GENERAL NOTES

- The scope of work for this project consists of removing substandard guardrail end treatments to be replaced with hardware that meets current safety standards, curb and median construction, and removal of concrete barrier ramp downs.
- 2. The Contractor is reminded of the requirements of Subsection 105.16 Subcontracts, which requires him to perform work to not less than 30 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
- 3. The Contractor's attention is directed to the following Sections: Subsection 104.11 Utilities and Services; Subsection 107.06 Contractor Duty Regarding Public Convenience; and Section 645 Work Zone Traffic Control.
- 4. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic. Contractor shall protect existing barrier ends after each working day and be concsidered incidental to various contract items.
- The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data, but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
- 6. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
- 7. The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.
- 8. Existing drainage system shall be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to any culvert work or the various contract items and will not be paid for separately.
- 9. Contractor to restore all landscaped areas damaged according to Section 641, Hydro-Mulch Seeding.
- 10. The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to bulk of work or the various contract items and will not be paid for separately.
- 11. Removal and disposal of existing curb and gutter, curb, sidewalk and asphalt concrete pavement, curb, sidewalk and any debris shall be considered incidental to their respective bid items
- 2. All saw cutting work shall be considered incidental to the various contract items.
- 13. The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes, and side streets and cross streets at all times. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
- 14. When installing guardrail posts within 3' from the waterline, the post shall be hand placed and not driven. The holes shall be backfilled and compressible material, ASTM C33 Coarse Aggregate, Size no. 57. This work shall be considered incidental to Guardrail items and shall not be paid for seperatelly.

- The Contractor shall provide and maintain a temporary pedestrian safe and easily accessible route or detour with barricades in or near the work zone. This temporary route or detour shall be paved with at least an inch of Asphalt Concrete Pavement, Mix No V or steel and/or wood planks and shall be American With Disabilities Act (ADA) compliant [This is only applicable if existing surface is dirt and/or if existing surface is non-ADA compliant.]. This work shall be incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
- The Contractor shall preserve all existing striping by locating them with survey nails at the begin and end of each type of striping, including 50' intervals along curves and 100' intervals along tangents. The location of the installed survey nails shall be within 0.5 inch of where the existing striping was located. Striping includes but is not limited to the following: centerline, lane lines, stop bars, yield lines, crosswalks, medians, words, and arrows. This work shall be incidental to the various contract items.
- 17. Drilling of holes shall be considered incidental to Various Guardrail Items and will not be paid for separately
- 8. Any unfinished shoulder widening, metal railings, guardrails, and median drainage work shall not be left unshielded at the end of the work day. Refer to State Standard Plans for more information. The contractor shall develop a Traffic Control Plan to include all necessary Traffic Control Devices and shall be approved by the Engineer. All work mentioned above including furnishing, installing, and maintaining traffic control devices shall be considered incidental to Contract Item No. 645.0100 Traffic Control and shall not be paid for separately.
- 19. The exact location and limits of guardrail improvements shall be determined in the field by the Engineer.
- 20. The Contractor shall verify the exact locations of any underground utilities within the project limits prior to installing guardrail posts. The Contractor shall adjust new guardrail posts within manufacturer's specifications to account for the actual locations of underground utilities. Probing foor utilities and adjusting new guardrail posts shall be considered incidental to various items of work. The Contractor shall be held liable for any damages incurred to existing facilities and/or improvements as a result oof his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at the Contractor's expense.
- 21. Asphalt concrete around guardrails shall be considered incidental to Guardrail Items and will not be paid for separately.
- 22. Refer to State Standard Plans Irrigation Details and Notes for information on the relocation of exisitng sprinklers.

NATIONAL HISTORIC PRESERVATION ACT SECTION 106 NOTES

- 1. This project has been determined to have no potential to cause effects to historic properties. Therefore, the Contractor shall ensure the following:
 - a. No part of this project shall penetrate below the subbase course of the roadway or disturb any subgrade soils.
 - i. In the event a pothole is found that is deeper than subgrade, repairs must be made without disturbing the soil. Use of geotextile fabric is encouraged. Make a note of the repairs and the GPS location so that recurring potholes may be addressed in a future project.
 - No signposts in this project require new ground disturbance. Any signpost replacements shall be done in their existing locations.
 - c. Guardrail repairs shall be done within the existing right-of-way, shall not disturb previously undisturbed soils, and shall not penetrate below the sub-base course of the roadway.
 - d. Vegetation maintenance shall be limited to activities that do not penetrate the sub-base course of the roadway, or roadway shoulders.
 - e. No part of this project, including staging, shall occur outside of the existing right-of-way, unless it is on a paved surface.
 - f. Staging areas must be within existing asphalt paving or previously graded areas.
 - g. Bridgework shall be limited to repaving activities.
 - Site 50-10-12-30924, located near mile post 9.95, is a modified depression of unknown function constructed during the historic period that lies outside of the APE of this project. Contractor shall not stage near the site.

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In the event of any conflict between this section and any other sections, plans, and or specifications of the project, this section shall prevail.

ENDANGERED SPECIES ACT SECTION 7 NOTES

1. <u>Hawaiian Seabirds</u>

To avoid or minimize effects to Hawaiian seabirds, the following conservation measures shall be incorporated into each project where applicable:

- a. Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary.
- Install automatic motion sensor switches and timer controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- Avoid nighttime construction during the seabird fledging period, September 15 to December 15 on all islands. If nighttime work cannot be avoided during that time, this PIC cannot be used, and a separate consultation is needed.
- Where fences extend above vegetation, integrate durable scare tape or bird deterrent into the fence to increase visibility and minimize fence strikes.
- For power lines and other cables, minimize exposure above vegetation height and vertical profile.

If the project includes a tower or antennae, then the following conservation measures shall be incorporated into each project:

- f. The profile of the tower shall be as small as possible, minimizing the extent of the tower that protrudes above the surrounding vegetation layer, use of guy-wires shall be avoided.
- g. If the top of the tower must be lit to comply with Federal Aviation Administration regulations, use a flashing red light versus a steady-beam red or white light.
- h. If possible, co-locate with existing towers or facilities.

2. Hawaiian Hoary Bat

To avoid or minimize effects to the Hawaiian Hoary Bat the following conservation measures shall be incorporated into each project where applicable: a. No barbed wire shall be used for fencing.

b. No woody plants taller than 15 feet will be trimmed, removed, or disturbed during the Hawaiian hoary bat birthing and pup rearing season (June 1 to September 15).

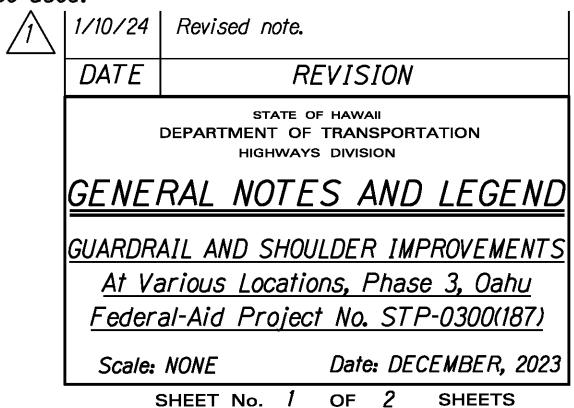
3. Blackburn's Sphinx Moth

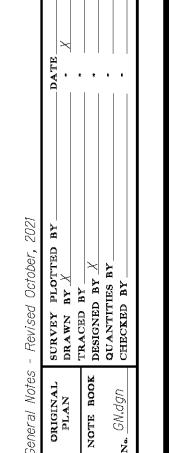
To avoid or minimize effects to the Blackburn's Sphinx Moth the following conservation measures shall be incorporated into each project where applicable:

- A biologist familiar with the species shall survey areas of proposed activities for Blackburn's sphinx moth and its larval host plants prior to project initiation.

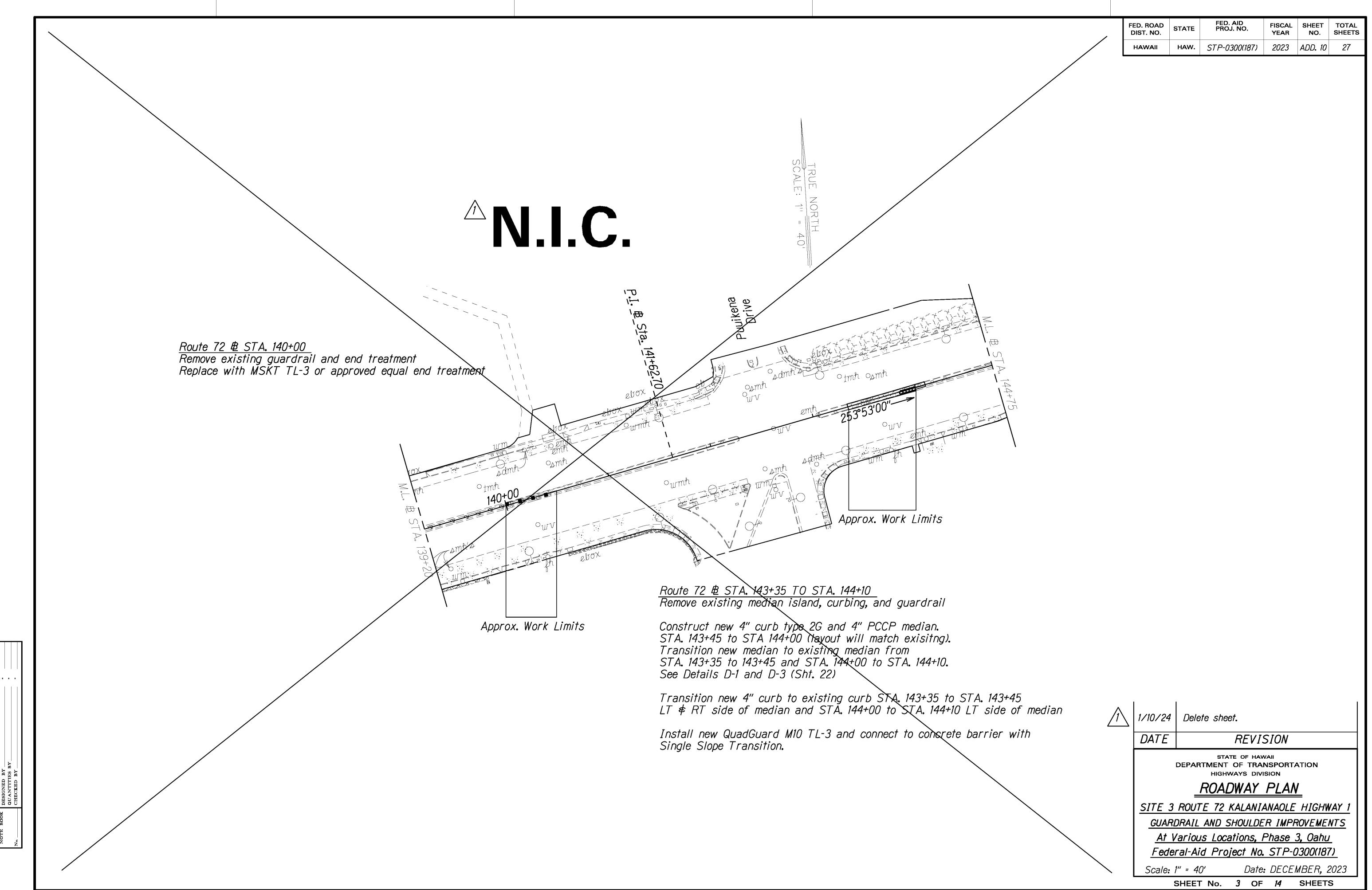
 b. Surveys shall be conducted during the wettest portion of the year
- (November 1 to April 30, or several weeks after a significant rain) and within 4 to 6 weeks prior to construction.

