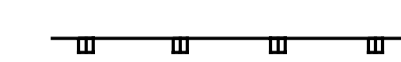


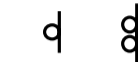


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-16(003)	2020	12	48

GENERAL 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 costs shall be incidental to the various pavement marking items.
- 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.
- All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape's manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
- The Contractor shall erect advanced construction warning signs at the beginning and at the end of the project site. Construction warning signs shall be placed as indicated on the plans or as directed by the Engineer. The signs shall be kept in place for the duration of the 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 - Work Zone Traffic Control.
- 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 630, 631 and 632 of Special Provisions, DOT standard plans, and the latest editions and amendments of the following FHWA publications:
 - "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
- Removal of existing signs, delineators and posts, as directed by the Engineer or as shown on the plans, shall be considered incidental to the various signing items.
- All existing signs and posts that are to remain but are removed for the Contractor's convenience shall be re-installed at no cost to the State.

PAVEMENT MARKING AND SIGNING LEGEND:

-  4" White Edge Stripe with Type C Raised Pavement Markers at 20' o.c.
-  4" Double Yellow Stripe with Type D Raised Pavement Markers at 10' o.c.
-  New or Relocated Sign (Single & Double Post)
-  Existing Sign

SIGNING NOTES:

- Sign details shall conform to the latest editions and amendments of the following FHWA publications: "Manual on Uniform Traffic Control Devices for Streets and Highways", "Standard Highway Signs" and "Standard Alphabets for Highway Signs".
- For Miscellaneous Sign Details, see Standard Plan TE-01 to TE-07, TE-09, & TE-14.
- Existing Signs to be removed shall be disposed of by the Contractor. Removal of signs shall also include the removal of post and foundation to a minimum height of 1-foot below the ground.
- The Contractor shall backfill all holes, depressions and pits left by the removal of the existing signs with embankment material and grass all areas exposed.
- Trim existing vegetation for installation of the sign and to provide a clear view of the sign.

PAVEMENT MARKING NOTES:

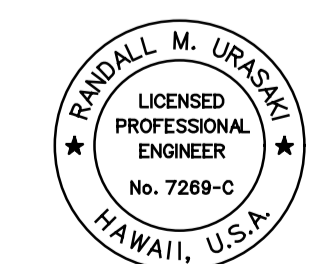
- All pavement striping, legends and symbols shall be retroreflective thermoplastic compound pavement markings.
- Location of pavement markers is shown schematically. For exact location of markers in relation to stripe, see Standard Plan TE-26.
- The Contractor shall remove all RM-2 Markers along the roadside and within the pavement area which conflict with the proposed construction.

ABBREVIATIONS:

