

LIST OF ALL REPAIR WORK

REPAIR TYPE	SCOPE OF WORK
512.A	SEAL WEARING SURFACE WITH SRS
513.A	REPLACE END CROSSFRAMES WITH JACKING FRAMES
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS (EXTERIOR)
516.A	REPLACE STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS
516.B	INSTALL STEEL BEARING SHIMS
516.C	CLEAN BEARING SEAT
518.A	REPLACE DOWNSPOUTS IN KIND

EXISTING STRUCTURE

TYPE: CONTINUOUS STEEL BEAM WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE

SPAN LENGTH: VARIES

ROADWAY: VARIES T/T PARAPET

SUPERELEVATION: VARIES

WEARING SURFACE: 2 3/4" ± SDC OVERLAY

ORIGINAL DESIGN LOADING: CF 2000 (57)

ALIGNMENT: VARIES

SKEW: VARIES

YEAR BUILT: 1960 WITH REHABILITATIONS IN 1988 AND 2009

STRUCTURE FILE NUMBER: 3105970

PROPOSED STRUCTURE

TYPE: SAME AS EXISTING

SPAN: SAME AS EXISTING

WIDTH: SAME AS EXISTING

LOADING: SAME AS EXISTING

ALIGNMENT: SAME AS EXISTING

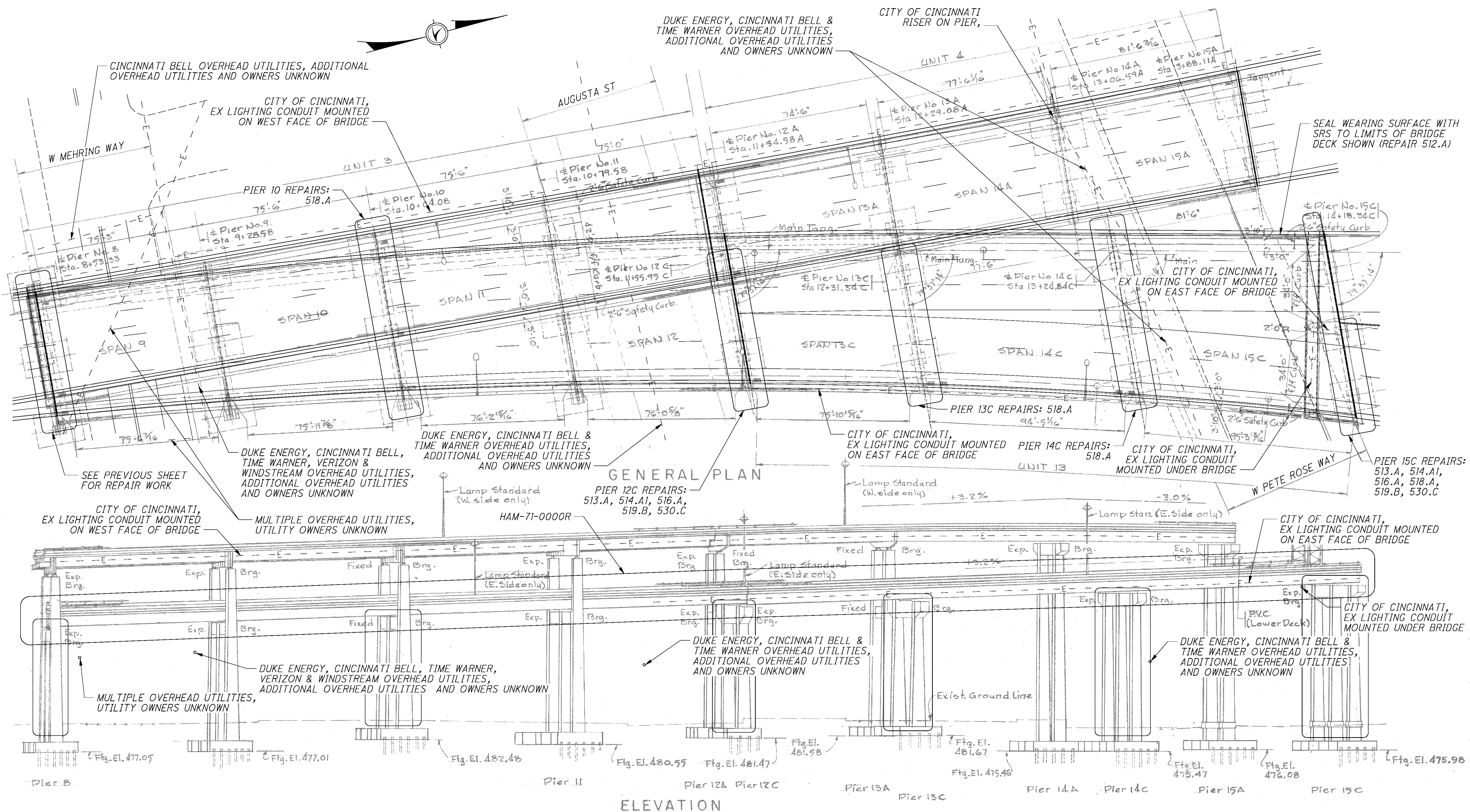
SKEW: SAME AS EXISTING

COORDINATES: SAME AS EXISTING

STRUCTURE FILE NUMBER: 3105970

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REPAIR TYPE	SCOPE OF WORK
512.A	SEAL WEARING SURFACE WITH SRS
513.A	REPLACE END CROSSFRAMES WITH JACKING FRAMES
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS
516.A	REPLACE STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS (LxWxTH)
518.A	REPLACE DOWNSPOUTS IN KIND
519.B	REPAIR CONCRETE SPALLS
530.C	INSTALL CARBON FIBERWRAP

NOTES:

- EXISTING 1960 PLAN & ELEVATION PROVIDED TO LOCATE THE REPAIR WORK & EXISTING UTILITIES, DIMENSIONS SHOWN MAY VARY IN THE FIELD.
- FOR DETAILS ON REPAIR WORK SHOWN, REFER TO SHEETS 4 29 TO 29 29.

Gannett Fleming
ENGINEERS & ARCHITECTS, P. C.
40 WESTWIND PARK DRIVE
WESTMINSTER, CO 80540

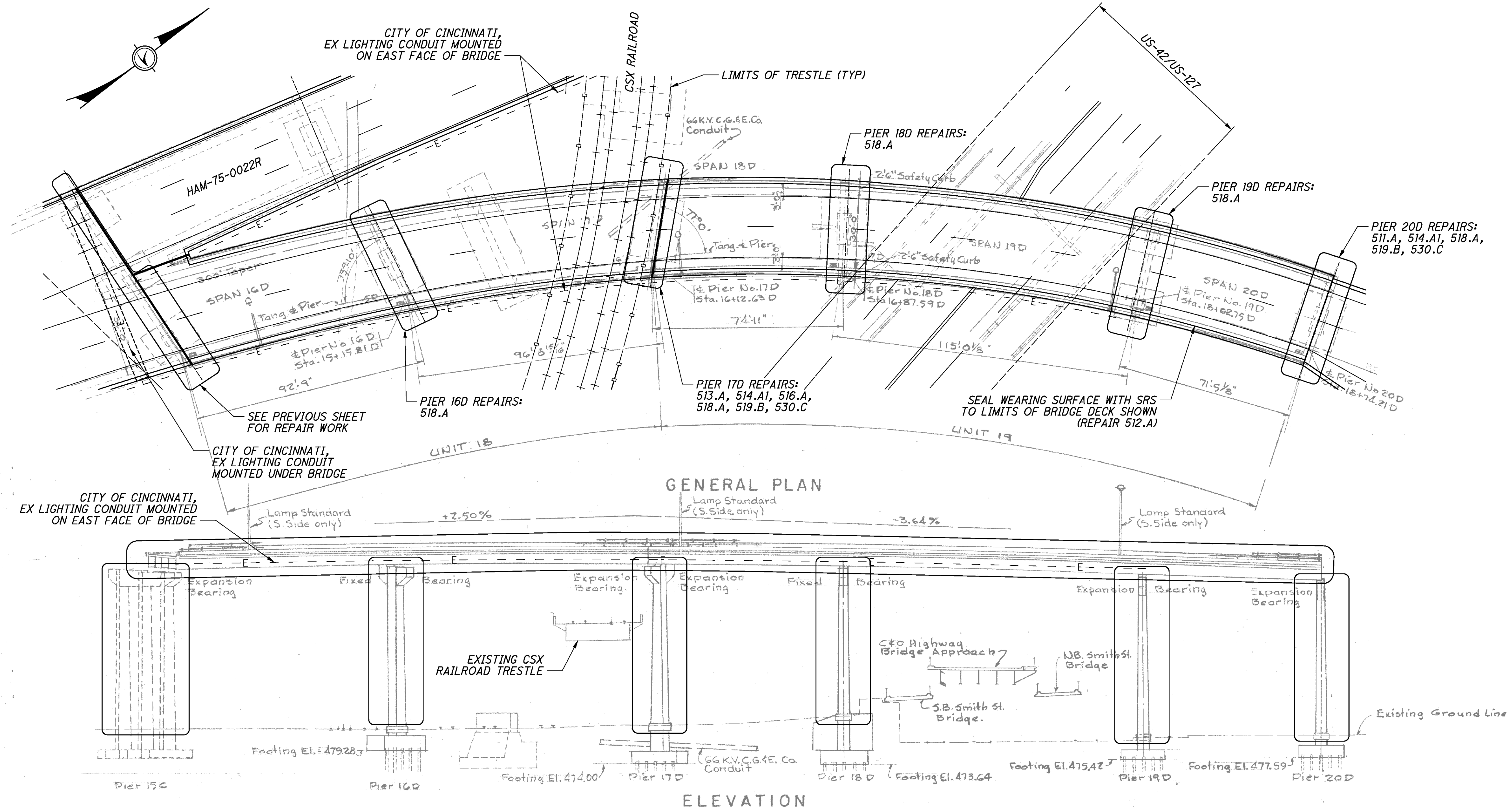
DESIGNED	DATE
CHKD	4/15
DRAWN	REVISED
VDI	STRUCTURE FILE NUMBER
REVISED	3105970

GENERAL PLAN 2 OF 3
BRIDGE NO. HAM-71-0000R (NB I-75)
OVER MEHRING WAY, PETE ROSE WAY, RAILROAD, US42, US 50 RAMPS, CENTRAL AVE

HAM-71-75-0.00/0.22
PID No. 97973

2 / 29

114
177



LIST OF ALL REPAIR WORK	
REPAIR TYPE	SCOPE OF WORK
511.A	PIER CAP CONCRETE EXTENSION
512.A	SEAL WEARING SURFACE WITH SRS
513.A	REPLACE END CROSSFRAMES WITH JACKING FRAMES
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS (EXTERIOR)
516.A	REPLACE STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS
518.A	REPLACE DOWNSPOUTS IN KIND
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NOTES:
 1. EXISTING 1960 PLAN & ELEVATION PROVIDED TO LOCATE THE REPAIR WORK & EXISTING UTILITIES, DIMENSIONS SHOWN MAY VARY IN THE FIELD.
 2. FOR DETAILS ON REPAIR WORK SHOWN, REFER TO SHEETS [4] [29] TO [29] [29].

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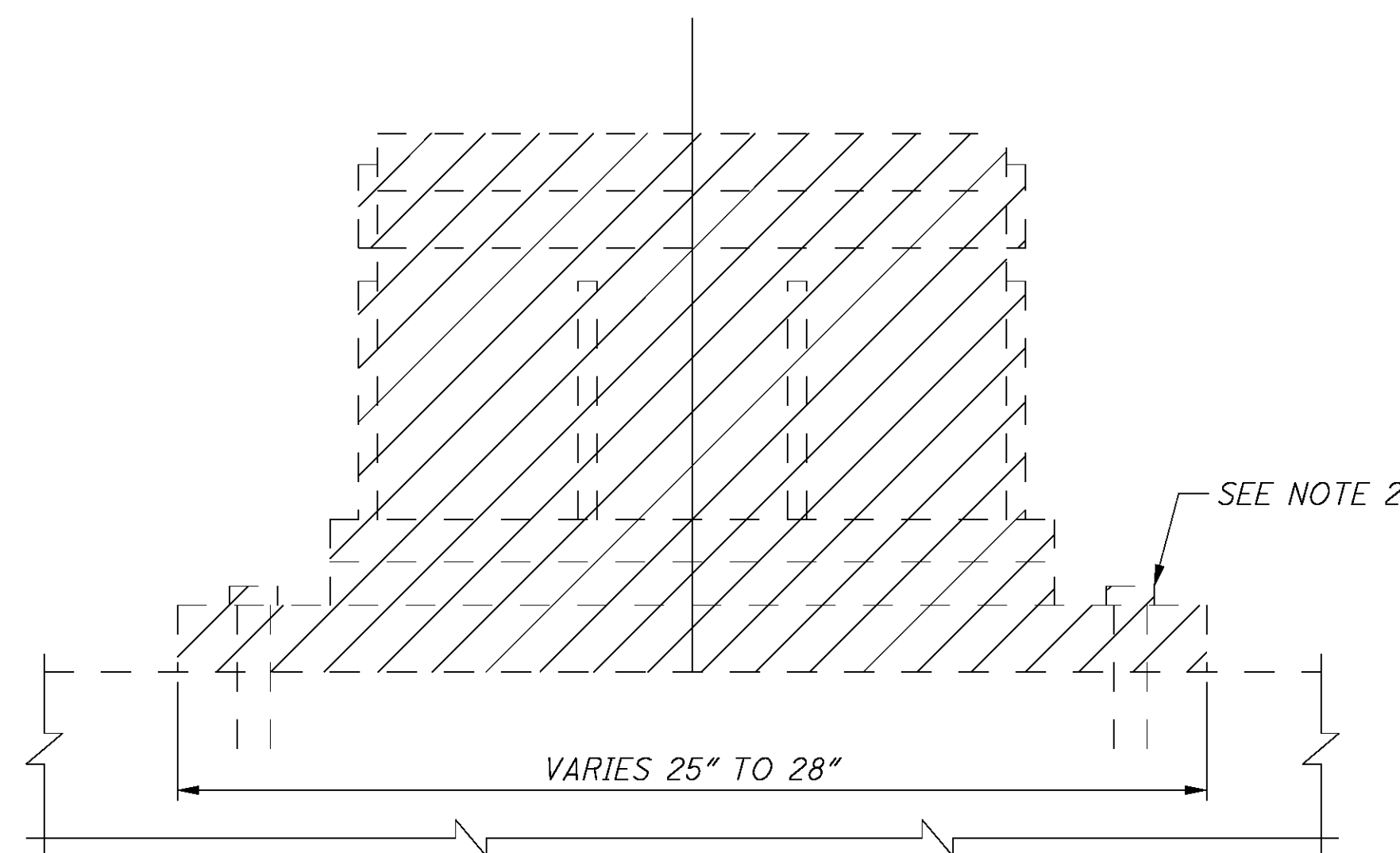
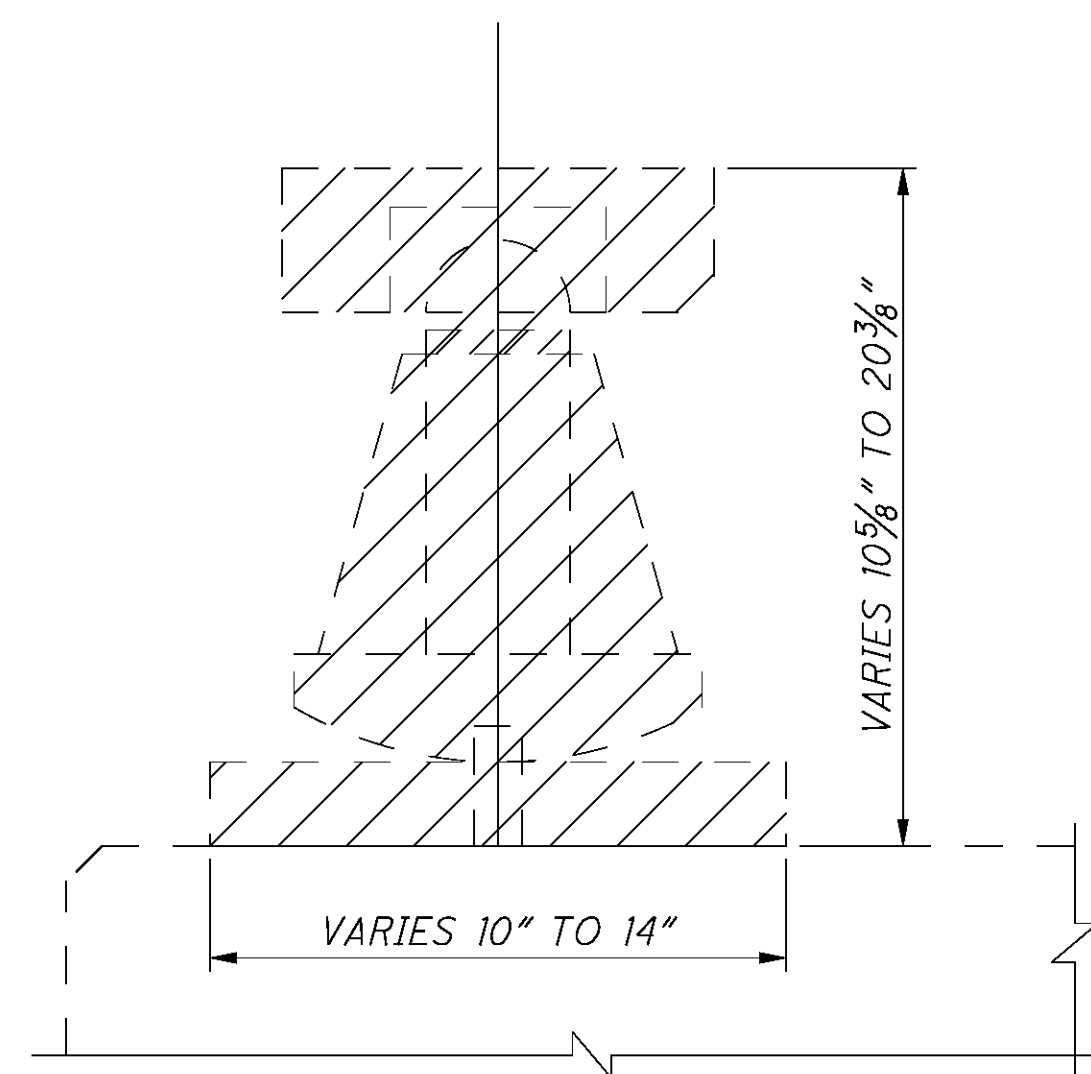
HAM-71-000R ESTIMATED BRIDGE QUANTITIES

100% 01/IMS/BR FUNDING

ITEM	ITEM EXT.	TOTAL QUANTITY	UNIT	DESCRIPTION	SUBSTRUCTURE															SUPER	GENERAL	SHEET REF	
					PIER 0	PIER 1	PIER 2	PIER 4	PIER 6	PIER 8	PIER 10	PIER 12C	PIER 13C	PIER 14C	PIER 15C	PIER 16D	PIER 17D	PIER 18D	PIER 19D				PIER 20D
202	11201	LS		PORTIONS OF STRUCTURE REMOVED, AS PER PLAN																		LS	57/177
509	10000	410	LB	EPOXY COATED REINFORCING STEEL																410			57/177
509	20001	350	LB	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN								100			100			50		100			61/177
510	09950	108	EACH	DOWEL HOLES WITH CEMENT GROUT																108			57/177
511	43210	6	CY	CLASS Q1 CONCRETE, PIER																6			57/177
511	81200	LS		CONCRETE, MISC.: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION																		LS	58/177
511	81300	61	EACH	CONCRETE, MISC.: EMBEDDED GALVANIC ANODE								47						14					58/177
512	10400	8886	SY	TREATING OF CONCRETE BRIDGE DECK WITH SRS																8886			
513	95030	40	EACH	STRUCTURAL STEEL, MISC.: JACKING FRAME																40			59/177
514	00050	10526	SF	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL																10526			59/177
514	00056	10526	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT																10526			59/177
514	00060	13154	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, INTERMEDIATE COAT																13154			59/177
514	00066	13154	SF	FIELD PAINTING OF EXISTING STRUCTURAL STEEL, FINISH COAT																13154			59/177
514	00504	11	MNHR	GRINDING FINS. TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL																11			59/177
514	10000	11	EACH	FINAL INSPECTION REPAIR																11			59/177
516	44101	5	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 17" x 2.239")																5			60/177
516	44201	7	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 13" x 3.903")																7			60/177
516	44201	21	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (12" x 14" x 3.348")																21			60/177
516	44201	14	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN (13" x 16" x 3.903")																14			60/177
516	46900	7	EACH	BEARING DEVICE, MISC.: INSTALL STEEL BEARING SHIMS																7			60/177
516	46930	LS		BEARING DEVICE, MISC.: CLEAN BEARING SEATS	LS																		60/177
516	47001	LS		JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN																LS			60/177
518	51101	1174	FT	8" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN	31	109	36	33	39	49	49	54	59	67	123	70	71	62	57	65		200	60/177
518	63300	LS		STRUCTURE DRAINAGE, MISC.: DRAINAGE PIPE VIDEO MONITORING																LS			138/177
519	11101	1370	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN								568			537		38			227			61/177
SPECIAL	530E00600	589	SF	STRUCTURE, MISC.: CARBON FIBER WRAP (1 LAYER)											72		116			401			62/177
SPECIAL	530E00600	2415	SF	STRUCTURE, MISC.: CARBON FIBER WRAP (2 LAYERS)								882			1533								62/177
SPECIAL	530E00600	312	SF	STRUCTURE, MISC.: DECK CONCRETE REMOVAL																312			61/177

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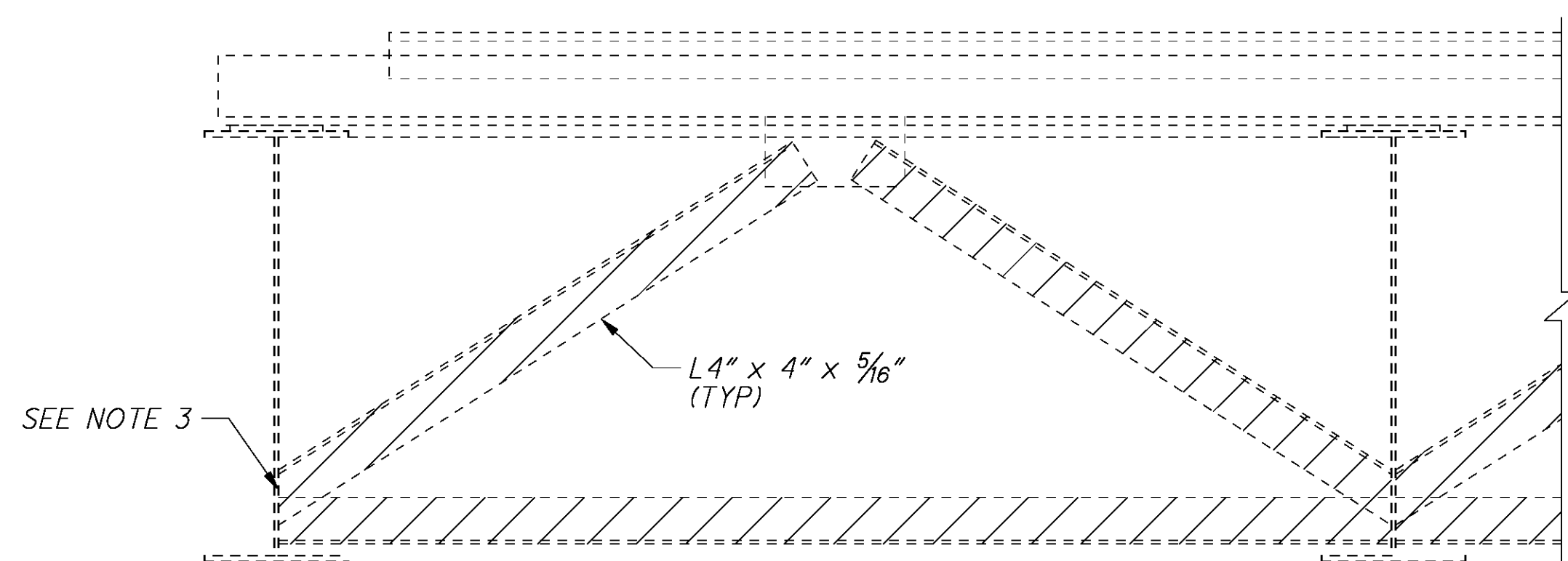
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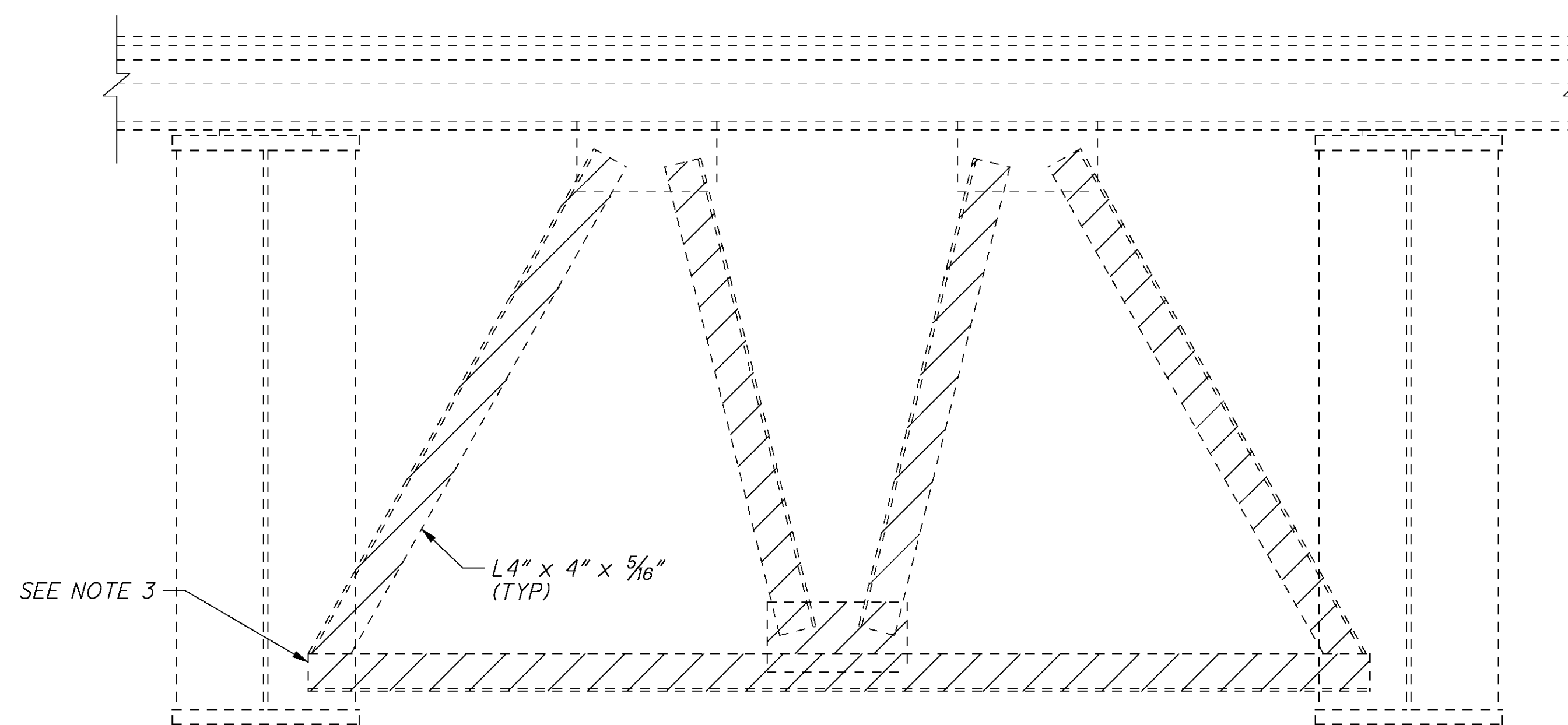
EXISTING STRUCTURAL STEEL ROCKER BEARING REMOVAL LIMITS
R100, R125, R150 & R175

NOTES:

1. DIMENSIONS AND SIZES MAY VARY IN FIELD.
2. REMOVE EXISTING ANCHOR BOLTS IN MASONRY PLATE TO TOP OF BEAM SEAT. SEAL EXPOSED FACE OF ANCHOR BOLTS TO REMAIN PER C&MS 509.09.
3. REMOVE CROSSFRAMES AND GRIND SMOOTH.
4. EXISTING BEARING AND END FRAME REMOVAL DETAILS PROVIDED FOR PIER 0 (BEARING ONLY), PIER 4 REAR, PIER 12C REAR & FORWARD, PIER 15C REAR & FORWARD & PIER 17D REAR & FORWARD.