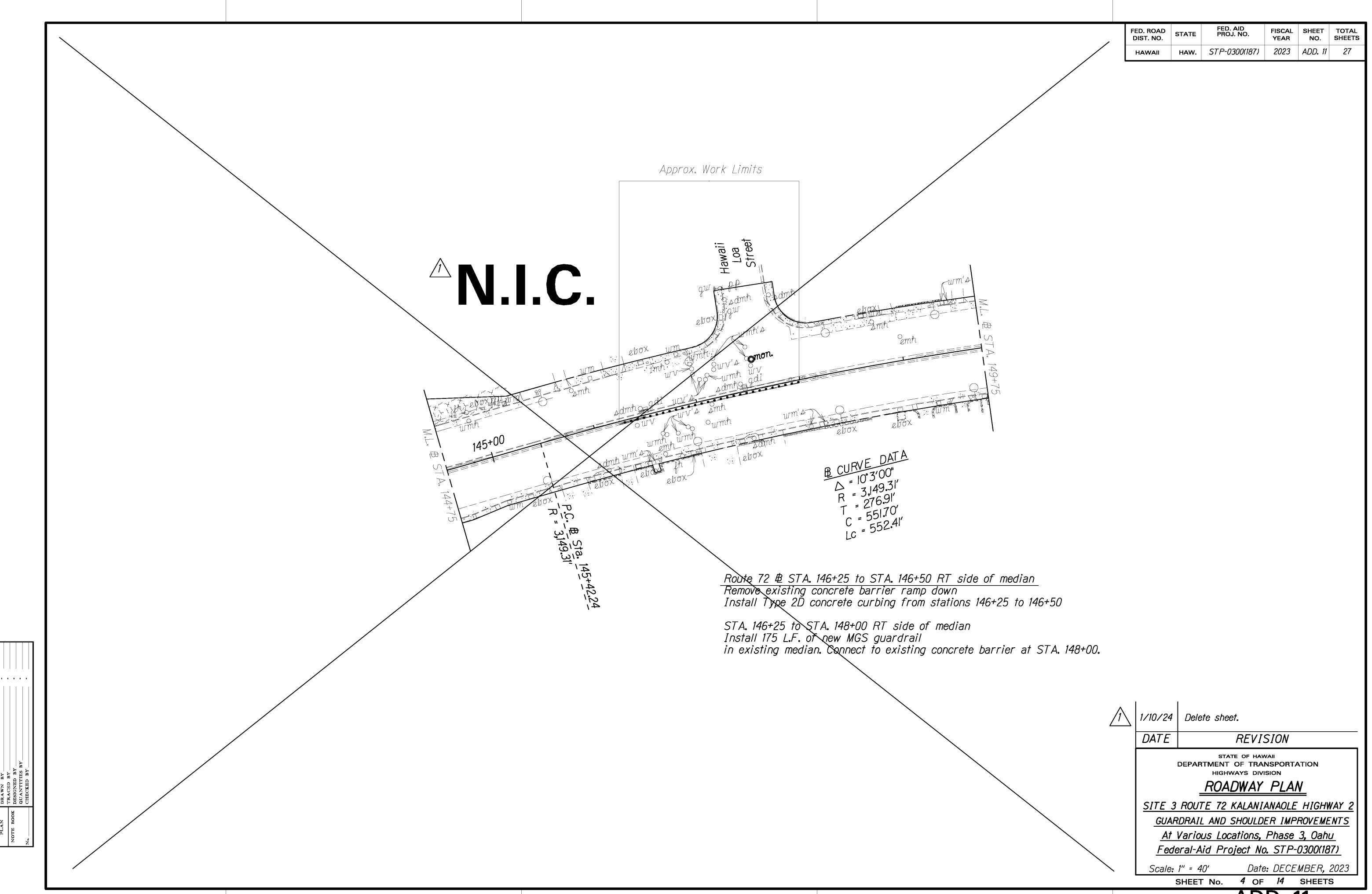
 Surveys shall include searches for eggs, larvae, and signs of larval feeding (chewed stems, frass, or leaf damage).
- d. If the Blackburn's sphinx moth or the native alea or tree tobacco over 3 feet tall are found during the survey, a separate consultation is needed, and this PIC shall not be used.





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1 1/10/24 Delete sheet.

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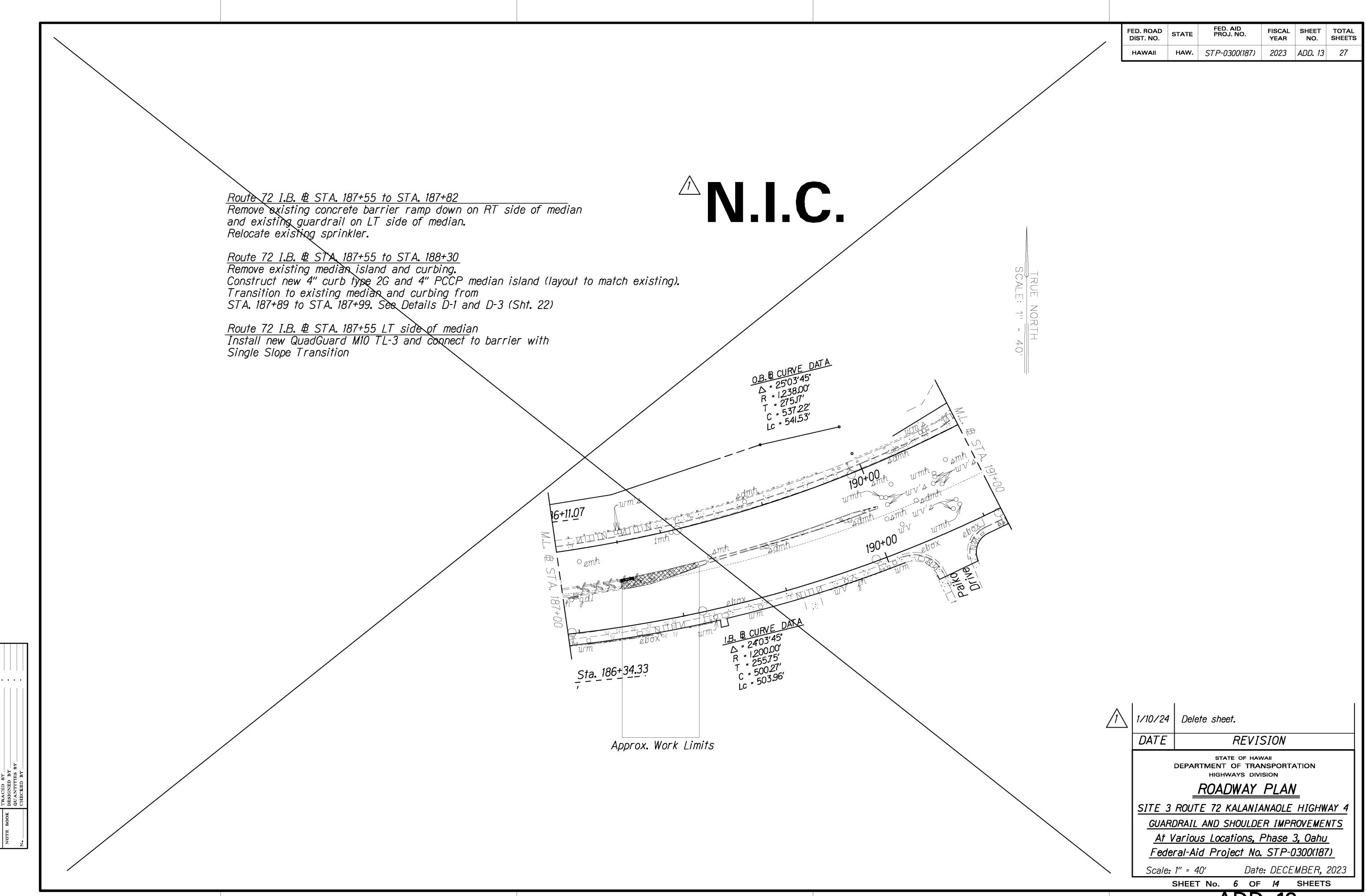
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

