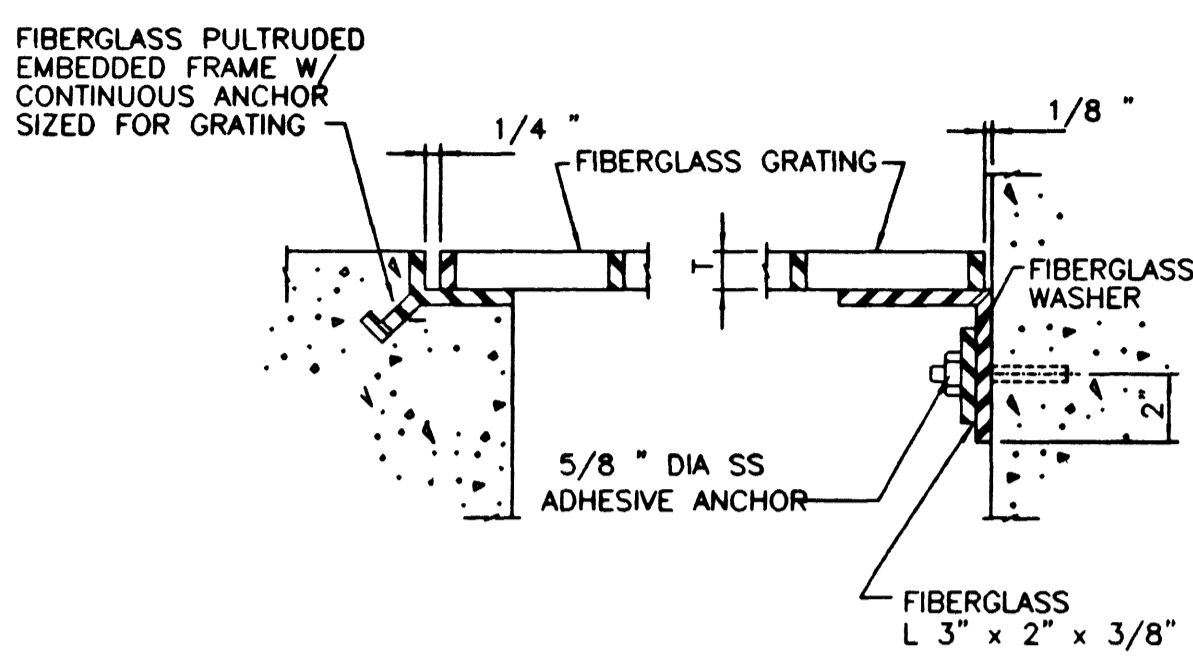
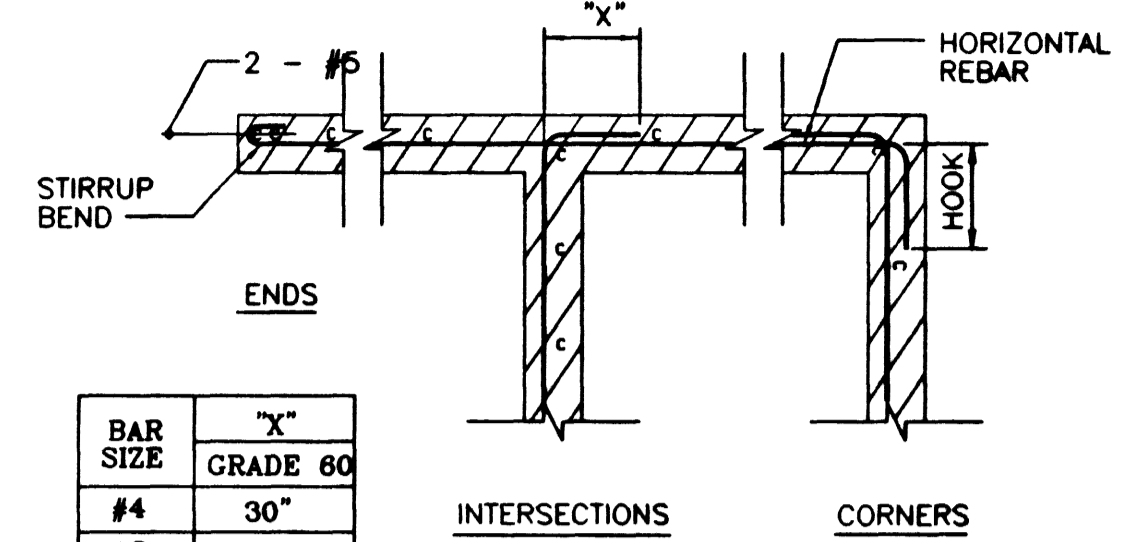


UNDERDRAIN ABOVE WALL FOOTING S-208
REV 010196

- NOTES:
1. ALL CUT EDGES SHALL BE SEALED WITH RESIN
 2. ALL GRATING SHALL BE SECURED IN PLACE WITH REMOVABLE FASTENERS, SIMILAR TO DETAIL S-517
 3. BONDING: USE EPOXY ADHESIVE BONDING AGENT
 4. WEIGHT OF EACH SECTION OF GRATING SHALL NOT EXCEED 80 POUNDS
 5. ALL FRAME COMPONENTS SHALL BE FIBERGLASS
 6. T TO BE DETERMINED BY GRATING MFR & APPROVED BY ENGINEER

