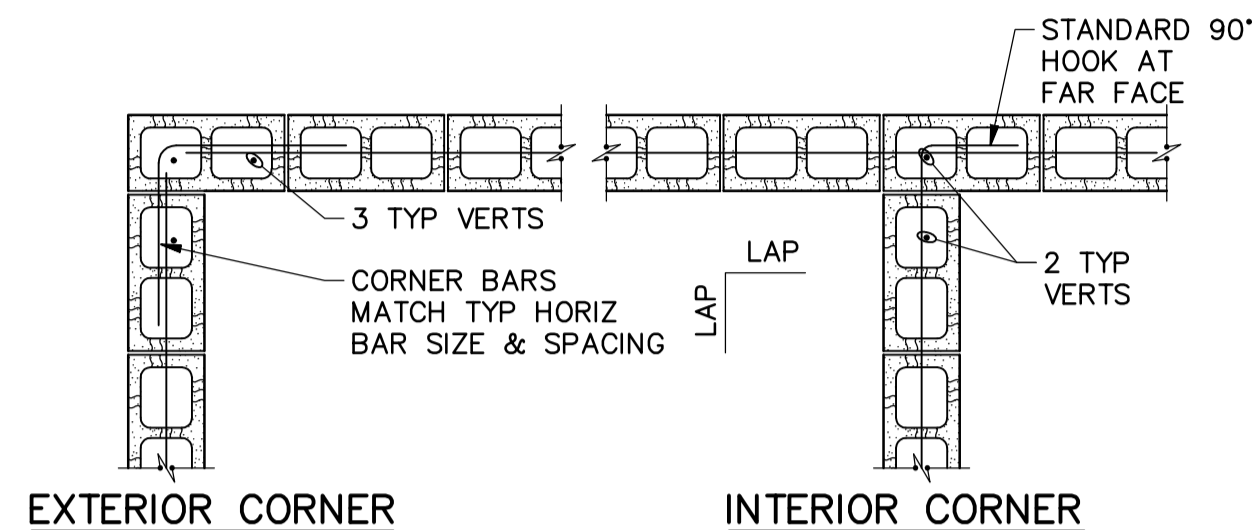


DOUBLE MAT PLAN (CMU 240mm AND MORE)

