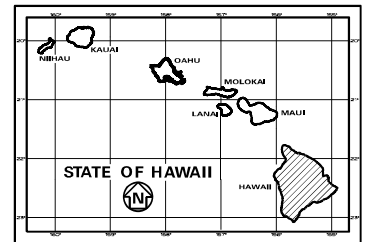


INDEX TO DRAWINGS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STANDARD PLANS SUMMARY
3	GENERAL NOTES
4 - 6	WATER POLLUTION CONTROL NOTES
7	TYPICAL SECTIONS
8 - 19	ROADWAY PLANS

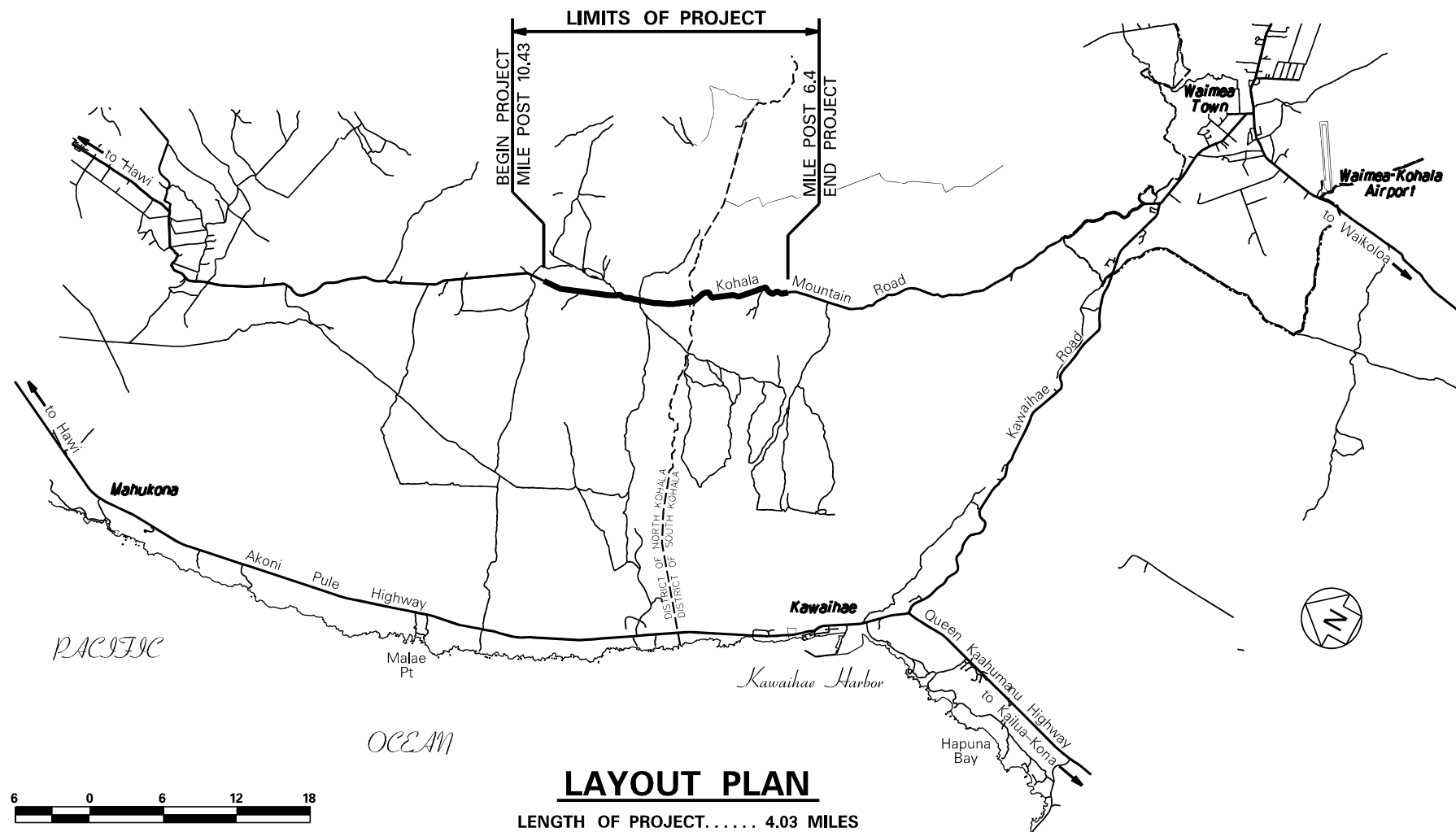
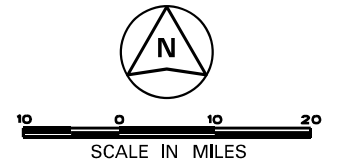
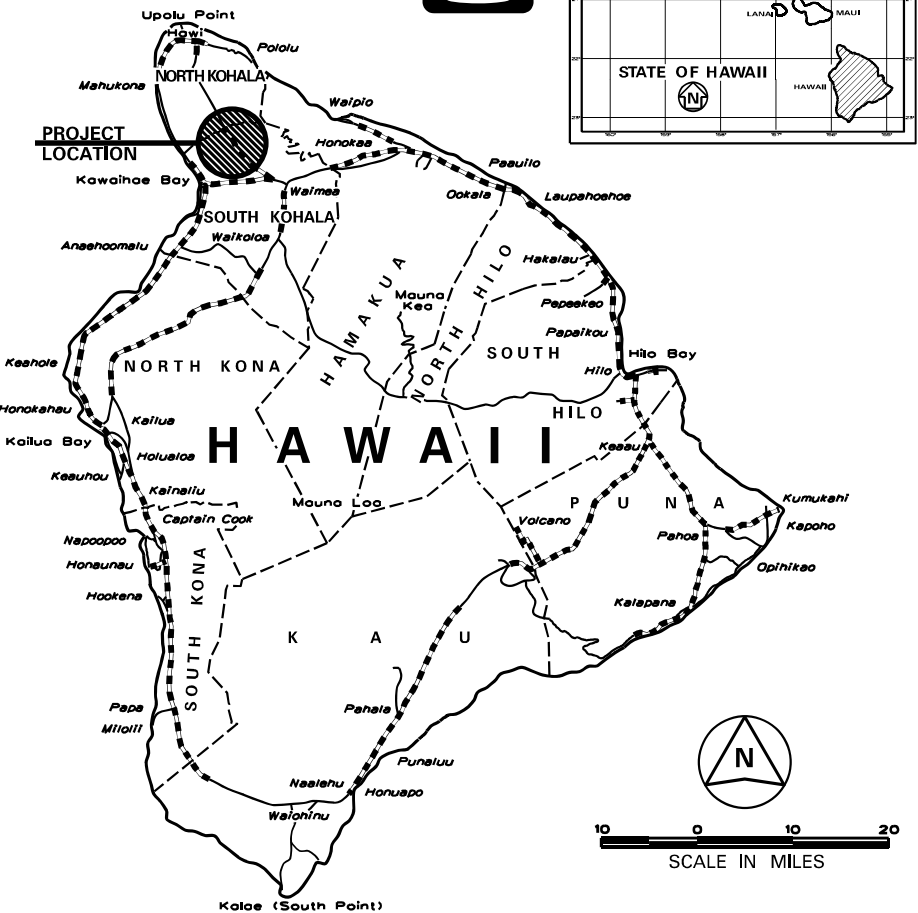
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HONOLULU, HAWAII