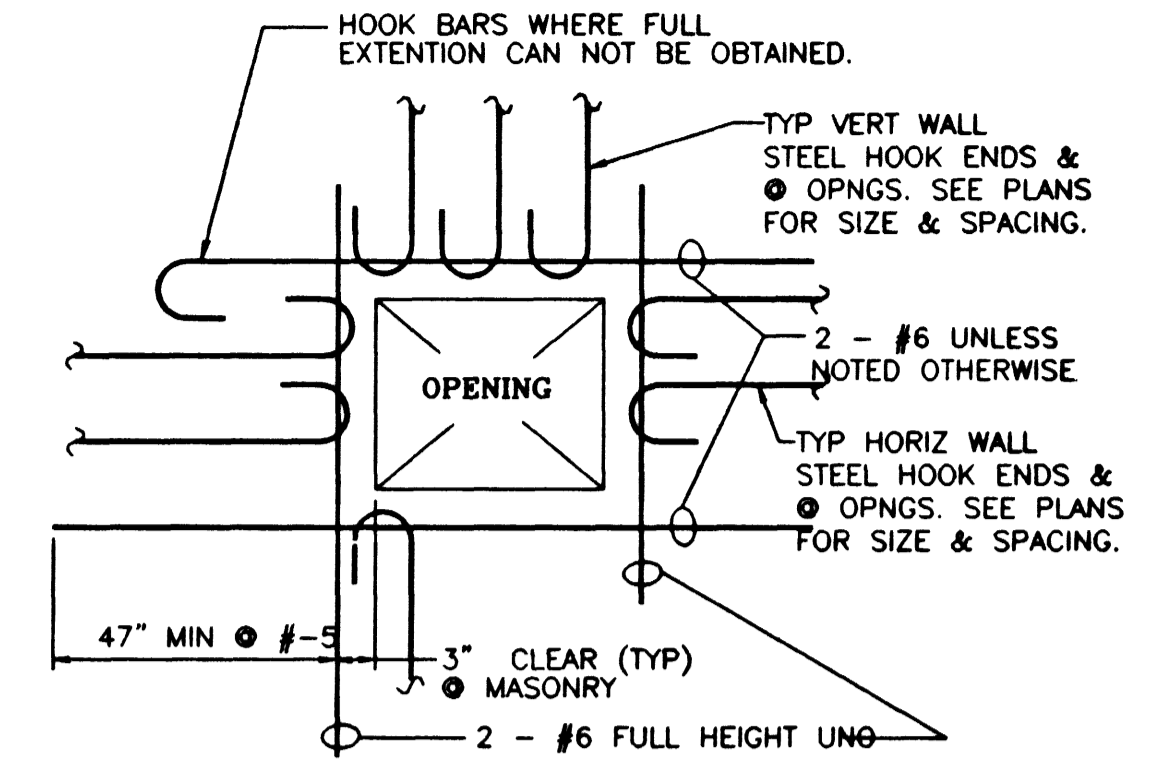


FIBERGLASS GRATING DETAILS S-320
REV 010196



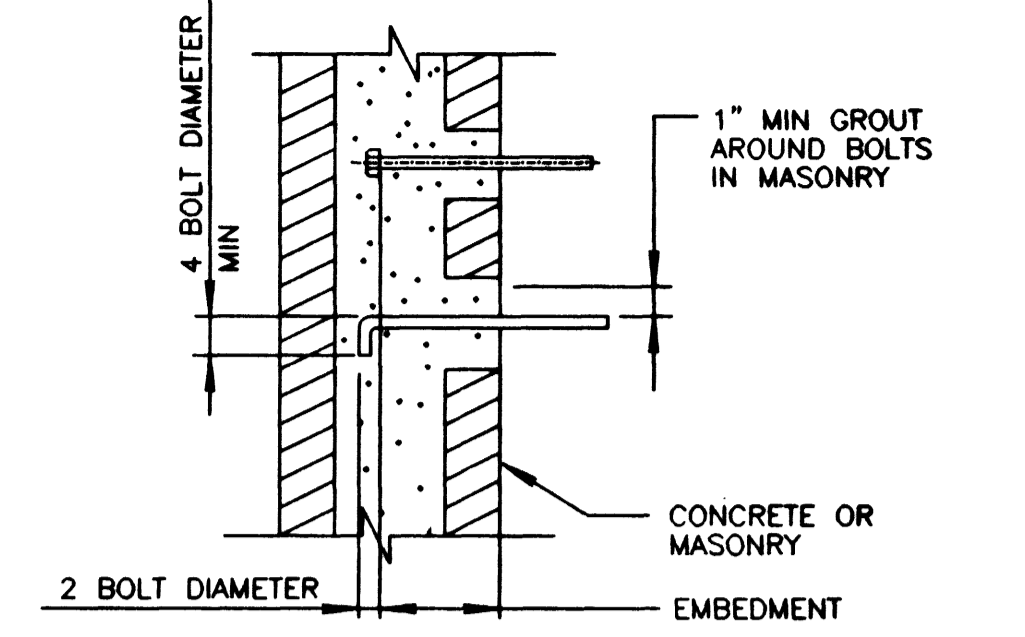
BAR SIZE	"X" GRADE
#4	30"
#5	38"
#6	45"
#7	53"
#8	60"

