

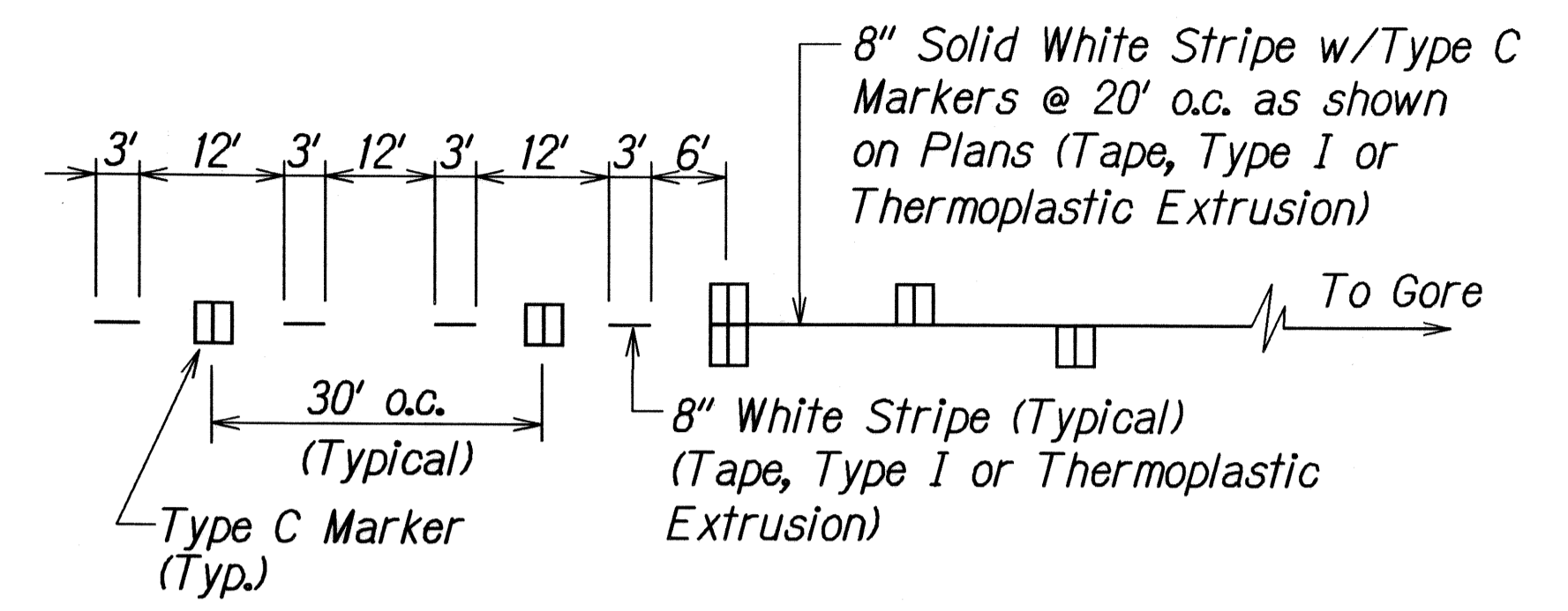
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201-01-06M	2008	58	64

LEGEND

- 4 each Type A Raised Pavement Markers
- Type C Raised Pavement Markers @ 40'-0" o.c.
- 4 each Type J Raised Pavement Markers
- Type D Raised Pavement Markers @ 40'-0" o.c.
- 8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- 4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion))
- 4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II or Thermoplastic Extrusion))
- 4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion))
- 4" Double Solid White Stripes with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
- Lane Change Restriction Marking
4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
- 4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
- 4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)
- Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)
- Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
- Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
- Crosswalk and Stop Line. All Stop Lines shall be 10'-0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment (Tape, Type III or Thermoplastic Extrusion)
- Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)
- Pavement Word (Tape, Type III or Thermoplastic Extrusion)
- 4 Each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
Type H Raised Pavement Markers (Reflective Surface facing no-passing direction)
4" Single Solid Yellow Stripe (Tape, Type I or Thermoplastic Extrusion)
- Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type C Markers @ 40'-0" o.c. (Tape, Type III or Thermoplastic Extrusion)
- Reflector Marker (RM-5) Mounted on Existing Metal Guardrail

NOTES

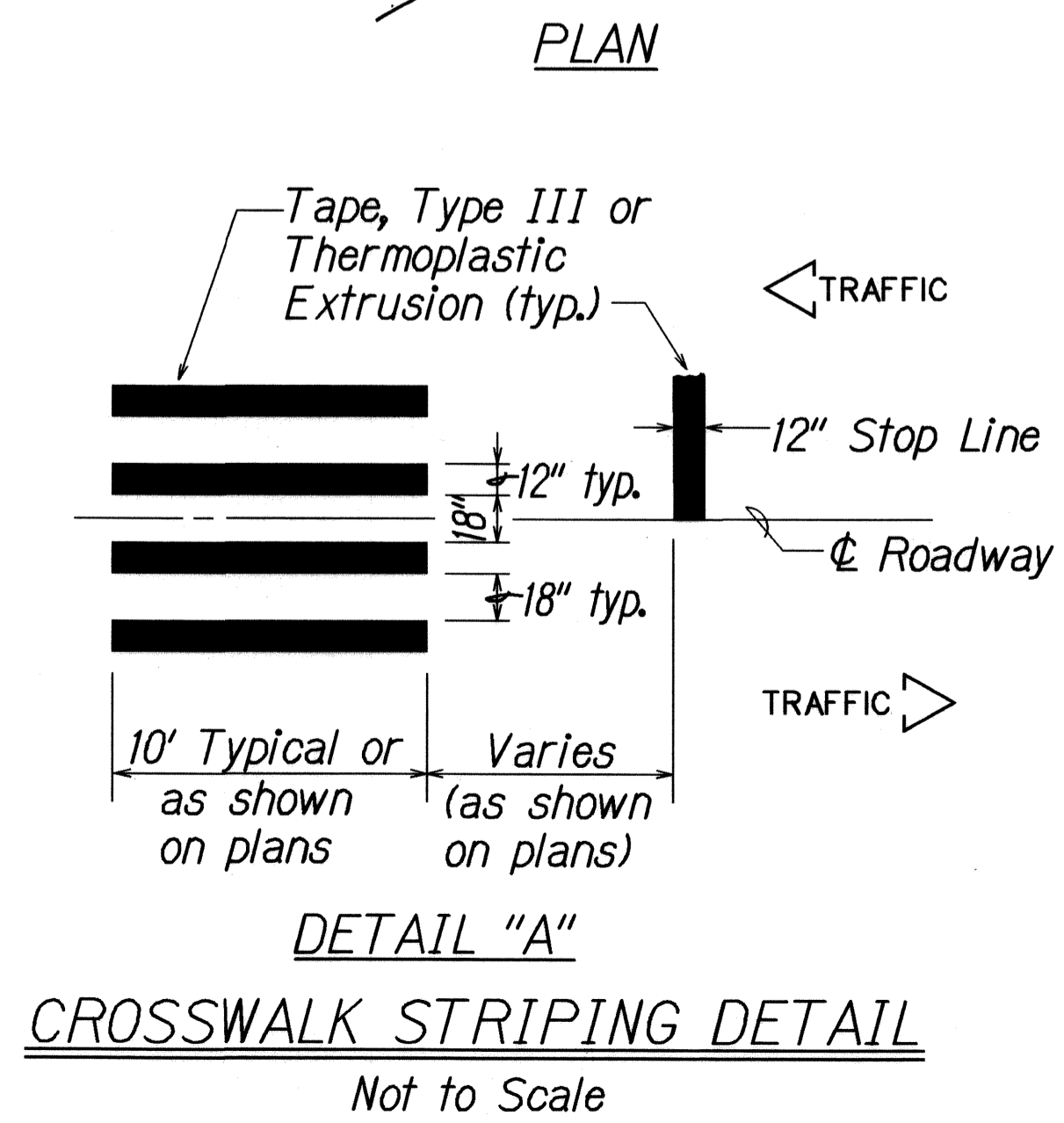
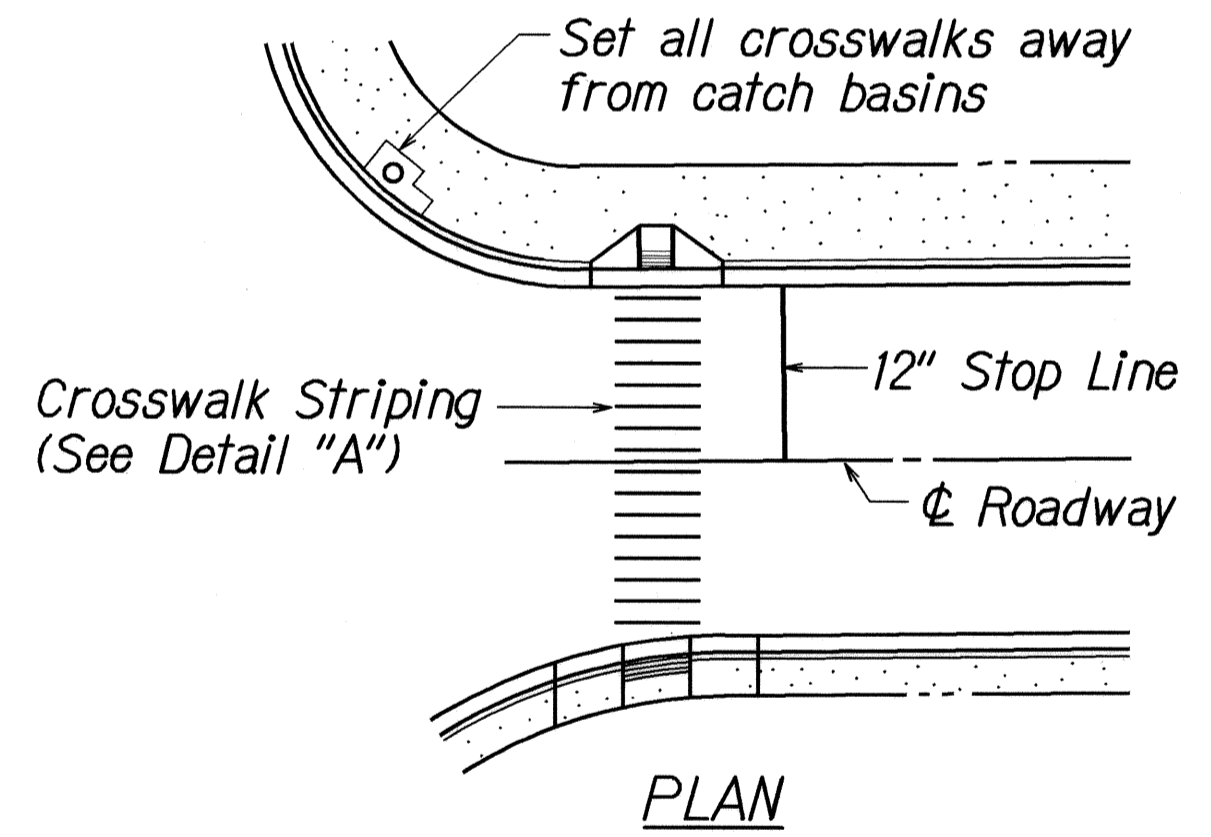
- Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
- Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
- Raised pavement markers shall not be installed within crosswalks.
- Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
- All pavement striping shall be as noted on the legend or plans.
- All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
- Final locations of all signs shall be approved by the Engineer prior to any installation work.
- Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
- The Contractor shall erect at the beginning of the project and at the end of the project advance construction warning signs placed as indicated on the plans or as directed by the Engineer for the duration of the highway project and shall be maintained by the Contractor. These signs shall be placed in addition to the required traffic control signs called for in Section 645 - Traffic Control. The advance construction warning signs shall be new and become the property of the State. The Contractor shall remove, clean, and deliver the signs and posts to the District Baseyard, or as directed by the Engineer, upon the completion of the project.
- Rumble strips will be paid for under Type A pavement markers.



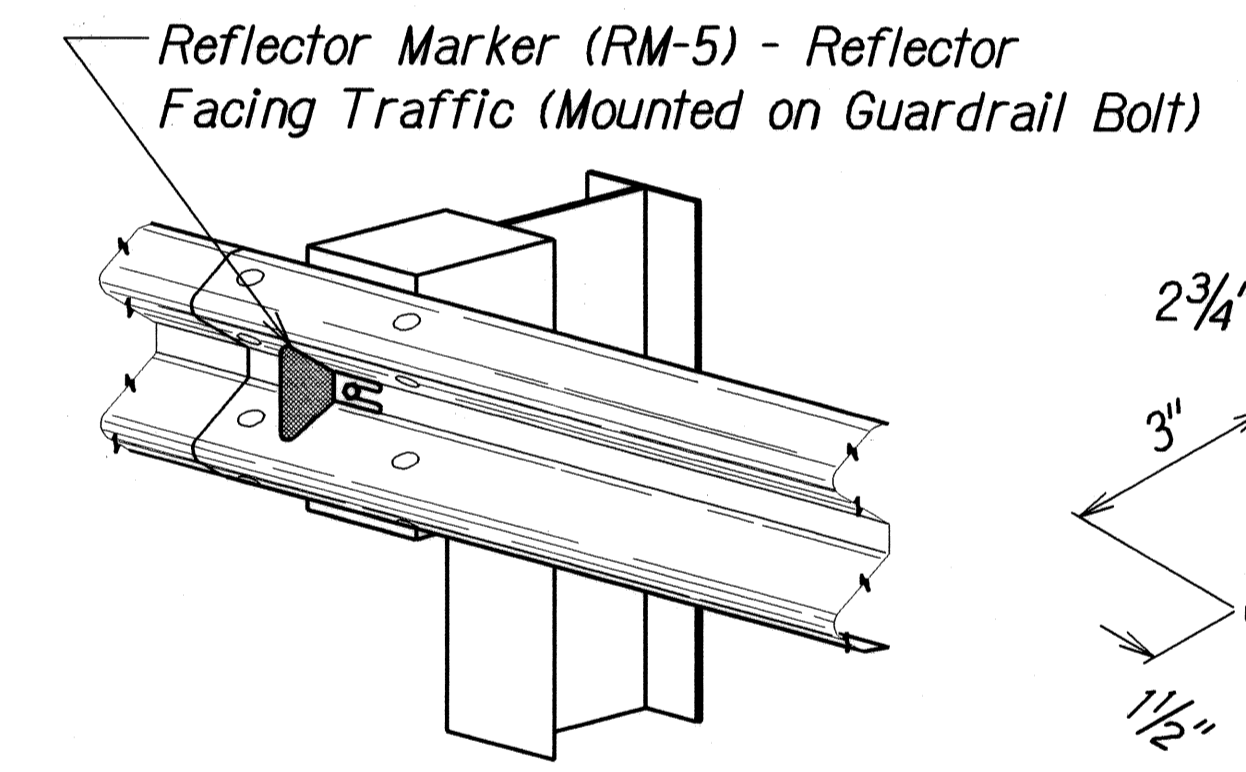
LANE DROP MARKING
Not to Scale

TRAFFIC CONTROL NOTES:

- Minimum width of traffic lane through work area is 10'.
- The Contractor shall maintain operation of ramp at all times.
- The Contractor shall coordinate construction with Kaiser Hospital.



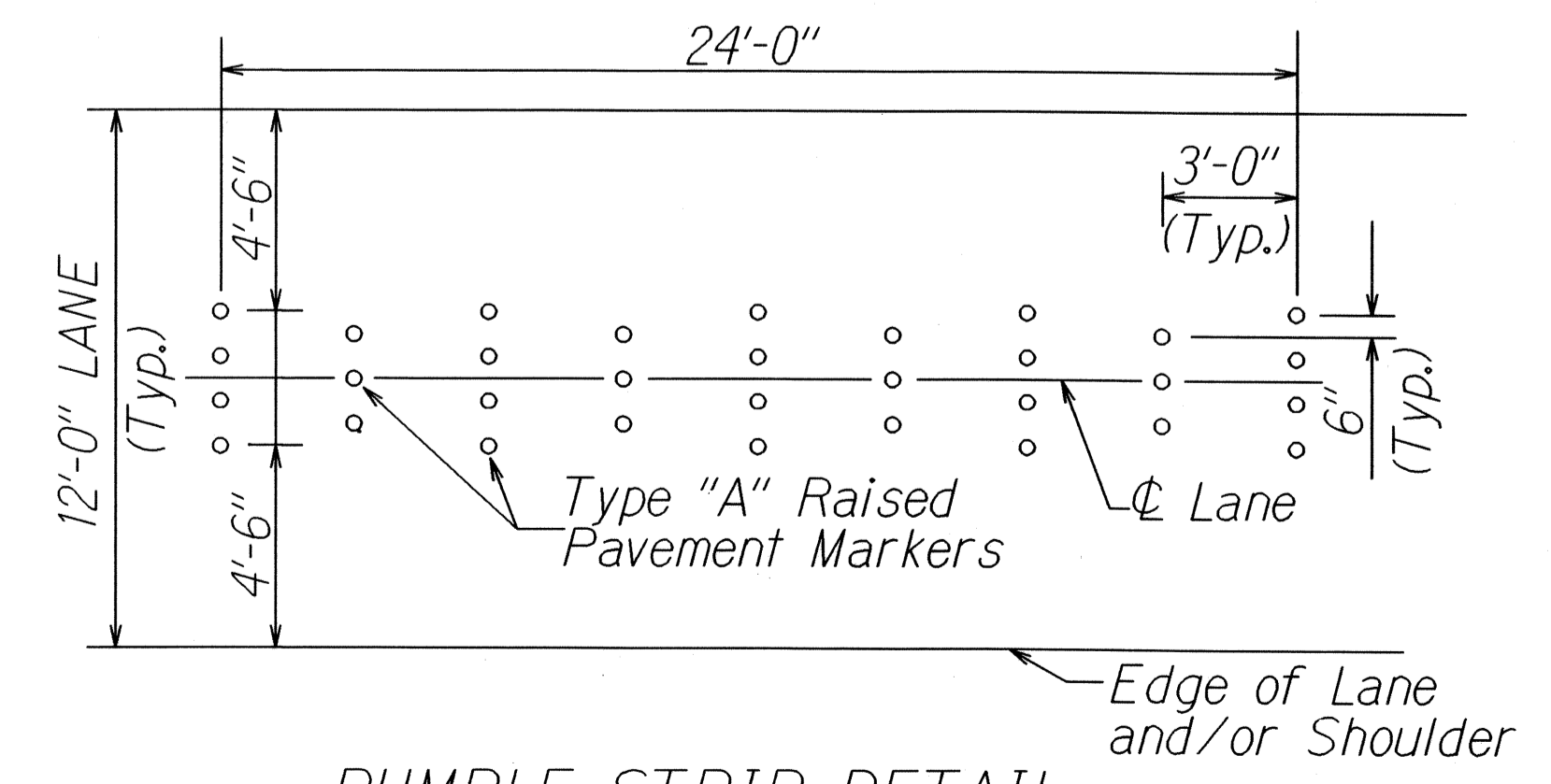
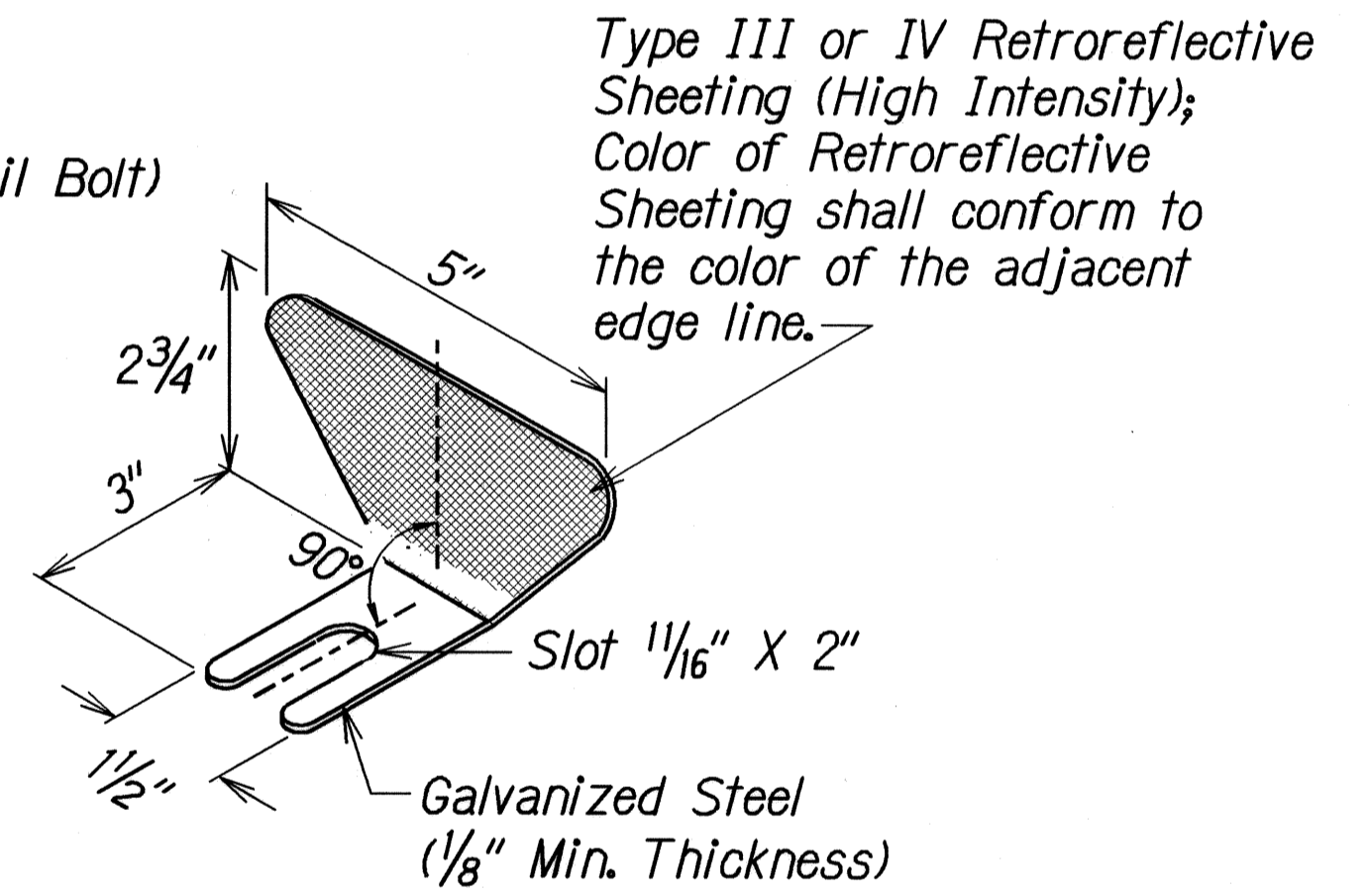
CROSSWALK STRIPING DETAIL
Not to Scale



Note:

Reflector Markers (RM-5) mounted on guardrails shall be spaced every 25 feet. RM-5's shall not be installed on Terminal Sections. Furnishing and installing of each RM-5 shall be paid for under Item No. 621C.4500, Traffic Control Signs - Markers. The Contractor shall be responsible for mounting RM-5's on all existing metal guardrails even when not shown on plans.

REFLECTOR MARKER (RM-5) DETAIL AND TYPICAL INSTALLATION

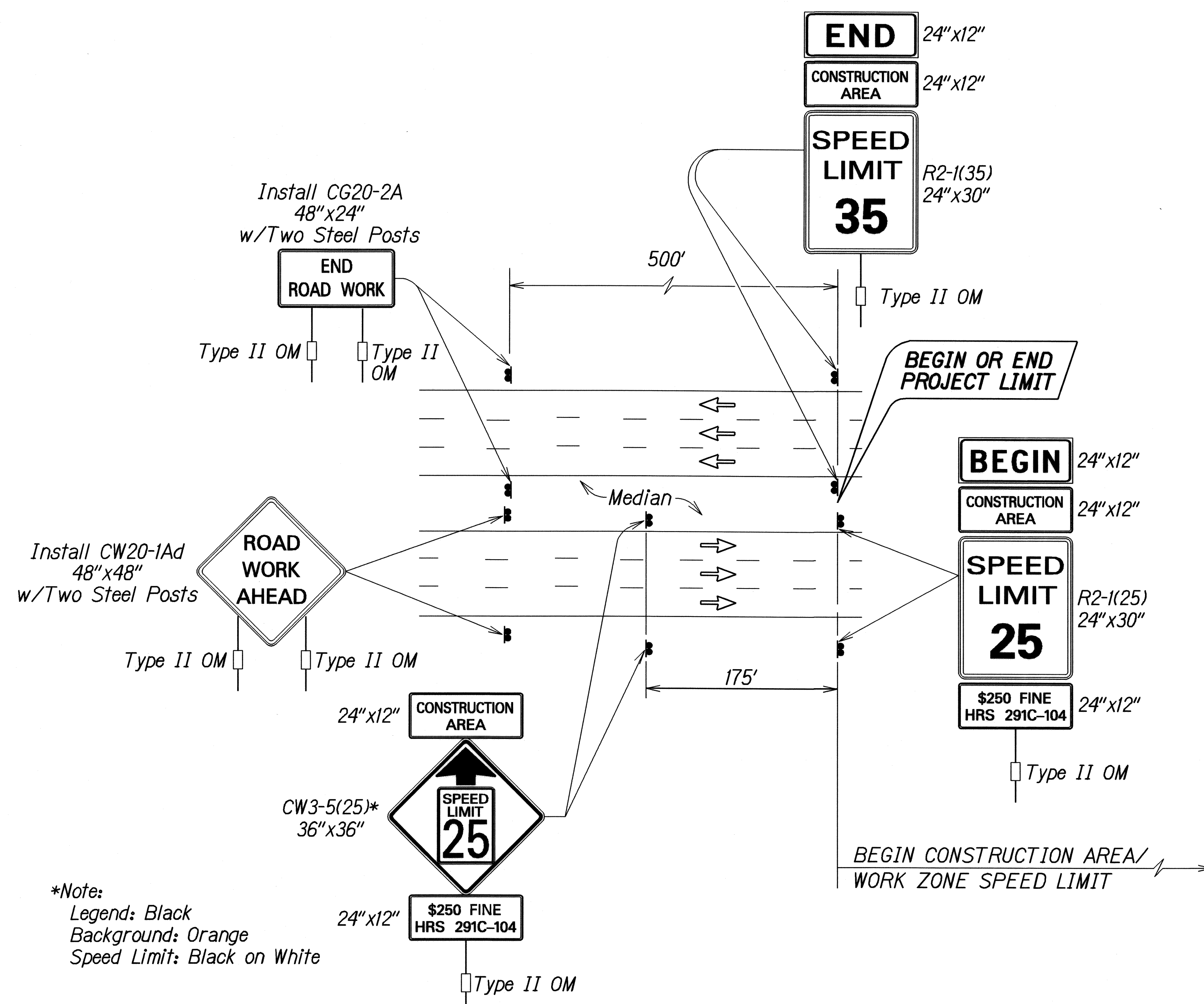


RUMBLE STRIP DETAIL
Scale: 1/4" = 1'-0"

DATE	_____
DESIGNED BY	_____
PLANNED BY	_____
DESIGNED BY	_____
PLANNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
DATE	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING
LEGEND, DETAILS & NOTES
MOANALUA FREEWAY
NORTH FRONTAGE ROAD RESURFACING
Vicinity of Ala Aolani to Vicinity of Ala Kapuna
Project No. H201-01-06M
Not to Scale Date: November 2005
SHEET No. 71 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201-01-06M	2008	59	64



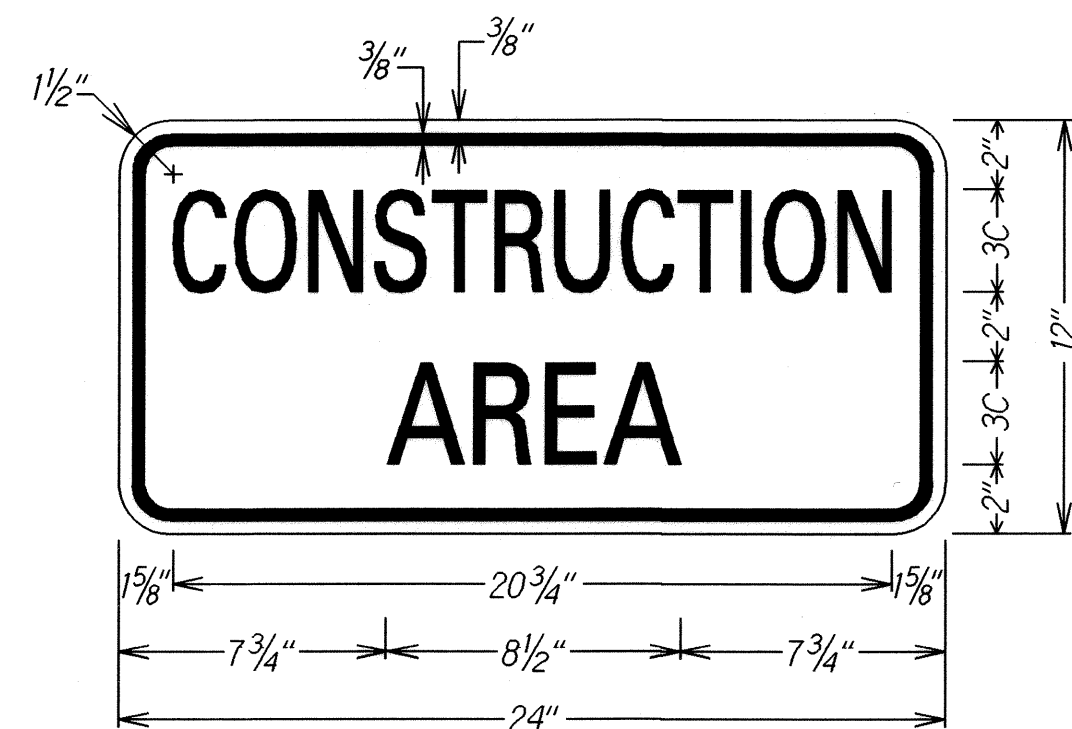
*Note:
 Legend: Black
 Background: Orange
 Speed Limit: Black on White

TYPICAL DETAIL FOR CONSTRUCTION SIGNS
 ON MULTILANE DIVIDED LOW SPEED HIGHWAY

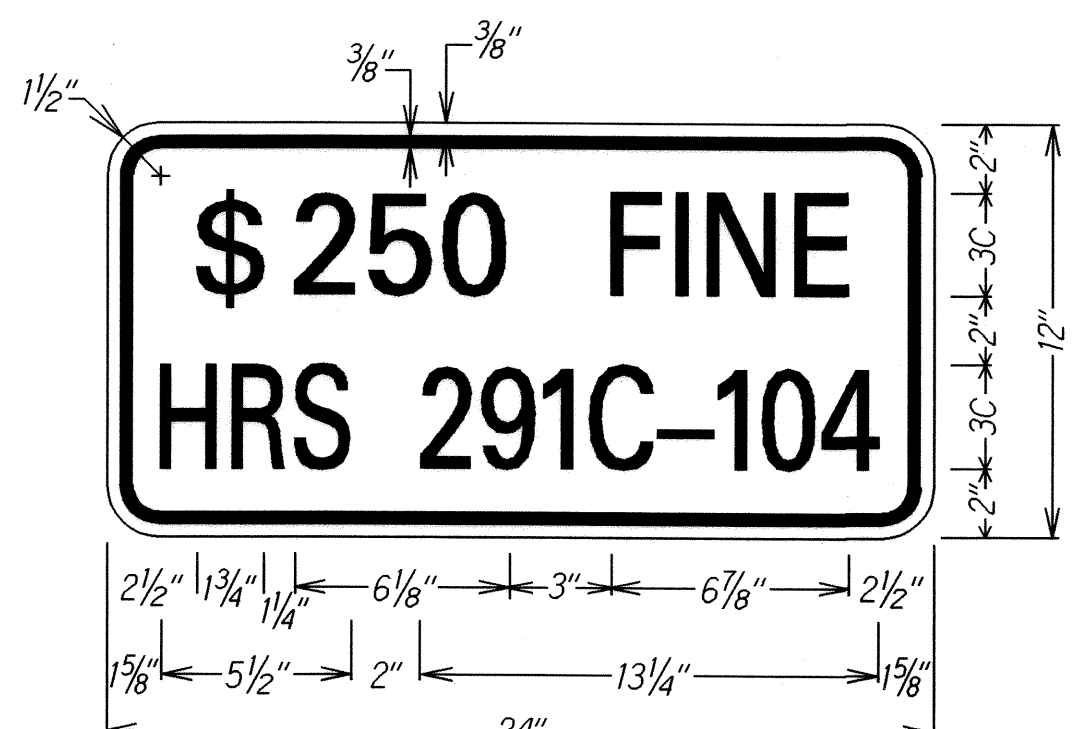
Work Zone Note:

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(25) and CW3-5(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 Item No. 645.1000 - 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. 645.1000 - Traffic Control.

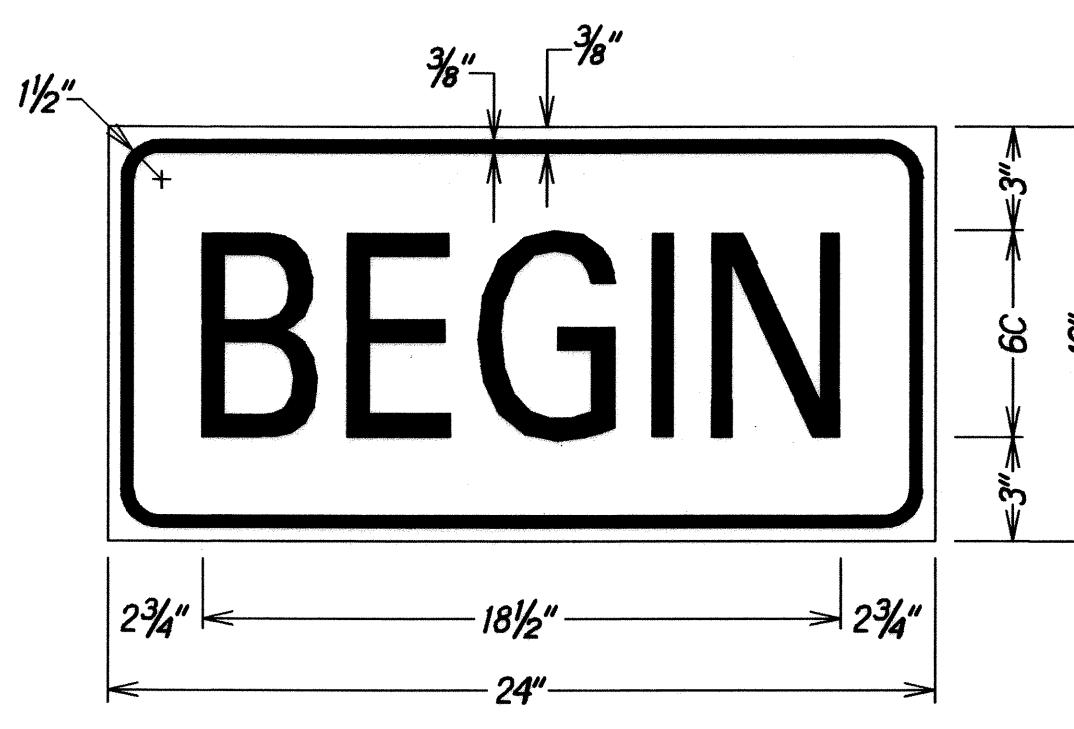
DATE	1/1
DESIGNED BY	J. J. J.
CHECKED BY	J. J. J.
PLACED BY	J. J. J.
QUANTITIES BY	J. J. J.
DESIGNED BY	J. J. J.
CHECKED BY	J. J. J.
PLACED BY	J. J. J.
QUANTITIES BY	J. J. J.



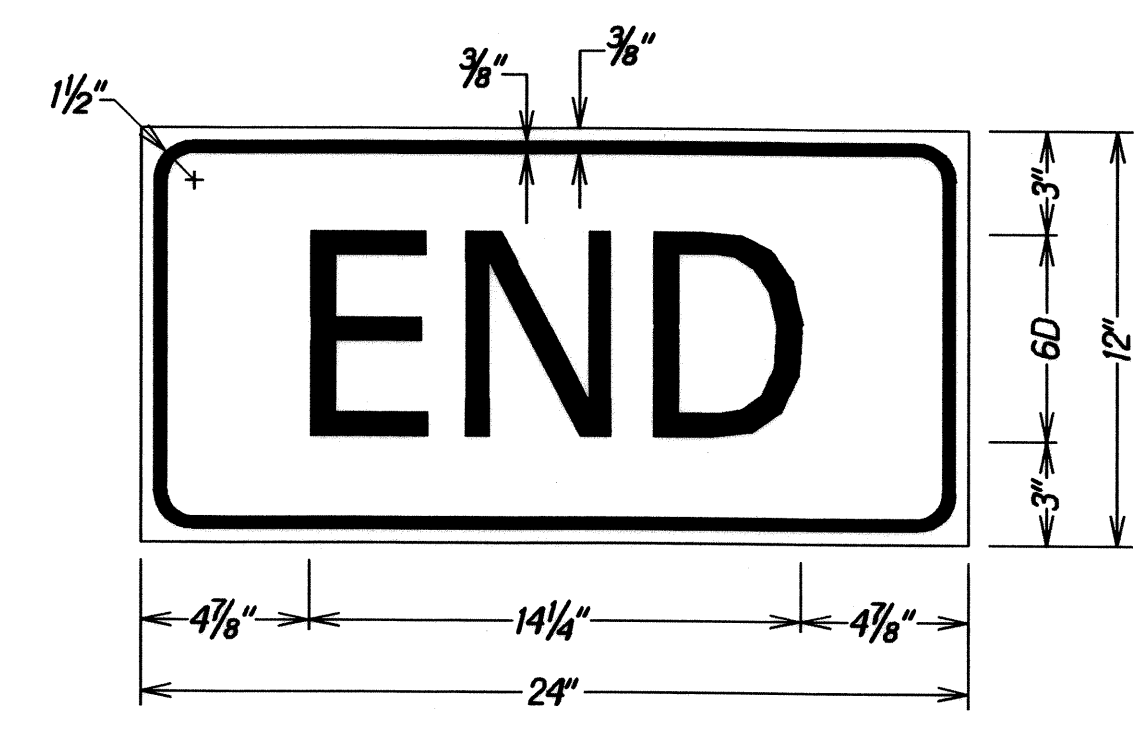
LEGEND: BLACK
 BACKGROUND: ORANGE



LEGEND: BLACK
 BACKGROUND: WHITE



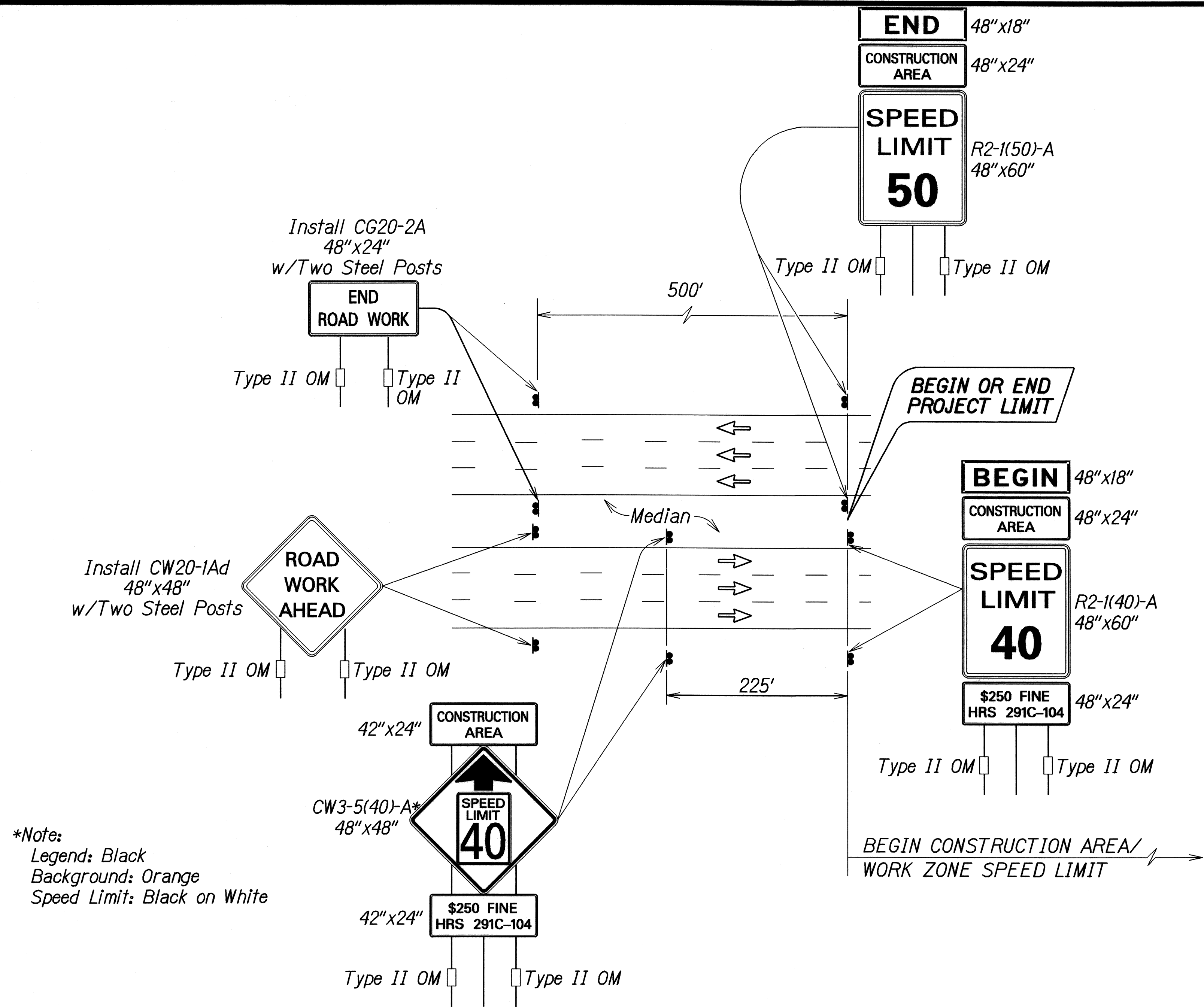
LEGEND: BLACK
 BACKGROUND: ORANGE



LEGEND: BLACK
 BACKGROUND: ORANGE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
LOW SPEED DIVIDED HIGHWAY
WORK ZONE SIGNING PLAN, NOTES+DETAILS
 MOANALUA FREEWAY
 NORTH FRONTAGE ROAD RESURFACING
 Vicinity of Ala Aolani to Vicinity of Ala Kapuna
 Project No. H201-01-06M
 Not to Scale Date: November 2005

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201A-01-06M	2008	60	64

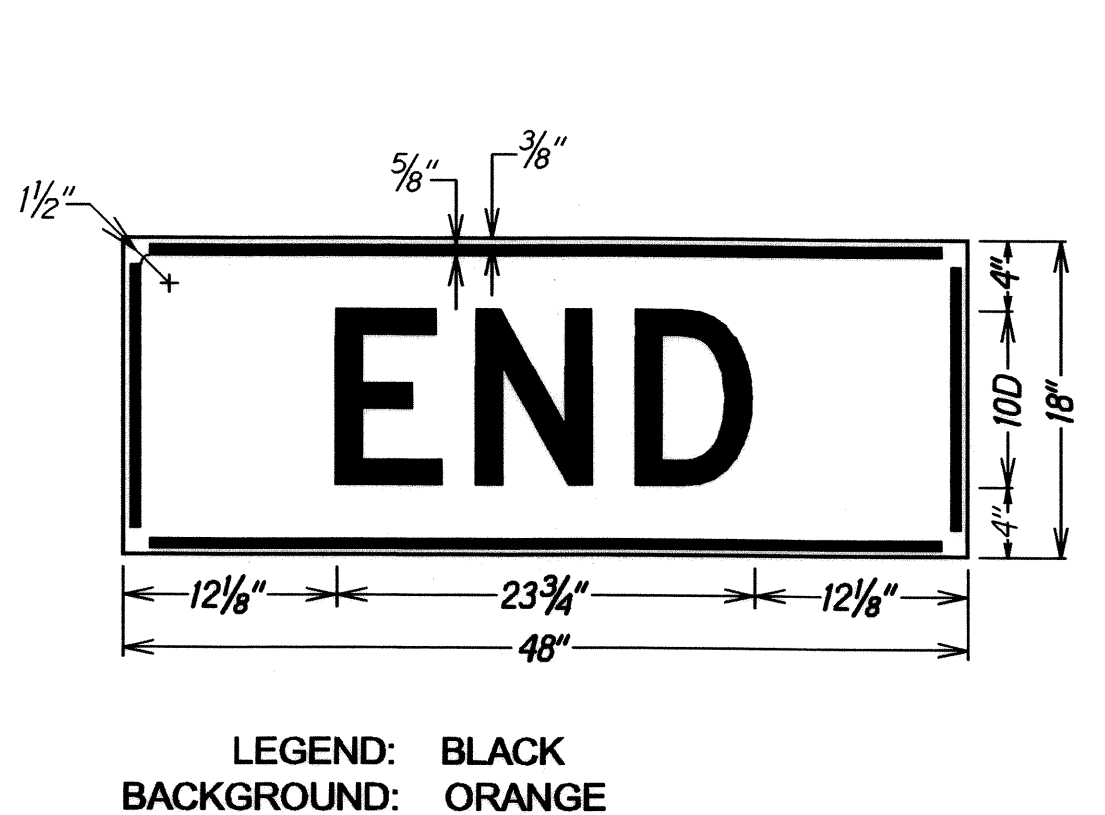
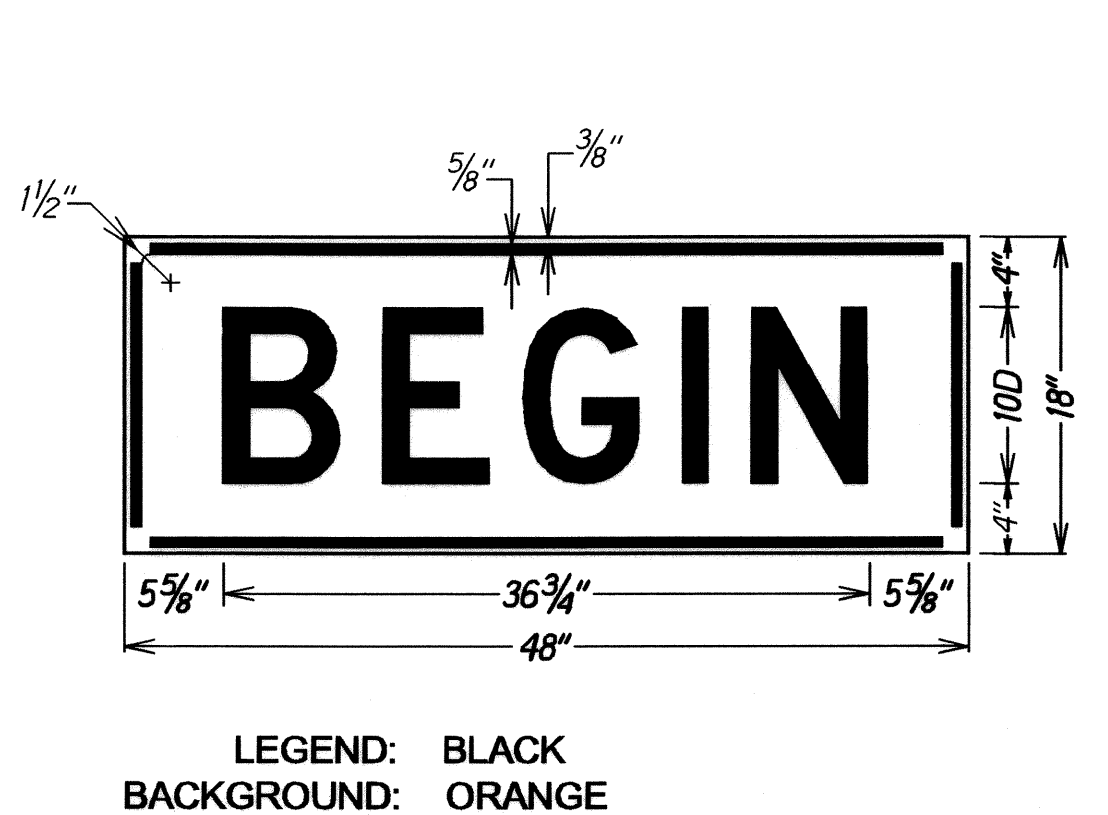
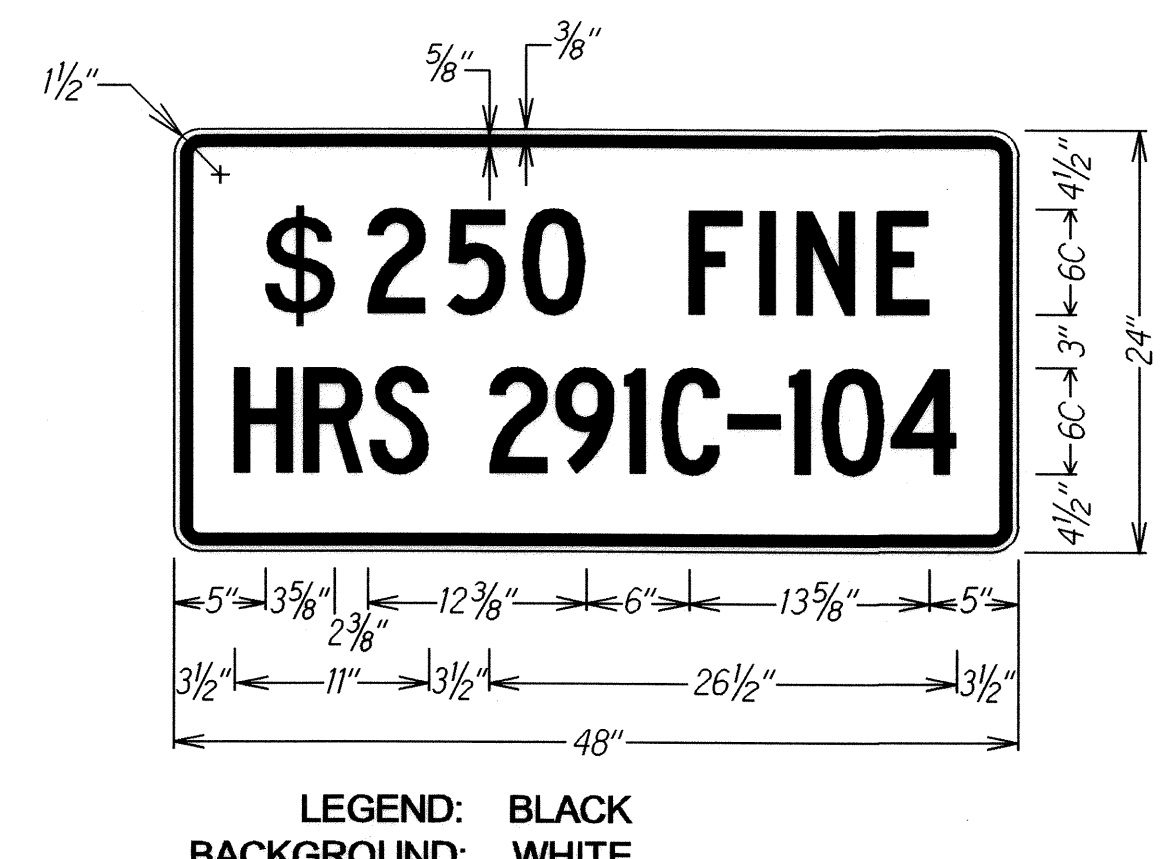
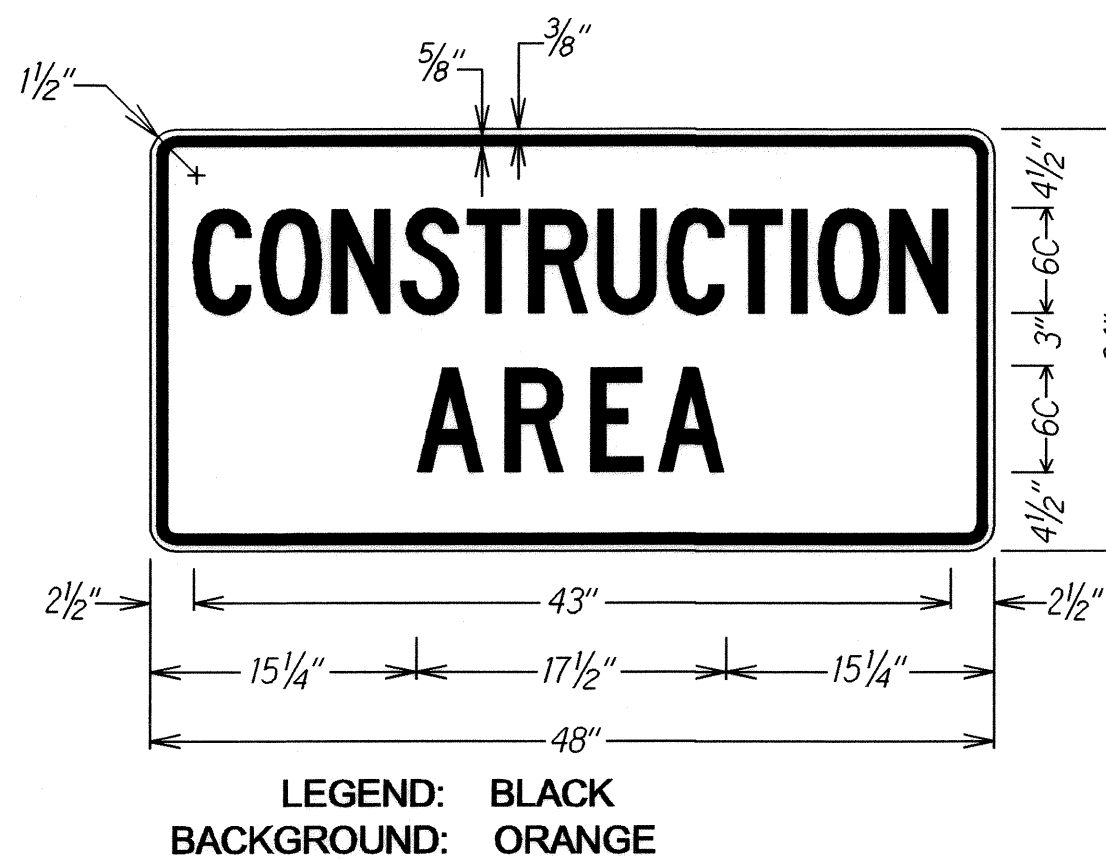


*Note:
 Legend: Black
 Background: Orange
 Speed Limit: Black on White

TYPICAL DETAIL FOR CONSTRUCTION SIGNS
 ON FREEWAY

- 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 within the work zone/project limits shall be covered and work zone speed limit sign assemblies (R2-1(40)-A and CW3-5(40)-A with "CONSTRUCTION AREA" and "\$250 FINE HRS 291C-104" Supplemental Signs) shall be displayed during lane closure hours.
 3. Upon the 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.
 4. Construction signs shall be installed on both the approaching and trailing ends of each work zone.
 5. Each construction sign shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.1000 - Traffic Control.
 6. 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.
 7. 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. 645.1000 - Traffic Control.

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

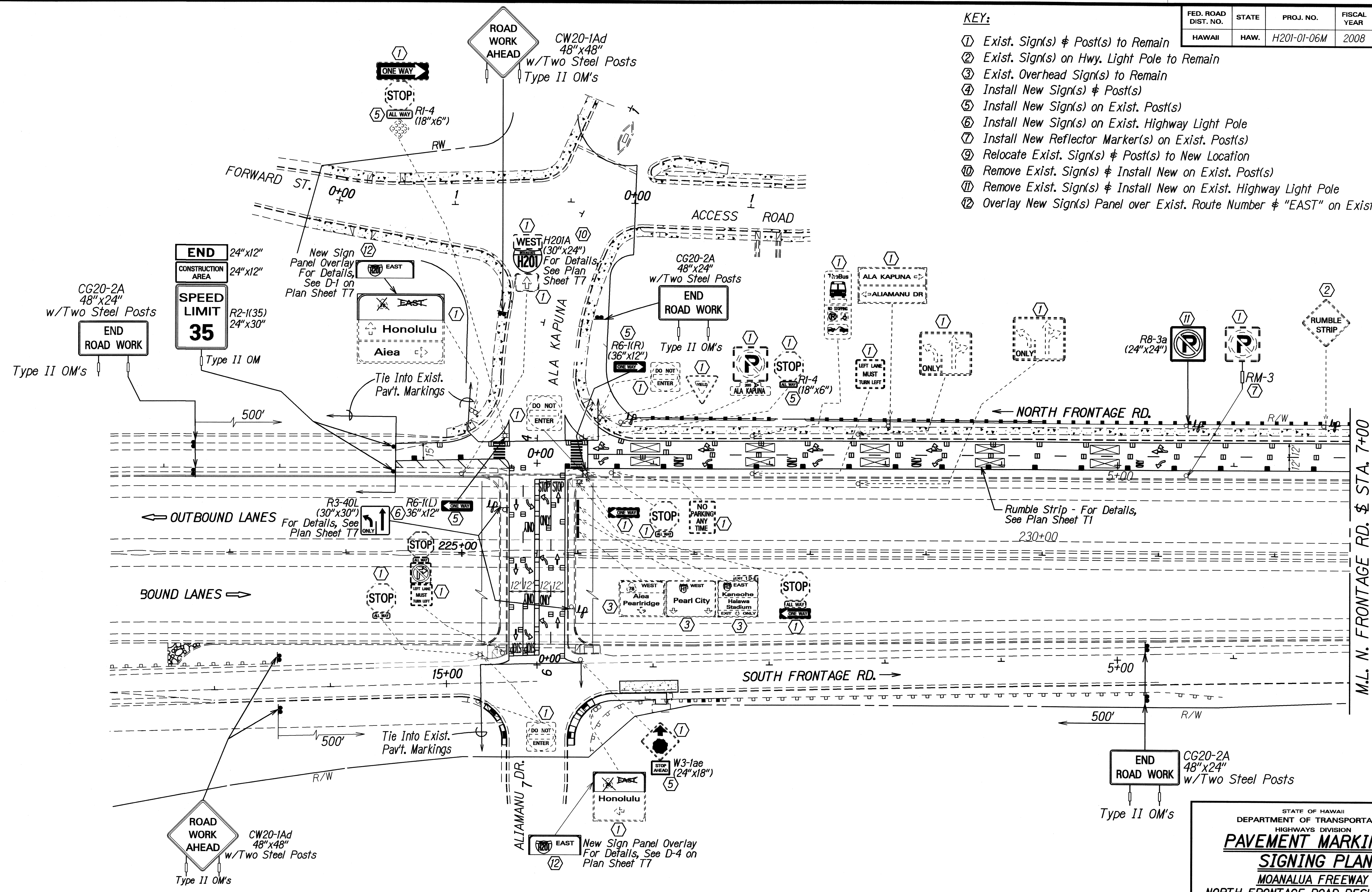


STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
FREEWAY WORK ZONE SIGNING
PLAN, NOTES & DETAILS
 MOANALUA FREEWAY
 NORTH FRONTAGE ROAD RESURFACING
 Vicinity of Ala Aolani to Vicinity of Ala Kapuna
 Project No. H201A-01-06M
 Not To Scale Date: November 2006
 SHEET No. T3 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201-01-06M	2008	61	64

- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Exist. Sign(s) on Hwy. Light Pole to Remain
 - ③ Exist. Overhead Sign(s) to Remain
 - ④ Install New Sign(s) & Post(s)
 - ⑤ Install New Sign(s) on Exist. Post(s)
 - ⑥ Install New Sign(s) on Exist. Highway Light Pole
 - ⑦ Install New Reflector Marker(s) on Exist. Post(s)
 - ⑧ Relocate Exist. Sign(s) & Post(s) to New Location
 - ⑩ Remove Exist. Sign(s) & Install New on Exist. Post(s)
 - ⑪ Remove Exist. Sign(s) & Install New on Exist. Highway Light Pole
 - ⑫ Overlay New Sign(s) Panel over Exist. Route Number & "EAST" on Exist. Sign(s)

- 5)
- 7)
- 9)
- 0)
- 11)
- 12)
- 13)
- 14)



DATE	_____
SURVEY PLOTTED BY	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PAVEMENT MARKING &
SIGNING PLAN**

MOANALUA FREEWAY

NORTH FRONTAGE ROAD RESURFACING

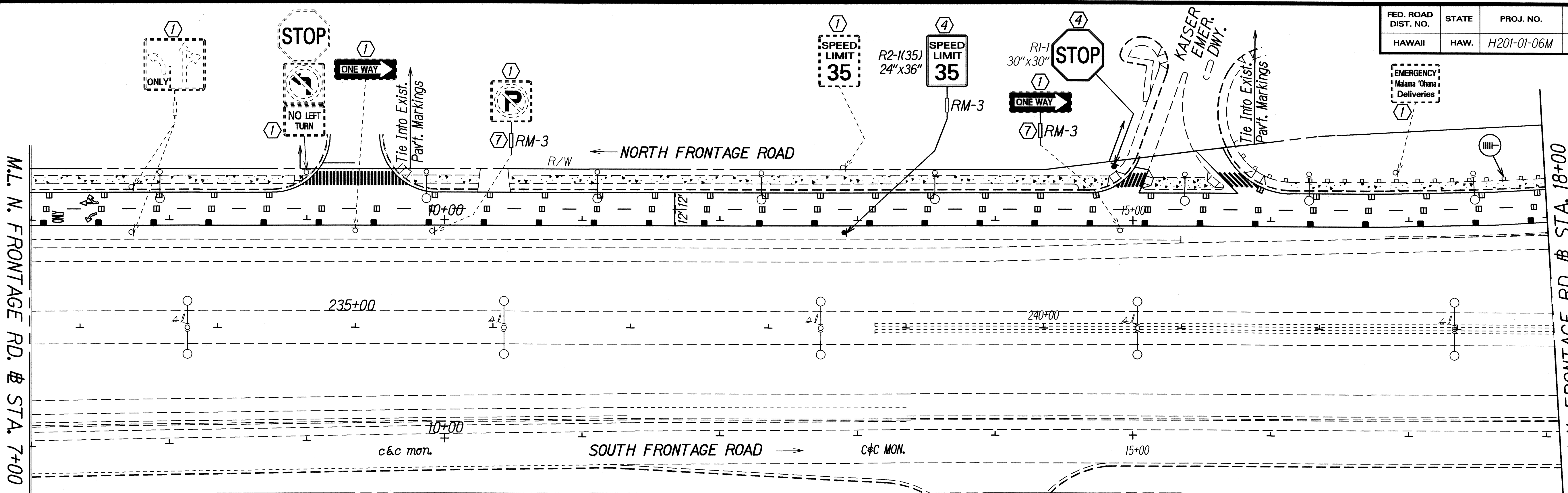
Vicinity of Ala Aolani to Vicinity of Ala Kapuna
Project No. H201-01-06M

Scale: 1" = 40' Date: November 2005

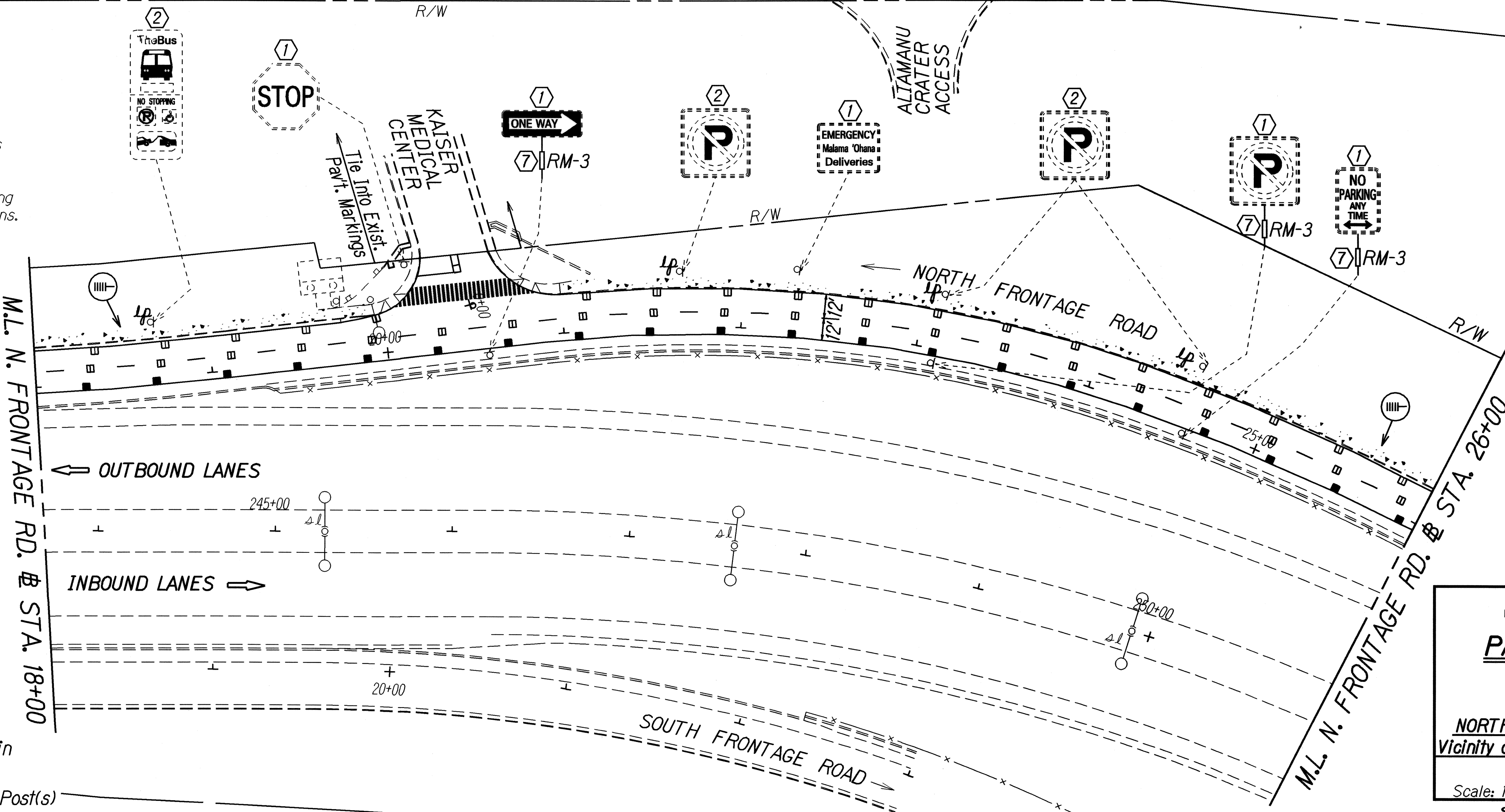
SHEET No. T4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201-01-06M	2008	62	64

- ②
- ③
- ②
- ③
- ⑤
- ⑦
- ⑧
- ⑨
- ⑩
- ⑪
- ⑫
- ⑬
- ⑭



Ⓜ Reflector Markers (RM-5) shall be mounted every 25 feet on all existing metal guardrails except on terminal sections. For details, see Plan Sheet No. T1. The Contractor shall be responsible for mounting RM-5's on all existing metal guardrails even when not shown on plans.



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Exist. Sign(s) on Hwy. Light Pole to Remain
 - ④ Install New Sign(s) & Post(s)
 - ⑦ Install New Reflector Marker(s) on Exist. Post(s)

SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING & SIGNING PLAN

MOANALUA FREEWAY

NORTH FRONTAGE ROAD RESURFACING

Vicinity of Ala Aolani to Vicinity of Ala Kapuna

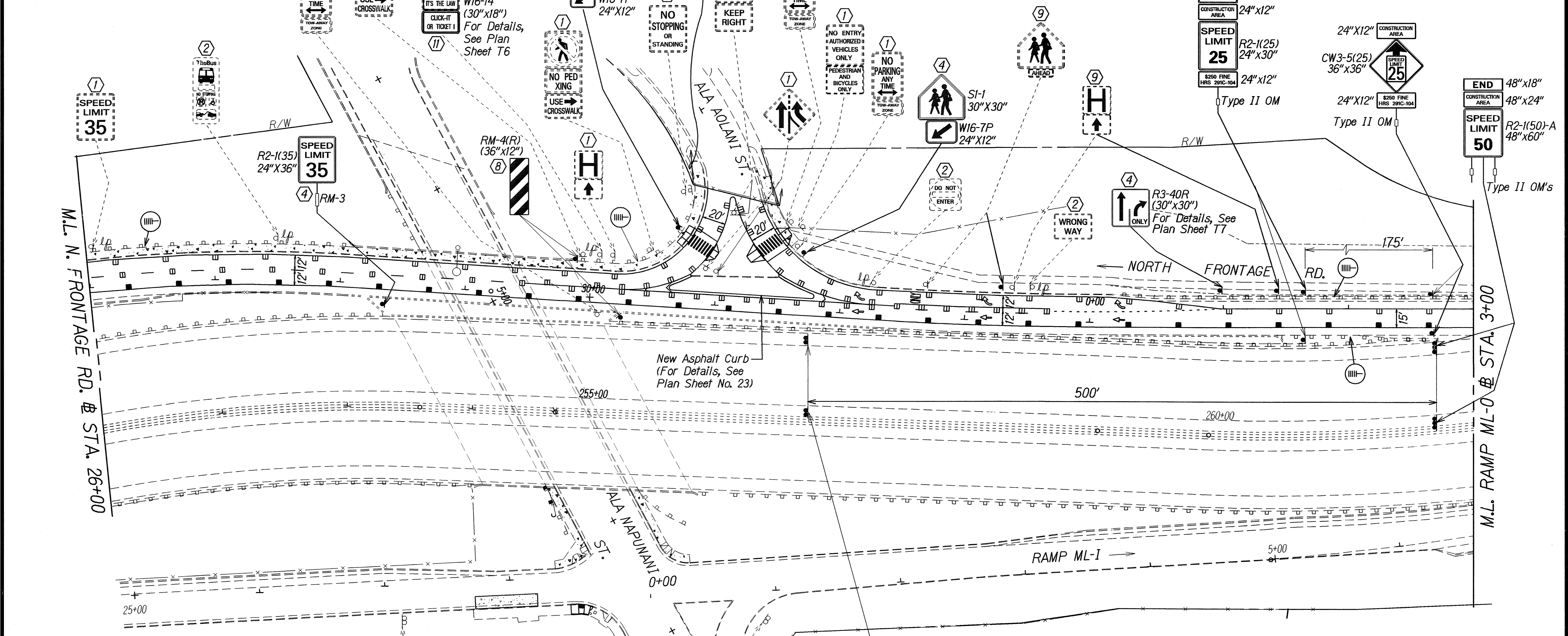
Project No. H201-01-06M

Scale: 1" = 40' Date: November 2005

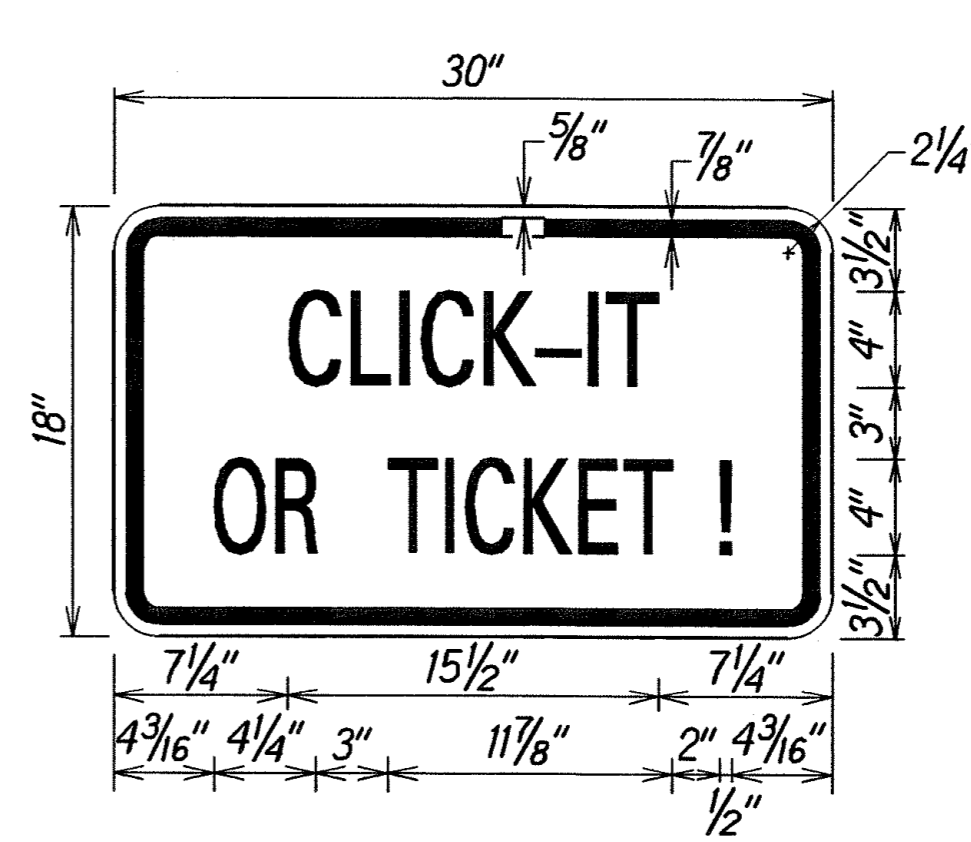
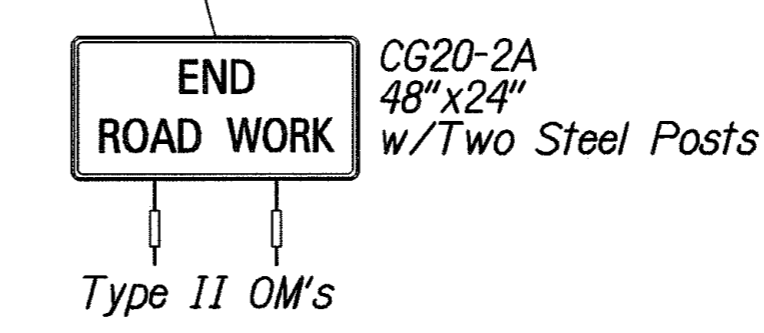
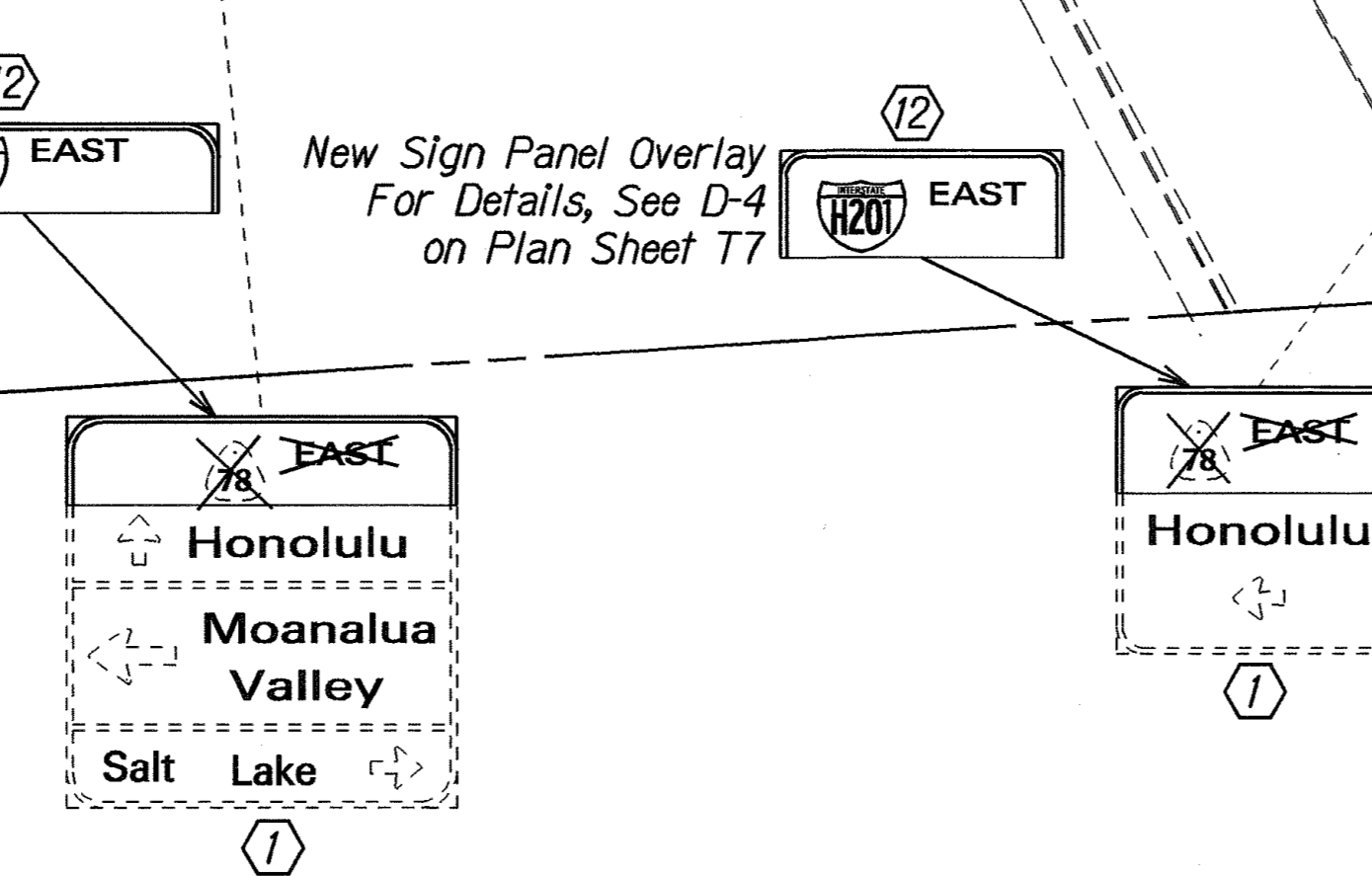
SHEET No. T5 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201-01-06M	2008	ADD. 63	64

Reflector Markers (RM-5) shall be mounted every 25 feet on all existing metal guardrails except on terminal sections. For details, see Plan Sheet No. T1. The Contractor shall be responsible for mounting RM-5's on all existing metal guardrails even when not shown on plans.



- KEY:**
- ① Exist. Sign(s) & Post(s) to Remain
 - ② Exist. Sign(s) on Hwy. Light Pole to Remain
 - ④ Install New Sign(s) & Post(s)
 - ⑥ Install New Sign(s) on Exist. Highway Light Pole
 - ⑧ Install New Reflector Marker(s) & Post(s)
 - ⑨ Relocate Exist. Sign(s) & Post(s) to New Location
 - ⑪ Remove Exist. Sign(s) & Install New on Exist. Highway Light Pole
 - ⑫ Overlay New Sign(s) Panel over Exist. Route Number & "EAST" on Exist. Sign(s)

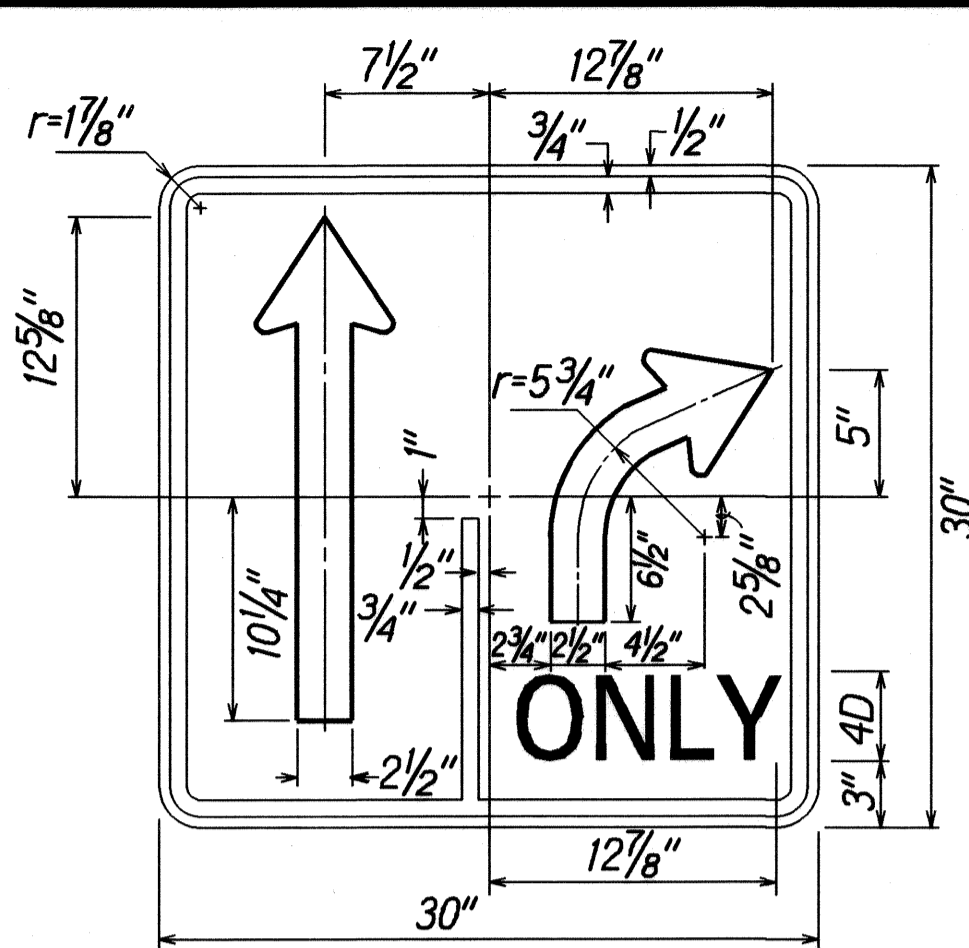


Colors: Black on Yellow
W16-14
Not to Scale

6/12/08	Crosswalk striping revised
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PAVEMENT MARKING & SIGNING PLAN	
MOANALUA FREEWAY	
NORTH FRONTAGE ROAD RESURFACING	
Vicinity of Ala Aolani to Vicinity of Ala Kapua	
Project No. H201-01-06M	
Scale: 1" = 40'	Date: November 2005
SHEET No. T6 OF 7 SHEETS	

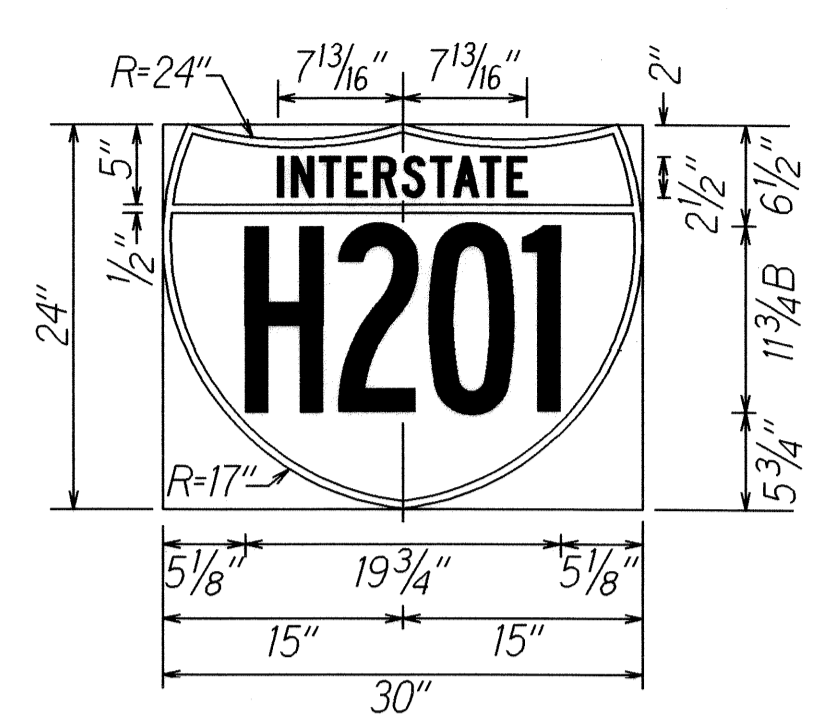
SURVEY PLOTTED BY	DATE
DESIGNED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
DATE	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	H201-01-06M	2008	64	64

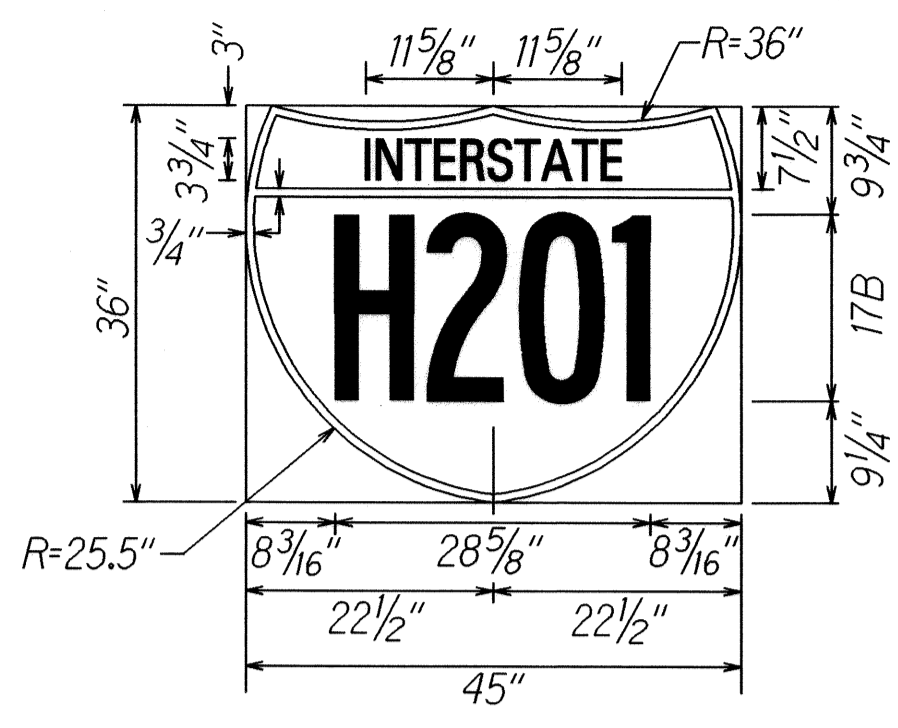


NOTE:
Sign R3-40R is a variation of sign R3-8.
Plate and arrow details shall conform to sign R3-8.

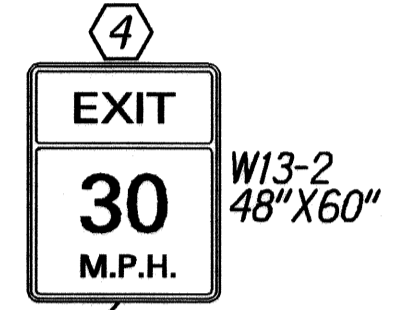
R3-40R
Not to Scale



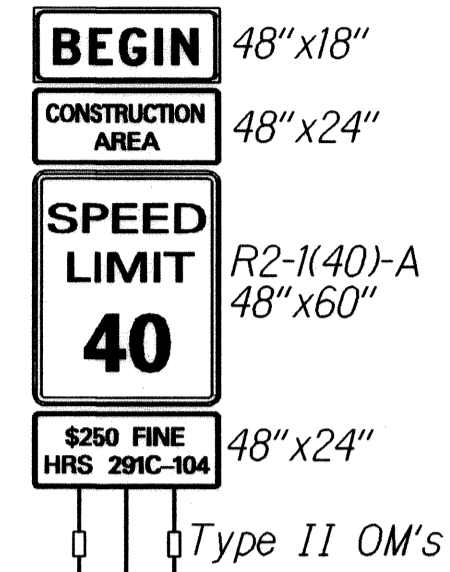
H201A
Not to Scale



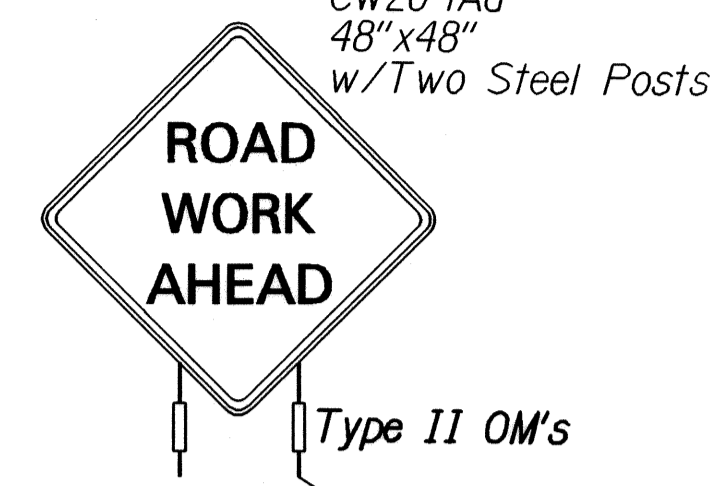
H201B
Not to Scale



W13-2
48" x 60"

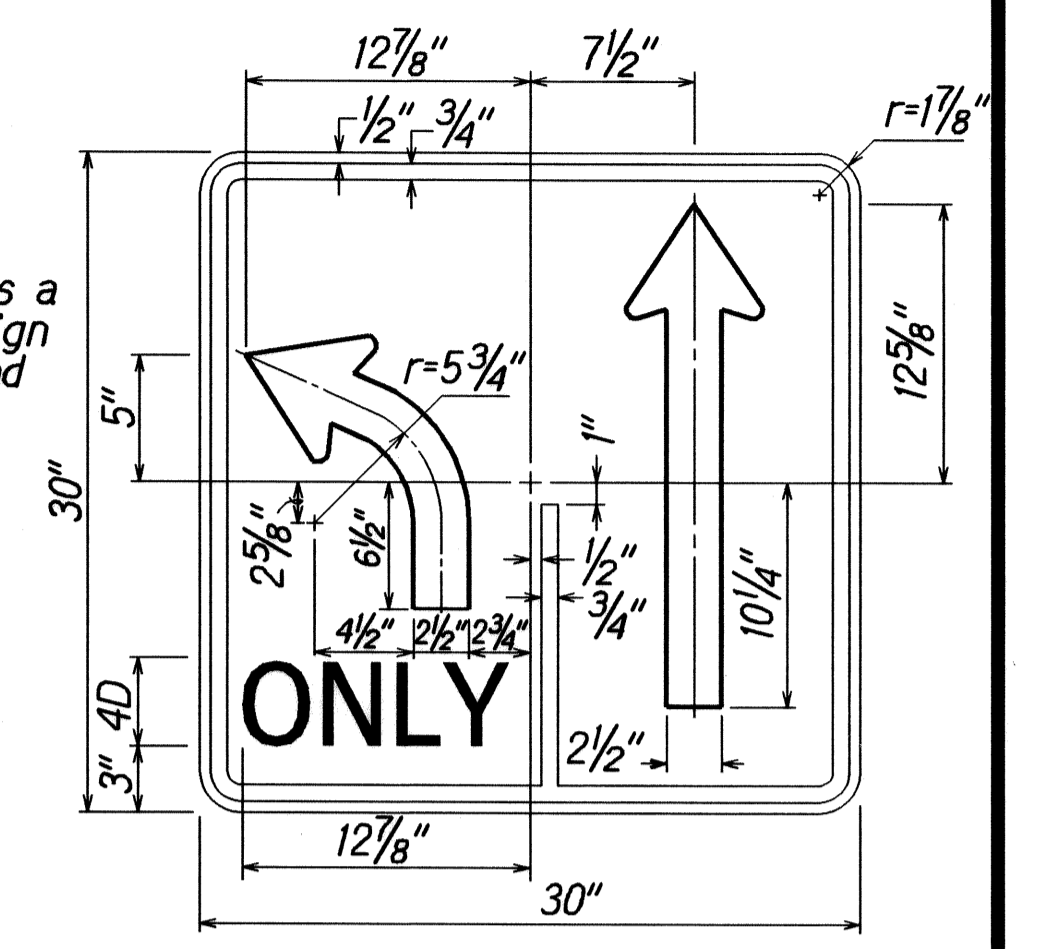


R2-1(40)-A
48" x 60"

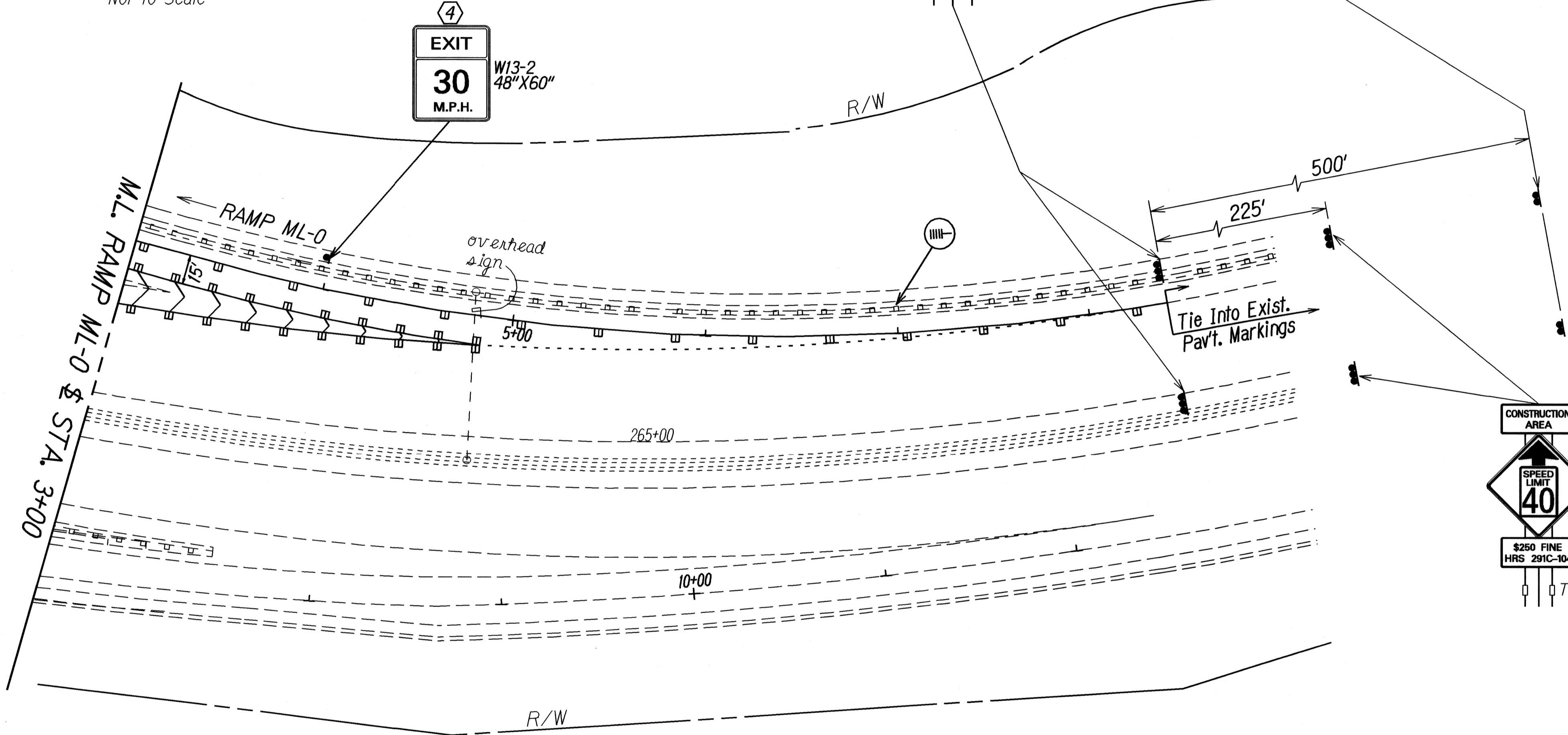


Type II OM's

NOTE:
Sign R3-40L is a variation of sign R3-8. Plate and arrow details shall conform to sign R3-8.



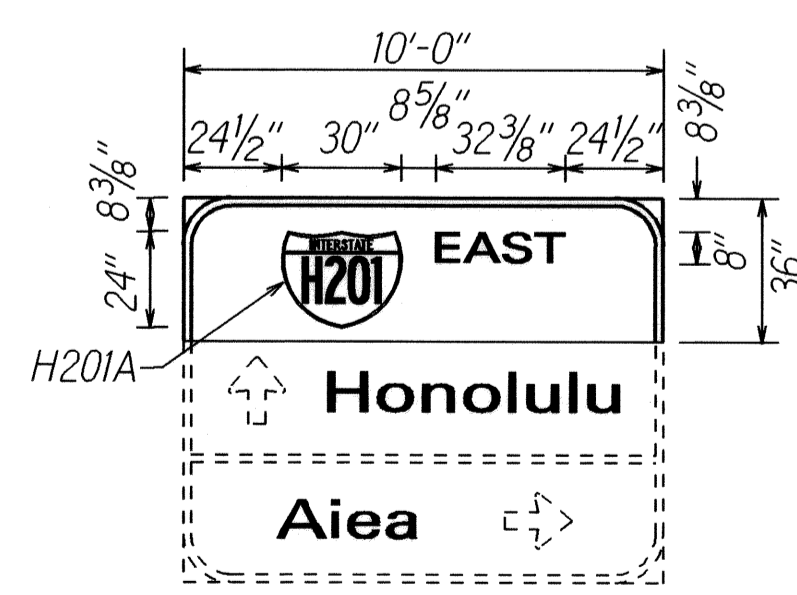
R3-40L
Not to Scale



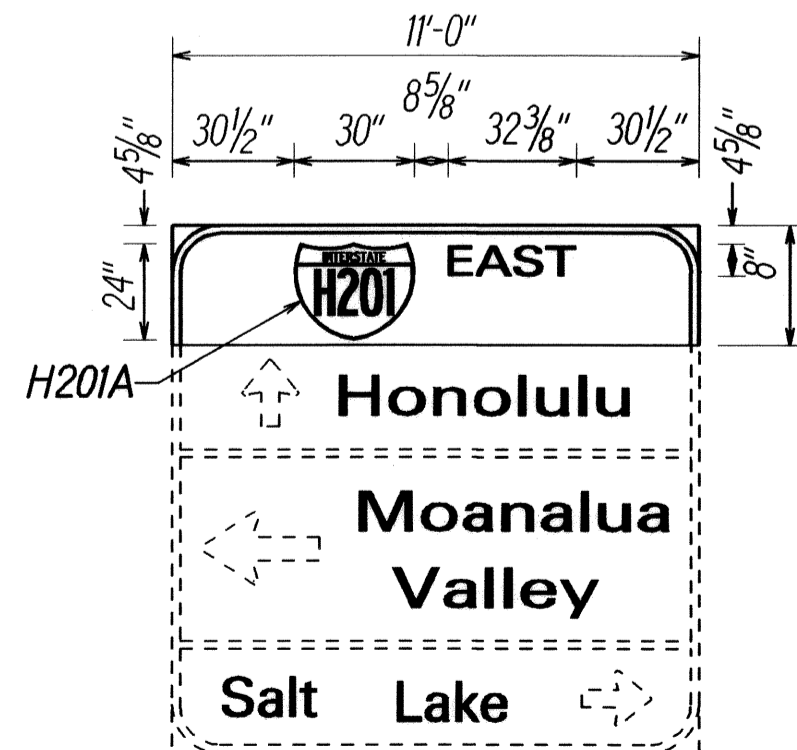
⊕ Reflector Markers (RM-5) shall be mounted every 25 feet on all existing metal guardrails except on terminal sections. For details, see Plan Sheet No. T1. The Contractor shall be responsible for mounting RM-5's on all existing metal guardrails even when not shown on plans.

KEY:

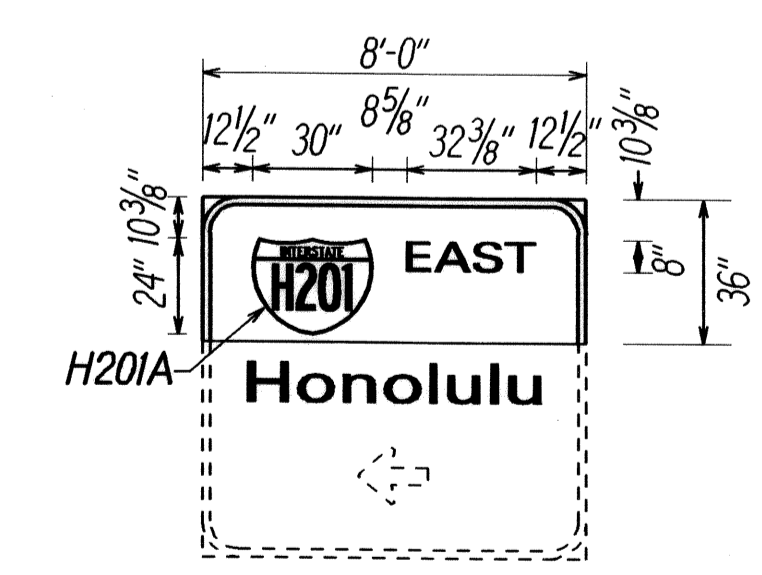
- ① Exist. Sign(s) & Post(s) to Remain
- ② Exist. Sign(s) on Hwy. Light Pole to Remain
- ③ Exist. Overhead Sign(s) to Remain
- ④ Install New Sign(s) & Post(s)
- ⑤ Install New Sign(s) on Exist. Post(s)
- ⑥ Install New Sign(s) on Exist. Highway Light Pole
- ⑦ Install New Reflector Marker(s) on Exist. Post(s)
- ⑧ Install New Reflector Marker(s) & Post(s)
- ⑨ Relocate Exist. Sign(s) & Post(s) to New Location
- ⑩ Remove Exist. Sign(s) & Install New on Exist. Post(s)
- ⑪ Remove Exist. Sign(s) & Install New on Exist. Highway Light Pole
- ⑫ Overlay New Sign(s) Panel over Exist. Route Number & "EAST" on Exist. Sign(s)



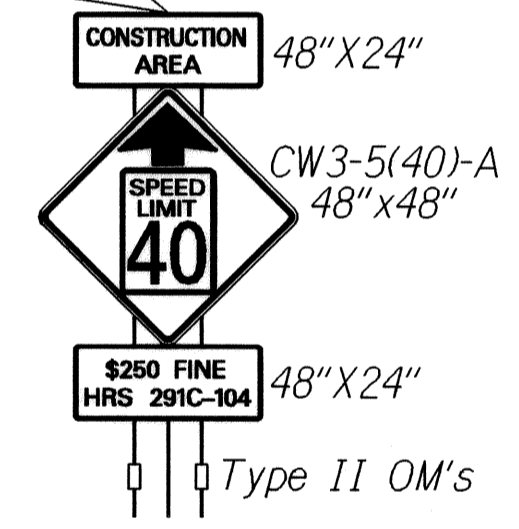
D-1
NEW SIGN PANEL OVERLAY
(Full Width)
Not to Scale



D-3
NEW SIGN PANEL OVERLAY
(Full Width)
Not to Scale



D-4
NEW SIGN PANEL OVERLAY
(Full Width)
Not to Scale



CW3-5(40)-A
48" x 48"

\$250 FINE
HRS 291C-104
48" x 24"

Type II OM's

DATE	
SURVEY PLOTTED BY	
PLAN	
DESIGNED BY	
NOTED BY	
CHECKED BY	
QUANTITIES BY	
IN CHARGE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING & SIGNING PLAN
MOANALUA FREEWAY
NORTH FRONTAGE ROAD RESURFACING
Vicinity of Ala Aolani to Vicinity of Ala Kapuna
Project No. H201-01-06M
Scale: 1" = 40' Date: November 2005
SHEET No. T7 OF 7 SHEETS