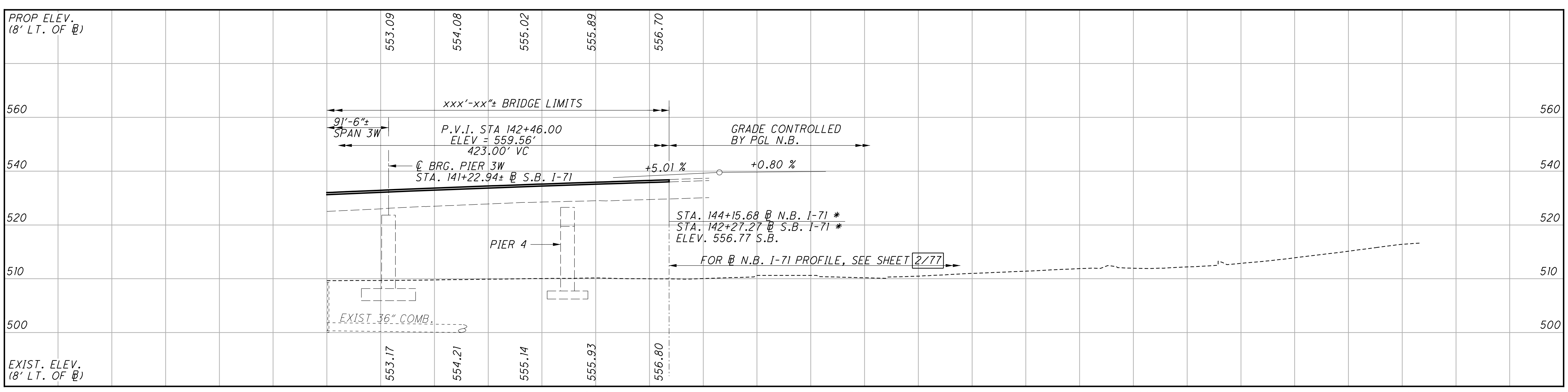
SITE PLAN

BRIDGE NO. HAM-71-0159 I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



PROFILE (℄ I-71 SB)



PROFILE (℄ I-71 SB)

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45249

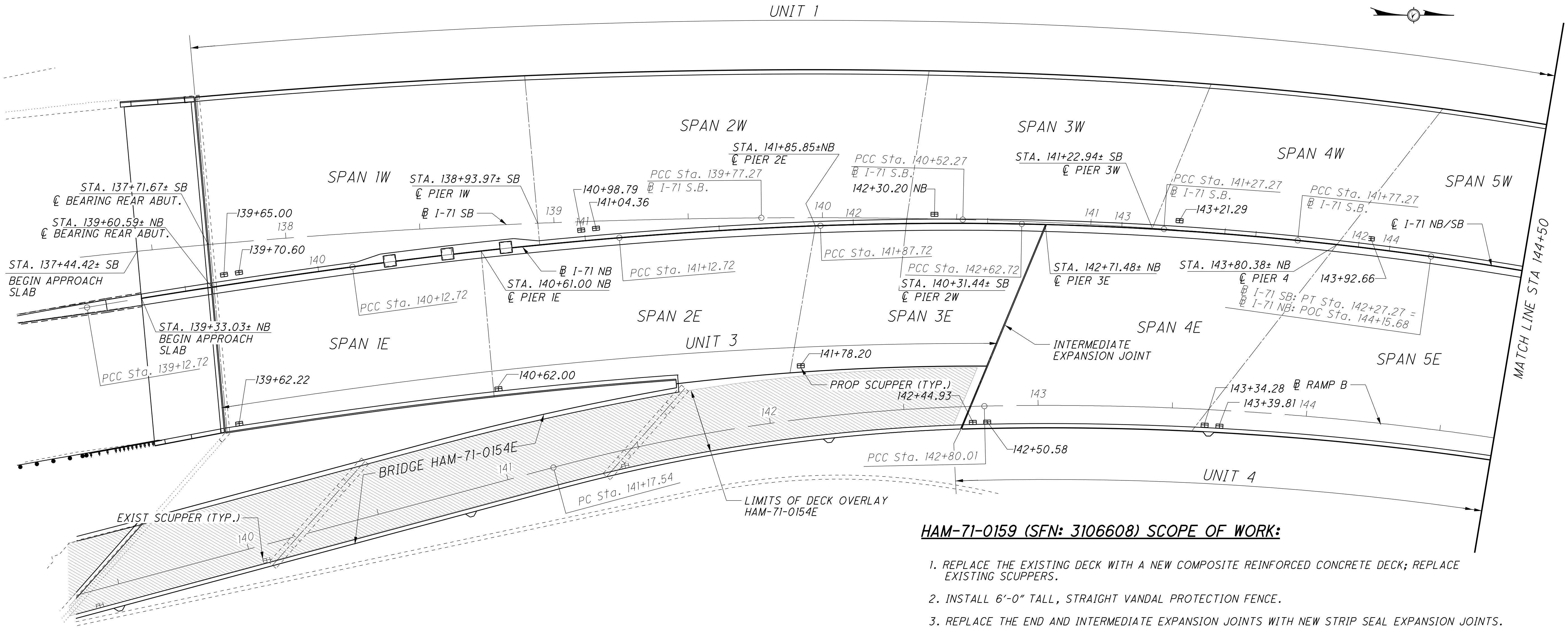
DESIGNED	CHECKED	DRAWN	REVISED	REVIEWED	DATE	STRUCTURE FILE NUMBER
CEJ	BJF	SDW		MLJ	02/26/16	3106608

HAMILTON COUNTY
STA. SB
STA. 142+27.27 SB

SITE PLAN

BRIDGE NO. HAM-71-0159 I-71 OVER I-471 SB,
EGGELSTON AVE., CULVERT ST & SENTINEL ST. (PROFILE)

HAM-71-1.59
PID No. 101939



DECK WIDTHS (OUT/OUT, MEASURED ALONG SUBSTRUCTURE UNIT)		
SUBSTRUCTURE UNIT	SOUTHBOUND I-71	NORTHBOUND I-71
REAR ABUTMENT	70' - 11 11/16" +/-	54' - 6 1/4" +/-
PIER 1E	-	54' - 5 1/8" +/-
PIER 1W	63' - 2 15/16" +/-	-
PIER 2E	-	55' - 4 11/16" +/-
PIER 2W	57' - 6 1/16" +/-	-
PIER 3E	-	82' - 2 5/8" +/-
PIER 3W	58' - 3 5/16" +/-	-
PIER 4	64' - 1 7/16" +/-	88' - 0 5/16" +/-
PIER 5	60' - 10 5/8" +/-	79' - 6 3/16" +/-
PIER 6	59' - 6" +/-	76' - 0" +/-
PIER 7E	-	68' - 5 7/8" +/-
PIER 7W	55' - 1" +/-	-
PIER 8E	-	69' - 11 11/16" +/-
PIER 8W	60' - 1" +/-	-
PIER 9E	-	62' - 9 5/16" +/-
PIER 9W	55' - 1" +/-	-
FOR. ABUTMENT	55' - 1" +/-	61' - 10 5/8" +/-

HAM-71-0159 (SFN: 3106608) SCOPE OF WORK:

1. REPLACE THE EXISTING DECK WITH A NEW COMPOSITE REINFORCED CONCRETE DECK; REPLACE EXISTING SCUPPERS.
2. INSTALL 6'-0" TALL, STRAIGHT VANDAL PROTECTION FENCE.
3. REPLACE THE END AND INTERMEDIATE EXPANSION JOINTS WITH NEW STRIP SEAL EXPANSION JOINTS.
4. REPLACE THE TOP OF THE BACKWALLS TO THE APPROACH SLAB SEAT.
5. REPLACE THE APPROACH SLABS WITH NEW REINFORCED CONCRETE APPROACH SLABS.
6. RELOCATE THE NORTHBOUND SIGN SUPPORT IN SPAN 1 AND REMOVE SIGN SUPPORT STRUCTURES.
7. REMOVE SOUTHBOUND SIGN AT MIDSPAN OF SPAN 5 AND SIGN SUPPORT STRUCTURES.
8. PATCH SUBSTRUCTURE PER 519 SPECIFICATIONS AND RE-SEAL DISTURBED AREAS WITH EPOXY URETHANE SEALER, FEDERAL COLOR NUMBER 17778.
9. PRESSURE WASH BEAM SEATS, BACKWALLS, AND STRUCTURAL STEEL WITHIN 10 FEET OF BOTH ABUTMENTS AND INTERMEDIATE EXPANSION JOINT AT PIER 6.
10. SEAL THE PARAPETS AND UNDERSIDE OF THE DECK TO THE FASCIA GIRDER FLANGE WITH EPOXY URETHANE SEALER, FEDERAL COLOR NO. 17778.
11. REPAIR FATIGUE CRACKS AND RETROFIT ALL PIER CAPS HAVING THE "DOGBONE" FATIGUE REPAIR.
12. CLEAN THE ENTIRE BRIDGE DECK DRAINAGE SYSTEM FROM THE DOWNSPOUT INLET TO THE FIRST MANHOLE.
13. RELOCATE EXISTING PRIMARY ELECTRIC LINE AND OTHER LIGHTING RELATED ITEMS ATTACHED TO THE EXISTING DECK.

NOTES

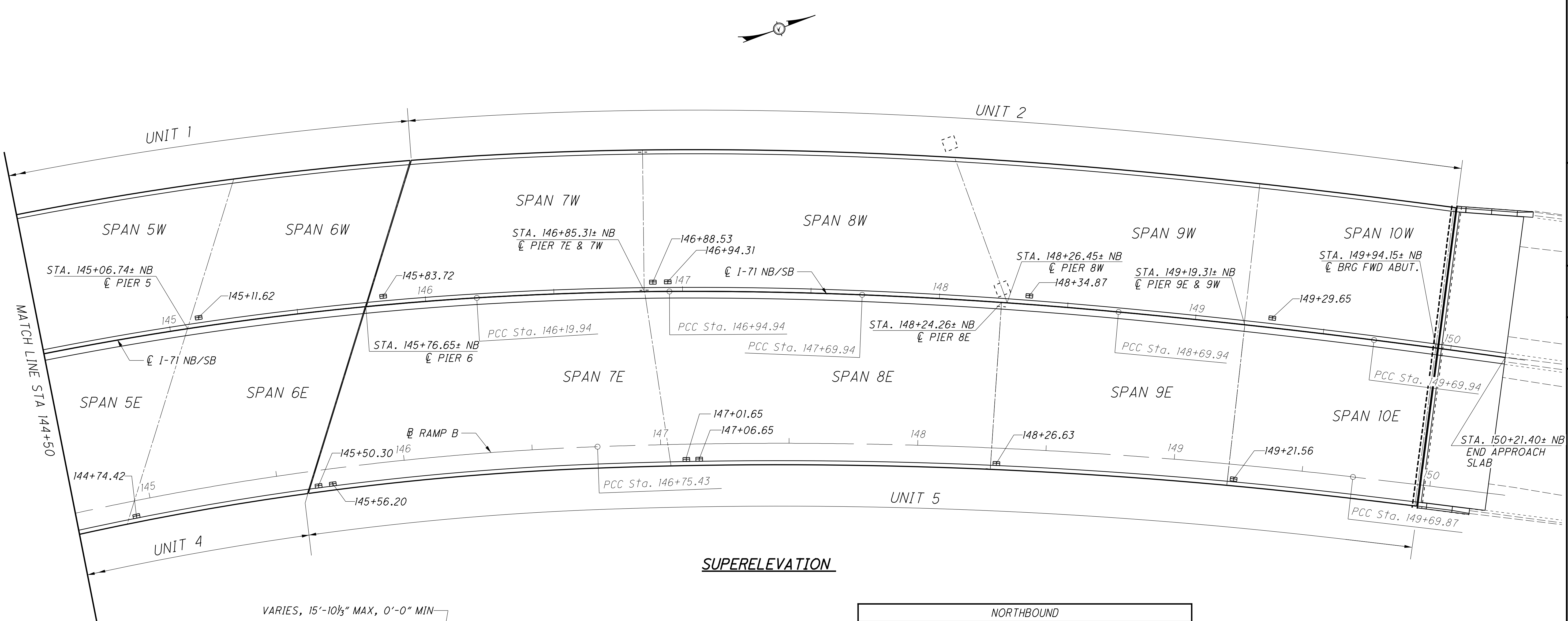
1. FOR CURVE DATA - SEE ROADWAY PLAN SHEET 2
2. FOR SUPERELEVATION LOCATION, SLOPES AND TRANSITION DIAGRAM, SEE SHEET 6/77 .
3. SCUPPER STATIONS BASED OFF ℄ I-71 N.B. SEE SHEET 33/77 FOR PROPOSED SCUPPER DETAILS.
4. SEE SITE PLAN SHEETS FOR SPAN LENGTHS.

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45249

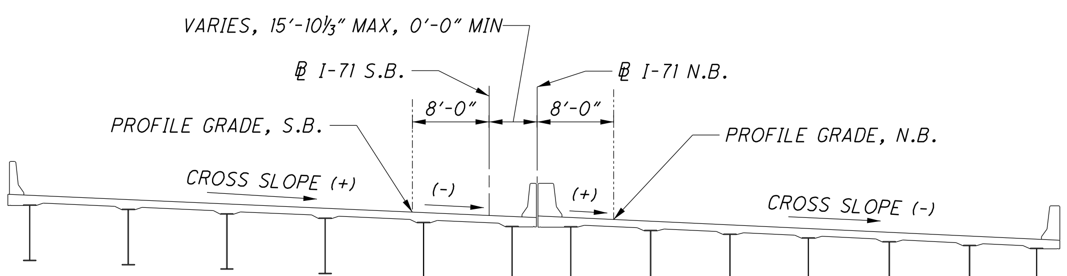
DESIGNED CEJ | CHECKED BJF | DRAWN DPF | REVIEWED | REVIEWED MLJ | DATE 02/26/16
STRUCTURE FILE NUMBER 3106608

GENERAL PLAN
BRIDGE HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

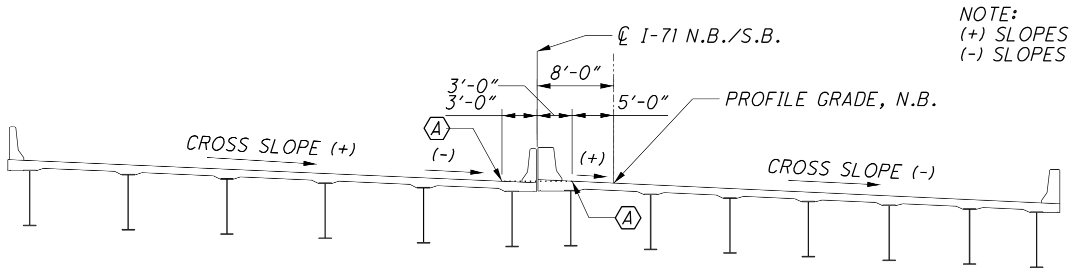
HAM-71-1.59
PID No. 101939



SUPERELEVATION



℄ I-71 N.B.: STA. 139+60.59± TO STA. 144+15.68
℄ I-71 S.B.: STA. 137+71.67± TO STA. 142+27.27
GRADE CONTROLLED BY ℄ N.B. I-71 @ 8'-0" RIGHT; ℄ S.B. @ 8'-0" LEFT



NOTE:
(+) SLOPES UP FROM PGL
(-) SLOPES DOWN FROM PGL

(A) = EQUAL ELEVATION

STA. 144+15.68 TO STA. 149+94.15±
GRADE CONTROLLED BY ℄ N.B. I-71 @ 8'-0" RIGHT OF ℄ N.B./S.B. I-71

NORTHBOUND		
STATION	CROSS SLOPE	COMMENT
SUPER ELEVATION TRANSITIONS		
134+12.72	-0.0156	BEGIN TRANSITION
142+62.72	-0.0625	FULL SUPER - END TRANSITION
146+19.94	-0.0625	FULL SUPER - BEGIN TRANSITION
151+15.00	-0.0156	END TRANSITION
KEY POINTS		
139+33.03	-0.0344	BEGIN APPROACH SLAB
139+60.59	-0.0367	℄ BEARING
149+94.15	-0.0270	℄ BEARING
150+21.40	-0.0245	END APPROACH SLAB
SOUTH BOUND		
STATION	CROSS SLOPE	COMMENT
SUPER ELEVATION TRANSITIONS		
137+44.42	0.0370	
139+72.27	0.0370	BEGIN TRANSITION
142+27.27	0.0625	FULL SUPER - END TRANSITION
END S.B. PGL CONTROL		
146+19.94	0.0625	FULL SUPER - BEGIN TRANSITION
150+80.14	0.0156	END TRANSITION
KEY POINTS		
137+44.42	0.0370	BEGIN APPROACH SLAB
137+71.67	0.0370	℄ BEARING
149+94.15	0.0244	℄ BEARING
150+21.40	0.0216	END APPROACH SLAB

FOR CURVE DATA - SEE ROADWAY PLAN SHEET 2

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45249

DESIGNED	CHECKED	DRAWN	REVIEWED	DATE
CEJ	DPF	DPF	MLJ	02/26/16

STRUCTURE FILE NUMBER 3106608

GENERAL PLAN

BRIDGE HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST

HAM-71-1.59
PID No. 101939

6/77

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWING(S):

AS-1-15	DATED/REVISED	07-17-15
BR-1-13	DATED/REVISED	01-17-14
EXJ-4-87	DATED/REVISED	07-19-02
GSD-1-96	DATED/REVISED	07-19-02
VPF-1-90	DATED/REVISED	07-17-15

AND TO THE FOLLOWING SUPPLEMENTAL SPECIFICATION(S):

800-2013	DATED/REVISED	01-15-16

DESIGN SPECIFICATIONS

THIS STRUCTURE CONFORMS TO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 17TH EDITION (2002), AND THE 2004 ODOT BRIDGE DESIGN MANUAL.

DESIGN LOADING

HS-20, CASE I AND THE ALTERNATE MILITARY LOADING

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

DESIGN DATA

CONCRETE CLASS QC2 WITH QC/QA- (PARAPETS, BRIDGE DECK) COMPRESSIVE STRENGTH 4.5 KSI

CONCRETE CLASS QC1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)

CONCRETE CLASS QC5 WITH QC/QA- (PATCHING) COMPRESSIVE STRENGTH 4.5 KSI

EXISTING STRUCTURAL STEEL - MINIMUM YIELD STRENGTH 36 KSI

REINFORCING STEEL - ASTM A615, OR A996; MINIMUM YIELD STRENGTH 60 KSI

DECK PROTECTION METHOD

EPOXY COATED REINFORCING STEEL

2.5" CONCRETE COVER

MONOLITHIC WEARING SURFACE

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

ITEM 201 - CLEARING AND GRUBBING, AS PER PLAN

THIS ITEM INCLUDES PRESSURE WASHING THE ABUTMENT AND PIER BEAM SEATS, REAR ABUTMENT BACKWALL, AND STRUCTURAL STEEL WITHIN 10 FEET OF THE REAR ABUTMENT AND FOR 10 FEET IN BOTH DIRECTIONS FROM THE EXPANSION JOINTS AT HAM-71-0159 AND HAM-71-0154E.

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 2.85 KIPS.

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

A MAXIMUM SPACING OF OVERHANG FALSEWORK BRACKETS OF 48 INCHES.

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

ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN

THIS WORK CONSISTS OF THE REMOVAL OF CONCRETE DECKS INCLUDING PARAPETS, DECK JOINTS AND OTHER APPURTENANCES FROM STEEL SUPPORTING SYSTEMS (BEAMS, GIRDERS, CROSS FRAMES, ETC.). THE PROVISIONS OF ITEM 202 APPLY EXCEPT AS SPECIFIED BY THE FOLLOWING NOTES. PERFORM WORK CAREFULLY DURING DECK REMOVALS TO PROTECT PORTIONS OF SUCH SYSTEMS THAT ARE TO BE SALVAGED AND INCORPORATED INTO THE PROPOSED STRUCTURE. THE USE OF EXPLOSIVES, HEADACHE BALLS AND/OR HOE RAM TYPE OF EQUIPMENT IS PROHIBITED. SUBMIT CONSTRUCTION PLANS ACCORDING TO CMS 501.05. THIS ITEM SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, PORTIONS OF ABUTMENT BACKWALL, EXISTING EXPANSION JOINTS, DRAIN INLETS AND PORTIONS OF EXISTING DOWNSPOUTS, AND SIGN SUPPORTS.

LIGHT POLES ON THE SUPERSTRUCTURE SHALL BE REMOVED IN ACCORDANCE WITH THE PROJECT LIGHTING PLANS.

THE CONTRACTOR MUST REVIEW THE STRUCTURE WHEN PREPARING HIS BID. THE CONTRACTOR WILL REVIEW THE CONDITION OF THE STRUCTURE TO DETERMINE WHAT DEBRIS WILL FALL FROM THE STRUCTURE DURING REMOVAL. THE CONTRACTOR WILL DETERMINE THE CORRESPONDING COST TO CLEAN UP ANY AND ALL DEBRIS WHICH FALLS FROM THE STRUCTURE DURING ANY REMOVAL OPERATION. THE COST TO CLEAR AND CLEAN UP ALL DEBRIS DURING REMOVAL SHALL BE INCLUDED WITH THE BID FOR THIS ITEM OF WORK. NO ADDITIONAL COST WILL BE RECOGNIZED TO CLEAN DEBRIS RESULTING FROM THE STRUCTURE REMOVAL OPERATION.

PROTECTION OF STEEL SUPPORT SYSTEMS: BEFORE DECK SLAB CUTTING IS PERMITTED, DRAW THE OUTLINE OF PRIMARY STEEL MEMBERS IN CONTACT WITH THE BOTTOM OF THE DECK ON THE SURFACE OF DECK. DRILL SMALL DIAMETER PILOT HOLES 2 INCHES OUTSIDE THESE LINES TO CONFIRM THE LOCATION OF FLANGE EDGES. DECK CUTS OVER OR WITHIN 2 INCHES OF FLANGE EDGES OR AT STEEL PIER CAPS SHALL NOT EXTEND LOWER THAN THE BOTTOM LAYER OF DECK SLAB REINFORCING STEEL. CUTS MADE OUTSIDE 2 INCHES OF FLANGE EDGES MAY EXTEND THE FULL DEPTH OF THE DECK. PERFORM WORK CAREFULLY DURING CUTTING OF THE DECK SLAB TO AVOID DAMAGING STEEL MEMBERS THAT ARE TO BE INCORPORATED INTO THE PROPOSED STRUCTURE. REPLACE OR REPAIR STEEL MEMBERS DAMAGED BY THE DECK SLAB CUTTING OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

REMOVAL METHODS: THE CONTRACTOR MAY REMOVE CONCRETE BY CUTTING AND BY MEANS OF HAND OPERATED PNEUMATIC HAMMERS EMPLOYING POINTED OR BLUNTED CHISEL TYPE TOOLS. FOR REMOVALS OVER STRUCTURAL MEMBERS (STEEL GIRDER AND STEEL BOX PIER CAPS), THE CONTRACTOR MAY USE A HAMMER HEAVIER THAN 35 POUNDS BUT NOT TO EXCEED 90 POUNDS UNLESS APPROVED BY THE ENGINEER. REMOVAL METHODS OVER STRUCTURAL MEMBERS SHALL ENSURE ADEQUATE DEPTH CONTROL AND PREVENT NICKING OR GOUGING THE PRIMARY STRUCTURAL MEMBERS. DUE TO THE POSSIBLE PRESENCE OF ATTACHMENTS (E.G., FINISHING MACHINE, SCUPPER AND FORM SUPPORTS, ETC.) TO EXISTING STRUCTURAL MEMBERS, PERFORM WORK CAREFULLY DURING DECK REMOVAL TO AVOID DAMAGING STRUCTURAL MEMBERS THAT ARE TO REMAIN. REPLACE OR REPAIR STRUCTURAL MEMBERS DAMAGED BY THE REMOVAL OPERATIONS AT NO COST TO THE PROJECT. AT LEAST 7 DAYS BEFORE PERFORMING REPAIR WORK, SUBMIT A PROPOSED REPAIR PLAN, DEVELOPED BY AN OHIO REGISTERED PROFESSIONAL ENGINEER TO THE DIRECTOR. OBTAIN THE DIRECTOR'S APPROVAL BEFORE PERFORMING REPAIR.

EXISTING WELDED ATTACHMENTS: REMOVE EXISTING WELDED ATTACHMENTS (E.G., FINISHING MACHINE AND FORM SUPPORTS; AND SUPPORTS FOR SCUPPERS AND BULB ANGLES WHICH ARE TO BE REMOVED) LOCATED IN THE DESIGNATED TENSION PORTIONS OF THE TOP FLANGES OF EXISTING STEEL MEMBERS AND GRIND THE FLANGE SURFACES SMOOTH. CAREFULLY GRIND PARALLEL TO THE FLANGES. EXISTING SIGN POST TO BE REMOVED, GRIND SMOOTH AND PAINT THE EXISTING STEEL WHERE THE MEMBERS WERE REMOVED. COLOR TO MATCH EXISTING.

SUBSTRUCTURE CONCRETE REMOVAL: REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 INCH LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

CUT LINE CONSTRUCTION JOINT PREPARATION: SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. LEAVE THE EXISTING REINFORCING STEEL, IF REQUIRED IN THE PLANS, IN PLACE. INSTALL DOWEL BARS IF SPECIFIED. PRIOR TO CONCRETE PLACEMENT ABRASIVELY CLEAN JOINT SURFACES AND EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

MEASUREMENT & PAYMENT: THE DEPARTMENT WILL MEASURE THE QUANTITY OF REMOVALS ON A LUMP SUM BASIS. THE DEPARTMENT WILL PAY FOR THE ACCEPTED QUANTITIES OF REMOVALS AT THE CONTRACT PRICE FOR ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20' SPAN, AS PER PLAN.

ITEM 509 REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN

REPLACE ALL EXISTING REINFORCING BARS, IN THE ABUTMENT BACKWALLS AND APPROACH SLAB CONNECTIONS, DEEMED BY THE ENGINEER TO BE UNUSABLE BECAUSE OF CORROSION. THE DEPARTMENT WILL MEASURE THE REPLACEMENT REINFORCING STEEL BY THE NUMBER OF POUNDS ACCEPTED IN PLACE. REPLACE ALL EXISTING REINFORCING STEEL BARS WHICH ARE TO BE INCORPORATED INTO THE NEW WORK AND ARE DEEMED BY THE ENGINEER TO BE MADE UNUSABLE BY CONCRETE REMOVAL OPERATIONS WITH NEW EPOXY COATED REINFORCING STEEL OF THE SAME SIZE AT NO COST TO THE DEPARTMENT.

AN ESTIMATED QUANTITY OF 200 POUNDS HAS BEEN CARRIED TO THE GENERAL SUMMARY FOR THIS ITEM.

ITEM 509 - EPOXY COATED REINFORCING STEEL, AS PER PLAN

IN ADDITION TO THE PROVISIONS OF ITEM 509, FIELD BEND AND/OR FIELD CUT THE REINFORCING STEEL DESIGNATED IN THE PLANS, AS NECESSARY, IN ORDER TO MAINTAIN THE REQUIRED CLEARANCES AND BAR SPACINGS. REPAIR ALL DAMAGE TO THE EPOXY COATING, AS A RESULT OF THIS WORK, ACCORDING TO 709.00.

ITEM 514 FIELD PAINTING, MISC.: REPAIR OF EXISTING PAINT

REPAIR ANY DAMAGE TO THE EXISTING PAINT CAUSED BY CONTRACTOR OPERATIONS. USE OZEU SPECIFICATIONS. THIS ITEM SHALL INCLUDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE EXISTING PAINT SYSTEM REPAIRS.

ITEM 517 - RAILING, MISC.: STEEL PLATES IN PARAPETS AT 6TH STREET OVERPASS

THIS ITEM SHALL INCLUDE ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING THE STEEL PLATES ALONG THE FACE OF THE PARAPETS NEAR THE 6TH ST. OVERPASS COLUMNS. SEE SHEETS 37/77 AND 38/77.

ALL STEEL SHALL BE GALVANIZED PER CMS 711.02 AFTER ALL FABRICATION IS COMPLETED. STUD ANCHORS SHALL BE FURNISHED AND INSTALLED IN THE SHOP PER CMS 513.22 (BEND TESTS ARE NOT REQUIRED). BOLTS SHALL BE DIPPED OR MECHANICALLY GALVANIZED.

ITEM 519 - PATCHING CONCRETE STRUCTURES, AS PER PLAN

PRIOR TO THE SURFACE CLEANING SPECIFIED IN 519.04 AND WITHIN 24 HOURS OF PLACING PATCHING MATERIAL, BLAST CLEAN ALL SURFACES TO BE PATCHED INCLUDING THE EXPOSED REINFORCING STEEL. ACCEPTABLE METHODS INCLUDE HIGH-PRESSURE WATER BLASTING WITH OR WITHOUT ABRASIVES IN THE WATER, ABRASIVE BLASTING WITH CONTAINMENT, OR VACUUM ABRASIVE BLASTING.

LOCATION OF PATCHING SHALL BE DETERMINED AND MARKED BY THE ENGINEER. AN ESTIMATED QUANTITY OF 100 SF HAS BEEN PROVIDED IN THE TABLE OF ESTIMATED QUANTITIES FOR PURPOSES OF ESTABLISHING A BID.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED CEJ | CHECKED BJF | DRAWN SDW | REVISED | REVIEWED MLJ | DATE 02/26/16 | STRUCTURE FILE NUMBER 3106608

GENERAL NOTES 1 OF 2
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN

THIS ITEM SHALL CONFORM TO CMS 511 WITH THE FOLLOWING CONDITIONS AND REVISIONS:

THE CLASS QC2 CONCRETE FOR THE SUPERSTRUCTURE SHALL MEET THE FOLLOWING CRITERIA:

WATER/CEMENT RATIO = 0.40 MAXIMUM; MICRO-SILICA ADMIXTURE (7% BY WEIGHT OF CEMENT ADDED TO THE TOTAL CEMENTITIOUS CONTENT); 2 LBS./C. Y. POLYPROPYLENE FIBERS (1.25" MIN.) MEETING ASTM C1116 TYPE III SHALL BE ADDED TO THE MIX.

MIX SHALL INCLUDE A MIGRATING CORROSION INHIBITOR AS MANUFACTURED BY AN APPROVED SUPPLIER LISTED ON ODOT'S QUALIFIED APPROVED SUPPLIERS, ITEM 515.15. THE CORROSION INHIBITOR DOSAGE RATE SHALL BE WITHIN THE MANUFACTURES RECOMMENDED LIMITS. THE DOSAGE RATE LISTED ON THE ODOT QUALIFIED APPROVED SUPPLIERS LIST NEED NOT APPLY.

THE FIBERS SHALL BE INCORPORATED INTO THE MIX IN SUCH A WAY THAT NO 'BALLING' OCCURS. UPON INSPECTION OF THE MIX AT THE TIME OF PLACEMENT, IF ANY 'BALLING' OCCURS, THE ENGINEER SHALL REJECT THE REMAINDER OF THE LOAD AT ANY TIME DURING THE POUR. IT IS IMPORTANT TO FOLLOW INDUSTRY STANDARDS AND ASTM SPECIFICATIONS ON THE PREMIXING OF THE CEMENT, AGGREGATE, FIBERS AND MICRO-SILICA PRIOR TO THE ADDITION OF WATER AND ADMIXTURES.

THE BATCH WEIGHTS SHALL BE CORRECTED TO COMPENSATE FOR THE MOISTURE CONTAINED IN THE AGGREGATE AT THE TIME OF USE. A CHEMICAL ADMIXTURE (705.12, TYPE A OR D) SHALL BE USED. THE TRANSIT MIXER CHARGE SHALL BE LIMITED TO ¾ OF ITS RATED CAPACITY OR 6 CUBIC YARDS, WHICHEVER IS SMALLER, UNLESS A LARGER SIZE IS APPROVED BY THE ENGINEER. CONCRETE SUPPLIERS SHOULD RECOGNIZE THAT THE CORROSION INHIBITOR AND ADMIXTURES MAY HAVE AN EFFECT ON STRENGTH, ENTRAINED AIR CONTENT, WORKABILITY, ETC. OF THEIR CONCRETE MIXES. THE CONCRETE SUPPLIERS CHOICE OF ONE OF THESE CORROSION INHIBITORS DOES NOT ALLEVIATE MEETING DESIGN REQUIREMENTS.

APPROACH SLABS AND BRIDGE RAILING CONCRETE (WHEN APPLICABLE) ARE TO USE THE SAME MIX DESIGN AS THE BRIDGE DECK. THE CONTRACTOR SHOULD BE ADVISED THAT CONCRETE RETARDING AGENTS MAY NEED TO BE ADDED TO OFFSET THE EFFECTS OF THE MIGRATING CORROSION INHIBITOR SELECTED.

THE CONTRACTOR SHALL PROVIDE TRADITIONAL BRIDGE DECK FORMS CONFORMING TO CMS 508. PERMANENT STAY-IN-PLACE (SIP) FORMS ARE NOT ALLOWED. THE PLACING OF THE DECK AND THE APPROACH SLABS IN THE SAME CONCRETE POUR IS NOT PERMITTED.

INSPECTION OF EXISTING STRUCTURAL STEEL

THE ENGINEER WILL VISUALLY INSPECT ALL EXISTING BUTT-WELDED SPLICES ON THE TOP FLANGES OF THE STEEL BOX PIER CAPS TO ENSURE THE WELDS AND PLATES ARE FREE OF DEFECTS AND CRACKS. IF NECESSARY, REMOVE ALL DECK SLAB HAUNCH FORMS IMMEDIATELY ADJACENT TO SUCH WELDS THAT MAY INTERFERE WITH THE ENGINEER'S INSPECTION. THE INSPECTION WILL NOT TAKE PLACE UNTIL THE TOP FLANGES ARE CLEANED ACCORDING TO 511.07 BUT WILL BE DONE BEFORE THE DECK SLAB REINFORCEMENT IS INSTALLED.

THE DEPARTMENT WILL PAY FOR THE COST ASSOCIATED WITH THIS INSPECTION UNDER ITEM 511, CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN. THE ENGINEER WILL REPORT ALL CRACKS FOUND TO THE OFFICE OF CONSTRUCTION ADMINISTRATION, BRIDGE CONSTRUCTION SPECIALIST, ALONG WITH SPECIFIC INFORMATION ON LOCATION OF THE CRACKS, LENGTH, AND DEPTH SO AN EVALUATION AND REPAIR OR REPLACEMENT RECOMMENDATION CAN BE MADE.

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 CMS SECTIONS 102.05, 105.02 AND 513.04. BASE CONTRACT BID PRICES UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PRE BID 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.

UTILITY LINES

THE CONTRACTOR SHALL PROTECT ALL UTILITY CONDUITS, DEVICES, AND APPURTENANCES THAT ARE TO REMAIN ON THE STRUCTURE DURING REMOVAL AND CONSTRUCTION OPERATIONS.

DESIGN AGENCY
Palmer ENGINEERING
1001 CORNELL PARK DR. - SUITE 200
ENGINEERING CINCINNATI, OH. 45242
CINCINNATI • AARON • WELLS • ASSOCIATES

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

GENERAL NOTES 2 OF 2
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

SHEET NUM.											PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
							REAR ABUT.	FWD ABUT.	SUPER STR	GENERAL	01/IMS/BR							
																	STRUCTURE 20 FOOT SPAN AND OVER (HAM-71-0159)	
											LS		201	11001	LS		CLEARING AND GRUBBING, AS PER PLAN	7
										LS	LS		202	11203	LS		PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	7
										622	622		202	22900	622	SY	APPROACH SLAB REMOVED	
							285	244	1,268,390	5,692	1,274,611		509	10001	1,274,611	LB	EPOXY COATED REINFORCING STEEL, AS PER PLAN	7
										200	200		509	20001	200	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	7
							4			94	98		510	10000	98	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	
									3,999		3,999		511	34447	3,999	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK, AS PER PLAN	7
									638	42	680		511	34451	680	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN	7
							9	8			17		511	45710	17	CY	CLASS QC1 CONCRETE, ABUTMENT	
									3,543	169	3,712		512	10100	3,712	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
									27,633		27,633		513	20000	27,633	EACH	WELDED STUD SHEAR CONNECTORS	
									4		4		513	95000	4	FT	STRUCTURAL STEEL, MISC.: GRINDING PER FOOT, AS PER PLAN	21
									LS		LS		513	95020	LS		STRUCTURAL STEEL, MISC.: GENERAL REPAIRS	21
									44		44		513	95030	44	EACH	STRUCTURAL STEEL, MISC.: 1" STRESS RELIEF HOLE RETROFIT	21
									LS		LS		514	27800	LS		FIELD PAINTING, MISC.:REPAIR OF EXISTING PAINT	7
									460		460		516	11210	460	FT	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL	
										336	336		516	13600	336	SF	1" PREFORMED EXPANSION JOINT FILLER	
									6		6		517	76302	6	EACH	RAILING, MISC.: STEEL PLATES IN PARAPETS AT 6TH STREET OVERPASS	7, 37-38
									27		27		518	12201	27	EACH	SCUPPERS, INCLUDING SUPPORTS, AS PER PLAN	33
									LS		LS		518	63300	LS		STRUCTURE DRAINAGE, MISC.: CLEANING BRIDGE DECK DRAINAGE SYSTEM	5
										100	100		519	11101	100	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN	7
										666	666		526	30011	666	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN	64-70
									1,462		1,462		607	39900	1,462	FT	VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC	

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED CEJ | CHECKED BJF | DRAWN SDW | REVISED | REVIEWED MLJ | DATE 02/28/16 | STRUCTURE FILE NUMBER 3106608

ESTIMATED QUANTITIES
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

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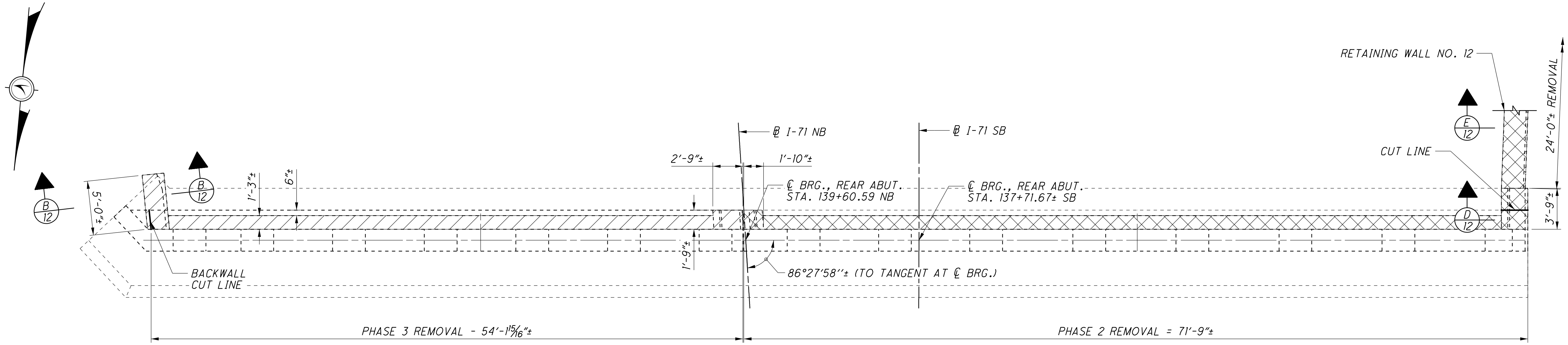

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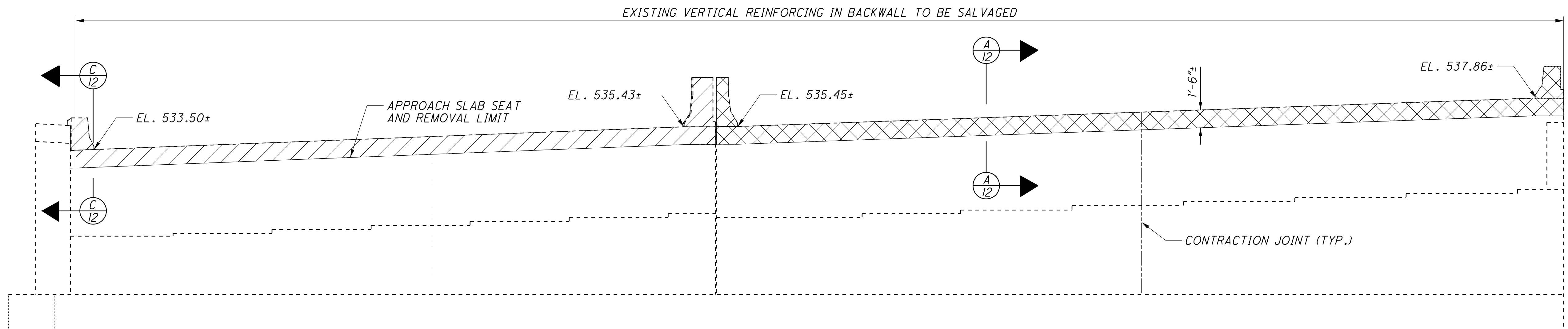


ELEVATION

LEGEND

PHASE 2 - ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

PHASE 3 - ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

NOTES

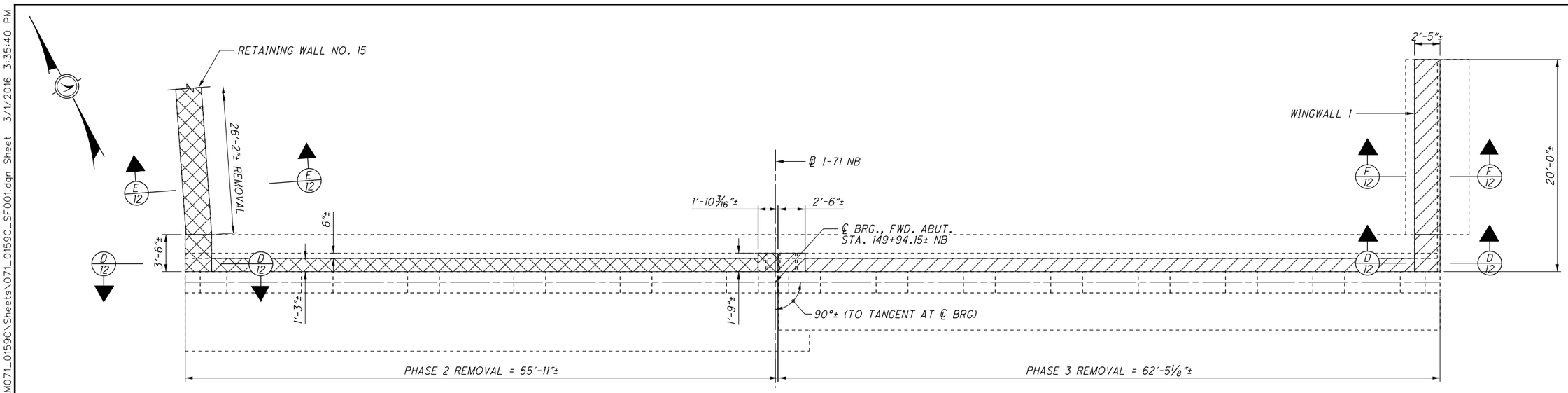
1. SEE SHEET 58/77 FOR EXISTING END DAM REMOVAL DETAILS.
2. SEE SHEET 12/77 FOR SECTIONS NOT SHOWN.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

REAR ABUTMENT REMOVAL DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



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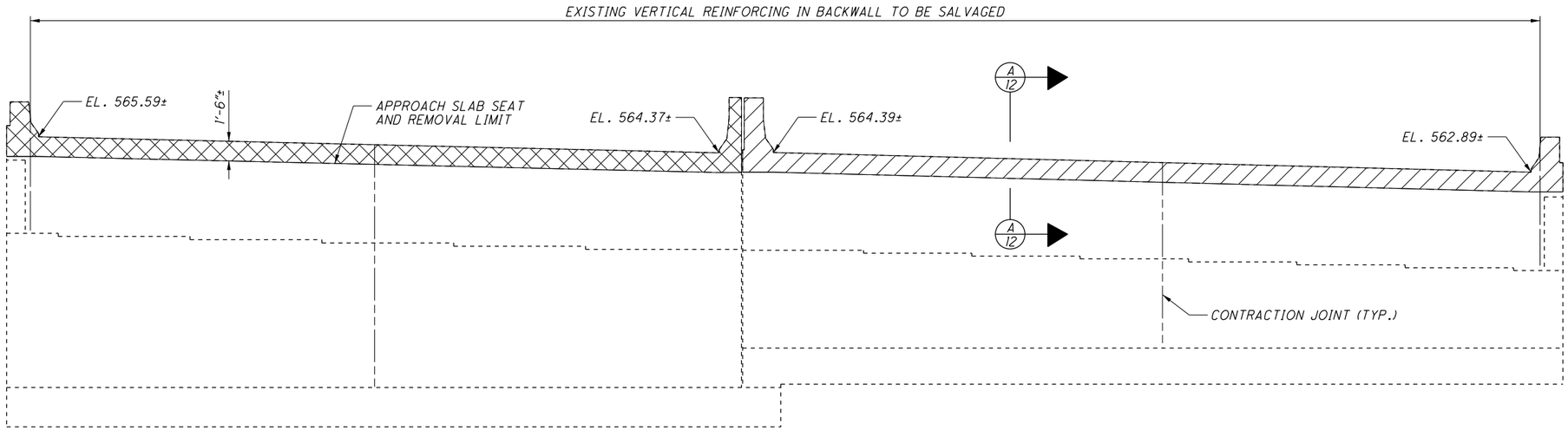

ELEVATION

LEGEND

PHASE 2 - ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

PHASE 3 - ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

NOTES

1. SEE SHEET 58/77 FOR EXISTING END DAM REMOVAL DETAILS.
2. SEE SHEET 12/77 FOR SECTIONS NOT SHOWN.

DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
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BJF		3106608	

FORWARD ABUTMENT REMOVAL DETAILS

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST. & SENTINEL ST.

HAM-71-1.59
PID No. 101939

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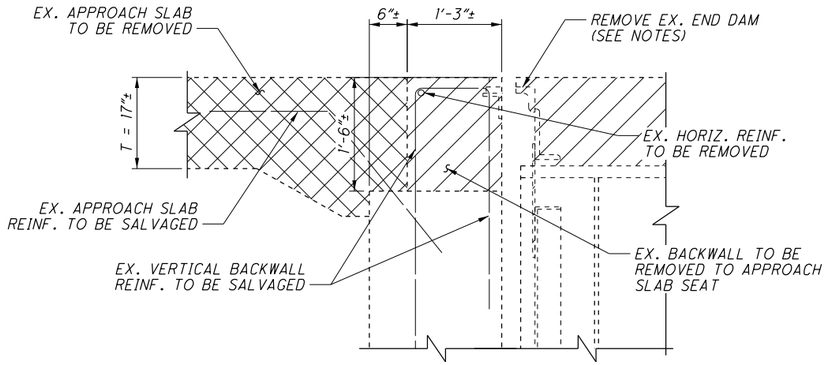
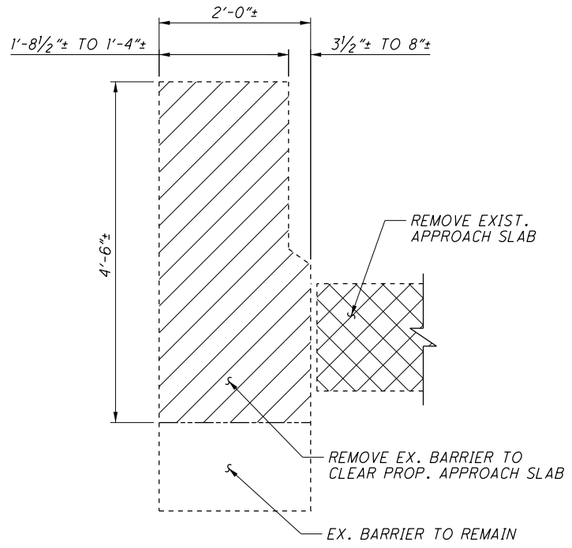
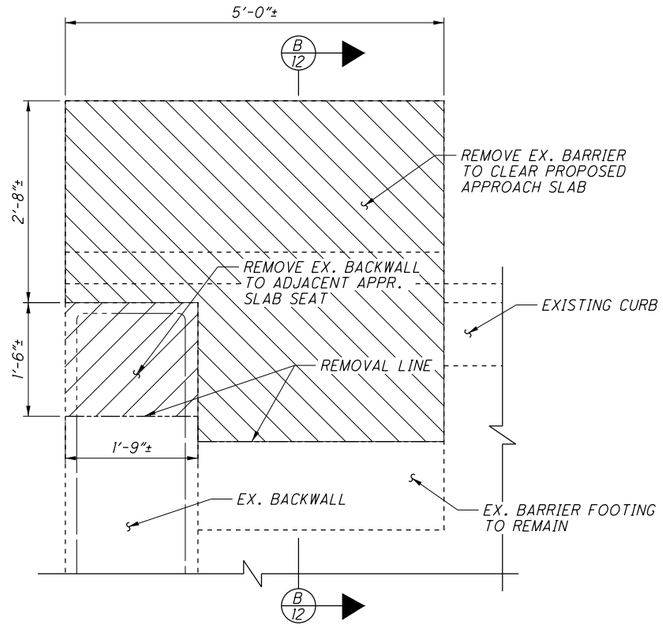


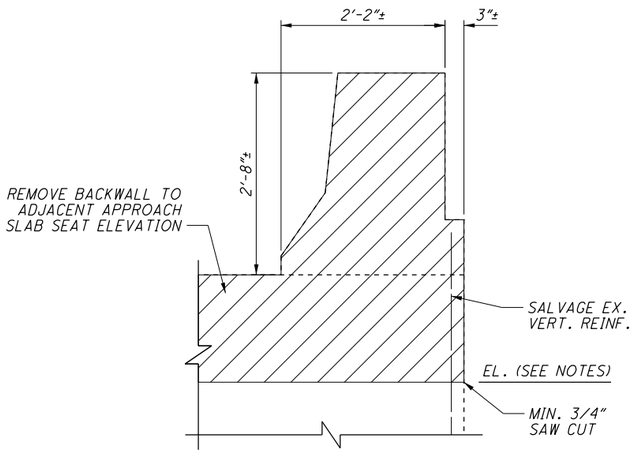
A/10 A/11 SECTION - BACKWALL AND APPROACH SLAB REMOVAL



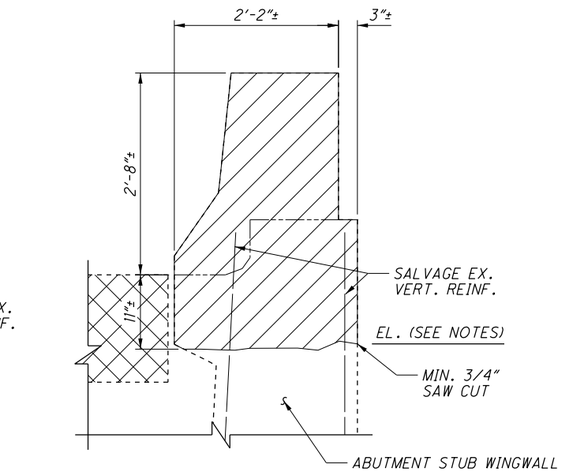
B/10 B/12 SECTION - REMOVAL AT RT CURB



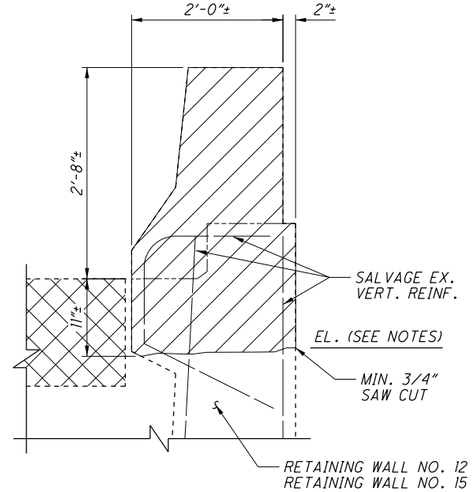
C/10 SECTION - REMOVAL AT RT CURB



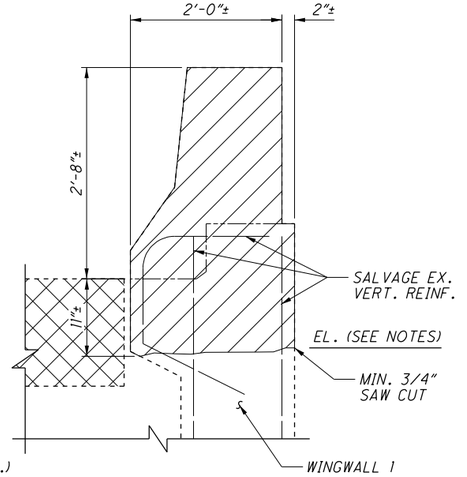
D/10 D/11 SECTION - BACKWALL



D/10 D/11 SECTION - STUB WINGWALL



E/10 E/11 SECTION - RET. WALL



F/11 SECTION - WINGWALL
(FORWARD ABUTMENT RT)

LEGEND

ITEM 202 - APPROACH SLAB REMOVED

ITEM 202 - PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

NOTES

1. SEE SHEETS 65/77, 69/77, AND 70/77 FOR SAW CUT ELEVATIONS AT ABUTMENT, RETAINING WALL, AND WINGWALL SECTIONS.
2. SEE SHEET 58/77 FOR EXPANSION JOINT REMOVAL DETAILS.

DESIGN AGENCY
PALMER ENGINEERING
191 CORNELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

ABUTMENT REMOVAL SECTIONS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

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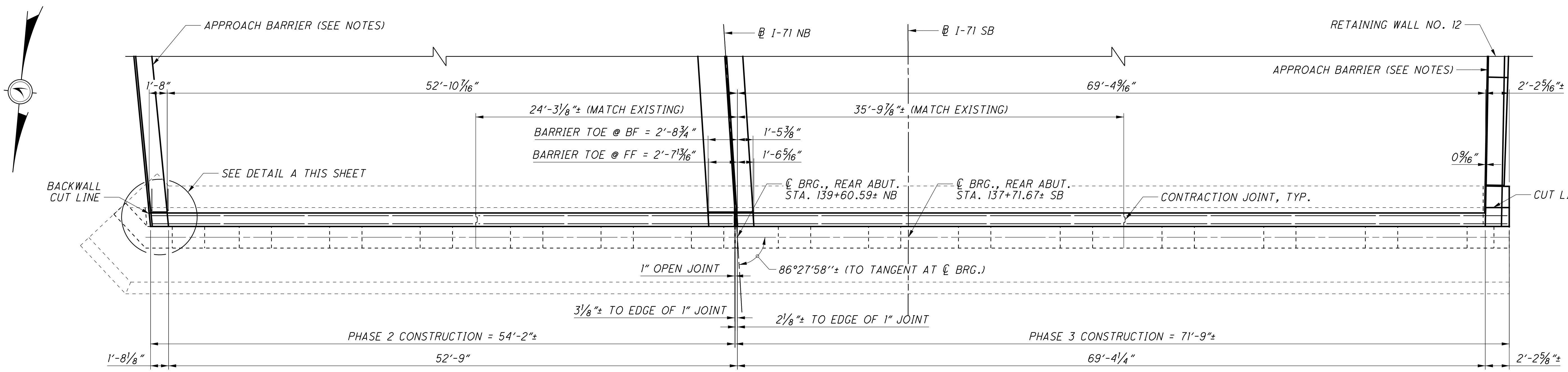
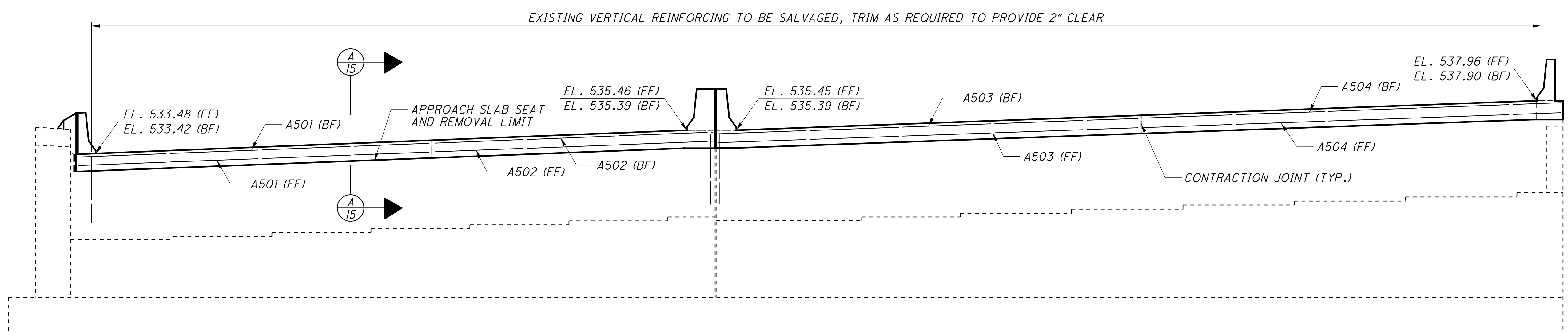
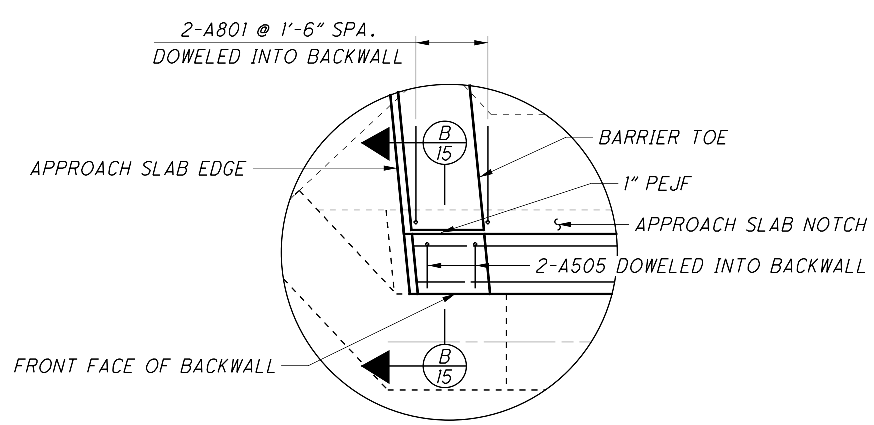


PLAN



ELEVATION



DETAIL A

NOTES

1. SEE SHEET 15/77 FOR SECTIONS NOT SHOWN.
2. SEE SHEET 59/77 FOR EXPANSION JOINT DETAILS.
3. SEE SHEET 64/77 FOR APPROACH AND BARRIER DETAILS.

LEGEND

BF = BACK FACE OF BACKWALL
FF = FRONT FACE OF BACKWALL

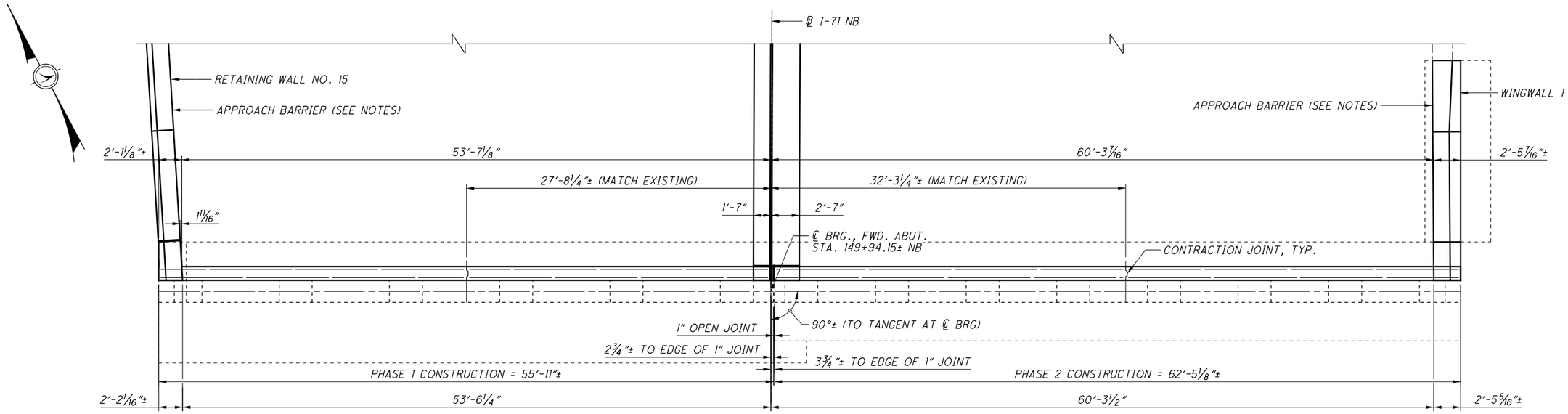
DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

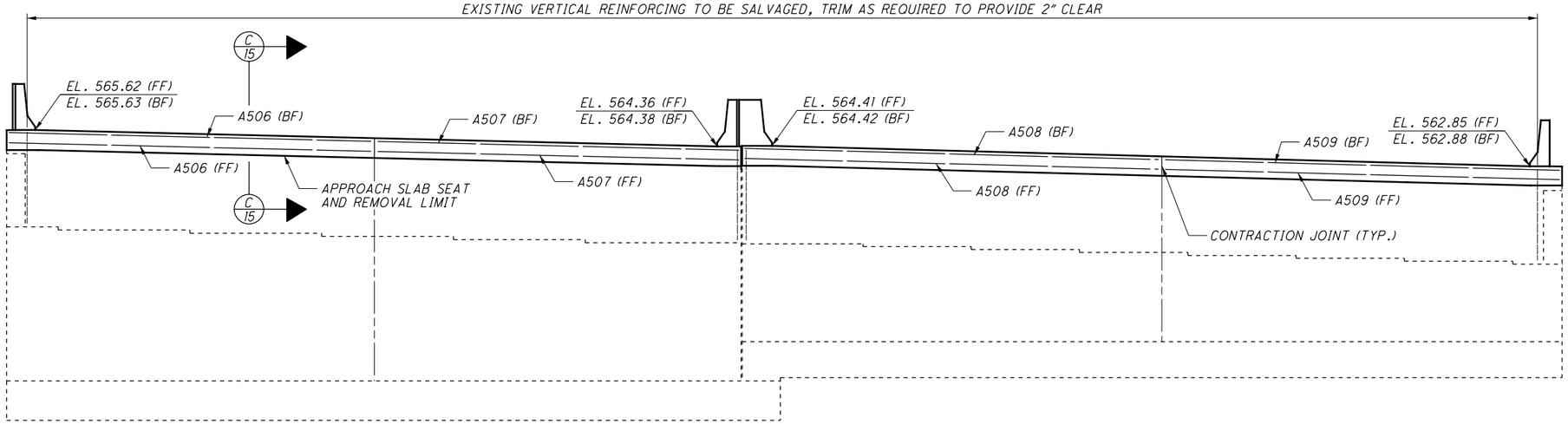
REAR ABUTMENT DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

13/77



PLAN



ELEVATION

NOTES

1. SEE SHEET 15/77 FOR SECTIONS NOT SHOWN.
2. SEE SHEET 60/77 FOR EXPANSION JOINT DETAILS.
3. SEE SHEET 68/77 FOR APPROACH AND BARRIER DETAILS.

LEGEND

BF = BACK FACE OF BACKWALL
FF = FRONT FACE OF BACKWALL

DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

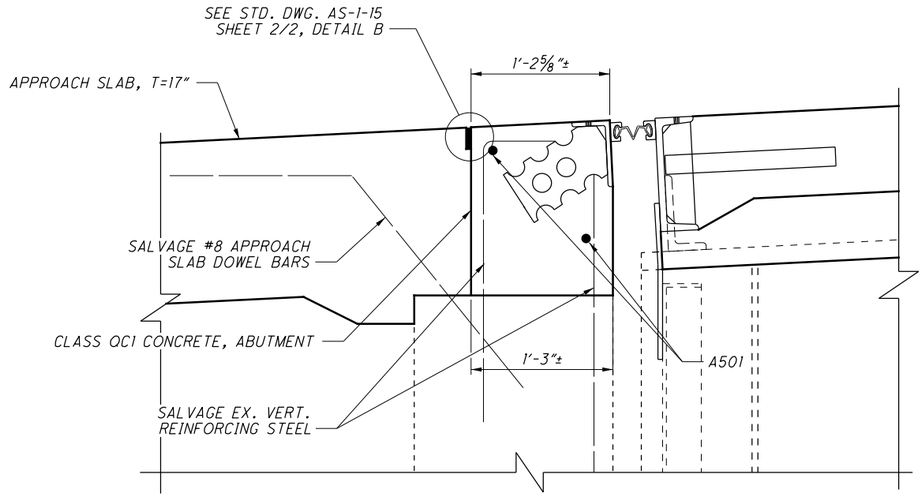
FORWARD ABUTMENT DETAILS

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST. & SENTINEL ST.

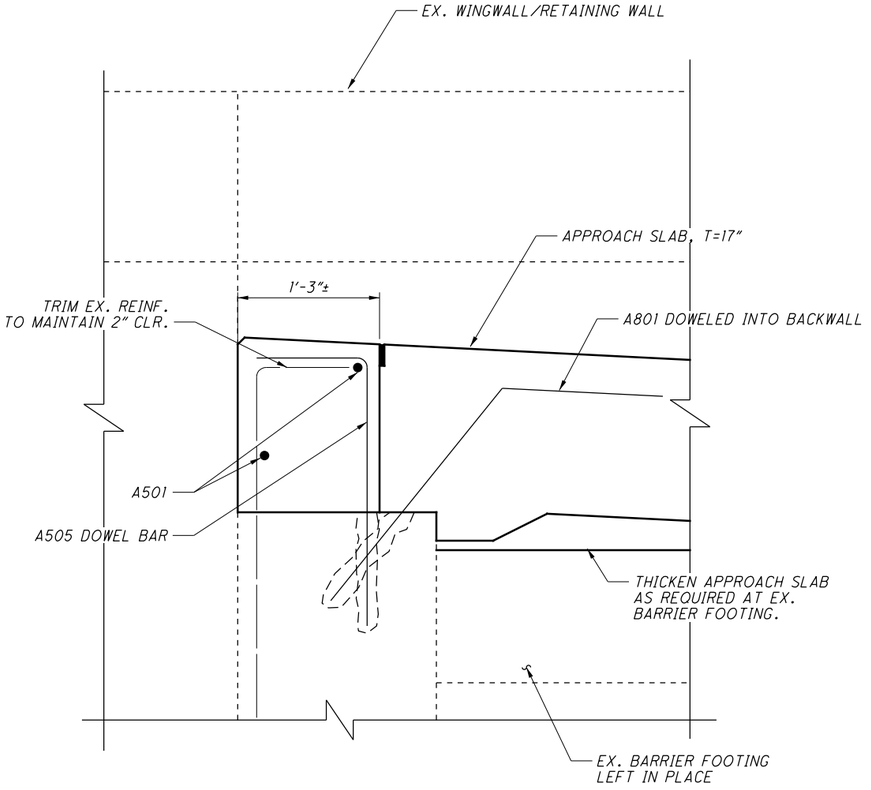
HAM-71-1.59
PID No. 101939

14 / 77

113
176

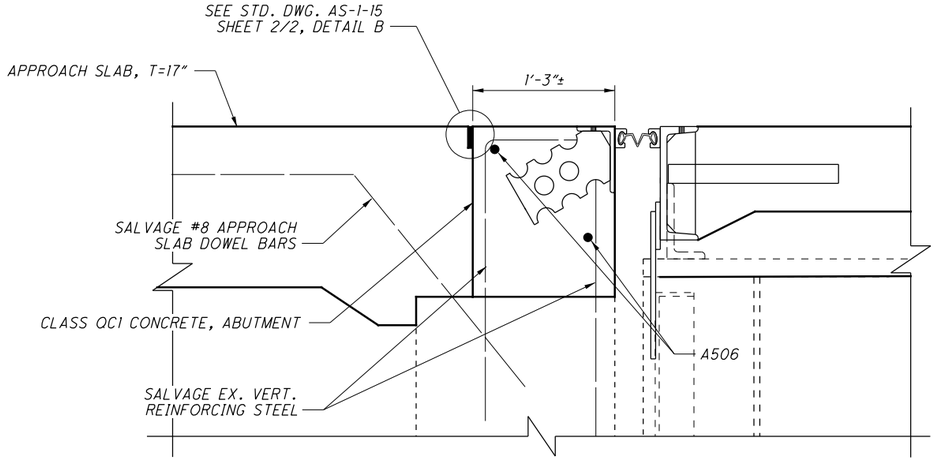


A/13 SECTION - REAR ABUTMENT

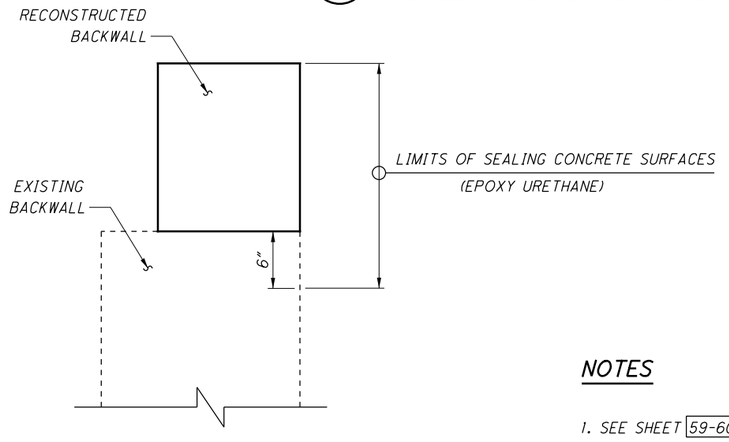


B/13 SECTION - REAR ABUT. RT. CURB

(PROPOSED BARRRIER NOT SHOWN FOR CLARITY)



C/14 SECTION - FORWARD ABUTMENT



SEALING LIMITS

NOTES

1. SEE SHEET 59-60/77 FOR EXPANSION JOINT DETAILS.
2. SEE SHEET 64-71/77 FOR APPROACH AND BARRIER DETAILS.
3. MINIMUM EMBEDMENT OF DOWEL BARS SHALL BE 1'-0".