TYPICAL 8" BLOCK WALL SECTIONS S-401
REV 010196



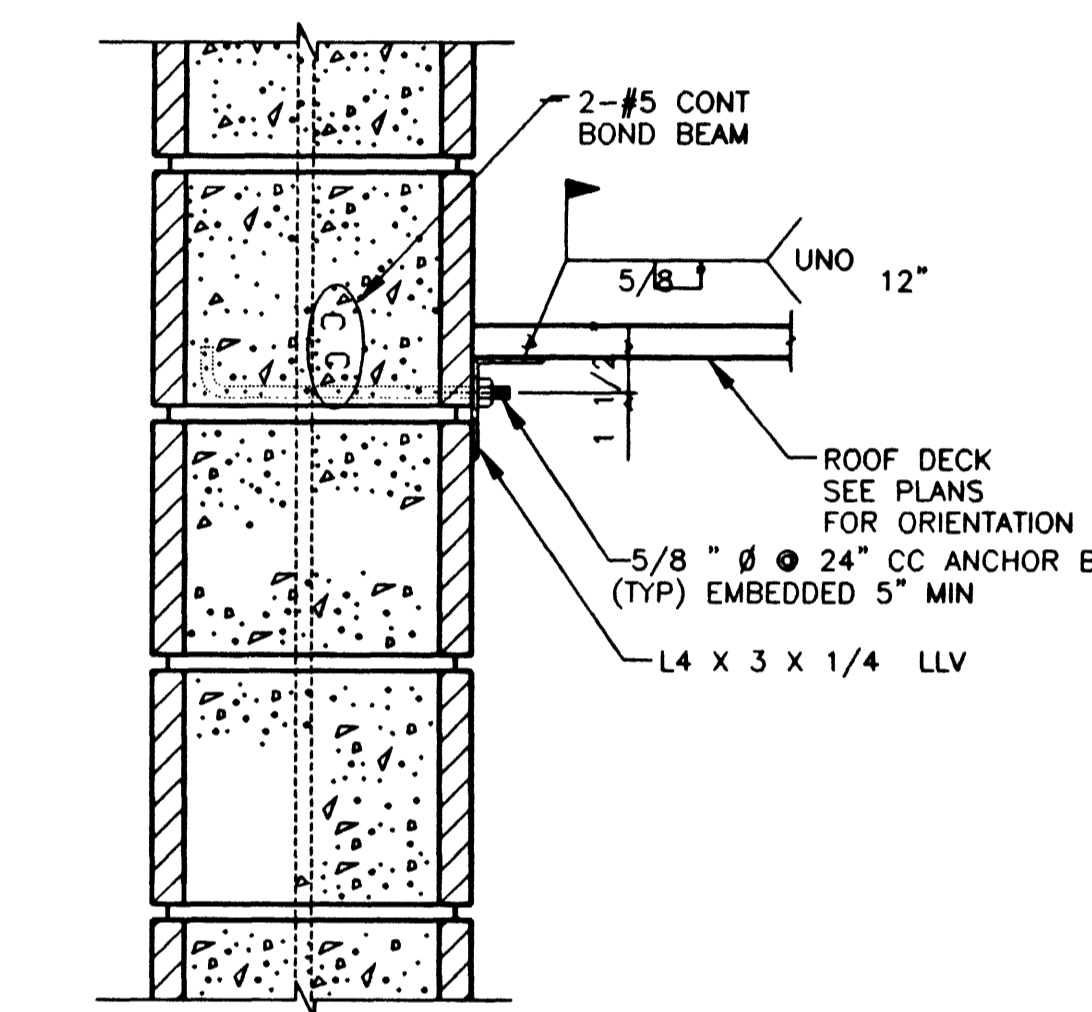
NOTE:
REINFORCING SHOWN IS IN ADDITION TO NORMAL REINFORCING AND SHALL BE PLACED WITH EACH LAYER OF BARS PROVIDED