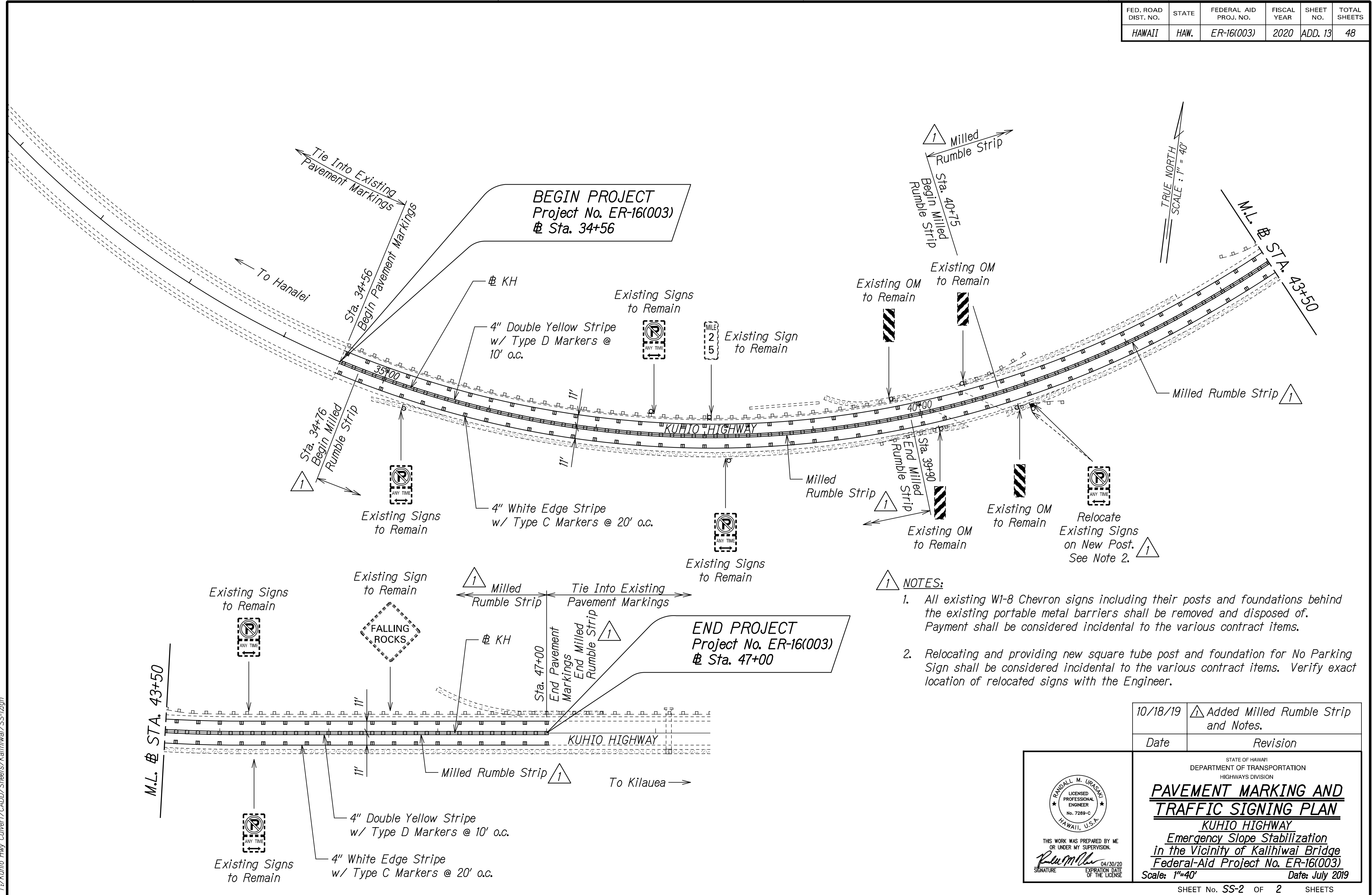
- OM Object Marker
- RM Reflector Markers
- RPM Raised Pavement Markers

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

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 <p>THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.</p> <p>Signature: <i>R. Urasaki</i> 04/30/20 SIGNATURE EXPIRATION DATE OF THE LICENSE</p>	<p>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</p> <p>PAVEMENT MARKING AND TRAFFIC SIGNING NOTES AND LEGEND</p> <p>KUHIO HIGHWAY <i>Emergency Slope Stabilization</i> <i>in the Vicinity of Kalihiwai Bridge</i> <i>Federal-Aid Project No. ER-16(003)</i></p> <p>Scale: NONE Date: July 2019</p>
	<p>SHEET No. SS-1 OF 2 SHEETS</p>

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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- NOTES:**
- All existing W1-8 Chevron signs including their posts and foundations behind the existing portable metal barriers shall be removed and disposed of. Payment shall be considered incidental to the various contract items.
 - Relocating and providing new square tube post and foundation for No Parking Sign shall be considered incidental to the various contract items. Verify exact location of relocated signs with the Engineer.

10/18/19	Added Milled Rumble Strip and Notes.
Date	Revision

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *R. Urasaki* Date: 04/30/20
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING AND TRAFFIC SIGNING PLAN

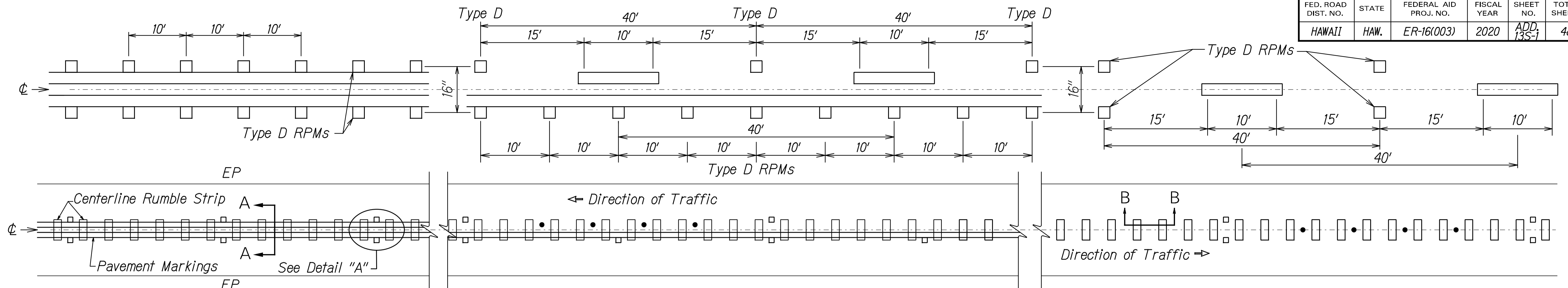
KUHIO HIGHWAY
Emergency Slope Stabilization
in the Vicinity of Kalihiwai Bridge
Federal-Aid Project No. ER-16(003)