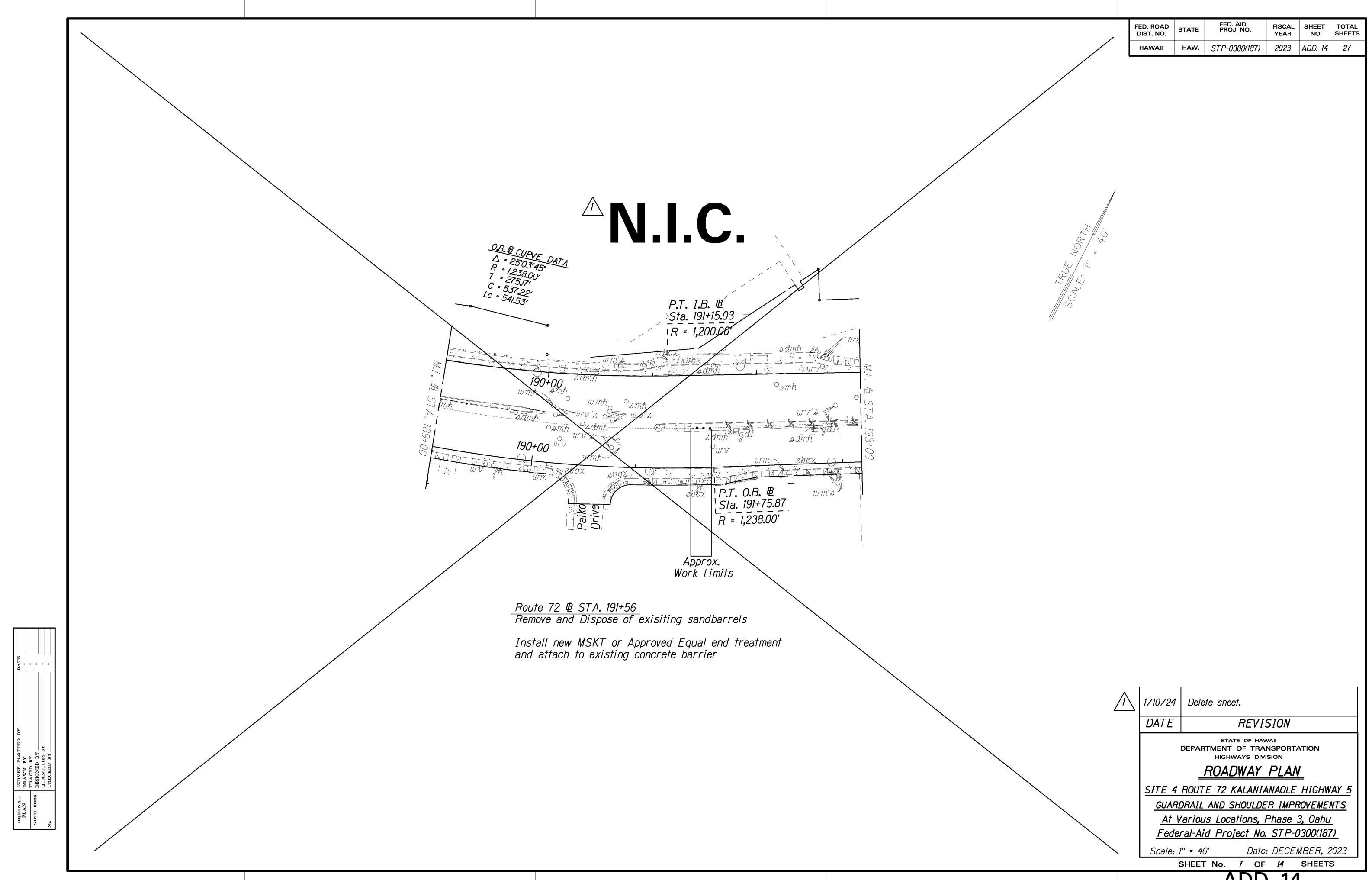
ROADWAY PLAN

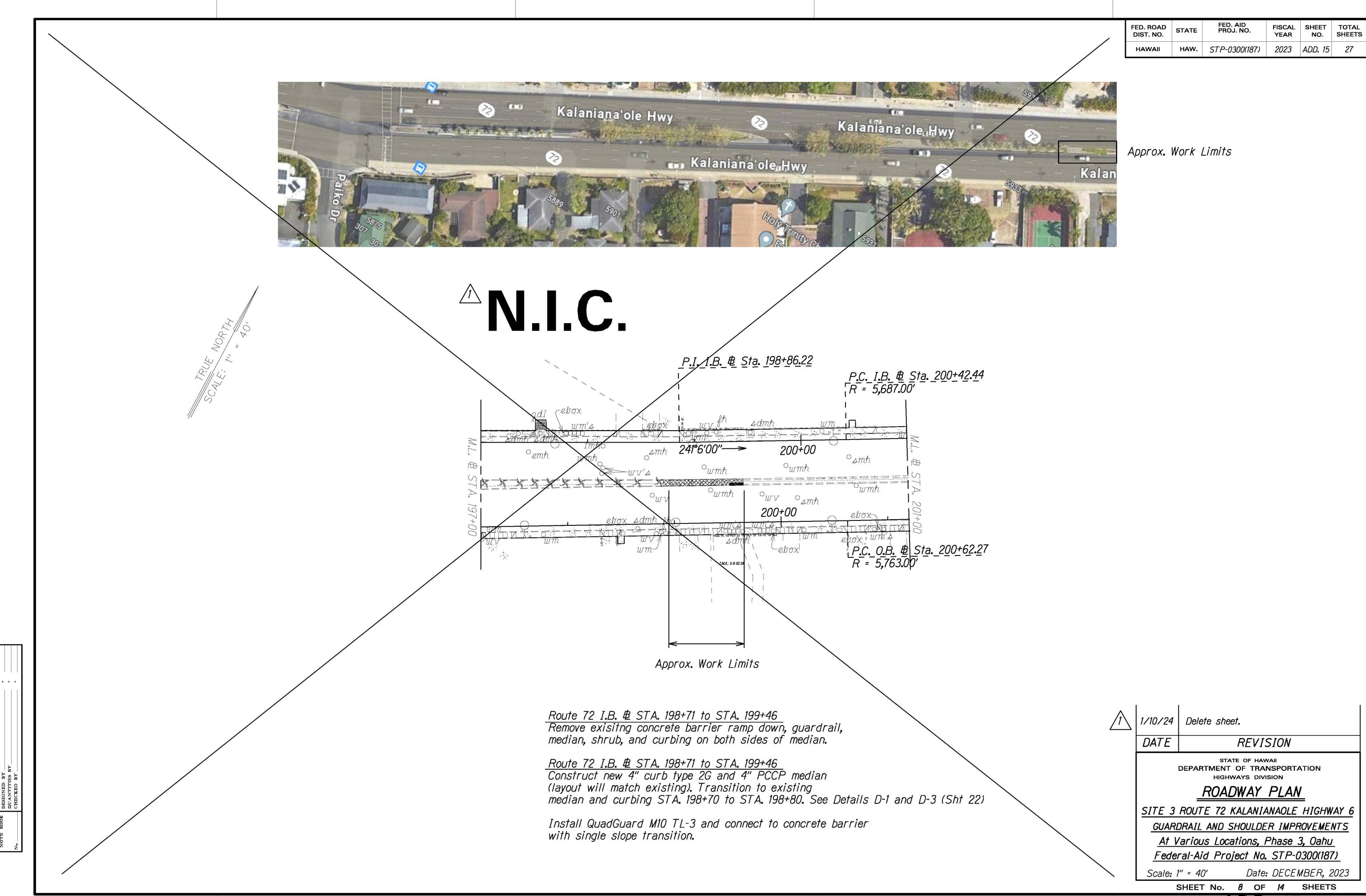
SITE 3 ROUTE 72 KALANIANAOLE HIGHWAY 3 GUARDRAIL AND SHOULDER IMPROVEMENTS At Various Locations, Phase 3, Oahu

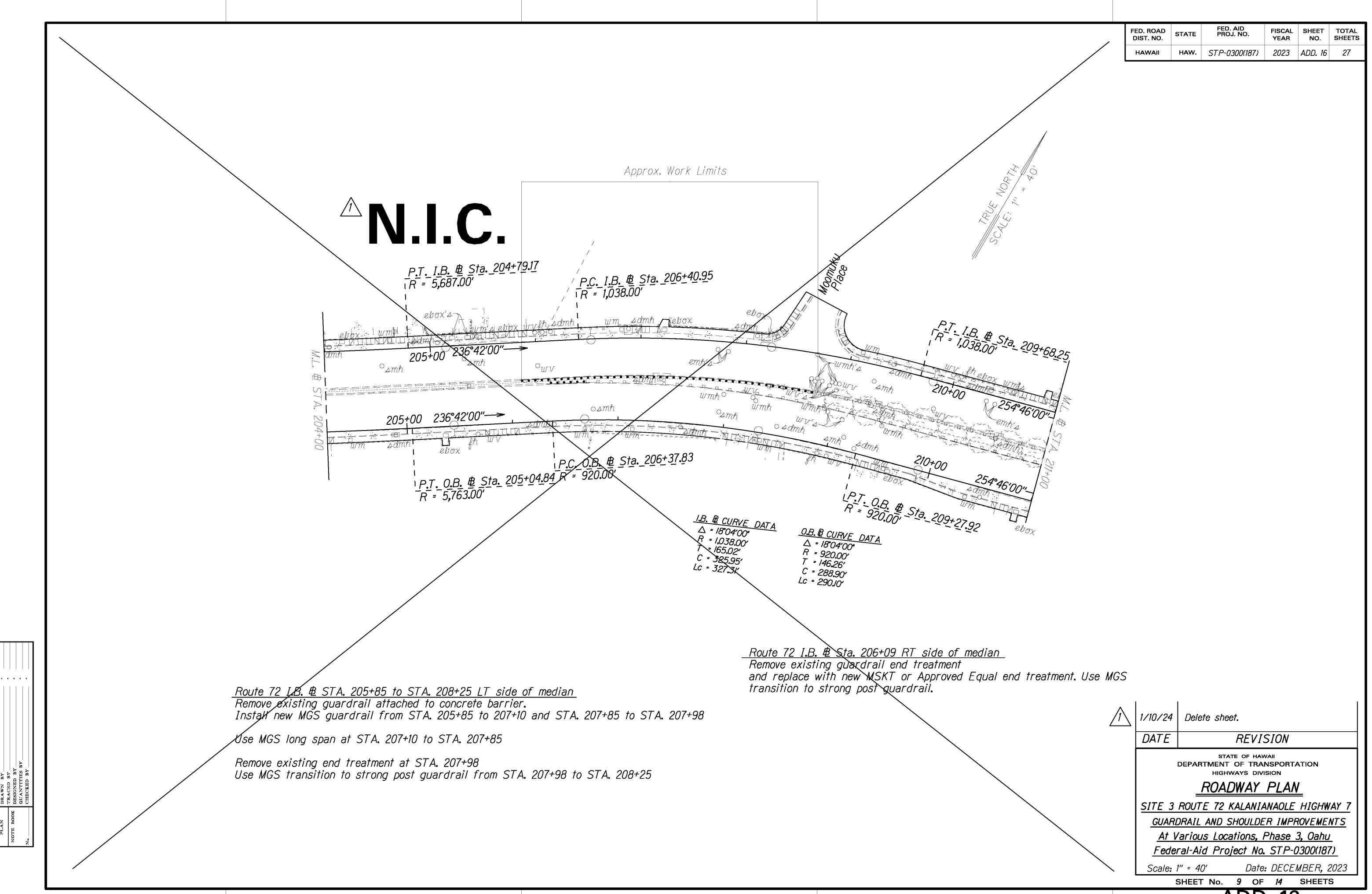
Federal-Aid Project No. STP-0300(187)

