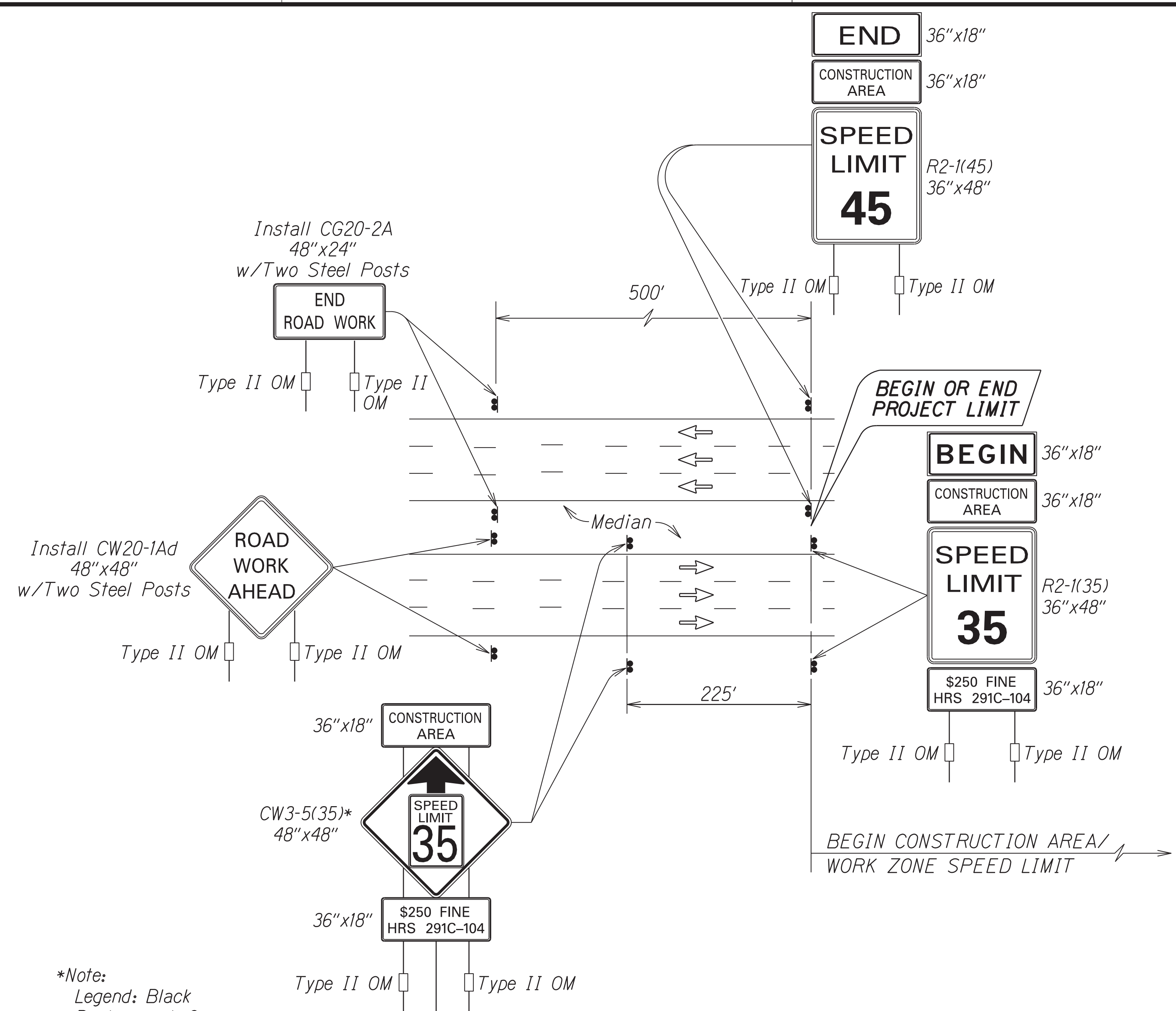


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(028)	2022	23	42

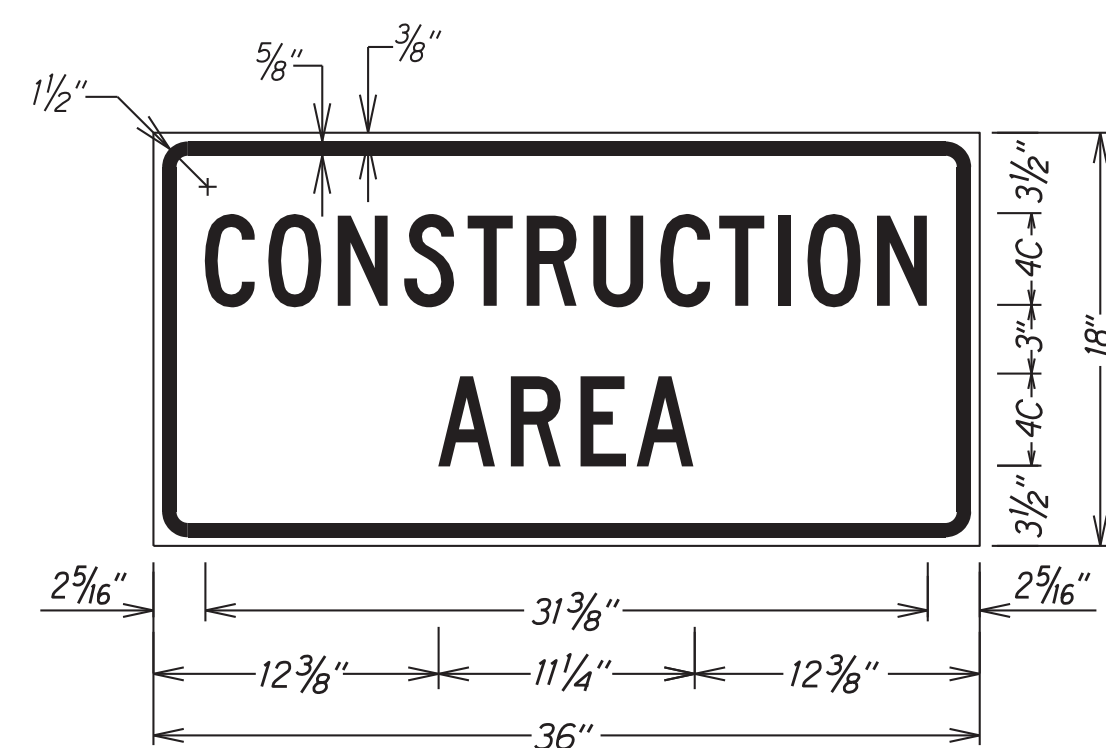


Work Zone Notes:

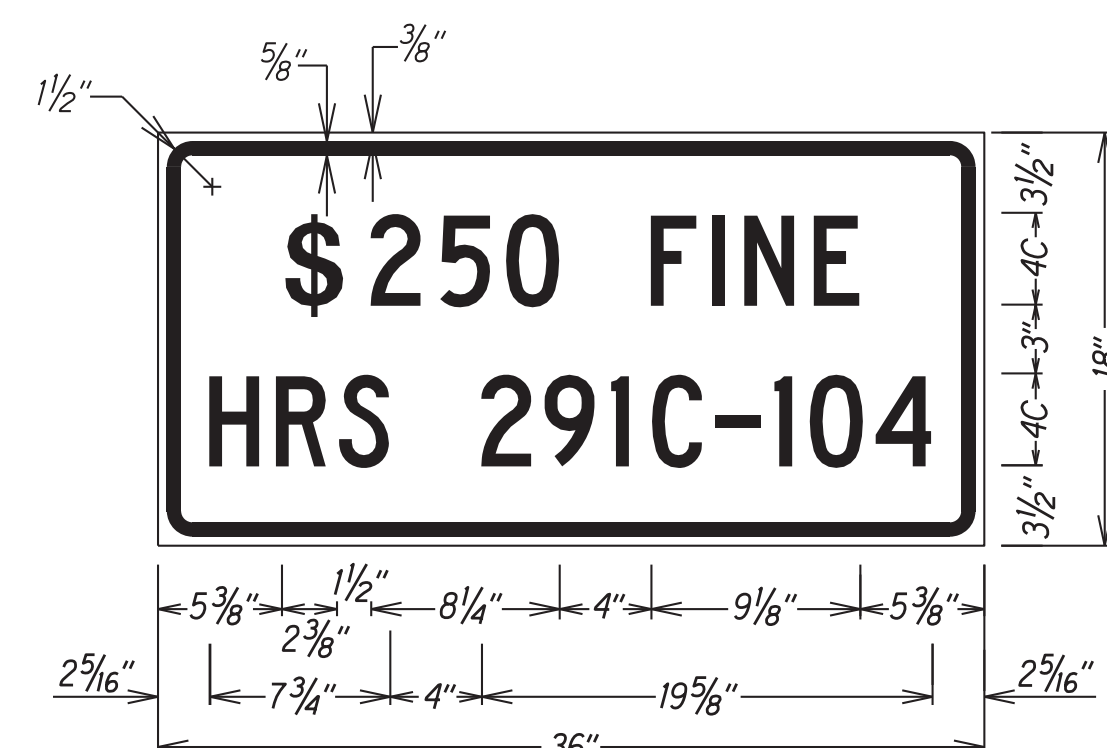
1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.
2. All existing regulatory speed limit signs with posts within the work zone/project limits shall be removed and replaced with work zone speed limit sign assemblies (R2-1(35) and CW3-5(35) with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs).
3. Construction sign assemblies shall be installed on both the approaching and trailing ends of each work zone as shown on this plan.
4. Each construction warning sign and work zone speed limit assembly shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.0100 - Traffic Control.
5. Upon the completion of all physical work or as directed by the Engineer, all construction signs and work zone speed limit assemblies shall be removed. All speed limit signs and posts that were existing at the start of the project within the work zone/project limits shall be restored back to their original locations and configurations.
6. Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.
7. The removal and restoration of existing regulatory speed limit signs with new posts along with the installation, maintenance and removal of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.0100 - Traffic Control.

