

FILE NAME = 302119.105.CPB.BOLSTER DETAILS.DGN  
DATE/TIME = 02-JAN-2014 09:17  
USER = rcollins

DESIGN SUPERVISOR JOHN SEXTON

JOB MANAGER KURT BOWER

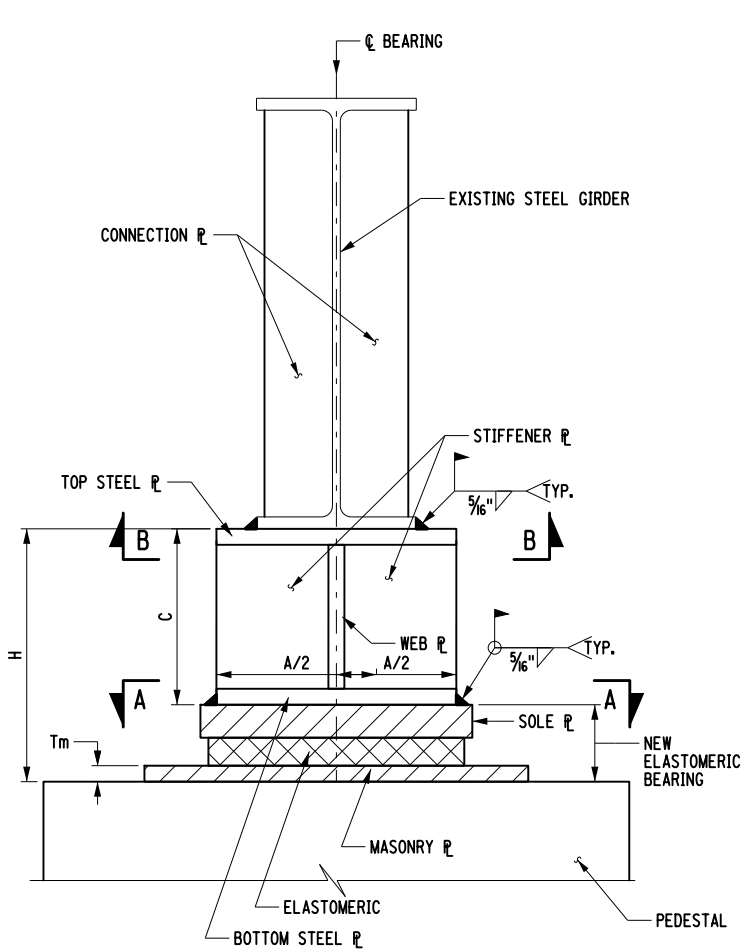
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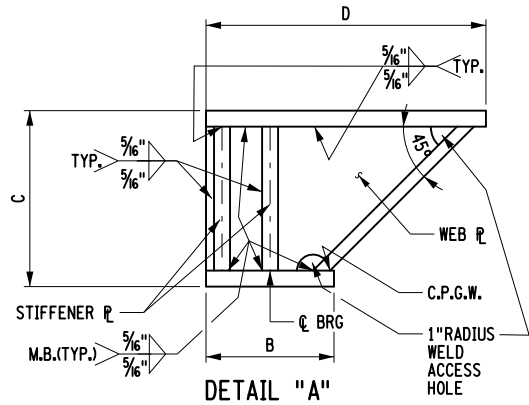
DRAFTING M. CHASE

CHECK KURT BOWER

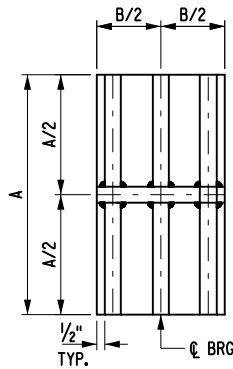
PROJECT MANAGER KURT BOWER



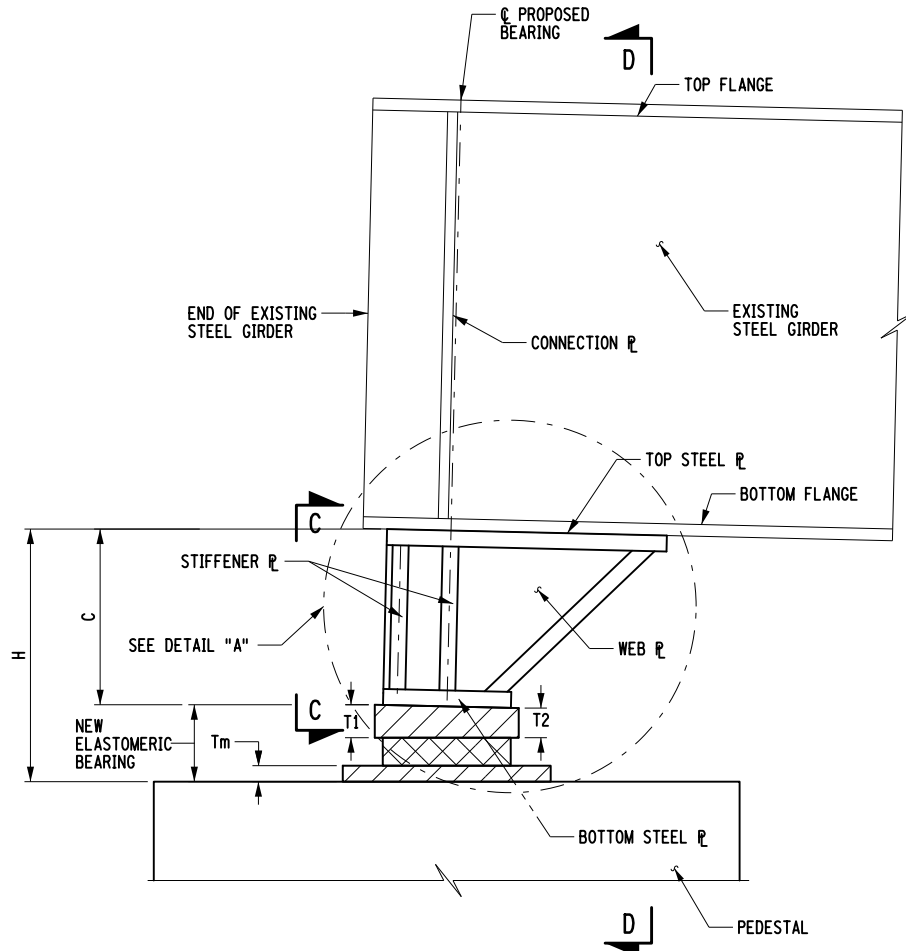
SECTION D-D  
(SIDE ELEVATION)



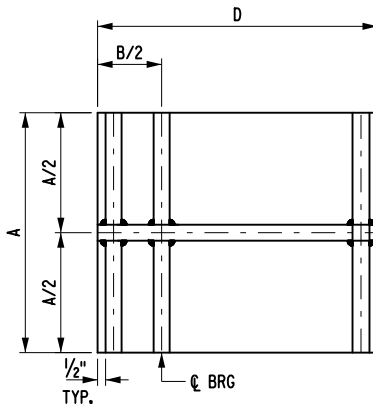
DETAIL "A"



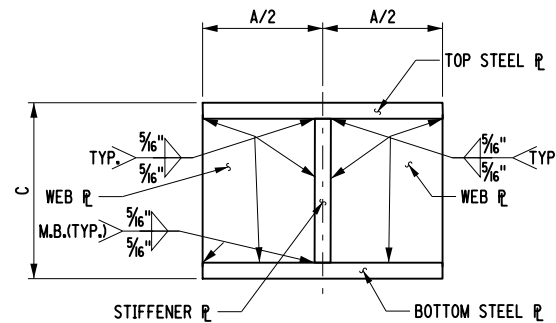
SECTION A-A  
BOTTOM PLATE



ELEVATION



SECTION B-B  
TOP PLATE



SECTION C-C

**BOLSTER FOR FIXED BEARING**

	A	B	C	T1	T2	Tm	H	D
PIER 4 (BRG 42 )	22	10	14 7/8	1 1/2	1 3/4	1.0	19 7/8	24
PIER 4 (BRG 43 )	22	10	14 3/4	1 1/2	1 3/4	1.0	19 3/4	24
PIER 4 (BRG 44 )	22	10	14 7/8	1 1/2	1 3/4	1.0	19 7/8	24

**BOLSTER FOR EXPANSION BEARING**

	A	B	C	T1	T2	Tm	H	D
PIER 9 (BRG 87 )	22	10	14 1/4	1 1/2	1 3/4	1.0	19 1/4	24
PIER 9 (BRG 88 )	22	10	14 3/8	1 1/2	1 3/4	1.0	19 3/8	24
PIER 9 (BRG 89 )	22	10	14 1/4	1 1/2	1 3/4	1.0	19 1/4	24

**NOTES:**

1. THE HEIGHT OF THE BOLSTERS SHALL BE FIELD VERIFIED WITH COPY TO EIC PRIOR TO MANUFACTURE.
2. ALL NEW STEEL FOR BOLSTERS, TO BE PAID FOR UNDER STRUCTURAL STEEL, TYPE 1, ITEM 564.0506. BOLSTERS TO BE PAINTED UNDER STRUCTURAL STEEL PAINTING: FIELD APPLIED, ITEM 573.010005.
3. ANY PAINTING OF THE BOLSTER AFTER FIELD WELDING SHALL BE PAID FOR UNDER ITEM 573.010001.
4. FOR BEARING LOCATIONS REFER TO DWG. NO. ST5-27 AND ST5-32.
5. ALL BOLSTER PLATES SHALL BE ASTM A709 GRADE 50 AND 1/8" THICK.