Scale: 1"=40' Date: July 2019

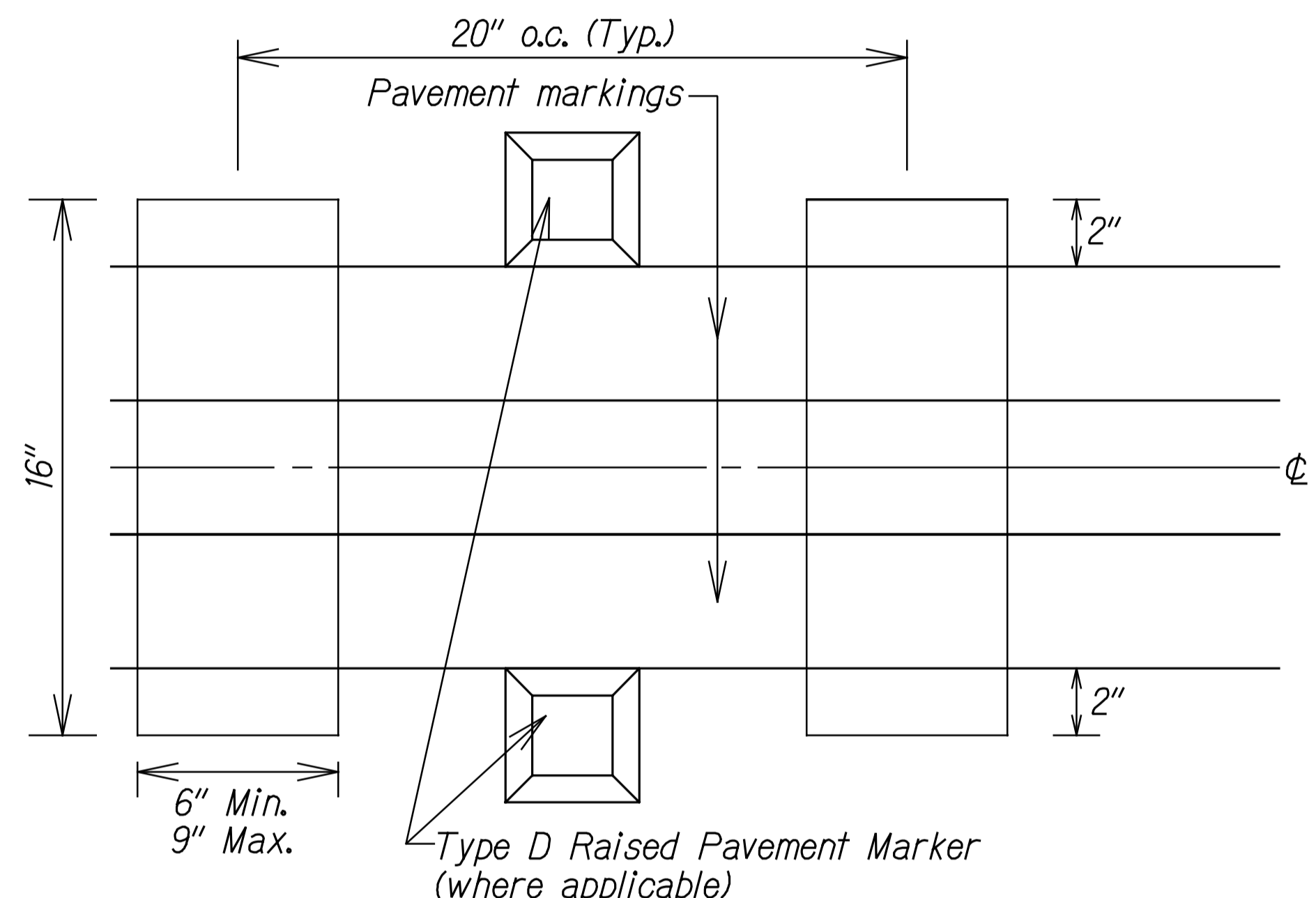
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DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO. _____	