DESIGN AGENCY
PALMER ENGINEERING
191 CORRELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

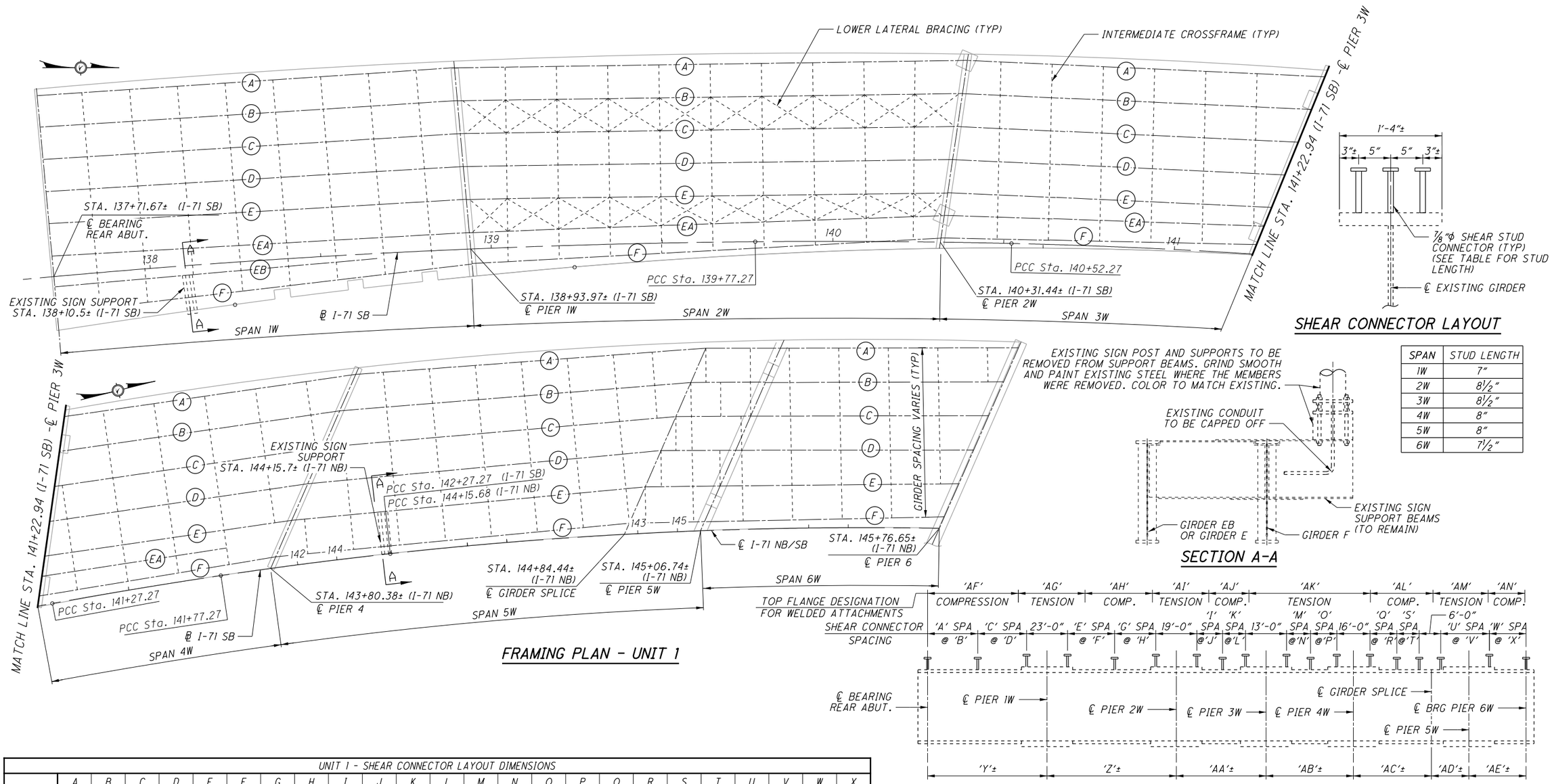
DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

ABUTMENT SECTIONS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

15/77

114/176



FRAMING PLAN - UNIT 1

SHEAR CONNECTOR LAYOUT

SPAN	STUD LENGTH
1W	7"
2W	8½"
3W	8½"
4W	8"
5W	8"
6W	7½"

EXISTING SIGN POST AND SUPPORTS TO BE REMOVED FROM SUPPORT BEAMS. GRIND SMOOTH AND PAINT EXISTING STEEL WHERE THE MEMBERS WERE REMOVED. COLOR TO MATCH EXISTING.

SECTION A-A

UNIT 1 GIRDER ELEVATION

UNIT 1 - SHEAR CONNECTOR LAYOUT DIMENSIONS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
GIRDER A	33	20"	28	24"	34	24"	33	22"	32	20"	29	15"	25	13"	31	17"	22	22"	31	20"	33	24"	29	9"
GIRDER B	46	12"	41	19"	32	20"	49	18"	30	20"	31	14"	27	12"	26	19"	21	19"	42	17"	38	20"	32	9"
GIRDER C	35	17"	37	20"	26	20"	54	18"	30	20"	31	13"	29	11"	29	16"	21	19"	42	17"	39	20"	30	9"
GIRDER D	35	17"	37	20"	35	19"	47	17"	33	17"	32	13"	28	11"	27	16"	23	19"	40	17"	46	16"	26	12"
GIRDER E	35	17"	37	20"	30	19"	51	17"	25	20"	34	13"	26	10"	28	16"	22	19"	41	17"	36	21"	33	9"
GIRDER EA	35	17"	37	20"	28	19"	52	17"	25	20"	33	13"	25	11"	22	13"	0	0"	0	0"	0	0"	0	0"
GIRDER EB	34	17"	35	17"	0	0"	0	0"	0	0"	0	0"	0	0"	0	0"	0	0"	0	0"	0	0"	0	0"
GIRDER F	35	17"	37	20"	32	20"	42	18"	25	20"	32	13"	25	10"	26	16"	36	20"	22	18"	32	24"	32	9"

UNIT 1 - GIRDER LAYOUT DIMENSIONS

	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN
GIRDER A	122' - 3 5/16"	149' - 0"	104' - 10 11/16"	86' - 2 13/16"	102' - 8 1/2"	21' - 10 1/16"	69' - 0 13/16"	86' - 3 3/4"	69' - 5 1/16"	91' - 2 1/16"	59' - 11 3/8"	55' - 11 7/8"	121' - 3 13/16"	83' - 8 1/4"	51' - 7 9/16"	37' - 6 1/8"
GIRDER B	122' - 3 3/8"	147' - 0"	102' - 4 13/16"	82' - 11 1/2"	103' - 1"	21' - 10 1/16"	69' - 0 13/16"	88' - 3 3/8"	67' - 4 13/16"	89' - 6"	58' - 2 3/16"	55' - 2 5/8"	116' - 9 5/8"	88' - 6 15/16"	44' - 5 1/4"	40' - 11 1/16"
GIRDER C	122' - 3 7/16"	145' - 0"	99' - 10 7/8"	79' - 8 3/16"	103' - 5 5/8"	21' - 10 1/16"	69' - 0 13/16"	89' - 2 1/4"	66' - 8 1/2"	87' - 3"	57' - 1 11/16"	54' - 7 3/16"	112' - 7 15/16"	83' - 0 1/2"	52' - 7 13/16"	38' - 5"
GIRDER D	122' - 3 9/16"	143' - 0"	97' - 4 15/16"	76' - 4 7/8"	103' - 10 3/4"	21' - 10 1/16"	69' - 0 13/16"	90' - 5 1/16"	65' - 3 15/16"	85' - 1 11/16"	57' - 7 3/16"	52' - 6 1/2"	108' - 6 1/4"	83' - 9 3/4"	55' - 11 1/2"	34' - 8 11/16"
GIRDER E	122' - 3 5/8"	140' - 0"	94' - 11"	73' - 1 9/16"	103' - 10 7/16"	21' - 11"	69' - 3 11/16"	92' - 0 3/8"	64' - 4 3/16"	82' - 5 3/16"	57' - 7 3/16"	50' - 9 3/4"	104' - 2 5/8"	83' - 9 1/8"	55' - 10 3/16"	35' - 2 13/16"
GIRDER EA	122' - 3 13/16"	139' - 0 7/16"	93' - 7 3/8"	54' - 0"	0' - 0"	0' - 0"	0' - 0"	95' - 1 1/16"	63' - 5 3/4"	79' - 0 3/8"	56' - 8 7/8"	50' - 5 3/4"	64' - 1 13/16"	0' - 0"	0' - 0"	0' - 0"
GIRDER EB	98' - 0"	0' - 0"	0' - 0"	0' - 0"	0' - 0"	0' - 0"	0' - 0"	96' - 4 13/16"	1' - 7 3/16"	0' - 0"	0' - 0"	0' - 0"	0' - 0"	0' - 0"	0' - 0"	0' - 0"
GIRDER F	122' - 3 9/16"	137' - 4 9/16"	92' - 3 7/8"	70' - 3 3/8"	103' - 10 5/8"	22' - 0 1/8"	69' - 7 3/8"	96' - 4 7/16"	64' - 3 5/8"	76' - 2 7/8"	55' - 2 1/16"	51' - 5 3/8"	100' - 9 3/8"	84' - 2 1/2"	54' - 1 15/16"	35' - 1 5/16"

NOTES:

1) WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA GIRDER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.

2) THE CONTRACTOR SHALL ADJUST THE LOCATION OF SHEAR CONNECTOR ROWS UP TO 1" TO AVOID CONFLICT WITH FLANGE PLATE TRANSITIONS.

3) WELDING OF THE STUD SHEAR CONNECTORS IS TO BE IN ACCORDANCE WITH 513.22 OF THE CMS.

4) ALL DIMENSIONS ARE MEASURED ALONG THE LENGTH OF THE GIRDER.

DESIGN AGENCY
PALMER ENGINEERING
191 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

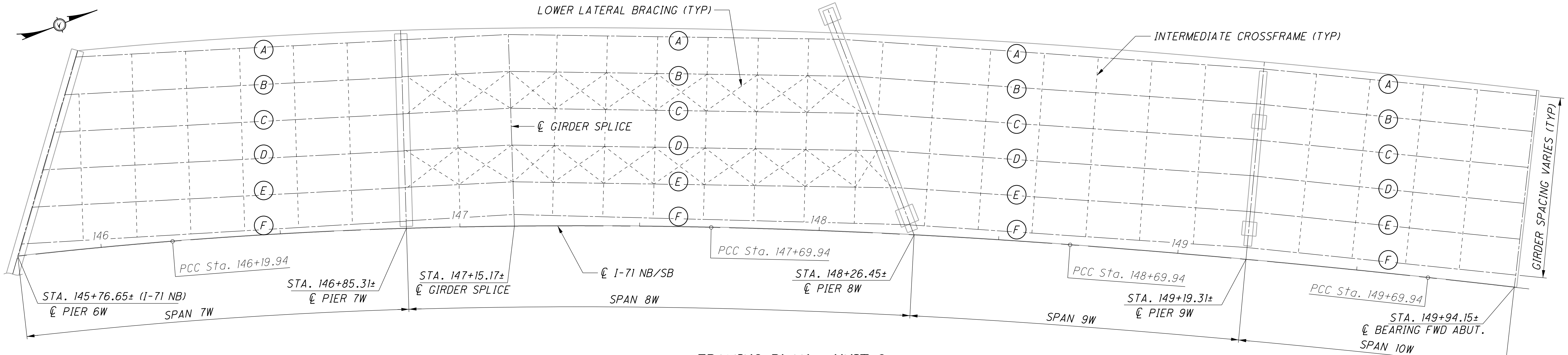
DESIGNED	DRAWN	REVIEWED	DATE
JPR	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

FRAMING PLAN - UNIT 1
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

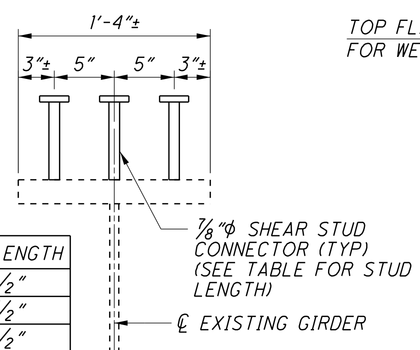
HAM-71-1.59
PID No. 101939

16 / 77

115
176

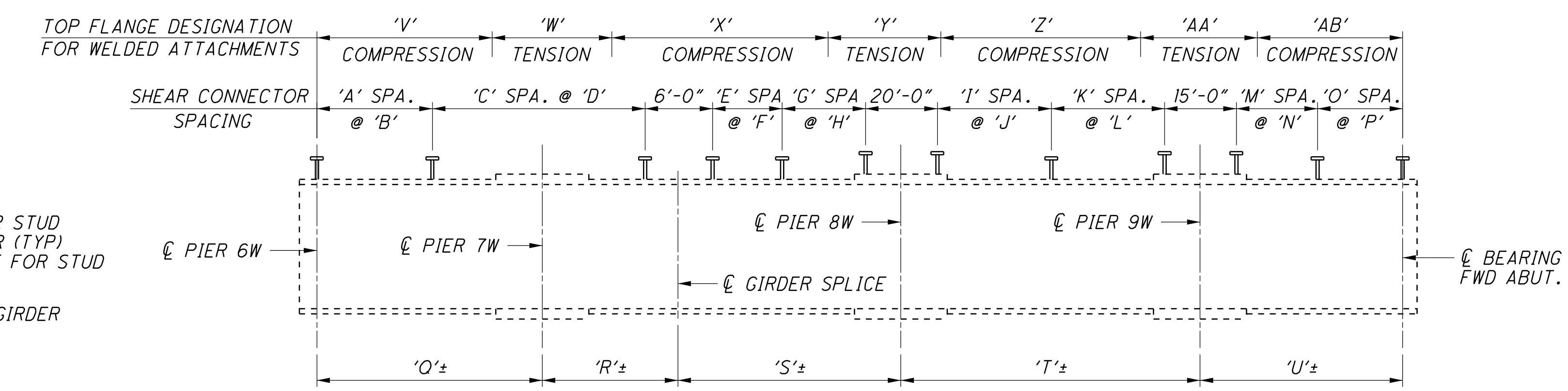


FRAMING PLAN - UNIT 2



SPAN	STUD LENGTH
7W	5½"
8W	6½"
9W	7½"
10W	7"

SHEAR CONNECTOR LAYOUT



UNIT 2 GIRDER ELEVATION

NOTES:

1) WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA GIRDER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR 5⁄16" FOR GREATER THAN ¾" THICK.

2) THE CONTRACTOR SHALL ADJUST THE LOCATION OF SHEAR CONNECTOR ROWS UP TO 1" TO AVOID CONFLICT WITH FLANGE PLATE TRANSITIONS.

3) WELDING OF THE STUD SHEAR CONNECTORS IS TO BE IN ACCORDANCE WITH 513.22 OF THE CMS.

4) ALL DIMENSIONS ARE MEASURED ALONG THE LENGTH OF THE GIRDER.

UNIT 2 - SHEAR CONNECTOR AND GIRDER LAYOUT DIMENSIONS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
GIRDER A	30	15"	53	18"	18	24"	29	18"	38	21"	18	23"	25	18"	23	16"
GIRDER B	36	7"	66	18"	14	24"	37	18"	39	19"	24	17"	29	20"	20	12"
GIRDER C	33	14"	57	18"	21	22"	32	18"	26	19"	35	17"	27	17"	24	15"
GIRDER D	73	14"	24	21"	32	19"	28	17"	15	18"	51	15"	36	15"	17	16"
GIRDER E	35	14"	49	22"	27	18"	37	17"	18	19"	38	17"	26	16"	28	14"
GIRDER F	35	11"	51	24"	27	24"	26	20"	17	24"	39	13"	27	14"	27	16"

	Q	R	S	T	U
GIRDER A	90' - 0 3/4"	30' - 0"	92' - 1 1/16"	118' - 5 1/4"	76' - 2 5/16"
GIRDER B	93' - 4 15/16"	30' - 0"	95' - 8 9/16"	113' - 6 7/8"	75' - 11 9/16"
GIRDER C	96' - 9 1/8"	30' - 0"	99' - 4 1/16"	108' - 8 9/16"	75' - 8 13/16"
GIRDER D	100' - 1 1/4"	30' - 0"	102' - 11 9/16"	103' - 10 3/16"	75' - 6 1/8"
GIRDER E	103' - 5 7/16"	30' - 0"	106' - 7 1/16"	98' - 11 7/8"	75' - 3 3/8"
GIRDER F	106' - 9 1/16"	30' - 0 1/16"	110' - 3 15/16"	94' - 1 1/2"	75' - 0 5/8"

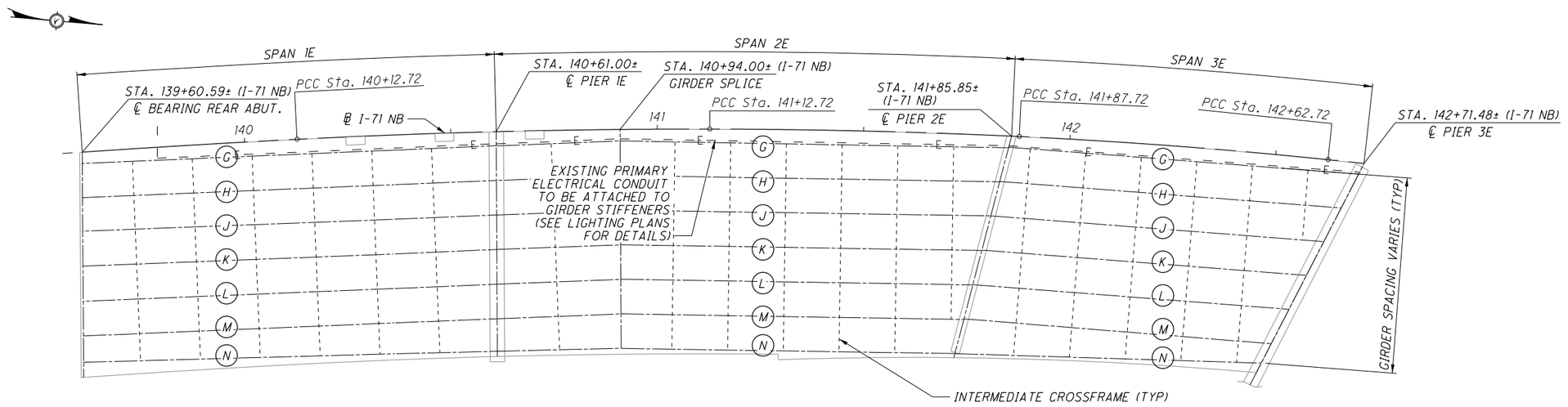
	V	W	X	Y	Z	AA	AB
GIRDER A	62' - 2 3/4"	54' - 6 1/2"	67' - 8 7/8"	56' - 4 9/16"	67' - 8 1/4"	48' - 5 7/8"	49' - 8 1/2"
GIRDER B	63' - 8 1/8"	57' - 11 3/8"	72' - 7 13/16"	53' - 6 1/2"	62' - 0 1/2"	48' - 6 1/4"	50' - 3 7/16"
GIRDER C	65' - 2 7/16"	61' - 2 3/8"	76' - 4 15/16"	50' - 4 3/16"	58' - 0 5/8"	48' - 5 7/8"	50' - 10 1/8"
GIRDER D	66' - 5 3/4"	64' - 0 3/4"	81' - 4 7/16"	48' - 0 3/8"	53' - 2 3/4"	46' - 10 11/16"	52' - 4 7/16"
GIRDER E	68' - 7"	65' - 5 1/4"	83' - 9 5/8"	54' - 1 9/16"	44' - 9 1/2"	42' - 0 5/8"	55' - 6 1/4"
GIRDER F	69' - 6 1/8"	67' - 3 1/8"	86' - 8 5/8"	62' - 4 5/16"	35' - 0 5/8"	36' - 10 9/16"	58' - 5 7/8"

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
JPR	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

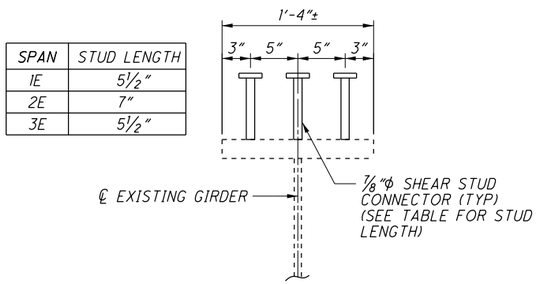
FRAMING PLAN - UNIT 2
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

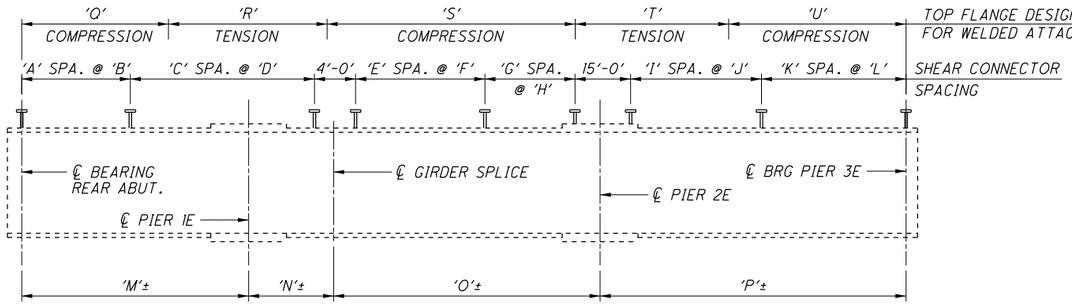


FRAMING PLAN - UNIT 3

SPAN	STUD LENGTH
1E	5½"
2E	7"
3E	5½"



SHEAR CONNECTOR LAYOUT



UNIT 3 GIRDER ELEVATION

UNIT 3 - SHEAR CONNECTOR AND GIRDER LAYOUT DIMENSIONS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
GIRDER G	27	14"	58	20"	40	20"	9	22"	20	20"	32	17"	100' - 4 1/4"	30' - 0 3/16"	94' - 2 3/4"	84' - 5 3/8"	70' - 2 7/8"	62' - 6 15/16"	66' - 3 1/2"	52' - 8 5/8"	57' - 2 5/8"
GIRDER H	26	14"	62	19"	36	20"	12	22"	23	20"	26	17"	100' - 4 1/4"	30' - 0 3/16"	92' - 0 1/8"	82' - 4 3/4"	67' - 9 13/16"	64' - 9 1/2"	64' - 10 15/16"	52' - 3"	55' - 0 1/16"
GIRDER J	25	14"	54	22"	21	20"	25	22"	26	19"	22	17"	100' - 4 1/4"	30' - 0 3/16"	89' - 9 1/2"	80' - 4 1/16"	67' - 10 13/16"	65' - 2 1/16"	60' - 3 13/16"	55' - 0 13/16"	52' - 0 1/2"
GIRDER K	27	14"	58	20"	26	20"	23	18"	30	20"	23	11"	100' - 4 1/4"	30' - 0 3/16"	87' - 6 15/16"	78' - 3 3/8"	68' - 10 13/16"	63' - 2 1/16"	60' - 6 1/4"	51' - 6 1/4"	52' - 1 7/16"
GIRDER L	26	14"	62	19"	23	18"	25	20"	35	17"	16	14"	100' - 4 1/4"	30' - 0 3/16"	85' - 4 5/16"	76' - 2 11/16"	69' - 3"	61' - 11 1/4"	60' - 3 1/2"	51' - 4 13/16"	49' - 0 7/8"
GIRDER M	31	18"	41	24"	28	22"	15	18"	20	18"	29	15"	100' - 4 1/4"	30' - 0 3/16"	83' - 1 11/16"	74' - 2"	69' - 11 1/16"	61' - 8 7/8"	58' - 9 1/2"	49' - 3 13/16"	47' - 10 7/8"
GIRDER N	26	14"	49	24"	17	24"	25	18"	18	20"	27	16"	100' - 3 11/16"	30' - 0"	80' - 10 15/16"	73' - 7 13/16"	70' - 2 1/16"	61' - 2 1/2"	57' - 2 1/16"	50' - 4 9/16"	45' - 11 5/16"

NOTES:

1) WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA GIRDER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST ¼" FOR THICKNESSES UP TO ¾" OR 5/16" FOR GREATER THAN ¾" THICK.

2) THE CONTRACTOR SHALL ADJUST THE LOCATION OF SHEAR CONNECTOR ROWS UP TO 1" TO AVOID CONFLICT WITH FLANGE PLATE TRANSITIONS.

3) WELDING OF THE STUD SHEAR CONNECTORS IS TO BE IN ACCORDANCE WITH 513.22 OF THE CMS.

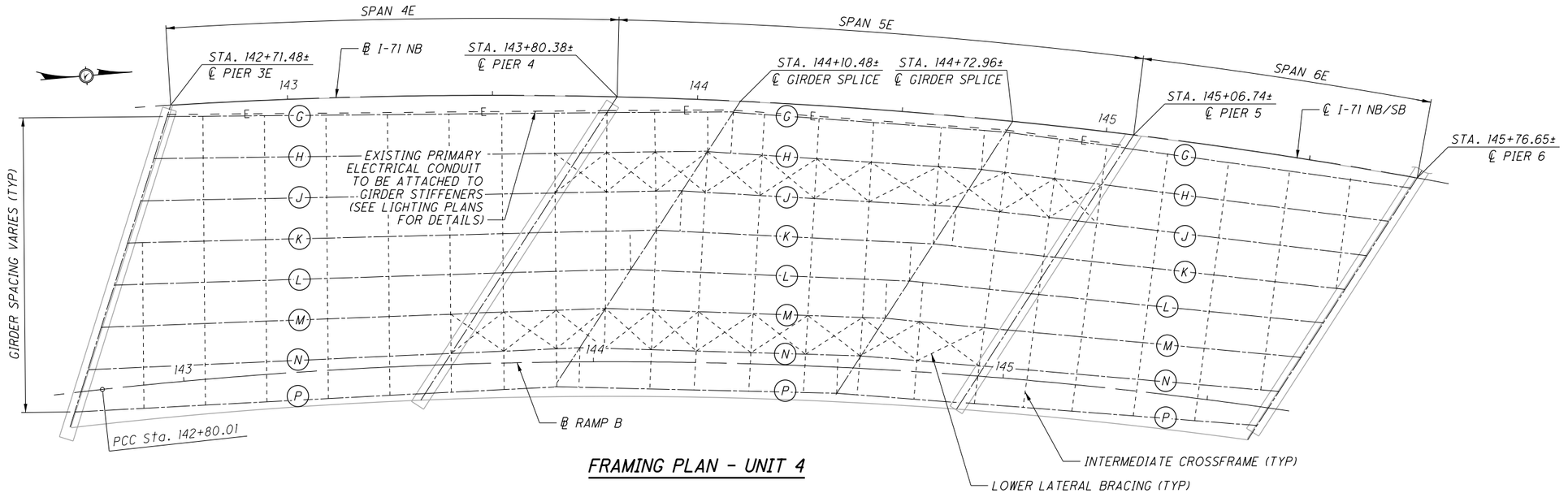
4) ALL DIMENSIONS ARE MEASURED ALONG THE LENGTH OF THE GIRDER.

DESIGN AGENCY
Palmer ENGINEERING
PALMER ENGINEERING
191 CORRELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG • LOUISVILLE

DESIGNED	DRAWN	REVIEWED	DATE
JPR	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

FRAMING PLAN - UNIT 3
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



FRAMING PLAN - UNIT 4

SHEAR CONNECTOR LAYOUT

UNIT 4 GIRDER ELEVATION

UNIT 4 - SHEAR CONNECTOR AND GIRDER LAYOUT DIMENSIONS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
GIRDER G	70	13"	35	20"	37	20"	24	22"	42	15"	106' - 0 9/16"	30' - 9 15/16"	66' - 4 1/8"	29' - 7 3/8"	69' - 9 7/16"	74' - 2 13/16"	66' - 0 3/4"	68' - 10 15/16"	59' - 0 3/8"	34' - 4 9/16"
GIRDER H	25	16"	59	20"	37	20"	41	19"	35	11"	102' - 11 11/16"	30' - 11 1/4"	66' - 7 9/16"	29' - 8 7/8"	70' - 1"	71' - 6 11/16"	63' - 1 3/16"	71' - 2 1/2"	59' - 7 7/16"	34' - 10 9/16"
GIRDER J	30	12"	62	19"	44	17"	39	20"	30	13"	99' - 10 7/8"	31' - 0 5/8"	66' - 11"	29' - 10 7/16"	70' - 4 5/8"	66' - 4 5/8"	64' - 0 1/4"	73' - 0 3/4"	59' - 6 5/8"	35' - 1 5/16"
GIRDER K	30	16"	49	21"	39	19"	38	20"	30	14"	96' - 10 1/16"	31' - 2 1/8"	67' - 2 3/8"	29' - 12"	70' - 8 5/16"	63' - 4 1/8"	64' - 1 13/16"	73' - 0 1/8"	61' - 11 7/8"	33' - 4 15/16"
GIRDER L	36	16"	50	18"	37	20"	39	20"	37	11"	93' - 9 5/16"	31' - 3 3/4"	67' - 5 11/16"	30' - 1 9/16"	71' - 0 1/8"	58' - 11 9/16"	64' - 10 7/16"	76' - 5 3/8"	57' - 1 9/16"	36' - 3 7/16"
GIRDER M	31	11"	61	18"	42	18"	38	19"	38	12"	90' - 8 5/8"	31' - 5 1/2"	67' - 8 15/16"	30' - 3 3/16"	71' - 3 15/16"	56' - 10 3/8"	63' - 6 3/8"	76' - 6 3/4"	57' - 0"	37' - 6 3/4"
GIRDER N	23	14"	57	19"	42	18"	33	20"	33	16"	87' - 7 15/16"	31' - 7 7/16"	68' - 0 1/16"	30' - 4 7/8"	71' - 7 7/8"	52' - 5 1/4"	64' - 4 5/16"	75' - 11 3/16"	64' - 0"	32' - 7 1/2"
GIRDER P	32	14"	46	20"	36	21"	41	21"	31	11"	84' - 7 3/8"	31' - 9 1/2"	68' - 3 1/8"	30' - 6 9/16"	71' - 11 13/16"	50' - 10 1/8"	62' - 0 3/8"	76' - 4 11/16"	69' - 7 3/16"	28' - 4"

NOTES:

1) WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA GIRDER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1" FROM EDGE OF FLANGE, BE NO MORE THAN 2" LONG, AND BE AT LEAST 1/4" FOR THICKNESSES UP TO 3/4" OR 5/16" FOR GREATER THAN 3/4" THICK.

2) THE CONTRACTOR SHALL ADJUST THE LOCATION OF SHEAR CONNECTOR ROWS UP TO 1" TO AVOID CONFLICT WITH FLANGE PLATE TRANSITIONS.

3) WELDING OF THE STUD SHEAR CONNECTORS IS TO BE IN ACCORDANCE WITH 513.22 OF THE CMS.

4) ALL DIMENSIONS ARE MEASURED ALONG THE LENGTH OF THE GIRDER.

DESIGN AGENCY
PALMER ENGINEERING
191 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

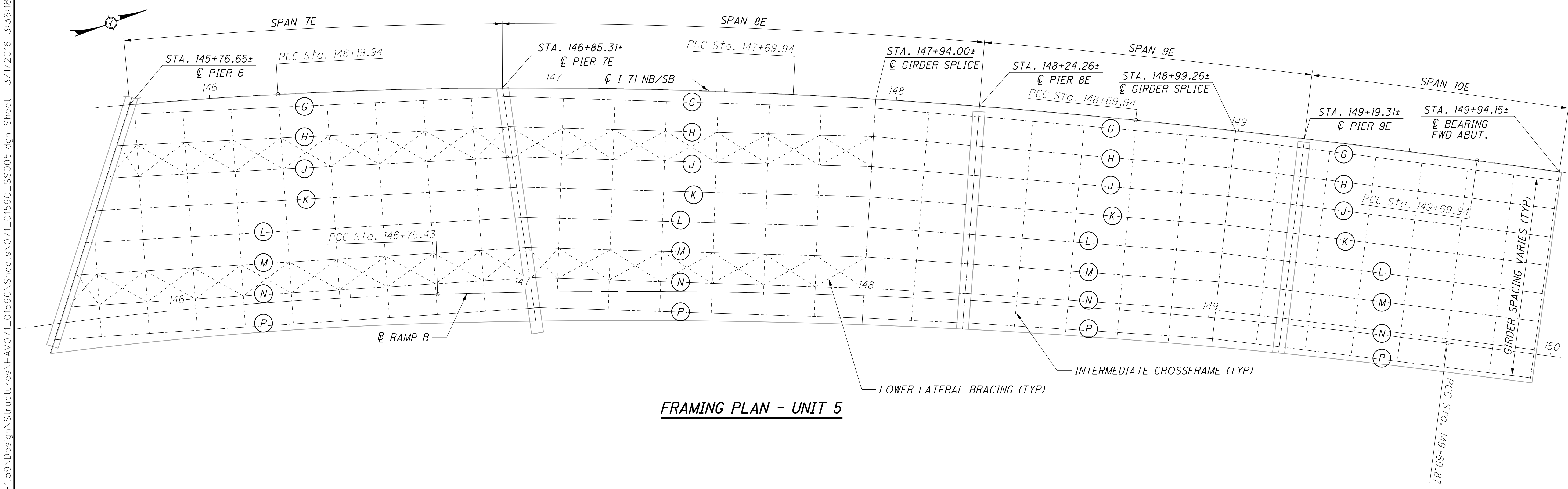
DESIGNED	DRAWN	REVIEWED	DATE
JPR	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

FRAMING PLAN - UNIT 4
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

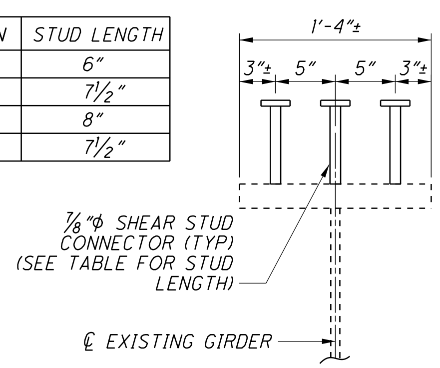
19 / 77

118
176

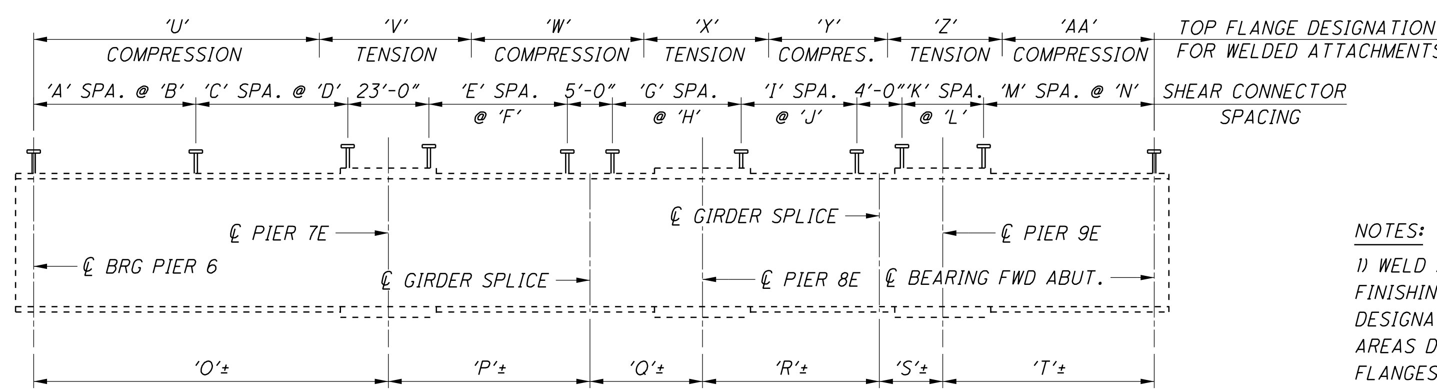


FRAMING PLAN - UNIT 5

SPAN	STUD LENGTH
7E	6″
8E	7½″
9E	8″
10E	7½″



SHEAR CONNECTOR LAYOUT



UNIT 5 GIRDER ELEVATION

NOTES:

1) WELD ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE TO AREAS OF THE FASCIA GIRDER FLANGES DESIGNATED "COMPRESSION". DO NOT WELD ATTACHMENTS TO AREAS DESIGNATED "TENSION". FILLET WELDS TO COMPRESSION FLANGES SHALL BE AT LEAST 1″ FROM EDGE OF FLANGE, BE NO MORE THAN 2″ LONG, AND BE AT LEAST ¼″ FOR THICKNESSES UP TO ¾″ OR 5⁄16″ FOR GREATER THAN ¾″ THICK.

2) THE CONTRACTOR SHALL ADJUST THE LOCATION OF SHEAR CONNECTOR ROWS UP TO 1″ TO AVOID CONFLICT WITH FLANGE PLATE TRANSITIONS.

3) WELDING OF THE STUD SHEAR CONNECTORS IS TO BE IN ACCORDANCE WITH 513.22 OF THE CMS.

4) ALL DIMENSIONS ARE MEASURED ALONG THE LENGTH OF THE GIRDER.

UNIT 5 - SHEAR CONNECTOR AND GIRDER LAYOUT DIMENSIONS

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
GIRDER G	29	13″	33	24″	54	21″	26	24″	29	20″	19	20″	46	16″
GIRDER H	41	17″	28	19″	58	19″	27	22″	36	17″	37	17″	32	15″
GIRDER J	34	17″	37	19″	57	19″	28	21″	32	19″	51	17″	16	15″
GIRDER K	36	17″	36	20″	53	20″	24	21″	43	16″	55	16″	16	14″
GIRDER L	38	18″	35	20″	52	20″	31	19″	35	17″	42	18″	23	15″
GIRDER M	40	18″	34	21″	51	20″	44	19″	19	18″	44	19″	19	14″
GIRDER N	33	19″	39	22″	59	17″	26	18″	44	16″	39	18″	28	14″
GIRDER P	35	22″	32	24″	49	20″	36	19″	23	21″	29	21″	30	16″

	O	P	Q	R	S	T
GIRDER G	109′ - 2″	108′ - 5 5/8″	29′ - 11 7/16″	74′ - 10 5/8″	19′ - 11 3/4″	74′ - 11″
GIRDER H	113′ - 5 1/2″	106′ - 7 15/16″	29′ - 9 13/16″	74′ - 7 3/16″	19′ - 11 1/16″	74′ - 8 3/4″
GIRDER J	117′ - 9 1/16″	104′ - 10 5/16″	29′ - 8 3/16″	74′ - 3 13/16″	19′ - 10 7/16″	74′ - 6 1/2″
GIRDER K	122′ - 0 9/16″	103′ - 0 5/8″	29′ - 6 1/2″	74′ - 0 7/16″	19′ - 9 3/4″	74′ - 4 1/4″
GIRDER L	126′ - 4 1/8″	101′ - 2 15/16″	29′ - 4 7/8″	73′ - 9 1/16″	19′ - 9 1/16″	74′ - 2″
GIRDER M	130′ - 7 11/16″	99′ - 5 1/4″	29′ - 3 1/4″	73′ - 5 3/4″	19′ - 8 3/8″	73′ - 11 3/4″
GIRDER N	134′ - 11 1/4″	97′ - 7 9/16″	29′ - 1 5/8″	73′ - 2 3/8″	19′ - 7 3/4″	73′ - 9 1/2″
GIRDER P	139′ - 2 13/16″	95′ - 9 15/16″	29′ - 0″	72′ - 11 1/16″	19′ - 7 1/16″	73′ - 7 5/16″

	U	V	W	X	Y	Z	AA
GIRDER G	78′ - 1″	64′ - 5 3/16″	80′ - 1 15/16″	64′ - 1 9/16″	35′ - 3 3/4″	36′ - 9 1/8″	58′ - 5 15/16″
GIRDER H	83′ - 0 9/16″	63′ - 6 13/16″	78′ - 2 3/16″	63′ - 8 3/8″	35′ - 10 7/16″	36′ - 4 3/16″	58′ - 5 11/16″
GIRDER J	89′ - 6 7/16″	62′ - 9 1/8″	74′ - 7 11/16″	62′ - 6 15/16″	37′ - 0 15/16″	36′ - 8 1/4″	57′ - 8 7/8″
GIRDER K	94′ - 5 1/4″	62′ - 10 9/16″	71′ - 11 1/16″	61′ - 3 1/8″	39′ - 7 9/16″	34′ - 9 5/8″	57′ - 11″
GIRDER L	98′ - 10 1/2″	64′ - 5 3/4″	67′ - 11 3/8″	60′ - 3 1/8″	41′ - 0 3/8″	32′ - 3 1/4″	59′ - 9 11/16″
GIRDER M	101′ - 9 3/16″	68′ - 2 5/8″	64′ - 8 5/8″	58′ - 1 13/16″	42′ - 5 1/16″	32′ - 11 3/4″	58′ - 3″
GIRDER N	105′ - 6 3/4″	69′ - 4 1/16″	62′ - 8 3/4″	56′ - 3 1/4″	42′ - 8 7/8″	33′ - 1 3/16″	58′ - 7 1/8″
GIRDER P	108′ - 9 5/16″	72′ - 6 3/8″	59′ - 6 15/16″	53′ - 10 15/16″	42′ - 10 9/16″	38′ - 9 15/16″	53′ - 8 1/8″

DESIGN AGENCY: PALMER ENGINEERING

DESIGNED JPR | CHECKED CEJ | DRAWN SDW | REVIEWED MLJ | DATE 02/26/16 | STRUCTURE FILE NUMBER 3106608

FRAMING PLAN - UNIT 5

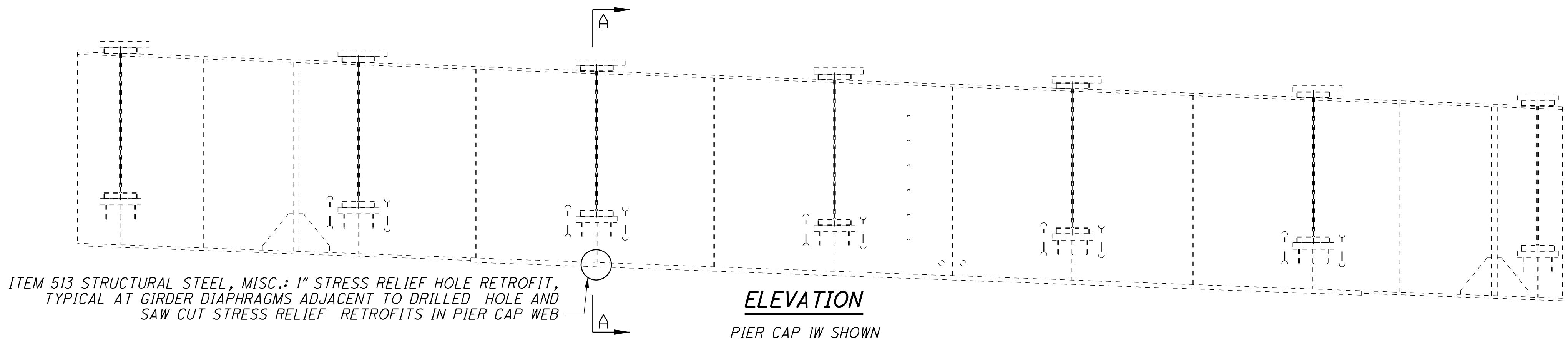
BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939

20/77



ELEVATION

PIER CAP 1W SHOWN
PIER CAPS 2W, 7E AND 8W SIMILAR

ITEM 513 STRUCTURAL STEEL, MISC.: 1" STRESS RELIEF HOLE RETROFIT

PERFORM THE REPAIRS DESCRIBED BELOW AT THE FOLLOWING LOCATIONS:

PIER CAP 1W - 10 LOCATIONS
PIER CAP 2W - 10 LOCATIONS
PIER CAP 7E - 14 LOCATIONS
PIER CAP 8W - 10 LOCATIONS

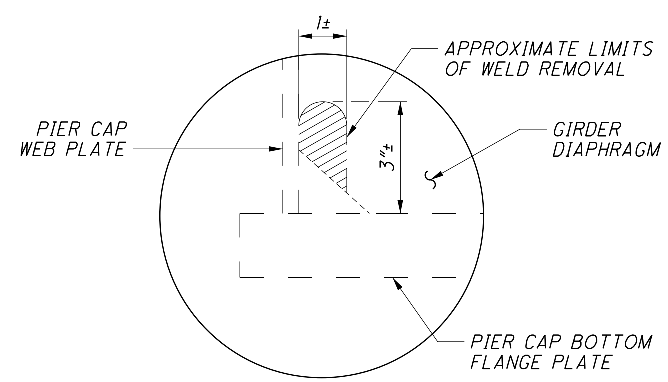
REPAIR PROCEDURE:

1) DRILL A 1"ϕ HOLE THROUGH TO REMOVE THE WELD BETWEEN THE PIER CAP WEB PLATE AND THE GIRDER DIAPHRAGM AT ALL EXISTING STRESS RELIEF RETROFIT LOCATIONS. ELONGATE THE HOLE VERTICALLY DOWN TO THE BOTTOM OF THE WELD. GRIND THE WEB SURFACE SMOOTH TO REMOVE WELD MATERIAL. DO NOT DISTURB THE WELD BETWEEN THE CAP BOTTOM FLANGE AND THE WEB PLATE.

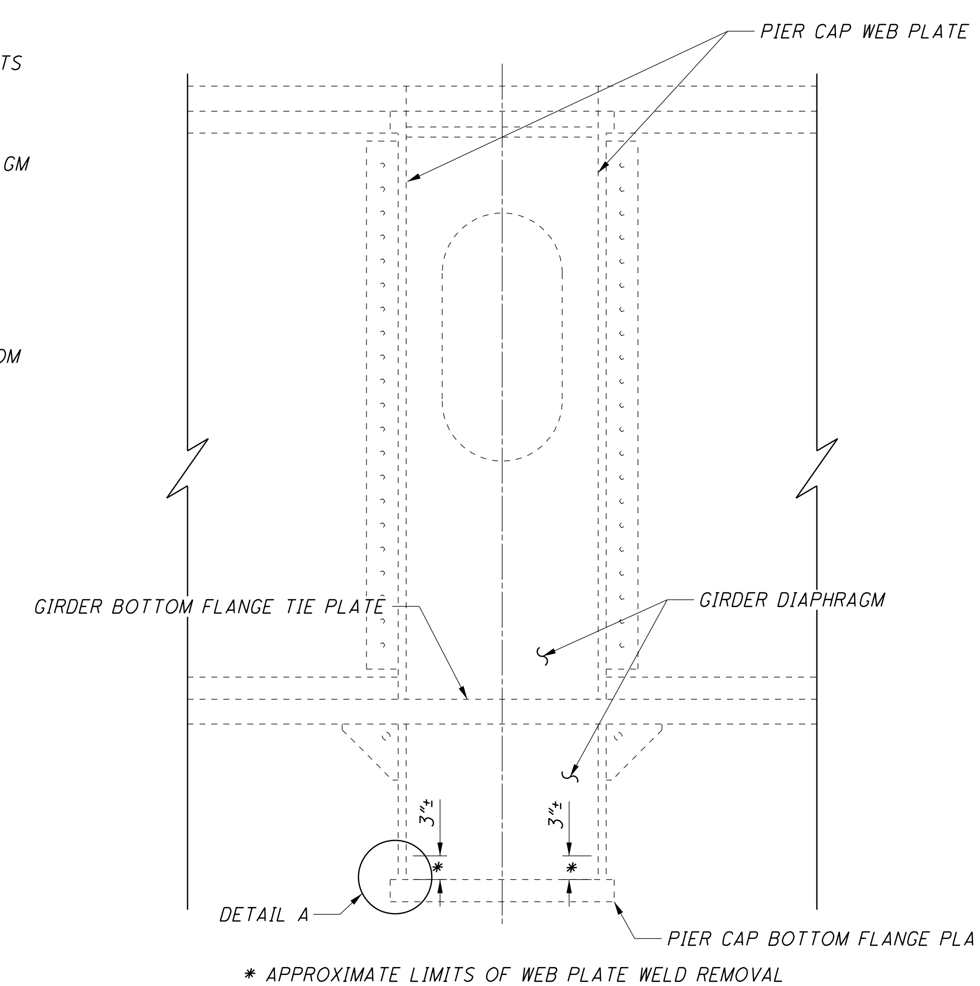
2) TREAT THE REMAINING DIAPHRAGM WELD BETWEEN THE DRILLED HOLE AND THE GIRDER BOTTOM FLANGE TIE PLATE AT ALL LOCATIONS WITH ULTRASONIC IMPACT TREATMENT (UIT). SEE THE SPECIAL PROVISION FOR ULTRASONIC IMPACT TREATMENT FOR REQUIREMENTS OF THE PROCEDURE. THE COST OF THE LABOR AND EQUIPMENT ASSOCIATED WITH THIS WORK IS INCIDENTAL TO THIS PAY ITEM.

3) PAINT ALL RETROFITTED/UIT TREATED AREAS USING OZEU SPECIFICATIONS. PREPARATION BY MECHANICAL MEANS IS ACCEPTABLE.

PIER CAP DESIGNATION	ITEM 513 STRUCTURAL STEEL, MISC.: GRINDING PER FOOT, AS PER PLAN	ITEM 513 STRUCTURAL STEEL, MISC.: GENERAL REPAIRS (LUMP SUM)	ITEM 513 STRUCTURAL STEEL, MISC.: 1" STRESS RELIEF HOLE RETROFIT
1W	TWO TACK WELDS ON INTERIOR OF NORTH WEB PLATE BETWEEN GIRDERS D AND E; ONE TACK WELD ON INTERIOR OF TOP FLANGE PLATE BETWEEN GIRDERS EA AND F (1 FT QUANTITY)	SEE REPAIR NOTE 1	10
2E	EIGHT TACK WELDS ON INTERIOR OF WEB PLATES BETWEEN GIRDERS H AND N; THREE TACK WELD ON INTERIOR OF BOTTOM FLANGE PLATE BETWEEN GIRDERS J AND M (2 FT QUANTITY)		
2W			10
3W		SEE REPAIR NOTE 2	
4W	THREE WELDS ON INTERIOR OF TOP FLANGE PLATE AND WEST BEARING DIAPHRAGM; THREE WELDS ON INTERIOR OF TOP FLANGE PLATE EAST BEARING DIAPHRAGM (1 FT. QUANTITY)	SEE REPAIR NOTE 2	
7E		SEE REPAIR NOTE 3	14
8W		SEE REPAIR NOTE 4	10
9W		SEE REPAIR NOTE 2	



DETAIL A



SECTION A-A

REPAIR NOTES:

1) TIGHTEN ANCHOR BOLT NUTS ON EAST AND WEST BEARING.

2) REPLACE MISSING BOLTS ON EAST ACCESS HATCH.

3) REMOVE STANDING WATER FROM EAST END OF CAP INTERIOR. REPLACE TWO MISSING BOLTS AT WEST ACCESS HATCH.

4) REMOVE DISLODGED BACKER BAR FROM NORTH WEB, WEST SIDE OF GIRDER D.

ITEM 513 STRUCTURAL STEEL, MISC.: GRINDING PER FOOT, AS PER PLAN

TACK WELDS SHALL BE REMOVED BY GRINDING THE WELD MATERIAL TO A SMOOTH FINISH FLUSH WITH THE SURFACE OF THE BASE METAL WITHOUT CUTTING OR GOUGING THE STRUCTURAL STEEL PLATES.

THE EXPOSED STEEL SHALL BE COATED WITH AN OZEU PAINT SYSTEM IN ACCORDANCE WITH CMS 514.22. THE COST OF PAINTING IS INCIDENTAL TO THIS PAY ITEM. PIER CAP INTERIORS ARE CONSIDERED CONFINED SPACES AND MAY REQUIRE EXTRA PRECAUTIONS TO ACCOMPLISH THE CONTRACT WORK, INCLUDING SPECIAL METHODS OF VENTILATION, PAINT APPLICATION AND/OR OTHER PRECAUTIONS DEEMED NECESSARY BY THE CONTRACTOR.

PAYMENT FOR THIS WORK SHALL INCLUDE ALL EQUIPMENT, TOOLS, LABOR, AND MATERIALS NECESSARY TO PERFORM THIS TASK.

DESIGN AGENCY: PALMER ENGINEERING, 1311 CORNELL PARK DR - SUITE 200, CINCINNATI, OH 45242
DESIGNED SDW | DRAWN SDW | REVIEWED CEJ | DATE 01/26/16
CHECKED BJF | REVISED | STRUCTURE FILE NUMBER 3106608

PIER CAP DETAILS - STRESS RELIEF RETROFIT REPAIRS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

CTY-RTE-SECTION
PID No. 101939

659'-4" (MEASURED ALONG LEFT FASCIA)
1374 SETS OF TRANSVERSE BARS (RADIAL) SPA. @ 5¾" = 657'-10¾" (TOP & BOTT.)
1370-S407 BUNDLED W/ TRANSVERSE BARS (OVERHANG BARS - TOP)

4½" | 69-S501 SPLICED W/ S502 | 69-S501 SPLICED W/ S503 | 69-S501 SPLICED W/ S504 | 69-S501 SPLICED W/ S505 | 69-S501 SPLICED W/ S506 | 69-S501 SPLICED W/ S507 | 69-S501 SPLICED W/ S508

5¾" | 3" | 5¾" | 3" | 5¾" | 5¾" | 5¾" | 5¾"

70'-11¾"
55'-2"
15'-9¾"

107 SETS OF 16-S401 & 1 SERIES OF 107-S402 EQUALLY SPACED (8" MAX.) (TOP)

BOTTOM LONGITUDINAL BARS @ EQ. SPA. BETWEEN GIRDERS AND OVERHANGS (10½" MAX.) (SEE TRANSVERSE SECTION)

46'-10" | 49'-10"

106 SETS OF 2-S401 & 1-S415 NEGATIVE MOMENT REINFORCING (TOP) STAGGERED OVER PIER ALTERNATE LAP SPLICES

49'-10" | 46'-10"

EDGE OF SLAB STA. 137+71.10±

℄ BRG. REAR ABUT. STA. 137+71.67± SB

138

SCUPPER INLET (TYP.)

FIELD CUT LONGITUDINAL AND TRANSVERSE BARS WHERE NECESSARY FOR PIER OPENINGS (TYP.)

139

℄ I-71 SB

℄ PIER 1W STA. 138+93.97± SB

FIELD CUT LONGITUDINAL AND TRANSVERSE BARS WHERE NECESSARY FOR INLET OPENINGS (TYP.)

PCC STA. 139+77.27

MATCH LINE STA. 139+77.27

A | B | C

77-S601 BUNDLED W/ TRANSVERSE BARS (OVERHANG BARS - TOP)

1251-S408 BUNDLED W/ TRANSVERSE BARS (OVERHANG BARS - TOP)

616'-7⅜" (MEASURED ALONG RIGHT FASCIA)

NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

PARTIAL PLAN UNIT 1
(PARAPET NOT SHOWN)

NOTES:

1) DECK SLAB CONCRETE QUANTITY:
THE ESTIMATED QUANTITY OF DECK SLAB CONCRETE FOR ALL SUPERSTRUCTURE UNITS IS BASED ON THE CONSTANT DECK SLAB THICKNESS, AS SHOWN, PLUS THE QUANTITY OF CONCRETE THAT FORMS EACH GIRDER HAUNCH. THE ESTIMATE ASSUMES CONSTANT HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE OF 9 INCHES AND VARIABLE HAUNCH THICKNESS. THE ALLOWABLE TOLERANCE FOR THE HAUNCH WIDTH OUTSIDE THE EDGE OF EACH GIRDER FLANGE IS ±3 INCHES. AT SUBSTRUCTURES, FIELD SPLICES, AND INTERMEDIATE POINTS, 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 511.24.

2) FOR LIMITS OF DECK AND PARAPET SEALING FOR ALL SUPERSTRUCTURE UNITS SEE SHEETS 35/77 TO 41/77.

3) SEE SHEET 23/77 FOR SECTION B-B & SECTION C-C.

4) FOR UNIT 1 HAUNCH BAR LOCATIONS, SEE "DECK HAUNCH REINFORCEMENT TABLE" AND "HAUNCH DETAIL" SHEET 32/77.

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"

VARIES
107 SETS OF 16-S401 & 1 SERIES OF 107-S402 EQUALLY SPACED (8" MAX.) (TOP)
106 SETS OF NEGATIVE MOMENT REINFORCING (TOP) STAGGERED OVER PIER

6'-0" STRAIGHT VANDAL PROTECTION FENCE, SEE RAILING DETAILS SHEET 34/77

1'-6" | S407 BUNDLED W/ TRANSVERSE BARS | S601 BUNDLED W/ TRANSVERSE BARS | 1'-6"

▲ BARS S602 TERMINATE @ PIER 3W
◆ BARS S606 TERMINATE @ PIER 1W
⬟ BARS S607 TERMINATE @ END OF GIRDER EB

2" | 1" DIAMETER HALF-ROUND DRIP GROOVE (TYP.) | 3" | 9" (TYP.) | 2½" CLR. | ½" CLR. | VARIES | S501 & S502 (ALTERNATE LAP SPLICES) | 3'-3" (MIN.) (LAP)

4 SETS 18-S602 & 1-S603 3 EQ. SPA. (10½" MAX.)

12 SETS OF 18-S602 & 1-S604 @ EQ. SPA. (10½" MAX.)

9" (TYP.)

8" (TYP.) | 12 SETS OF 18-S602 @ EQ. SPA. (10½" MAX.) (TYP. BTWN. GIRDERS UNLESS NOTED OTHERWISE) | 8" (TYP.)

5 SETS 10-S602 | 6 SETS 17-S602 & 1-S605 | 10 EQ. SPA. (10½" MAX.)

3 SETS 10-S602 | 4 SETS 4-S606 | 3 SETS 17-S602 & 1-S605 | 9 EQ. SPA. (10½" MAX.)

3 SETS 10-S602 | 4 SETS 3-S607 | 3 SETS 17-S602 & 1-S605 | 9 EQ. SPA. (10½" MAX.)

3 SETS 4-S606 | 4 SETS 17-S602 | 6 EQ. SPA. (10½" MAX.) | 3"

8" (MIN.) 14" (MAX.)

A | B | C | D | E | EA | EB | F

GIRDER IDENTIFICATION (TYP.)

SECTION A-A
(REAR ABUTMENT TO END OF GIRDER EB)

DESIGN AGENCY
PALMER ENGINEERING
1311 CORNELL PARK DR. - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG • LOUISVILLE

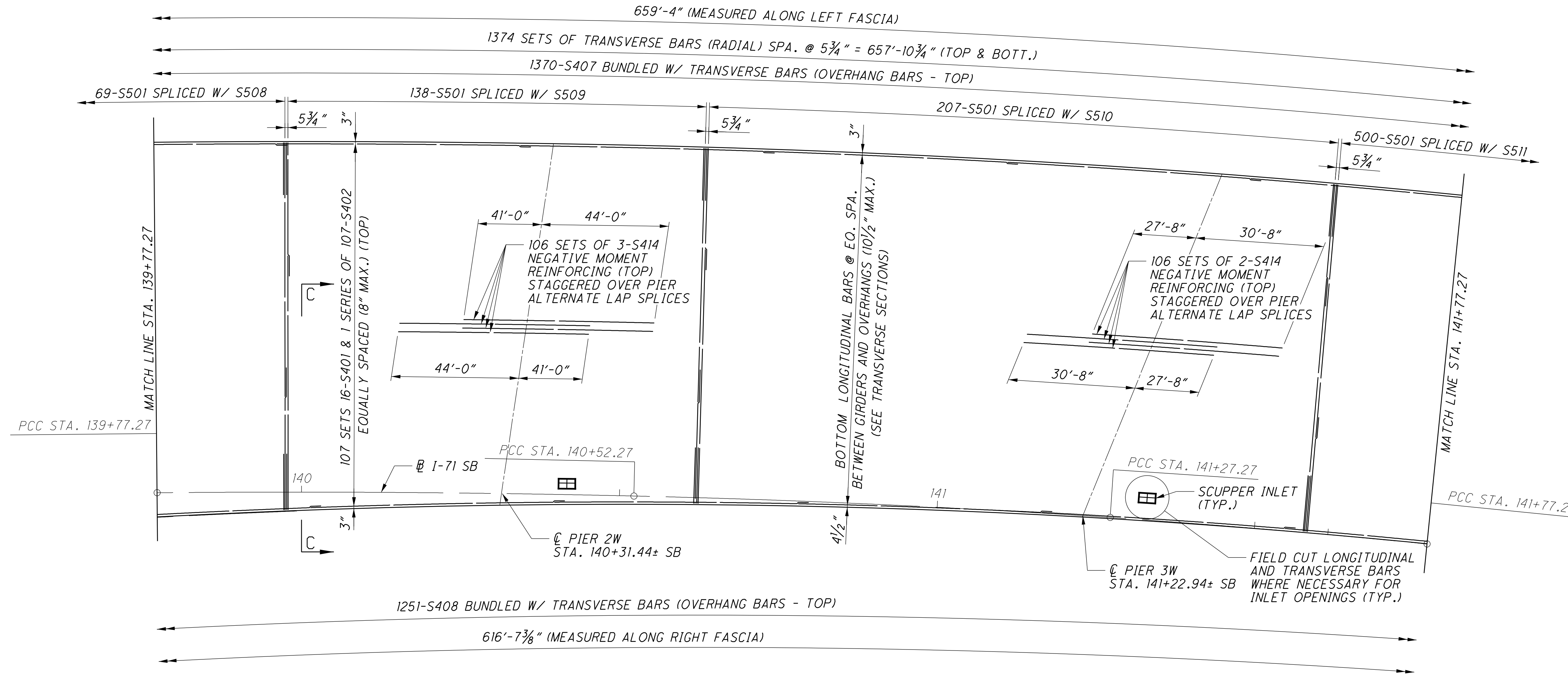
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 1 (1 OF 3)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

22 / 77

121
176

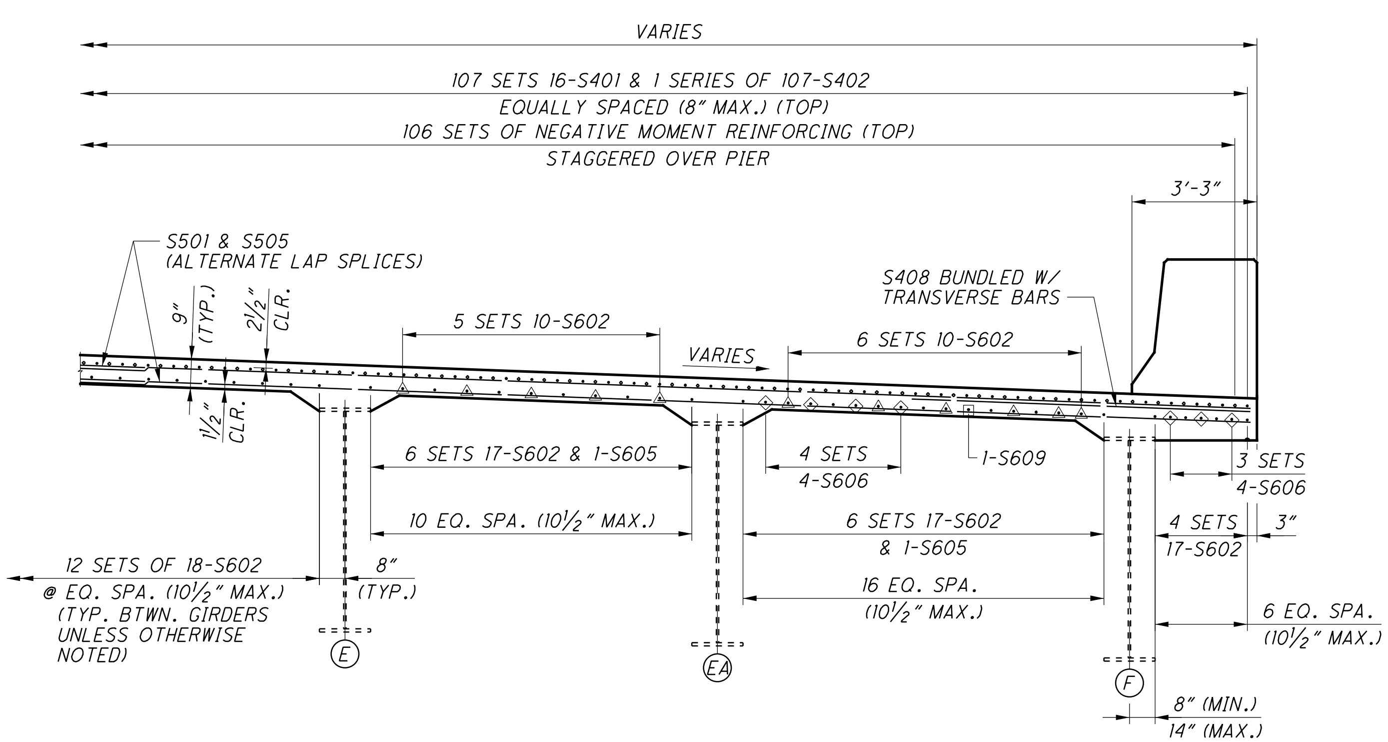


NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

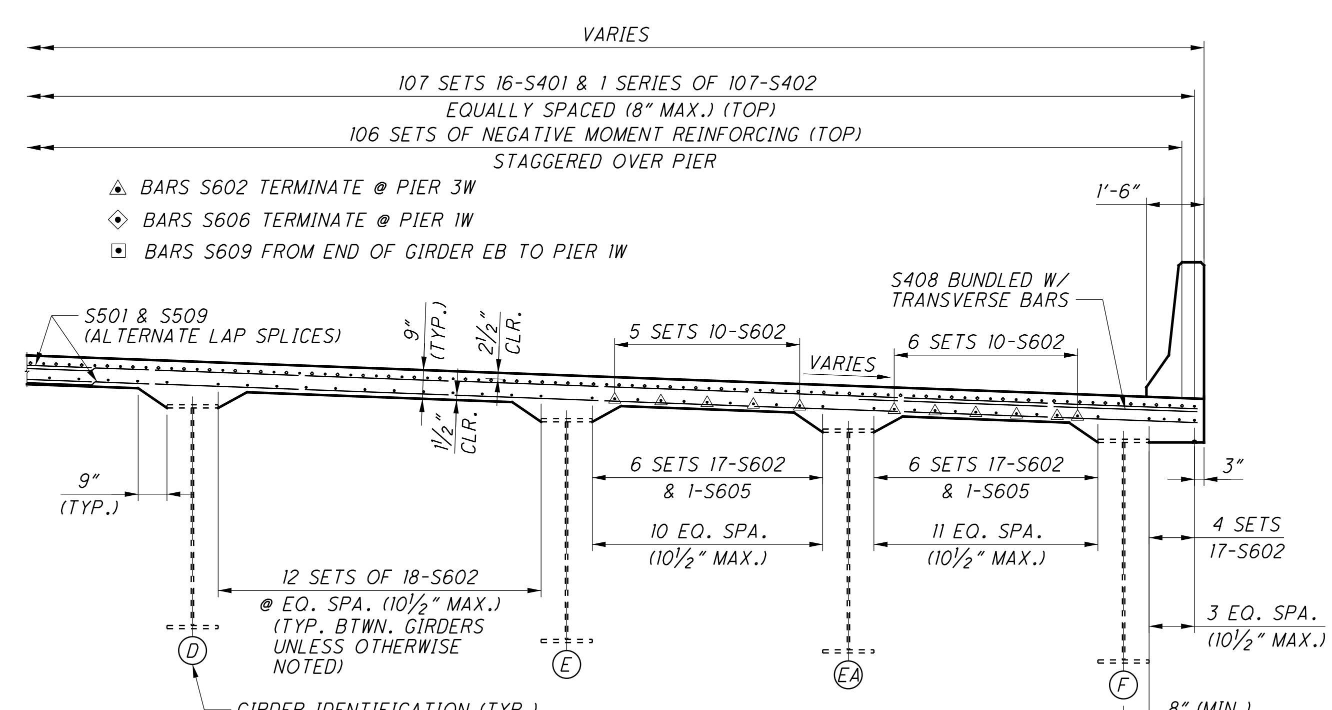
PARTIAL PLAN UNIT 1
(PARAPET NOT SHOWN)

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"



PARTIAL SECTION B-B
(SEE SHEET 20/69)
(END OF GIRDER EB TO PIER 1W)



PARTIAL SECTION C-C
(PIER 1W TO END OF GIRDER EA)

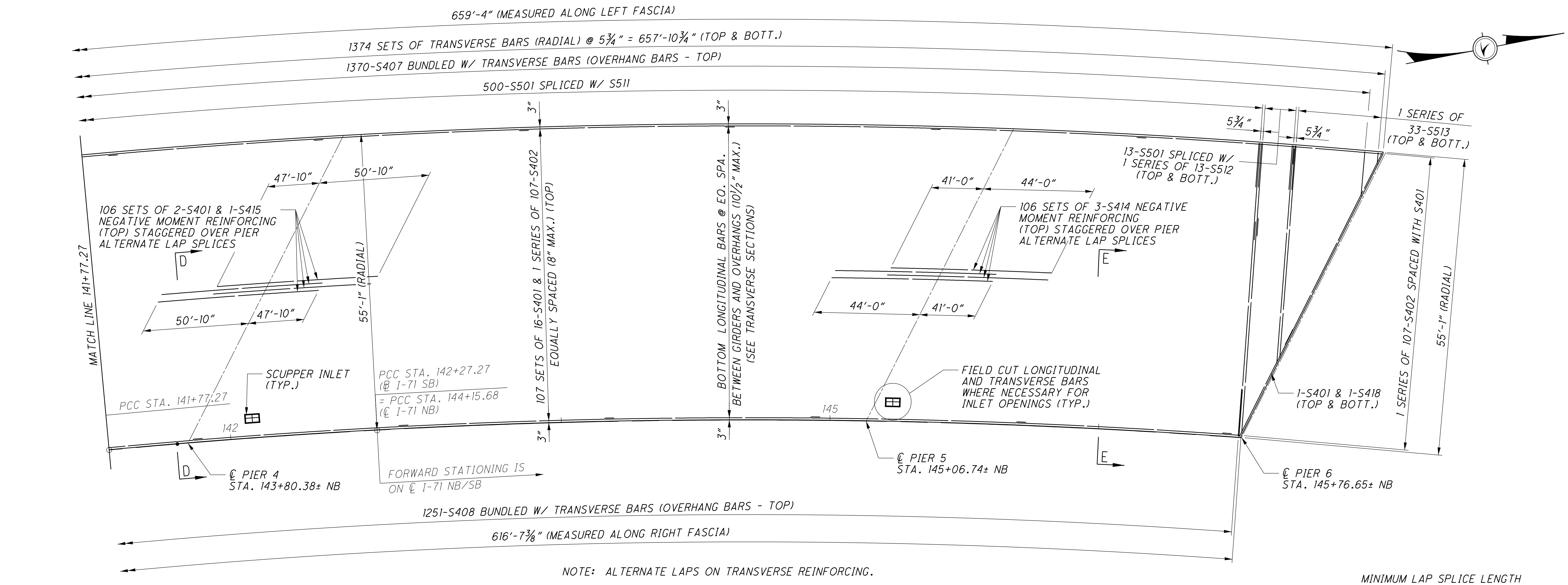
DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED CEJ | CHECKED JPR | DRAWN DLH | REVISED | REVIEWED MLJ | DATE 2/29/16 | STRUCTURE FILE NUMBER 3106608

DECK PLAN - UNIT 1 (2 OF 3)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

23/77

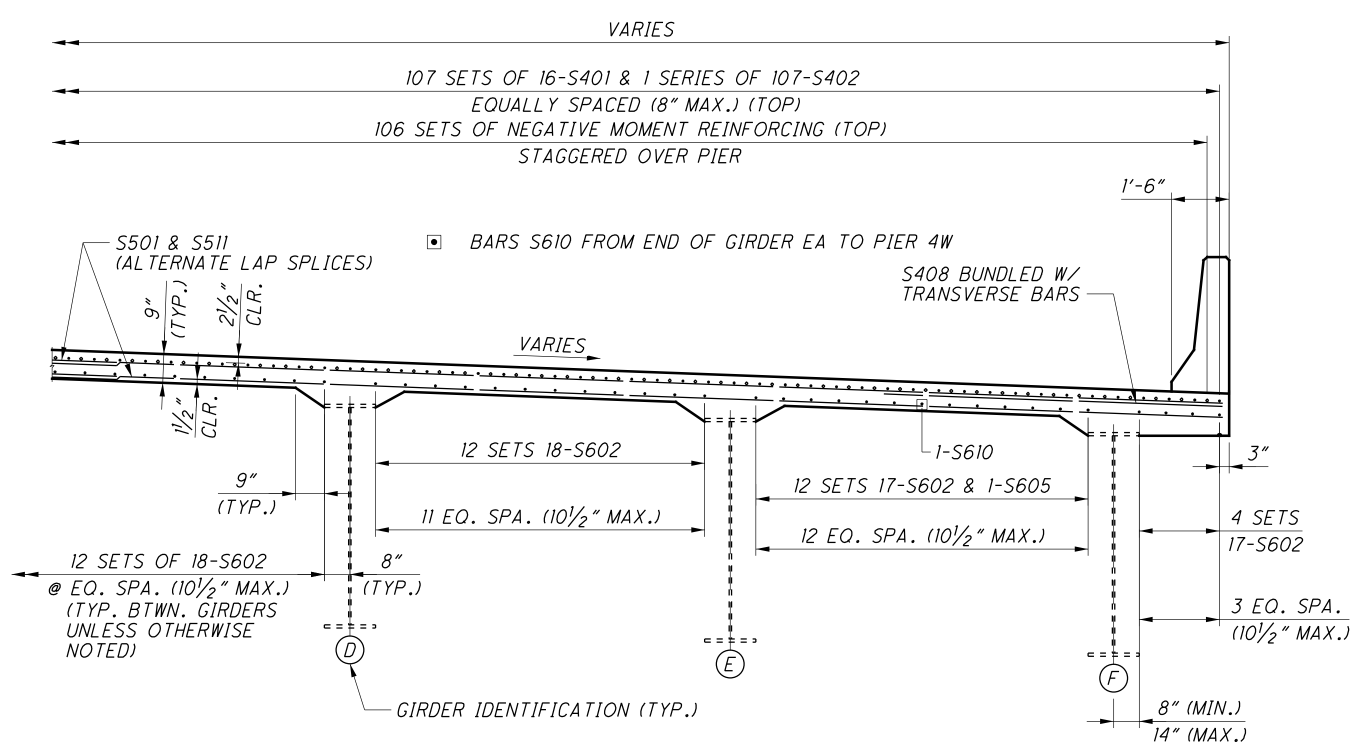


NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

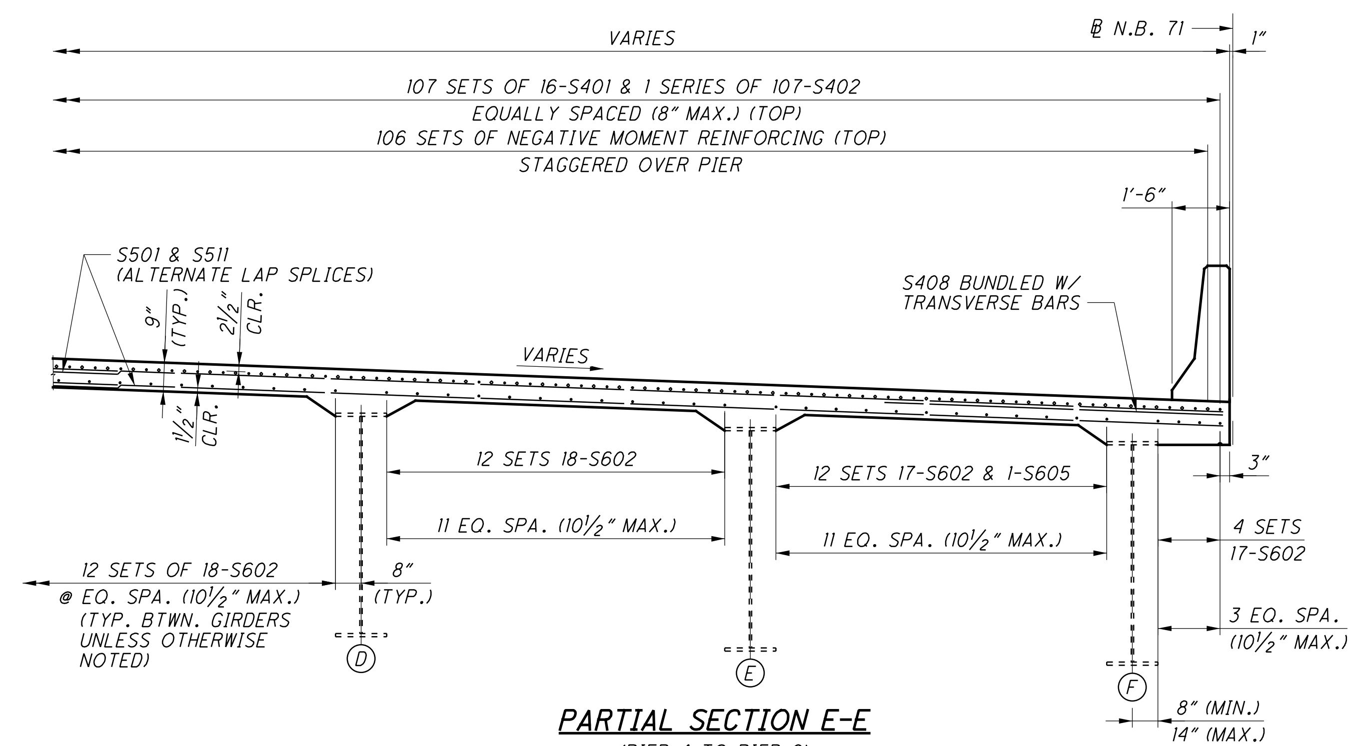
PARTIAL PLAN UNIT 1
(PARAPET NOT SHOWN)

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"



PARTIAL SECTION D-D
(END OF GIRDER EA TO PIER 4)



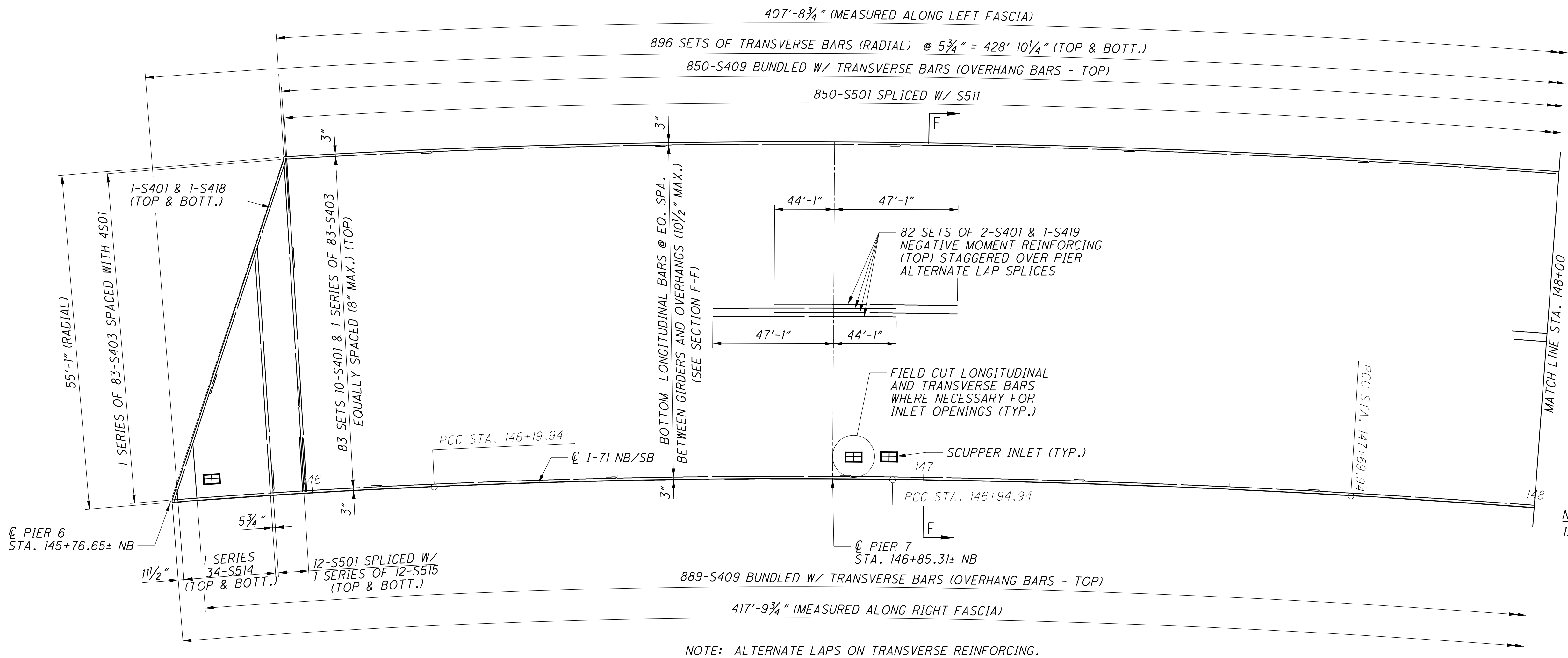
PARTIAL SECTION E-E
(PIER 4 TO PIER 6)

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 1 (3 OF 3)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



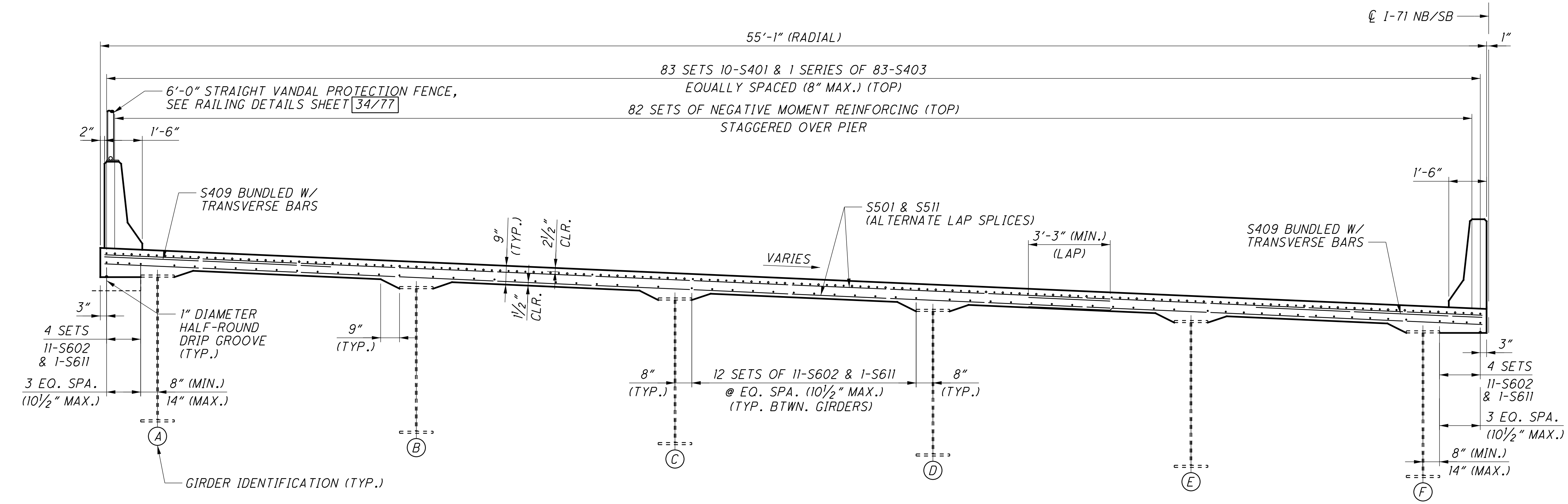
PARTIAL PLAN UNIT 2

(PARAPET NOT SHOWN)

NOTE:
1) FOR UNIT 2 HAUNCH BAR LOCATIONS, SEE "DECK HAUNCH REINFORCEMENT TABLE" AND "HAUNCH DETAIL" SHEET 32/77 .