AFFIX SEAL:  
ON:

ALTERED BY:  
ON:

AS-BUILT REVISIONS  
DESCRIPTION OF ALTERATIONS:

S.H. NO. 8323 HALSEY CORNERS-SAVANNAH, PART 1

PIN 3021.19

BRIDGES  
4060410

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

CONTRACT NUMBER



BOLSTER DETAILS

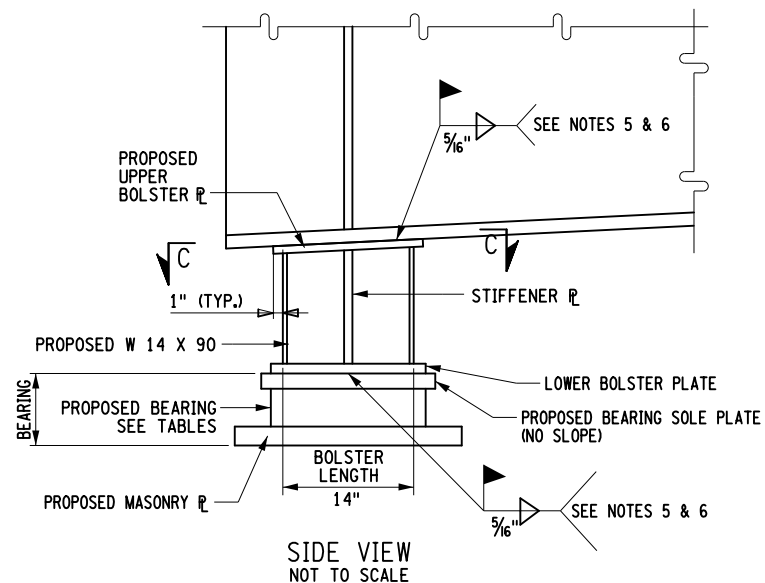
D262543

DRAWING NO. ST2-45

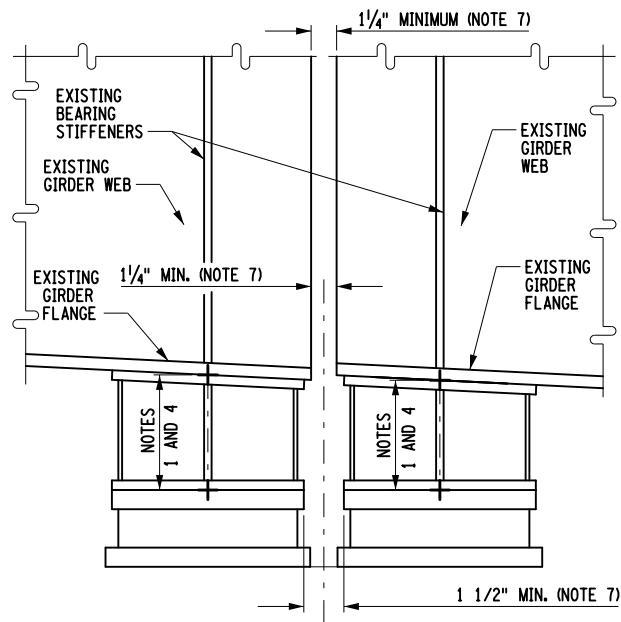
SHEET NO. 105

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REGION 03  
DOCUMENT NAME: 302119.105.CPB.BOLSTER DETAILS.DGN



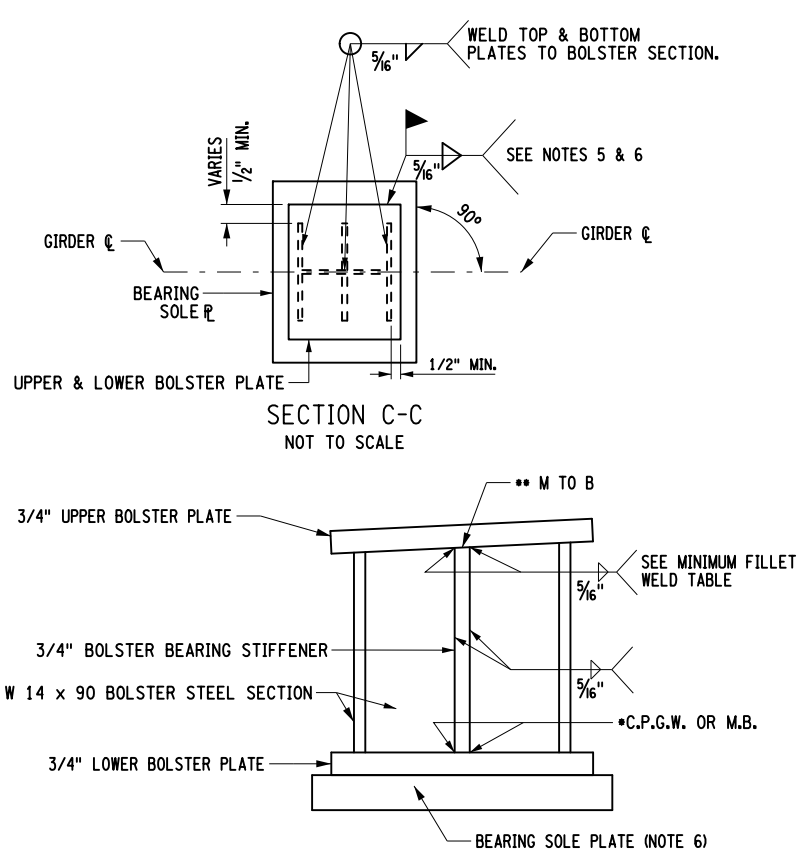
FOR THE REQUIRED FILLET WELD SIZE (X),  
SEE THE MINIMUM FILLET WELD SIZE TABLE  
ON THIS SHEET.



**TYPICAL NEW LOW BOLSTERS AT  
EXISTING HIGH ROCKER BEARINGS**  
(EXCEPT MAINLINE PIER 13- SEE BELOW)

FOR THE REQUIRED FILLET WELD SIZE (X),  
SEE THE MINIMUM FILLET WELD SIZE TABLE  
ON THIS SHEET.

NOT TO SCALE

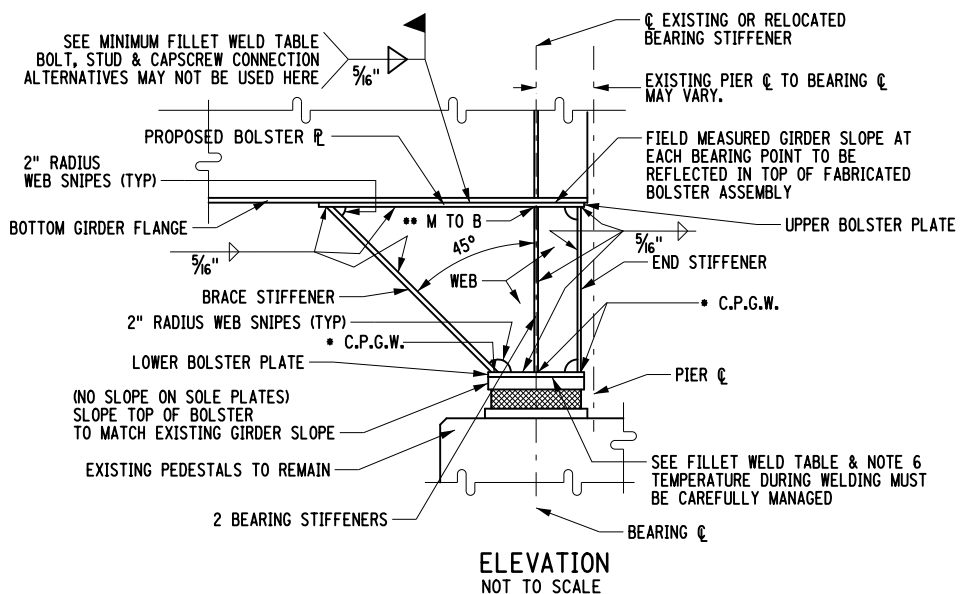


**TYPICAL STEEL COMPONENTS & STIFFENER WELDS**  
NOT TO SCALE

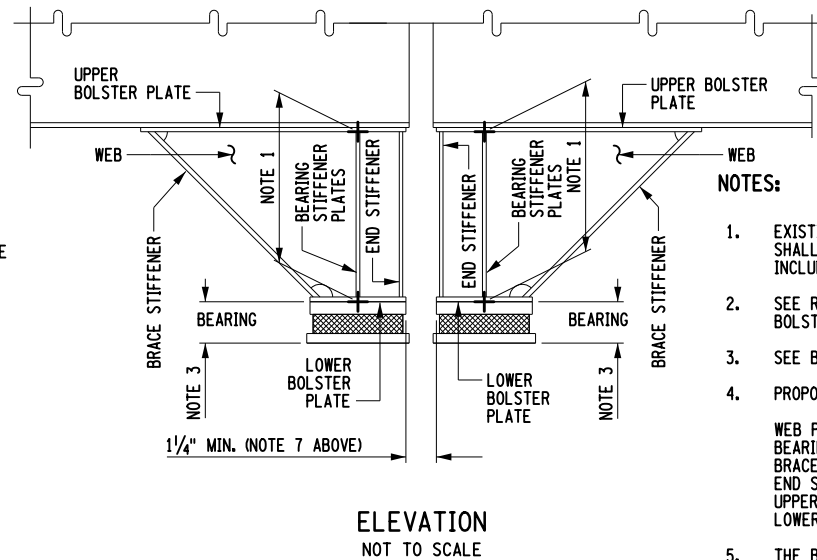
- NOTES:**
1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY FOR THE PROPER FIT OF STEEL COMPONENTS PRIOR TO THE FABRICATION OF THE BEARINGS & BOLSTERS. ALSO, THE EXISTING GIRDER SLOPES CANNOT BE RELIABLY DETERMINED FROM RECORD PLAN INFORMATION AND MUST BE FIELD VERIFIED. ALL FIELD MEASUREMENT COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM 625.01.
  2. THE BOLSTER STEEL SECTION OR WEB, BOLSTER STIFFENERS AND BOLSTER UPPER & LOWER PLATES ARE TO BE PAID FOR UNDER THE PRICE BID FOR ITEM 564.700001 - STRUCTURAL STEEL REPLACEMENT.
  3. THERE SHALL BE NO ADDITIONAL PAYMENT FOR CHANGES TO BOLSTER DIMENSIONS DUE TO THE ACTUAL BEARINGS THAT ARE SUPPLIED. THE CONTRACTOR SHALL COORDINATE SUCH CHANGES.
  4. SEE BEARING TABLES TO DETERMINE BOLSTER HEIGHT & DIMENSIONS.
  5. BOLT STUD AND CAPSCREW UPPER BOLSTER PLATE CONNECTIONS TO THE BOTTOM GIRDER FLANGE ARE NOT ACCEPTABLE AS BOLSTERS & BEARINGS MAY REQUIRE FUTURE RELOCATION ALONG THE GIRDER. SEE DRAWING MSD-5 FOR OPTIONS AT THE LOWER BOLSTER PLATE CONNECTION TO THE BEARING SOLE PLATE.
  6. THE CONTRACTOR HAS THE OPTION OF SHOP WELDING OR FIELD WELDING THE LOWER BOLSTER PLATE TO THE BEARING SOLE PLATE. SOLE PLATE TEMPERATURE DURING THE WELDING PROCESS MUST BE CONTROLLED TO PROTECT HEAT SENSITIVE BEARING COMPONENTS. SEE LIMITED FASTENER OPTIONS ON DRAWING MSD-5
  7. MINIMUM OPERATIONAL CLEARANCE BETWEEN ALL STEEL SUPER-STRUCTURE AND STEEL JOINT & BEARING COMPONENTS SHALL BE 1/4". SEE STEEL REPAIR DETAIL DRAWING FOR DETAIL AND NOTES ON DRAWING NO. ST-18.
  8. \* C.P.G.W = COMPLETE PENETRATION GROOVE WELD  
\*\* M TO B = MILL TO BEAR
  9. ALL COSTS TO REMOVE & DISPOSE OF EXISTING HIGH ROCKER (& LOW BEARINGS) SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 589.520008 WESTBOUND & EASTBOUND
  10. FOR BIDDING PURPOSES ONLY-THE CONTRACTOR SHALL ASSUME THE TYPICAL LOW BOLSTER TO CONSIST OF A 9 INCH LONG W14 X 90 BOLSTER SECTION & (2) 7"x9"x3/4" BEARING STIFFENERS WITH A TOP PLATE OF 16"x16"x3/4" AND A BOTTOM PLATE OF 16"x16"x3/4". THE BOLSTERS WILL BE PAID FOR UNDER ITEM 564.700001.
  11. PEDESTALS ARE TO BE REBUILT ON PIERS 4, 5 AND 6. NO BOLSTERS ARE NECESSARY.
  12. ALL NEW BOLSTER SHALL BE PAINTED UNDER ITEM 572.010001 FOR WESTBOUND AND ITEM 572.010002 FOR EASTBOUND.