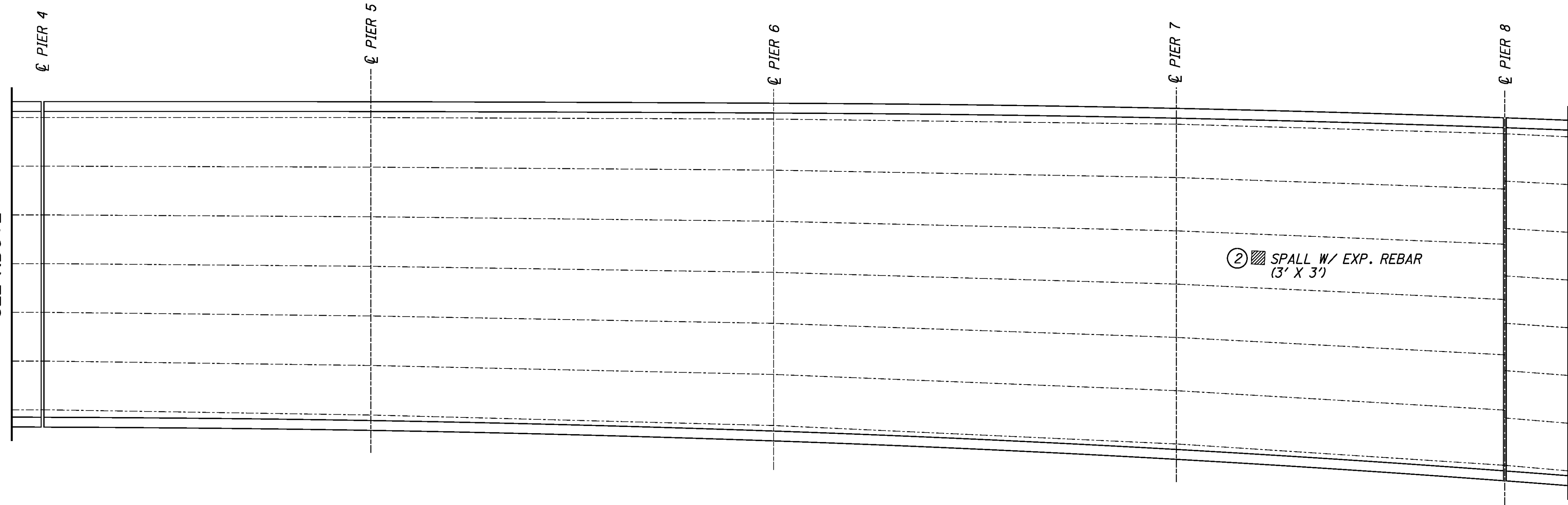
EXISTING END FRAME REMOVAL LIMITS
FOR BEAM SPACING LESS THAN 8'-0"



EXISTING END FRAME REMOVAL LIMITS
FOR BEAM SPACING GREATER THAN 8'-0"

DESIGNED	SNH	DRAWN	SNH	REVIEWED	DEK	DATE	4/15
CHECKED	CTM	REVISED		STRUCTURE FILE NUMBER			3105970

SEE ABOVE



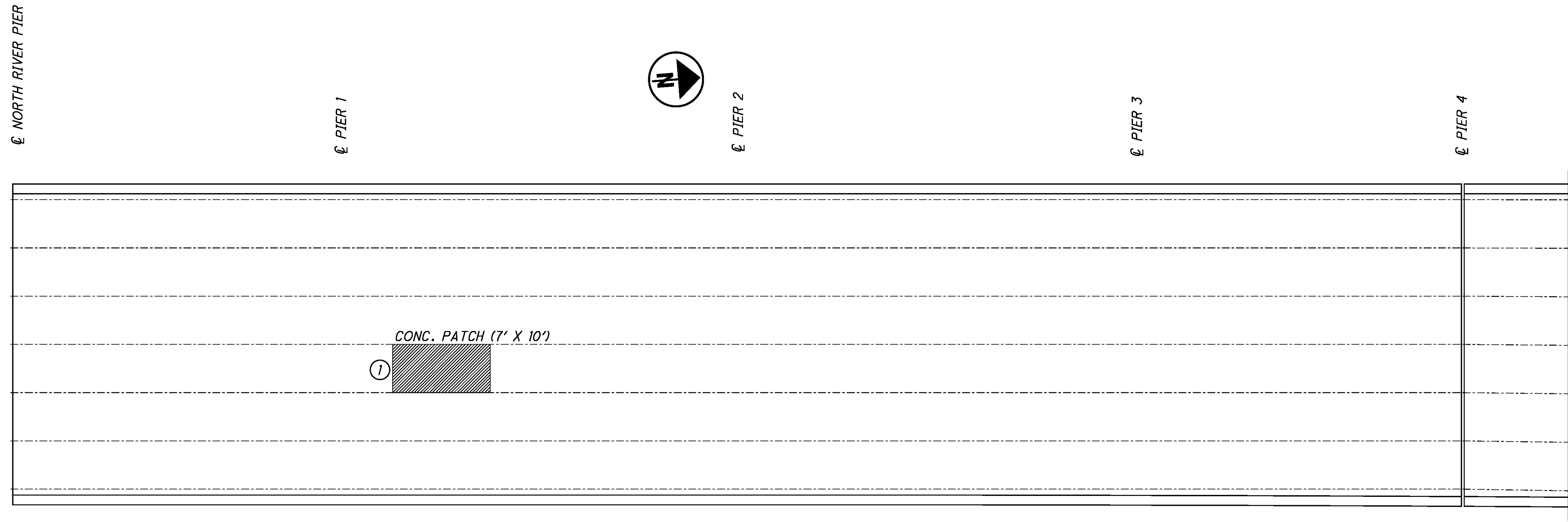
SEE SHEET 7/29

LEGEND

 REMOVAL AREA (DECK UNDERSIDE)

NOTE

SEE SHEET 9/29 FOR ESTIMATED QUANTITY TABLE AND ADDITIONAL NOTES.



SEE BELOW

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SEE SHEET 6/29

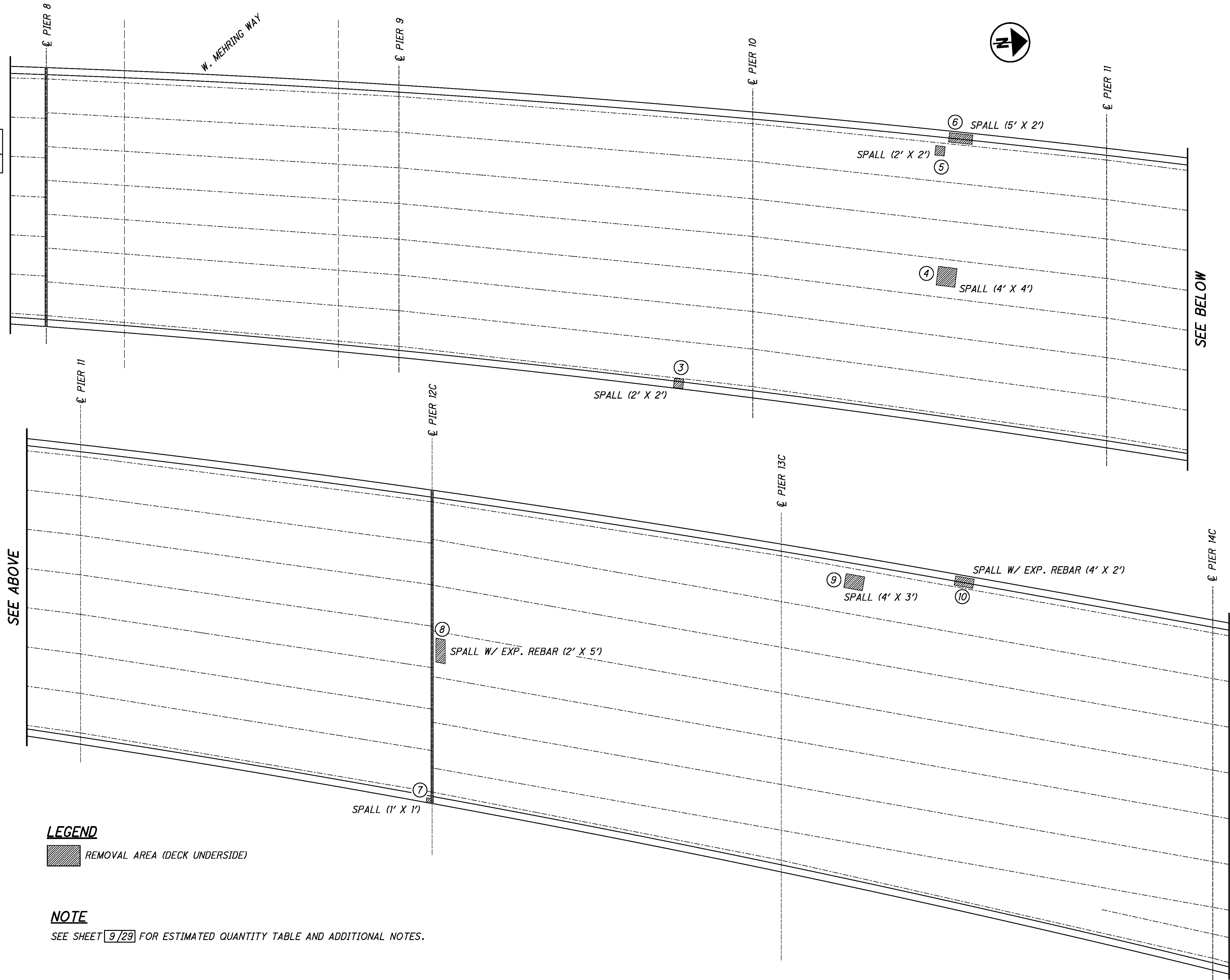
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LEGEND

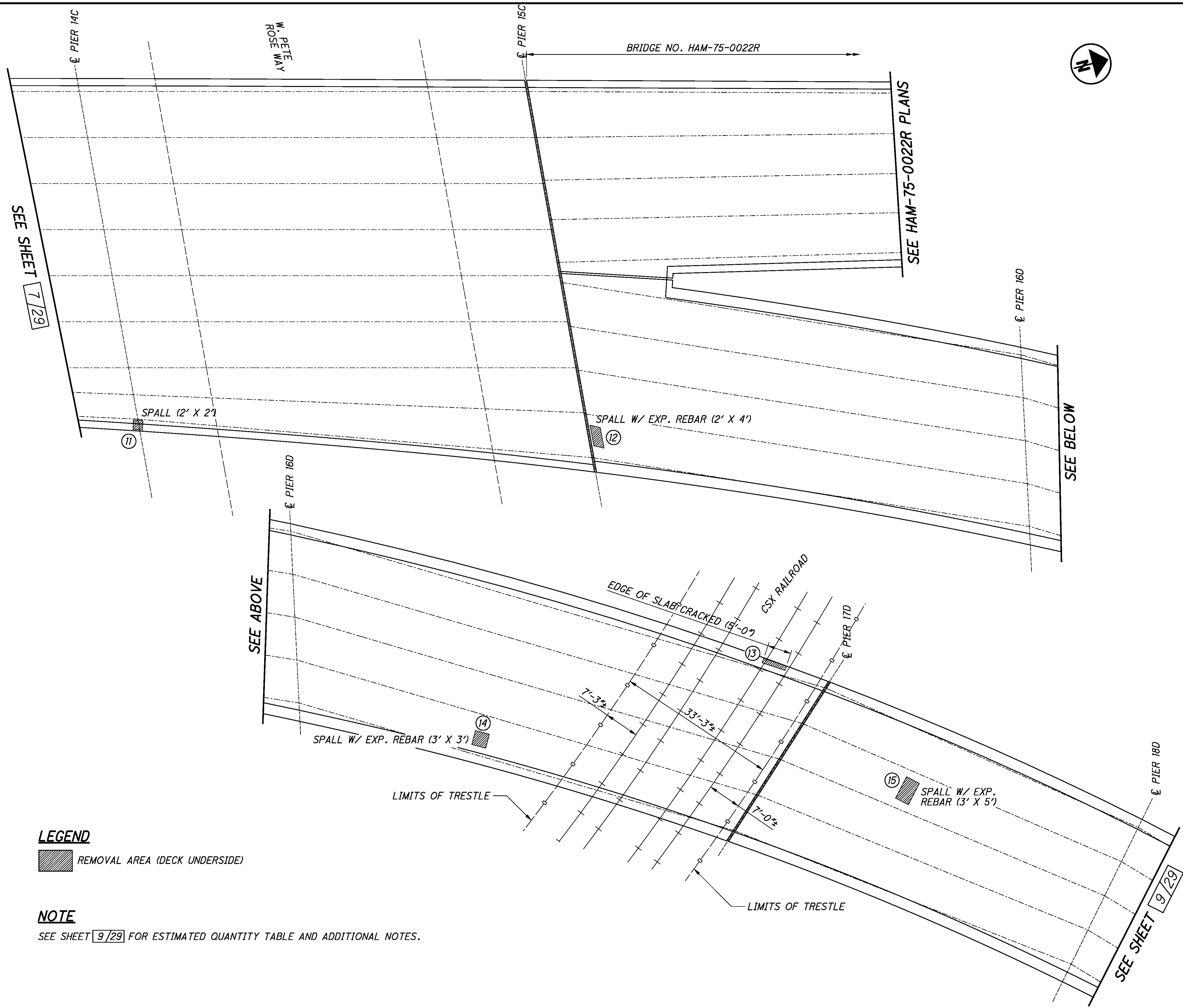
 REMOVAL AREA (DECK UNDERSIDE)

NOTE

SEE SHEET 9/29 FOR ESTIMATED QUANTITY TABLE AND ADDITIONAL NOTES.



SEE SHEET 8/29




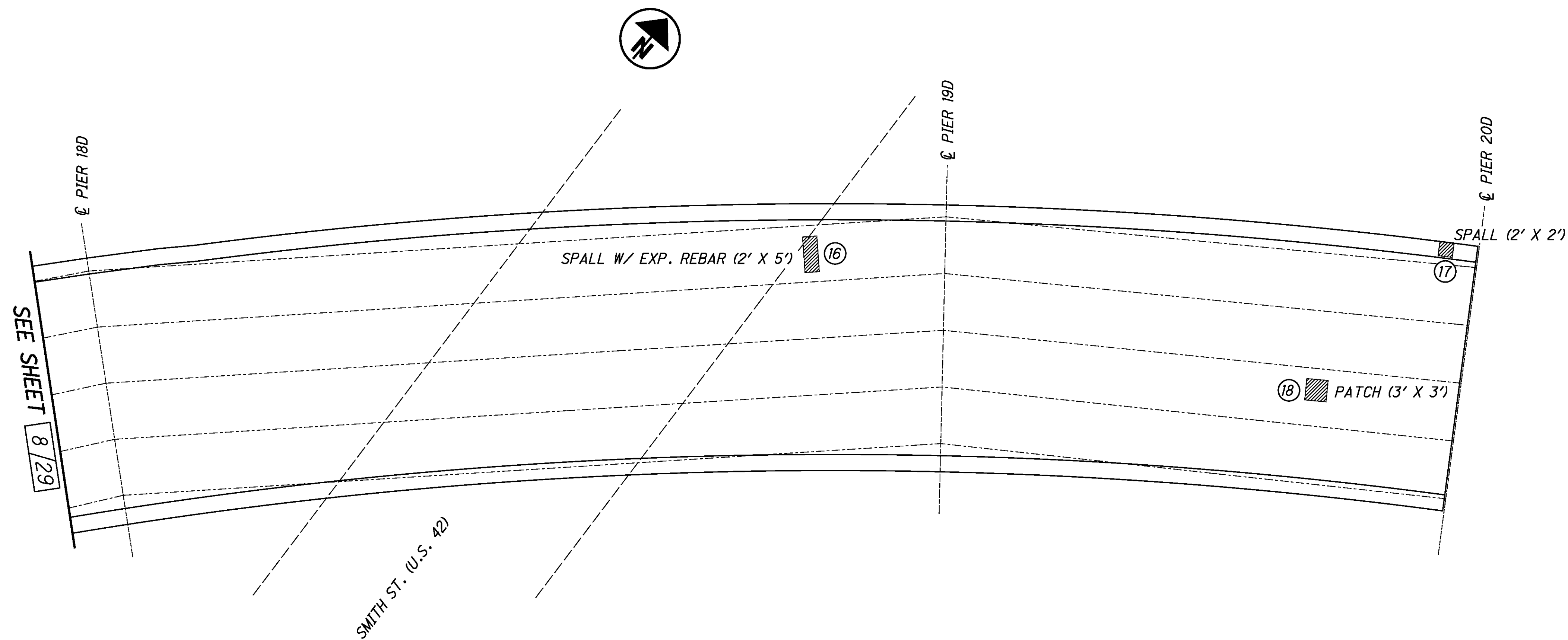
LEGEND

 REMOVAL AREA (DECK UNDERSIDE)

NOTE

SEE SHEET **9/29** FOR ESTIMATED QUANTITY TABLE AND ADDITIONAL NOTES.

	DESIGNED	AMR	CHECKED	STK
	DRAWN	AMR	REVISED	
REVIEWED	GDJ	STRUCTURE FILE NUMBER	3105970	
DATE	3-11-15			
HAM-71/75-0.00/0.22				
PID No. 97973				
SUPERSTRUCTURE CONCRETE REMOVAL DETAILS BRIDGE NO. HAM-71-0000R OVER W. MEHRING WAY, PETE ROSE WAY, RR, US42, US50 RAMPS, CENTRAL AVENUE				
8	29			
120	177			



LEGEND

REMOVAL AREA (DECK UNDERSIDE)

NOTES

1. THE MEASURED QUANTITIES PROVIDED IN THE TABLE WERE ACQUIRED VISUALLY FROM THE GROUND AND ARE TO BE USED AS AN ESTIMATE. THE CONTRACTOR SHALL PERFORM A PHYSICAL INSPECTION OF THE AREAS LOCATED IN THE PLANS TO DETERMINE IF THEY ARE IN NEED OF REMOVAL. AFTER PHYSICAL INSPECTION ANY AREAS THAT THE CONTRACTOR DEEMS DOES NOT NEED REMOVED SHALL MEET THE APPROVAL OF THE ENGINEER. PAYMENT FOR ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED WITH ITEM 530 - SPECIAL - STRUCTURE MISC.: DECK CONCRETE REMOVAL.
2. ITEM 530 - SPECIAL - STRUCTURE MISC.: DECK CONCRETE REMOVAL: REMOVE ALL LOOSE AND DISINTEGRATED CONCRETE FROM THE AREAS DETAILED IN THE PLAN SET TO AN EXTENT AS TO EXPOSE A SOUND CONCRETE SURFACE.

ITEM 530 - SPECIAL - STRUCTURE, MISC.: DECK CONCRETE REMOVAL

VISUAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN SEPTEMBER OF 2014.

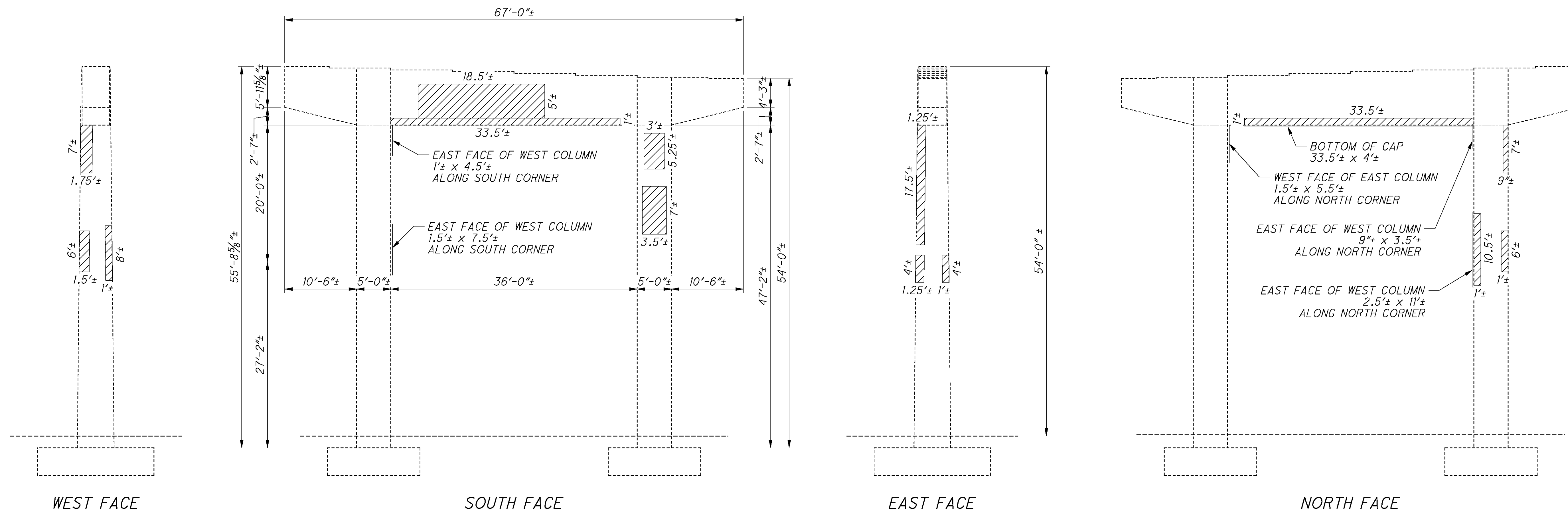
EXACT DIMENSIONS AND LOCATIONS OF REMOVAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

ESTIMATED REMOVAL QUANTITIES (S.F.)

BRIDGE NO. HAM-71-0000R	MEASURED QUANTITIES	ESTIMATED QUANTITIES
①	70.0	105.0*
②	9.0	13.5*
③	4.0	6.0*
④	16.0	24.0*
⑤	4.0	6.0*
⑥	10.0	15.0*
⑦	1.0	1.5*
⑧	10.0	15.0*
⑨	12.0	18.0*
⑩	8.0	12.0*
⑪	4.0	6.0*
⑫	8.0	12.0*
⑬	5.0	7.5*
⑭	9.0	13.5*
⑮	15.0	22.5*
⑯	10.0	15.0*
⑰	4.0	6.0*
⑱	9.0	13.5*
TOTAL	208.0	312.0*

* - ESTIMATED QUANTITIES HAVE BEEN INCREASED BY 50% OVER MEASURED QUANTITIES TO ALLOW FOR ADDITIONAL DETERIORATION

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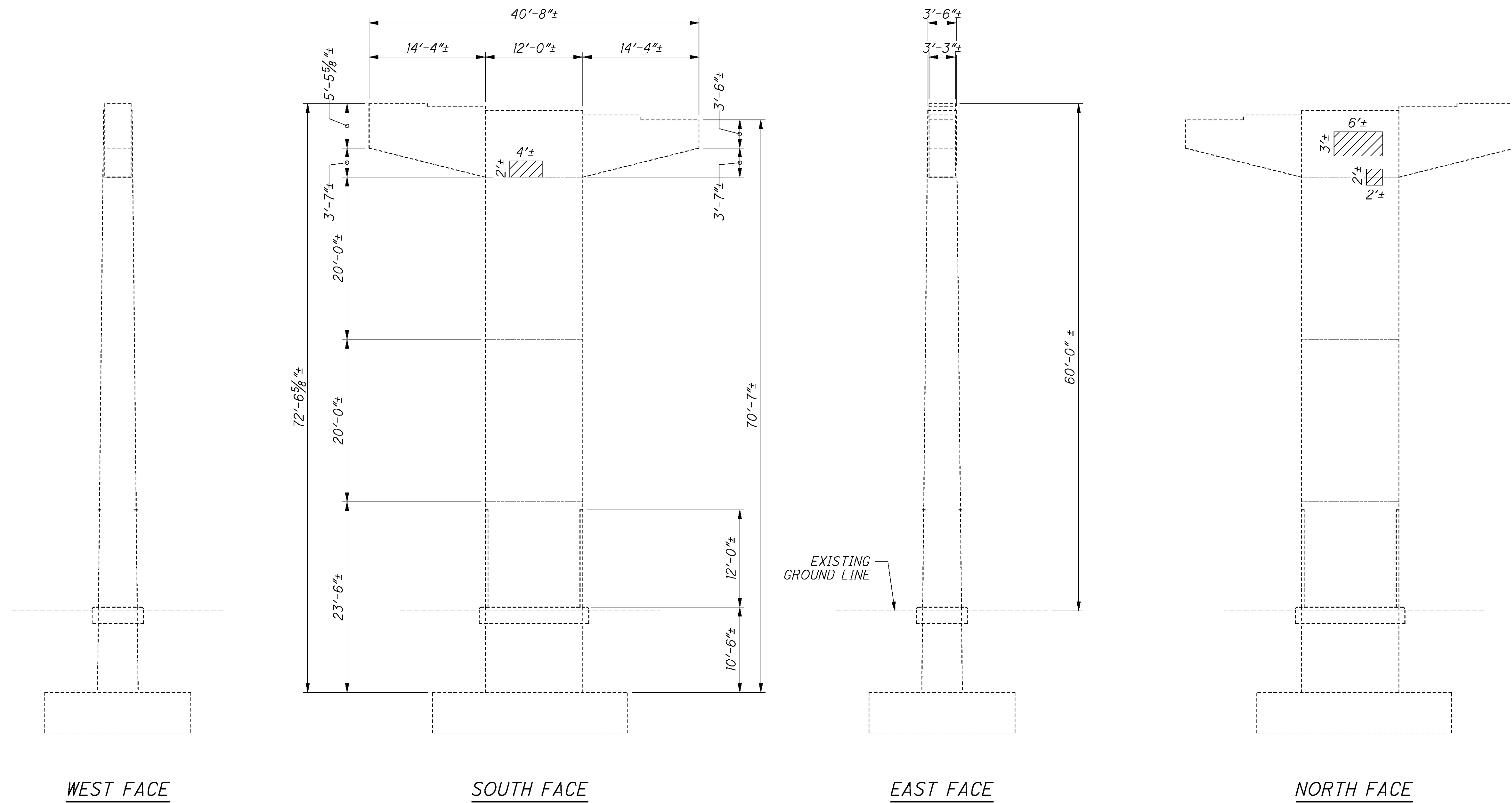
SUMMARY OF REPAIR QUANTITIES - PIER 12C				
LOCATION	- 519.B - REPAIR CONCRETE SPALLS			
	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
WEST FACE *	SQ FT	38	10	48
SOUTH FACE	SQ FT	167	42	209 (47)
EAST FACE **	SQ FT	77	20	97
NORTH FACE	SQ FT	56	14	70
BOTTOM OF CAP	SQ FT	144	0	144
TOTAL PIER 12C QTY.	SQ FT			568 (47)

* INCLUDES WEST FACES OF ALL COLUMNS
 ** INCLUDES EAST FACES OF ALL COLUMNS
 () INDICATES NUMBER OF GALVANIC ANODES TO BE INCLUDED IN SPALL PATCH

- NOTES:**
- FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS 57 THRU 63.
 - PORTIONS OF REPAIRED SPALLS SHALL BE FIBER WRAPPED. FOR FIBERWRAP DETAILS, INCLUDING SECTIONS AND BASIS OF PAYMENT FOR WRAPPING, SEE SHEET 15/29.