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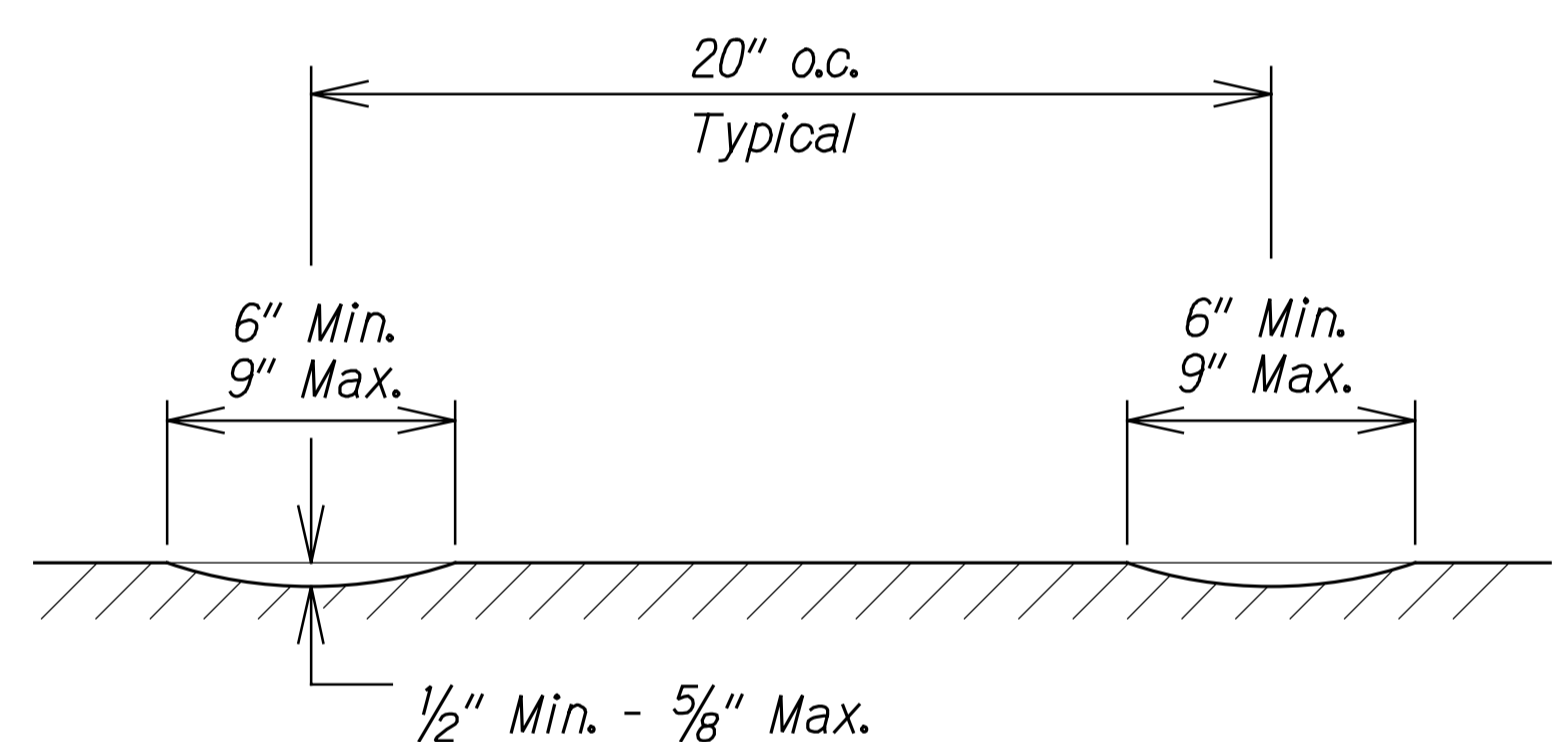
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-16(003)	2020	ADD. 13S-1	48



