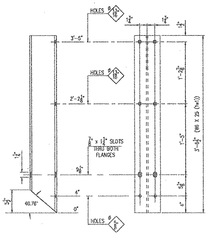


32 – SIDERAIL POSTS – 1A

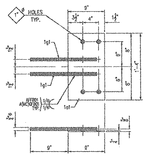
GENERAL NOTES:

1) MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2000" AS AMENDED BY THE LATEST SUPPLEMENTS, THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, SEVENTEENTH EDITION.
2) FABRICATION SHALL BE PERFORMED IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, AWS/AASHTO/ANSI D1.5 AND THE CURRENT INTERIM SPECIFICATIONS AS MODIFIED BY VTRANS SPEC. 505.03.
3) RAILING MATERIALS SHALL BE ASTM A709 GR 50, UNLESS NOTED OTHERWISE.
   PER VTRANS SPECIFICATION 732.03(a), (NO 1 P3 POSTS SHALL BE CVN TESTED PER 25 FT. LBS. @ 40°F).
   - HOLLOW STRUCTURAL SHAPES TO CONFORM WITH ASTM A500, GRADE B IN ACCORDANCE WITH VTRANS SPECIFICATION 732.03(d). (HSS SHALL BE CVN TESTED PER 15 FT. LBS. @ 40°F).
   - PIPE SHALL BE ASTM A53, GRADE B.
   - FABRIMAIL TO BE IN ACCORDANCE WITH ASTM F568M, CLASS 4.6 (ASTM A307), G.N.O.
   - HIGH STRENGTH HARDWARE SHALL BE IN ACCORDANCE WITH: AASHTO M164 TYPE 1 (ASTM A325) OR AASHTO M253 TYPE 3 (ASTM A490) IN ACCORDANCE TO VTRANS SPEC. 714.05. WHICH INCLUDES ROCKWELL PROOF AND WEDGE TESTING.
   - THREADED ROD FOR POST ANCHORAGE SHALL SHALL CONFORM TO ASTM F 1554 GRADE 55 "WELDABLE STEEL".
4) ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-232 (ASTM A-153).
5) RAILING COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-111 (ASTM A123), UNLESS NOTED OTHERWISE. BURRS AS, EDGES 1/16" AND BLAST CLEAN PER SSPC-SP 6 PRIOR TO GALVANIZING AND REPAIR GALVANIZING PER ASTM A780.
6) FABRICATION SHALL TAKE PLACE IN A FACILITY WITH A MINIMUM AISC CATEGORY III CERTIFICATION OR BE APPROVED BY VTRANS. NON-CERTIFIED FACILITIES MUST SATISFY THE REQUIREMENTS OF VTRANS SPEC 506.03

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO FABRICATION TO ENSURE ACCURACY OF DESIGN PLANS. STAMPED APPROVED DRAWINGS ASSUME DIMENSIONS HAVE BEEN VERIFIED BY CONTRACTOR