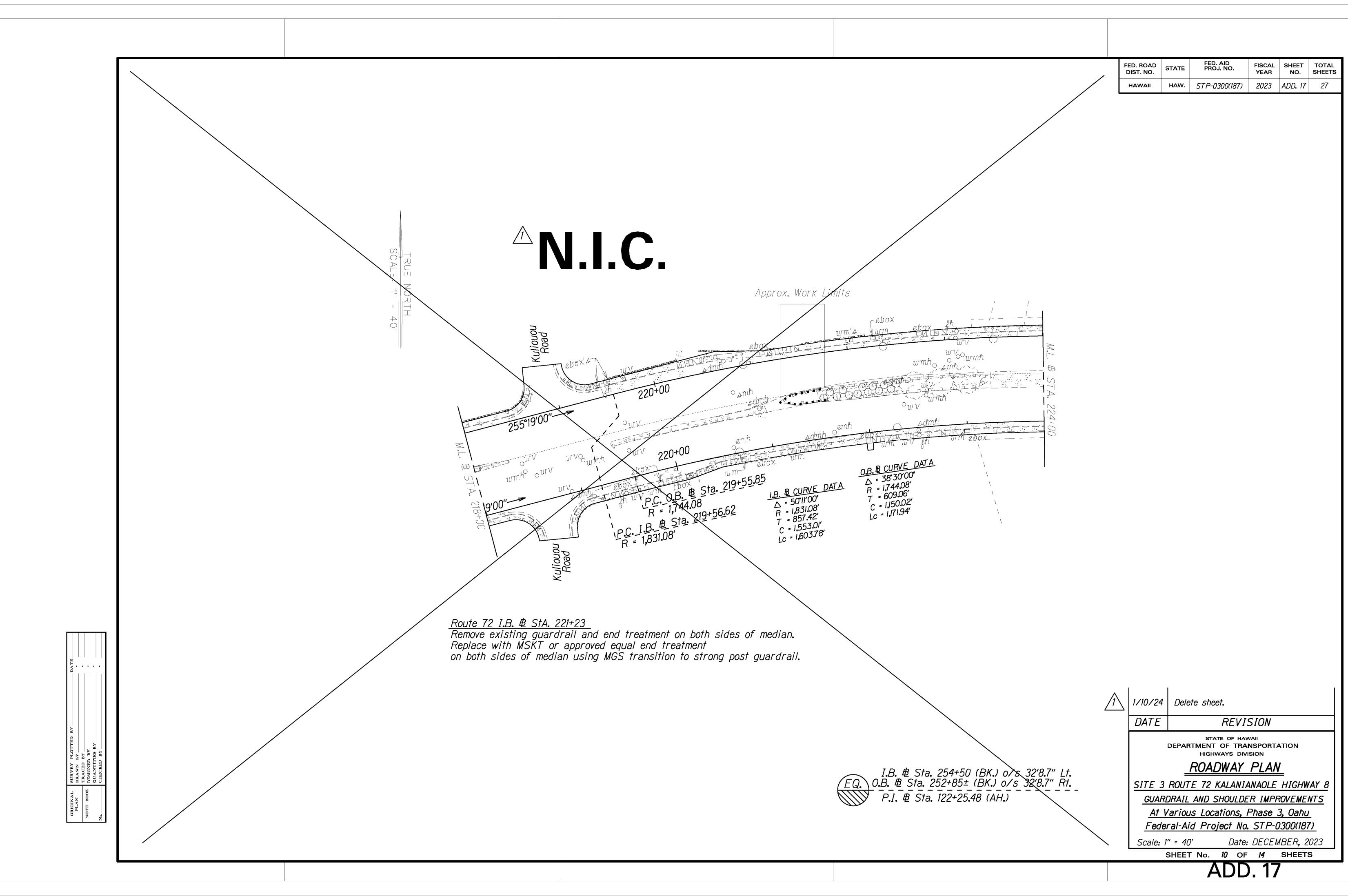
Scale: 1" = 40' Date: DECEMBER, 2023 SHEET No. 5 OF 14 SHEETS

