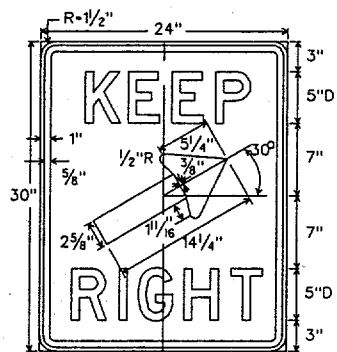
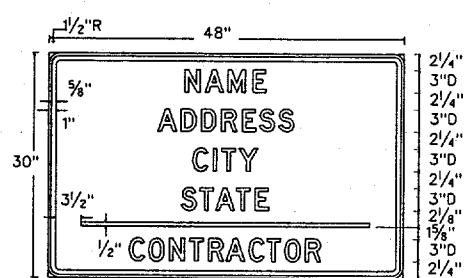


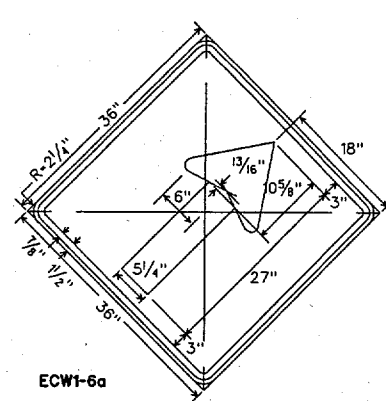
TYPICAL SIGNS USED IN TRAFFIC SIGNAL CONSTRUCTION AREAS



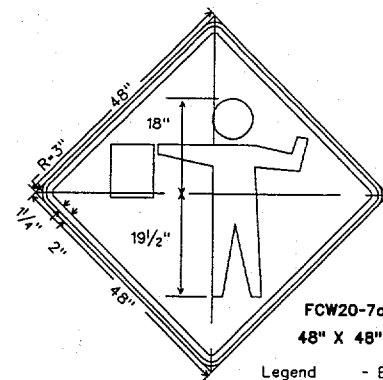
R4-7b
24" X 30"
Letters - Black
Symbol - Black
Border - Black
Background - White Refl.



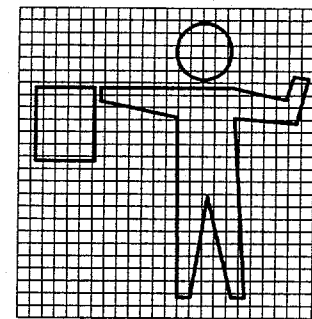
SG20-6
48" X 30"
Letters - Black
Border - Black
Background - Orange or White Refl.



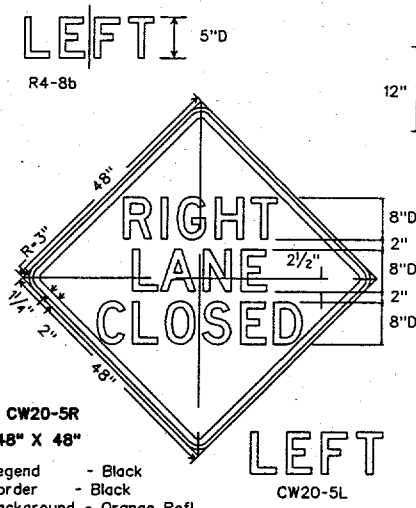
ECW1-6a
36" X 36"
Legend - Black
Border - Black
Background - Orange Refl.



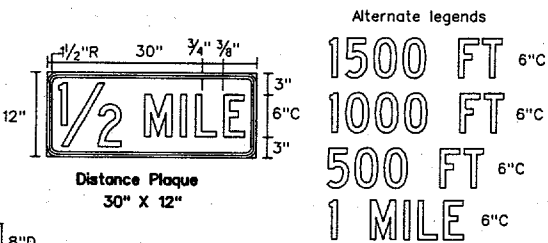
FCW20-7a
48" X 48"
Legend - Black
Border - Black
Background - Orange Refl.



EG20-9
36" X 24"
Letters - Black
Border - Black
Background - Orange Refl.

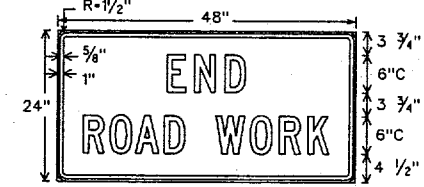


CW20-5R
48" X 48"
Legend - Black
Border - Black
Background - Orange Refl.

