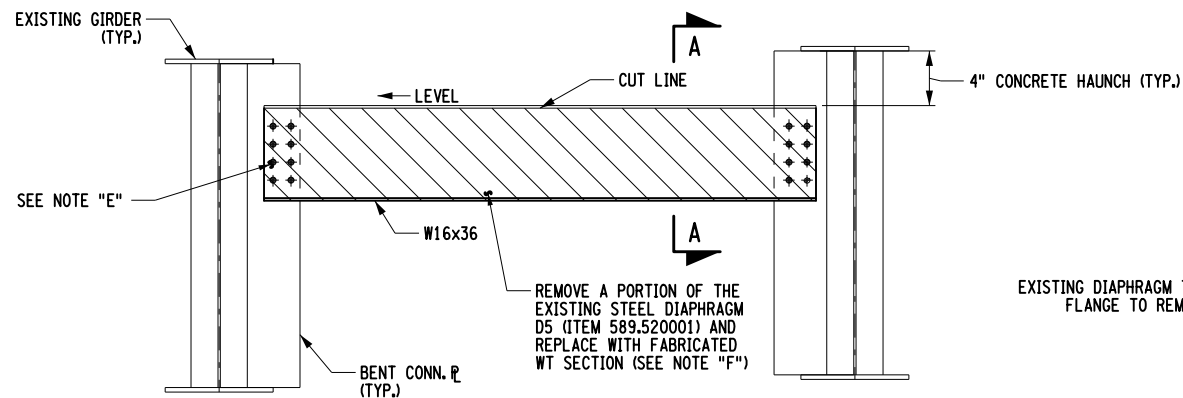


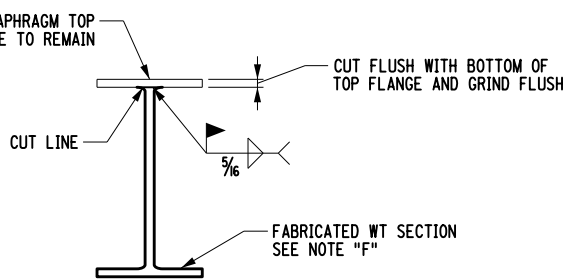
FRAMING PLAN
NOT TO SCALE

QUANTITY TABLE			
ITEM	UNIT	DESCRIPTION	QUANTITY
564.700001	EA	STRUCTURAL STEEL REPLACEMENT	6
586.10	EA	FIELD DRILLING HOLES IN EXISTING STRUCTURAL STEEL	96
589.520001	EA	REMOVAL OF EXISTING STEEL-TYPE 1	6
589.520002	EA	REMOVAL OF EXISTING STEEL-TYPE 2	18

