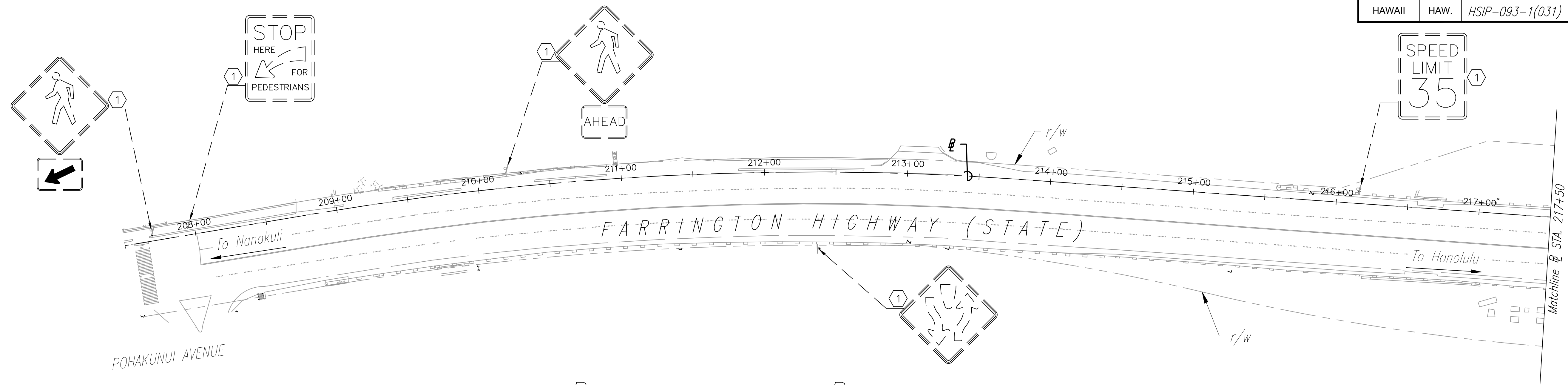
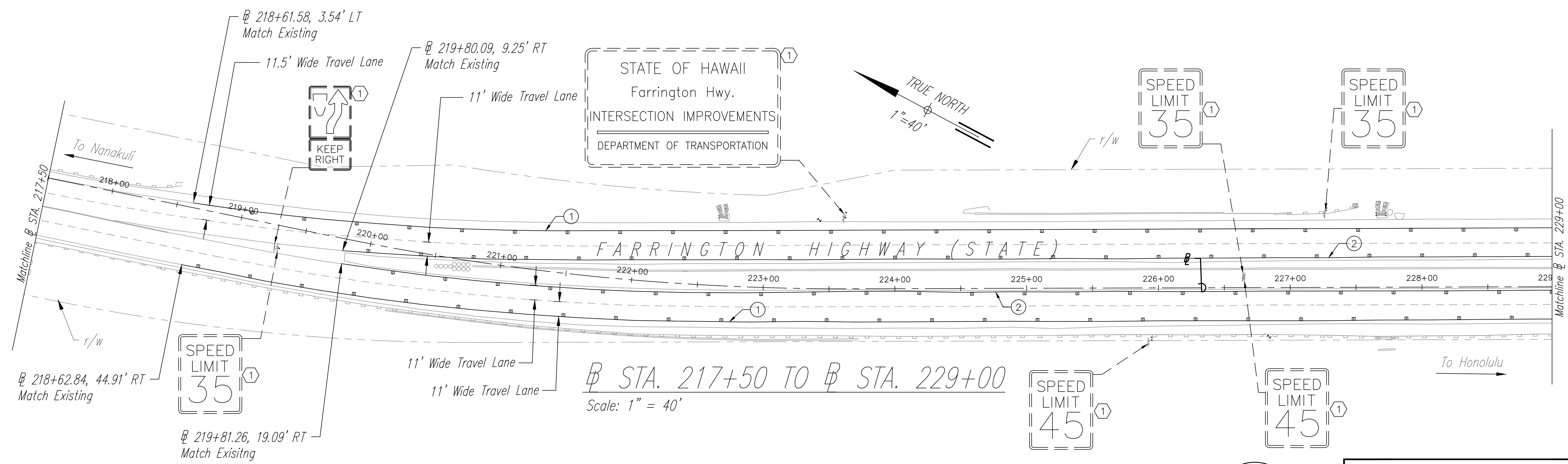


FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	49	62



Sta. 207+50 to Sta. 217+50  
Scale: 1" = 40'



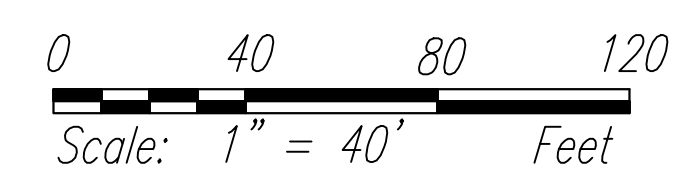
Sta. 217+50 to Sta. 229+00  
Scale: 1" = 40'

ORIGINAL PLAN	DATE	SURVEY PLOTTED BY
		_____
NOTE BOOK	No.	DESIGNED BY
		_____
		CHECKED BY
		_____

- PAVEMENT MARKING NOTES:
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM
  - ② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM

- SIGNING NOTES:
- ① Exist. Sign(s) & Post(s) to Remain

- LEGEND:
- Exist. Sign Post (1)
  - ▬ Exist. Sign Post (2)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