LEGEND:
 APPROXIMATE AREA TO BE REPAIRED PER ITEM 519.B

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SUMMARY OF REPAIR QUANTITIES - PIER 17D				
LOCATION	▨ - 519.B - REPAIR CONCRETE SPALLS			
	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
WEST FACE	SQ FT	0	0	0
SOUTH FACE	SQ FT	8	2	10
EAST FACE	SQ FT	0	0	0
NORTH FACE	SQ FT	22	6	28 (14)
BOTTOM OF CAP	SQ FT	0	0	0
TOTAL PIER 17D QTY.	SQ FT			38 (14)

() INDICATES NUMBER OF GALVANIC ANODES TO BE INCLUDED IN SPALL PATCH

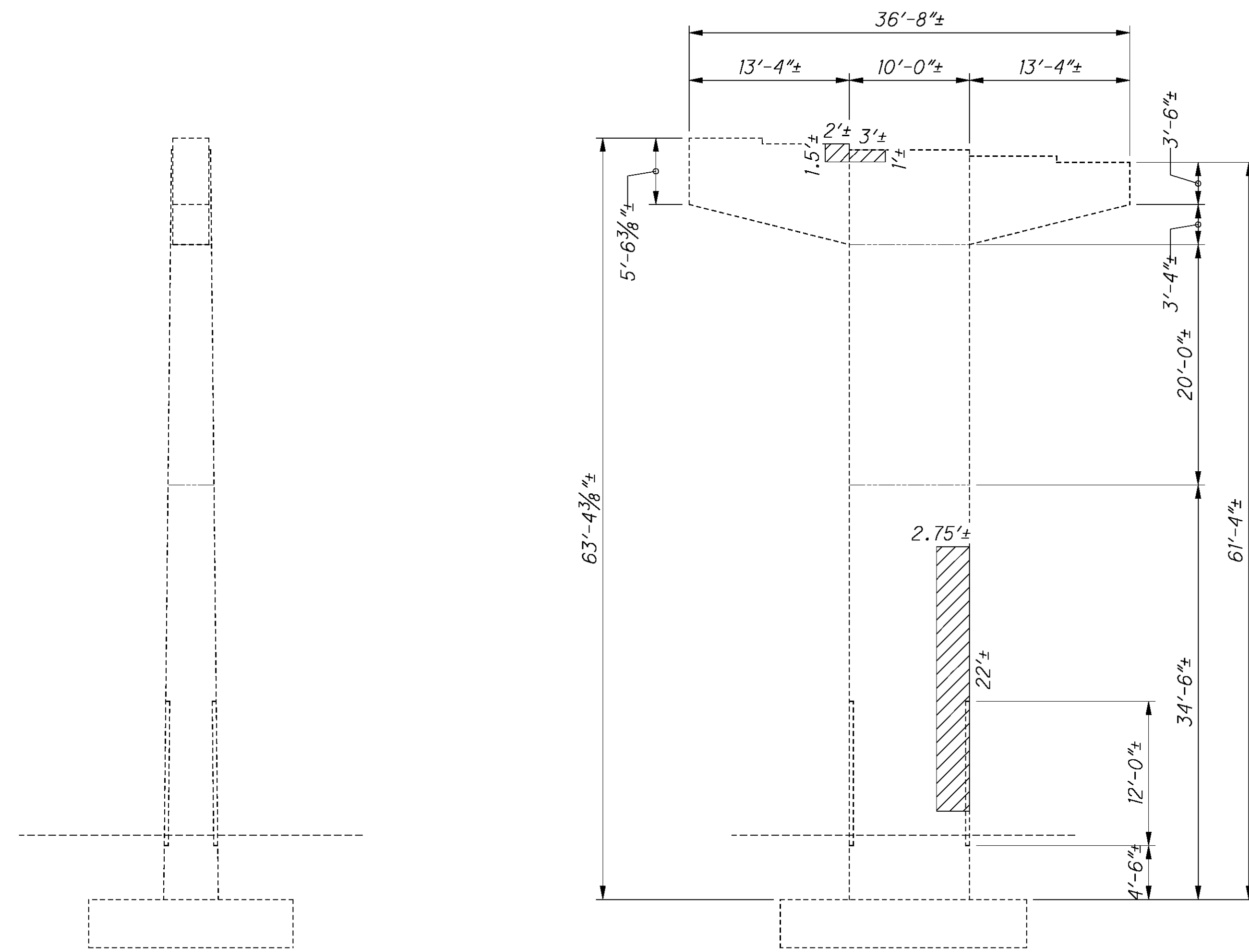
NOTES:

- FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS 57 THRU 63 (177) (177).
- PORTIONS OF REPAIRED SPALLS SHALL BE FIBER WRAPPED. FOR FIBERWRAP DETAILS, INCLUDING SECTIONS AND BASIS OF PAYMENT FOR WRAPPING, SEE SHEET 17/29.

LEGEND:

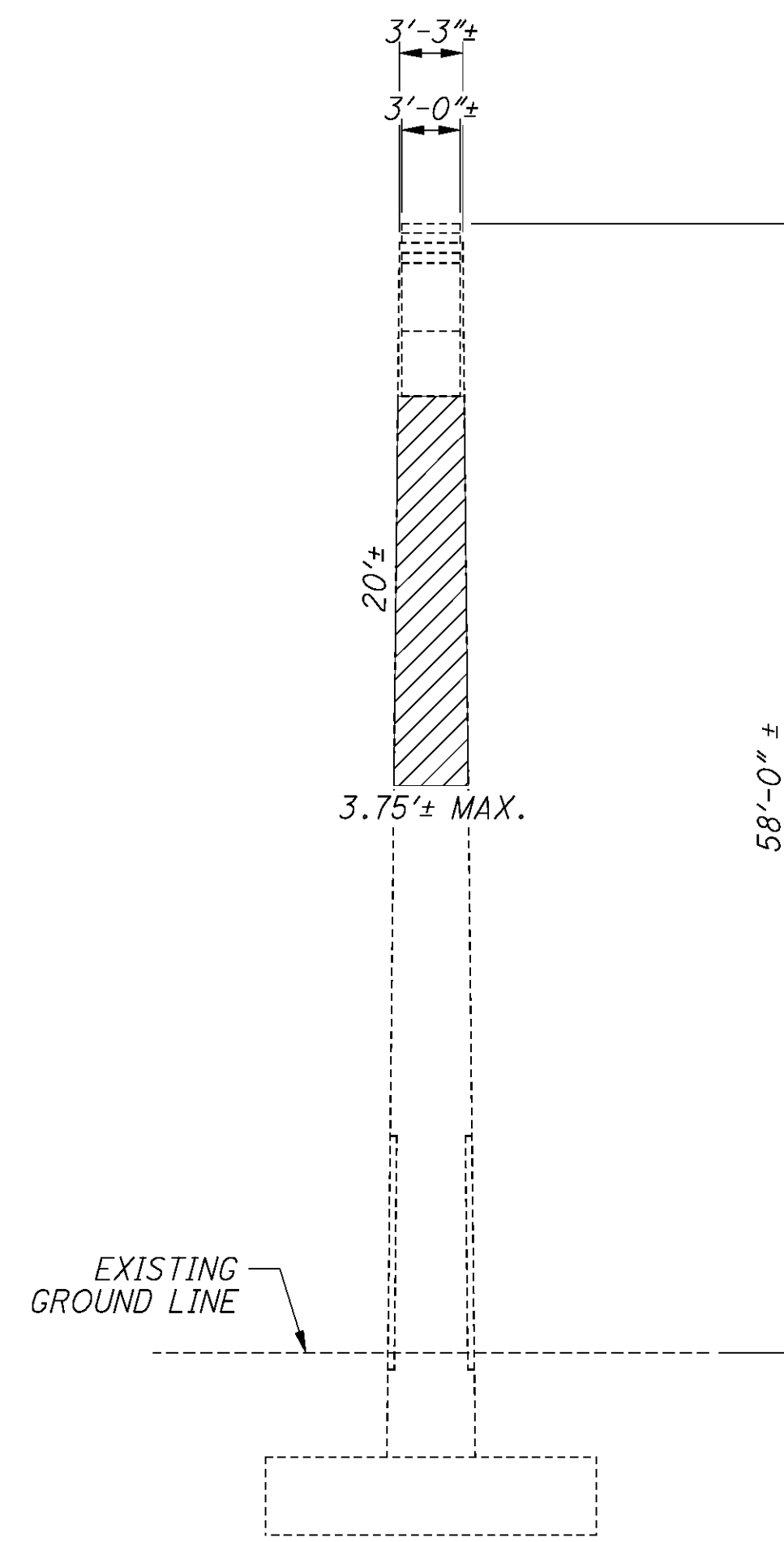
▨ APPROXIMATE AREA TO BE REPAIRED PER ITEM 519.B

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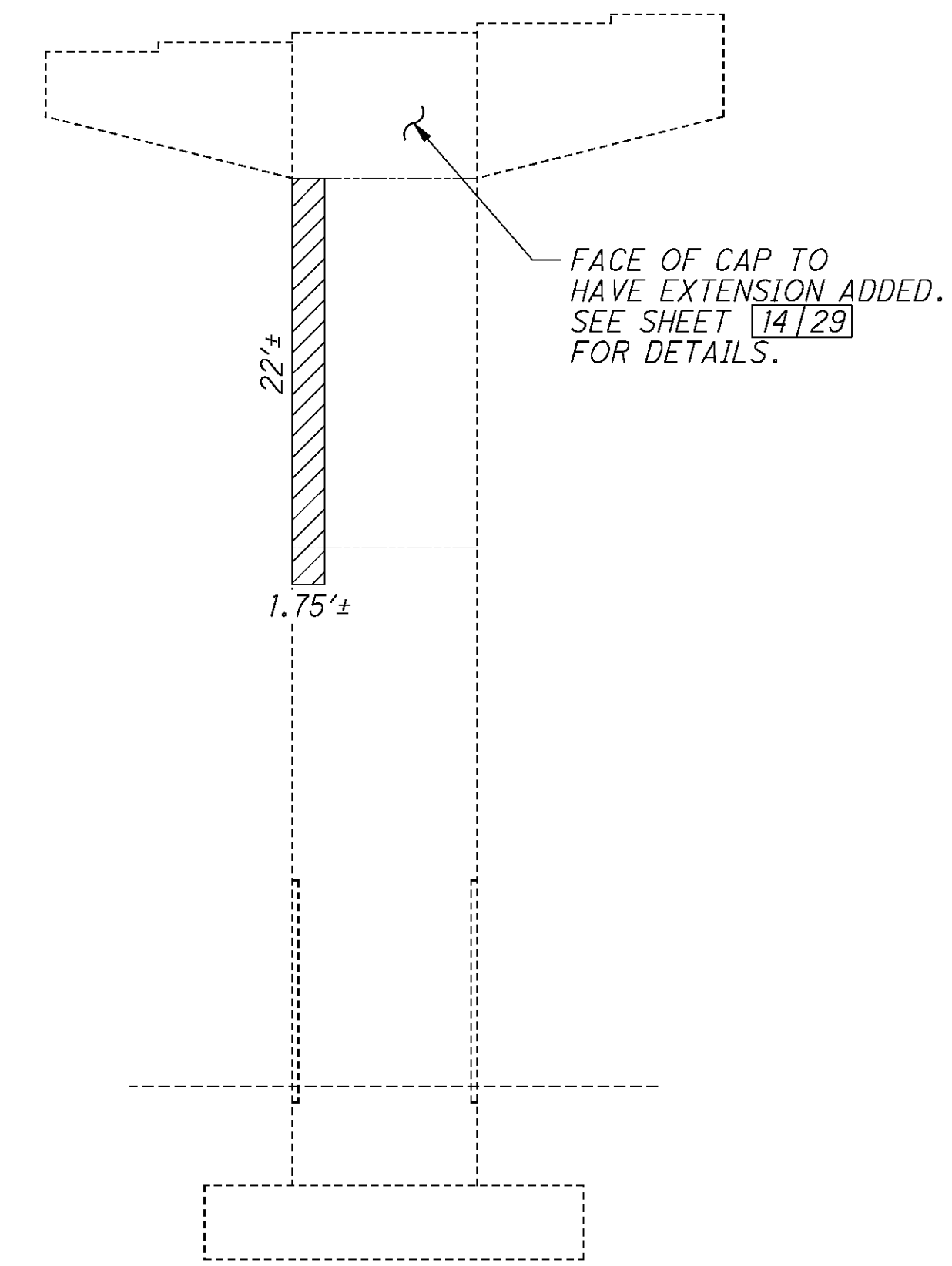


WEST FACE

SOUTH FACE



EAST FACE



NORTH FACE

SUMMARY OF REPAIR QUANTITIES - PIER 20D				
LOCATION	- 519.B - REPAIR CONCRETE SPALLS			
	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
WEST FACE	SQ FT	0	0	0
SOUTH FACE	SQ FT	67	17	84
EAST FACE	SQ FT	75	19	94
NORTH FACE	SQ FT	39	10	49
BOTTOM OF CAP	SQ FT	0	0	0
TOTAL PIER 20D QTY.	SQ FT			227

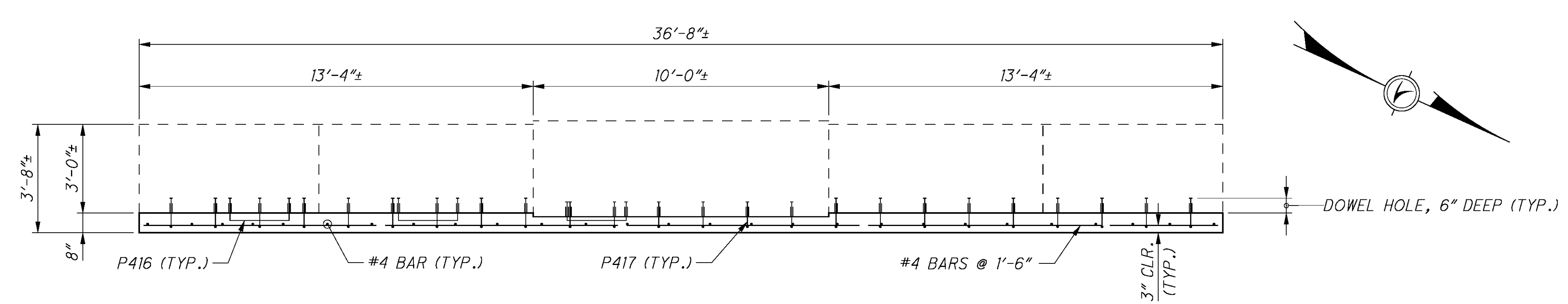
NOTES:

- FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS 57 THRU 63 .
(177) (177)
- PORTIONS OF REPAIRED SPALLS SHALL BE FIBER WRAPPED. FOR FIBERWRAP DETAILS, INCLUDING SECTIONS AND BASIS OF PAYMENT FOR WRAPPING, SEE SHEET 18129.

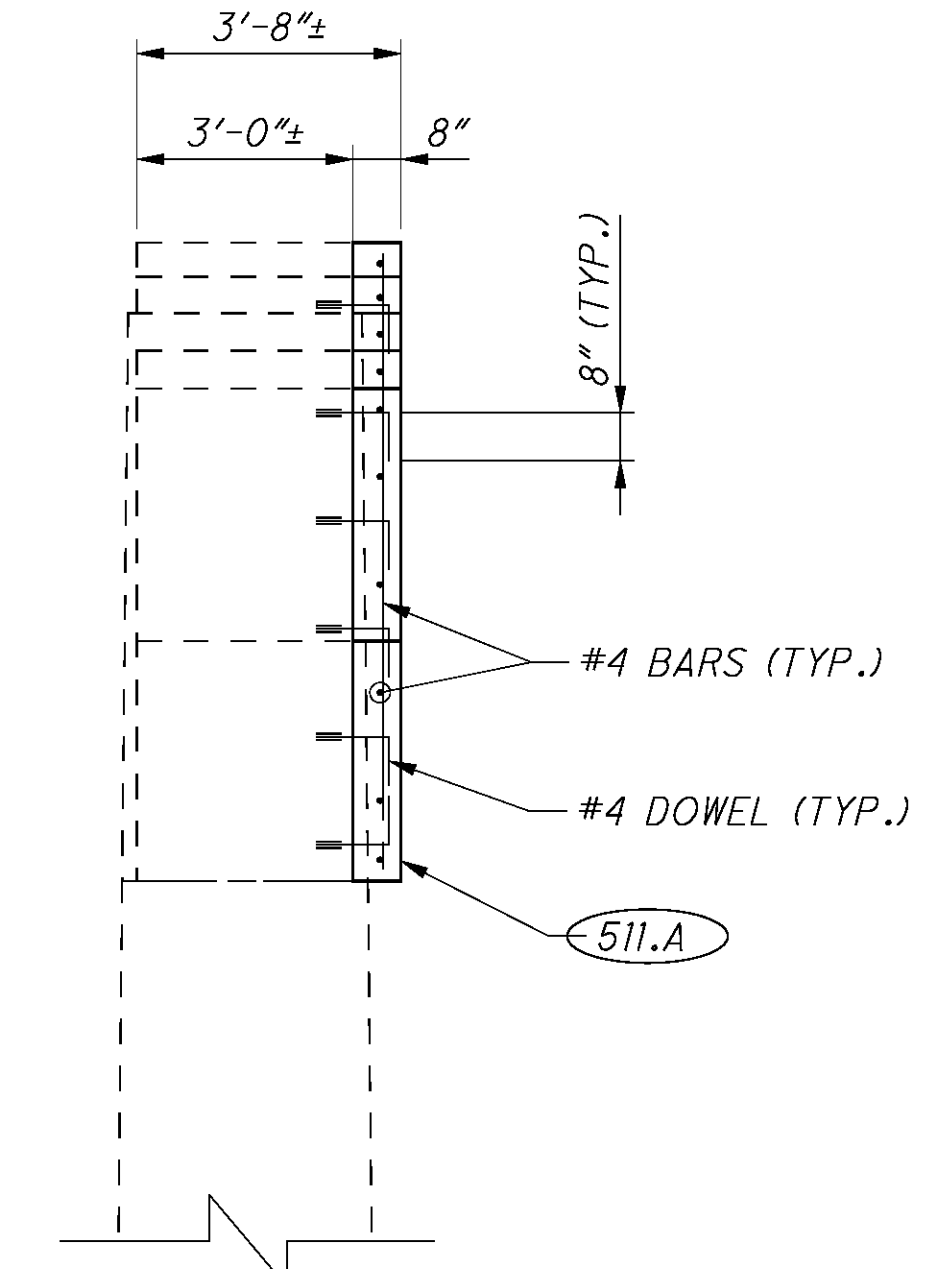
LEGEND:

 APPROXIMATE AREA TO BE REPAIRED PER ITEM 519.B

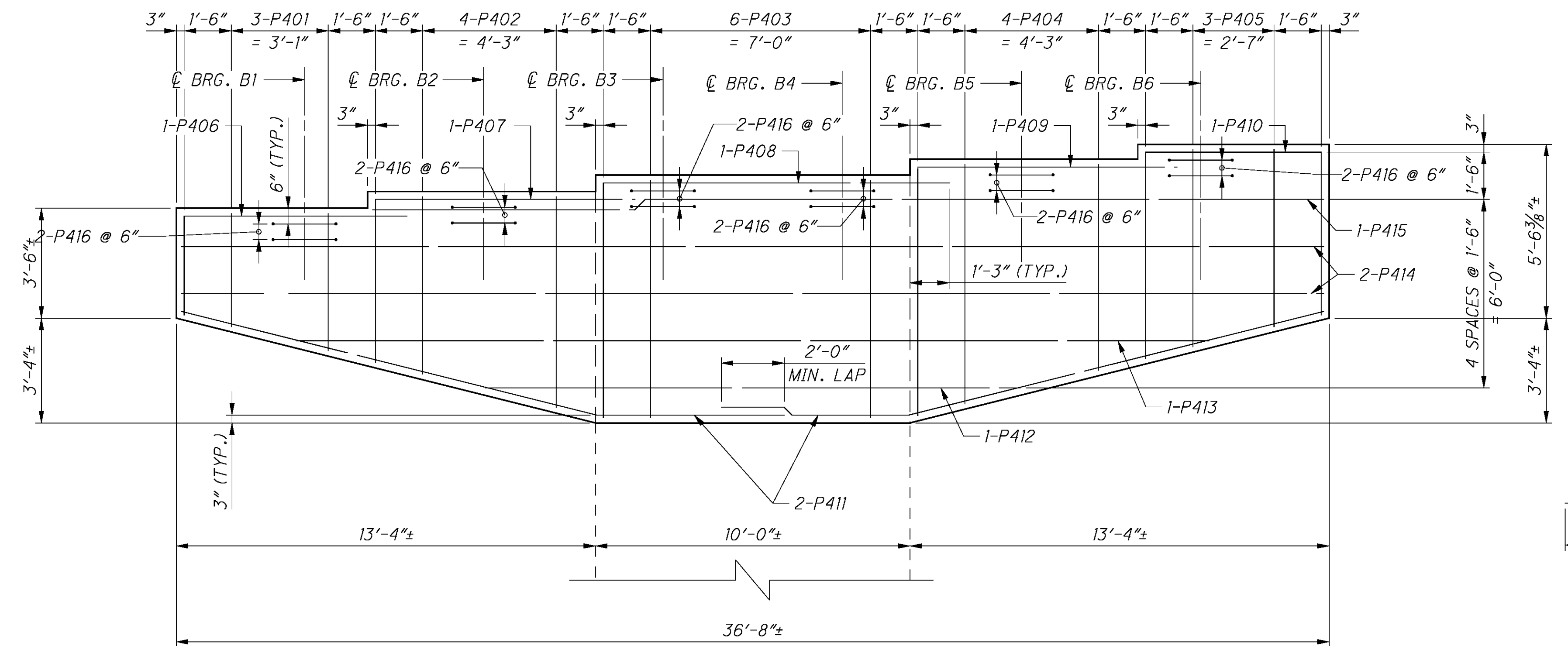
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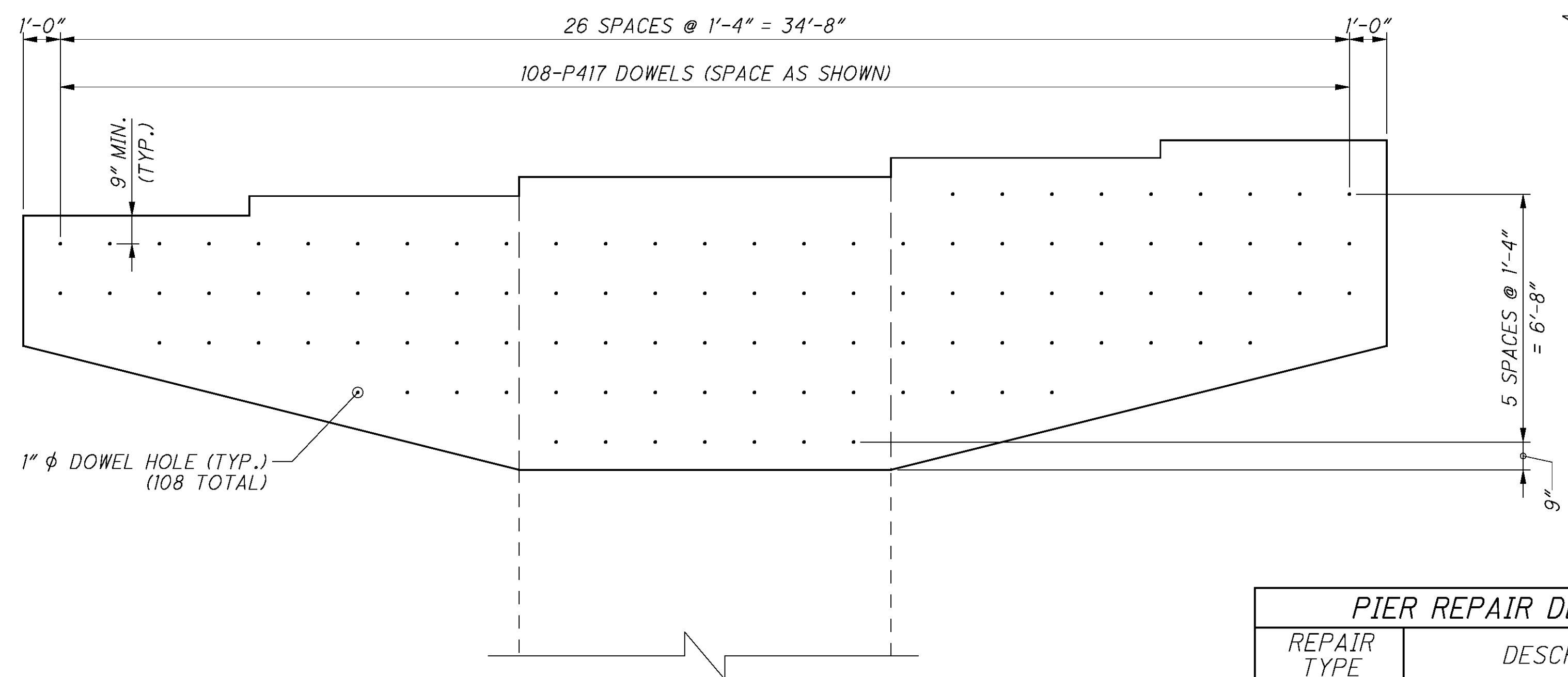
CAP PLAN