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	1	19



PLANS FOR
**KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43**

FEDERAL-AID PROJECT NO. STP-0250(008)
DISTRICT OF NORTH AND SOUTH KOHALA
ISLAND OF HAWAII



LAYOUT PLAN
LENGTH OF PROJECT..... 4.03 MILES

--- FEDERAL AID PROJECTS PREVIOUSLY CONSTRUCTED OR UNDER CONSTRUCTION

MILE POST 6.4 TO MILE POST 10.43

DESIGN DESIGNATION

ADT (2021).....	3000
ADT (2031).....	3,600
DHV	340
D	55/45
T	4.0 %
V	35 M.P.H.

HAWAII DISTRICT DESIGNED BY _____
 HWY-HE MANAGED BY _____
 933-8866 PHONE _____
 DEC., 2021 DATE _____

DEPARTMENT OF TRANSPORTATION STATE OF HAWAII	
APPROVED:	
DIR. OF TRANSPORTATION	DATE

STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	2	19

STANDARD PLAN NO.	TITLE	DATE
TE-26 ●	RAISED PAVEMENT MARKERS AND STRIPING	07/11/08
TE-27 ●	RAISED PAVEMENT MARKERS AND STRIPING	07/11/08
TE-28 ●	ENTRANCE AND EXIT PAVEMENT MARKINGS	07/11/08
TE-28A ●	MISCELLANEOUS PAVEMENT MARKINGS	07/11/08
TE-29 ●	PAVEMENT ARROWS AND SYMBOLS	07/11/08
TE-30 ●	PAVEMENT ALPHABETS, NUMBERS & SYMBOLS	07/11/08
TE-31 ●	PAVEMENT ALPHABETS, NUMBERS & SYMBOLS	07/11/08

ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
N.	

NOTE:
 STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " ● " NEXT TO THE STANDARD PLAN NO.
 (FOR EXAMPLE: D-07 ●)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

KOHALA MOUNTAIN ROAD
 RESURFACING AND RECONSTRUCTION
 ROUTE 250, MP 6.4 TO 10.43
 Federal Aid Project No. STP-0250(008)

Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	3	19

GENERAL NOTES

- The scope of work for this project consists of cold planing; resurfacing; and reconstruction of weakened pavement areas.
- The Contractor is reminded of the requirements of Subsection 105J6 - Subletting of Contract, 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.
- 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.
- 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.
- 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.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
- 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.
- 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.
- Smooth riding connections shall be constructed at all limits of project, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to asphalt concrete and will not be paid for separately.

- 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.
- 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.
- All saw cutting work shall be considered incidental to Roadway Excavation or Asphalt Concrete or Various Contract Items or their respective bid items.
- 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.
- 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.
- Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk. Transition shall not be steeper than 2% cross and longitudinal slopes and not less than 6.0 feet long or as specified on the plans. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
- The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tapes, and epoxy adhesives prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Asphalt Concrete Pavement, Mix No. IV 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 ft intervals along curves and 100 ft 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 not limited to the following: centerline, lane lines, stop bars, yield lines, crosswalks, medians, words, and arrows. This work shall be incidental to the contract items.
- Reconstructing and/or adjustment of centerline and reference survey monuments shall be incidental to the contract items.