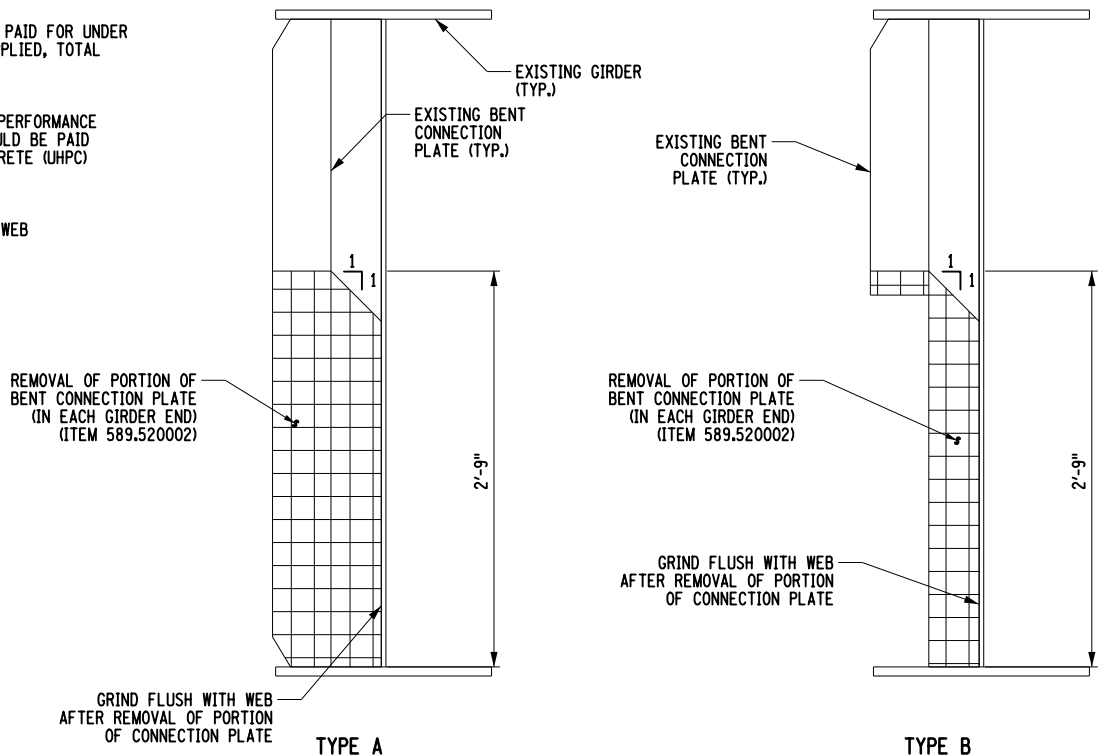


TYPICAL DIAPHRAGM DETAIL
STEEL REPAIR TYPE 1

- LEGEND**
- REMOVAL OF EXISTING STEEL-TYPE 1 (ITEM 589.520001)
 - REMOVAL OF EXISTING STEEL-TYPE 2 (ITEM 589.520002)
 - PORTION OF BEAM TO BE CLEANED AND PAID FOR UNDER STRUCTURAL STEEL PAINTING FIELD APPLIED, TOTAL REMOVAL (ITEM 573.010001)
 - PORTION OF BEAM TO BE PAINTED AND PAID FOR UNDER STRUCTURAL STEEL PAINTING FIELD APPLIED, TOTAL REMOVAL (ITEM 573.010001)
 - GIRDER END REPAIR WITH ULTRA-HIGH PERFORMANCE CONCRETE - PARTIAL HEIGHT AND SHOULD BE PAID UNDER ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1 (ITEM 557.66010116)
 - STUD LOCATION ON OPPOSITE SIDE OF WEB
 - STUD LOCATION ON NEAR SIDE



SECTION A-A
NOT TO SCALE



CONNECTION PLATE REMOVAL
STEEL REPAIR TYPE 2

NOTES:

G* - DENOTES GIRDER NUMBER.

D* - DENOTES DIAPHRAGM.

NOTE "A"
STEEL REPAIR TYPE 1 - PARTIALLY CUT AND REMOVE EXISTING DIAPHRAGMS AND REPLACE WITH NEW FIELD PAINTED DIAPHRAGMS. PARTIAL REMOVAL OF EXISTING DIAPHRAGMS SHALL BE PAID UNDER REMOVAL OF EXISTING STEEL-TYPE 1 (ITEM 589.520001) AND REPLACEMENT STEEL SHALL BE PAID UNDER STRUCTURAL STEEL REPLACEMENT (ITEM 564.700001).

NOTE "B"
STEEL REPAIR TYPE 2 - PARTIALLY CUT AND REMOVE EXISTING DIAPHRAGM CONNECTION PLATE BETWEEN BEARING STIFFENERS AND END OF THE GIRDER AND SHALL BE PAID UNDER REMOVAL OF EXISTING STEEL-TYPE 2 (ITEM 589.520002).

NOTE "C"
STEEL REPAIR TYPE 3 - REMOVE EXISTING PAINT OVER LAST 5'-0" OF GIRDER ENDS AT EACH SIDE OF PIER AND FIELD PAINT (ITEM 573.010001). SEE DWG. NO. ST-42.

NOTE "D"
STEEL REPAIR TYPE 4 - GIRDER END REPAIR WITH ULTRA HIGH PERFORMANCE CONCRETE - PARTIAL HEIGHT (ITEM 557.66010116). SEE DWG. NO. ST-42 & ST-43.

NOTE "E"
DIAPHRAGMS SHALL BE PROVIDED WITHOUT BOLT HOLES. DIAPHRAGMS SHALL BE DRILLED IN THE FIELD TO MATCH EXISTING BOLT PATTERN AND SHALL BE PAID UNDER FIELD DRILLING HOLES IN EXISTING STEEL (ITEM 586.10). ALL BOLT HOLES SHALL BE 15/16" DIAMETER.

NOTE "F"
THE CONTRACTOR SHALL PROVIDE A CUT WT SECTION FROM A W16x36 ROLLED SHAPE. THE W16x36 SHALL BE CUT TO MATCH THE DEPTH OF THE EXISTING DIAPHRAGM. ALL DIAPHRAGMS BEING REPLACED SHALL BE FULLY FIELD PAINTED AND PAID FOR UNDER ITEM 573.010001.