X = MINIMUM SIZE FILLET WELDS	
MATERIAL THICKNESS OF THICKER PART JOINED	MINIMUM SIZE FILLET WELD (X)
TO 1 1/2" INCLUSIVE	5/16"
1 1/2" TO 2 1/4"	3/8"
2 1/4" TO 6.00"	1/2"
OVER 6.00"	5/8"

**MINIMUM FILLET WELD SIZE TABLE**



**ELEVATION  
NOT TO SCALE**



**ELEVATION  
NOT TO SCALE**

**NOTES:**

1. EXISTING MAINLINE BOLSTERS AT PIER 13 EASTBOUND & WESTBOUND SHALL BE REMOVED AND DISPOSED OF. ALL COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM 589.520001
2. SEE RECORD PLAN SWE 67-1 SHEET 145 FOR EXISTING BOLSTER DETAILS AT PIER 13
3. SEE BEARING TABLES TO DETERMINE PROPOSED BOLSTER HEIGHTS
4. PROPOSED PIER 13 MAINLINE BOLSTER PLATE THICKNESSES:  

WEB PLATE	3/4"
BEARING STIFFENERS	3/4"
BRACE STIFFENERS	3/4"
END STIFFENERS	3/4"
UPPER BOLSTER PLATE	3/4"
LOWER BOLSTER PLATE	3/4"
5. THE BOLSTER STEEL SECTION OR WEB, BOLSTER STIFFENERS AND BOLSTER UPPER & LOWER PLATES ARE TO BE PAID FOR UNDER THE PRICE BID FOR ITEM 564.700001 - STRUCTURAL STEEL REPLACEMENT.
6. THERE ARE ALSO 14 TYPICAL LOW BOLSTERS PROPOSED AT PIER 13
7. ALL NEW BOLSTER SHALL BE PAINTED UNDER ITEM 572.010001 FOR WESTBOUND AND ITEM 572.010002 FOR EASTBOUND.

AFFIX SEAL:  
ON: 8/6/15

ALTERED BY:  
ON:



AS-BUILT REVISIONS  
DESCRIPTION OF ALTERATIONS:

SMA BRIDGES FROM I-787 TO EMPIRE STATE PLAZA RAMPS  
F.A.M.A.C. 67-2, INTERSTATE ROUTE CONNECTION 540  
CITY OF ALBANY  
COUNTY: ALBANY REGION: 01

PIN 1051.71

BRIDGES  
1-09298-1  
1-09298-2

CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED  
COMMON DETAILS  
BOLSTER DETAILS & BEARING & BOLSTER  
ATTACHMENT

CONTRACT NUMBER  
D263014  
DRAWING NO. MSD-4  
SHEET NO. 89

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



**Department of  
Transportation**

FILE NAME = 005926\_cpb-71.dfl\_brg4.dgn  
DATE/TIME = 17-APR-2018 14:32  
USER = mcar-tagenes

DESIGN SUPERVISOR T. SOKA

JOB MANAGER R. HUDA

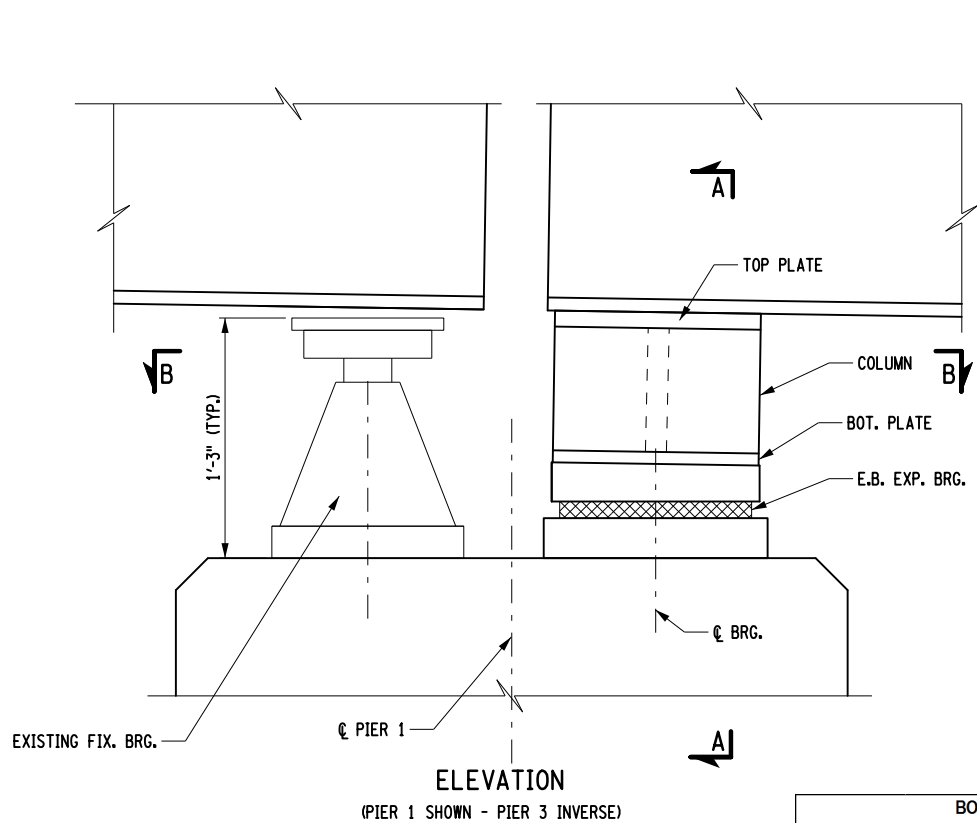
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CHECK HUDA/CARTAGENES

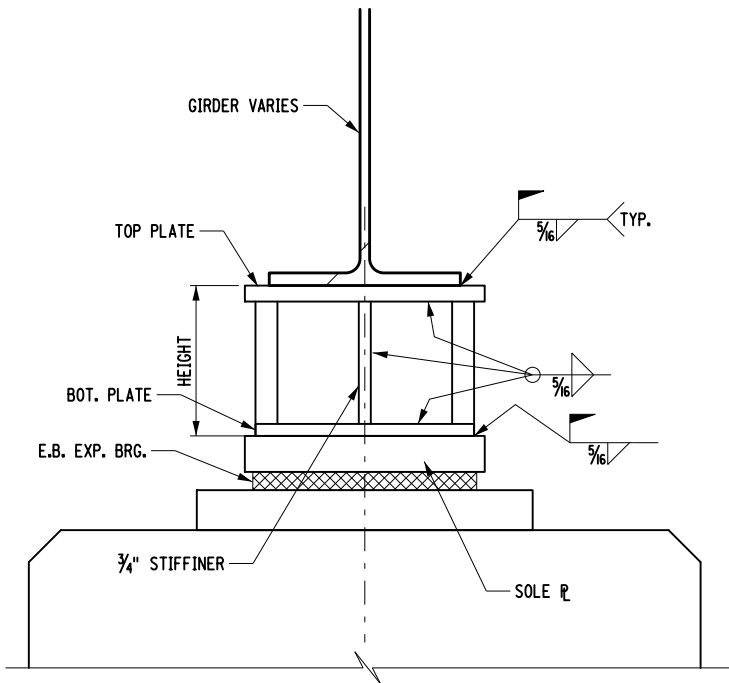
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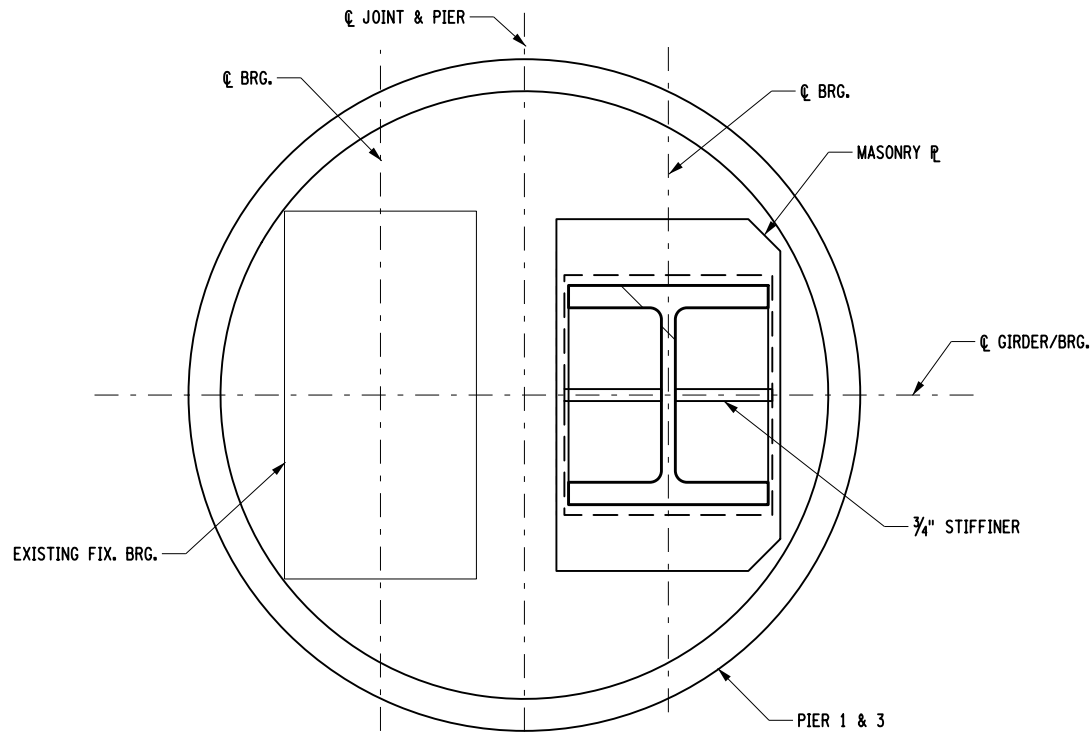
PROJECT MANAGER R. KUDLA



LOW BOLSTER DETAIL "A"



SECTION A-A



SECTION B-B

NOTE:  
BEAMS NOT SHOWN  
FOR CLARITY.

