

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	100&ALSIP
				BRIDGE 0013	HIGHWAY LIGHTING 0021
				S.N. 016-0570	URBAN
70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	5135	5135	
70307130	TEMPORARY PAVEMENT MARKING - LINE 6" - TYPE IV TAPE	FOOT	5977	5977	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	875	875	
* 72000100	SIGN PANEL - TYPE 1	SQ FT	4.5	4.5	
* 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2	
* 72900100	METAL POST - TYPE A	FOOT	21	21	
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	4145	4145	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	8	8	
* 78112000	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	336	336	△
* 78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	5	5	
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	4327	4327	
* 80400100	ELECTRIC SERVICE INSTALLATION	EACH	1	1	
* 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	1	
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	150	150	

LEGEND:
* - DENOTES SPECIALTY ITEM

△ REVISED SHEET 6/5/2023



USER NAME = orush	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED - ZJT	REVISED -
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	8
CONTRACT NO. 62H52			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE	
				80% FEDERAL 20% STATE	100&ALSIP
				BRIDGE 0013	HIGHWAY LIGHTING 0021
				S.N. 016-0570	URBAN
X5537600	STORM SEWERS TO BE CLEANED 8"	FOOT	62	62	
X5537800	STORM SEWERS TO BE CLEANED 12"	FOOT	200	200	
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1	
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	1	1	
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	54950	54950	
Z0001905	STRUCTURAL STEEL REPAIR	POUND	93180 112090	93180 112090	△
Z0004552	APPROACH SLAB REMOVAL	SQ YD	516	516	
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1	
Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1346	1346	
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	138	138	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
Z0018002	DRAINAGE SCUPPERS, DS-11	EACH	30	30	
Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	2	2	

LEGEND:
* - DENOTES SPECIALTY ITEM

△ REVISED SHEET 6/5/2023



USER NAME = orush	DESIGNED - OLR	REVISED -
	DRAWN - OLR	REVISED -
PLOT SCALE = 2.0000' / 1" =	CHECKED - ZJT	REVISED -
PLOT DATE = 3/1/2023	DATE - 2/24/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL RTE 83 (127TH STREET)

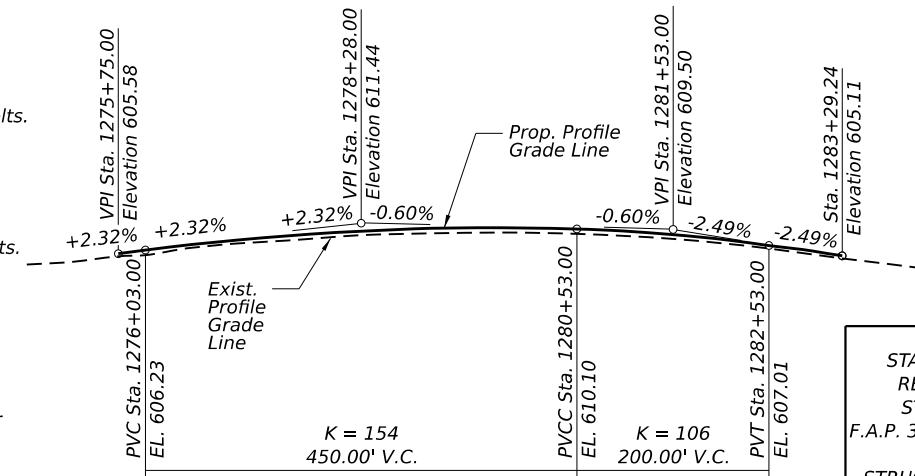
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	11
CONTRACT NO. 62H52			ILLINOIS FED. AID PROJECT	

GENERAL NOTES:

Repairs of stringers 2 and 9 in span3 were not included previously.

- Fasteners shall be ASTM F3125 Grade Type 1, mechanically galvanized bolts. Bolts 7/8" Ø, holes 1 1/16" Ø, unless otherwise noted.
- Calculated weight of Structural Steel = 114,780 Grade 36, = 61,340 Grade 50
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars designated (E) shall be epoxy coated.
- If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.
Any cracks that cannot be removed by grinding 3/4-inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans.
- The Contractor shall take extreme caution during all phases of construction to prevent the deposition of any material into Cal Sag Channel.
- The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.
- All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.
- Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".
- Cleaning and painting of the existing structural steel shall be as specified in the Special Provision for "Cleaning and Painting Existing Steel Structures."
- All interior and exterior surfaces of approach spans and built-up truss members, other truss members, beams, bearings and other structural steel (floor beams, stringers, diaphragms, bracing, etc.) shall be cleaned per near white blast cleaning (SSPC-SP10).
- The designated areas cleaned per near white blast cleaning (SSPC-SP10) shall be painted according to the requirements of the Organic Zinc-Rich / Epoxy / Urethane paint system. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell no 5B 7/1. The color of the final finish coat for the truss members shall be blue, Munsell No. 10B 3/6.