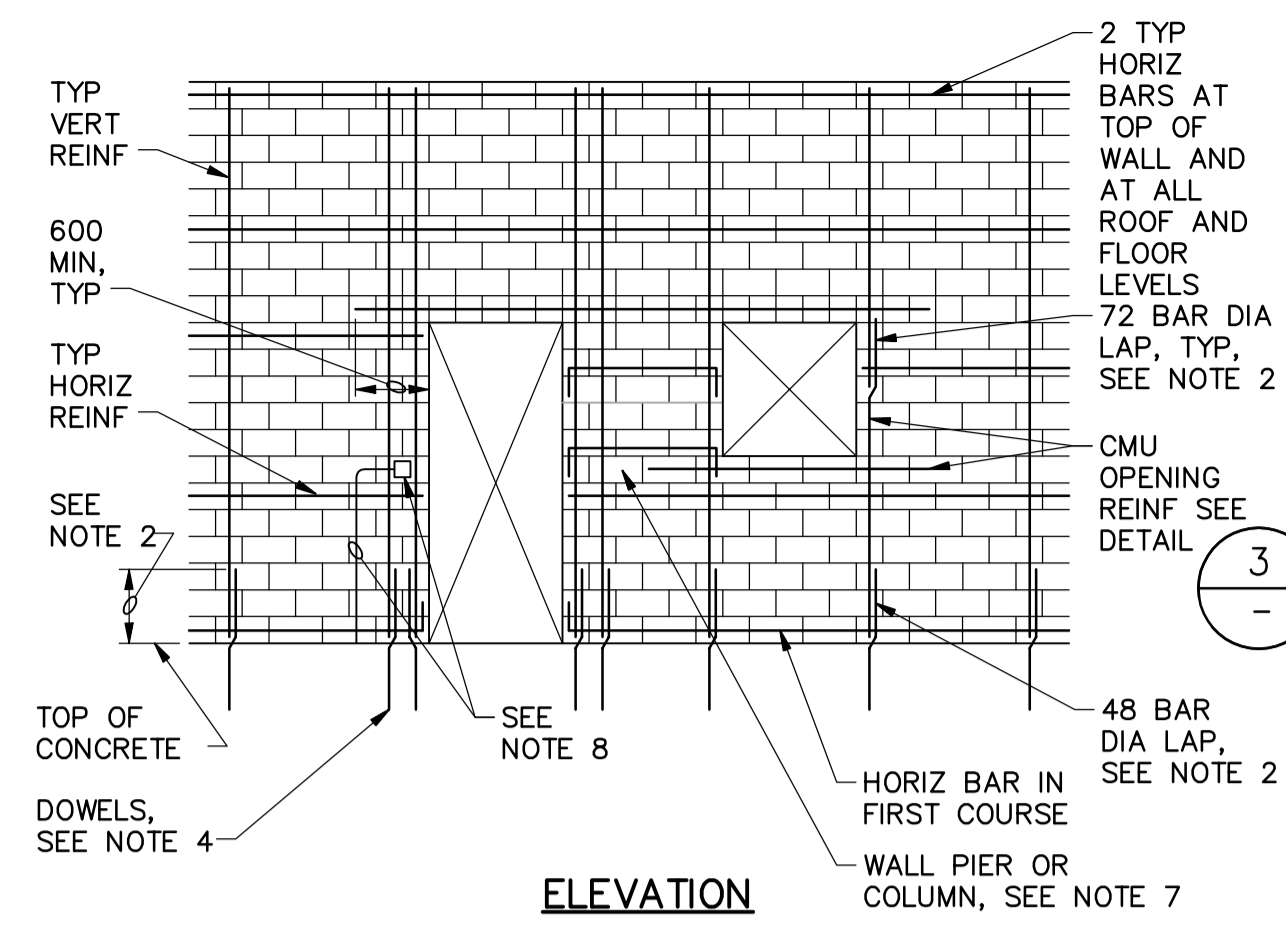


SINGLE MAT PLAN (CMU 190mm AND LESS)

NOTES:

- LAP = 48 BAR DIAMETERS OR 600 MINIMUM UNLESS OTHERWISE NOTED.
- PROVIDE A STANDARD 90° HOOK EACH END ON ANY HORIZONTAL BAR BETWEEN OPENINGS, CONTROL JOINTS, OR CORNERS LESS THAN 1800 IN LENGTH.

1
-
CMU WALL CORNERS
N.T.S.



ELEVATION

NOTES:

- FOR TYPICAL WALL REINFORCING, SEE WALL SECTIONS AND DETAILS FOR EACH FACILITY. FOR MINIMUM REINFORCING REQUIREMENTS, SEE GENERAL STRUCTURAL NOTES. PROVIDE 20M BAR UNO.
- LAP VERTICAL REINFORCING WITH WALL DOWELS 48 BAR DIAMETERS (600mm MIN), LAP ALL OTHER VERTICAL BARS 72 BAR DIAMETERS.
- STAGGER SPLICES IN ADJACENT HORIZONTAL BARS IN THE SAME COURSE BY 600mm.
- DOWEL BARS IN FOUNDATION INSTALLED BY OTHERS.
- FOR ADDED REINFORCING AT WALL INTERSECTIONS AND CORNERS, SEE DETAIL
- GROUT EACH SIDE OF OPENING AS NOTED IN TYPICAL OPENING REINFORCING DETAIL
- FOR HORIZONTAL REINFORCING AT OPENINGS SEE COLUMN AND PIER DETAILS.
- DO NOT PLACE VERTICAL CONDUIT IN THE SAME CELL AS VERTICAL REINFORCING.