TYPICAL REINFORCEMENT AT MASONRY WALL OPENING S-410

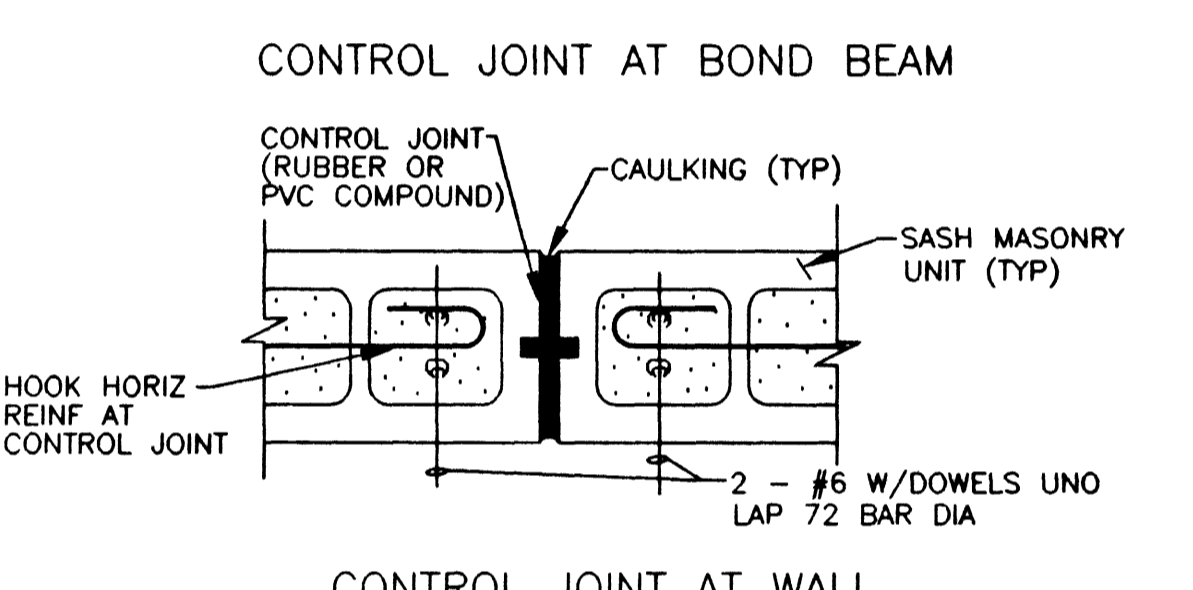
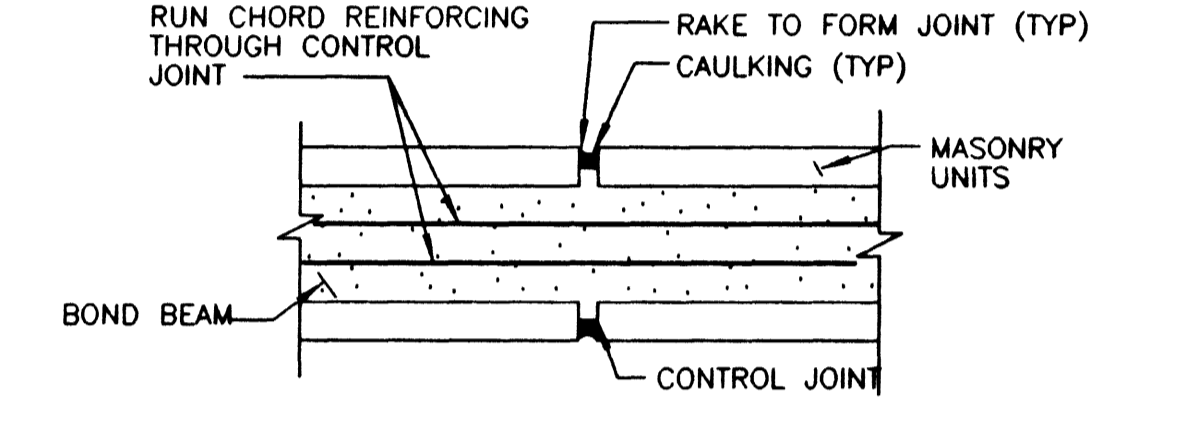


SIZE	EMBEDMENT (MINIMUM)
1/2" Ø	4"
5/8" Ø	4"
3/4" Ø	5"
7/8" Ø	6"
1" Ø	7"