LEGEND

- | | | | |
|---------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------|-------------------------------------|
|  | Reconstruction Areas |  | Existing Sewer Line |
|  | Leveling Areas |  | New 12" Sewer Line |
|  | Cold Planing Areas |  | Existing Sewer Manhole |
|  | Resurfacing Limits |  | Adjusted Sewer MH Frame/Cover |
|  | Existing Electrical Line |  | New Sewer Manhole |
|  | New Electrical Line |  | Existing 6" Gas Line |
|  | Existing Joint Pole |  | New 6" Gas Line |
|  | Existing Power Pole |  | Existing Gas Valve Box |
|  | Existing Electric Manhole |  | Adjusted Gas Valve Box |
|  | Adjusted Elec. MH Frame/Cover |  | New Gas Valve Box |
|  | New Electric Manhole |  | Existing Gas Manhole |
|  | Existing Telephone Line |  | Adjusted Gas MH Frame/Cover |
|  | New Telephone Line |  | New Gas Manhole |
|  | Existing Telephone Pole |  | Existing Monument |
|  | Existing Telephone Manhole |  | Adjusted Monument |
|  | Adjusted Tele. MH Frame/Cover |  | New Monument |
|  | New Telephone Manhole |  | Existing 24" Drain Line |
|  | Existing Signal Corps Line |  | New 24 " RCP Drain Line |
|  | New Signal Corps Line |  | Existing Storm Drain Manhole |
|  | Existing TV Cable |  | Adjusted Storm Drain MH Frame/Cover |
|  | New TV Cable |  | New Storm Drain Manhole |
|  | Existing 12" Water Line |  | Existing Grated Drop Inlet |
|  | New 12" Water Line |  | Existing Catch Basin |
|  | Existing Water Manhole |  | Existing Traffic Sign |
|  | Adjusted Water MH Frame/Cover |  | Existing Highway Lighting Standard |
|  | New Water Manhole |  | Existing Highway Lighting Pullbox |
|  | Existing Water Air Valve | | |
|  | Adjusted Water Air Valve | | |
|  | New Water Air Valve | | |
|  | Existing Water Valve Box | | |
|  | Adjusted Water Valve Box | | |
|  | New Water Valve Box | | |
|  | Existing Water Meter | | |
|  | Adjusted Water Meter | | |
|  | New Water Meter | | |
|  | Existing Fire Hydrant | | |
|  | New Fire Hydrant | | |

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
N.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal Aid Project No. STP-0250(008)
Date: April, 2022

WATER POLLUTION AND EROSION CONTROL NOTES:

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	4	19

A. GENERAL:

- See Special Provisions Section 209 - Water Pollution and Erosion Control. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment. In addition, Appendix A lists potential pollutant sources and corresponding BMPs used to mitigate the pollutants.
- Follow the guidelines in the current HDOT Construction Best Management Practices Field Manual in developing, installing and maintaining the Best Management Practices (BMP) for the project. For any conflicting requirements between the Manual and applicable bid documents, the applicable bid documents will govern. Should a requirement not be clearly described within the applicable bid documents, the Contractor shall notify the Engineer immediately for interpretation. For the purposes of clarification under Note A.2, "applicable bid documents" include the construction plans, standard specifications, Special Provisions, Permits, and the Storm Water Pollution Prevention Plan (SWPPP) when applicable.
- Follow the guidelines in the Honolulu's City & County "Rules Relating to Soil Erosion Standards and Guidelines" along with applicable Soil Erosion Guidelines for projects on Maui, Molokai, Kauai, and Hawaii.
- The Engineer may assess liquidated damages of up to \$27,500 for non-compliance of each BMP requirement and each requirement stated in Section 209 and special provisions, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
- The Engineer will deduct the cost from the progress payment for all citations received by the Department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State.
- If necessary, install a rain gauge prior to any field work including the installation of any site-specific best management practices. The rain gauge shall have a tolerance of at least 0.05 inches of rainfall. Install the rain gauge on the project site in an area that will not deter rainfall from entering the gauge opening. Do not install in a location where rain water may splash into rain gauge. The rain gauge installation shall be stable and plumbed. Do not begin field work until the rain gauge is installed and site-specific best management practices are in-place.
- Submit Site-Specific BMP Plan to the Engineer along with a completed Site-Specific BMP Review Checklist within 30 calendar days of contract execution. The Site-Specific BMP Review Checklist may be obtained from <http://www.stormwaterhawaii.com>.

B. WASTE DISPOSAL:

1. Waste Materials

Collect and store all waste materials in a securely lidded metal dumpster or roll off container with cover to keep rain out or loss of waste during windy conditions. The dumpster shall meet all local and State solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster weekly or when the container is two-thirds full, whichever is sooner. Do not bury construction waste materials onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices in the office trailer, on a weatherproof bulletin board, or other accessible location acceptable to the Engineer. The Contractor shall be responsible for seeing that these procedures are followed. Submit the Solid Waste Disclosure Form for Construction Sites to the Engineer within 30 calendar days of contract execution. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed.

2. Hazardous Waste

Dispose all hazardous waste materials in the manner specified by local or State regulations and by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.

3. Sanitary Waste

Collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary facilities where they are secure and will not be tipped over or knocked down.

C. EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

- For projects with an NPDES Permit for Construction Activities, inspect at the following intervals. For construction areas discharging to nutrient or sediment impaired waters, inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.25 inches or greater within a 24 hour period. For construction areas discharging to waters not impaired for nutrient or sediments, inspect all control measures weekly. Inspections are only required during the project's normal working hours. The discharge point water classification may be found in the SWPPP.
- For projects without an NPDES Permit for Construction Activities, inspect all control measures weekly.
- Maintain all erosion and sediment control measures in good working order. If repair is necessary, initiate repair immediately and complete by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. When installation of a new erosion or sediment control or a significant repair is needed, install the new or modified control or complete the repair no later than 7 calendar days from the time of discovery. "Immediately" means the Contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day.
- Remove built-up sediment from silt fence when it has reached one-third the height of the fence. Remove sediment from other perimeter sediment control devices when it has reached one-half the height of the device.
- Inspect silt screen or fence for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
- Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
- Complete and submit to the Engineer a maintenance inspection report within 24 hours after each inspection.
- Provide a stabilized construction entrance at all points of exit onto paved roads to reduce vehicle tracking of sediments. Include stabilized construction entrance in the Water Pollution, Dust, and Erosion Control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. If minimum dimensions cannot be met, provide other stabilization techniques that remove sediment prior to exit. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold-planed materials, dirt or rock tracked from the site. Do not hose down the street without containing or vacuuming wash water. Cover dump trucks hauling material from the construction site with a tarpaulin. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which the track-out occurs.
- Include designated Concrete Washout Area(s) in the Water Pollution, Dust, and Erosion Control submittals.
- Submit the name of a specific individual designated responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.
- Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.