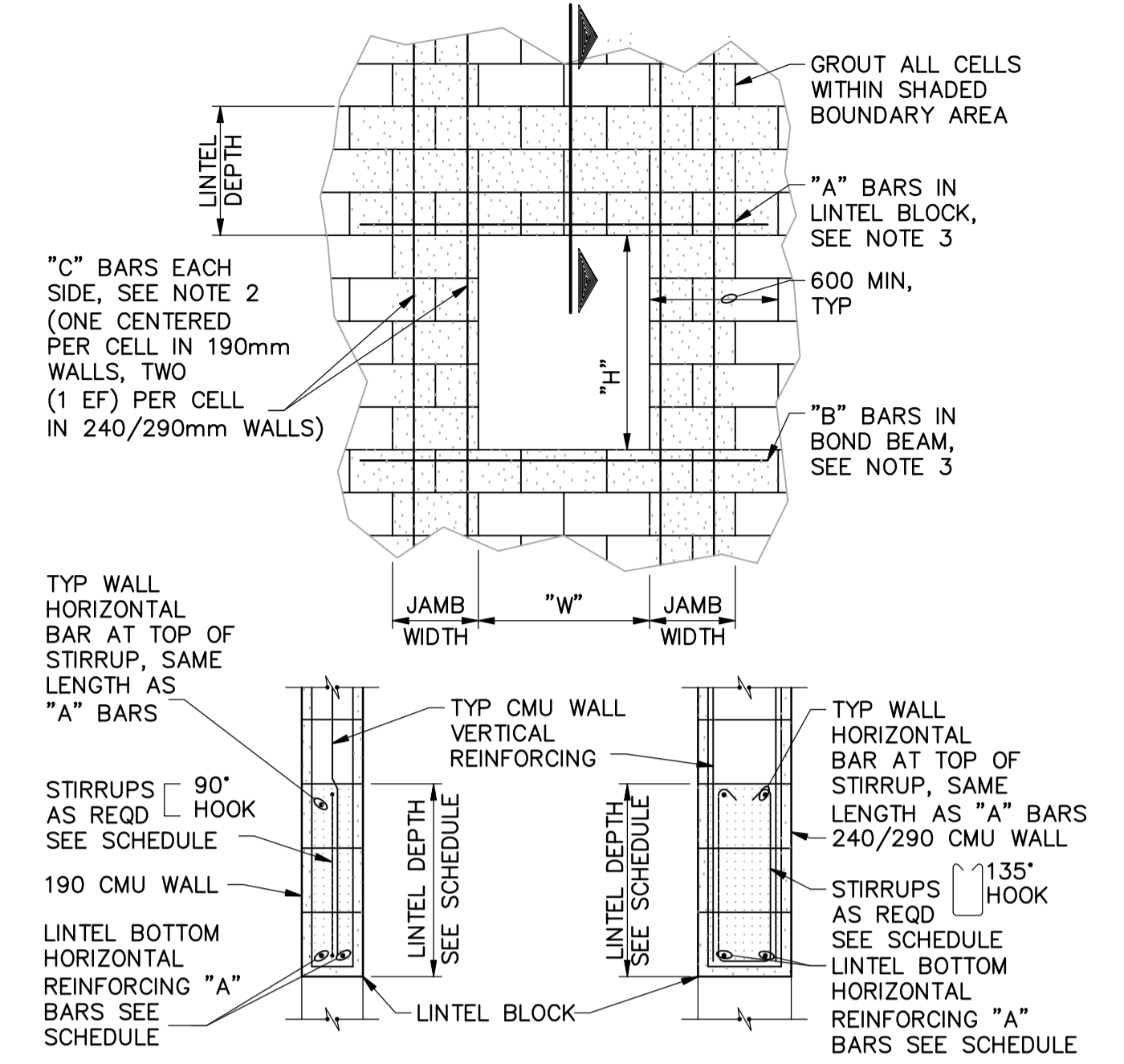
2
-
REINFORCED CMU WALL
N.T.S.

CMU OPENING REINF SCHEDULE						
190mm WALLS						
W	LINTEL DEPTH	STIRRUP SIZE, SPG	"A" BARS	"B" BARS	"C" BARS	JAMB WIDTH
≤800	200mm	-	1	1	1	200mm
>800≤1200	400mm	-	2	1	1	200mm
>1200≤1800	600mm	10M@200	2	1	2	400mm
>1800≤2400	800mm	10M@400	2	2	3	600mm
>2400≤3000	1200mm	10M@600	2	2	3	600mm
240/290mm WALLS						
W	LINTEL DEPTH	STIRRUP SIZE, SPG	"A" BARS	"B" BARS	"C" BARS	JAMB WIDTH
≤800	200mm	-	2	2	2	200mm
>800≤1200	400mm	-	2	2	2	200mm
>1200≤1800	600mm	10M@200	2	2	4	400mm
>1800≤2400	800mm	10M@400	2	2	6	600mm
>2400≤3000	1200mm	10M@600	2	2	6	600mm

NOTES:

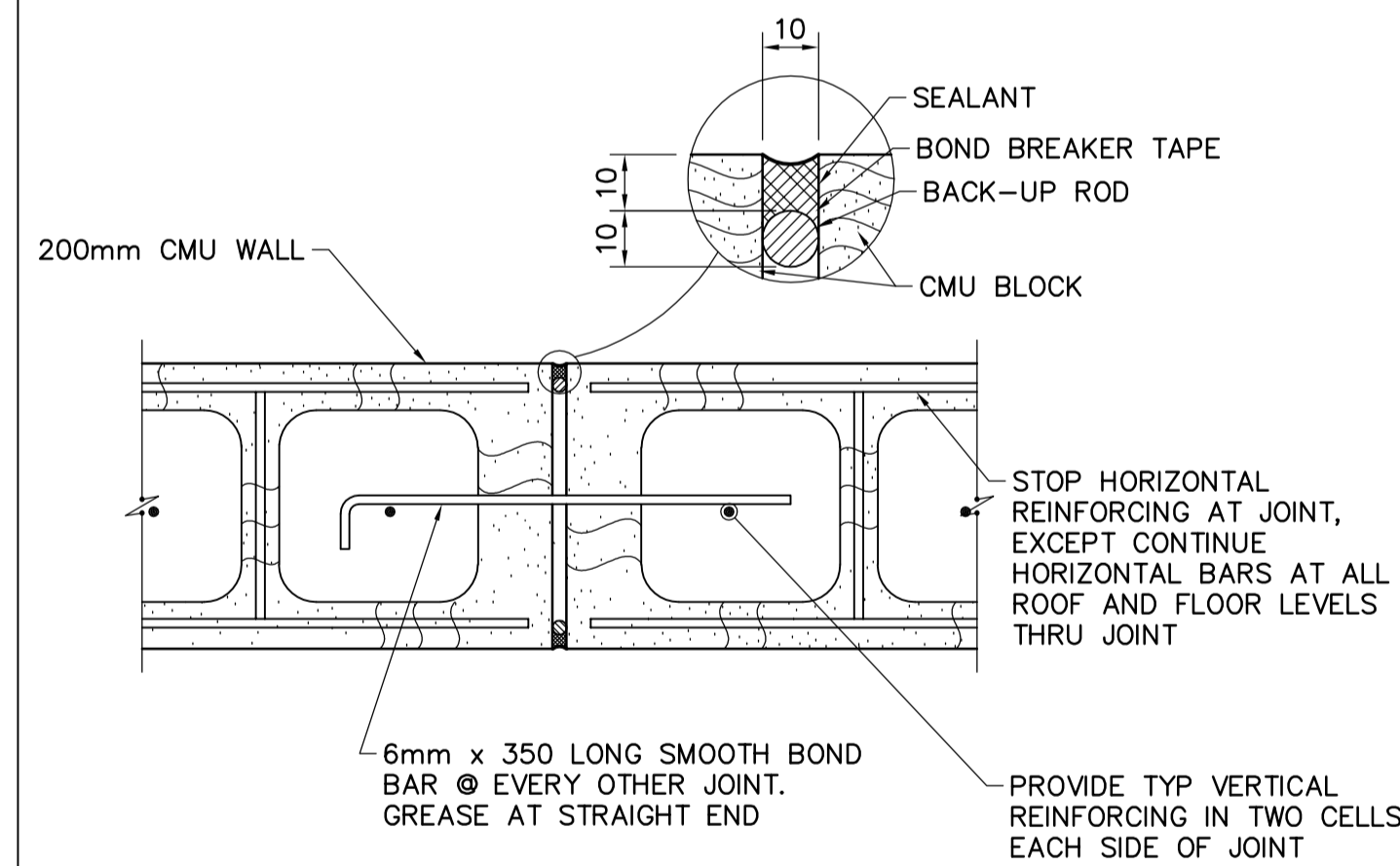
- USE BAR QUANTITIES AND SIZES GIVEN IN LINTEL SCHEDULE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- EXTEND "C" BARS 48 BAR DIAMETERS OR 600mm MINIMUM BEYOND TOP AND BOTTOM OF OPENING EXCEPT THAT WHEN "H" OR "W" EXCEEDS 600mm, "C" BARS SHALL EXTEND FULL HEIGHT. WHERE THERE IS LESS THAN 2400mm BETWEEN ADJACENT OPENINGS, EXTEND REINFORCING CONTINUOUS TO 800mm BEYOND FURTHEST OPENING.
- "A" AND "B" BARS SHALL EXTEND 48 BAR DIAMETERS OR 600mm MINIMUM EACH SIDE OF THE OPENINGS.
- FOR BAR SIZES, MATCH TYPICAL WALL REINFORCING AS SHOWN ON THE BUILDING WALL SECTIONS.
- BAR A = 20M DIA, BAR B & C = 15M DIA

3
-
CMU OPENING REINFORCING
N.T.S.