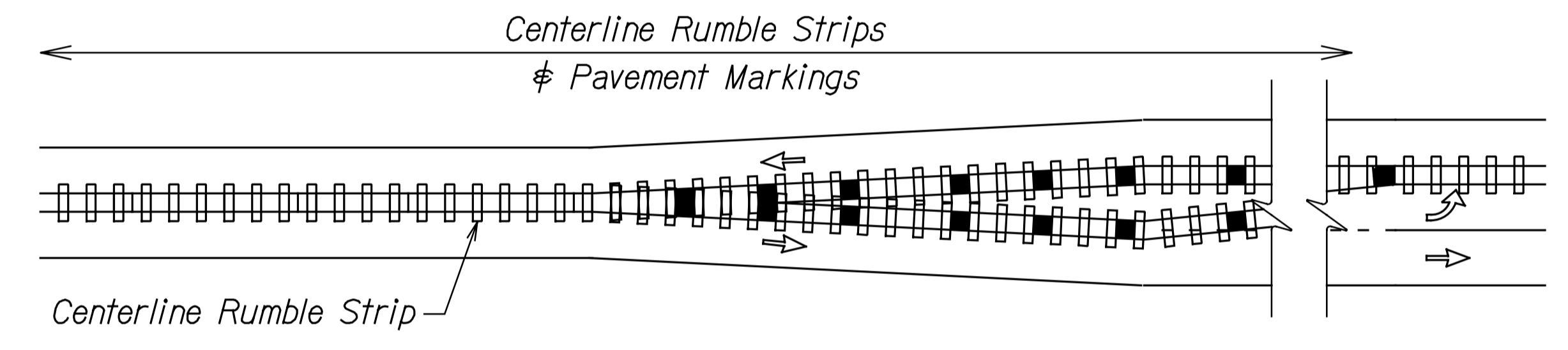
PLAN - CENTERLINE MILLED RUMBLE STRIP
Not to Scale



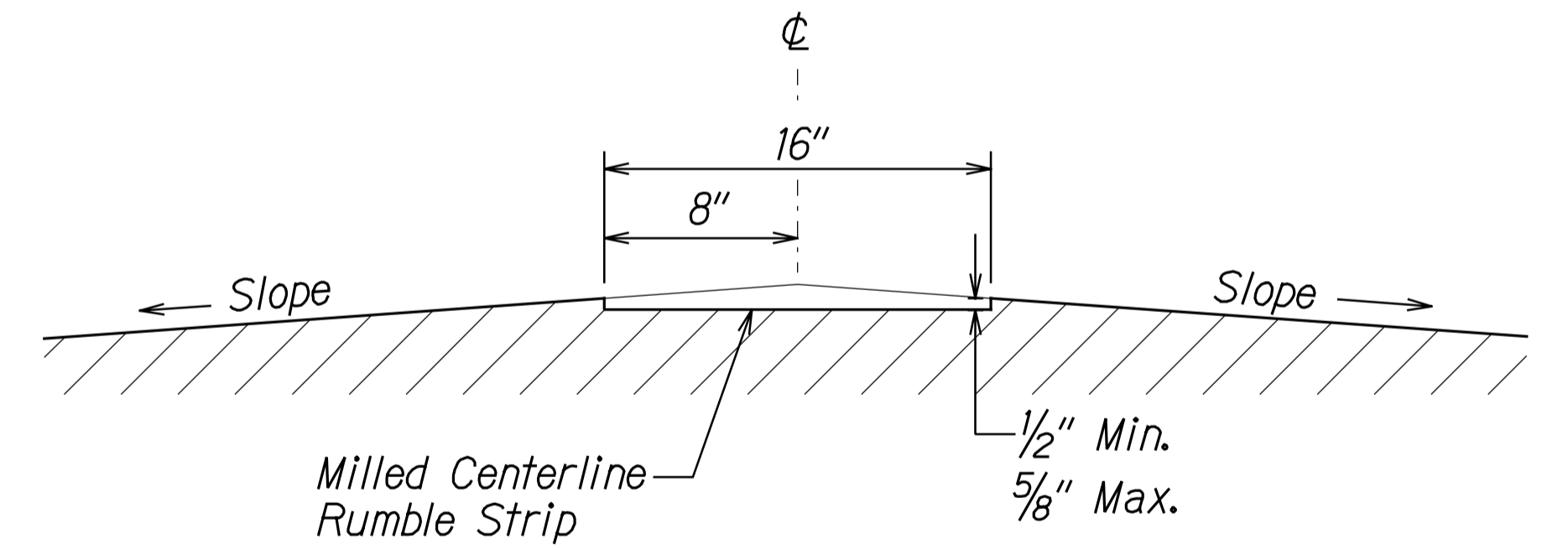
DETAIL "A"
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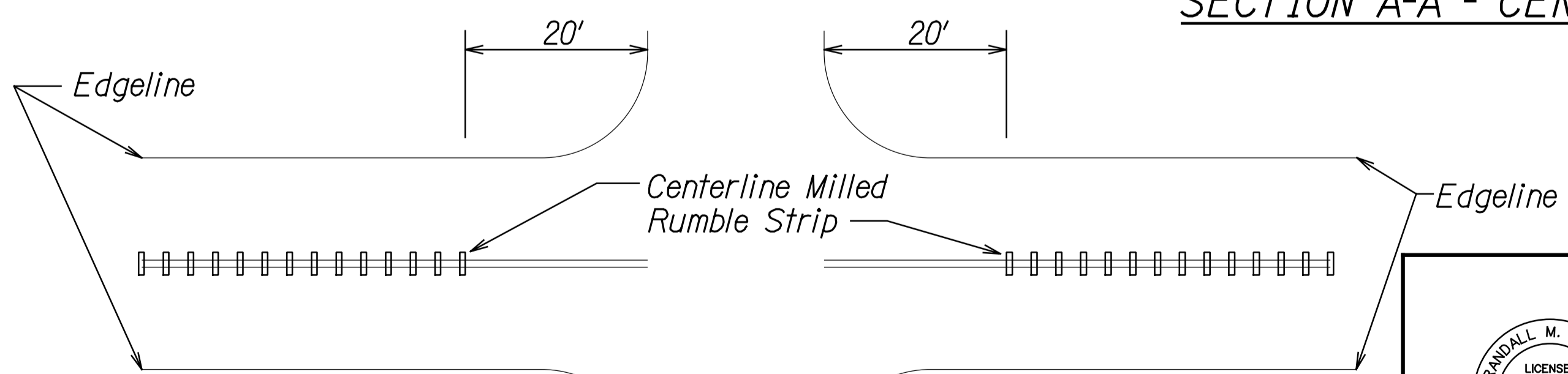
SECTION B-B - CENTERLINE MILLED RUMBLE STRIP
Not to Scale



