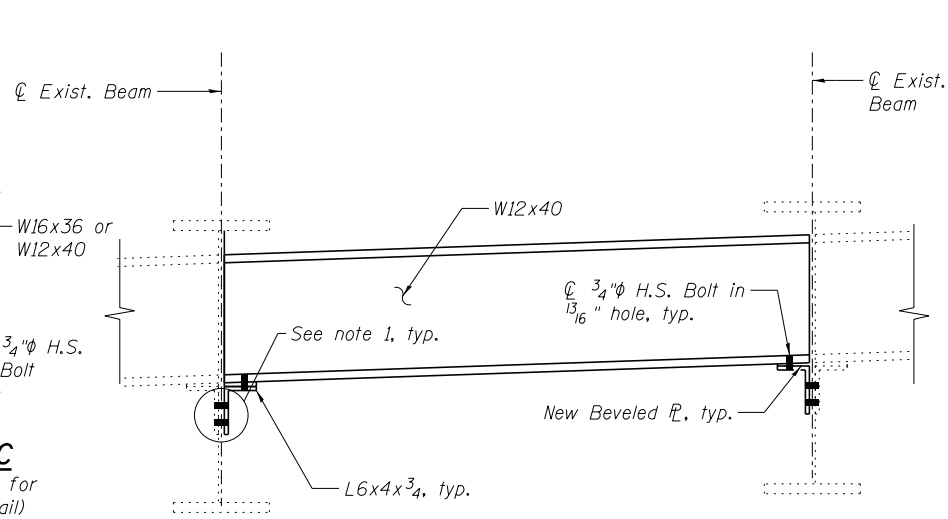


INTERIOR DIAPHRAGM REPLACEMENT DETAIL

(No. of Locations 4)

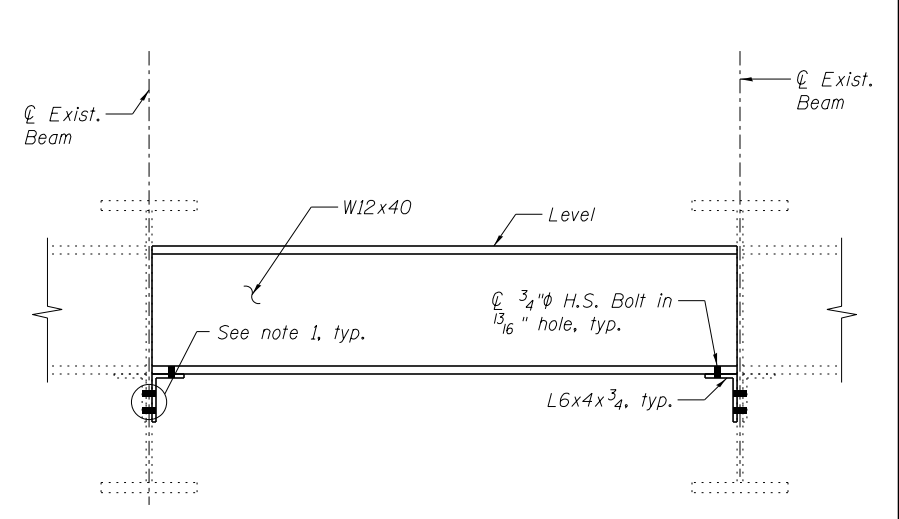
(See sheet SD58 for replacement of diaphragms to proposed beams, not included in No. of Locations above)