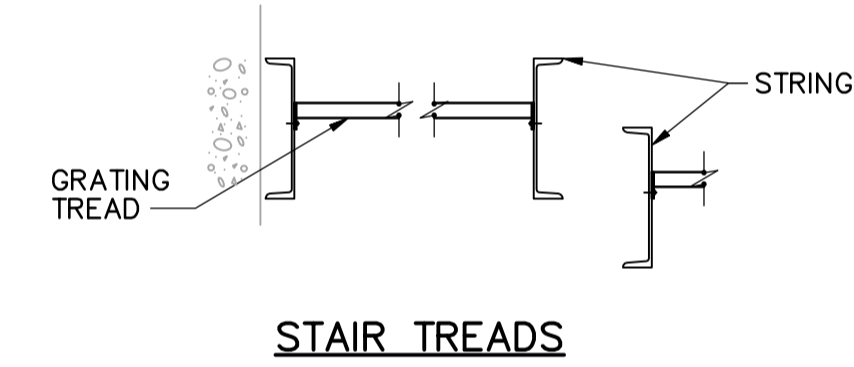


190mm LINTEL SECTION 240/290mm LINTEL SECTION

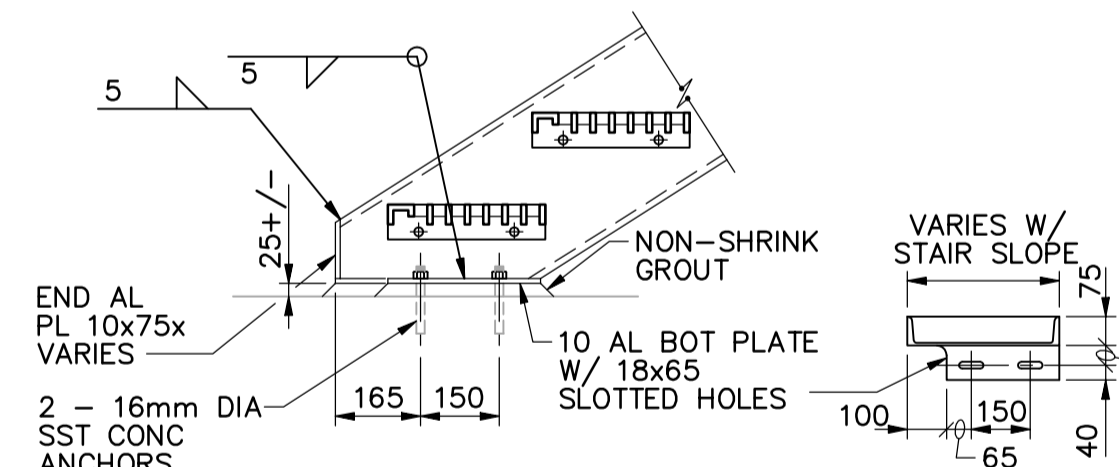
NOT USED



4
-
CMU CONTROL JOINT
N.T.S.