EXPANSION ELASTOMERIC BEARING (TYPE E.B.) TABLE																																
LOCATION	ITEM NO.	QUANTITY REQUIRED	DL + SDL (Kips)	LL W/O IMP. (Kips)	TOTAL DESIGN REACTION (Kips)	SHAPE FACTOR	ELASTOMER LAYERS					hrt (in)	COMP. AREA (sq. in)	SHEAR AREA (sq. in)	MASONRY PLATE								ANCHOR STUDS		WELD SIZE	WASHER PLATE		SOLE PLATE				BRG. H
							THK/LAYER	N LAYERS	L	W	D				Tm	Wm	Lm	Et	El	Ez	Am	Bm				DIA.	STUDS/BRG	Awp	Bwp	Ws	Ls	
BEG. ABUT. - SPAN 1	565.2023	6	40	90	130	6.46	0.5	3	12.0	14.0	---	1.5	162	168	1.00	22.00	14.00	2.00	7.00	1.50	2.50	1.38	1.00	2	0.313	3.50	2.38	15	13	1.50	1.76	4.38
PIER 1 - SPAN 2	565.2024	6	68	125	193	7.37	0.5	5	13.0	17.0	---	2.5	214	221	1.00	25.00	15.00	2.00	7.50	1.50	2.50	1.38	1.00	2	0.313	3.50	2.38	18	14	1.50	1.68	5.59
PIER 3 - SPAN 3	565.2024	6	90	112	202	7.37	0.5	5	13.0	17.0	---	2.5	214	221	1.00	25.00	15.00	2.00	7.50	1.50	2.50	1.38	1.00	2	0.313	3.50	2.38	18	14	1.68	1.50	5.59
END ABUT. - SPAN 4	565.2023	6	40	90	130	6.46	0.5	3	12.0	14.0	---	1.5	162	168	1.00	22.00	14.00	2.00	7.00	1.50	2.50	1.38	1.00	2	0.313	3.50	2.38	15	13	1.76	1.50	4.38

LONGITUDINAL SECTION

BOLSTER		
ITEM 564.0501 - STRUCTURAL STEEL, TYPE 1		
	ABUTMENTS	PIERS 1 & 3
TOP PLATE	14" X 13" X 1"	18.75" X 14" X 1"
COLUMN	W12 X 106	W12 X 170
BOT. PLATE	12.9" X 13" X 1"	14" X 14" X 1"
↑ HEIGHT	10.63"	9.41"
↑ TOTAL HEIGHT OF BOLSTER		

ITEM 586.0202	
DRILLING AND GROUTING BOLTS OR REINFORCEMENT BARS	
BEGIN ABUT.	12 EACH
PIER 1	12 EACH
PIER 3	12 EACH
END ABUT.	12 EACH
48 EACH	



AS-BUILT REVISIONS  
DESCRIPTION OF ALTERATIONS:

REHABILITATION OF THE SUNRISE HIGHWAY (NY27)  
VARIOUS LOCATIONS  
TOWNS OF ISLIP, BABYLON, & BROOKHAVEN

COUNTY: SUFFOLK REGION: 10

PIN 0T1880

BRIDGES  
1056150  
1056320  
1056520

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

BEARING DETAILS  
3 OF 3  
NY 27 EASTBOUND COLLECTOR-DISTRIBUTOR RD  
OVER  
COUNTY ROAD 51

CONTRACT NUMBER  
D263752

DRAWING NO. ST2-11  
SHEET NO. 106

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NEW YORK  
STATE OF  
OPPORTUNITY.  
Department of  
Transportation

FILE NAME = 105177\_cpb\_dfl.bol.dgn  
DATE/TIME = 03-OCT-2019 13:48  
USER = jecters1

DESIGN SUPERVISOR J. FREDERICKS

JOB MANAGER J. MCGURN

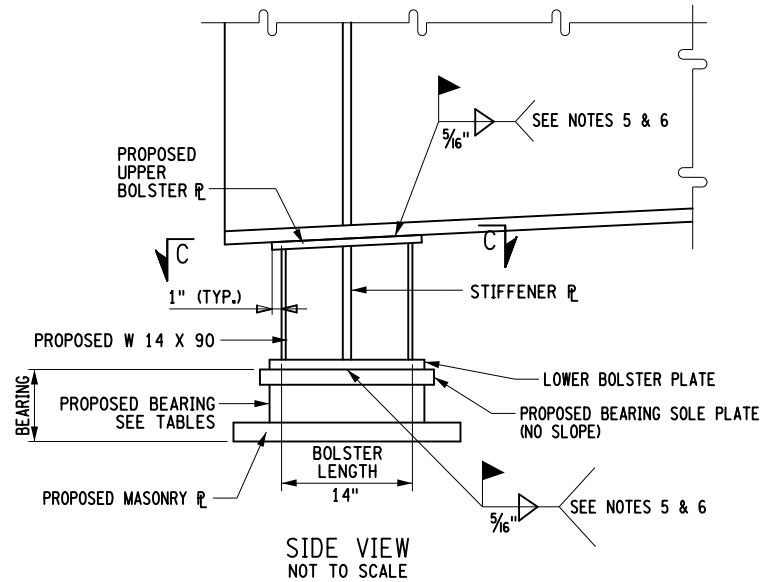
DESIGN J. WATERS

CHECK

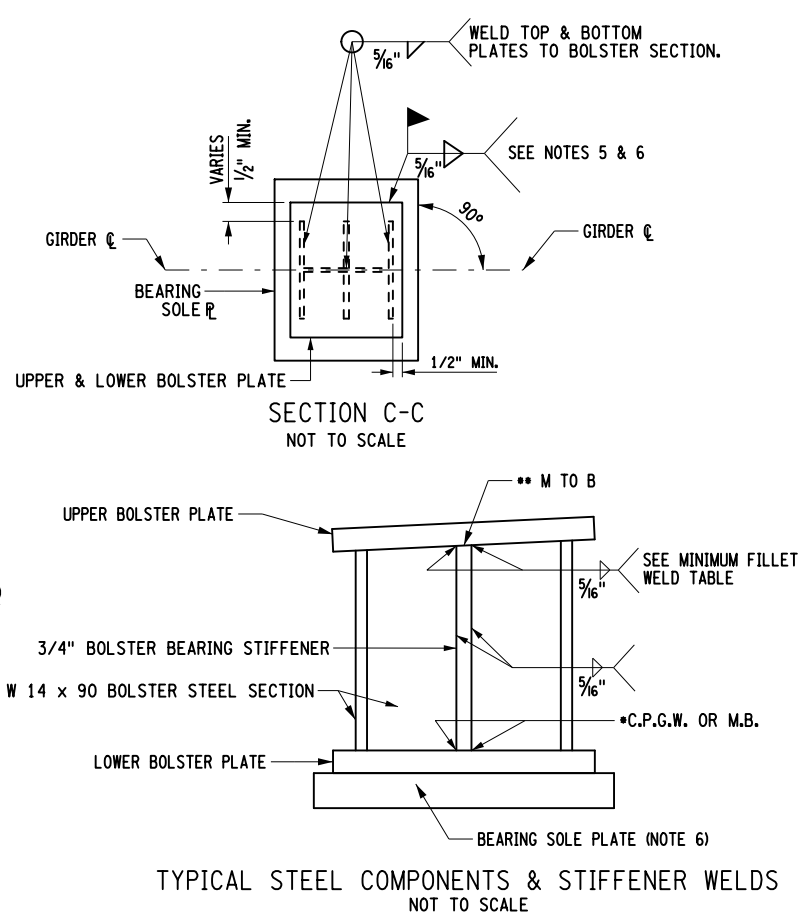
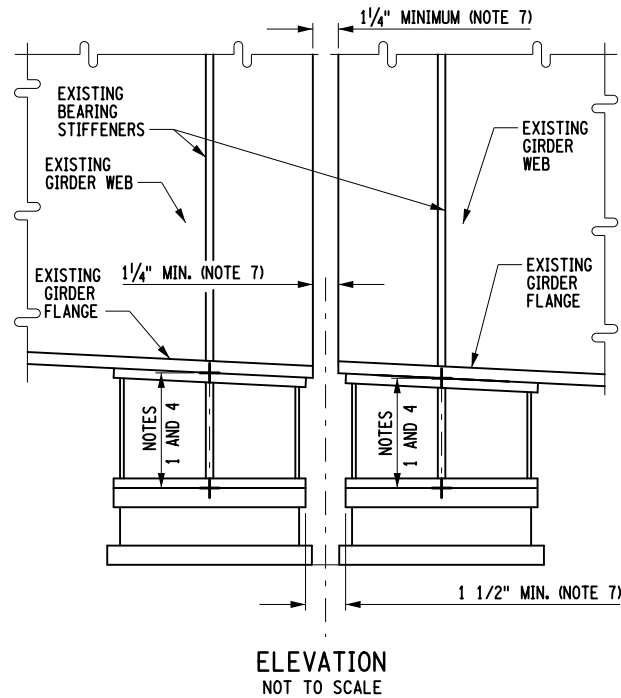
DRAFTING

CHECK

PROJECT MANAGER J. MCGURN



FOR THE REQUIRED FILLET WELD SIZE (X),  
SEE THE MINIMUM FILLET WELD SIZE TABLE  
ON THIS SHEET.