PROFILE
Along W.B. and E.B. PGL

NAME PLATE
See Std. 515001
Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates.

- All items (such as, but not limited to: conduits, brackets and deck drains) attached to the truss or beams should be cleaned and painted.
- All truss members that pass through the deck shall be painted a minimum length of 2'-0" past the proposed concrete prior to the concrete being placed.
- The contractor shall submit calculations and details demonstrating the structural integrity of the bridge truss span is maintained under the additional imposed loads of the containment system. See Special Provisions.
- A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site. See special provision for "Containment and Disposal of Lead Paint Cleaning Residues."
- All vertical and diagonal lapping members shall be caulked along the top and sides. The bottom shall remain open for drainage.
- Joint Sealant shall be installed around all connection plates and at areas of pack rust and between built up members.
- The joint sealant shall be an approved polyurethane sealant, compatible with the proposed paint system and shall be submitted to the Engineer for approval prior to use.
- The surfaces of the crevices to receive joint sealant shall be cleaned according to commercial grade power tool cleaning SSPC-SP15 and painted according to the requirements of paint system 2-PS/EM/U. Once the paint system is dry to touch, the sealant shall be installed over the final finish coat. After the sealant has cured in accordance with the manufacturer's written product data sheet, a strip finish coat shall be applied over the sealant. The cost of joint sealant and caulking included in the "Cleaning and Painting Steel Bridge" pay item.
- Shear studs shall be free of any rust, rust pits, scale oil, or deleterious matter at the time of welding. The surface to receive the stud shall be free from mill scale and heavy rust. Paint, galvanizing and oil are contaminants and shall be removed. This work shall be included with Stud Shear Connectors pay item.
- It shall be the Contractor's responsibility to protect and preserve the existing bridge lighting at any locations that lighting is encountered adjacent to an area to be cleaned and painted.
- The Contractor shall obtain Coast Guard approval for any work that may interfere with navigational operations of the navigable waters. A work plan shall be prepared by the Contractor, reviewed and approved by the Engineer and be submitted by the Engineer to the Coast Guard at the address listed below for approval.
Locations upstream (North) of 16th St. Bridge in Lockport, IL:
Bridge Administrator
US Coast Guard
Ninth Coast Guard District
1240 E. Ninth St.
Cleveland, OH 44199-2060
(Scott Striffler (216) 902-6087)
- Concrete Superstructure shall have a seven day minimum cure.
- The contractor shall relocate any conduit attached to the flange prior to the installation of the Protective Shield. Under no circumstances shall the Protective Shield rest on top of the conduit.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Dumped Riprap, Class A6	SQ YD		450	450
Concrete Removal	CU YD		20.4	20.4
Removal of Existing Concrete Deck	EACH	1		1
Protective Shield	SQ YD	3,200		3,200
Concrete Structures	CU YD		67.7	67.7
Concrete Superstructure	CU YD	1,475.3		1,475.3
Bridge Deck Grooving	SQ YD	4,171		4,171
Protective Coat	SQ YD	6,491		6,491
Concrete Superstructure (Approach Slab)	CU YD	211		211
Furnishing and Erecting Structural Steel	POUND	65,190		65,190
Stud Shear Connectors	EACH	3,780		3,780
Reinforcement Bars, Epoxy Coated	POUND	445,970	13,810	466,780
Bicycle Railing	FOOT	2,150		2,150
Parapet Railing	FOOT	1,320		1,320
Name Plates	EACH	1		1
Preformed Joint Strip Seal	FOOT	542		542
Finger Plate Expansion Joint, 3"	FOOT	78		78
Fabric Reinforced Elastomeric Trough	FOOT	85		85
Anchor Bolts, 1 1/2"	EACH	2		2
Drainage System for Structures	L SUM	1		1
Epoxy Crack Injection	FOOT		71	71
Straighten Bent Member	EACH	3		3
Slope Wall Crack Sealing	FOOT		86	86
Reinstall Rubber Fender System	L SUM		1	1
Bridge Cleaning and Painting Warranty	L SUM	1		1
Jack and Remove Existing Bearings	EACH	1		1
Structural Steel Removal	POUND	54,950		54,950
Structural Steel Repair	POUND	93,180		93,180
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L SUM	1		1
Cleaning and Painting Steel Bridge No. 1	L SUM	1		1
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	SQ FT		1,346	1,346
Structural Repair of Concrete (Depth Greater Than 5 Inches)	SQ FT		138	138
Drainage Scuppers, DS-11	EACH	30		30
Slope Wall Repair	SQ YD		95	95
Slope Wall Slurry Pumping	CU YD		6	6
Underwater Concrete Repair	SQ FT		24	24
Temporary Shoring and Cribbing	EACH		3	3