THE FRAMING PLAN HAS BEEN PREPARED BASED ON INFORMATION GATHERED FROM FIELD INSPECTION AND EXISTING BRIDGE PLANS. ACTUAL FIELD CONDITIONS MAY VARY AND MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.

ALL WELDS SHALL BE PERFORMED IN ACCORDANCE WITH THE NEW YORK STATE STEEL CONSTRUCTION MANUAL AND SHALL BE PERFORMED BY NEW YORK STATE DEPARTMENT OF TRANSPORTATION CERTIFIED WELDERS.

ANY DAMAGE TO ANY PART OF THE STRUCTURE WHICH IS TO REMAIN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.

THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS PRIOR TO FABRICATING ANY COMPONENTS OF THE PROPOSED WORK.



AFFIX SEAL:
ON: _____

ALTERED BY:
ON: _____

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

BRIDGE DECK OVERLAY CONTRACTS
TOWNS OF OYSTER BAY, NASSAU COUNTY
AND BROOKHAVEN, SUFFOLK COUNTY

COUNTY: SUFFOLK REGION: 10

PIN 08DP.04

BRIDGES
BIN 1064139

CULVERTS

ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED
UHPC BEAM END REPAIR DETAILS
(1 OF 3)

CONTRACT NUMBER
D264689

DRAWING NO. ST-41
SHEET NO. 115

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.

BEAM END REHABILITATION NOTES

NO PAINT SHALL BE APPLIED UNDER THE UHPC BLOCK AND THE STUDS EXCEPT AS SHOWN.

ADDITIONAL LIMITS OF UHPC GIRDER END REPAIR OR STUDS MAY BE ADDED DURING CONSTRUCTION AS APPROVED BY THE ENGINEER.

BEAM ENDS SHALL BE REPAIRED BY ENCASING THE BEAM END IN ULTRA HIGH PERFORMANCE CONCRETE (UHPC) AS SHOWN ON DWG. NO. ST-43 AND SHALL BE PAID UNDER THE ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1 ITEM.

THE CONTRACTOR SHALL PROVIDE ACCESS TO BEAM END REPAIR LOCATIONS SHOWN ON THE PLANS.

HEADED STUDS SHALL BE WELDED TO CLEAN SECTIONS OF THE WEB AND FLANGE AS SHOWN ON DWG. NO. ST-43. STUDS MAY BE WELDED IN SECTIONS OF THE WEB AND FLANGE WITH MINOR (UP TO 1/16") SECTION LOSS. STUDS MUST BE INSTALLED FOLLOWING STANDARD PRACTICES OF STUD WELDING USING CONVENTIONAL STUD GUNS AND STUD WELDING PROCEDURES. WELD COLLAR SHOULD BE LARGER THAN THE DIAMETER OF THE STUD. STUD WELDING DETAILS, PROCEDURES, AND TESTING METHODS SHALL CONFORM TO THE NEW YORK STATE STEEL CONSTRUCTION MANUAL AND SHALL BE PERFORMED BY NEW YORK STATE DEPARTMENT OF TRANSPORTATION CERTIFIED WELDERS.

THE STUD SPACING SHALL BE A MINIMUM OF 3" AND A MAXIMUM OF 6". THE SPACING MAY BE VARIED WITHIN THIS RANGE TO ACCOMMODATE THE NUMBER OF STUDS SHOWN IN THE PLANS. THE STUD PATTERN SHALL BE LAID OUT BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PRIOR TO WELDING THE STUDS.

THE NUMBER OF STUDS SHOWN IN THE PLANS IS A MINIMUM VALUE BASED ON ANTICIPATED FIELD CONDITIONS. SHOULD THE CONTRACTOR BE UNABLE TO ACCOMMODATE THE MINIMUM NUMBER OF STUDS SHOWN IN THE PLANS DUE TO THE AREA OF DETERIORATED STEEL BEING LARGER THAN ANTICIPATED, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. WORK AT THAT LOCATION SHALL NOT PROCEED UNTIL DIRECTION IS GIVEN BY THE ENGINEER.

ALL HEADED STUDS SHALL BE WELDED USING A STUD GUN. AT LOCATIONS WHERE THE USE OF A STUD GUN IS NOT POSSIBLE DUE TO LIMITED CLEARANCE, UP TO A MAXIMUM OF 3 STUDS MAY BE WELDED USING AN ALL-AROUND 5/16" FILLET WELD. IF MORE THAN 3 STUDS IN ANY GIVEN BEAM END NEED TO BE WELDED USING A FILLET WELD, THE ENGINEER SHALL BE NOTIFIED. FILLET WELDED STUDS SHALL BE PLACED AT A SPACING OF 6".