*R. B. Valero*  
SIGNATURE

4/30/24  
EXPIRATION DATE OF LICENSE



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING PLAN - 1

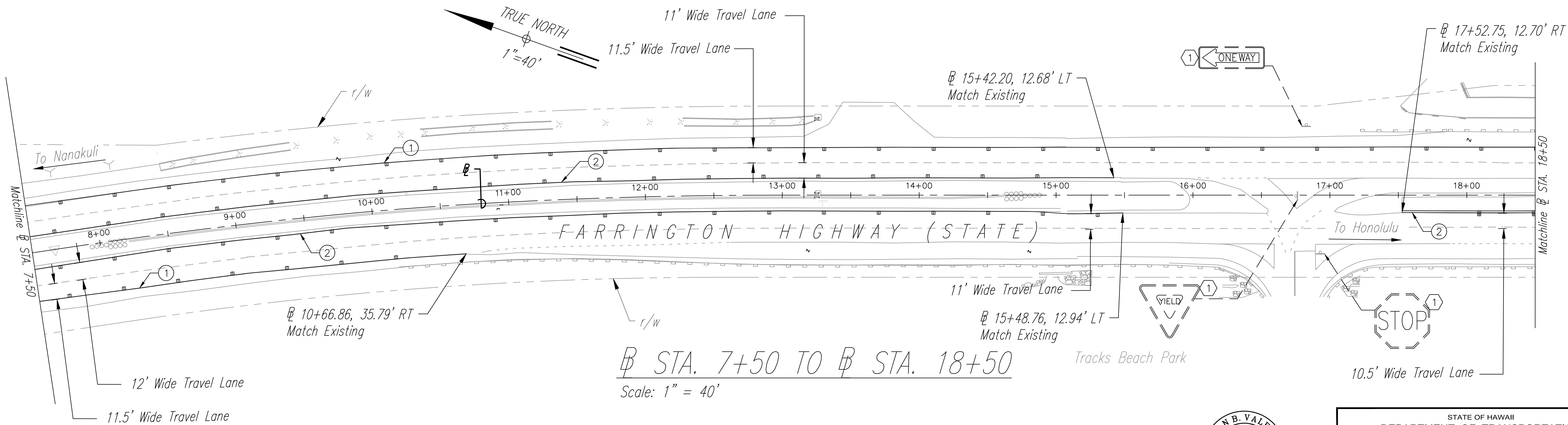
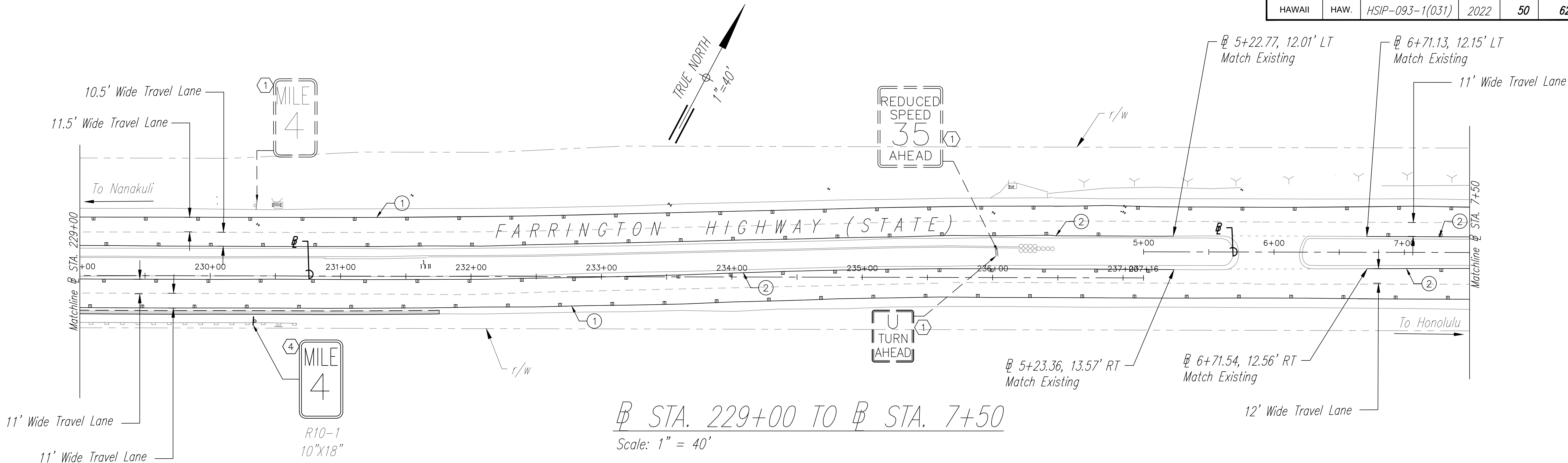
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS

Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)

Date: November 2021

SHEET No. 1 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	50	62



DATE	_____
SURVEY PLOTTED BY	_____
PLAN	_____
DRAWN BY	_____
TRACED BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

PAVEMENT MARKING NOTES:

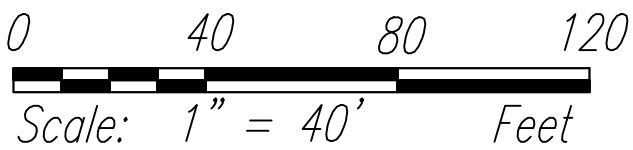
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM
- ② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM

SIGNING NOTES:

- ① Exist. Sign(s) & Post(s) to Remain
- ④ Install New Sign(s) & Post(s)

LEGEND:

- ① Exist. Sign Post (1)
- ② Exist. Sign Post (2)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *R. B. Valero*

4/30/24  
EXPIRATION DATE OF LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

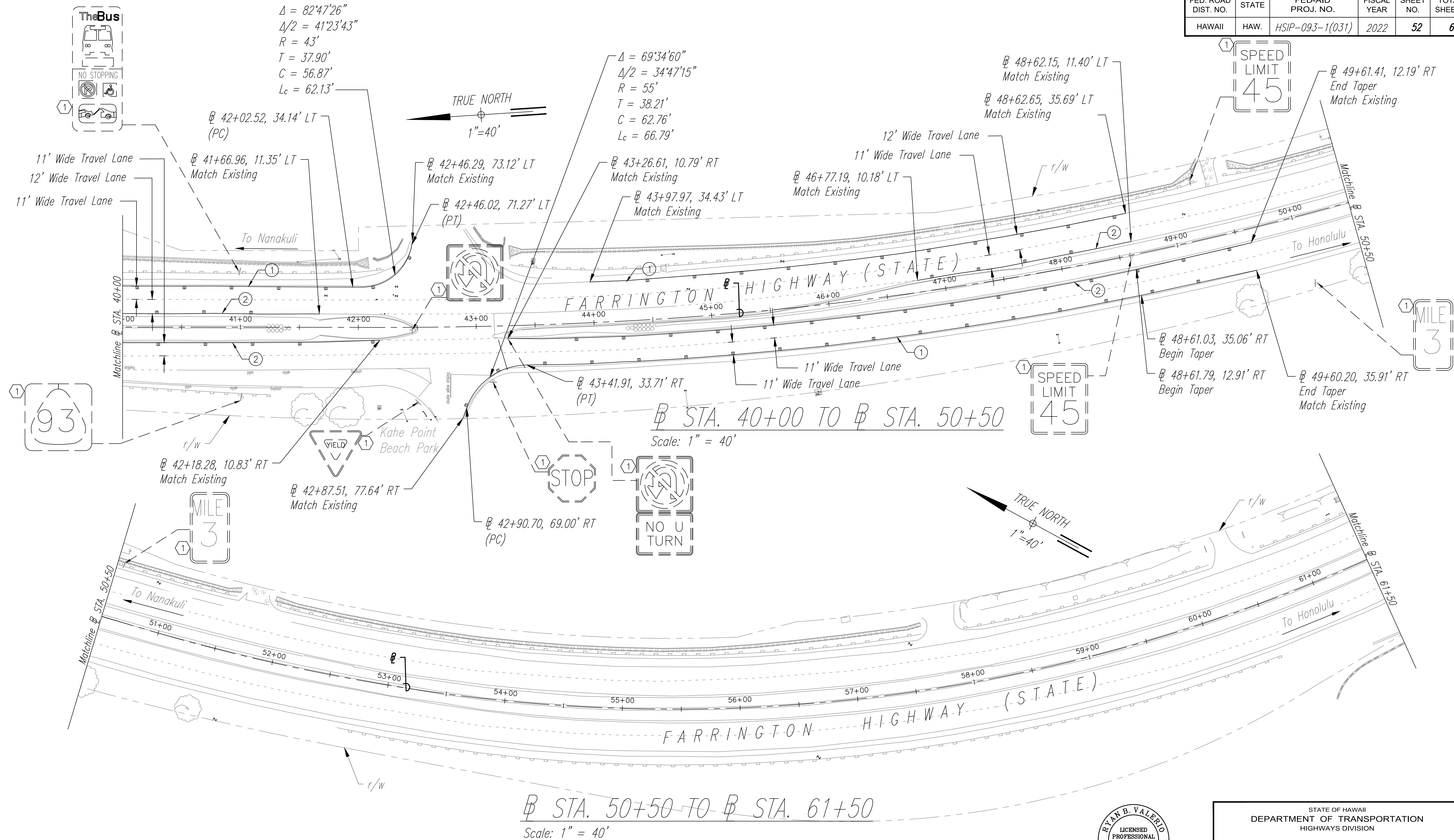
SIGNAGE & STRIPING PLAN - 2  
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS  
Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)  
Date: November 2021