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REVISOR SHEET 6/5/2023



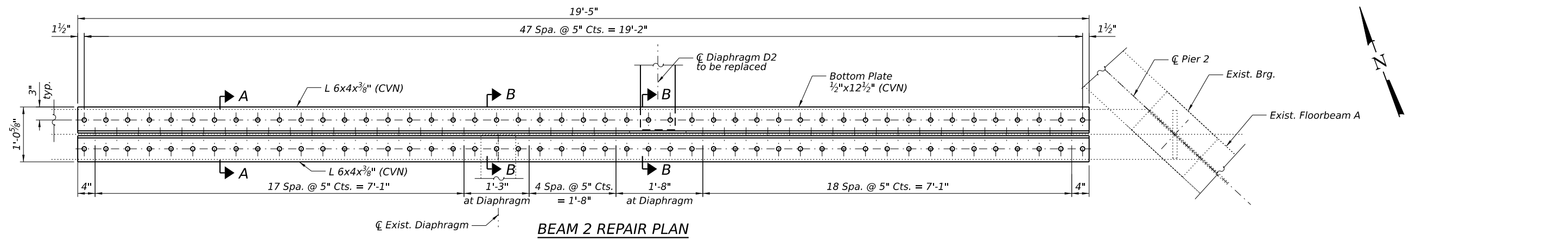
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DRAWN	DR	CHECKED	EKM	REVISOR	
PLOT SCALE		DATE	04/25/2023		
PLOT DATE	6/2/2023				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

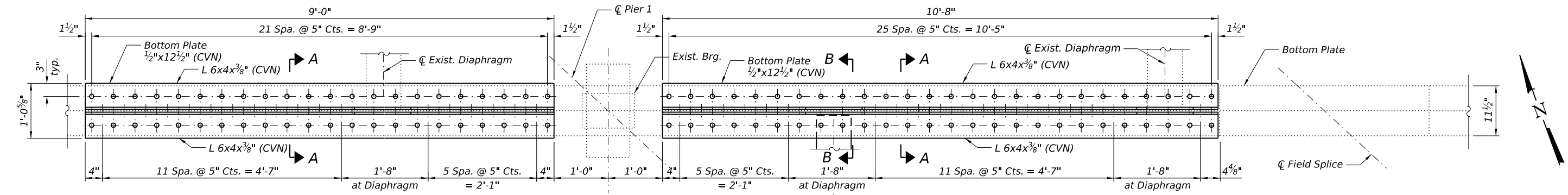
GENERAL NOTES, INDEX OF SHEETS AND B.O.M.
STRUCTURE NO. 016-0570

SCALE: SHEET S-2 OF S-70 SHEETS STA. TO STA.

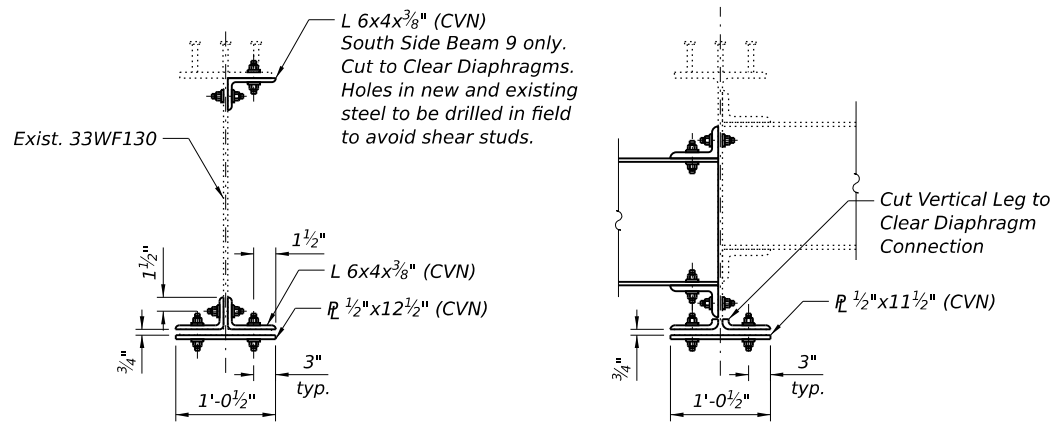
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
344	2018-125-B-R	COOK	141	30
CONTRACT NO. 62H52				
ILLINOIS FED. AID PROJECT				



