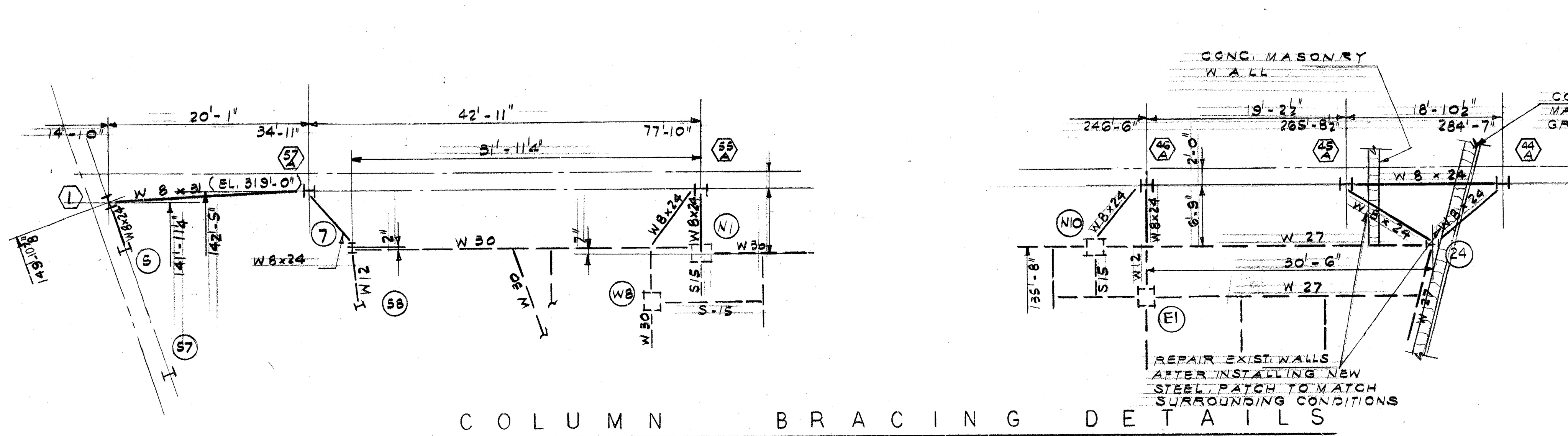
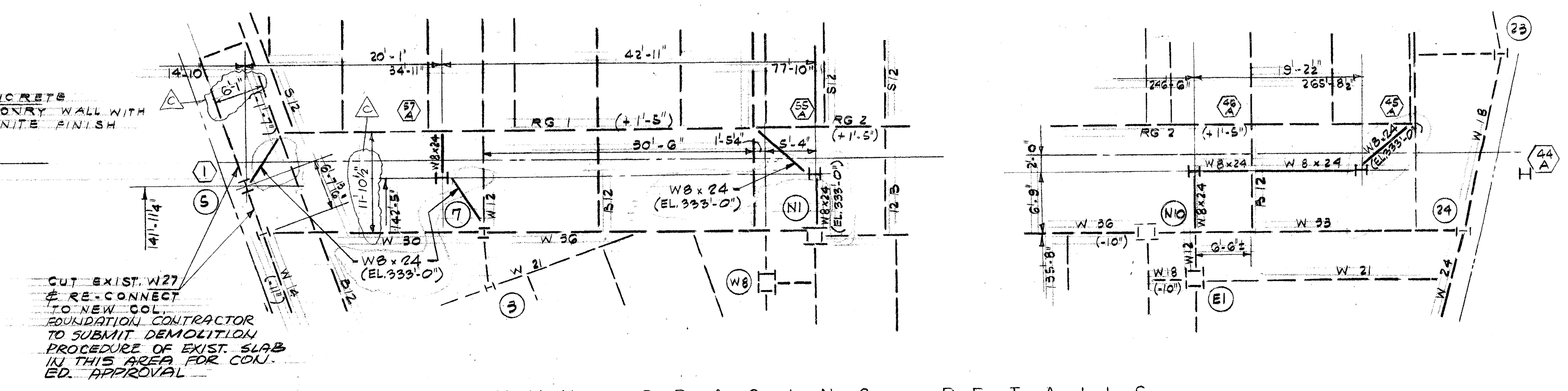


COLUMN BRACING DETAILS
AT EXIST. ELECTRICAL SUBSTATION 2ND FLOOR

NOTES:
1. SEE DWG. 2 WTC 130.028 FOR REMAINDER OF EXISTING FLOOR
2. FIN. FLOOR ELEVATION 318'-6"
3. TOP OF EXISTING STEEL EL. 318'-4" U.O.N. (±)
4. TOP OF NEW BRACING STEEL EL. 318'-0" U.O.N.

