

<u>Legend</u>

Temporary double 4" yellow stripe w/ Double row Type D reflectors at 20' OC, typical.

Temporary 4" white stripe and white flexible delineator post along E.P.

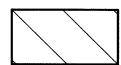
'////////// Remove existing marking

Sigi

Flexible Delineator Post

 $\Rightarrow$ 

Direction of Traffic



Work Area

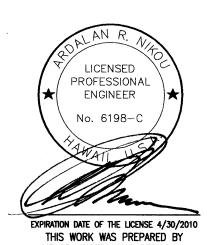
Flashing Light (Photovoltaic)

## Notes:

- 1. Flexible delineator posts shall be white. Delineators to be mounted 24 hours. Delineator spacing not drawn to scale. Actual spacing shall be as specified by the Delineator Schedule on this sheet.
- 2. Double Type D reflectors shall be mounted in-line with double 4" yellow stripes. If installing in conjuction with 4" tape, cut and remove tape section prior to setting reflectors.
- Replace all pavement striping and markers within the traffic control limits after work is completed.

SPACING
(FEET)
35
10
20





STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL - MP 12.9

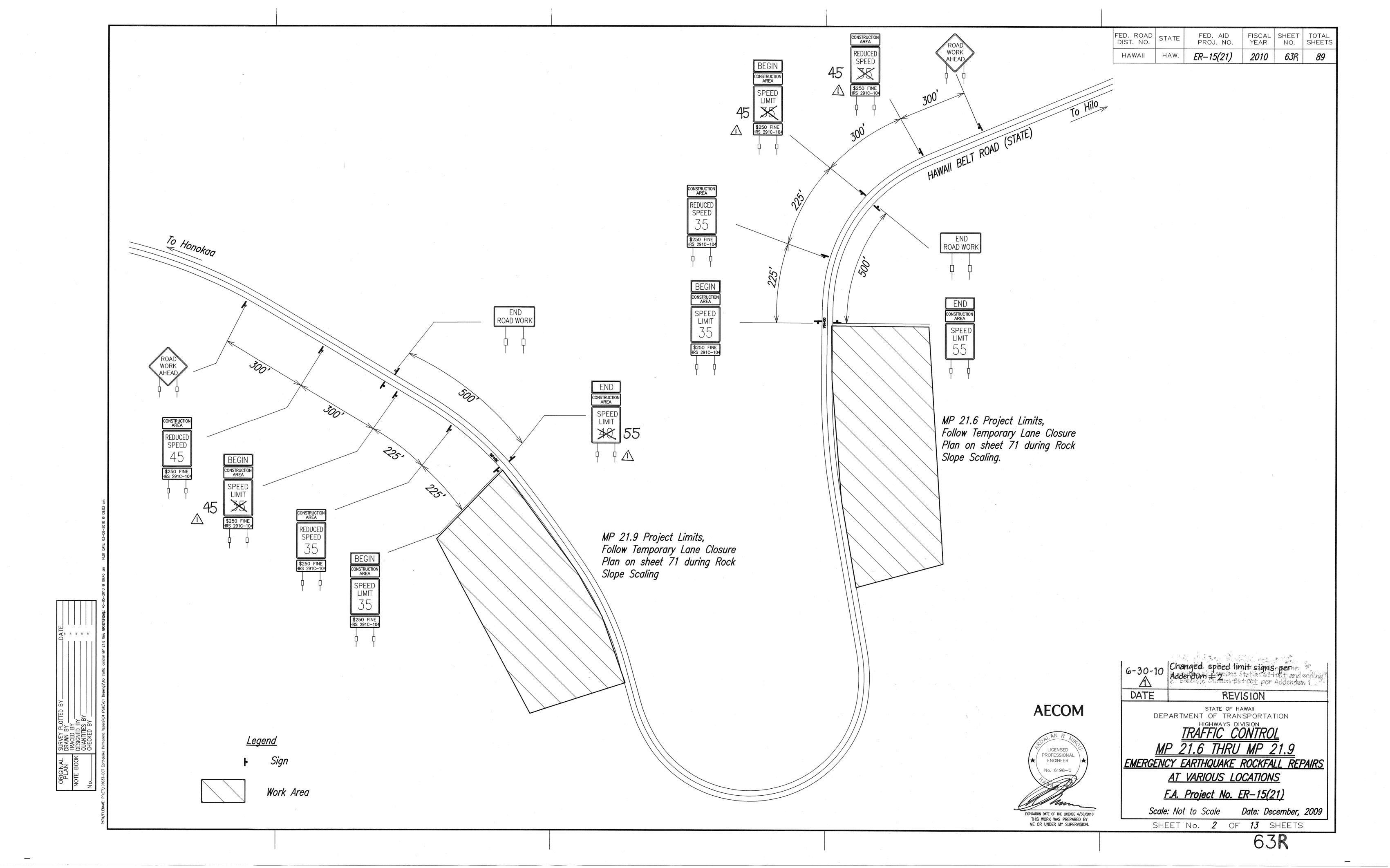
EMERGENCY EARTHQUAKE ROCKFALL REPAIRS

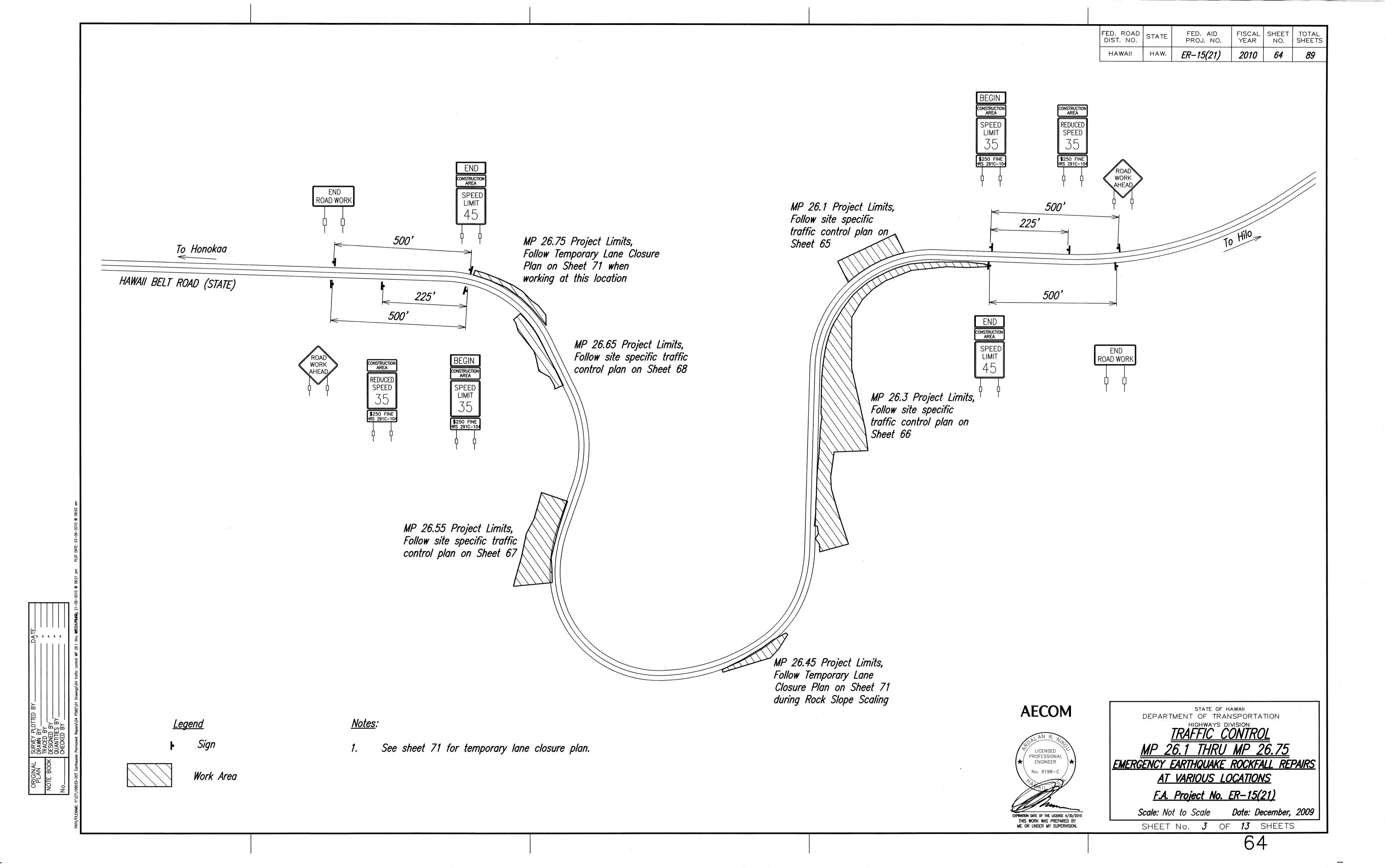
AT VARIOUS LOCATIONS

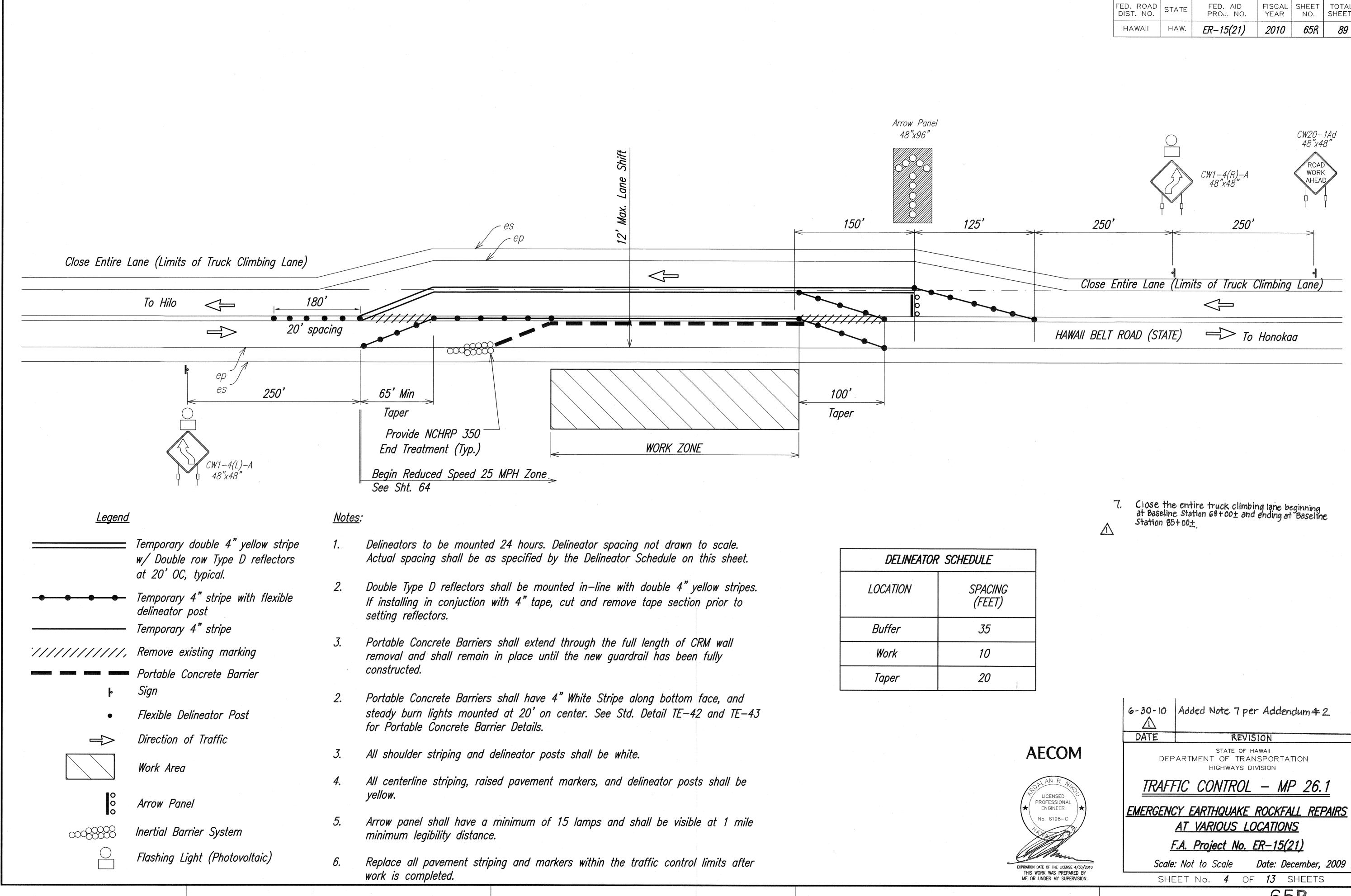
F.A. Project No. ER-15(21)