		ID	QTY.	DESCRIPTION	MATERIAL	LENGTH	REMARKS	PART NO.
		M1	32	SIDERAIL POSTS			4 1/2"	
		P1	64	PIPE (FRELL)	A53 GR B (F.B.W.)	2'-9 1/2"	PIPE, GALV, 6122-1100G, 12V	
		P2	32	PIPE (FRELL)	A53 GR B (F.B.W.)	2'-9 1/2"	PIPE, GALV, 6122-1100G, 12V	
		S1	32	SIDERAIL	A709 GR 50	7'-3	4X3-GSC	
		M2	32	U.V.T.	A709 GR 50		4X3-GSC	
		M3	64	PLATE 1/8 THICKNESS	ASTM 1554 GR 55		WELDABLE STEEL, 4X3X-NGC	
		M4	64	U.V.T.				
		C1	32	PLATE WASHERS			4"x4"	
		M5	32	U.V.T.	A709 GR 50	5"x4"	4X3-GSC	
		N1	96	NUTS			1"-8	
		N2	72	1"x7"HP HEX NUT	A563 GR A		HPHD DEPRESSED, PLAIN, NGC	
		N3	96	1"(0.D.) X 2 1/2 (L)x1/4	A500 GR B	1"-8	W-SHPL 6X3X1/8 (NB 6X), 4X3-NGC	
		W1	32	1"(0.D.) x 3 (L) x 1/4				
		W2	32	1"(0.D.) x 3 (L) x 1/4	A563 GR A		LBS, FB PER ASTM B695, 4X3-GSC	
		N4	32	1"x7" HEX NUTS				
		W3	32	1"x7"HP FLAT WASHER	F844		SQ, FB PER ASTM B695, 4X3-GSC	
		N5	32	1"x7"HEX NUTS				
		T1	144	7/8"x1 1/2 ASC GR 55 STRUCTURAL BOLTS	A325, GR A449		FB (2" THRU BL, 8X3-NGC, 8X3-GSC	
		W4	144	7/8"x7"HP FLAT WASHER	F436		(3X3), 8X3-GSC, 8X3-GSC	
		W5	144	7/8"x7"HP FLAT WASHER	F436		(3X3), 8X3-GSC, 8X3-GSC	
		N6	144	7/8"x7"HEX NUTS				
		P3	32	1"x7"x1 1/2 STEEL PLATE			3X3X1/2-4X3X3X1/2-NGC	
		P4	32	1"x7"x1 1/2 STEEL PLATE			3X3X1/2-4X3X3X1/2-NGC	
		N7	64	1"x7"HEX NUTS				
		N8	64	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-NGC, 6X3-GSC	
		N9	32	1"x7"HEX NUTS				
		W6	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N10	32	1"x7"HEX NUTS				
		W7	32	1"x7"HP FLAT WASHER	A307 GR A		(3X3), 6X3-GSC, 6X3-GSC	
		N11	32	1"x7"HEX NUTS	A307 GR A		(3X3), 6X3-GSC, 6X3-GSC	
		W8	64	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N12	64	1"x7"HEX NUTS				
		N13	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W9	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N14	32	1"x7"HEX NUTS				
		N15	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W10	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N16	32	1"x7"HEX NUTS				
		N17	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W11	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N18	32	1"x7"HEX NUTS				
		N19	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W12	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N20	32	1"x7"HEX NUTS				
		N21	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W13	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N22	32	1"x7"HEX NUTS				
		N23	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W14	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N24	32	1"x7"HEX NUTS				
		N25	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W15	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N26	32	1"x7"HEX NUTS				
		N27	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W16	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N28	32	1"x7"HEX NUTS				
		N29	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W17	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N30	32	1"x7"HEX NUTS				
		N31	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W18	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N32	32	1"x7"HEX NUTS				
		N33	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W19	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N34	32	1"x7"HEX NUTS				
		N35	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W20	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N36	32	1"x7"HEX NUTS				
		N37	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W21	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N38	32	1"x7"HEX NUTS				
		N39	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W22	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N40	32	1"x7"HEX NUTS				
		N41	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W23	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N42	32	1"x7"HEX NUTS				
		N43	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W24	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N44	32	1"x7"HEX NUTS				
		N45	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W25	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N46	32	1"x7"HEX NUTS				
		N47	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W26	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N48	32	1"x7"HEX NUTS				
		N49	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W27	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N50	32	1"x7"HEX NUTS				
		N51	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W28	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N52	32	1"x7"HEX NUTS				
		N53	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W29	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N54	32	1"x7"HEX NUTS				
		N55	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W30	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N56	32	1"x7"HEX NUTS				
		N57	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W31	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N58	32	1"x7"HEX NUTS				
		N59	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W32	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N60	32	1"x7"HEX NUTS				
		N61	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W33	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N62	32	1"x7"HEX NUTS				
		N63	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W34	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N64	32	1"x7"HEX NUTS				
		N65	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W35	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N66	32	1"x7"HEX NUTS				
		N67	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W36	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N68	32	1"x7"HEX NUTS				
		N69	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W37	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N70	32	1"x7"HEX NUTS				
		N71	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W38	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N72	32	1"x7"HEX NUTS				
		N73	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W39	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N74	32	1"x7"HEX NUTS				
		N75	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W40	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N76	32	1"x7"HEX NUTS				
		N77	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W41	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N78	32	1"x7"HEX NUTS				
		N79	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W42	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N80	32	1"x7"HEX NUTS				
		N81	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W43	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N82	32	1"x7"HEX NUTS				
		N83	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W44	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N84	32	1"x7"HEX NUTS				
		N85	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W45	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N86	32	1"x7"HEX NUTS				
		N87	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W46	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N88	32	1"x7"HEX NUTS				
		N89	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W47	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N90	32	1"x7"HEX NUTS				
		N91	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W48	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N92	32	1"x7"HEX NUTS				
		N93	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W49	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N94	32	1"x7"HEX NUTS				
		N95	32	1"x7"HEX NUTS	A563 DH		(3X3), 6X3-GSC, 6X3-GSC	
		W50	32	1"x7"HP FLAT WASHER	F844		(3X3), 6X3-GSC, 6X3-GSC	
		N96	32	1"x7"HEX NUTS				

NOTE: ALL HARDWARE SPECIFICATION DESCRIPTIONS ARE ABOVE, UNLESS OTHERWISE NOTED.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