

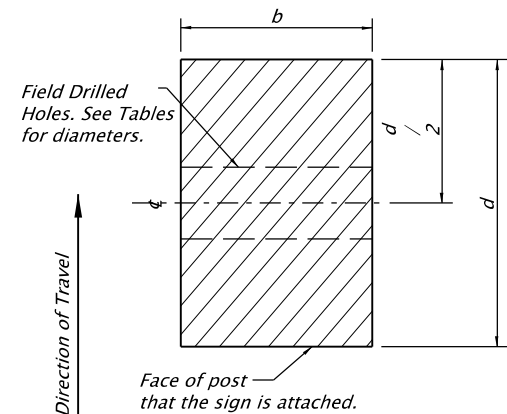
ELEVATION
No scale

General Notes:

1. Wood posts are available in the following commercial lengths: 12', 14', 16', 18', 20', 22', 24', 26'.
2. Material shall be Douglas Fir No. 1 and according to Section 02110.40.
3. For horizontal and vertical clearances of permanent signs refer to TM200 and of temporary signs refer to TM822.
4. Wood post design in accordance with the 5th Edition 2009 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.
5. Use the 3 second gust wind speeds shown on TM671 for the site specific sign location.
6. General design parameters are $K_z = 0.87$, SIF (duration factor) = 1.6, C_d (sign) = 1.20, and $G = 1.14$.
7. The sign width to sign height or sign height to sign width ratio shall not exceed 5.0.
8. Permanent signing uses an $I_r = 0.71$ for a recurrence interval of 10 years.
9. Temporary signing uses an $I_r = 0.45$ for a recurrence interval of 1.5 years.
10. Posts protected by barrier or guardrail do not require field drilled holes.
11. 4" x 4" posts should not be used in snow plow areas.

Post Embedment Installation:

1. Excavate the hole at least 12" larger in diameter than the diagonal dimension of the post. Maintain at least 6" of space around the edges of the post to accommodate compaction equipment.
2. Align the post in the hole to a vertical position.
3. The space around the wood post shall be backfilled to finished ground surface.
4. Backfill with selected general backfill meeting the requirements of 00330.13.
5. Place in layers not greater than 6 inches.
6. Solidly ram and tamp the layers into the excavation area around the post.
7. Dampen during placement if too dry to compact properly.
8. Replace and finish the surface around the post to match the surrounding surface.



SECTION A-A
No scale

		$(X * Y * Z)$ in ft^3 - Maximum												Field Drilled Hole Diameters	Post Embedment Depth "D"		
		3 Second Gust Wind Speed (TM671)															
		85 MPH				95 MPH				105 and 110 MPH							
		Number of Posts				Number of Posts				Number of Posts							
POST SIZE $b \times d$		1	2	3*	3*	1	2	3*	3*	1	2	3*	3*	Not Req'd	4' - 0"		
				$X=15'$	$X \geq 20'$			$X=15'$	$X \geq 20'$			$X=15'$	$X \geq 20'$				
		4" x 4"		77	154	165	231	62	124	132	186	56	112			120	168
		4" x 6"		162	324	347	486	130	260	278	390	117	234			250	351
		6" x 6"		270	540	578	810	216	432	462	648	195	390			417	585
6" x 8"		494	988	1058	1482	395	790	846	1185	356	712	762	1068				

PERMANENT WOOD POST TABLE

* - Linear Interpolate X^*Y^*Z 3 post values for signs greater than 15' and less than 20'.
 ** - See note 8

		$(X * Y * Z)$ in ft^3 - Maximum												Field Drilled Hole Diameters	Post Embedment Depth "D"		
		3 Second Gust Wind Speed (TM671)															
		85 MPH				95 MPH				105 and 110 MPH							
		Number of Posts				Number of Posts				Number of Posts							
POST SIZE $b \times d$		1	2	3*	3*	1	2	3*	3*	1	2	3*	3*	Not Req'd	4' - 0"		
				$X=15'$	$X \geq 20'$			$X=15'$	$X \geq 20'$			$X=15'$	$X \geq 20'$				
		4" x 4"		122	244	261	366	98	196	210	294	88	176			188	264
		4" x 6"		257	514	550	771	205	410	439	615	185	370			396	555
		6" x 6"		426	852	912	1278	341	682	730	1023	308	616			660	924
6" x 8"		779	1558	1669	2337	624	1248	1337	1872	563	1126	1206	1689				

TEMPORARY WOOD POST TABLE

* - Linear Interpolate X^*Y^*Z 3 post values for signs greater than 15' and less than 20'.
 ** - See note 9

Accompanied by dwgs. TM200, TM671, TM822

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.			
OREGON STANDARD DRAWINGS			
WOOD POST SIGN SUPPORTS			
2021			
DATE	REVISION DESCRIPTION		
01-2022	ADDED 3'-6" MINIMUM SPACING FOR 4"x4" POSTS AND 8'-0" MINIMUM SIGN WIDTHS FOR 4"x6" AND LARGER POSTS		
CALC. BOOK NO.	5850	SDR DATE	07-JAN-2022
			TM670