THE DISTANCE FROM THE TOP OF THE BOTTOM FLANGE TO THE FIRST STUD SHALL BE A MINIMUM OF 6 1/2". ALL EXPOSED INTERFACES BETWEEN THE UHPC PANEL AND STEEL GIRDER SHALL BE SEALED WITH JOINT SEALANT. JOINT SEALANT MATERIAL SHALL CONFORM TO MATERIAL SPEC. 705-06. THIS SHALL BE PAID FOR UNDER THE ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1.

FORMWORK SHALL BE SEALED TO CONTAIN THE FLUIDITY OF THE UHPC. ALL FORMWORK SHALL INCLUDE A VENT HOLE AT THE TOP TO PROVIDE AN ESCAPE FOR TRAPPED AIR. THE CONTRACTOR SHALL HAVE A REPEATABLE METHOD TO DETERMINE IF THE PANEL HAS REACHED FULL HEIGHT. UHPC PANELS SHALL BE TOP FORMED. ALL FORMWORK SHALL BE APPROVED BY THE ENGINEER PRIOR TO POURING THE UHPC AND SHALL BE PAID FOR UNDER ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1.

THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ADJUSTMENT NEED TO BE MADE TO THE PLACEMENT OF STUDS TO WELD TO NON-DETERIORATED STEEL.

IF THE TOP PITCH OF THE UHPC PANEL CANNOT BE MET DURING CASTING, THE CONTRACTOR SHALL GRIND THE TOP OF THE PANEL TO THE REQUIRED SLOPE AFTER THE REMOVAL OF THE FORMS. THE COST OF THIS WORK SHALL BE PAID UNDER ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1 ITEM.

THE LIMITS OF PAINTING SHALL EXTEND 1" INTO THE AREA UNDER THE UHPC BLOCK, AS DETAILED.

THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS PRIOR TO FABRICATING ANY COMPONENTS OF THE PROPOSED WORK.

THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR A REVISED UHPC BLOCK SIZE IF THE DETERIORATION EXTENDS BEYOND THE LIMITS SHOWN.