SHEET No. 2 OF 12 SHEETS





FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	52	62



DATE	_____
SURVEY PLOTTED BY	_____
PLAN	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

PAVEMENT MARKING NOTES:

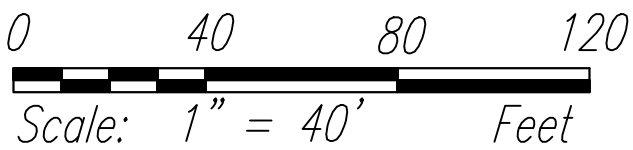
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM
- ② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM

SIGNING NOTES:

- ① Exist. Sign(s) & Post(s) to Remain

LEGEND:

- ① Exist. Sign Post (1)
- ② Exist. Sign Post (2)



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SIGNATURE: *R. B. Valero*

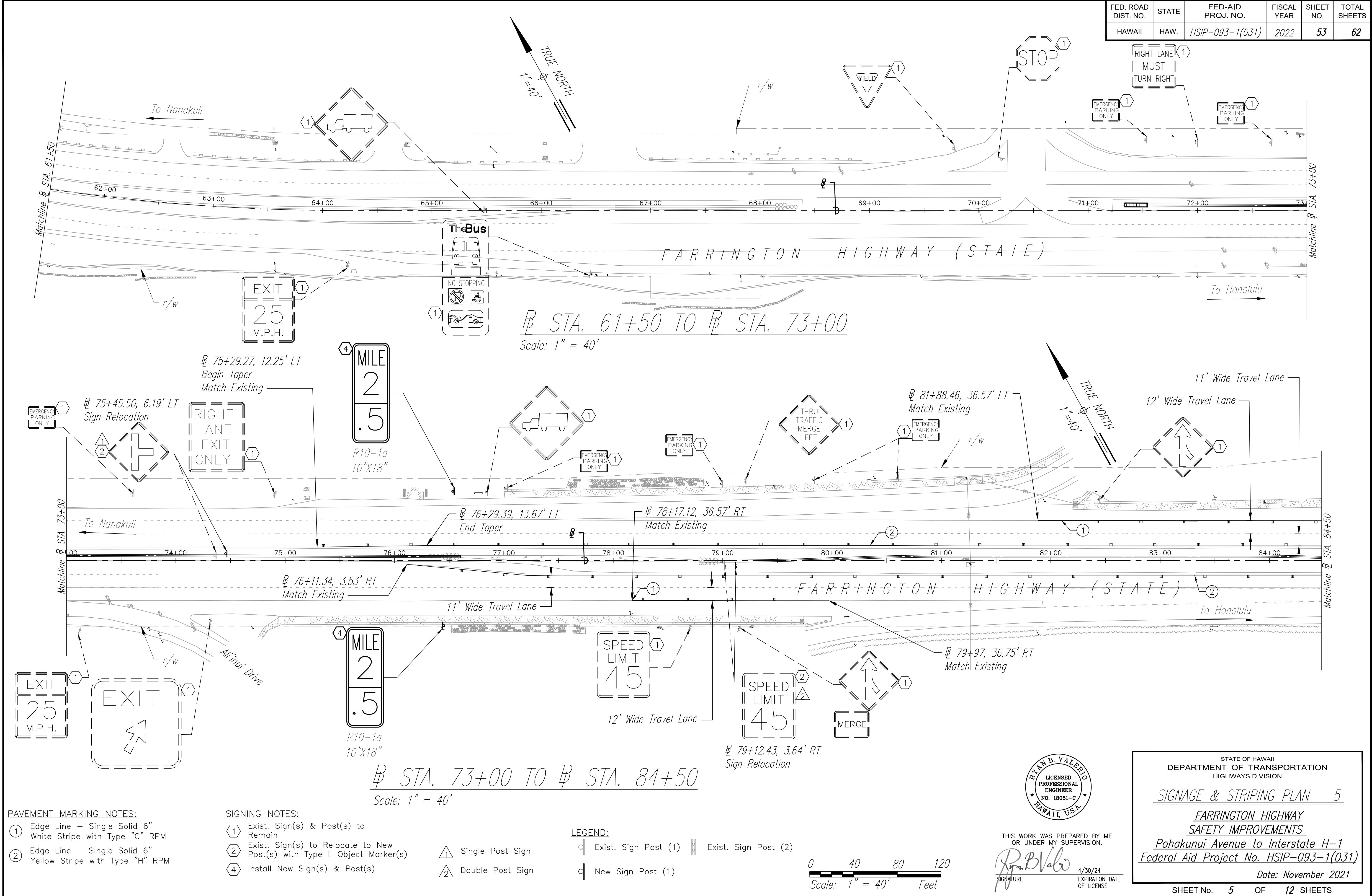
4/30/24  
EXPIRATION DATE OF LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING PLANS - 4  
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS  
Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)  
Date: November 2021

SHEET No. 4 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	53	62



DATE	_____
SURVEY PLOTTED BY	_____
ORIGINAL PLAN	_____
DESIGNED BY	_____
TRACED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

PAVEMENT MARKING NOTES:

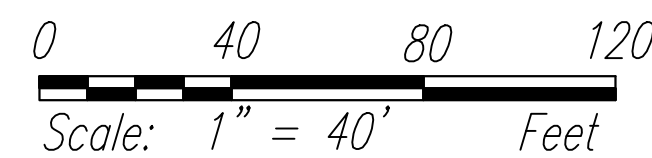
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM
- ② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM

SIGNING NOTES:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Exist. Sign(s) to Relocate to New Post(s) with Type II Object Marker(s)
- ④ Install New Sign(s) & Post(s)
- ① Single Post Sign
- ② Double Post Sign

LEGEND:

- ① Exist. Sign Post (1)
- ② Exist. Sign Post (2)
- ③ New Sign Post (1)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *R. B. Valero*  
Date: 4/30/24  
Expiration Date of License

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING PLAN - 5

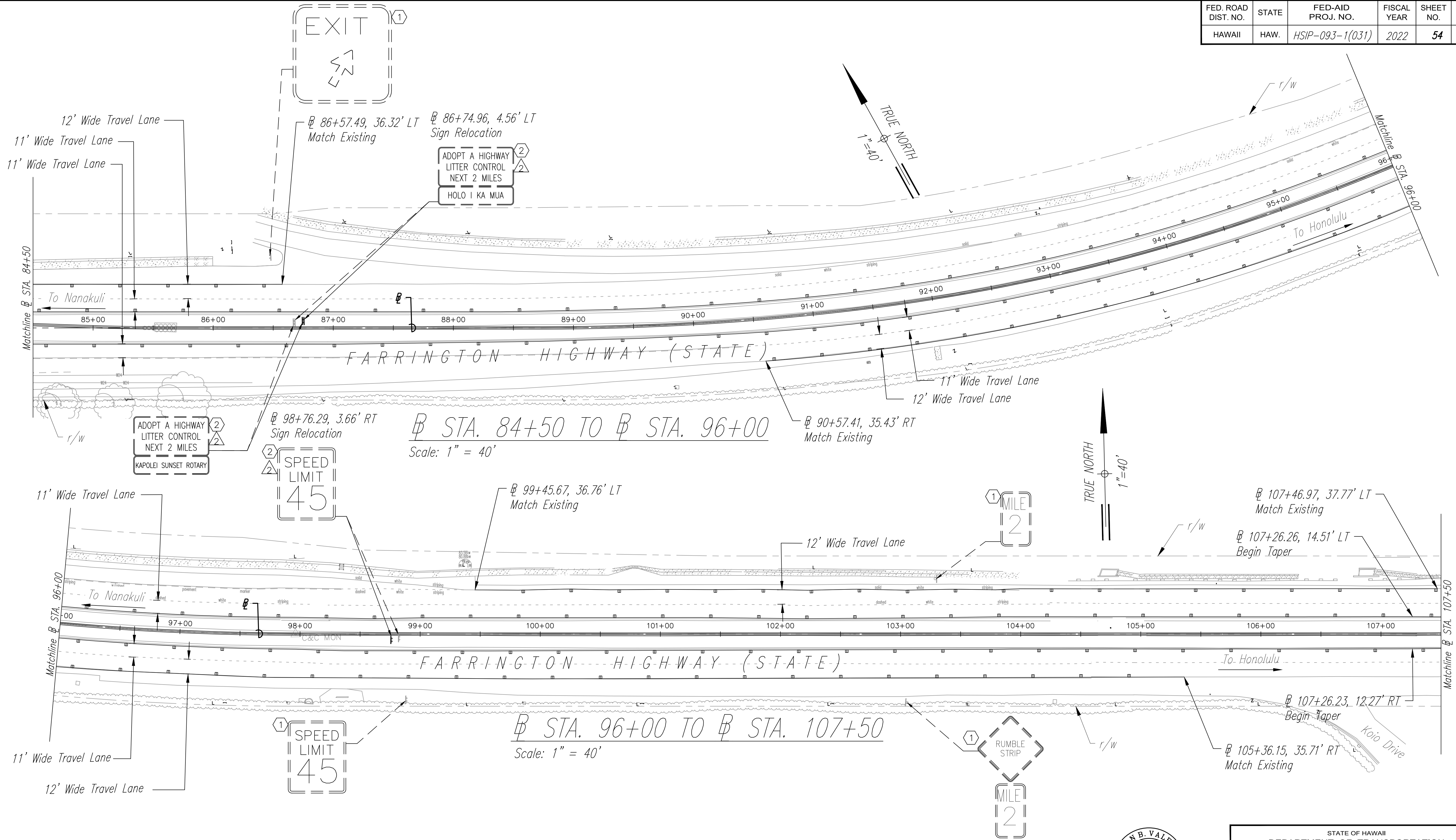
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS

Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)

Date: November 2021

SHEET No. 5 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	54	62



ORIGINAL PLAN	DATE
NO. 1	4/30/24
DESIGNED BY	
CHECKED BY	
TRACED BY	
QUANTITIES BY	
DATE	

PAVEMENT MARKING NOTES:

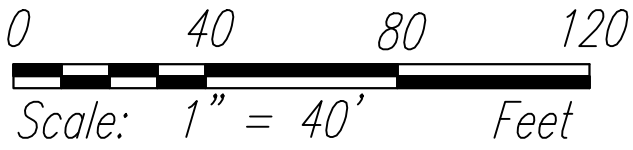
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM
- ② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM

SIGNING NOTES:

- ① Exist. Sign(s) & Post(s) to Remain
- ② Exist. Sign(s) to Relocate to New Post(s) with Type II Object Marker(s)
- △ Double Post Sign

LEGEND:

- Exist. Sign Post (1) □ Exist. Sign Post (2)
- New Sign Post (2)



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SIGNATURE: *R. B. Valero*

EXPIRATION DATE OF LICENSE: 4/30/24

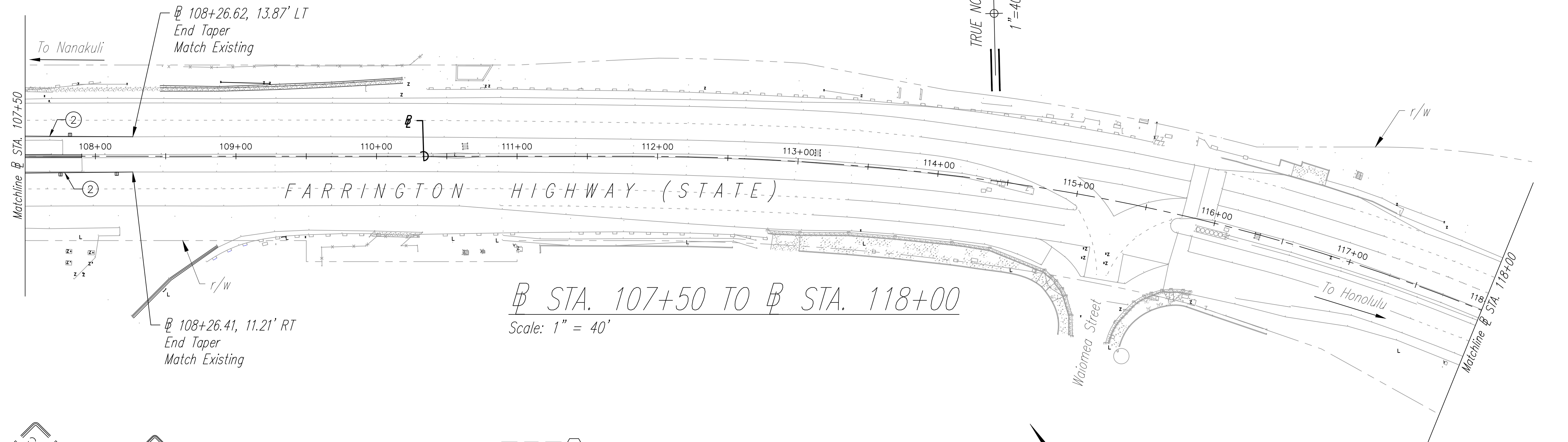
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING PLANS - 6  
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS  
Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)  
Date: November 2021