EAST FACE OF CAP



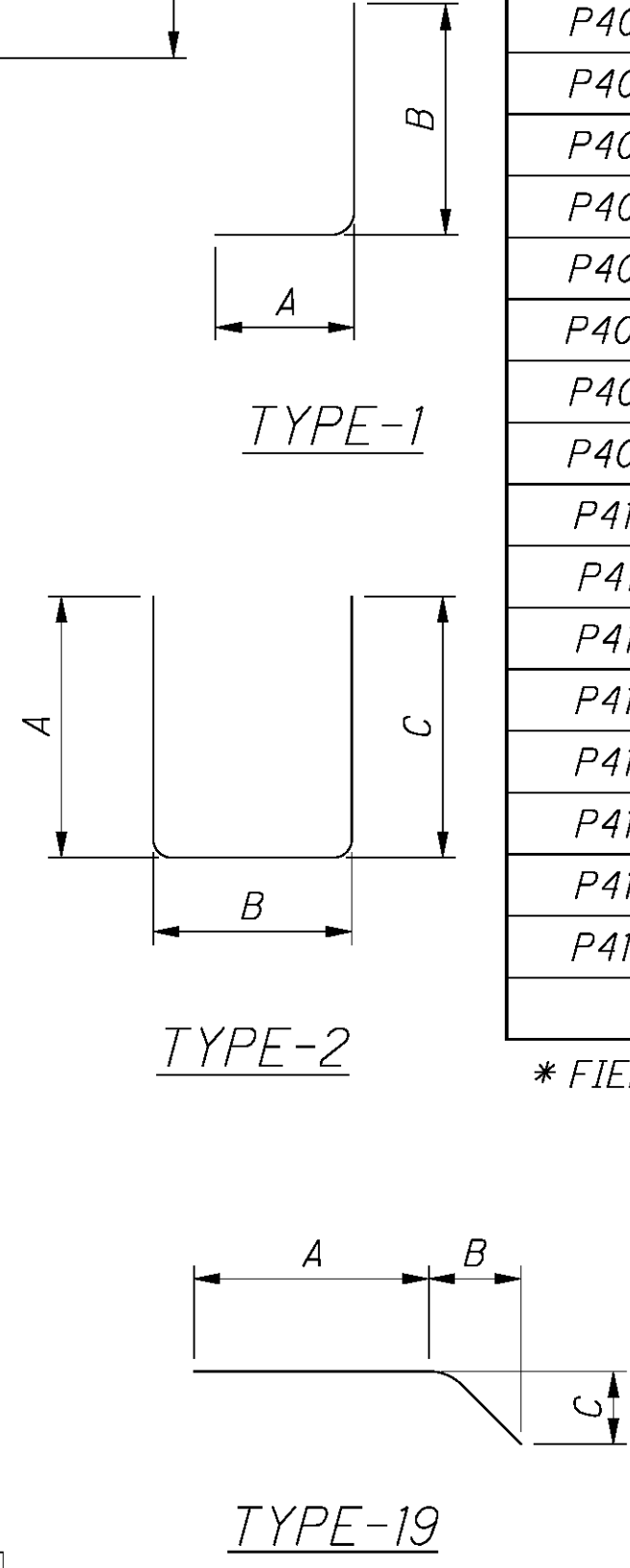
NORTH FACE OF CAP



DOWEL HOLE LOCATIONS

MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS		
					A	B	C
P401	1 S/O 3	3'-3" TO 4'-0"	8	STR			
P402	1 S/O 4	5'-4" TO 6'-4"	16	STR			
P403	6	7'-4"	30	STR			
P404	1 S/O 4	6'-3" TO 7'-3"	19	STR			
P405	1 S/O 3	5'-3" TO 5'-10"	12	STR			
P406	1	10'-1"	7	1	3'-0"	7'-1"	
P407	1	13'-4"	9	1	5'-1"	8'-3"	
P408	1	18'-4"	13	1	7'-4"	11'-0"	
P409	1	16'-0"	11	1	7'-9"	8'-3"	
P410	1	17'-1"	12	2	6'-5"	5'-7"	5'-1"
P411	2	19'-1"	26	19	6'-0"	13'-1"	3'-3"
P412	1	16'-10"	12	STR			
P413	1	28'-10"	20	STR			
P414	2	36'-2"	49	STR			
P415	1	30'-1"	21	STR			
P416	12	3'-6"	30	2	9"	2'-0"	9"
P417*	108	1'-8"	115	1	8"	1'-0"	
TOTAL			410				

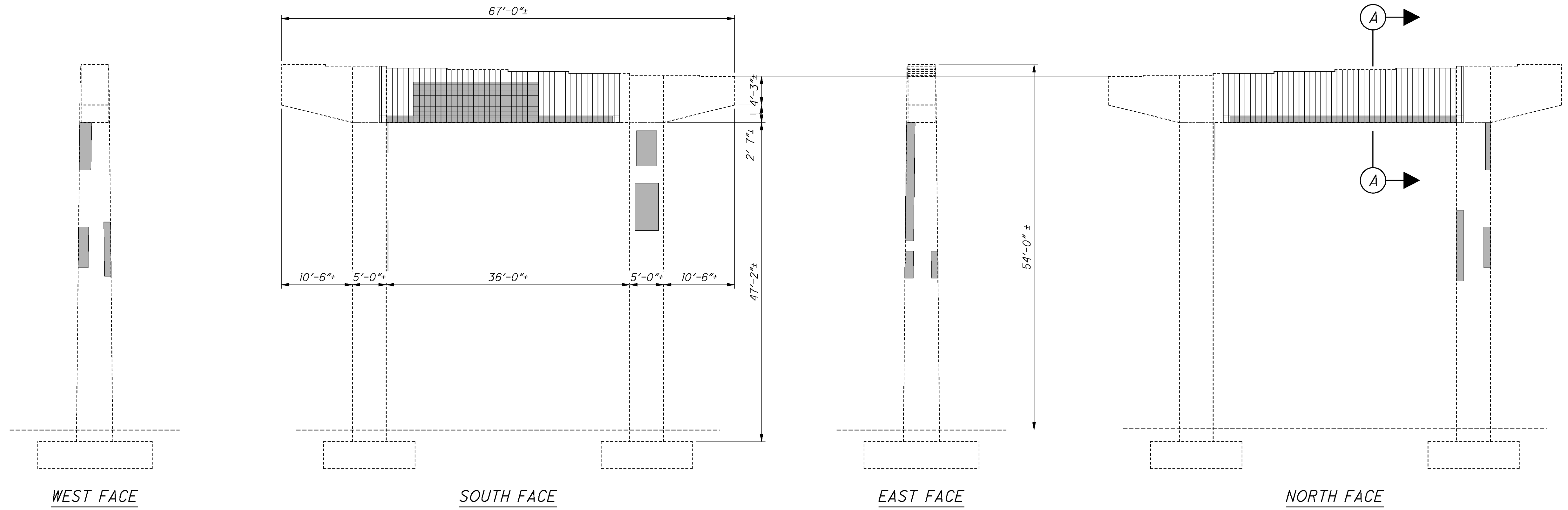
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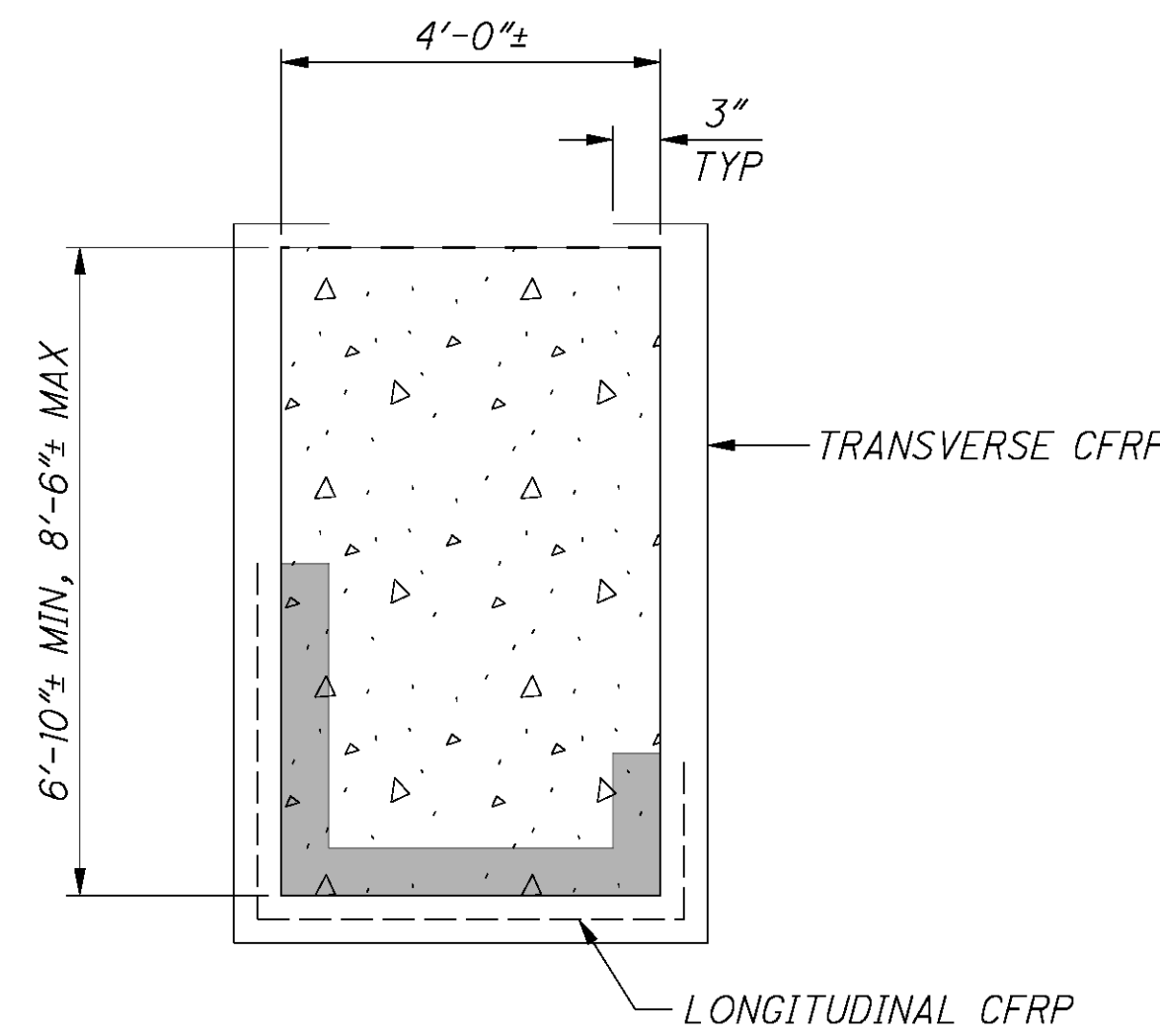
PIER REPAIR DETAILS	
REPAIR TYPE	DESCRIPTION
511.A	PIER CAP CONCRETE EXTENSION

- NOTES:**
- FOR ADDITIONAL PIER 20D REMOVAL DETAILS, SEE SHEET [13]29.
 - FOR PARTIAL FRAMING AT PIER 20D, SEE SHEET [22]29.
 - REMOVE DETERIORATED AND LOOSE CONCRETE AT SPALLS AND DELAMINATIONS IN EXPOSED PIER COMPONENTS.
 - FLUSH AND CLEAN THE PIER.
 - LOCATE THE EXISTING REINFORCEMENT BARS WITH A PACHOMETER OR OTHER APPROVED METHOD PRIOR TO DRILLING DOWEL HOLES. ADJUST DOWEL HOLE LOCATIONS AS NECESSARY TO AVOID DRILLING THROUGH EXISTING REINFORCEMENT BARS. DRILL AND GROUT THE DOWELS PER C&S 510.
 - FOR FIBERWRAP DETAILS, SEE SHEET [18]29.
 - ALL REINFORCEMENT TO BE EPOXY COATED.

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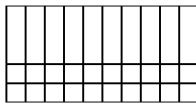



SUMMARY OF FIBER WRAP QUANTITIES - PIER 12C				
REPAIR TYPE	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
530.C - INSTALL CARBON FIBERWRAP, 2 LAYERS	SQ FT	706	176	882

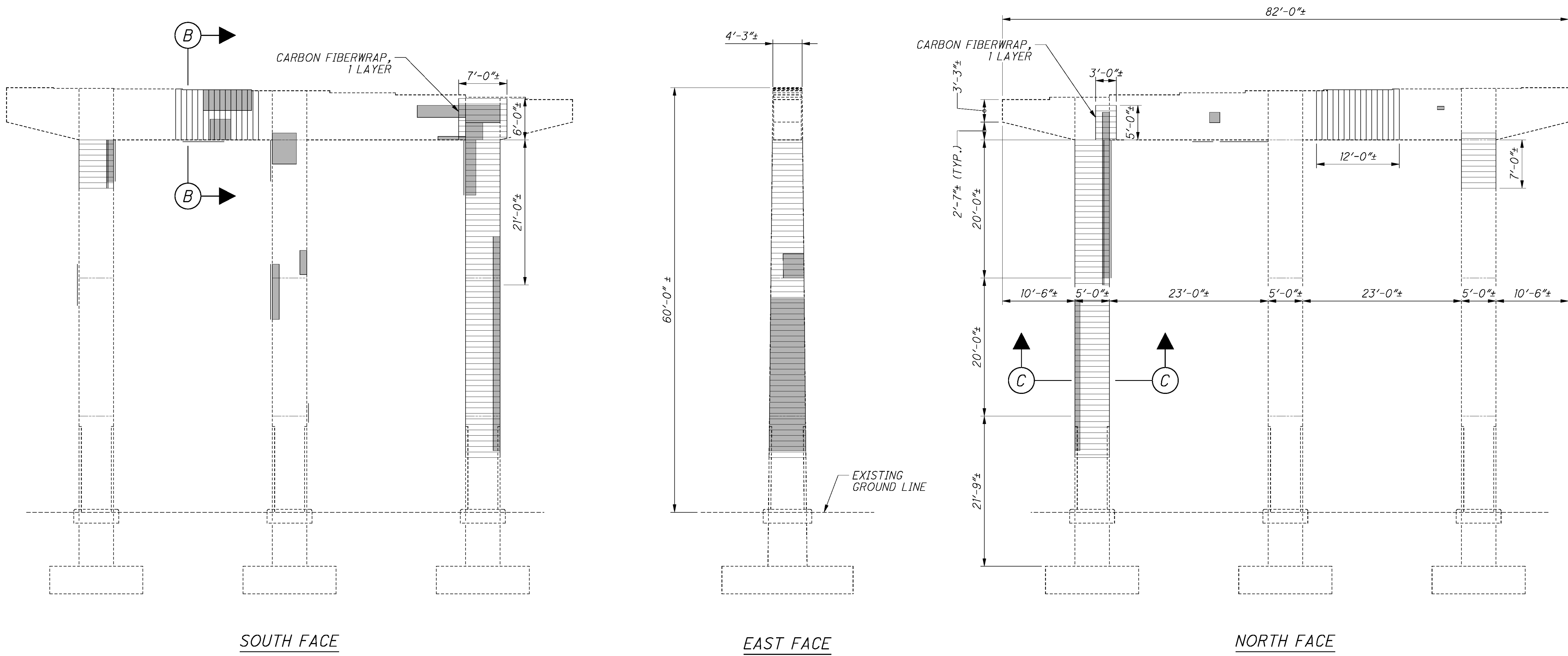


(A) SECTION
CAP FIBER WRAP DETAIL

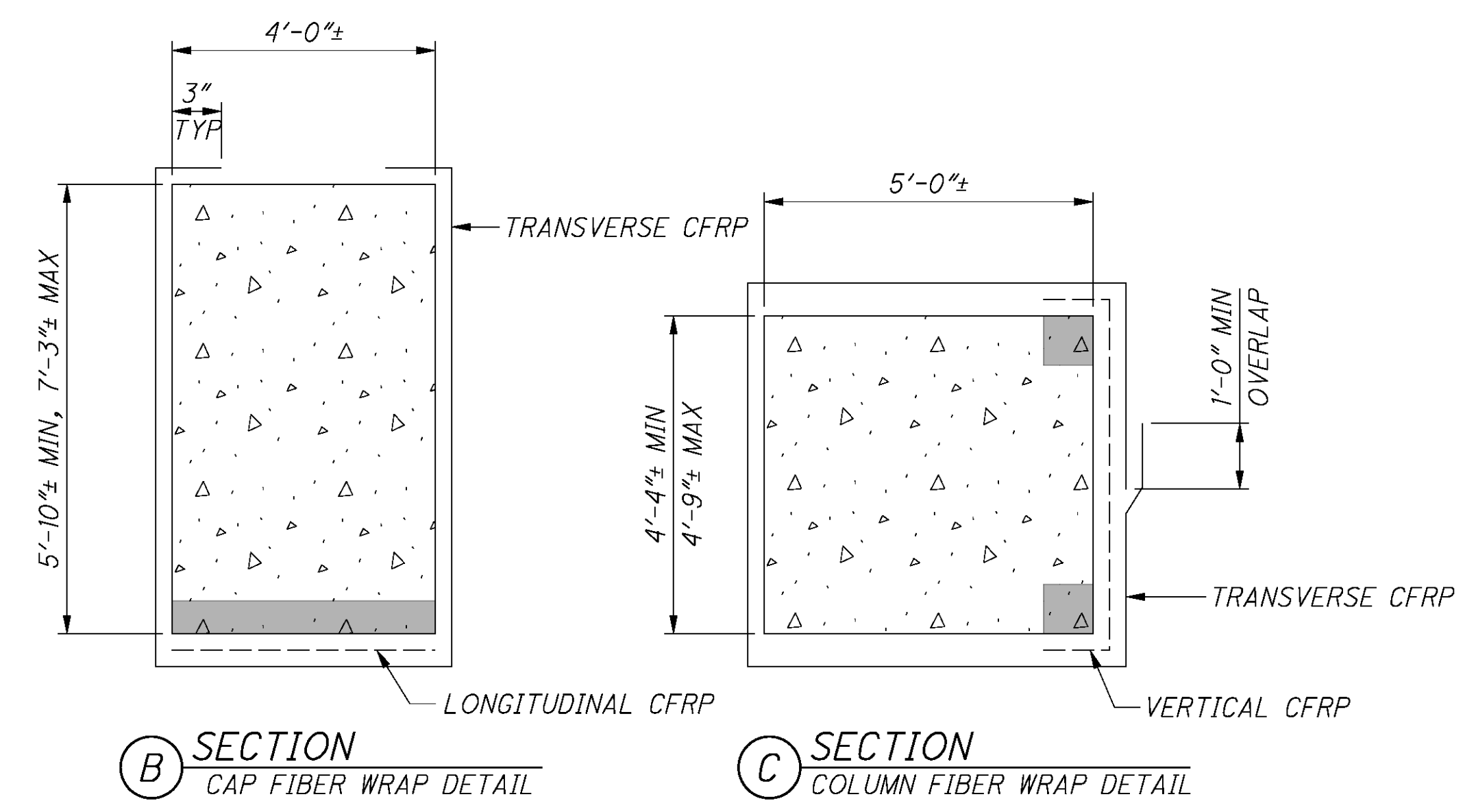
NOTES:
 1. INSTALL LONGITUDINAL CFRP TO LIMITS OF COMPLETED SPALL REPAIR BEFORE WRAPPING CAP WITH TRANSVERSE CFRP.

LEGEND:
 APPROXIMATE AREA TO BE FIBER WRAPPED PER ITEM 530 - STRUCTURE MISC.: CARBON FIBER WRAP (2 LAYERS).
 APPROXIMATE AREA OF COMPLETED SPALL REPAIR, REPAIR TYPE 519.B

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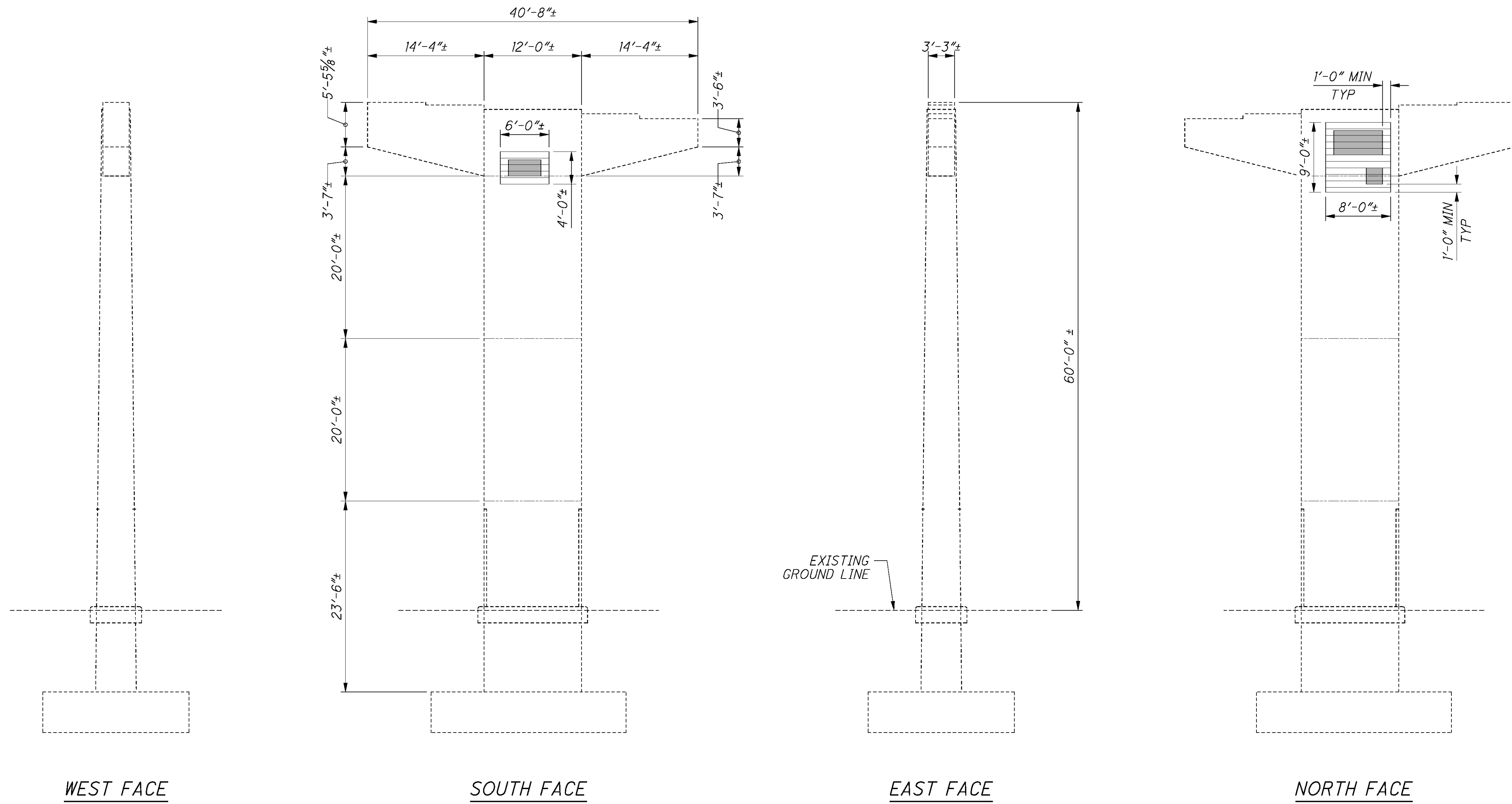


SUMMARY OF FIBER WRAP QUANTITIES - PIER 15C				
REPAIR TYPE	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
530.C - INSTALL CARBON FIBERWRAP, 1 LAYER	SQ FT	57	15	72
530.C - INSTALL CARBON FIBERWRAP, 2 LAYERS	SQ FT	1226	307	1533



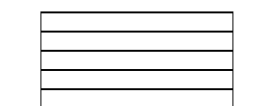
- NOTES:**
1. INSTALL LONGITUDINAL/VERTICAL CFRP TO LIMITS OF COMPLETED SPALL REPAIR BEFORE WRAPPING WITH TRANSVERSE CFRP.
 2. ALL FIBER WRAP PER ITEM 530 - STRUCTURE MISC.: CARBON FIBER WRAP (2 LAYERS) UNLESS NOTED OTHERWISE.

- LEGEND:**
- [Grid pattern] APPROXIMATE AREA TO BE FIBER WRAPPED PER ITEM 530 - STRUCTURE MISC.: CARBON FIBER WRAP (2 LAYERS).
 - [Solid grey] APPROXIMATE AREA OF COMPLETED SPALL REPAIR, REPAIR TYPE 519.B
 - [Horizontal lines] APPROXIMATE AREA TO BE FIBER WRAPPED PER ITEM 530 - STRUCTURE MISC.: CARBON FIBER WRAP (1 LAYER).



SUMMARY OF FIBER WRAP QUANTITIES - PIER 17D				
REPAIR TYPE	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
530.C - INSTALL CARBON FIBERWRAP, 1 LAYER	SQ FT	96	24	116

LEGEND:



APPROXIMATE AREA TO BE FIBER WRAPPED PER ITEM 530 - STRUCTURE MISC.: CARBON FIBER WRAP (1 LAYER).



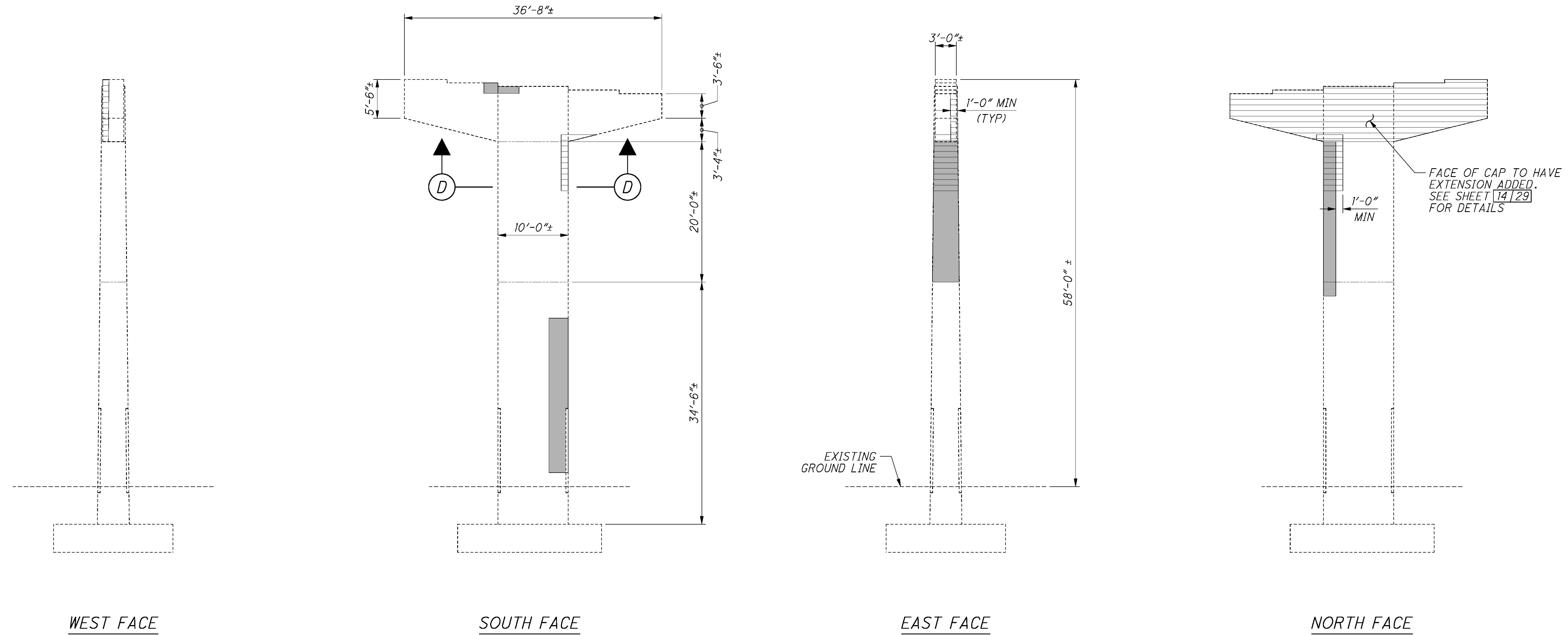
APPROXIMATE AREA OF COMPLETED SPALL REPAIR, REPAIR TYPE 519.B