*Note:
 Legend: Black
 Background: Orange
 Speed Limit: Black on White

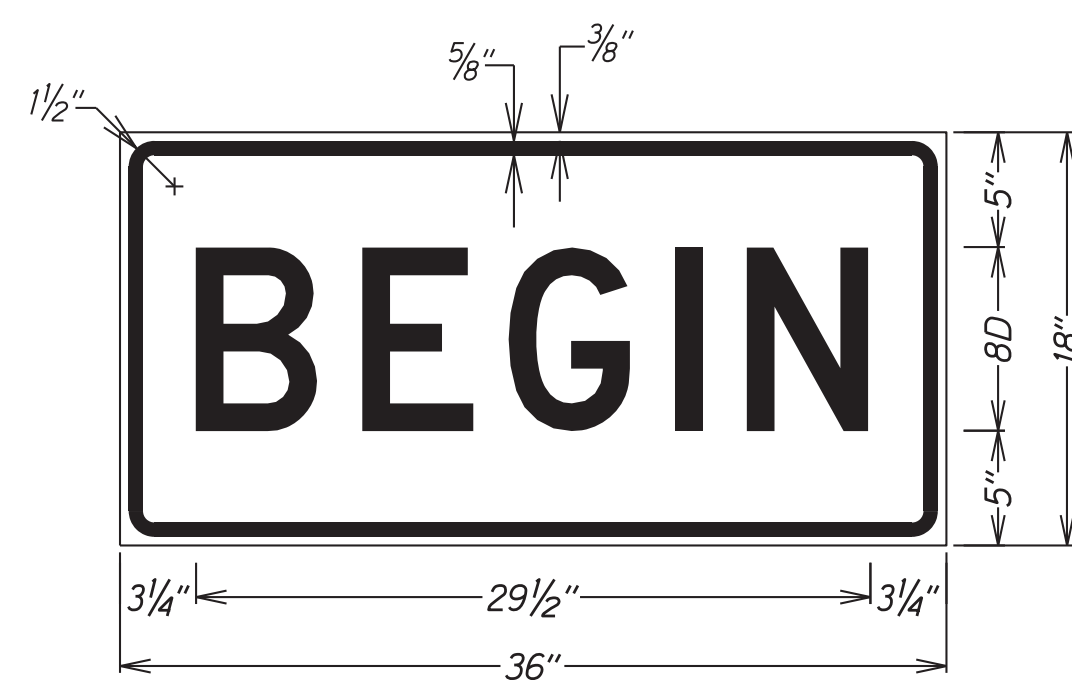
**TYPICAL DETAIL FOR CONSTRUCTION SIGNS
 ON MULTILANE DIVIDED HIGH SPEED HIGHWAY**