- NOTES:
1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY FOR THE PROPER FIT OF STEEL COMPONENTS PRIOR TO THE FABRICATION OF THE BEARINGS & BOLSTERS. ALSO, THE EXISTING GIRDER SLOPES CANNOT BE RELIABLY DETERMINED FROM RECORD PLAN INFORMATION AND MUST BE FIELD VERIFIED. ALL FIELD MEASUREMENT COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM 625.01.
  2. THE BOLSTER STEEL SECTION OR WEB, BOLSTER STIFFENERS AND BOLSTER UPPER & LOWER PLATES ARE TO BE PAID FOR UNDER THE PRICE BID FOR ITEM 564.700001 - STRUCTURAL STEEL REPLACEMENT.
  3. THERE SHALL BE NO ADDITIONAL PAYMENT FOR CHANGES TO BOLSTER DIMENSIONS DUE TO THE ACTUAL BEARINGS THAT ARE SUPPLIED. THE CONTRACTOR SHALL COORDINATE SUCH CHANGES.
  4. SEE BEARING TABLES TO DETERMINE BOLSTER HEIGHT & DIMENSIONS.
  5. BOLT STUD AND CAPSCREW UPPER BOLSTER PLATE CONNECTIONS TO THE BOTTOM GIRDER FLANGE ARE NOT ACCEPTABLE AS BOLSTERS & BEARINGS MAY REQUIRE FUTURE RELOCATION ALONG THE GIRDER.
  6. THE CONTRACTOR HAS THE OPTION OF SHOP WELDING OR FIELD WELDING THE LOWER BOLSTER PLATE TO THE BEARING SOLE PLATE. SOLE PLATE TEMPERATURE DURING THE WELDING PROCESS MUST BE CONTROLLED TO PROTECT HEAT SENSITIVE BEARING COMPONENTS.
  7. MINIMUM OPERATIONAL CLEARANCE BETWEEN ALL STEEL SUPER-STRUCTURE AND STEEL JOINT & BEARING COMPONENTS SHALL BE 1/4".
  8. • C.P.G.W. = COMPLETE PENETRATION GROOVE WELD  
• M TO B = MILL TO BEAR
  9. ALL BEARING REMOVAL WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REMOVAL OF EXISTING STEEL, ITEM 589.520001.
  10. ALL NEW BOLSTER SHALL BE PAINTED UNDER ITEM 572.020001.

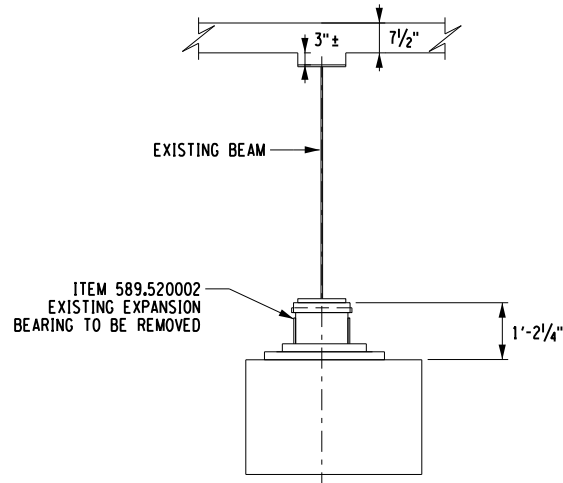
X = MINIMUM SIZE FILLET WELDS	
MATERIAL THICKNESS OF THICKER PART JOINED	MINIMUM SIZE FILLET WELD (X)
TO 1 1/2" INCLUSIVE	5/16"
1 1/2" TO 2 1/4"	3/8"
2 1/4" TO 6.00"	1/2"
OVER 6.00"	5/8"

MINIMUM FILLET WELD SIZE TABLE

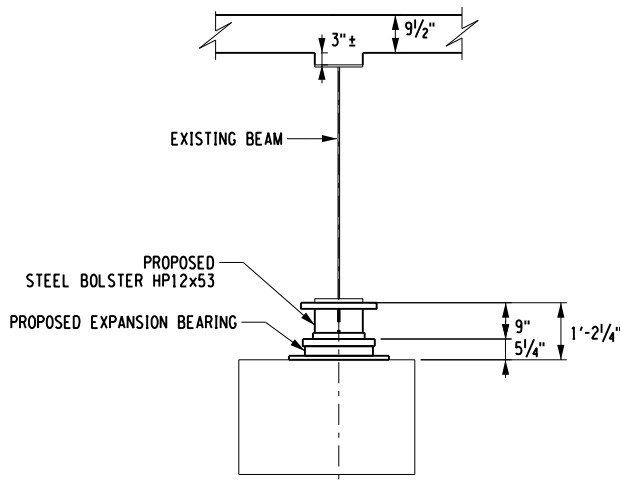
AFFIX SEAL: JEFFREY KEVIN MCGURN ON: 10/17/19	ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	I-787 NB RAMP TO SMA WB - RAMP 'AC'	PIN 1051.77	BRIDGES 1-09299-A	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER D264105
	C 70-4, INTERSTATE ROUTE CONNECTION 540					DRAWING NO. ST1-42
	CITY OF ALBANY					SHEET NO. 109
	COUNTY: ALBANY REGION: 01					
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						Department of Transportation

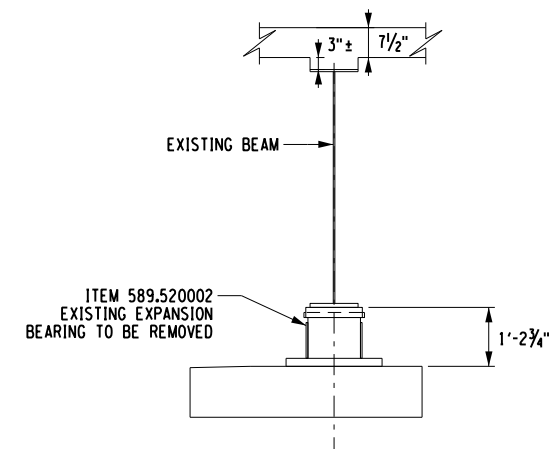
DESIGN SUPERVISOR C. TUTUNJIAN  
JOB MANAGER M. HUNT  
DESIGN L. SHORT  
CHECK M. HUNT  
DRAFTING K. DETRICK  
CHECK A. BROWN  
PROJECT MANAGER C. TUTUNJIAN



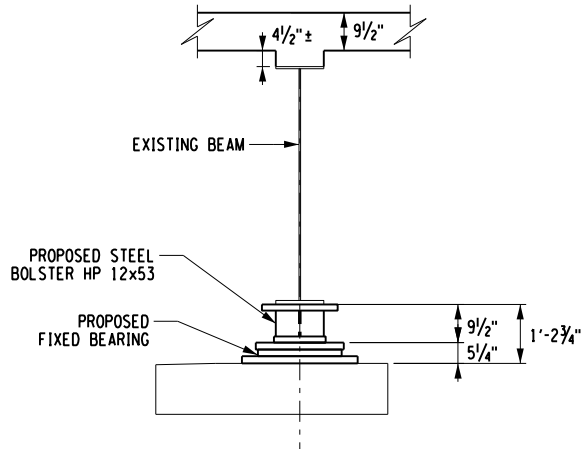
EXISTING ABUTMENT PEDESTAL  
PEDESTALS G1 THRU G4  
AND PEDESTALS G5 THRU G8



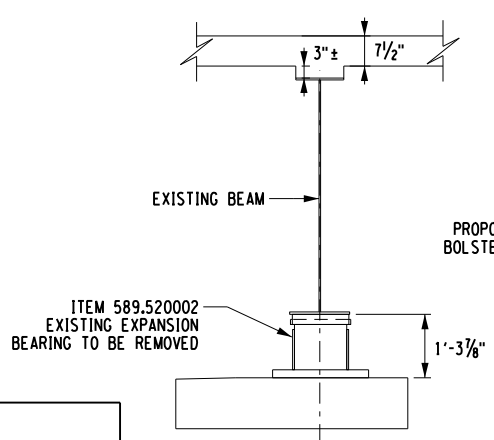
PROPOSED ABUTMENT PEDESTAL  
PEDESTALS G1 THRU G4  
AND PEDESTALS G5 THRU G8



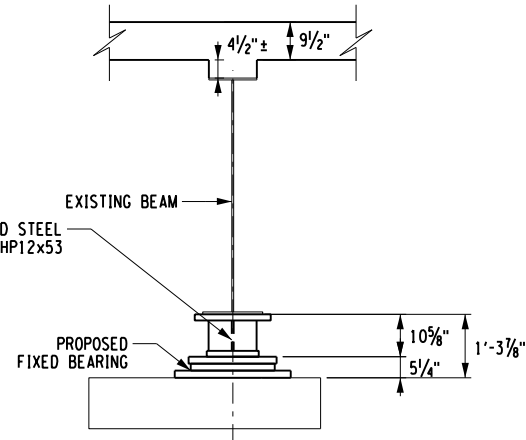
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PEDESTALS G11 THRU G4



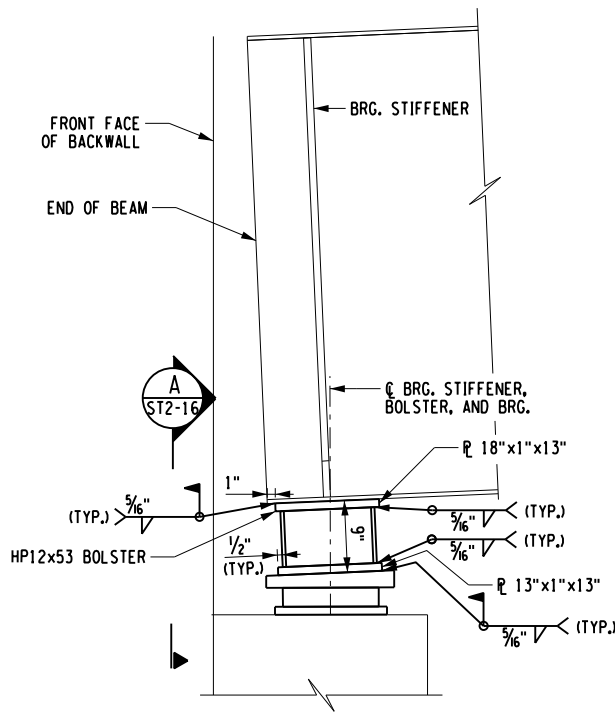
PROPOSED PIER PEDESTAL  
PEDESTALS G1 THROUGH G4