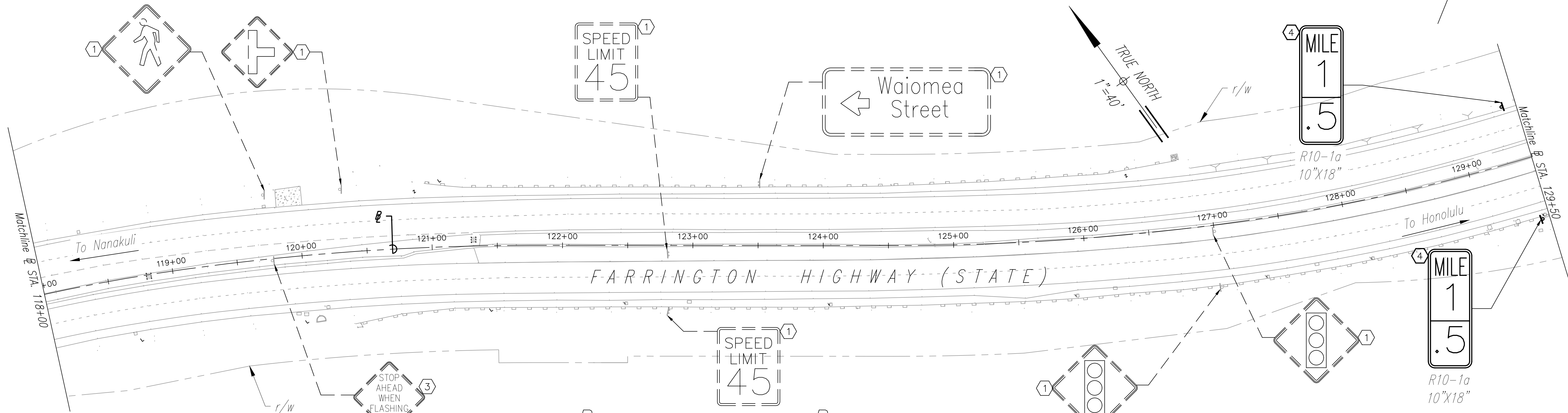
SHEET No. 7 OF 7 SHEETS



FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	55	62



From STA. 107+50 TO STA. 118+00  
Scale: 1" = 40'



From STA. 118+00 TO STA. 129+50  
Scale: 1" = 40'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
NOTE BOOK	QUANTITIES BY	
	CHECKED BY	
No.		

PAVEMENT MARKING NOTES:

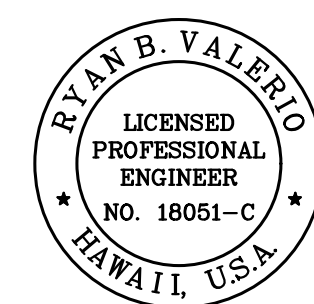
- ② Edge Line - Single Solid 6"
- Yellow Stripe with Type "H" RPM

SIGNING NOTES:

- ① Exist. Sign(s) & Post(s) to Remain
- ③ Exist. Sign(s) on Lt. Pole to Remain
- ④ Install New Sign(s) & Post(s)
- ① Single Post Sign
- ② Double Post Sign

LEGEND:

- ① Exist. Sign Post (1)
- ② Exist. Sign Post (2)



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *R. B. Valero*  
EXPIRATION DATE OF LICENSE: 4/30/24

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING PLAN - 7

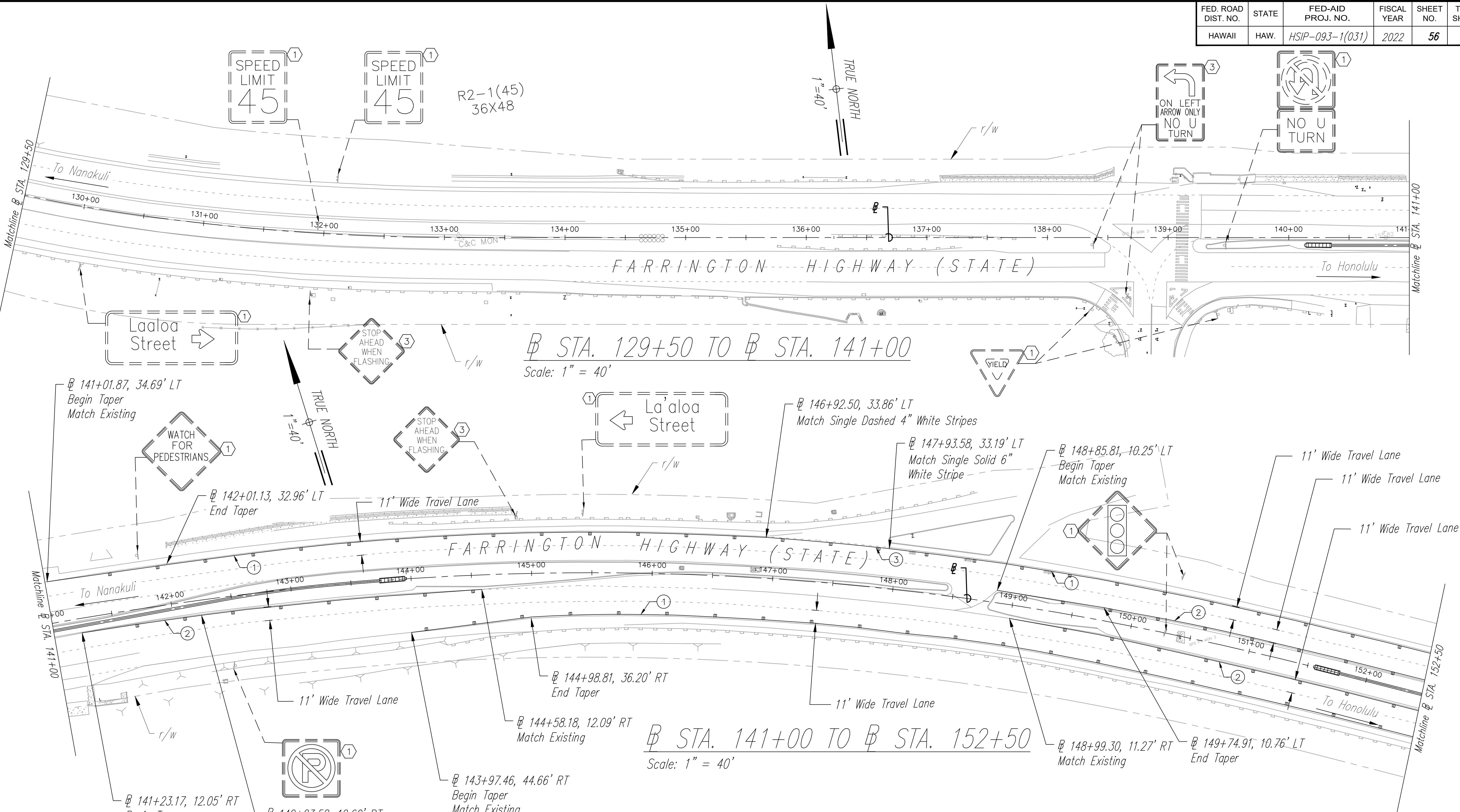
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS

Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)

Date: November 2021

SHEET No. 7 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	56	62



DATE	_____
SURVEY PLOTTED BY	_____
ORIGINAL PLAN	_____
DESIGNED BY	_____
TRACED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
NO.	_____

PAVEMENT MARKING NOTES:

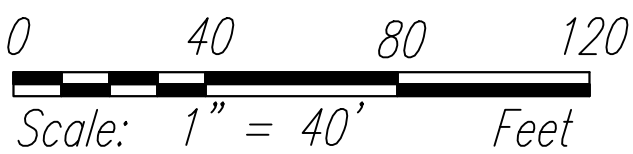
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM  
② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM  
③ Lane Line - Guidance Single Dashed 6" White Stripe

SIGNING NOTES:

- ① Exist. Sign(s) & Post(s) to Remain  
③ Exist. Sign(s) on Lt. Pole to Remain

LEGEND:

- ① Exist. Sign Post (1)  
③ Exist. Sign Post (2)



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SIGNATURE: *Ryan B. Valero*  
EXPIRATION DATE OF LICENSE: 4/30/24

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNAGE & STRIPING PLAN - 8**

**FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS**

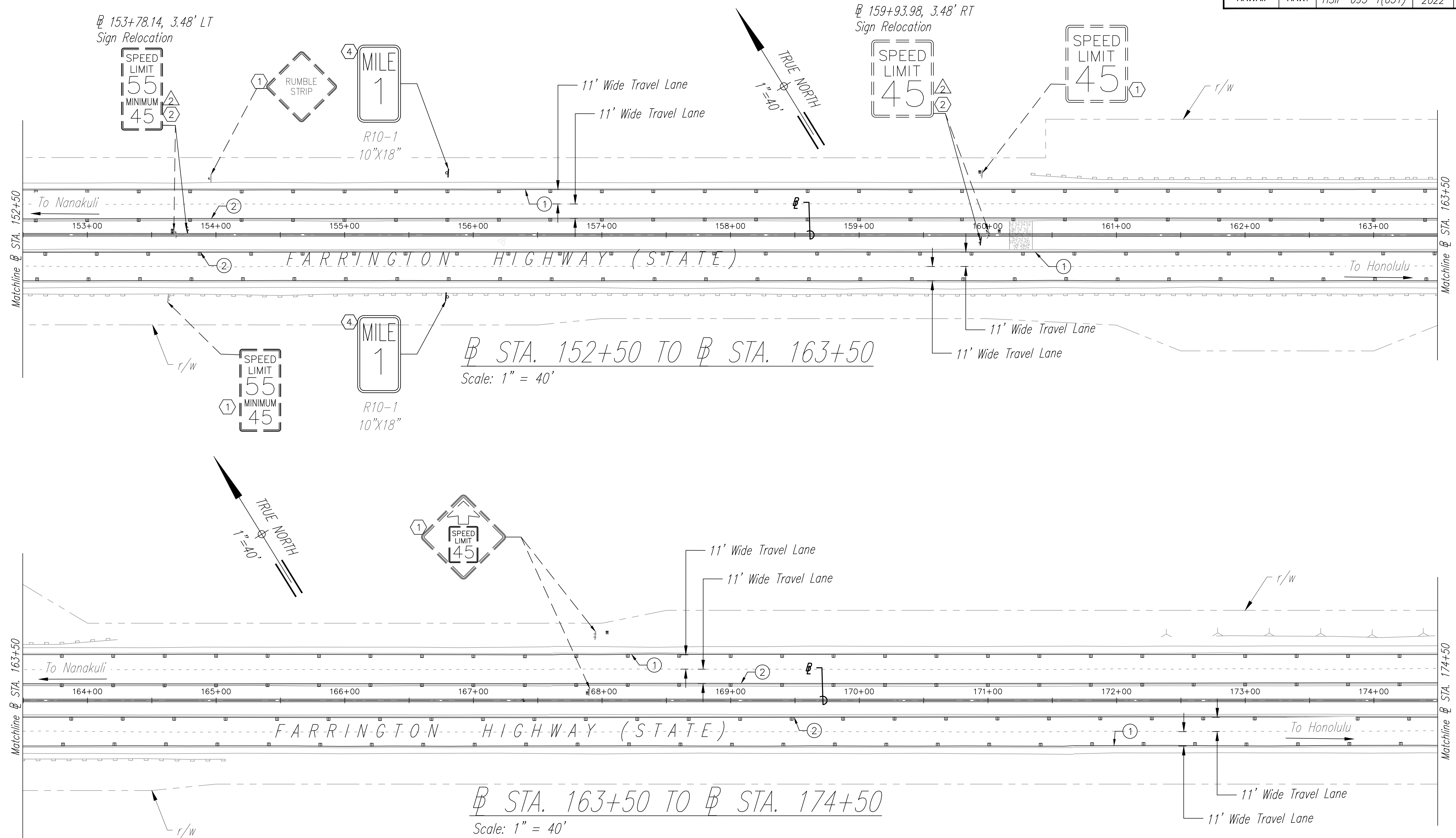
**Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)**

Date: November 2021

SHEET No. 8 OF 12 SHEETS



FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	57	62

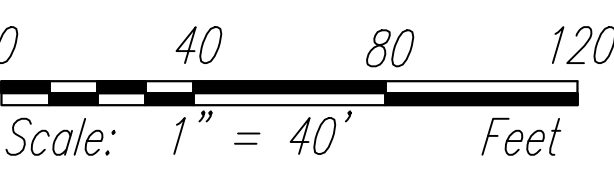


ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

- PAVEMENT MARKING NOTES:
- ① Edge Line - Single Solid 6" White Stripe with Type "C" RPM
  - ② Edge Line - Single Solid 6" Yellow Stripe with Type "H" RPM

- SIGNING NOTES:
- ① Exist. Sign(s) & Post(s) to Remain
  - ② Exist. Sign(s) to Relocate to New Post(s) with Type II Object Marker(s)
  - ④ Install New Sign(s) & Post(s)

- LEGEND:
- ② Double Post Sign
  - Exist. Sign Post (1)
  - ⌚ Exist. Sign Post (2)
  - ⌚ New Sign Post (2)



RYAN B. VALERO  
LICENSED PROFESSIONAL ENGINEER  
NO. 18051-C  
HAWAII, U.S.A.