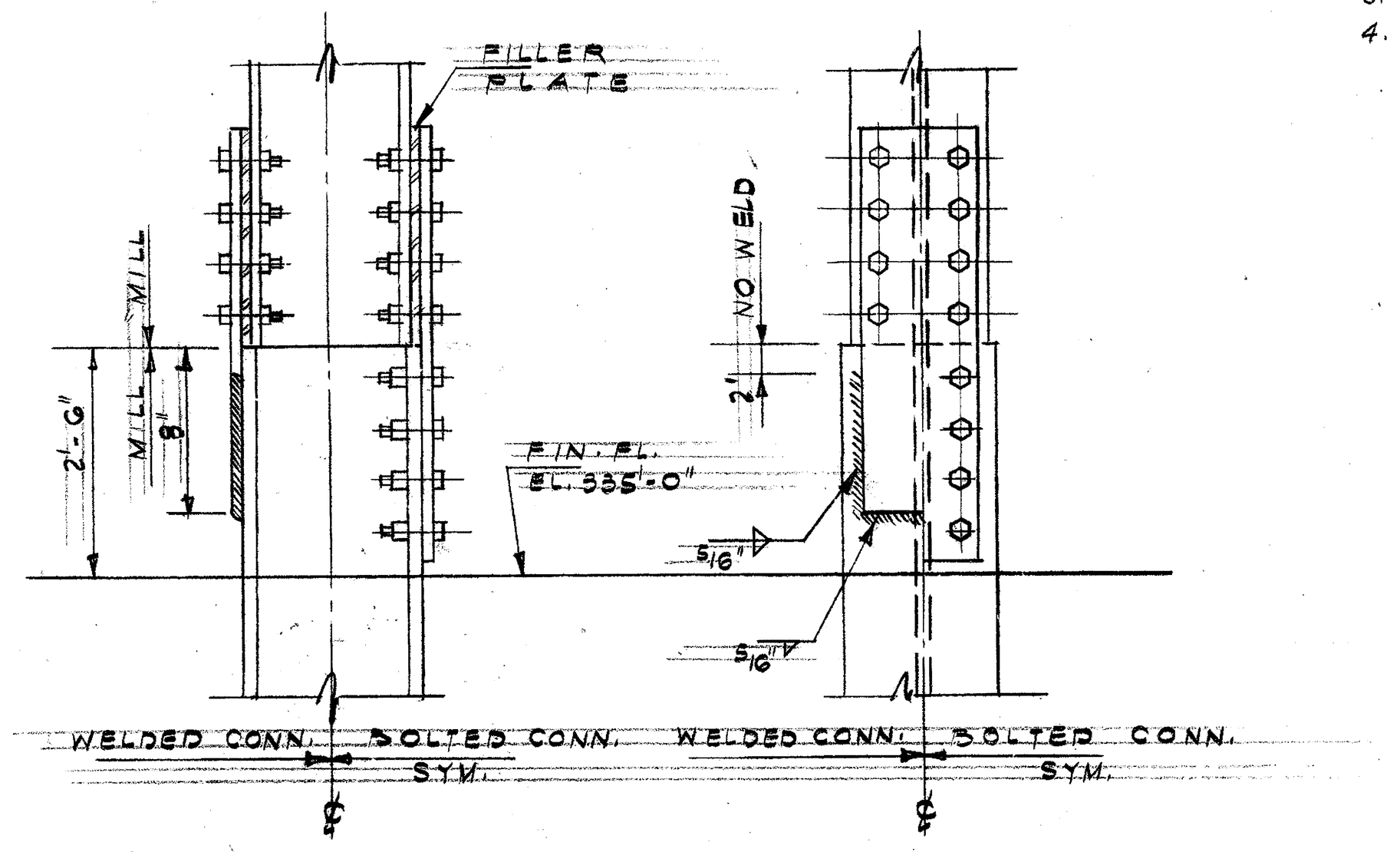


COLUMN BRACING DETAILS
AT EXIST. ELECTRICAL SUBSTATION ROOF

NOTES:
1. SEE DWG. 3 WTC 130.028 FOR REMAINDER OF EXIST. FLOOR
2. FIN. FLOOR ELEVATION 335'-0"
3. TOP OF EXISTING STEEL EL. 334'-4" U.O.N. (±)
4. TOP OF NEW BRACING STEEL EL. 333'-8" U.O.N.