CENTERLINE MILLED RUMBLE STRIP INSTALLATION LIMIT
Not to Scale



SECTION A-A - CENTERLINE MILLED RUMBLE STRIP
Not to Scale



MILLED RUMBLE STRIP INSTALLATION LIMITS
Not to Scale

NOTES:

1. The method of constructing the centerline milled rumble strip shall be submitted to the Engineer for acceptance prior to the actual work.
2. Dimensions shown are approximate. Adjust rumble strip spacing to coordinate with pavement markings prior to installation.
3. Raised pavement markers shall be installed on level surface between the rumble strips. Do not install raised pavement markers inside the milled area.
4. The construction of the centerline milled rumble strip shall be paid for under Item No. 615.1000 - 16-Inch Milled Rumble Strip, Centerline.
5. The milling apparatus and removal of existing pavement markings will not be paid for separately and shall be considered incidental to Item 615.1000 - 16-Inch Milled Rumble Strip, Centerline.
6. Do not install centerline rumble strips on bridge decks.
7. Where at-grade bridges are present, rumble strips shall end/begin 20 L.F. beyond the existing bridge deck joints/concrete approach slab.
8. Hot spray thermoplastic shall be used for solid line markings within the milled centerline rumble strip area. Hot spray thermoplastic shall be paid for under Item No. 629.1011 - Double 4-inch Pavement Striping.
9. Seal entire surface of Milled Rumble Strips by applying/coating emulsified asphalt. This scope of work shall be incidental to Item No. 615.1000 - 16-inch Milled Rumble Strip, Centerline.

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

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10/18/19	New Sheet
Date	Revision

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CENTERLINE MILLED RUMBLE STRIP DETAIL

KUHIO HIGHWAY
Emergency Slope Stabilization
in the Vicinity of Kalihiwai Bridge
Federal-Aid Project No. ER-16(003)

Scale: As Shown Date: July 2019

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Signature: *R. Urasaki* 04/30/20
EXPIRATION DATE OF THE LICENSE

SHEET No. SS-2A OF 2 SHEETS