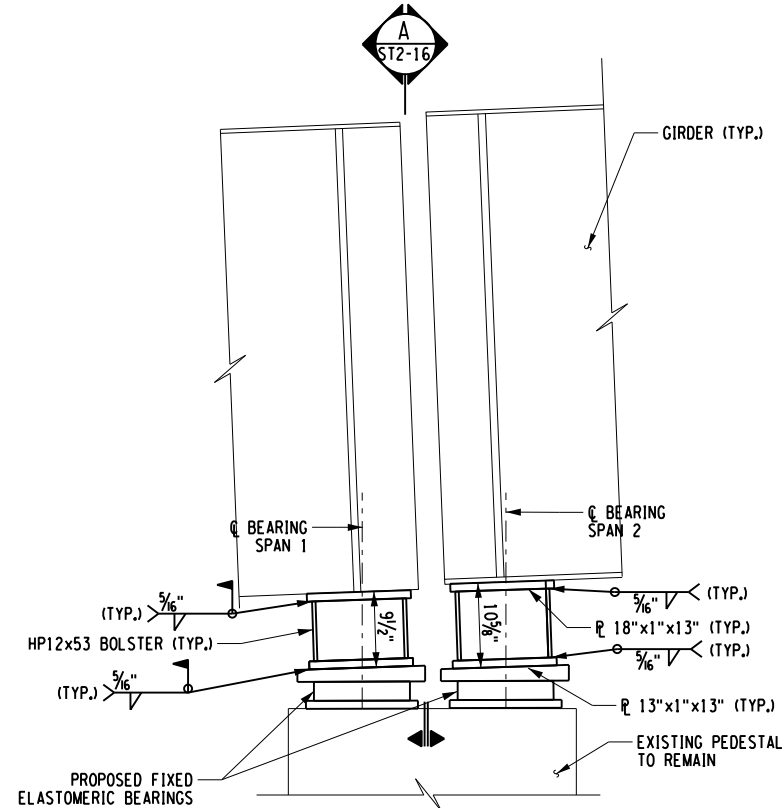
EXISTING PIER PEDESTAL  
PEDESTALS G5 THROUGH G8



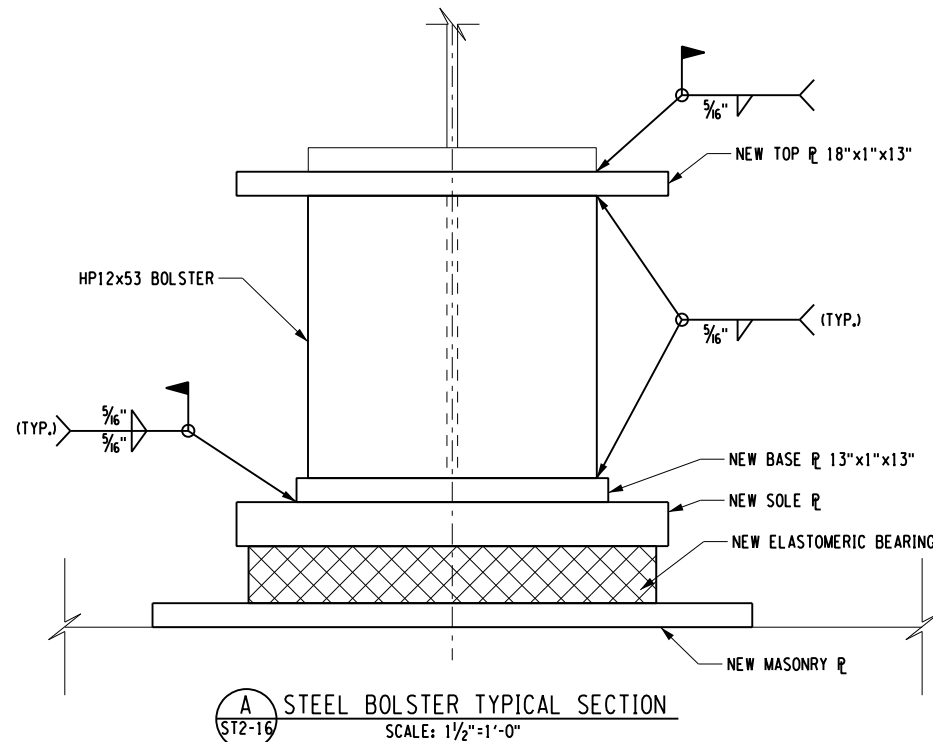
PROPOSED PIER PEDESTAL  
PEDESTALS G5 THRU G8



BEGIN/END ABUTMENT BOLSTER ELEVATION  
SCALE: 1/2" = 1'-0"



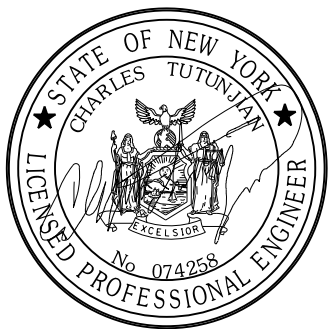
PIER BOLSTER ELEVATION  
SCALE: 1/2" = 1'-0"



STEEL BOLSTER TYPICAL SECTION  
SCALE: 1/2" = 1'-0"



PREPARED BY: CHARLES TUTUNJIAN, P.E.  
ON: 9/5/2019  
ALTERED BY:  
ON:



AS-BUILT REVISIONS  
DESCRIPTION OF ALTERATIONS:

MULTI-SITE BRIDGE REHABILITATION  
ACCESS US 9/SH22 OVER I-87

PIN 1722.66  
UTILITY QUALITY LEVEL C

BRIDGES  
BIN 1054220

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

CONTRACT NUMBER  
D264121

PEDESTAL MODIFICATION DETAILS  
ACCESS US 9/SH22 OVER I-87

DRAWING NO. ST2-16  
SHEET NO. 97

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.



Department of  
Transportation

FILE NAME = 906777.dgn  
DATE/TIME = 10-SEP-2019 11:55  
USER = mperterra

DESIGN SUPERVISOR A. CLARK

JOB MANAGER M. PERTERRA

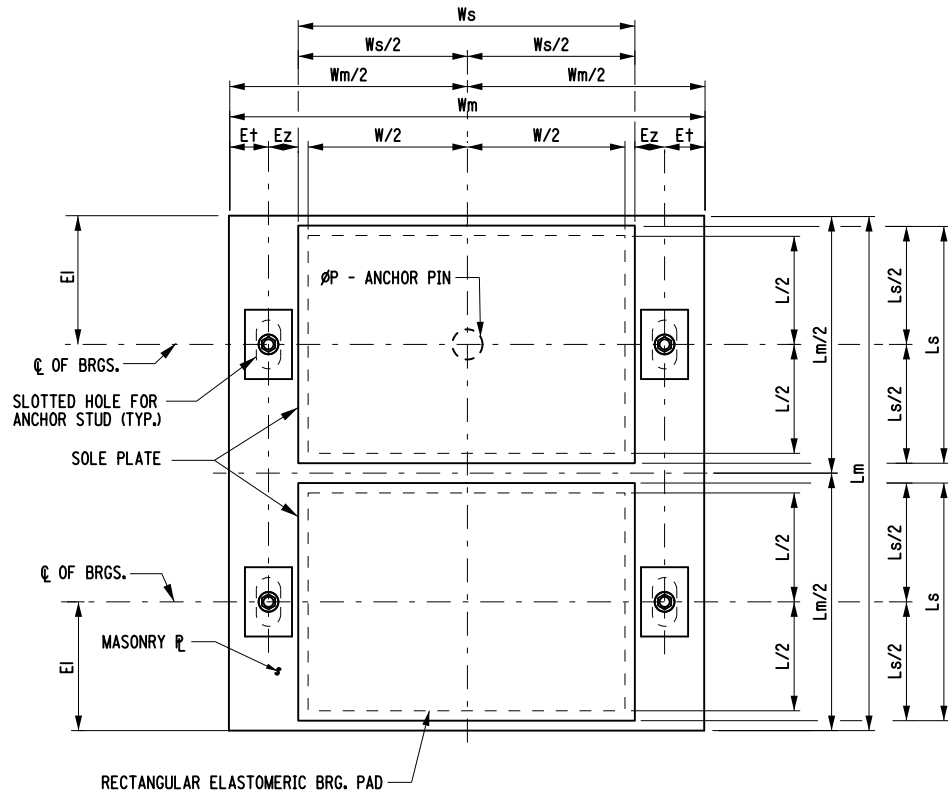
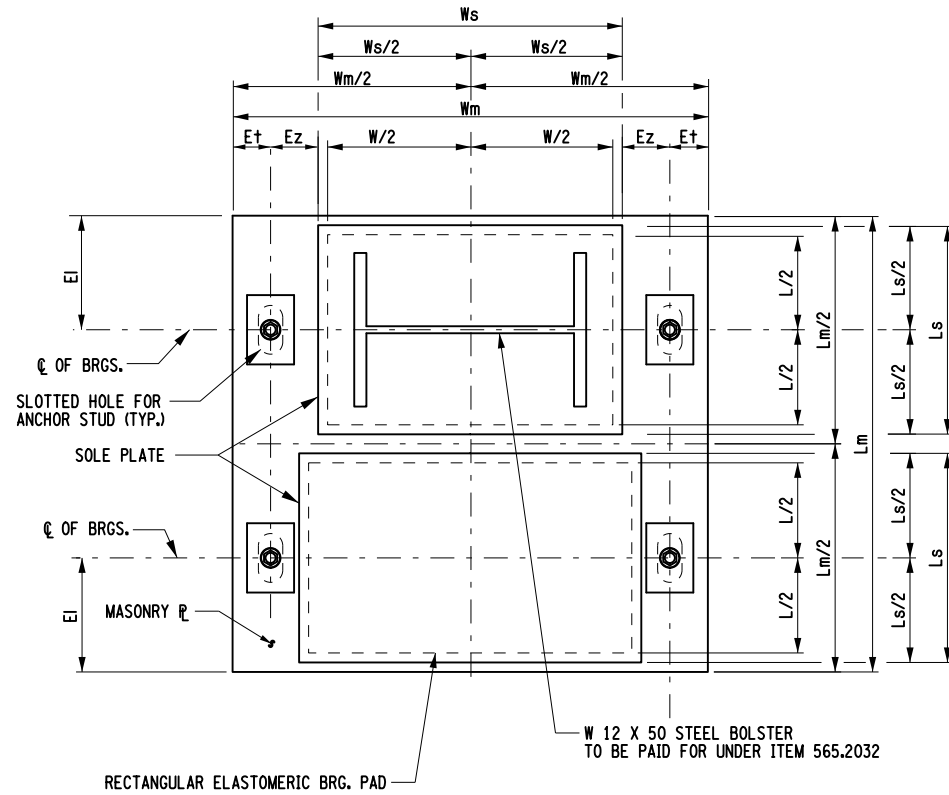
DESIGN J. ROSS