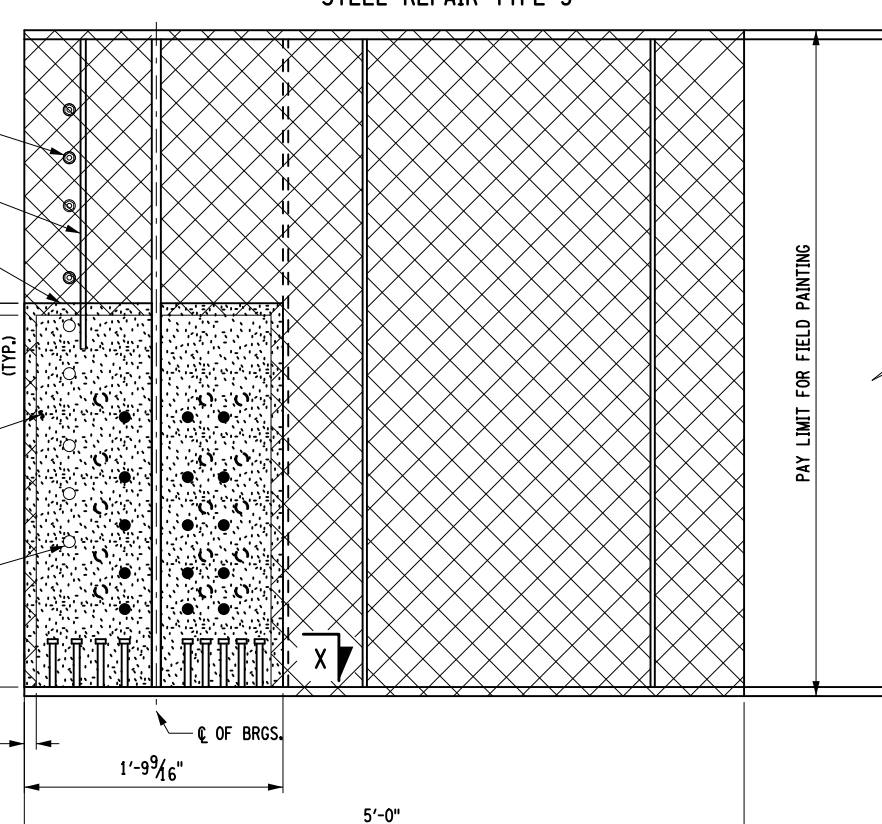
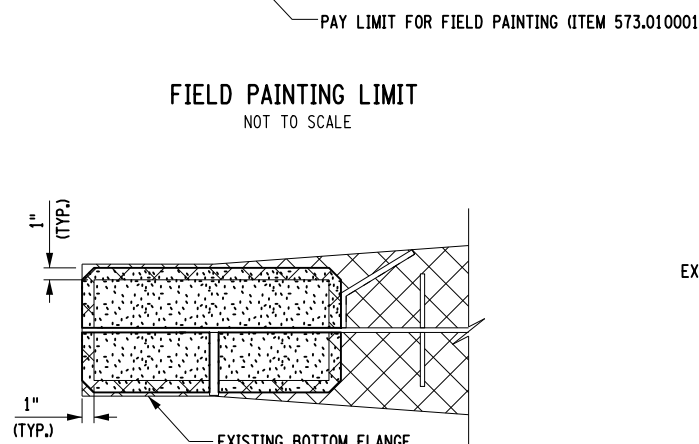
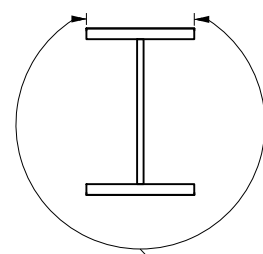
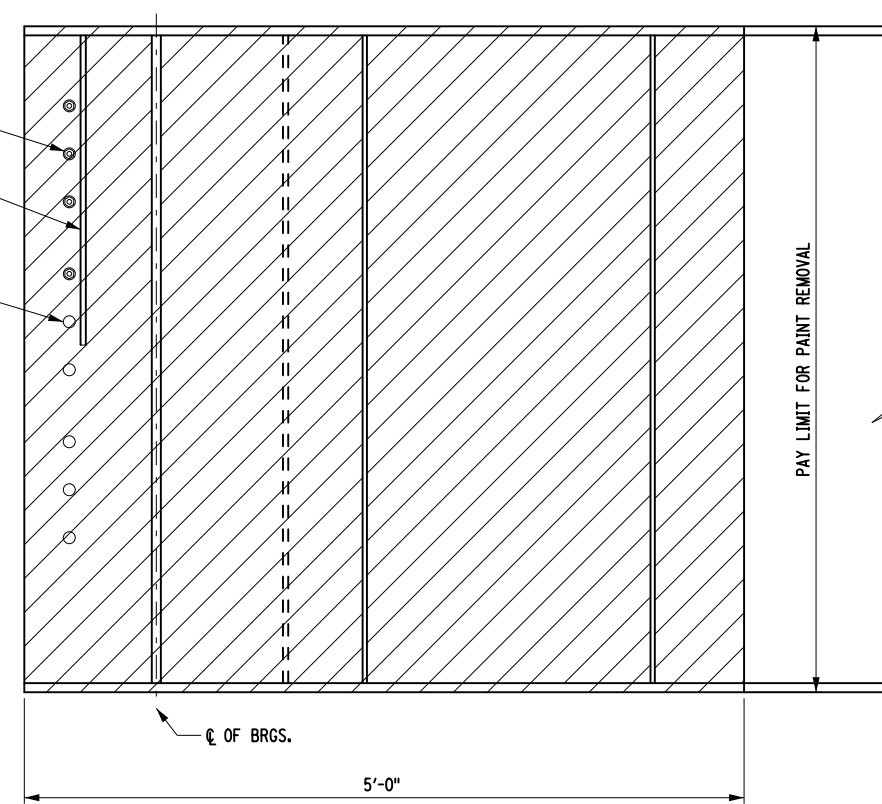
THE CONTRACTOR SHALL COMPLY WITH ALL FORMING AND GRINDING REQUIREMENTS FROM THE UHPC SPECIFICATION. IN CASE OF ANY DISCREPANCIES BETWEEN THESE NOTES AND THE UHPC SPECIFICATION, THE REQUIREMENTS FROM THE SPECIFICATION SHALL GOVERN.

ALL EXPOSED CORNERS OF UHPC BLOCKS SHALL HAVE A 1"x1" CHAMFER.

NOTE "A": THE BOLTS IN THE EXISTING BOLT HOLES WITHIN THE UHPC PANEL AREA SHALL BE REMOVED AND DISCARDED AT PIER 3. THE BOLT HOLES SHALL REMAIN UNFILLED. THE EXISTING BOLTS ABOVE THE UHPC BLOCK SHALL REMAIN AT PIER 3. ALL THE EXISTING BOLTS AT THE END OF GIRDERS AT PIER 2 SHALL REMAIN.