END DIAPHRAGM REPLACEMENT DETAIL 1

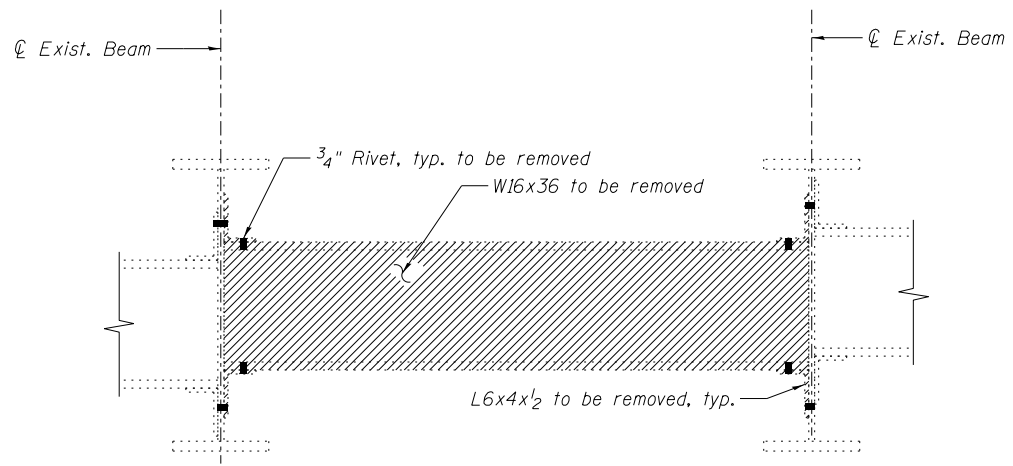
(No. of Locations 7)

(See sheet SD58 for replacement of diaphragms to proposed beams, not included in No. of Locations above)



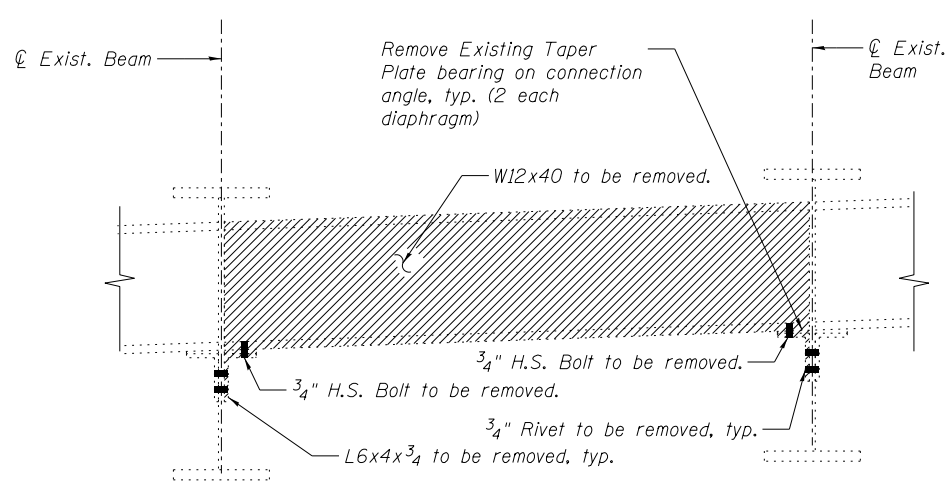
END DIAPHRAGM REPLACEMENT DETAIL 2

(No. of Locations 15)



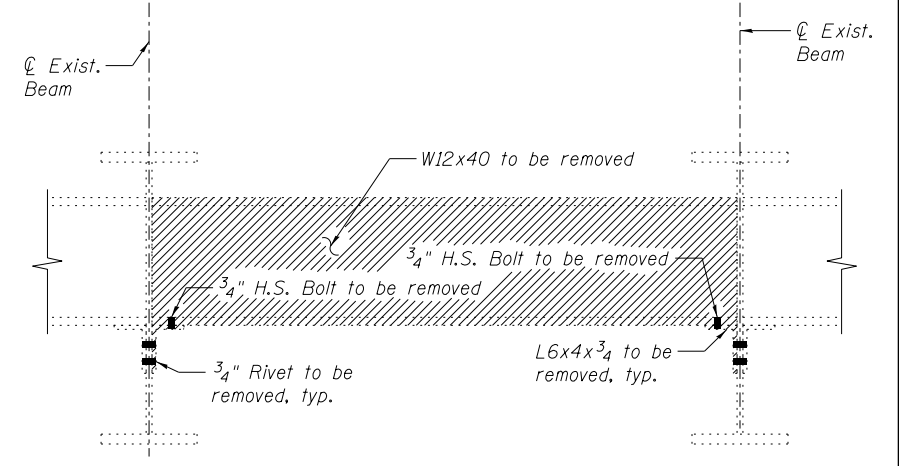
EXISTING INTERIOR DIAPHRAGM REMOVAL DETAIL