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"



SECTION F-F

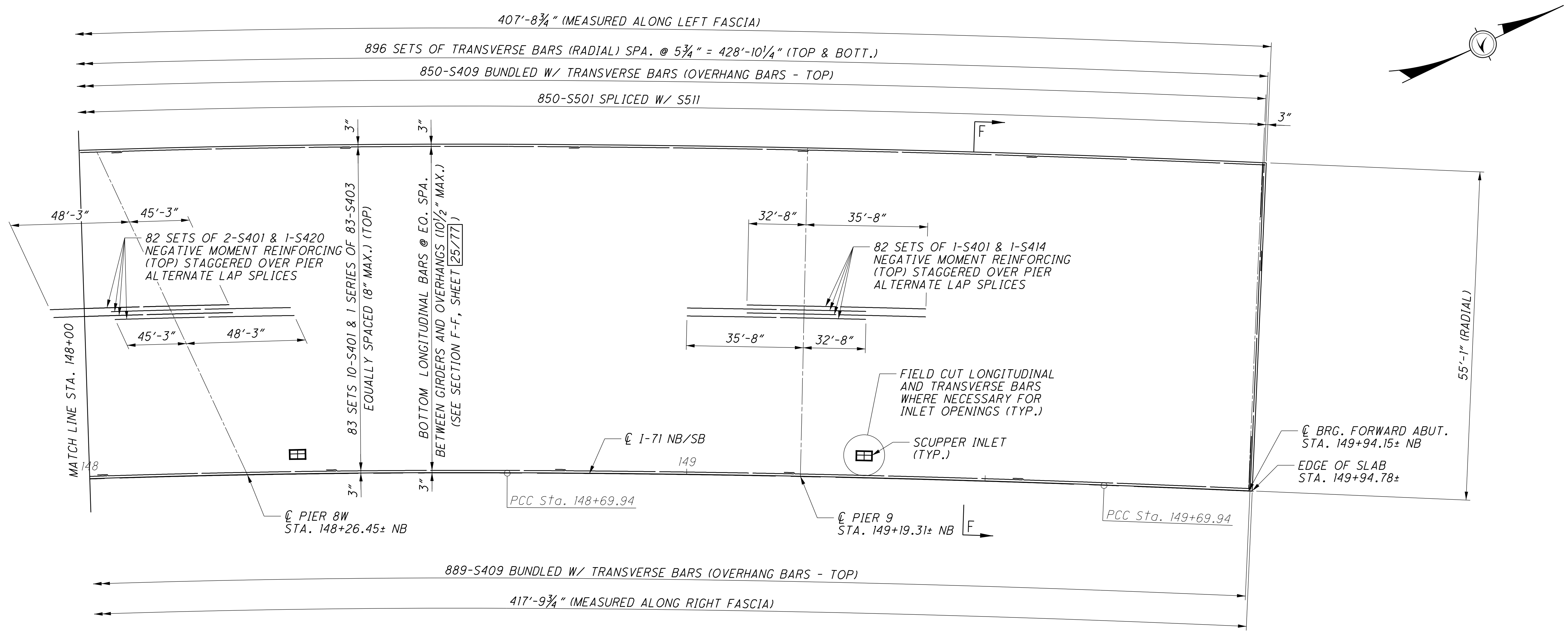
(TYPICAL TRANSVERSE SECTION FOR UNIT 2)

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 2 (1 OF 2)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

PARTIAL PLAN UNIT 2

(PARAPET NOT SHOWN)

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"

NOTE:
1) SEE SHEET 25/77 FOR SECTION F-F.

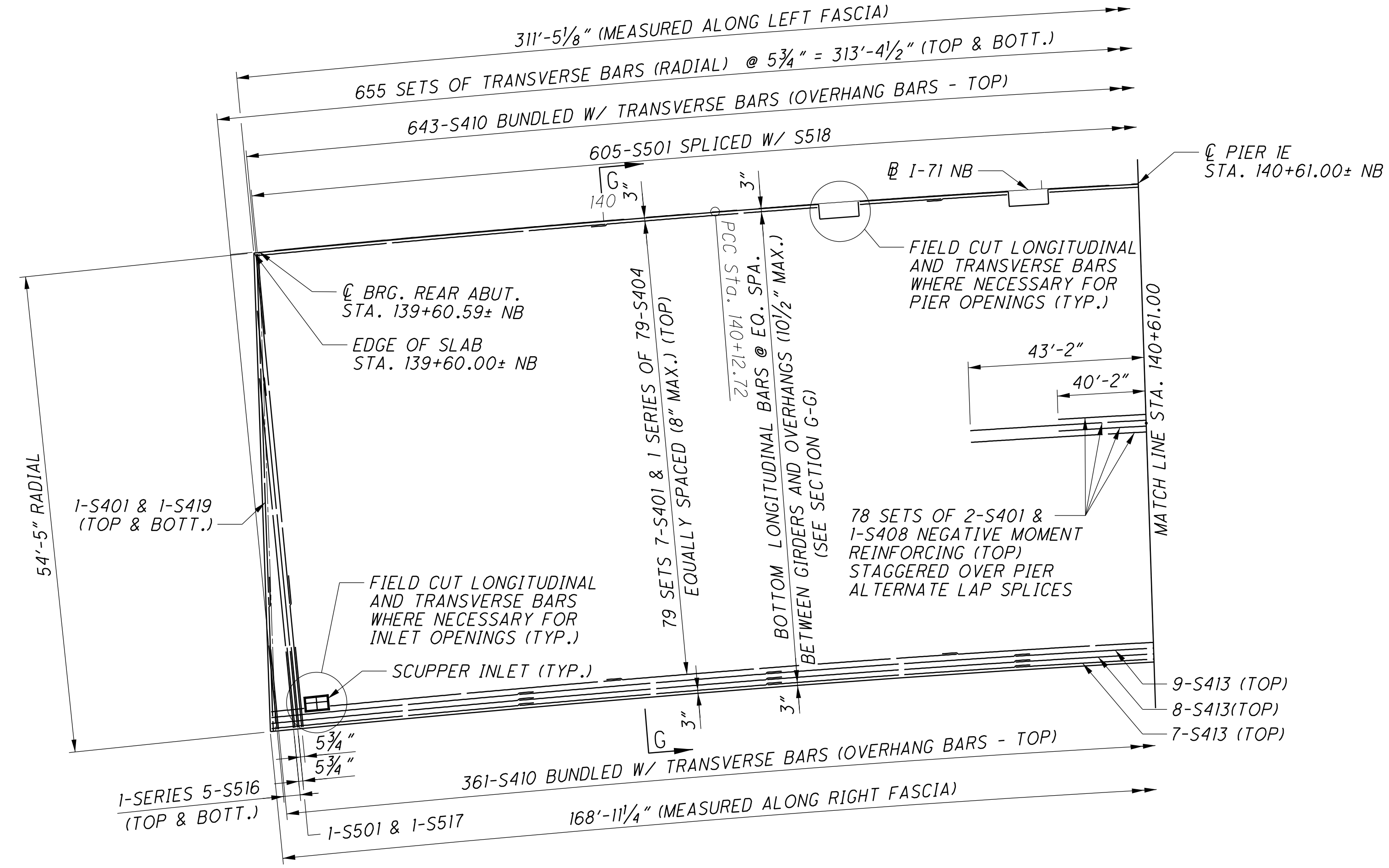
DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 2 (2 OF 2)

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



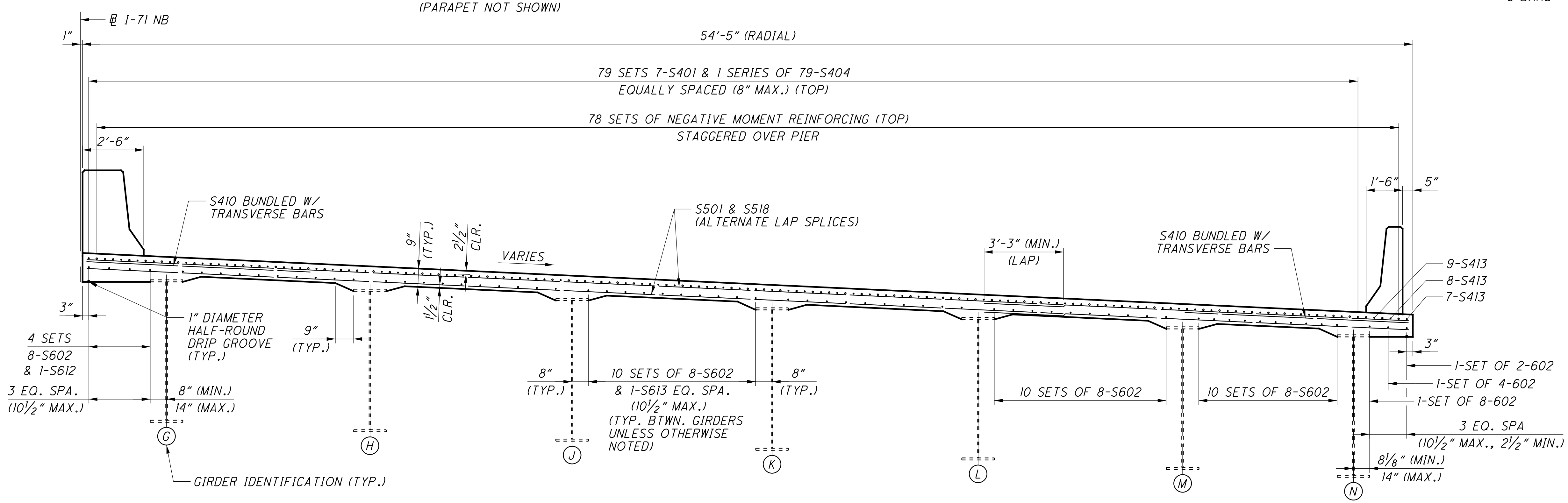
NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

PARTIAL PLAN UNIT 3

(PARAPET NOT SHOWN)

NOTE:
1) FOR UNIT 3 HAUNCH BAR LOCATIONS, SEE "DECK HAUNCH REINFORCEMENT TABLE" AND "HAUNCH DETAIL" SHEET 31/77.

MINIMUM LAP SPLICE LENGTH	
#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"



SECTION G-G

(REAR ABUTMENT TO STA. 141+29.93)

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 3 (1 OF 2)

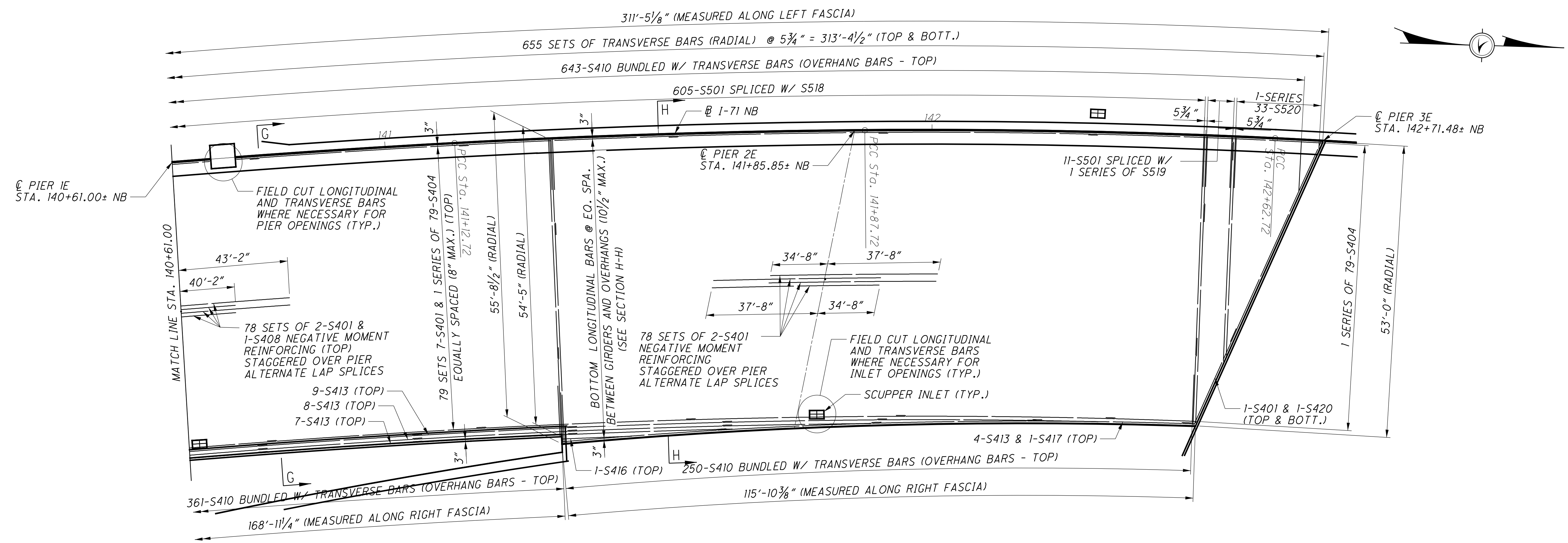
BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939

27/77



NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

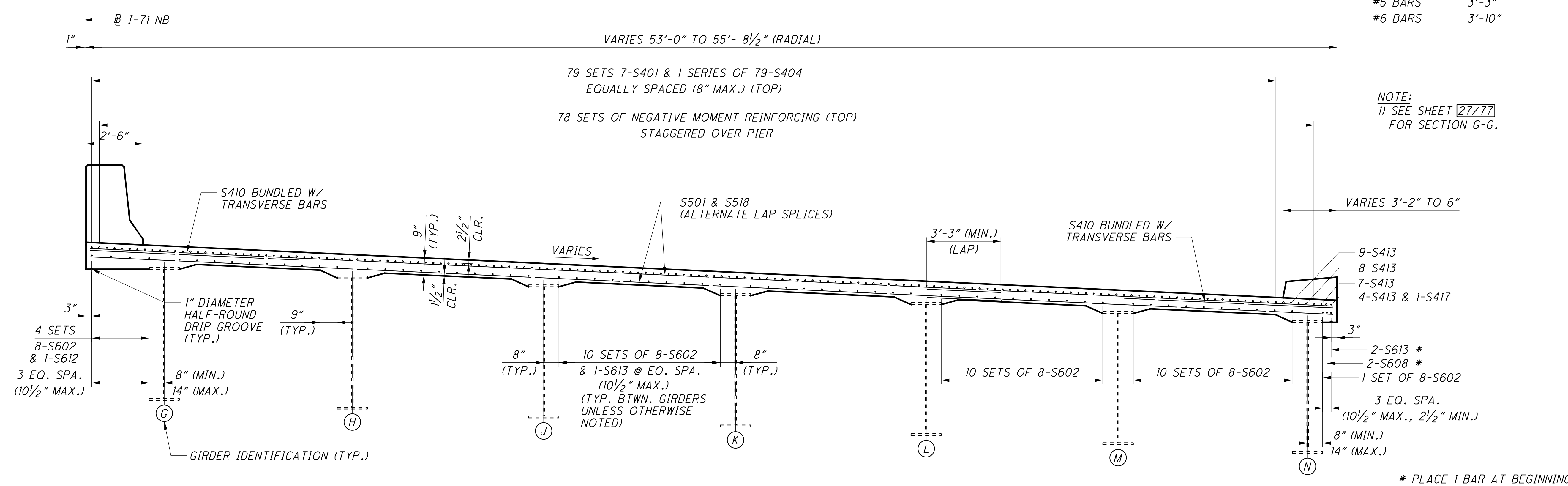
PARTIAL PLAN UNIT 3

(PARAPET NOT SHOWN)

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"

NOTE:
1) SEE SHEET 27/77 FOR SECTION G-G.



SECTION H-H

(STA. 141+29.93 TO PIER 3E)

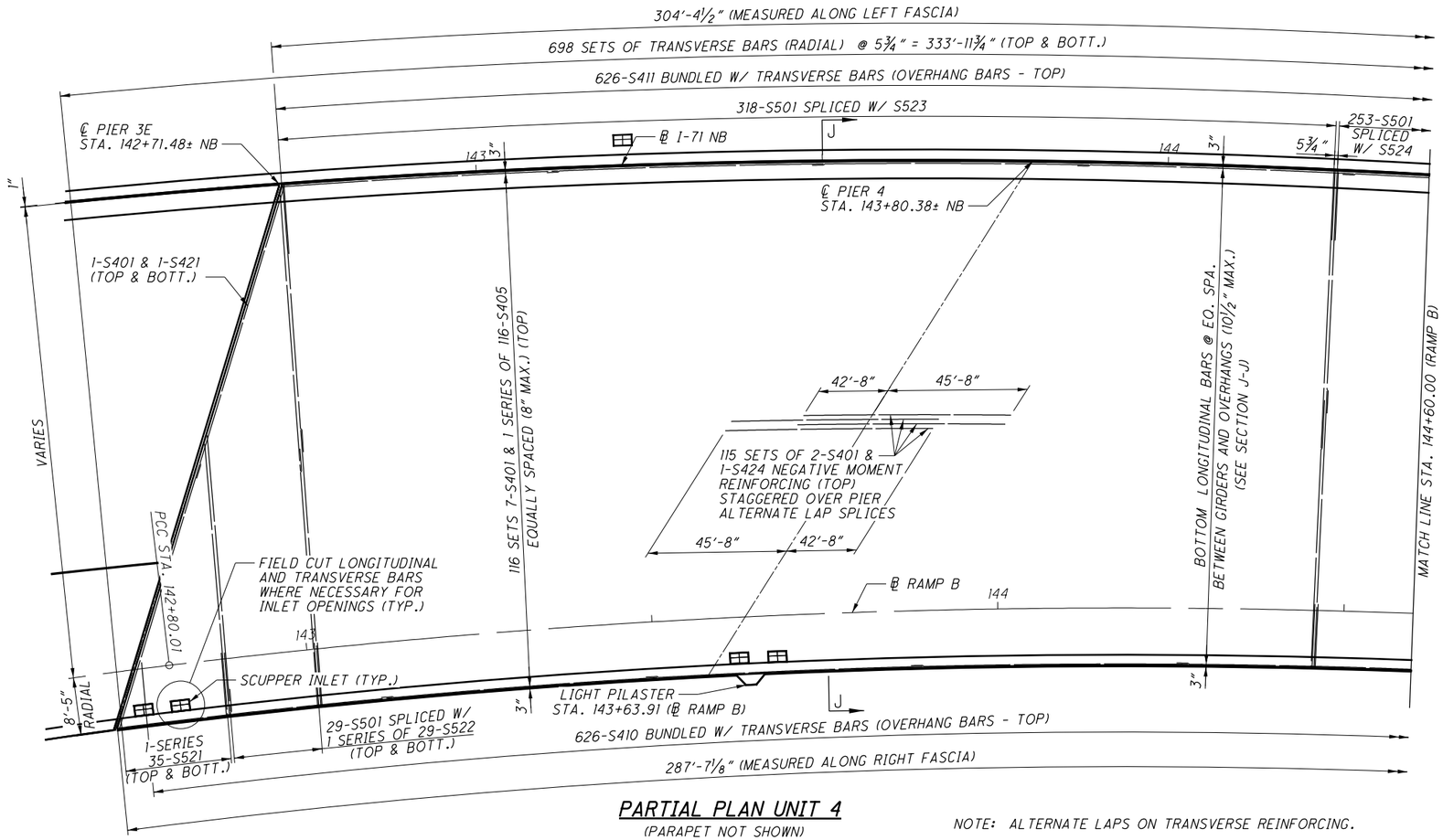
* PLACE 1 BAR AT BEGINNING OF CURB AND 1 BAR AT THE END OF CURB.

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 3 (2 OF 2)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 00000



PARTIAL PLAN UNIT 4

(PARAPET NOT SHOWN)

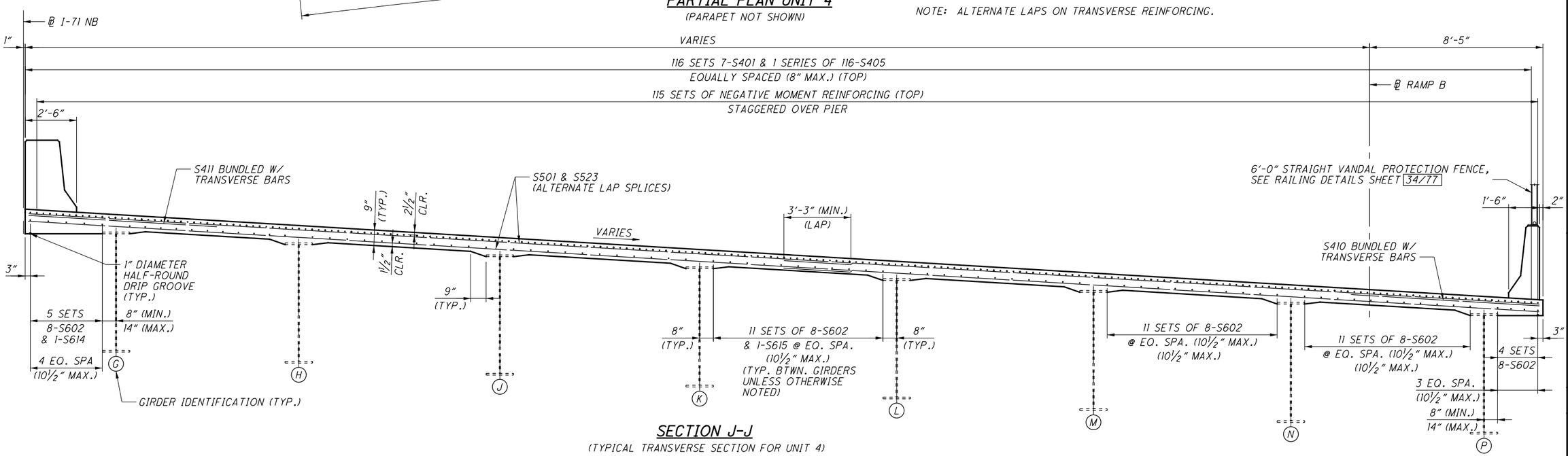
NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

NOTE:

1) SEE SHEET 41/77 FOR LIGHT PILASTER REINFORCING STEEL AND DETAILS.

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"



SECTION J-J

(TYPICAL TRANSVERSE SECTION FOR UNIT 4)

DESIGN AGENCY
PALMER ENGINEERING
801 CORNELL PARK DR. - SUITE 200
ENGINEERS INC. CINCINNATI, OH. 45242
CINCINNATI • AARON • WELLS • ASSOCIATES • LAND

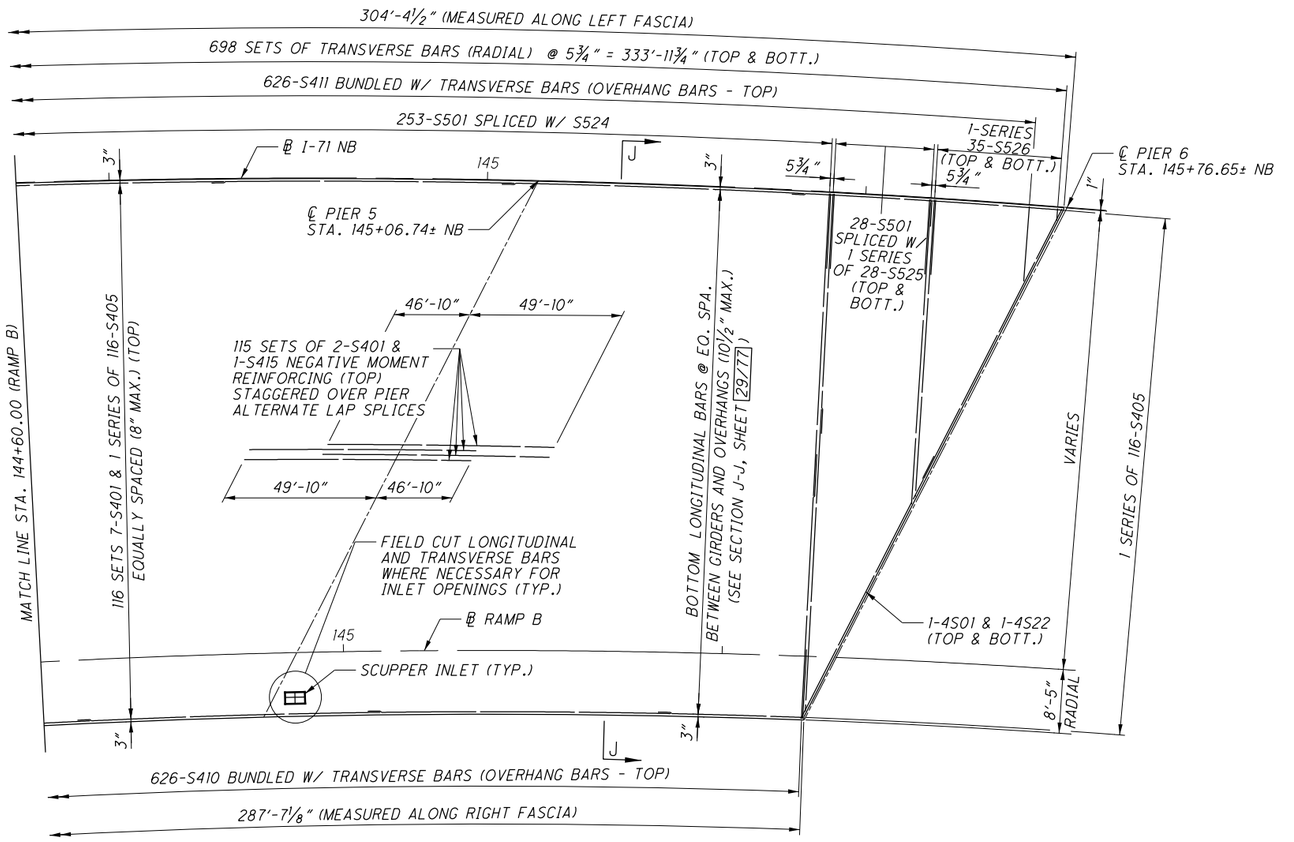
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 4 (1 OF 2)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

29 / 77

128 / 176



NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

PARTIAL PLAN UNIT 4

(PARAPET NOT SHOWN)

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"

NOTE:
1) SEE SHEET 29/77 FOR SECTION J-J.

DESIGN AGENCY
PALMER ENGINEERING
130 COMMERCIAL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH - 45242
CINCINNATI • AKRON • WILLIAMSBURG

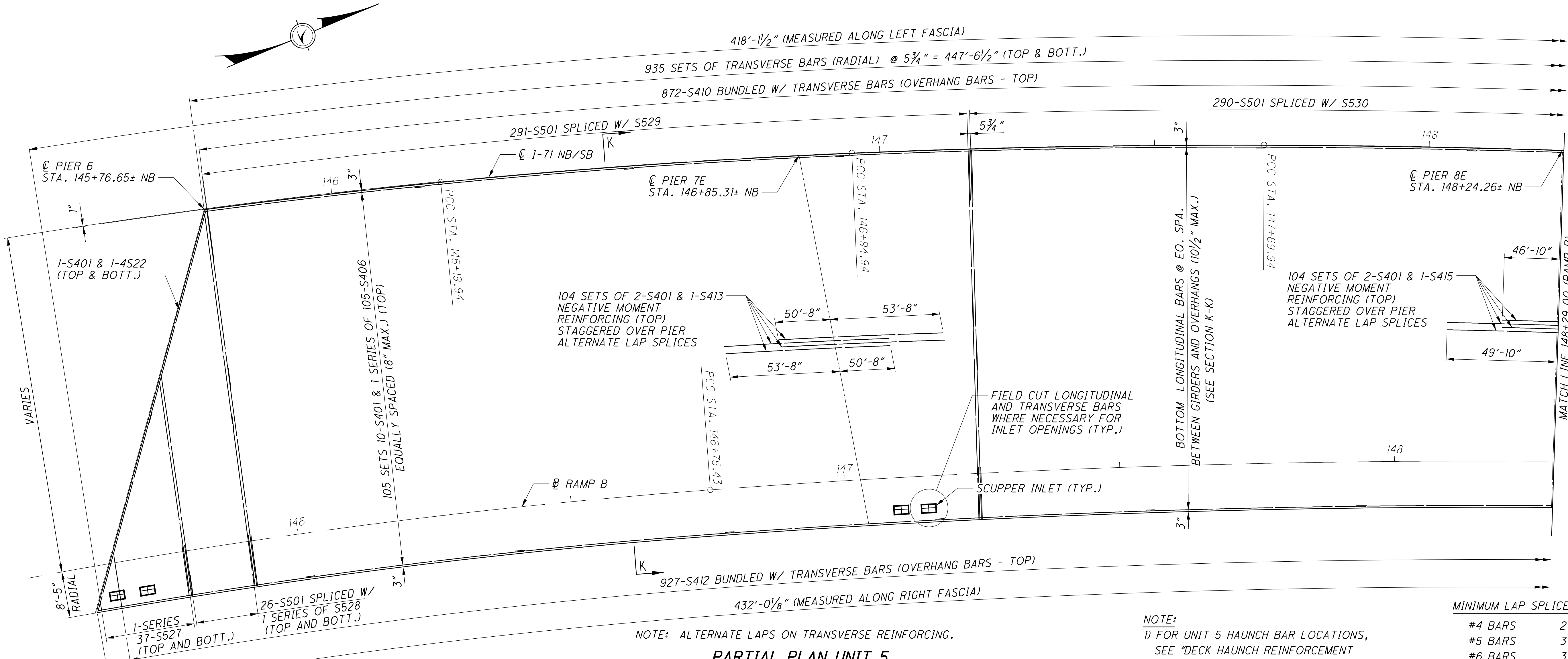
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 4 (2 OF 2)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

30/77

129/176



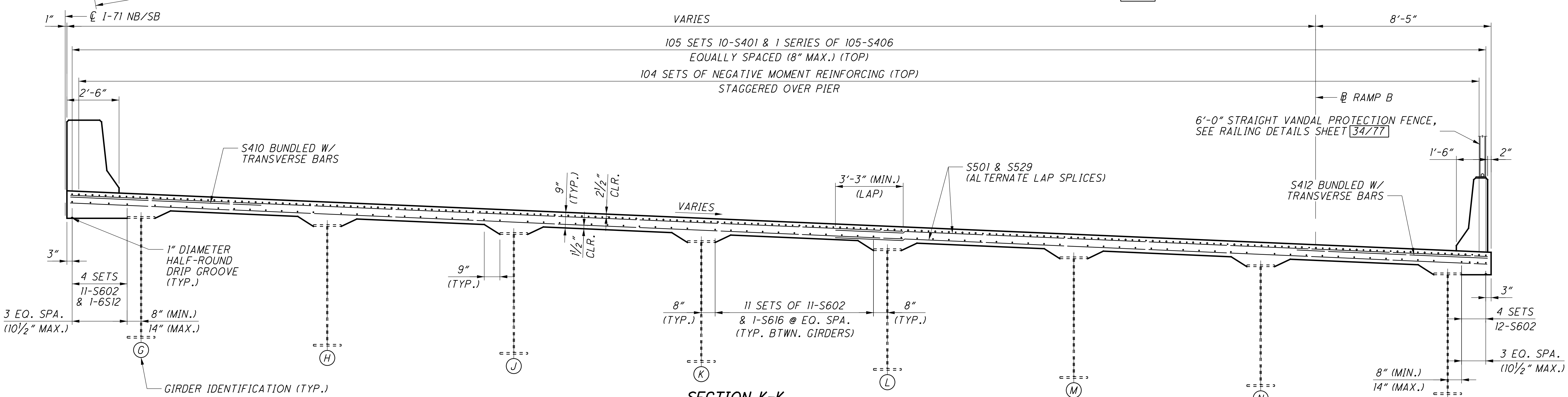
NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

PARTIAL PLAN UNIT 5

(PARAPET NOT SHOWN)

NOTE:
1) FOR UNIT 5 HAUNCH BAR LOCATIONS, SEE "DECK HAUNCH REINFORCEMENT TABLE" AND "HAUNCH DETAIL" SHEET 32/77.

MINIMUM LAP SPLICE LENGTH	
#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"



SECTION K-K

(TYPICAL TRANSVERSE SECTION FOR UNIT 5)

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

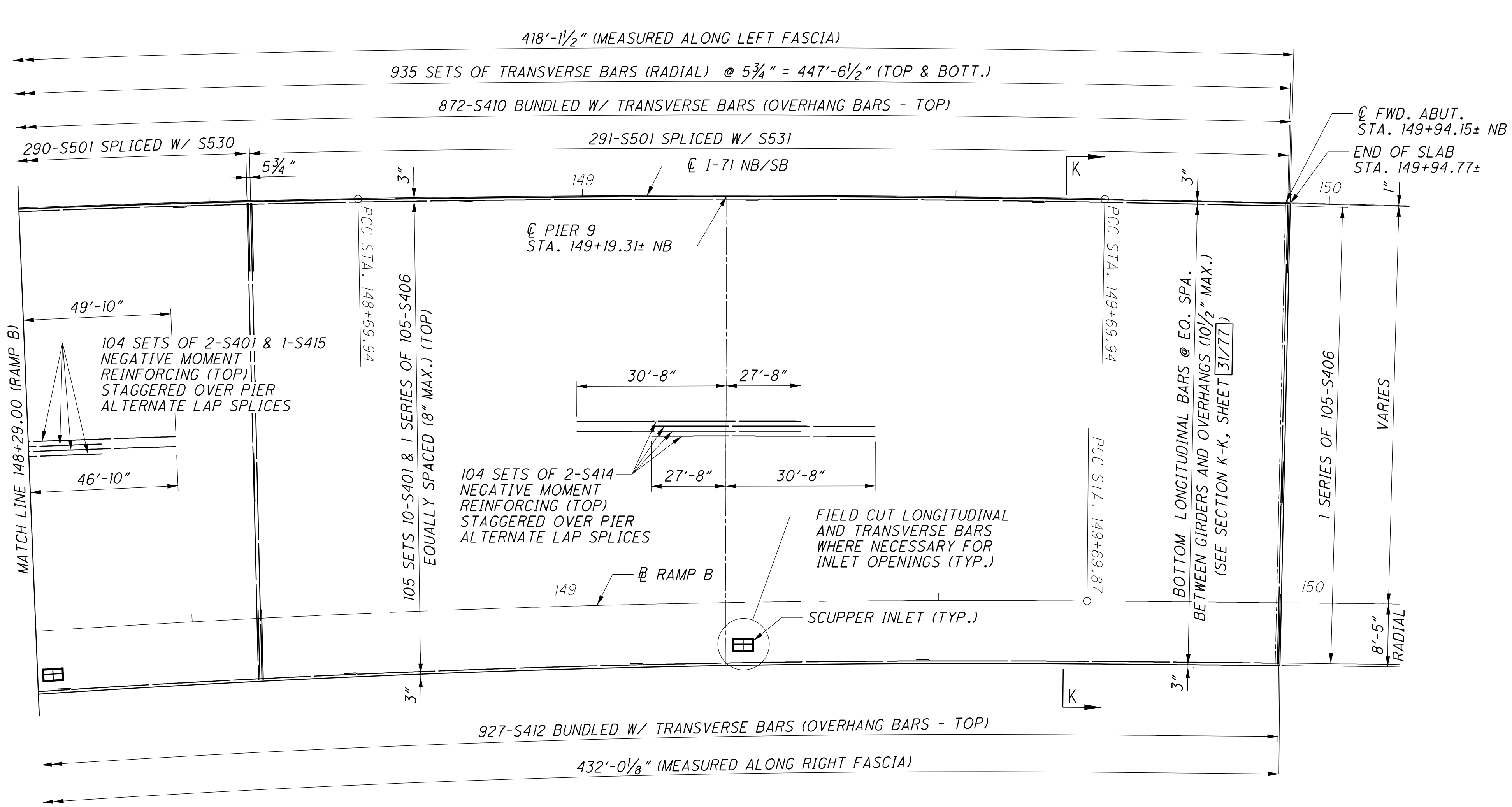
DECK PLAN - UNIT 5 (1 OF 2)

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939



NOTE: ALTERNATE LAPS ON TRANSVERSE REINFORCING.

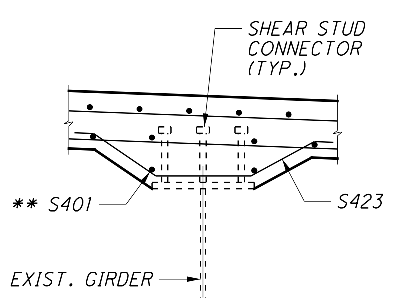
PARTIAL PLAN UNIT 5

(PARAPET NOT SHOWN)

MINIMUM LAP SPLICE LENGTH

#4 BARS	2'-7"
#5 BARS	3'-3"
#6 BARS	3'-10"

NOTE:
1) SEE SHEET 31/77 FOR SECTION K-K.



NOTE: FOR BAR LOCATIONS SEE, "DECK HAUNCH REINFORCEMENT TABLES".

HAUNCH DETAIL

** MINIMUM LAP LENGTH = 1'-11" FOR BARS S401 LOCATED IN HAUNCH.

LIMITS OF HAUNCH REINFORCEMENT - UNIT 1

LOCATION	START*	REINFORCING STEEL	END	START*	REINFORCING STEEL	END*	START*	REINFORCING STEEL	END*
GIRDER A	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	211-S423 @ 2'-0" & 2 SETS OF 11-S401	556'-0"	617'-0"	21-S423 @ 2'-0" & 2-S401	657'-0"
GIRDER B	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	211-S423 @ 2'-0" & 2 SETS OF 11-S401	556'-0"	609'-6"	21-S423 @ 2'-0" & 2-S401	649'-6"
GIRDER C	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	211-S423 @ 2'-0" & 2 SETS OF 11-S401	556'-0"	602'-0"	21-S423 @ 2'-0" & 2-S401	642'-0"
GIRDER D	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	211-S423 @ 2'-0" & 2 SETS OF 11-S401	556'-0"	594'-0"	21-S423 @ 2'-0" & 2-S401	634'-0"
GIRDER E	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	192-S423 @ 2'-0" & 2 SETS OF 10-S401	518'-0"	586'-6"	21-S423 @ 2'-0" & 2-S401	626'-6"
GIRDER EA	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	135-S423 @ 2'-0" & 2 SETS OF 7-S401	404'-0"			
GIRDER EB	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"						
GIRDER F	0'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	78'-0"	136'-0"	192-S423 @ 2'-0" & 2 SETS OF 10-S401	518'-0"	578'-0"	21-S423 @ 2'-0" & 2-S401	618'-0"

* UNIT 1 NOTE: LIMITS OF HAUNCH REINFORCEMENT ARE MEASURED ALONG THE GIRDERS FROM REAR ABUTMENT BEARING. LONGITUDINAL HAUNCH REINFORCING BARS SHALL BE FIELD BENT AS NEEDED TO FOLLOW THE GIRDER ALIGNMENT.

LIMITS OF HAUNCH REINFORCEMENT - UNIT 2

LOCATION	START*	REINFORCING STEEL	END*
GIRDER A	22'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	100'-0"
GIRDER B	19'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	97'-0"
GIRDER C	17'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	95'-0"
GIRDER D	14'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	92'-0"
GIRDER E	12'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	90'-0"
GIRDER F	9'-0"	40-S423 @ 2'-0" & 2 SETS OF 2-S401	87'-0"

* UNIT 2 NOTE: LIMITS OF HAUNCH REINFORCEMENT ARE MEASURED ALONG THE GIRDERS FROM C/L PIER 8W.

LIMITS OF HAUNCH REINFORCEMENT - UNIT 3

LOCATION	START*	REINFORCING STEEL	END*
ALL GIRDERS	37'-0"	21-S423 @ 2'-0" & 2-S401	77'-0"

* UNIT 3 NOTE: LIMITS OF HAUNCH REINFORCEMENT ARE MEASURED ALONG THE GIRDERS FROM C/L PIER 1E.

LIMITS OF HAUNCH REINFORCEMENT - UNIT 5

LOCATION	START*	REINFORCING STEEL	END*
GIRDER G	70'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	300'-0"
GIRDER H	68'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	298'-0"
GIRDER J	67'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	297'-0"
GIRDER K	65'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	295'-0"
GIRDER L	63'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	293'-0"
GIRDER M	62'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	292'-0"
GIRDER N	60'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	290'-0"
GIRDER P	58'-0"	116-S423 @ 2'-0" & 2 SETS OF 6-S401	288'-0"

* UNIT 5 NOTE: LIMITS OF HAUNCH REINFORCEMENT ARE MEASURED ALONG THE GIRDERS FROM C/L PIER 7E. LONGITUDINAL HAUNCH REINFORCING BARS SHALL BE FIELD BENT AS NEEDED TO FOLLOW THE GIRDER ALIGNMENT.

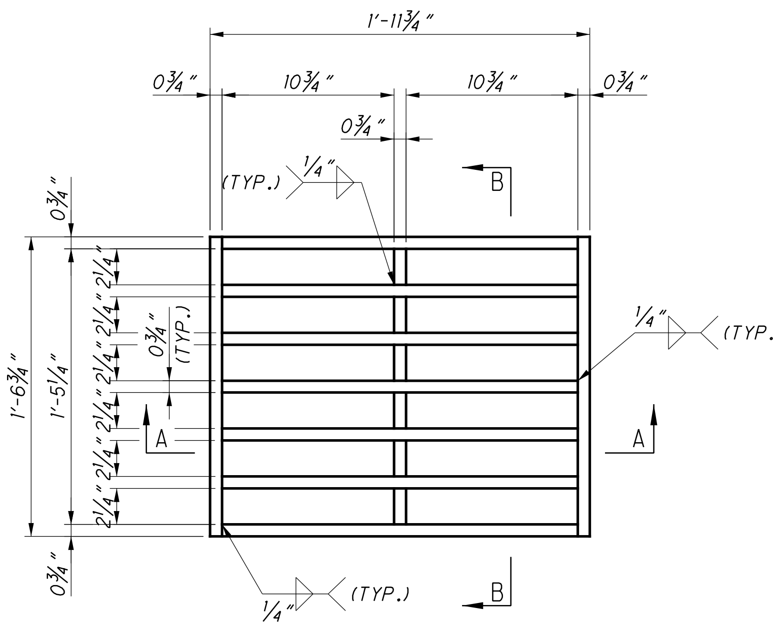
DECK HAUNCH REINFORCEMENT TABLES

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

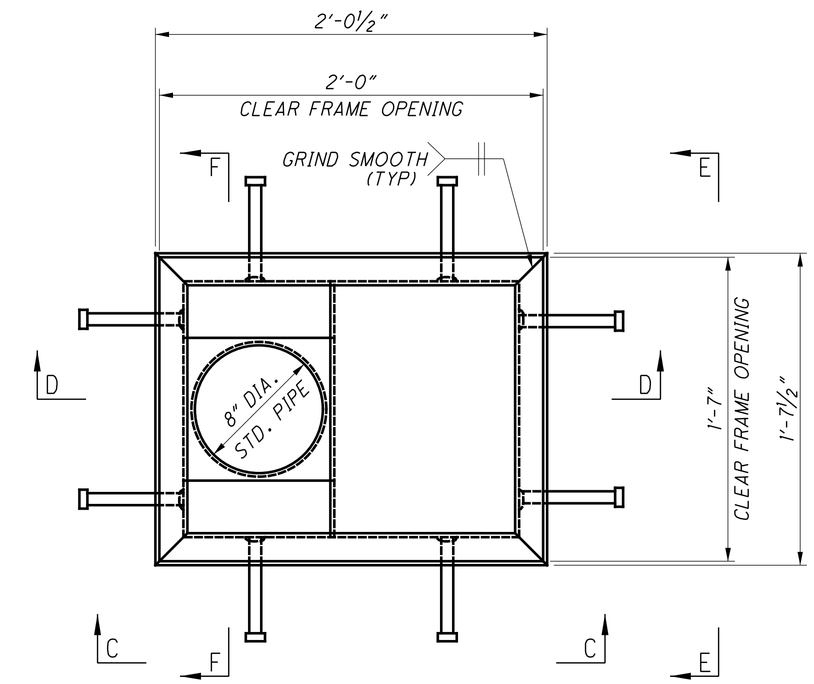
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	2/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK PLAN - UNIT 5 (2 OF 2)
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

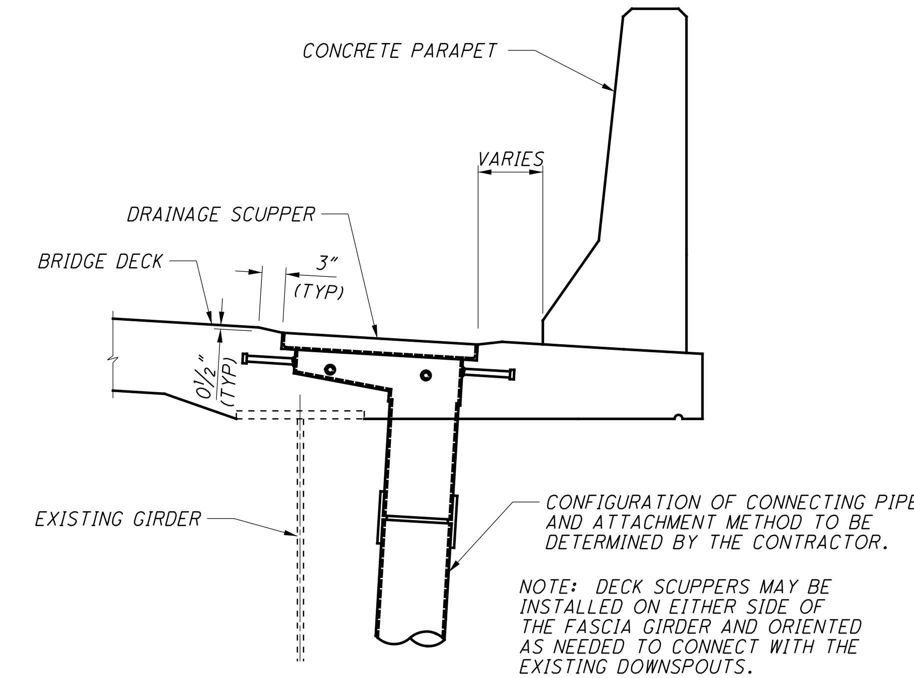
HAM-71-1.59
PID No. 101939



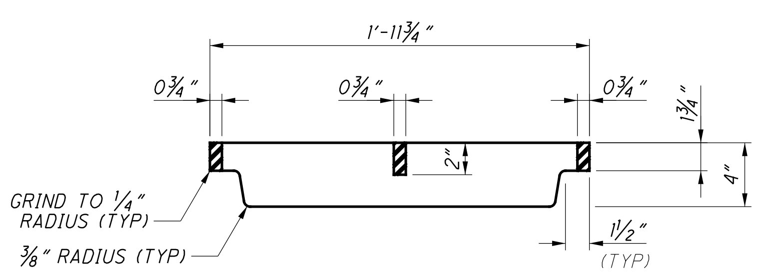
PLAN VIEW OF GRATE



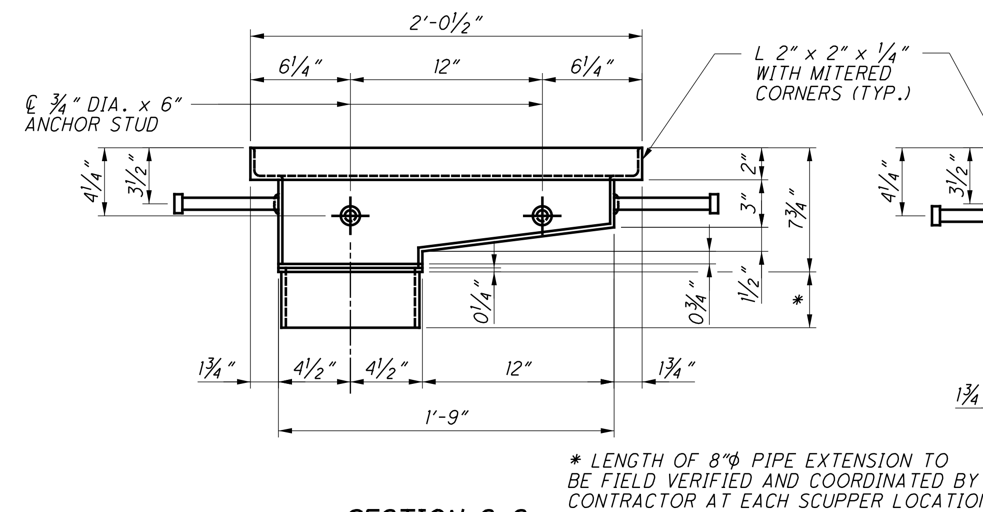
PLAN VIEW OF FRAME



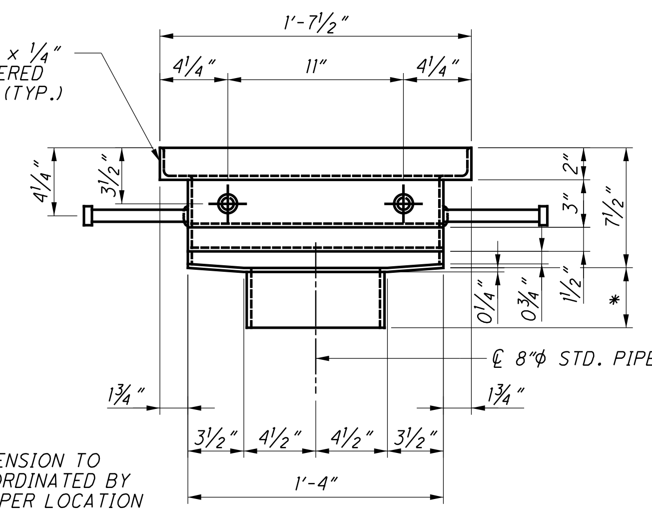
SECTION THRU DECK



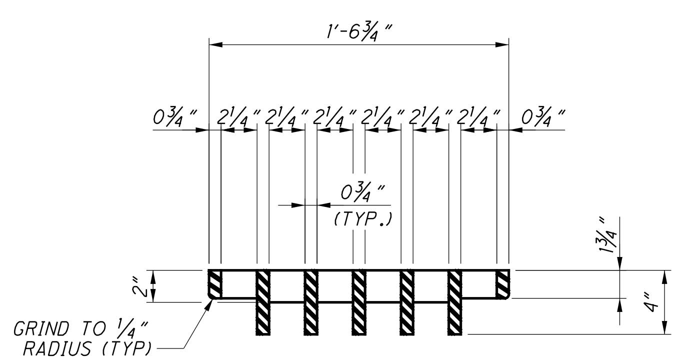
SECTION A-A



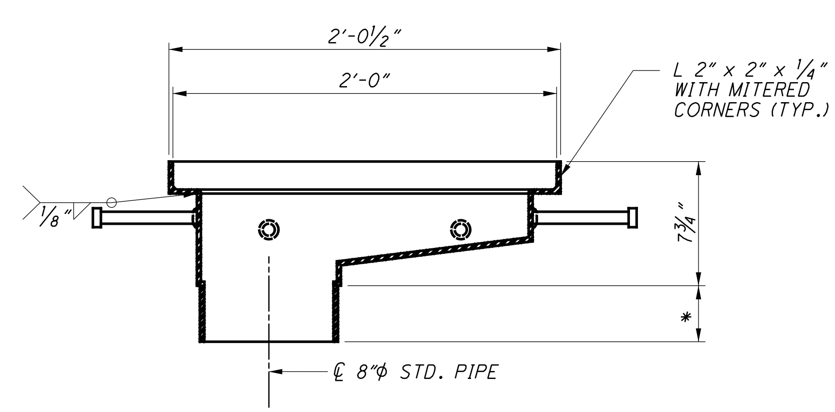
SECTION C-C



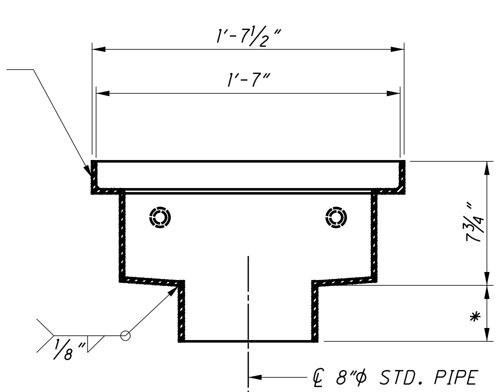
SECTION E-E



SECTION B-B



SECTION D-D



SECTION F-F

NOTES

DECK SCUPPERS SHALL BE INSTALLED AT THE APPROXIMATE LOCATIONS OF THE EXISTING DECK DRAIN INLETS. SLIGHT VARIATION IS PERMITTED TO FACILITATE ALIGNMENT WITH EXISTING DOWNSPOUT.

FRAME SHALL BE MADE FROM ¼" PLATES EXCEPT WHERE NOTED.

FRAME, GRATE, AND ALL PLATES SHALL CONFORM TO AASHTO M270 GRADE 36 STEEL OR APPROVED EQUAL. PIPE SHALL CONFORM TO ASTM A53, TYPE S. ALL ANCHOR STUDS SHALL CONFORM TO AASHTO M169 GRADES 1010 THRU 1020 OR APPROVED EQUAL.

ANCHOR STUDS SHALL BE SHOP WELDED AND ALL HOLES SHALL BE SHOP DRILLED AS SHOWN ON PLANS.

ANCHOR STUDS SHALL BE ELECTRIC ARC END WELDED WITH COMPLETE FUSION.

UPON COMPLETION OF SHOP FABRICATION, ALL STEEL PARTS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123.

WELDING TO BE PERFORMED IN ACCORDANCE WITH THE ANSI/AASHTO/AWS D1.5 WELDING CODE. ALL CONNECTIONS SHALL BE SEAL WELDED ALONG TOP AND BOTTOM HORIZONTAL SEAMS OF CONNECTIONS IN ADDITION TO REQUIRED STRUCTURAL WELDS SHOWN.

FRAME SHALL BE COVERED DURING THE POURING OF THE DECK CONCRETE.

PRIOR TO PLACING THE GRATE, ALL DEBRIS SHALL BE CLEARED FROM FRAME IN ORDER TO ALLOW FOR PROPER SEATING OF THE GRATE.

SHEAR STUDS ON THE GIRDER MAY BE CUT AS APPROVED BY THE ENGINEER TO AVOID INTERFERENCE WITH THE BRIDGE SCUPPER.

REINFORCING STEEL IN THE DECK AND BARRIER RAIL MAY BE SHIFTED, FIELD BENT, OR CUT AS APPROVED BY THE ENGINEER TO AVOID INTERFERENCE WITH THE BRIDGE SCUPPER.

SUPPLEMENTAL REINFORCEMENT: REINFORCE THE CONCRETE DECK AT THE TWO SCUPPER CORNERS OPPOSITE THE CURB LINE WITH ONE #4 BAR, 3'-0" LONG ORIENTED AT 45° TO THE LONG AXIS OF THE SCUPPER AND LOCATED JUST BELOW THE TRANSVERSE BARS IN THE TOP MAT OF STEEL.

FOR LOCATION OF SCUPPERS, SEE GENERAL PLAN.

THE ENTIRE COST OF FURNISHING AND INSTALLING THE SCUPPERS AND SUPPLEMENTAL REINFORCEMENT SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 518-SCUPPERS INCLUDING SUPPORTS, AS PER PLAN.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	01/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

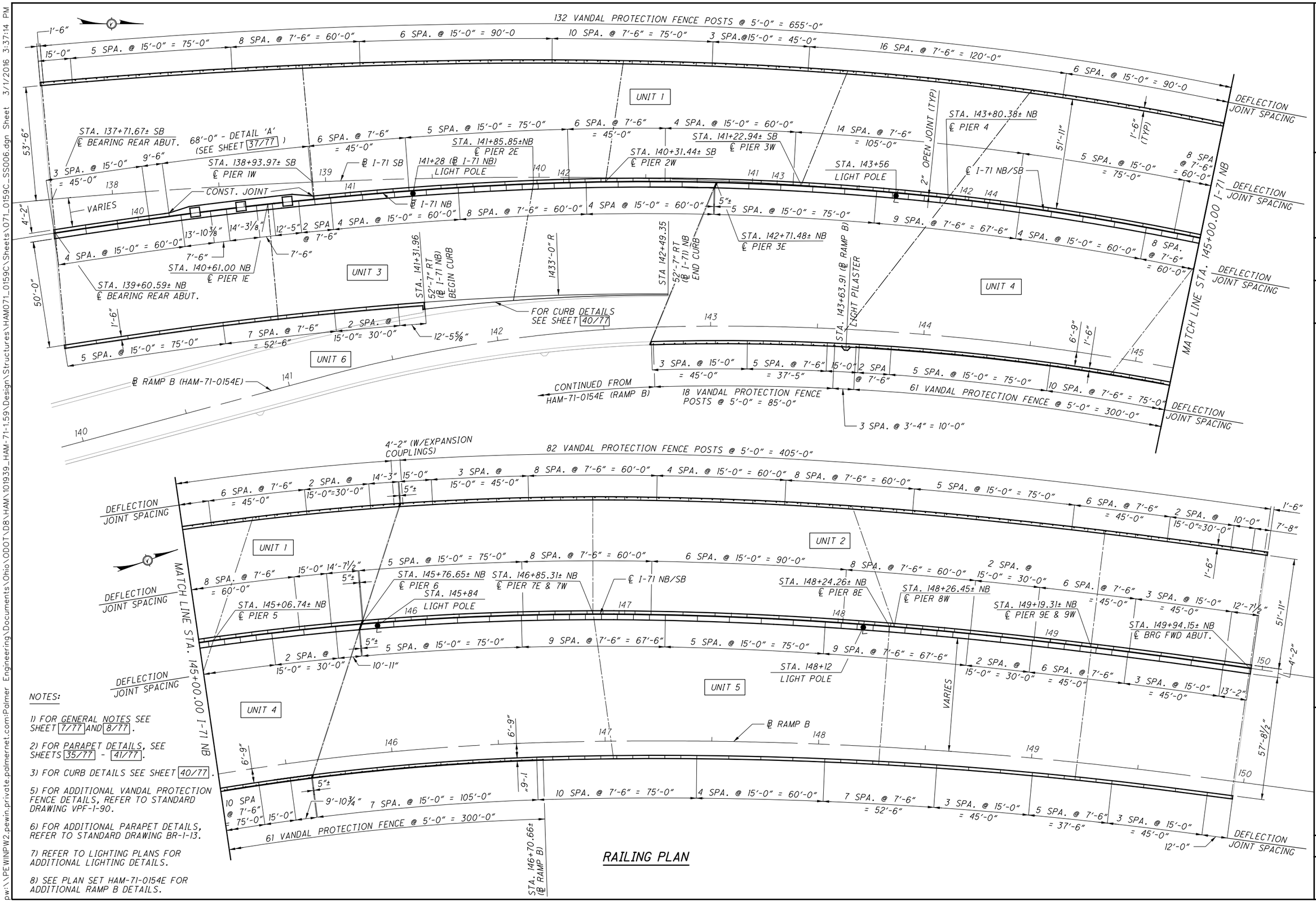
DECK SCUPPER DETAILS

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939



RAILING PLAN

NOTES:

1) FOR GENERAL NOTES SEE SHEET 7/77 AND 8/77.

2) FOR PARAPET DETAILS, SEE SHEETS 35/77 - 41/77.

3) FOR CURB DETAILS SEE SHEET 40/77.

5) FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS, REFER TO STANDARD DRAWING VPF-1-90.

6) FOR ADDITIONAL PARAPET DETAILS, REFER TO STANDARD DRAWING BR-1-13.

7) REFER TO LIGHTING PLANS FOR ADDITIONAL LIGHTING DETAILS.

8) SEE PLAN SET HAM-71-0154E FOR ADDITIONAL RAMP B DETAILS.