NOTE "B": THERE SHALL BE NO UHPC GIRDER END REPAIR AT PIER 2. THE PAINTING LIMIT SHALL EXTEND OVER THE FULL 5'-0" GIRDER END DIMENSION AS SHOWN IN THE PAINT REMOVAL LIMIT STEEL REPAIR TYPE 3 DETAIL.

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	UNIT	ESTIMATED	FINAL
556.03	STUD SHEAR CONNECTORS FOR BRIDGES	EA	1140	
557.66010116	ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1	CF	70	
564.700001	STRUCTURAL STEEL REPLACEMENT	EA	6	
570.01	LEAD EXPOSURE CONTROL PLAN	LS	1	
570.02	MEDICAL TESTING	DC	1000	
570.03	PERSONAL EXPOSURE MONITORING SAMPLE ANALYSIS	DC	2000	
570.04	DECONTAMINATION FACILITIES	CW	4	
570.09	ENVIRONMENTAL GROUND PROTECTION	LS	1	
570.150001	CLASS A CONTAINMENT FOR PAINT REMOVAL	LS	1	
571.03	DISPOSAL OF HAZARDOUS PAINT WASTE CONTAINING LEAD	LB	1750	
571.04	DISPOSAL OF NON-HAZARDOUS INDUSTRIAL SOLID PAINT WASTE	LB	750	
573.010001	STRUCTURAL STEEL PAINTING FIELD APPLIED, TOTAL REMOVAL	LS	1	
586.10	FIELD DRILLING HOLES IN EXISTING STRUCTURAL STEEL	EA	96	
589.520001	REMOVAL OF EXISTING STEEL-TYPE 1	EA	6	
589.520002	REMOVAL OF EXISTING STEEL-TYPE 2	EA	18	



AFFIX SEAL: ON: ALTERED BY: ON:



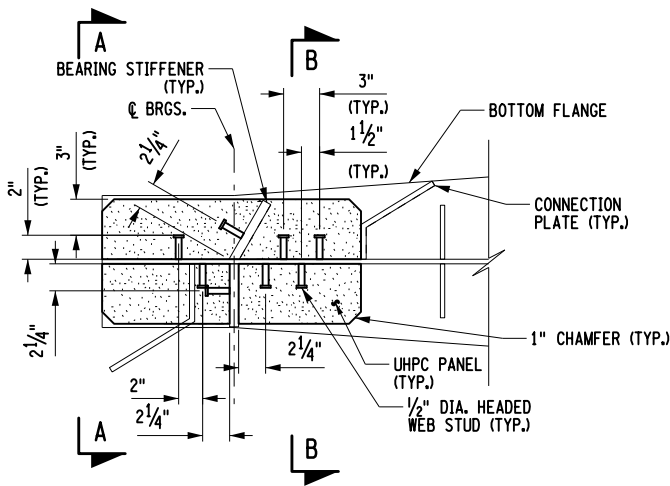
AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	BRIDGE DECK OVERLAY CONTRACTS	PIN OBDP.04	BRIDGES BIN 1064139	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D264689
	TOWNS OF OYSTER BAY, NASSAU COUNTY				UHPC BEAM END REPAIR DETAILS (2 OF 3)	DRAWING NO. ST-42
	AND BROOKHAVEN, SUFFOLK COUNTY					SHEET NO. 116
	COUNTY: SUFFOLK	REGION: 10				

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.



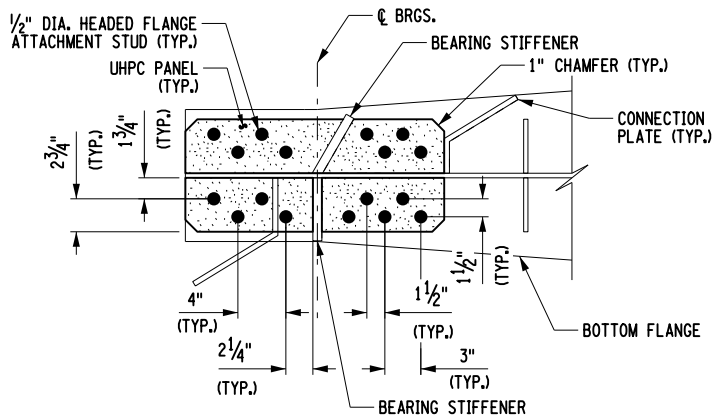
FILE NAME = OBDP04_74_def_beam2.dgn
DATE/TIME = 10-NOV-2021 10:50
USER = Mohamed