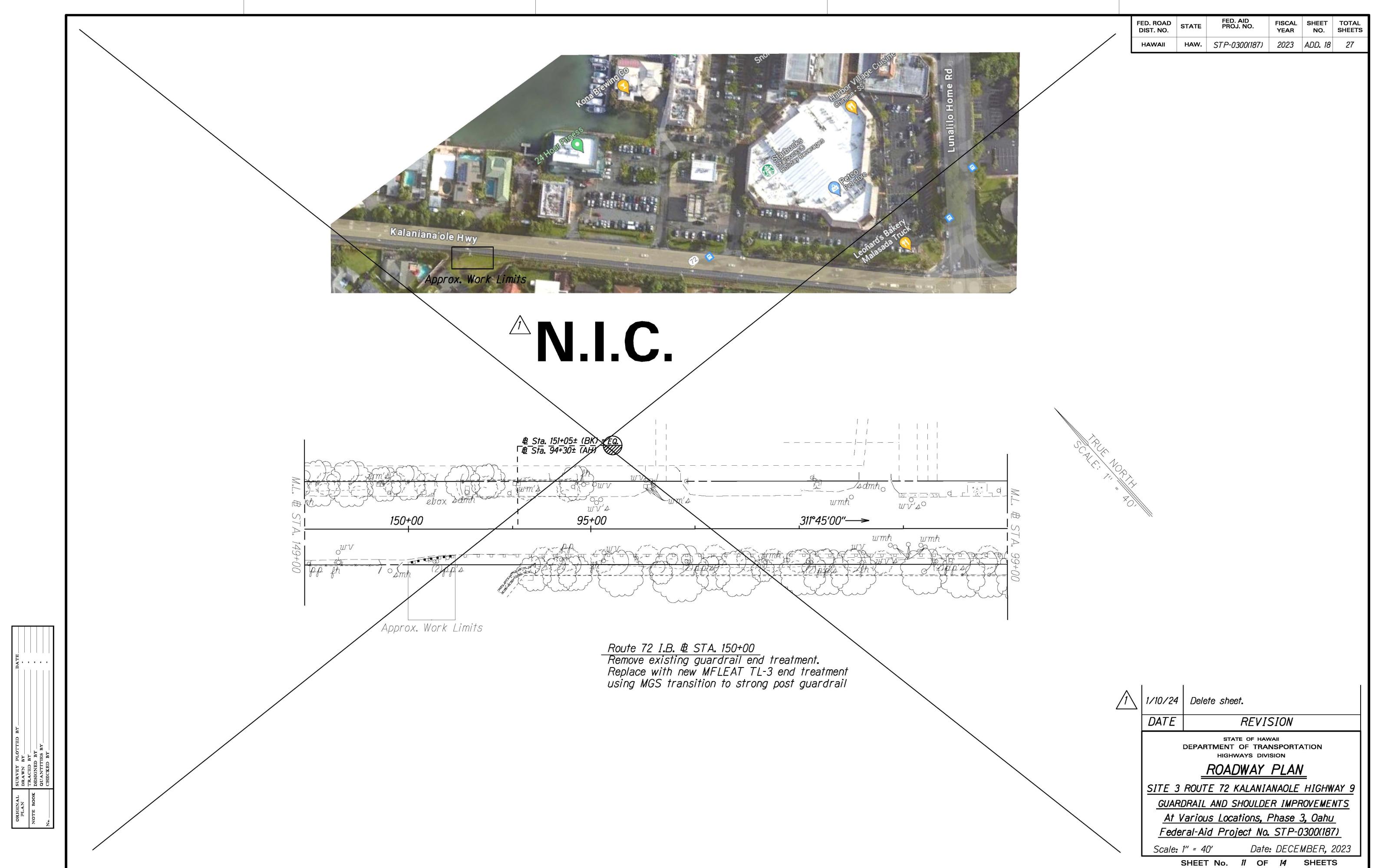


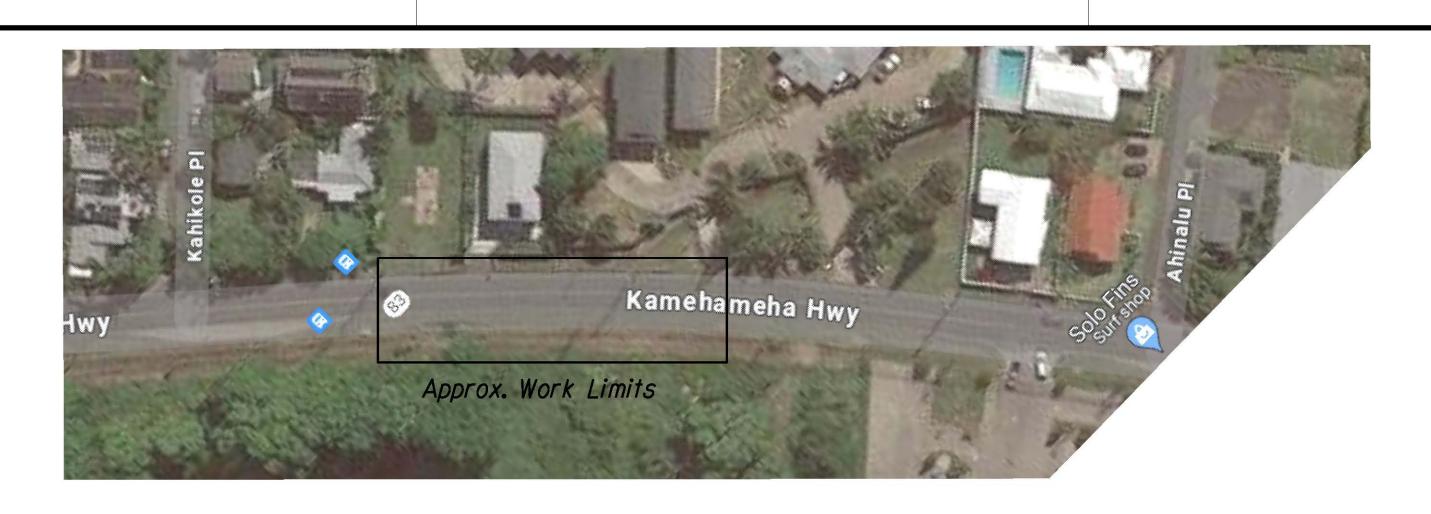








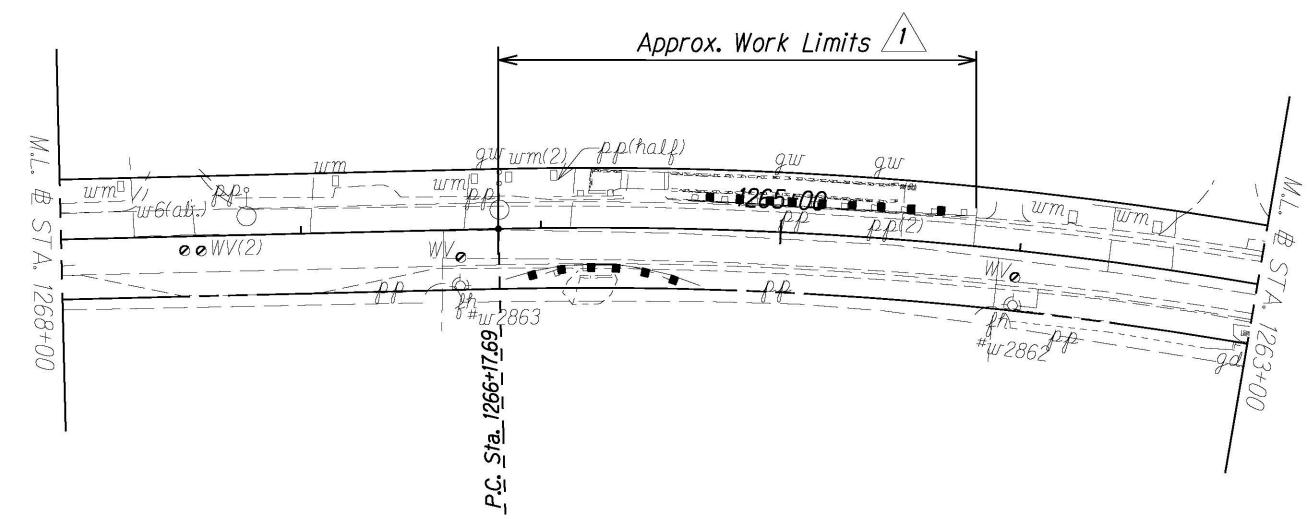




2023 ADD. 19 27 HAW. STP-0300(187)

Route 83 B Sta. 1265+40 to STA. 1264+20
Remove existing guardrail
Install new MSKT TL-2 at Sta. 1265+40 and Sta. 1264+20
Install new MGS guardrail from Sta. 1265+15 to Sta. 1264+45

Route 83 # Sta. 1266+15 to STA. 1265+35
Remove existing guardrail
Install 2 new MFLEAT TL-2 end treatments



<-- 119°18′00″

Approx. Work Limits



Updated note Route 83 巻 Sta. 1265+40 to STA. 1264+20

Update note Route 83 ₺ Sta. 1266+05 to STA. 1265+80

Updated notes Route 83 월 STA. 1053+25 to STA. 1052+00 and Route 83 월 STA. 1053+83 to STA. 1052+44

DATE

REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

ROADWAY PLAN

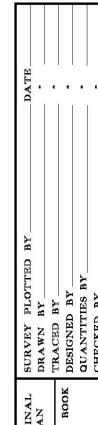
SITE 4 ROUTE 83 KAMEHAMEHA HIGHWAY GUARDRAIL AND SHOULDER IMPROVEMENTS At Various Locations, Phase 3, Oahu Federal-Aid Project No. STP-0300(187) Scale: 1" = 40' Date: DECEMBER, 2023

SHEET No. 12 OF 14 SHEETS ADD. 19

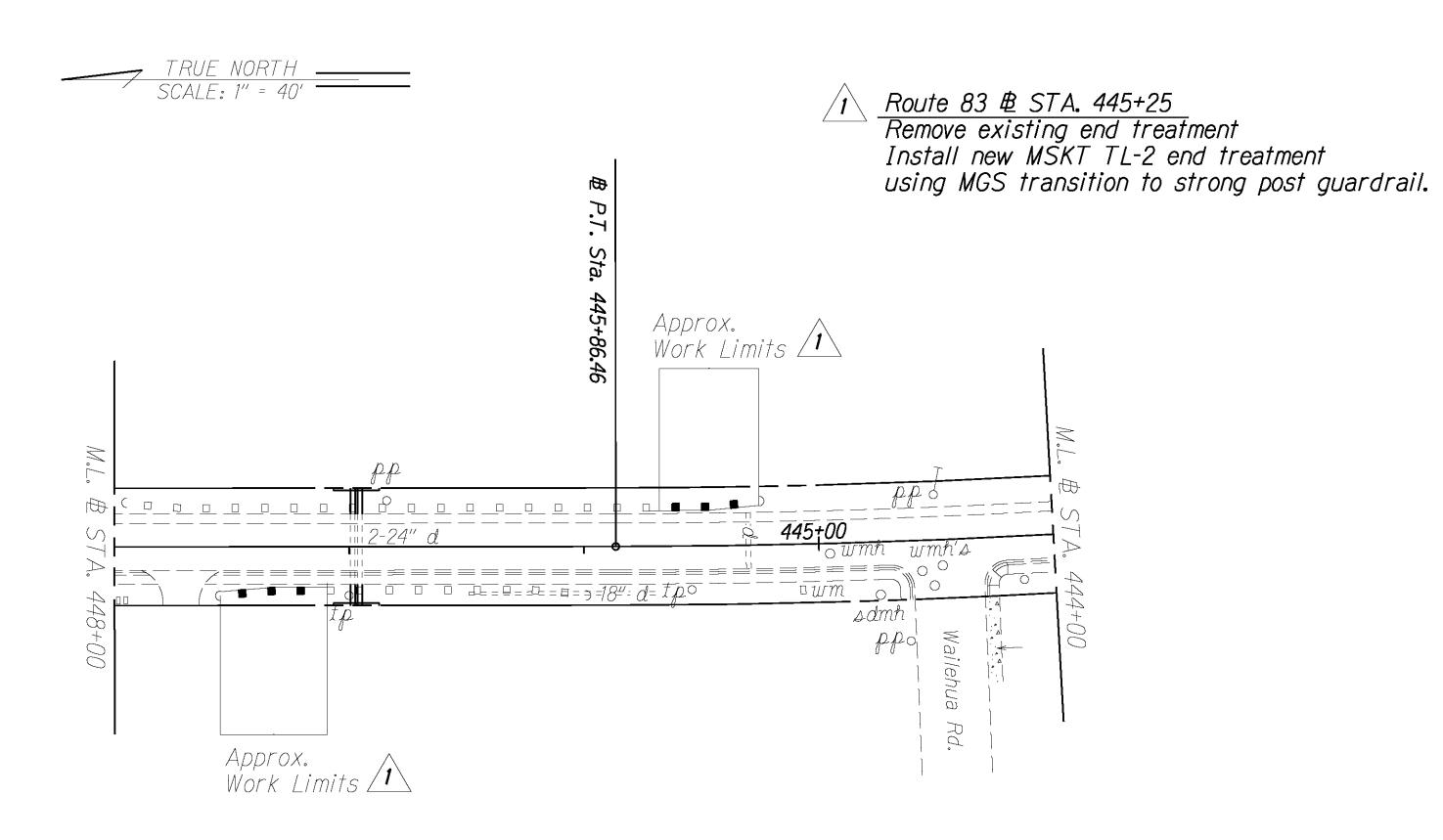
Route 83 B STA. 1053+25 to STA. 1052+00
Remove existing guardrail
Install MFLEAT TL-2 end treatments at sta. 1053+25 and sta. 1052+00 Install new MGS guardrail from sta. 1052+85 to sta. 1052+40 Route 83 # STA. 1053+83 to STA. 1052+45 Remove existing guardrail

Install MFLEAT TL-2 end treatments at sta. 1053+83 and sta. 1052+45

Install new MGS guardrail from sta. 1053+43 to 1052+85



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Route 83 B STA. 447+57
Remove existing end treatment
Install new MSKT TL-2 end treatment
using MGS transition to strong post guardrail.

Replace MSKT or approved equal with MSKT TL-2 in note Route 83 \$\mathbb{B}\$ STA. 447+57 and Route 83 \$\mathbb{B}\$ STA. 445+25

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

SITE 4 ROUTE 83 KAMEHAMEHA HIGHWAY 2

GUARDRAIL AND SHOULDER IMPROVEMENTS

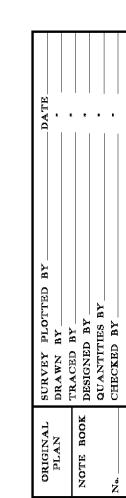
At Various Locations, Phase 3, Oahu

Fodoral Aid Project No. CER 0200(197)