BEAM 2 REPAIR PLAN



BEAM 9 REPAIR PLAN

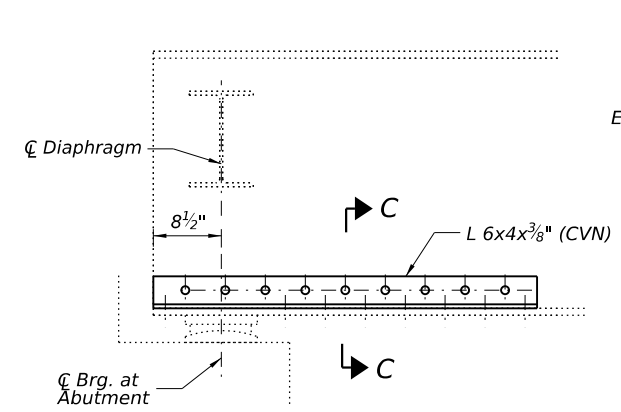


SECTION A-A

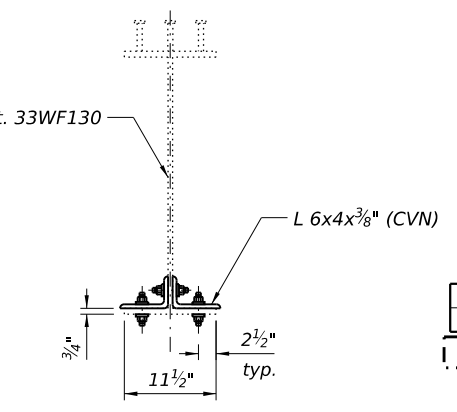
Grind heel of angle to fit radius, typ.

SECTION B-B

At Diaphragm



BEAM 4 END REPAIR ELEVATION



SECTION C-C

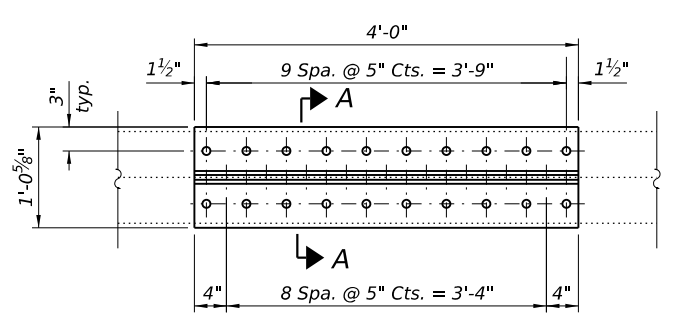
Grind heel of angle to fit radius, typ.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	10,620

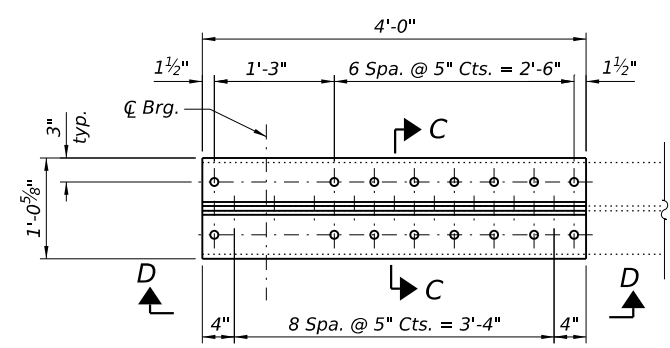
Includes repairs at existing floor drains in spans 1, 2, 4 & 5.

- Notes:**
- All dimensions shall be field verified prior to ordering any material.
 - Cost of removing existing structural steel elements for repairs shall be included in Structural Steel Repairs.
 - Cost of furnishing and erecting structural steel elements for repairs shall be included in Structural Steel Repairs.
 - Cost of removing rivets or welds and replacing with HS bolts for repairs shall be included in Structural Steel Repairs.
 - Where new holes are required in existing structural steel elements, the bolt spacing shall be 3" min. and 5 1/2" max. Edge distance shall be 1 1/2" min.
 - Load carrying components designated "CVN" shall conform to the Impact Testing Requirement, Zone 2.
 - All connections shown on this sheet are primary connections for cleaning and painting.



TYPICAL REPAIR AT EXISTING FLOOR DRAIN

Spans 1 & 2 - 20 Locations
Span 3 - 89 Locations
Spans 4 & 5 - 18 Locations
Excluding Locations of Stringer Repairs



BEAM 4 END REPAIR PLAN

MODEL: D:\default...
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USER NAME: drezic	DESIGNED: JFS / NA	REVISED: 06/02/2023 EKM
PLOT SCALE: -	DRAWN: DR	REVISED: -
PLOT DATE: 6/2/2023	CHECKED: EKM	REVISED: -
	DATE: 04/25/2023	REVISED: -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STEEL REPAIRS SPANS 1 & 2
STRUCTURE NO. 016-0570**

SCALE: SHEET 5-49 OF 5-70 SHEETS STA. TO STA.

F.A.P. RTE. 344	SECTION 2018-125-B-R	COUNTY COOK	TOTAL SHEETS 141	SHEET NO. 2
CONTRACT NO. 62H52			ILLINOIS FED. AID PROJECT	

REVISED SHEET 6/5/2023

(Sheet 2 of 4)