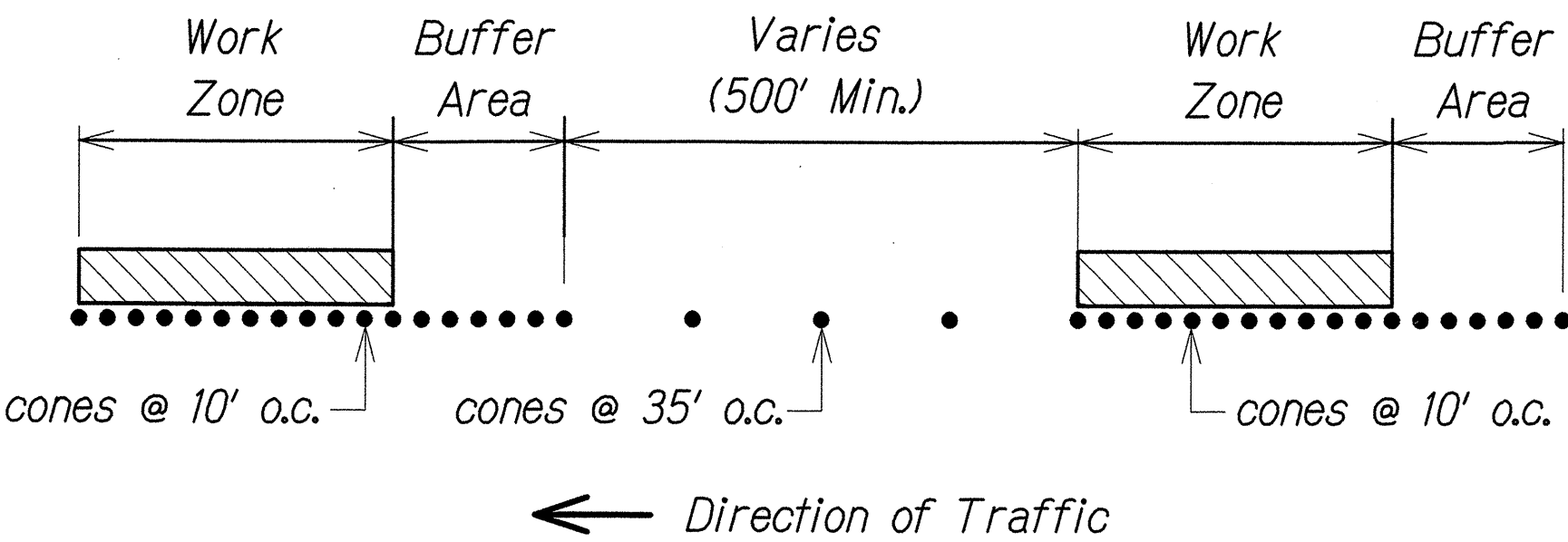


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-14M	2014	56	67

GENERAL NOTES FOR TRAFFIC CONTROL PLAN

- Only Traffic Control Plans for major construction activities are shown. The Contractor shall develop his own Traffic Control Plans in accordance with Section 645 of the Special Provisions or the current US Federal Highways Administration "Manual on Uniform Control Devices, Part IV-Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations" (MUTCD 2009) for activities to complete work not covered by the Traffic Control Plans for the sites listed in the "Traffic Control Schedule" table. The Contractor shall follow the more stringent guidelines. The Contractor shall submit the Traffic Control Plans to the Engineer for approval. Payment for development and implementation of the Traffic Control Plans shall be considered incidental to the various contract items.
- All lane closures and traffic pattern changes (detours) not shown on the plan shall be submitted to the Engineer for approval in accordance with Specifications Section 645 - Work Zone Traffic Control. For restrictions on lane closures, detours, construction work during peak hours, and other requirements regarding maintaining vehicular and pedestrian traffic, see Section 107.06 - Contractor Duty Regarding Public Convenience, and Section 645 - Work Zone Traffic Control.
- Sites requiring lane closures are as indicated in the plans. Additional lane closures are prohibited unless otherwise approved by the Engineer. Fees for unauthorized lane closures shall be borne by the Contractor, in accordance with Section 108-Prosecution and Progress of the Special Provisions.
- The Contractor shall make minor adjustments at intersections, driveways, bridges, structures, etc. to fit field conditions.
- Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area. Likewise, removal of traffic control should begin with the device closest to the work area and progressively away from the work area.
- Regulatory and warning signs within the construction zone that are in conflict with the traffic plans shall be removed or covered.
- Flaggers and/or police officers shall be in sight of each other or in direct communications at all times.
- Sign spacings (L), taper lengths (T), and spacings of cones or delineators shall be as shown in Table 1 of Section 645 in the Specifications, unless otherwise noted on HDOT's Traffic Control Plans.
- All traffic lanes shall be a minimum of 11 feet wide.
- All signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- The backs of all signs for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).

- At the end of each day's work or as soon as the work is completed, the Contractor shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation.
- Replace permanent pavement markings and traffic signs upon completion of each phase of work. Temporary pavement markings and traffic signs shall be used in the interim.
- Existing conflicting pavement markings shall be removed and temporary pavement markings shall be installed before traffic patterns are changed. After completion of the work, temporary pavement markings shall be removed. Payment for removal of existing pavement markings; and furnishing, installing, and removal of temporary pavement markings, whether or not shown on the Traffic Control Plans shall be considered incidental to the various contract items.
- The locations of pavement markings, signs, and delineators used in the Traffic Control shall be as shown on the plans, Contractor's approved Traffic Control Plans, and/or as determined in the field by the Engineer.
- Damage to signs, temporary pavement markers, and delineators caused by the public or Contractor's negligence shall be repaired or replaced by the Contractor at the Contractor's expense.
- Signs for night work shall be retroreflective and shall be mounted with a Type B high intensity flasher.
- Work zone limits shown for each traffic control phase encompass all work items to be completed in that particular phase. The length of the work zone may be reduced to accommodate the Contractor's actual work zone for that time period, provided it has been accepted by the Engineer, and all tangents, tapers, and buffer lengths are maintained.
- The Contractor is responsible for providing all sign supports and/or posts for construction warning signs.
- For intermittent work zones within a particular traffic control phase, only cones along the actual work zone need to be placed at 10' o.c. The intermittent work zone shall include a 220' buffer area along the leading edge of traffic flow. All other traffic control cones can be placed at 35' o.c. See typical detail below.



TYPICAL CONE SPACING FOR INTERMITTENT WORK ZONE
Not to Scale

LEGEND

- Portable Arrow Board
- Sign
- Existing Sign
- Direction of Traffic
- Cones with Retroreflective bands (All cones in work area shall be 28" high).
- Work Area
- Portable Concrete Barriers (See Standard Details TE-42 and TE-43)
- Police Officer

TRAFFIC CONTROL SCHEDULE*	
Section 645.05	Site
Figure 7	PID 207 & 208

* Not applicable for H-3 & Likelike Interchange

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
DATE	

TC-01 TCF-NOTES/LOG 3/13/2014 10:52:46 AM

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL
NOTES AND LEGEND

KANEHOE WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-04-14M
Scale: None Date: March 2014

SHEET No. TC-01 OF TC-12 SHEETS

4/30/14
EXP. DATE
This work was prepared by
me or under my supervision.

PROFESSIONAL
ENGINEER
NO. 9360-C
HAWAII USA

56

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-14M	2014	57	67

Work Zone Note:

1. All existing regulatory speed limit signs within the work zone/project limits shall be covered and work zone speed limit sign assemblies (R2-1(45)-A and R2-5b(45)-A with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs) shall be displayed during lane closure hours.