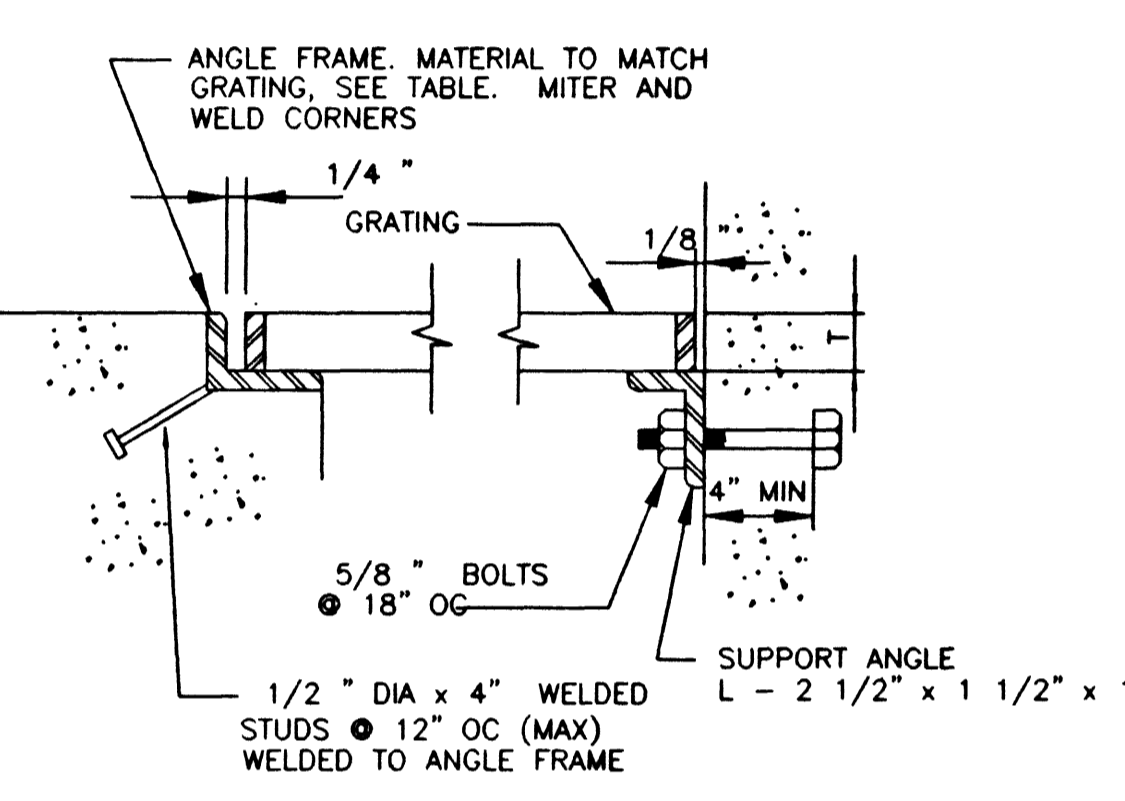
TYPICAL ANCHOR BOLT PLACING S-420
REV 051893



TYPICAL ROOF DECK LEDGER L CONNECTOR S-423
REV 051893



CONTROL JOINTS S-430
REV 010196



GRATING FRAME TABLE

GRATING DEPTH T	FRAME ANGLE	GRATING DEPTH T	FRAME ANGLE
1"	1 3/4" x 1 1/4" x 1/4"	2"	*2 1/2" x 2 1/2" x 1/2"
1 1/4"	2 x 1 1/2" x 1/4"	2 1/4"	2 1/2" x 2 1/2" x 1/4"
1 1/2"	1 3/4" x 1 3/4" x 1/4"	2 1/2"	3 x 2 1/2" x 1/2"
1 3/4"	2 x 2 x 1/4"		

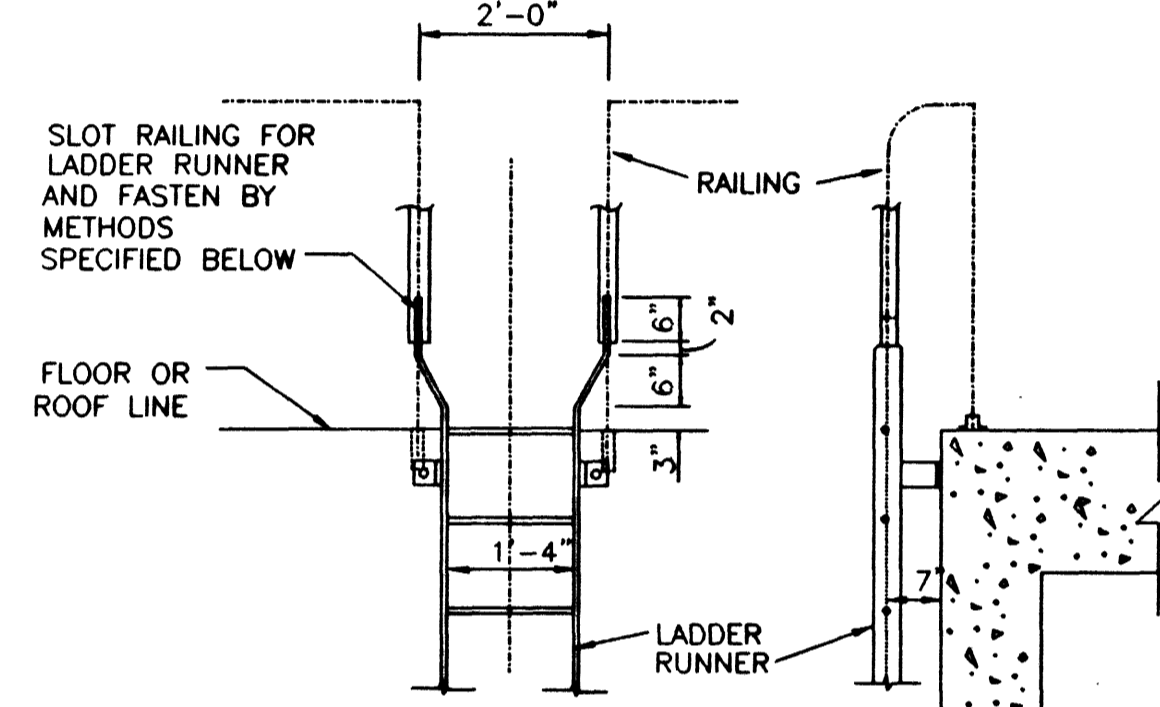
*OR USE 2 1/2" x 2 1/2" x 1/4" W/ 1/4" SHIM PLATE WELDED TO BOTTOM