Scale: Not to Scale Date: December, 2009

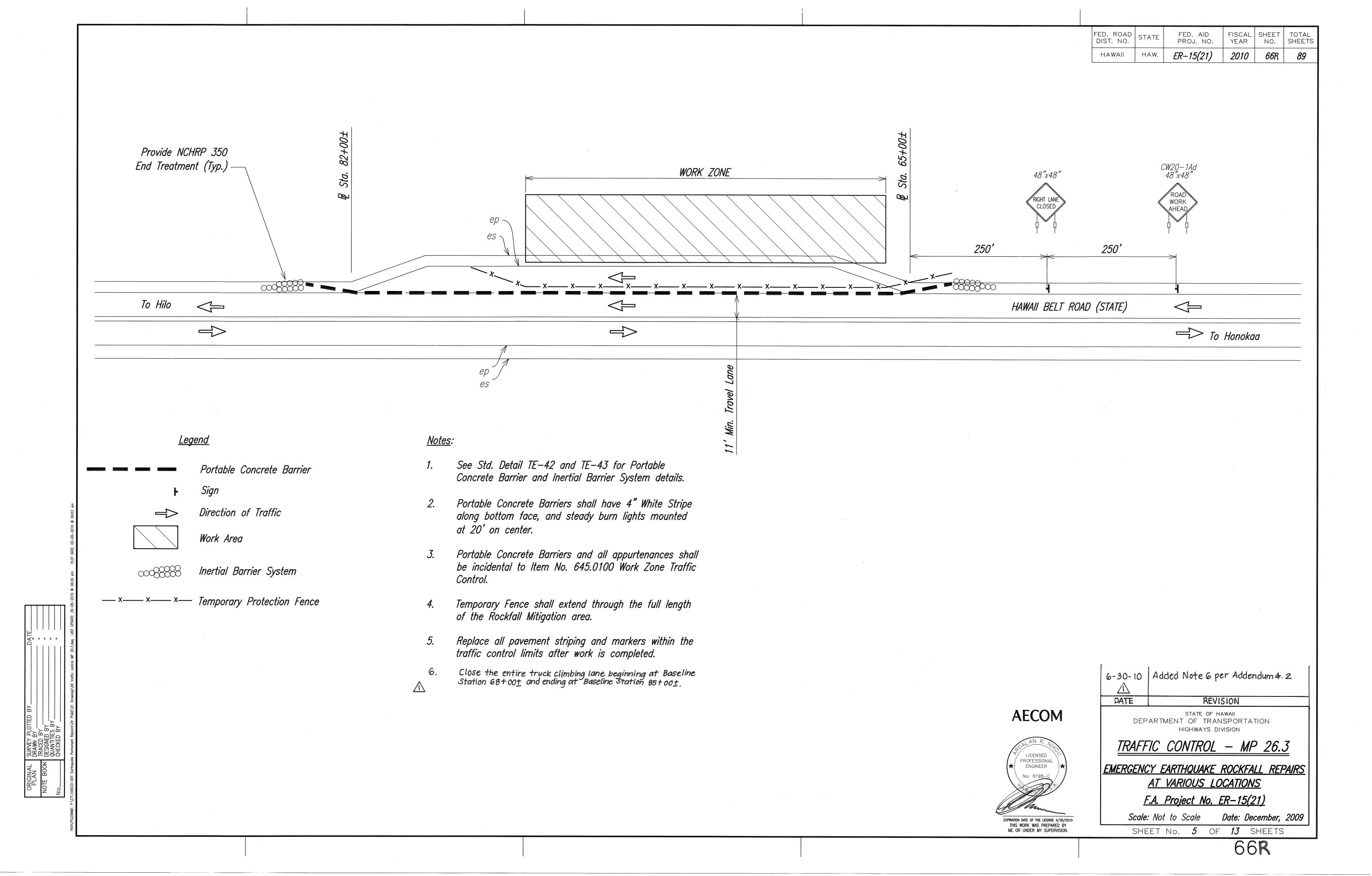
SHEET No. 1 OF 13 SHEETS

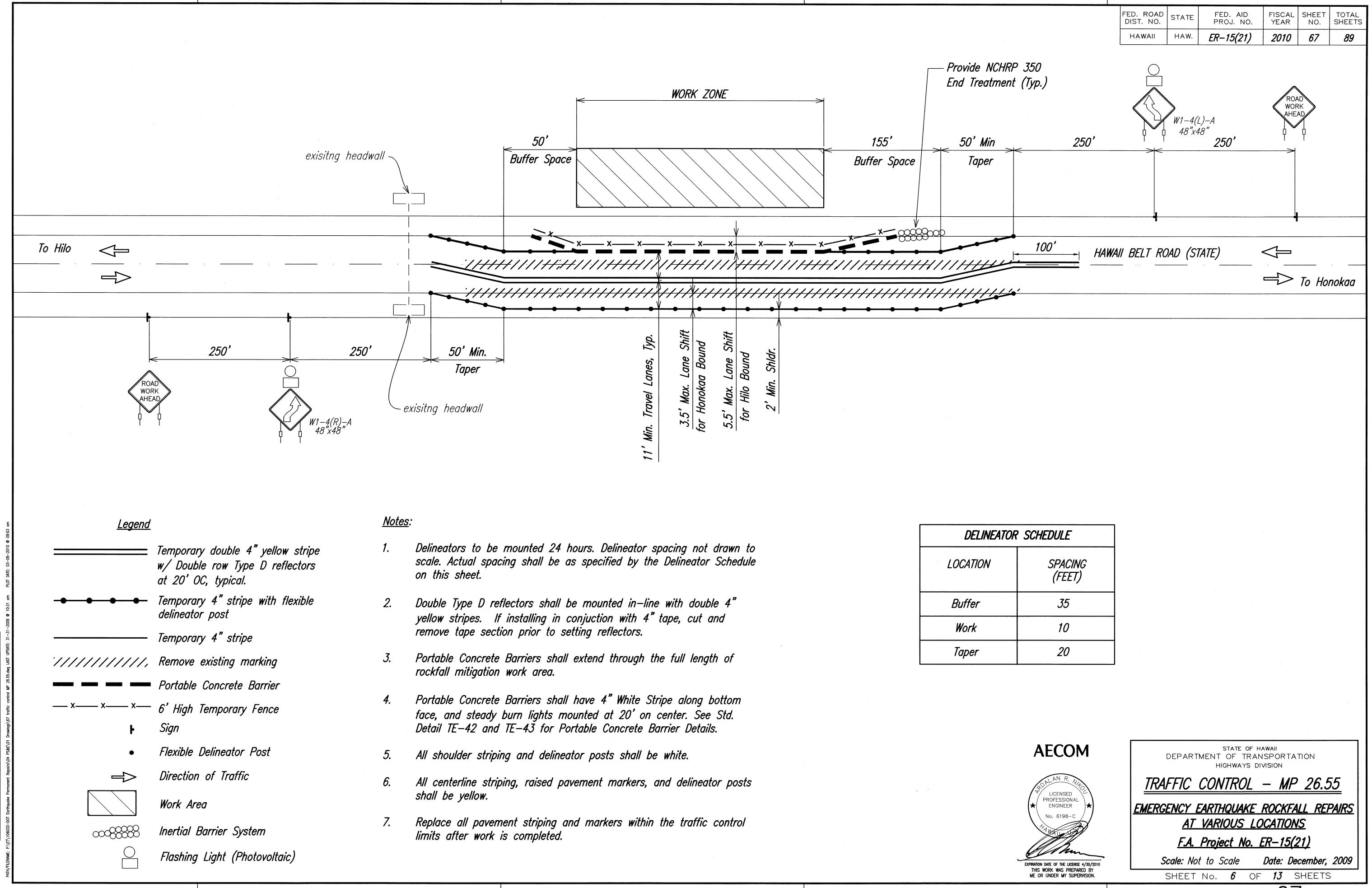




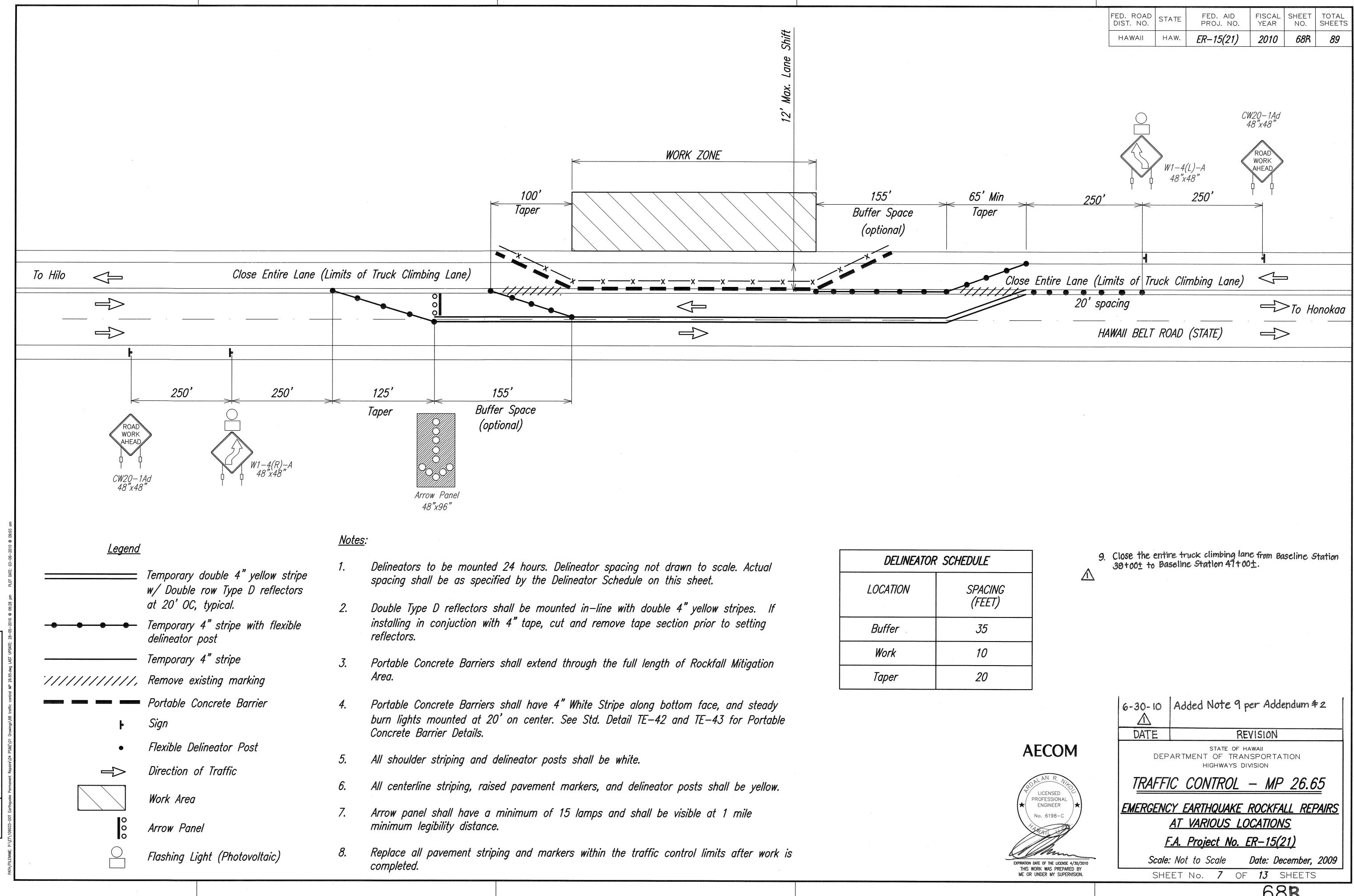


SURVEY PLOTT
DRAWN BY \_\_\_
TRACED BY \_\_
DESIGNED BY QUANITIES BY
CHECKED BY