STAIR TREADS

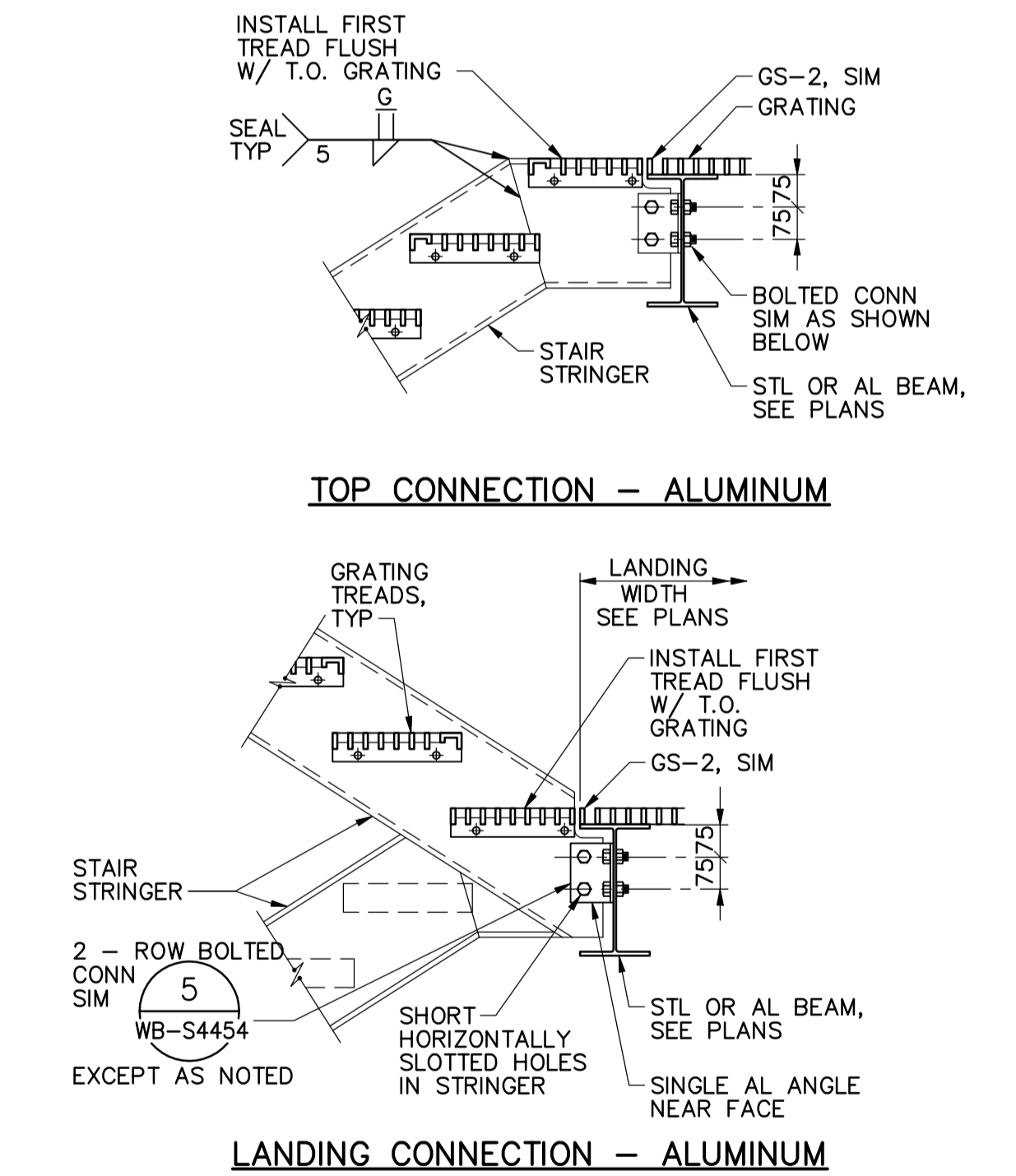


BOTTOM CONNECTION PLAN

NOTES:

- PROVIDE PROTECTION FOR DISSIMILAR METALS AND CONCRETE AS SPECIFIED.
- AMERICAN STANDARD C12x7.41 ALUMINUM, ALLOY 6061-T6 STRINGERS TYPICAL EXCEPT WHERE OTHERWISE NOTED ON PLANS.
- STAIR HANDRAIL NOT SHOWN.
- ALL FASTENERS SHALL BE STAINLESS STEEL.
- FIELD VERIFY DIMENSIONS & ELEVATIONS PRIOR TO FABRICATION.
- FOR TOP AND LANDING CONNECTION TO CONCRETE, DETAILS SHOWN ON ARCH. DRAWING TYPICAL EXCEPT WHERE OTHERWISE NOTED ON DRAWINGS.

5
-
STAIR DETAILS-ALUMINUM
N.T.S.



LANDING CONNECTION - ALUMINUM

APEGM
Certificate of Authorization
CH2M HILL Canada Ltd.
No. 1441 Expiry: April 30, 2008

NO.	REVISIONS	DATE	BY	DATE	BY
00	ISSUED FOR TENDER	07/06/05	MH		

CH2MHILL
Frederickson Cooper ARCHITECTS

EarthTech
A Tyco International Ltd. Company

DESIGNED BY: MH	CHECKED BY: AP
DRAWN BY: CR	APPROVED BY: AHL
SCALE: NTS	RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI
DATE: 2007/06/05	DATE: 2007/05/06

ENGINEER'S SEAL
ORIGINAL SIGNED BY: C. MILITANO
DATE: 2007/06/05
CONSULTANT DRAWING NO. WB-S4451

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

WATER TREATMENT PLANT
MAIN BUILDING
OFFICE AND PLANT INTERIOR FINISHES

STRUCTURAL
STANDARD DETAILS

CITY FILE NUMBER
SHEET OF
CITY DRAWING NUMBER
1-0601B-A-S4451-001-000