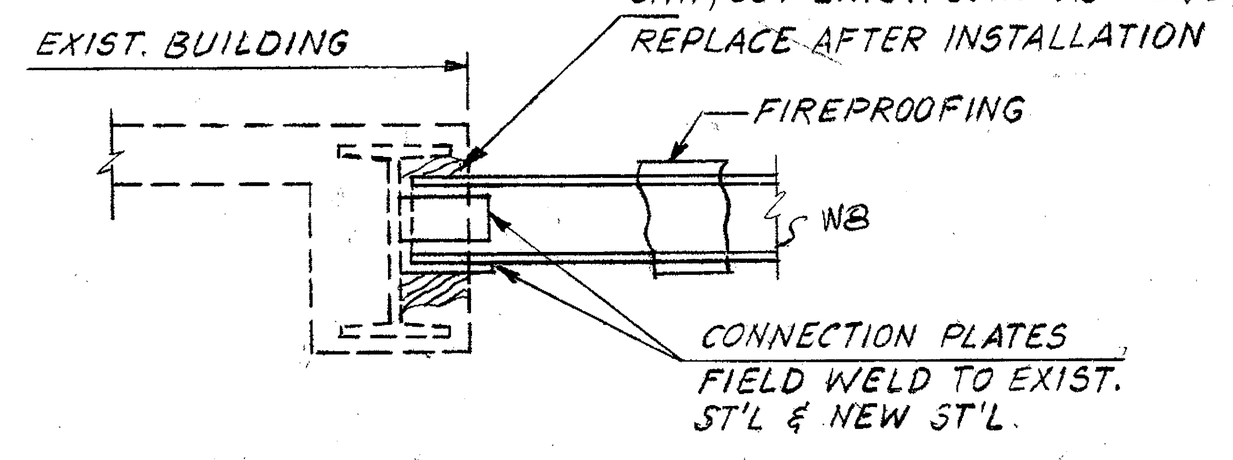
GENERAL NOTES:
1. ALL NEW BEAMS TO BE ENCASED IN 2" MIN. CONCRETE
2. CHIP OUT PORTIONS OF EXISTING CONCRETE AS REQUIRED FOR INSTALLATION OF NEW BRACING STEEL. RESTORE CONCRETE TO ITS ORIGINAL CONDITION AFTERWARDS.
3. CONNECTIONS OF NEW BRACING STEEL SHALL TRANSMIT THE FOLLOWING AXIAL FORCES:
   W8x24 - 110 K
   W8x31 - 124 K
4. ACTUAL EXISTING FIELD CONDITIONS AND DIMENSIONS TO BE MEASURED AND VERIFIED PRIOR TO DETAILING.

LEGEND.
- ◯ EXISTING COLUMN
- ⬡ NEW COL.
- – – – EXISTING STEEL
- —— NEW STEEL
- —·— BUILDING LINE

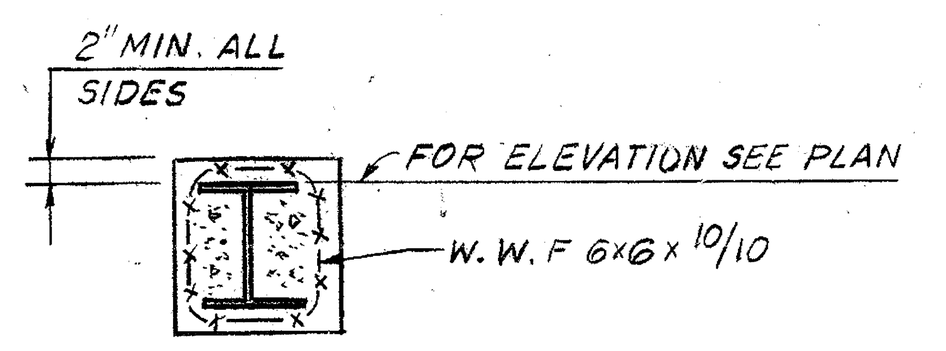


NOTE:
THE BOLTS AND WELD SHOWN IN THIS DETAIL ARE SYMBOLIC. COL. SPLICE FORCES SHALL BE FULLY DEVELOPED AT EACH SPLICE.

COL. SPLICE SHOWING ALTERNATE SHOP WELDING
(COL'S 1; 8; 45A; 46A; 55A; 57A)



TYP. CONNECTION DETAIL
SIMILAR AT COLUMN CONNECTION



TYP. NEW BEAM FIREPROOFING

ISSUED TO PORT AUTHORITY 1-15-85
FOR FDN STL ONLY 11/7/84

DATE	REVISIONS
5-10-85	ISSUED TO PORT AUTHORITY
8-7-84	ISSUED FOR FOUNDATION STEEL CONSTRUCTION ONLY
7-7-84	ISSUED FOR FOUNDATION STEEL BID ONLY

CON EDISON AREA
COL. BRACING DETAILS

7 WORLD TRADE CENTER
47 STORY OFFICE BUILDING
BOUNDED BY
VESEY STREET AND BARCLAY STREET
WASHINGTON STREET AND WEST BROADWAY
NEW YORK NEW YORK

EMERY ROTH & SONS P.C.
ARCHITECTS
845 THIRD AVENUE NEW YORK, N.Y. 10022

THE OFFICE OF
IRWIN G. CANTOR P.C.
STRUCTURAL ENGINEERS
919 THIRD AVENUE NEW YORK, N.Y. 10022

SYSKA & HENNESSY
ENGINEERS
11 WEST 42ND STREET NEW YORK, N.Y. 10036

DATE: SCALE:

DWG. S-25

80022