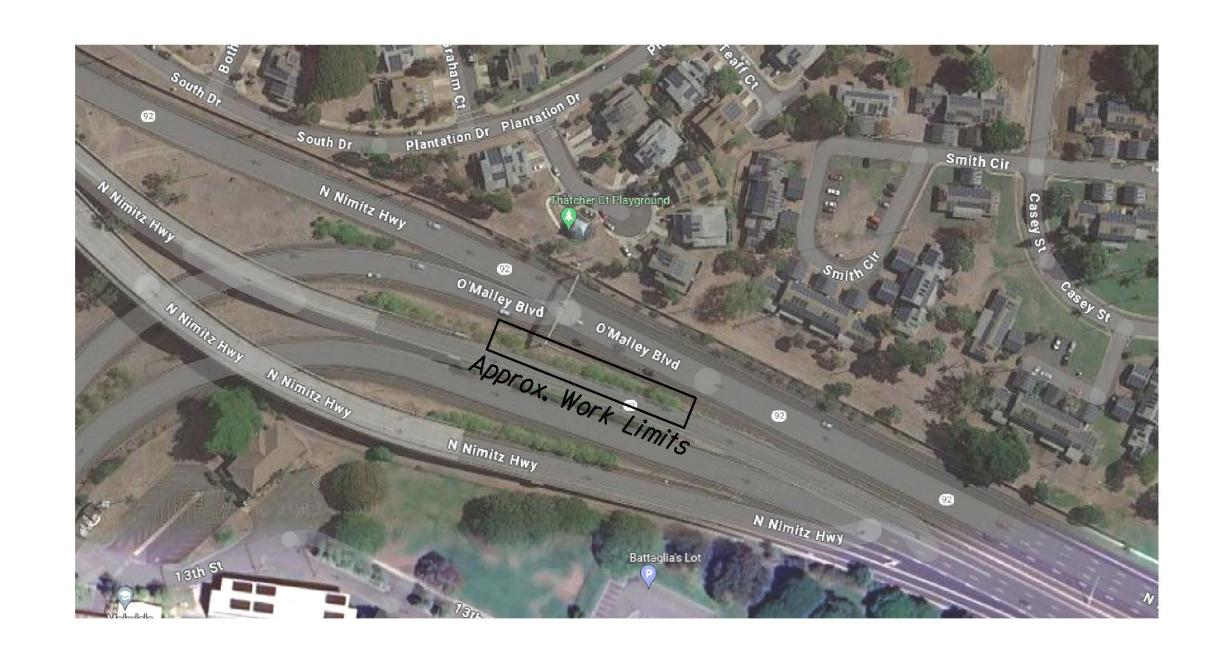
Federal-Aid Project No. STP-0300(187)

Scale: 1" = 40' Date: DECEMBER, 2023

SHEET No. 13 OF 14 SHEETS

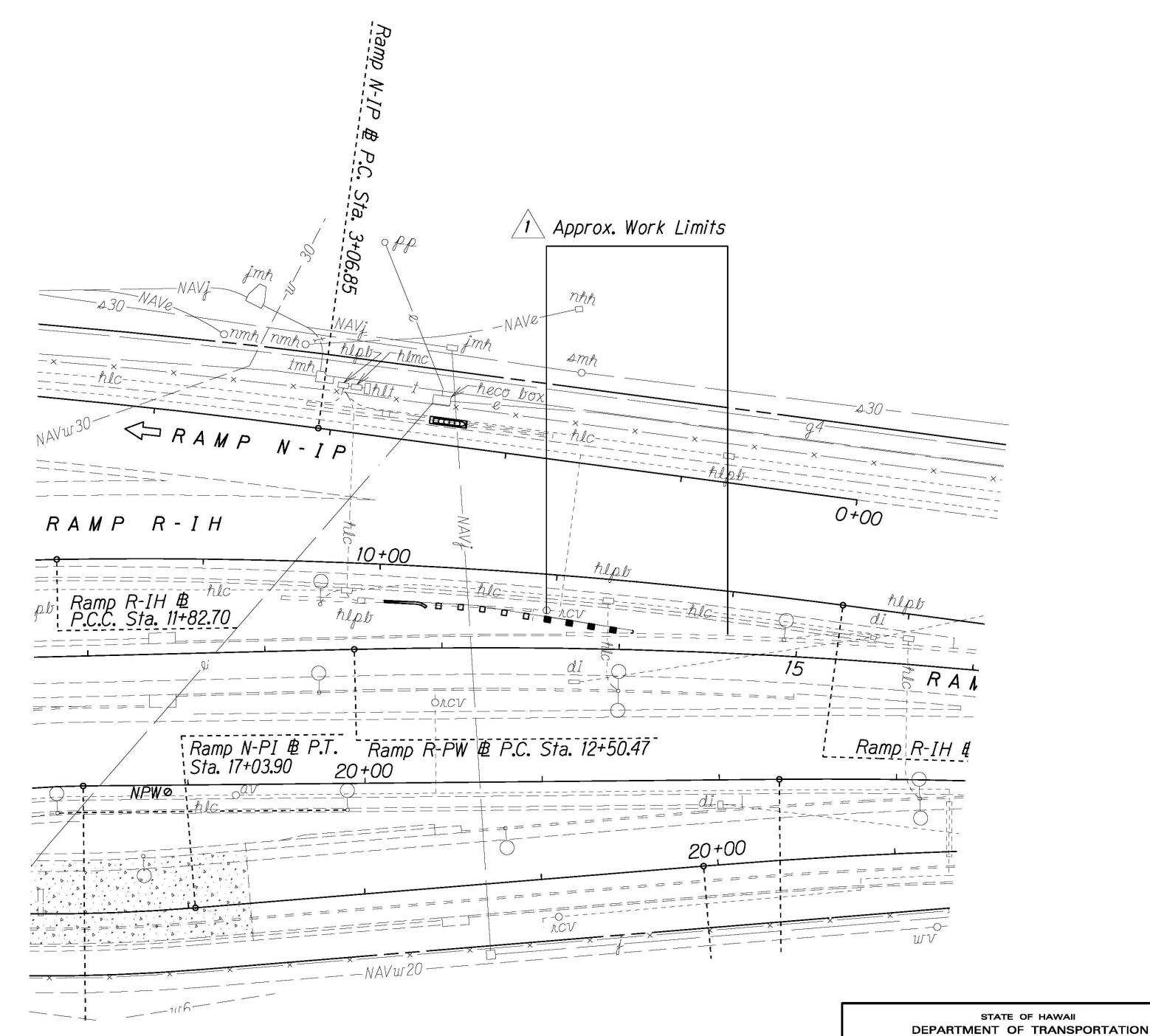


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(187)	2023	ADD. 21	27



Ramp N-IP B STA. 1+16
Remove existing end treatment.
Replace with new MSKT TL-3 end treatment using MGS transition to strong post guardrail.

Remove any obstructions within 50 L.F. of face of guardrail end treatment.