CHECK A. RIEDMAN

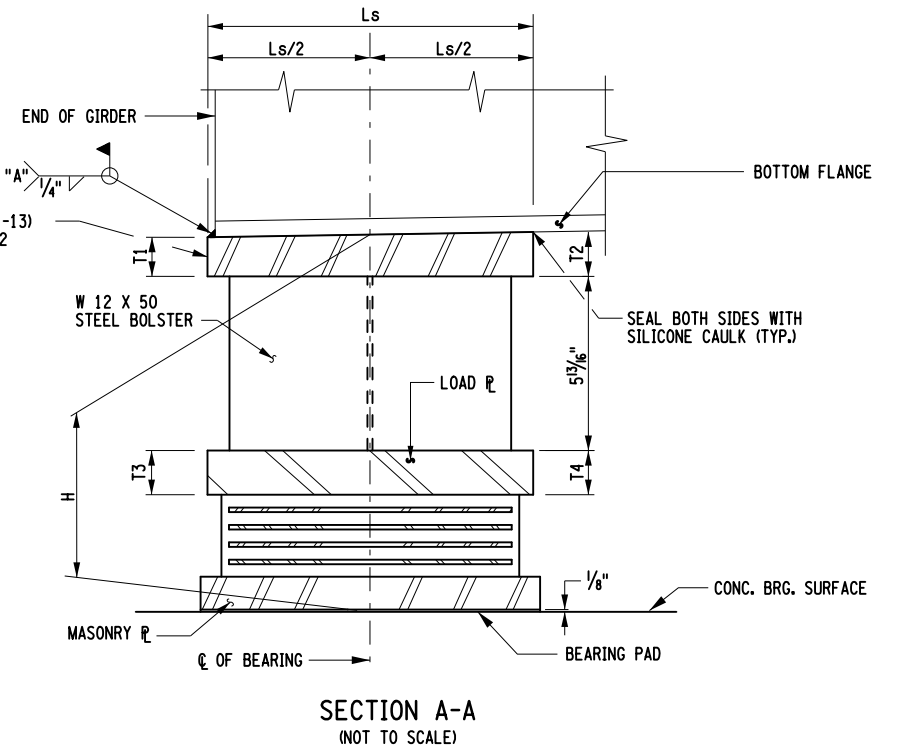
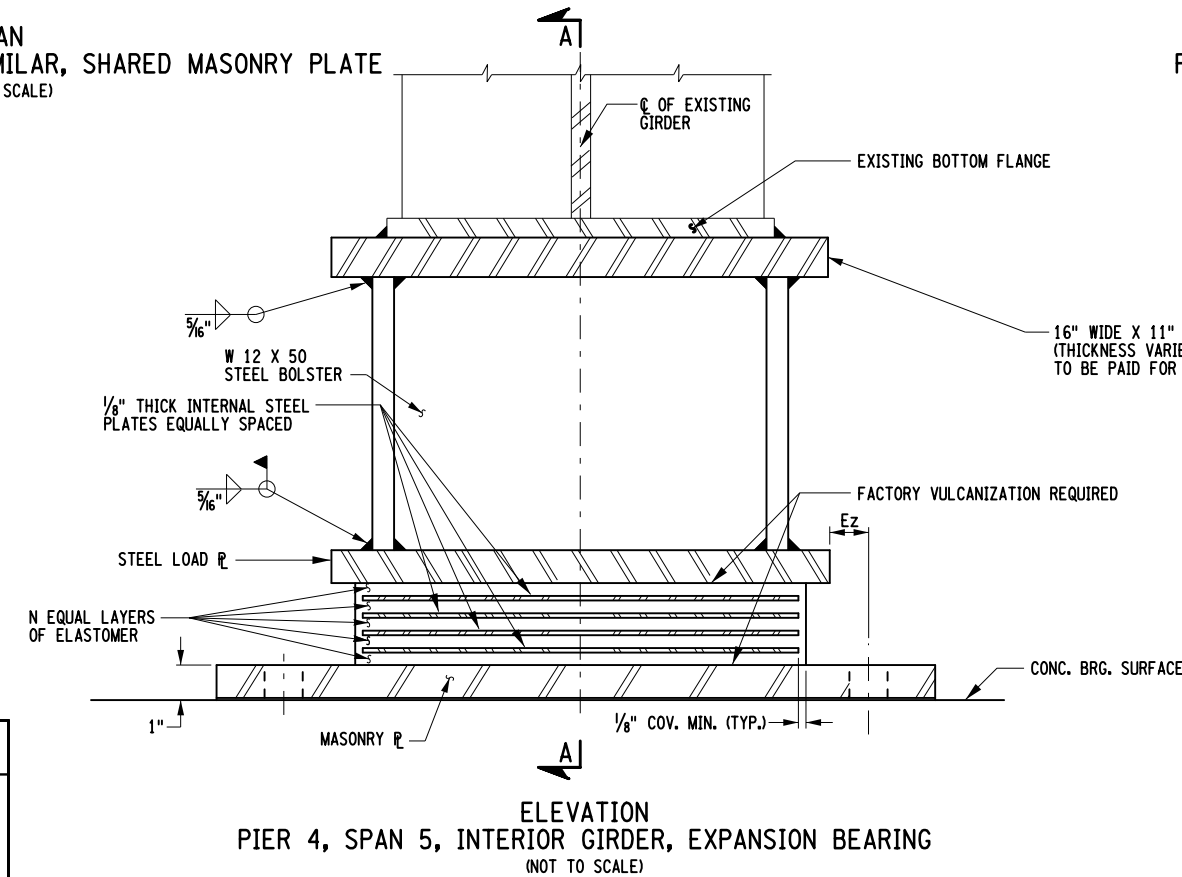
DRAFTING E. HERRIZ

CHECK J. ROSS

PROJECT MANAGER J. HAMLIN



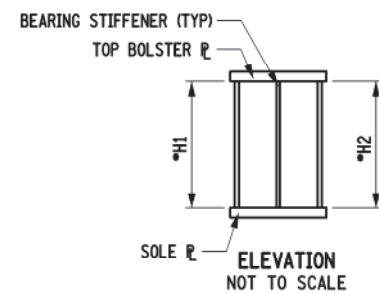
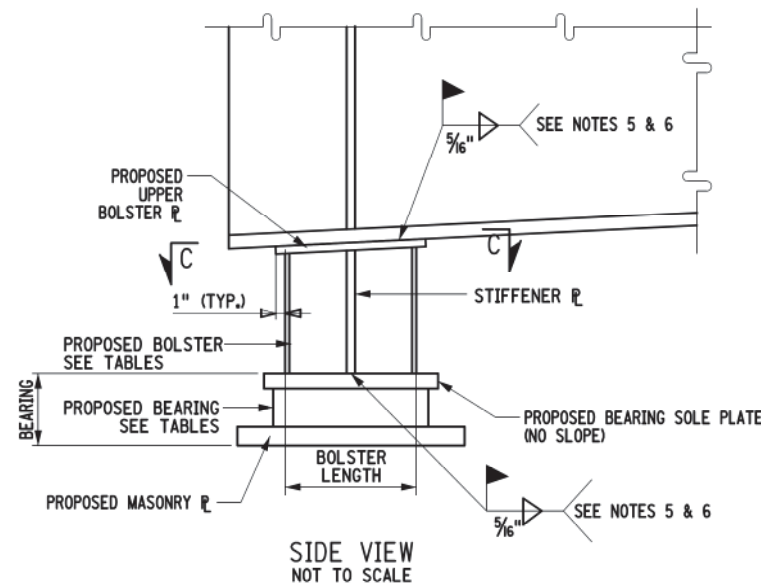
- NOTES:
- THE BEARINGS SHALL MEET THE REQUIREMENTS OF STANDARD SPECIFICATION SECTION 565 UNLESS OTHERWISE NOTED.
  - ALL ELASTOMER SHALL BE 50 DUROMETER HARDNESS ON THE SHORE A SCALE.
  - THE STEEL BOLSTERS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARING ITEM.
  - BEARINGS SHALL BE ORIENTED SUCH THAT THE SOLE PLATE HAS THICKNESS T2 SOUTH OF T1, WHILE THE LOAD PLATE HAS THICKNESS T4 SOUTH OF T3.
  - FOR TABLE DIMENSIONS, SEE DWG. NO. ST1-12 AND ST1-13.
  - FOR NOTE "A", SEE DWG. NO. ST1-12.



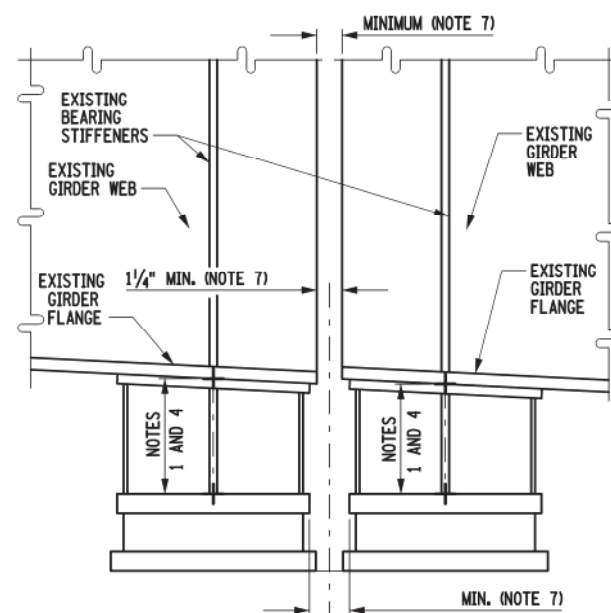
AFFIX SEAL: ON:

ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	GULF SUMMIT RD OVER NYS RTE 17	PIN 9067.77	BRIDGES 1013250	CULVERTS	ALL DIMENSIONS IN $\pm$ UNLESS OTHERWISE NOTED	CONTRACT NUMBER D264091
	TOWN OF WINDSOR				MISCELLANEOUS BEARING DETAILS	DRAWING NO. ST1-14
	NYS ROUTE 17				GULF SUMMIT RD OVER NYS RTE 17	SHEET NO. 82
	COUNTY: BROOME	REGION: 09				
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						Department of Transportation

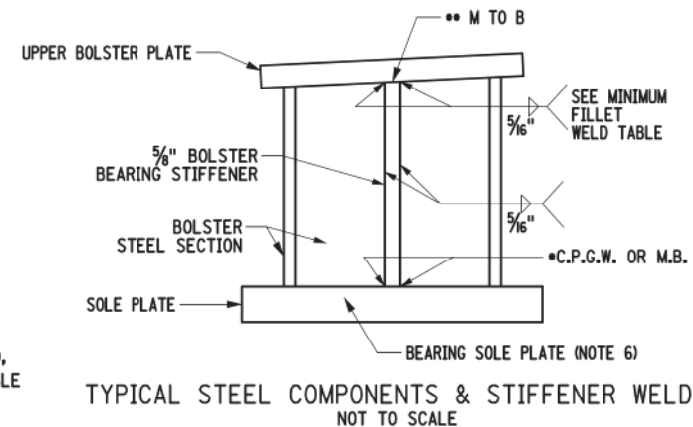
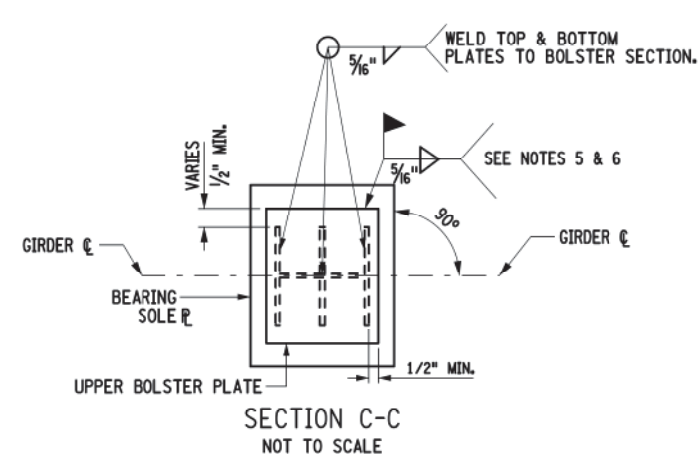


\* BOLSTER AND SOLE PLATE TAPERS ARE ASSUMED FROM RECORD PLANS. CONTRACTOR SHALL FIELD VERIFY EXISTING GIRDER SLOPES FOR PROPER SHIM PLATE DESIGN. NO ADDITIONAL PAYMENT WILL BE MADE FOR ADDITIONAL SHIM PLATES.