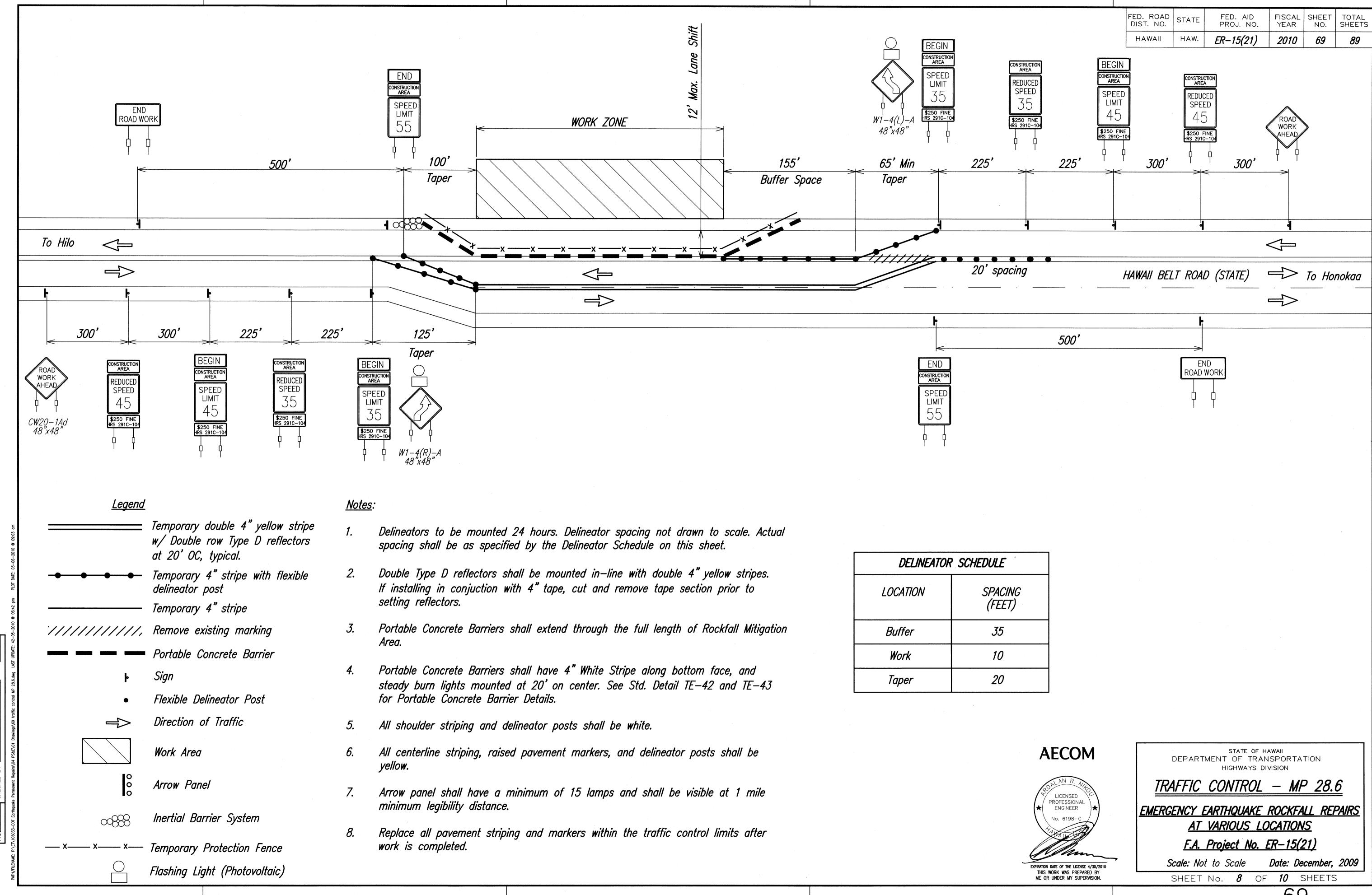


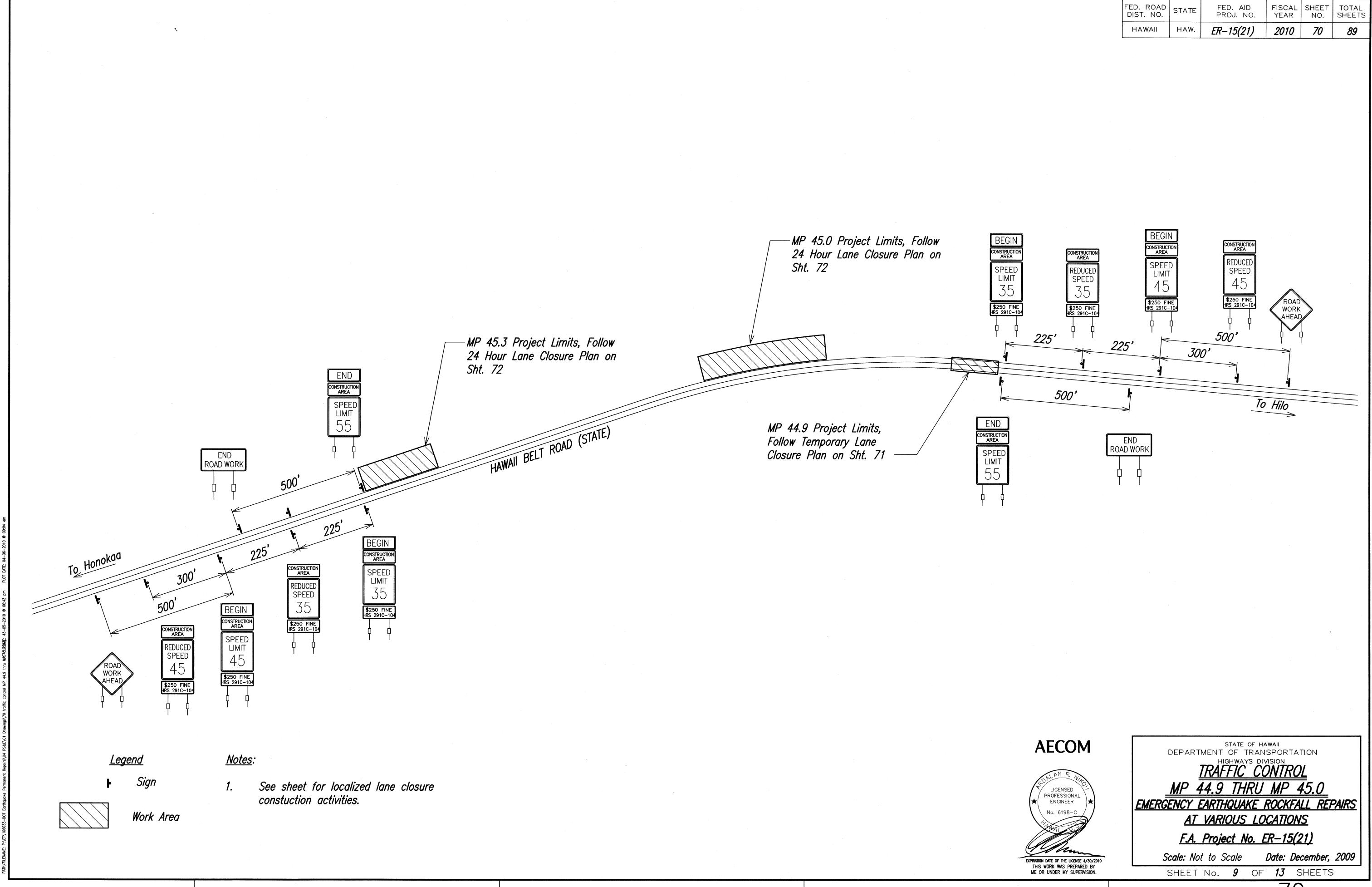
ORIGINAL SURVEY PLOTTE PLAN DRAWN BY \_\_\_\_\_ TRACED BY \_\_\_\_\_ NOTE BOOK DESIGNED BY \_\_\_\_\_ QUANITIES BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_ CHECKED BY \_\_\_\_\_\_