DATE

Replace MSKT or approved equal with MSKT TL-3 in note Ramp N-IP & STA. 1+16

REVISION

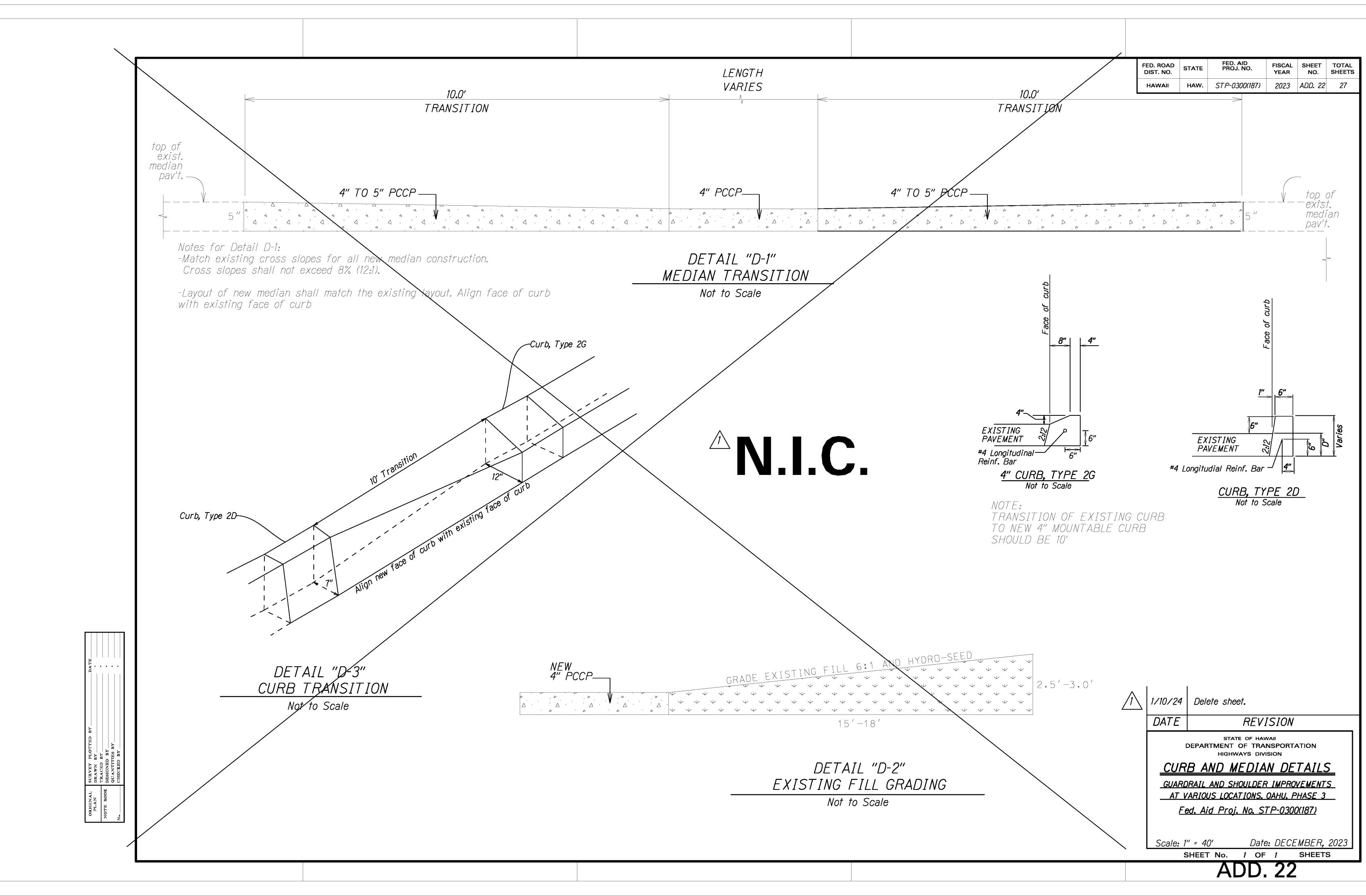
HIGHWAYS DIVISION

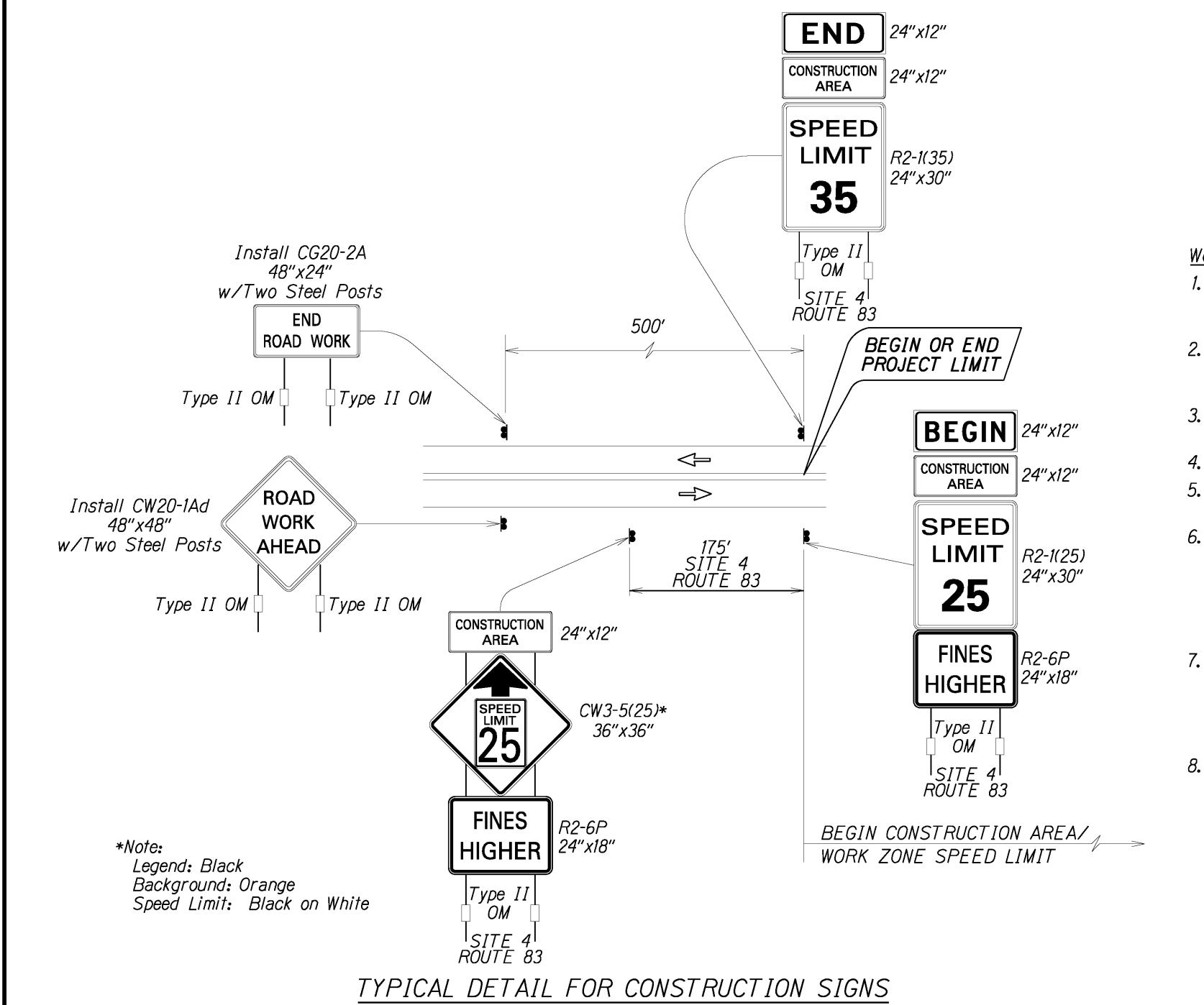
ROADWAY PLAN

SITE 5 ROUTE 92 NIMITZ HIGHWAY 1 GUARDRAIL AND SHOULDER IMPROVEMENTS

At Various Locations, Phase 3, Oahu Federal-Aid Project No. STP-0300(187)

Date: DECEMBER, 2023 Scale: 1" = 40' SHEET No. 14 OF 14 SHEETS





FED. AID PROJ. NO. HAW. | STP-0300(187) | 2023 | ADD. 275-1 | 27

Work Zone Notes:

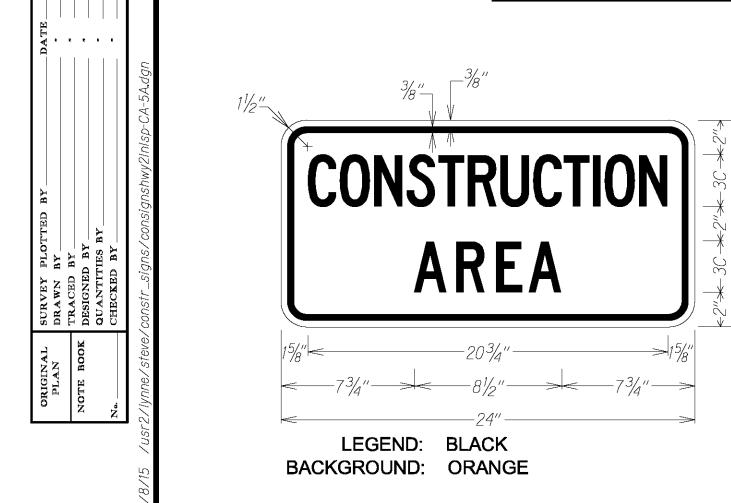
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.
- 2. All existing regulatory speed limit signs within the work zone/project limits shall be covered and work zone speed limit sign assemblies (R2-1(35) and CW3-5(25) with "CONSTRUCTION AREA" and R2-6P, "FINE'S HIGHER" 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 and work zone speed limit assembly shall have a minimum of two (2) Type II OM. Installation of each Type II OM shall be considered incidental to Item No. 645.0100 - Traffic Control.
- 6. The contractor shall maintain a log of the covering and uncovering of the existing regulatory speed limit signs, as well as the covering and uncovering of the work zone speed limit sign assemblies. The log will be submitted weekly to the engineer and indicate the daily times of when each existing regulatory speed limit sign and work zone speed limit assembly are covered and uncovered. The log will also include the installation and removal dates, times, and locations of the work zone speed limit sign assemblies at the start and end of the project.
- 7. The daily covering and uncovering of existing regulatory speed limit signs along with the installation, maintenance, removal, daily covering and uncovering of work zone speed limit sign assemblies and weekly log shall be considered incidental to Item No. 645.0100 - Traffic Control. Sign covers shall not allow any portion of the sign being covered to be visible. If the sign has more than one side, cover shall completely cover each side. "Homemade" or "field made" covers shall not be used or accepted.

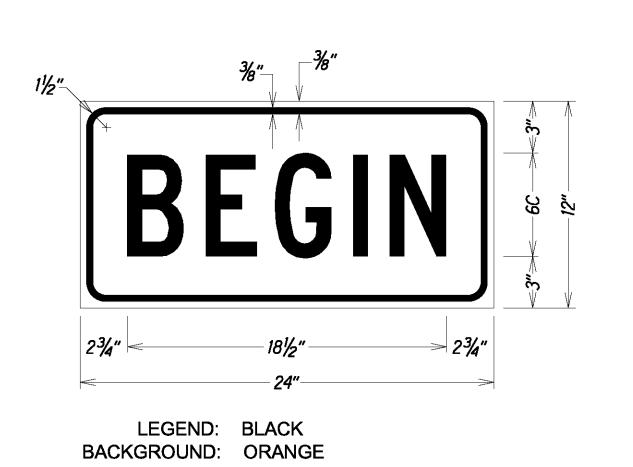
REVISION

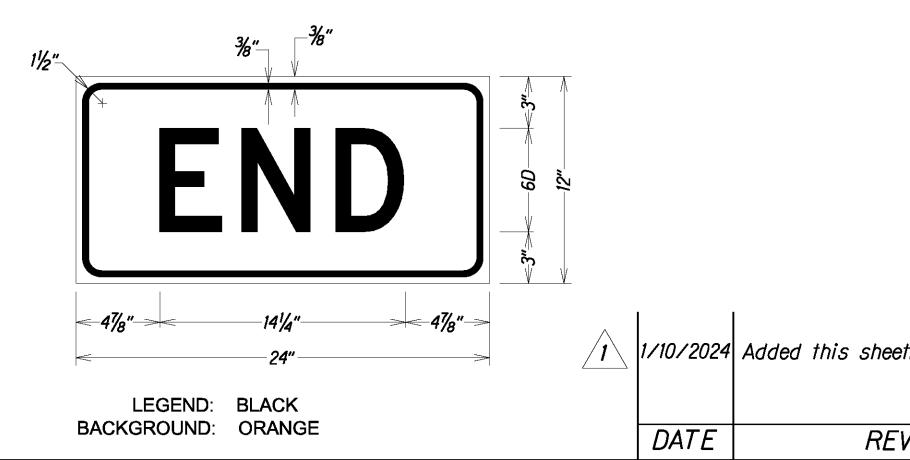
DATE

8. Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.

ON TWO LANE OR MULTILANE UNDIVIDED LOW SPEED HIGHWAY







DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION LOW SPEED UNDIVIDED HIGHWAY