PROJECT MANAGER R. ESLINGER
CHECK M. AHMED
DRAFTING D. SPERBECK
CHECK M. PERTIERRA
DESIGN M. AHMED
JOB MANAGER M. PERTIERRA
DESIGN SUPERVISOR A. CLARK

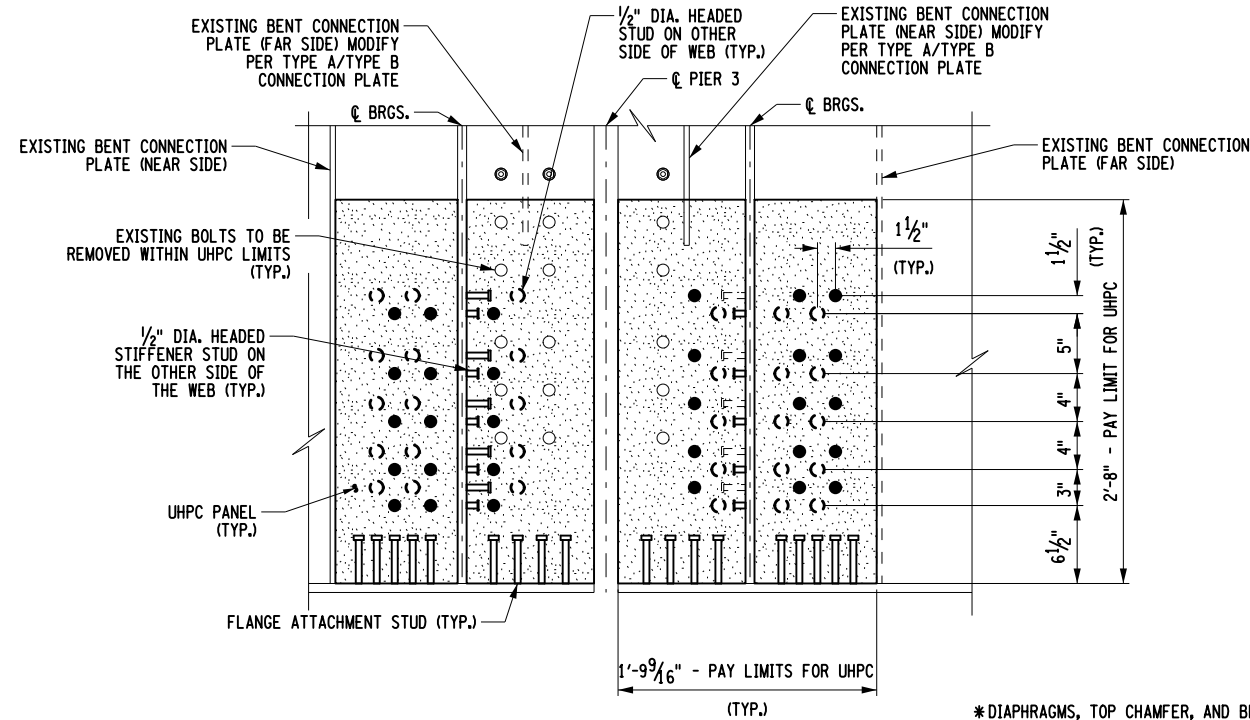


SHEAR CONNECTOR DETAIL

*DIAPHRAGMS, TOP FLANGE, TOP CHAMFER, AND FLANGE STUDS NOT SHOWN FOR CLARITY

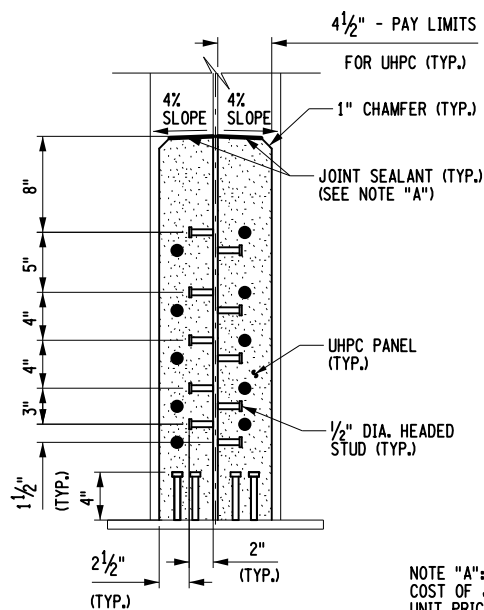


TYPICAL BOTTOM FLANGE ATTACHMENT STUD LAYOUT



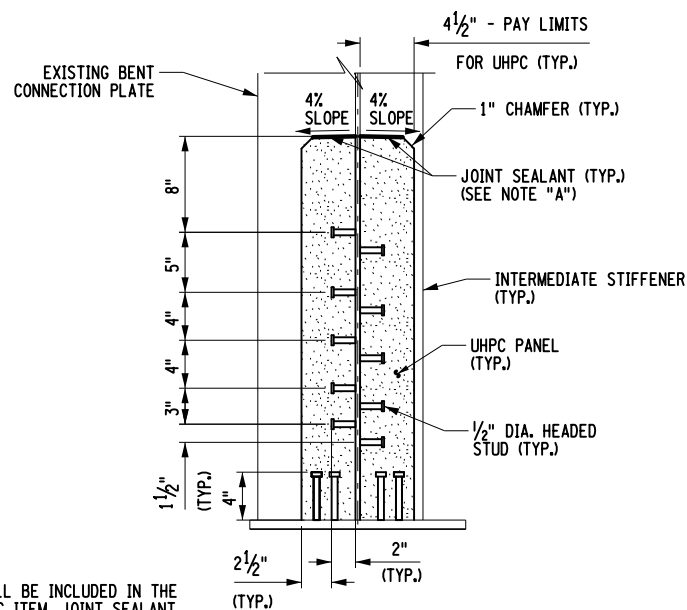
INTERIOR GIRDER END REPAIR ELEVATION (EXTERIOR GIRDER END IS SIMILAR)

*DIAPHRAGMS, TOP CHAMFER, AND BEARINGS NOT SHOWN FOR CLARITY



SECTION A-A

*BENT CONNECTION PLATE NOT SHOWN FOR CLARITY



SECTION B-B

NOTES:

OPPOSING STUDS LOCATED BETWEEN THE BEARING STIFFENERS AND THE END OF THE GIRDER SHALL HAVE A MINIMUM VERTICAL SPACING OF 1 1/2\"/>

DO NOT PAINT STUDS.

REMOVE ALL BOLTS ATTACHED TO THE WEB WITHIN UHPC LIMITS.

SIDE COVER OF THE STUDS SHALL BE 2\"/>

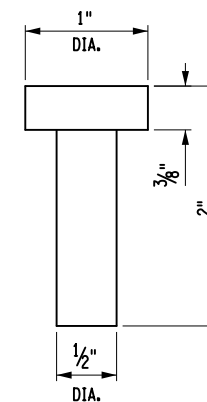
THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS PRIOR TO FABRICATING ANY COMPONENTS OF THE PROPOSED WORK.

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:

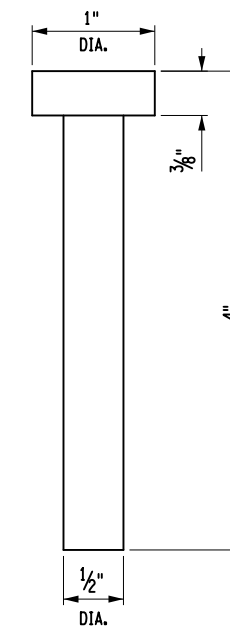
BRIDGE DECK OVERLAY CONTRACTS	PIN OBDP.04
TOWNS OF OYSTER BAY, NASSAU COUNTY AND BROOKHAVEN, SUFFOLK COUNTY	
COUNTY: SUFFOLK	REGION: 10

QUANTITY TABLE			
ITEM	UNIT	DESCRIPTION	QUANTITY
556.03	EA	WEB AND STIFFENER STUD	40
556.03	EA	FLANGE ATTACHMENT STUD	17
557.66010116	CF	ULTRA-HIGH PERFORMANCE CONCRETE (UHPC) TYPE 1	3.5

** QUANTITIES ARE PROVIDED FOR EACH GIRDER END



WEB AND STIFFENER STUD DETAIL (ITEM 556.03)



FLANGE ATTACHMENT STUD DETAIL (ITEM 556.03)

AFFIX SEAL: ON: _____

ALTERED BY: ON: _____

BRIDGES BIN 1064139	CULVERTS	ALL DIMENSIONS IN FT UNLESS OTHERWISE NOTED	CONTRACT NUMBER D264689
UHPC BEAM END REPAIR DETAILS (3 OF 3)		DRAWING NO. ST-43 SHEET NO. 117	

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.