- NOTES:
1. GRATING DEPTH TO BE DETERMINED BY MANUFACTURER AND APPROVED BY ENGINEER (UNO)
 2. ALL ENDS AND OPENINGS SHALL BE Banded
 3. ALL GRATING SHALL BE SECURED IN PLACE WITH REMOVABLE FASTENERS, SEE DETAIL S-517
 4. WEIGHT OF GRATING SECTION SHALL NOT EXCEED 80 LBS
 5. BEARING BARS SHALL BE DEPTH T x 3/16" Ø x 1 3/16" OC CROSS BARS SHALL BE Ø 4" OC

ALUMINUM GRATING S-501
USE ALUMINUM ANGLE SUPPORTS AND STAINLESS STEEL BOLTS

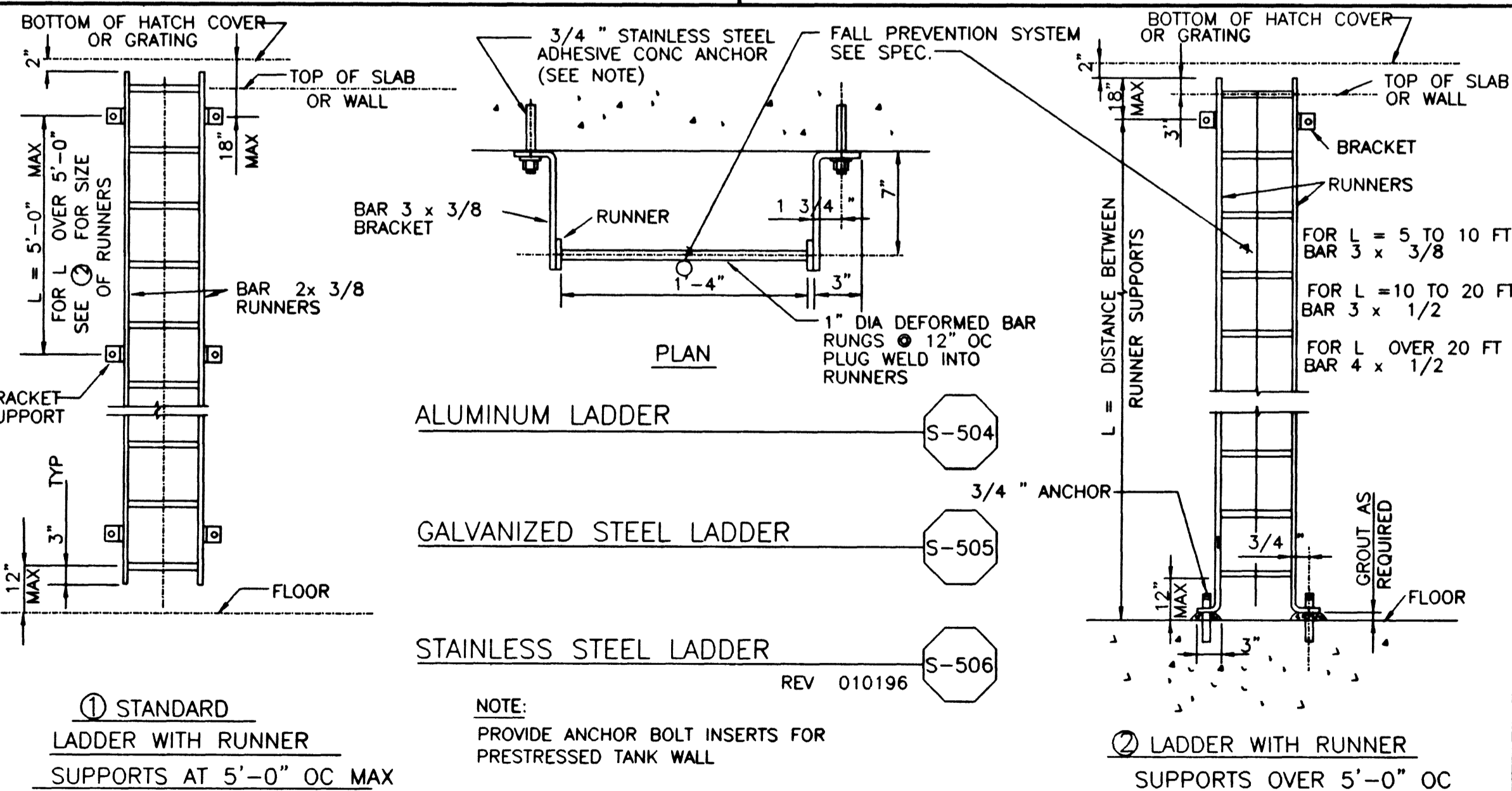
GALVANIZED STEEL GRATING S-502
USE STEEL ANGLE SUPPORTS AND BOLTS GALVANIZE AFTER FABRICATION