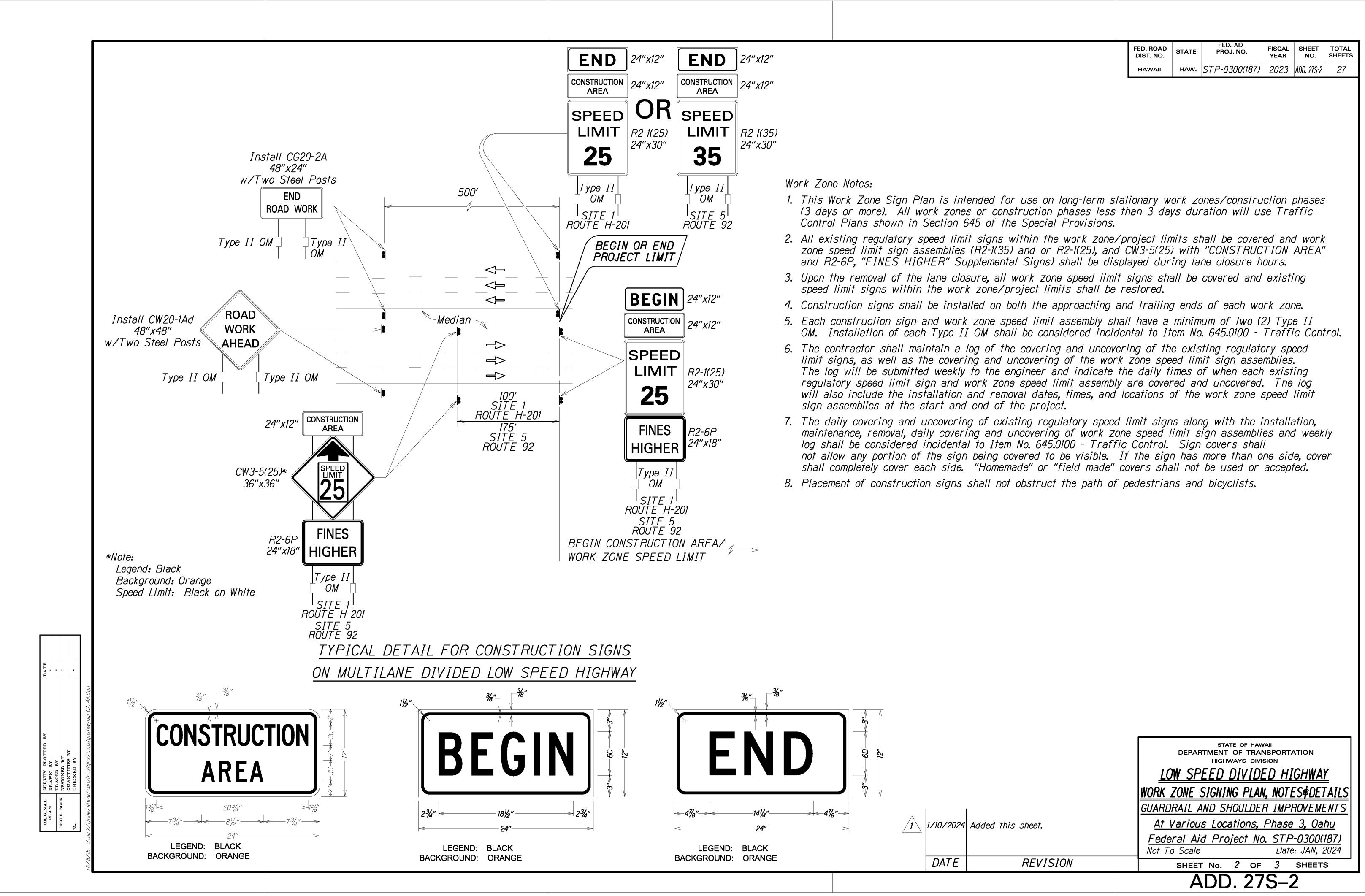
SHEET No. 1

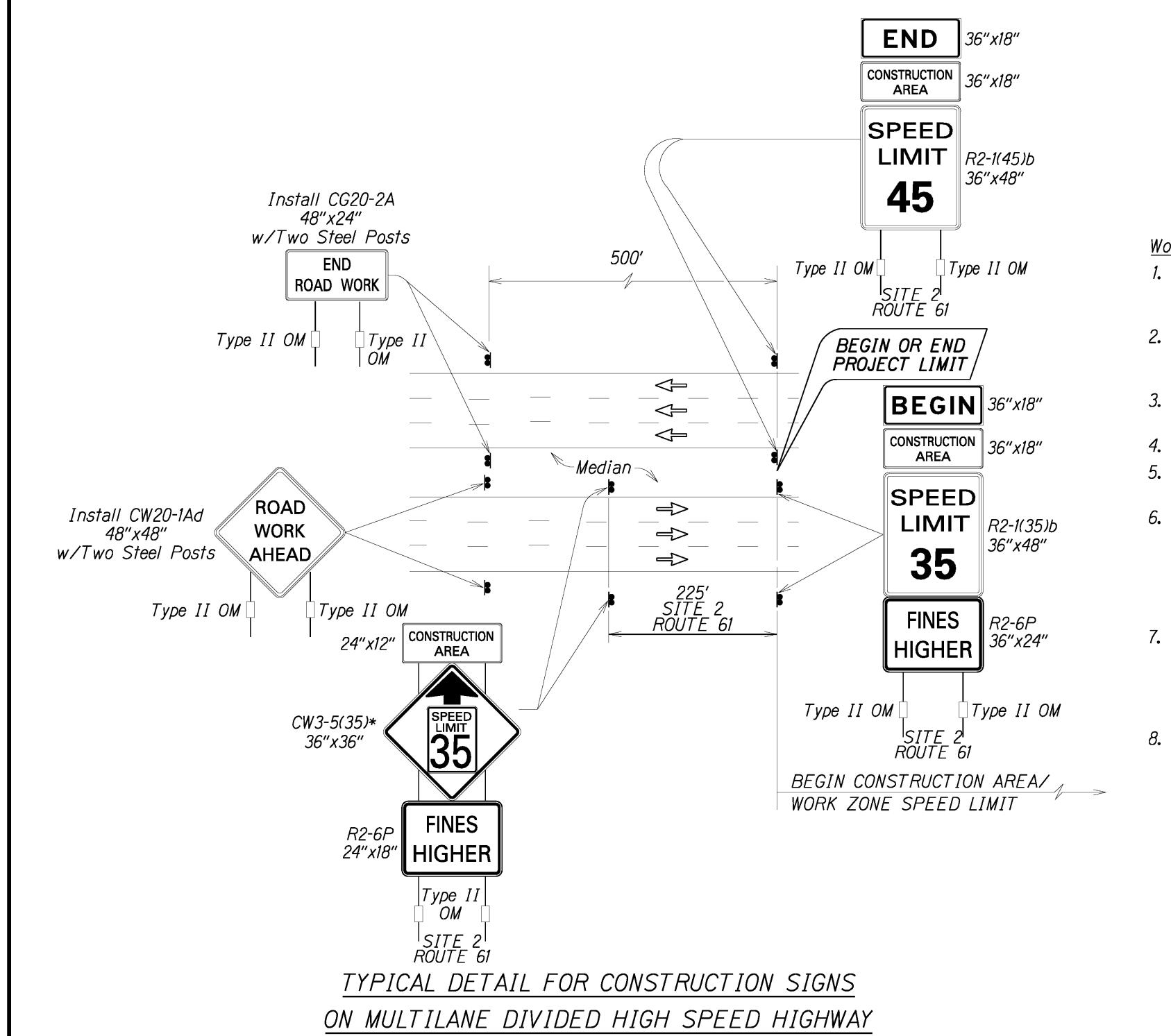
WORK ZONE SIGNING PLAN, NOTES&DETAILS GUARDRAIL AND SHOULDER IMPROVEMENTS

At Various Locations, Phase 3, Oahu Federal Aid Project No. STP-0300(187) Date: JAN, 2024 Not To Scale

ADD. 27S-1

OF 3 SHEETS

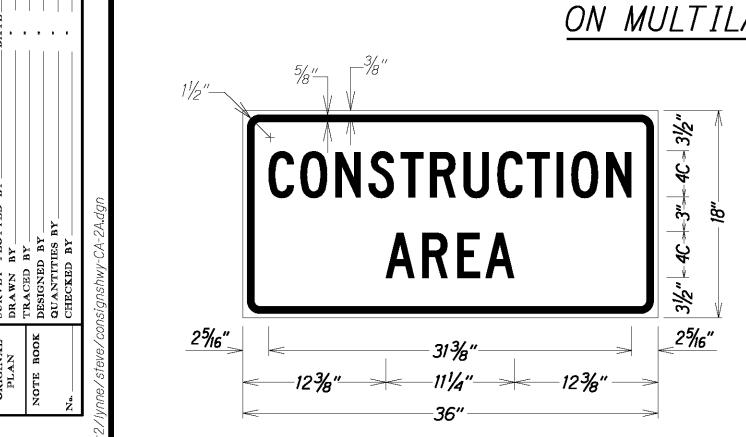




FED. AID PROJ. NO. FED. ROAD DIST. NO. FISCAL SHEET TOTAL NO. SHEETS HAW. | STP-0300(187) | 2023 | ADD. 27S-3 | 27

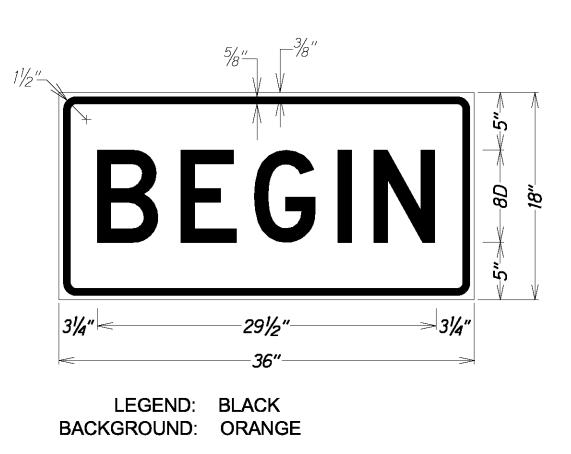
Work Zone Notes:

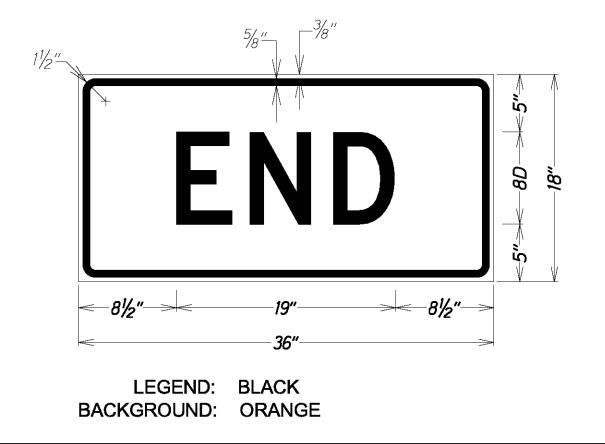
- 1. This Work Zone Sign Plan is intended for use on long-term stationary work zones/construction phases (3 days or more). All work zones or construction phases less than 3 days duration will use Traffic Control Plans shown in Section 645 of the Special Provisions.
- 2. All existing regulatory speed limit signs within the work zone/project limits shall be covered and work zone speed limit sign assemblies (R2-1(35)b, R2-1(45)b, and CW3-5(35) with "CONSTRUCTION AREA" and R2-6P, "FINES HIĞHER" 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.
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- 8. Placement of construction signs shall not obstruct the path of pedestrians and bicyclists.



LEGEND: BLACK

BACKGROUND: ORANGE





<u>HIGH SPEED DIVIDED HIGHWAY</u> WORK ZONE SIGNING PLAN, NOTES&DETAILS GUARDRAIL AND SHOULDER IMPROVEMENTS At Various Locations, Phase 3, Oahu 1/10/2024 Added this sheet Federal Aid Project No. STP-0300(187) Not To Scale REVISION DATE SHEET No. 3 OF 3 SHEETS

Date: JAN, 2024

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION