

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	31	50

LEGEND

10' White Profiled Thermoplastic Stripe

Type C Raised Pavement Markers @ 40'-0" o.c.

10' Yellow Profiled Thermoplastic Stripe

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)

6" 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

10' White Profiled Thermoplastic Stripe

Type C Raised Pavement Markers @ 20'-0" o.c.

4" White Stripe (Tape, Type I or Thermoplastic Extrusion)

6" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)

4" White Guide Line (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)

STOP

10' Yellow Profiled Thermoplastic Stripe

Type D Raised Pavement Markers @ 40'-0" o.c.

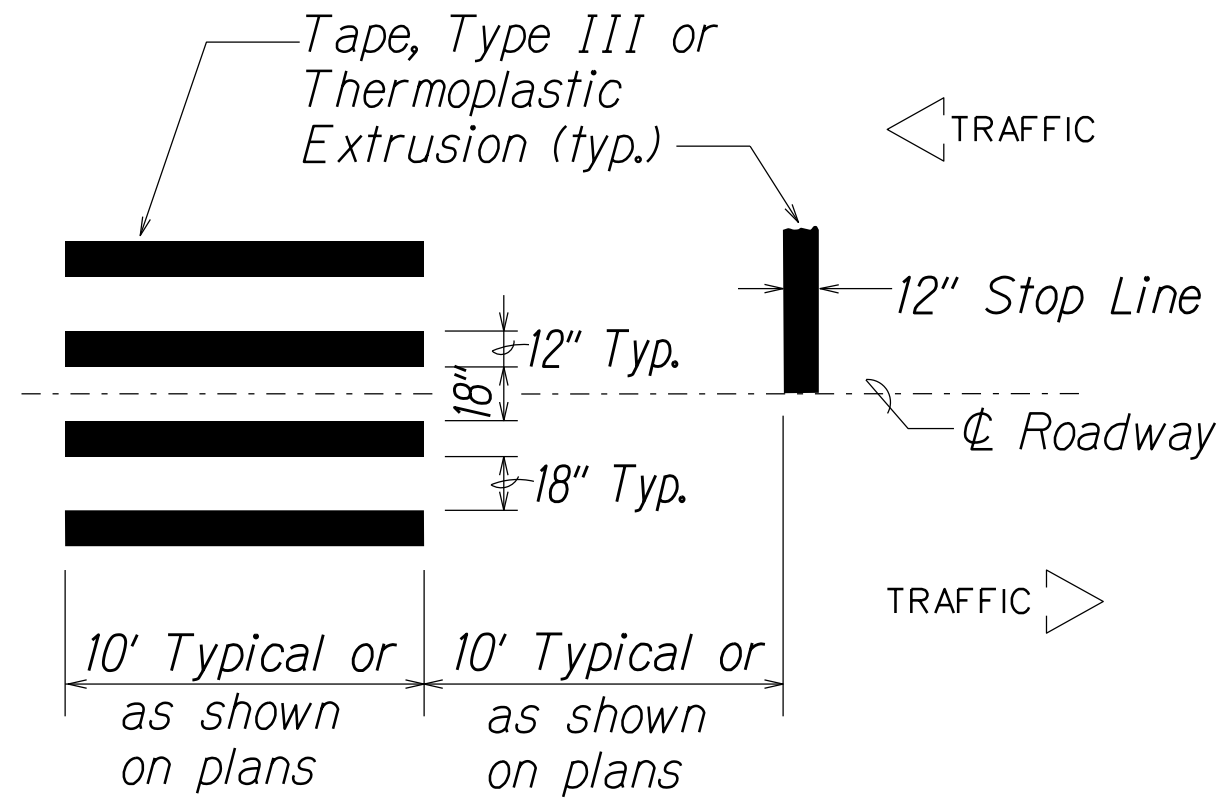
Type H Raised Pavement Markers (Reflective Surface facing no-passing direction)

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)

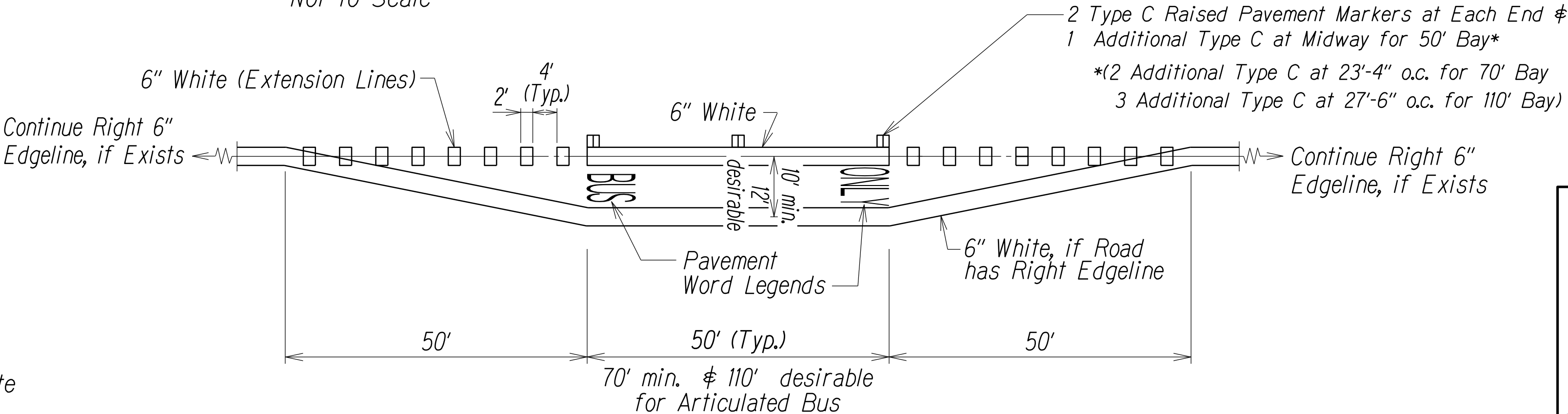
NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. 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.
3. Raised pavement markers shall not be installed within crosswalks.
4. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. 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.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the legend or plans.
8. 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.
9. All pedestrian warning signs with supplemental sign shall be on a fluorescent yellow-green retroreflective background with a black legend and border.

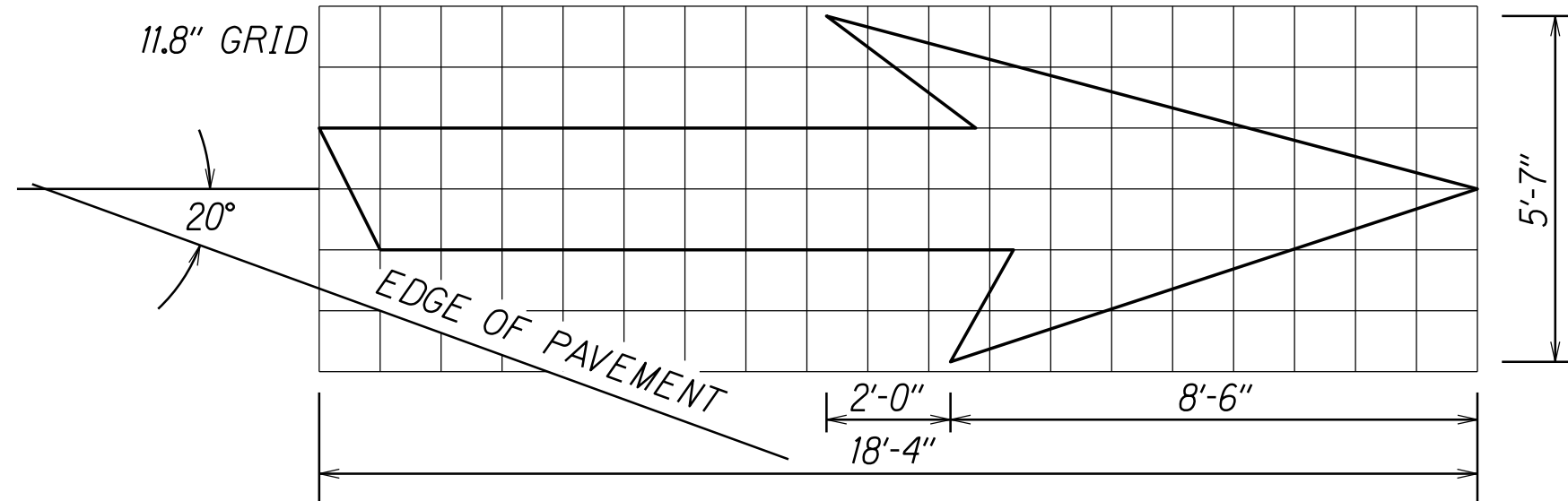


CROSSWALK STRIPING DETAIL

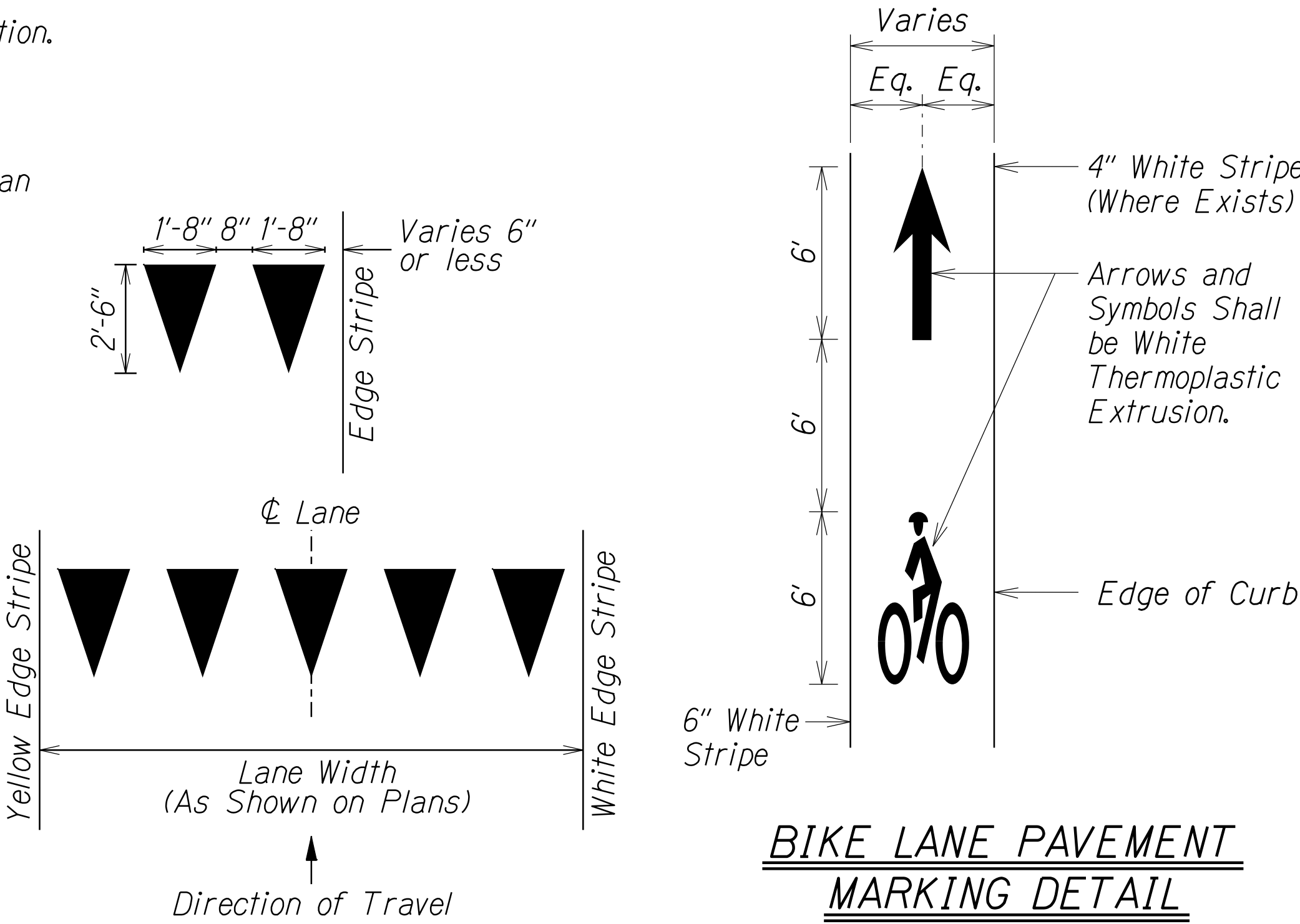
Not to Scale



BUS BAY



TYPE VI ARROW
RIGHT LANE DROP ARROW
(FOR LEFT LANE,
USE MIRROR IMAGE)



BIKE LANE PAVEMENT
MARKING DETAIL

Not to Scale

YIELD LINE

Not to Scale

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
PRINTING	
No.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING
LEGEND, DETAILS & NOTES

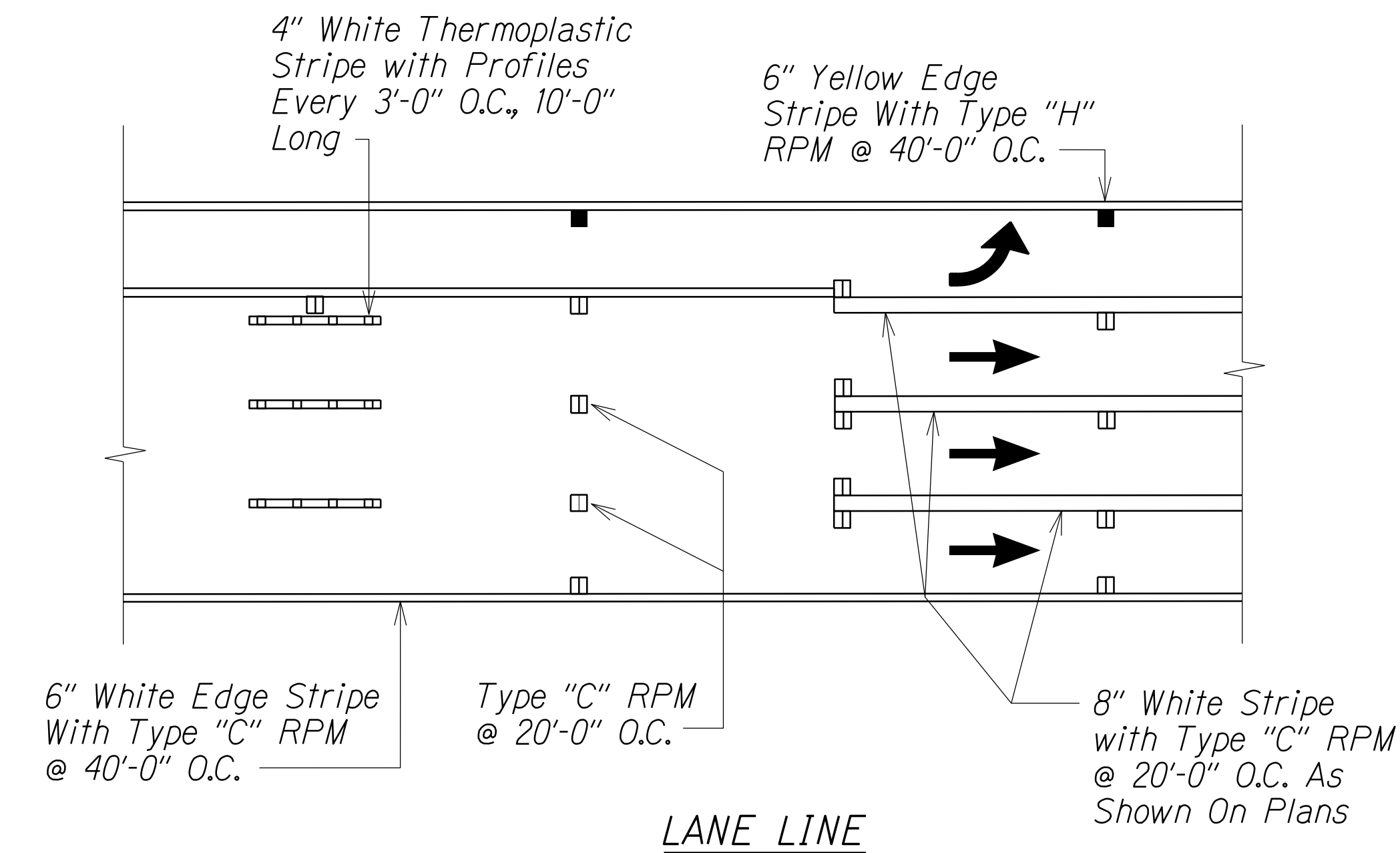
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING

Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)

Scale: As Shown Date: August, 2020

SHEET No. 71 OF 20 SHEETS

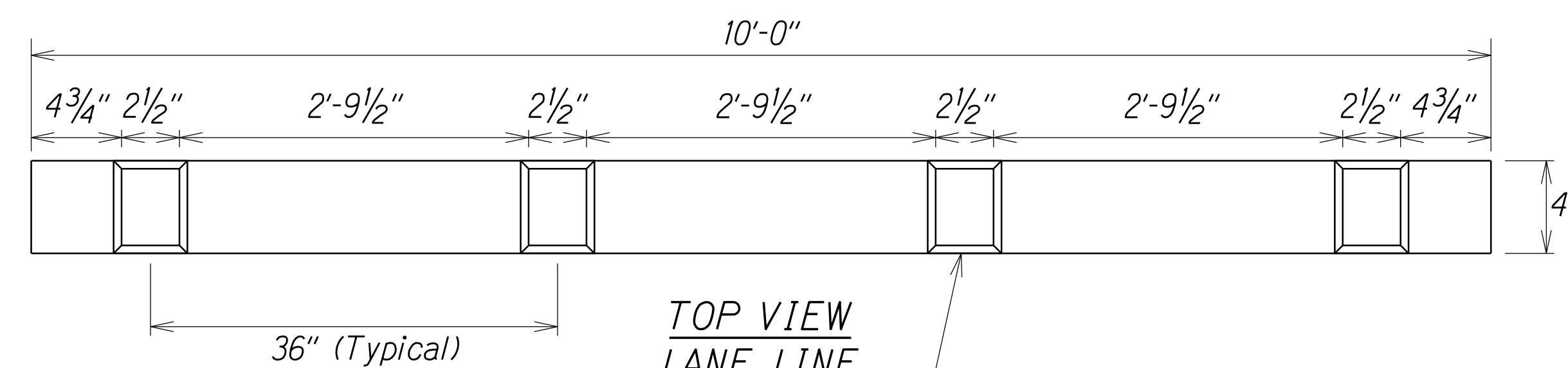
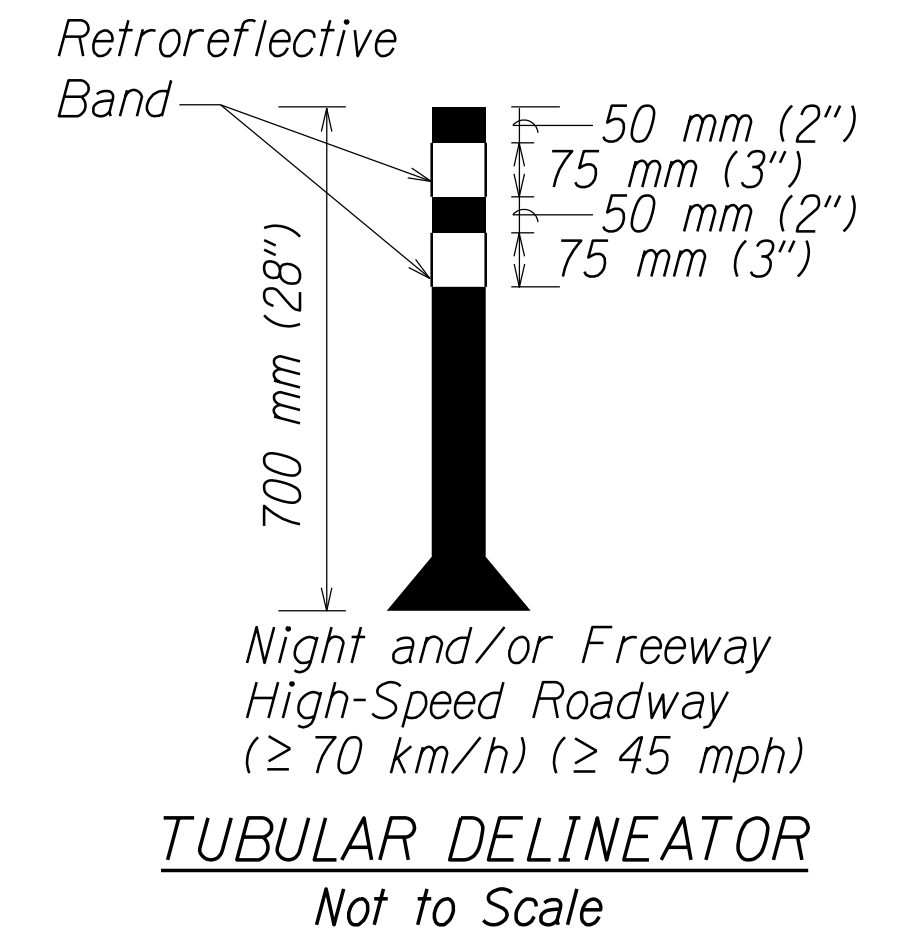
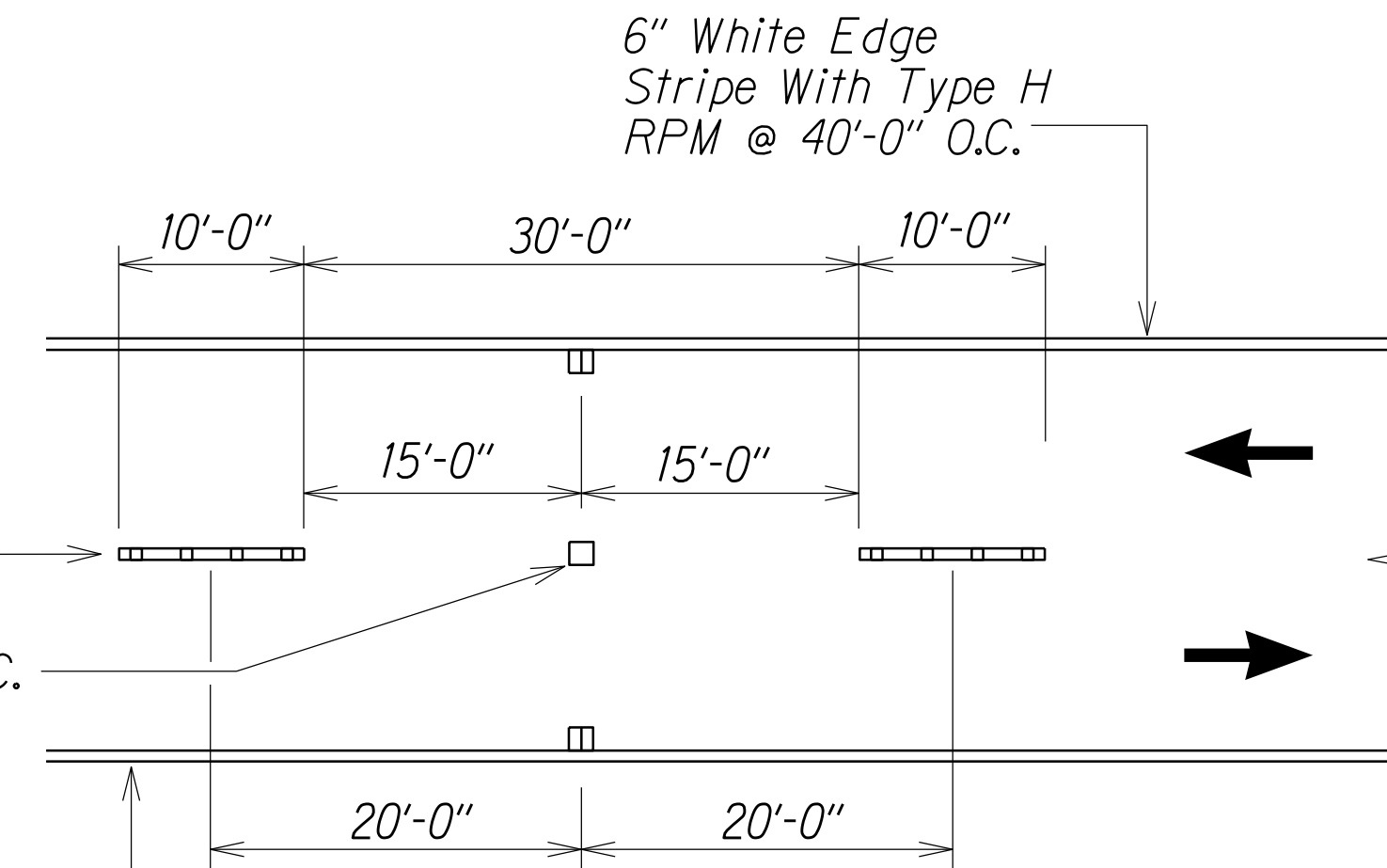
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	32	50



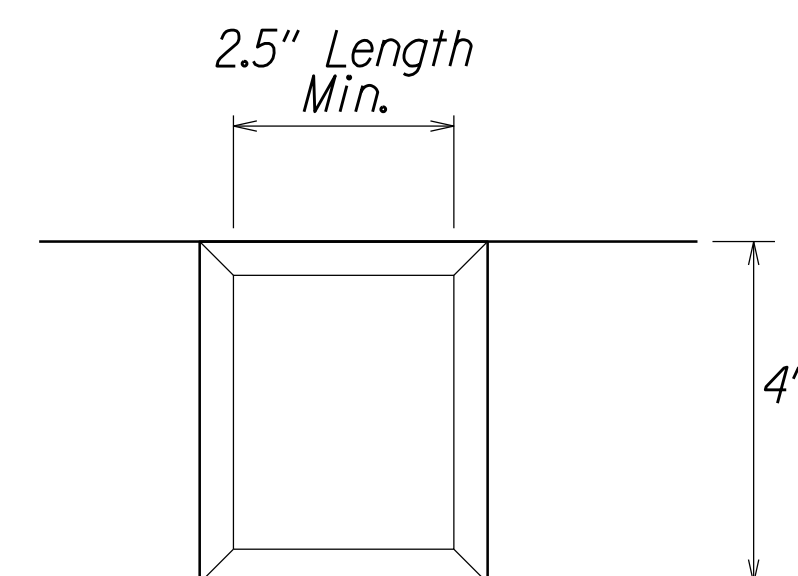
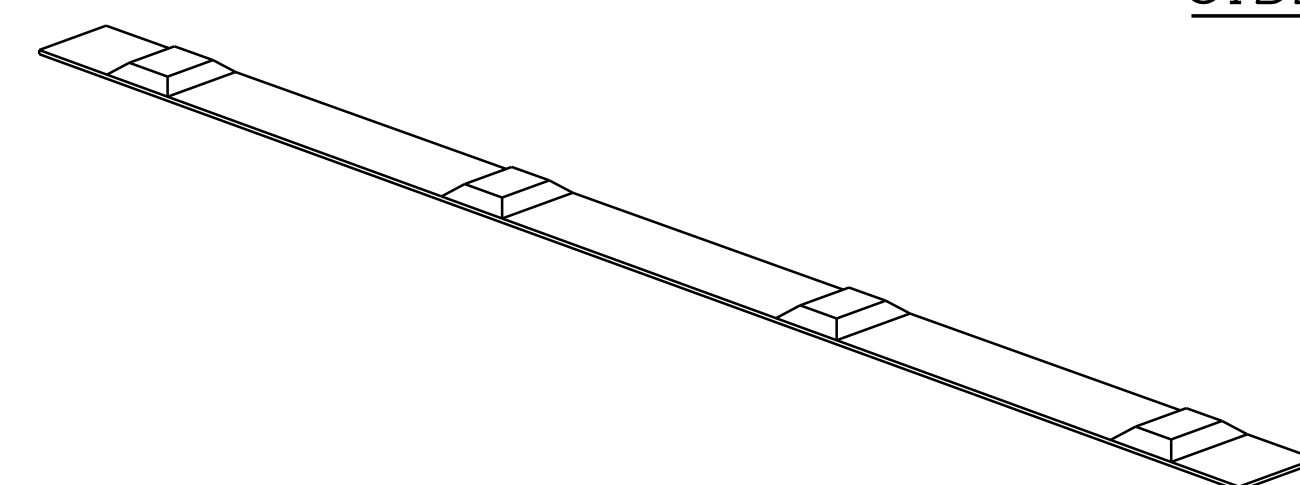
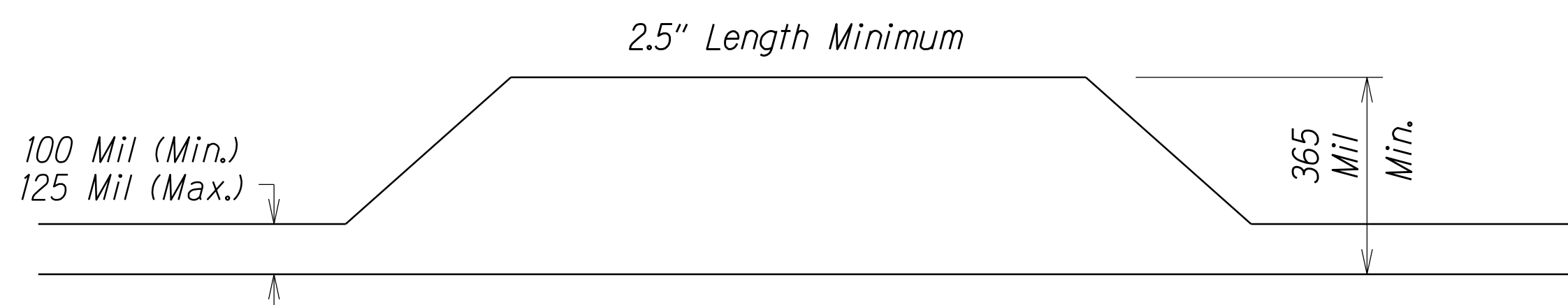
4" Yellow Thermoplastic Stripe with Profiles Every 3'-0" O.C., 10'-0" Long (See Note #5)

Type "D" RPM @ 40'-0" O.C.

6" White Edge Stripe With Type "C" RPM @ 40'-0" O.C.

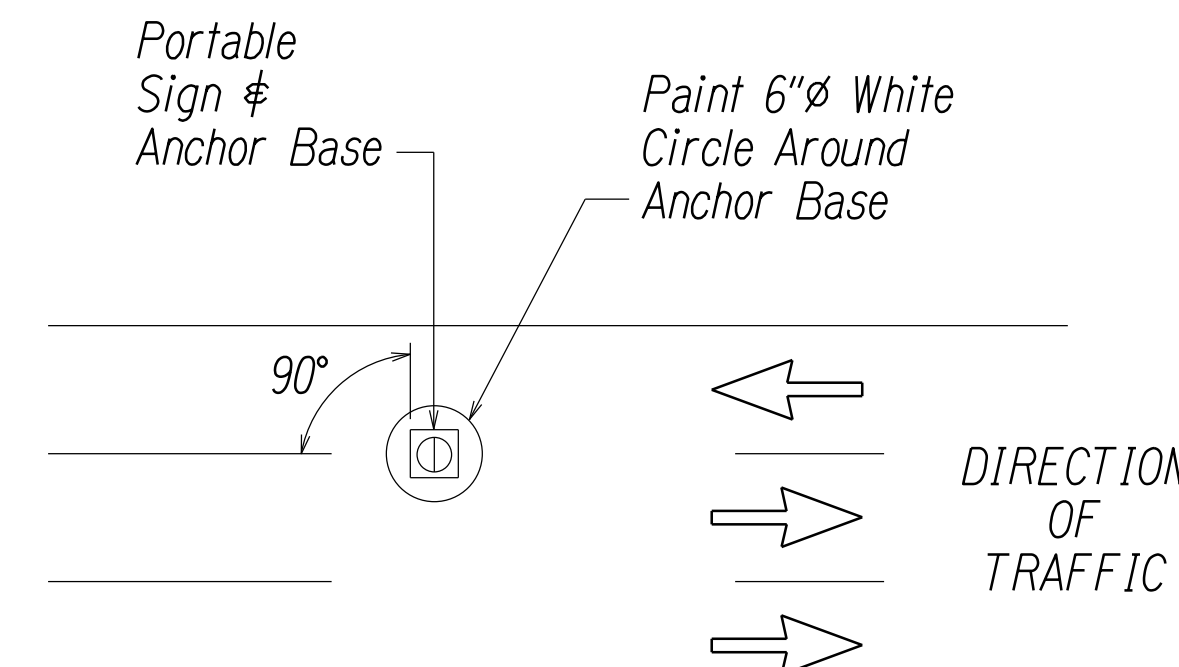
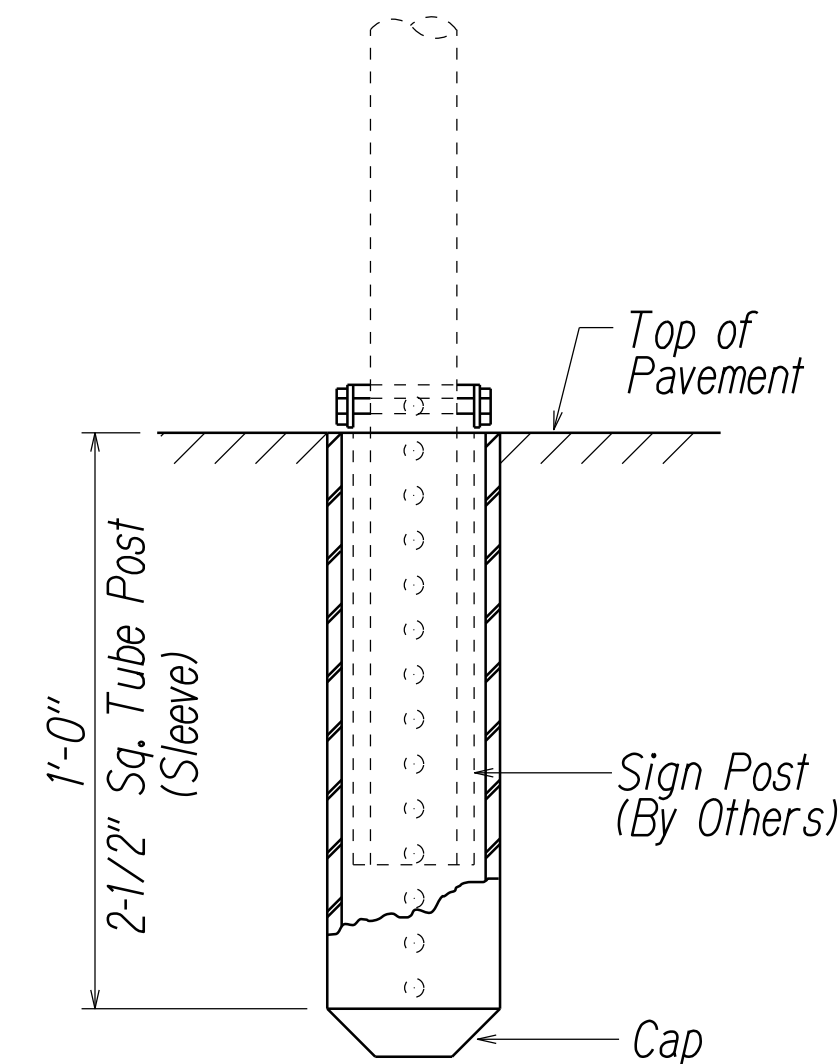


Profiles Placed on 36" O.C.
365 Mil. Height, including 100 Mil. Baseline.
Width Equal to Approximately Baseline Width

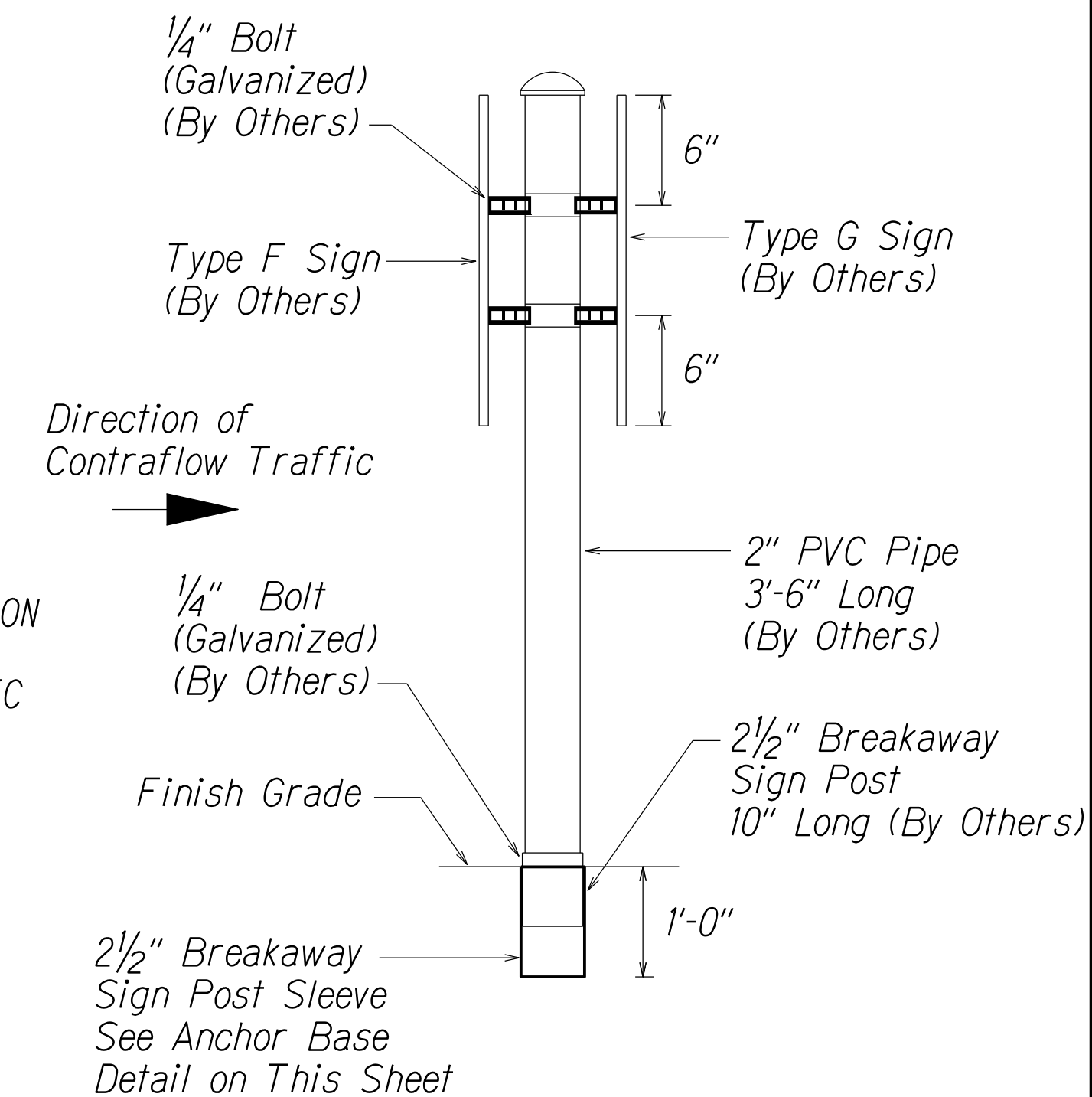


PROFIED THERMOPLASTIC STRIPING

Not to Scale



ANCHOR BASE FOR PORTABLE CONTRA-FLOW SIGN

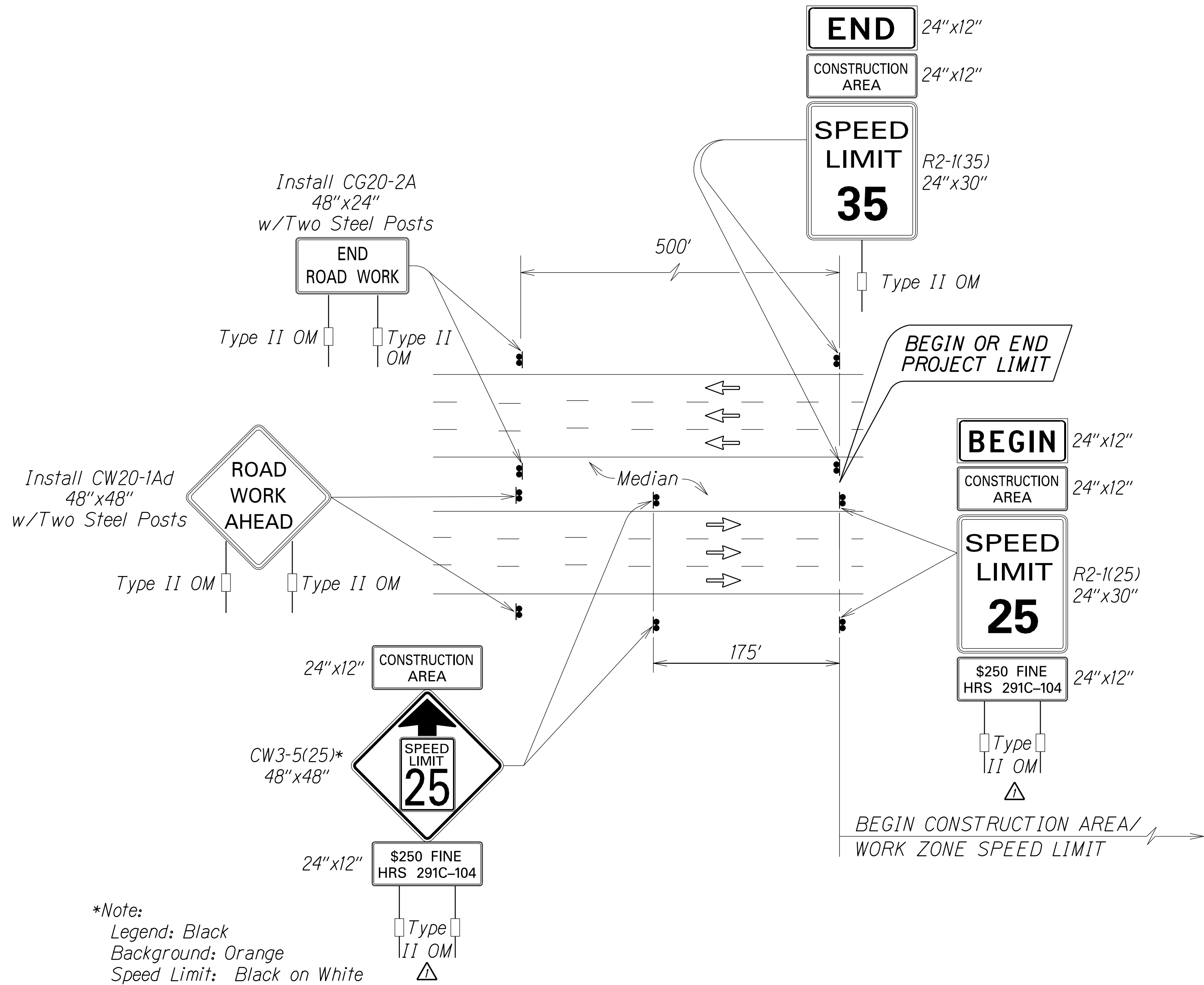


NOTES:

- The thermoplastic material shall be a alkyd-based compound formulated for profiled pavement marking. See specs subsection 629.03 for additional requirements
- The Engineer will include the longitudinal gaps for skip striping, up to thirty (30) feet long, in the measurement for payment.
- Install white profiled thermoplastic stripes as lane line.
- Install yellow profiled thermoplastic stripes for centerline passing zone.
- In areas with centerline milled rumble strips, install standard yellow thermoplastic stripes without raised profiles

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
PAVEMENT MARKING DETAILS
NIMITZ HIGHWAY & ALA MOANA BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St. Federal-Aid Project No. NH-092-1(030)
Scale: As Shown Date: August, 2020
SHEET No. T2 OF 20 SHEETS

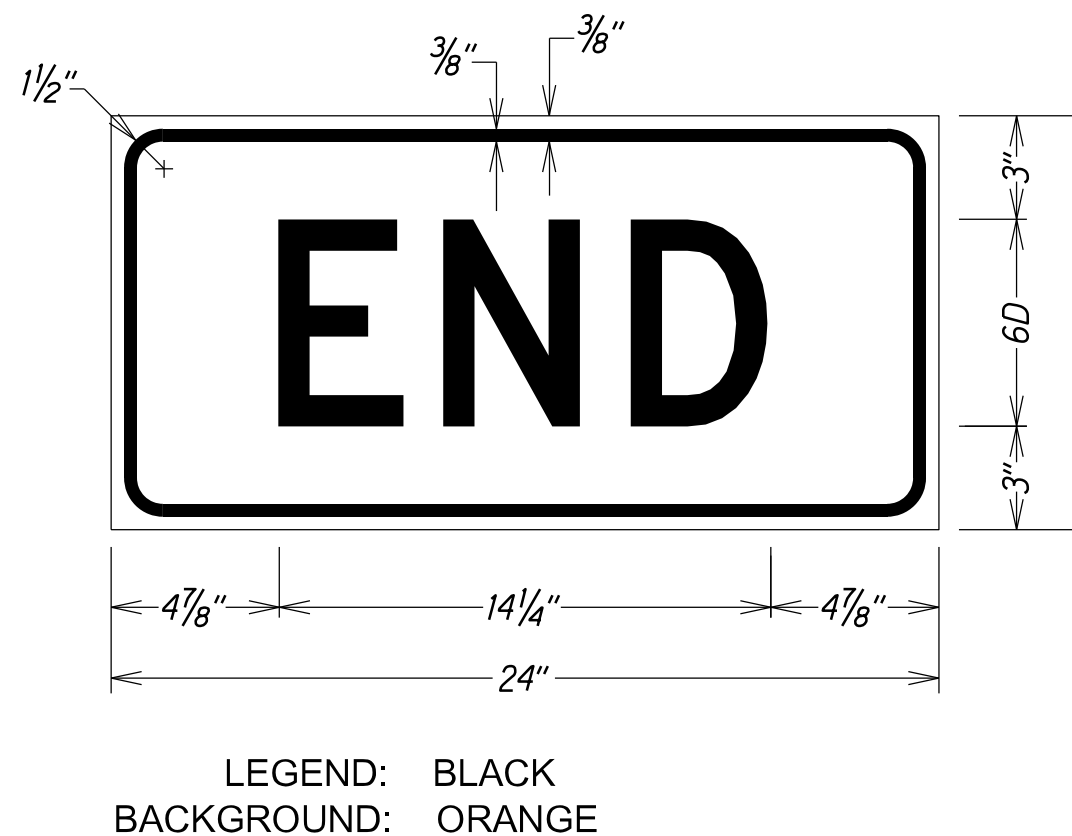
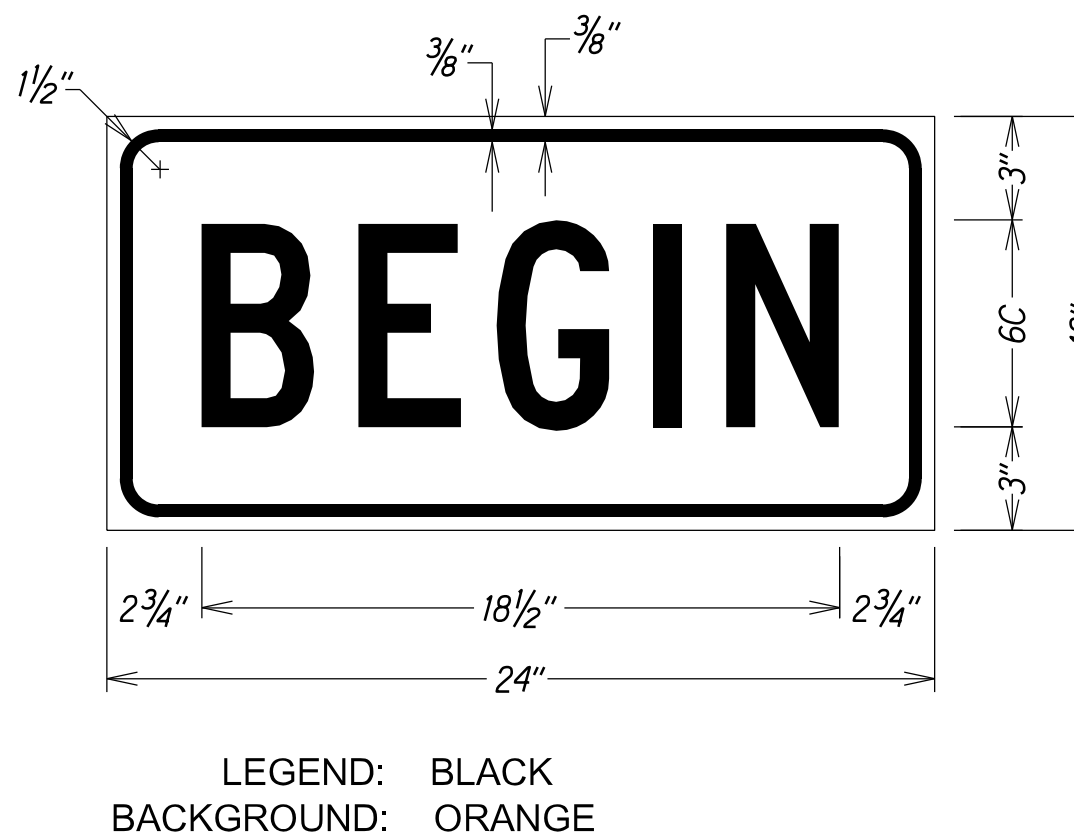
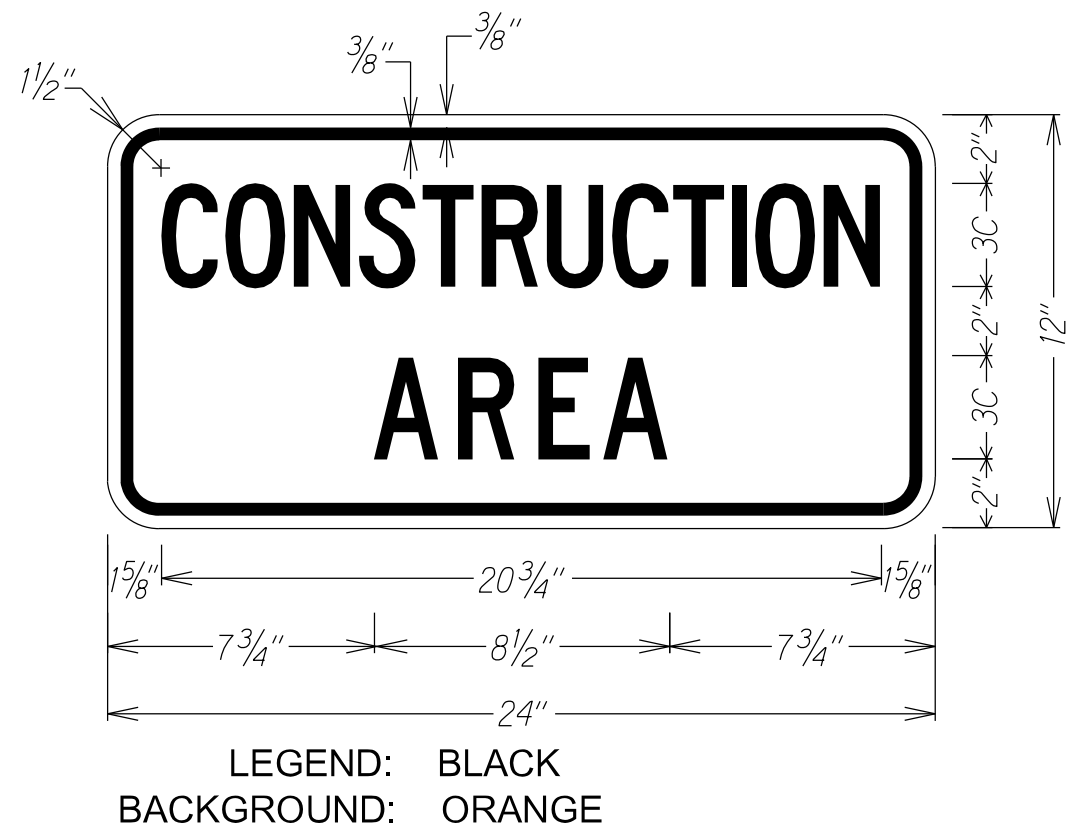
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	ADD. 33	50



Work Zone Notes:

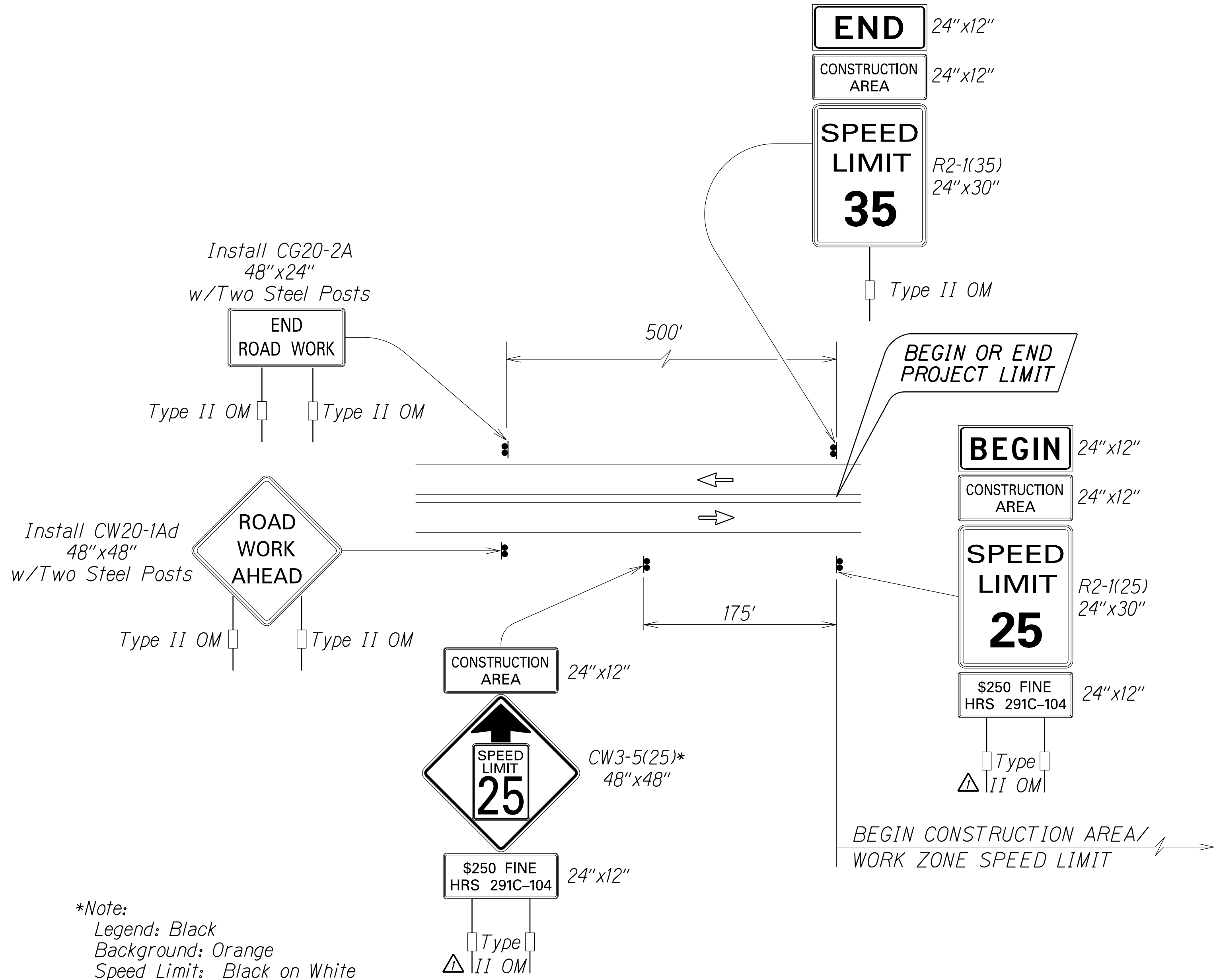
- This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Standard Specifications and/or Special Provisions.
- All existing 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).
- 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 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. 645.0100 - 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.
- 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.

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



2/11/21	Change sign assemblies to show two posts.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION LOW SPEED DIVIDED HIGHWAY WORK ZONE SIGNING PLAN, NOTES&DETAILS NIMITZ HIGHWAY & ALA MOANA BOULEVARD RESURFACING Sand Island Access Rd. to Vic of Piikoi St. Federal-Aid Project No. NH-092-1(030) Scale: As Shown Date: August, 2020	
SHEET No. T3 OF 20 SHEETS	

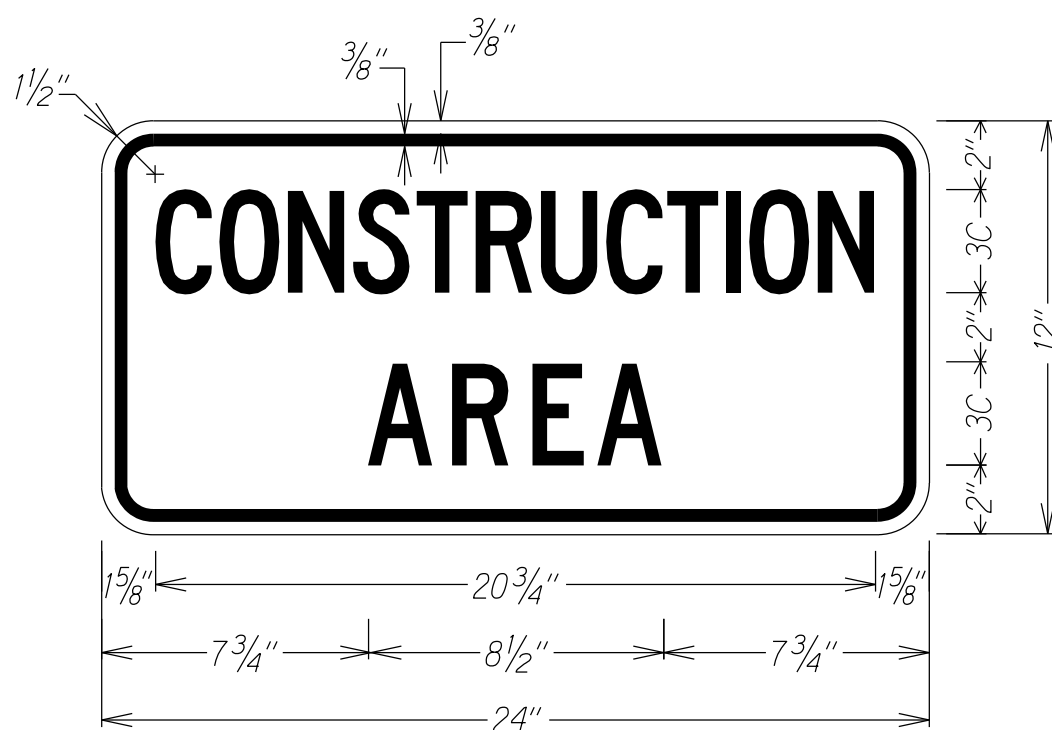
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	ADD. 34	50



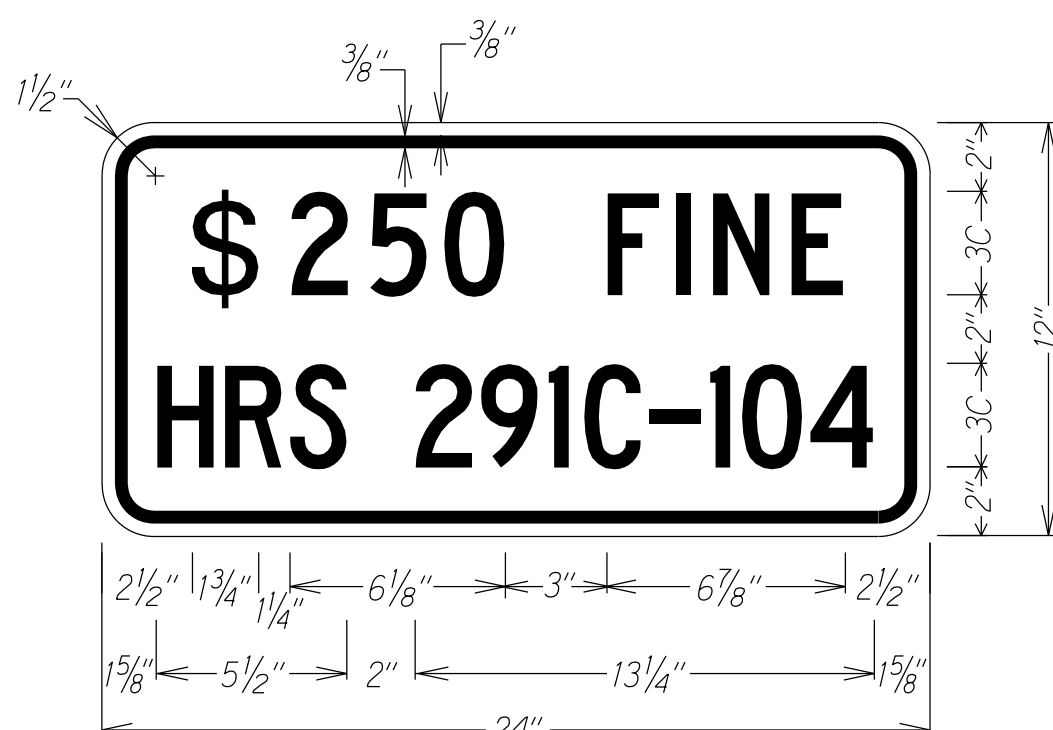
Work Zone Notes:

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 Standard Specifications and/or 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. 645.0100 - 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.

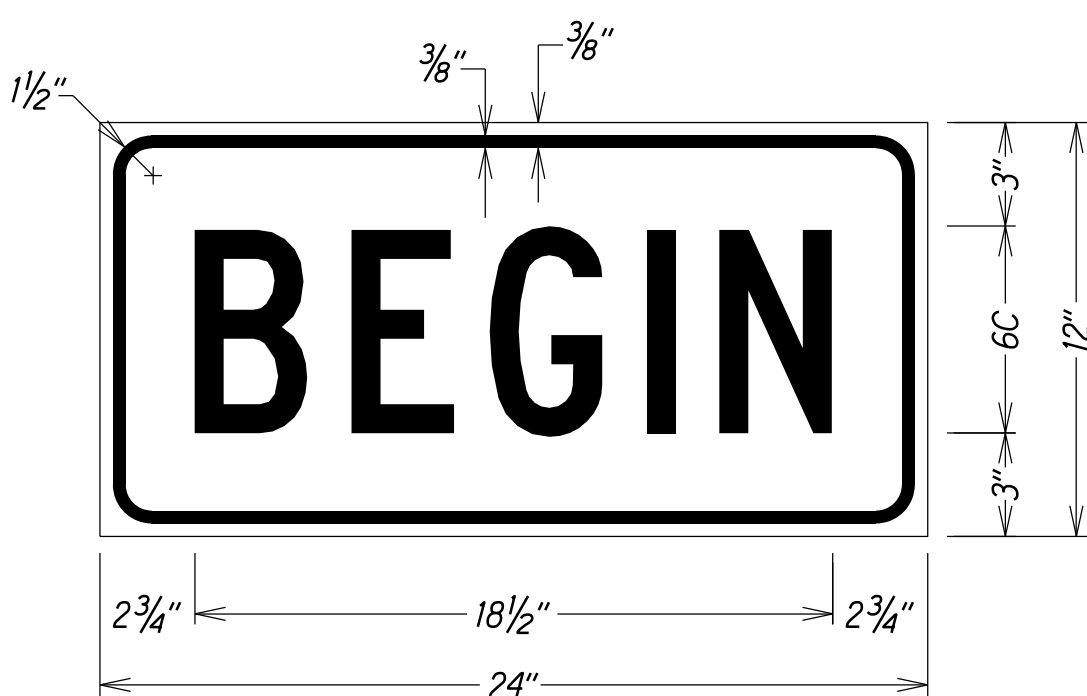
**TYPICAL DETAIL FOR CONSTRUCTION SIGNS
ON TWO LANE OR MULTILANE UNDIVIDED LOW SPEED HIGHWAY**



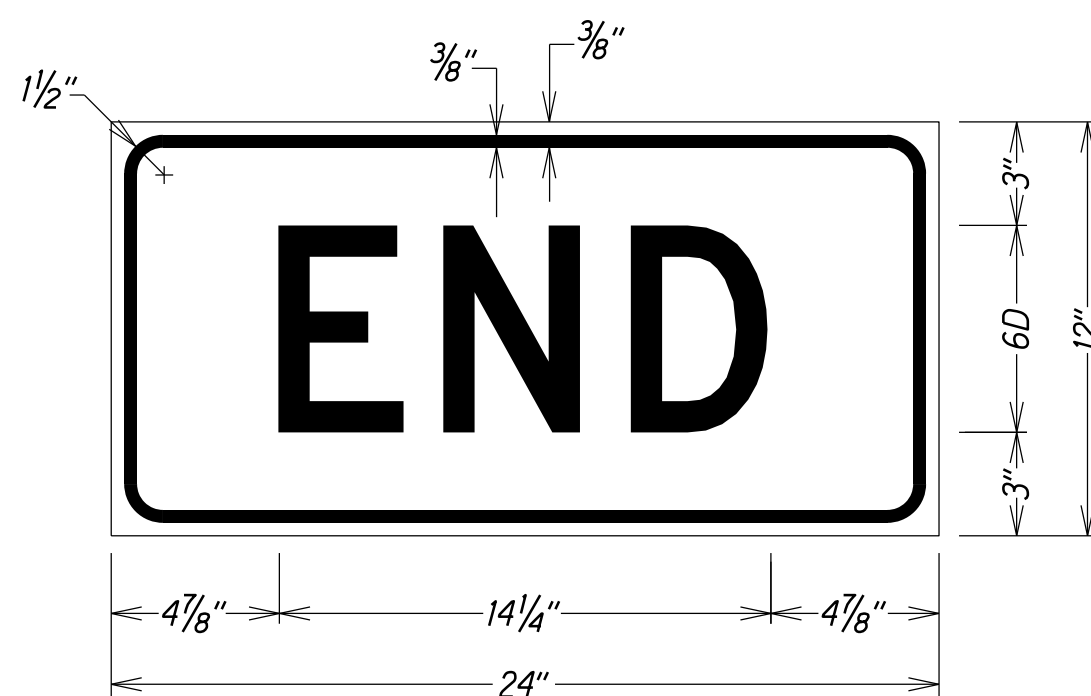
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BACKGROUND: ORANGE



LEGEND: BLACK
BACKGROUND: WHITE



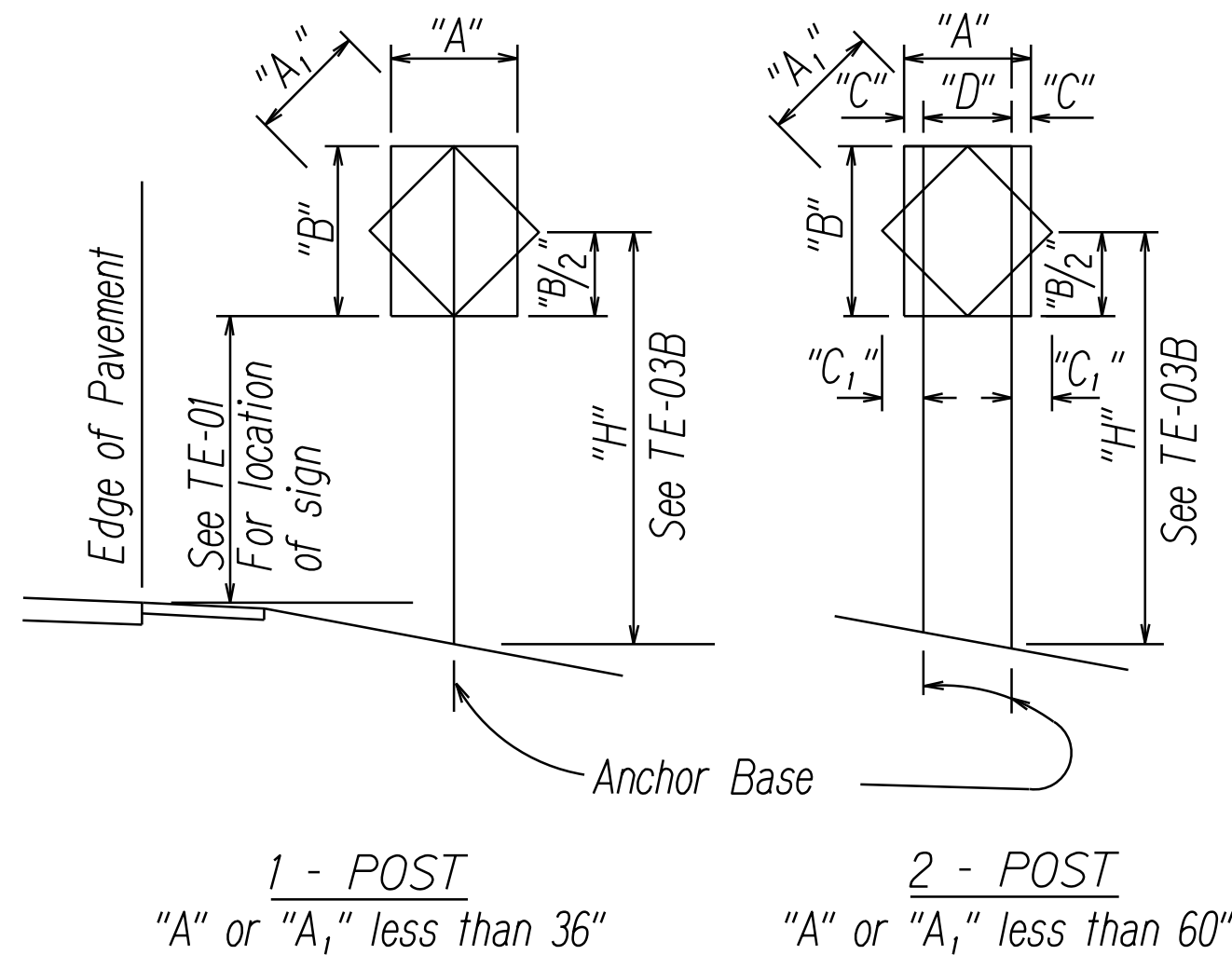
LEGEND: BLACK
BACKGROUND: ORANGE



LEGEND: BLACK
BACKGROUND: ORANGE

2/11/21	Change sign assemblies to show two posts.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION LOW SPEED UNDIVIDED HIGHWAY WORK ZONE SIGNING PLAN, NOTES & DETAILS NIMITZ HIGHWAY & ALA MOANA BOULEVARD RESURFACING Sand Island Access Rd. to Vic of Piikoi St. Federal-Aid Project No. NH-092-1(030) Scale: As Shown Date: August, 2020	
SHEET No. T4 OF 20 SHEETS	

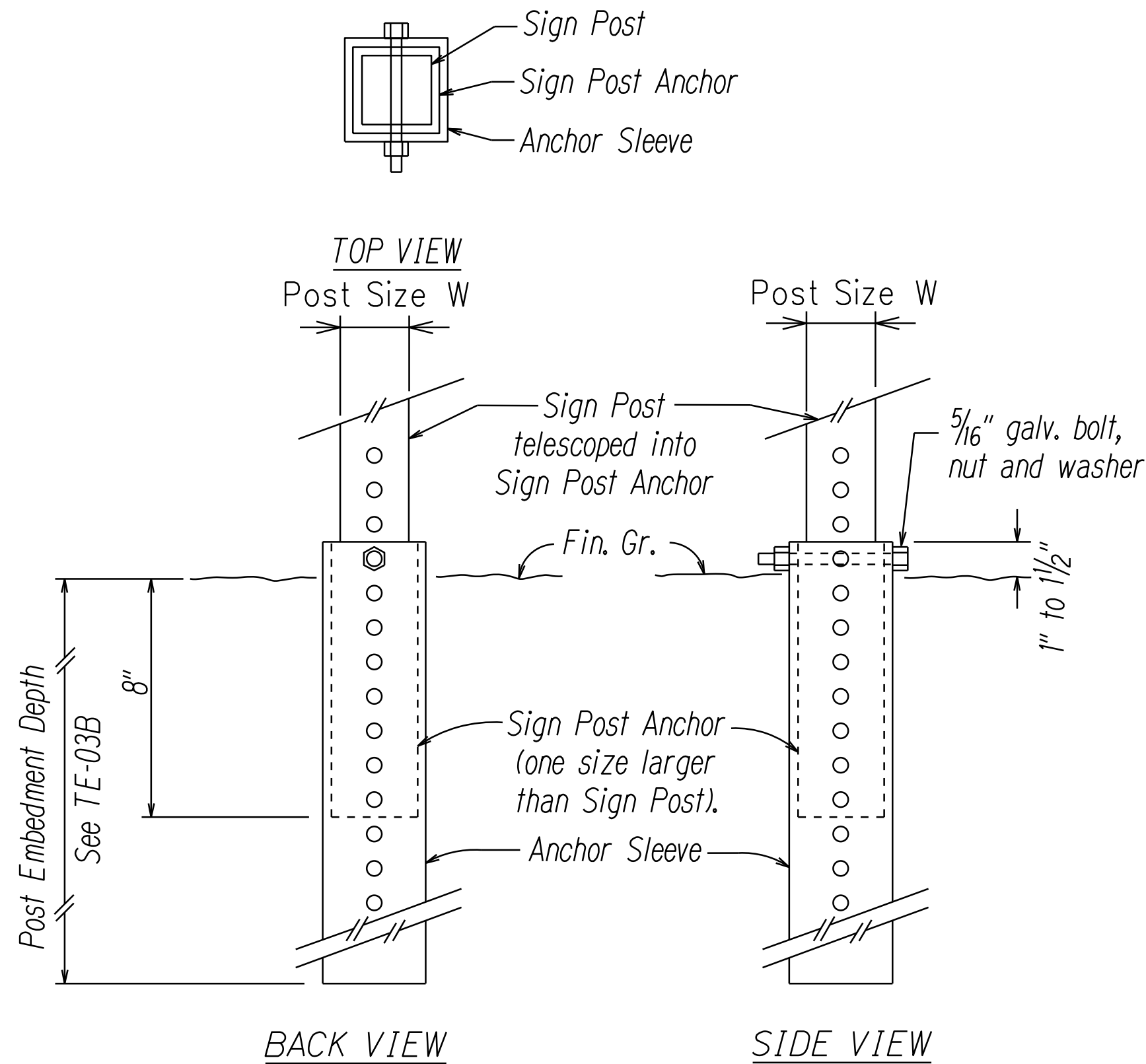
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	35	50



"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



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 7/16"Ø 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
DRAWN BY	X
DESIGNED BY	X
CHECKED BY	X
ORIGINAL PLAN	
NOTE BOOK	
DATE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**GALVANIZED SQUARE TUBE
SIGN POST MOUNTING**

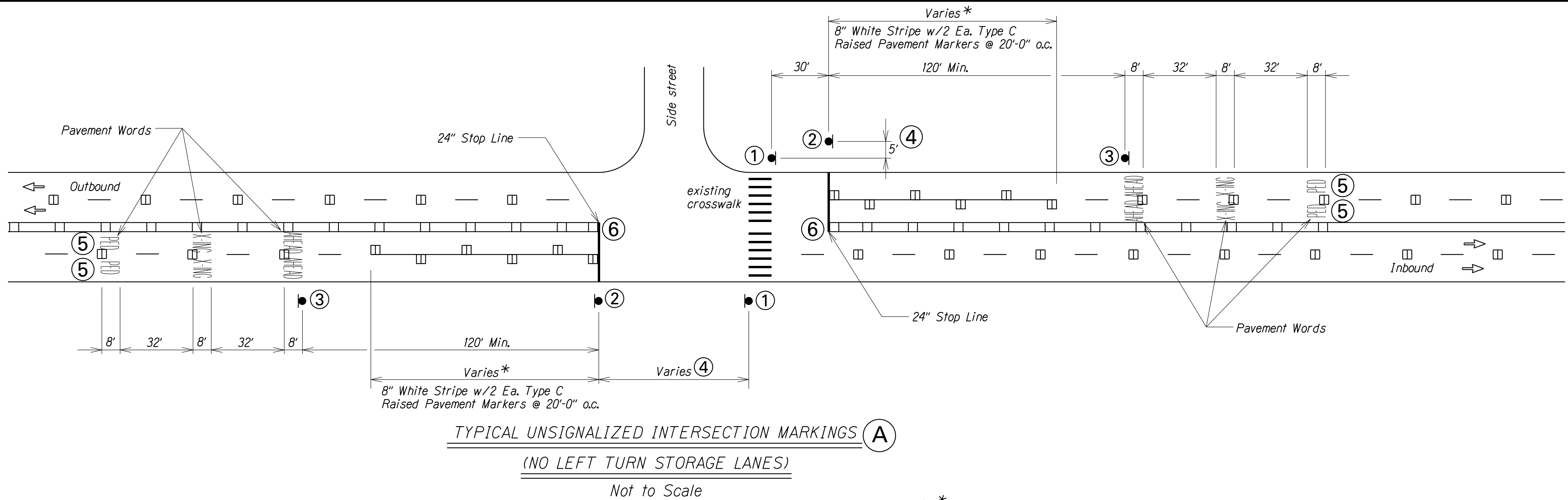
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING

Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)

Scale: As Shown Date: August, 2020

SHEET No. 75 OF 20 SHEETS

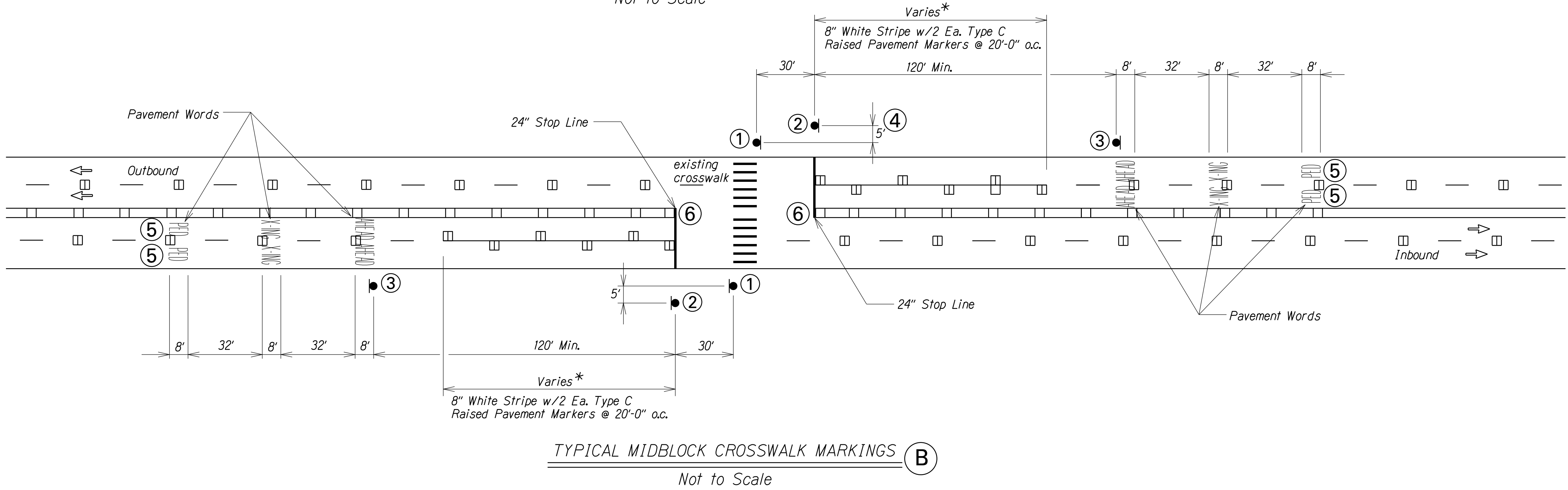
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-11(030)	2021	36	50



TYPICAL UNSIGNALIZED INTERSECTION MARKINGS (A)

(NO LEFT TURN STORAGE LANES)

Not to Scale



TYPICAL MIDBLOCK CROSSWALK MARKINGS (B)

Not to Scale

* See Project Pavement Marking Plans

<p>①</p> <p>W11-2 36"x36" OR SI-1 36"x36"</p> <p>⑥</p> <p>W16-7p 24"x12" OR W16-7p 24"x12"</p> <p>Black legend on flourescent yellow green background</p>	<p>②</p> <p>See ④ Note RI-5c(L) 30"x36" OR RI-5c(R) 30"x36"</p> <p>⑥</p> <p>W16-7p 24"x12"</p> <p>Black legend on white background See detail on this sheet.</p>	<p>③</p> <p>W11-2 36"x36" OR SI-1 36"x36"</p> <p>⑥</p> <p>W16-9p 24"x12" OR W16-9p 24"x12"</p> <p>Black legend on flourescent yellow green background</p>	<p>④</p> <p>NOTE: If Distance is <50', Offset "STOP HERE FOR PEDESTRIANS" sign 5' horizontally with crossing sign. If insufficient space to offset, install sign as directed by the Engineer.</p>	<p>⑤</p> <p>NOTE: When school crosswalk warning assembly used install "SCHOOL" pavement word. See Standard Plan TE-31 for detail.</p>
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RI-5c(L)

Colors: Black on White



RI-5c(R)

Colors: Black on White

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**MIDBLOCK CROSSWALK
SIGNING & MARKINGS**

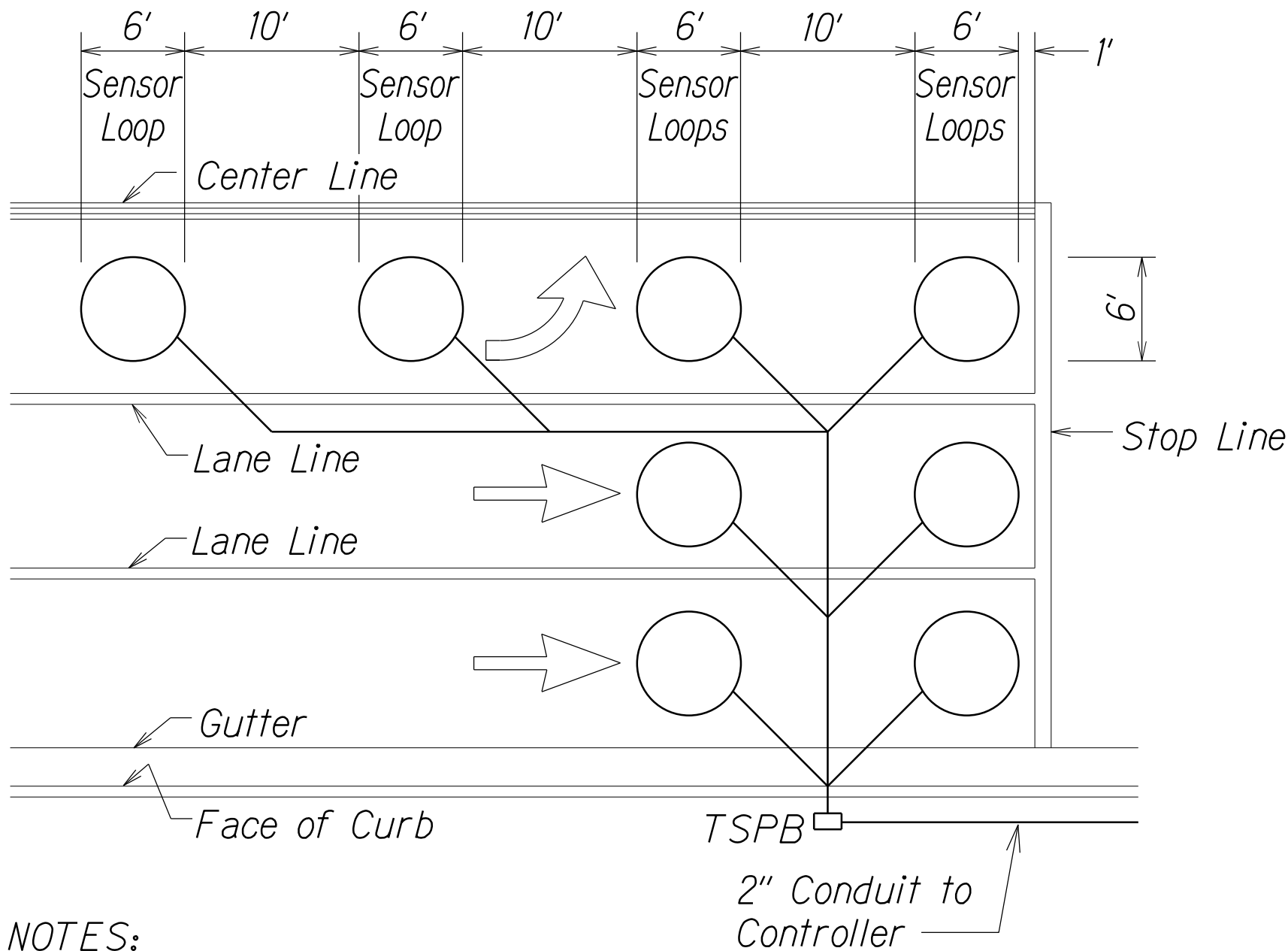
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING

Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-11(030)

Scale: As Shown Date: August, 2020

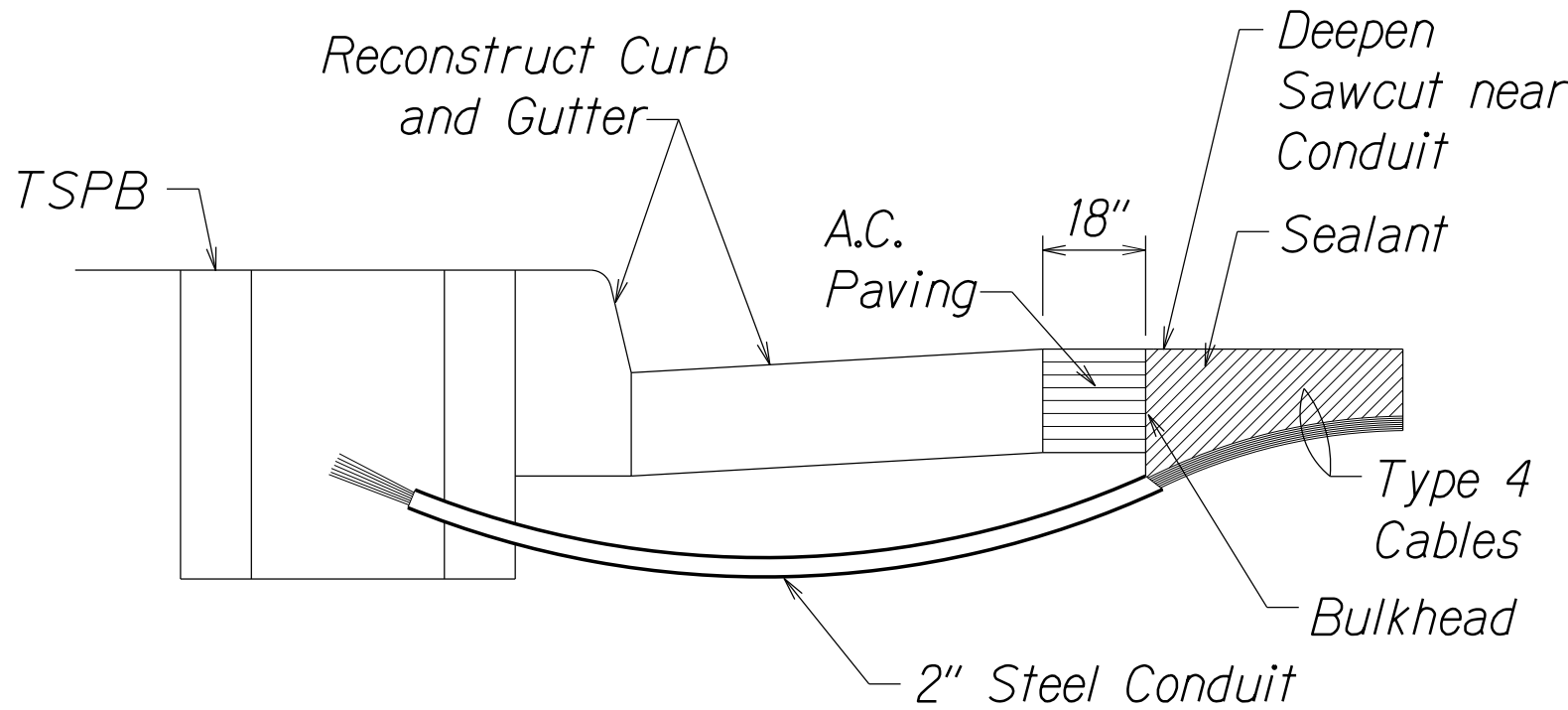
SHEET No. 76 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	37	50



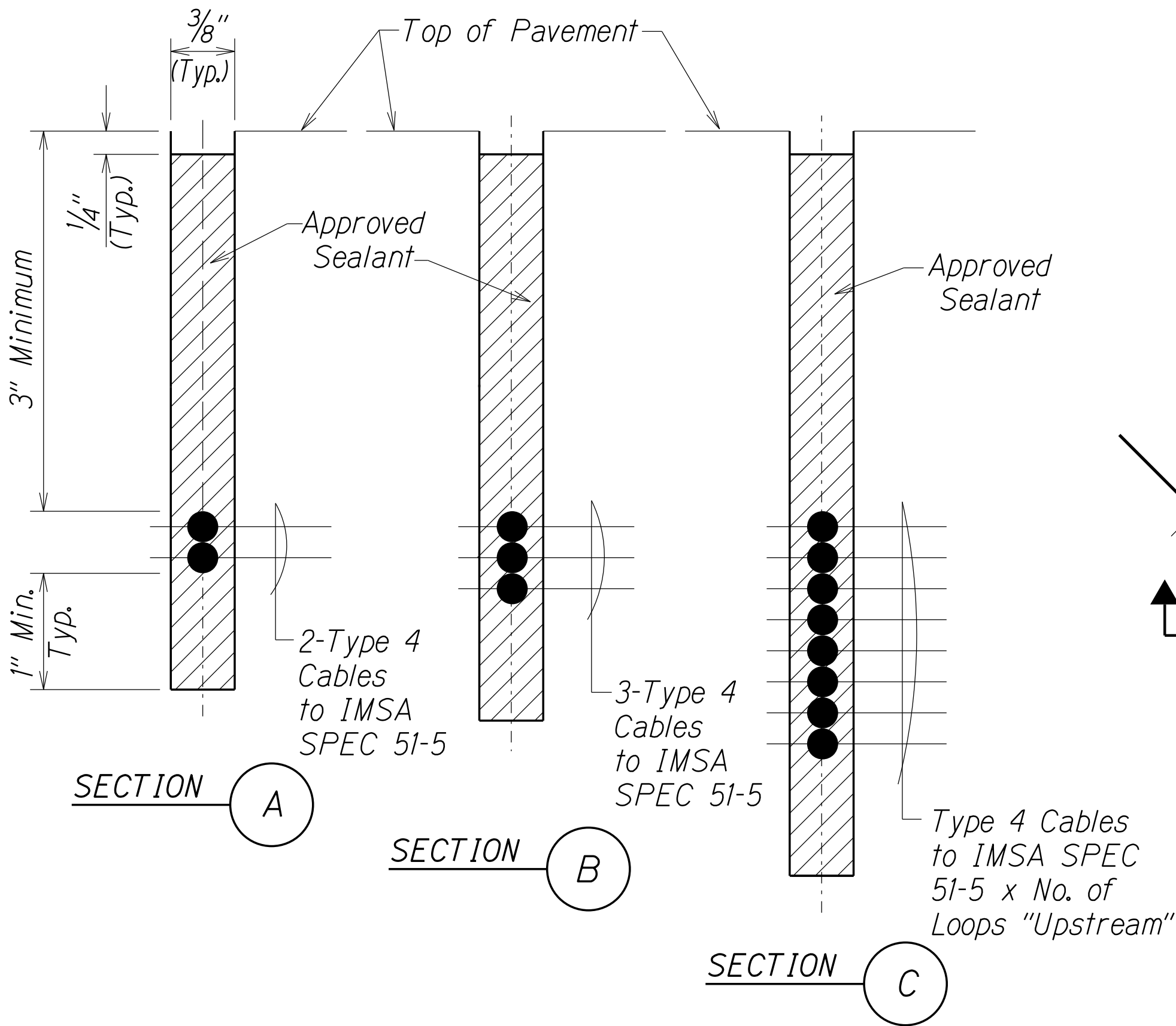
- NOTES:**
- Center sensor loops in lanes.
 - Collector cables shall be twisted 2 turns per foot.
 - Number of loops and locations vary. See project plans.
 - Number and locations of collector sawcuts may be varied in the field to suit.

TYPICAL SENSOR LOOP LAYOUT
Not To Scale

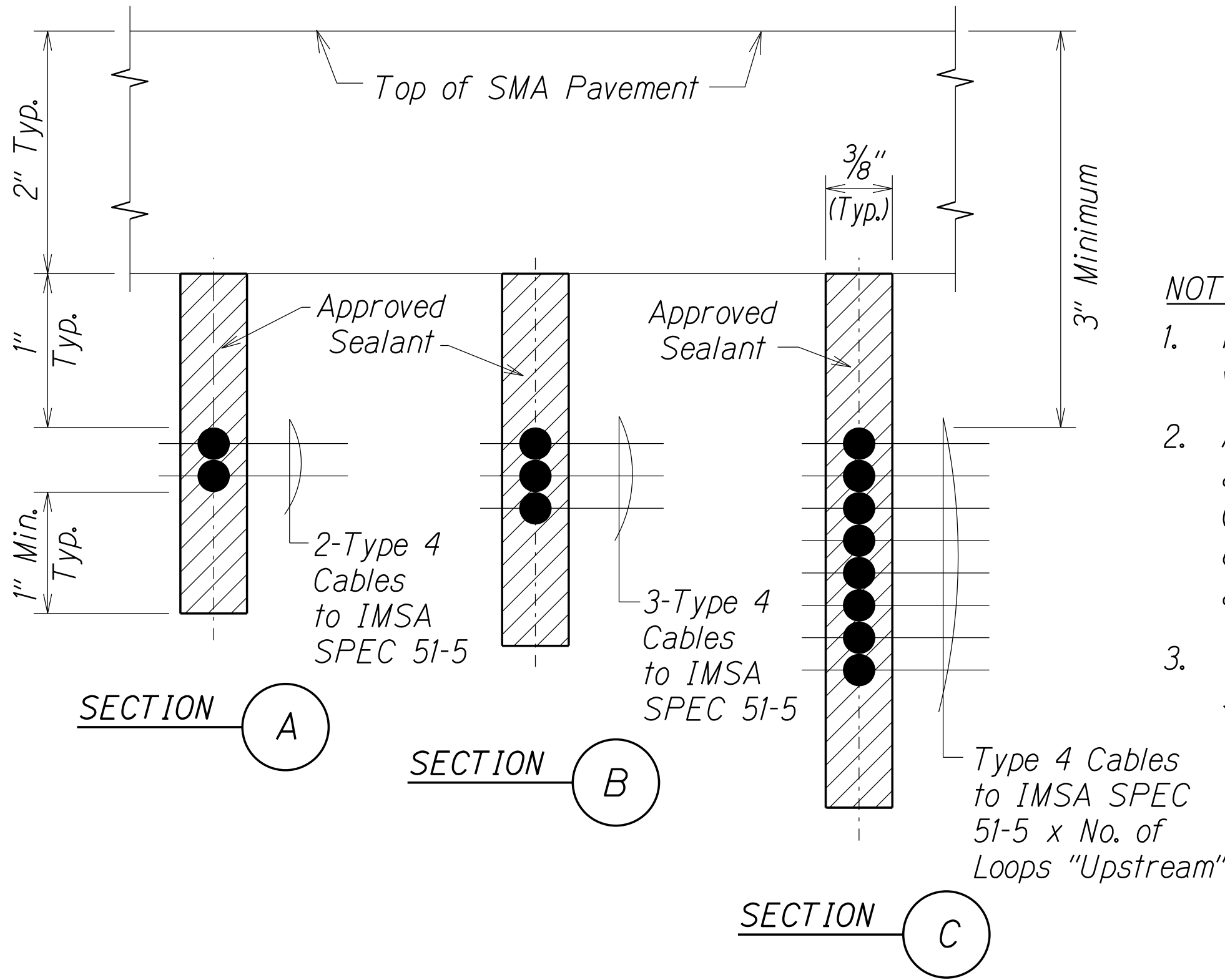


- NOTES ON CONSTRUCTION AT END OF SAWCUT**
- Seal roadway end of conduit after installation of conductors.
 - Install bulkhead across conduit trench.
 - Place hot tar in sawcut.
 - Backfill over conduit with new A.C.
 - Reconstruct curb and gutter as required.