2. Upon removal of the lane closure, all work zone speed limit signs shall be covered and existing speed limit signs within the work zone/project limits shall be restored.

3. Construction signs shall be installed on both the approaching and trailing ends of each work zone.

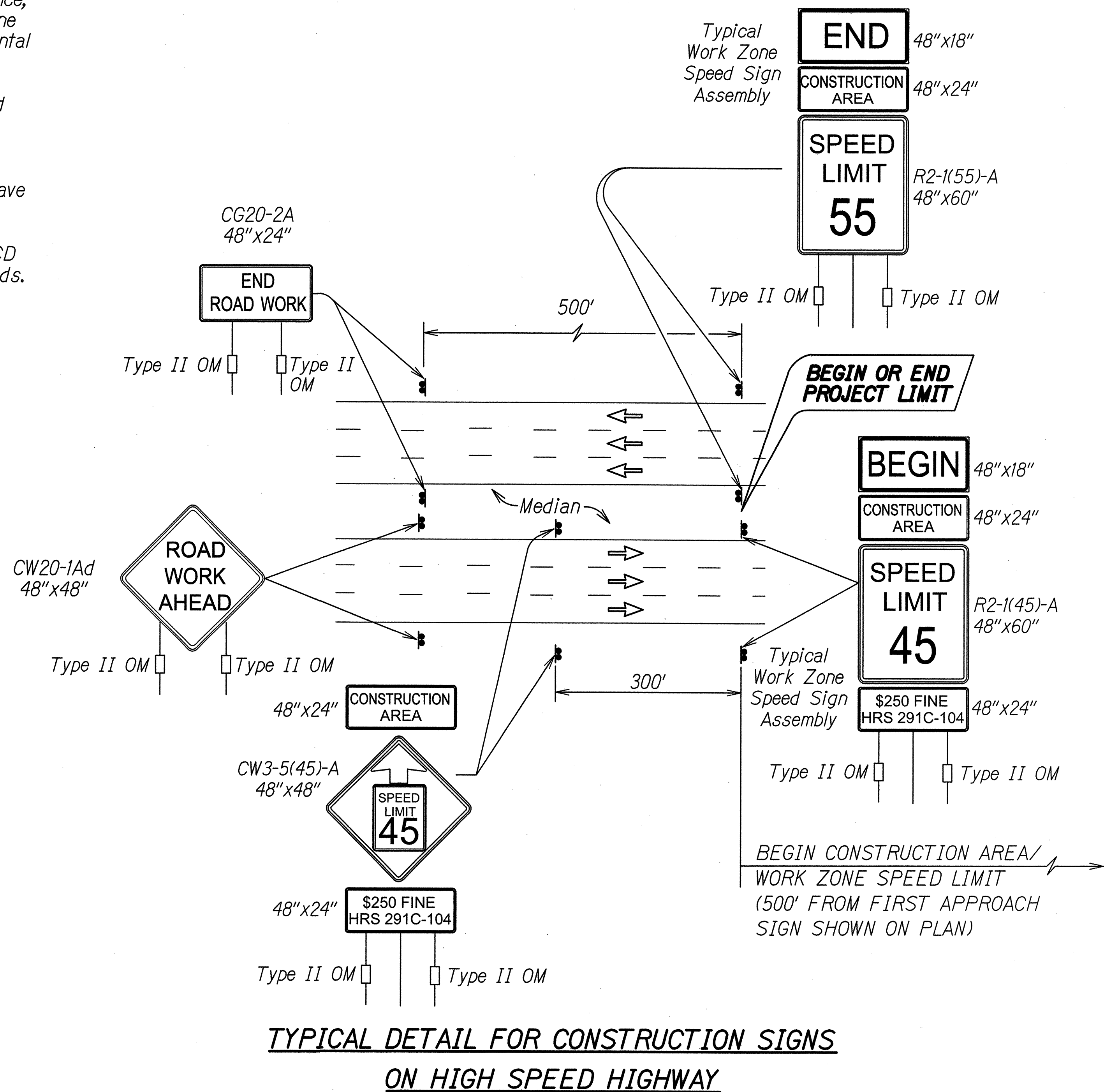
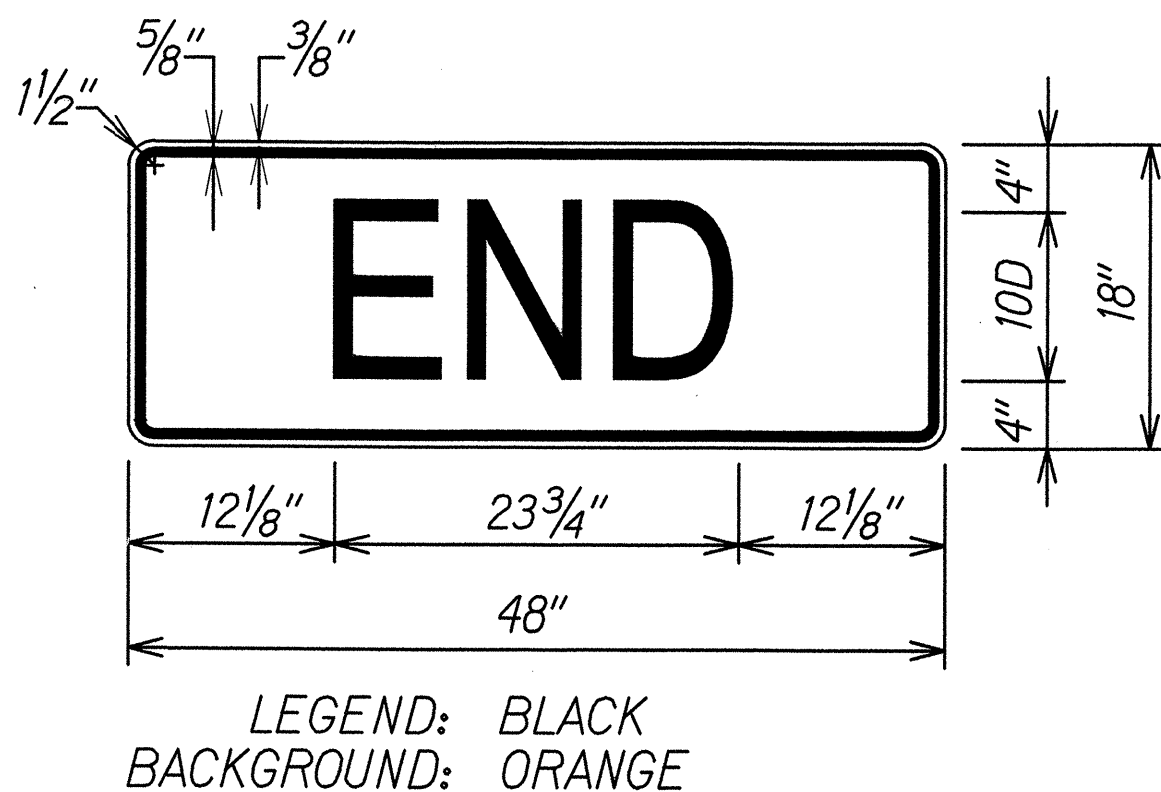
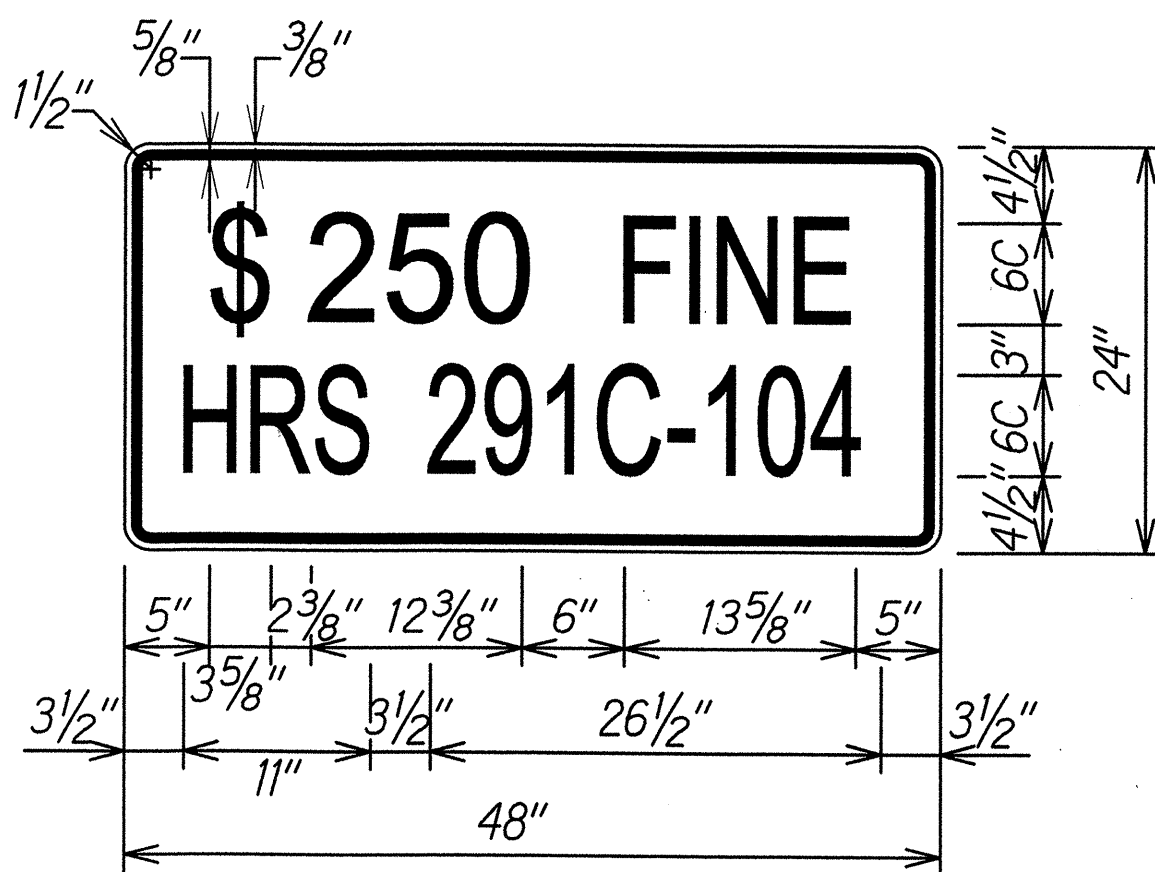
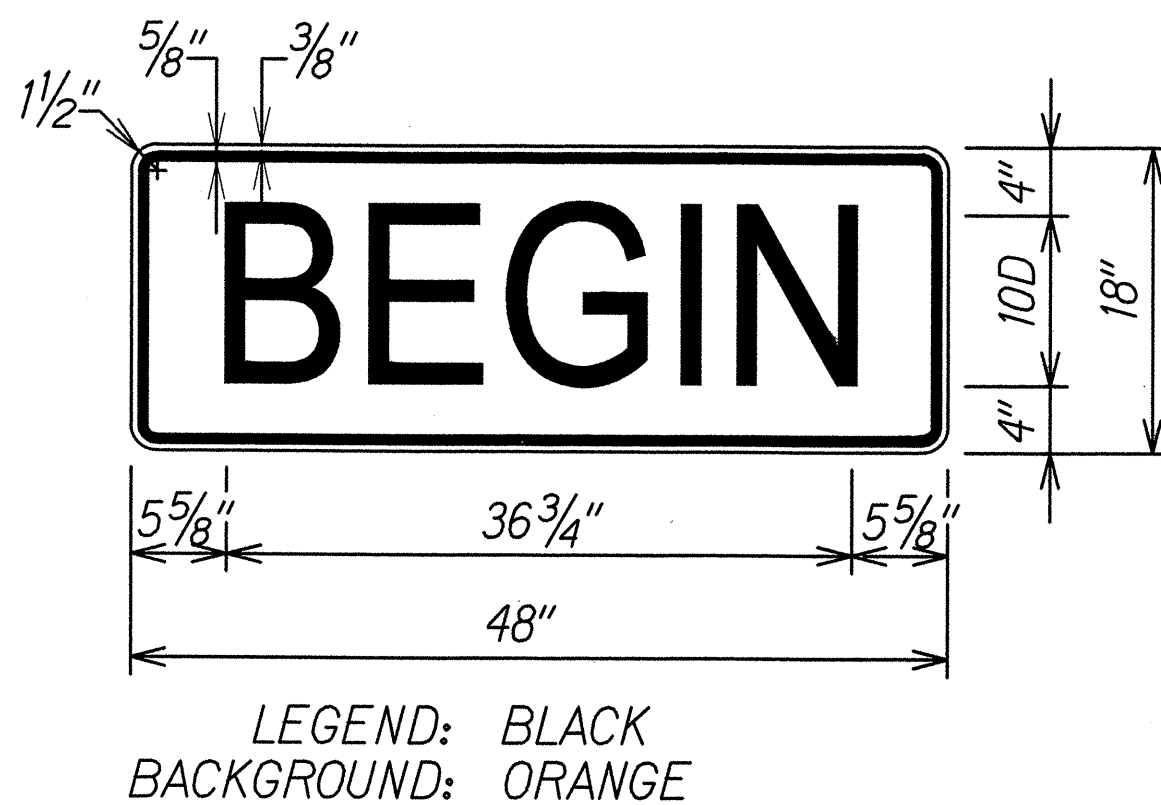
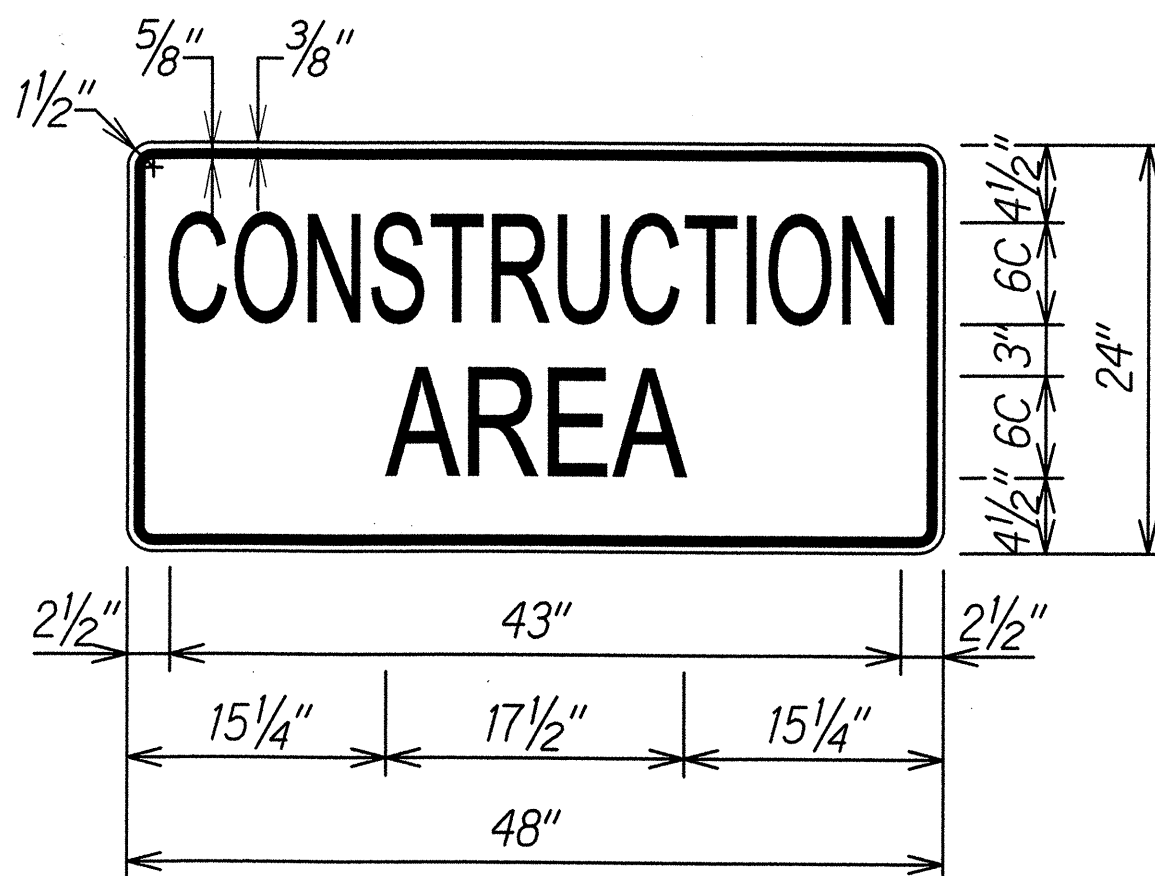
4. Each construction sign and work zone speed limit assembly shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.0100-Traffic Control.

5. All work zone speed sign assembly shall be mounted on three (3) 4.00 lbs./ft. galvanized flanged channel sign posts with a sign clearance height of five (5) feet. Sign stiffeners as specified by Standard Plan Sheet TE-02 shall be installed as needed or as directed by the Engineer.
6. The daily covering and uncovering of existing regulatory speed limit signs along with the installation; maintenance, removal and daily covering and uncovering of work zone speed limit sign assemblies shall be considered incidental to Item No. 645.0100 - Traffic Control.

7. All work zone signs shall have the project number and Contractor's name on the back of the sign in 1/2" high letters, black paint.

8. All traffic cones, delineators, and barrels, etc. shall have retroreflective bands.

9. All cones shall be retroreflective as required by MUTCD and be a min. of 28" high & weigh a minimum 10 pounds.



DATE	3/23/2014
DRAWN BY	TC-02
DESIGNED BY	TC-02
CHECKED BY	TC-02
NOTED BY	TC-02
QUANTITIES BY	TC-02
PLAN	TC-02
NOTE	TC-02
BOOK	TC-02
NO.	TC-02

TC-02 TOP NOTES 3/23/2014 10:52:01 AM

JASON R. LAU
LICENSED PROFESSIONAL ENGINEER
NO. 9360-C
HAWAII USA

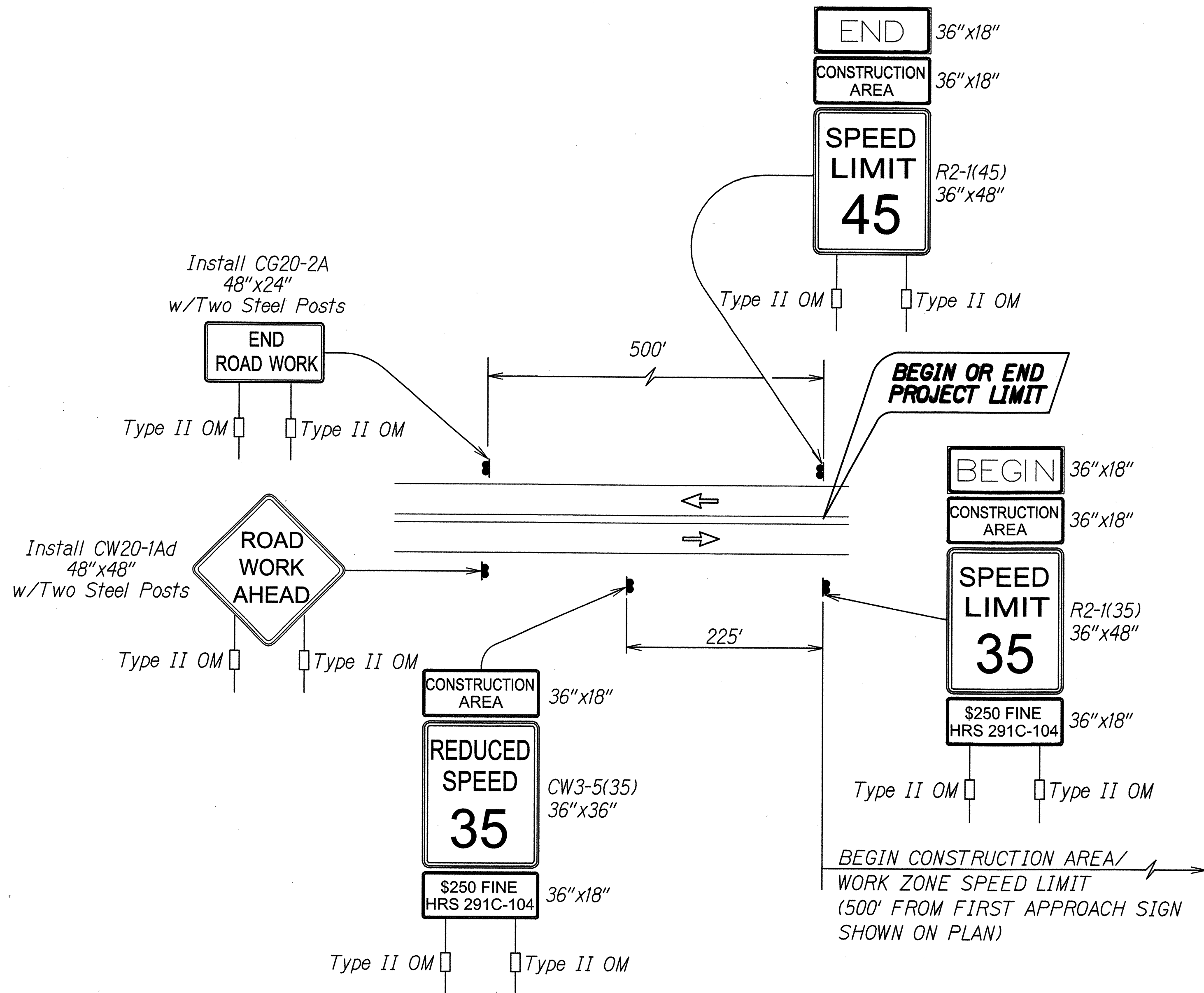
4/30/14
EXP. DATE
This work was prepared by me or under my supervision.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

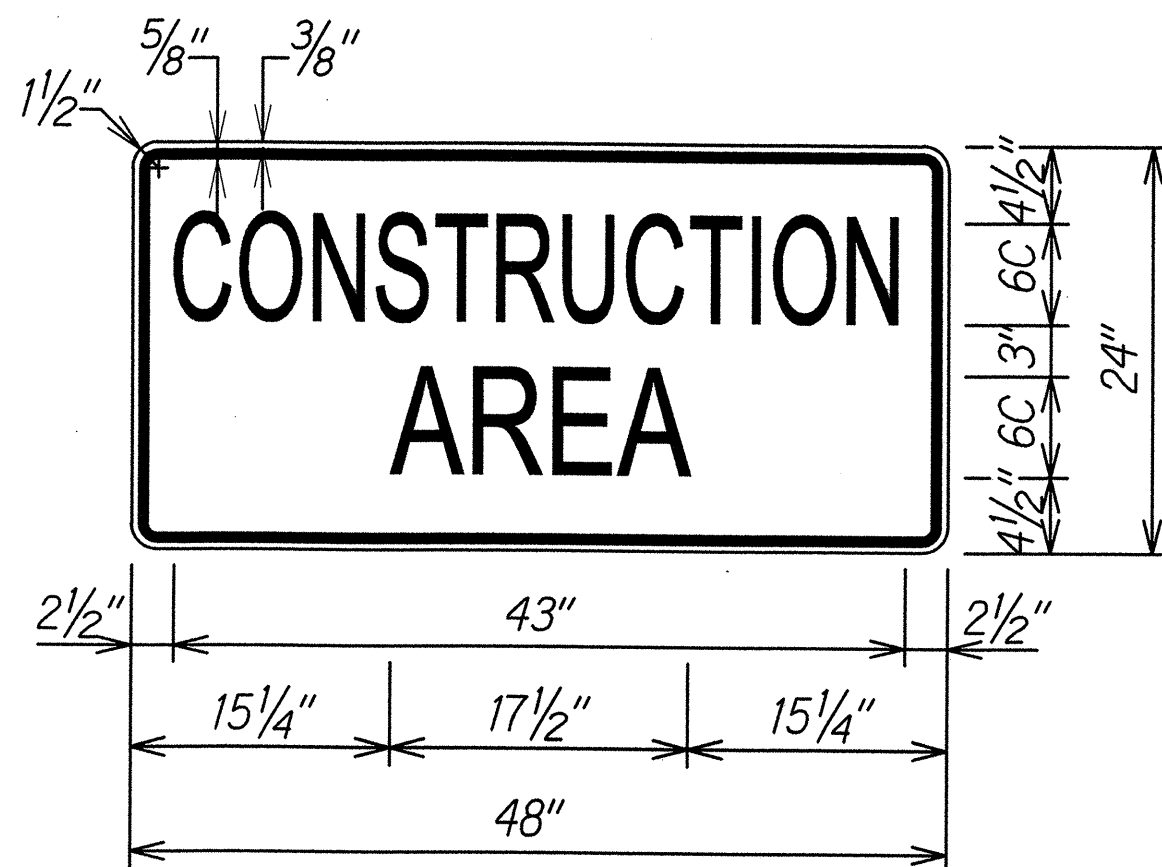
FREWAY WORK ZONE SIGNING
PLAN, NOTES & DETAILS
KANEHOE WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-04-14M
Scale: None Date: March 2014

SHEET No. TC-02 OF TC-12 SHEETS

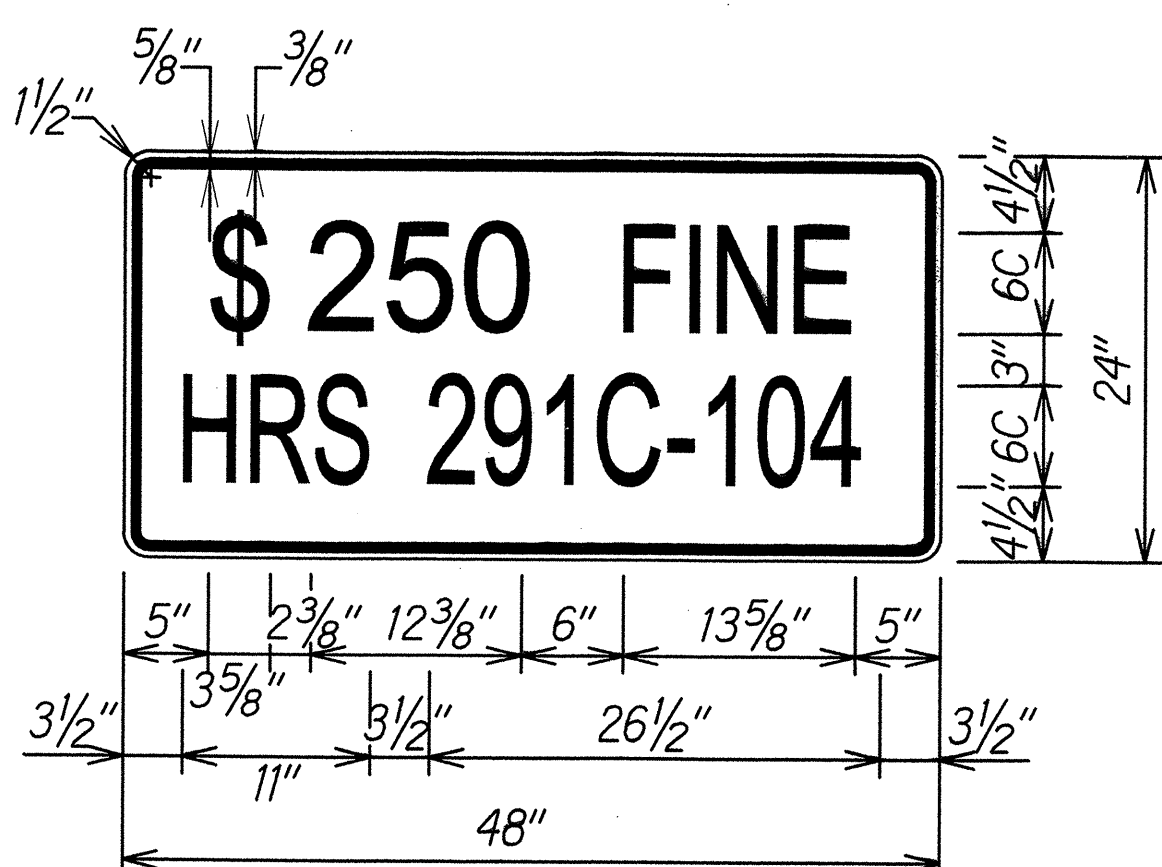
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-14M	2014	58	67



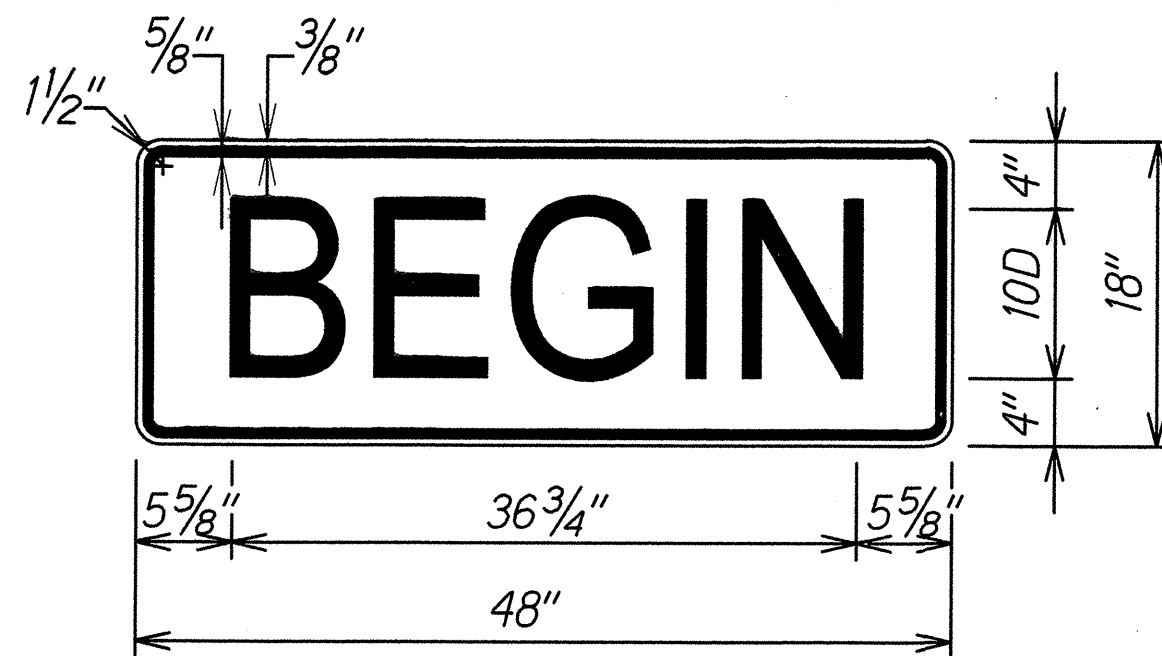
**TYPICAL DETAIL FOR CONSTRUCTION SIGNS
ON TWO LANE OR MULTILANE UNDIVIDED HIGH SPEED HIGHWAY**



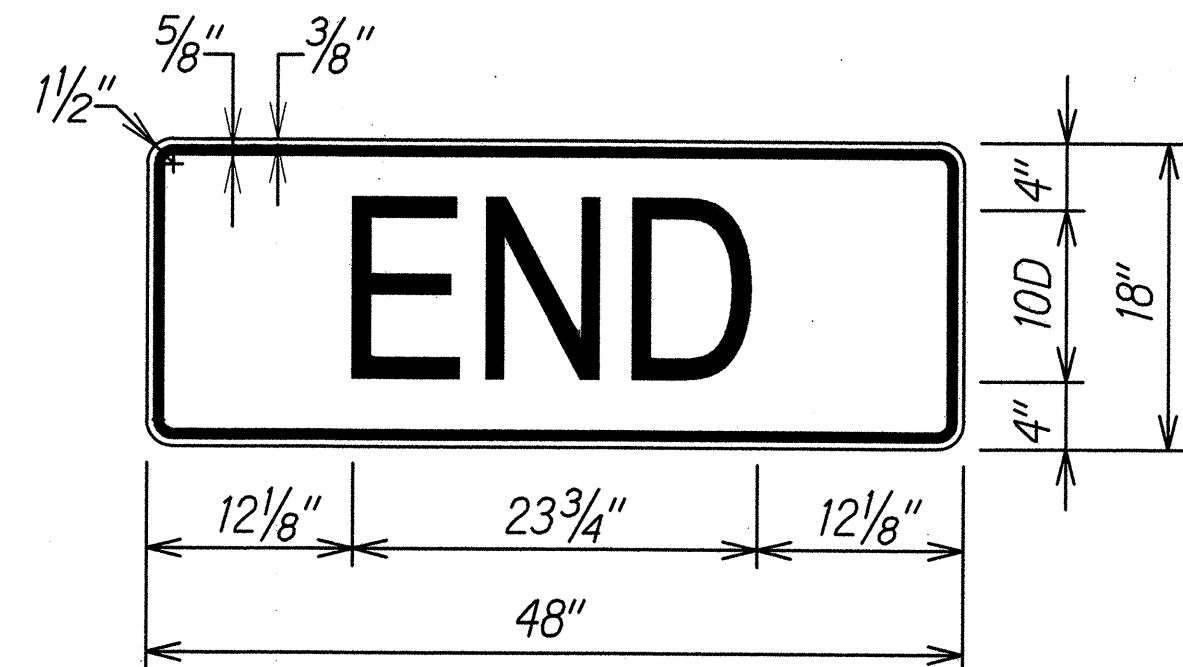
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BACKGROUND: ORANGE



LEGEND: BLACK
BACKGROUND: WHITE



LEGEND: BLACK
BACKGROUND: ORANGE



LEGEND: BLACK
BACKGROUND: ORANGE

Work Zone Note:

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 Standard Specifications.
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 R2-5b(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 the various contract items.
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 the various contract items.

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	
APPROVED BY	

TC-03 TOP-NOTES LONG 3/2/2014 10:52:36 AM

JASON H. LAU
LICENSED PROFESSIONAL ENGINEER
NO. 9360-C
HAWAII, USA

4/30/14
EXP. DATE
This work was prepared by me or under my supervision.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**HIGH SPEED UNDIVIDED HIGHWAY
WORK ZONE SIGNING PLAN, NOTES & DETAILS**

KANEOHE WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU
Project No. HWY-O-04-14M
Scale: None Date: March 2014

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-14M	2014	59	67

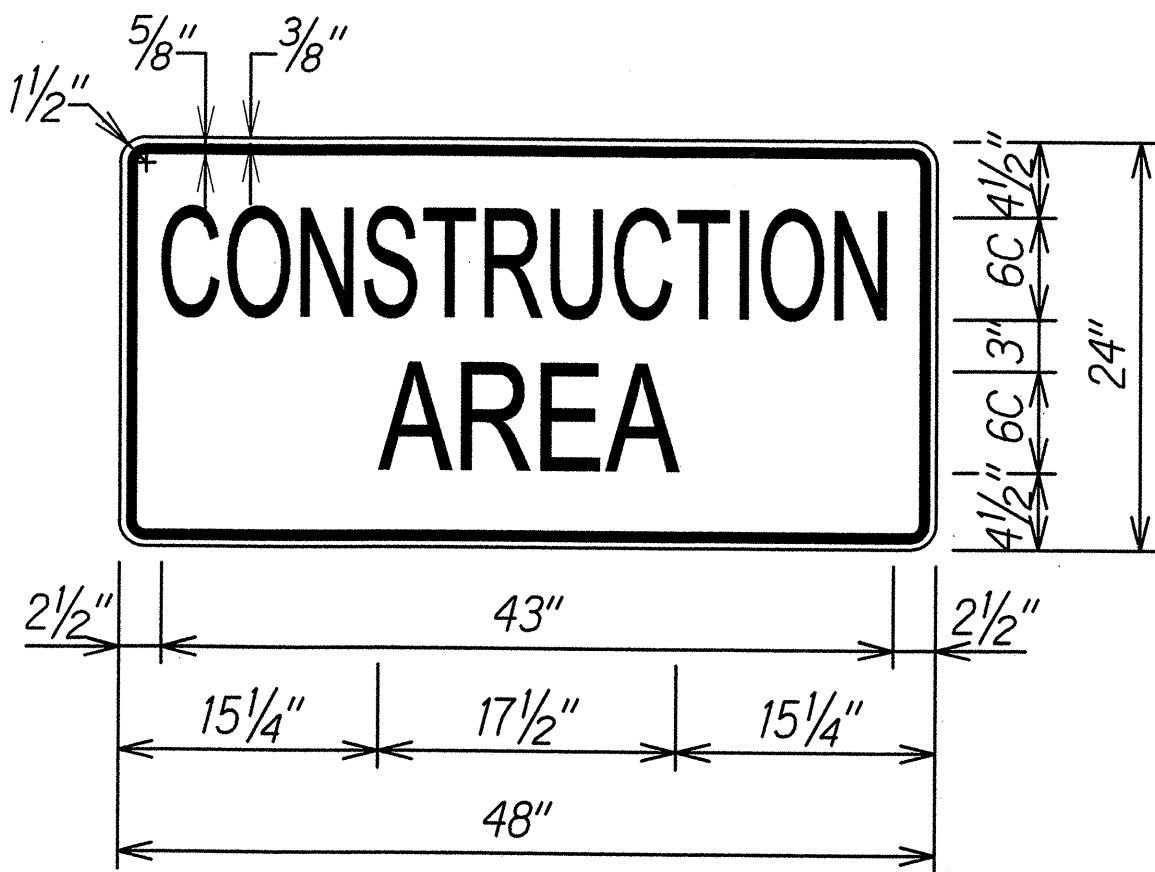
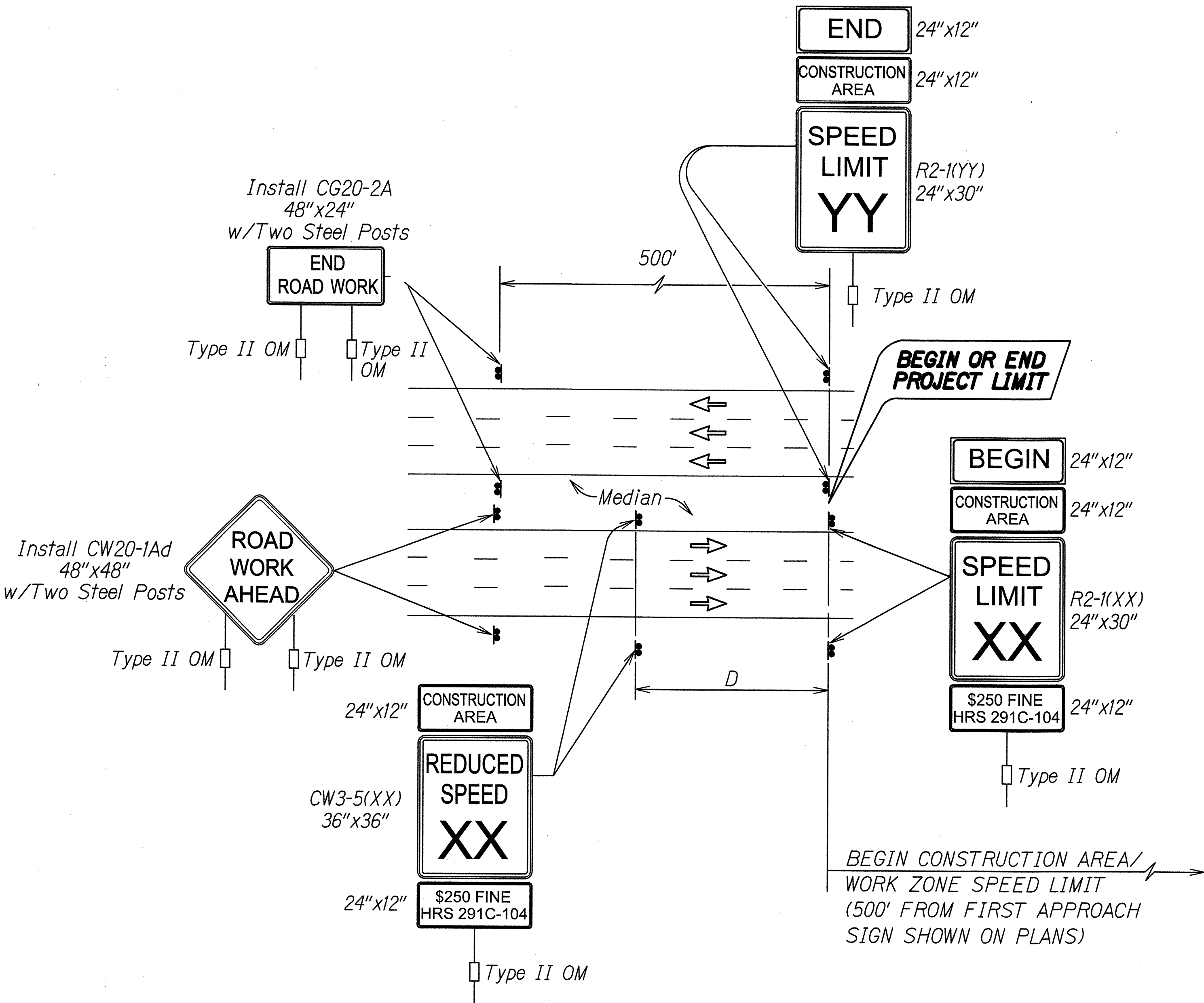
Work Zone Note:

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 Standard Specifications.
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(25) and R2-5b(25) 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 shall have a minimum of two (2) Type II OM. Each work zone speed limit assembly shall have a minimum of one (1) Type II OM. Installation of each Type II OM shall be considered incidental to the various contract items.
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.
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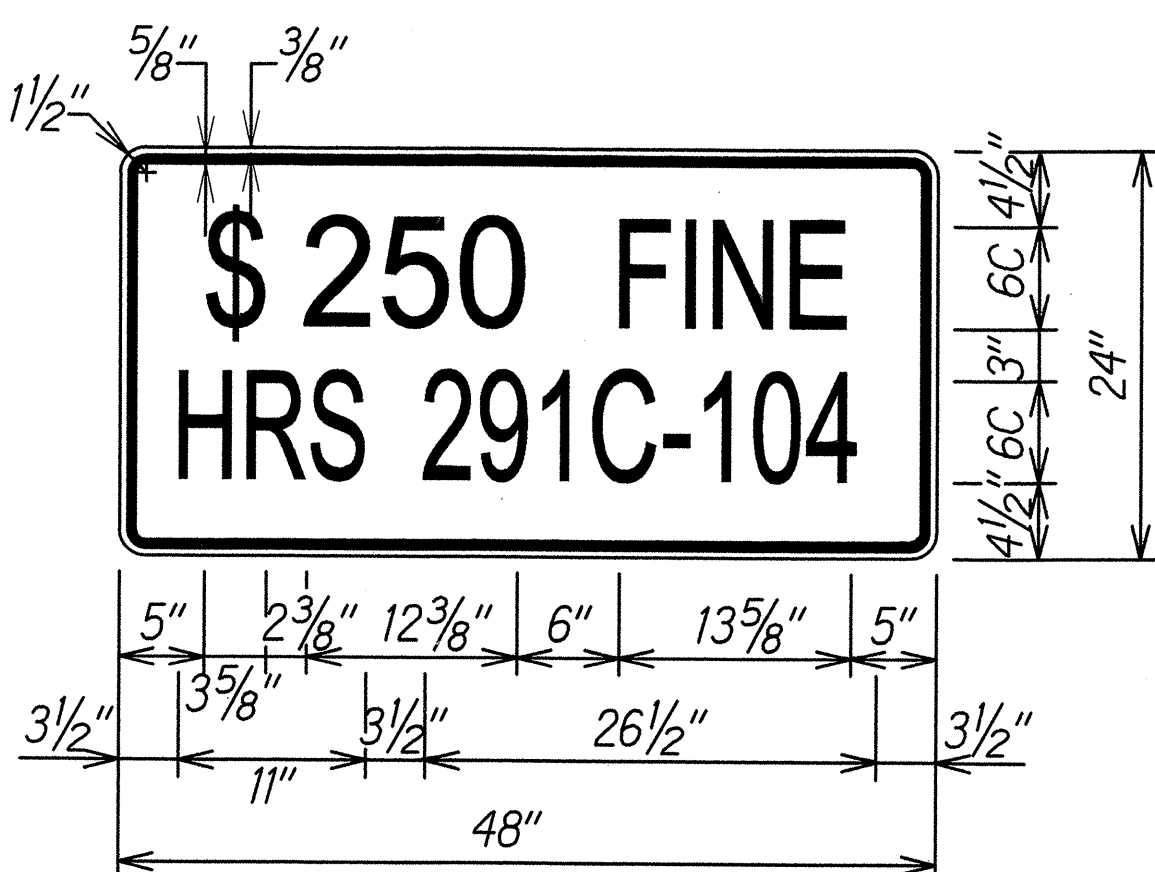
TABLE 1
GUIDELINE FOR ADVANCE PLACEMENT OF SPEED REDUCTION SIGN R2-5b(XX)-A,
CONSTRUCTION AREA SPEED LIMIT

YY-EXISTING POSTED SPEED LIMIT (MPH)	XX-NEW CONSTRUCTION AREA SPEED LIMIT (MPH)	D-REDUCED SPEED LIMIT SIGN SPACING TO FIRST CONSTRUCTION AREA SPEED LIMIT SIGN (FEET)
<25	EXIST. SPEED LIMIT TO REMAIN	
30	25	100
35	25	175
40	30	175

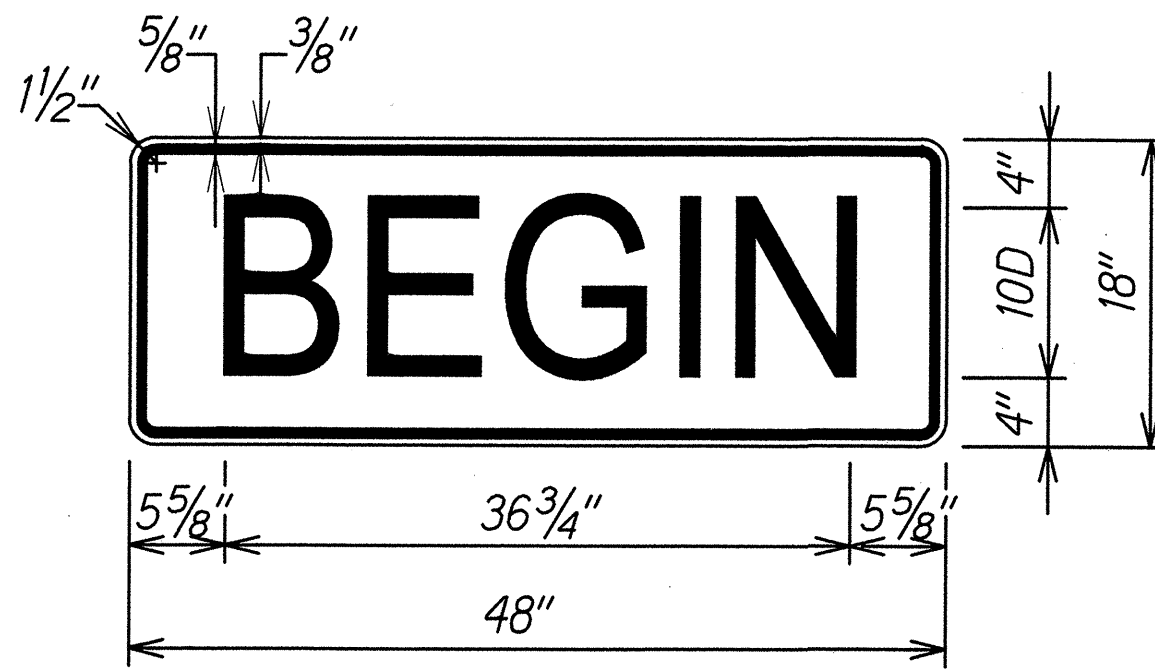
TYPICAL DETAIL FOR CONSTRUCTION SIGNS
ON MULTILANE DIVIDED LOW SPEED HIGHWAY



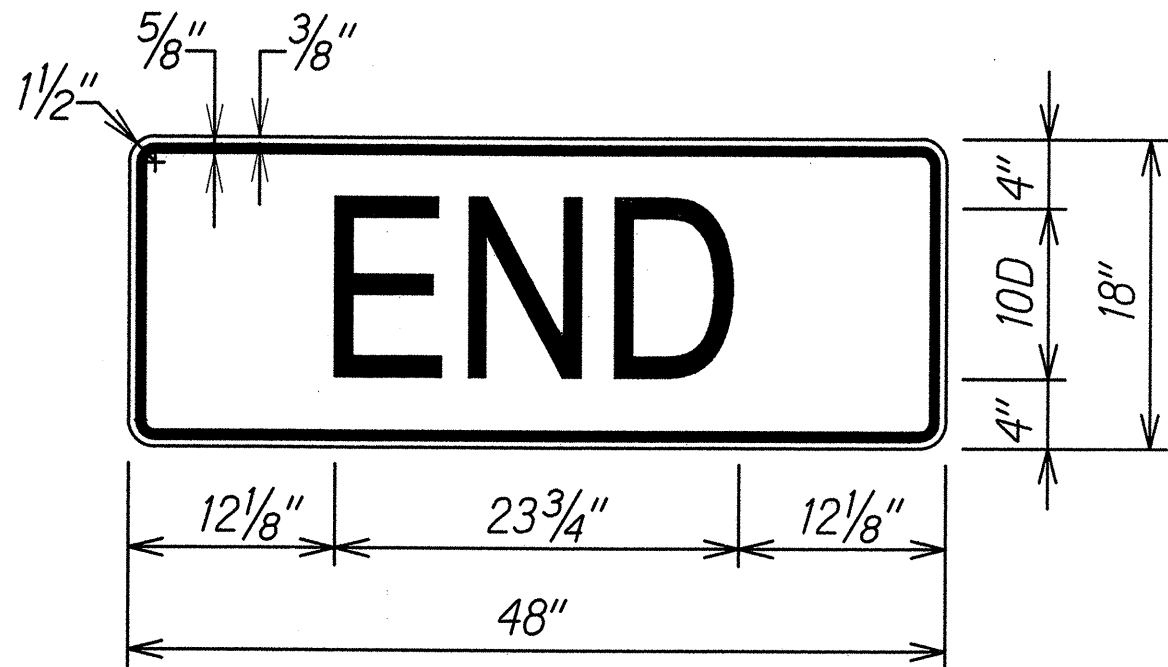
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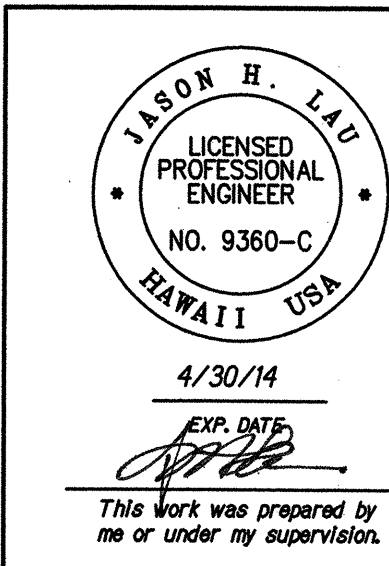
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LEGEND: BLACK
BACKGROUND: ORANGE



LEGEND: BLACK
BACKGROUND: ORANGE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**LOW SPEED DIVIDED HIGHWAY
WORK ZONE SIGNING PLAN, NOTES & DETAILS**

KANEOHE WATERSHED STORM WATER
BEST MANAGEMENT PRACTICES ON OAHU

Project No. HWY-O-04-14M

Scale: None

Date: March 2014

SHEET No. TC-04 OF TC-12 SHEETS