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Signature: *R. B. Valero*  
EXPIRATION DATE OF LICENSE: 4/30/24

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING PLAN - 9

FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS  
Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)

Date: November 2021

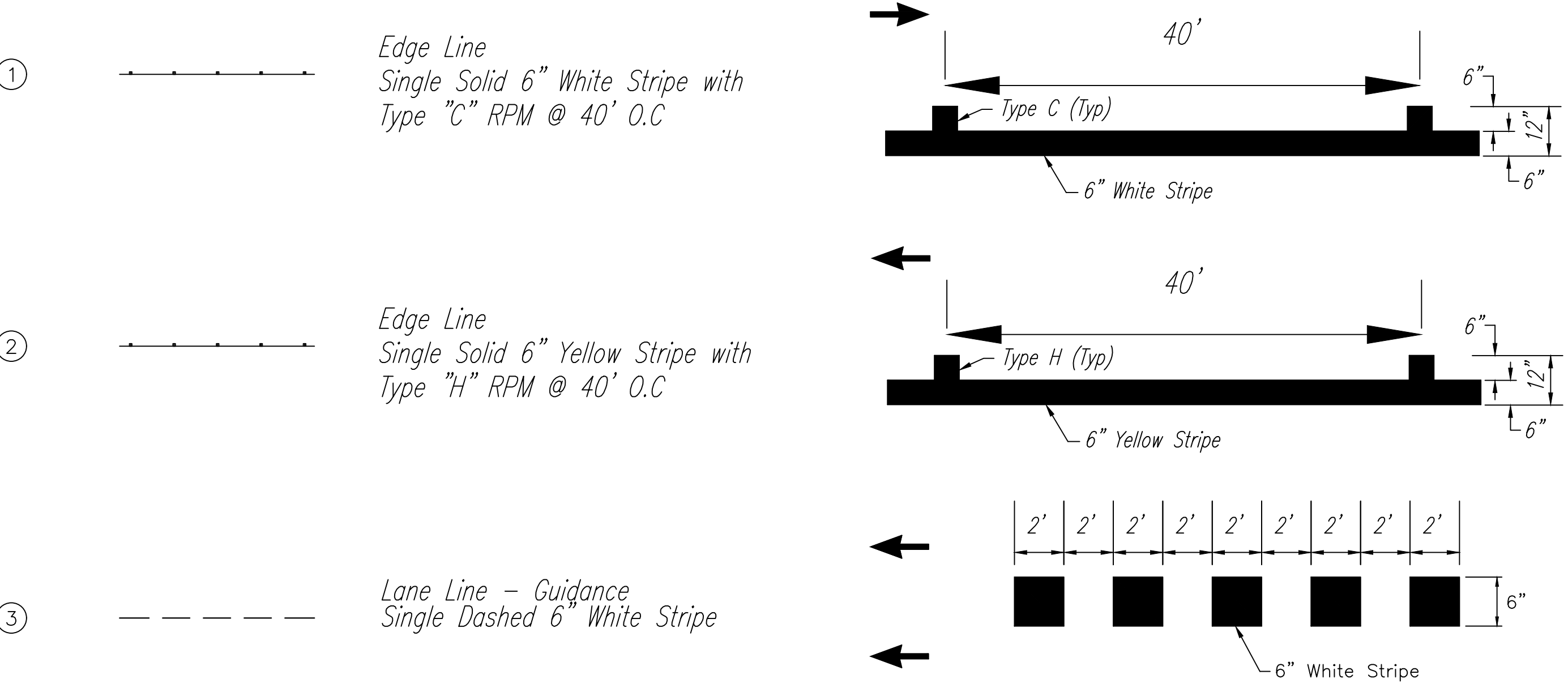
SHEET No. 9 OF 12 SHEETS



FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	59	62

SIGNAGE & STRIPING 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. The Contractor shall consider the work required for the removal of pavement markings incidental to the various contract items.
- The cost for temporary pavement markings shall be incidental to the various pavement marking contract items.
- Raised pavement markers shall not be installed within crosswalks.
- Final locations of all signs shall be approved by the Engineer prior to any installation work.
- All pavement striping shall be as noted on the legend or plans.
- Existing signs that are to be replaced shall not be removed until new signs are installed as replacements, or the messages are no longer necessary.
- Backing for all new regulatory and warning signs shall not be spliced.
- All sign panels shall conform to Section 750.01 of Standard Specifications and the latest editions and amendments of the following FHWA publications:
  - "Manual on Uniform Traffic Control Devices for Streets and Highways" (M.U.T.C.D.)
  - "Standard Highway Signs"
  - "Standard Alphabets For Highway Signs"
- All relocated signs and markers installed on pipe posts or light standard are to be mounted on new square tubes with band brackets and steel braces.
- 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.
- Removal of existing delineators and posts, as directed by the Engineer or shown on the plans, shall be considered incidental to the various signing items.
- Sign posts shall be square tubes posts (2" or 2 1/2") unless shown on these plans or directed by Engineer.
- All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as directed by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
- Prior to installing new striping, existing striping and markers shall be completely removed according to Specification Section 629.03(D) Removal of Existing Pavement Markings. This work shall be incidental to the various striping pay items and shall not be paid for separately.



PAVEMENT MARKING LEGEND  
Not To Scale



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OR UNDER MY SUPERVISION.

SIGNATURE  
R. B. Valero

EXPIRATION DATE  
4/30/24  
OF LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE & STRIPING DETAILS