DESIGNED	SNH	CHECKED	CTM
DRAWN	SNH	REVISED	
REVIEWED	DEK	STRUCTURE FILE NUMBER	3106970
DATE	4/15		

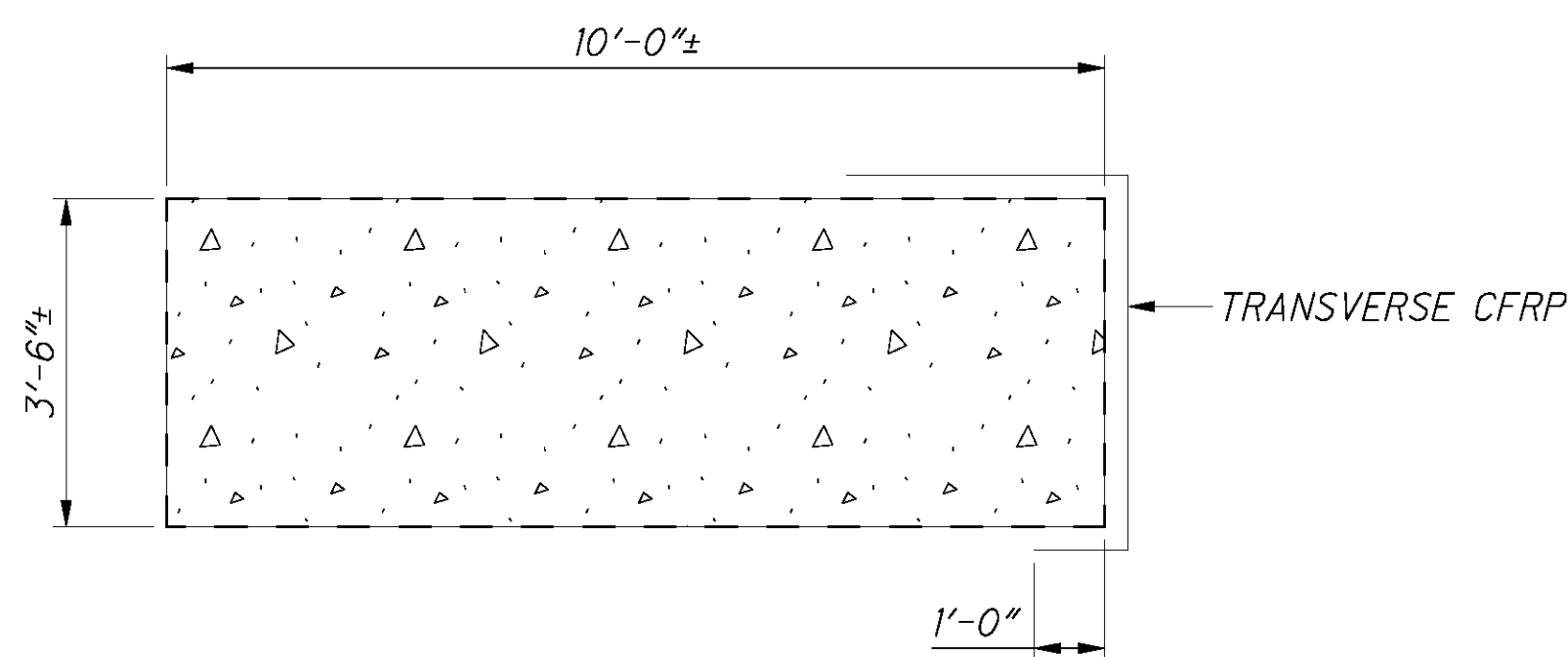
PIER 17D FIBER WRAP INSTALLATION DETAILS
 BRIDGE NO. HAM-71-0000R (NB I-75)
 OVER MEHRING WAY, PETE ROSE WAY, RAILROAD, US42, US 50 RAMPS, CENTRAL AVE

HAM-71-75-0.00/0.22
PID No. 97973

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SUMMARY OF FIBER WRAP QUANTITIES - PIER 20D				
REPAIR TYPE	UNIT	MEASURED QUANTITY	CONTINGENCY QTY. (25%)	TOTAL REPAIR QTY.
530.C - INSTALL CARBON FIBERWRAP, 1 LAYER	SQ FT	321	80	401

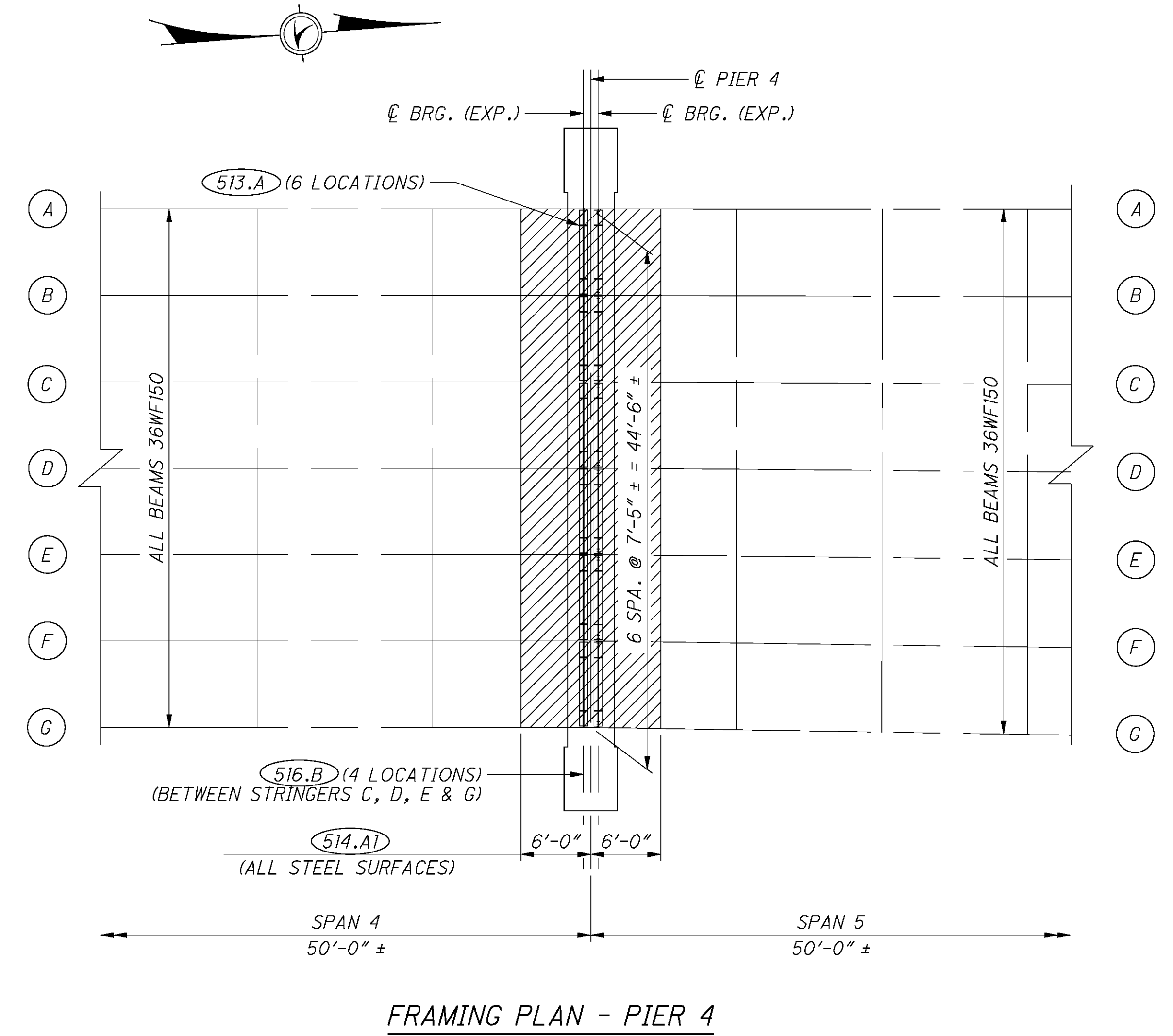
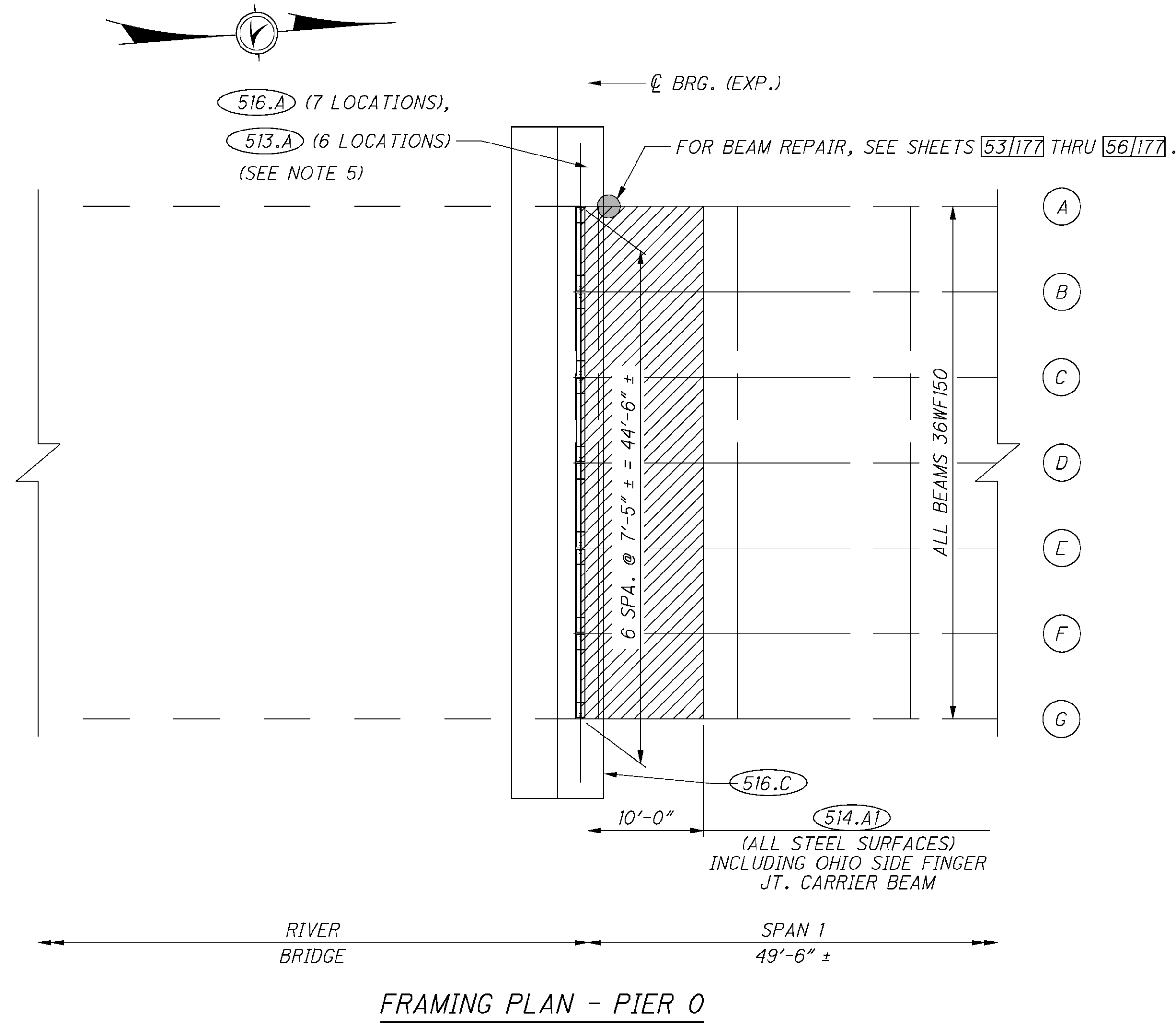


D SECTION
FIBER WRAP DETAIL

LEGEND:

- APPROXIMATE AREA TO BE FIBER WRAPPED PER ITEM 530 - STRUCTURE MISC.: CARBON FIBER WRAP (1 LAYER).
- APPROXIMATE AREA OF COMPLETED SPALL REPAIR, REPAIR TYPE 519.B

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MISCELLANEOUS STEEL REPAIR DETAILS	
REPAIR TYPE	SCOPE OF WORK
513.A	REPLACE END CROSSFRAMES WITH JACKING FRAMES
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS (EXTERIOR)
516.A	REPLACE STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS
516.B	INSTALL STEEL BEARING SHIMS
516.C	CLEAN BEARING SEAT

- LEGEND:**
- STRINGER/GIRDER LINE
 - REPAIR TYPE
 - 514.A1 PAINT LIMITS

- NOTES:**
1. FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS (57/177) THRU (63/177).
 2. FOR JACKING FRAME DETAILS, SEE SHEETS [23/29] THRU [24/29].
 3. FOR BEARING DETAILS, SEE SHEET [25/29].

DESIGN AGENCY
Gannett Fleming
 ENGINEERS & ARCHITECTS, P. C.
 400 WESTWIND DR
 WESTVILLE, OHIO 43081

DESIGNED	KSC	CHECKED	JAR
DRAWN	BKH	REVISED	
REVIEWED	DEK	STRUCTURE FILE NUMBER	3106970
DATE	4/15		

PIER 0 AND PIER 4 FRAMING
 BRIDGE NO. HAM-71-0000R (NB I-75)
 OVER MEHRING WAY, PETE ROSE WAY, RAILROAD, US42, US 50 RAMPS, CENTRAL AVE

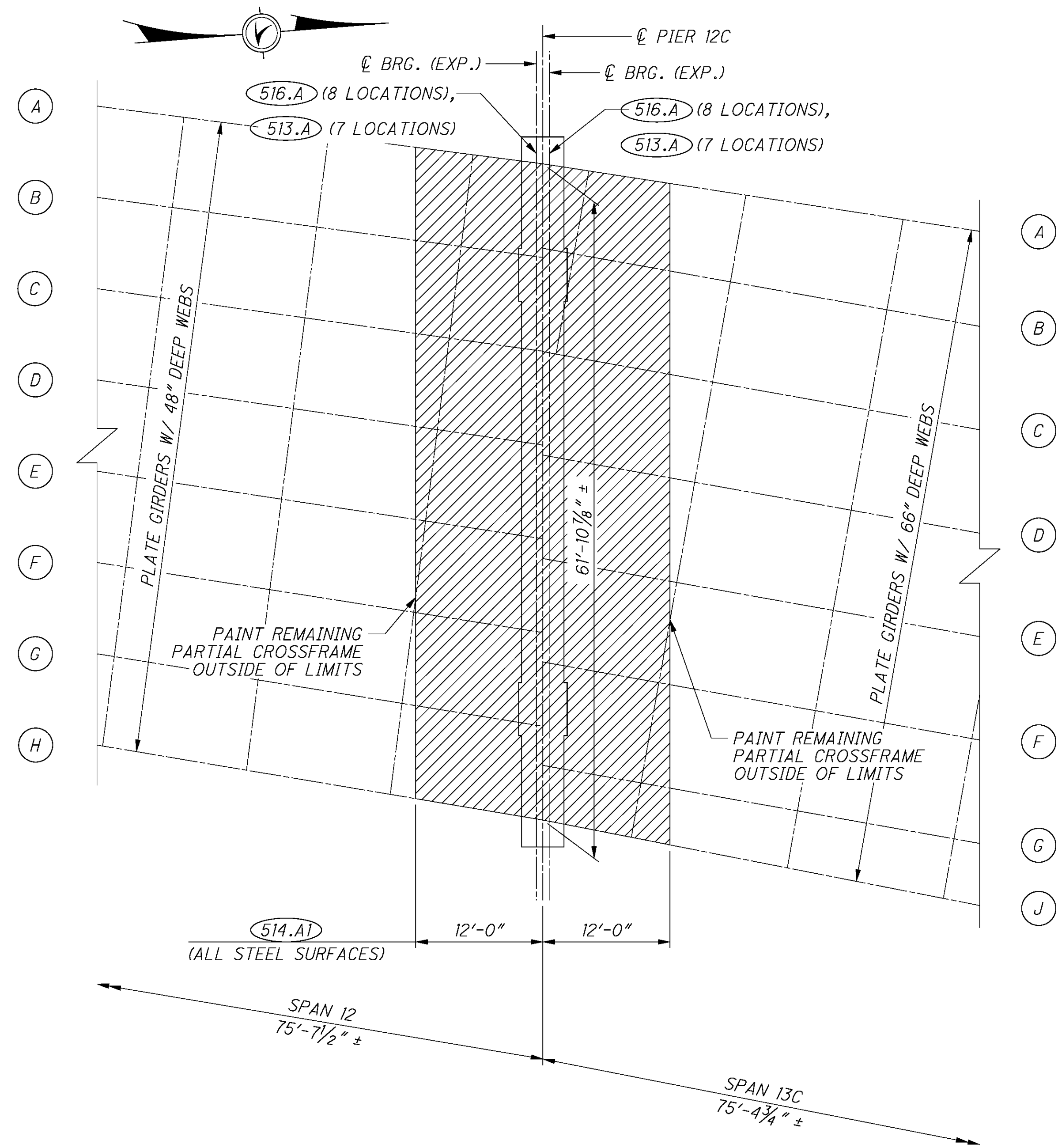
HAM-71/75-0.00/0.22
PID No. 97973

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177

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MISCELLANEOUS STEEL REPAIR DETAILS	
REPAIR TYPE	SCOPE OF WORK
513.A	REPLACE END CROSSFRAMES WITH JACKING FRAMES
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS (EXTERIOR)
516.A	REPLACE STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS



FRAMING PLAN - PIER 12C

LEGEND:

- - STRINGER/GIRDER LINE
- - REPAIR TYPE
- ▨ - 514.A1 PAINT LIMITS

NOTES:

1. FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS (57/177) THRU (63/177).
2. FOR JACKING FRAME DETAILS, SEE SHEETS [23/29] THRU [24/29].
3. FOR BEARING DETAILS, SEE SHEET [25/29].

DESIGN AGENCY
Gannett Fleming
 ENGINEERS & ARCHITECTS, P. C.
400 WESTVALE DRIVE SUITE 200 WESTVALE, OHIO 43081

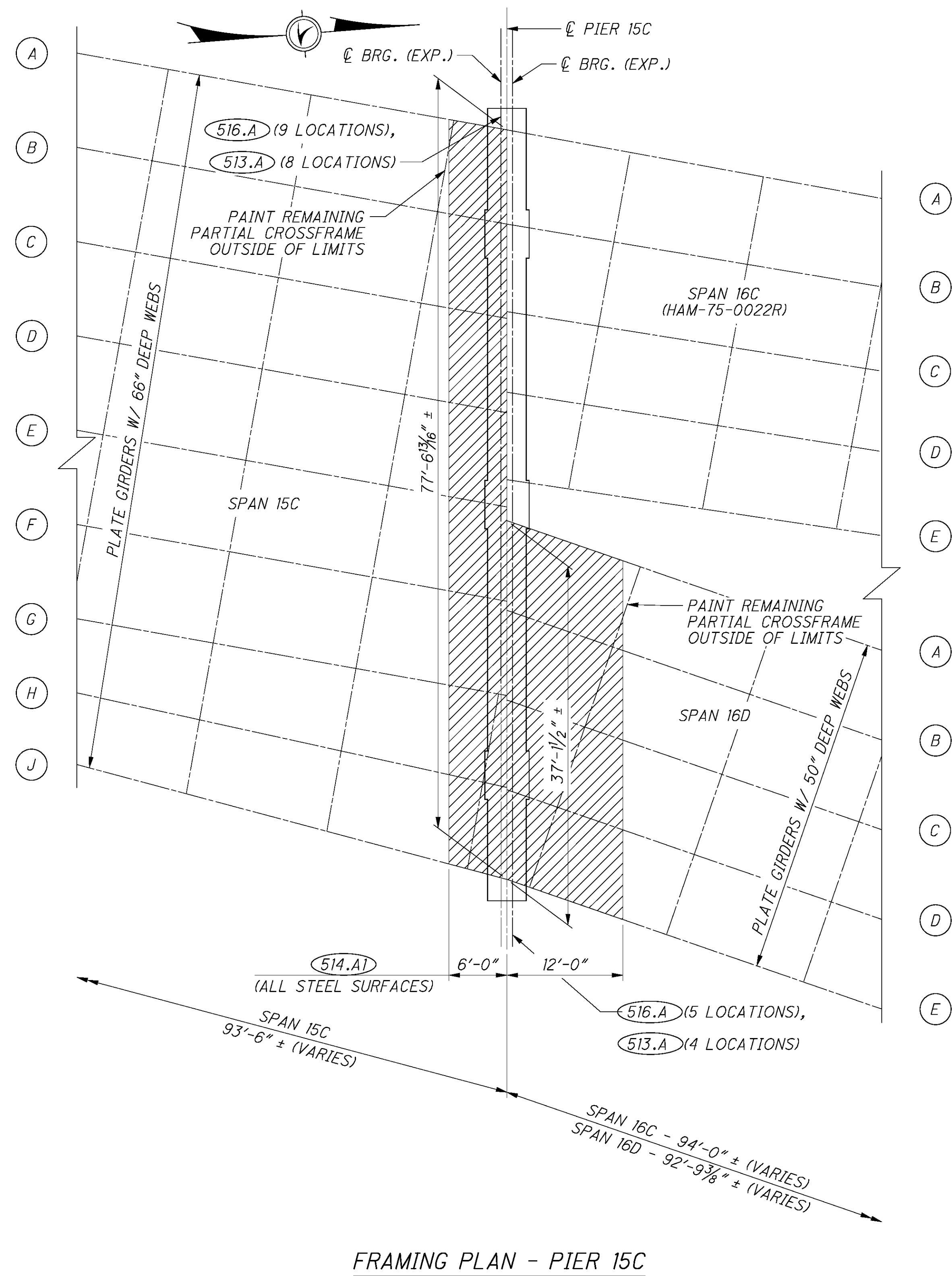
DESIGNED	KSC	CHECKED	JAR
DRAWN	BKH	REVISED	
REVIEWED	DEK	STRUCTURE FILE NUMBER	3106970
DATE	4/15		

Pier 12C Framing
 BRIDGE NO. HAM-71-0000R (NB I-75)
 OVER MEHRING WAY, PETE ROSE WAY, RAILROAD, US42, US 50 RAMPS, CENTRAL AVE

HAM-71/75-0.00/0.22
PID No. 97973

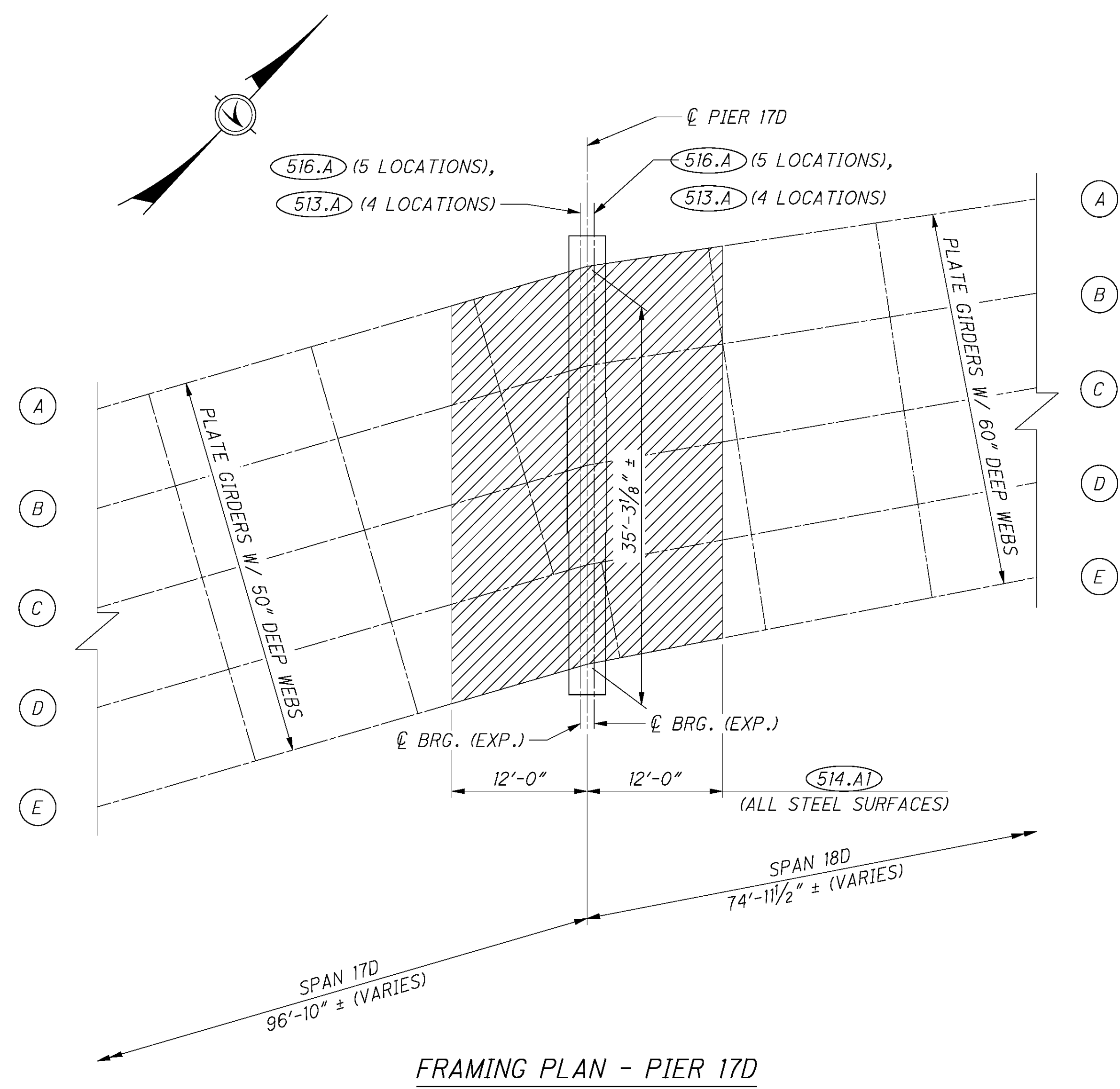
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 (132/177)

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FRAMING PLAN - PIER 15C

MISCELLANEOUS STEEL REPAIR DETAILS	
REPAIR TYPE	SCOPE OF WORK
513.A	REPLACE END CROSSFRAMES WITH JACKING FRAMES
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS (EXTERIOR)
516.A	REPLACE STEEL ROCKER BEARINGS WITH ELASTOMERIC BEARINGS
518.A	REPLACE DOWNSPOUTS IN KIND

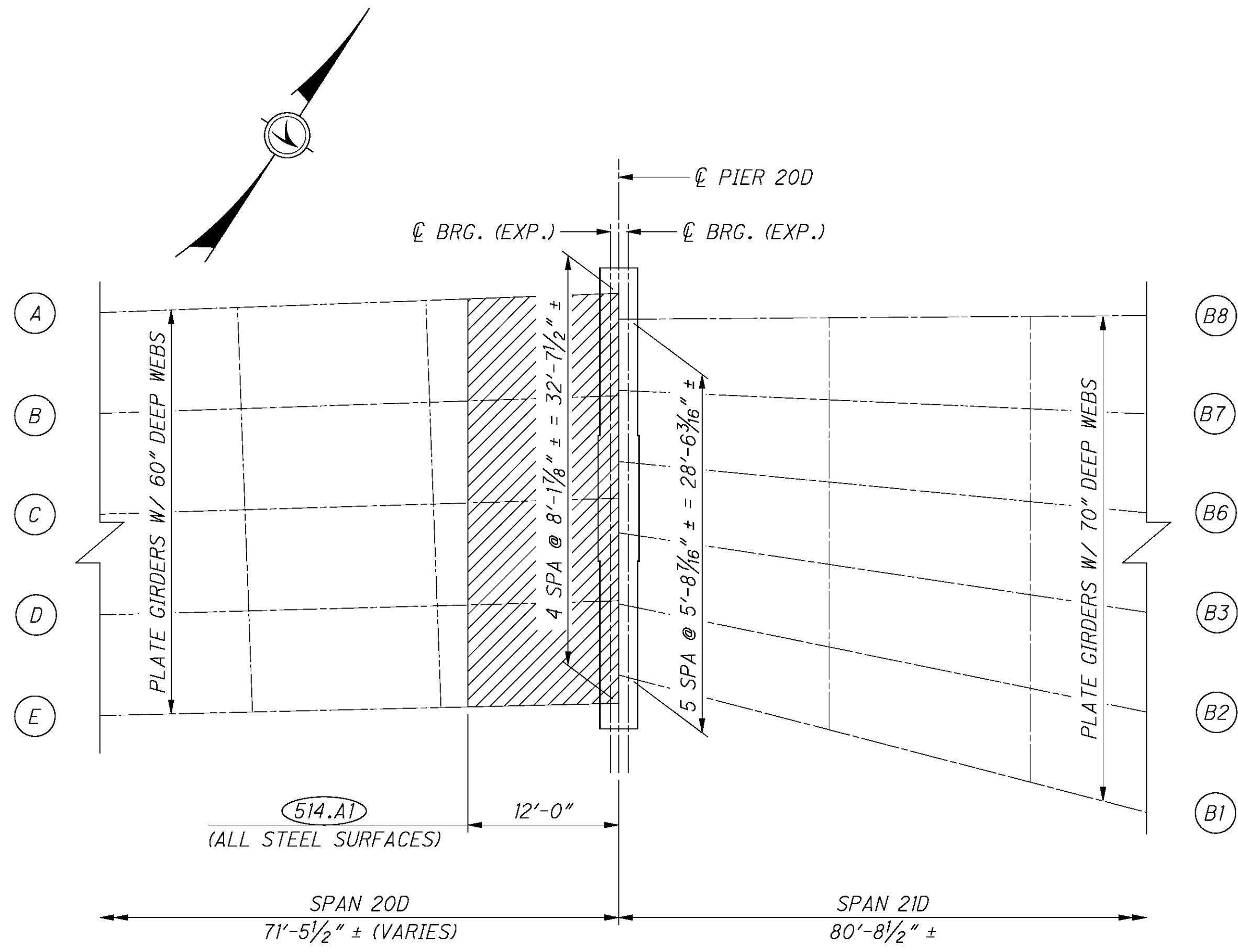


FRAMING PLAN - PIER 17D

- LEGEND:**
- - STRINGER/GIRDER LINE
 - - REPAIR TYPE
 - ▨ - 514.A1 PAINT LIMITS

- NOTES:**
1. FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS (57/177) THRU (63/177).
 2. FOR JACKING FRAME DETAILS, SEE SHEETS [23/29] THRU [24/29].
 3. FOR BEARING DETAILS, SEE SHEET [25/29].
 4. REPAIRS IN SPAN 16C (HAM-75-0022R) ARE INCLUDED WITH HAM-75-0022R. SEE SHEET (165/177).