DESIGNED BY	DATE
TRACED BY	10/25/15
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES
KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Date: April, 2022

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.):

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	5	19

12. Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved BMP practices. Do not allow discharge into the drainage system or State waters.
13. For projects with an NPDES Permit for Construction Activities, immediately initiate stabilizing exposed soil areas upon completion of earth-disturbing activities for areas where earth-disturbing activities have permanently or temporarily ceased. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future. For construction areas discharging into waters not impaired for nutrients sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities. For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities. Classification of water at the discharge point may be found in the SWPPP.
14. For projects without an NPDES Permit for Construction Activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

D. GOOD HOUSEKEEPING BEST MANAGEMENT PRACTICES:

1. Materials Pollution Prevention Plan

- a. Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

Concrete	Cleaning Solvents
Detergents	Wood
Paints (enamel and latex)	Masonry Block
Metal Studs	Herbicides and Pesticides
Tar	Curing Compounds
Fertilizers	Adhesives
Petroleum Based Products	

- b. Use Material Management Practices to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.
- c. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
- d. Keep products in their original containers with the original manufacturer's label.
- e. Do not mix substances with one another unless recommended by the manufacturer.
- f. Whenever possible, use a product up completely before disposing of the container.
- g. Follow manufacturer's recommendations for proper use and disposal.
- h. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

- a. Keep products in original containers unless they are not resealable.
- b. Retain original labels and Safety Data Sheets (SDS), formerly Material Safety Data Sheets (MSDS).
- c. Dispose of surplus products according to manufacturers' instructions and local and State regulations.

3. Onsite and Offsite Product Specific Plan

The following product specific practices shall be followed onsite:

- a. **Petroleum Based Products:**
Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

b. Fertilizers:

Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or stormwater. Transfer the contents of any partially used bags of fertilizer to a sealable plastic bin to avoid spills.

c. Paints:

Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or State waters. Dispose properly according to manufacturers' instructions and State and local regulations.

d. Concrete Trucks:

Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or State waters. Do not discharge water in the drainage system or State waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the Engineer.

4. Spill Control Plan

- a. Post a spill prevention plan to include measures to prevent and clean up each spill.
- b. The Contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a weatherproof bulletin board or other accessible location acceptable to the Engineer and in the office trailer onsite.
- c. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- d. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.
- e. Clean up all spills immediately after discovery.
- f. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- g. Report spills of toxic hazardous material to the appropriate State or local government agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, the Contractor shall notify the Engineer as soon as the Contractor has knowledge of the discharge. The Engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital Operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately. The Contractor shall also provide to the Engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The Engineer will provide this information to the DOH-CWB. The Engineer will provide information to the NRC if requested.

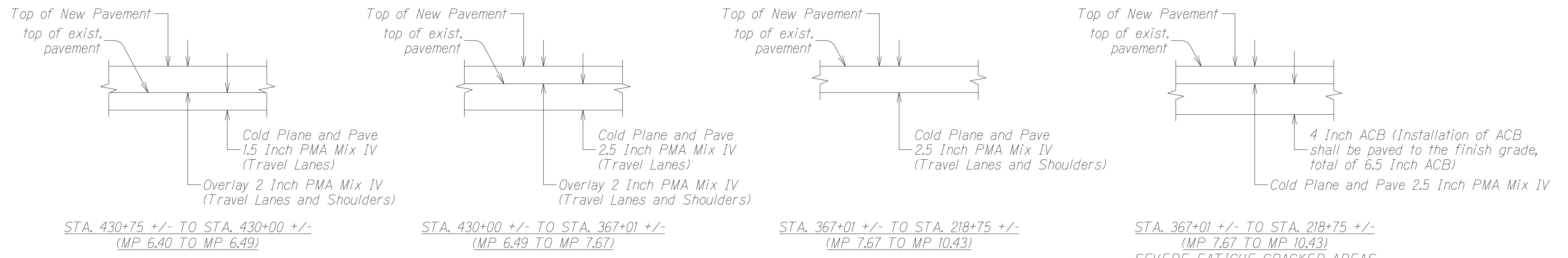
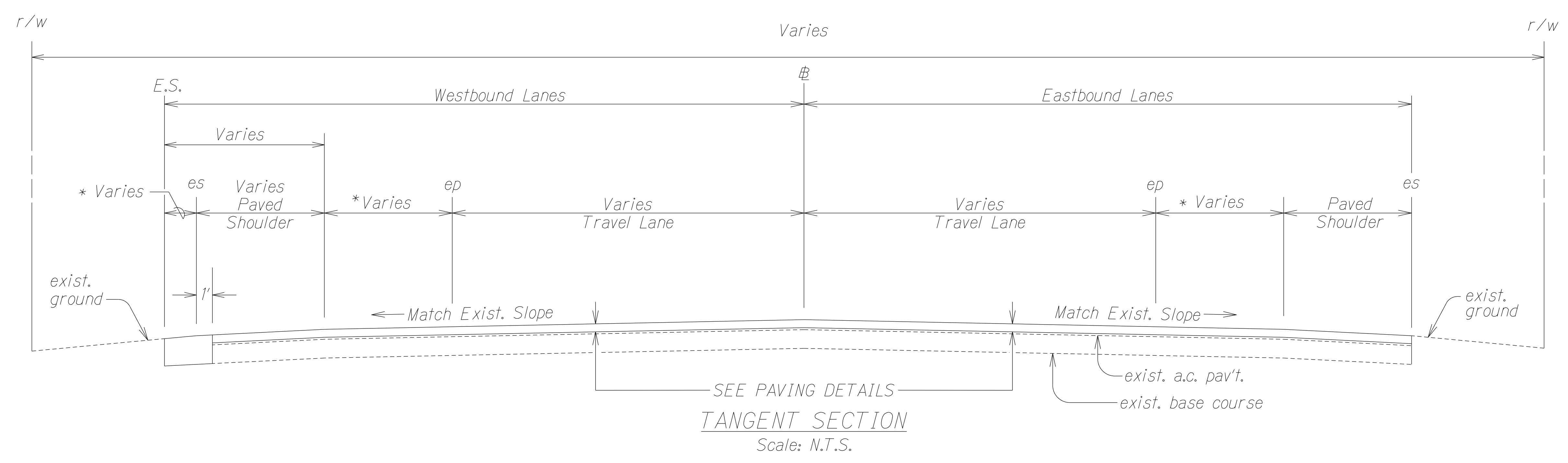