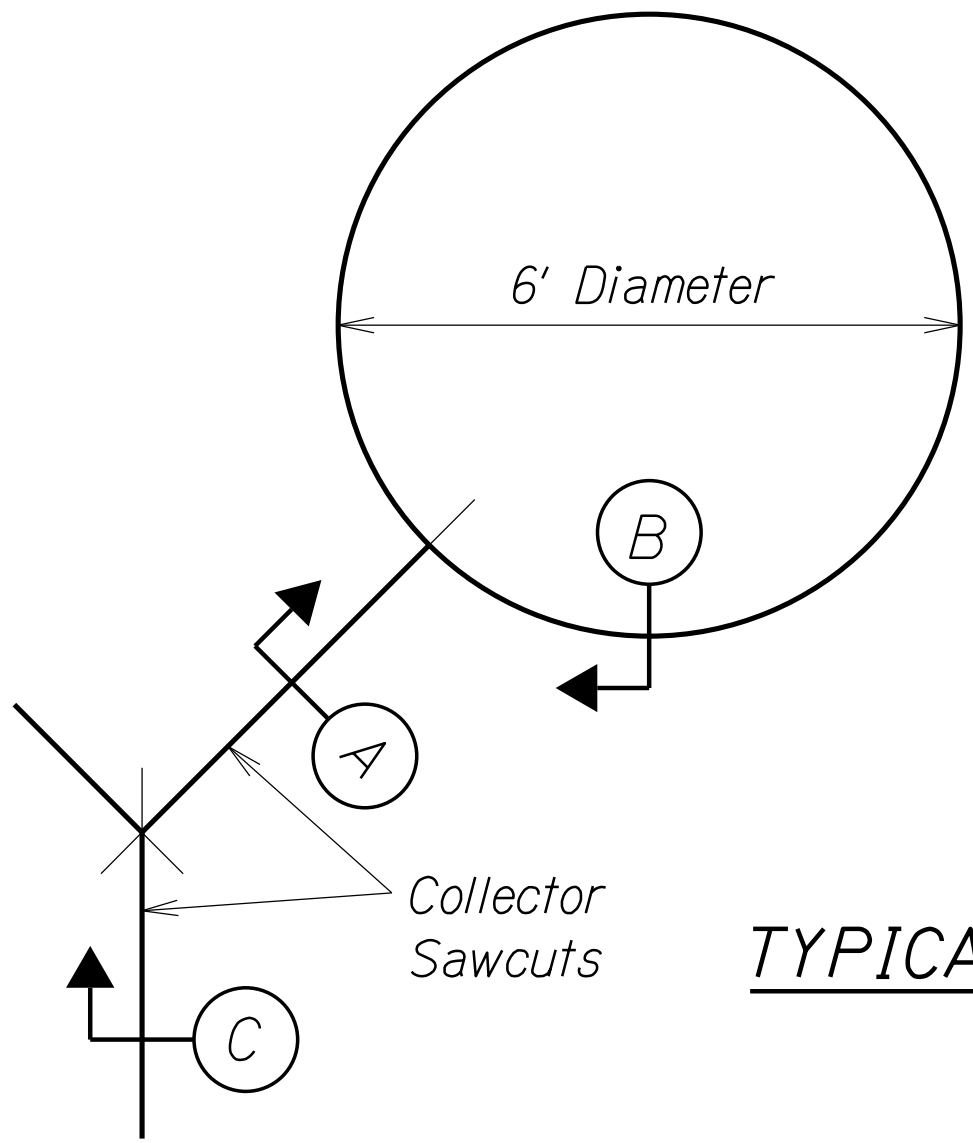
DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY
Not To Scale



TYPICAL SENSOR LOOP SECTION (HMA PAVEMENT)
Not to Scale

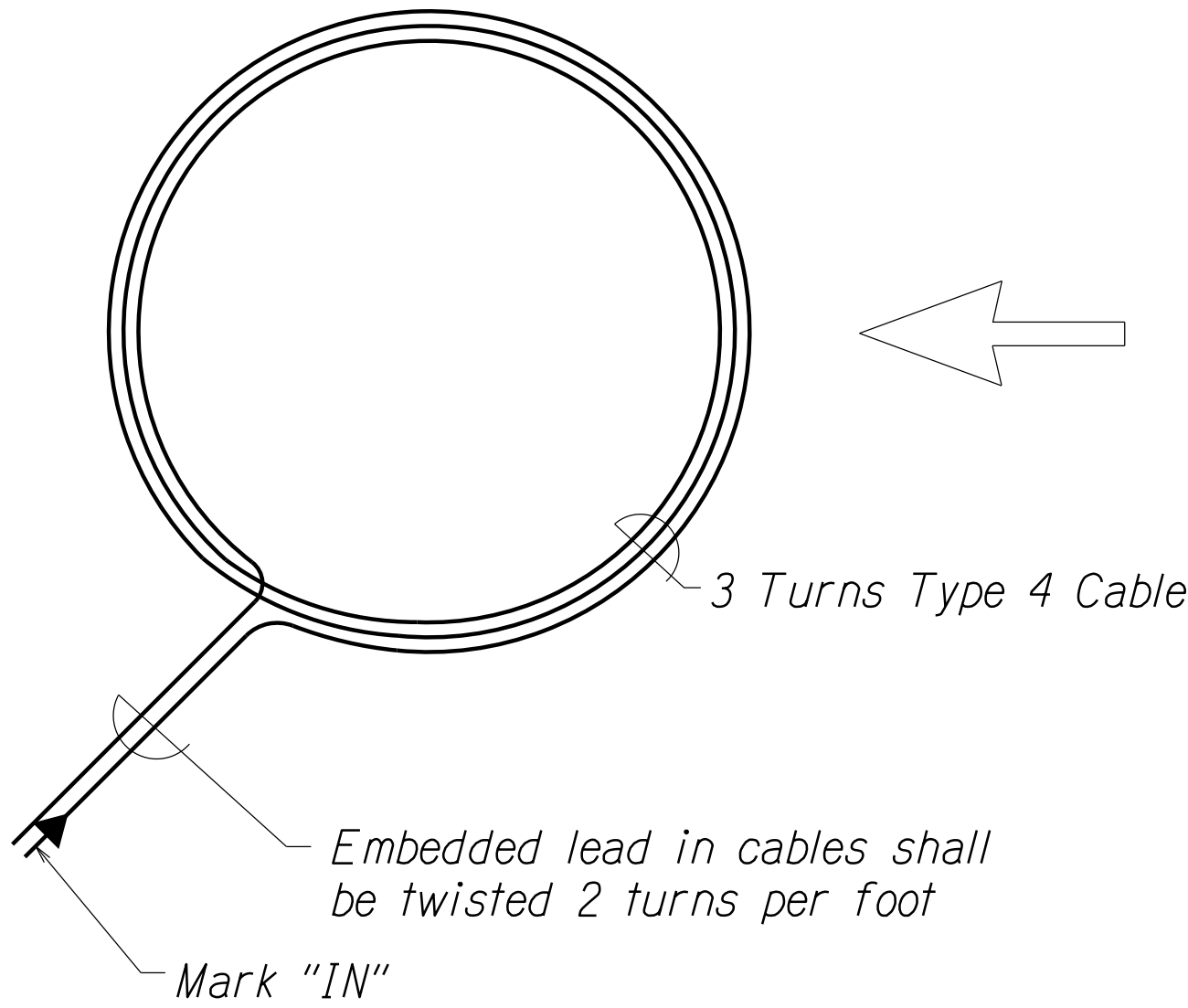


TYPICAL SENSOR LOOP SECTION (SMA PAVEMENT)
Not to Scale



- NOTES:**
- Round corners of acute angle saw cuts to prevent damage to loop sensor cables
 - Length of overcuts shall be kept to a minimum. All overcuts shall be back filled with hot tar.

TYPICAL SENSOR LOOP SAWCUT DETAIL
Not To Scale



TYPICAL SENSOR LOOP WIRING DIAGRAM
Not To Scale

- NOTES:**
- No saw-cutting in Stone Matrix Asphalt (SMA) Pavement allowed. Install loop sensor within underlying a.c. pavement prior to placement of SMA Layer.
 - All saw-cutting slurry shall be wet vacuumed, either simultaneously with or immediately after the saw-cutting operations, and the collected slurry disposed of appropriately (e.g. either placed in a filter fabric lined filtration box or in a filter fabric lined dug up retention/percolation basin) After filtration/percolation the filter fabric and the retained sediments shall be disposed of appropriately.
 - Type 4 loop sensor cable 12 AWG stranded THHN conductor in polyethylene tube, IMSA SPEC 51-5 certified

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
LOOP DETECTOR DETAILS	
NIMITZ HIGHWAY & ALA MOANA BOULEVARD RESURFACING	
Sand Island Access Rd. to Vic. of Piikoi St. Federal-Aid Project No. NH-092-1(030)	
Scale: As Shown	Date: August, 2020
SHEET No. T7 OF 20 SHEETS	

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No. <i>final</i>	

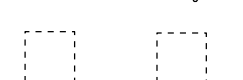
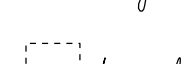
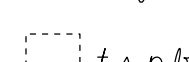
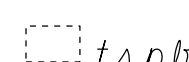
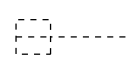
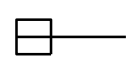
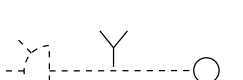
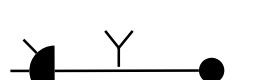
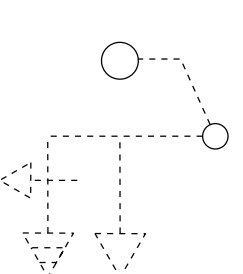
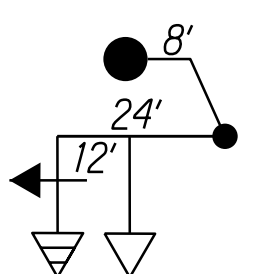
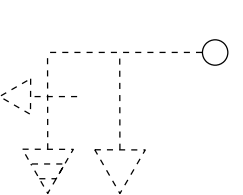
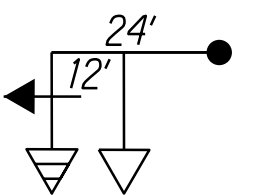
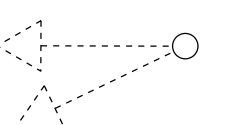
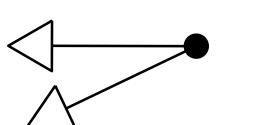
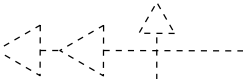
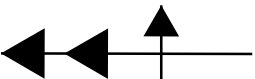
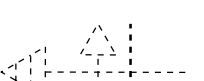
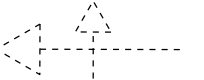
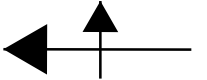
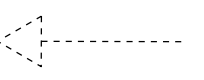
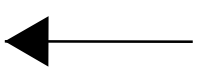
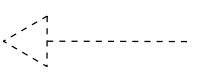
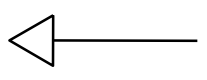
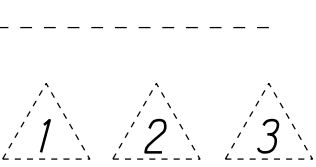
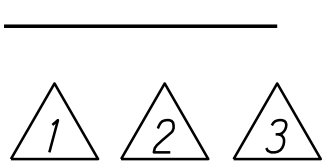
TRAFFIC SIGNAL NOTES

1. The locations of the Traffic Signal Standards, Traffic Signal Standards w/Mast Arms, Pedestrian Push Buttons, Traffic Controller, Pullboxes, Conduits and Loop Detectors shall be staked out in the field by the Contractor and approval of the locations shall be obtained from the Engineer prior to construction and installation.
2. All splicing shall be done in the pullboxes.
3. Furnishing and installing the conduit stubouts (pullboxes to edge of pavement) will not be paid for separately but shall be considered incidental to the various contract items.
4. A solid #8 bare copper wire shall be pulled with the traffic signal control cable for equipment ground. Cost shall be incidental to the installation of the control cable.
5. All Traffic signal controller equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the plans.
6. The loop amplifier units furnished for this project shall be capable of operating the loop detector configurations shown on the plans. Cost for the loop amplifier shall be incidental to the installation of the loop detector.
7. Should any defect be encountered during the warranty period, the manufacturer will be notified and he shall promptly correct such defect. Service call (by factory qualified representative) during the warranty period for repairs or other maintenance shall be answered within 24 hours and shall be done at no expense to the State. All repairs shall be done as soon as possible.
8. All traffic signal work shall conform to the requirements of the "Manual On Uniform Traffic Control Devices For Streets And Highways", Federal Highway Administration (1988) and Amendments.
9. Locations of traffic markings and markers (lane lines, Stop lines, crosswalk, etc.) shown on the plans shall be verified with the Engineer prior to the installation of the traffic signal system.
10. All Conduits between pullboxes and Traffic Signal/Highway Lighting Standards shall not be paid for separately but shall be considered incidental to the various contract items.
11. All Signal-Drop Cables (Type 5 Cables) from the various Types of Traffic Signal Head on the traffic signal standards and mast arms to the pullboxes shall not be paid for separately but considered incidental to the Traffic Signal Head.
12. After installing all the traffic signal cables, the Contractor shall duct seal all conduits in the pullboxes, traffic signal standards and traffic signal controller cabinet concrete base. The duct seal material shall be approved by the Traffic Signal Inspector/Engineer and shall not be paid for separately but considered incidental to the direct buried and/or concrete encased conduits.
13. After installing the Traffic Signal System, the Contractor shall apply grease to all parts of the Traffic Signal System (i.e. fittings, brackets, nipples, elbows, screws, signal head assemblies, bolts, hinges, etc.) as directed by the Traffic Signal Inspector, to prevent rust and corrosion. The grease material shall be approved by the Signal Inspector.
14. Connecting into existing traffic signal system and making all necessary adjustments shall not be paid for separately, but considered incidental to the various traffic signal contract items.
15. The Contractor shall notify the Traffic Control Branch, Department of Transportation Services, City & County of Honolulu, (Phone No. 768-8388) two weeks prior to commencing any work on the traffic signal system.

TRAFFIC SIGNAL LEGEND

NEW

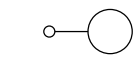
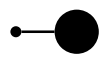
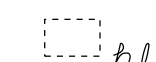
EXISTING



HIGHWAY LIGHTING LEGEND

NEW

EXISTING



Highway Lighting Conduit

Type A Pullbox (Hwy. Ltg.)

Highway Lighting Standard

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL NOTES & LEGEND

**NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING**

**Sand Island Access Rd. to Vic of Piikoi St.
Federal-Aid Project No. NH-092-1(030)**

Scale: As Shown Date: August, 2020

SHEET No. 78 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	39	50

Nimitz Highway Traffic Signal Backplate Retrofit
Sand Island Access Road to Vicinity of Bishop Street

NEW TRAFFIC SIGNAL ASSEMBLY W/ LED SIGNAL LIGHTS & TRAFFIC SIGNAL BACK PLATE (1)					
STREET NAME/INTERSECTION	IN BOUND (IB)		OUT BOUND (OB)		
	Left-Turn P-V (2)	Thru	Left-Turn P-V (2)	Thru	Contra-Flow P-V (2)
Sand Island Access Road		3	2	2	
Puuhale Road		2		2	2
Mokauea Street		2		2	2
Kalihi Street		2		3	2
Waiakamilo Road		2		2	2
Fishing Village/Pier 36-38		2		3	2
Alakawa Street	2	2	1	2	2
Pacific Street		2		2	
River Street				3	
Smith Street				3	
Nuuanu Avenue	2	2		3	
Bethel Street				2	
Fort Street				1 (PV)	
Bishop Street		2			
Sub-Total:	4 (P-V)	21	3 (P-V)	29, 1 (P-V)	12 (P-V)

1. Replace existing mast arm mounted traffic signal head with new traffic signal head with LED optical units and traffic signal back plate.
2. P-V: Programmed Visibility traffic signal head

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	1
1d2	TRACED BY	
N:\frimisl2	DESIGNED BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL NOTES & LEGEND

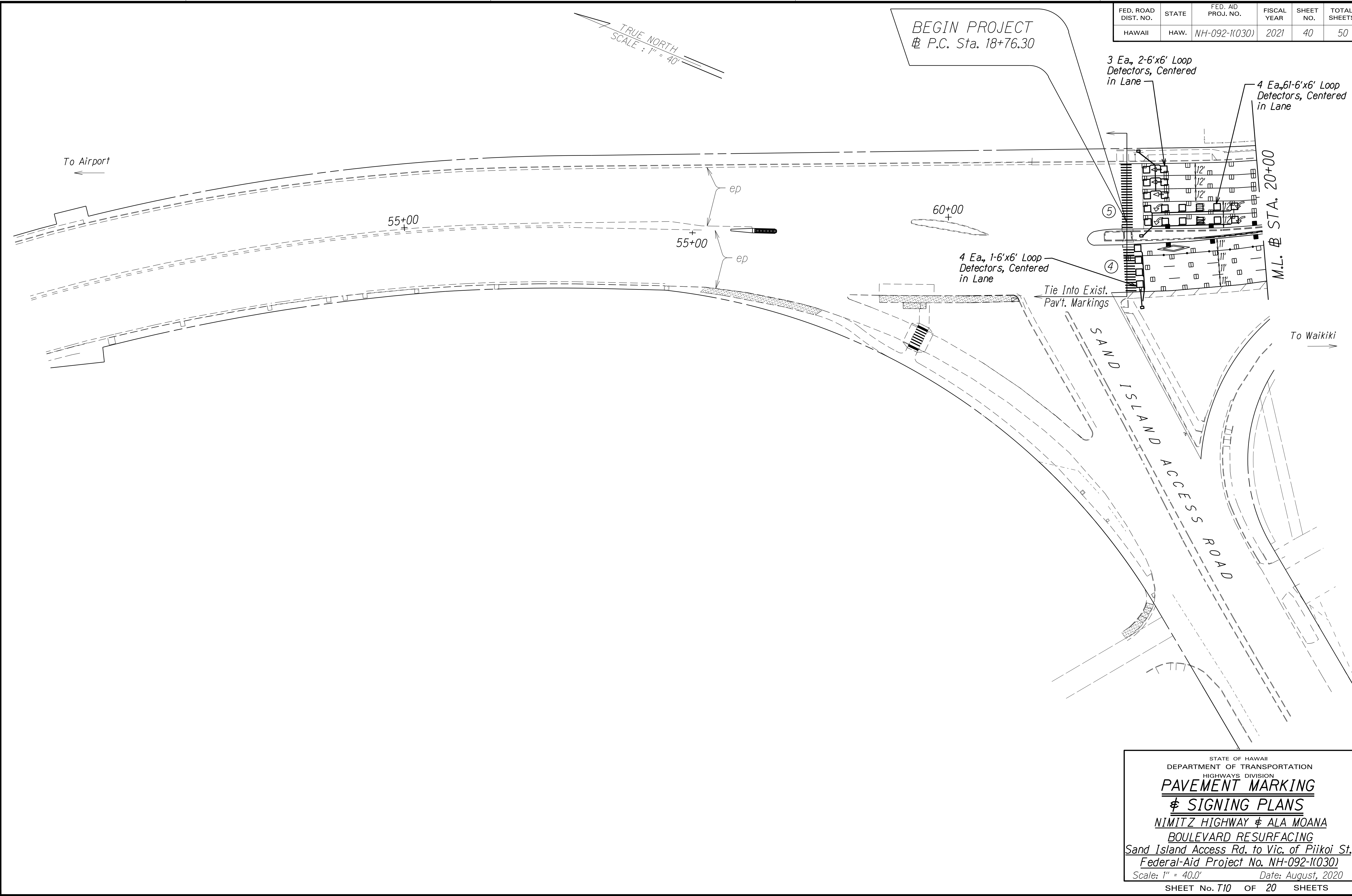
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING

Sand Island Access Rd. to Vic of Piikoi St.
Federal-Aid Project No. NH-092-1(030)

Scale: As ShownDate: August, 2020

SHEET No. T9 OF 20 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY <i>X</i>	<i>X</i>
DESIGNED BY <i>hgz</i>	TRACED BY <i>X</i>	
CHECKED BY <i>hgz</i>	DESIGNED BY <i>hgz</i>	
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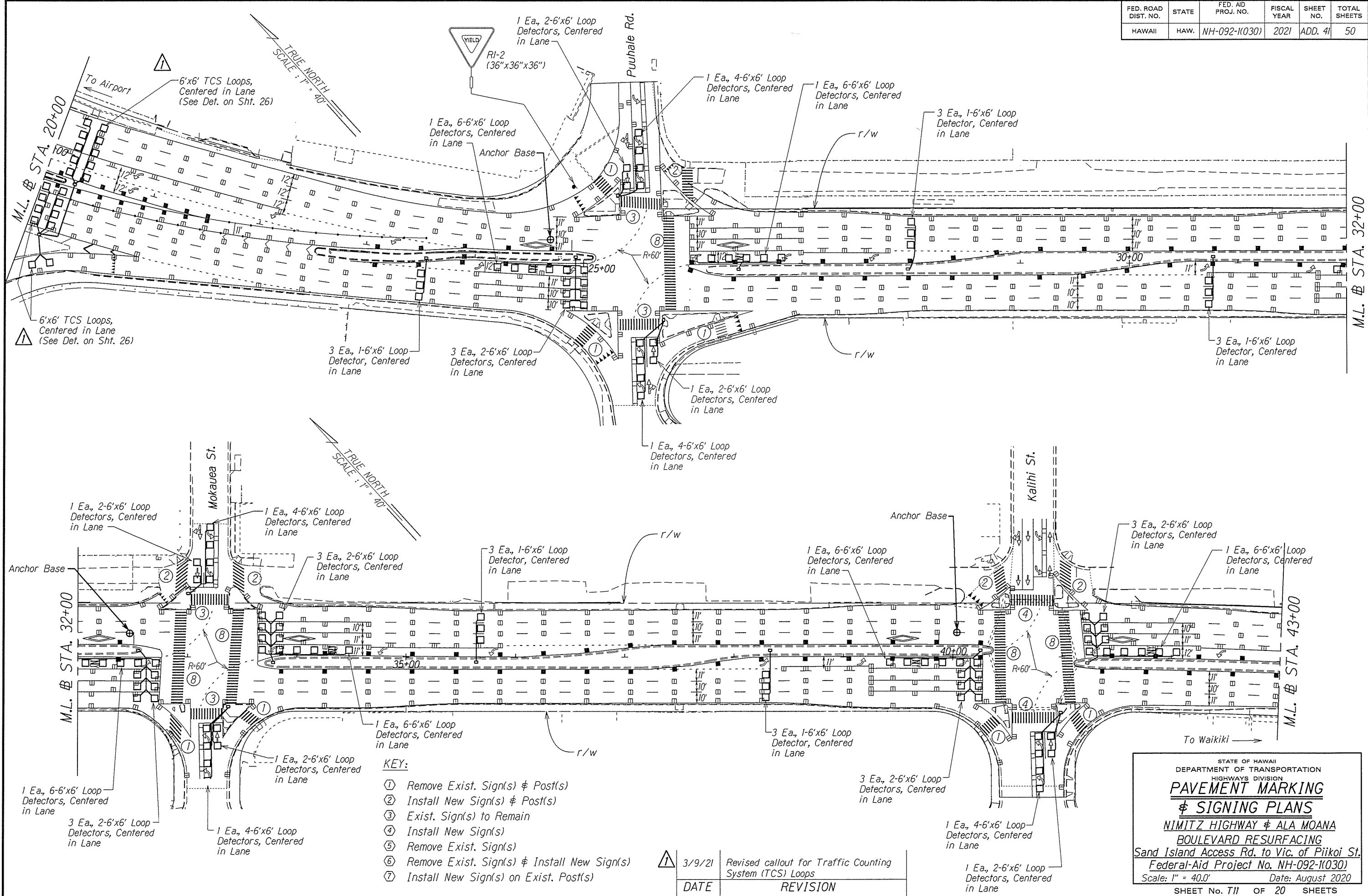


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PAVEMENT MARKING
& SIGNING PLANS**
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0' Date: August, 2020

SHEET No. 110 OF 20 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	ADD. 41	50



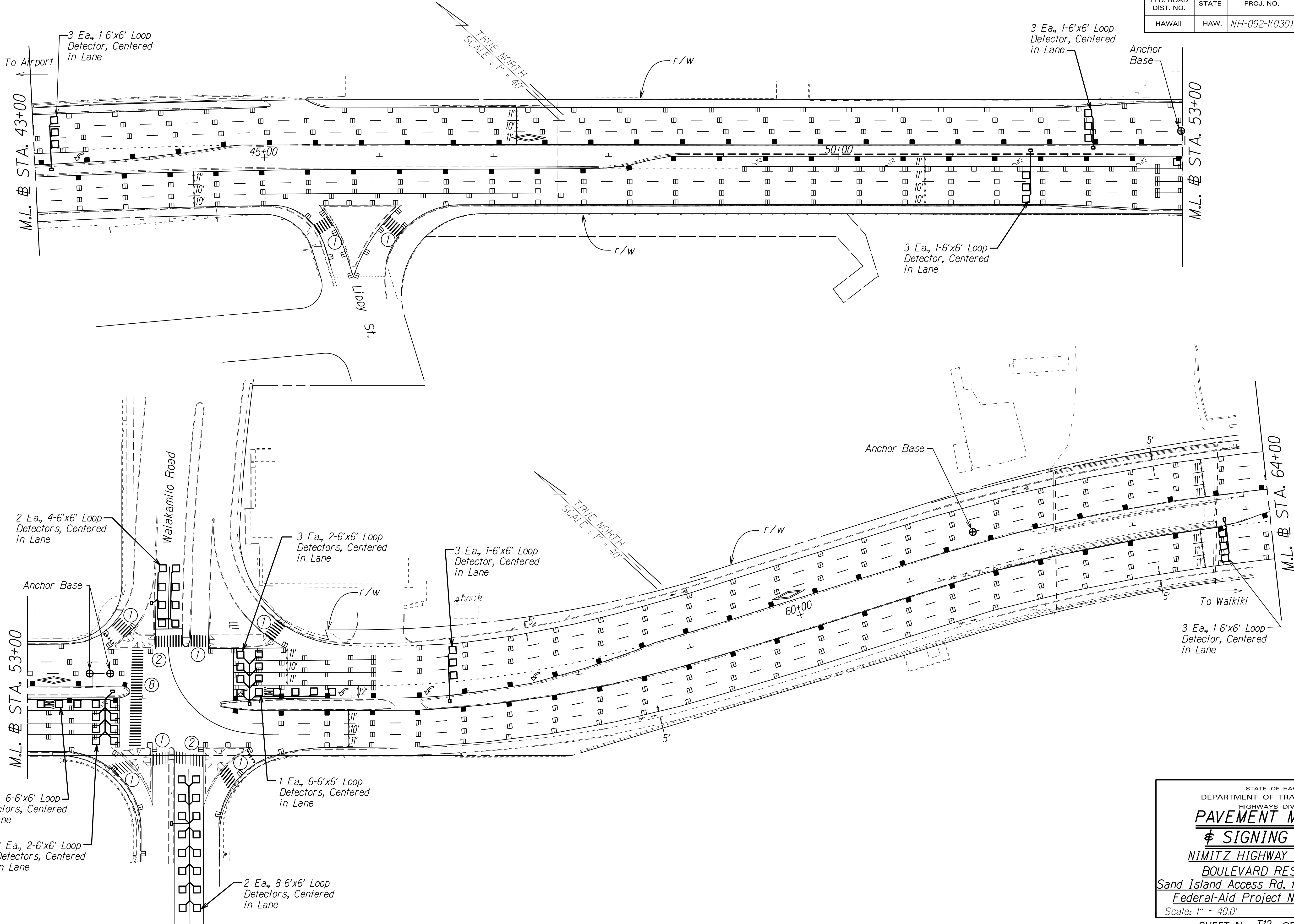
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**PAVEMENT MARKING
& SIGNING PLANS**
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0'
Date: August 2020

SHEET No. 711 OF 20 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	42	50



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

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

PAVEMENT MARKING

& SIGNING PLANS

NIMITZ HIGHWAY & ALA MOANA

BOULEVARD RESURFACING

Sand Island Access Rd. to Vic. of Piikoi St.

Federal-Aid Project No. NH-092-1(030)

Scale: 1" = 40.0'

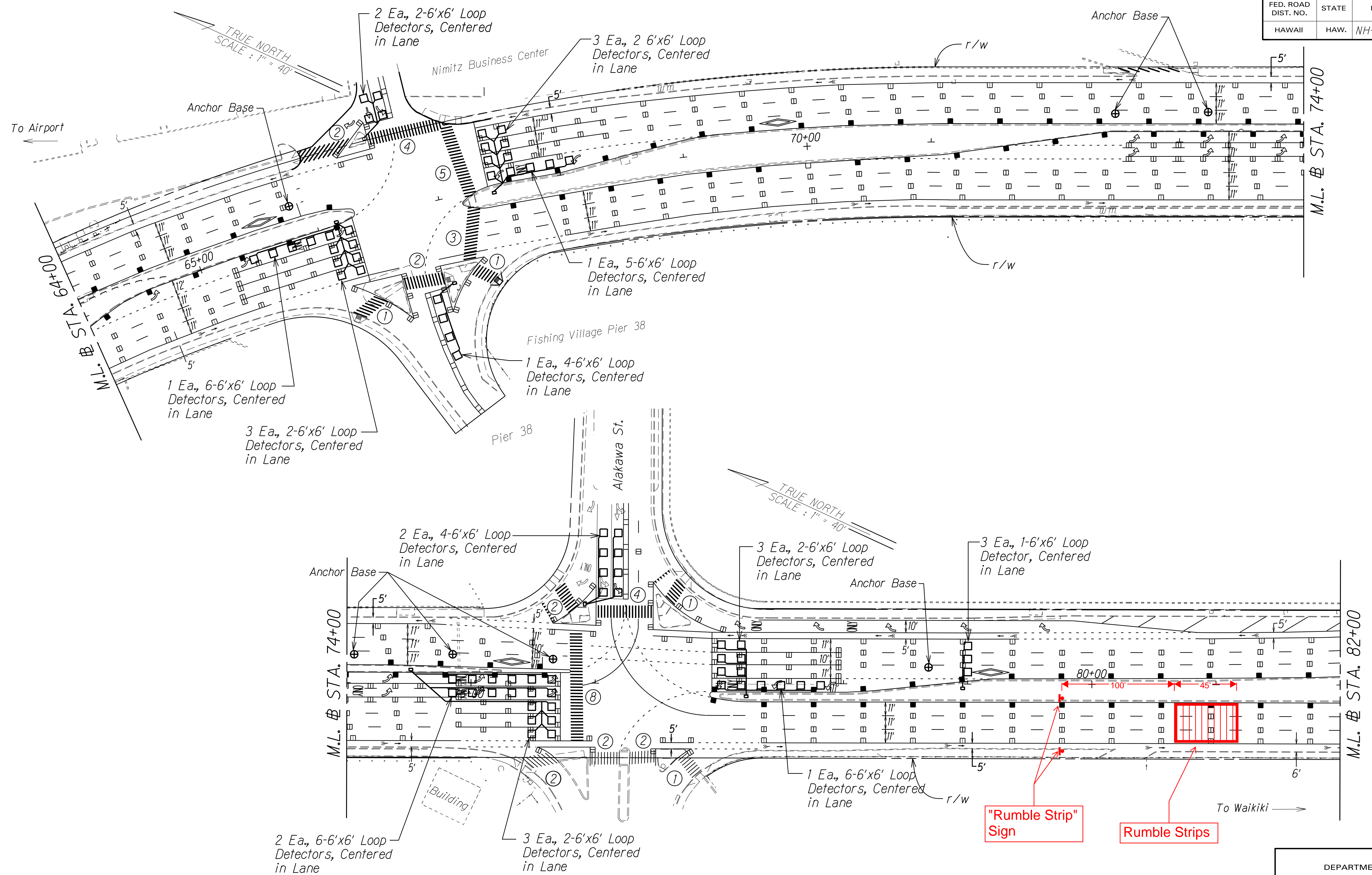
Date: August, 2020

SHEET No. T12

OF 20

SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	43	50

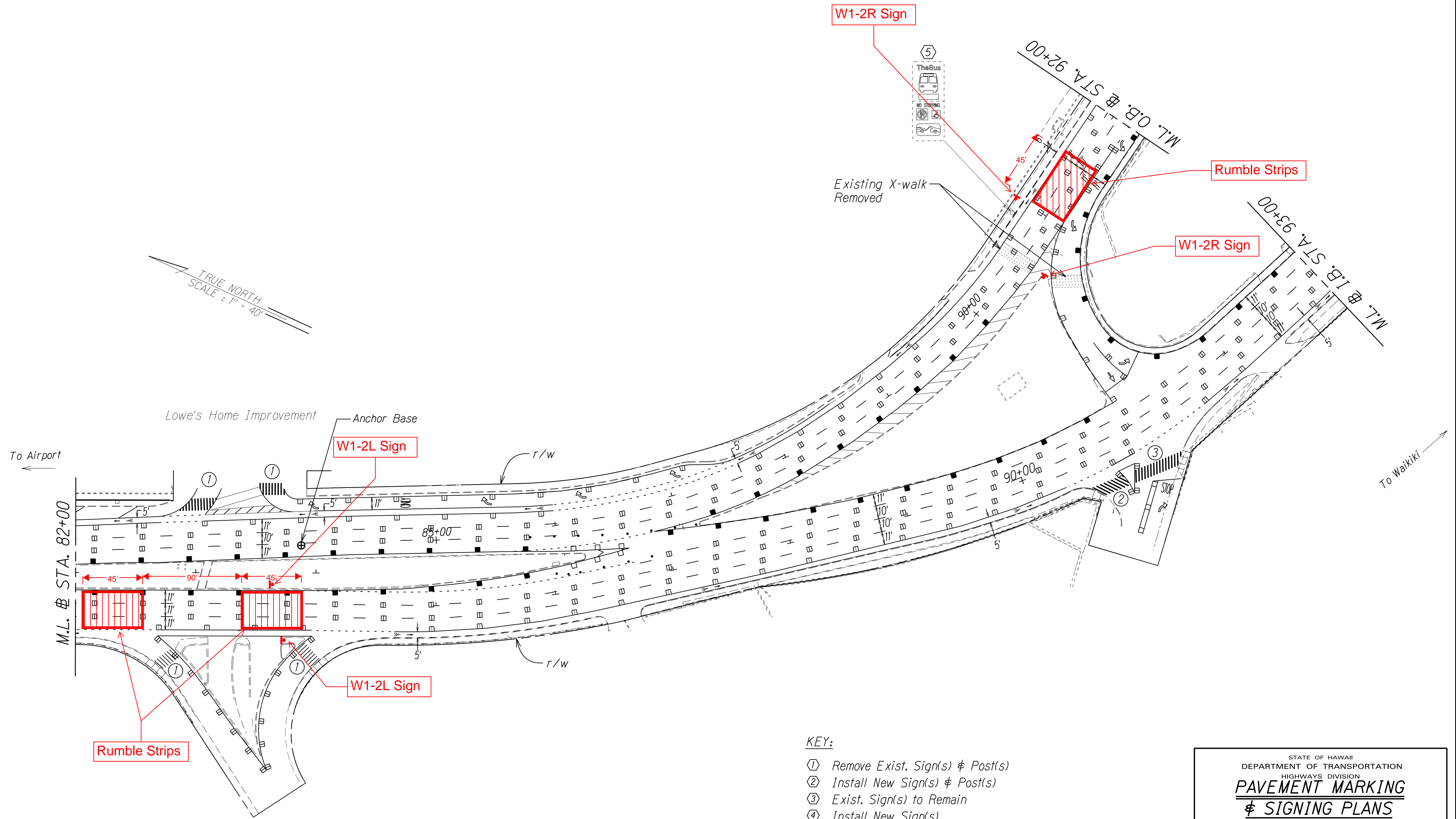


ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	TRACED BY	
CHECKED BY	DESIGNED BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PAVEMENT MARKING
& SIGNING PLANS**
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0' Date: August, 2020
SHEET No. 713 OF 20 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	44	50



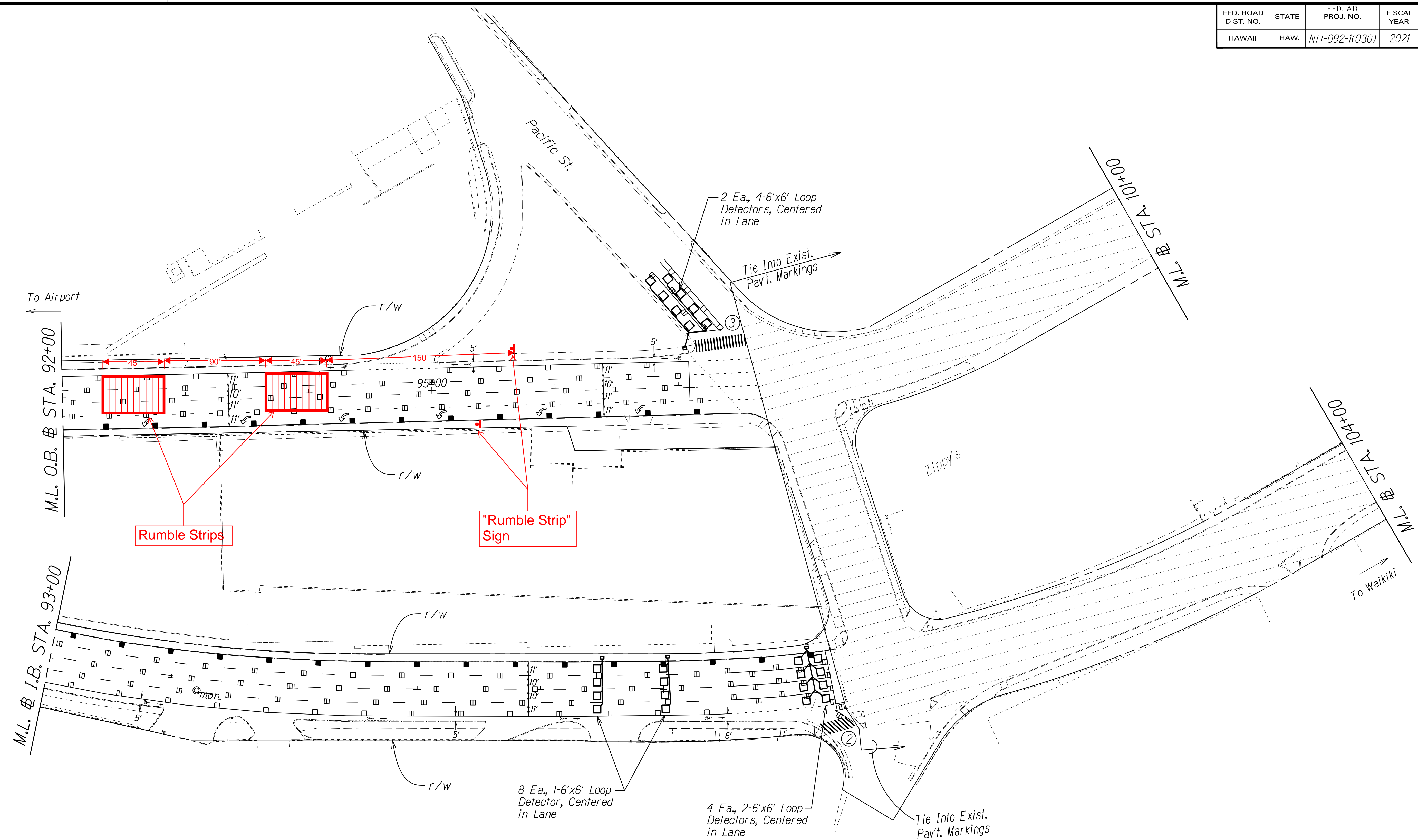
- KEY:
- ① Remove Exist. Sign(s) & Post(s)
 - ② Install New Sign(s) & Post(s)
 - ③ Exist. Sign(s) to Remain
 - ④ Install New Sign(s)
 - ⑤ Remove Exist. Sign(s)
 - ⑥ Remove Exist. Sign(s) & Install New Sign(s)
 - ⑦ Install New Sign(s) on Exist. Post(s)

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY	X
NOTE BOOK	TRACED BY	
14220	DESIGNED BY	
finim2	CHECKED BY	
No.		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PAVEMENT MARKING
& SIGNING PLANS**
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0' Date: August, 2020
SHEET No. T14 OF 20 SHEETS

"AS-BUILT"

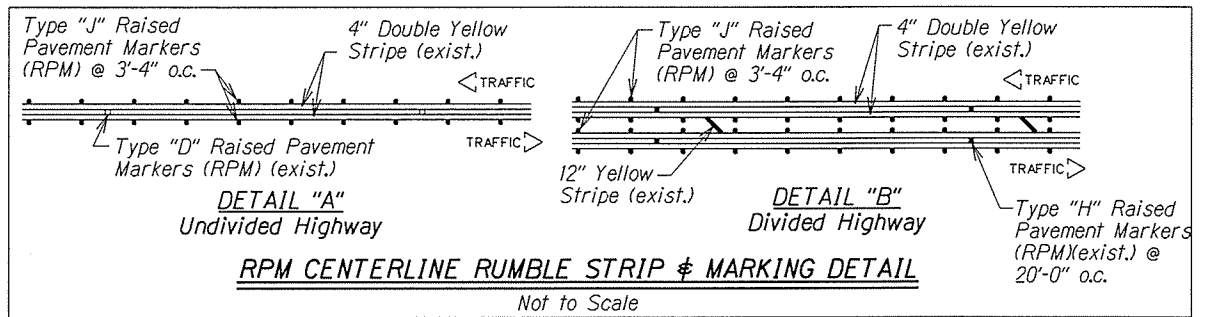
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	45	50