DESIGN AGENCY
PALMER ENGINEERING
191 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

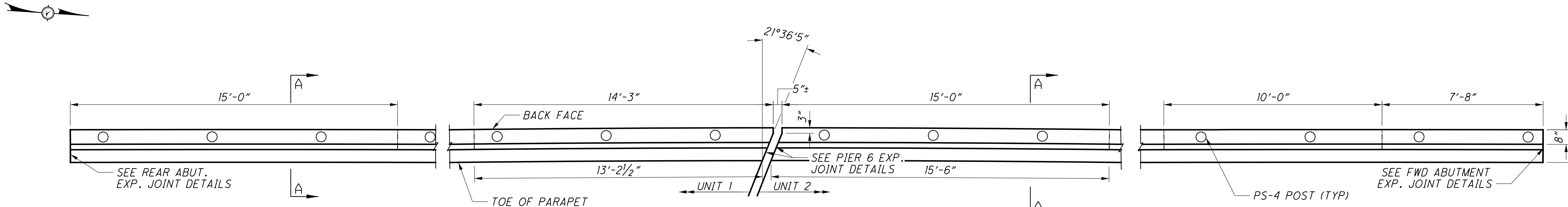
DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

RAILING PLAN
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

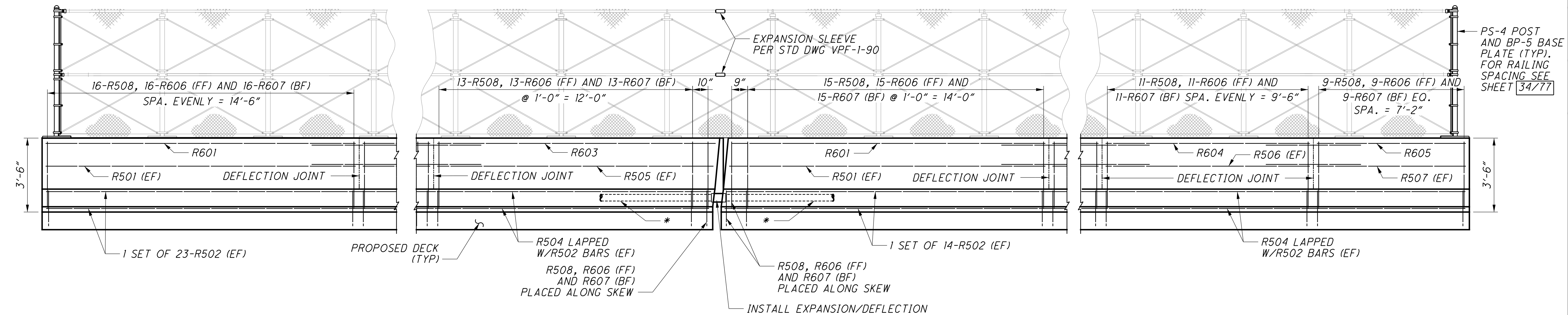
HAM-71-1.59
PID No. 101939

34 / 77

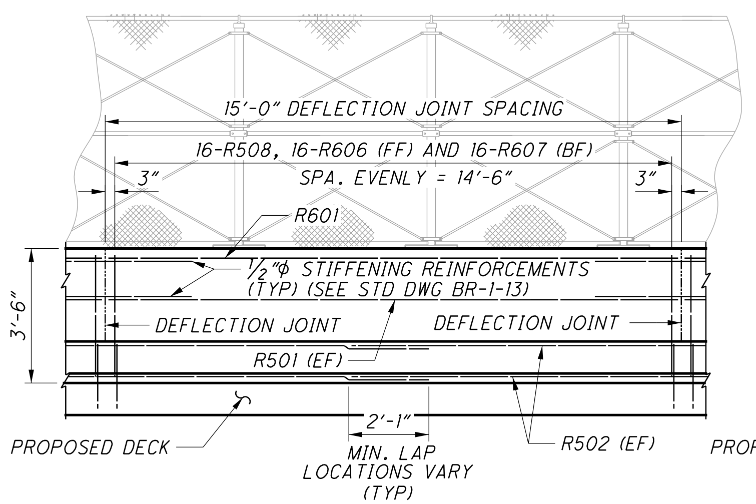
133 / 176



PLAN

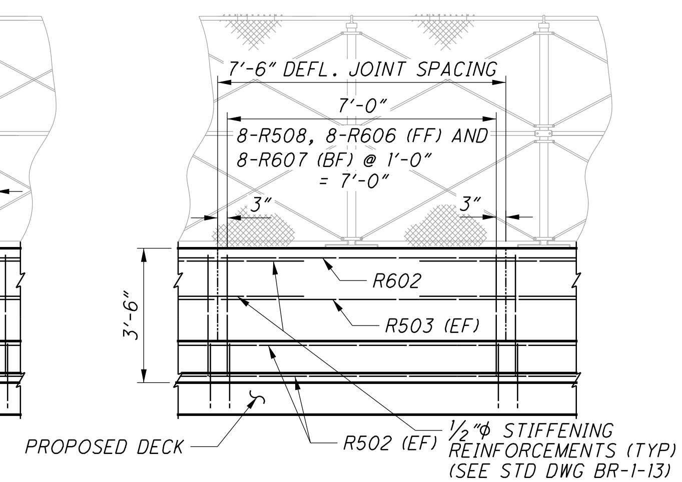


ELEVATION



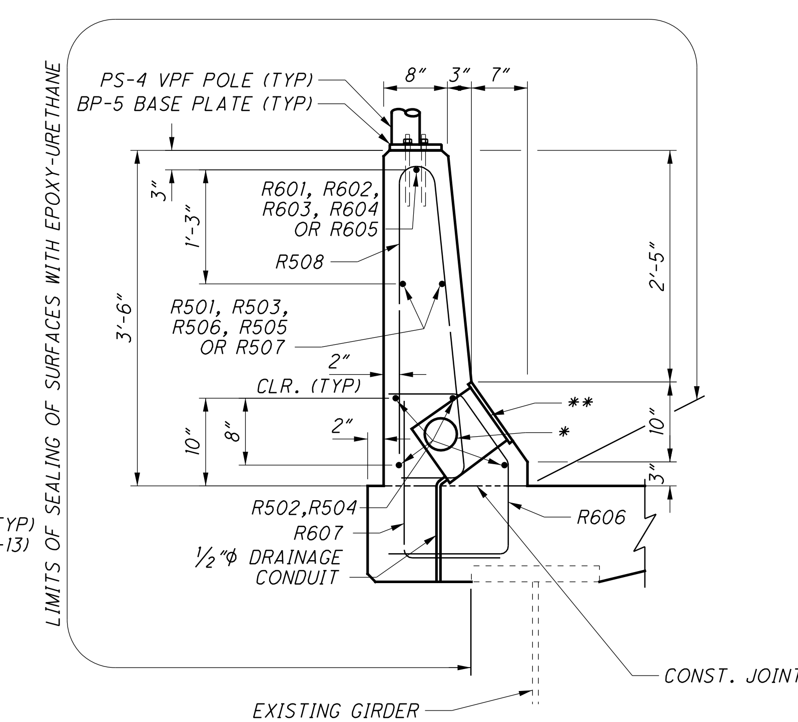
ELEVATION

TYPICAL ELEVATION
15'-0" SPACED DEFLECTION JOINTS



ELEVATION

TYPICAL ELEVATION
7'-6" SPACED DEFLECTION JOINTS



SECTION A-A

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE
* 4"ϕ CONDUIT FOR FUTURE USE
** JUNCTION BOX

NOTES:

1) SEE SHEET 34/77 FOR PLAN VIEW OF RAILING.

2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL RAILING DETAILS AND NOTES.

3) SEE STANDARD DRAWING VPF-1-90 FOR ADDITIONAL VANDAL PROTECTION FENCE DETAILS.

4) SEE SHEET 59-63/77 FOR EXPANSION JOINT AND RETAINER PLATE DETAILS.

5) SEE STANDARD DRAWING HL-50.21 FOR VANDAL PROTECTION FENCE GROUNDING DETAILS.

6) THE VANDAL PROTECTION FENCE EXPANSION SLEEVE SHALL ACCOMMODATE 5" OF MOVEMENT. THE INSTALLATION OF THE SLEEVE SHALL BE COORDINATED WITH THE JOINT OPENING TABLE FOR THE STRIP SEAL ON SHEET 43/77.

7) THE EXPANSION/DEFLECTION DEVICE FOR THE CONDUIT SHALL ACCOMMODATE 5" (MIN.) OF MOVEMENT. PAYMENT SHALL BE INCIDENTAL TO THE CONDUIT ITEM.

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

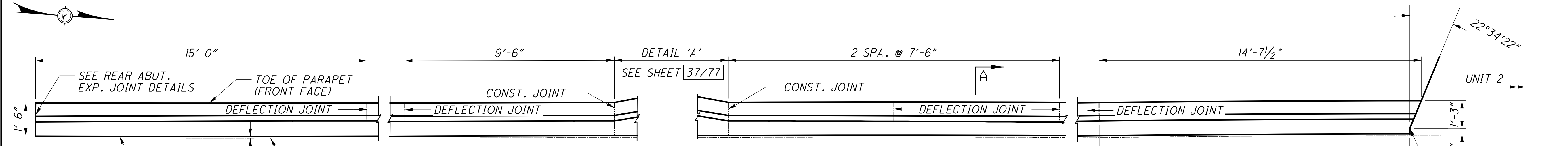
DESIGNED CEJ | CHECKED BJF | DRAWN SDW | REVISED | REVIEWED MLJ | DATE 02/26/16

STRUCTURE FILE NUMBER 3106608

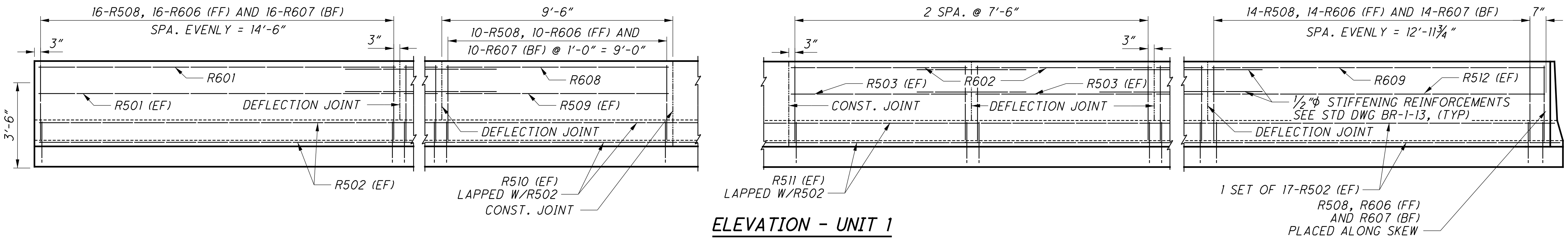
LEFT PARAPET DETAILS - UNITS 1 AND 2

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

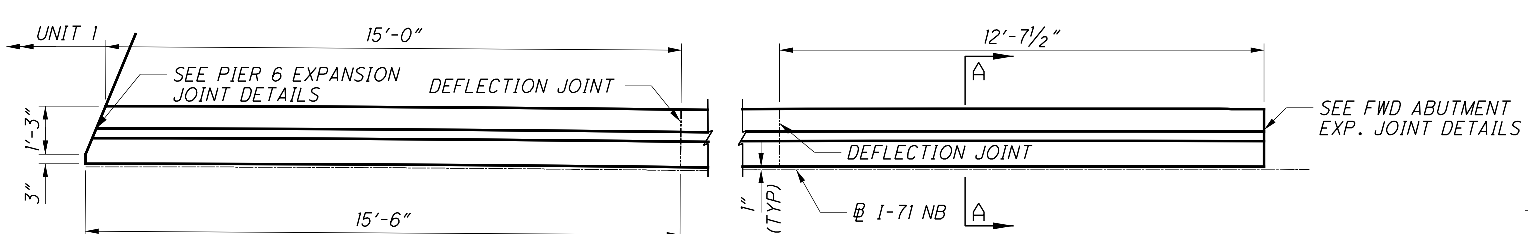
HAM-71-1.59
PID No. 101939



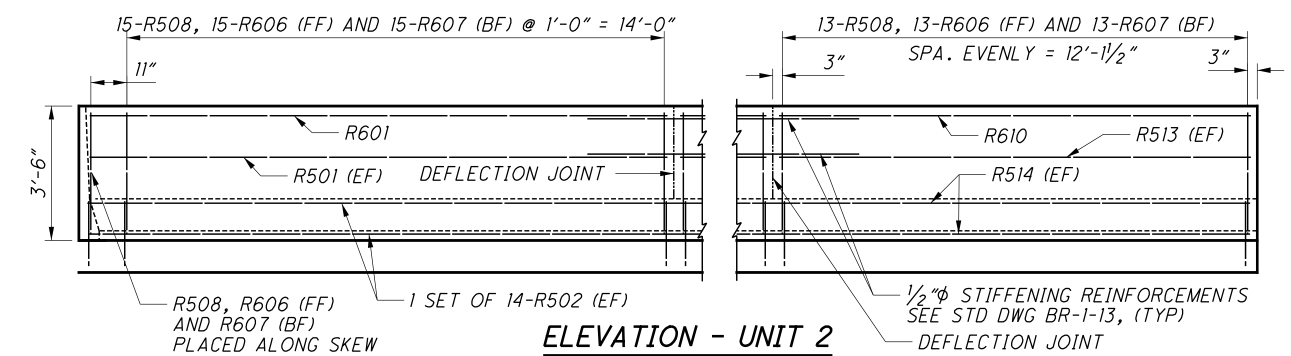
PLAN - UNIT 1



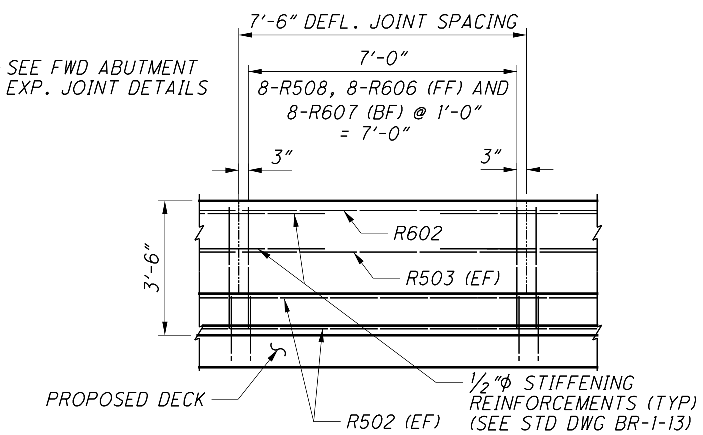
ELEVATION - UNIT 1



PLAN - UNIT 2

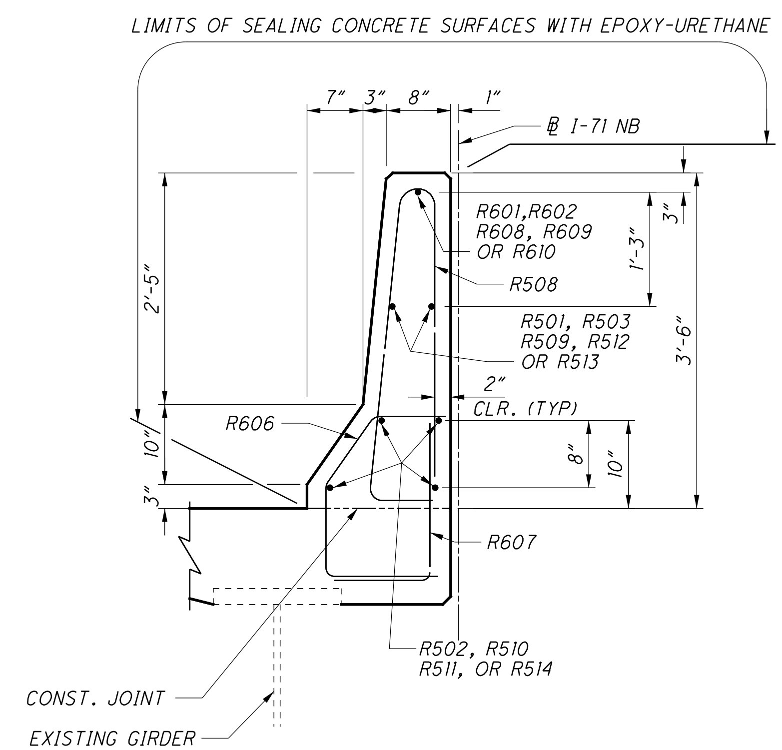


ELEVATION - UNIT 2



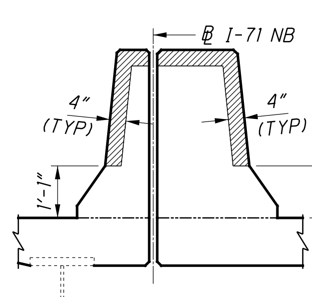
ELEVATION

TYPICAL ELEVATION
7'-6" SPACED DEFLECTION JOINTS



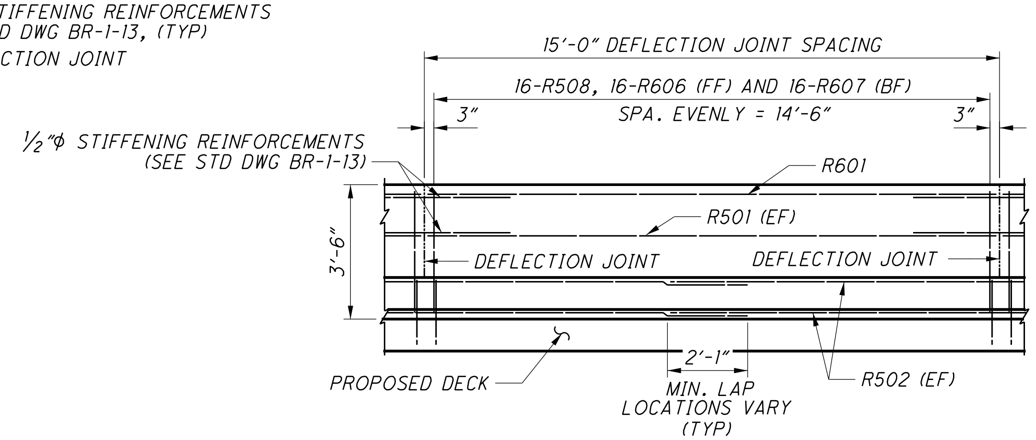
SECTION A-A

SECTION IS TYPICAL FOR UNITS 1 AND 2 EXCEPT FOR DETAIL 'A', SEE SHEET 37/77



SAWCUT DETAIL

TYPICAL SECTION THROUGH SAWCUT PERIMETER @ DEFLECTION JOINTS (SEE STD DWG SBR-2-13, 5/5)



ELEVATION

TYPICAL ELEVATION
15'-0" SPACED DEFLECTION JOINTS

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE

NOTES:

1) SEE SHEET 34/77 FOR PLAN VIEW OF RAILING.

2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL RAILING DETAILS AND NOTES.

4) SEE SHEET 59-63/77 FOR EXPANSION JOINT AND RETAINER PLATE DETAILS.

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

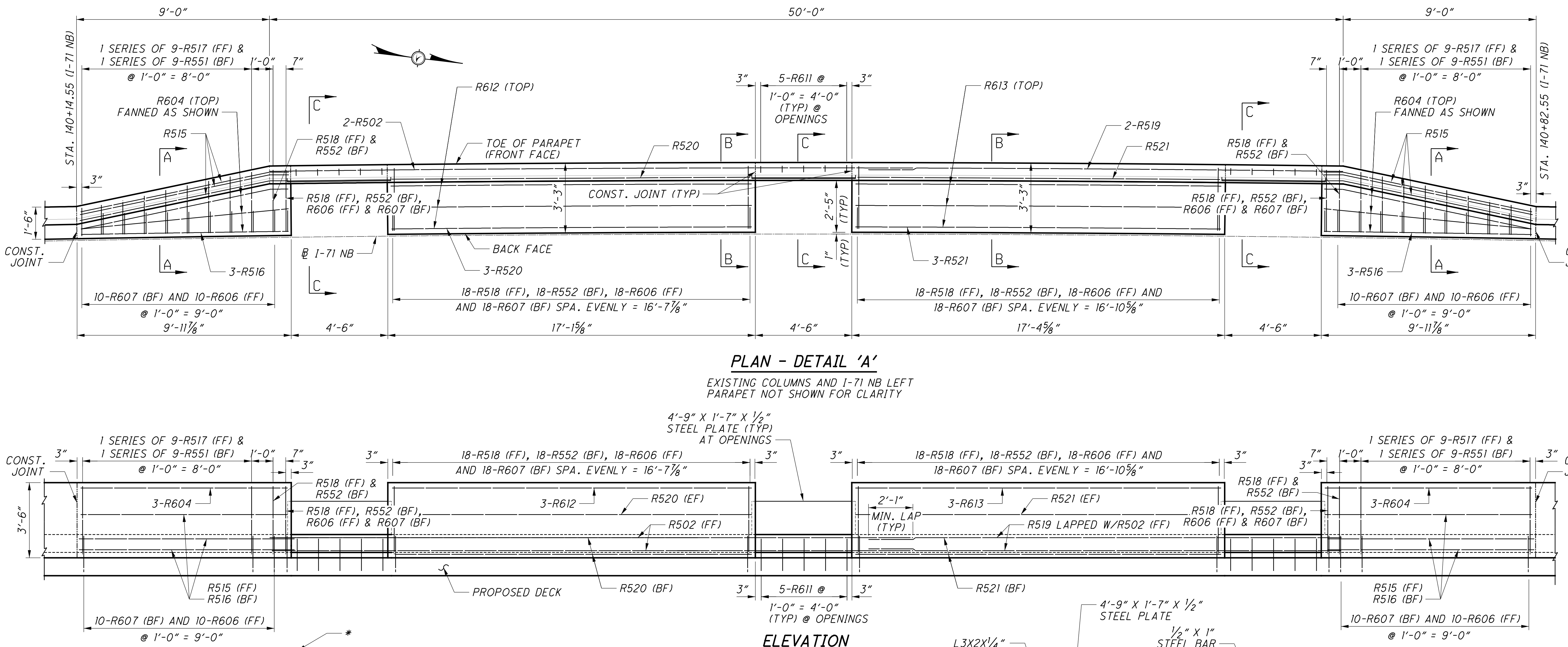
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

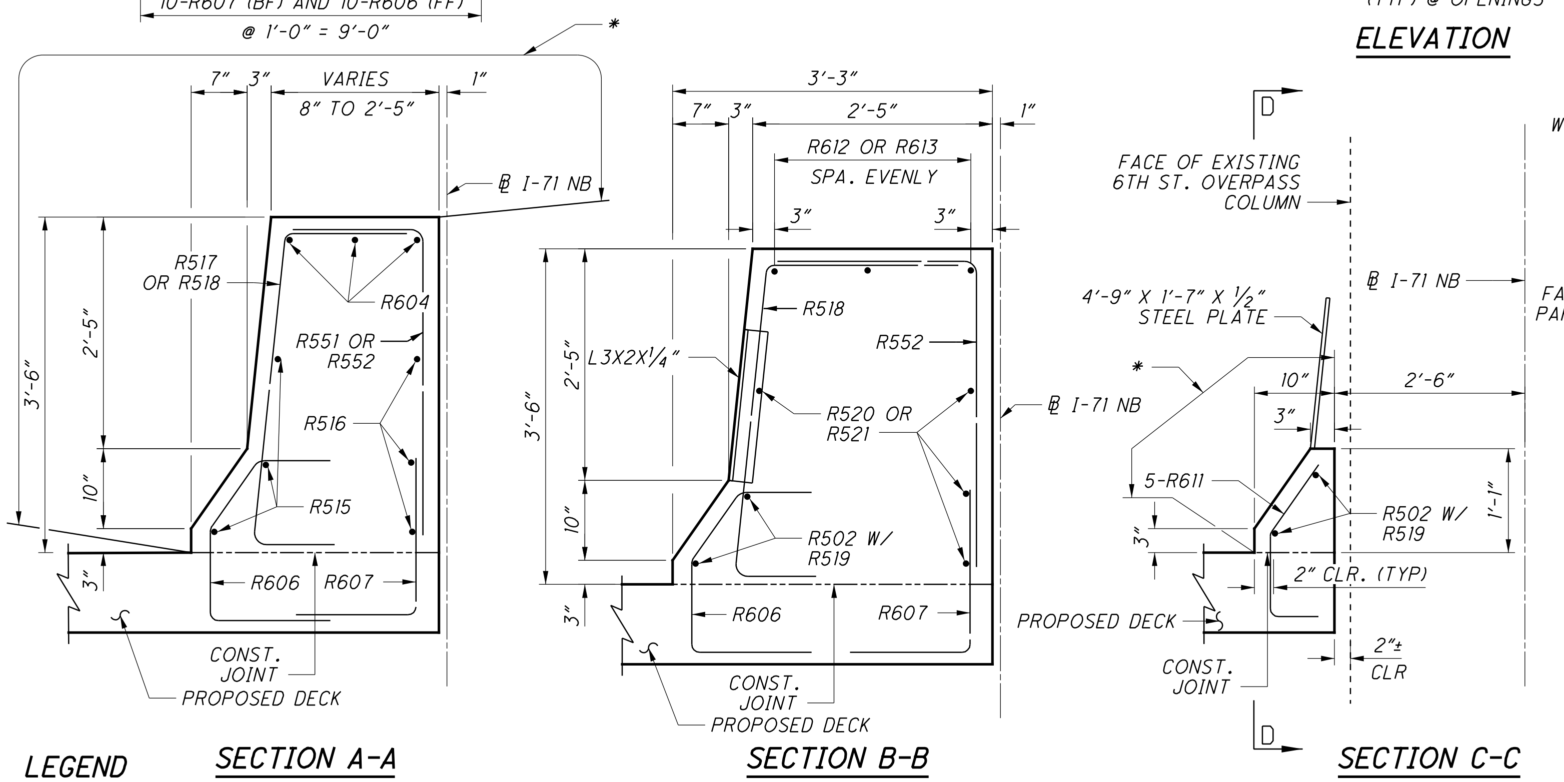
RIGHT PARAPET DETAILS - UNITS 1 AND 2

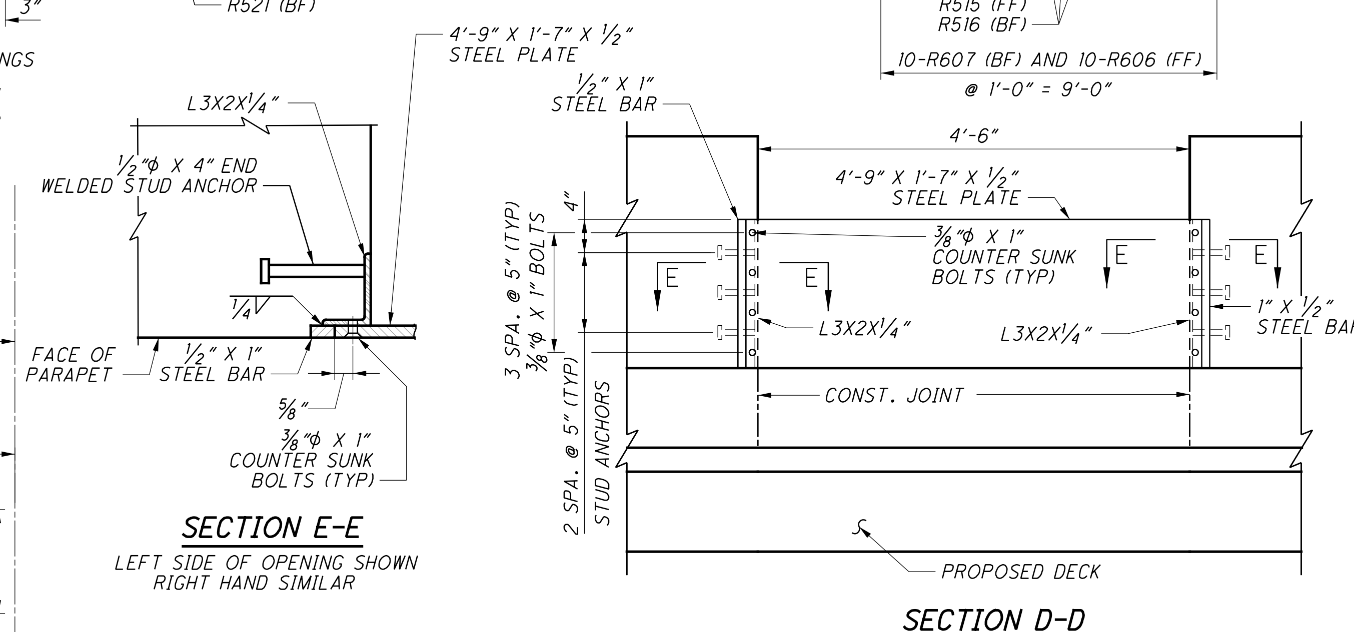
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

pw:\\PEWINPW2.pewin.private.palmernet.com:Palmer Engineering\Documents\Ohio\ODOT\D8\HAM\101939_HAM-71-1.59\Design\Structures\HAM071_0159C\Sheets\071_0159C_SS008.dgn Sheet 3/1/2016 3:37:29 PM







NOTES:

1) SEE SHEET 34/77 FOR PLAN VIEW OF RAILING.

2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE SHEET 35/77 FOR ADDITIONAL UNIT 1 RIGHT PARAPET DETAILS.

4) ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING THE STEEL PLATES AND ANCHORAGE ASSEMBLIES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 517 RAILING, MISC.: STEEL PLATES IN PARAPETS AT 6TH STREET OVERPASS.

5) APPLY A BOND BREAKER TO THE ⅜" BOLT THREADS AND FULLY THREAD THE BOLTS INTO THE SUPPORT ANGLE BEFORE CONCRETE PLACEMENT.

* LIMITS OF SEALING CONCRETE SURFACES WITH EPOXY-URETHANE

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

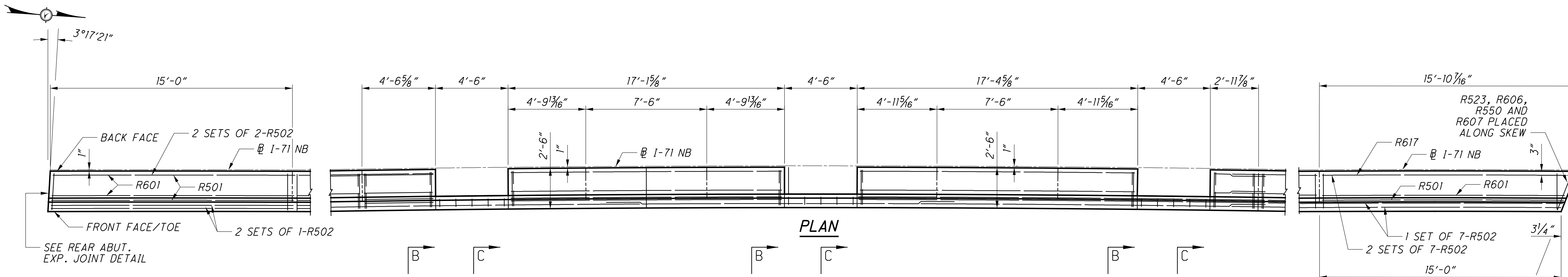
RIGHT PARAPET DETAILS - UNIT 1 UNDER 6TH ST. OVERPASS

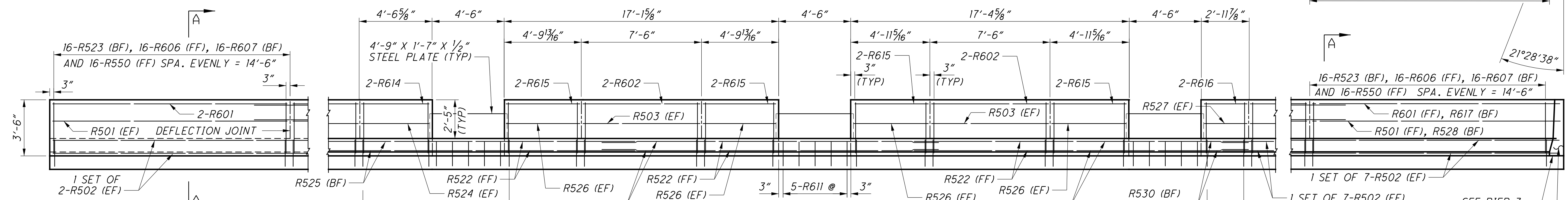
BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939





(SEE SHEET 36/77 FOR TYPICAL SAWCUT DETAIL FOR MEDIAN BARRIERS)

NOTES:

1) SEE SHEET 34/77 FOR GENERAL PLAN VIEW OF RAILING.

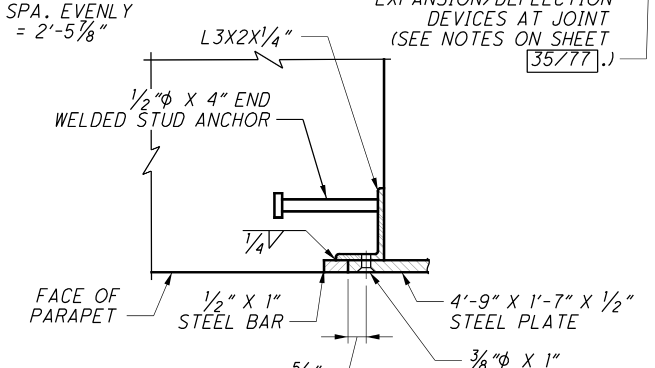
2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE SHEET 39/77 FOR TYPICAL ELEVATION VIEWS FOR 15'-0" AND 7'-6" DEFLECTION JOINTS

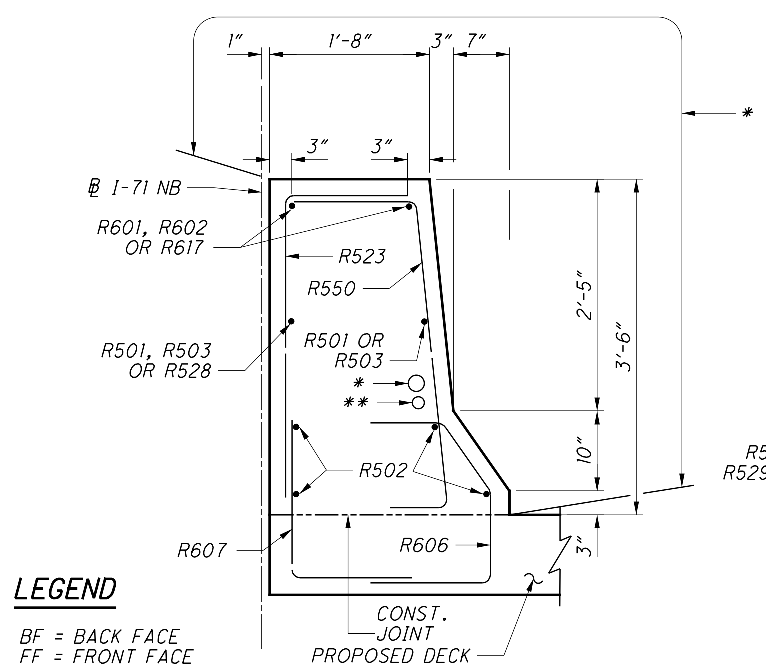
4) SEE SHEET 39/77 FOR TYPICAL RAIL SECTION FOR LIGHT POLES.

4) ALL COSTS ASSOCIATED WITH FURNISHING AND INSTALLING THE STEEL PLATES AND ANCHORAGE ASSEMBLIES SHALL BE INCLUDED FOR PAYMENT UNDER ITEM 517 RAILING, MISC.: STEEL PLATES IN PARAPETS AT 6TH STREET OVERPASS.

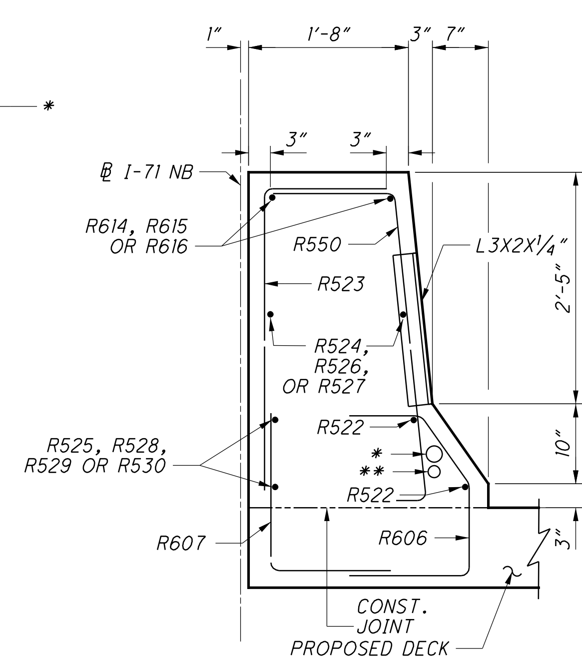
5) APPLY A BOND BREAKER TO THE 3#8" BOLT THREADS AND FULLY THREAD THE BOLTS INTO THE SUPPORT ANGLE BEFORE CONCRETE PLACEMENT.



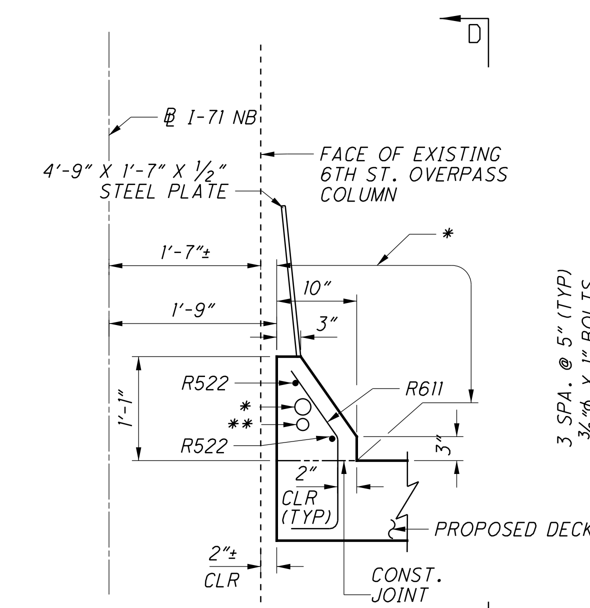
LEFT SIDE OF OPENING SHOWN RIGHT HAND SIMILAR

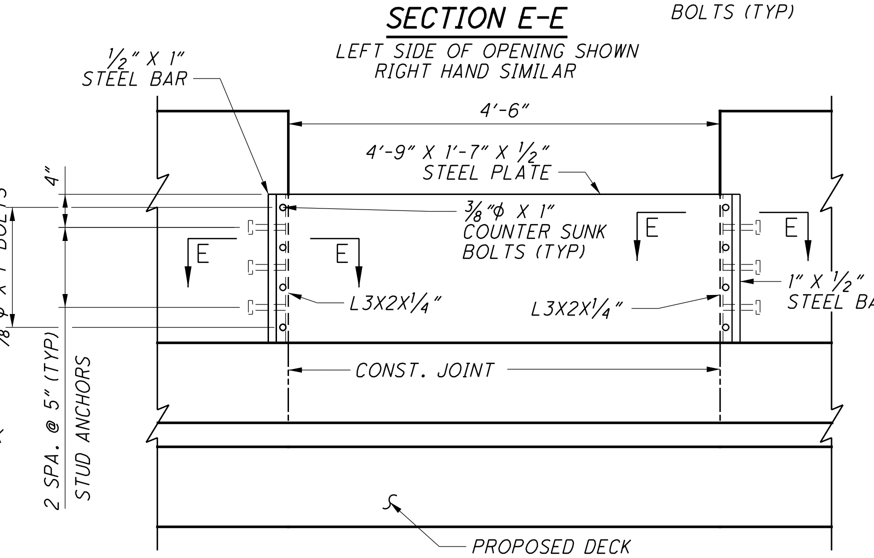


SEE SHEET 39/77 FOR TYPICAL SECTION AT LIGHT POLES



* LIMITS OF SEALING CONCRETE SURFACES WITH EPOXY-URETHANE





LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE
* 2" CONDUIT
** 1½" CONDUIT

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

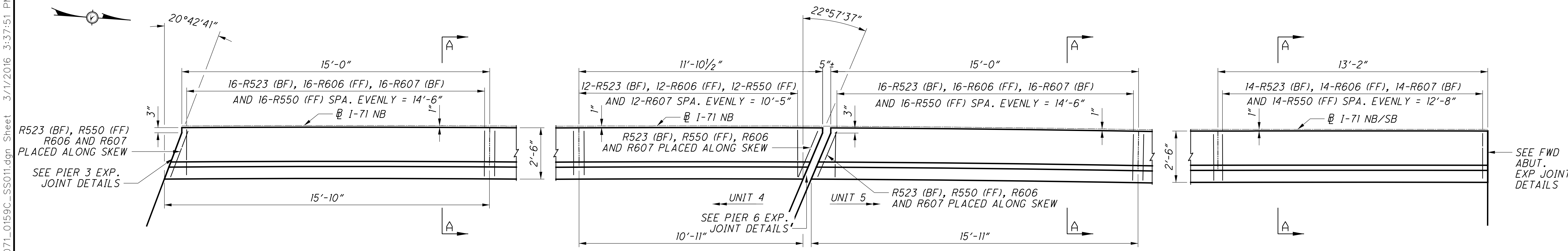
LEFT PARAPET DETAILS - UNIT 3

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

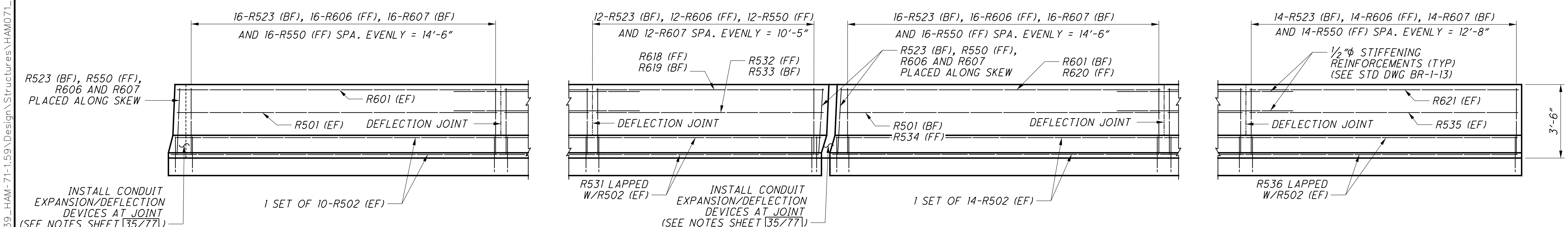
HAM-71-1.59

PID No. 101939



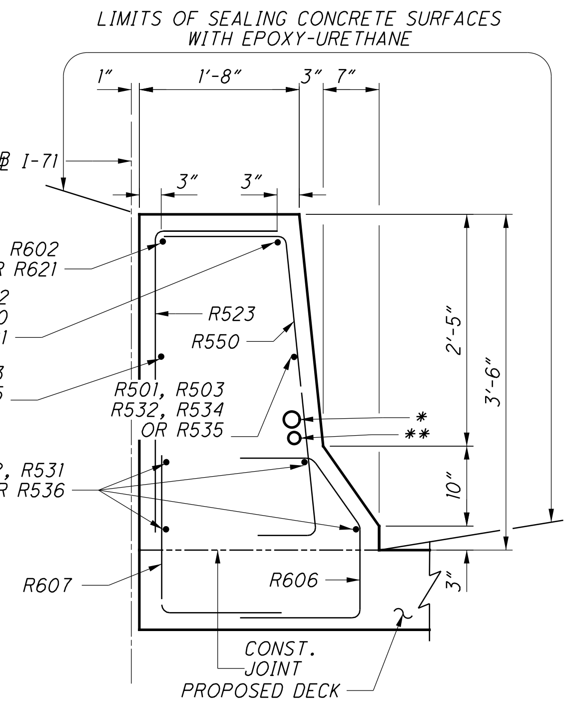
PLAN

NOTE: CONDUIT EXPANSION DEVICES ARE TO BE INTALLED AT INTERMEDIATE JOINTS

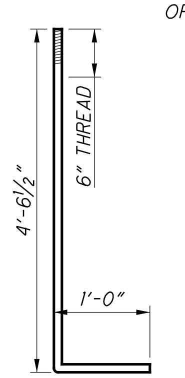


ELEVATION

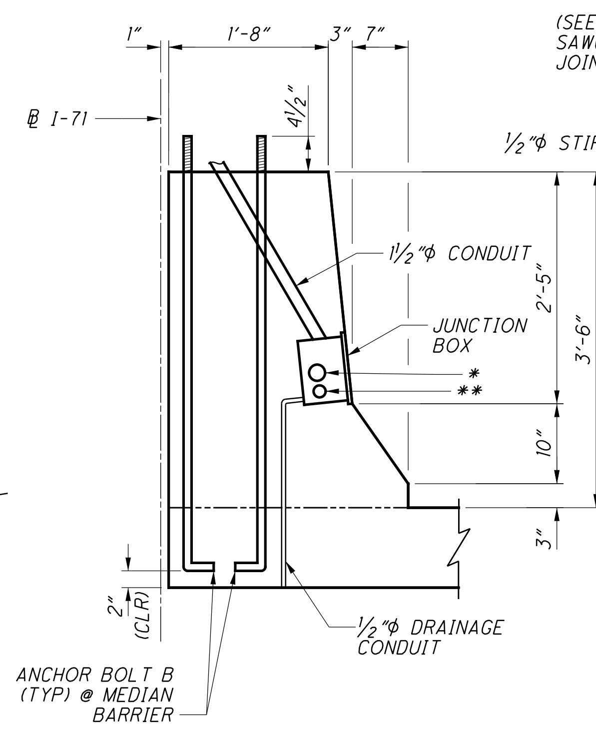
(SEE SHEET 36/77 FOR TYPICAL SAWCUT DETAIL FOR DEFLECTION JOINTS AT MEDIAN BARRIERS)



SECTION A-A

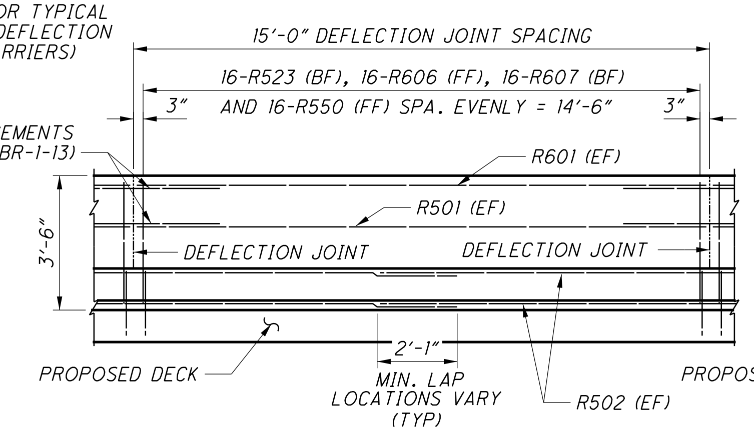


ANCHOR 'B'



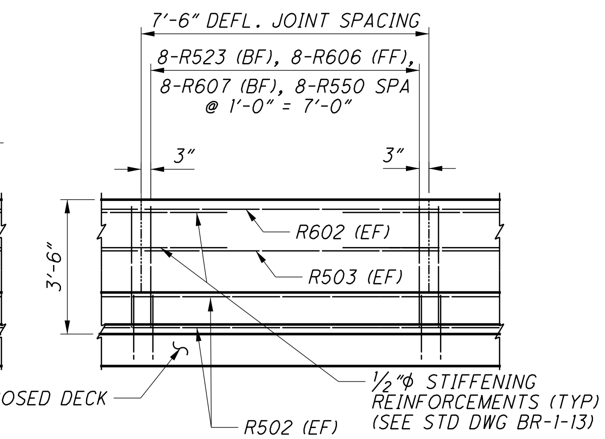
BARRIER DETAILS @ LIGHT POLES

SEE SHEET 34/77 FOR LOCATIONS



ELEVATION

TYPICAL ELEVATION
15'-0" SPACED DEFLECTION JOINTS



ELEVATION

TYPICAL ELEVATION
7'-6" SPACED DEFLECTION JOINTS

NOTES:

1) SEE SHEET 34/77 FOR GENERAL PLAN VIEW OF RAILING.

2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL RAILING DETAILS AND NOTES.

4) SEE SHEET 59-63/77 FOR EXPANSION JOINT AND RETAINER PLATE DETAILS.

5) SEE LIGHTING PLANS FOR ADDITIONAL DETAILS. REFER TO STD. DWGS HL-20.13 FOR ANCHOR BOLT PLACEMENT AND HL-50.21 FOR STRUCTURE GROUNDING.

6) SEE SHEET 34/77 FOR LIGHT POLE LOCATIONS.

7) SEE LIGHTING PLANS FOR ANCHOR BOLT NOTES AND PAYMENT.

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE
* 2" CONDUIT
** 1½" CONDUIT

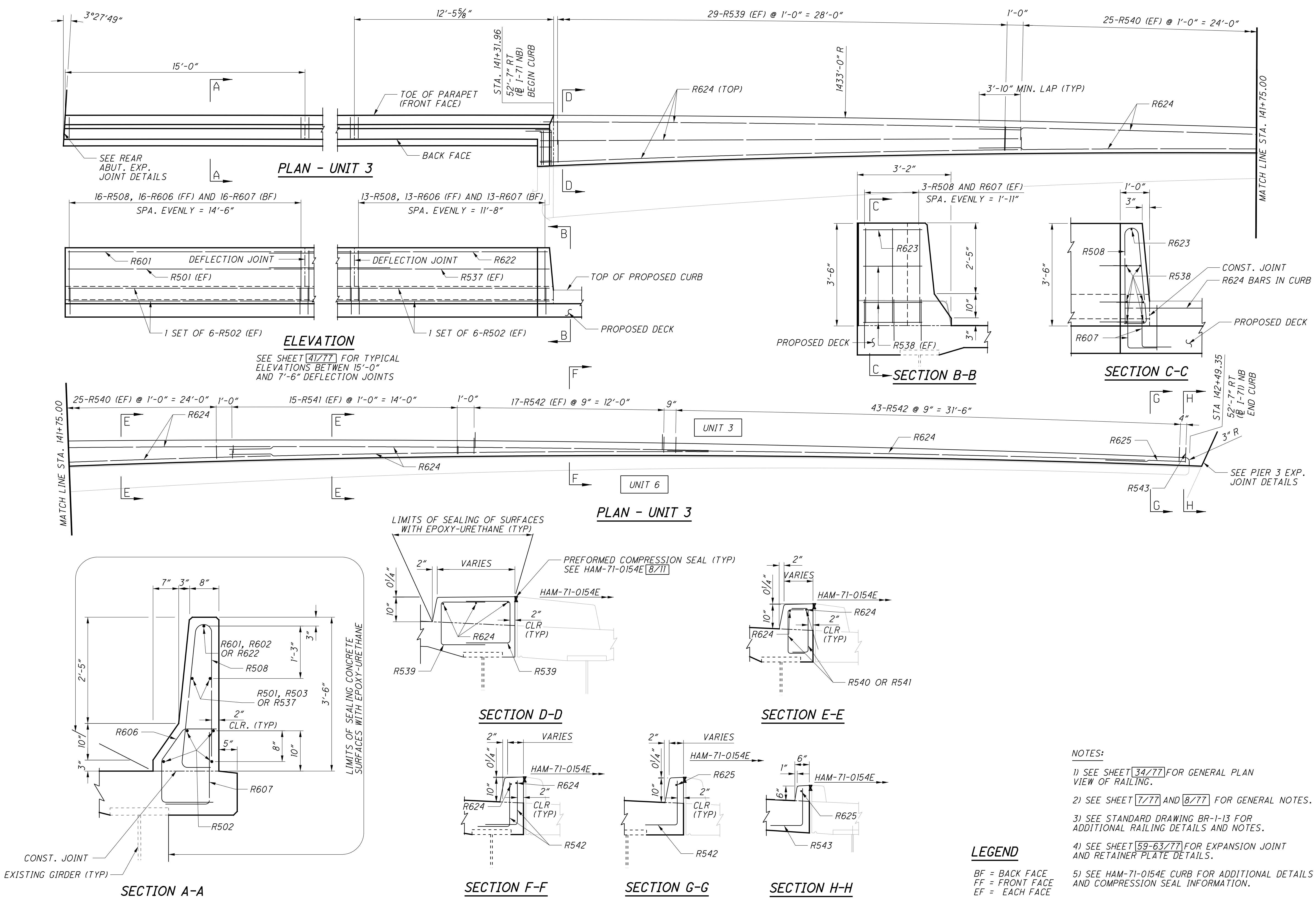
DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED BJF | CHECKED CEJ | DRAWN SDW | REVISED | REVIEWED MLJ | DATE 02/26/16 | STRUCTURE FILE NUMBER 3106608

LEFT PARAPET DETAILS - UNITS 4 AND 5

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



NOTES:

1) SEE SHEET 34/77 FOR GENERAL PLAN VIEW OF RAILING.

2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL RAILING DETAILS AND NOTES.

4) SEE SHEET 59-63/77 FOR EXPANSION JOINT AND RETAINER PLATE DETAILS.

5) SEE HAM-71-0154E CURB FOR ADDITIONAL DETAILS AND COMPRESSION SEAL INFORMATION.

LEGEND

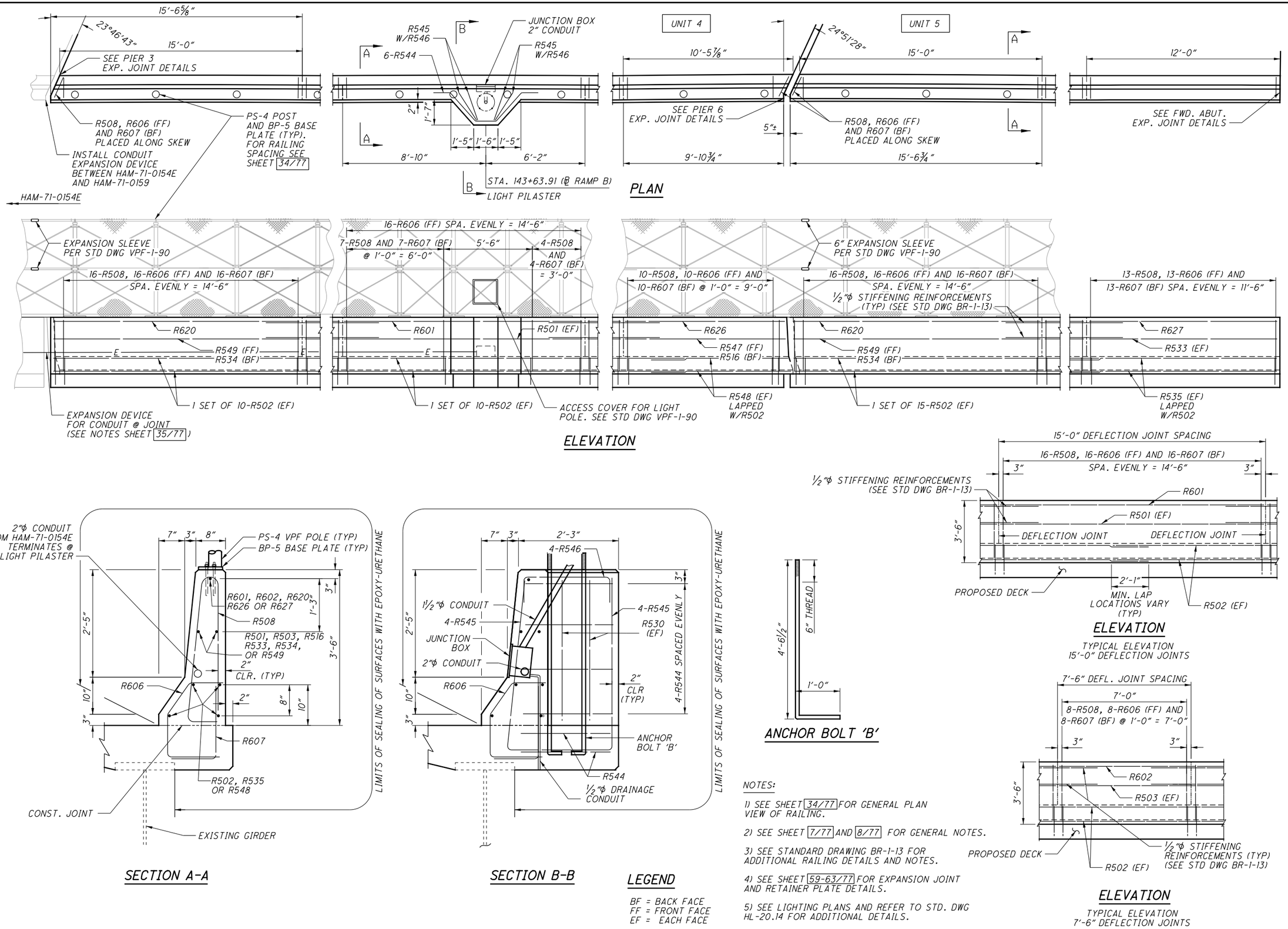
BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE

RIGHT PARAPET DETAILS - UNIT 3
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

HAM-71-1.59
PID No. 101939



NOTES:

1) SEE SHEET 34/77 FOR GENERAL PLAN VIEW OF RAILING.

2) SEE SHEET 7/77 AND 8/77 FOR GENERAL NOTES.

3) SEE STANDARD DRAWING BR-1-13 FOR ADDITIONAL RAILING DETAILS AND NOTES.

4) SEE SHEET 59-63/77 FOR EXPANSION JOINT AND RETAINER PLATE DETAILS.

5) SEE LIGHTING PLANS AND REFER TO STD. DWG HL-20.14 FOR ADDITIONAL DETAILS.

LEGEND

BF = BACK FACE
FF = FRONT FACE
EF = EACH FACE

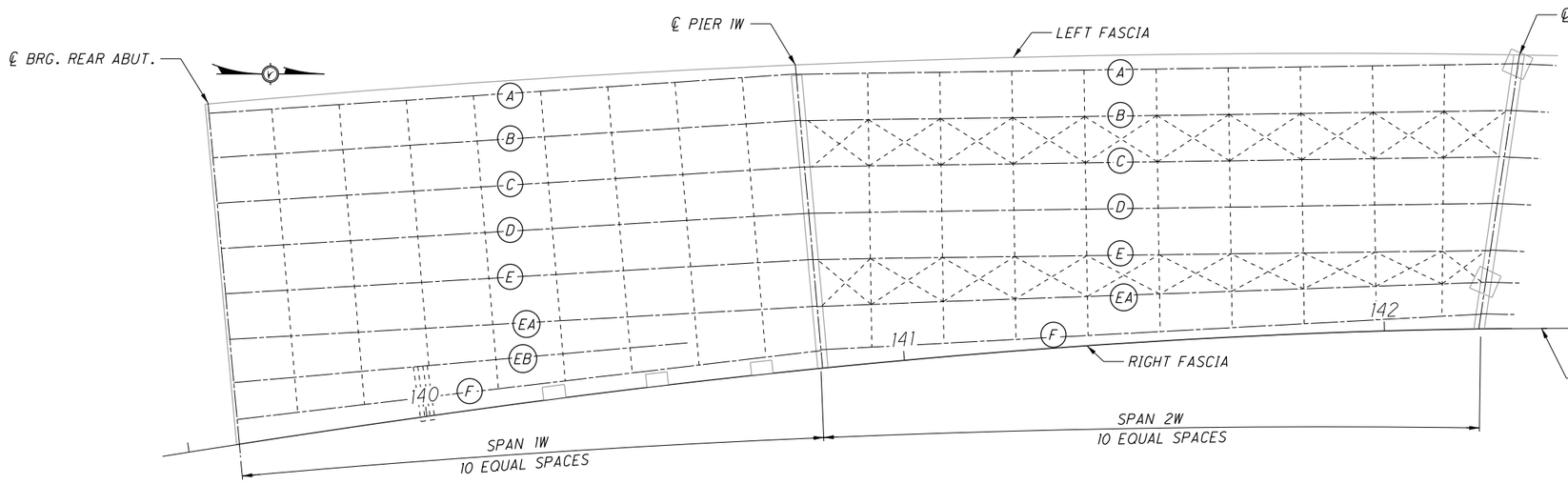
DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH. 45242
CINCINNATI • AARON METELLUS ASSOCIATES • CLEVELAND

DESIGNED	DRAWN	REVIEWED	DATE
BJF	SDW	MLJ	02/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
CEJ		3106608	

RIGHT PARAPET DETAILS - UNITS 4 AND 5

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SCHEMATIC

NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

4) SEE SHEET 52/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTIONS.

	LOCATION	℄ BRG. REAR ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
GIRDER A	STATION	139+64.88	139+76.80	139+88.72	140+00.65	140+12.58	140+24.39	140+36.20	140+48.02	140+59.84	140+71.68	140+83.52	140+98.01	141+12.52	141+26.98	141+41.45	141+55.94	141+70.43	141+84.94	141+99.36	142+13.77
	OFFSET	-68.98 L	-67.96 L	-66.98 L	-66.05 L	-65.18 L	-64.36 L	-63.62 L	-62.95 L	-62.36 L	-61.84 L	-61.40 L	-60.18 L	-59.07 L	-58.09 L	-57.23 L	-56.51 L	-55.92 L	-55.46 L	-55.14 L	-54.99 L
	FINAL DECK ELEV.	538.00	538.56	539.12	539.68	540.24	540.81	541.38	541.95	542.52	543.10	543.68	544.36	545.04	545.74	546.44	547.15	547.88	548.67	549.48	550.29
	TOP OF HAUNCH ELEV.	537.25	537.83	538.41	538.98	539.55	540.11	540.67	541.22	541.78	542.34	542.92	543.61	544.32	545.05	545.77	546.49	547.22	548.00	548.78	549.56
GIRDER B	STATION	139+64.31	139+76.26	139+88.21	140+00.18	140+12.15	140+24.01	140+35.88	140+47.76	140+59.64	140+71.53	140+83.43	140+97.79	141+12.17	141+26.50	141+40.84	141+55.19	141+69.54	141+83.90	141+98.20	142+12.47
	OFFSET	-59.57 L	-58.52 L	-57.51 L	-56.56 L	-55.65 L	-54.81 L	-54.04 L	-53.35 L	-52.73 L	-52.19 L	-51.72 L	-50.52 L	-49.42 L	-48.45 L	-47.60 L	-46.88 L	-46.29 L	-45.83 L	-45.51 L	-45.34 L
	FINAL DECK ELEV.	537.65	538.21	538.77	539.33	539.90	540.47	541.04	541.61	542.19	542.76	543.34	544.01	544.69	545.38	546.07	546.78	547.49	548.26	549.04	549.83
	TOP OF HAUNCH ELEV.	536.90	537.49	538.07	538.65	539.22	539.79	540.35	540.90	541.46	542.02	542.59	543.28	543.98	544.70	545.41	546.12	546.84	547.59	548.35	549.11
GIRDER C	STATION	139+63.73	139+75.72	139+87.71	139+99.71	140+11.71	140+23.64	140+35.56	140+47.49	140+59.44	140+71.39	140+83.34	140+97.57	141+11.81	141+26.01	141+40.22	141+54.43	141+68.64	141+82.86	141+97.02	142+11.15
	OFFSET	-50.16 L	-49.08 L	-48.05 L	-47.07 L	-46.13 L	-45.26 L	-44.47 L	-43.75 L	-43.10 L	-42.53 L	-42.04 L	-40.85 L	-39.77 L	-38.80 L	-37.96 L	-37.25 L	-36.66 L	-36.20 L	-35.87 L	-35.70 L
	FINAL DECK ELEV.	537.30	537.86	538.43	538.99	539.56	540.13	540.70	541.27	541.85	542.42	543.00	543.67	544.34	545.02	545.71	546.40	547.11	547.85	548.61	549.37
	TOP OF HAUNCH ELEV.	536.55	537.14	537.73	538.31	538.89	539.46	540.02	540.57	541.13	541.69	542.27	542.95	543.64	544.34	545.05	545.75	546.45	547.19	547.92	548.66
GIRDER D	STATION	139+63.15	139+75.17	139+87.20	139+99.23	140+11.28	140+23.26	140+35.24	140+47.23	140+59.23	140+71.24	140+83.25	140+97.35	141+11.45	141+25.52	141+39.59	141+53.66	141+67.73	141+81.80	141+95.82	142+09.81
	OFFSET	-40.74 L	-39.64 L	-38.58 L	-37.57 L	-36.61 L	-35.71 L	-34.89 L	-34.14 L	-33.47 L	-32.88 L	-32.36 L	-31.19 L	-30.12 L	-29.16 L	-28.33 L	-27.62 L	-27.04 L	-26.57 L	-26.24 L	-26.05 L
	FINAL DECK ELEV.	536.95	537.51	538.08	538.64	539.21	539.78	540.36	540.93	541.51	542.09	542.67	543.33	543.99	544.66	545.34	546.03	546.72	547.45	548.18	548.92
	TOP OF HAUNCH ELEV.	536.20	536.80	537.39	537.97	538.55	539.12	539.68	540.24	540.80	541.36	541.94	542.61	543.29	543.98	544.67	545.37	546.06	546.77	547.48	548.20
GIRDER E	STATION	139+62.56	139+74.62	139+86.68	139+98.75	140+10.84	140+22.87	140+34.91	140+46.96	140+59.02	140+71.09	140+83.16	140+97.13	141+11.09	141+25.03	141+38.96	141+52.89	141+66.81	141+80.72	141+94.61	142+08.46
	OFFSET	-31.33 L	-30.20 L	-29.11 L	-28.08 L	-27.09 L	-26.17 L	-25.31 L	-24.54 L	-23.84 L	-23.23 L	-22.68 L	-21.52 L	-20.47 L	-19.52 L	-18.70 L	-18.00 L	-17.41 L	-16.95 L	-16.61 L	-16.41 L
	FINAL DECK ELEV.	536.60	537.17	537.73	538.30	538.87	539.44	540.01	540.59	541.17	541.75	542.33	542.99	543.64	544.31	544.98	545.65	546.34	547.04	547.75	548.46
	TOP OF HAUNCH ELEV.	535.85	536.45	537.04	537.63	538.21	538.78	539.34	539.90	540.46	541.03	541.60	542.26	542.93	543.61	544.29	544.97	545.66	546.35	547.04	547.73
GIRDER EA	STATION	139+61.97	139+74.07	139+86.16	139+98.27	140+10.39	140+22.48	140+34.58	140+46.69	140+58.81	140+70.94	140+83.07	140+96.90	141+10.74	141+24.57	141+38.40	141+52.22	141+66.05	141+79.87	141+93.68	142+07.47
	OFFSET	-21.92 L	-20.74 L	-19.62 L	-18.55 L	-17.52 L	-16.55 L	-15.66 L	-14.85 L	-14.12 L	-13.46 L	-12.88 L	-12.05 L	-11.32 L	-10.70 L	-10.19 L	-9.80 L	-9.53 L	-9.38 L	-9.35 L	-9.45 L
	FINAL DECK ELEV.	536.26	536.82	537.38	537.95	538.52	539.10	539.67	540.25	540.83	541.41	541.99	542.65	543.31	543.98	544.65	545.33	546.02	546.72	547.42	548.13
	TOP OF HAUNCH ELEV.	535.51	536.10	536.70	537.28	537.86	538.44	539.00	539.56	540.12	540.68	541.25	541.91	542.58	543.26	543.94	544.63	545.32	546.01	546.70	547.40
GIRDER EB	STATION	139+61.45	139+73.60	139+85.75	139+97.91	140+10.07	140+22.22	140+34.37	140+46.53	140+57.02											
	OFFSET	-13.58 L	-12.78 L	-12.03 L	-11.34 L	-10.69 L	-10.10 L	-9.59 L	-9.15 L	-8.84 L											
	FINAL DECK ELEV.	535.95	536.53	537.11	537.69	538.28	538.86	539.45	540.05	540.56											
	TOP OF HAUNCH ELEV.	535.20	535.81	536.42	537.03	537.62	538.21	538.79	539.36	539.85											
GIRDER F	STATION	139+60.92	139+73.12	139+85.33	139+97.54	140+09.75	140+21.95	140+34.16	140+46.37	140+58.57	140+70.78	140+82.99	140+96.69	141+10.41	141+24.13	141+37.85	141+51.58	141+65.31	141+79.03	141+92.76	142+06.47
	OFFSET	-5.24 L	-4.82 L	-4.45 L	-4.13 L	-3.86 L	-3.65 L	-3.51 L	-3.45 L	-3.47 L	-3.57 L	-3.75 L	-3.18 L	-2.71 L	-2.34 L	-2.08 L	-1.95 L	-1.92 L	-2.01 L	-2.22 L	-2.56 L
	FINAL DECK ELEV.	535.64	536.23	536.83	537.43	538.03	538.63	539.24	539.84	540.45	541.06	541.67	542.33	543.00	543.67	544.34	545.03	545.72	546.41	547.10	547.81
	TOP OF HAUNCH ELEV.	534.89	535.52	536.15	536.77	537.39	537.99	538.58	539.16	539.75	540.33	540.92	541.57	542.24	542.92	543.61	544.30	544.99	545.68	546.37	547.06

DESIGN AGENCY
PALMER ENGINEERING
191 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG • LOUISVILLE

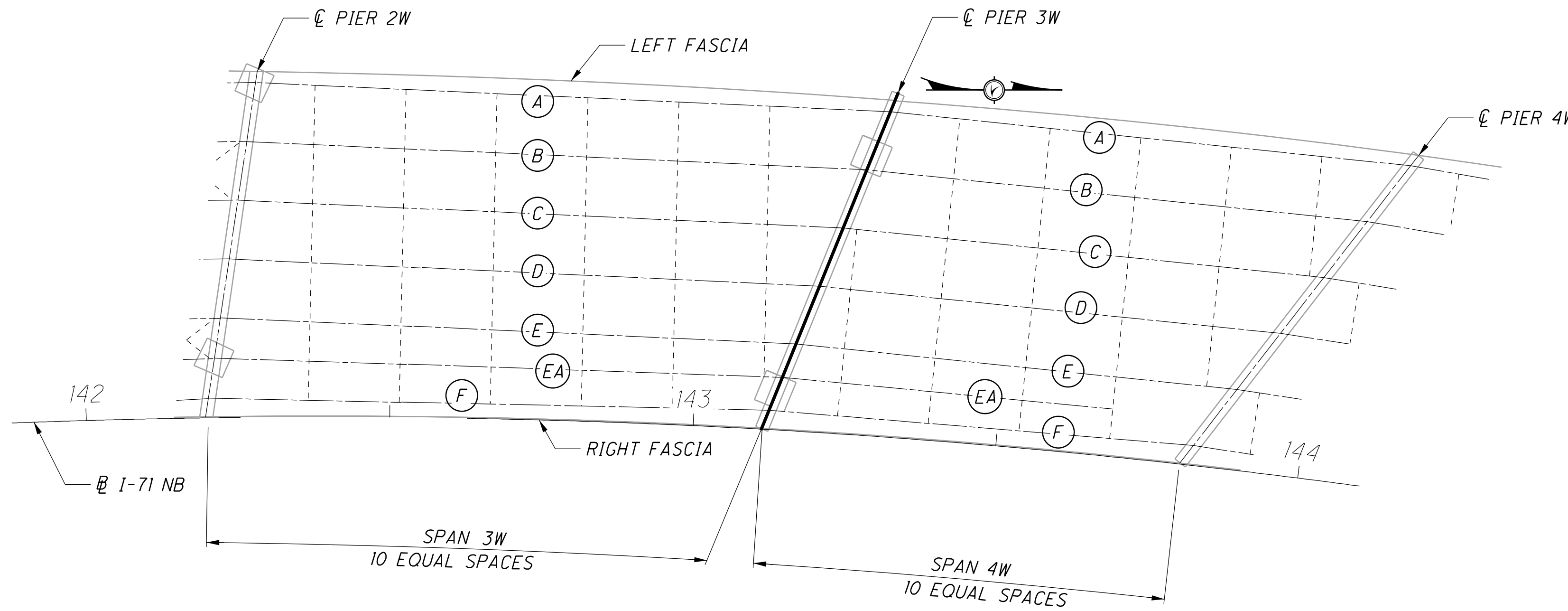
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - SOUTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

42/77

141/176



DECK SCHEMATIC

NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

4) SEE SHEET 52/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTIONS.