DESIGNED BY	DATE
TRACED BY	10/25/15
DESIGNED BY	
TRACED BY	
DESIGNED BY	
TRACED BY	
DESIGNED BY	
TRACED BY	
DESIGNED BY	
TRACED BY	

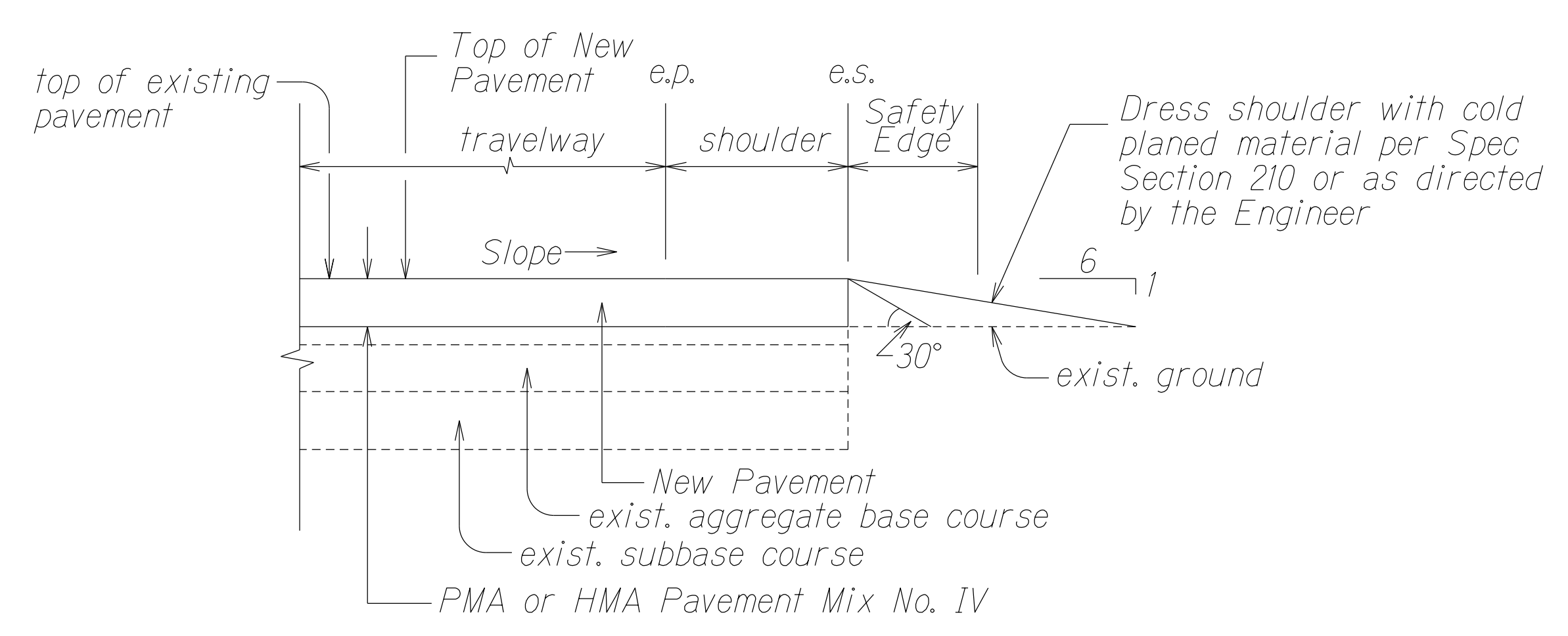
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

WATER POLLUTION & EROSION CONTROL NOTES
KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	7	19