(No. of Locations 4)



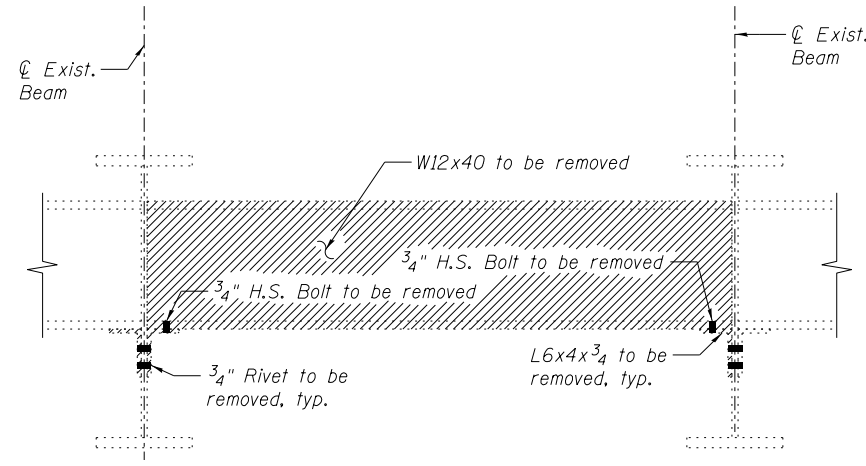
EXISTING END DIAPHRAGM REMOVAL DETAIL 1

(No. of Locations 7)



EXISTING END DIAPHRAGM REMOVAL DETAIL 2

(No. of Locations 14)



EXISTING END DIAPHRAGM REMOVAL DETAIL 3

(No. of Locations 1)

NOTES:

1. New 3/4" dia. fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Holes in new steel shall be subpunched or subdrilled 1/16" dia. and reamed in the field to 13/16" dia. Reuse existing holes in existing steel. Contractor to field verify location, size and spacing of existing holes prior to ordering new materials. Cost included with "Furnishing and Erecting Structural Steel".
2. See sheets SD63 thru SD65 for location of diaphragm replacement and removal.
3. Contractor shall ensure that the adjacent existing diaphragm is supported during angle replacement under proposed diaphragm. Cost included with structural steel removal.
4. Cost of field drilling included with furnishing and erecting structural steel.
5. Removal of steel paid for as "Structural Steel Removal". Replacement of steel paid for as "Furnishing and Erecting Structural Steel".

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10093

| | | | |
|--|------------------------|----------------|-----------|
| FILE NAME = | USER NAME = ksnider | DESIGNED - DTS | REVISED - |
| | | CHECKED - TPS | REVISED - |
| 0162457.60J16.068.Steel.Repair.Details.3.dwg | PLOT SCALE = | DRAWN - KMS | REVISED - |
| | PLOT DATE = 12/20/2013 | CHECKED - TPS | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL STEEL REPAIR DETAILS (3 OF 3)
STRUCTURE NO. 016-2457**

SHEET NO. SD68 OF SD83 SHEETS

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|-------------|--------|---------------------------|-----------|
| 372 | 2013-038B-R | COOK | 821 | 443 |
| CONTRACT NO. 60J16 | | | ILLINOIS FED. AID PROJECT | |

Y:\chicago\100005\100093\Eng_Docs_Phase_1\1\SN_016-2456-2457-1st-Ave-over-River-Volley\Final\0162457-60J16-068-Steel.Repair.Details.3.dwg 3:51:35 PM 8/6/2014