A:::::

68R





FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-15(21)	2010	71	<i>89</i>

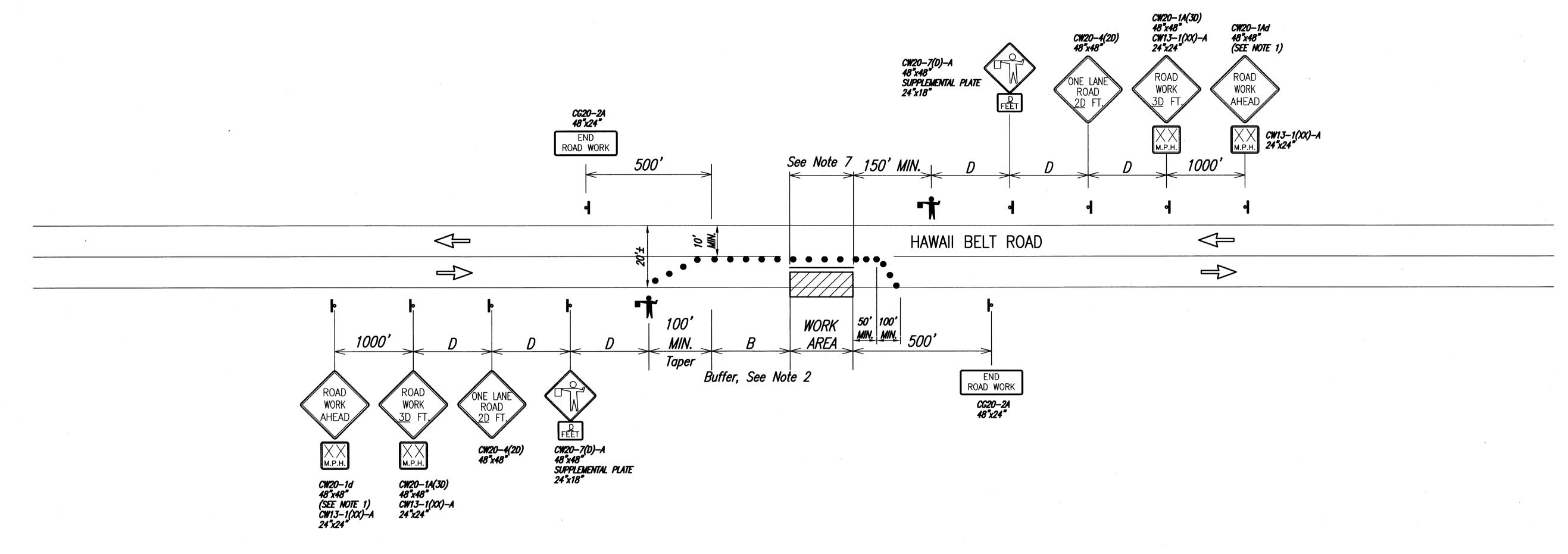


TABLE 1. FOR TRAFFIC CONTROL PLAN										
POSTED SPEED LIMIT	SIGN SPACING (D) (FEET)	TAPER LENGTH (T) (FEET)	LONGITUDINAL BUFFER	SPACING OF CONES OR DELINEATORS (FEET)						
(M.P.H.)			(FEET) SPACE (B) (FEET)	TAPER	TANGENT	WORK AREA				
20	250	200	<i>35</i>	20	20	10				
25	250	200	55	25	<i>25</i>	10				
30	250	250	85	<i>30</i>	30	10				
35	250	250	120	<i>35</i>	<i>35</i>	10				
40	500	350	170	40	40	10				
45	500	550	220	<b>4</b> 5	<b>4</b> 5	10				
50	1000	600	280	50	50	10				
55	1000	700	335	55	55	10				

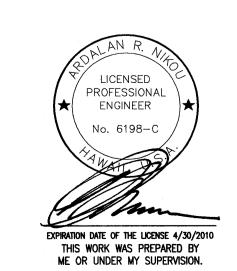
### *Notes:*

- "One Lane Road" (CW20-4) AND "Flagger Ahead" (CW20-7) signs shall be removed or covered when no work is being performed and lane is not closed.
- The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.
- Cones or delineators shall be installed at 20' o.c. max. on tapers and 25' o.c. max. for buffer and work areas.
- 'Be Prepared to Stop' sign should be located between the flagger sign and the 'One Lane Road' sign.
- Except in emergencies, illuminate flagger stations at night.
- The advisory speed (XX) shall be determined by the engineer.
- Protect the highway surface and public during rock scaling/removal operations by means of temporary fence, protable concrete barriers, and/or steel plating (incidental to Traffic Control).