TYPICAL NEW LOW BOLSTERS (TYPE I)

FOR THE REQUIRED FILLET WELD SIZE (X), SEE THE MINIMUM FILLET WELD SIZE TABLE ON THIS SHEET.

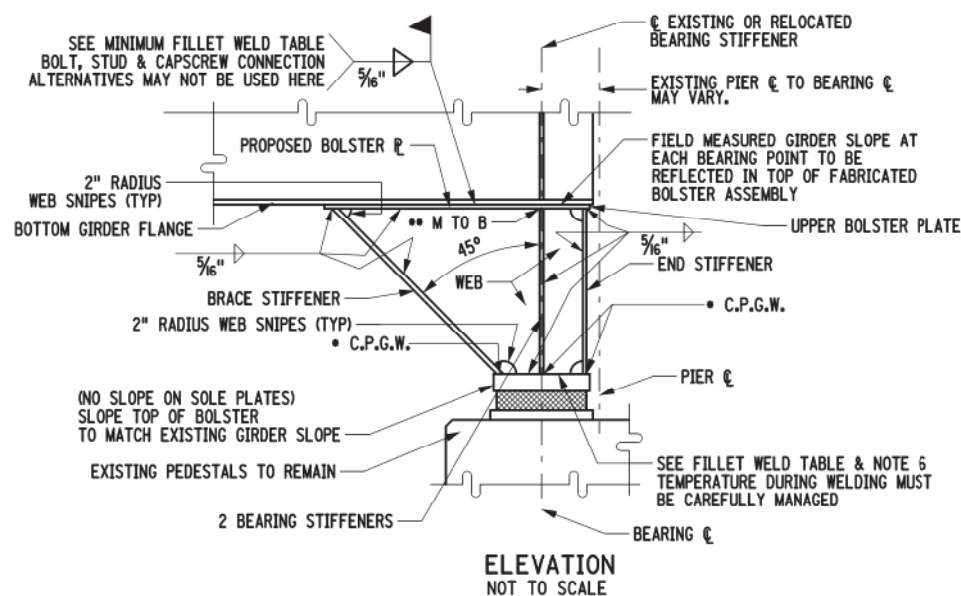


## NOTES:

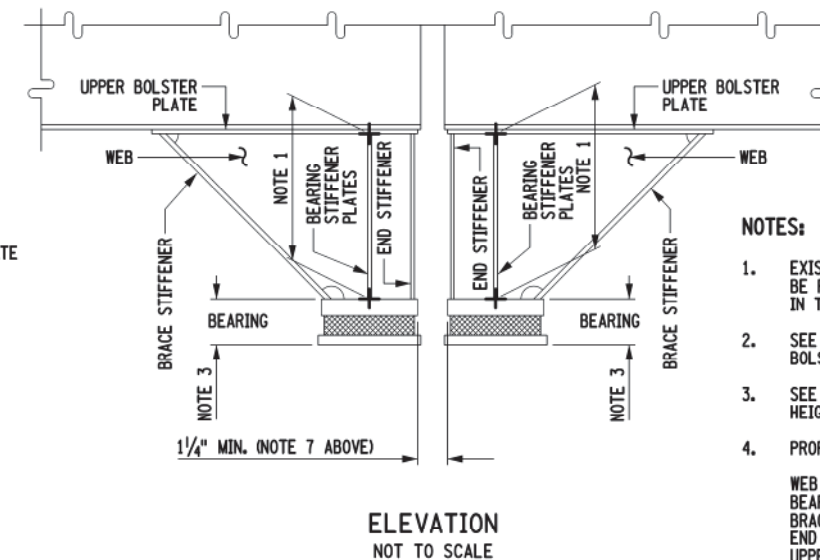
1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS NECESSARY FOR THE PROPER FIT OF STEEL COMPONENTS PRIOR TO THE FABRICATION OF THE BOLSTERS & BOLSTERS. ALSO, THE EXISTING GIRDER SLOPES CANNOT BE RELIABLY DETERMINED FROM RECORD PLAN INFORMATION AND MUST BE FIELD VERIFIED. ALL FIELD MEASUREMENT COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM 625.01.
2. THE BOLSTER STEEL SECTION OR WEB, BOLSTER STIFFENERS AND BOLSTER UPPER PLATES ARE TO BE PAID FOR UNDER THE PRICE BID FOR ITEM 564.700001 AND 564.700002 - STRUCTURAL STEEL REPLACEMENT.
3. THERE SHALL BE NO ADDITIONAL PAYMENT FOR CHANGES TO BOLSTER DIMENSIONS DUE TO THE ACTUAL BEARINGS THAT ARE SUPPLIED. THE CONTRACTOR SHALL COORDINATE SUCH CHANGES.
4. SEE BEARING TABLES TO DETERMINE APPROXIMATE BOLSTER HEIGHT & DIMENSIONS.
5. BOLT STUD AND CAPSCREW UPPER BOLSTER PLATE CONNECTIONS TO THE BOTTOM GIRDER FLANGE ARE NOT ACCEPTABLE AS BOLSTERS & BEARINGS MAY REQUIRE FUTURE RELOCATION ALONG THE GIRDER.
6. THE CONTRACTOR HAS THE OPTION OF SHOP WELDING OR FIELD WELDING THE BOLSTER TO THE BEARING SOLE PLATE. SOLE PLATE TEMPERATURE DURING THE WELDING PROCESS MUST BE CONTROLLED TO PROTECT HEAT SENSITIVE BEARING COMPONENTS.
7. MINIMUM OPERATIONAL CLEARANCE BETWEEN ALL STEEL SUPER-STRUCTURE AND STEEL JOINT & BEARING COMPONENTS SHALL BE 1/4" FOR FIXED - EXPANSION AND 3/8" FOR EXPANSION - EXPANSION.
8. • C.P.G.W. = COMPLETE PENETRATION GROOVE WELD  
• M TO B = MILL TO BEAR
9. ALL COSTS TO REMOVE & DISPOSE OF EXISTING HIGH ROCKER BEARINGS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 589.520001 AND ITEM 589.520002.
10. THE BOLSTERS WILL BE PAID FOR UNDER ITEM 564.700001 AND ITEM 564.700002.
11. PEDESTALS ARE TO BE REBUILT ON PIERS 1 (BC-4) & 5 (AC-26) BIN 1-09297-A, PIERS 1 (CB-1), 3 (CB-3) AND 4 (CB-4) BIN 1-09298-C. NO BOLSTERS ARE NECESSARY.
12. ALL NEW BOLSTERS SHALL BE PAINTED UNDER ITEM 572.020001 FOR BIN 1-09298-C AND ITEM 572.020002 FOR 1-09297-A.

X = MINIMUM SIZE FILLET WELDS	
MATERIAL THICKNESS OF THICKER PART JOINED	MINIMUM SIZE FILLET WELD (X)
TO 1 1/2" INCLUSIVE	5/16"
1 1/2" TO 2 1/4"	3/8"
2 1/4" TO 6.00"	1/2"
OVER 6.00"	5/8"

MINIMUM FILLET WELD SIZE TABLE



PROPOSED HIGH BOLSTERS (TYPE II)  
FOR "X" SEE MINIMUM FILLET WELD TABLE



## NOTES:

1. EXISTING BOLSTERS AT PIER 6 (AC27) BIN 1-09297-A SHALL BE REMOVED AND DISPOSED OF. ALL COSTS TO BE INCLUDED IN THE PRICE BID FOR ITEM 589.520003.
2. SEE RECORD PLAN FIC 70-4 SHEET 363 FOR EXISTING BOLSTER DETAILS AT PIER 6 (AC27)
3. SEE BEARING TABLES TO DETERMINE APPROXIMATE BOLSTER HEIGHTS
4. PROPOSED BOLSTER PLATE THICKNESSES:  
WEB PLATE 3/4"  
BEARING STIFFENERS 3/8"  
BRACE STIFFENERS 3/8"  
END STIFFENERS 1"  
UPPER BOLSTER PLATE 1"
5. THE BOLSTER STEEL SECTION OR WEB, BOLSTER STIFFENERS AND BOLSTER UPPER PLATES ARE TO BE PAID FOR UNDER THE PRICE BID FOR ITEM 564.700002 - STRUCTURAL STEEL REPLACEMENT.
6. ALL NEW BOLSTERS SHALL BE PAINTED UNDER ITEM 572.020002 FOR BIN 1-09297-A.

AFFIX SEAL: 6-19-2018  
ON:

ALTERED BY:  
ON:



AS-BUILT REVISIONS  
DESCRIPTION OF ALTERATIONS:

I-787 SB RAMP TO SMA WB  
SMA EB RAMP TO I-787 NB  
C 70-4, INTERSTATE ROUTE CONNECTION 540  
CITY OF ALBANY  
COUNTY: ALBANY REGION: 01

PIN 1809.81

BRIDGES  
1-09297-A  
1-09298-C

CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED

MISCELLANEOUS BRIDGE DETAILS  
BOLSTER DETAILS

CONTRACT NUMBER  
D263776

DRAWING NO. MSD-15  
SHEET NO. 58

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