STAINLESS STEEL GRATING S-503
USE STAINLESS STEEL ANGLE SUPPORTS AND BOLTS

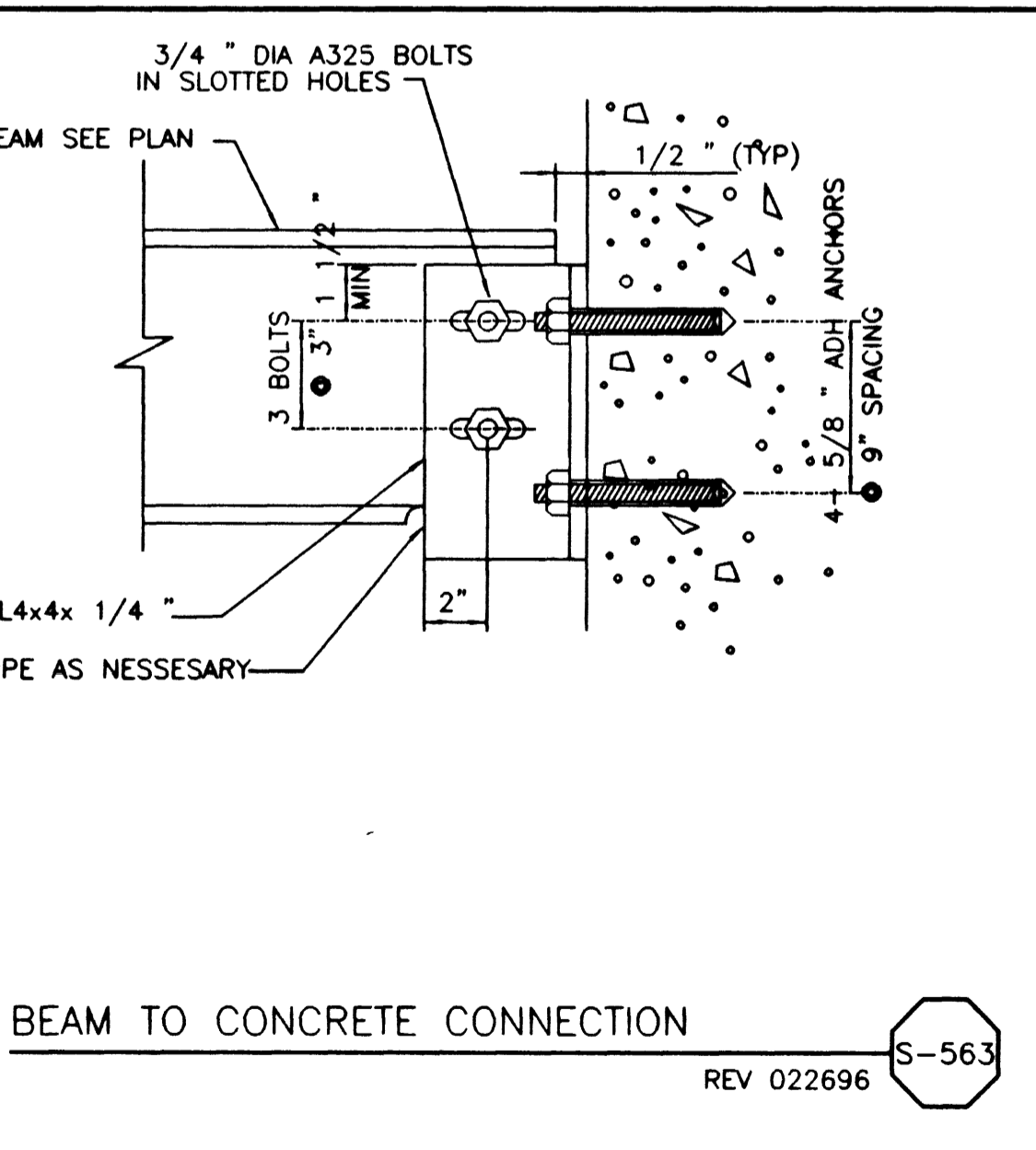


CONNECTIONS:
STEEL TO STEEL OR ALUMINUM TO ALUMINUM: WELDED CONNECTION, GRIND SMOOTH
STEEL TO ALUMINUM: DRILL HOLE THRU LADDER RUNNER AND RAILING FOR 1/2" PIN, INSERT PIN AND WELD BOTH ENDS AND GRIND SMOOTH. PIN SHALL BE THE SAME MATERIAL AS RAILING