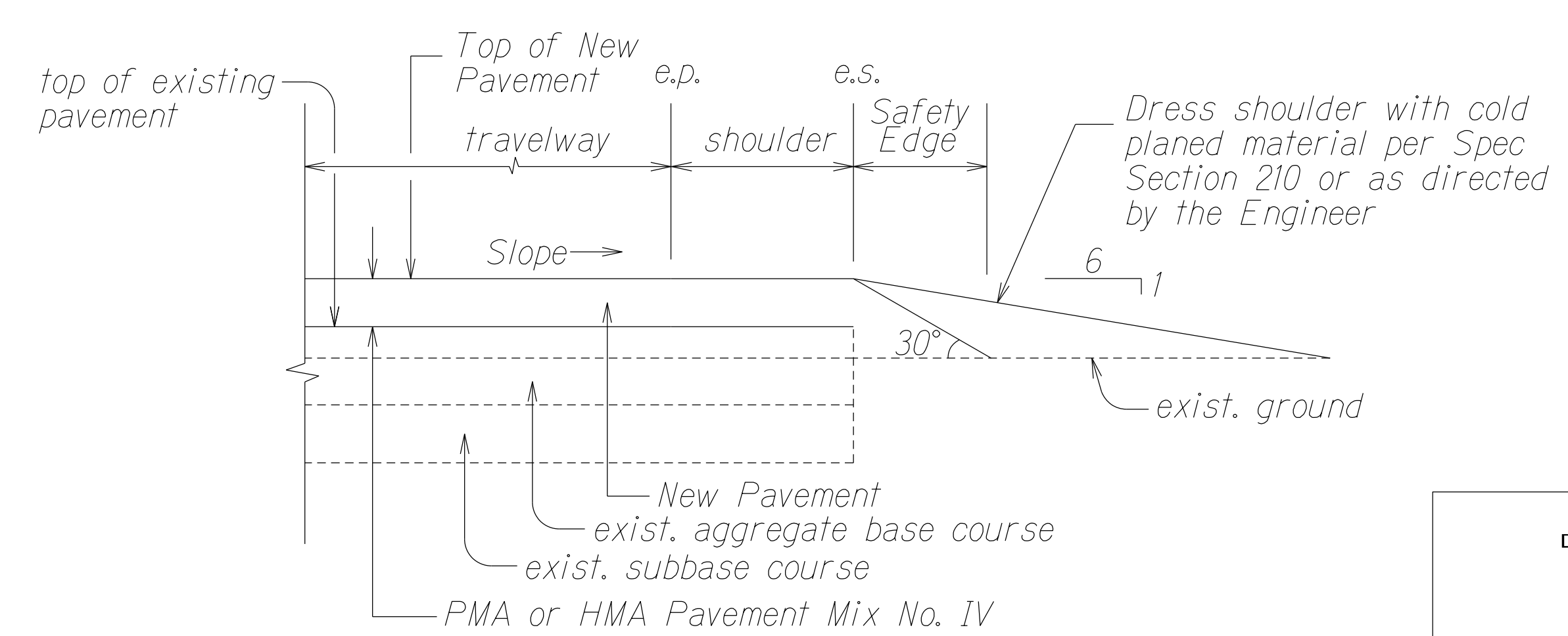


SEVERE FATIGUE CRACKED AREAS TO BE DETERMINED BY THE ENGINEER



DETAIL A

Note: Contractor shall mount a device directly on the paver screed extension to provide a 30° beveled shoulder edge. Installation of the Safety Edge and shoulder dressing shall be considered incidental to the various contract paving pay items.



DETAIL B

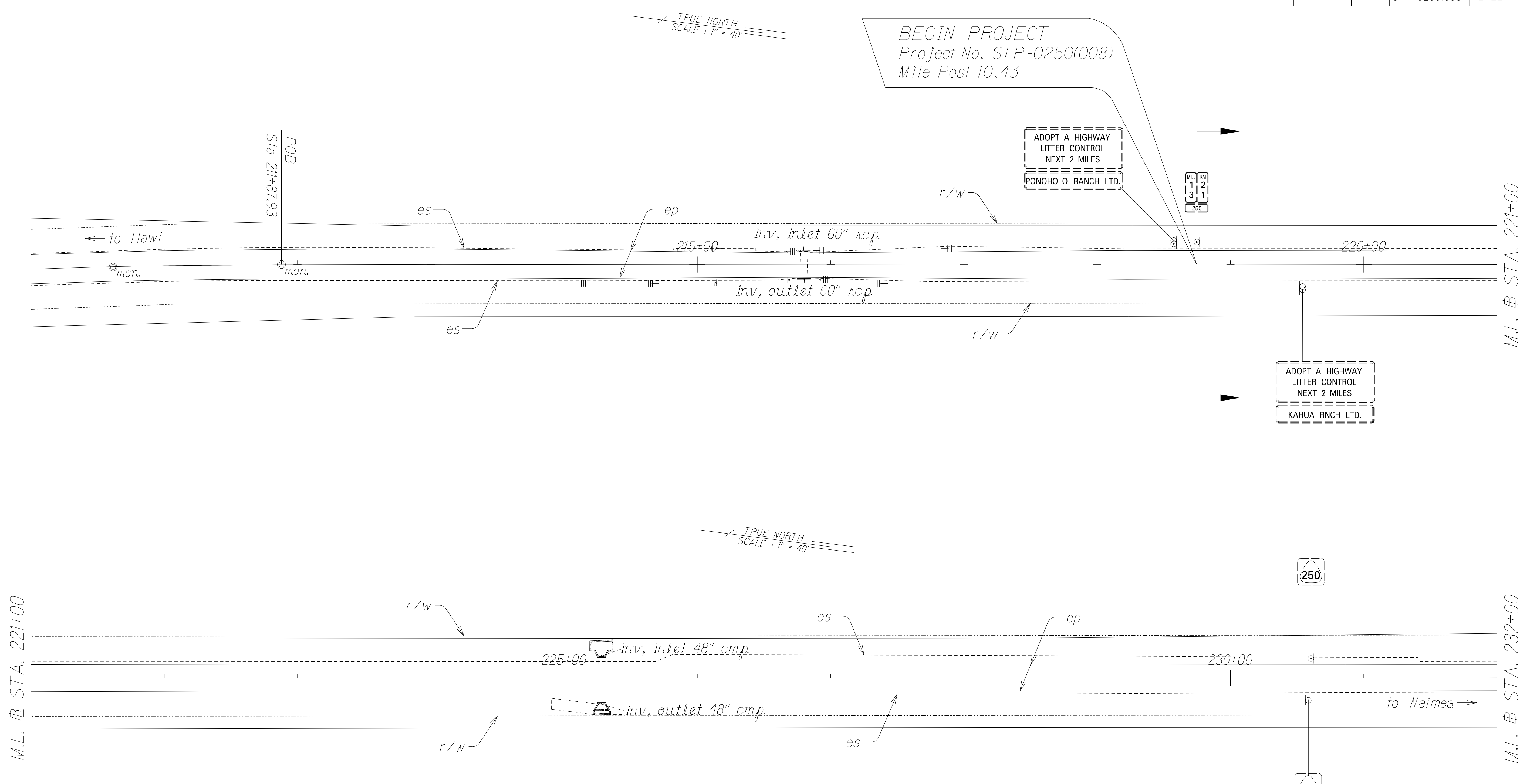
DESIGNED BY	DATE
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL SECTION

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal Aid Project No. STP-0250(008)
Scale: As Shown Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	8	19