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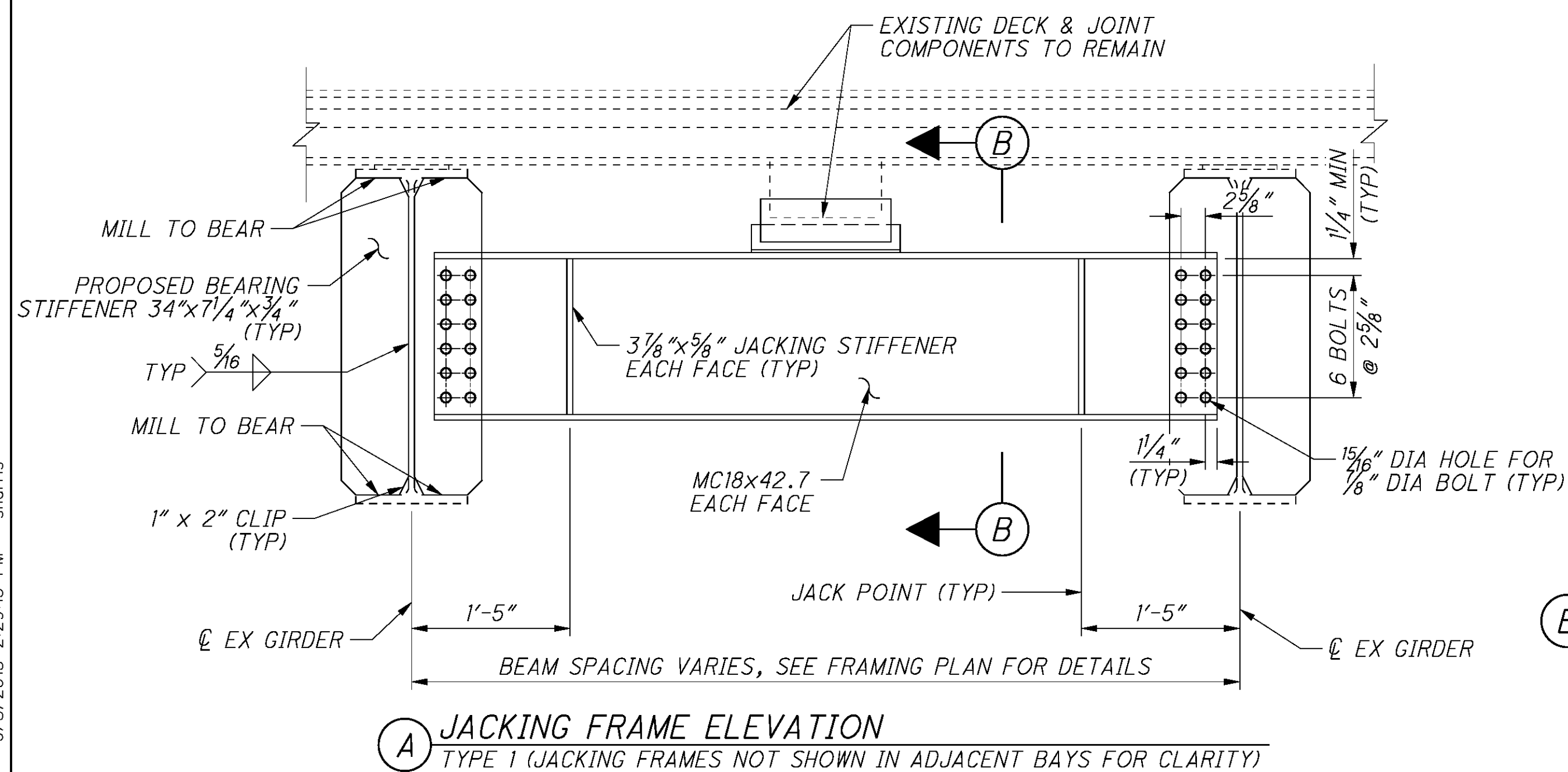
FRAMING PLAN - PIER 20D

MISCELLANEOUS STEEL REPAIR DETAILS	
REPAIR TYPE	SCOPE OF WORK
514.A1	ZONE PAINT STRUCTURAL STEEL TO LIMITS SHOWN, OZEU SPECIFICATIONS (EXTERIOR)

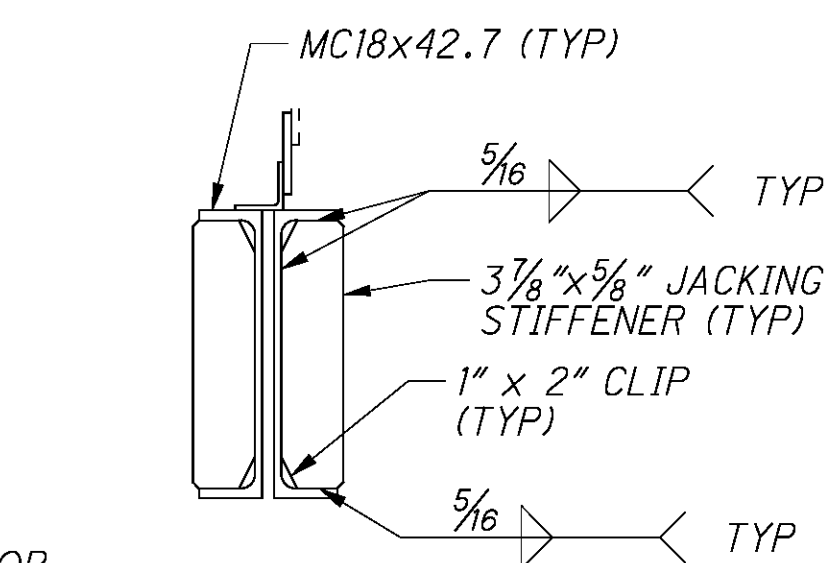
- LEGEND:**
- STRINGER/GIRDER LINE
 - REPAIR TYPE
 - 514.A1 PAINT LIMITS

NOTES:
 1. FOR ADDITIONAL REPAIR TYPE DESCRIPTIONS, SEE GENERAL NOTES SHEETS THRU .

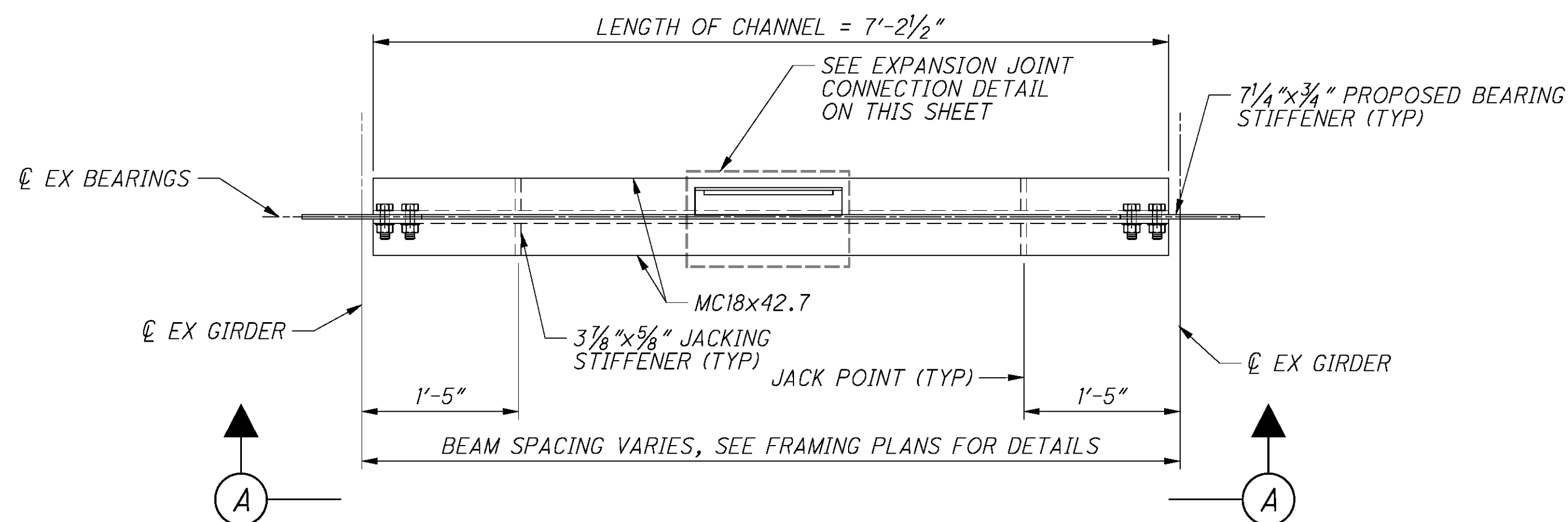
TYPE 1 JACKING FRAMES						
LOCATION	SPAN	BAY	QUANTITY (NO. OF FRAMES)	WEIGHT OF STEEL (LBS)	DESIGN LOAD	
					DL (KIPS)	LL+I (KIPS)
PIER 4 - REAR	4	ALL BAYS	6	770	25	95



(A) JACKING FRAME ELEVATION
TYPE 1 (JACKING FRAMES NOT SHOWN IN ADJACENT BAYS FOR CLARITY)



(B) SECTION JACKING STIFFENER



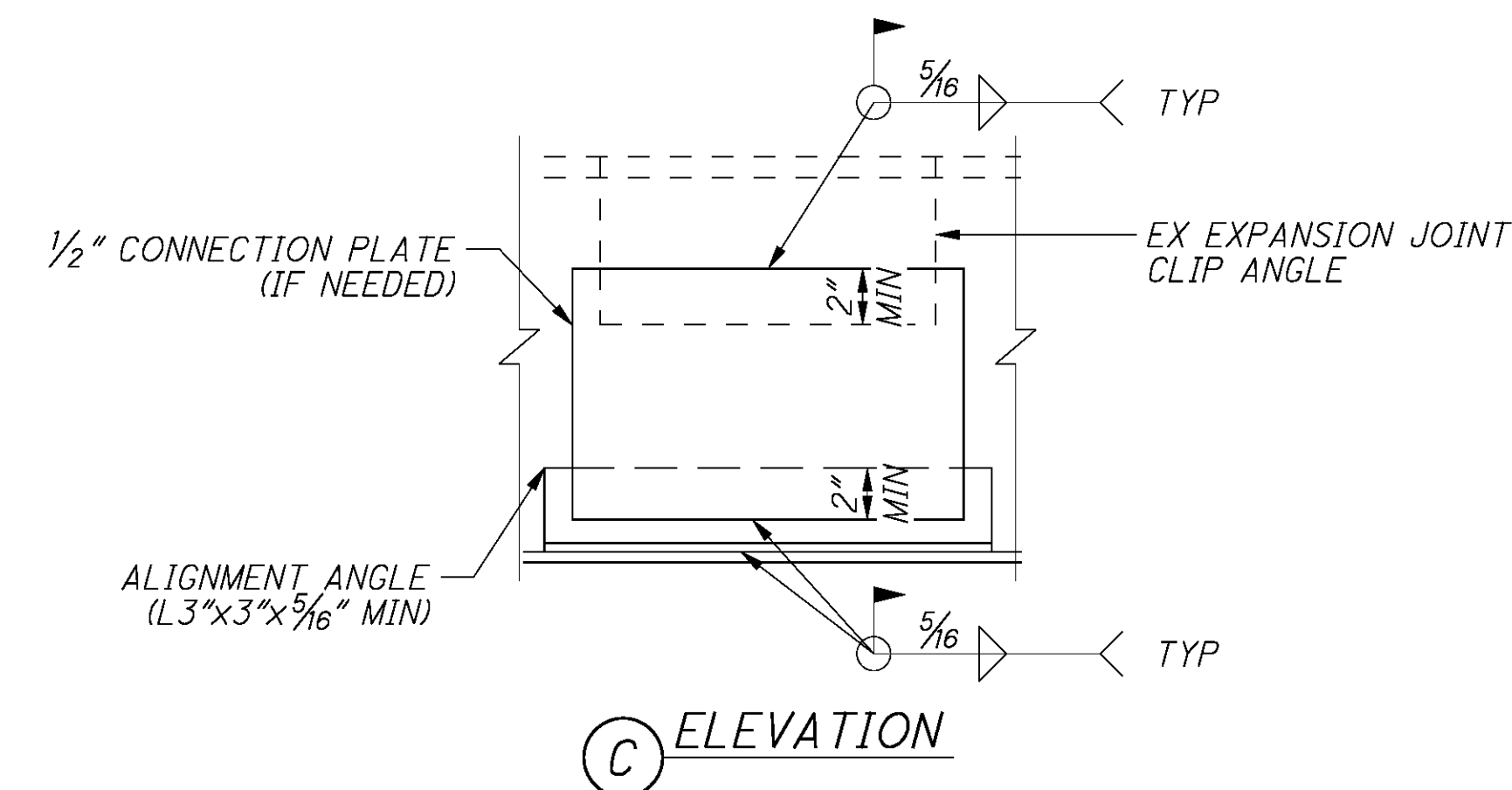
TYPICAL PLAN VIEW OF TYPE 1 JACKING FRAME
(JACKING FRAMES NOT SHOWN IN ADJACENT SPAN AND BAYS FOR CLARITY)

NOTES:

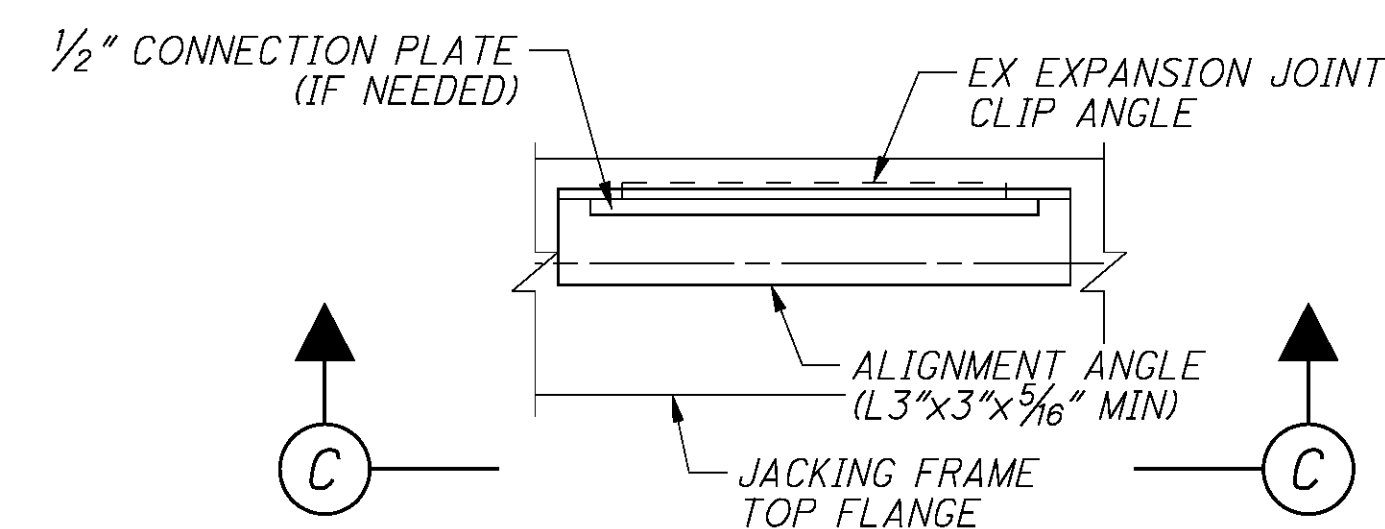
1. FIELD VERIFY ALL EXISTING MEMBER SIZES AND DIMENSIONS PRIOR TO FABRICATING MEMBERS FOR PROPOSED CONNECTIONS AND PERFORMING WORK.
2. CONTRACTOR MAY USE SHIM PLATES AS NEEDED TO MAKE CONNECTION FIT UP.
3. ALL EXISTING END CROSSFRAMES MUST BE REMOVED AND REPLACED WITH JACKING FRAMES IN ALL BAYS PRIOR TO BEGINNING JACKING PROCEDURES AND REPLACING APPLICABLE BEARINGS. EXISTING END CROSSFRAME REPAIR TO BE PERFORMED IN ONE BAY AT A TIME.
4. ALL BOLTS SHALL BE 1/2" DIA A325, TYPE 1, HIGH STRENGTH. PROVIDE PER C&MS 513.20. ALL HOLES SHALL BE 1/16" DIA.
5. CONTRACTOR SHALL SUBMIT JACKING PLAN TO THE ENGINEER AND RECEIVE APPROVAL BEFORE BEGINNING WORK. THE CONTRACTOR MAY SUBMIT AN ALTERNATE SEQUENCE OF CONSTRUCTION, JACKING FRAME DETAILS, AND DETAILS OF AN ADEQUATE JACKING SYSTEM. METHODS AND PROCEDURES SHALL BE PREPARED AND SUBMITTED TO THE ENGINEER PER APPROVAL IN ACCORDANCE WITH C&MS 501.05.

SEQUENCE OF CONSTRUCTION:

- WORKING IN ONE BAY AT A TIME:
1. REMOVE EXISTING END CROSSFRAMES.
 2. PREPARE SURFACE OF EXISTING BEARING STIFFENERS AND PROPOSED CONNECTION PLATE(S) AT BOLTED CONNECTIONS TO PROVIDE CLASS A SLIP RESISTANCE (FAYING SURFACE).
 3. INSTALL APPLICABLE JACKING FRAME PER JACKING FRAME DETAIL SHEETS.
 4. INSTALL CONNECTION BETWEEN THE PROPOSED JACKING FRAME AND EXISTING EXPANSION JOINT.
 5. REPEAT STEPS 1-4 IN ALL BAYS PRIOR TO PERFORMING ANY JACKING PROCEDURES.



(C) ELEVATION



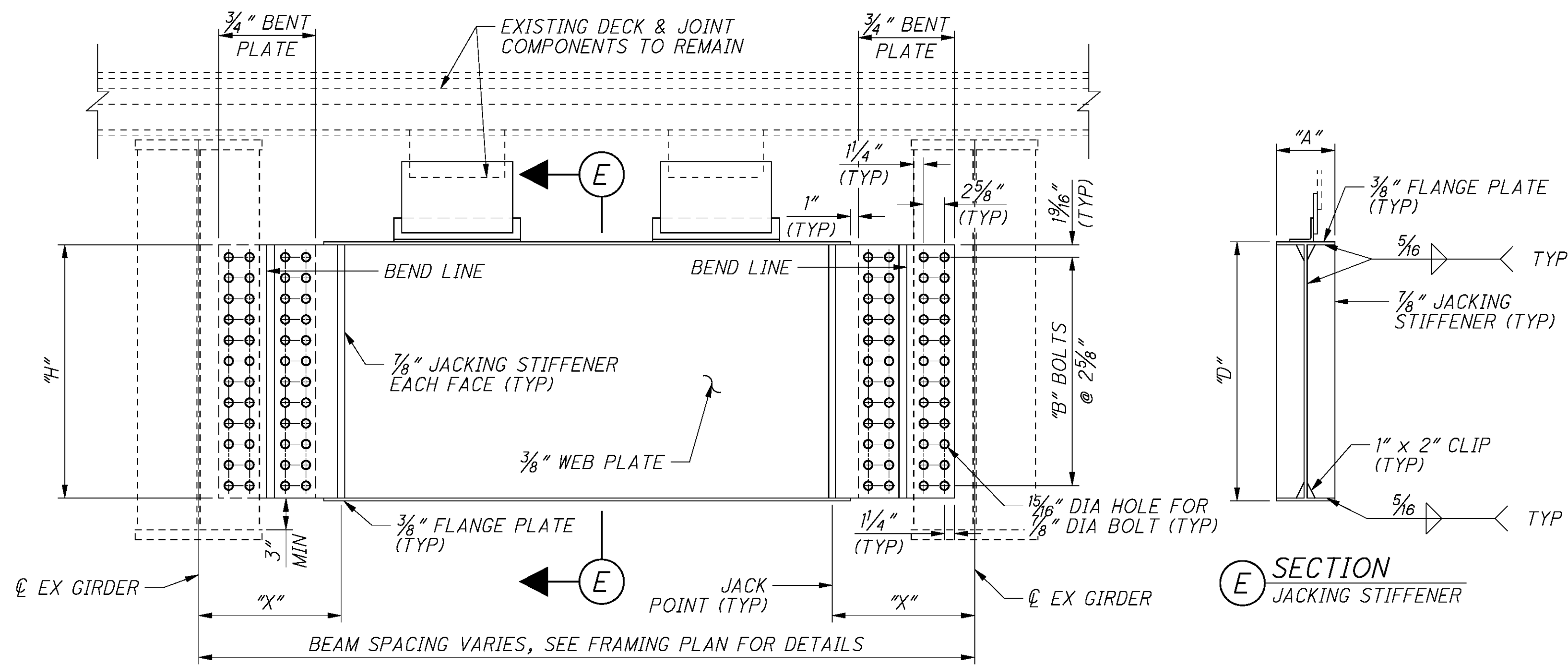
EXPANSION JOINT CONNECTION DETAIL

TYPE 4 JACKING FRAMES

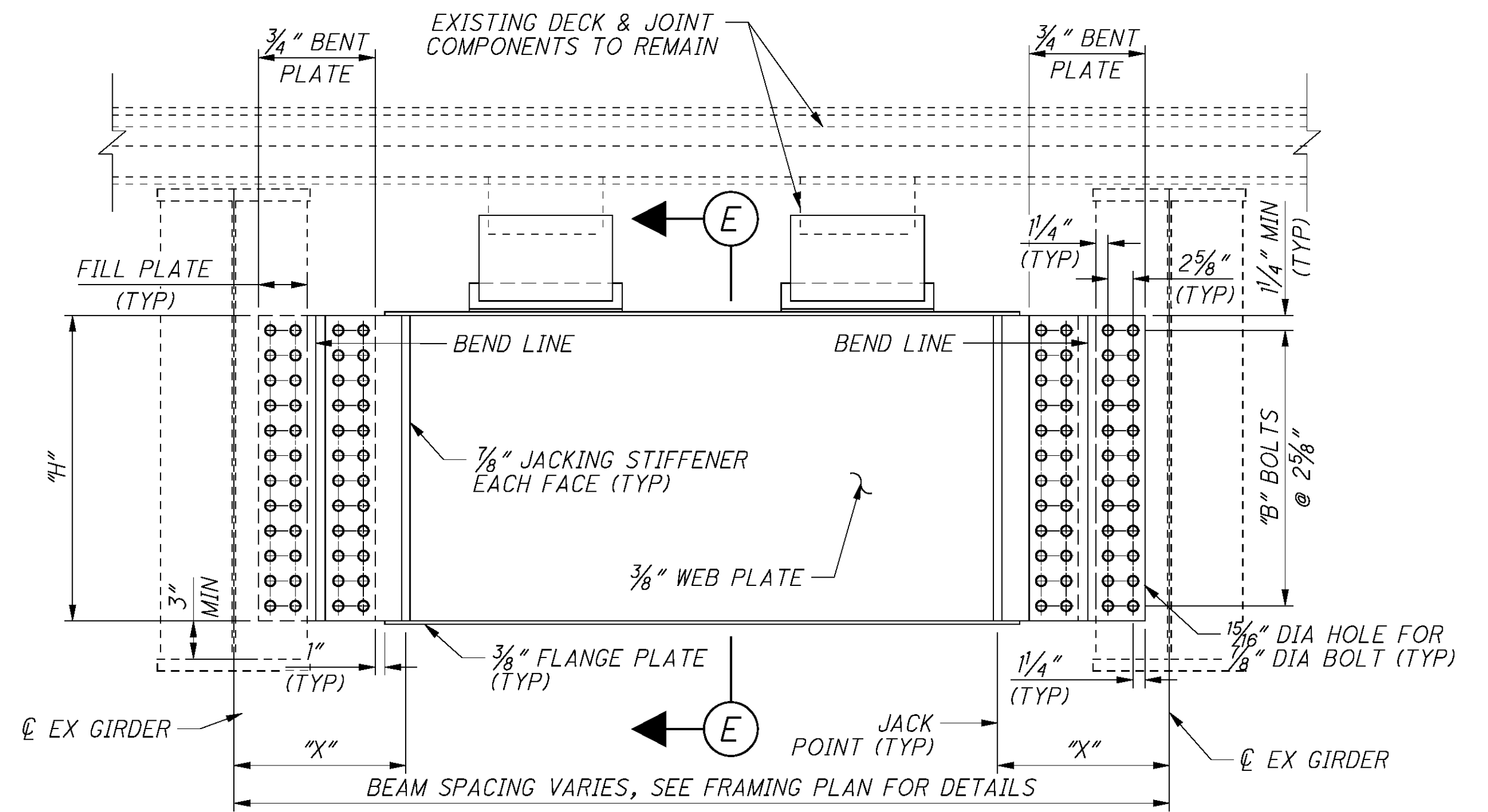
LOCATION	SPAN	BAY	QUANTITY (NO. OF FRAMES)	WEIGHT OF STEEL (LBS)	DESIGN LOAD		WEB PLATE		FLANGE PLATES		TOTAL DEPTH D	JACKING STIFFENER	JACK POINT X	FILL PLATE			BENT PLATE							
					DL (KIPS)	LL+I (KIPS)	H	W	A	F				H	WIDTH	THK	H	B1	B2	THETA	B3	B4	BETA	B
PIER 12C - FORWARD	13C	A-B	1	729	70	130	32"	6'-1"	8 7/8"	5'-0"	32 3/4"	32" x 4 1/4"	1'-6 1/4"	32"	5 1/8"	1/2"	32"	6 3/4"	6 1/8"	169 52' 55.26"	8 1/4"	171 12' 53.26"	12	
		B-C THRU F-G	5	839				7'-11 3/4"		6'-11"								6 3/4"		169 52' 55.26"	6 3/4"	169 52' 55.26"		
		G-J	1	548				3'-5 1/2"		2'-5"								6"		168 56' 07.41"	6 3/4"	169 52' 55.26"		
PIER 15C - REAR	15C	A-B THRU F-G	6	839	70	130	32"	7'-11 3/4"	8 7/8"	6'-11"	32 3/4"	32" x 4 1/4"	1'-6 1/4"	32"	5 1/8"	1/2"	32"	6 3/4"	6 1/8"	169 52' 11.75"	6 3/4"	169 52' 11.75"	12	
		G-H	1	853				7'-9"		6'-8"								6 1/8"		167 35' 05.13"	8 1/4"	169 52' 11.75"		
		H-J	1	874				7'-10 1/4"		6'-10"								5 1/2"		165 01' 44.75"	7 1/4"	167 35' 05.13"		
PIER 15C - FORWARD	16D	ALL BAYS	4	921	70	130	32"	7'-7 1/4"	8 7/8"	6'-6"	32 3/4"	32" x 4 1/4"	1'-6 1/4"	32"	5 1/8"	1 3/4"	32"	6"	6 1/8"	160 54' 33.75"	6"	6 1/8"	160 54' 33.75"	12
PIER 17D - REAR	17D	ALL BAYS	4	843	70	130	32"	7'-2"	8 7/8"	6'-1"	32 3/4"	32" x 4 1/4"	1'-6 1/4"	32"	5 1/8"	1 1/4"	32"	5 3/4"	6 1/8"	163 45' 47"	5 3/4"	6 1/8"	163 45' 47"	12
PIER 17D - FORWARD	18D	D-E	1	714	50	110	30"	7'-1"	7 3/8"	6'-1"	30 3/4"	30" x 3 1/2"	1'-5 1/4"	30"	5 1/8"	1/2"	30"	8 1/4"	6 1/8"	169 37' 57"	7 3/4"	6 1/8"	169 03' 23"	11

SEE SHEET [24/29], FOR JACKING FRAME TYPE 4 DETAILS.