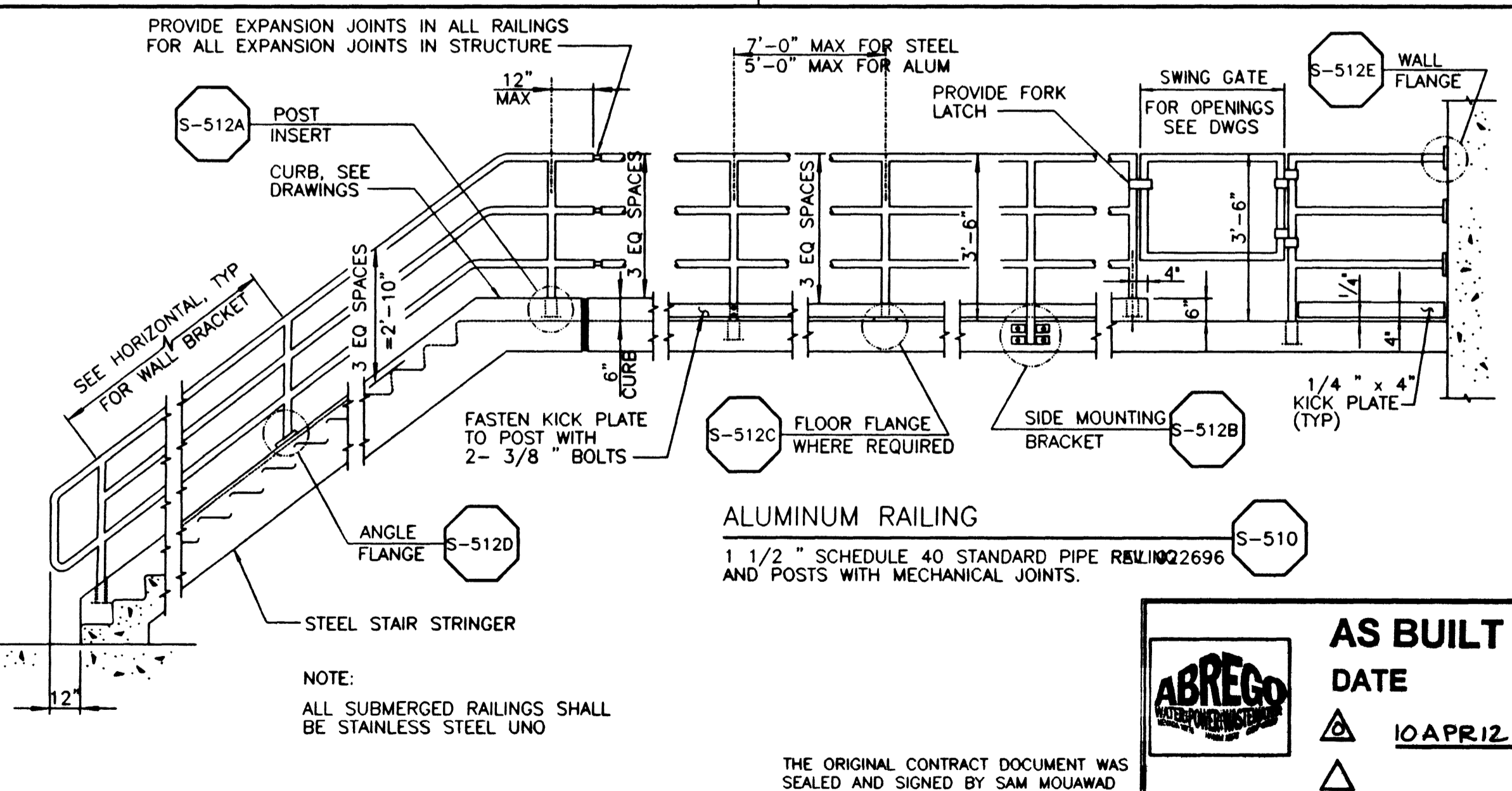
LADDER TO RAILING CONNECTIONS S-507
REV 010196



① STANDARD LADDER WITH RUNNER SUPPORTS AT 5'-0" OC MAX S-504
ALUMINUM LADDER
S-505
GALVANIZED STEEL LADDER
S-506
STAINLESS STEEL LADDER
REV 010196
NOTE: PROVIDE ANCHOR BOLT INSERTS FOR PRESTRESSED TANK WALL



BEAM TO CONCRETE CONNECTION S-563
REV 022696



ALUMINUM RAILING S-510
1 1/2" SCHEDULE 40 STANDARD PIPE REBUN22696 AND POSTS WITH MECHANICAL JOINTS.
NOTE: ALL SUBMERGED RAILINGS SHALL BE STAINLESS STEEL UNO

DATE/TIME DD-MMM-YYYY HH:MM
FILE No. P:\proj\wvrf\str\bzmm0's*.dgn
JOB No.

REV	DATE	BY	DESCRIPTION

SCALE:	WARNING	DESIGNED MW	SUBMITTED THE ORIGINAL CONTRACT DOCUMENT WAS SIGNED BY SAM MOUAWAD
NONE	0 1/2 1	DRAWN MW	PROJECT ENGINEER R. C. E. NO. DATE
	IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE.	CHECKED C. LEE	RECOMMENDED THE ORIGINAL CONTRACT DOCUMENT WAS SIGNED BY VICKI J. SCHARNHORST
			MONTGOMERY WATSON R. C. E. NO. DATE

MONTGOMERY WATSON
Las Vegas, Nevada

MONTGOMERY WATSON
3014 WEST CHARLESTON BLVD
LAS VEGAS, NV 89102-1944
(702) 878-8010

CITY OF LAS VEGAS
BONANZA/MOJAVE WATER RESOURCE CENTER
STRUCTURAL STANDARD DETAILS - 4

AS BUILT DATE
10 APR 12
DWG. 46
GS-4
513-64