	LOCATION	℄ PIER 2W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 3W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
GIRDER A	STATION	142+28.18	142+38.25	142+48.33	142+58.42	142+68.49	142+78.57	142+88.64	142+98.72	143+08.79	143+18.87	143+28.94	143+37.23	143+45.51	143+53.80	143+62.09	143+70.38	143+78.68	143+86.97	143+95.26	144+03.54
	OFFSET	-55.00 L	-54.48 L	-54.04 L	-53.68 L	-53.40 L	-53.20 L	-53.09 L	-53.06 L	-53.11 L	-53.25 L	-53.46 L	-53.20 L	-52.99 L	-52.83 L	-52.73 L	-52.69 L	-52.70 L	-52.77 L	-52.90 L	-53.08 L
	FINAL DECK ELEV.	551.11	551.65	552.18	552.70	553.21	553.72	554.21	554.70	555.19	555.66	556.13	556.48	556.83	557.18	557.52	557.85	558.18	558.51	558.83	559.15
	TOP OF HAUNCH ELEV.	550.36	550.90	551.43	551.96	552.48	552.99	553.49	553.97	554.45	554.92	555.37	555.73	556.07	556.42	556.76	557.09	557.42	557.74	558.06	558.39
GIRDER B	STATION	142+26.74	142+36.65	142+46.56	142+56.48	142+66.40	142+76.30	142+86.21	142+96.12	143+06.02	143+15.92	143+25.82	143+33.86	143+41.89	143+49.93	143+57.97	143+66.01	143+74.05	143+82.08	143+90.11	143+98.14
	OFFSET	-45.33 L	-44.82 L	-44.37 L	-44.01 L	-43.72 L	-43.51 L	-43.38 L	-43.33 L	-43.36 L	-43.47 L	-43.66 L	-43.38 L	-43.15 L	-42.98 L	-42.86 L	-42.79 L	-42.77 L	-42.81 L	-42.90 L	-43.04 L
	FINAL DECK ELEV.	550.63	551.15	551.66	552.16	552.65	553.14	553.62	554.09	554.56	555.02	555.47	555.80	556.14	556.46	556.79	557.11	557.42	557.73	558.03	558.34
	TOP OF HAUNCH ELEV.	549.89	550.41	550.92	551.43	551.93	552.42	552.90	553.37	553.83	554.28	554.72	555.05	555.39	555.71	556.04	556.35	556.67	556.97	557.28	557.59
GIRDER C	STATION	142+25.28	142+35.02	142+44.77	142+54.52	142+64.27	142+74.01	142+83.75	142+93.48	143+03.21	143+12.94	143+22.65	143+30.44	143+38.22	143+46.01	143+53.79	143+61.57	143+69.35	143+77.12	143+84.89	143+92.66
	OFFSET	-35.67 L	-35.15 L	-34.71 L	-34.34 L	-34.04 L	-33.82 L	-33.67 L	-33.61 L	-33.61 L	-33.70 L	-33.86 L	-33.57 L	-33.33 L	-33.14 L	-33.00 L	-32.90 L	-32.86 L	-32.86 L	-32.92 L	-33.02 L
	FINAL DECK ELEV.	550.14	550.65	551.14	551.62	552.10	552.57	553.03	553.49	553.94	554.38	554.81	555.13	555.45	555.76	556.06	556.37	556.66	556.96	557.25	557.54
	TOP OF HAUNCH ELEV.	549.41	549.91	550.41	550.90	551.38	551.86	552.32	552.77	553.21	553.65	554.07	554.39	554.70	555.01	555.32	555.62	555.92	556.21	556.50	556.79
GIRDER D	STATION	142+23.80	142+33.38	142+42.96	142+52.54	142+62.11	142+71.68	142+81.25	142+90.80	143+00.36	143+09.90	143+19.44	143+26.97	143+34.50	143+42.02	143+49.54	143+57.06	143+64.57	143+72.08	143+79.59	143+87.08
	OFFSET	-26.01 L	-25.50 L	-25.05 L	-24.67 L	-24.37 L	-24.14 L	-23.97 L	-23.89 L	-23.87 L	-23.93 L	-24.06 L	-23.77 L	-23.52 L	-23.31 L	-23.15 L	-23.03 L	-22.96 L	-22.94 L	-22.96 L	-23.02 L
	FINAL DECK ELEV.	549.66	550.15	550.62	551.09	551.55	552.00	552.45	552.88	553.32	553.74	554.16	554.46	554.76	555.05	555.34	555.63	555.91	556.19	556.47	556.74
	TOP OF HAUNCH ELEV.	548.93	549.41	549.89	550.36	550.83	551.28	551.73	552.17	552.59	553.01	553.42	553.72	554.02	554.31	554.60	554.88	555.16	555.44	555.72	555.99
GIRDER E	STATION	142+22.29	142+31.70	142+41.11	142+50.52	142+59.92	142+69.32	142+78.71	142+88.09	142+97.46	143+06.82	143+16.18	143+23.45	143+30.71	143+37.97	143+45.23	143+52.48	143+59.73	143+66.97	143+74.20	143+81.43
	OFFSET	-16.35 L	-15.84 L	-15.39 L	-15.01 L	-14.70 L	-14.45 L	-14.28 L	-14.18 L	-14.14 L	-14.18 L	-14.28 L	-13.98 L	-13.71 L	-13.49 L	-13.32 L	-13.18 L	-13.09 L	-13.03 L	-13.02 L	-13.05 L
	FINAL DECK ELEV.	549.18	549.65	550.11	550.56	551.00	551.43	551.86	552.28	552.70	553.11	553.51	553.80	554.08	554.36	554.63	554.90	555.17	555.43	555.69	555.95
	TOP OF HAUNCH ELEV.	548.44	548.91	549.37	549.82	550.27	550.71	551.14	551.56	551.97	552.37	552.77	553.05	553.33	553.61	553.88	554.15	554.41	554.68	554.94	555.20
GIRDER EA	STATION	142+21.24	142+30.56	142+39.87	142+49.19	142+58.50	142+67.81	142+77.12	142+86.42	142+95.72	143+05.01	143+14.29	143+21.44	143+28.58	143+35.73	143+42.87	143+50.01	143+57.14	143+63.86		
	OFFSET	-9.70 L	-9.30 L	-8.97 L	-8.70 L	-8.50 L	-8.36 L	-8.29 L	-8.29 L	-8.36 L	-8.50 L	-8.70 L	-8.46 L	-8.27 L	-8.11 L	-7.99 L	-7.92 L	-7.88 L	-7.89 L		
	FINAL DECK ELEV.	548.85	549.31	549.77	550.21	550.65	551.08	551.50	551.92	552.34	552.74	553.14	553.42	553.70	553.98	554.25	554.52	554.78	555.03		
	TOP OF HAUNCH ELEV.	548.11	548.56	549.02	549.47	549.91	550.34	550.77	551.19	551.60	552.00	552.40	552.67	552.95	553.22	553.49	553.76	554.02	554.27		
GIRDER F	STATION	142+20.18	142+29.40	142+38.62	142+47.84	142+57.06	142+66.29	142+75.51	142+84.74	142+93.96	143+03.17	143+12.39	143+19.41	143+26.43	143+33.45	143+40.48	143+47.50	143+54.53	143+61.55	143+68.58	143+75.60
	OFFSET	-3.04 L	-2.76 L	-2.54 L	-2.38 L	-2.29 L	-2.26 L	-2.30 L	-2.41 L	-2.58 L	-2.82 L	-3.12 L	-2.95 L	-2.82 L	-2.72 L	-2.67 L	-2.65 L	-2.67 L	-2.73 L	-2.83 L	-2.97 L
	FINAL DECK ELEV.	548.53	548.98	549.43	549.86	550.30	550.72	551.15	551.56	551.97	552.38	552.78	553.05	553.33	553.60	553.86	554.13	554.39	554.65	554.90	555.16
	TOP OF HAUNCH ELEV.	547.77	548.22	548.67	549.11	549.55	549.98	550.41	550.82	551.23	551.63	552.02	552.30	552.57	552.84	553.10	553.37	553.63	553.88	554.14	554.40

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - SOUTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

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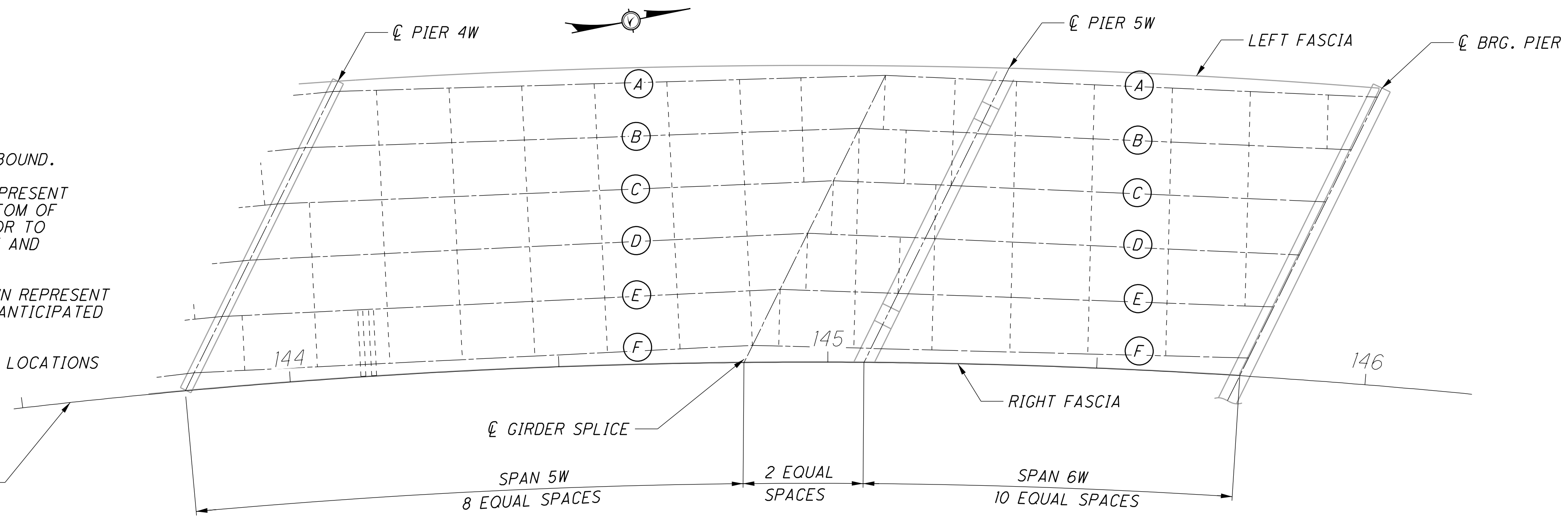
NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

4) SEE SHEET 53/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTIONS.



DECK SCHEMATIC

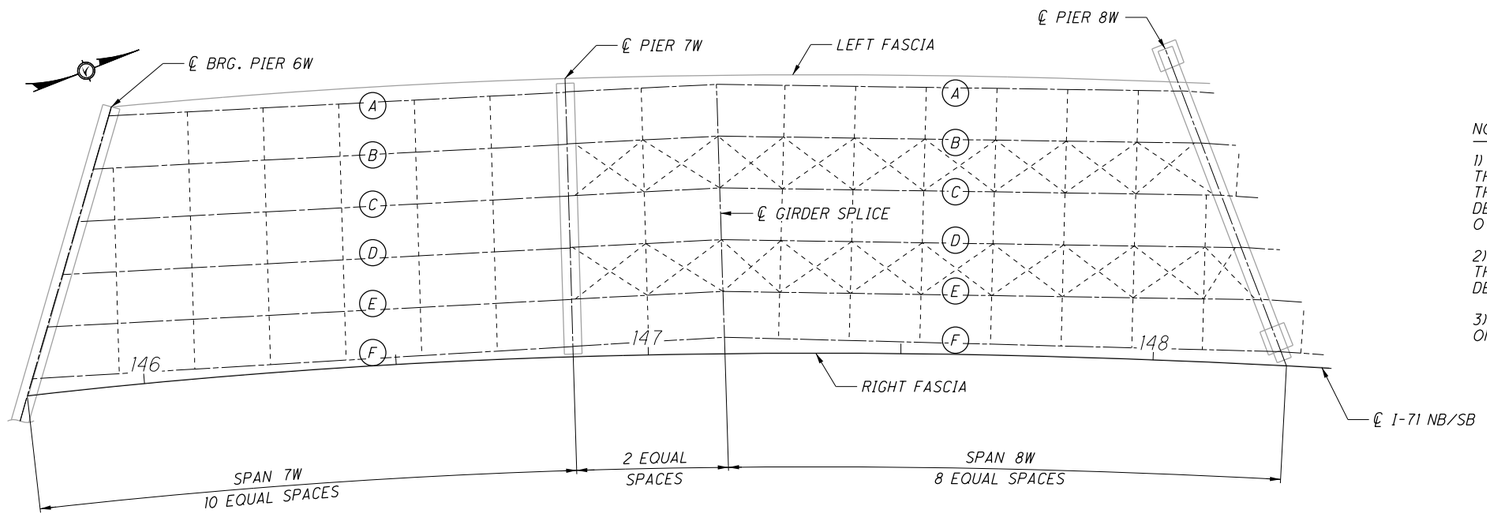
GIRDER	LOCATION	C/L PIER 4W	1/8	2/8	3/8	4/8	5/8	6/8	7/8	FIELD SPLICE	1/2	C/L PIER 5W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C/L BRG. PIER 6W
GIRDER A	STATION	144+11.83	144+24.16	144+36.49	144+48.82	144+61.16	144+73.50	144+85.83	144+98.17	145+10.49	145+20.96	145+31.44	145+38.07	145+44.70	145+51.33	145+57.97	145+64.60	145+71.23	145+77.86	145+84.49	145+91.12	145+97.75
	OFFSET	-53.32 L	-52.90 L	-52.60 L	-52.43 L	-52.38 L	-52.45 L	-52.65 L	-52.97 L	-53.42 L	-53.09 L	-52.85 L	-52.75 L	-52.68 L	-52.64 L	-52.65 L	-52.69 L	-52.76 L	-52.87 L	-53.02 L	-53.20 L	-53.42 L
	FINAL DECK ELEV.	559.46	559.83	560.18	560.52	560.85	561.17	561.49	561.80	562.10	562.30	562.49	562.61	562.73	562.85	562.96	563.07	563.18	563.29	563.40	563.50	563.60
	TOP OF HAUNCH ELEV.	558.71	559.10	559.47	559.83	560.18	560.51	560.82	561.12	561.39	561.57	561.74	561.86	561.98	562.09	562.21	562.32	562.44	562.55	562.65	562.75	562.85
GIRDER B	STATION	144+06.17	144+18.63	144+31.10	144+43.58	144+56.06	144+68.54	144+81.01	144+93.48	145+05.94	145+16.48	145+27.04	145+33.72	145+40.40	145+47.08	145+53.77	145+60.45	145+67.13	145+73.81	145+80.49	145+87.17	145+93.85
	OFFSET	-43.23 L	-42.84 L	-42.57 L	-42.43 L	-42.42 L	-42.53 L	-42.77 L	-43.14 L	-43.63 L	-43.26 L	-42.98 L	-42.85 L	-42.76 L	-42.70 L	-42.68 L	-42.70 L	-42.75 L	-42.84 L	-42.96 L	-43.12 L	-43.32 L
	FINAL DECK ELEV.	558.64	559.04	559.40	559.75	560.09	560.42	560.75	561.07	561.39	561.59	561.79	561.91	562.03	562.15	562.27	562.38	562.49	562.60	562.71	562.82	562.92
	TOP OF HAUNCH ELEV.	557.89	558.31	558.70	559.07	559.43	559.77	560.09	560.40	560.69	560.87	561.04	561.16	561.28	561.40	561.52	561.64	561.75	561.86	561.97	562.07	562.17
GIRDER C	STATION	144+00.42	144+13.02	144+25.64	144+38.26	144+50.88	144+63.50	144+76.11	144+88.72	145+01.31	145+11.94	145+22.57	145+29.30	145+36.04	145+42.77	145+49.50	145+56.24	145+62.97	145+69.70	145+76.44	145+83.17	145+89.90
	OFFSET	-33.17 L	-32.81 L	-32.57 L	-32.46 L	-32.48 L	-32.63 L	-32.91 L	-33.32 L	-33.85 L	-33.44 L	-33.13 L	-32.97 L	-32.86 L	-32.78 L	-32.73 L	-32.73 L	-32.76 L	-32.82 L	-32.92 L	-33.06 L	-33.24 L
	FINAL DECK ELEV.	557.82	558.23	558.61	558.97	559.33	559.67	560.01	560.35	560.67	560.88	561.08	561.21	561.33	561.45	561.57	561.69	561.80	561.91	562.02	562.13	562.24
	TOP OF HAUNCH ELEV.	557.08	557.51	557.92	558.30	558.68	559.03	559.36	559.67	559.97	560.15	560.33	560.45	560.57	560.70	560.82	560.94	561.06	561.17	561.28	561.39	561.49
GIRDER D	STATION	143+94.58	144+07.33	144+20.09	144+32.85	144+45.62	144+58.38	144+71.14	144+83.88	144+96.62	145+07.33	145+18.04	145+24.82	145+31.61	145+38.39	145+45.17	145+51.96	145+58.75	145+65.53	145+72.32	145+79.10	145+85.88
	OFFSET	-23.13 L	-22.80 L	-22.59 L	-22.52 L	-22.57 L	-22.76 L	-23.07 L	-23.52 L	-24.09 L	-23.64 L	-23.29 L	-23.11 L	-22.97 L	-22.87 L	-22.80 L	-22.77 L	-22.77 L	-22.82 L	-22.90 L	-23.01 L	-23.17 L
	FINAL DECK ELEV.	557.01	557.42	557.82	558.19	558.56	558.92	559.27	559.62	559.96	560.17	560.37	560.50	560.63	560.75	560.87	560.99	561.11	561.22	561.33	561.44	561.55
	TOP OF HAUNCH ELEV.	556.27	556.70	557.13	557.53	557.91	558.28	558.62	558.95	559.26	559.44	559.62	559.75	559.87	560.00	560.12	560.24	560.36	560.47	560.59	560.70	560.80
GIRDER E	STATION	143+88.64	144+01.50	144+14.36	144+27.23	144+40.09	144+52.96	144+65.82	144+78.68	144+91.52	145+02.35	145+13.19	145+20.05	145+26.91	145+33.77	145+40.63	145+47.50	145+54.36	145+61.22	145+68.09	145+74.95	145+81.80
	OFFSET	-13.13 L	-12.73 L	-12.47 L	-12.34 L	-12.34 L	-12.47 L	-12.74 L	-13.13 L	-13.66 L	-13.25 L	-12.94 L	-12.79 L	-12.67 L	-12.59 L	-12.56 L	-12.55 L	-12.59 L	-12.66 L	-12.77 L	-12.92 L	-13.11 L
	FINAL DECK ELEV.	556.20	556.61	557.01	557.39	557.77	558.13	558.49	558.84	559.18	559.41	559.62	559.76	559.89	560.02	560.15	560.27	560.40	560.52	560.64	560.75	560.87
	TOP OF HAUNCH ELEV.	555.46	555.88	556.31	556.72	557.11	557.48	557.84	558.17	558.48	558.68	558.87	559.00	559.13	559.26	559.39	559.52	559.65	559.77	559.89	560.00	560.12
GIRDER F	STATION	143+82.62	143+95.58	144+08.54	144+21.51	144+34.48	144+47.45	144+60.42	144+73.38	144+86.34	144+97.30	145+08.28	145+15.22	145+22.17	145+29.12	145+36.07	145+43.02	145+49.96	145+56.91	145+63.86	145+70.80	145+77.74
	OFFSET	-3.15 L	-2.70 L	-2.38 L	-2.19 L	-2.14 L	-2.22 L	-2.43 L	-2.77 L	-3.25 L	-2.90 L	-2.65 L	-2.54 L	-2.46 L	-2.43 L	-2.43 L	-2.47 L	-2.55 L	-2.67 L	-2.82 L	-3.02 L	-3.25 L
	FINAL DECK ELEV.	555.41	555.81	556.20	556.59	556.97	557.34	557.71	558.06	558.41	558.65	558.88	559.02	559.16	559.29	559.43	559.56	559.69	559.82	559.95	560.07	560.19
	TOP OF HAUNCH ELEV.	554.65	555.07	555.49	555.91	556.30	556.68	557.04	557.39	557.71	557.92	558.13	558.26	558.40	558.54	558.68	558.81	558.94	559.07	559.20	559.32	559.44

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED CEJ | CHECKED JPR | DRAWN CML | REVISED | REVIEWED MLJ | DATE 02/27/16 | STRUCTURE FILE NUMBER 3106608

DECK ELEVATIONS - SOUTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SCHEMATIC

NOTES

1) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

3) SEE SHEET 53/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTIONS.

	LOCATION	℄ BRG. PIER 6W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 7W	1/2	FIELD SPLICE	1/8	2/8	3/8	4/8	5/8	6/8	7/8
GIRDER A	STATION	145+98.94	146+07.57	146+16.20	146+24.84	146+33.49	146+42.14	146+50.79	146+59.44	146+68.10	146+76.75	146+85.40	146+99.86	147+14.38	147+25.51	147+36.63	147+47.76	147+58.89	147+70.02	147+81.20	147+92.37
	OFFSET	-53.41 L	-53.06 L	-52.76 L	-52.53 L	-52.35 L	-52.24 L	-52.18 L	-52.18 L	-52.23 L	-52.35 L	-52.52 L	-52.94 L	-53.50 L	-53.23 L	-53.04 L	-52.93 L	-52.90 L	-52.94 L	-53.06 L	-53.25 L
	FINAL DECK ELEV.	563.62	563.70	563.78	563.84	563.87	563.90	563.94	563.98	564.03	564.07	564.12	564.22	564.31	564.35	564.39	564.44	564.49	564.55	564.60	564.67
	TOP OF HAUNCH ELEV.	562.87	562.96	563.06	563.11	563.15	563.18	563.21	563.24	563.28	563.32	563.37	563.47	563.58	563.64	563.69	563.74	563.79	563.84	563.88	563.93
GIRDER B	STATION	145+95.06	146+04.07	146+13.08	146+22.10	146+31.14	146+40.18	146+49.22	146+58.27	146+67.31	146+76.35	146+85.40	146+99.96	147+14.57	147+26.21	147+37.86	147+49.50	147+61.14	147+72.79	147+84.46	147+96.13
	OFFSET	-43.31 L	-42.92 L	-42.59 L	-42.32 L	-42.12 L	-41.99 L	-41.91 L	-41.90 L	-41.96 L	-42.07 L	-42.25 L	-42.67 L	-43.23 L	-42.96 L	-42.77 L	-42.66 L	-42.64 L	-42.71 L	-42.85 L	-43.06 L
	FINAL DECK ELEV.	562.94	563.03	563.11	563.19	563.23	563.27	563.32	563.37	563.43	563.49	563.55	563.66	563.77	563.82	563.88	563.94	564.01	564.08	564.15	564.23
	TOP OF HAUNCH ELEV.	562.19	562.29	562.39	562.47	562.51	562.56	562.60	562.64	562.69	562.74	562.80	562.92	563.05	563.12	563.20	563.27	563.33	563.39	563.45	563.51
GIRDER C	STATION	145+91.11	146+00.51	146+09.92	146+19.33	146+28.76	146+38.19	146+47.63	146+57.07	146+66.51	146+75.95	146+85.40	147+00.06	147+14.76	147+26.93	147+39.10	147+51.26	147+63.42	147+75.58	147+87.76	147+99.93
	OFFSET	-33.23 L	-32.79 L	-32.42 L	-32.13 L	-31.90 L	-31.74 L	-31.65 L	-31.63 L	-31.68 L	-31.80 L	-31.98 L	-32.40 L	-32.96 L	-32.68 L	-32.49 L	-32.39 L	-32.39 L	-32.47 L	-32.64 L	-32.88 L
	FINAL DECK ELEV.	562.25	562.35	562.44	562.53	562.58	562.64	562.70	562.76	562.83	562.90	562.98	563.10	563.23	563.30	563.37	563.45	563.53	563.62	563.71	563.80
	TOP OF HAUNCH ELEV.	561.50	561.62	561.72	561.82	561.88	561.93	561.98	562.03	562.09	562.15	562.23	562.36	562.51	562.60	562.70	562.79	562.87	562.95	563.02	563.09
GIRDER D	STATION	145+87.11	145+96.90	146+06.70	146+16.52	146+26.34	146+36.17	146+46.01	146+55.86	146+65.70	146+75.55	146+85.40	147+00.17	147+14.96	147+27.66	147+40.35	147+53.04	147+65.72	147+78.41	147+91.09	148+03.77
	OFFSET	-23.15 L	-22.67 L	-22.26 L	-21.93 L	-21.68 L	-21.50 L	-21.39 L	-21.36 L	-21.40 L	-21.52 L	-21.71 L	-22.13 L	-22.69 L	-22.40 L	-22.21 L	-22.13 L	-22.14 L	-22.24 L	-22.43 L	-22.71 L
	FINAL DECK ELEV.	561.57	561.67	561.77	561.86	561.93	562.00	562.07	562.15	562.23	562.32	562.40	562.54	562.69	562.77	562.86	562.96	563.06	563.16	563.27	563.38
	TOP OF HAUNCH ELEV.	560.82	560.94	561.05	561.15	561.23	561.29	561.35	561.42	561.49	561.57	561.65	561.81	561.97	562.09	562.20	562.31	562.41	562.50	562.59	562.68
GIRDER E	STATION	145+83.04	145+93.23	146+03.44	146+13.66	146+23.89	146+34.13	146+44.37	146+54.62	146+64.88	146+75.14	146+85.40	147+00.27	147+15.16	147+28.39	147+41.62	147+54.84	147+68.05	147+81.26	147+94.46	148+07.65
	OFFSET	-13.09 L	-12.56 L	-12.11 L	-11.75 L	-11.46 L	-11.26 L	-11.14 L	-11.09 L	-11.13 L	-11.24 L	-11.44 L	-11.86 L	-12.42 L	-12.13 L	-11.94 L	-11.86 L	-11.89 L	-12.02 L	-12.24 L	-12.55 L
	FINAL DECK ELEV.	560.88	560.99	561.09	561.19	561.28	561.36	561.45	561.53	561.63	561.73	561.83	561.99	562.15	562.25	562.36	562.47	562.59	562.71	562.84	562.97
	TOP OF HAUNCH ELEV.	560.13	560.25	560.37	560.48	560.57	560.65	560.72	560.80	560.89	560.98	561.08	561.25	561.44	561.56	561.69	561.82	561.94	562.05	562.15	562.26
GIRDER F	STATION	145+78.98	145+89.61	146+00.24	146+10.88	146+21.52	146+32.17	146+42.81	146+53.46	146+64.11	146+74.76	146+85.40	147+00.37	147+15.33	147+29.06	147+42.79	147+56.53	147+70.28	147+84.02	147+97.77	148+11.51
	OFFSET	-3.24 L	-2.73 L	-2.32 L	-2.00 L	-1.76 L	-1.61 L	-1.55 L	-1.57 L	-1.67 L	-1.86 L	-2.14 L	-2.67 L	-3.34 L	-2.89 L	-2.56 L	-2.34 L	-2.23 L	-2.24 L	-2.34 L	-2.54 L
	FINAL DECK ELEV.	560.21	560.33	560.44	560.55	560.65	560.75	560.85	560.96	561.07	561.19	561.31	561.49	561.67	561.78	561.90	562.02	562.16	562.29	562.43	562.58
	TOP OF HAUNCH ELEV.	559.46	559.59	559.72	559.84	559.94	560.04	560.13	560.23	560.33	560.44	560.56	560.75	560.96	561.10	561.23	561.37	561.49	561.61	561.73	561.84

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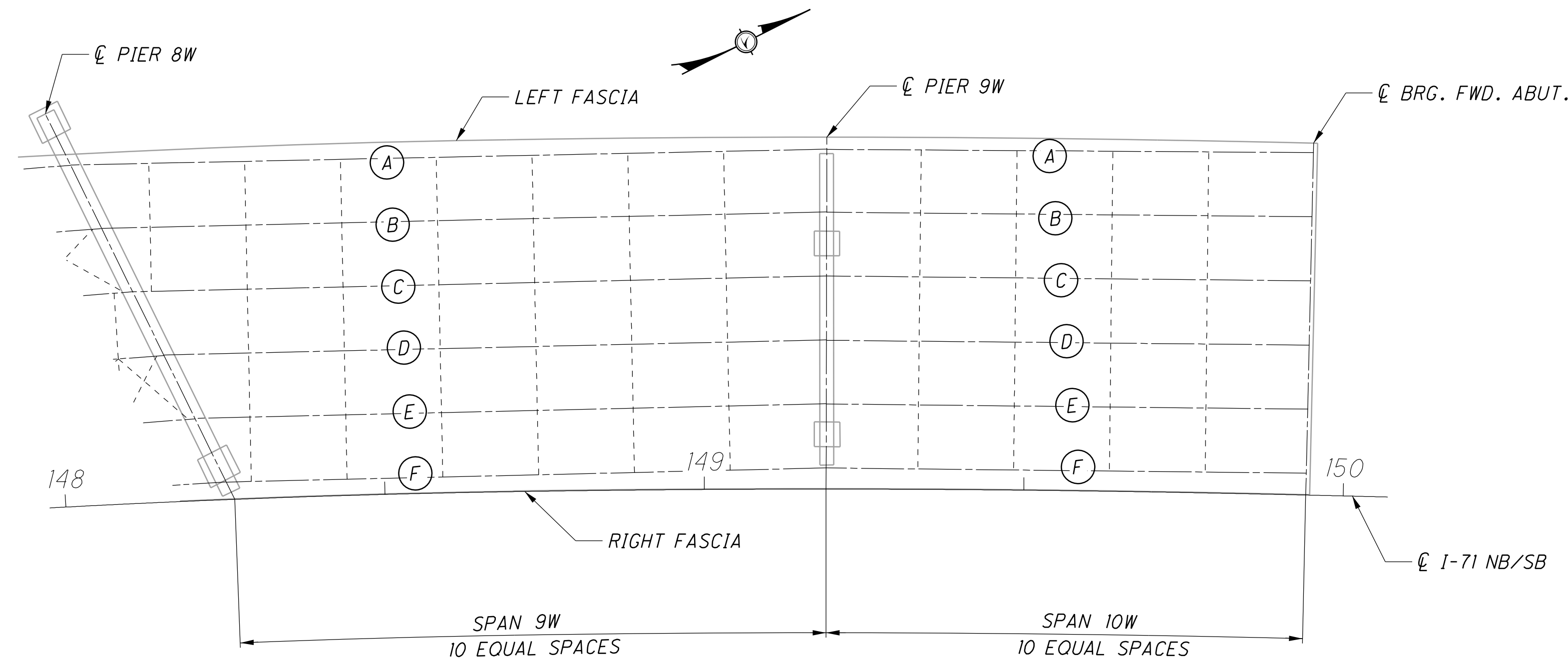
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - SOUTHBOUND I-71

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SCHEMATIC

NOTES

1) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

3) SEE SHEET 54/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTIONS.

	LOCATION	℄ PIER 8W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 9W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. FWD. ABUT.
GIRDER A	STATION	148+03.55	148+15.09	148+26.64	148+38.18	148+49.73	148+61.28	148+72.86	148+84.52	148+96.18	149+07.84	149+19.50	149+26.99	149+34.47	149+41.96	149+49.45	149+56.94	149+64.43	149+71.92	149+79.45	149+86.97	149+94.50
	OFFSET	-53.50 L	-53.20 L	-52.97 L	-52.81 L	-52.73 L	-52.71 L	-52.77 L	-52.88 L	-53.04 L	-53.24 L	-53.49 L	-53.41 L	-53.35 L	-53.30 L	-53.28 L	-53.27 L	-53.28 L	-53.31 L	-53.36 L	-53.42 L	-53.49 L
	FINAL DECK ELEV.	564.73	564.77	564.81	564.86	564.91	564.97	565.03	565.09	565.15	565.21	565.27	565.30	565.34	565.37	565.40	565.44	565.47	565.51	565.55	565.58	565.62
	TOP OF HAUNCH ELEV.	563.99	564.04	564.10	564.17	564.23	564.29	564.35	564.40	564.44	564.49	564.54	564.57	564.60	564.64	564.67	564.71	564.74	564.78	564.81	564.84	564.87
GIRDER B	STATION	148+07.80	148+18.93	148+30.06	148+41.19	148+52.32	148+63.45	148+74.62	148+85.84	148+97.06	149+08.28	149+19.50	149+26.99	149+34.48	149+41.97	149+49.46	149+56.95	149+64.44	149+71.94	149+79.46	149+86.98	149+94.50
	OFFSET	-43.34 L	-43.08 L	-42.88 L	-42.75 L	-42.69 L	-42.69 L	-42.76 L	-42.87 L	-43.02 L	-43.22 L	-43.46 L	-43.38 L	-43.32 L	-43.27 L	-43.25 L	-43.24 L	-43.25 L	-43.28 L	-43.33 L	-43.39 L	-43.46 L
	FINAL DECK ELEV.	564.31	564.36	564.42	564.48	564.54	564.60	564.67	564.74	564.81	564.88	564.95	564.99	565.03	565.07	565.11	565.16	565.20	565.24	565.29	565.33	565.38
	TOP OF HAUNCH ELEV.	563.59	563.64	563.71	563.78	563.85	563.92	563.98	564.04	564.09	564.14	564.20	564.24	564.29	564.33	564.38	564.42	564.47	564.51	564.55	564.59	564.63
GIRDER C	STATION	148+12.09	148+22.80	148+33.51	148+44.22	148+54.93	148+65.65	148+76.40	148+87.18	148+97.95	149+08.73	149+19.50	149+26.99	149+34.48	149+41.98	149+49.47	149+56.96	149+64.45	149+71.95	149+79.47	149+86.98	149+94.50
	OFFSET	-33.20 L	-32.97 L	-32.81 L	-32.70 L	-32.65 L	-32.67 L	-32.74 L	-32.85 L	-33.01 L	-33.20 L	-33.43 L	-33.35 L	-33.28 L	-33.24 L	-33.21 L	-33.21 L	-33.22 L	-33.25 L	-33.30 L	-33.36 L	-33.43 L
	FINAL DECK ELEV.	563.90	563.96	564.03	564.09	564.17	564.24	564.31	564.39	564.47	564.55	564.63	564.68	564.72	564.77	564.82	564.87	564.92	564.98	565.03	565.08	565.13
	TOP OF HAUNCH ELEV.	563.18	563.24	563.32	563.39	563.47	563.55	563.62	563.68	563.74	563.81	563.88	563.92	563.98	564.03	564.09	564.14	564.19	564.24	564.29	564.34	564.38
GIRDER D	STATION	148+16.43	148+26.72	148+37.00	148+47.29	148+57.58	148+67.86	148+78.19	148+88.52	148+98.84	149+09.17	149+19.50	149+26.99	149+34.49	149+41.98	149+49.48	149+56.97	149+64.47	149+71.97	149+79.48	149+86.99	149+94.50
	OFFSET	-23.07 L	-22.87 L	-22.73 L	-22.65 L	-22.62 L	-22.65 L	-22.73 L	-22.84 L	-22.99 L	-23.18 L	-23.40 L	-23.32 L	-23.25 L	-23.21 L	-23.18 L	-23.18 L	-23.19 L	-23.22 L	-23.26 L	-23.32 L	-23.40 L
	FINAL DECK ELEV.	563.50	563.57	563.64	563.72	563.80	563.88	563.96	564.05	564.13	564.22	564.31	564.36	564.42	564.48	564.53	564.59	564.65	564.71	564.77	564.83	564.89
	TOP OF HAUNCH ELEV.	562.77	562.84	562.92	563.01	563.09	563.17	563.25	563.33	563.40	563.47	563.56	563.61	563.67	563.73	563.80	563.86	563.92	563.98	564.03	564.09	564.14
GIRDER E	STATION	148+20.82	148+30.67	148+40.53	148+50.39	148+60.24	148+70.10	148+79.98	148+89.86	148+99.74	149+09.62	149+19.50	149+27.00	149+34.49	149+41.99	149+49.49	149+56.98	149+64.48	149+71.98	149+79.49	149+86.99	149+94.50
	OFFSET	-12.95 L	-12.78 L	-12.67 L	-12.61 L	-12.59 L	-12.63 L	-12.72 L	-12.83 L	-12.97 L	-13.15 L	-13.37 L	-13.28 L	-13.22 L	-13.18 L	-13.15 L	-13.14 L	-13.16 L	-13.19 L	-13.23 L	-13.29 L	-13.37 L
	FINAL DECK ELEV.	563.11	563.19	563.27	563.35	563.44	563.53	563.62	563.71	563.80	563.89	563.99	564.05	564.11	564.18	564.24	564.31	564.38	564.44	564.51	564.58	564.64
	TOP OF HAUNCH ELEV.	562.37	562.44	562.53	562.62	562.71	562.80	562.89	562.97	563.06	563.15	563.24	563.30	563.37	563.44	563.51	563.58	563.65	563.71	563.78	563.84	563.89
GIRDER F	STATION	148+25.25	148+34.67	148+44.09	148+53.52	148+62.94	148+72.37	148+81.80	148+91.22	149+00.65	149+10.08	149+19.50	149+27.00	149+34.50	149+42.00	149+49.50	149+57.00	149+64.50	149+72.00	149+79.50	149+87.00	149+94.50
	OFFSET	-2.84 L	-2.70 L	-2.61 L	-2.57 L	-2.57 L	-2.62 L	-2.70 L	-2.82 L	-2.96 L	-3.13 L	-3.33 L	-3.25 L	-3.19 L	-3.14 L	-3.12 L	-3.11 L	-3.13 L	-3.16 L	-3.20 L	-3.26 L	-3.33 L
	FINAL DECK ELEV.	562.72	562.81	562.90	562.99	563.08	563.18	563.28	563.37	563.47	563.57	563.67	563.74	563.81	563.88	563.95	564.03	564.10	564.17	564.25	564.32	564.40
	TOP OF HAUNCH ELEV.	561.97	562.05	562.14	562.23	562.33	562.43	562.53	562.62	562.72	562.82	562.92	562.99	563.07	563.15	563.23	563.30	563.38	563.45	563.52	563.59	563.65

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - SOUTHBOUND I-71

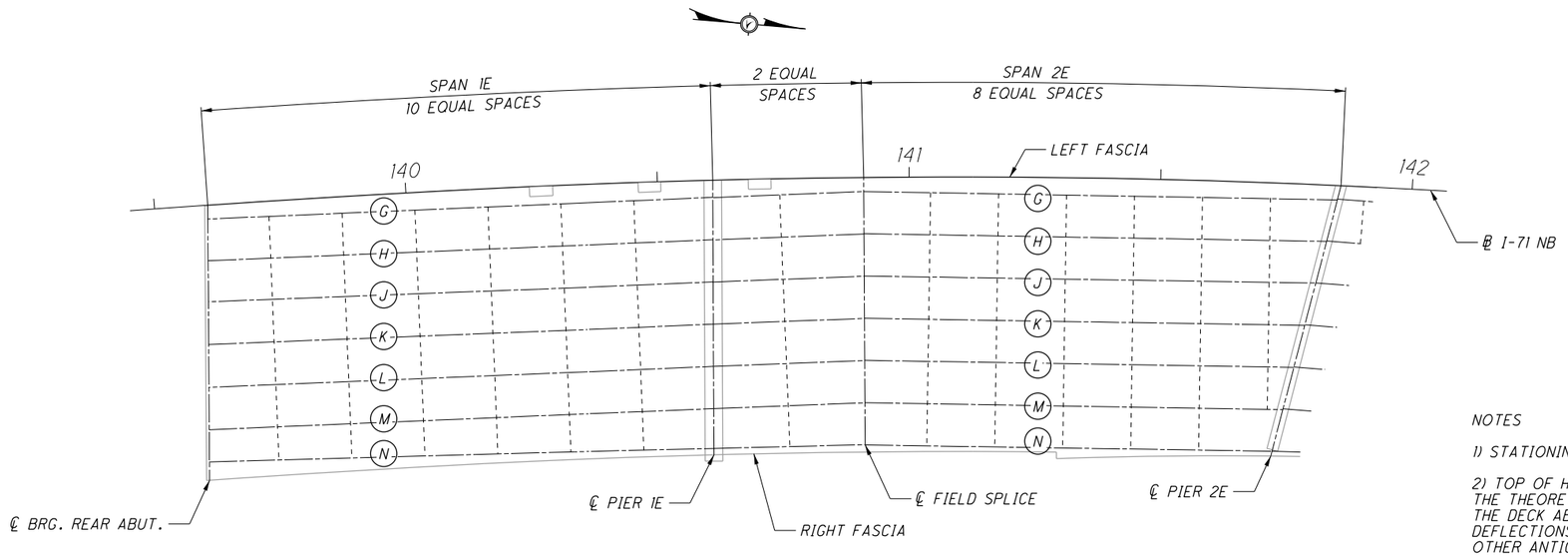
BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939

46/77



DECK SCHEMATIC

NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

4) SEE SHEET 55/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTIONS.

	LOCATION	℄ BRG. REAR ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1E	1/2	FIELD SPLICE	1/8	2/8	3/8	4/8	5/8	6/8	7/8	℄ PIER 2E
GIRDER G	STATION	139+60.41	139+70.46	139+80.50	139+90.55	140+00.60	140+10.65	140+20.70	140+30.76	140+40.82	140+50.87	140+60.93	140+75.96	140+90.99	141+02.78	141+14.58	141+26.39	141+38.20	141+50.00	141+61.81	141+73.61	141+85.41
	OFFSET	2.78 R	3.03 R	3.24 R	3.41 R	3.56 R	3.66 R	3.73 R	3.75 R	3.72 R	3.63 R	3.49 R	3.18 R	2.75 R	3.03 R	3.24 R	3.37 R	3.42 R	3.38 R	3.25 R	3.04 R	2.75 R
	FINAL DECK ELEV.	535.50	535.99	536.49	536.98	537.48	537.98	538.48	538.98	539.49	540.00	540.51	541.27	542.05	542.63	543.21	543.79	544.38	544.98	545.57	546.18	546.78
	TOP OF HAUNCH ELEV.	534.75	535.26	535.77	536.28	536.78	537.28	537.77	538.26	538.75	539.25	539.76	540.53	541.32	541.92	542.52	543.11	543.70	544.28	544.85	545.44	546.03
GIRDER H	STATION	139+59.88	139+69.95	139+80.02	139+90.10	140+00.17	140+10.25	140+20.35	140+30.45	140+40.55	140+50.65	140+60.75	140+75.85	140+90.94	141+02.51	141+14.09	141+25.67	141+37.26	141+48.85	141+60.44	141+72.03	141+83.61
	OFFSET	11.14 R	11.39 R	11.60 R	11.78 R	11.92 R	12.03 R	12.10 R	12.12 R	12.09 R	12.00 R	11.86 R	11.55 R	11.13 R	11.40 R	11.61 R	11.74 R	11.79 R	11.76 R	11.65 R	11.45 R	11.18 R
	FINAL DECK ELEV.	535.16	535.65	536.14	536.63	537.13	537.62	538.11	538.61	539.11	539.61	540.12	540.88	541.65	542.20	542.77	543.33	543.90	544.47	545.05	545.64	546.22
	TOP OF HAUNCH ELEV.	534.41	534.92	535.43	535.93	536.43	536.92	537.40	537.89	538.38	538.87	539.37	540.14	540.92	541.50	542.07	542.65	543.21	543.77	544.33	544.90	545.47
GIRDER J	STATION	139+59.34	139+69.44	139+79.54	139+89.64	139+99.75	140+09.85	140+19.99	140+30.14	140+40.28	140+50.43	140+60.57	140+75.74	140+90.90	141+02.24	141+13.58	141+24.95	141+36.32	141+47.69	141+59.05	141+70.42	141+81.78
	OFFSET	19.50 R	19.75 R	19.96 R	20.14 R	20.29 R	20.40 R	20.47 R	20.49 R	20.46 R	20.38 R	20.24 R	19.93 R	19.50 R	19.77 R	19.98 R	20.11 R	20.16 R	20.14 R	20.04 R	19.86 R	19.60 R
	FINAL DECK ELEV.	534.83	535.31	535.80	536.28	536.77	537.26	537.75	538.24	538.73	539.23	539.73	540.48	541.24	541.78	542.32	542.87	543.42	543.98	544.53	545.10	545.67
	TOP OF HAUNCH ELEV.	534.08	534.59	535.09	535.58	536.07	536.56	537.04	537.52	538.00	538.49	538.98	539.74	540.51	541.07	541.63	542.18	542.73	543.27	543.82	544.36	544.92
GIRDER K	STATION	139+58.80	139+68.93	139+79.06	139+89.19	139+99.32	140+09.46	140+19.63	140+29.82	140+40.01	140+50.20	140+60.39	140+75.62	140+90.85	141+01.96	141+13.08	141+24.22	141+35.36	141+46.51	141+57.65	141+68.80	141+79.94
	OFFSET	27.86 R	28.11 R	28.33 R	28.51 R	28.65 R	28.77 R	28.84 R	28.87 R	28.83 R	28.75 R	28.61 R	28.31 R	27.88 R	28.15 R	28.35 R	28.48 R	28.54 R	28.52 R	28.43 R	28.27 R	28.03 R
	FINAL DECK ELEV.	534.50	534.98	535.45	535.93	536.41	536.89	537.38	537.87	538.36	538.85	539.34	540.09	540.84	541.36	541.88	542.41	542.94	543.48	544.02	544.56	545.11
	TOP OF HAUNCH ELEV.	533.75	534.25	534.74	535.23	535.72	536.19	536.67	537.14	537.62	538.10	538.59	539.34	540.11	540.65	541.18	541.72	542.25	542.78	543.30	543.83	544.37
GIRDER L	STATION	139+58.25	139+68.41	139+78.57	139+88.73	139+98.89	140+09.05	140+19.26	140+29.50	140+39.74	140+49.97	140+60.21	140+75.51	140+90.80	141+01.68	141+12.56	141+23.48	141+34.40	141+45.32	141+56.24	141+67.16	141+78.07
	OFFSET	36.22 R	36.47 R	36.69 R	36.87 R	37.02 R	37.14 R	37.21 R	37.24 R	37.21 R	37.12 R	36.99 R	36.68 R	36.26 R	36.52 R	36.72 R	36.85 R	36.91 R	36.90 R	36.82 R	36.67 R	36.45 R
	FINAL DECK ELEV.	534.17	534.64	535.11	535.58	536.06	536.53	537.01	537.49	537.98	538.47	538.96	539.69	540.44	540.94	541.44	541.95	542.46	542.98	543.50	544.03	544.55
	TOP OF HAUNCH ELEV.	533.42	533.91	534.40	534.88	535.36	535.83	536.30	536.77	537.25	537.72	538.21	538.95	539.70	540.22	540.74	541.25	541.77	542.27	542.78	543.29	543.81
GIRDER M	STATION	139+57.71	139+67.89	139+78.08	139+88.27	139+98.46	140+08.65	140+18.90	140+29.18	140+39.46	140+49.74	140+60.02	140+75.39	140+90.76	141+01.40	141+12.05	141+22.73	141+33.43	141+44.12	141+54.81	141+65.50	141+76.19
	OFFSET	44.58 R	44.83 R	45.05 R	45.24 R	45.39 R	45.50 R	45.58 R	45.61 R	45.58 R	45.50 R	45.36 R	45.06 R	44.63 R	44.89 R	45.08 R	45.22 R	45.28 R	45.28 R	45.21 R	45.08 R	44.87 R
	FINAL DECK ELEV.	533.84	534.30	534.77	535.24	535.70	536.17	536.65	537.12	537.60	538.08	538.57	539.30	540.03	540.52	541.00	541.49	541.99	542.48	542.99	543.49	544.00
	TOP OF HAUNCH ELEV.	533.09	533.57	534.05	534.53	535.00	535.47	535.94	536.40	536.87	537.34	537.82	538.55	539.30	539.79	540.29	540.79	541.28	541.77	542.26	542.75	543.25
GIRDER N	STATION	139+57.30	139+67.50	139+77.70	139+87.90	139+98.10	140+08.31	140+18.58	140+28.89	140+39.21	140+49.53	140+59.85	140+75.28	140+90.71	141+01.12	141+11.53	141+21.98	141+32.44	141+42.90	141+53.37	141+63.83	141+74.28
	OFFSET	50.78 R	51.20 R	51.58 R	51.94 R	52.25 R	52.54 R	52.78 R	52.98 R	53.12 R	53.21 R	53.24 R	53.18 R	53.01 R	53.26 R	53.45 R	53.59 R	53.66 R	53.66 R	53.60 R	53.48 R	53.29 R
	FINAL DECK ELEV.	533.59	534.05	534.50	534.96	535.41	535.87	536.33	536.80	537.26	537.73	538.20	538.91	539.63	540.10	540.56	541.04	541.51	541.99	542.47	542.96	543.45
	TOP OF HAUNCH ELEV.	532.84	533.31	533.78	534.25	534.71	535.16	535.62	536.07	536.53	536.99	537.45	538.17	538.89	539.37	539.84	540.32	540.79	541.27	541.74	542.21	542.70

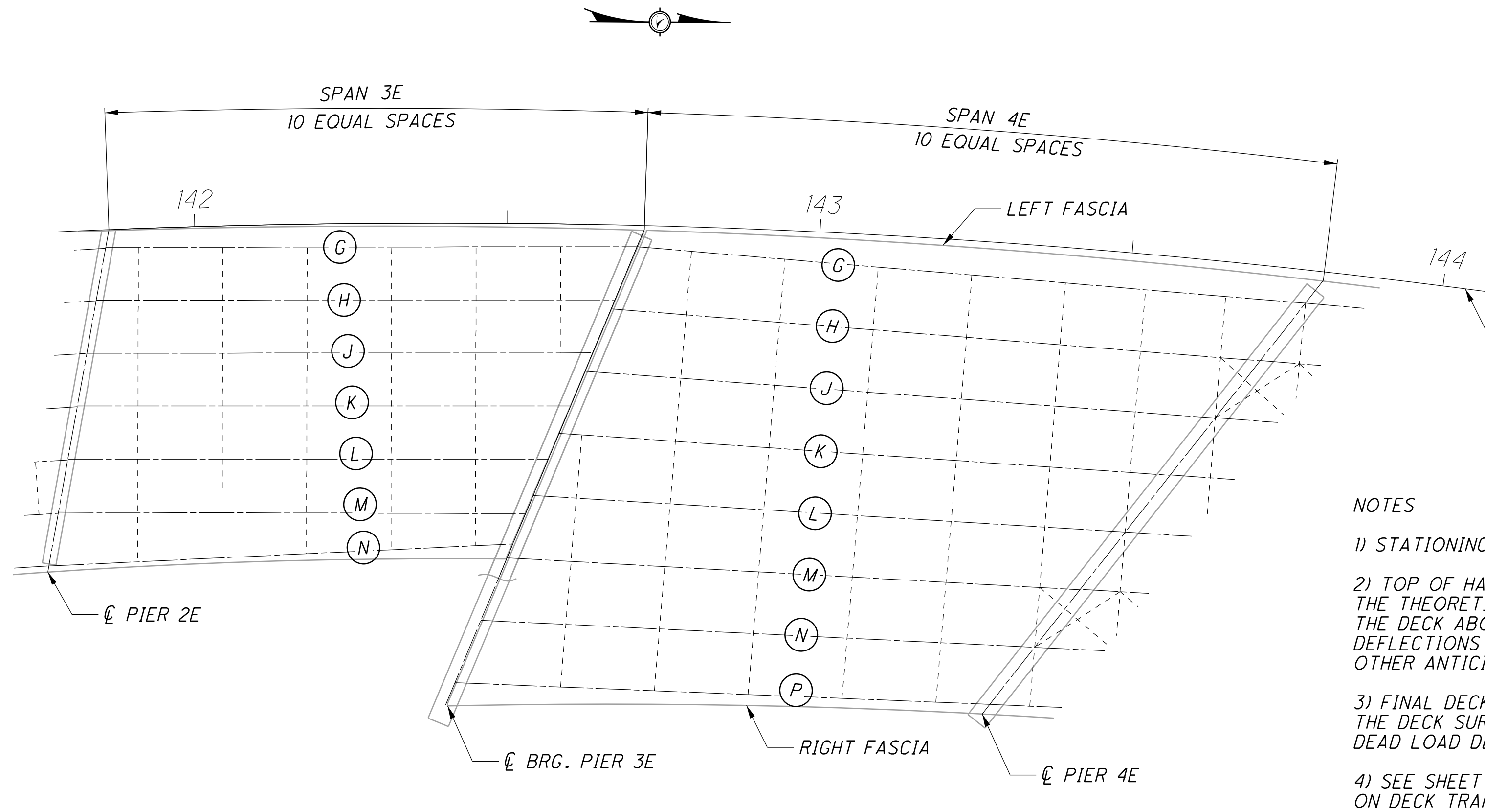
DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - NORTHBOUND I-71

HAM-71-1.59
PID No. 101939

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.



DECK SCHEMATIC

NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

4) SEE SHEET 55/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTION.

	LOCATION	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. PIER 3E	℄ BRG. PIER 3E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
GIRDER G	STATION	141+93.88	142+02.35	142+10.82	142+19.29	142+27.76	142+36.23	142+44.70	142+53.17	142+61.64	142+70.11	142+71.77	142+82.41	142+93.04	143+03.69	143+14.34	143+24.99	143+35.65	143+46.30	143+56.96	143+67.61
	OFFSET	2.99 R	3.18 R	3.32 R	3.41 R	3.44 R	3.41 R	3.33 R	3.20 R	3.02 R	2.78 R	2.80 R	3.31 R	3.74 R	4.08 R	4.33 R	4.49 R	4.56 R	4.55 R	4.44 R	4.25 R
	FINAL DECK ELEV.	547.20	547.61	548.03	548.44	548.87	549.29	549.70	550.12	550.52	550.93	551.00	551.44	551.88	552.31	552.74	553.16	553.57	553.98	554.38	554.78
	TOP OF HAUNCH ELEV.	546.44	546.86	547.28	547.71	548.14	548.56	548.98	549.38	549.78	550.18	550.25	550.72	551.18	551.62	552.05	552.47	552.87	553.26	553.65	554.04
GIRDER H	STATION	141+91.93	142+00.25	142+08.57	142+16.90	142+25.22	142+33.53	142+41.85	142+50.16	142+58.46	142+66.76	142+67.87	142+78.27	142+88.69	142+99.11	143+09.53	143+19.96	143+30.39	143+40.81	143+51.24	143+61.67
	OFFSET	11.43 R	11.63 R	11.77 R	11.87 R	11.91 R	11.91 R	11.85 R	11.74 R	11.58 R	11.37 R	12.86 R	13.34 R	13.73 R	14.05 R	14.27 R	14.42 R	14.48 R	14.45 R	14.34 R	14.15 R
	FINAL DECK ELEV.	546.62	547.02	547.42	547.83	548.24	548.64	549.05	549.45	549.84	550.24	550.20	550.63	551.07	551.49	551.92	552.33	552.74	553.15	553.55	553.95
	TOP OF HAUNCH ELEV.	545.87	546.27	546.68	547.09	547.51	547.92	548.32	548.72	549.10	549.49	549.45	549.90	550.35	550.79	551.22	551.63	552.04	552.43	552.82	553.20
GIRDER J	STATION	141+89.95	141+98.13	142+06.30	142+14.47	142+22.64	142+30.80	142+38.96	142+47.11	142+55.25	142+63.37	142+63.90	142+74.08	142+84.26	142+94.45	143+04.64	143+14.84	143+25.04	143+35.24	143+45.43	143+55.63
	OFFSET	19.86 R	20.06 R	20.22 R	20.33 R	20.39 R	20.40 R	20.36 R	20.27 R	20.13 R	19.95 R	22.90 R	23.35 R	23.71 R	24.00 R	24.20 R	24.33 R	24.37 R	24.33 R	24.22 R	24.02 R
	FINAL DECK ELEV.	546.05	546.44	546.82	547.21	547.61	548.00	548.40	548.78	549.17	549.55	549.39	549.82	550.25	550.67	551.09	551.51	551.91	552.32	552.72	553.11
	TOP OF HAUNCH ELEV.	545.30	545.69	546.08	546.48	546.88	547.28	547.67	548.05	548.43	548.80	548.64	549.09	549.53	549.96	550.39	550.80	551.20	551.59	551.98	552.36
GIRDER K	STATION	141+87.94	141+95.97	142+04.00	142+12.02	142+20.03	142+28.03	142+36.03	142+44.01	142+51.99	142+59.94	142+59.87	142+69.81	142+79.76	142+89.72	142+99.68	143+09.64	143+19.61	143+29.57	143+39.53	143+49.49
	OFFSET	28.29 R	28.50 R	28.67 R	28.79 R	28.86 R	28.88 R	28.86 R	28.79 R	28.68 R	28.52 R	32.94 R	33.35 R	33.68 R	33.93 R	34.11 R	34.21 R	34.24 R	34.19 R	34.06 R	33.86 R
	FINAL DECK ELEV.	545.48	545.85	546.23	546.60	546.98	547.37	547.74	548.12	548.49	548.86	548.58	549.00	549.43	549.85	550.26	550.67	551.08	551.48	551.88	552.27
	TOP OF HAUNCH ELEV.	544.74	545.11	545.49	545.87	546.26	546.64	547.01	547.39	547.75	548.11	547.83	548.27	548.70	549.13	549.55	549.96	550.35	550.74	551.13	551.52
GIRDER L	STATION	141+85.92	141+93.79	142+01.67	142+09.53	142+17.39	142+25.23	142+33.06	142+40.88	142+48.69	142+56.47	142+55.78	142+65.48	142+75.19	142+84.91	142+94.64	143+04.36	143+14.09	143+23.81	143+33.54	143+43.26
	OFFSET	36.71 R	36.93 R	37.11 R	37.24 R	37.32 R	37.36 R	37.36 R	37.31 R	37.21 R	37.08 R	42.96 R	43.33 R	43.62 R	43.85 R	44.00 R	44.08 R	44.08 R	44.02 R	43.89 R	43.68 R
	FINAL DECK ELEV.	544.91	545.27	545.63	545.99	546.36	546.73	547.10	547.46	547.82	548.17	547.78	548.18	548.60	549.02	549.43	549.84	550.24	550.64	551.03	551.42
	TOP OF HAUNCH ELEV.	544.17	544.53	544.89	545.26	545.63	546.00	546.36	546.72	547.08	547.42	547.03	547.44	547.87	548.30	548.71	549.11	549.51	549.90	550.28	550.67
GIRDER M	STATION	141+83.88	141+91.59	141+99.31	142+07.02	142+14.71	142+22.39	142+30.06	142+37.71	142+45.34	142+52.94	142+51.62	142+61.07	142+70.55	142+80.03	142+89.51	142+98.99	143+08.48	143+17.96	143+27.45	143+36.93
	OFFSET	45.13 R	45.36 R	45.54 R	45.68 R	45.78 R	45.84 R	45.85 R	45.82 R	45.74 R	45.63 R	52.97 R	53.29 R	53.55 R	53.74 R	53.87 R	53.92 R	53.91 R	53.83 R	53.68 R	53.46 R
	FINAL DECK ELEV.	544.34	544.69	545.04	545.39	545.74	546.09	546.45	546.80	547.15	547.49	546.98	547.36	547.77	548.19	548.59	549.00	549.40	549.79	550.18	550.56
	TOP OF HAUNCH ELEV.	543.60	543.94	544.29	544.65	545.00	545.36	545.71	546.06	546.40	546.74	546.23	546.62	547.04	547.46	547.87	548.27	548.66	549.05	549.43	549.81
GIRDER N	STATION	141+81.90	141+89.53	141+97.21	142+04.88	142+12.55	142+20.22	142+27.88	142+35.54	142+43.19	142+50.84	142+47.40	142+56.61	142+65.83	142+75.06	142+84.30	142+93.54	143+02.78	143+12.02	143+21.26	143+30.49
	OFFSET	53.21 R	53.10 R	52.95 R	52.76 R	52.52 R	52.25 R	51.93 R	51.56 R	51.16 R	50.71 R	62.97 R	63.25 R	63.47 R	63.62 R	63.71 R	63.74 R	63.71 R	63.61 R	63.44 R	63.22 R
	FINAL DECK ELEV.	543.80	544.16	544.52	544.88	545.25	545.62	545.99	546.35	546.72	547.08	546.15	546.54	546.94	547.35	547.75	548.15	548.55	548.94	549.32	549.70
	TOP OF HAUNCH ELEV.	543.05	543.40	543.77	544.13	544.50	544.87	545.24	545.61	545.97	546.33	545.40	545.80	546.20	546.61	547.02	547.41	547.80	548.19	548.57	548.95
GIRDER P	STATION											142+43.11	142+52.07	142+61.03	142+70.02	142+79.01	142+88.00	142+96.99	143+05.98	143+14.97	143+23.95
	OFFSET											72.95 R	73.18 R	73.36 R	73.48 R	73.54 R	73.54 R	73.48 R	73.36 R	73.18 R	72.94 R
	FINAL DECK ELEV.											545.29	545.69	546.10	546.50	546.90	547.30	547.69	548.08	548.46	548.84
	TOP OF HAUNCH ELEV.											544.54	544.95	545.36	545.77	546.16	546.56	546.94	547.33	547.71	548.08

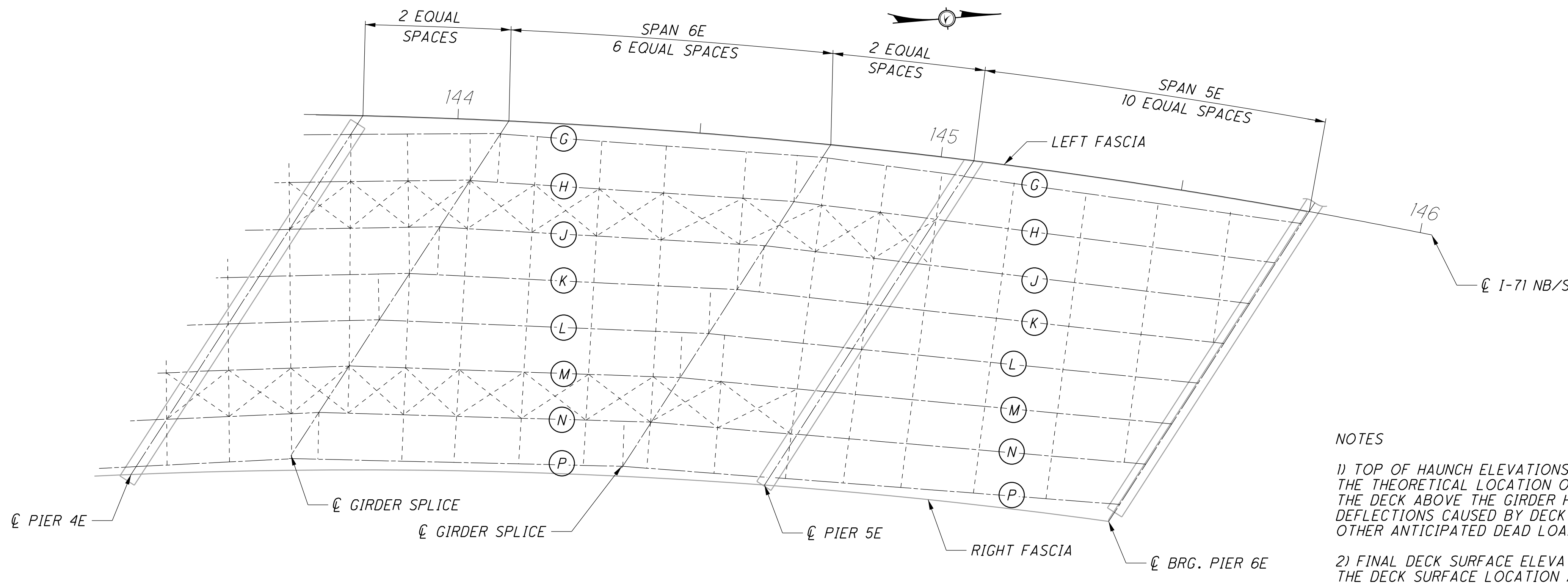
DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - NORTHBOUND I-71

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SCHEMATIC

NOTES

1) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

3) SEE SHEET 56/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTION.

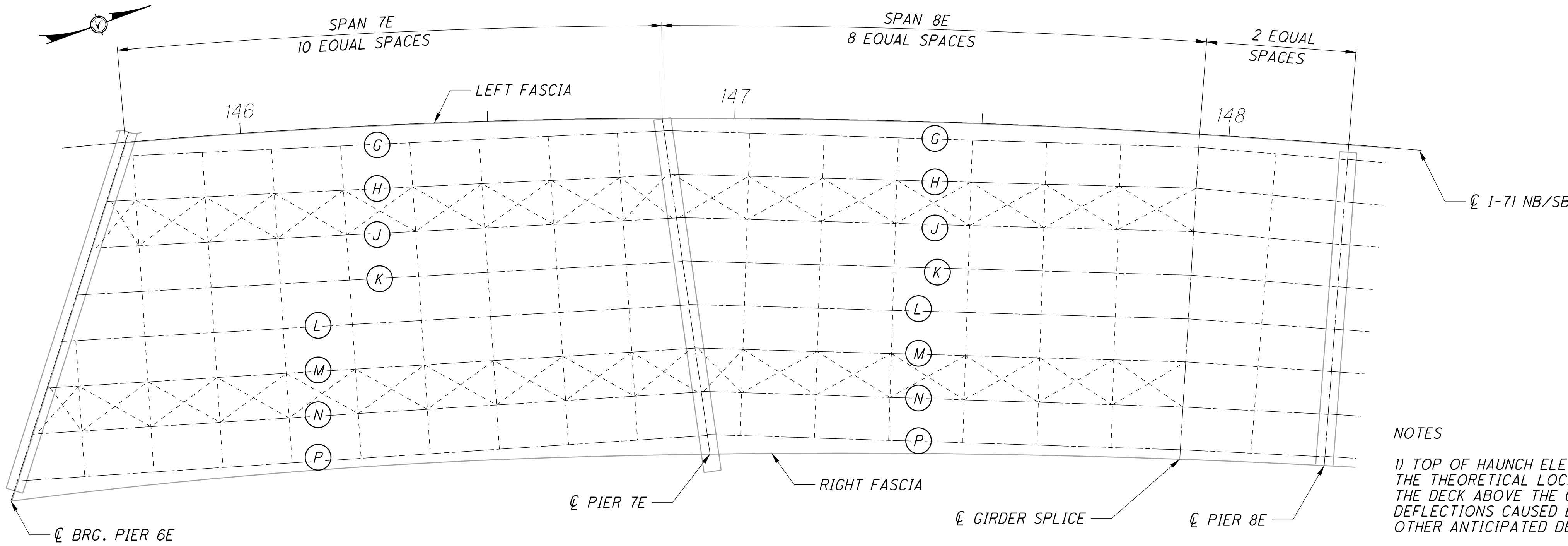
	LOCATION	℄ PIER 4E	1/2	FIELD SPLICE	1/6	2/6	3/6	4/6	5/6	FIELD SPLICE	1/2	℄ PIER 5E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. PIER 6E
GIRDER G	STATION	143+78.26	143+93.72	144+09.16	144+20.24	144+31.33	144+42.42	144+53.50	144+64.59	144+75.67	144+90.51	145+05.36	145+12.36	145+19.36	145+26.36	145+33.36	145+40.36	145+47.35	145+54.35	145+61.35	145+68.34	145+75.33
	OFFSET	3.96 R	3.39 R	2.64 R	2.87 R	3.00 R	3.04 R	2.99 R	2.83 R	2.59 R	3.07 R	3.38 R	3.47 R	3.52 R	3.53 R	3.50 R	3.43 R	3.33 R	3.18 R	3.00 R	2.78 R	2.52 R
	FINAL DECK ELEV.	555.17	555.73	556.28	556.61	556.93	557.25	557.56	557.86	558.16	558.49	558.81	558.96	559.10	559.24	559.38	559.52	559.65	559.79	559.91	560.04	560.17
	TOP OF HAUNCH ELEV.	554.42	554.99	555.55	555.89	556.23	556.56	556.87	557.16	557.45	557.76	558.06	558.20	558.35	558.49	558.63	558.77	558.91	559.04	559.17	559.29	559.42
GIRDER H	STATION	143+72.09	143+87.72	144+03.34	144+14.56	144+25.78	144+37.00	144+48.22	144+59.44	144+70.65	144+85.67	145+00.70	145+07.78	145+14.86	145+21.95	145+29.03	145+36.11	145+43.19	145+50.27	145+57.34	145+64.41	145+71.48
	OFFSET	13.87 R	13.29 R	12.52 R	12.72 R	12.82 R	12.82 R	12.72 R	12.52 R	12.23 R	12.64 R	12.87 R	12.92 R	12.93 R	12.91 R	12.84 R	12.73 R	12.59 R	12.40 R	12.18 R	11.92 R	11.62 R
	FINAL DECK ELEV.	554.34	554.91	555.47	555.81	556.15	556.48	556.80	557.12	557.43	557.78	558.11	558.27	558.42	558.57	558.71	558.86	559.00	559.14	559.27	559.41	559.54
	TOP OF HAUNCH ELEV.	553.59	554.17	554.75	555.11	555.46	555.80	556.12	556.43	556.72	557.04	557.36	557.51	557.66	557.81	557.96	558.11	558.25	558.39	558.53	558.66	558.79
GIRDER J	STATION	143+65.82	143+81.63	143+97.43	144+08.79	144+20.14	144+31.50	144+42.86	144+54.21	144+65.56	144+80.76	144+95.97	145+03.14	145+10.30	145+17.47	145+24.64	145+31.80	145+38.96	145+46.12	145+53.28	145+60.43	145+67.58
	OFFSET	23.74 R	23.16 R	22.37 R	22.54 R	22.60 R	22.56 R	22.43 R	22.19 R	21.86 R	22.19 R	22.35 R	22.36 R	22.34 R	22.27 R	22.16 R	22.02 R	21.83 R	21.61 R	21.34 R	21.04 R	20.69 R
	FINAL DECK ELEV.	553.50	554.09	554.67	555.02	555.37	555.71	556.05	556.38	556.70	557.06	557.41	557.57	557.73	557.89	558.04	558.19	558.34	558.49	558.63	558.77	558.91
	TOP OF HAUNCH ELEV.	552.75	553.35	553.95	554.32	554.69	555.04	555.37	555.69	555.99	556.33	556.66	556.82	556.98	557.13	557.29	557.44	557.59	557.74	557.88	558.02	558.16
GIRDER K	STATION	143+59.45	143+75.45	143+91.43	144+02.93	144+14.43	144+25.92	144+37.42	144+48.91	144+60.39	144+75.78	144+91.17	144+98.42	145+05.68	145+12.93	145+20.18	145+27.43	145+34.67	145+41.92	145+49.16	145+56.39	145+63.62
	OFFSET	33.59 R	32.98 R	32.19 R	32.32 R	32.35 R	32.28 R	32.11 R	31.83 R	31.46 R	31.73 R	31.81 R	31.79 R	31.72 R	31.62 R	31.47 R	31.29 R	31.06 R	30.80 R	30.49 R	30.15 R	29.76 R
	FINAL DECK ELEV.	552.65	553.26	553.85	554.22	554.58	554.94	555.29	555.63	555.96	556.34	556.71	556.88	557.05	557.21	557.37	557.53	557.68	557.84	557.99	558.14	558.28
	TOP OF HAUNCH ELEV.	551.90	552.52	553.14	553.53	553.91	554.28	554.62	554.95	555.26	555.61	555.96	556.12	556.29	556.45	556.62	556.78	556.94	557.09	557.24	557.39	557.53
GIRDER L	STATION	143+52.98	143+69.17	143+85.35	143+96.99	144+08.62	144+20.26	144+31.89	144+43.52	144+55.14	144+70.71	144+86.29	144+93.64	145+00.98	145+08.31	145+15.65	145+22.99	145+30.32	145+37.65	145+44.97	145+52.29	145+59.61
	OFFSET	43.40 R	42.78 R	41.95 R	42.06 R	42.06 R	41.96 R	41.76 R	41.45 R	41.05 R	41.24 R	41.25 R	41.19 R	41.09 R	40.95 R	40.77 R	40.55 R	40.28 R	39.98 R	39.63 R	39.25 R	38.82 R
	FINAL DECK ELEV.	551.80	552.43	553.04	553.42	553.80	554.16	554.52	554.88	555.22	555.62	556.00	556.18	556.35	556.53	556.69	556.86	557.02	557.18	557.34	557.50	557.65
	TOP OF HAUNCH ELEV.	551.05	551.69	552.33	552.73	553.13	553.50	553.86	554.20	554.52	554.89	555.25	555.43	555.60	555.77	555.94	556.11	556.28	556.44	556.59	556.75	556.90
GIRDER M	STATION	143+46.40	143+62.80	143+79.18	143+90.96	144+02.73	144+14.51	144+26.28	144+38.04	144+49.80	144+65.57	144+81.34	144+88.77	144+96.20	145+03.63	145+11.06	145+18.48	145+25.90	145+33.31	145+40.72	145+48.13	145+55.53
	OFFSET	53.18 R	52.53 R	51.68 R	51.76 R	51.74 R	51.61 R	51.38 R	51.05 R	50.61 R	50.73 R	50.67 R	50.58 R	50.44 R	50.27 R	50.05 R	49.79 R	49.48 R	49.14 R	48.76 R	48.33 R	47.86 R
	FINAL DECK ELEV.	550.94	551.59	552.22	552.62	553.00	553.38	553.76	554.12	554.48	554.89	555.30	555.48	555.66	555.84	556.02	556.19	556.36	556.53	556.69	556.85	557.01
	TOP OF HAUNCH ELEV.	550.19	550.85	551.51	551.93	552.34	552.73	553.10	553.45	553.78	554.17	554.55	554.73	554.91	555.09	555.27	555.44	555.61	555.78	555.95	556.11	556.26
GIRDER N	STATION	143+39.72	143+56.33	143+72.92	143+84.84	143+96.76	144+08.67	144+20.58	144+32.49	144+44.38	144+60.35	144+76.32	144+83.84	144+91.36	144+98.88	145+06.39	145+13.90	145+21.41	145+28.92	145+36.41	145+43.91	145+51.39
	OFFSET	62.93 R	62.25 R	61.36 R	61.42 R	61.38 R	61.23 R	60.98 R	60.62 R	60.15 R	60.21 R	60.08 R	59.95 R	59.78 R	59.56 R	59.31 R	59.01 R	58.67 R	58.29 R	57.87 R	57.40 R	56.89 R
	FINAL DECK ELEV.	550.08	550.75	551.40	551.81	552.21	552.60	552.98	553.36	553.73	554.16	554.58	554.78	554.97	555.15	555.34	555.52	555.70	555.87	556.04	556.21	556.38
	TOP OF HAUNCH ELEV.	549.33	550.01	550.69	551.12	551.54	551.94	552.32	552.68	553.03	553.43	553.83	554.02	554.21	554.40	554.58	554.77	554.95	555.12	555.30	555.46	555.63
GIRDER P	STATION	143+32.93	143+49.77	143+66.58	143+78.64	143+90.69	144+02.75	144+14.80	144+26.84	144+38.88	144+55.05	144+71.21	144+78.83	144+86.44	144+94.05	145+01.66	145+09.26	145+16.86	145+24.45	145+32.04	145+39.62	145+47.20
	OFFSET	72.64 R	71.92 R	70.99 R	71.04 R	70.98 R	70.81 R	70.54 R	70.16 R	69.67 R	69.66 R	69.46 R	69.30 R	69.09 R	68.85 R	68.56 R	68.22 R	67.84 R	67.42 R	66.96 R	66.46 R	65.91 R
	FINAL DECK ELEV.	549.21	549.90	550.57	550.99	551.41	551.81	552.21	552.60	552.98	553.43	553.87	554.07	554.27	554.46	554.65	554.84	555.03	555.21	555.39	555.57	555.74
	TOP OF HAUNCH ELEV.	548.46	549.16	549.86	550.30	550.74	551.15	551.54	551.92	552.27	552.70	553.12	553.31	553.51	553.70	553.90	554.09	554.28	554.46	554.64	554.82	554.99

DESIGN AGENCY
Palmer ENGINEERING
CINCINNATI, OH 45242

DESIGNED CEJ | CHECKED JPR | DRAWN CML | REVISED | REVIEWED MLJ | DATE 02/27/16 | STRUCTURE FILE NUMBER 3106608

DECK ELEVATIONS - NORTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SCHEMATIC

NOTES

1) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

3) SEE SHEET 56/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTION.