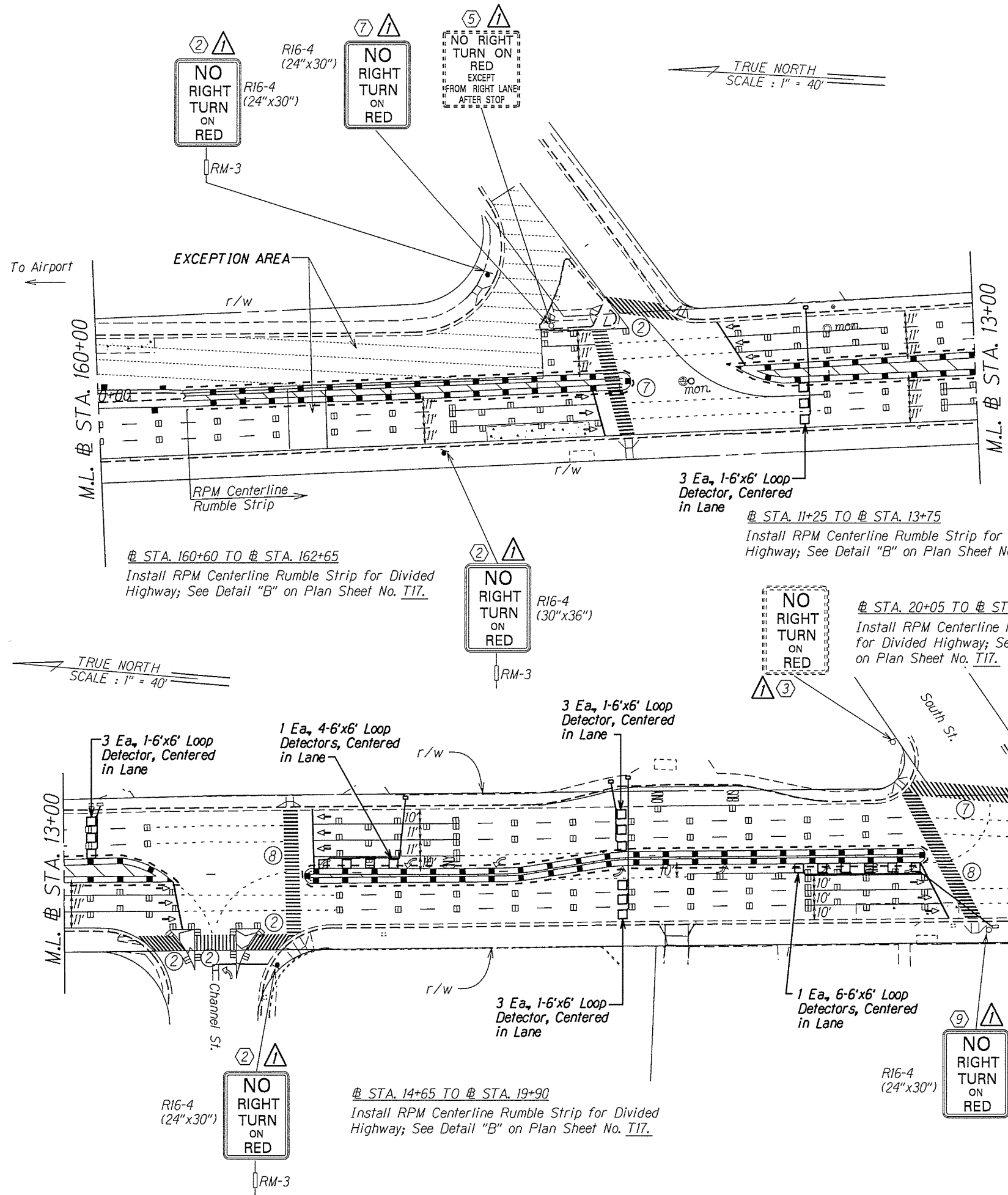
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	11/13
1422m	DESIGNED BY	
1422m	CHECKED BY	
1422m		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PAVEMENT MARKING
& SIGNING PLANS**
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0' Date: August, 2020
SHEET No. 715 OF 20 SHEETS

"AS-BUILT"



- KEY:**
- ① Remove Exist. Sign(s) & Post(s)
 - ② Install New Sign(s) & Post(s)
 - ③ Exist. Sign(s) to Remain
 - ④ Install New Sign(s)
 - ⑤ Remove Exist. Sign(s)
 - ⑥ Remove Exist. Sign(s) & Install New Sign(s)
 - ⑦ Install New Sign(s) on Exist. Post(s)
 - ⑧ Install New Sign(s) on Exist. Light Pole
 - ⑨ Install New Sign(s) on Exist. Traffic Signal Pole
 - ⑩ Relocate Exist. Sign(s) to Exist. Light Pole
 - ⑪ Relocate Exist. Sign(s) on New Post(s)



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

2/22/22	Install New R16-4 Signs, Adjust Exist. Signs & Add Sign Key
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLANS NIMITZ HIGHWAY & ALA MOANA BOULEVARD RESURFACING Sand Island Access Rd. to Vic. of Piikoi St. Federal-Aid Project No. NH-092-1(030) Scale: 1" = 40.0' Date: February 2022	
SHEET No. T17 OF 20 SHEETS	

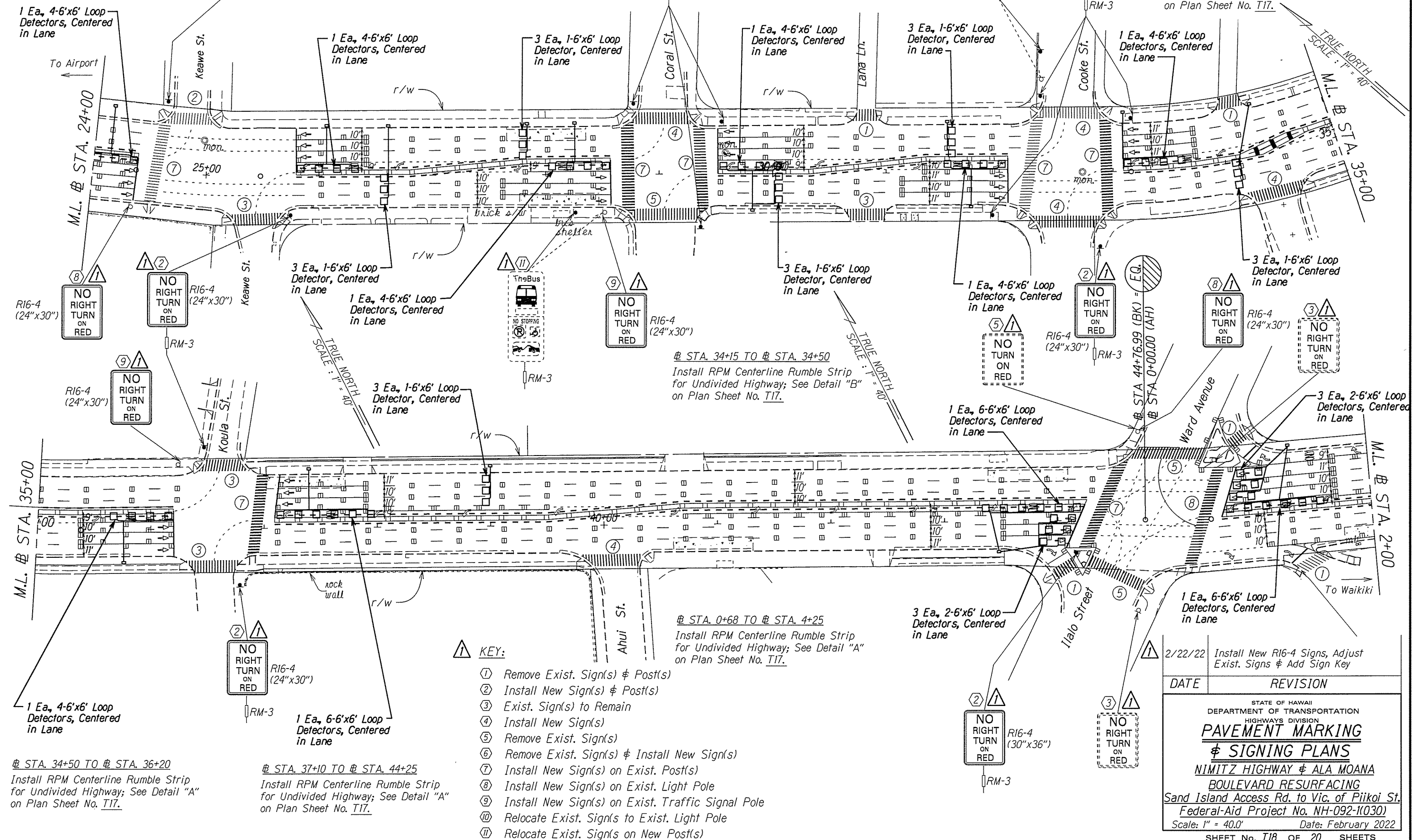
⑥ STA. 23+55 TO ⑥ STA. 24+40
Install RPM Centerline Rumble Strip
for Undivided Highway; See Detail "A"
on Plan Sheet No. T17.

⑥ STA. 25+80 TO ⑥ STA. 28+56
Install RPM Centerline Rumble Strip
for Undivided Highway; See Detail "A"
on Plan Sheet No. T17.

⑥ STA. 29+50 TO ⑥ STA. 32+08
Install RPM Centerline Rumble Strip
for Undivided Highway; See Detail "A"
on Plan Sheet No. T17.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	C.O. 48	50

⑥ STA. 33+10 TO ⑥ STA. 34+15
Install RPM Centerline Rumble Strip
for Undivided Highway; See Detail "A"
on Plan Sheet No. T17.



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	

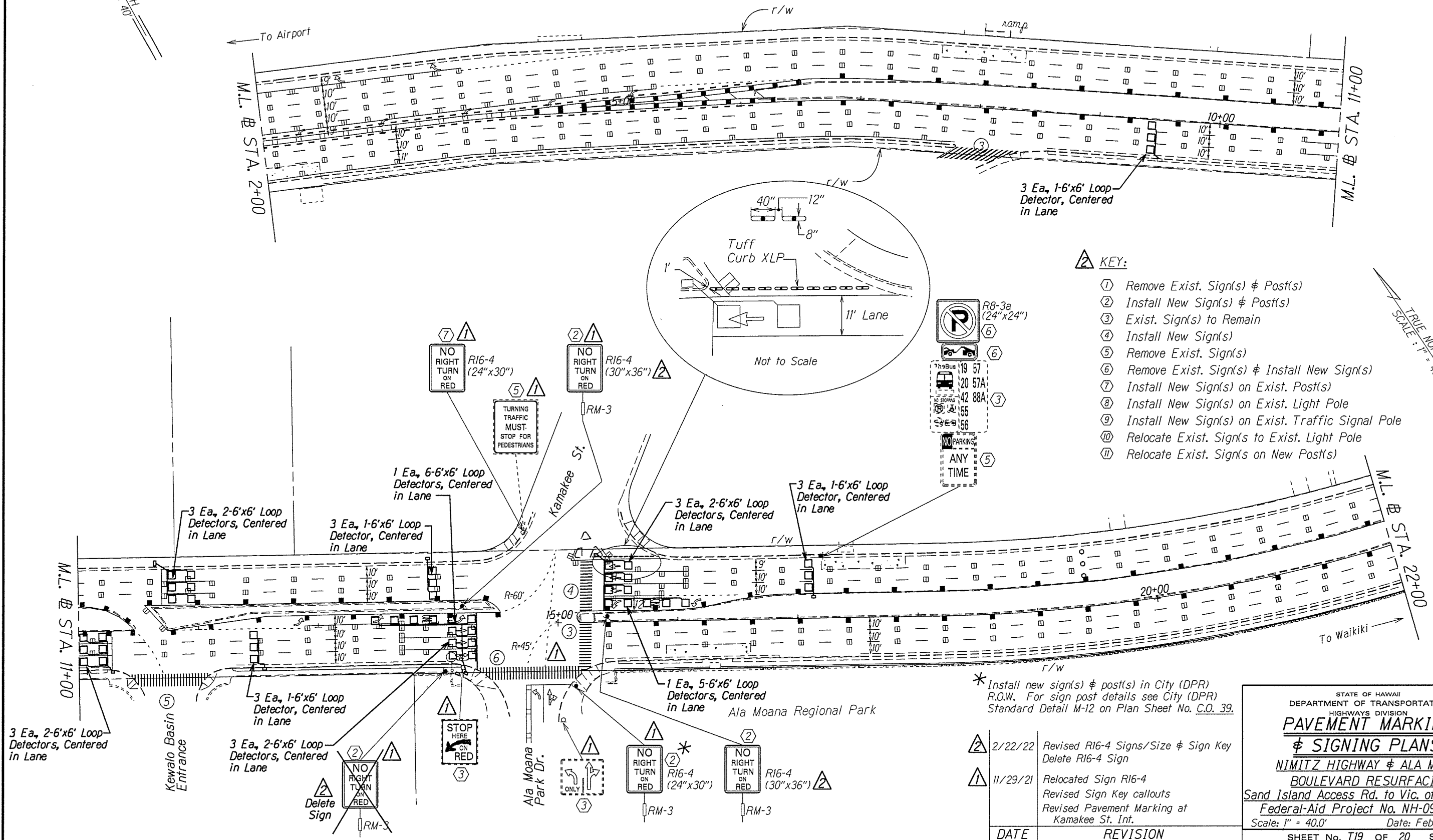
DATE	REVISION
2/22/22	Install New R16-4 Signs, Adjust Exist. Signs & Add Sign Key
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION PAVEMENT MARKING & SIGNING PLANS NIMITZ HIGHWAY & ALA MOANA BOULEVARD RESURFACING Sand Island Access Rd. to Vic. of Piikoi St. Federal-Aid Project No. NH-092-1(030) Scale: 1" = 40.0' Date: February 2022	
SHEET No. T18 OF 20 SHEETS	

From STA. 0+68 TO STA. 4+25
Install RPM Centerline Rumble Strip
for Undivided Highway; See Detail "A"
on Plan Sheet No. T17.

From STA. 4+25 TO STA. 6+10
Install RPM Centerline Rumble Strip
for Undivided Highway; See Detail "B"
on Plan Sheet No. T17.

TRUE NORTH
SCALE: 1" = 40'

TRUE NORTH
SCALE: 1" = 40'



- KEY:**
- ① Remove Exist. Sign(s) & Post(s)
 - ② Install New Sign(s) & Post(s)
 - ③ Exist. Sign(s) to Remain
 - ④ Install New Sign(s)
 - ⑤ Remove Exist. Sign(s)
 - ⑥ Remove Exist. Sign(s) & Install New Sign(s)
 - ⑦ Install New Sign(s) on Exist. Post(s)
 - ⑧ Install New Sign(s) on Exist. Light Pole
 - ⑨ Install New Sign(s) on Exist. Traffic Signal Pole
 - ⑩ Relocate Exist. Sign(s) to Exist. Light Pole
 - ⑪ Relocate Exist. Sign(s) on New Post(s)

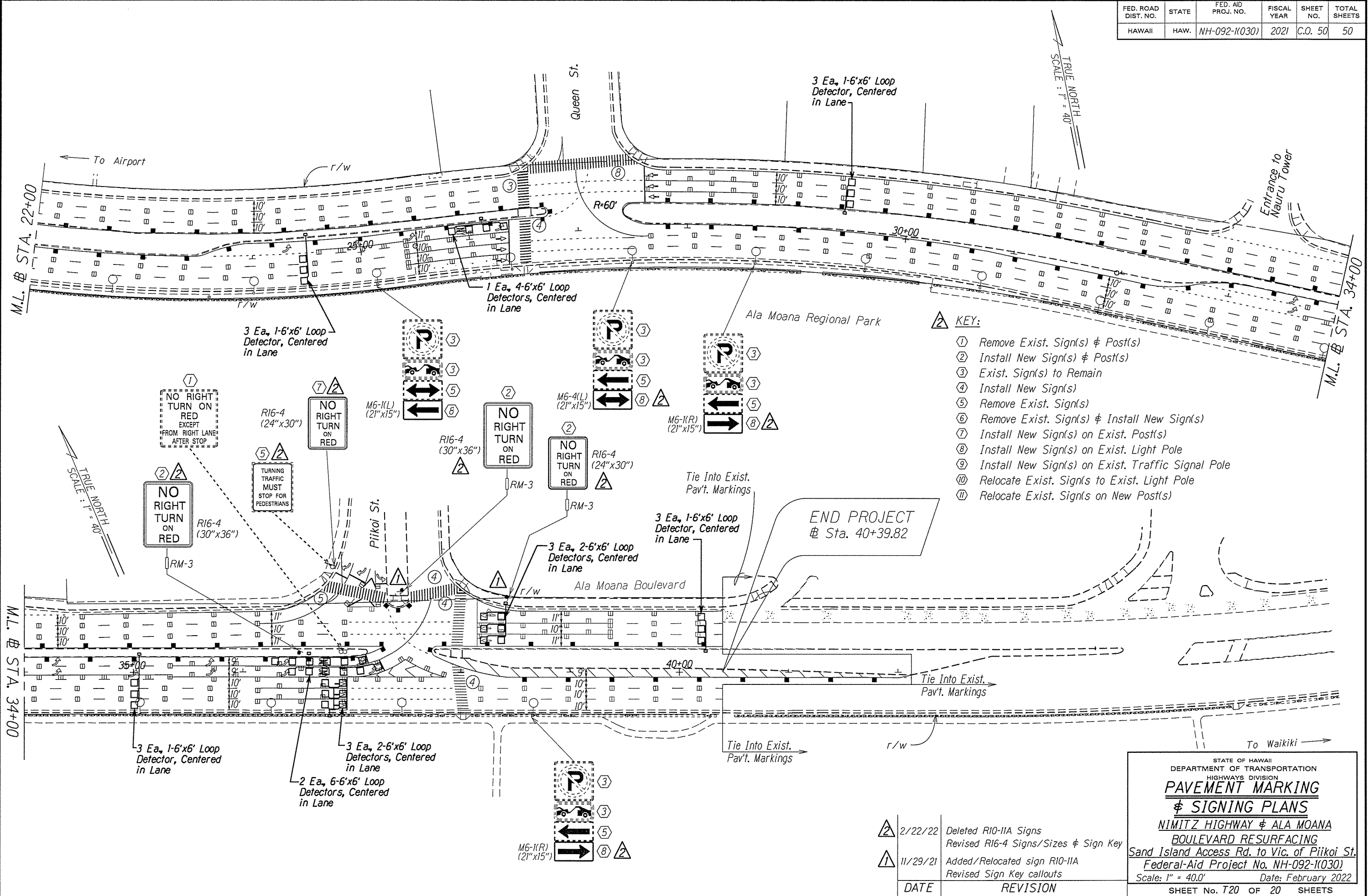
* Install new sign(s) & post(s) in City (DPR) R.O.W. For sign post details see City (DPR) Standard Detail M-12 on Plan Sheet No. C.O. 39.

DATE	REVISION
2/22/22	Revised R16-4 Signs/Size & Sign Key Delete R16-4 Sign
11/29/21	Relocated Sign R16-4 Revised Sign Key callouts Revised Pavement Marking at Kamakee St. Int.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT MARKING
& SIGNING PLANS
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0' Date: February 2022
SHEET No. T19 OF 20 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
REVISIONS	
CHECKED BY	
DATE	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-092-1(030)	2021	C.O. 50	50



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	

DATE	REVISION
2/22/22	Deleted R10-11A Signs Revised R16-4 Signs/Sizes & Sign Key
11/29/21	Added/Relocated sign R10-11A Revised Sign Key callouts

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**PAVEMENT MARKING
& SIGNING PLANS**
NIMITZ HIGHWAY & ALA MOANA
BOULEVARD RESURFACING
Sand Island Access Rd. to Vic. of Piikoi St.
Federal-Aid Project No. NH-092-1(030)
Scale: 1" = 40.0' Date: February 2022
SHEET No. T20 OF 20 SHEETS