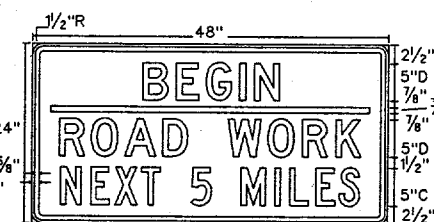


Distance Plaque
30" X 12"

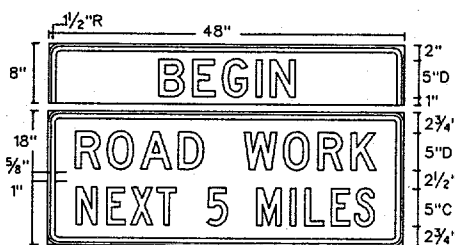
Alternate legends
1500 FT 6"
1000 FT 6"
500 FT 6"
1 MILE 6"



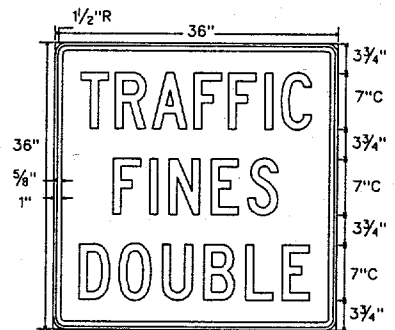
G20-2a
48" X 24"
Letters - Black
Border - Black
Background - Orange Refl.



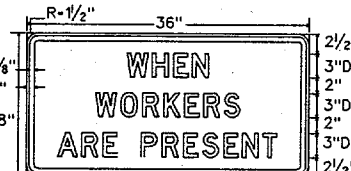
SG20-5T
48" X 24"
Letters - Black
Border - Black
Background - Orange Refl.



SG20-1 w/plaque
48" X 26"
Letters - Black
Border - Black
Background - Orange Refl.

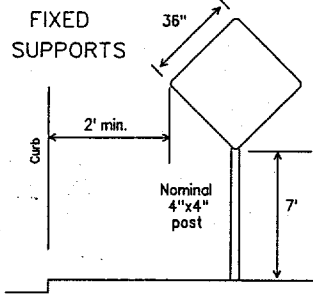


ER20-5
36" X 36"
Letters - Black
Border - Black
Background - White Refl.

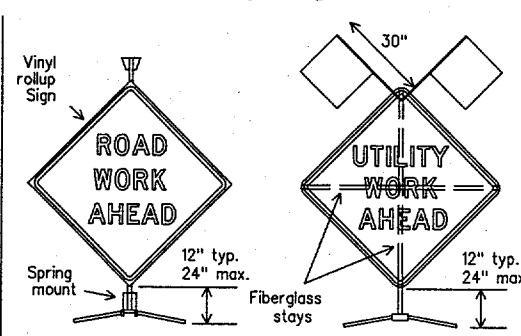


ER20-5 Plaque
36" X 18"
Letters - Black
Border - Black
Background - White Refl.

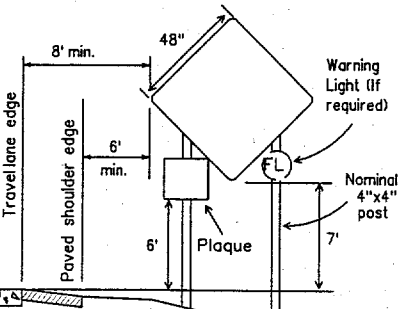
TYPICAL SIGN SUPPORTS



WOOD POST SIGN SUPPORT: for 36" x 36" and smaller warning signs, and other signs having an area not exceeding 12 sq.ft.



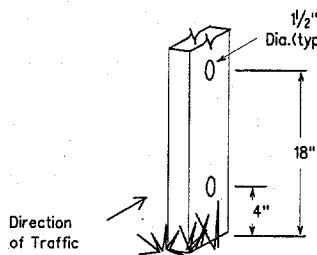
PORTABLE SUPPORTS
Short Term Stationary/Short Duration



WOOD POST SIGN SUPPORT: for 48" x 48" warning signs.

Signs erected on fixed supports shall be at a minimum height of 7 feet. Embedment depth for wood sign supports and post type barricades should be 3 feet minimum, unless specified elsewhere in the plans. Driveable sign supports may be used and shall be installed in accordance with the manufacturer's recommendations.