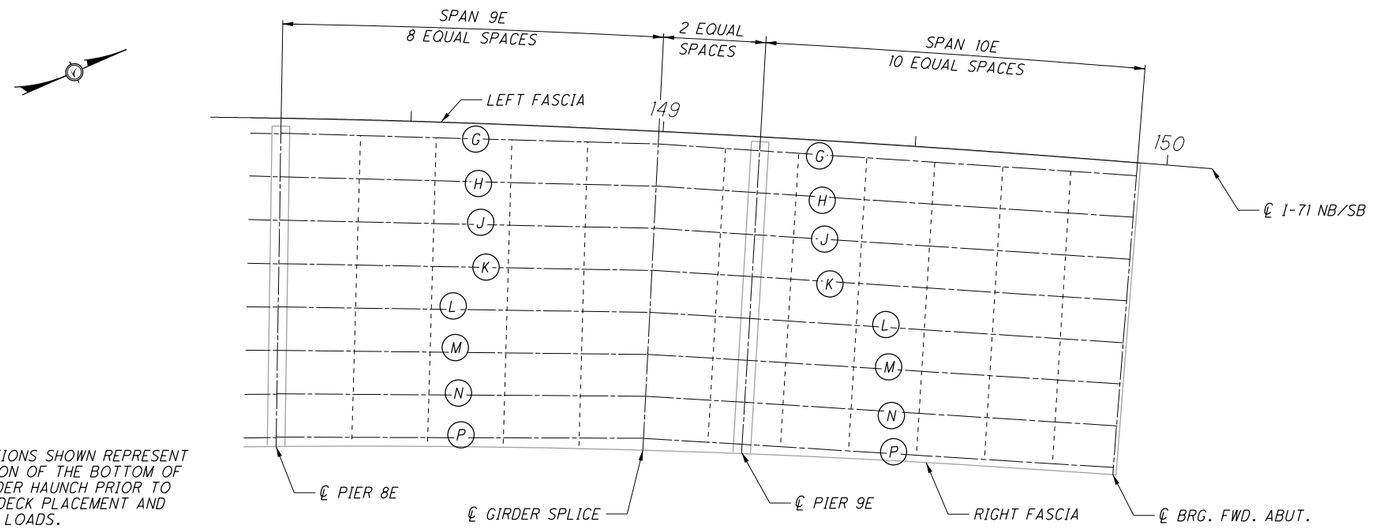
	LOCATION	℄ BRG. PIER 6E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 7E	1/8	2/8	3/8	4/8	5/8	6/8	7/8	FIELD SPLICE	1/2	℄ PIER 8E
GIRDER G	STATION	145+76.58	145+87.49	145+98.40	146+09.32	146+20.24	146+31.17	146+42.09	146+53.01	146+63.93	146+74.84	146+85.75	146+99.34	147+12.93	147+26.53	147+40.13	147+53.73	147+67.32	147+80.91	147+94.50	148+09.50	148+24.50
	OFFSET	2.52 R	2.93 R	3.25 R	3.47 R	3.60 R	3.64 R	3.59 R	3.45 R	3.22 R	2.90 R	2.49 R	2.89 R	3.17 R	3.33 R	3.38 R	3.33 R	3.15 R	2.88 R	2.50 R	2.84 R	3.06 R
	FINAL DECK ELEV.	560.19	560.32	560.45	560.57	560.68	560.79	560.90	561.01	561.14	561.26	561.39	561.50	561.62	561.75	561.88	562.01	562.16	562.30	562.45	562.58	562.72
	TOP OF HAUNCH ELEV.	559.44	559.59	559.74	559.87	559.99	560.08	560.18	560.28	560.39	560.53	560.68	560.82	560.96	561.10	561.23	561.35	561.47	561.58	561.71	561.83	561.96
GIRDER H	STATION	145+72.74	145+84.16	145+95.59	146+07.02	146+18.46	146+29.89	146+41.32	146+52.74	146+64.17	146+75.58	146+86.99	147+00.44	147+13.88	147+27.32	147+40.77	147+54.21	147+67.65	147+81.08	147+94.50	148+09.50	148+24.50
	OFFSET	11.61 R	12.03 R	12.34 R	12.55 R	12.66 R	12.67 R	12.58 R	12.40 R	12.12 R	11.74 R	11.26 R	11.64 R	11.90 R	12.05 R	12.09 R	12.02 R	11.85 R	11.57 R	11.19 R	11.48 R	11.66 R
	FINAL DECK ELEV.	559.56	559.70	559.84	559.97	560.10	560.22	560.35	560.48	560.62	560.76	560.91	561.03	561.16	561.30	561.44	561.59	561.74	561.89	562.05	562.20	562.35
	TOP OF HAUNCH ELEV.	558.81	558.98	559.14	559.30	559.42	559.54	559.65	559.77	559.89	560.04	560.21	560.36	560.51	560.65	560.79	560.92	561.05	561.17	561.31	561.45	561.59
GIRDER J	STATION	145+68.85	145+80.79	145+92.74	146+04.69	146+16.64	146+28.59	146+40.53	146+52.47	146+64.41	146+76.34	146+88.26	147+01.55	147+14.84	147+28.12	147+41.41	147+54.70	147+67.98	147+81.25	147+94.50	148+09.50	148+24.50
	OFFSET	20.69 R	21.11 R	21.42 R	21.62 R	21.72 R	21.70 R	21.58 R	21.35 R	21.02 R	20.58 R	20.03 R	20.39 R	20.63 R	20.76 R	20.80 R	20.72 R	20.54 R	20.26 R	19.88 R	20.12 R	20.25 R
	FINAL DECK ELEV.	558.93	559.09	559.23	559.38	559.51	559.65	559.79	559.95	560.10	560.27	560.43	560.57	560.70	560.85	561.00	561.16	561.32	561.48	561.65	561.81	561.98
	TOP OF HAUNCH ELEV.	558.18	558.37	558.55	558.72	558.86	558.99	559.12	559.26	559.39	559.56	559.74	559.90	560.05	560.21	560.35	560.49	560.63	560.76	560.91	561.06	561.22
GIRDER K	STATION	145+64.90	145+77.37	145+89.84	146+02.32	146+14.80	146+27.27	146+39.74	146+52.20	146+64.65	146+77.10	146+89.54	147+02.68	147+15.80	147+28.93	147+42.06	147+55.19	147+68.32	147+81.41	147+94.50	148+09.50	148+24.50
	OFFSET	29.75 R	30.19 R	30.50 R	30.69 R	30.77 R	30.73 R	30.57 R	30.30 R	29.91 R	29.41 R	28.80 R	29.13 R	29.36 R	29.48 R	29.50 R	29.42 R	29.23 R	28.95 R	28.57 R	28.76 R	28.84 R
	FINAL DECK ELEV.	558.30	558.47	558.63	558.78	558.92	559.08	559.24	559.41	559.59	559.77	559.96	560.10	560.25	560.40	560.57	560.73	560.90	561.08	561.25	561.43	561.61
	TOP OF HAUNCH ELEV.	557.55	557.76	557.95	558.14	558.29	558.43	558.58	558.74	558.89	559.07	559.27	559.43	559.60	559.76	559.91	560.06	560.21	560.35	560.51	560.68	560.86
GIRDER L	STATION	145+60.89	145+73.89	145+86.90	145+99.91	146+12.93	146+25.94	146+38.93	146+51.92	146+64.90	146+77.87	146+90.83	147+03.82	147+16.78	147+29.75	147+42.72	147+55.69	147+68.66	147+81.58	147+94.50	148+09.50	148+24.50
	OFFSET	38.80 R	39.25 R	39.57 R	39.76 R	39.82 R	39.75 R	39.56 R	39.25 R	38.81 R	38.25 R	37.57 R	37.88 R	38.09 R	38.20 R	38.20 R	38.11 R	37.92 R	37.64 R	37.27 R	37.41 R	37.43 R
	FINAL DECK ELEV.	557.67	557.85	558.02	558.18	558.34	558.50	558.68	558.88	559.07	559.28	559.48	559.64	559.80	559.96	560.13	560.31	560.49	560.67	560.85	561.04	561.24
	TOP OF HAUNCH ELEV.	556.92	557.14	557.35	557.55	557.71	557.87	558.04	558.21	558.37	558.58	558.80	558.96	559.14	559.31	559.47	559.63	559.79	559.94	560.11	560.29	560.49
GIRDER M	STATION	145+56.83	145+70.37	145+83.92	145+97.48	146+11.03	146+24.58	146+38.11	146+51.64	146+65.15	146+78.66	146+92.15	147+04.97	147+17.77	147+30.58	147+43.39	147+56.20	147+69.00	147+81.75	147+94.50	148+09.50	148+24.50
	OFFSET	47.84 R	48.31 R	48.63 R	48.82 R	48.87 R	48.78 R	48.55 R	48.20 R	47.71 R	47.09 R	46.34 R	46.63 R	46.82 R	46.91 R	46.91 R	46.81 R	46.61 R	46.33 R	45.96 R	46.05 R	46.02 R
	FINAL DECK ELEV.	557.04	557.23	557.41	557.58	557.75	557.92	558.13	558.34	558.56	558.78	559.01	559.18	559.34	559.52	559.70	559.88	560.07	560.26	560.46	560.66	560.87
	TOP OF HAUNCH ELEV.	556.29	556.52	556.75	556.96	557.13	557.30	557.48	557.67	557.86	558.08	558.32	558.49	558.67	558.85	559.03	559.20	559.37	559.53	559.71	559.91	560.12
GIRDER N	STATION	145+52.70	145+66.79	145+80.89	145+95.00	146+09.11	146+23.21	146+37.29	146+51.35	146+65.41	146+79.45	146+93.48	147+06.13	147+18.77	147+31.42	147+44.06	147+56.71	147+69.35	147+81.93	147+94.50	148+09.50	148+24.50
	OFFSET	56.87 R	57.36 R	57.69 R	57.88 R	57.91 R	57.80 R	57.54 R	57.15 R	56.61 R	55.92 R	55.10 R	55.37 R	55.55 R	55.63 R	55.61 R	55.51 R	55.31 R	55.02 R	54.65 R	54.69 R	54.62 R
	FINAL DECK ELEV.	556.40	556.61	556.80	556.99	557.16	557.34	557.57	557.80	558.04	558.29	558.54	558.72	558.89	559.08	559.26	559.46	559.65	559.85	560.06	560.27	560.50
	TOP OF HAUNCH ELEV.	555.65	555.90	556.14	556.37	556.55	556.72	556.92	557.13	557.33	557.57	557.83	558.02	558.21	558.40	558.58	558.76	558.94	559.12	559.31	559.52	559.75
GIRDER P	STATION	145+48.51	145+63.16	145+77.82	145+92.49	146+07.16	146+21.82	146+36.45	146+51.06	146+65.67	146+80.26	146+94.83	147+07.30	147+19.78	147+32.26	147+44.74	147+57.22	147+69.70	147+82.10	147+94.50	148+09.50	148+24.50
	OFFSET	65.89 R	66.39 R	66.74 R	66.93 R	66.96 R	66.82 R	66.54 R	66.10 R	65.50 R	64.76 R	63.86 R	64.11 R	64.27 R	64.34 R	64.32 R	64.20 R	64.00 R	63.71 R	63.34 R	63.33 R	63.21 R
	FINAL DECK ELEV.	555.76	555.98	556.19	556.39	556.57	556.76	557.01	557.26	557.53	557.80	558.08	558.26	558.45	558.64	558.83	559.03	559.24	559.45	559.66	559.89	560.13
	TOP OF HAUNCH ELEV.	555.01	555.28	555.53	555.77	555.96	556.13	556.36	556.58	556.80	557.06	557.35	557.54	557.74	557.94	558.14	558.33	558.52	558.71	558.91	559.14	559.38

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED CEJ | DRAWN CML | REVIEWED MLJ | DATE 02/27/16
CHECKED JPR | REVISED | STRUCTURE FILE NUMBER 3106608

DECK ELEVATIONS - NORTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SCHEMATIC

NOTES

1) TOP OF HAUNCH ELEVATIONS SHOWN REPRESENT THE THEORETICAL LOCATION OF THE BOTTOM OF THE DECK ABOVE THE GIRDER HAUNCH PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURED.

3) SEE SHEET 57/77 FOR DECK ELEVATION LOCATIONS ON DECK TRANSVERSE SECTION.

	LOCATION	1/8	2/8	3/8	4/8	5/8	6/8	7/8	FIELD SPLICE	1/2	℄ PIER 9E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. FWD. ABUT.
GIRDER G	STATION	148+33.88	148+43.26	148+52.63	148+62.01	148+71.39	148+80.76	148+90.13	148+99.50	149+09.50	149+19.50	149+27.00	149+34.50	149+42.00	149+49.50	149+57.00	149+64.51	149+72.01	149+79.50	149+87.00	149+94.50
	OFFSET	3.14 R	3.18 R	3.17 R	3.11 R	3.00 R	2.87 R	2.70 R	2.50 R	2.64 R	2.74 R	2.80 R	2.84 R	2.86 R	2.86 R	2.84 R	2.81 R	2.75 R	2.68 R	2.60 R	2.50 R
	FINAL DECK ELEV.	562.81	562.90	562.99	563.09	563.18	563.28	563.38	563.48	563.57	563.66	563.74	563.81	563.88	563.95	564.03	564.10	564.18	564.25	564.33	564.40
	TOP OF HAUNCH ELEV.	562.05	562.15	562.24	562.34	562.44	562.53	562.63	562.73	562.82	562.93	563.00	563.08	563.16	563.23	563.30	563.37	563.43	563.50	563.58	563.65
GIRDER H	STATION	148+33.88	148+43.27	148+52.65	148+62.04	148+71.42	148+80.78	148+90.14	148+99.50	149+09.50	149+19.50	149+27.00	149+34.51	149+42.01	149+49.51	149+57.01	149+64.52	149+72.02	149+79.51	149+87.01	149+94.50
	OFFSET	11.71 R	11.71 R	11.67 R	11.58 R	11.44 R	11.28 R	11.08 R	10.85 R	10.98 R	11.07 R	11.12 R	11.15 R	11.16 R	11.15 R	11.13 R	11.08 R	11.02 R	10.94 R	10.85 R	10.75 R
	FINAL DECK ELEV.	562.45	562.55	562.65	562.75	562.86	562.96	563.07	563.18	563.28	563.38	563.46	563.54	563.62	563.69	563.78	563.86	563.94	564.02	564.10	564.18
	TOP OF HAUNCH ELEV.	561.69	561.80	561.90	562.01	562.11	562.21	562.32	562.43	562.53	562.64	562.73	562.81	562.89	562.97	563.05	563.12	563.19	563.27	563.35	563.43
GIRDER J	STATION	148+33.89	148+43.28	148+52.67	148+62.07	148+71.45	148+80.80	148+90.15	148+99.50	149+09.50	149+19.50	149+27.00	149+34.51	149+42.02	149+49.52	149+57.03	149+64.53	149+72.03	149+79.52	149+87.01	149+94.50
	OFFSET	20.27 R	20.24 R	20.17 R	20.05 R	19.89 R	19.69 R	19.46 R	19.20 R	19.32 R	19.40 R	19.44 R	19.46 R	19.46 R	19.45 R	19.41 R	19.36 R	19.29 R	19.20 R	19.10 R	18.99 R
	FINAL DECK ELEV.	562.09	562.20	562.31	562.42	562.53	562.65	562.76	562.88	562.99	563.10	563.18	563.26	563.35	563.44	563.52	563.61	563.70	563.78	563.87	563.96
	TOP OF HAUNCH ELEV.	561.33	561.45	561.56	561.67	561.79	561.90	562.01	562.13	562.24	562.36	562.45	562.54	562.63	562.71	562.79	562.87	562.95	563.04	563.12	563.21
GIRDER K	STATION	148+33.90	148+43.30	148+52.70	148+62.09	148+71.48	148+80.82	148+90.16	148+99.50	149+09.50	149+19.50	149+27.01	149+34.51	149+42.02	149+49.53	149+57.04	149+64.54	149+72.04	149+79.53	149+87.01	149+94.50
	OFFSET	28.83 R	28.77 R	28.67 R	28.52 R	28.33 R	28.10 R	27.84 R	27.55 R	27.66 R	27.73 R	27.76 R	27.77 R	27.77 R	27.74 R	27.70 R	27.64 R	27.56 R	27.46 R	27.36 R	27.24 R
	FINAL DECK ELEV.	561.73	561.84	561.96	562.08	562.21	562.33	562.45	562.58	562.69	562.81	562.90	562.99	563.08	563.18	563.27	563.36	563.46	563.55	563.64	563.74
	TOP OF HAUNCH ELEV.	560.97	561.10	561.22	561.34	561.46	561.58	561.70	561.83	561.95	562.07	562.17	562.27	562.36	562.45	562.54	562.63	562.71	562.80	562.89	562.99
GIRDER L	STATION	148+33.91	148+43.31	148+52.72	148+62.12	148+71.51	148+80.84	148+90.17	148+99.50	149+09.50	149+19.50	149+27.01	149+34.52	149+42.03	149+49.54	149+57.05	149+64.55	149+72.06	149+79.54	149+87.02	149+94.50
	OFFSET	37.39 R	37.30 R	37.17 R	36.99 R	36.77 R	36.51 R	36.22 R	35.90 R	36.00 R	36.06 R	36.08 R	36.08 R	36.07 R	36.04 R	35.99 R	35.92 R	35.83 R	35.73 R	35.61 R	35.48 R
	FINAL DECK ELEV.	561.36	561.49	561.62	561.75	561.88	562.01	562.14	562.27	562.40	562.53	562.62	562.72	562.82	562.92	563.02	563.12	563.21	563.31	563.41	563.51
	TOP OF HAUNCH ELEV.	560.61	560.75	560.88	561.01	561.14	561.27	561.40	561.52	561.66	561.79	561.89	562.00	562.10	562.19	562.29	562.38	562.47	562.57	562.67	562.76
GIRDER M	STATION	148+33.91	148+43.33	148+52.74	148+62.14	148+71.54	148+80.86	148+90.18	148+99.50	149+09.50	149+19.50	149+27.01	149+34.52	149+42.03	149+49.55	149+57.06	149+64.57	149+72.07	149+79.55	149+87.02	149+94.50
	OFFSET	45.95 R	45.83 R	45.67 R	45.46 R	45.21 R	44.92 R	44.60 R	44.26 R	44.34 R	44.39 R	44.40 R	44.40 R	44.37 R	44.33 R	44.27 R	44.19 R	44.10 R	43.99 R	43.86 R	43.73 R
	FINAL DECK ELEV.	561.00	561.14	561.27	561.41	561.55	561.69	561.83	561.97	562.11	562.24	562.35	562.45	562.55	562.66	562.76	562.87	562.97	563.08	563.19	563.29
	TOP OF HAUNCH ELEV.	560.26	560.40	560.54	560.68	560.82	560.95	561.09	561.22	561.36	561.51	561.62	561.73	561.83	561.93	562.03	562.13	562.23	562.33	562.44	562.54
GIRDER N	STATION	148+33.92	148+43.34	148+52.76	148+62.17	148+71.57	148+80.88	148+90.19	148+99.50	149+09.50	149+19.50	149+27.01	149+34.53	149+42.04	149+49.55	149+57.07	149+64.58	149+72.08	149+79.55	149+87.03	149+94.50
	OFFSET	54.51 R	54.36 R	54.17 R	53.93 R	53.65 R	53.33 R	52.98 R	52.61 R	52.68 R	52.71 R	52.72 R	52.71 R	52.68 R	52.63 R	52.56 R	52.47 R	52.37 R	52.25 R	52.12 R	51.97 R
	FINAL DECK ELEV.	560.64	560.79	560.93	561.08	561.23	561.38	561.52	561.67	561.82	561.96	562.07	562.18	562.29	562.40	562.51	562.62	562.73	562.84	562.96	563.07
	TOP OF HAUNCH ELEV.	559.90	560.05	560.19	560.34	560.49	560.63	560.78	560.92	561.07	561.22	561.34	561.45	561.57	561.67	561.78	561.88	561.99	562.10	562.21	562.32
GIRDER P	STATION	148+33.93	148+43.35	148+52.78	148+62.20	148+71.60	148+80.90	148+90.20	148+99.50	149+09.50	149+19.50	149+27.02	149+34.53	149+42.05	149+49.56	149+57.08	149+64.59	149+72.09	149+79.56	149+87.03	149+94.50
	OFFSET	63.07 R	62.90 R	62.67 R	62.40 R	62.09 R	61.74 R	61.36 R	60.96 R	61.02 R	61.04 R	61.04 R	61.02 R	60.98 R	60.92 R	60.84 R	60.75 R	60.64 R	60.51 R	60.37 R	60.22 R
	FINAL DECK ELEV.	560.28	560.43	560.59	560.74	560.90	561.06	561.21	561.37	561.52	561.68	561.79	561.91	562.02	562.14	562.26	562.37	562.49	562.61	562.73	562.85
	TOP OF HAUNCH ELEV.	559.53	559.69	559.85	560.01	560.16	560.32	560.47	560.62	560.78	560.93	561.05	561.17	561.29	561.41	561.52	561.63	561.74	561.86	561.98	562.10

DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - NORTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

51/77

150/176

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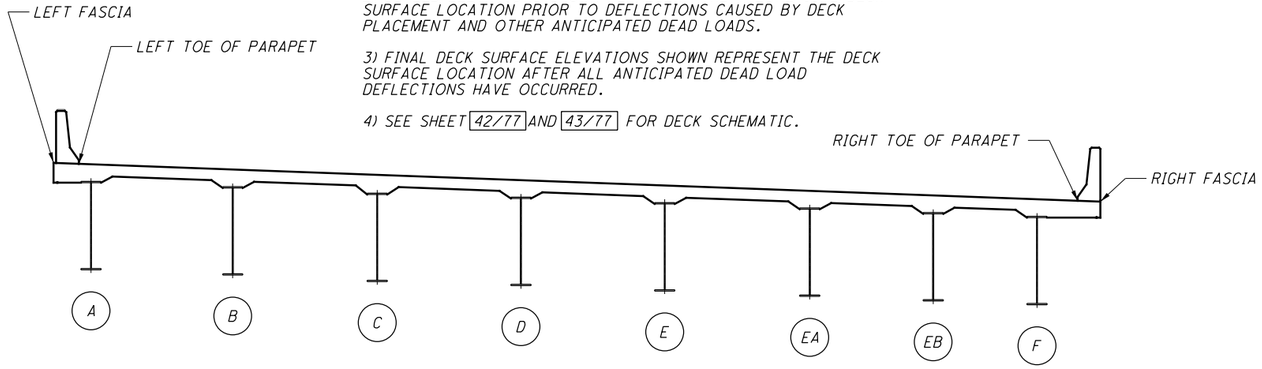
NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

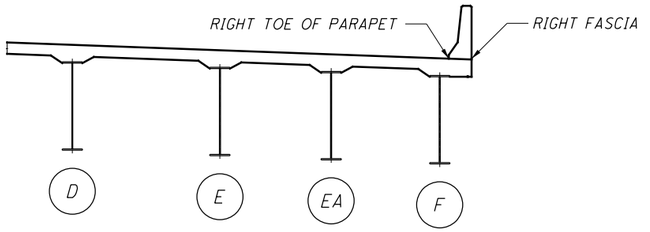
2) SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

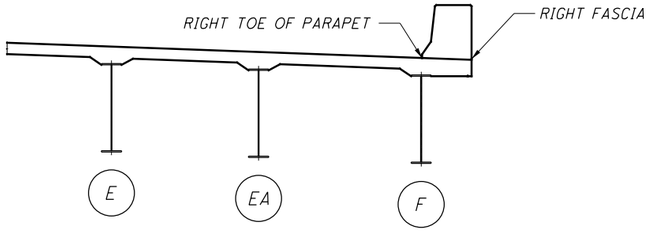
4) SEE SHEET 42/77 AND 43/77 FOR DECK SCHEMATIC.



DECK SECTION - ℄ BRG. REAR ABUT. TO ℄ PIER 1W



PARTIAL DECK SECTION - ℄ PIER 1W TO ℄ PIER 4W



PARTIAL DECK SECTION - ℄ PIER 1W TO ℄ PIER 4W

AREAS OF WIDENED PARAPET

	LOCATION	℄ BRG. REAR ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 2W
LEFT FASCIA	STATION	139+65.00	139+76.92	139+88.84	140+00.77	140+12.70	140+24.49	140+36.28	140+48.08	140+59.89	140+71.71	140+83.53	140+98.06	141+12.62	141+27.12	141+41.64	141+56.17	141+70.71	141+85.24	141+99.68	142+14.08	142+28.46
	OFFSET	-70.88 L	-70.12 L	-69.35 L	-68.56 L	-67.77 L	-66.99 L	-66.22 L	-65.47 L	-64.74 L	-64.02 L	-63.33 L	-62.50 L	-61.69 L	-60.92 L	-60.20 L	-59.52 L	-58.89 L	-58.30 L	-57.75 L	-57.28 L	-56.87 L
	FINAL DECK ELEV.	538.07	538.64	539.20	539.77	540.34	540.91	541.47	542.04	542.61	543.18	543.74	544.44	545.14	545.84	546.55	547.27	548.00	548.80	549.60	550.40	551.21
	SCREED ELEV.	538.07	538.66	539.25	539.82	540.39	540.96	541.51	542.06	542.62	543.17	543.74	544.45	545.17	545.90	546.63	547.36	548.09	548.87	549.64	550.42	551.21
LEFT TOE PARAPET	STATION	139+64.90	139+76.83	139+88.76	140+00.69	140+12.63	140+24.42	140+36.23	140+48.04	140+59.86	140+71.68	140+83.52	140+98.02	141+12.56	141+27.04	141+41.53	141+56.04	141+70.55	141+85.06	141+99.48	142+13.86	142+28.21
	OFFSET	-69.22 L	-68.45 L	-67.68 L	-66.90 L	-66.11 L	-65.32 L	-64.55 L	-63.80 L	-63.07 L	-62.36 L	-61.66 L	-60.83 L	-60.03 L	-59.26 L	-58.53 L	-57.86 L	-57.23 L	-56.63 L	-56.09 L	-55.61 L	-55.21 L
	FINAL DECK ELEV.	538.01	538.58	539.14	539.71	540.28	540.85	541.41	541.98	542.55	543.12	543.69	544.38	545.08	545.78	546.49	547.20	547.93	548.72	549.52	550.32	551.12
	SCREED ELEV.	538.01	538.60	539.18	539.76	540.33	540.90	541.45	542.01	542.56	543.11	543.68	544.39	545.11	545.84	546.57	547.29	548.02	548.80	549.57	550.34	551.12
RIGHT TOE PARAPET	STATION	139+60.69	139+72.93	139+85.17	139+97.41	140+09.64	140+21.92	140+34.15	140+46.36	140+58.57	140+70.78	140+82.96	140+96.65	141+10.36	141+24.09	141+37.82	141+51.55	141+65.27	141+78.99	141+92.68	142+06.33	142+19.95
	OFFSET	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-2.83 L	-3.33 L	-3.33 L	-3.33 L	-3.33 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L
	FINAL DECK ELEV.	535.50	536.11	536.72	537.34	537.95	538.60	539.23	539.84	540.45	541.05	541.60	542.28	542.96	543.64	544.32	545.01	545.71	546.39	547.08	547.77	548.45
	SCREED ELEV.	535.50	536.15	536.80	537.43	538.05	538.71	539.32	539.91	540.49	541.07	541.60	542.27	542.95	543.64	544.34	545.04	545.73	546.41	547.09	547.77	548.45
RIGHT FASCIA	STATION	139+60.59	139+72.84	139+85.09	139+97.33	140+09.57	140+21.81	140+34.04	140+46.35	140+58.50	140+70.77	140+82.95	140+96.62	141+10.31	141+24.01	141+37.72	141+51.42	141+65.13	141+78.81	141+92.48	142+06.12	142+19.71
	OFFSET	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-2.75 L	-0.08 L	-2.75 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L
	FINAL DECK ELEV.	535.45	536.06	536.67	537.28	537.89	538.50	539.12	539.82	540.33	541.03	541.55	542.22	542.90	543.58	544.27	544.96	545.65	546.33	547.01	547.70	548.38
	SCREED ELEV.	535.45	536.10	536.74	537.38	538.00	538.61	539.21	539.89	540.38	541.05	541.55	542.21	542.90	543.59	544.28	544.98	545.67	546.35	547.02	547.70	548.37

	LOCATION	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 3W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
LEFT FASCIA	STATION	142+38.61	142+48.76	142+58.91	142+69.05	142+79.18	142+89.29	142+99.39	143+09.46	143+19.51	143+29.53	143+37.94	143+46.34	143+54.73	143+63.11	143+71.48	143+79.82	143+88.13	143+96.41	144+04.65
	OFFSET	-56.62 L	-56.40 L	-56.20 L	-56.01 L	-55.85 L	-55.71 L	-55.58 L	-55.48 L	-55.40 L	-55.33 L	-55.29 L	-55.25 L	-55.22 L	-55.20 L	-55.19 L	-55.18 L	-55.18 L	-55.17 L	-55.17 L
	FINAL DECK ELEV.	551.76	552.31	552.84	553.36	553.87	554.37	554.86	555.34	555.80	556.26	556.63	556.99	557.35	557.70	558.04	558.37	558.69	559.01	559.32
	SCREED ELEV.	551.76	552.31	552.85	553.38	553.89	554.40	554.88	555.35	555.81	556.25	556.62	556.98	557.34	557.69	558.03	558.36	558.68	558.99	559.30
LEFT TOE PARAPET	STATION	142+38.33	142+48.46	142+58.58	142+68.70	142+78.79	142+88.88	142+98.95	143+08.99	143+19.02	143+29.01	143+37.37	143+45.73	143+54.08	143+62.43	143+70.75	143+79.05	143+87.32	143+95.56	144+03.77
	OFFSET	-54.96 L	-54.74 L	-54.54 L	-54.35 L	-54.19 L	-54.05 L	-53.92 L	-53.82 L	-53.74 L	-53.67 L	-53.62 L	-53.59 L	-53.56 L	-53.54 L	-53.53 L	-53.52 L	-53.51 L	-53.51 L	-53.50 L
	FINAL DECK ELEV.	551.68	552.22	552.75	553.27	553.77	554.27	554.76	555.23	555.69	556.14	556.51	556.87	557.23	557.58	557.91	558.24	558.56	558.88	559.18
	SCREED ELEV.	551.67	552.22	552.76	553.28	553.80	554.29	554.78	555.24	555.70	556.14	556.50	556.87	557.22	557.57	557.90	558.23	558.55	558.86	559.17
RIGHT TOE PARAPET	STATION	142+29.19	142+38.43	142+47.67	142+56.90	142+66.12	142+75.32	142+84.50	142+93.65	143+02.77	143+11.86	143+18.90	143+25.94	143+32.97	143+39.99	143+47.00	143+53.98	143+60.94	143+67.88	143+74.79
	OFFSET	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L
	FINAL DECK ELEV.	548.92	549.37	549.82	550.26	550.69	551.10	551.51	551.91	552.30	552.67	552.96	553.24	553.52	553.79	554.05	554.31	554.56	554.81	555.05
	SCREED ELEV.	548.91	549.37	549.82	550.26	550.69	551.11	551.52	551.92	552.30	552.67	552.96	553.23	553.51	553.78	554.04	554.29	554.55	554.79	555.04
RIGHT FASCIA	STATION	142+28.92	142+38.13	142+47.35	142+56.55	142+65.74	142+74.91	142+84.07	142+93.19	143+02.29	143+11.34	143+18.35	143+25.35	143+32.34	143+39.31	143+46.28	143+53.22	143+60.15	143+67.04	143+73.91
	OFFSET	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L
	FINAL DECK ELEV.	548.84	549.29	549.74	550.17	550.60	551.01	551.42	551.82	552.20	552.58	552.86	553.14	553.41	553.68	553.94	554.20	554.45	554.69	554.93
	SCREED ELEV.	548.83	549.29	549.74	550.18	550.61	551.02	551.43	551.82	552.20	552.57	552.85	553.13	553.40	553.67	553.93	554.18	554.43	554.68	554.92

DESIGN AGENCY
PALMER ENGINEERING
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CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

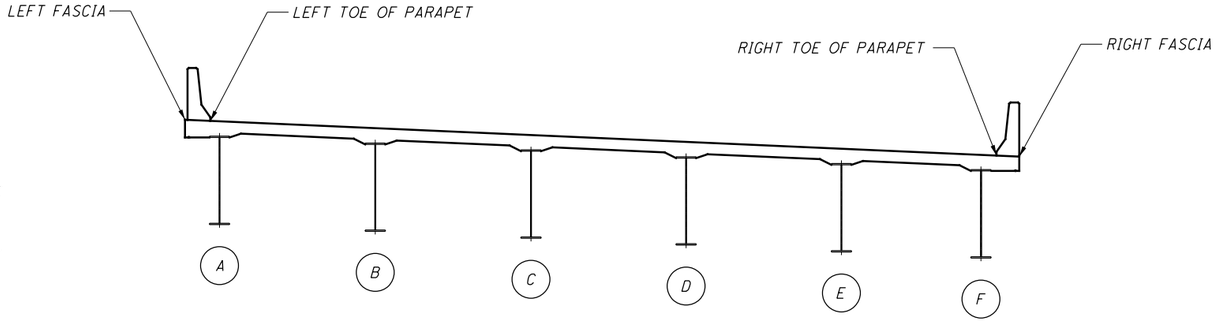
DECK ELEVATIONS - SOUTHBOUND I-71

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939



NOTES

1) SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

3) SEE SHEET 44/77 AND 45/77 FOR DECK SCHEMATIC.

DECK SECTION - ℄ PIER 4W TO ℄ PIER 8W

LOCATION		C/L PIER 4W	1/8	2/8	3/8	4/8	5/8	6/8	7/8	FIELD SPLICE	1/2	C/L PIER 5W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
LEFT FASCIA	STATION	144+12.86	144+25.39	144+37.85	144+50.25	144+62.58	144+74.84	144+87.05	144+99.20	145+11.29	145+21.90	145+32.46	145+39.12	145+45.77	145+52.40	145+59.02	145+65.62	145+72.21	145+78.78	145+85.34	145+91.88
	OFFSET	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L
	FINAL DECK ELEV.	559.62	560.01	560.38	560.73	561.06	561.37	561.67	561.96	562.22	562.45	562.66	562.78	562.91	563.02	563.14	563.25	563.35	563.45	563.54	563.63
	SCREED ELEV.	559.61	560.03	560.42	560.79	561.14	561.47	561.76	562.03	562.27	562.47	562.66	562.78	562.90	563.02	563.14	563.25	563.35	563.45	563.55	563.64
LEFT TOE PARAPET	STATION	144+11.93	144+24.48	144+36.97	144+49.38	144+61.73	144+74.02	144+86.25	144+98.41	145+10.53	145+21.15	145+31.72	145+38.40	145+45.05	145+51.70	145+58.32	145+64.93	145+71.53	145+78.11	145+84.68	145+91.24
	OFFSET	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L
	FINAL DECK ELEV.	559.48	559.88	560.25	560.60	560.93	561.25	561.55	561.83	562.10	562.33	562.54	562.67	562.79	562.91	563.02	563.13	563.23	563.34	563.43	563.52
	SCREED ELEV.	559.47	559.90	560.29	560.67	561.02	561.34	561.64	561.90	562.15	562.35	562.54	562.66	562.78	562.90	563.02	563.13	563.24	563.34	563.43	563.52
RIGHT TOE PARAPET	STATION	143+81.67	143+94.91	144+08.08	144+21.16	144+34.17	144+47.11	144+59.97	144+72.77	144+85.50	144+96.66	145+07.76	145+14.77	145+21.76	145+28.73	145+35.68	145+42.62	145+49.54	145+56.44	145+63.32	145+70.19
	OFFSET	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L
	FINAL DECK ELEV.	555.28	555.72	556.14	556.54	556.92	557.29	557.64	557.97	558.29	558.55	558.80	558.95	559.09	559.23	559.37	559.50	559.62	559.74	559.86	559.97
	SCREED ELEV.	555.28	555.74	556.18	556.61	557.01	557.38	557.73	558.05	558.34	558.57	558.80	558.94	559.09	559.23	559.36	559.50	559.62	559.75	559.86	559.97
RIGHT FASCIA	STATION	143+80.75	143+94.02	144+07.20	144+20.31	144+33.34	144+46.29	144+59.18	144+71.99	144+84.74	144+95.91	145+07.04	145+14.06	145+21.06	145+28.04	145+35.00	145+41.94	145+48.87	145+55.78	145+62.68	145+69.56
	OFFSET	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L
	FINAL DECK ELEV.	555.16	555.60	556.02	556.42	556.81	557.18	557.53	557.86	558.18	558.44	558.69	558.84	558.99	559.13	559.26	559.39	559.52	559.64	559.76	559.87
	SCREED ELEV.	555.16	555.62	556.06	556.49	556.89	557.27	557.62	557.93	558.23	558.46	558.69	558.84	558.98	559.12	559.26	559.39	559.52	559.64	559.76	559.87

LOCATION		C/L BRG. PIER 6W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	C/L PIER 7W	1/2	FIELD SPLICE	1/8	2/8	3/8	4/8	5/8	6/8	7/8
LEFT FASCIA	STATION	145+99.61	146+08.29	146+16.92	146+25.54	146+34.12	146+42.69	146+51.24	146+59.78	146+68.32	146+76.85	146+85.40	146+99.84	147+14.35	147+25.37	147+36.38	147+47.39	147+58.40	147+69.43	147+80.53	147+91.67
	OFFSET	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L
	FINAL DECK ELEV.	563.74	563.84	563.94	564.00	564.04	564.08	564.12	564.16	564.20	564.23	564.27	564.34	564.40	564.45	564.50	564.55	564.60	564.65	564.70	564.75
	SCREED ELEV.	563.74	563.85	563.96	564.03	564.07	564.11	564.14	564.17	564.20	564.23	564.27	564.34	564.42	564.49	564.55	564.60	564.65	564.69	564.73	564.77
LEFT TOE PARAPET	STATION	145+98.98	146+07.72	146+16.42	146+25.09	146+33.75	146+42.38	146+50.99	146+59.59	146+68.19	146+76.79	146+85.40	146+99.85	147+14.38	147+25.49	147+36.58	147+47.67	147+58.76	147+69.87	147+81.06	147+92.28
	OFFSET	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L
	FINAL DECK ELEV.	563.62	563.73	563.83	563.90	563.94	563.98	564.02	564.06	564.10	564.14	564.18	564.25	564.31	564.37	564.42	564.47	564.52	564.57	564.62	564.68
	SCREED ELEV.	563.62	563.74	563.85	563.92	563.97	564.01	564.04	564.07	564.11	564.14	564.18	564.25	564.33	564.40	564.46	564.52	564.57	564.61	564.65	564.69
RIGHT TOE PARAPET	STATION	145+78.30	145+89.18	146+00.00	146+10.76	146+21.48	146+32.16	146+42.82	146+53.47	146+64.10	146+74.74	146+85.40	147+00.38	147+15.37	147+29.16	147+42.92	147+56.67	147+70.43	147+84.21	147+98.02	148+11.88
	OFFSET	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L
	FINAL DECK ELEV.	560.09	560.25	560.39	560.52	560.64	560.75	560.86	560.96	561.07	561.17	561.28	561.43	561.58	561.72	561.85	561.99	562.13	562.26	562.40	562.54
	SCREED ELEV.	560.09	560.26	560.42	560.56	560.68	560.79	560.88	560.98	561.07	561.17	561.28	561.44	561.62	561.78	561.94	562.08	562.21	562.33	562.45	562.56
RIGHT FASCIA	STATION	145+77.67	145+88.62	145+99.50	146+10.33	146+21.11	146+31.85	146+42.58	146+53.28	146+63.98	146+74.68	146+85.40	147+00.40	147+15.40	147+29.26	147+43.11	147+56.94	147+70.78	147+84.63	147+98.52	148+12.46
	OFFSET	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L
	FINAL DECK ELEV.	559.99	560.15	560.29	560.43	560.55	560.66	560.77	560.87	560.98	561.09	561.20	561.35	561.50	561.64	561.78	561.92	562.06	562.20	562.34	562.48
	SCREED ELEV.	559.99	560.16	560.32	560.47	560.59	560.69	560.79	560.89	560.99	561.09	561.20	561.36	561.54	561.71	561.87	562.01	562.15	562.27	562.39	562.50

DESIGN AGENCY
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331 COMELL PARK DR - SUITE 200
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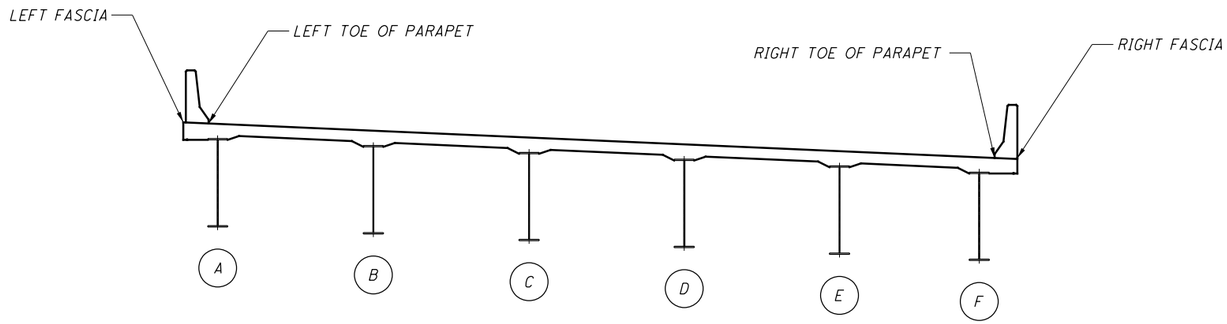
CINCINNATI • AKRON • MILLERSBURG

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - SOUTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SECTION - ℄ PIER 8W TO ℄ BRG. FWD. ABUT.

NOTES

1) SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

3) SEE SHEET 46/77 FOR DECK SCHEMATIC.

	LOCATION	℄ PIER 8W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 9W	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. FWD. ABUT.
LEFT FASCIA	STATION	148+02.85	148+14.35	148+25.90	148+37.48	148+49.11	148+60.75	148+72.44	148+84.22	148+96.00	149+07.76	149+19.50	149+26.99	149+34.47	149+41.96	149+49.45	149+56.94	149+64.42	149+71.92	149+79.45	149+86.97	149+94.50
	OFFSET	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L	-55.17 L
	FINAL DECK ELEV.	564.80	564.85	564.90	564.95	565.01	565.06	565.11	565.17	565.22	565.27	565.32	565.36	565.39	565.42	565.46	565.49	565.53	565.56	565.59	565.63	565.66
	SCREED ELEV.	564.81	564.87	564.94	565.01	565.07	565.13	565.18	565.23	565.26	565.30	565.34	565.37	565.41	565.44	565.48	565.51	565.55	565.58	565.61	565.63	565.66
LEFT TOE PARAPET	STATION	148+03.55	148+14.98	148+26.46	148+37.98	148+49.53	148+61.11	148+72.73	148+84.44	148+96.14	149+07.83	149+19.50	149+26.99	149+34.47	149+41.96	149+49.45	149+56.94	149+64.43	149+71.92	149+79.45	149+86.97	149+94.50
	OFFSET	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L	-53.50 L
	FINAL DECK ELEV.	564.73	564.78	564.84	564.89	564.94	565.00	565.05	565.11	565.16	565.22	565.27	565.30	565.34	565.38	565.41	565.44	565.48	565.51	565.55	565.58	565.62
	SCREED ELEV.	564.74	564.80	564.87	564.94	565.01	565.07	565.12	565.17	565.21	565.25	565.29	565.32	565.35	565.39	565.43	565.46	565.50	565.53	565.56	565.59	565.62
RIGHT TOE PARAPET	STATION	148+25.80	148+35.12	148+44.46	148+53.83	148+63.21	148+72.60	148+82.00	148+91.39	149+00.77	149+10.15	149+19.50	149+27.00	149+34.50	149+42.00	149+49.50	149+57.00	149+64.50	149+72.00	149+79.50	149+87.00	149+94.50
	OFFSET	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L	-1.58 L
	FINAL DECK ELEV.	562.68	562.77	562.86	562.96	563.05	563.14	563.24	563.33	563.42	563.52	563.61	563.68	563.76	563.83	563.91	563.98	564.06	564.13	564.21	564.28	564.36
	SCREED ELEV.	562.67	562.76	562.85	562.95	563.05	563.14	563.24	563.33	563.43	563.52	563.61	563.69	563.77	563.85	563.93	564.01	564.09	564.16	564.23	564.29	564.36
RIGHT FASCIA	STATION	148+26.46	148+35.72	148+45.00	148+54.30	148+63.62	148+72.94	148+82.27	148+91.59	149+00.91	149+10.21	149+19.50	149+27.00	149+34.50	149+42.00	149+49.50	149+57.00	149+64.50	149+72.00	149+79.50	149+87.00	149+94.50
	OFFSET	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L	-0.08 L
	FINAL DECK ELEV.	562.62	562.72	562.81	562.91	563.00	563.09	563.19	563.28	563.38	563.47	563.56	563.64	563.72	563.79	563.87	563.94	564.02	564.14	564.17	564.25	564.32
	SCREED ELEV.	562.62	562.71	562.80	562.90	563.00	563.09	563.19	563.29	563.38	563.47	563.57	563.65	563.73	563.81	563.89	563.97	564.05	564.17	564.19	564.26	564.32

DESIGN AGENCY
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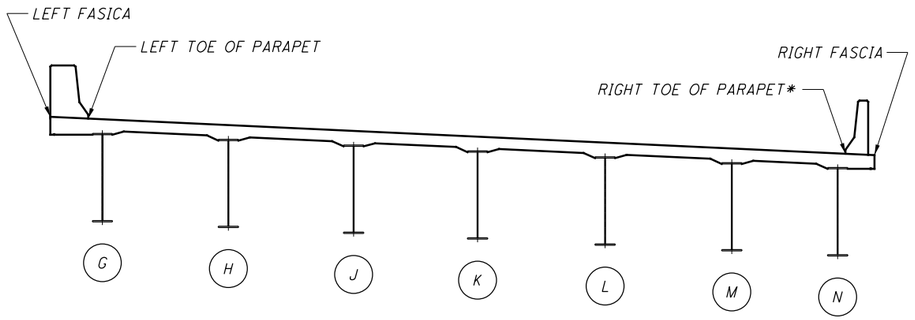
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - SOUTHBOUND I-71

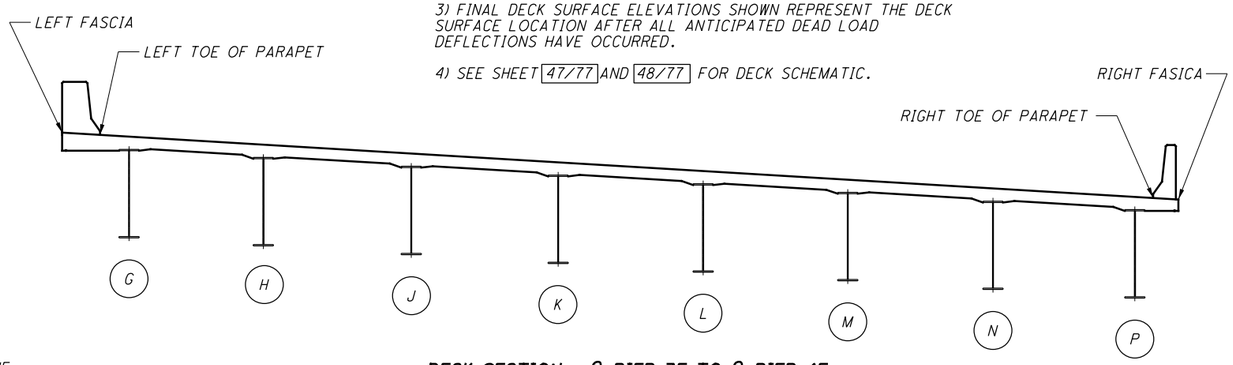
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



DECK SECTION - ℄ BRG. REAR ABUT. TO ℄ PIER 3E

* FROM STA. 141+31.96 TO THE PIER 3E EXPANSION JOINT, THE LOCATION IS THE TOE OF CURB.



DECK SECTION - ℄ PIER 3E TO ℄ PIER 4E

NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

4) SEE SHEET 47/77 AND 48/77 FOR DECK SCHEMATIC.

	LOCATION	℄ BRG. REAR ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 1E	1/2	FIELD SPLICE	1/8	2/8	3/8	4/8	5/8	6/8	7/8	℄ PIER 2E
LEFT FASCIA	STATION	139+60.58	139+70.63	139+80.68	139+90.73	140+00.77	140+10.81	140+20.85	140+30.89	140+40.93	140+50.96	140+61.00	140+76.00	140+91.00	141+02.88	141+14.77	141+26.67	141+38.57	141+50.45	141+62.32	141+74.17	141+85.98
	OFFSET	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R
	FINAL DECK ELEV.	535.61	536.11	536.62	537.12	537.63	538.14	538.64	539.15	539.65	540.16	540.66	541.42	542.18	542.77	543.37	543.97	544.57	545.17	545.77	546.37	546.96
	SCREED ELEV.	535.61	536.13	536.65	537.17	537.68	538.18	538.68	539.17	539.67	540.16	540.66	541.43	542.20	542.82	543.43	544.04	544.64	545.22	545.80	546.38	546.96
LEFT TOE PARAPET	STATION	139+60.42	139+70.48	139+80.54	139+90.59	140+00.65	140+10.70	140+20.75	140+30.80	140+40.85	140+50.90	140+60.95	140+75.97	140+90.99	141+02.80	141+14.62	141+26.46	141+38.29	141+50.11	141+61.92	141+73.70	141+85.45
	OFFSET	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R
	FINAL DECK ELEV.	535.51	536.01	536.52	537.02	537.52	538.03	538.53	539.04	539.54	540.04	540.55	541.30	542.06	542.65	543.24	543.84	544.43	545.02	545.61	546.21	546.80
	SCREED ELEV.	535.51	536.03	536.55	537.07	537.57	538.08	538.57	539.06	539.55	540.05	540.55	541.31	542.08	542.69	543.30	543.90	544.49	545.07	545.65	546.22	546.80
RIGHT TOE PARAPET	STATION	139+57.18	139+67.41	139+77.64	139+87.86	139+98.09	140+08.31	140+18.59	140+28.91	140+39.23	140+49.55	140+59.86	140+75.29	140+90.71	141+01.14	141+11.58	141+22.07	141+32.57	141+43.06	141+53.54	141+64.01	141+74.45
	OFFSET	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R
	FINAL DECK ELEV.	533.52	533.99	534.46	534.93	535.40	535.87	536.34	536.81	537.29	537.76	538.23	538.94	539.65	540.13	540.61	541.09	541.57	542.05	542.53	543.02	543.49
	SCREED ELEV.	533.52	534.01	534.49	534.97	535.44	535.91	536.38	536.84	537.30	537.77	538.23	538.94	539.66	540.15	540.64	541.12	541.60	542.08	542.55	543.02	543.49
RIGHT FASCIA	STATION	139+57.05	139+67.29	139+77.52	139+87.76	139+97.99	140+08.21	140+18.50	140+28.83	140+39.17	140+49.49	140+59.82	140+75.26	140+90.70	141+01.07	141+11.46	141+21.90	141+32.19	141+42.66	141+53.14	141+63.61	141+74.06
	OFFSET	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	54.50 R	55.75 R	55.32 R	54.92 R	54.58 R	54.28 R
	FINAL DECK ELEV.	533.45	533.91	534.38	534.85	535.32	535.79	536.26	536.73	537.20	537.67	538.15	538.85	539.56	540.03	540.51	540.99	541.39	541.89	542.39	542.89	543.38
	SCREED ELEV.	533.45	533.93	534.41	534.89	535.36	535.83	536.29	536.75	537.22	537.68	538.15	538.85	539.57	540.05	540.54	541.02	541.42	541.92	542.41	542.89	543.38

	LOCATION	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. PIER 3E	℄ BRG. PIER 3E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10
LEFT FASCIA	STATION	141+94.55	142+03.11	142+11.67	142+20.22	142+28.75	142+37.28	142+45.78	142+54.26	142+62.72	142+71.14	142+72.82	142+83.72	142+94.62	143+05.50	143+16.37	143+27.20	143+38.00	143+48.75	143+59.44	143+70.08
	OFFSET	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R
	FINAL DECK ELEV.	547.39	547.82	548.26	548.69	549.12	549.54	549.95	550.36	550.76	551.14	551.22	551.70	552.17	552.64	553.08	553.52	553.94	554.35	554.75	555.13
	SCREED ELEV.	547.39	547.83	548.26	548.70	549.14	549.56	549.98	550.38	550.77	551.14	551.22	551.73	552.22	552.70	553.15	553.58	553.99	554.39	554.76	555.13
LEFT TOE PARAPET	STATION	141+93.97	142+02.49	142+11.01	142+19.52	142+28.01	142+36.49	142+44.95	142+53.39	142+61.80	142+70.18	142+71.86	142+82.70	142+93.54	143+04.37	143+15.18	143+25.95	143+36.69	143+47.38	143+58.02	143+68.60
	OFFSET	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R
	FINAL DECK ELEV.	547.22	547.65	548.08	548.50	548.93	549.35	549.76	550.16	550.56	550.94	551.02	551.50	551.97	552.43	552.88	553.31	553.73	554.14	554.54	554.92
	SCREED ELEV.	547.22	547.65	548.09	548.52	548.95	549.37	549.78	550.18	550.57	550.94	551.02	551.53	552.02	552.49	552.94	553.38	553.79	554.18	554.56	554.92
RIGHT TOE PARAPET	STATION	141+82.06	141+89.67	141+97.31	142+04.93	142+12.53	142+20.10	142+27.64	142+35.15	142+42.62		142+42.23	142+51.37	142+60.50	142+69.65	142+78.79	142+87.91	142+97.00	143+06.06	143+15.09	143+24.07
	OFFSET	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R	52.58 R		74.98 R	74.70 R	74.44 R	74.19 R	73.94 R	73.70 R	73.46 R	73.22 R	72.99 R	72.76 R
	FINAL DECK ELEV.	543.84	544.19	544.54	544.89	545.24	545.59	545.94	546.28	546.61		545.11	545.56	546.01	546.44	546.87	547.28	547.69	548.09	548.47	548.85
	SCREED ELEV.	543.84	544.19	544.54	544.90	545.25	545.60	545.94	546.28	546.61		545.11	545.57	546.02	546.45	546.88	547.29	547.70	548.09	548.47	548.85
RIGHT FASCIA	STATION	141+81.69	141+89.31	141+96.97	142+04.61	142+12.22	142+19.81	142+27.36	142+34.88	142+42.36	142+49.79	142+41.49	142+50.59	142+59.68	142+68.77	142+77.87	142+86.94	142+95.99	143+05.00	143+13.98	143+22.92
	OFFSET	54.09 R	53.92 R	53.78 R	53.65 R	53.53 R	53.44 R	53.36 R	53.30 R	53.25 R	53.22 R	76.67 R	76.39 R	76.13 R	75.88 R	75.64 R	75.39 R	75.15 R	74.92 R	74.69 R	74.46 R
	FINAL DECK ELEV.	543.74	544.10	544.46	544.82	545.17	545.53	545.88	546.22	546.56	546.88	544.96	545.42	545.86	546.30	546.72	547.14	547.54	547.94	548.32	548.70
	SCREED ELEV.	543.74	544.10	544.46	544.82	545.18	545.53	545.88	546.23	546.56	546.88	544.96	545.42	545.87	546.31	546.73	547.14	547.55	547.94	548.32	548.70

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DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - NORTHBOUND I-71

BRIDGE NO. HAM-71-0159
1-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

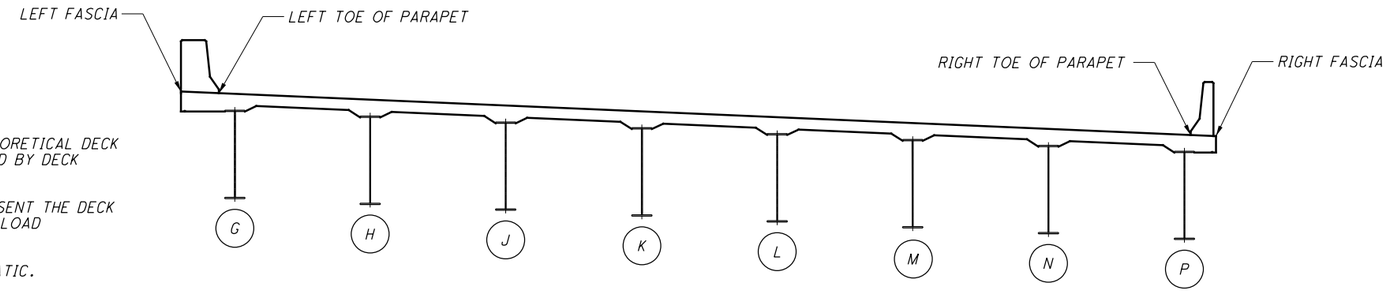
NOTES

1) STATIONING IS BASED ON ℄ I-71 NORTHBOUND.

2) SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

3) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

4) SEE SHEET 49/77 AND 50/77 FOR DECK SCHEMATIC.



DECK SECTION - ℄ PIER 4E TO ℄ PIER 8E

	LOCATION	℄ PIER 4E	1/2	FIELD SPLICE	1/6	2/6	3/6	4/6	5/6	FIELD SPLICE	1/2	℄ PIER 5E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. PIER 6E
LEFT FASCIA	STATION	143+80.65	143+95.70	144+10.65	144+21.83	144+32.96	144+44.04	144+55.06	144+66.03	144+76.96	144+92.00	145+06.96	145+13.98	145+20.98	145+27.96	145+34.92	145+41.87	145+48.80	145+55.71	145+62.61	145+69.49	145+76.35
	OFFSET	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R
	FINAL DECK ELEV.	555.50	556.00	556.48	556.83	557.16	557.48	557.78	558.07	558.35	558.71	559.05	559.20	559.35	559.49	559.63	559.76	559.88	560.00	560.12	560.23	560.33
	SCREED ELEV.	555.50	556.01	556.50	556.87	557.21	557.54	557.84	558.12	558.38	558.73	559.05	559.20	559.34	559.49	559.62	559.76	559.88	560.00	560.12	560.23	560.33
LEFT TOE PARAPET	STATION	143+79.11	143+94.21	144+09.19	144+20.41	144+31.57	144+42.67	144+53.72	144+64.72	144+75.67	144+90.75	145+05.75	145+12.78	145+19.80	145+26.80	145+33.78	145+40.74	145+47.69	145+54.61	145+61.53	145+68.42	145+75.30
	OFFSET	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R
	FINAL DECK ELEV.	555.29	555.80	556.28	556.63	556.96	557.28	557.59	557.88	558.16	558.53	558.87	559.02	559.17	559.31	559.45	559.58	559.71	559.83	559.94	560.06	560.16
	SCREED ELEV.	555.29	555.80	556.30	556.67	557.02	557.35	557.65	557.93	558.20	558.54	558.87	559.02	559.16	559.31	559.44	559.58	559.71	559.83	559.95	560.06	560.16
RIGHT TOE PARAPET	STATION	143+33.00	143+49.62	143+66.08	143+78.37	143+90.57	144+02.69	144+14.74	144+26.71	144+38.60	144+54.96	144+71.19	144+78.80	144+86.38	144+93.93	145+01.46	145+08.97	145+16.45	145+23.90	145+31.33	145+38.74	145+46.13
	OFFSET	72.54 R	72.13 R	71.74 R	71.45 R	71.17 R	70.90 R	70.64 R	70.39 R	70.14 R	69.81 R	69.49 R	69.35 R	69.20 R	69.07 R	68.93 R	68.80 R	68.67 R	68.54 R	68.41 R	68.29 R	68.17 R
	FINAL DECK ELEV.	549.22	549.88	550.51	550.96	551.39	551.80	552.20	552.58	552.94	553.42	553.87	554.07	554.26	554.45	554.63	554.80	554.97	555.13	555.29	555.43	555.58
	SCREED ELEV.	549.22	549.90	550.55	551.02	551.47	551.89	552.28	552.65	552.99	553.44	553.87	554.06	554.25	554.44	554.62	554.80	554.97	555.13	555.29	555.44	555.58
RIGHT FASCIA	STATION	143+31.80	143+48.46	143+64.95	143+77.26	143+89.49	144+01.63	144+13.70	144+25.70	144+37.62	144+54.01	144+70.27	144+77.89	144+85.48	144+93.05	145+00.59	145+08.11	145+15.60	145+23.07	145+30.52	145+37.94	145+45.34
	OFFSET	74.24 R	73.83 R	73.43 R	73.14 R	72.87 R	72.59 R	72.33 R	72.08 R	71.83 R	71.49 R	71.18 R	71.03 R	70.89 R	70.75 R	70.61 R	70.48 R	70.35 R	70.22 R	70.09 R	69.97 R	69.85 R
	FINAL DECK ELEV.	549.07	549.73	550.36	550.81	551.25	551.66	552.06	552.45	552.81	553.29	553.74	553.94	554.13	554.32	554.50	554.68	554.85	555.01	555.16	555.31	555.46
	SCREED ELEV.	549.07	549.75	550.40	550.87	551.33	551.75	552.14	552.51	552.85	553.31	553.74	553.93	554.13	554.31	554.50	554.67	554.84	555.01	555.17	555.32	555.46

	LOCATION	℄ BRG. PIER 6E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ PIER 7E	1/8	2/8	3/8	4/8	5/8	6/8	7/8	FIELD SPLICE	1/2	℄ PIER 8E
LEFT FASCIA	STATION	145+77.60	145+88.52	145+99.37	146+10.17	146+20.93	146+31.67	146+42.39	146+53.11	146+63.84	146+74.61	146+85.41	146+98.99	147+12.60	147+26.24	147+39.89	147+53.55	147+67.21	147+80.86	147+94.50	148+09.50	148+24.50
	OFFSET	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R
	FINAL DECK ELEV.	560.35	560.51	560.66	560.79	560.91	561.01	561.11	561.22	561.32	561.42	561.52	561.65	561.78	561.91	562.04	562.17	562.30	562.43	562.56	562.71	562.85
	SCREED ELEV.	560.35	560.53	560.70	560.85	560.96	561.06	561.15	561.23	561.32	561.44	561.56	561.72	561.87	562.02	562.15	562.26	562.36	562.46	562.57	562.70	562.84
LEFT TOE PARAPET	STATION	145+76.56	145+87.62	145+98.61	146+09.55	146+20.44	146+31.32	146+42.18	146+53.04	146+63.91	146+74.81	146+85.76	146+99.30	147+12.87	147+26.46	147+40.07	147+53.69	147+67.30	147+80.91	147+94.50	148+09.50	148+24.50
	OFFSET	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R
	FINAL DECK ELEV.	560.18	560.34	560.49	560.62	560.75	560.85	560.96	561.07	561.17	561.28	561.39	561.52	561.65	561.78	561.92	562.05	562.18	562.32	562.45	562.60	562.74
	SCREED ELEV.	560.18	560.36	560.53	560.68	560.80	560.90	560.99	561.08	561.18	561.29	561.42	561.58	561.74	561.89	562.02	562.14	562.24	562.35	562.46	562.59	562.73
RIGHT TOE PARAPET	STATION	145+47.45	145+62.54	145+77.50	145+92.33	146+07.09	146+21.78	146+36.41	146+51.04	146+65.70	146+80.41	146+95.19	147+07.56	147+19.96	147+32.38	147+44.82	147+57.27	147+69.73	147+82.12	147+94.50	148+09.50	148+24.50
	OFFSET	68.15 R	67.91 R	67.69 R	67.48 R	67.28 R	67.08 R	66.91 R	66.75 R	66.60 R	66.44 R	66.23 R	66.02 R	65.79 R	65.55 R	65.29 R	65.02 R	64.73 R	64.43 R	64.13 R	63.76 R	63.39 R
	FINAL DECK ELEV.	555.60	555.88	556.13	556.35	556.55	556.74	556.98	557.23	557.47	557.71	557.95	558.16	558.37	558.58	558.79	559.00	559.20	559.41	559.62	559.87	560.12
	SCREED ELEV.	555.60	555.93	556.22	556.49	556.69	556.87	557.08	557.29	557.49	557.72	557.97	558.19	558.41	558.63	558.84	559.04	559.24	559.43	559.62	559.87	560.12
RIGHT FASCIA	STATION	145+46.66	145+61.86	145+76.92	145+91.86	146+06.72	146+21.52	146+36.25	146+50.99	146+65.75	146+80.57	146+95.45	147+07.79	147+20.15	147+32.54	147+44.95	147+57.37	147+69.80	147+82.15	147+94.50	148+09.50	148+24.50
	OFFSET	69.83 R	69.59 R	69.37 R	69.15 R	68.95 R	68.75 R	68.58 R	68.41 R	68.27 R	68.11 R	67.89 R	67.68 R	67.45 R	67.21 R	66.95 R	66.68 R	66.39 R	66.09 R	65.79 R	65.43 R	65.06 R
	FINAL DECK ELEV.	555.48	555.76	556.01	556.24	556.44	556.63	556.88	557.13	557.37	557.62	557.87	558.07	558.28	558.49	558.70	558.91	559.13	559.33	559.54	559.80	560.05
	SCREED ELEV.	555.48	555.81	556.10	556.38	556.58	556.76	556.98	557.19	557.39	557.63	557.88	558.10	558.33	558.54	558.76	558.96	559.16	559.35	559.55	559.80	560.05

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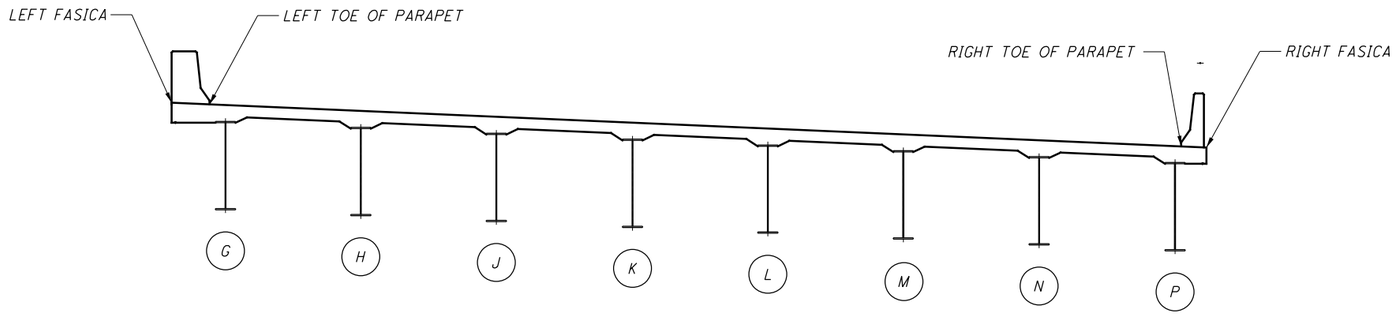
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - NORTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



NOTES

1) SCREED ELEVATIONS SHOWN REPRESENT THE THEORETICAL DECK SURFACE LOCATION PRIOR TO DEFLECTIONS CAUSED BY DECK PLACEMENT AND OTHER ANTICIPATED DEAD LOADS.

2) FINAL DECK SURFACE ELEVATIONS SHOWN REPRESENT THE DECK SURFACE LOCATION AFTER ALL ANTICIPATED DEAD LOAD DEFLECTIONS HAVE OCCURRED.

3) SEE SHEET 51/77 FOR DECK SCHEMATIC.

DECK SECTION - ℄ PIER 8E TO ℄ BRG. FWD. ABUT.

	LOCATION	1/8	2/8	3/8	4/8	5/8	6/8	7/8	FIELD SPLICE	1/2	℄ PIER 9E	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	℄ BRG. FWD. ABUT.
LEFT FASCIA	STATION	148+33.88	148+43.25	148+52.63	148+62.00	148+71.38	148+80.75	148+90.13	148+99.50	149+09.50	149+19.50	149+27.00	149+34.50	149+42.00	149+49.50	149+57.00	149+64.50	149+72.00	149+79.50	149+87.00	149+94.50
	OFFSET	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R	0.08 R
	FINAL DECK ELEV.	562.94	563.03	563.12	563.21	563.30	563.39	563.48	563.56	563.66	563.76	563.83	563.90	563.97	564.04	564.11	564.18	564.26	564.33	564.40	564.47
	SCREED ELEV.	562.93	563.03	563.12	563.21	563.30	563.39	563.47	563.56	563.66	563.77	563.85	563.92	564.00	564.07	564.13	564.20	564.26	564.33	564.40	564.47
LEFT TOE PARAPET	STATION	148+33.88	148+43.26	148+52.63	148+62.01	148+71.39	148+80.76	148+90.13	148+99.50	149+09.50	149+19.50	149+27.00	149+34.50	149+42.00	149+49.50	149+57.00	149+64.51	149+72.01	149+79.50	149+87.00	149+94.50
	OFFSET	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R	2.58 R
	FINAL DECK ELEV.	562.83	562.92	563.02	563.11	563.20	563.29	563.38	563.47	563.57	563.67	563.74	563.82	563.89	563.96	564.04	564.11	564.18	564.26	564.33	564.40
	SCREED ELEV.	562.83	562.92	563.02	563.11	563.20	563.29	563.38	563.47	563.58	563.68	563.76	563.84	563.92	563.99	564.06	564.12	564.19	564.26	564.33	564.40
RIGHT TOE PARAPET	STATION	148+33.93	148+43.35	148+52.78	148+62.20	148+71.60	148+80.90	148+90.20	148+99.50	149+09.50	149+19.50	149+27.02	149+34.53	149+42.05	149+49.56	149+57.08	149+64.59	149+72.09	149+79.56	149+87.03	149+94.50
	OFFSET	63.16 R	62.92 R	62.68 R	62.44 R	62.21 R	61.98 R	61.76 R	61.56 R	61.37 R	61.19 R	61.07 R	60.95 R	60.85 R	60.76 R	60.68 R	60.61 R	60.54 R	60.47 R	60.39 R	60.30 R
	FINAL DECK ELEV.	560.28	560.43	560.59	560.74	560.90	561.05	561.20	561.35	561.51	561.67	561.79	561.91	562.03	562.14	562.26	562.38	562.49	562.61	562.73	562.84
	SCREED ELEV.	560.28	560.44	560.60	560.76	560.91	561.06	561.20	561.35	561.51	561.68	561.80	561.93	562.05	562.16	562.28	562.39	562.50	562.61	562.73	562.84
RIGHT FASCIA	STATION	148+33.93	148+43.36	148+52.78	148+62.20	148+71.60	148+80.91	148+90.20	148+99.50	149+09.50	149+19.50	149+27.02	149+34.53	149+42.05	149+49.56	149+57.08	149+64.59	149+72.10	149+79.56	149+87.03	149+94.50
	OFFSET	64.82 R	64.59 R	64.35 R	64.11 R	63.87 R	63.64 R	63.43 R	63.23 R	63.04 R	62.86 R	62.73 R	62.62 R	62.52 R	62.43 R	62.34 R	62.27 R	62.21 R	62.14 R	62.06 R	61.97 R
	FINAL DECK ELEV.	560.21	560.36	560.52	560.68	560.83	560.99	561.14	561.29	561.45	561.61	561.73	561.85	561.97	562.09	562.21	562.33	562.45	562.56	562.68	562.80
	SCREED ELEV.	560.21	560.37	560.53	560.69	560.84	560.99	561.14	561.29	561.45	561.62	561.75	561.87	562.00	562.11	562.23	562.34	562.45	562.57	562.68	562.80

DESIGN AGENCY
PALMER ENGINEERING
191 CORRELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI@PALMER-ENGINEERING.COM

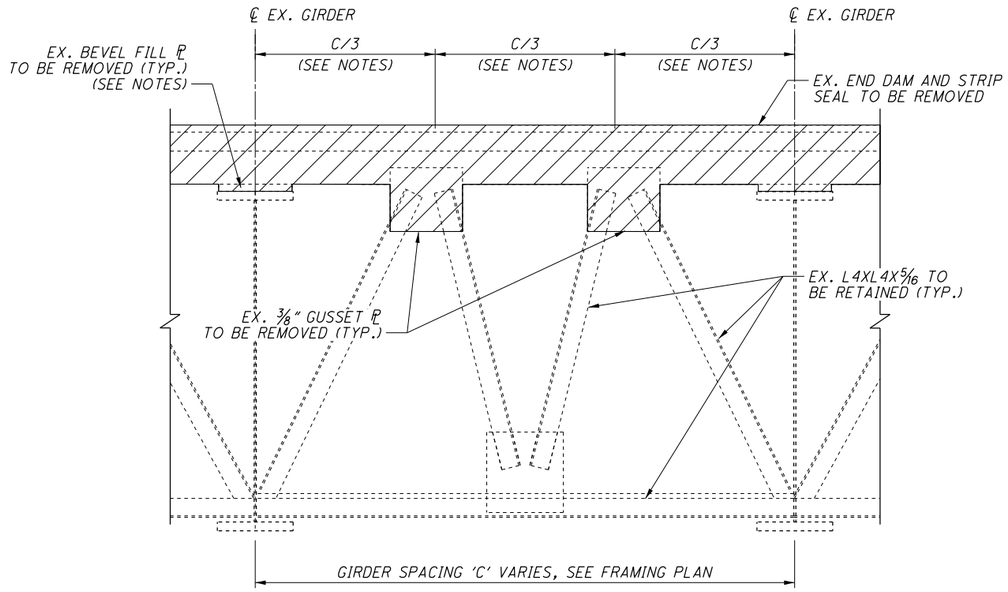
DESIGNED	DRAWN	REVIEWED	DATE
CEJ	CML	MLJ	02/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
JPR		3106608	

DECK ELEVATIONS - NORTHBOUND I-71
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

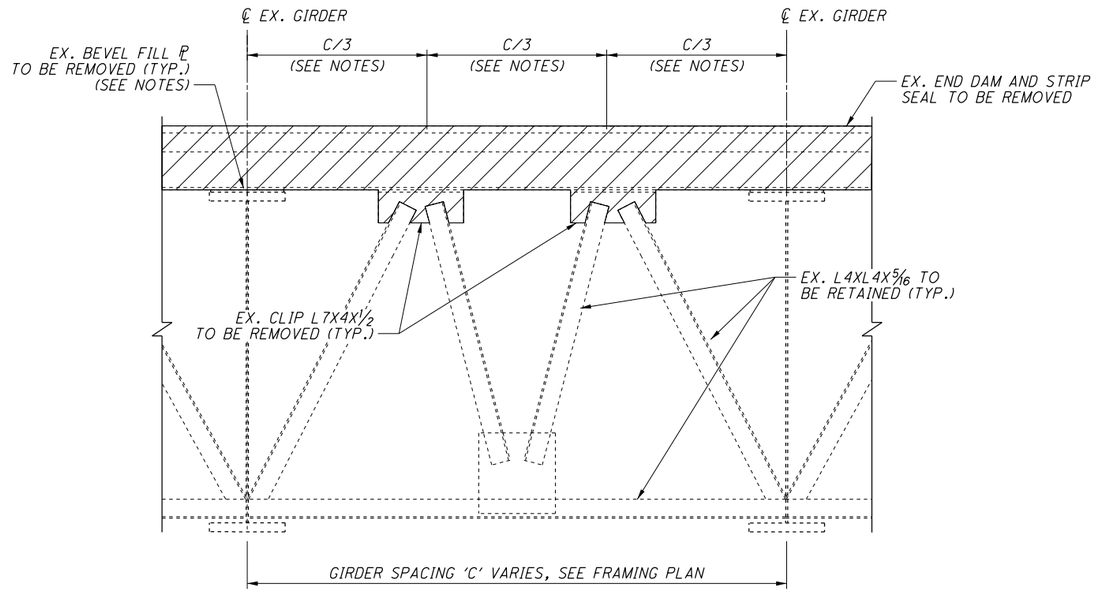
HAM-71-1.59
PID No. 101939

57/77

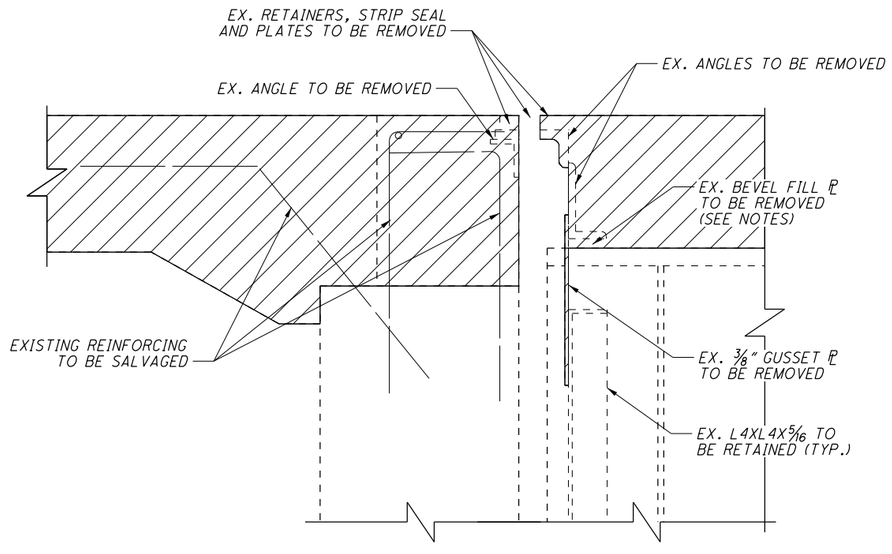
156/176



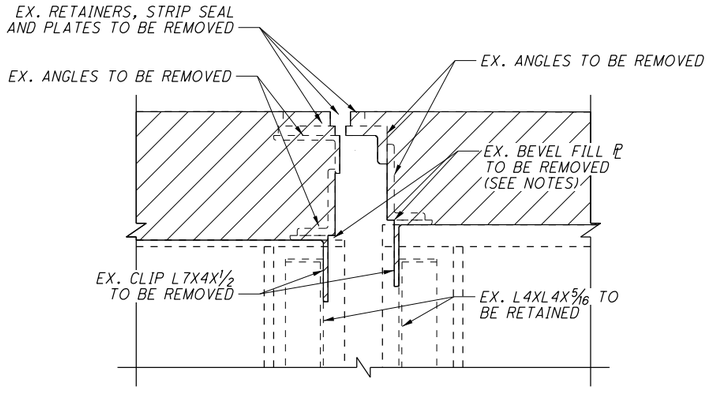
EXISTING END CROSSFRAME ELEVATION AT ABUTMENT JOINTS



EXISTING END CROSSFRAME ELEVATION AT INTERMEDIATE JOINTS



REMOVAL SECTION AT ABUTMENT JOINTS



REMOVAL SECTION AT INTERMEDIATE JOINTS

NOTES

1. SEE SHEETS 59/77, 60/77 AND 61/77 FOR PART PLAN VIEWS OF THE JOINTS.
2. THE ENDS OF THE EXISTING CROSSFRAME ANGLES MAY REQUIRE TRIMMING WHERE THEY MEET THE NEW CLIP ANGLES OR GUSSET PLATES. ANGLES SHALL BE TRIMMED TO PROVIDE A MINIMUM CLEARANCE OF 1" BETWEEN THE END OF THE EXISTING CROSSFRAME ANGLE AND THE PROPOSED MC CHANNEL OR CLIP ANGLE. ALL CUT EDGES SHALL BE GROUND SMOOTH PRIOR TO PAINTING.
3. THE LOCATIONS OF EXISTING CLIP ANGLES, GUSSET PLATES AND END CROSSFRAMES AND CONFIGURATION OF THE EXISTING JOINTS SHOWN IN THE DETAILS IN THIS PLAN ARE BASED ON INFORMATION OBTAINED FROM PLANS OF THE ORIGINAL STRUCTURE, REHABILITATION PLANS, AND RETIRED ODOT STANDARD DRAWING SD-1-63. THE ACTUAL LOCATIONS OF THE EXISTING CLIP ANGLES AND JOINT CONFIGURATION MAY DIFFER FROM THE INFORMATION SHOWN. TO ENSURE PROPER FIT OF THE JOINT ARMOR, THE CONTRACTOR SHALL TAKE MEASUREMENTS TO FIELD VERIFY ALL CLIP ANGLE AND GIRDER LOCATIONS PRIOR TO FABRICATING THE NEW SUPERSTRUCTURE JOINT ARMOR.
4. THE BEVEL FILL PLATES MAY BE RETAINED AT THE CONTRACTOR'S OPTION IF THE PLATE DIMENSION PROVIDES AT LEAST 1/2" CLEARANCE FROM THE TOE OF THE PROPOSED JOINT SUPPORT ANGLE TO THE EDGE OF PLATE TO ACCOMODATE THE 5/16" FILLET WELD SHOWN ON STD. DWG. EXJ-4-87.
5. ALL COSTS ASSOCIATED WITH THE REMOVAL OF THE EXISTING END DAM AND JOINT COMPONENTS, INCLUDING ANY REQUIRED TRIMMING OF THE EXISTING CROSSFRAME ANGLES, SHALL BE INCLUDED FOR PAYMENT WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

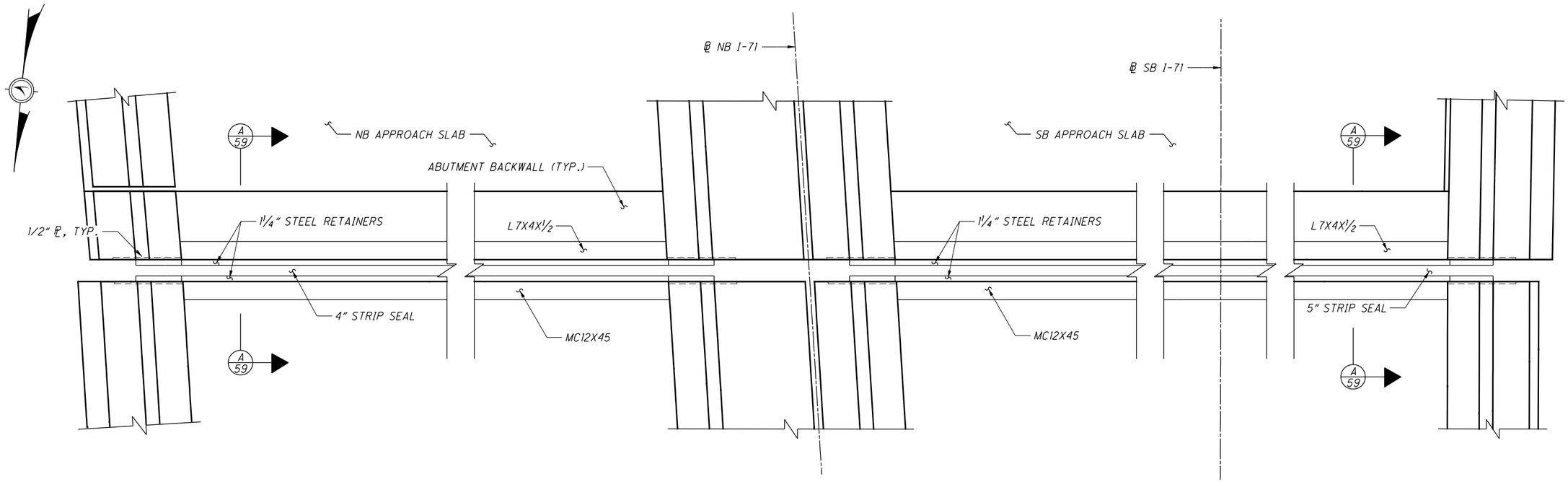
DESIGN AGENCY
PALMER ENGINEERING
191 CORNELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	CEJ	01/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

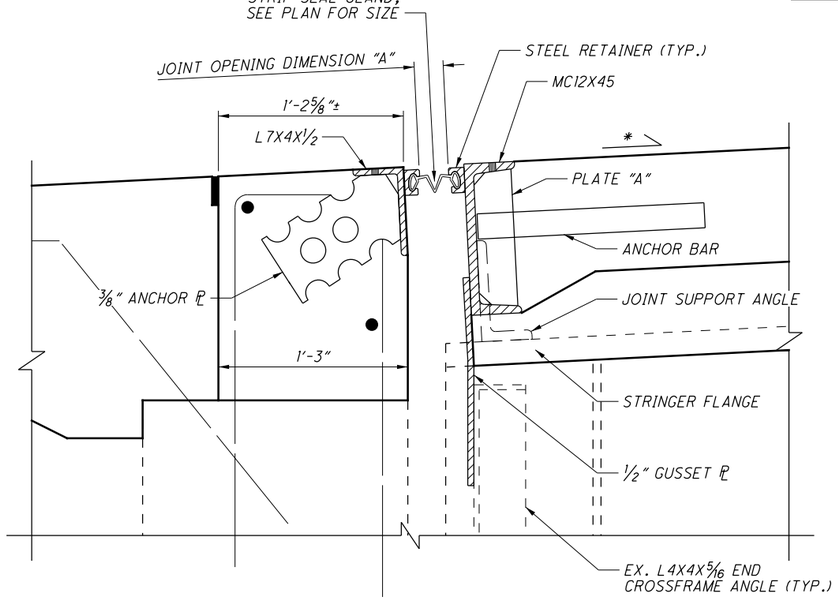
EXPANSION JOINT REMOVAL DETAILS

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



PART PLAN AT REAR ABUTMENT



A 59 SECTION THROUGH JOINT AT END CROSSFRAME SUPPORT

* 4.79% PROFILE GRADE ACROSS SB JOINT AT ℄ SB I-71
* 5.00% PROFILE GRADE ACROSS JOINT AT ℄ NB I-71

DIMENSION "A"		
AMBIENT TEMPERATURE	NB	SB
30°F	2⅞"	3 3/16"
40°F	2⅝"	2⅞"
50°F	2½"	2⅝"
60°F	2¼"	2⅜"
70°F	2⅛"	2"
80°F	1⅞"	1¾"
90°F	1¾"	1½"

JOINT OPENING TABLE

NOTES

1. SEE STD. DWG. EXJ-4-87 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 58/77 FOR EXISTING JOINT REMOVAL DETAILS.
3. SEE SHEET 60/77 FOR A PART END CROSSFRAME ELEVATION AND WELDING DETAILS.
4. JOINTS IN ARMOR STEEL: SHOP OR FIELD JOINTS IN THE ARMOR CHANNEL SHALL BE COMPLETE PENETRATION WELDS GROUND FLUSH WHERE IN CONTACT WITH THE RETAINER.
5. THE LOCATIONS OF EXISTING GUSSET PLATES AND END CROSSFRAMES SHOWN IN THE DETAILS IN THIS PLAN ARE BASED ON INFORMATION OBTAINED FROM PLANS OF THE ORIGINAL STRUCTURE AND RETIRED ODOT STANDARD DRAWING SD-1-63. THE ACTUAL LOCATIONS OF THE EXISTING GUSSET PLATES MAY DIFFER FROM THE INFORMATION SHOWN. TO ENSURE PROPER FIT OF THE JOINT ARMOR, THE CONTRACTOR SHALL TAKE MEASUREMENTS TO FIELD VERIFY ALL GUSSET PLATE AND GIRDER LOCATIONS PRIOR TO FABRICATING THE NEW SUPERSTRUCTURE JOINT ARMOR.
6. COAT ALL STEEL PARTS OF THE JOINT ASSEMBLY ACCORDING TO STD. DWG. EXJ-4-87. CLEAN AND PAINT THE CLIP ANGLES AND DAMAGED AREAS OF THE EXISTING CROSS FRAME ANGLES ACCORDING TO CMS 514, SYSTEM OZEU. THE PAINT COLOR SHALL MATCH THE EXISTING CROSSFRAME PAINT COLOR.
7. INSTALLATION OF SEAL: DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE EXPANSION JOINT SEAL, OBSERVE THE SEATING OF THE BEAMS ON BEARINGS TO ASSURE THAT POSITVE BEARING IS MAINTAINED.
8. PAYMENT FOR ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO FABRICATE AND INSTALL THE NEW END DAMS ACCORDING THE NOTES AND DETAILS ON THIS PLAN SHALL BE INCLUDED WITH ITEM 516, STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN.

DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • MILLERSBURG

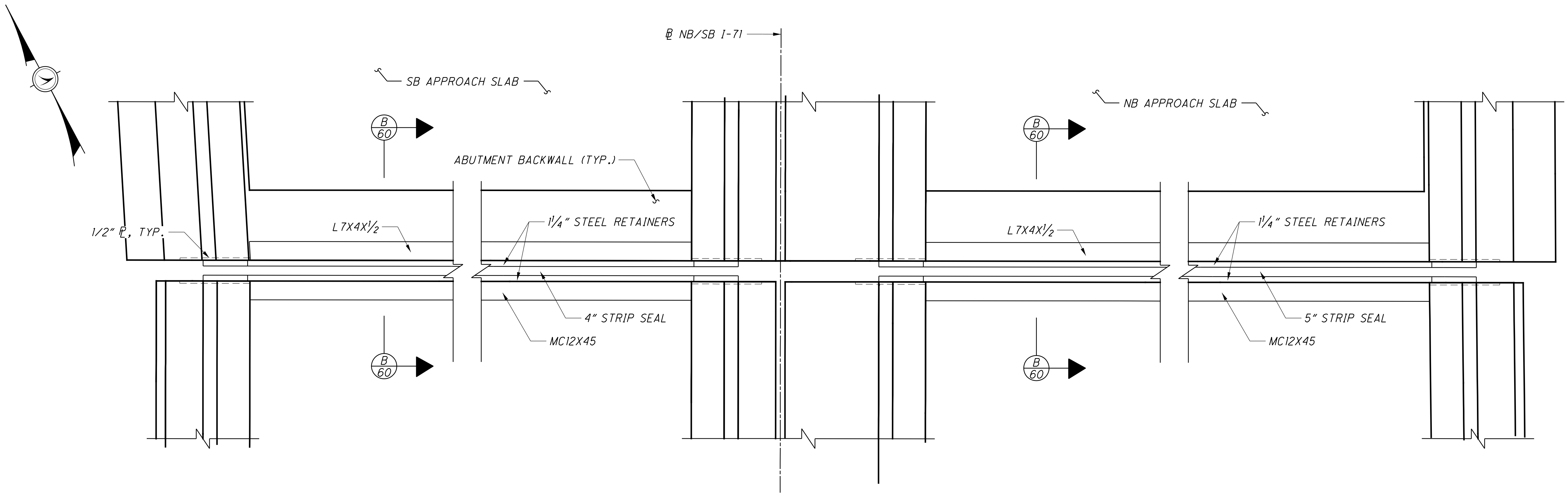
DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	CEJ	01/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

REAR ABUTMENT EXPANSION JOINT DETAILS

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

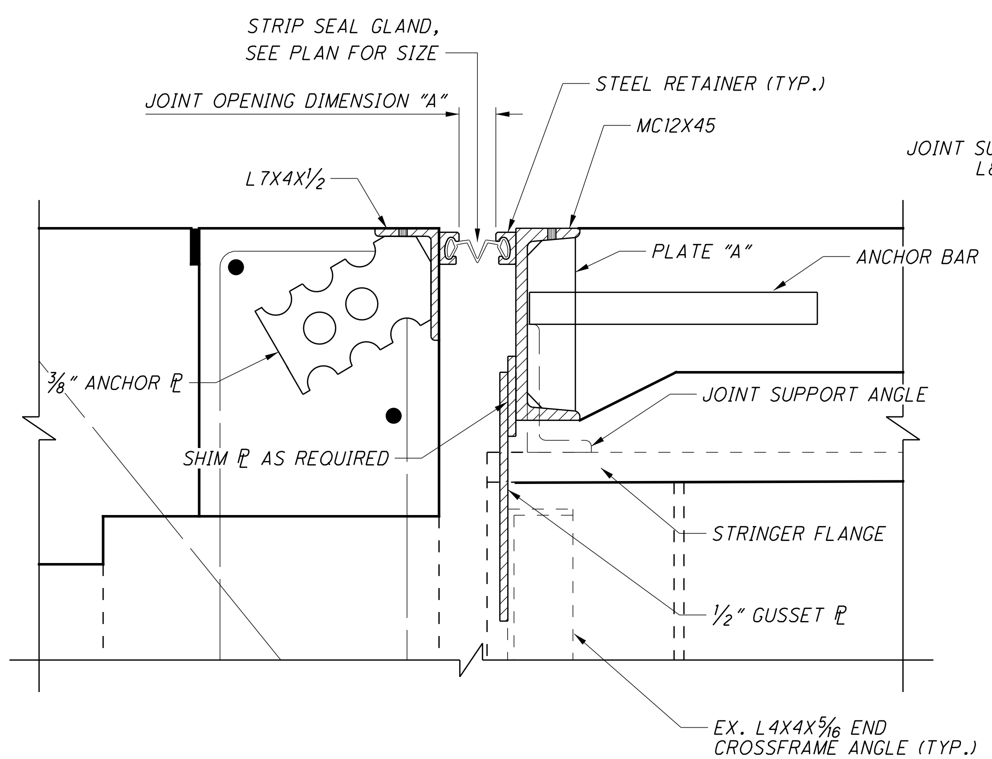
59/77
158/176



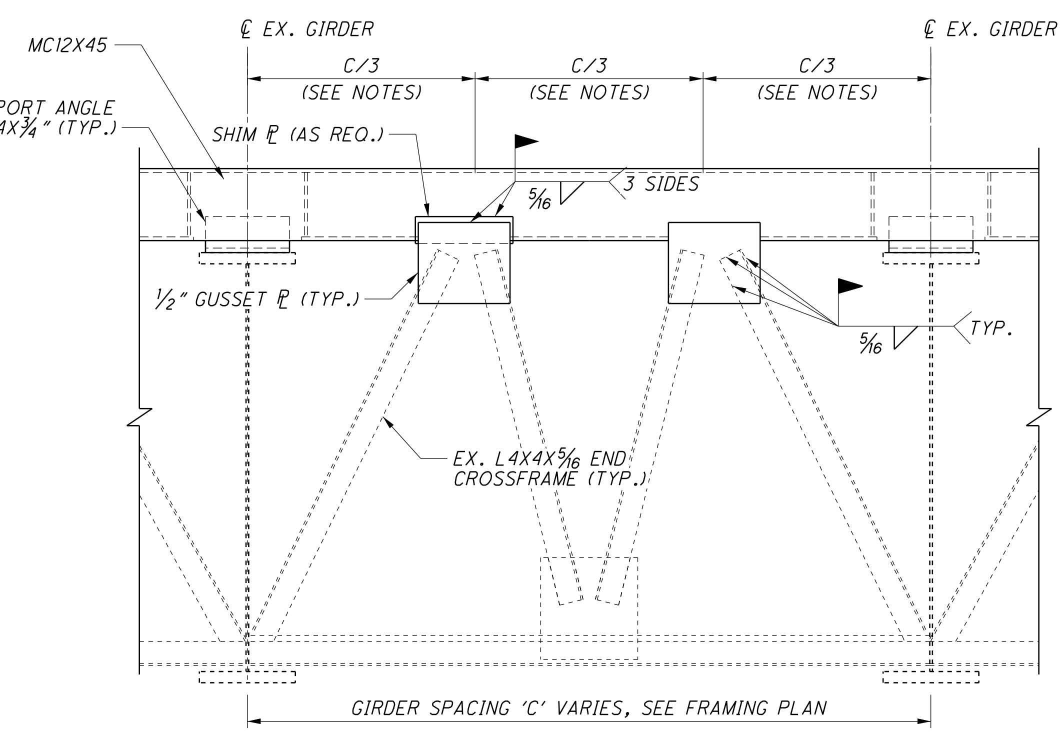
PART PLAN AT FORWARD ABUTMENT

NOTES

1. SEE STD. DWGS. EXJ-4-87 AND GSD-1-96 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 58/77 FOR EXISTING JOINT REMOVAL DETAILS.
3. SEE SHEET 59/77 FOR ADDITIONAL NOTES.



B/60 SECTION THROUGH JOINT AT END CROSSFRAME SUPPORT



PART TRANSVERSE SECTION AT ABUTMENTS

DIMENSION "A"		
AMBIENT TEMPERATURE	SB	NB
30°F	2⅜"	2¹³⁄₁₆"
40°F	2¼"	2½"
50°F	2⅛"	2³⁄₁₆"
60°F	2"	2"
70°F	1¹³⁄₁₆"	1¾"
80°F	1⅝"	1½"
90°F	1½"	*

* - JOINT OPENING LESS THAN 1½"

JOINT OPENING TABLE

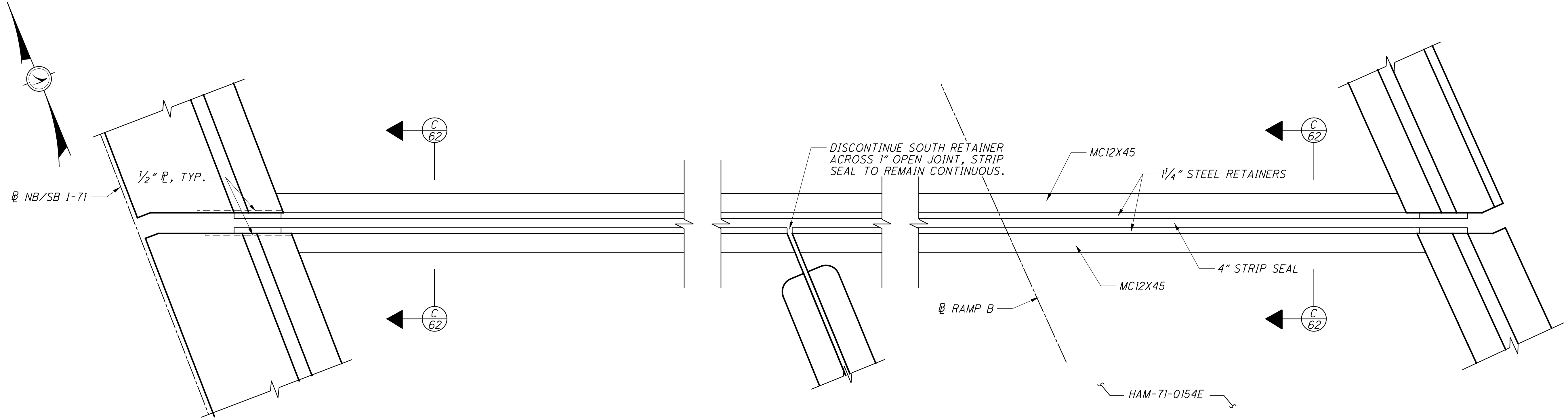
DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED TES | CHECKED BJF | DRAWN TES | REVISED | REVIEWED CEJ | DATE 01/27/16 | STRUCTURE FILE NUMBER 3106608

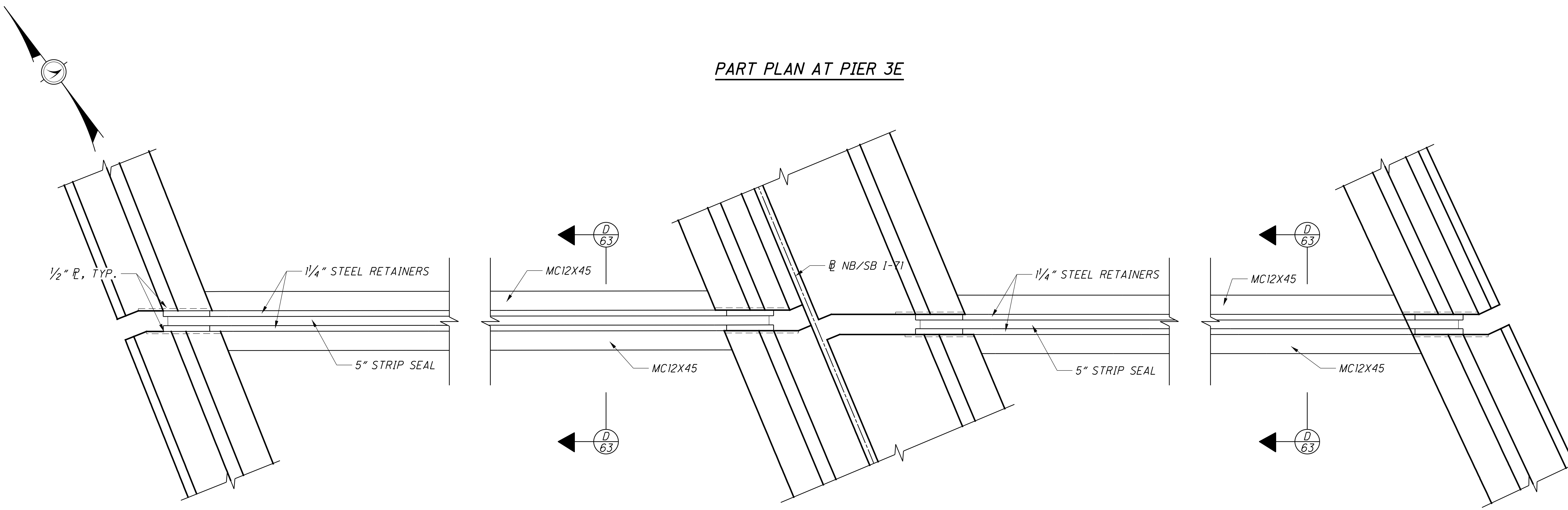
FORWARD ABUTMENT EXPANSION JOINT DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

60/77



PART PLAN AT PIER 3E



PART PLAN AT PIER 6

NOTES

1. SEE STD. DWG. EXJ-4-87 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEETS 62/77 AND 63/77 FOR ADDITIONAL DETAILS, SECTIONS AND NOTES.
3. SEE SHEET 8/11 FOR DECK DETAILS AT JOINT FOR BRIDGE HAM-71-0154E.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	CEJ	01/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

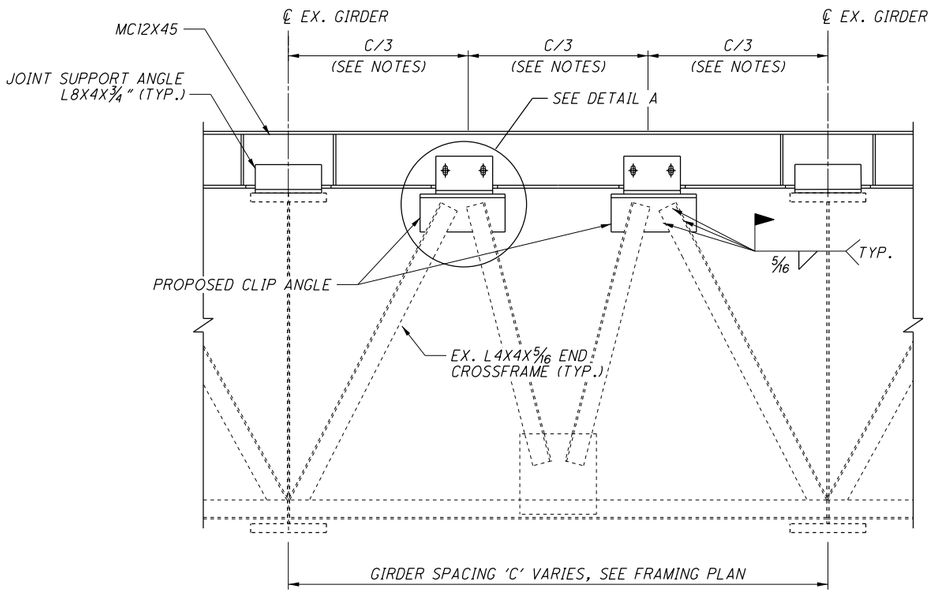
INTERMEDIATE EXPANSION JOINT PLANS

BRIDGE NO. HAM-71-0159

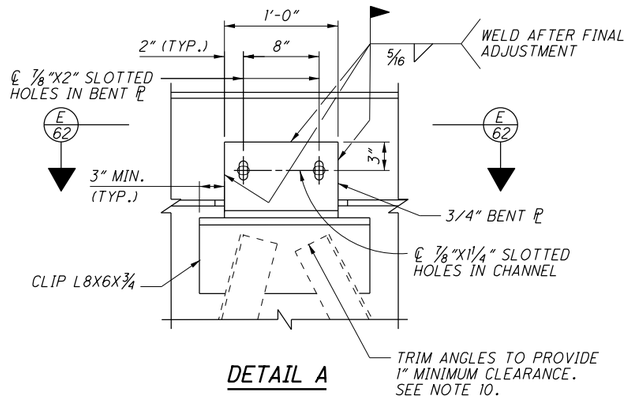
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

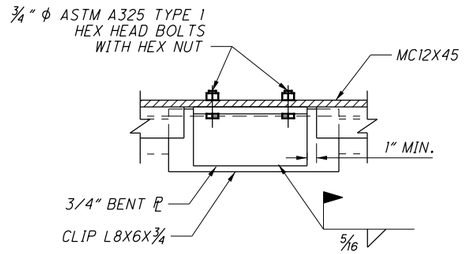
PID No. 101939



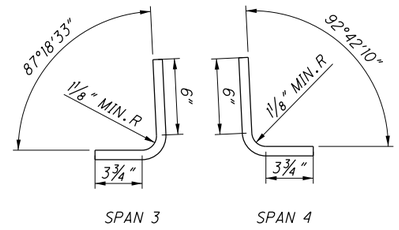
PART TRANSVERSE SECTION AT PIER 3E



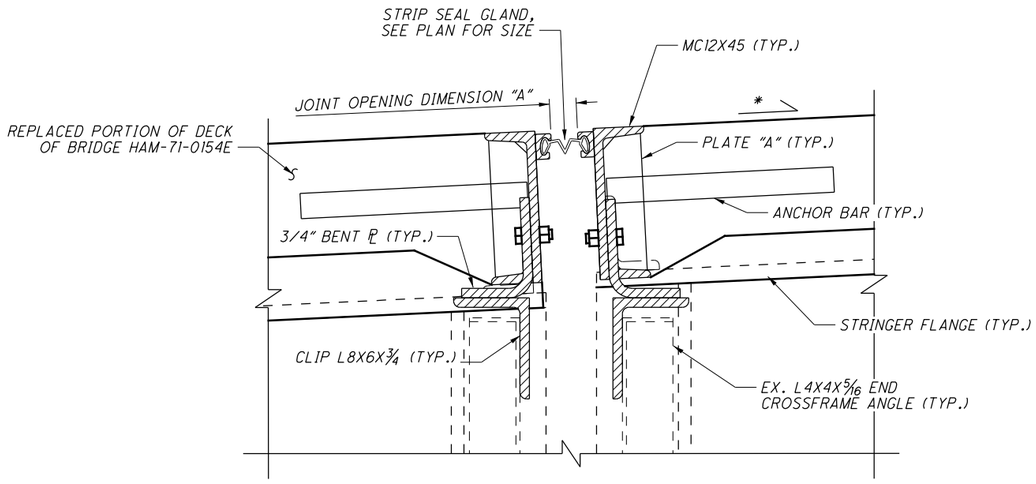
DETAIL A



E 62 SECTION



3/4" BENT ℄ DETAIL



C 61 SECTION THROUGH JOINT AT END CROSSFRAME SUPPORT

* AVERAGE 4.70% PROFILE GRADE ACROSS JOINT

DIMENSION "A"	
AMBIENT TEMPERATURE	PIER 3E
30°F	2⅞"
40°F	2¹¹⁄₁₆"
50°F	2½"
60°F	2⁵⁄₁₆"
70°F	2⅛"
80°F	1¹⁵⁄₁₆"
90°F	1¾"

JOINT OPENING TABLE

NOTES

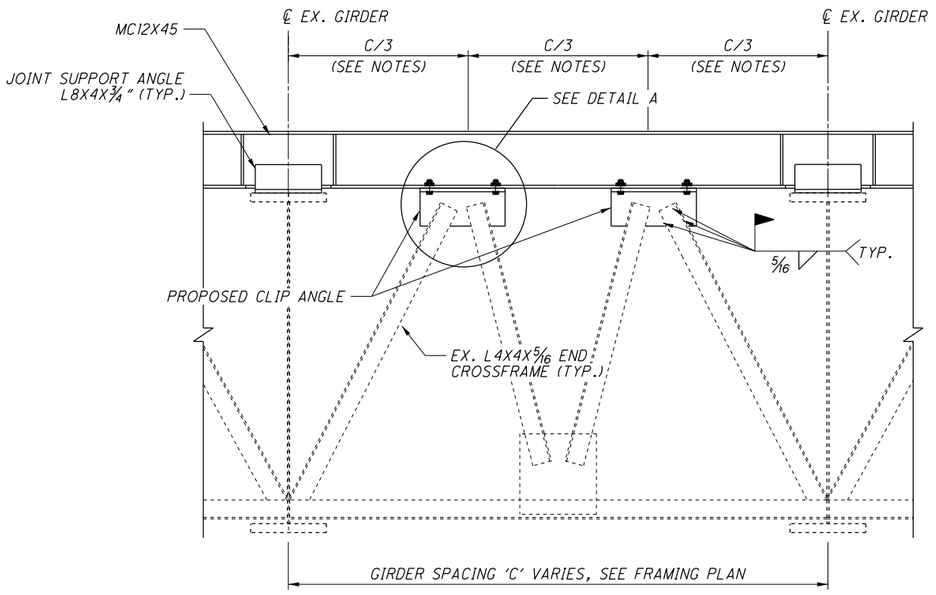
1. SEE STD. DWG. EXJ-4-87 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 58/77 FOR EXISTING JOINT REMOVAL DETAILS.
3. SEE SHEET 61/77 FOR A PART PLAN VIEW OF THE JOINT.
4. JOINTS IN ARMOR STEEL: SHOP OR FIELD JOINTS IN THE ARMOR CHANNEL SHALL BE COMPLETE PENETRATION WELDS GROUND FLUSH WHERE IN CONTACT WITH THE RETAINER.
5. THE LOCATIONS OF EXISTING CLIP ANGLES AND END CROSSFRAMES SHOWN IN THE DETAILS IN THIS PLAN ARE BASED ON INFORMATION OBTAINED FROM PLANS OF THE ORIGINAL STRUCTURE AND RETIRED ODOT STANDARD DRAWING SD-1-63. THE ACTUAL LOCATIONS OF THE EXISTING CLIP ANGLES MAY DIFFER FROM THE INFORMATION SHOWN. TO ENSURE PROPER FIT OF THE JOINT ARMOR, THE CONTRACTOR SHALL TAKE MEASUREMENTS TO FIELD VERIFY ALL CLIP ANGLE AND GIRDER LOCATIONS PRIOR TO FABRICATING THE NEW SUPERSTRUCTURE JOINT ARMOR.
6. COAT ALL STEEL PARTS OF THE JOINT ASSEMBLY ACCORDING TO STD. DWG. EXJ-4-87. CLEAN AND PAINT THE CLIP ANGLES AND DAMAGED AREAS OF THE EXISTING CROSS FRAME ANGLES ACCORDING TO CMS 514, SYSTEM OZEU. THE PAINT COLOR SHALL MATCH THE EXISTING CROSSFRAME PAINT COLOR.
7. INSTALLATION OF SEAL: DURING INSTALLATION OF THE SUPPORT/ARMOR FOR THE EXPANSION JOINT SEAL, OBSERVE THE SEATING OF THE BEAMS ON BEARINGS TO ASSURE THAT POSITIVE BEARING IS MAINTAINED.
8. IF REQUIRED, A ½" SHIM PLATE MAY BE USED BETWEEN THE PROPOSED CLIP ANGLE AND THE EXISTING CROSS FRAME ANGLE TO MAINTAIN DIMENSION "A". THE SHIM PLATE SHALL BE WELDED TO THE CLIP ANGLE WITH A 5⁄16" MINIMUM FILLET WELD TO AT LEAST THREE SIDES OF THE PLATE.
9. PAYMENT FOR ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO FABRICATE AND INSTALL THE NEW END DAMS ACCORDING THE NOTES AND DETAILS ON THIS PLAN SHALL BE INCLUDED WITH ITEM 516, STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN.
10. THE ENDS OF THE EXISTING CROSSFRAME ANGLES MAY REQUIRE TRIMMING WHERE THEY MEET THE NEW CLIP ANGLES. ANGLES SHALL BE TRIMMED TO PROVIDE A MINIMUM CLEARANCE OF 1" BETWEEN THE END OF THE EXISTING CROSSFRAME ANGLE AND THE PROPOSED CLIP ANGLE. ALL CUT EDGES SHALL BE GROUND SMOOTH PRIOR TO PAINTING. PAYMENT FOR ALL MATERIALS, EQUIPMENT AND LABOR REQUIRED TO TRIM THE EXISTING CROSSFRAME ANGLES SHALL BE INCLUDED WITH ITEM 202, PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN.

DESIGN AGENCY
PALMER ENGINEERING
301 CORNELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

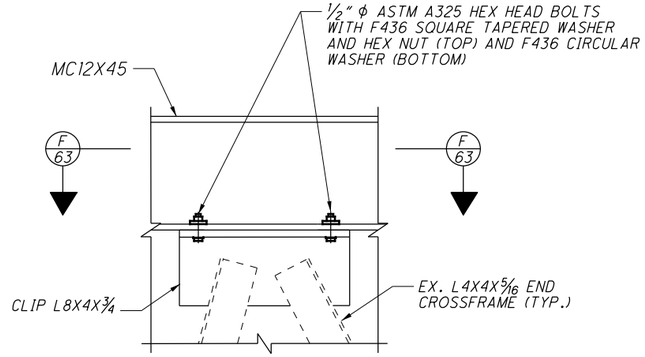
DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	CEJ	01/27/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

PIER 3E EXPANSION JOINT DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

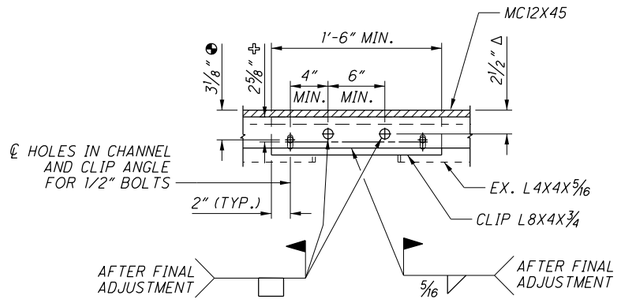
HAM-71-1.59
PID No. 101939



PART TRANSVERSE SECTION AT PIER 6



DETAIL A

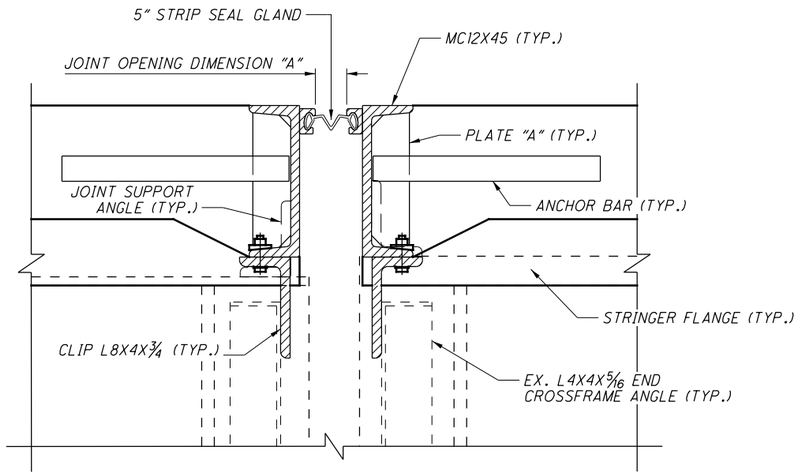


F/63 SECTION

◒ - JOINT FACE OF MC TO ℄ OF ⅝" OVERSIZED HOLES IN MC.

✣ - JOINT FACE OF CLIP ANGLE TO CENTER OF SLOT FOR 9/16"X1½" SLOTTED HOLES IN CLIP ANGLE.

Δ - JOINT FACE OF MC TO ℄ OF 1/16" HOLE IN MC FOR PLUG WELD.



D/61 SECTION THROUGH JOINT AT END CROSSFRAME SUPPORT

DIMENSION "A"		
AMBIENT TEMPERATURE	PIER 6E	PIER 6W
30°F	3⅛"	3½"
40°F	2 13/16"	3⅜"
50°F	2½"	2¾"
60°F	2 3/16"	2⅜"
70°F	1⅞"	2"
80°F	1⅝"	1⅝"
90°F	*	*

* - JOINT OPENING LESS THAN 1½"

JOINT OPENING TABLE

NOTES

1. SEE STD. DWG. EXJ-4-87 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 58/77 FOR EXISTING JOINT REMOVAL DETAILS.
3. SEE SHEET 61/77 FOR A PART PLAN VIEW OF THE JOINT.
4. SEE SHEET 62/77 FOR ADDITIONAL NOTES.

DESIGN AGENCY
PALMER ENGINEERING
191 CORNELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

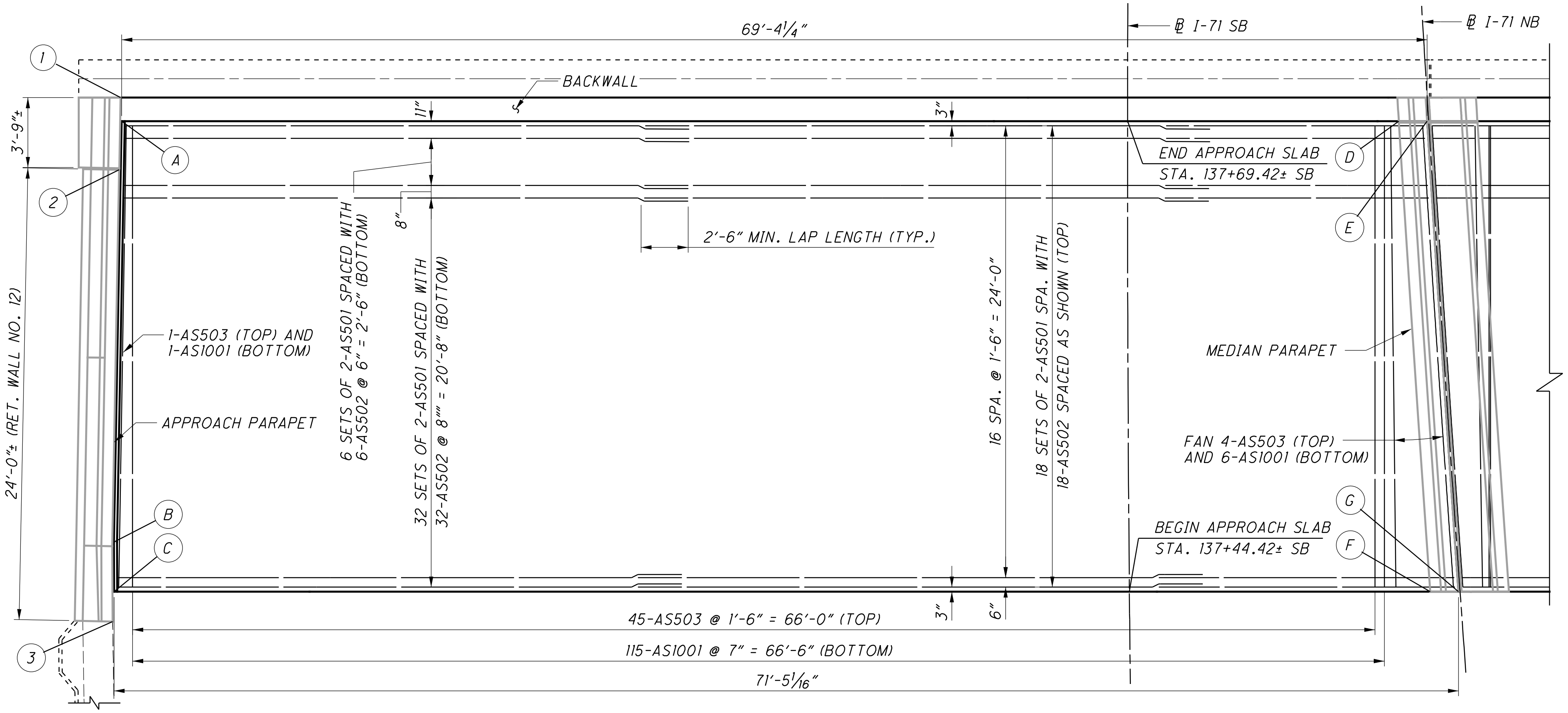
DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	CEJ	01/26/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

PIER 6 EXPANSION JOINT DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

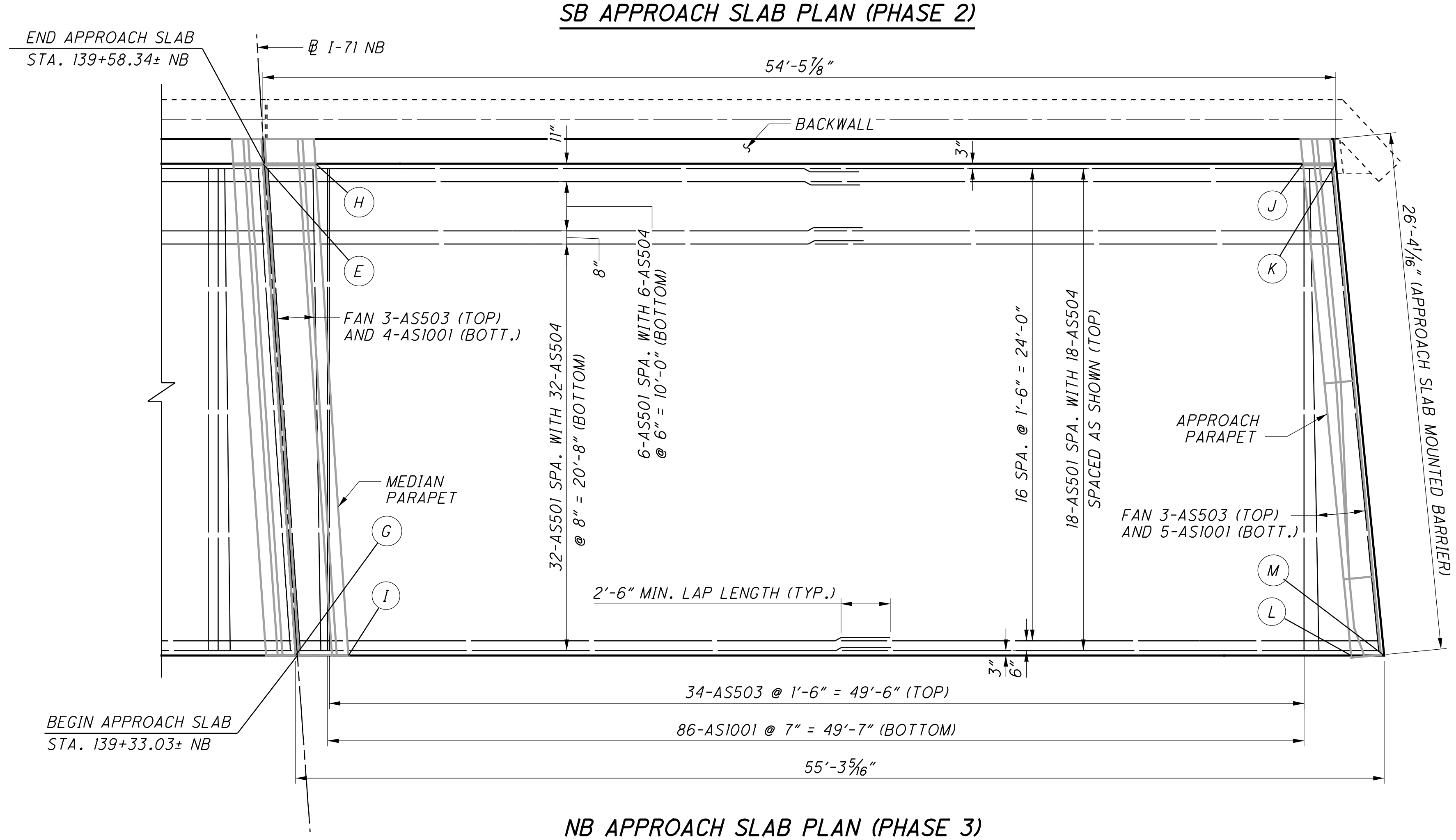
HAM-71-1.59
PID No. 101939

63/77

162/176



SB APPROACH SLAB PLAN (PHASE 2)



NB APPROACH SLAB PLAN (PHASE 3)

APPROACH SLAB POINTS			
POINT	STATION	OFFSET	ELEV.
A	137+69.37 SB	53.44' LT	537.90
B	137+47.47 SB	53.92' LT	536.88
C	137+44.89 SB	53.94' LT	536.75
D	139+58.44 NB	1.58' LT	535.39
E	139+58.34 NB	0.08' LT	535.39
F	139+33.39 NB	1.58' LT	534.14
G	139+33.29 NB	0.08' LT	534.14
H	139+58.17 NB	2.58' RT	535.39
I	139+33.10 NB	2.58' RT	534.14
J	139+54.99 NB	52.63' RT	533.42
K	139+54.88 NB	54.30' RT	533.35
L	139+29.43 NB	53.38' RT	532.22
M	139+29.30 NB	55.05' RT	532.16

TOE OF PARAPET POINTS			
POINT	STATION	OFFSET	ELEV.
1	137+70.59 SB	53.50' RT	537.96
2	137+66.84 SB	53.57' RT	537.78
3	137+43.34 SB	54.03' RT	536.68

NOTES

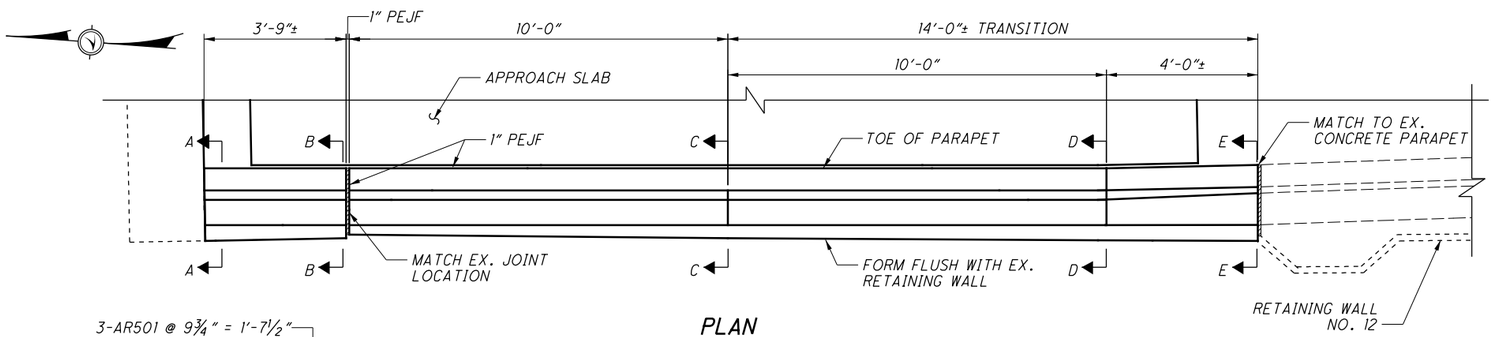
1. SEE SHEET 65/77 AND 66/77 FOR APPROACH PARAPET DETAILS.
2. SEE SHEET 67/77 FOR MEDIAN PARAPET DETAILS.
3. SEE STD. DWG. AS-1-15 FOR ADDITIONAL DETAILS AND NOTES. THE INSTALLATION SHALL BE WITHOUT A SLEEPER SLAB DUE TO MOT CONSTRAINTS.
4. THE PARAPETS AT THE OUTER CURB SHALL BE CONSTRUCTED AS A STRAIGHT LINE BETWEEN THE POINTS SHOWN. THE MEDIAN PARAPETS SHALL BE CONSTRUCTED ALONG THE I-71 NB ℄ BASED ON THE POINTS SHOWN.
5. POINTS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
6. PAYMENT FOR THE APPROACH SLABS AND REINFORCING SHALL BE INCLUDED UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED: TES | CHECKED: BJF | DRAWN: TES | REVIEWED: MLJ | DATE: 02/28/16 | STRUCTURE FILE NUMBER: 3106608

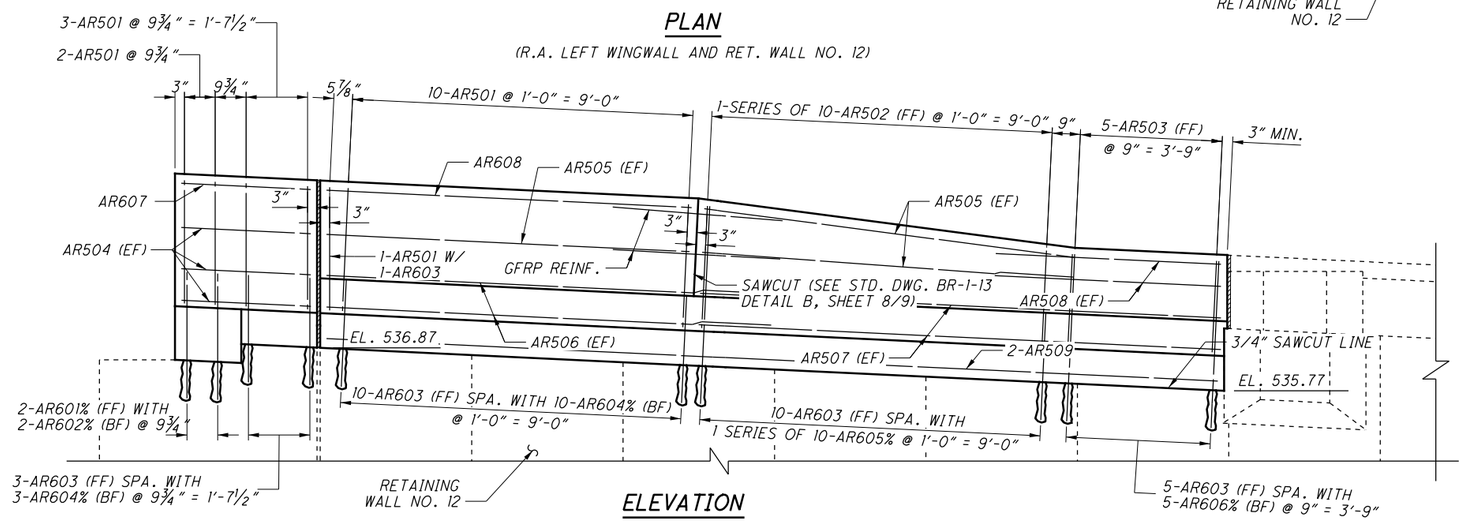
REAR APPROACH PLAN
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939



PLAN

(R.A. LEFT WINGWALL AND RET. WALL NO. 12)



ELEVATION

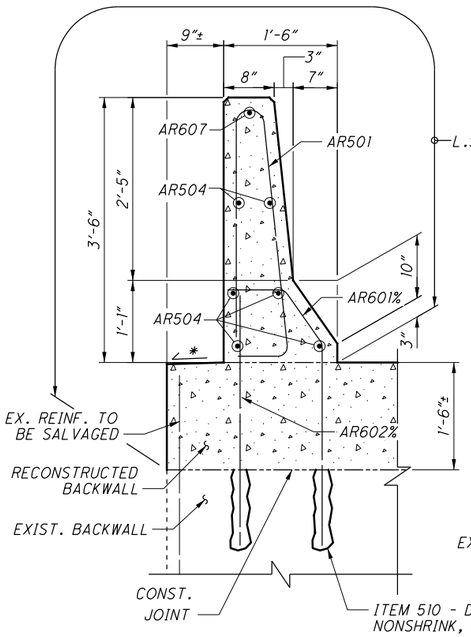
(R.A. LEFT WINGWALL AND RET. WALL NO. 12)

NOTES

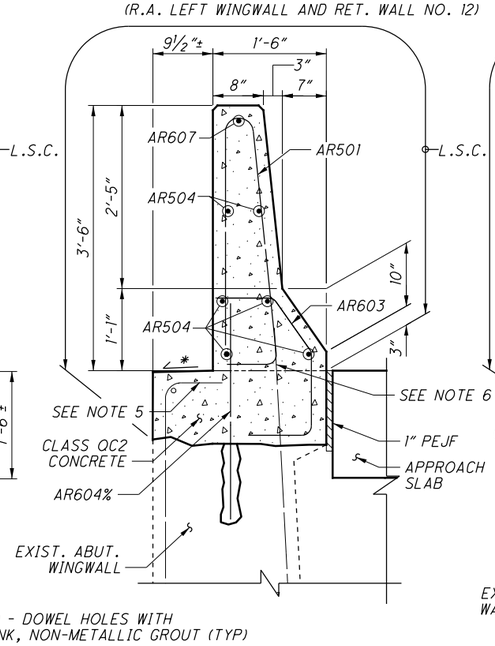
1. SEE STD. DWG. BR-1-13 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 64/77 FOR APPROACH SLAB DETAILS AND PARAPET LAYOUT.
3. SEE SHEET 12/77 FOR EXISTING PARAPET REMOVAL DETAILS
4. DIMENSIONS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
5. SALVAGE EXISTING #5 BAR AND BEND TO PROVIDE A 10" HOOK WITH 2" CLEAR.
6. SALVAGE EXISTING #7 BAR. DO NOT TRIM.
7. SALVAGE EXISTING #5 BAR AND BEND AS SHOWN TO PROVIDE 2" CLEAR. TRIM ONLY TO PROVIDE 2" CLEAR TO BACK FACE OF PARAPET, IF REQUIRED.
8. SALVAGE EXISTING HORIZONTAL WINGWALL AND RETAINING WALL REINFORCING BELOW THE PARAPET CONSTRUCTION JOINT.
8. APPROACH PARAPET CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET). THE COMPRESSIVE STRENGTH SHALL BE 4500 PSI.
9. MINIMUM EMBEDMENT OF DOWEL BARS SHALL BE 1'-0". GROUT SHALL BE EPOXY TYPE PER CMS 705.20.
10. MINIMUM EBEDMENT OF AR603 BARS SHALL BE 7½".

LEGEND

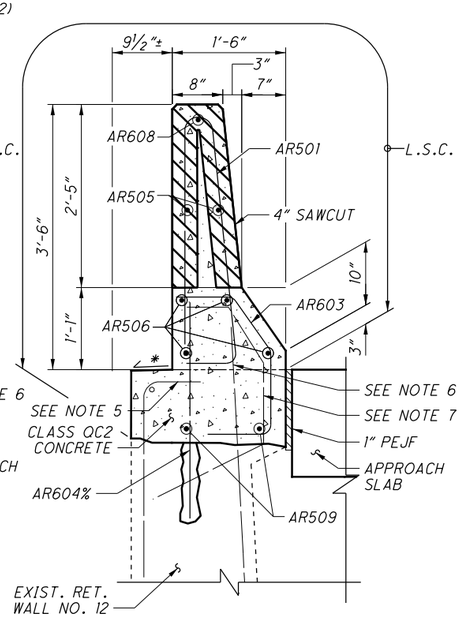
(FF) - FRONT FACE (ROADWAY SIDE OF PARAPET)
(BF) - BACK FACE
EF - EACH FACE
L/W - LAPPED WITH
% - INDICATES A BAR DOWELED INTO ABUTMENT OR RETAINING WALL
* - PROVIDE 1/4" PER FOOT SLOPE TO DRAIN
L.S.C. - LIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)



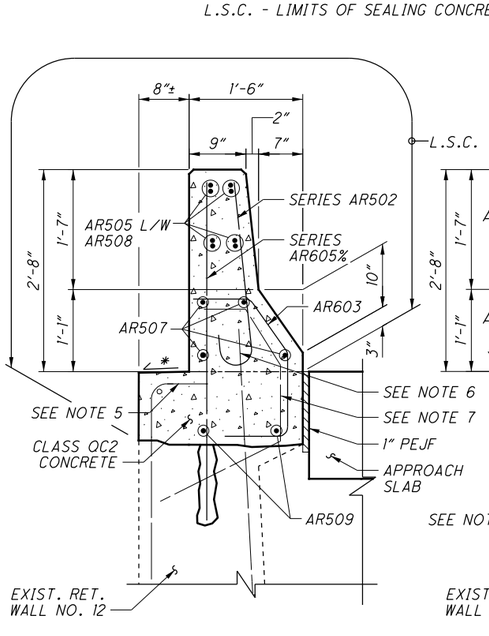
SECTION A-A



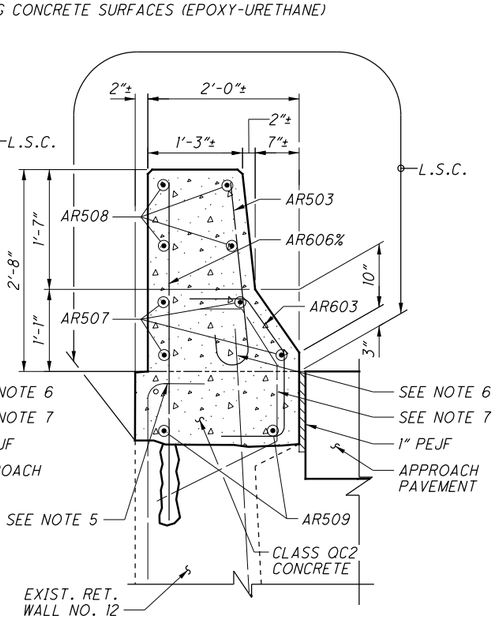
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

(SEE NOTE 4)

DESIGN AGENCY
PALMER ENGINEERING
511 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

REAR APPROACH PARAPET DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

65/77
164/176

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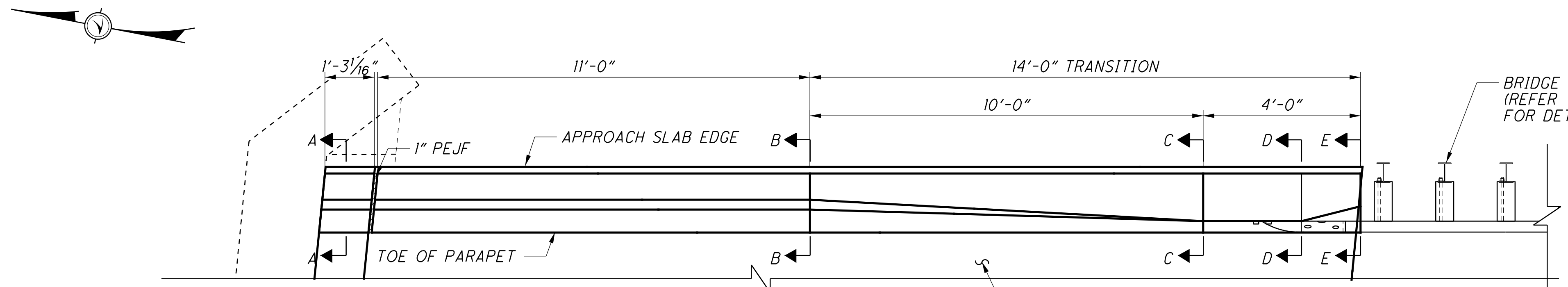
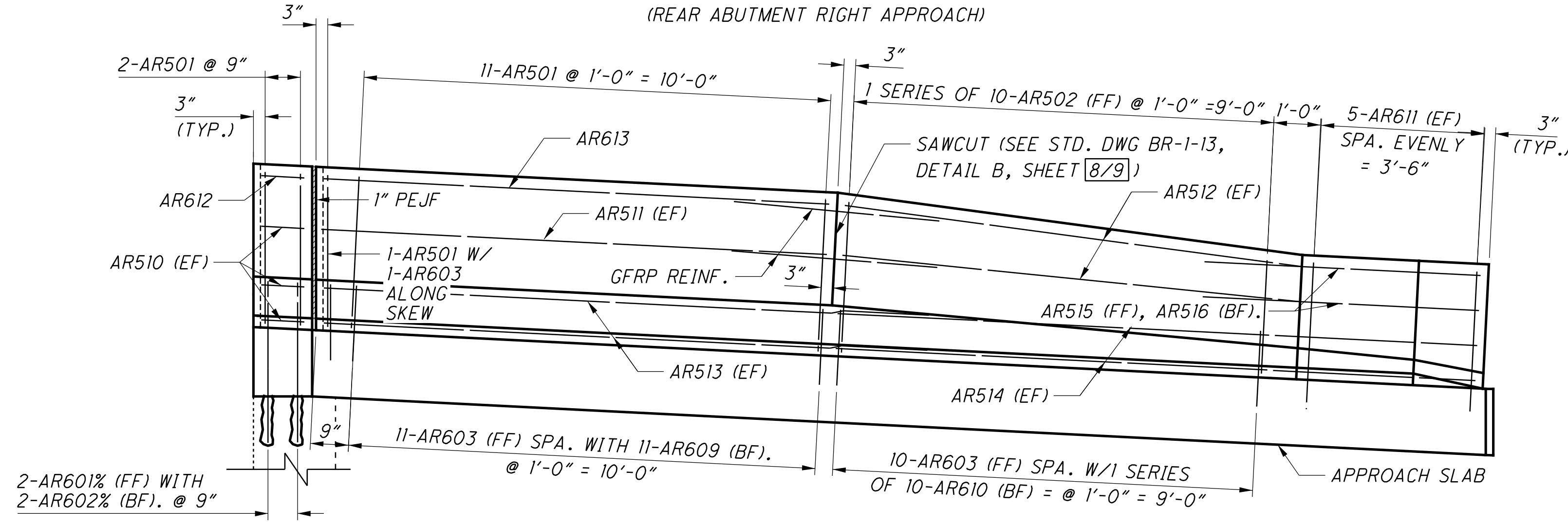


PLAN

(REAR ABUTMENT RIGHT APPROACH)



ELEVATION

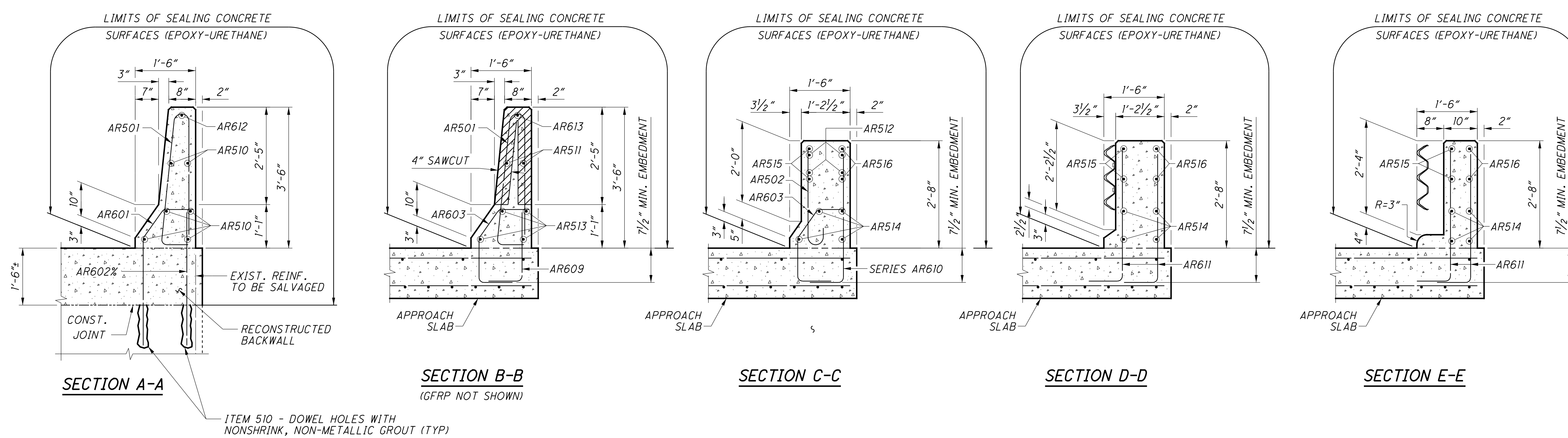
(REAR ABUTMENT RIGHT APPROACH)

NOTES

1. SEE STD. DWG. BR-1-13 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 64/77 FOR APPROACH SLAB DETAILS AND PARAPET LAYOUT.
3. SEE SHEET 12/77 FOR EXISTING PARAPET REMOVAL DETAILS.
4. APPROACH PARAPET CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET). THE COMPRESSIVE STRENGTH SHALL BE 4500 PSI.
5. MINIMUM EBEDMENT OF DOWEL BARS SHALL BE 1'-0". GROUT SHALL BE EPOXY TYPE PER CMS 705.20.

LEGEND

(FF). - FRONT FACE (ROADWAY SIDE OF PARAPET)
(BF) - BACK FACE
EF - EACH FACE
% - INDICATES A BAR DOWELED INTO ABUTMENT OR RETAINING WALL

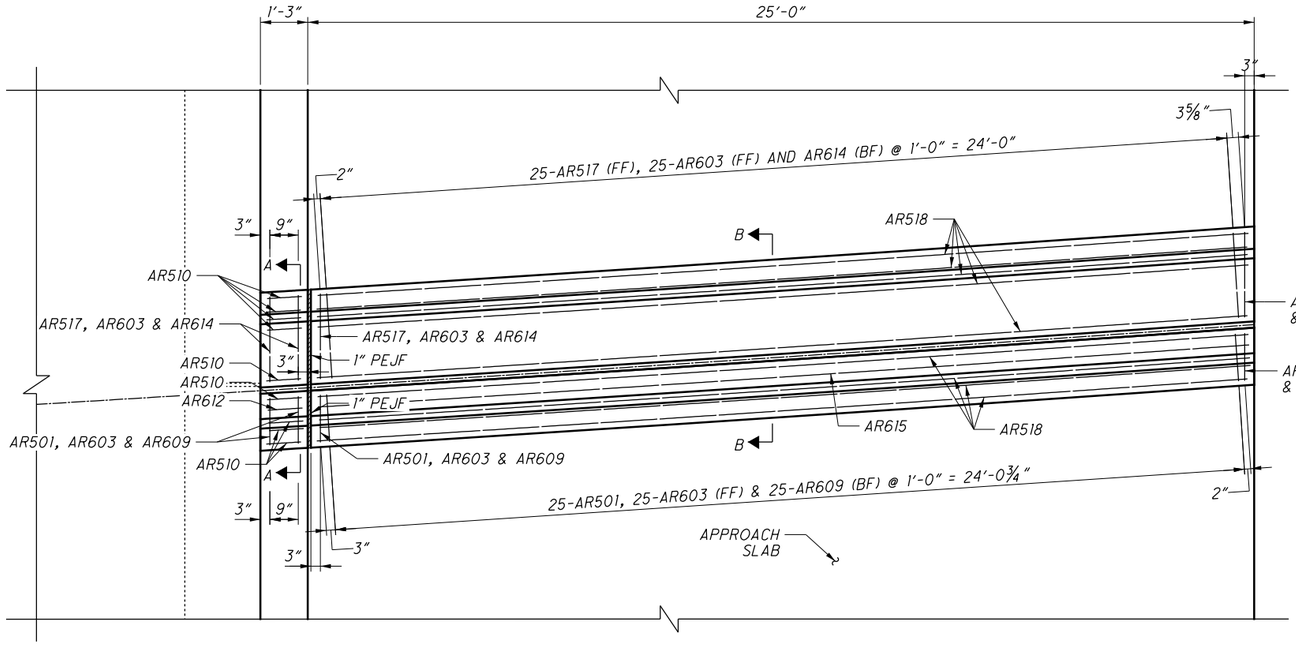


REAR APPROACH PARAPET DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

HAM-71-1.59
PID No. 101939



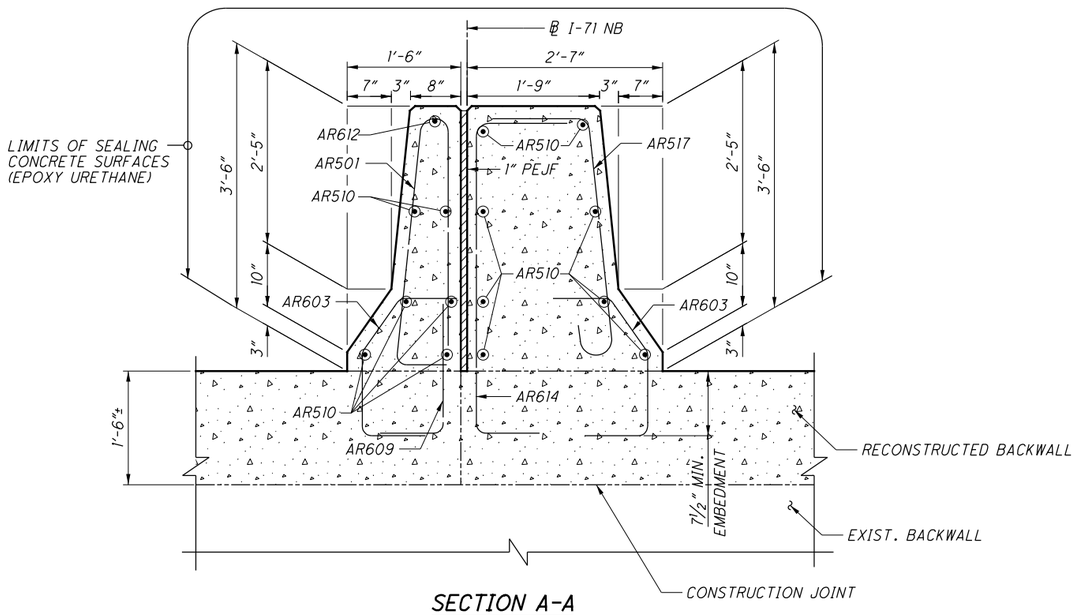
PLAN

NOTES

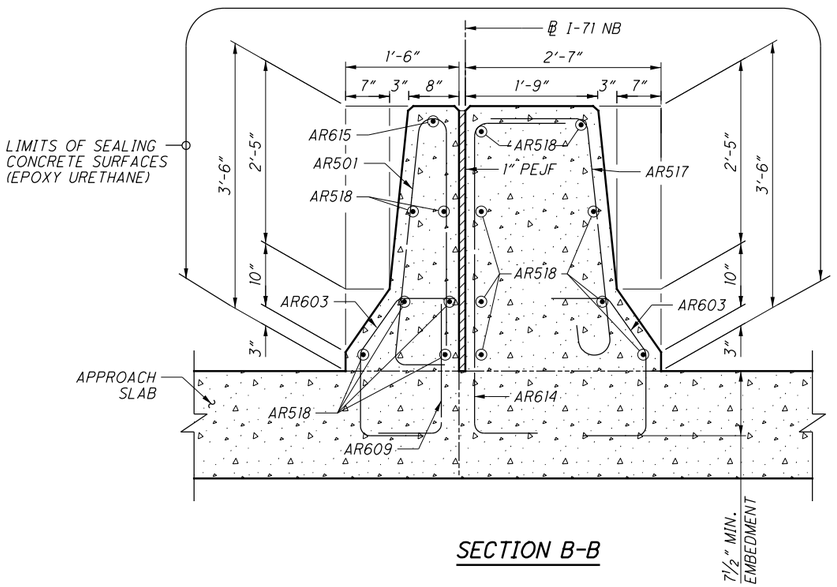
1. SEE STD. DWG. BR-1-13 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 64/77 FOR APPROACH SLAB DETAILS AND PARAPET LAYOUT.
3. SEE SHEET 12/77 FOR EXISTING PARAPET REMOVAL DETAILS
4. DIMENSIONS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
5. ADJUST THE BACK FACE OF THE PARAPETS OVER THE BACKWALL AS REQUIRED TO MATCH THE EXISTING 1" OPEN JOINT IN THE ABUTMENT BACKWALL.
6. APPROACH PARAPET CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET). THE COMPRESSIVE STRENGTH SHALL BE 4500 PSI.

LEGEND

FF - FRONT FACE (ROADWAY SIDE OF PARAPET)
BF - BACK FACE
EF - EACH FACE



SECTION A-A



SECTION B-B

DESIGN AGENCY
PALMER ENGINEERING
191 CORRELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
TES	DLH	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

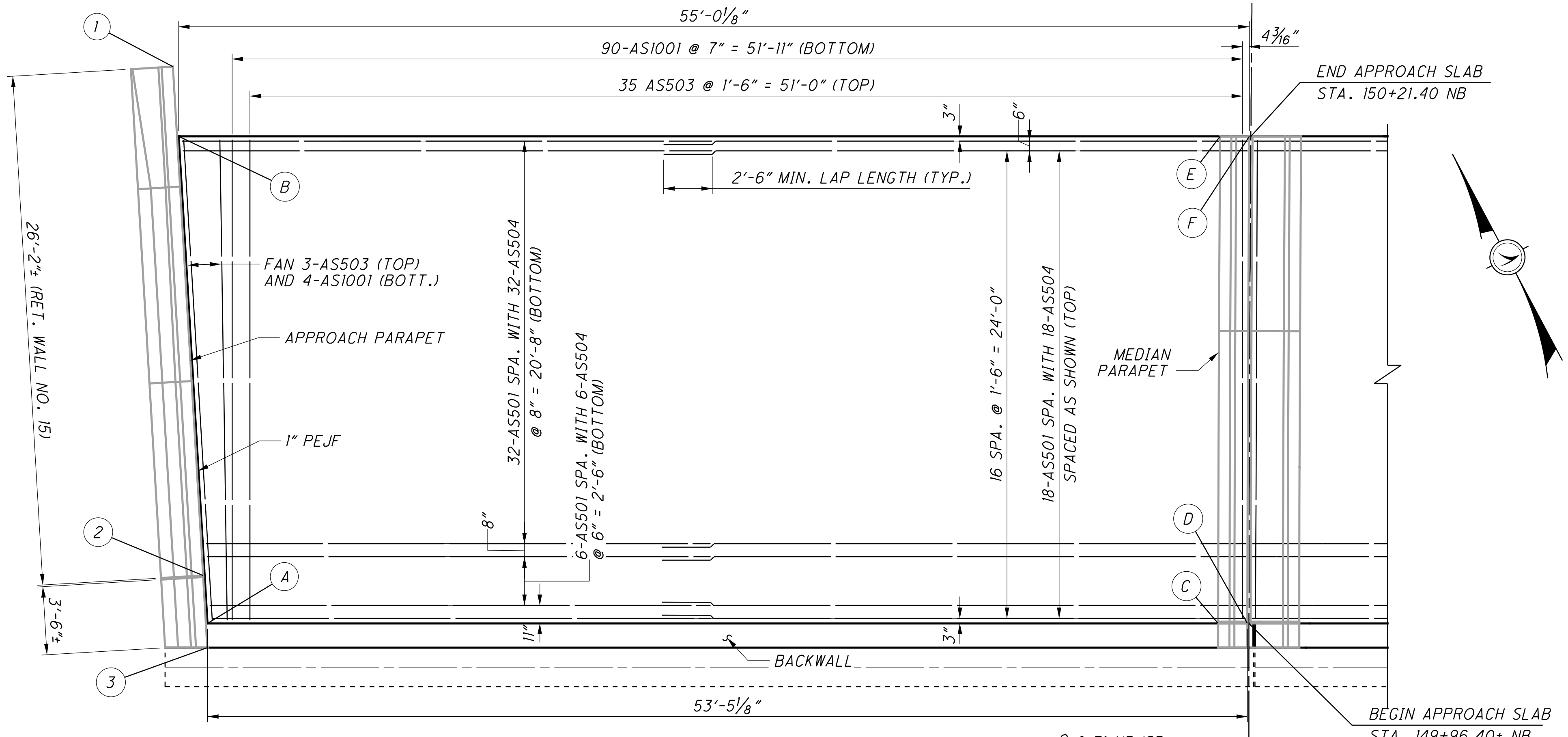
REAR APPROACH MEDIAN PARAPET DETAILS

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

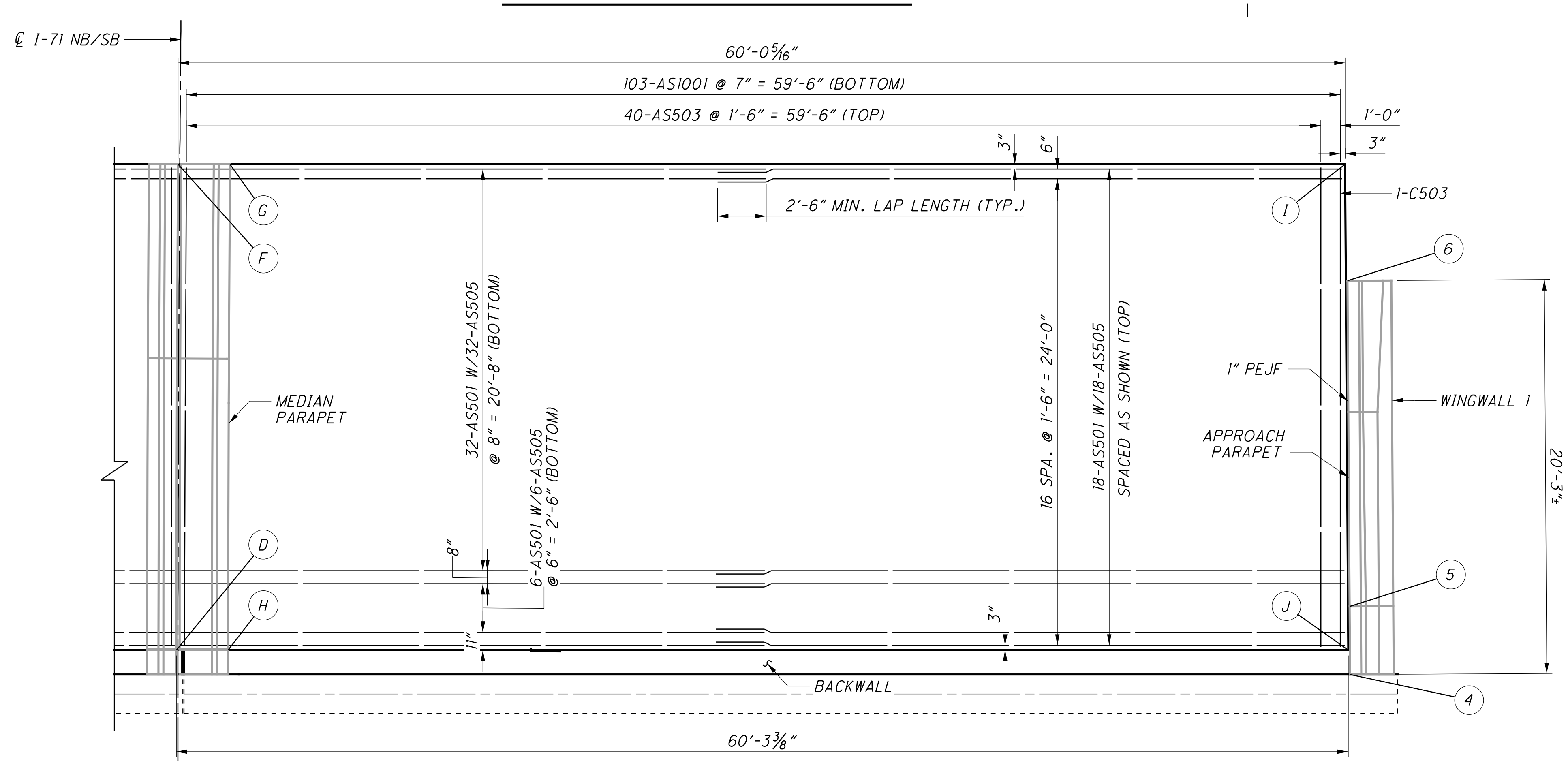
HAM-71-1.59
PID No. 101939

67 / 77

166
176



SB APPROACH SLAB PLAN (PHASE 2)



NB APPROACH SLAB PLAN (PHASE 3)

APPROACH SLAB POINTS			
POINT	STATION	OFFSET	ELEV.
A	149+96.35 NB	53.51' LT	565.63
B	150+21.02 NB	55.09' LT	565.81
C	149+96.39 NB	1.58' LT	564.38
D	149+96.40 NB	0.08' LT	564.40
E	150+21.39 NB	1.58' LT	564.65
F	150+21.40 NB	0.08' LT	564.67
G	150+21.41 NB	2.58' RT	564.69
H	149+96.40 NB	2.58' RT	564.42
I	150+21.81 NB	59.94' RT	563.29
J	149+96.45 NB	60.20' RT	562.88

TOE OF PARAPET POINTS			
POINT	STATION	OFFSET	ELEV.
1	150+24.55 NB	55.41' LT	565.83
2	149+98.77 NB	53.74' LT	565.65
3	149+95.11 NB	53.52' LT	565.62
4	149+95.19 NB	60.29' RT	562.85
5	149+98.74 NB	60.27' RT	562.91
6	150+15.73 NB	60.10' RT	563.19

NOTES

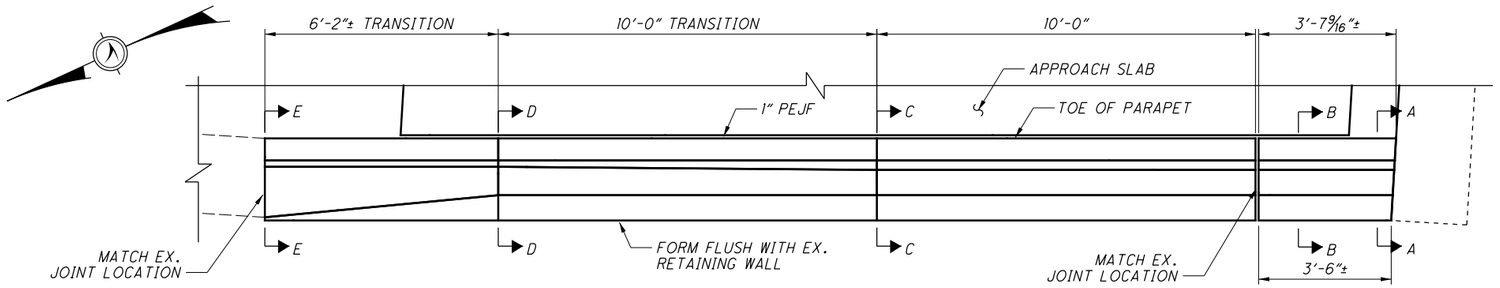
1. SEE SHEET 69/77 AND 70/77 FOR APPROACH PARAPET DETAILS.
2. SEE SHEET 71/77 FOR MEDIAN PARAPET DETAILS.
3. SEE STD. DWG. AS-1-15 FOR ADDITIONAL NOTES AND DETAILS. INSTALLATION SHALL BE WITHOUT A SLEEPER SLAB DUE TO THE LOCATION OF THE EXISTING DRAINAGE CATCH BASIN AT THE NORTH APPROACH.
4. THE PARAPETS AT THE OUTER CURB SHALL BE CONSTRUCTED AS A STRAIGHT LINE BETWEEN THE POINTS SHOWN. THE MEDIAN PARAPETS SHALL BE CONSTRUCTED ALONG THE I-71 NB ℄ BASED ON THE POINTS SHOWN.
5. POINTS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
6. PAYMENT FOR THE APPROACH SLABS AND REINFORCING SHALL BE INCLUDED UNDER ITEM 526, REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17"), AS PER PLAN.

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED TES | CHECKED BJF | DRAWN TES | REVISED | REVIEWED MLJ | DATE 02/29/16 | STRUCTURE FILE NUMBER 3106608

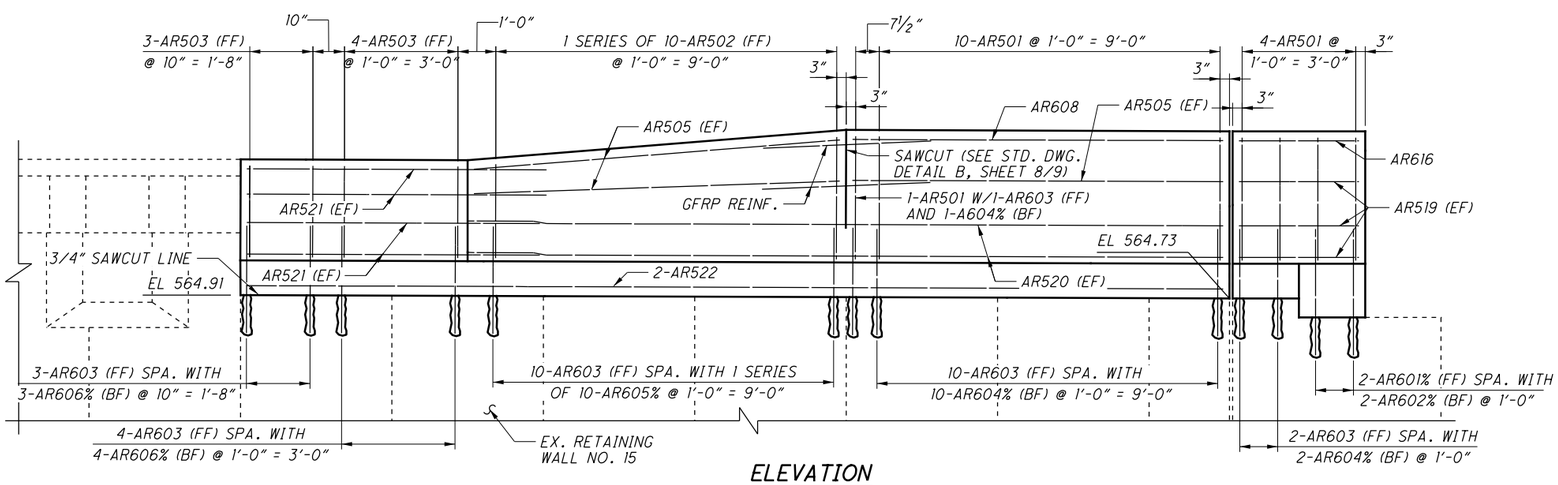
FORWARD APPROACH PLAN
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST. & SENTINEL ST.

HAM-71-1.59
PID No. 101939



PLAN

(FWD APPROACH LEFT WINGWALL AND RET. WALL NO. 15)



ELEVATION

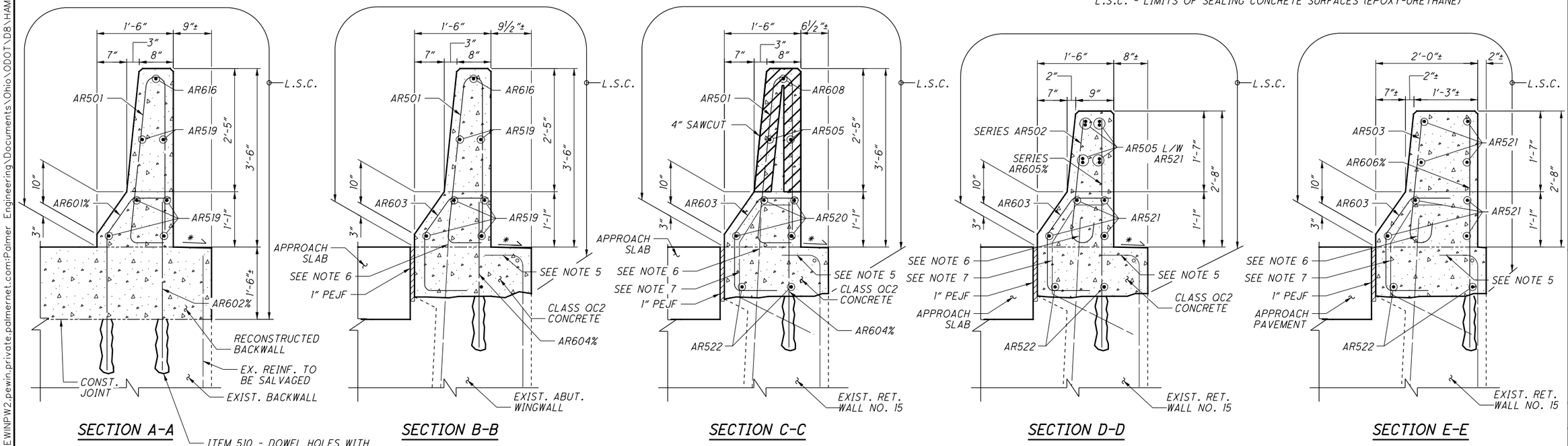
(FWD APPROACH LEFT WINGWALL AND RET. WALL NO. 15)

NOTES

1. SEE STD. DWG. BR-1-13 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 68/77 FOR APPROACH SLAB DETAILS AND PARAPET LAYOUT.
3. SEE SHEET 12/77 FOR EXISTING PARAPET REMOVAL DETAILS
4. DIMENSIONS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
5. SALVAGE EXISTING #5 BAR AND BEND TO PROVIDE A 10" HOOK WITH 2" CLEAR.
6. SALVAGE EXISTING #7 BAR. DO NOT TRIM.
7. SALVAGE EXISTING #5 BAR AND BEND AS SHOWN TO PROVIDE 2" CLEAR. TRIM ONLY TO PROVIDE 2" CLEAR TO BACK FACE OF PARAPET, IF REQUIRED.
8. SALVAGE EXISTING HORIZONTAL WINGWALL AND RETAINING WALL REINFORCING BELOW THE PARAPET CONSTRUCTION JOINT.
9. APPROACH PARAPET CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET). THE COMPRESSIVE STRENGTH SHALL BE 4500 PSI.
10. MINIMUM EMBEDMENT OF DOWEL BARS SHALL BE 1'-0". GROUT SHALL BE EPOXY TYPE PER CMS 705.20.
11. MINIMUM EMBEDMENT OF AR603 BARS SHALL BE 0'-7 1/2".

LEGEND

FF - FRONT FACE (ROADWAY SIDE OF PARAPET)
BF - BACK FACE
EF - EACH FACE
L/W - LAPPED WITH
% - INDICATES A BAR DOWELED INTO ABUTMENT OR RETAINING WALL
* - PROVIDE 1/4" PER FOOT SLOPE TO DRAIN
L.S.C. - LIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)



SECTION A-A — ITEM 510 - DOWEL HOLES WITH NONSHRINK, NON-METALLIC GROUT (TYP)

SECTION B-B

SECTION C-C

SECTION D-D

SECTION E-E

DESIGN AGENCY
PALMER ENGINEERING
191 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	01/MM/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

FORWARD APPROACH PARAPET DETAILS
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST. & SENTINEL ST.

HAM-71-1.59
PID No. 101939

69/77
168/176

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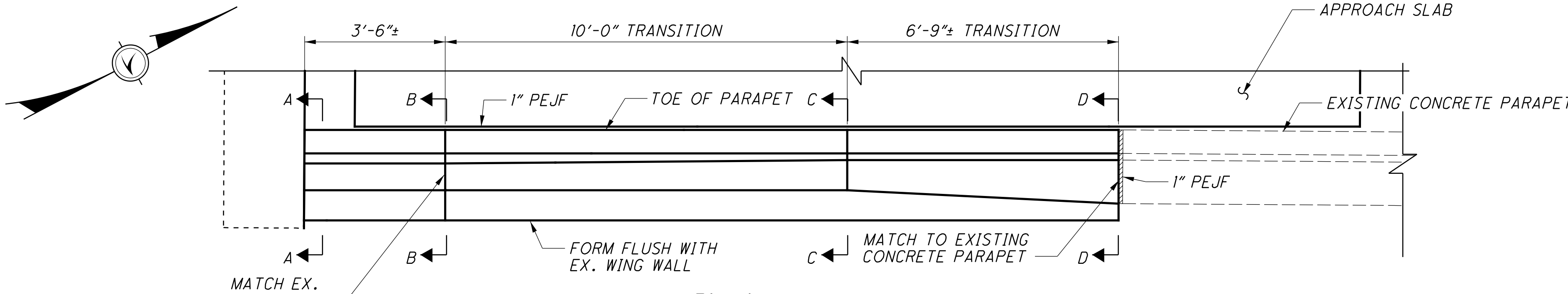
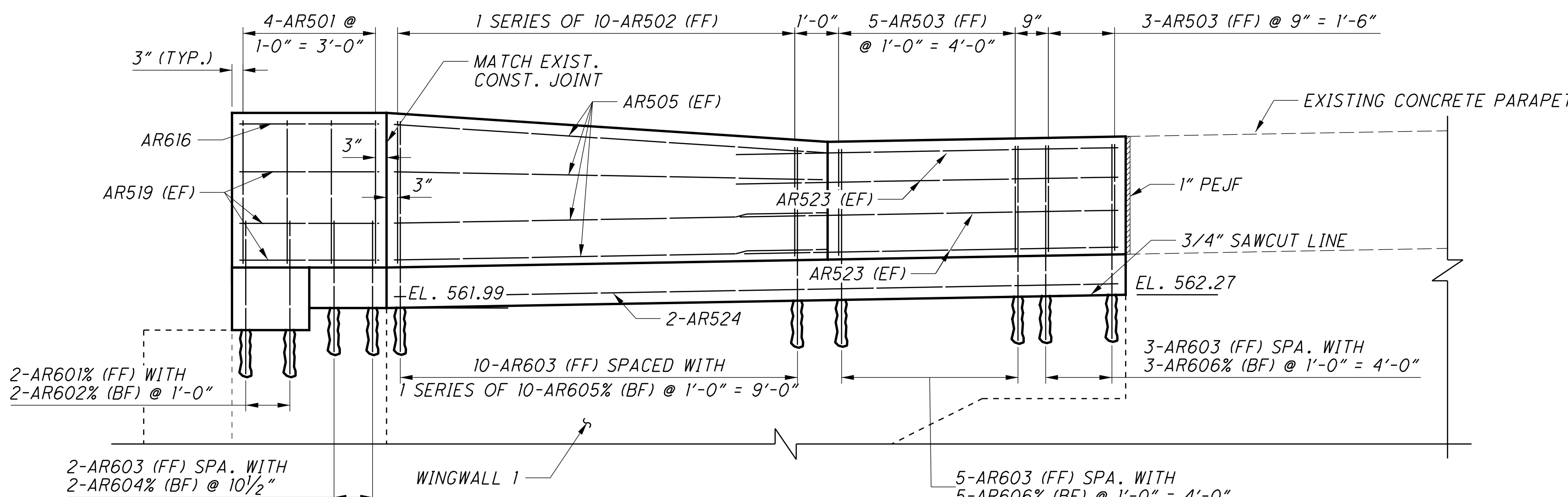


PLAN

(FORWARD ABUTMENT RIGHT WINGWALL)



ELEVATION

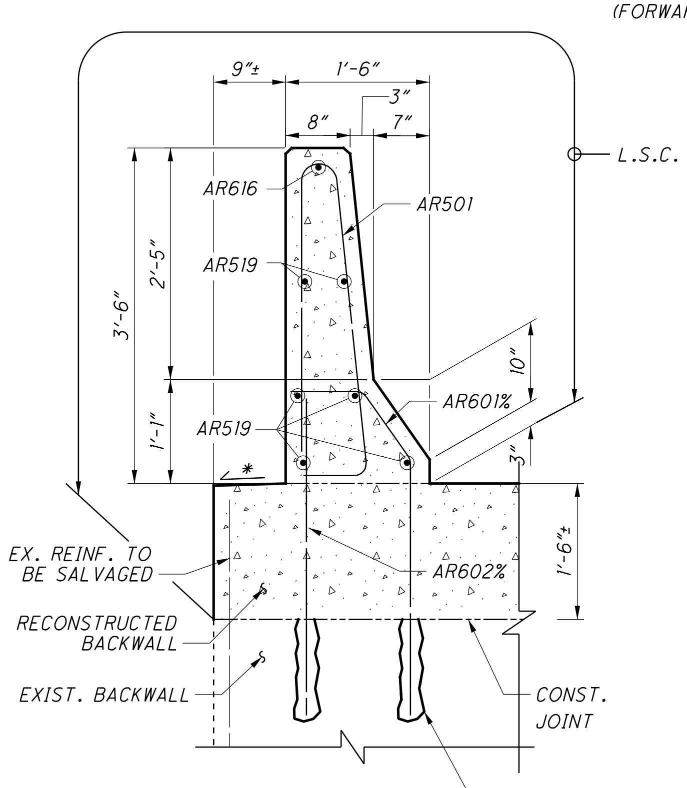
(FORWARD ABUTMENT RIGHT WINGWALL)

NOTES

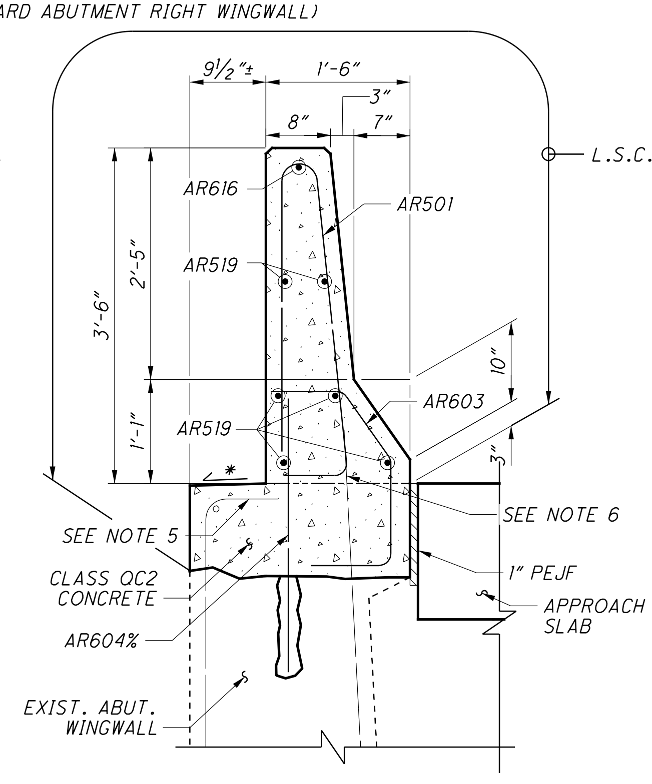
1. SEE STD. DWG. BR-1-13 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 68/77 FOR APPROACH SLAB DETAILS AND PARAPET LAYOUT.
3. SEE SHEET 12/77 FOR EXISTING PARAPET REMOVAL DETAILS
4. DIMENSIONS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
5. SLAVAGE EXISTING #5 BAR AND BEND TO PROVIDE A 10" HOOK WITH 2" CLEAR.
6. SALVAGE EXISTING #7 BAR. DO NOT TRIM.
7. SALVAGE EXISTING #5 BAR AND BEND AS SHOWN TO PROVIDE 2" CLEAR. TRIM ONLY TO PROVIDE 2" CLEAR TO BACK FACE OF PARAPET, IF REQUIRED.
8. SALVAGE EXISTING HORIZONTAL REINFORCING IN WINGWALL BELOW PARAPET CONSTRUCTION JOINT.
9. APPROACH PARAPET CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET). THE COMPRESSIVE STRENGTH SHALL BE 4500 PSI.
10. MINIMUM EMBEDMENT OF DOWEL BARS SHALL BE 1'-0". GROUT SHALL BE EPOXY TYPE PER CMS 705.20.
11. MINIMUM EMBEDMENT OF AR603 BARS SHALL BE 0'-7½".

LEGEND

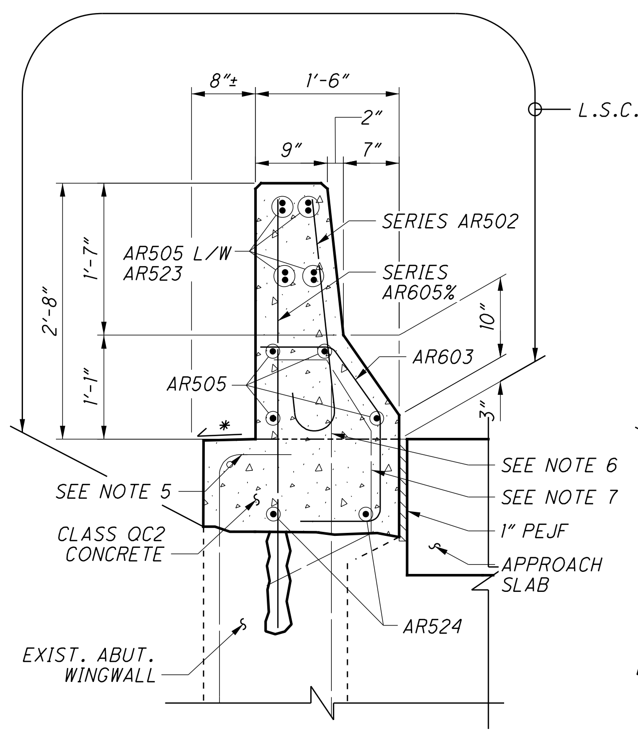
FF - FRONT FACE (ROADWAY SIDE OF PARAPET)
BF - BACK FACE
EF - EACH FACE
L/W - LAPPED WITH
% - INDICATES A BAR DOWELED INTO ABUTMENT OR RETAINING WALL
* - PROVIDE 1/4" PER FOOT SLOPE TO DRAIN
L.S.C. - LIMITS OF SEALING CONCRETE SURFACES (EPOXY-URETHANE)



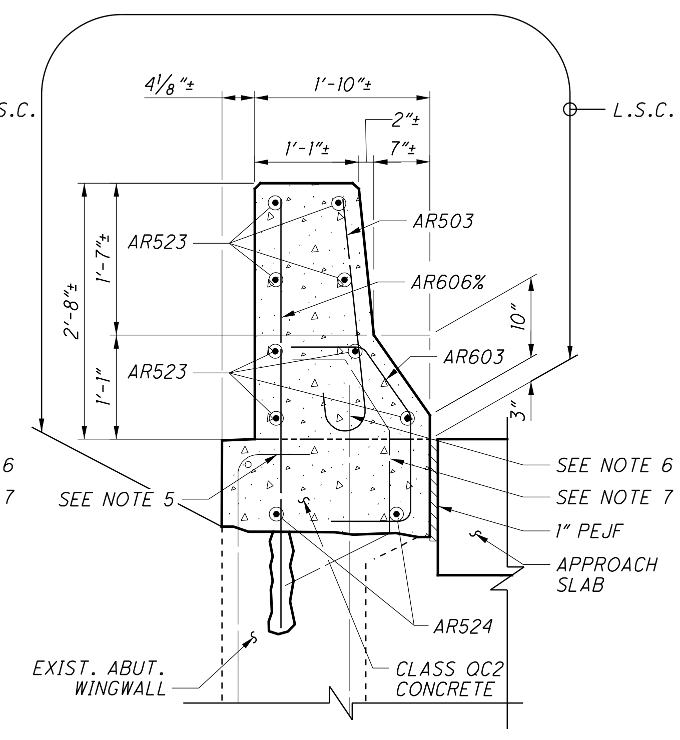
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

(SEE NOTE 4)

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NON-METALLIC GROUT (TYP)

DESIGN AGENCY	PALMER ENGINEERING, CINCINNATI, OH 45242
DESIGNED	TES
CHECKED	BJF
DRAWN	TES
REVISED	
REVIEWED	MLJ
DATE	02/29/16
STRUCTURE FILE NUMBER	3106608

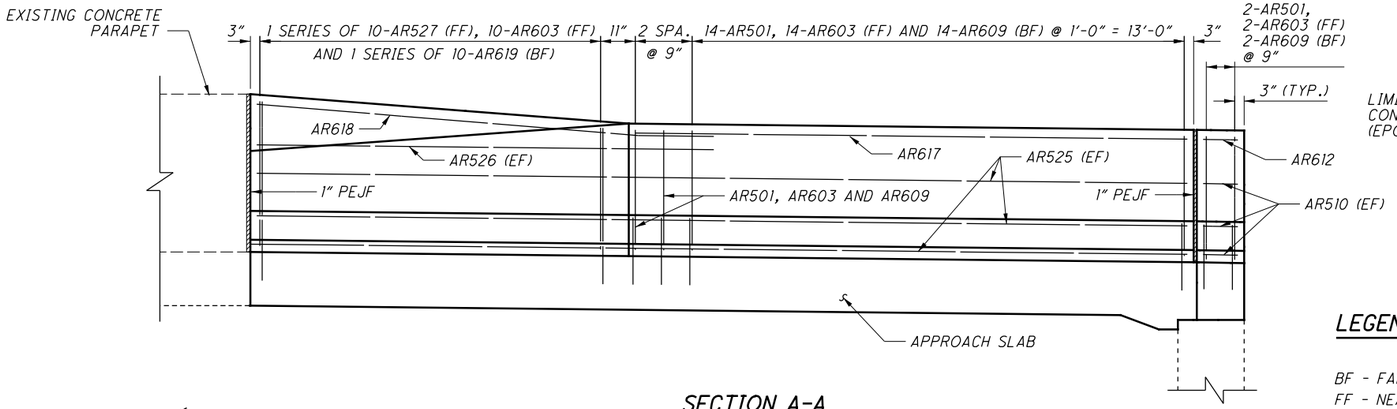
FORWARD APPROACH PARAPET DETAILS

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST. & SENTINEL ST.

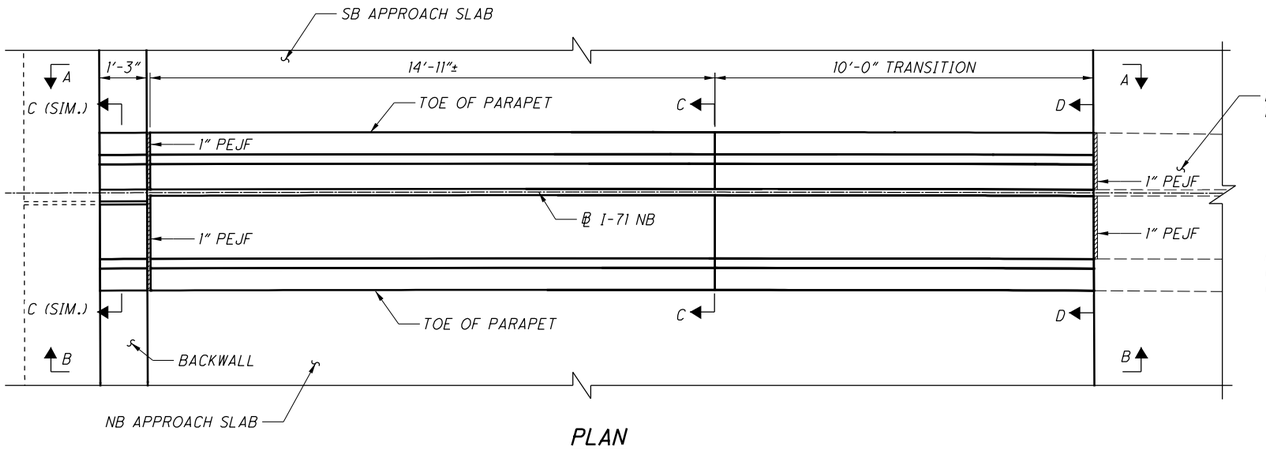
HAM-71-1.59

PID No. 101939

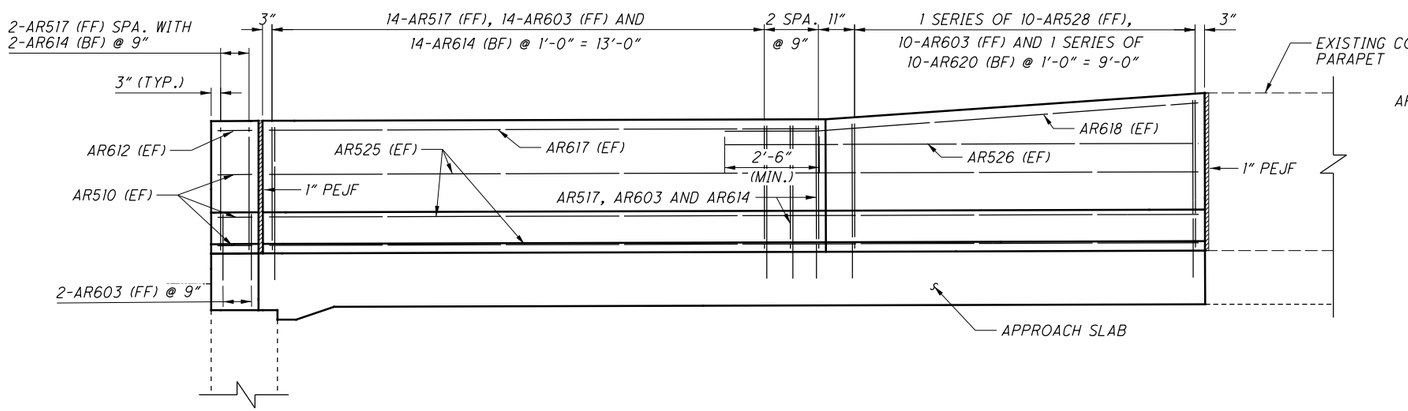


SECTION A-A

(SB MEDIAN PARAPET ELEVATION)

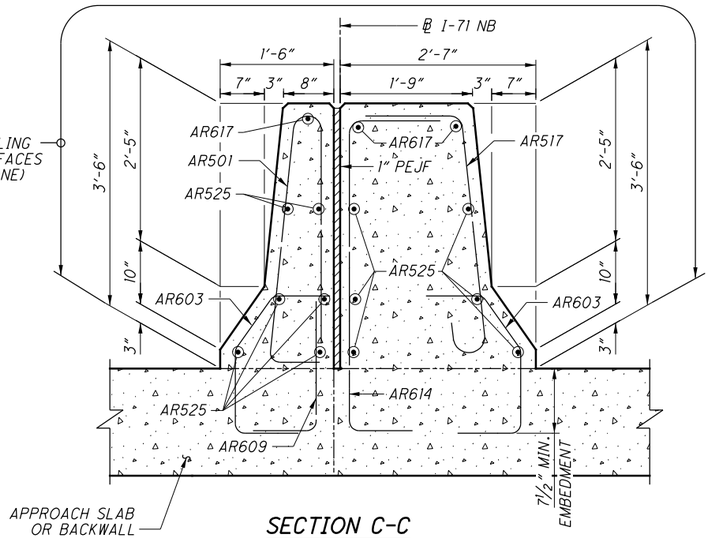


PLAN

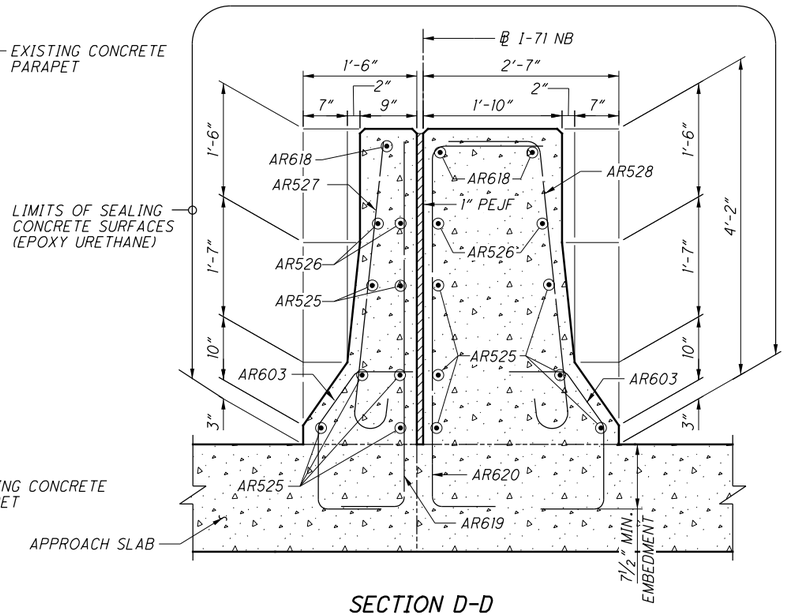


SECTION B-B

(NB MEDIAN PARAPET ELEVATION)



SECTION C-C



SECTION D-D

(SEE NOTE 4)

LEGEND

BF - FAR SIDE
FF - NEAR SIDE
EF - EACH FACE

NOTES

1. SEE STD. DWG. BR-1-13 FOR ADDITIONAL DETAILS AND NOTES.
2. SEE SHEET 68/77 FOR APPROACH SLAB DETAILS AND PARAPET LAYOUT.
3. SEE SHEET 12/77 FOR EXISTING PARAPET REMOVAL DETAILS
4. DIMENSIONS TYING INTO EXISTING CONCRETE ROADWAY PARAPET ARE APPROXIMATE AND SHALL BE ADJUSTED AS REQUIRED TO MATCH THE EXISTING PARAPET.
5. ADJUST THE BACK FACE OF THE PARAPET OVER THE BACKWALL TO MATCH THE EXISTING 1" OPEN JOINT IN THE ABUTMENT BACKWALL.
6. APPROACH PARAPET CONCRETE SHALL BE INCLUDED FOR PAYMENT WITH ITEM 511, CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET). THE COMPRESSIVE STRENGTH SHALL BE 4500 PSI.

DESIGN AGENCY
PALMER ENGINEERING
191 CORELL PARK DR - SUITE 200
ENGINEERING CINCINNATI, OH 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
TES	TES	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
BJF		3106608	

FORWARD APPROACH MEDIAN PARAPET DETAILS

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

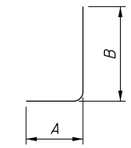
HAM-71-1.59
PID No. 101939

71 / 77

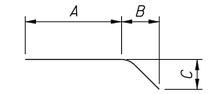
170 / 176

REINFORCING STEEL LIST

MARK	NUMBER							LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS						
	REAR APPR NB	REAR APPR SB	FWD APPR NB	FWD APPR SB	REAR ABUT	FWD ABUT	TOTAL				A	B	C	D	E	R	INC.
A501					2		2	29'-7"	62	STR							
A502					2		2	23'-7"	49	STR							
A503					2		2	35'-7"	74	STR							
A504					2		2	35'-4"	74	STR							
A505					2		2	3'-1"	6	1	0'-11"	2'-4"					
A506						2	2	27'-7"	58	STR							
A507						2	2	27'-6"	57	STR							
A508						2	2	31'-6"	66	STR							
A509						2	2	30'-0"	63	STR							
A801					2		2	3'-9"	20	19	2'-5"	0'-10"	1'-2"				
AS501	56	112	56	56			280	30'-0"	8,761	STR							
AS502		56					56	16'-0"	935	STR							
AS503	40	50	40	38			168	24'-8"	4,322	STR							
AS504	56			56			112	27'-6"	3,212	STR							
AS505			56				56	32'-6"	1,898	STR							
AS1001	95	122	103	94			414	26'-1"	46,466	16	24'-8"						
								SUBTOTAL	66,123								



TYPE-1



TYPE-19

DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH. 45242
CINCINNATI • AKRON • WILLIAMSBURG

DESIGNED	DRAWN	REVIEWED	DATE
SDW	SDW	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TES		3106608	

ABUTMENT AND APPROACH SLAB REINFORCING STEEL LIST

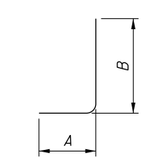
BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

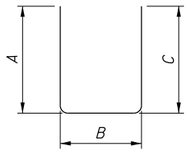
HAM-71-1.59
PID No. 101939

REINFORCING STEEL LIST

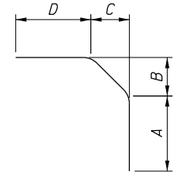
MARK	NUMBER							LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS						
	REAR LT	REAR RT	REAR MED	FWD. LT	FWD. RT	FWD. MED.	TOTAL				A	B	C	D	E	R	INC.
APPROACH PARAPETS AND MEDIAN BARRIERS																	
AR501	16	14	29	15	4	18	96	6′ - 11″	693	22	0′ - 8″	3′ - 3″	3′ - 0″			0′ - 1 1/2″	
	1	1		1	1		4	3′ - 0″			2′ - 5″						
AR502	SERIES OF	SERIES OF		SERIES OF	SERIES OF		SERIES OF	TO	143	16	TO						0′ - 1 1/8″
	10	10		10	10		10	3′ - 10″			3′ - 3″						
AR503	5			7	8		20	3′ - 0″	63	16	2′ - 5″						
AR504	6						6	3′ - 5″	21	STR							
AR505	6			6	8		20	9′ - 8″	202	STR							
AR506	4						4	11′ - 11″	50	STR							
AR507	4						4	14′ - 0″	58	STR							
AR508	4						4	6′ - 1″	25	STR							
AR509	2						2	23′ - 7″	49	STR							
AR510		6	14			12	32	0′ - 11″	31	STR							
AR511		2					2	10′ - 8″	22	STR							
AR512		4					4	10′ - 0″	42	STR							
AR513		4					4	13′ - 0″	54	STR							
AR514		4					4	13′ - 10″	58	STR							
AR515		2					2	5′ - 8″	12	25	1′ - 10″	2′ - 5″	1′ - 4″	0′ - 1 1/2″	0′ - 5″		
AR516		2					2	5′ - 8″	12	STR							
AR517			29			18	47	5′ - 3″	256	18	3′ - 3″	0′ - 2″	1′ - 5″				
AR518			14				14	24′ - 8″	360	STR							
AR519				6	6		12	3′ - 2″	40	STR							
AR520				4			4	19′ - 10″	83	STR							
AR521				8			8	8′ - 3″	69	STR							
AR522				2			2	25′ - 9″	54	STR							
AR523					8		8	8′ - 10″	74	STR							
AR524					2		2	16′ - 5″	34	STR							
AR525						12	12	24′ - 7″	308	STR							
AR526						4	4	12′ - 6″	52	STR							
						1	1	3′ - 10″			3′ - 3″						
AR527						SERIES OF	SERIES OF	TO	43	16	TO						0′ - 0 7/8″
						10	10	4′ - 6″			3′ - 11″						
						1	1	5′ - 3″			3′ - 3″	0′ - 2″	1′ - 5″				
AR528						SERIES OF	SERIES OF	TO	58	18	TO	TO	TO				0′ - 0 7/8″
						10	10	5′ - 11″			3′ - 11″	0′ - 2″	1′ - 5″				
AR601	2	2		2	2		8	4′ - 2″	50	13	2′ - 9″	0′ - 8 1/2″	0′ - 6″	0′ - 7″			
AR602	2	2		2	2		8	3′ - 6″	42	STR							
AR603	29	22	58	30	20	56	215	3′ - 1″	996	14	1′ - 0″	0′ - 10″	0′ - 8 1/2″	0′ - 6″	0′ - 7″		
AR604	13			13	2		28	2′ - 11″	123	STR							
	1			1	1		3	4′ - 6″									
AR605	SERIES OF			SERIES OF	SERIES OF		SERIES OF	TO	220	STR							0′ - 1″
	10			10	10		10	5′ - 3″									
AR606	5			7	8		20	4′ - 6″	135	STR							
AR607	1						1	3′ - 5″	5	STR							
AR608	1			1			2	9′ - 8″	29	STR							
AR609		11	29			18	58	2′ - 5″	207	1	1′ - 0″	1′ - 6 1/2″					
		1					1	4′ - 0″			1′ - 0″	3′ - 2″					
AR610		SERIES OF					SERIES OF	TO	66	1	TO	TO					0′ - 1 1/8″
		10					10	4′ - 10″			1′ - 0″	4′ - 0″					
AR611		10					10	4′ - 0″	60	1	1′ - 0″	3′ - 2″					
AR612		1	1			3	5	0′ - 11″	7	STR							
AR613		1					1	10′ - 8″	16	STR							
AR614			29			18	47	6′ - 1″	427	2	1′ - 5″	3′ - 11 1/2″	1′ - 0″				
AR615			1				1	24′ - 8″	37	STR							
AR616				1	1		2	3′ - 2″	10	STR							
AR617						3	3	14′ - 9″	66	STR							
AR618						3	3	12′ - 8″	57	19	10′ - 2″	2′ - 6″	0′ - 2″				
						1	1	4′ - 10″			1′ - 0″	4′ - 0″					
AR619						SERIES OF	SERIES OF	TO	78	1	TO	TO					0′ - 0 7/8″
						10	10	5′ - 6″			1′ - 0″	4′ - 8″					
						1	1	6′ - 0″			1′ - 4″	4′ - 0″	1′ - 0″				
AR620						SERIES OF	SERIES OF	TO	95	2	TO	TO	TO				0′ - 0 7/8″
						10	10	6′ - 8″			1′ - 4″	4′ - 8″	1′ - 0″				
								SUBTOTAL	5,692									



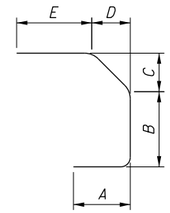
TYPE-1



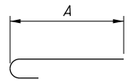
TYPE-2



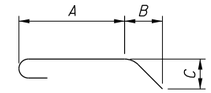
TYPE-13



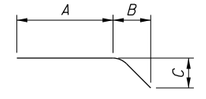
TYPE-14



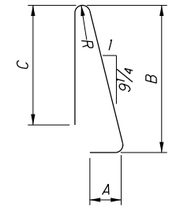
TYPE-16



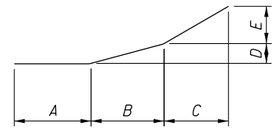
TYPE-18



TYPE-19



TYPE-22



TYPE-25

DESIGN AGENCY
PALMER ENGINEERING
1011 CORNELL PARK DR., SUITE 200
ENGINEERING CINCINNATI, OH. 45242
CLEVELAND • COLUMBUS • DAYTON • LEXINGTON
CINCINNATI • AARON METELLUS ASSOCIATES

DESIGNED	DRAWN	REVIEWED	DATE
SDW	SDW	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TES		3106608	

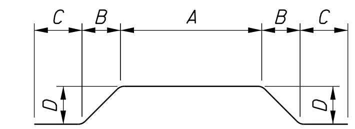
ABUTMENT AND APPROACH SLAB REINFORCING STEEL LIST

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

DECK REINFORCING STEEL LIST

MARK	NUMBER						LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS						
	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	TOTAL				A	B	C	D	E	R	INC.
S401	2324	1266	883	1276	1564	7313	40' - 0"	195,404	STR							
	1					1	18'-4"									
S402	SERIES					SERIES	TO	2,800	STR							0' - 4 3/4"
	107					107	60'-0"									
		1				1	33'-4"									
S403		SERIES				SERIES	TO	2,130	STR							0' - 1 1/2"
		83				83	43'-6"									
			1			1	22'-11"									
S404			SERIES			SERIES	TO	1,911	STR							0' - 4 1/8"
			79			79	49'-6"									
				1		1	25'-5"									
S405				SERIES		SERIES	TO	2,622	STR							0' - 1 3/4"
				116		116	42'-3"									
					1	1	43'-8"									
S406					SERIES	SERIES	TO	3,554	STR							0' - 1 5/8"
					105	105	57'-8"									
S407	1370					1370	8' - 3"	7,551	STR							
S408	1251		78			1329	8' - 10"	7,842	STR							
S409		1739				1739	9' - 0"	10,455	STR							
S410			1254	626	872	2752	9' - 2"	16,852	STR							
S411				626		626	9' - 11"	4,147	STR							
S412					927	927	9' - 5"	5,832	STR							
S413			28		104	132	30' - 0"	2,646	STR							
S414	848	82			208	1138	31' - 0"	23,566	STR							
S415	212			115	104	431	23' - 10"	6,862	STR							
S416			1			1	12' - 8"	9	STR							
S417			1			1	5' - 10"	4	STR							
S418	2	2				4	25' - 10"	70	STR							
S419		82	2			84	17' - 8"	992	STR							
S420		82	2			84	19' - 3"	1,081	STR							
S421				2		2	44' - 8"	60	STR							
S422				2	2	4	38' - 3"	103	STR							
S423	1809	240	147		928	3124	4' - 3"	8,869	21	1'-3"	10"	7"	6"			
S424				115		115	15' - 10"	1,217	STR							
S501	2682	1724	1234	1256	1796	8692	40' - 0"	362,630	STR							
S502	138					138	33' - 11"	4,882	STR							
S503	138					138	31' - 10"	4,582	STR							
S504	138					138	29' - 8"	4,270	STR							
S505	138					138	27' - 8"	3,982	STR							
S506	138					138	25' - 9"	3,706	STR							
S507	138					138	24' - 0"	3,454	STR							
S508	138					138	22' - 5"	3,227	STR							
S509	276					276	21' - 1"	6,069	STR							
S510	414					414	19' - 3"	8,312	STR							
S511	1000	1700				2700	18' - 1"	50,924	STR							
	2					2	3'-10"									
S512	SERIES					SERIES	TO	287	STR							1' - 1 1/2"
	13					13	17'-4"									
	2					2	2' - 2"									
S513	SERIES					SERIES	TO	1,435	STR							1'-2"
	33					33	39' - 6"									
		2				2	2'-0"									
S514		SERIES				SERIES	TO	1,475	STR							1' - 1 5/8"
		34				34	39'-7"									
		2				2	4'-0"									
S515		SERIES				SERIES	TO	268	STR							1' - 2 1/2"
		12				12	17'-4"									
						SUB TOTAL		766,083								



TYPE-21

DESIGN AGENCY
Palmer ENGINEERING
PALMER ENGINEERING
1131 CORNELL PARK DR - SUITE 200
CINCINNATI, OH 45242
WINCHESTER • NASHVILLE • LOUISVILLE • CINCINNATI • AKRON • TALLAHASSEE • ORLANDO

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TES		3106608	

DECK REINFORCING STEEL LIST

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939

DECK REINFORCING STEEL LIST

MARK	NUMBER						LENGTH	WEIGHT	TYPE	DIMENSIONS						
	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	TOTAL		(LBS.)		A	B	C	D	E	R	INC.
			2			2	9'-8"									
S516			SERIES			SERIES	TO	260	STR							7'-7"
			5			5	40'-0"									
S517			2			2	11' - 0"	23	STR							
S518			1210			1210	18' - 7"	23,453	STR							
			2			2	4'-2"									
S519			SERIES			SERIES	TO	228	STR							1' - 1 3/4"
			11			11	15'-8"									
			2			2	1'-4"									
S520			SERIES			SERIES	TO	1,415	STR							1' - 2 3/8"
			33			33	39'-9"									
				2		2	1'-5"									
S521				SERIES		SERIES	TO	1,494	STR							1' - 1 1/2"
				35		35	39'-6"									
				2		2	3'-10"									
S522				SERIES		SERIES	TO	1,246	STR							1' - 2 3/8"
				29		29	37'-4"									
S523				636		636	38' - 8"	25,650	STR							
S524				506		506	35' - 0"	18,472	STR							
				2		2	3'-7"									
S525				SERIES		SERIES	TO	1,032	STR							1' - 0 1/2"
				28		28	31'-9"									
				2		2	1'-8"									
S526				SERIES		SERIES	TO	1,494	STR							1' - 1 1/4"
				35		35	39'-3"									
					2	2	1'-9"									
S527					SERIES	SERIES	TO	1,592	STR							1' - 0 5/8"
					37	37	39'-6"									
					2	2	3'-10"									
S528					SERIES	SERIES	TO	963	STR							1' - 1 3/8"
					26	26	31'-8"									
S529					582	582	32' - 3"	19,577	STR							
S530					580	580	30' - 5"	18,401	STR							
S531					582	582	27' - 2"	16,491	STR							
S601	77					77	11' - 5"	1,321	STR							
S602	1318	748	526	688	939	4219	40' - 0"	253,478	STR							
S603	4					4	8' - 0"	49	STR							
S604	12					12	6' - 6"	118	STR							
S605	12					12	12' - 0"	217	STR							
S606	28					28	34' - 0"	1,430	STR							
S607	12					12	35' - 0"	631	STR							
S608			2			2	29' - 0"	88	STR							
S609	1					1	27' - 0"	41	STR							
S610	1					1	16' - 8"	26	STR							
S611		68				68	19' - 7"	2,001	STR							
S612			4		4	8	21' - 9"	262	STR							
S613			62			62	20' - 2"	1,879	STR							
S614				5		5	14' - 8"	111	STR							
S615				55		55	13' - 9"	1,136	STR							
S616					77	77	33' - 0"	3,817	STR							
						SUB TOTAL		398,396								
						DECK TOTAL		1,164,479								

DESIGN AGENCY
PALMER ENGINEERING
CINCINNATI, OH 45242

DESIGNED	DRAWN	REVIEWED	DATE
CEJ	DLH	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TES		3106608	

DECK REINFORCING STEEL LIST
BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

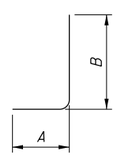
HAM-71-1.59
PID No. 101939

75/77

174/176

DECK RAILING REINFORCING STEEL LIST

MARK	NUMBER						LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS						
	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	TOTAL				A	B	C	D	E	R	INC.
R501	82	62	37	40	61	282	14'-8"	4,314	STR							
R502	166	112	60	80	116	534	30'-0"	16,709	STR							
R503	148	88	38	68	92	434	7'-2"	3,244	STR							
R504	4	4				8	16'-9"	141	STR							
R505	2					2	13'-8"	28	STR							
R506		2				2	9'-8"	21	STR							
R507		2				2	7'-4"	16	STR							
R508	1287	881	184	303	462	3117	6'-11"	22,487	22	0'-8"	3'-3"	3'-0"			0'-1 1/2"	
R509	2					2	9'-2"	20	STR							
R510	4					4	26'-3"	110	STR							
R511	4					4	21'-0"	88	STR							
R512	2					2	13'-9"	29	STR							
R513		2				2	12'-3"	26	STR							
R514		4				4	26'-8"	111	STR							
R515	6					6	9'-11"	62	19	9'-0"	0'-10 1/2"	0'-2"				
R516	6				1	7	9'-8"	71	STR							
	2					2	4'-2"				0'-4"					
R517	SER. OF					SER. OF	TO	94	37	3'-3"	TO	0'-10"				0'-2 3/8"
	9					9	5'-9"				1'-11"					
R518	40					40	5'-11"	247	37	3'-3"	2'-1"	0'-10"				
R519	2					2	21'-9"	46	STR							
R520	4					4	16'-9"	70	STR							
R521	4					4	17'-0"	71	STR							
R522			6			6	21'-6"	135	STR							
R523			317	326	447	1090	4'-5"	5,021	1	1'-4"	3'-3"					
R524			2			2	4'-2"	9	STR							
R525			2			2	8'-4"	18	STR							
R526			8			8	4'-5"	37	STR							
R527			2			2	2'-8"	6	STR							
R528			2			2	15'-8"	33	STR							
R529			2			2	17'-0"	36	STR							
R530			2	4		6	3'-3"	20	STR							
R531				4		4	24'-10"	104	STR							
R532				1		1	10'-11"	11	STR							
R533				1	2	3	11'-7"	36	STR							
R534				1	2	3	15'-2"	48	STR							
R535					6	6	12'-10"	80	STR							
R536					4	4	27'-0"	113	STR							
R537			2			2	11'-10"	25	STR							
R538			6			6	2'-10"	18	1	1'-0"	2'-0"					
R539			58			58	3'-11"	237	2	1'-6"	1'-2"	1'-6"				
R540			50			50	2'-7"	135	2	0'-10"	1'-2"	0'-10"				
R541			30			30	1'-11"	60	2	0'-6"	1'-2"	0'-6"				
R542			77			77	2'-0"	161	1	1'-0"	1'-2"					
R543			1			1	1'-10"	2	1	1'-0"	1'-0"					
R544				6		6	7'-5"	46	21	1'-4"	1'-10"	0'-6"	1'-10"			
R545				4		4	10'-1"	42	9	0'-6"	4'-0"	2'-4"	4'-0"			
R546				4		4	3'-3"	14	2	0'-10"	1'-10"	0'-10"				
R547				1		1	9'-8"	10	STR							
R548				4		4	8'-7"	36	STR							
R549				1	1	2	14'-11"	31	STR							
R550			322	326	447	1095	5'-2"	5,901	37	3'-3"	1'-4"	0'-10"				
	2					2	3'-6"			0'-4"						
R551	SER. OF					SER. OF	TO	80	1	TO	3'-3"					0'-2 3/8"
	9					9	5'-1"			1'-11"						
R552	40					40	5'-3"	218	1	2'-1"	3'-3"					
						SUB TOTAL		60,728								



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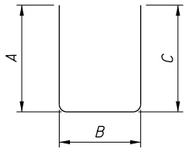

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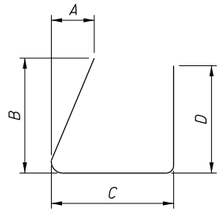

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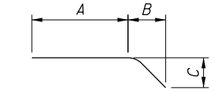

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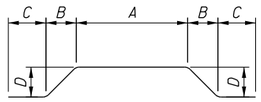

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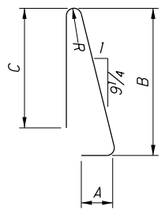

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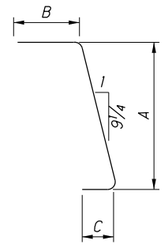


TYPE-37

DESIGN AGENCY
PALMER ENGINEERING
ENGINEERING CINCINNATI, OH. 45242
CINCINNATI • AARON • WELLS • ASSOCIATES

DESIGNED	DRAWN	REVIEWED	DATE
SDW	SDW	MLJ	02/29/16
CHECKED	REVISED	STRUCTURE FILE NUMBER	
TES		3106608	

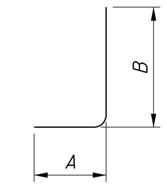
DECK RAIL REINFORCING STEEL LIST

BRIDGE NO. HAM-71-0159
I-71 OVER I-471 SB, EGGLESTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59
PID No. 101939

DECK RAILING REINFORCING STEEL LIST

MARK	NUMBER						LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS						
	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	TOTAL				A	B	C	D	E	R	INC.
R601	41	31	30	31	45	178	14'-8"	3,921	STR							
R602	74	44	31	51	70	270	7'-2"	2,906	STR							
R603	1					1	13'-8"	21	STR							
R604	6	1				7	9'-8"	102	STR							
R605		1				1	7'-4"	11	STR							
R606	1343	881	503	634	909	4270	3'-1"	19,776	14	1'-0"	0'-10 1/2"	0'-8 1/2"	0'-6"	0'-7"		
R607	1343	881	509	629	909	4271	2'-5"	15,504	1	1'-0"	1'-7"					
R608	1					1	9'-2"	14	STR							
R609	1					1	13'-9"	21	STR							
R610		1				1	12'-3"	18	STR							
R611	15		15			30	2'-0"	90	10	0'-8"	0'-6"	0'-10 1/2"	0'-6"			
R612	3					3	16'-9"	76	STR							
R613	3					3	17'-0"	77	STR							
R614			2			2	4'-2"	13	STR							
R615			8			8	4'-5"	53	STR							
R616			2			2	2'-8"	8	STR							
R617			1			1	15-6"	23	STR							
R618				1		1	10'-11"	17	STR							
R619				1		1	11'-6"	17	STR							
R620				1	1	2	15'-2"	46	STR							
R621					2	2	12'-10"	39	STR							
R622			1			1	11'-10"	18	STR							
R623			1			1	2'-0"	3	STR							
R624			8			8	30'-0"	361	STR							
R625			1			1	10'-10"	16	STR							
R626				1		1	9'-6"	14	STR							
R627					1	1	11'-8"	18	STR							
							SUB TOTAL	43,183								



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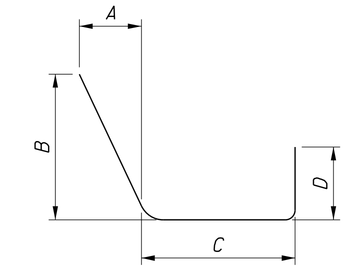

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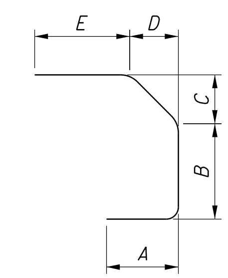

TYPE-14

DESIGN AGENCY: PALMER ENGINEERING, CINCINNATI, OH 45242

DESIGNED SDW | DRAWN SDW | REVIEWED MLJ | DATE 02/29/16
CHECKED TES | REVISED | STRUCTURE FILE NUMBER 3106608

DECK RAIL REINFORCING STEEL LIST

BRIDGE NO. HAM-71-0159

I-71 OVER I-471 SB, EGGELSTON AVE., CULVERT ST & SENTINEL ST.

HAM-71-1.59

PID No. 101939