- - Cone or Delineator
- Direction of Traffic
- Flagger / Police Officer



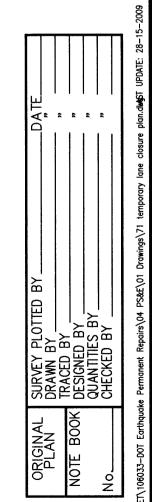
**AECOM** 

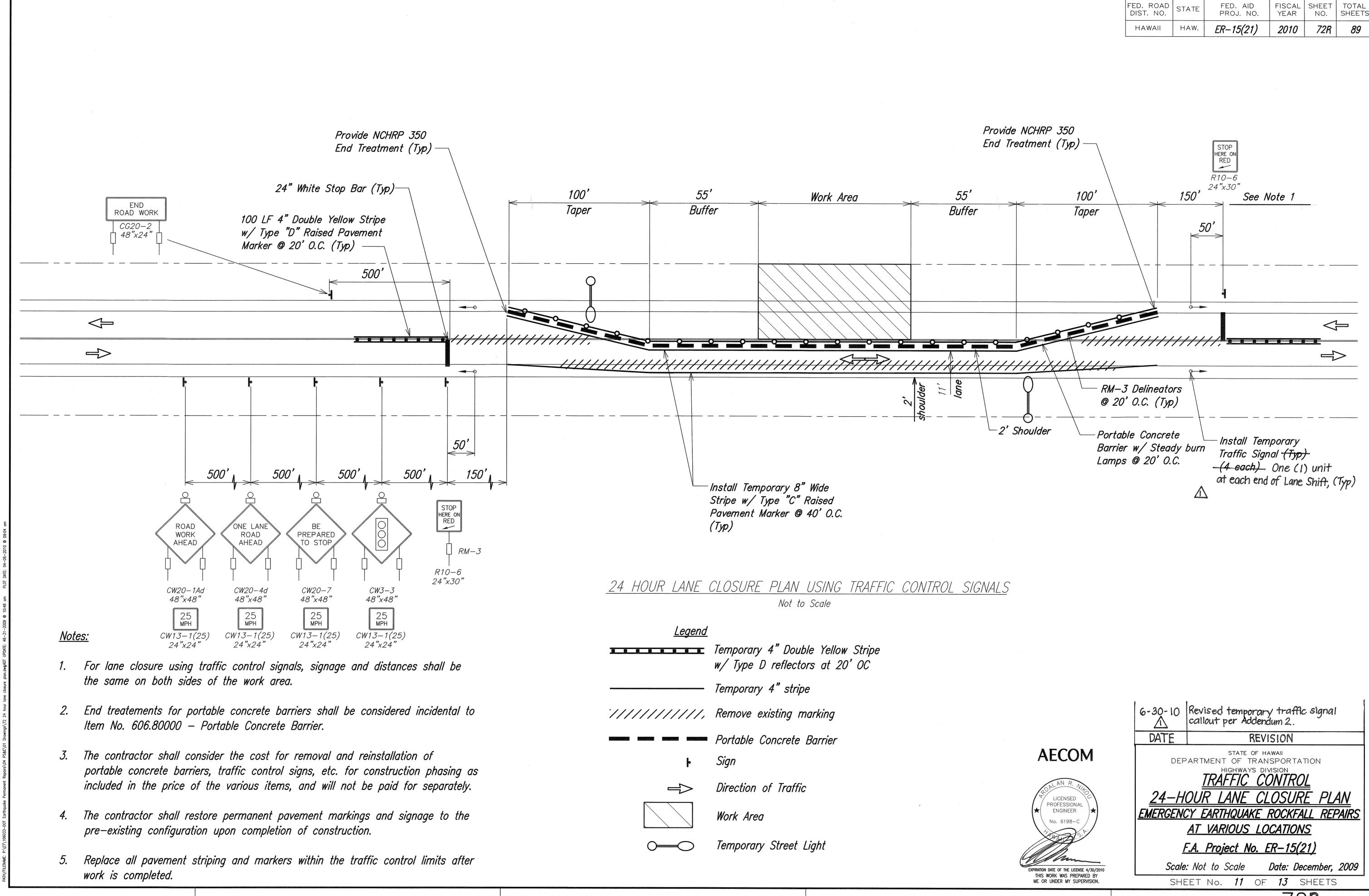


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL TEMPORARY LANE CLOSURE PLAN EMERGENCY EARTHQUAKE ROCKFALL REPAIRS

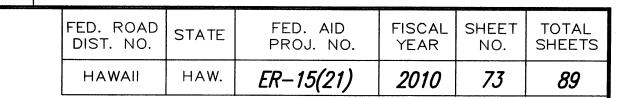
AT VARIOUS LOCATIONS F.A. Project No. ER-15(21)

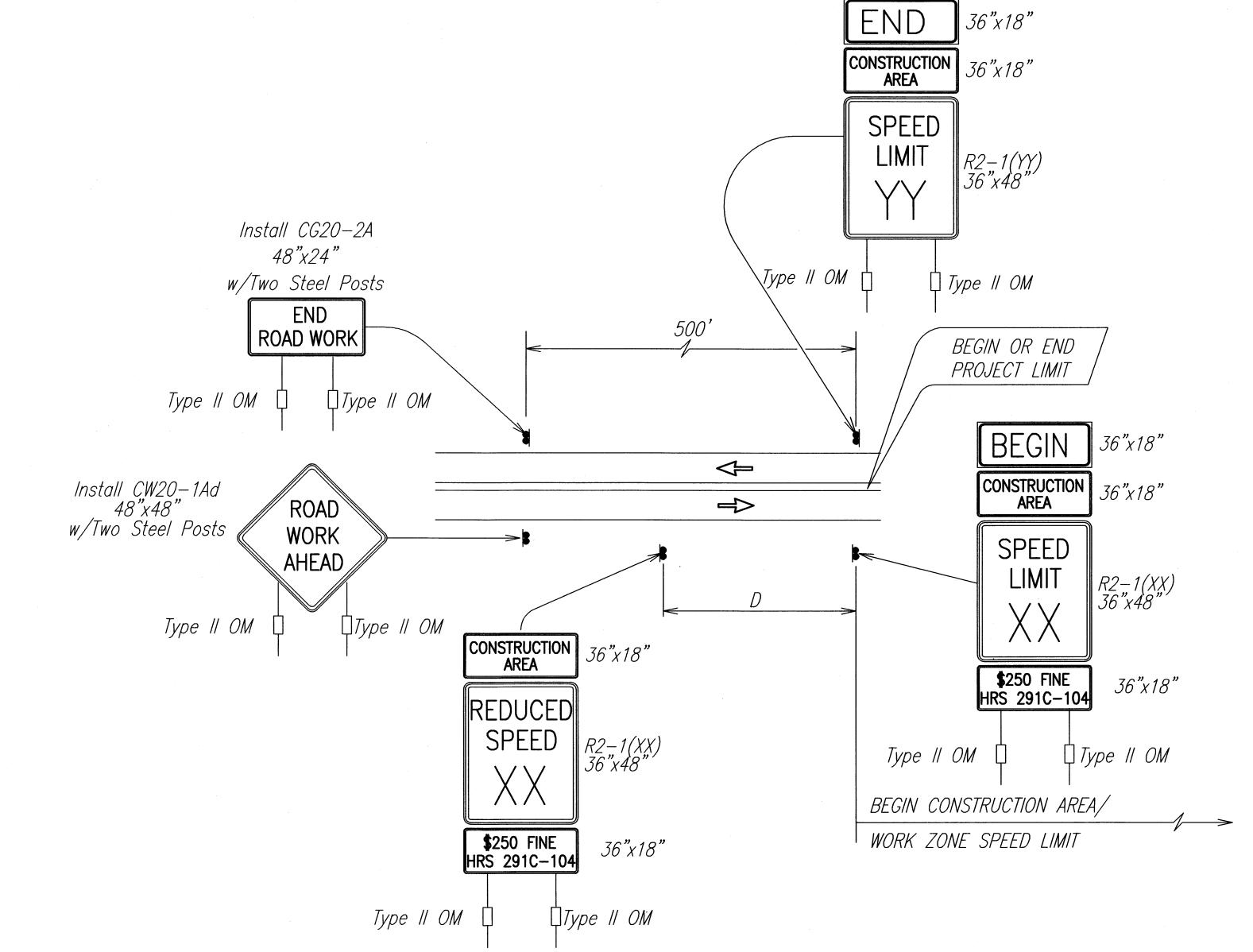
Date: December, 2009 Scale: Not to Scale SHEET No. 10 OF 13 SHEETS





72R

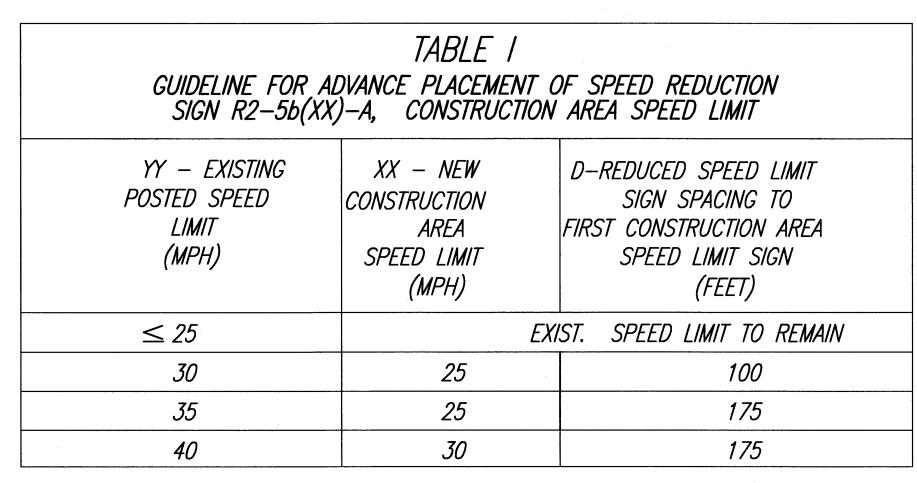


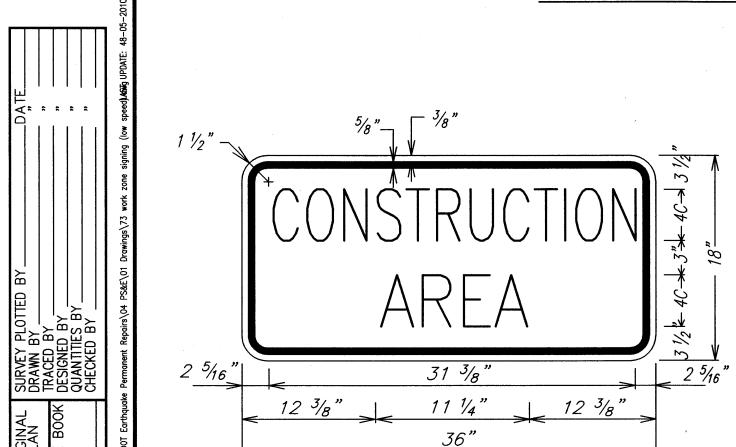


TYPICAL DETAIL FOR CONSTRUCTION SIGNS ON TWO LANE OR MULTILANE UNDIVIDED HIGH SPEED HIGHWAY

# Work Zone Note:

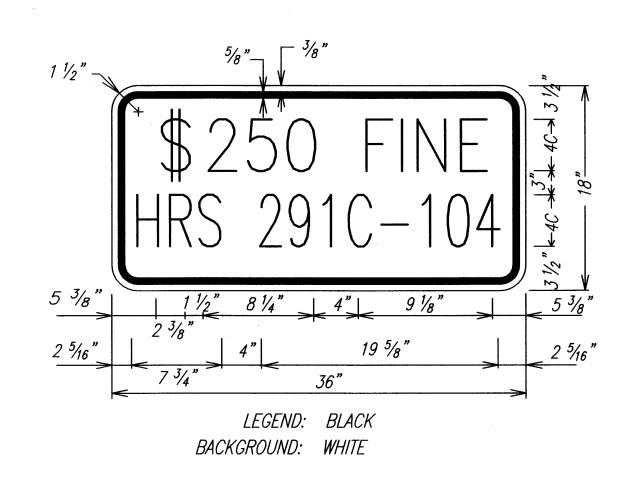
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3) days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.
- 2. All existing regulatory speed limit signs with posts within the work zone/project limits shall be removed and replaced with work zone speed limit sign assemblies (R2-1(XX) and R2-5b(XX) with "CONSTRUCTION" AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs).
- Construction sign assemblies shall be installed on both the approaching and trailing ends of each work zone as shown on this plan.
- Each construction warning sign and work zone speed limit assembly shall have a minimum of two (2) Type Il OM. Installation of each Type Il OM shall be considered incidental to Item No. 645.0100 - Traffic Control.
- 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.
- Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.
- 7. The removal and restoration of existing regulatory speed limit signs shall be considered incidental to Item No. 645.0100 - Traffic Control.
- The installation, maintenance and removal of work zone speed limit sign assemblies shall be paid for under Item No. 645.0100 - Traffic Control.
- 9. The work zone speed limit signs shall be new and become the property of the Contractor.

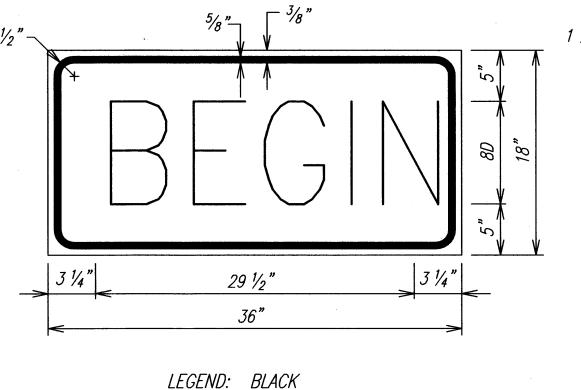




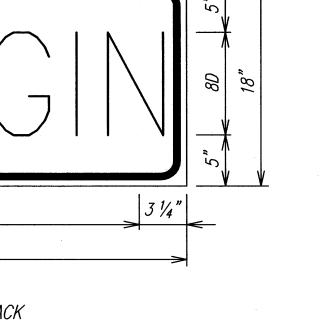
LEGEND: BLACK

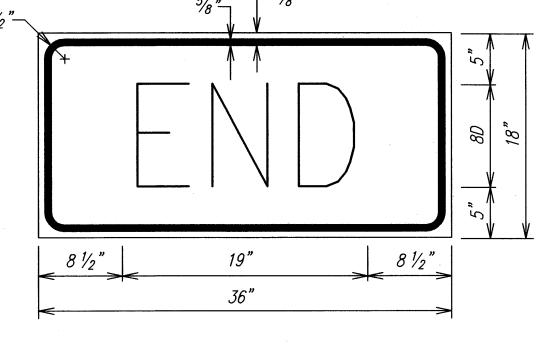
BACKGROUND: ORANGE



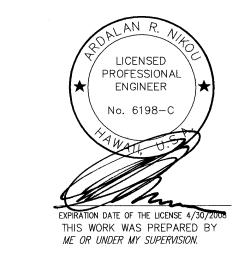


BACKGROUND: ORANGE



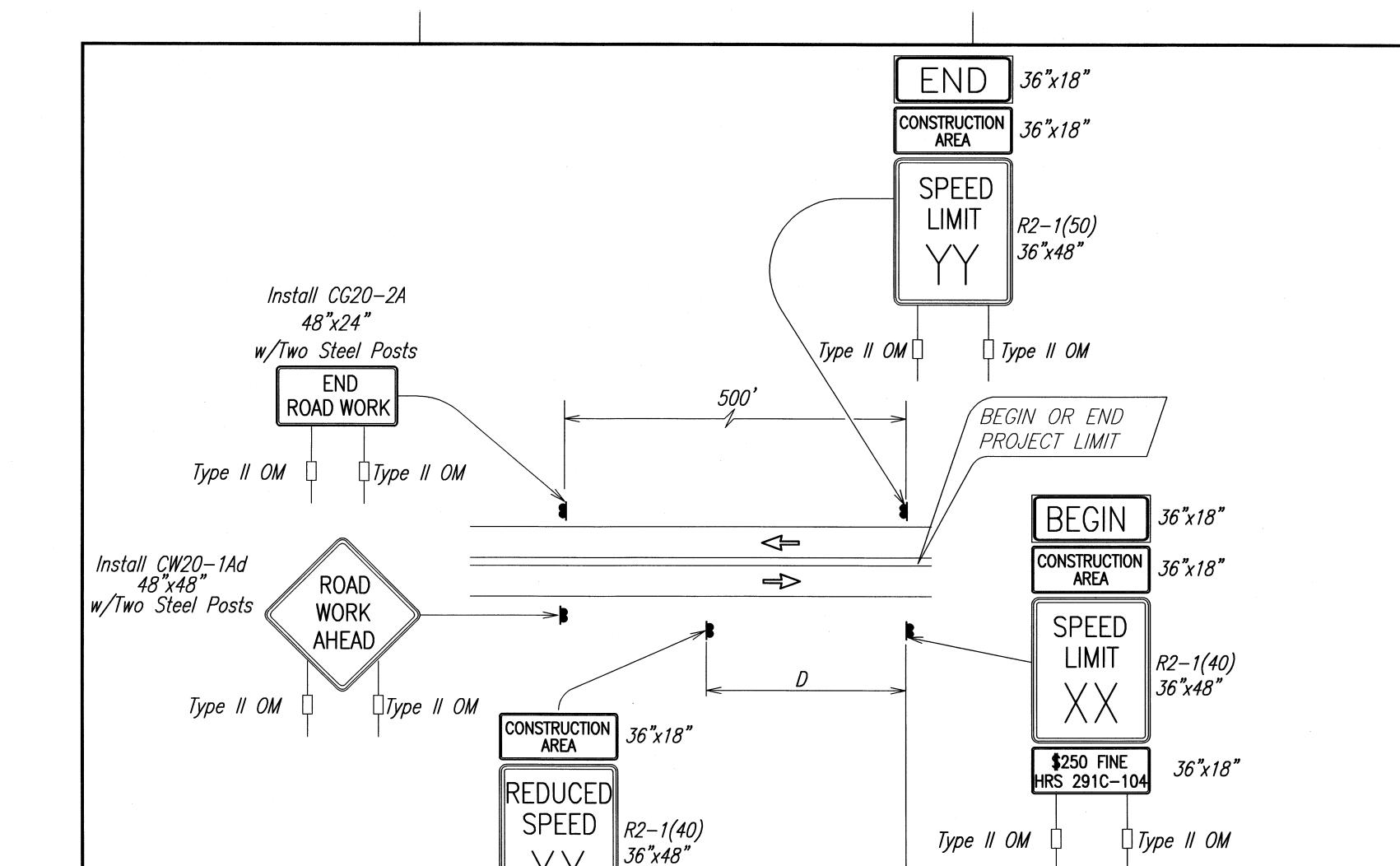


LEGEND: BLACK BACKGROUND: ORANGE



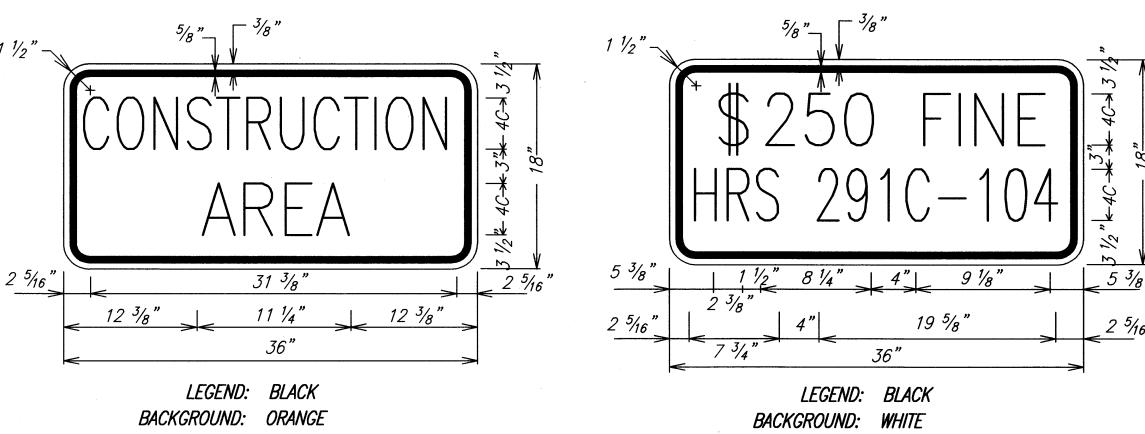
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL WORK ZONE SIGNING (LOW SPEED) EMERGENCY EARTHQUAKE ROCKFALL REPAIRS AT VARIOUS LOCATIONS F.A. Project No. ER-15(21) Date: December, 2009 Scale: None

SHEET No. 12 OF 13 SHEETS



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

36"x18"



\$250 FINE

HRS 291C-104

Type II OM

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 Special Provisions.

FED. ROAD STATE

HAWAII

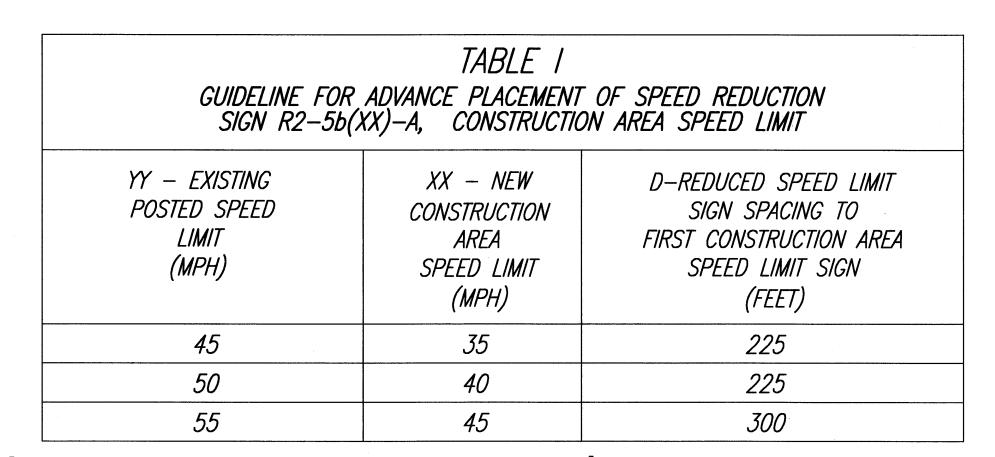
FED. AID PROJ. NO.

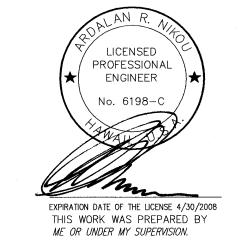
ER-15(21) 2010

FISCAL SHEET YEAR NO.

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- 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(40) and R2-5b(40) 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.
- Each construction warning sign and work zone speed limit assembly shall have a minimum of two (2) Type Il OM. Installation of each Type Il 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.
- Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.
- 7. The removal and restoration of existing regulatory speed limit signs shall be considered incidental to Item No. 645.0100 - Traffic Control.
- 8. The installation, maintenance and removal of work zone speed limit sign assemblies shall be paid for under Item No. 645.0100 - Traffic Control.
- 9. The work zone speed limit signs shall be new and become the property of the Contractor.
- 10. The design taper length for all sites shall be one—half of T in accordance with "Guidelines for TEMPORARY TRAFFIC CONTROL". For sites with multiple posted speed limits, the higher speed limit shall be used in the design.





19" *36"* 

AT VARIOUS LOCATIONS F.A. Project No. ER-15(21)

Scale: None

Date: December, 2009 SHEET No. 13 OF 13 SHEETS

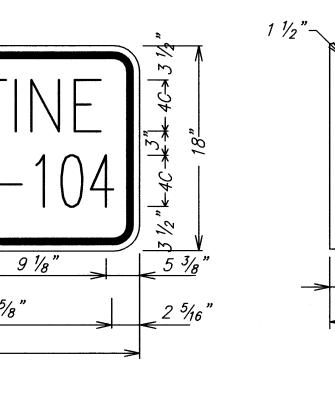
STATE OF HAWAII

TRAFFIC CONTROL

WORK ZONE SIGNING (HIGH SPEED)

EMERGENCY EARTHQUAKE ROCKFALL REPAIRS

DEPARTMENT OF TRANSPORTATION



BEGIN CONSTRUCTION AREA/

WORK ZONE SPEED LIMIT

29 1/2" *36* " LEGEND: BLACK

BACKGROUND: ORANGE

LEGEND: BLACK BACKGROUND: ORANGE

8 1/2"