WOOD POST SYSTEM FOR FIXED SIGN SUPPORTS



Nominal Post Size	Maximum No. of Posts	Minimum Sq. feet of Sign Face	Drilled Soil Hole(s) Embedment Required
4 x 4	1	12	36" no
4 x 4	2	21	36" no
4 x 6	1	21	36" YES
4 x 6	2	36	36" YES

Only pre-qualified products shall be used. A list of compliant products and their sources may be obtained by writing, calling or faxing:

Standards Engineer
Traffic Operations Division - TE
Texas Department of Transportation
125 East 11th Street
Austin, Texas 78701-2483
Phone (512) 416-3120
Fax (512) 416-3161
E-mail TRF-STANDARD@mailgw.dot.state.tx.us

SPECIFICATION REFERENCE TABLE	
MATERIALS AND TESTS DIVISION SPECIFICATIONS	
PLYWOOD SIGN BLANKS	DMS 7100
ALUMINUM SIGN BLANKS	DMS 7110
FLAT SURFACE REFLECTIVE SHEETING, TYPE A (ENGINEER GRADE)	DMS 8300
FLAT SURFACE REFLECTIVE SHEETING, TYPE B (SUPER ENGINEER GRADE)	DMS 8300
FLAT SURFACE REFLECTIVE SHEETING, TYPE C (HIGH SPECIFIC INTENSITY)	DMS 8300

GENERAL
Standard signs shall be used as required by the BC Standard sheets, the plans, or as directed by the Engineer to regulate, warn, and guide traffic. All sign usage and erection shall be in strict accordance with the "Texas Manual on Uniform Traffic Control Devices for Streets and Highways" (TMUTCD). The Contractor shall maintain each sign as directed by the Engineer.
The Contractor may use either the sign designs shown on the BC Standard Sheets, or those sign designs shown in the "Standard Highway Sign Designs for Texas" (SHSD). All work zone signs provided for in the TMUTCD but not detailed in the plans may be used when directed by the Engineer.

REFLECTIVE SHEETING
Reflectorized signs shall be constructed of retroreflective sheeting meeting the color and reflectivity requirements of Material Specification, DMS 8300 or DMS 8310. Day only is defined as a device that is used only during daylight hours.
Type A, B or C sheeting may be used for all, day only, applications. Type A sheeting should be used for all, white background, regulatory signs. Type C sheeting shall be used for all other applications.
The above applications of sheeting grades to different type signs will apply unless otherwise specified in the plans.
TYPE A - Engineer Grade
TYPE B - Super Engineer Grade
TYPE C - High Specific Intensity

WORK DURATION TERMINOLOGY-as defined by the "Texas Manual on Uniform Traffic Control Devices" Part VI
Long-term Stationary - occupies a location 3 or more days;
Intermediate-term Stationary - occupies a location from overnight to 3 days;
Short-term Stationary - daylight work that occupies a location from 1 to 12 hours;
Short Duration - occupies a location up to 1 hour.

SUPPORTS AND MOUNTING HEIGHT
The bottom of Long-term / Intermediate-term signs shall be at least 7 feet above the paved surface. The bottom of any supplementary plaques shall be at least 6 feet above the paved surface.
The bottom of Short-term / Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 24" above the ground. Long-term / Intermediate-term Signs may be used in lieu of Short-term / Short Duration signing. Short-term / Short Durations signs shall be used only during daylight and removed at the end of the workday.
Regulatory signs shall be mounted at least 7 feet above the paved surface regardless of work duration.

SIGN SUPPORT WEIGHTS
Where sign supports require the use of weights to keep from turning over, the use of some type of sandbag is recommended. The use of pieces of rock, concrete, iron, steel or other solid objects will not be permitted. Sandbags shall only be placed along or upon the base supports of the device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners.

REMOVING OR COVERING
When sign messages may be confusing or no longer apply, the signs and supports shall be removed from roadway and shoulder, or the signs shall be completely covered. Turning signs from motorists view will not be allowed. When signs are covered the material used shall be opaque, such as heavy mil black plastic. Burlap shall not be used to cover signs. Signs shall be removed upon completion of the work.
Duct tape or other adhesive material shall not be affixed to sign face.

10/99 Revision
Added new signs
Added details of Short Term sign supports
Added detail for use of 1-4"x6" post
Added chart to page

STANDARD PLANS
TEXAS DEPARTMENT OF TRANSPORTATION
Traffic Operations Division

TRAFFIC SIGNAL BARRICADES AND SIGNS

SHEET 2 OF 2 WZ(BTS-2)-99

REVISIONS	DATE	BY	CHKD	APP'D	DESCRIPTION
1-97					
2-98					
4-98					
10-99					

LEVELS DISPLAYED	DATE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	