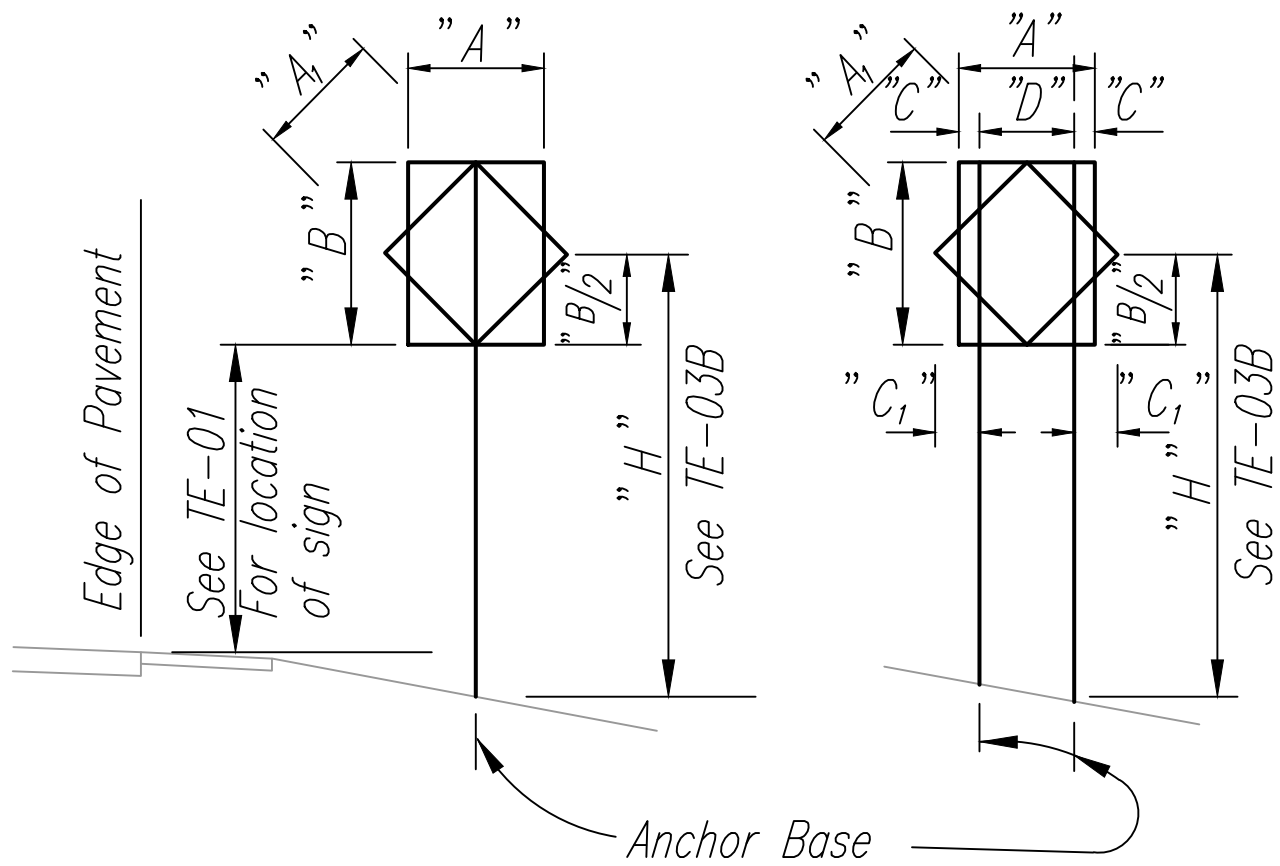
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS

Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)

Date: November 2021



FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HSIP-093-1(031)	2022	60	62



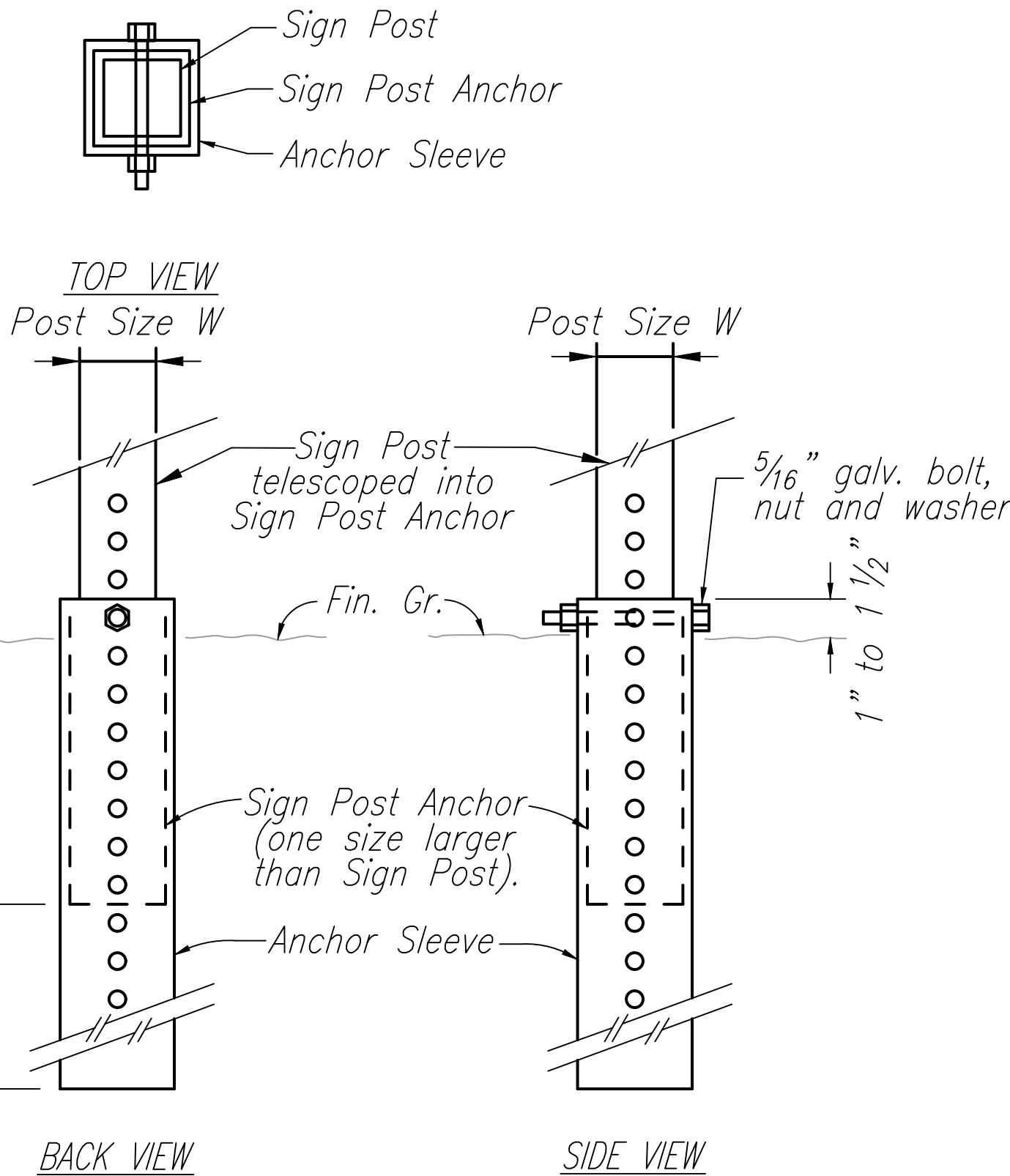
1 - POST  
"A" or "A<sub>1</sub>" less than 36"

2 - POST  
"A" or "A<sub>1</sub>" less than 60"

"A" or "A <sub>1</sub> "	"C"	"C <sub>1</sub> "
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 posts shall be 12 gage unless otherwise specified or shown on the plans.
  - Square tube posts shall be perforated with 7/16"  $\phi$  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 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.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
No.	



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION.

*R. B. Valero*  
SIGNATURE

4/30/24  
EXPIRATION DATE  
OF LICENSE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

SIGNAGE DETAIL  
FARRINGTON HIGHWAY  
SAFETY IMPROVEMENTS  
Pohakunui Avenue to Interstate H-1  
Federal Aid Project No. HSIP-093-1(031)  
Date: November 2021