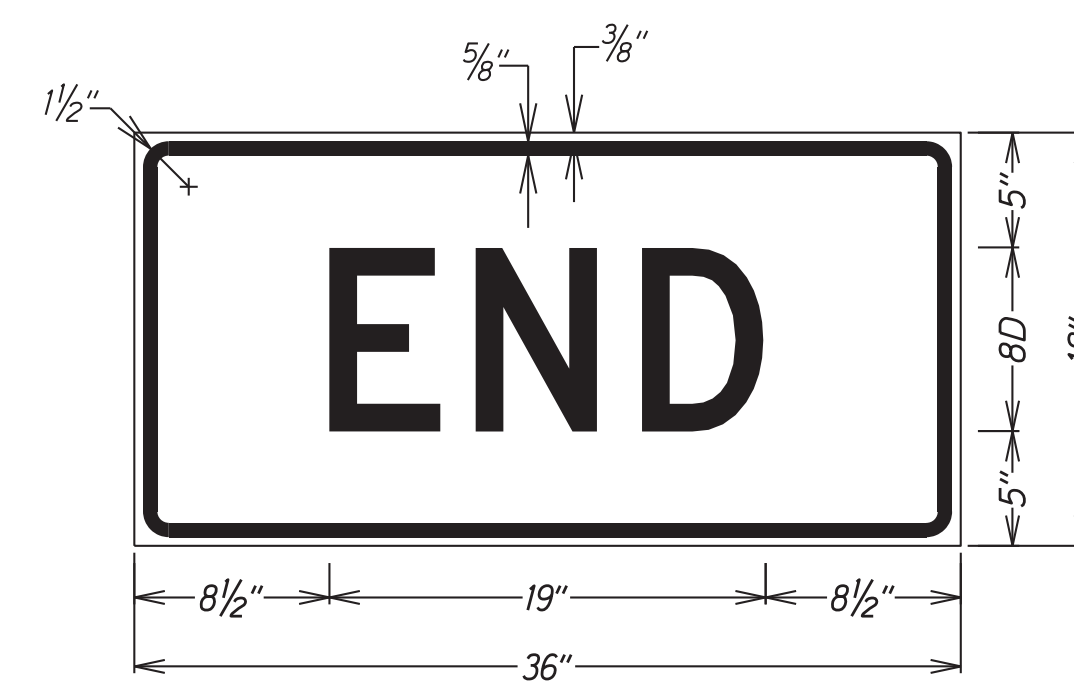
LEGEND: BLACK
 BACKGROUND: ORANGE



LEGEND: BLACK
 BACKGROUND: WHITE



LEGEND: BLACK
 BACKGROUND: ORANGE

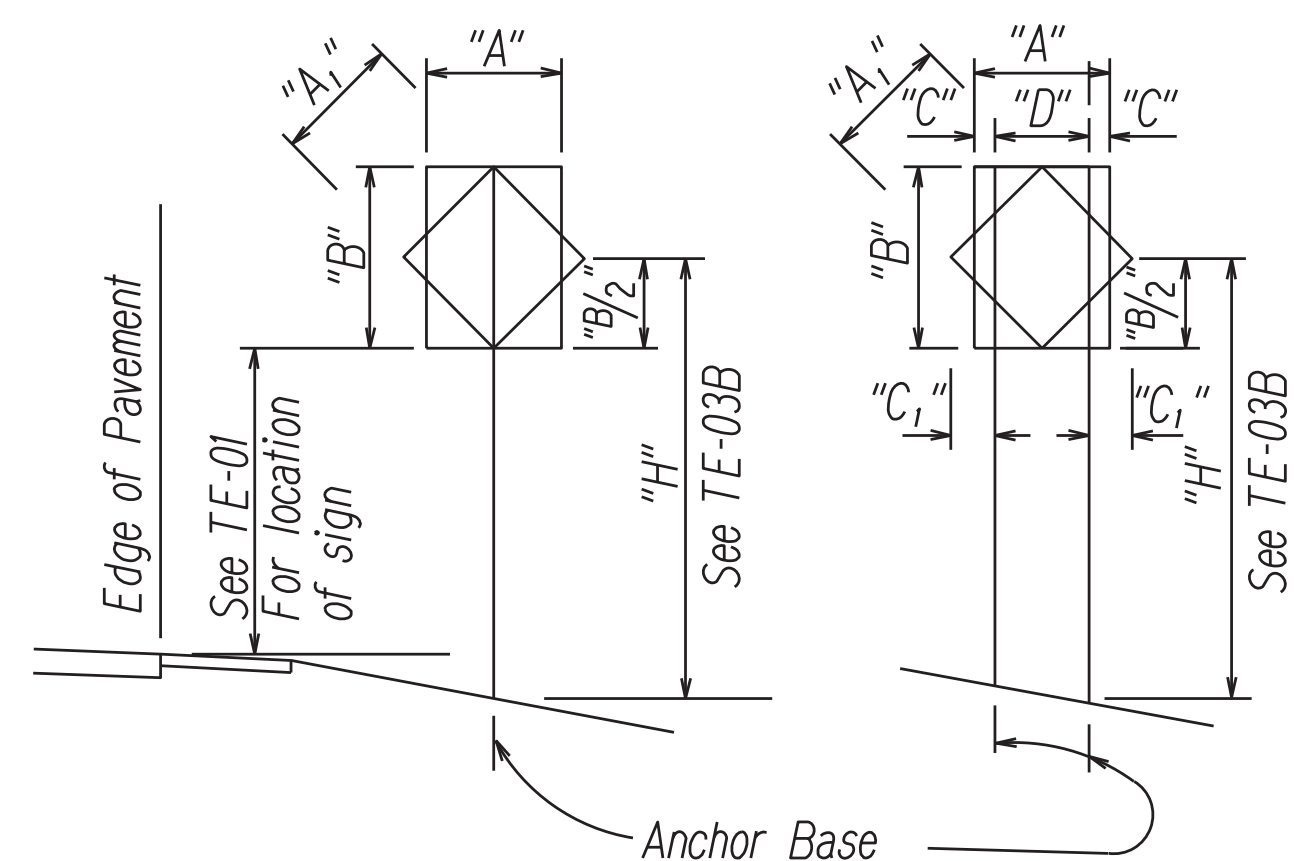


LEGEND: BLACK
 BACKGROUND: ORANGE

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
**HIGH SPEED DIVIDED HIGHWAY
 WORK ZONE SIGNING PLAN, NOTES&DETAILS**