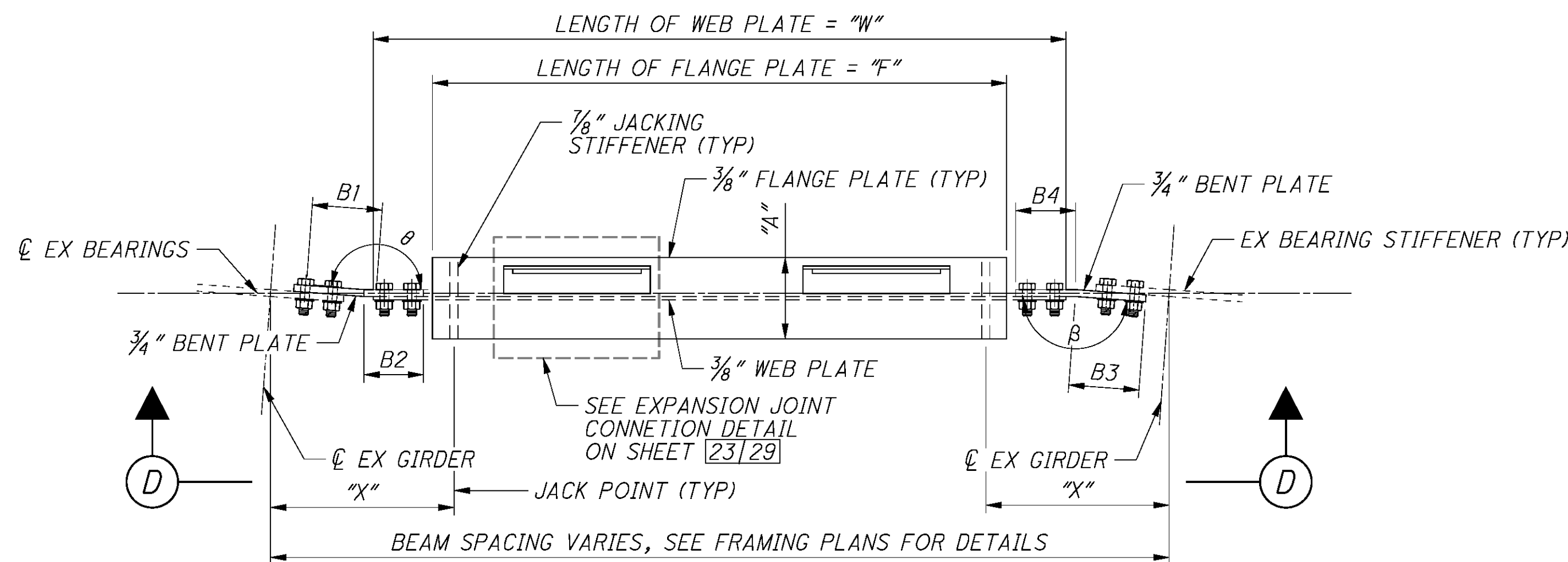
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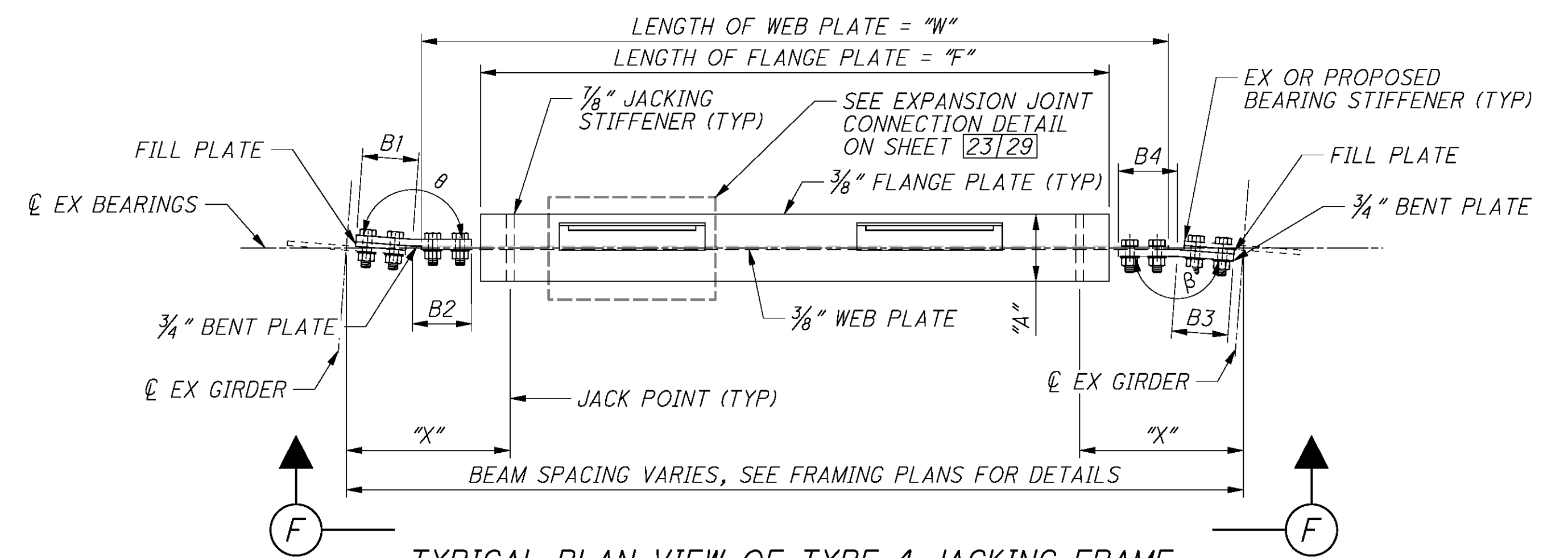
(D) JACKING FRAME ELEVATION
 TYPE 3 (JACKING FRAMES NOT SHOWN IN ADJACENT BAYS FOR CLARITY)



(F) JACKING FRAME ELEVATION
 TYPE 4 (JACKING FRAMES NOT SHOWN IN ADJACENT BAYS FOR CLARITY)



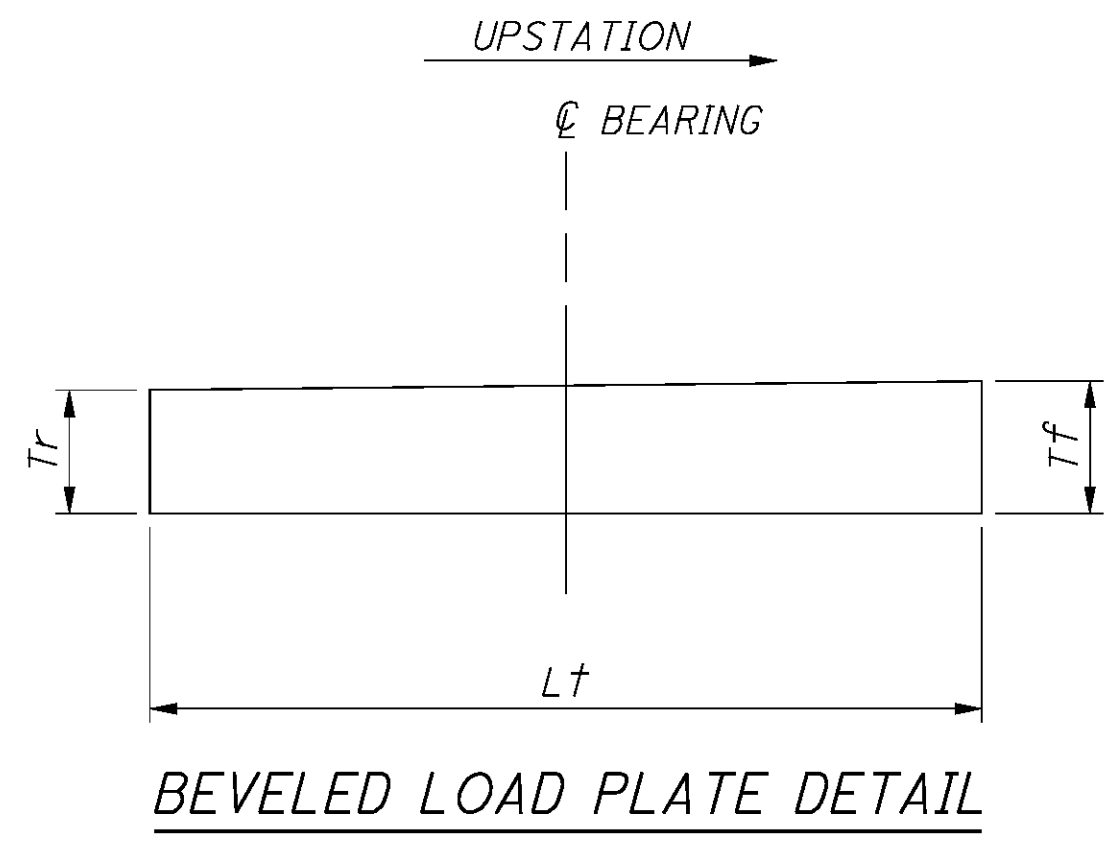
TYPICAL PLAN VIEW OF TYPE 3 JACKING FRAME
 (JACKING FRAMES NOT SHOWN IN ADJACENT SPAN AND BAYS FOR CLARITY)



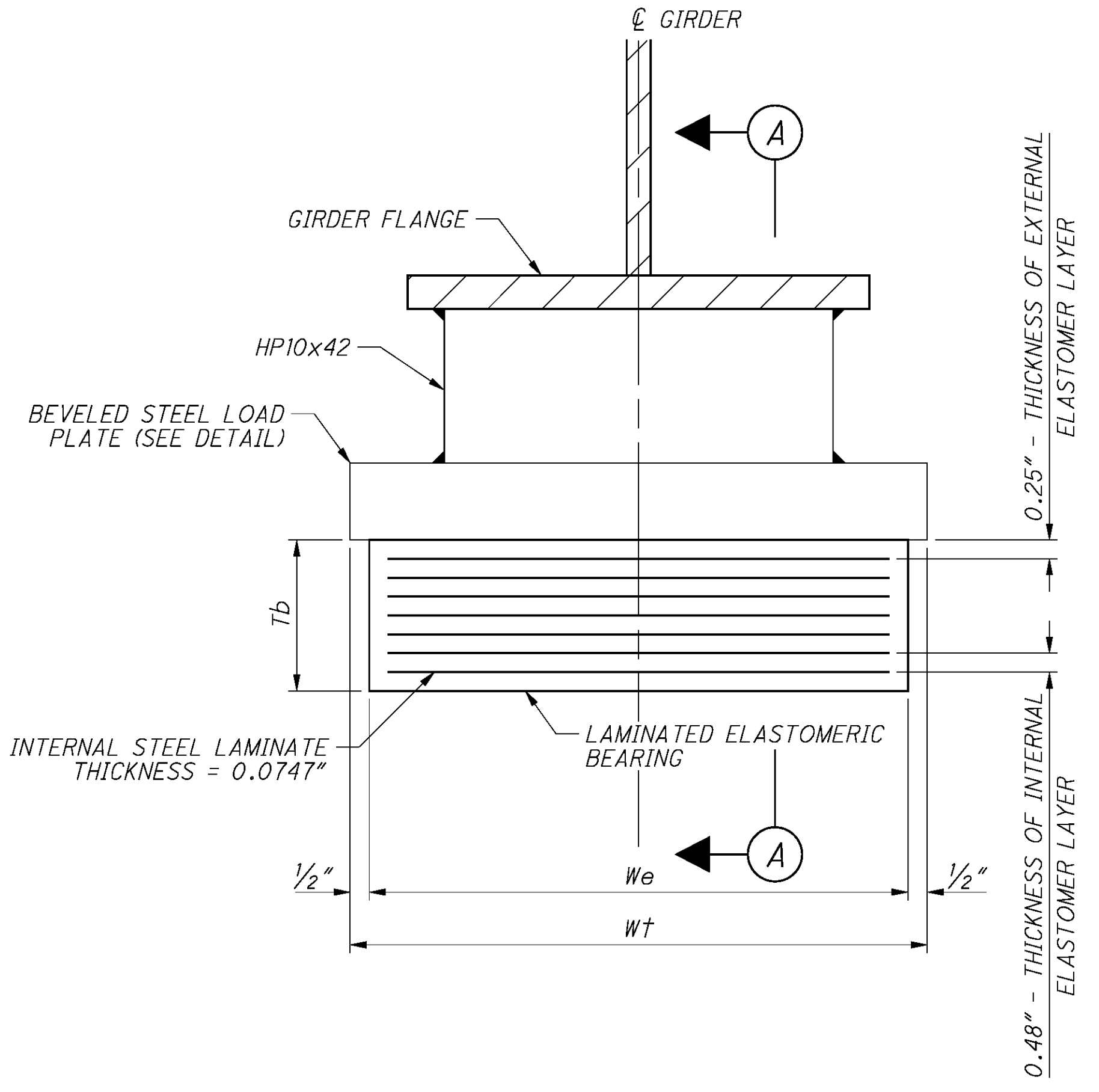
TYPICAL PLAN VIEW OF TYPE 4 JACKING FRAME
 (JACKING FRAMES NOT SHOWN IN ADJACENT SPAN AND BAYS FOR CLARITY)

NOTES:
 1. SEE SHEET 23/29, JACKING FRAME DETAILS 1 OF 2, FOR DETAILED NOTES.

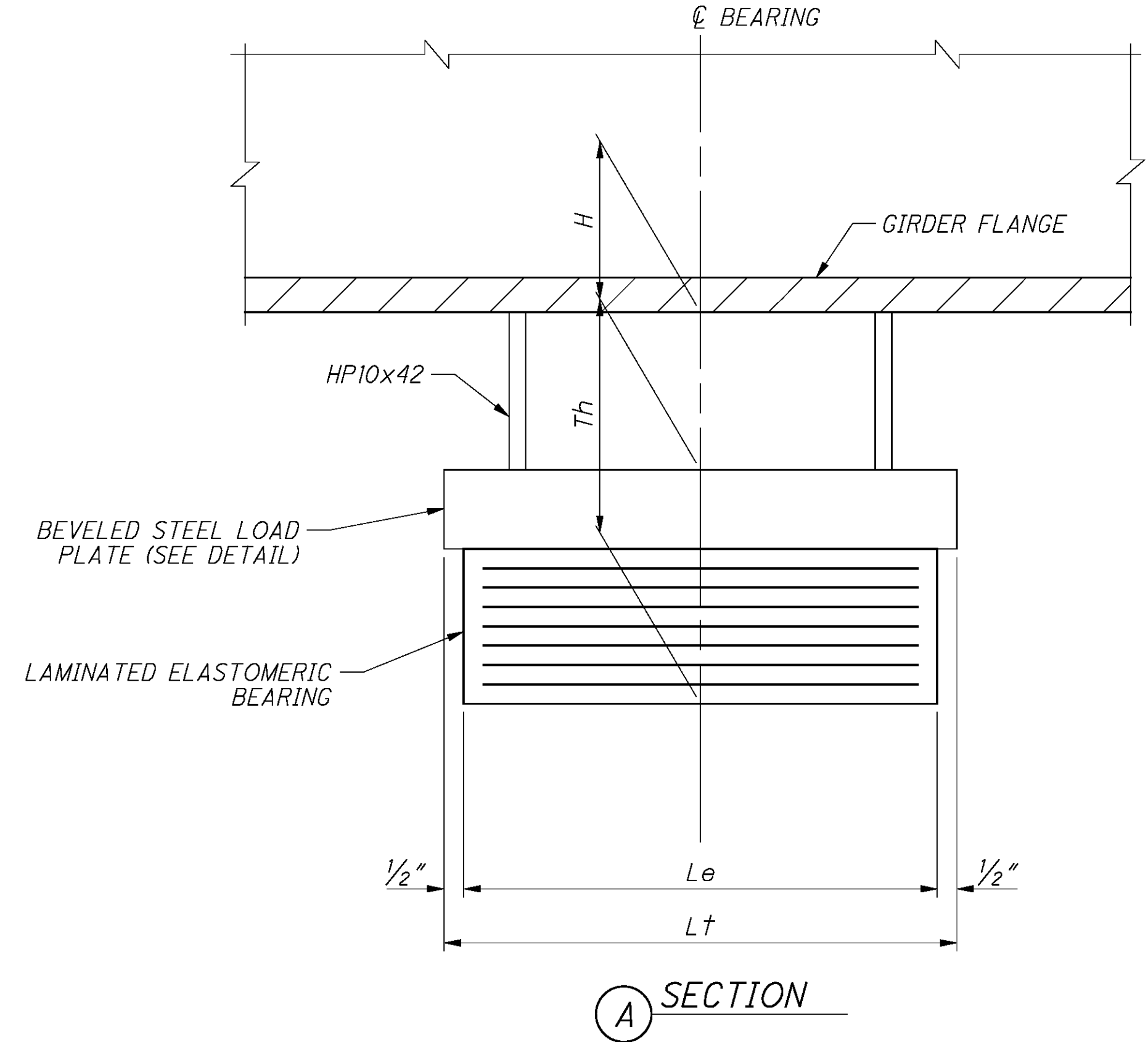
TYPE 3 JACKING FRAME																					
LOCATION	SPAN	BAY	QUANTITY (No. OF FRAMES)	WEIGHT OF STEEL (LBS)	DESIGN LOAD		WEB PLATE		FLANGE PLATE		TOTAL DEPTH	JACKING STIFFENER	JACK POINT	BENT PLATE							
					DL (KIPS)	LL+I (KIPS)	H	W	A	F				D	X	B1	B2	THETA	B3	B4	BETA
PIER 12C - REAR	12	A-B	1	748	70	130	32"	7'-2"	8 7/8"	6'-2"	32 3/4"	32" x 4 1/4"	1'-6 1/4"	7 3/8"	6 1/8"	172 37' 36.36"	7"	6 1/8"	172 18' 51.36"	12	
		B-C	1	747				7'-2 3/4"						6'-2"		7"	172 18' 51.36"		6 3/4"		172 0' 09.36"
		C-D	1	746				7'-3 1/2"						6'-3"		6 3/4"	172 0' 09.36"		6 1/4"		171 41' 27.36"
		D-E	1	743				7'-4"						6'-3"		6 1/4"	171 41' 27.36"		6"		171 22' 48.36"
		E-F	1	743				7'-4 3/4"						6'-4"		6"	171 22' 48.36"		5 3/4"		171 04' 10.36"
		F-G	1	744				7'-5 1/4"						6'-5"		5 3/4"	171 04' 10.36"		5 1/2"		170 45' 35.36"
		G-H	1	744				7'-5 3/4"						6'-5"		5 1/2"	170 45' 35.36"		5 1/4"		170 27' 07.23"
PIER 17D - FORWARD	18D	A-B	1	665	50	110	30"	7'-3 1/2"	7 3/8"	6'-3"	30 3/4"	30" x 3 1/2"	1'-5 1/4"	7"	6 1/8"	171 27' 39"	6 1/2"	6 1/8"	170 50' 03"	11	
		B-C	1	664				7'-4 1/2"						6'-4"		6 1/2"	170 50' 03"		6"		170 13' 29"
		C-D	1	662				7'-5 1/2"						6'-5"		6"	170 13' 29"		5 1/2"		169 37' 57"



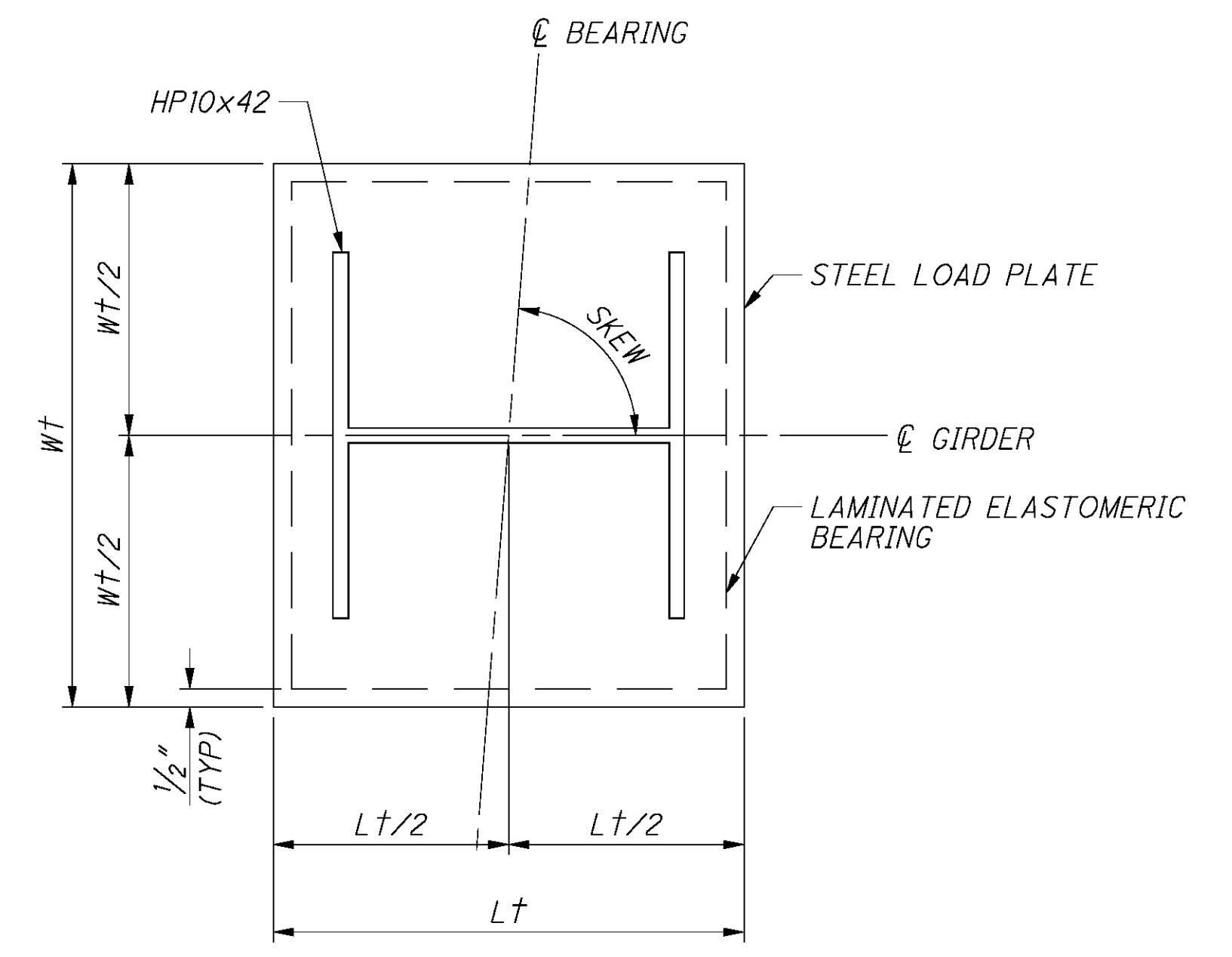
BEVELED LOAD PLATE DETAIL



LAMINATED ELASTOMERIC EXPANSION BEARING



SECTION A



BEARING ORIENTATION PLAN

- NOTES:**
- ELASTOMERIC BEARINGS: THE ELASTOMER SHALL HAVE A HARDNESS OF 50 DUROMETER. THE BEARINGS WERE DESIGNED UNDER DIVISION I, SECTION 14.6.6 (METHOD A) OF THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES.
 - THE STEEL LOAD PLATE SHALL BE ASTM A709, GRADE 50 STEEL. BOND THE LOAD PLATE BY VULCANIZATION TO THE ELASTOMER DURING THE MOLDING PROCESS. CONTROL WELDING SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 300° F AS DETERMINED BY THE USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
 - BEARING REPOSITIONING: IF THE BEAMS ARE ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80°F OR LOWER THAN 40°F, AND THE BEARING SHEAR DEFLECTION EXCEEDS 1/8 OF THE BEARING HEIGHT AT 60°F (±10°F), RAISE THE BEAMS TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60°F (±10°F).
 - FOR SKEW ANGLES, SEE EXISTING PLANS.

BEARING SCHEDULE																	
LOCATION	TYPE	NO. REQ'D	DL (KIP)	LL (KIP)	TOTAL LOAD (DL+LL)	Le (IN)	We (IN)	NO. OF ti's	NO. of te's	NO. INTERNAL LAMINATES	Tb (IN)	Wt (IN)	Lt (IN)	Tr (IN)	Tf (IN)	Th (IN)	H (IN)
PIER 0	EXP	7	24.4	42.2	66.6	12	13	6	2	7	3.903	14	13	2.06	1.94	5.903	4.847
PIER 12C - REAR	EXP	8	47.2	53.2	100.4	12	14	5	2	6	3.348	15	13	1.81	2.19	5.348	6.902
PIER 12C - FORWARD	EXP	8	49.5	56.5	106.0	12	14	5	2	6	3.348	15	13	1.81	2.19	5.348	6.902
PIER 15C - REAR	EXP	9	66.2	58.5	124.7	13	16	6	2	7	3.903	17	14	1.86	2.14	5.903	7.597
PIER 15C - FORWARD	EXP	5	54.2	54.5	108.7	13	16	6	2	7	3.903	17	14	1.86	2.14	5.903	7.597
PIER 17D - REAR	EXP	5	78.7	55.7	134.4	12	17	3	2	4	2.239	18	13	2.05	1.95	4.239	14.636
PIER 17D - FORWARD	EXP	5	36.4	52.5	88.9	12	14	5	2	6	3.348	15	13	2.05	1.95	5.348	5.402

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DESIGN AGENCY
Gannett Fleming
 ENGINEERS & ARCHITECTS, P.C.
40 WESTWATER PLACE, SUITE 200
 WESTFIELD, MASSACHUSETTS 01095

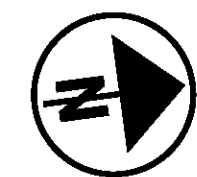
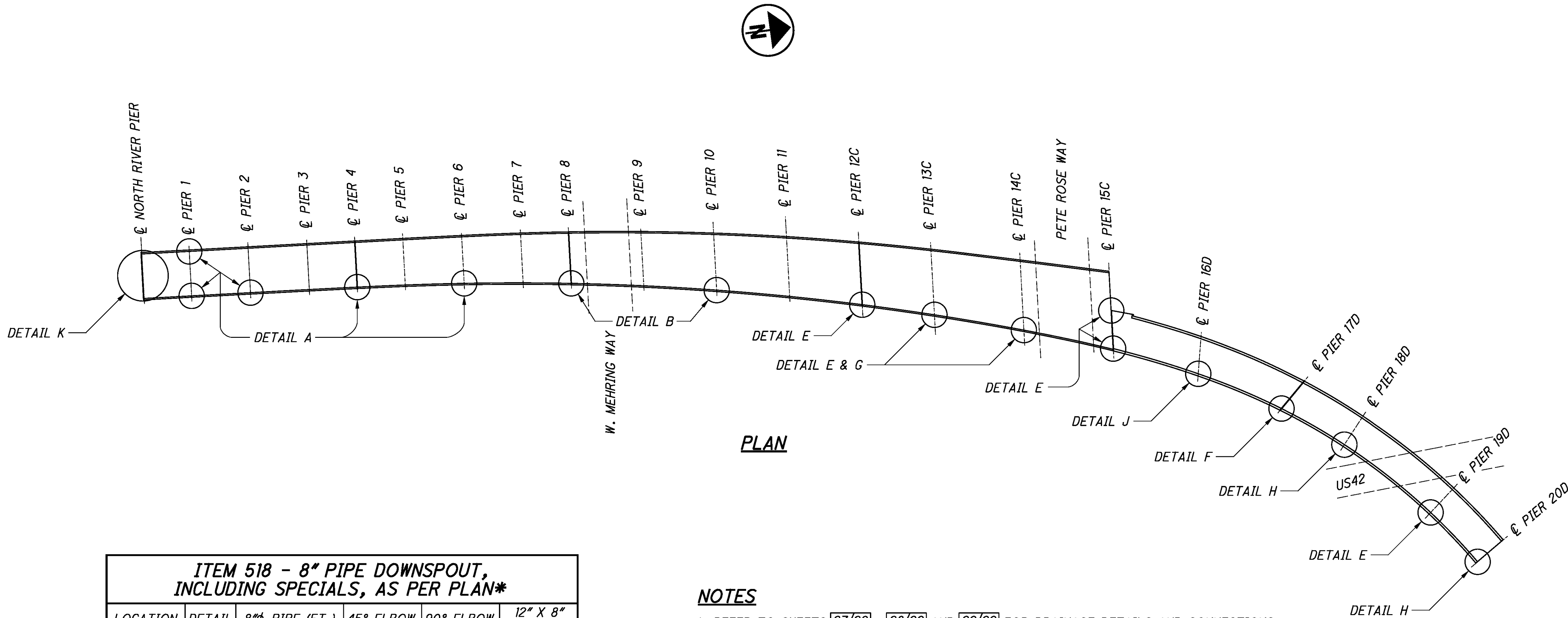
DESIGNED	SNH	CHECKED	VDT
DRAWN	SNH	REVISED	
REVIEWED	DEK	STRUCTURE FILE NUMBER	3105970
DATE	4/15		

ELASTOMERIC BEARING DETAILS
 BRIDGE NO. HAM-71-000R (NB I-75)
 OVER MEHRING WAY, PETE ROSE WAY, RAILROAD, US42, US 50 RAMPS, CENTRAL AVE

HAM-71-75-0.00/0.22
PID No. 97973

25 / 29

137
177



PLAN

ITEM 518 - 8" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN*					
LOCATION	DETAIL	8"φ PIPE (FT.)	45° ELBOW	90° ELBOW	12" X 8" REDUCER
RIVER PIER	K	31	2		1
PIER 1	A	109		4	2
PIER 2	A	36		3	1
PIER 4	A	33		1	1
PIER 6	A	39		1	1
PIER 8	B	49		3	1
PIER 10	B	49		2	1
PIER 12C	E	54		2	1
PIER 13C	E & G	59		2	1
PIER 14C	E & G	67		3	1
PIER 15C	E	123	3	2	2
PIER 16D	J	70	2	2	1
PIER 17D	F	71		2	1
PIER 18D	H	62	2		1
PIER 19D	E	57	2		1
PIER 20D	H	65		2	1
TOTAL		974	11	29	18

* - QUANTITIES BASED ON VISUAL FIELD OBSERVATIONS PERFORMED IN SEPTEMBER 2014

NOTES

- REFER TO SHEETS 27/29, 28/29 AND 29/29 FOR DRAINAGE DETAILS AND CONNECTIONS.
- IN ADDITION TO REPLACING THE EXISTING DRAINAGE DOWNSPOUTS AND CONNECTIONS, THE SCUPPER BASINS SHALL BE CLEANED AND FLUSHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE WATER SUPPLY USED DURING THE CLEANING OPERATION AND SHALL BE RESPONSIBLE FOR PROPER DISPOSAL OF ANY DEBRIS COLLECTED DURING THESE OPERATIONS. ALL WORK NECESSARY TO CLEAN AND FLUSH THE BASINS TO BE INCLUDED WITH ITEM 518 - 8" PIPE DOWNSPOUT, INCLUDING SPECIALS, AS PER PLAN.
- THE UNDERGROUND PORTIONS OF DRAINAGE PIPES SHALL BE CLEANED TO THE NEAREST DRAINAGE INLET. THE PORTIONS THAT ARE TO BE CLEANED BELOW GROUND SHALL ALSO BE INSPECTED USING REMOTE VIDEO INSPECTION EQUIPMENT TO ENSURE THAT THEY ARE INTACT AND FREE OF DEBRIS. THE CONTRACTOR SHALL COORDINATE ALL DRAINAGE REPAIR TO PREVENT ANY DRAINAGE ONTO TRAFFIC, PARKED VEHICLES, LANDSCAPED AREAS, OR OTHER OCCUPIED AREAS BELOW.

PROVIDE A CRAWLER MOUNTED CAMERA AND EQUIPMENT IN ACCORDANCE WITH SUPPLEMENTAL SPECIFICATION 902 CONDUIT INSPECTION EQUIPMENT.

THE CONTRACTOR SHALL CONDUCT A SURVEY OF THE UNDERGROUND PORTIONS OF DRAINAGE PIPES TO THE CLOSEST DRAINAGE INLET. THE CONTRACTOR SHALL DELIVER THREE COPIES OF THE SURVEY IN DIGITAL FORMAT TO THE ENGINEER. ALL DRAINAGE PIPE DEFECTS SHALL BE IDENTIFIED, MEASURED, AND DOCUMENTED. REPLACEMENT OF ANY DAMAGED DRAINAGE PIPES CANNOT BEGIN UNTIL APPROVAL OF THE ENGINEER. A CONTINGENCY QUANTITY OF 200 LINEAR FEET FOR REPLACEMENT OF UNDERGROUND DRAIN PIPE IS PROVIDED AS DEEMED NECESSARY BY THE ENGINEER.

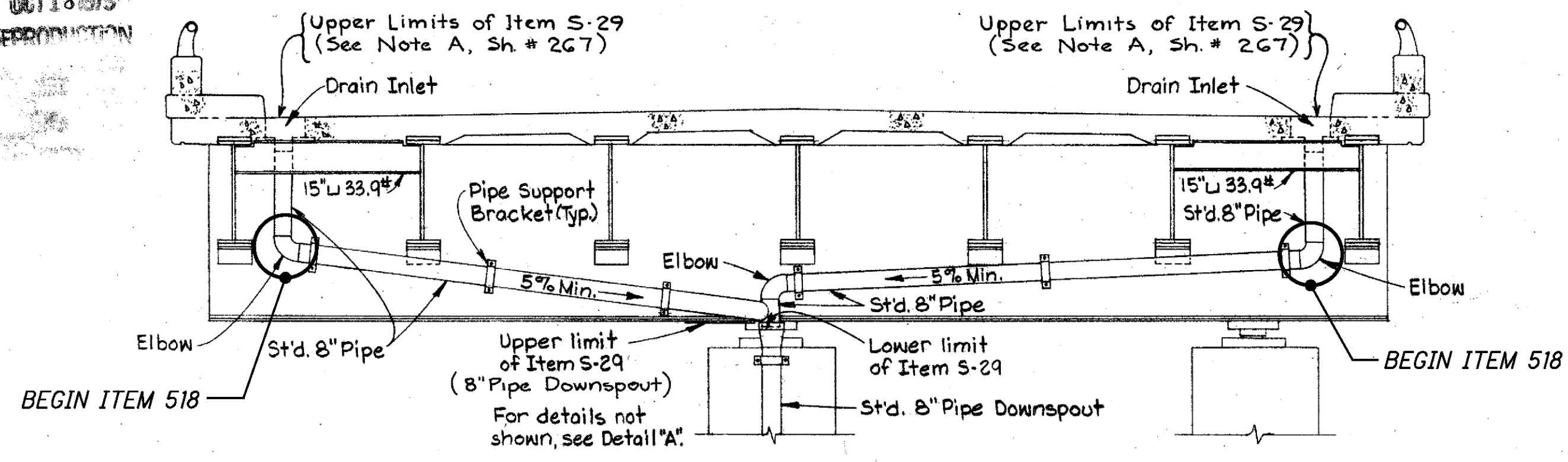
ALL PREPARATION, INSTALLATION, OPERATION, LABOR AND EQUIPMENT REQUIRED FOR THE DESCRIBED WORK SHALL BE PER ITEM 518-STRUCTURE DRAINAGE, MISC.: DRAINAGE PIPE VIDEO MONITORING.
- ALL QUANTITIES LISTED SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS.

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OCT 18 1975
REPRODUCTION

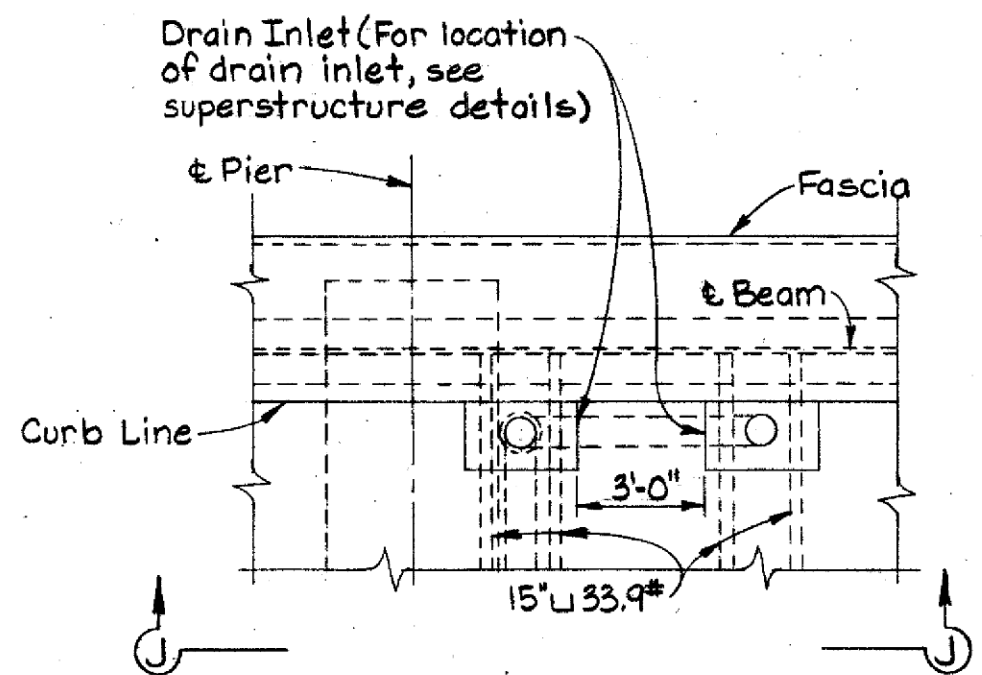
FED. RD. DIV.	STATE	PROJECT	FISCAL YEAR
2	OHIO		

268

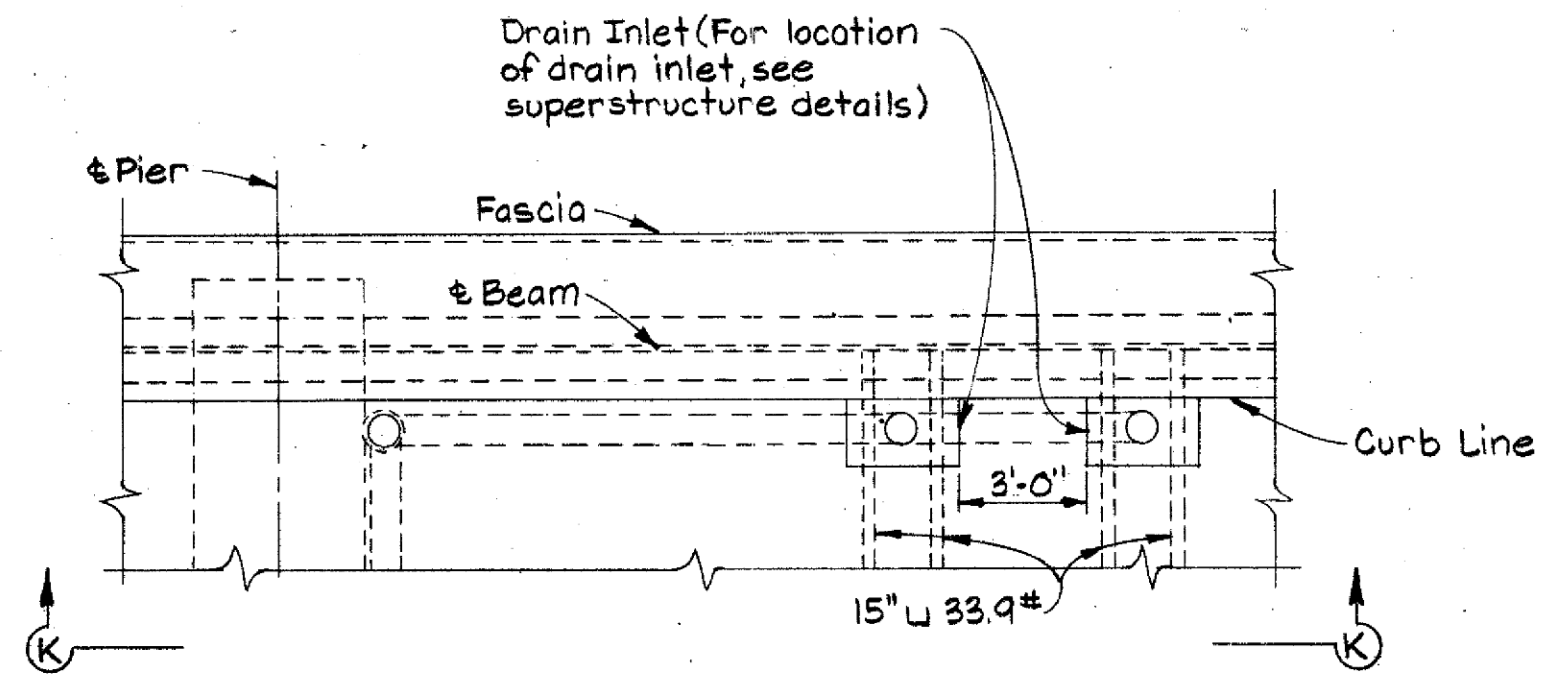
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DETAIL "D"
(Transverse section (looking south)
of upper deck at Pier No. 12A)

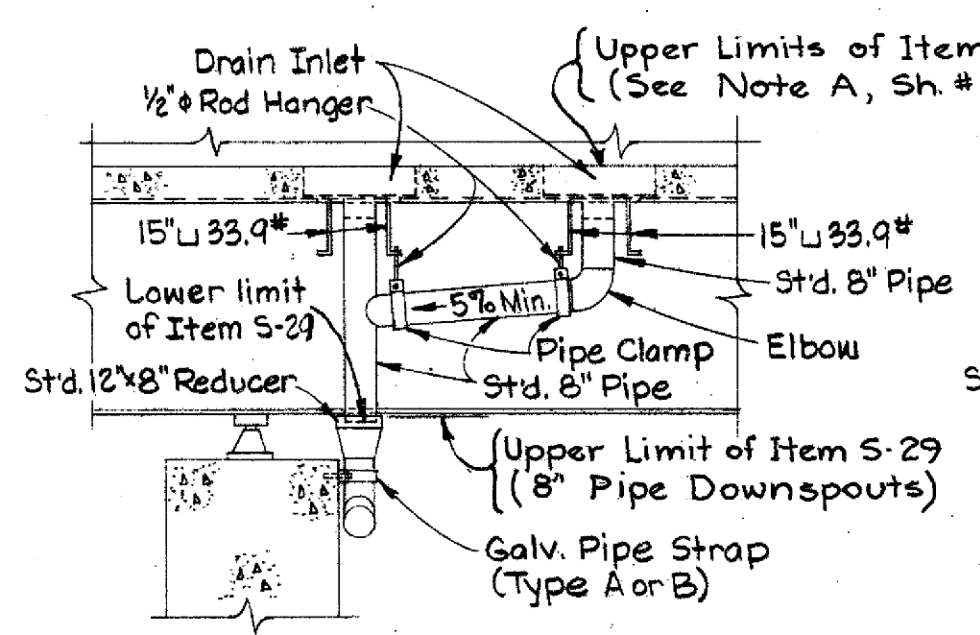


VIEW H-H
(For double inlet located near Pier)

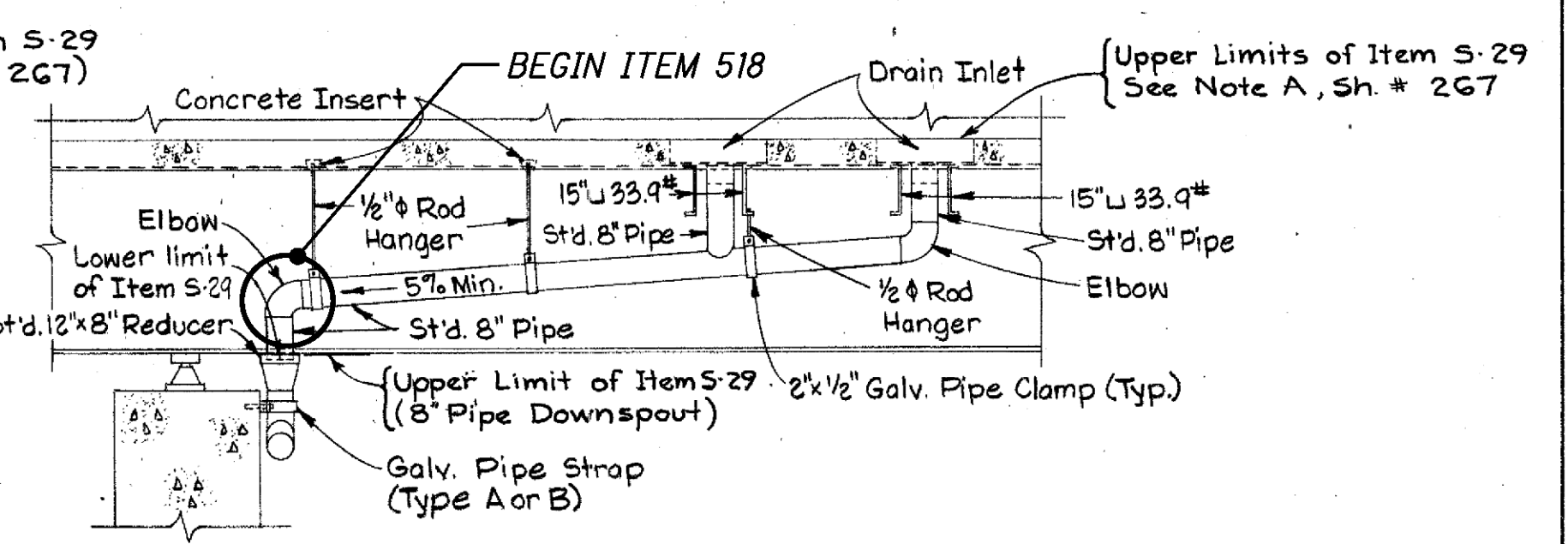


VIEW H-H
(For double inlet located in center of span)

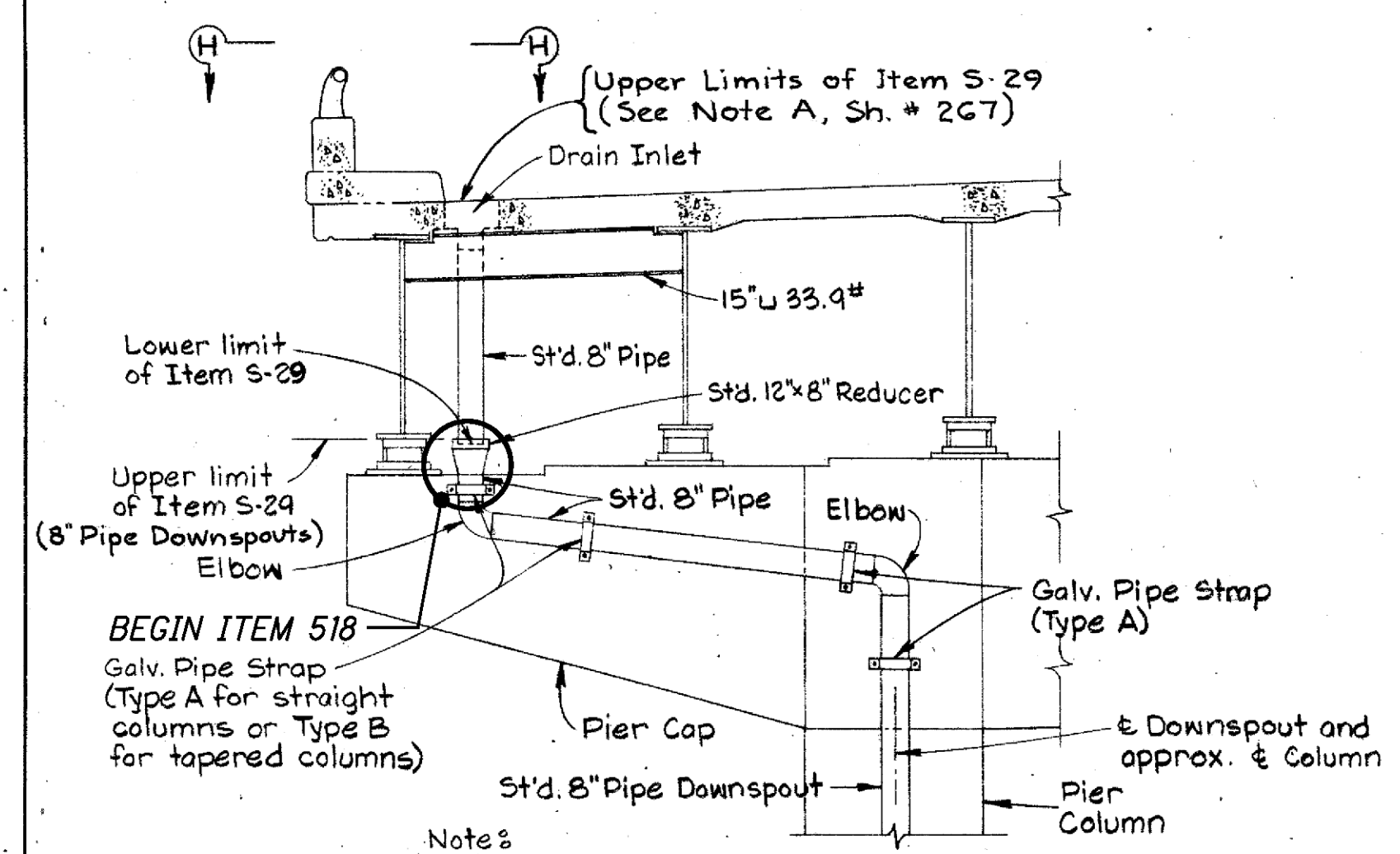
DETAIL "G"



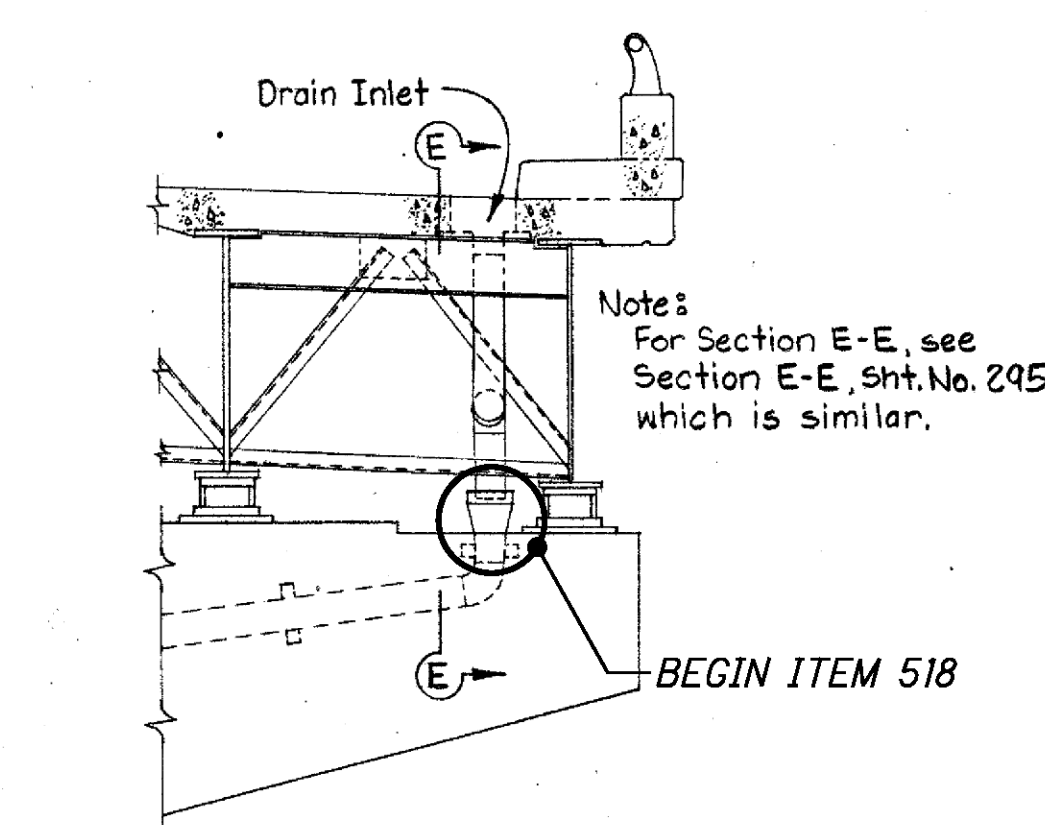
VIEW J-J



VIEW K-K



DETAIL "E"
(Typical detail for two-column or three-column pier, where drain inlet and downspout are located on same side of pier.)



DETAIL "F"
(Typical detail for two-column, three-column, or shaft-type pier, where drain inlet and downspout are located on opposite sides of pier.)

NOTE
EXISTING PLANS ARE FOR REFERENCE ONLY AND MAY NOT BE INDICATIVE OF ACTUAL DRAINAGE DETAILS. THE CONTRACTOR SHALL FIELD VERIFY ALL REMOVAL/REPLACEMENT QUANTITIES PRIOR TO ORDERING MATERIALS.

Work this sheet with Shts. Nos. 266, 267 & 269

HAZELET & ERDAL
CONSULTING ENGINEERS
CINCINNATI, OHIO

DRAINAGE DETAILS

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED DATE	REVISED
	JVK 6-15-60		W.S.C. 7-18-60	H.A.F. 10-12-60	

DESIGN AGENCY
CARPENTER MARTY
TRANSPORTATION
ENGINEERS
1485222 - CANTON, OHIO

DATE	REVIEWED	DRAWN	DESIGNED
3-11-15	GDJ	AMR	AMR
STRUCTURE FILE NUMBER	3105970	REVISED	CHECKED
		STK	STK

DRAINAGE DETAILS
BRIDGE NO. HAM-71-0000R
OVER MEHRING WAY, PETE ROSE WAY, RR, US42, US50 RAMPS, CENTRAL AVENUE

HAM-71/75-0.00/0.22
PID No. 97973

28/29

140
177

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