HALEAKALA HIGHWAY RECONSTRUCTION
 North Firebreak Road to Old Haleakala Highway
 Fed. Aid Proj. No. NH-037-1(028)
 Not to Scale Date: March 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(028)	2022	24	42

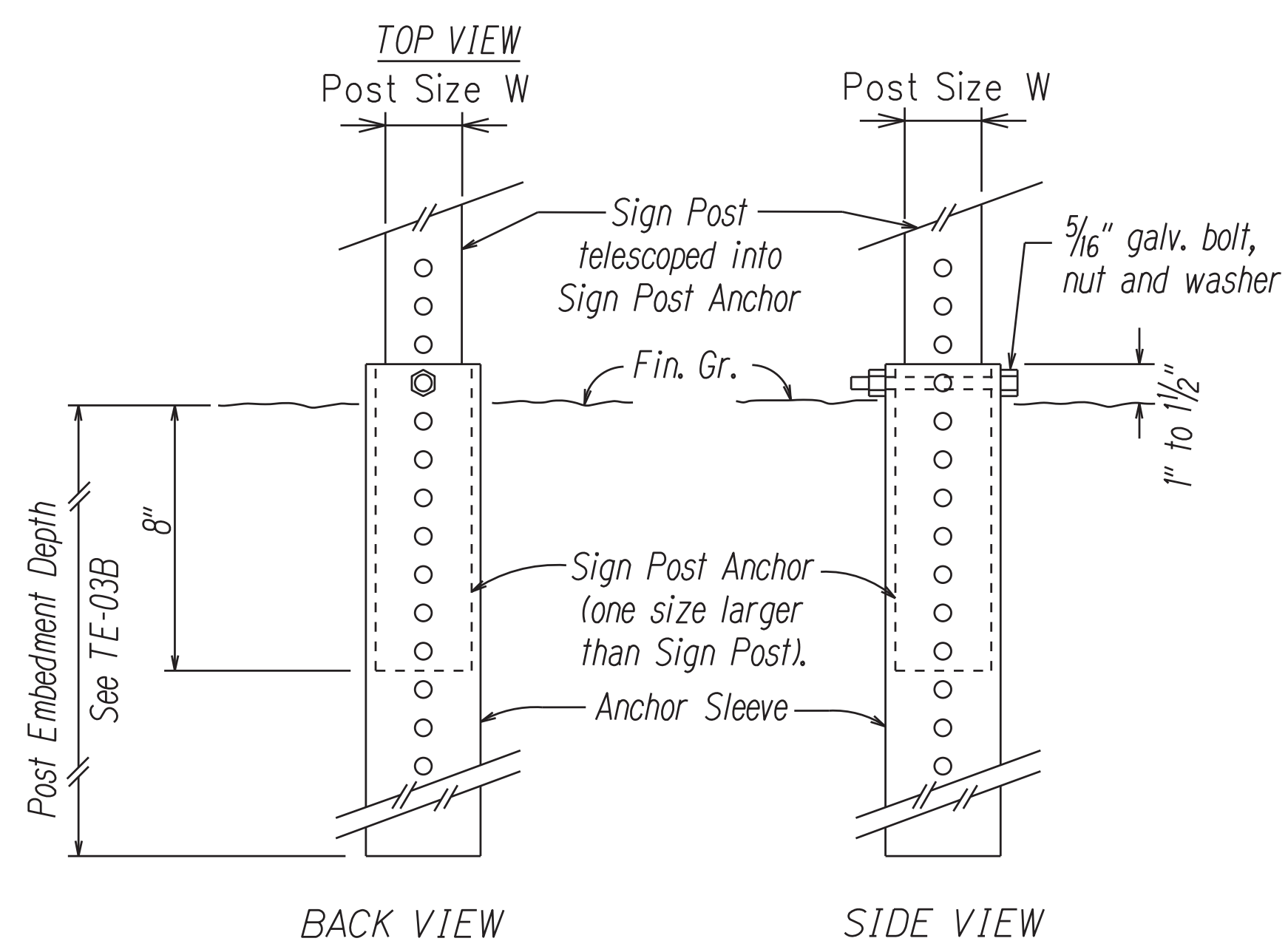
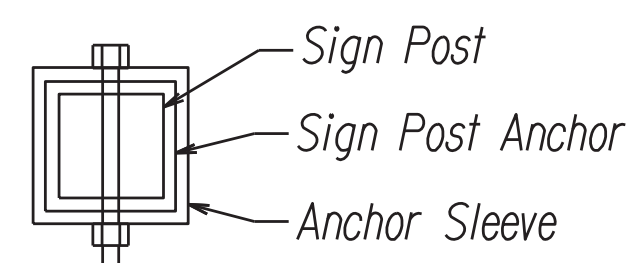


1 - POST "A" or "A₁" less than 36"
2 - POST "A" or "A₁" less than 60"

"A" or "A ₁ "	"C"	"C ₁ "
Less than 36"	6"	-
Greater than 36" and less than 48"	9"	19"
Greater than 48"	12"	24"

NOTE: Frame stiffeners are required when D is greater than 24" See General Notes.

TYPICAL INSTALLATION



BACK VIEW SIDE VIEW
SIGN POST INSTALLATION

ANCHOR BASE DETAIL

GENERAL NOTES

- Design Specifications:**
 - Design shall conform w/ the latest AASHTO Standard Specifications for the Structural Supports for Highway Signs, Luminaires & Traffic Signals and its interim supplements and modifications by the Highways Division, Department of Transportation State of Hawaii.
 - Latest HDOT Memorandum with subject title "Design Criteria for Bridges and Structures."
- Loads:**
 - Basic Wind Speed: 105 mph.
 - Recurrence Interval of 10 years.
- Materials:**
 - Post shall conform to the Standard Specifications.
 - All connection bolts shall be AASHTO M164 bolts and anchor bolts shall be AASHTO M314-105 bolt.
 - Lap splice nuts and bolts shall be M180, with an ultimate tensile strength of 180 ksi, min.
 - Aluminum members and surfaces in contact with structural steel shall be isolated with neoprene material as approved by the Engineer.
- General:**
 - See General Notes on B-01, TE-01, and TE-03B for additional information.
 - All square tube posts shall be 12 gauge unless otherwise specified or shown on the plans.
 - Square tube posts shall be perforated with $\frac{7}{16}$ " ϕ holes, 1" o.c., 4 sides, along entire length of post.
 - All accessories, fittings and stiffener details (as required) shall be submitted to the Engineer for approval 20 days prior to installation.
 - Alternate designs in accordance with the plans and specifications shall use the Service Load Design Method and shall be stamped by a registered structural engineer of the State of Hawaii and submitted to the Engineer for approval.
 - All sign support posts without break away anchor base shall be outside of the clear zone or shielded by an appropriate traffic barrier system. The traffic barrier system shall be submitted to the Engineer for his approval.
 - The Contractor shall use templates while installing the anchor bolts. Anchor bolts shall be vertical.
 - Excavation and backfill shall be considered incidental to the cost of the sign foundation.

SURVEY PLOTTED BY	DATE
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QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**GALVANIZED SQUARE TUBE
SIGN POST MOUNTING**

HALEAKALA HIGHWAY RECONSTRUCTION
North Firebreak Road to Old Haleakala Highway
Fed. Aid Proj. No. NH-037-1(028)

Not To Scale Date: March 2022