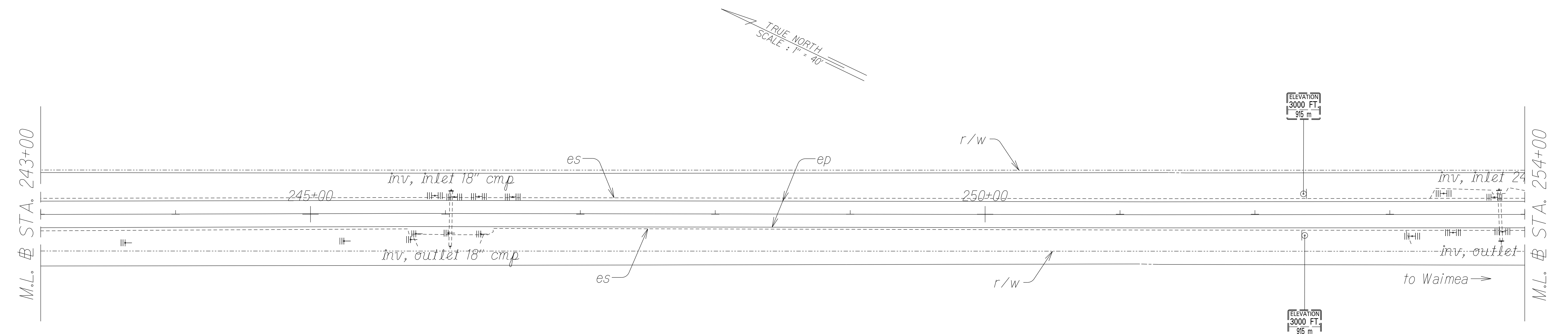
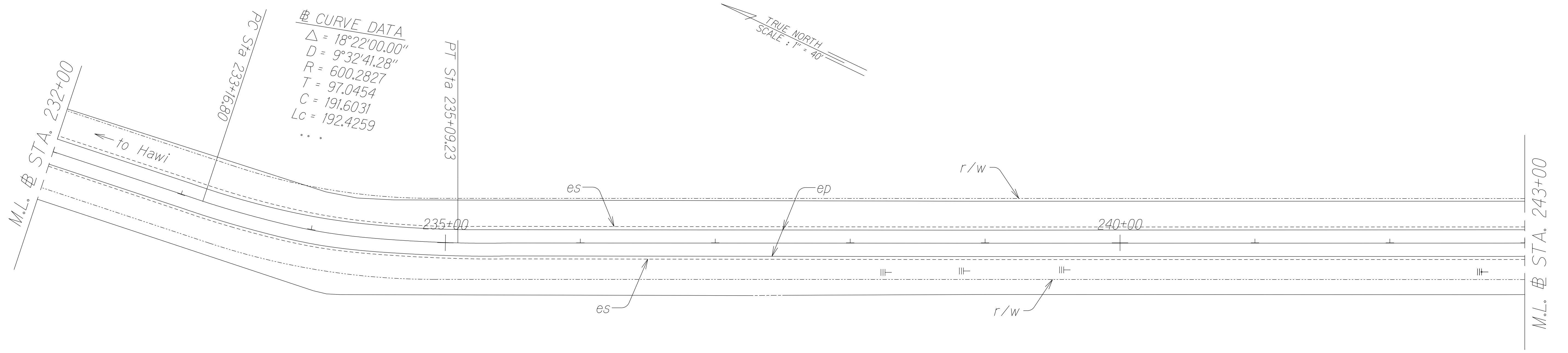


ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	9	19



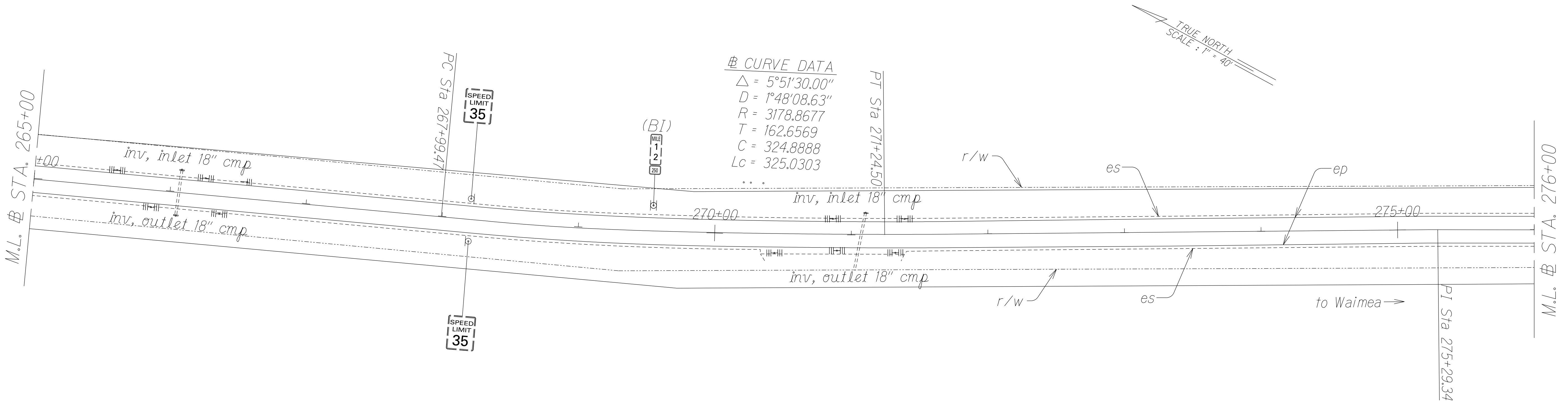
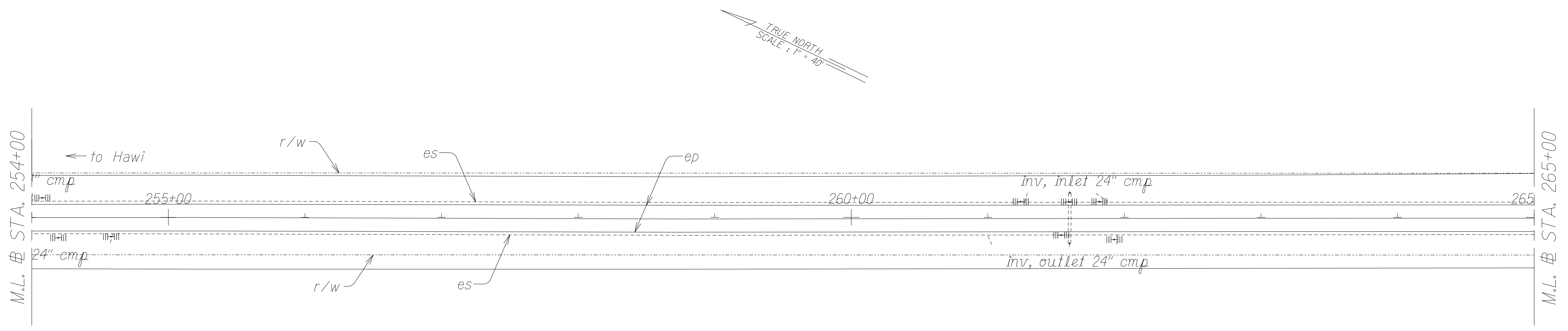
ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	10	19



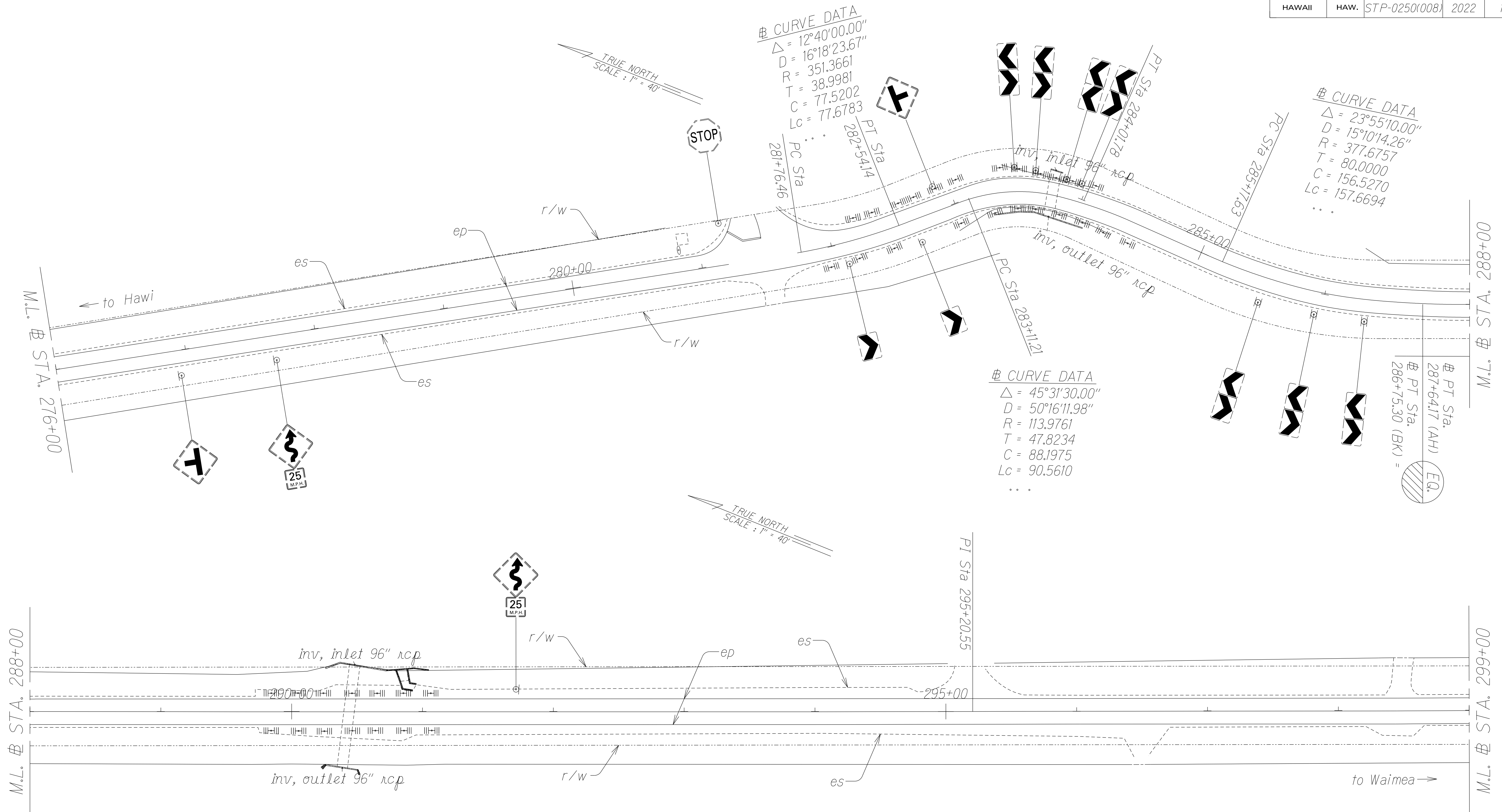
DATE	✓
SURVEY PLOTTED BY	
DESIGNED BY	
TRACED BY	
NOTE BOOK	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	13, 250, 6.4, 10.4

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	11	19



CURVE DATA
 $\Delta = 12^\circ 40' 00.00''$
 $D = 16^\circ 18' 23.67''$
 $R = 351.3661$
 $T = 38.9981$
 $C = 77.5202$
 $Lc = 77.6783$

CURVE DATA
 $\Delta = 23^\circ 55' 10.00''$
 $D = 15^\circ 10' 14.26''$
 $R = 377.6757$
 $T = 80.0000$
 $C = 156.5270$
 $Lc = 157.6694$

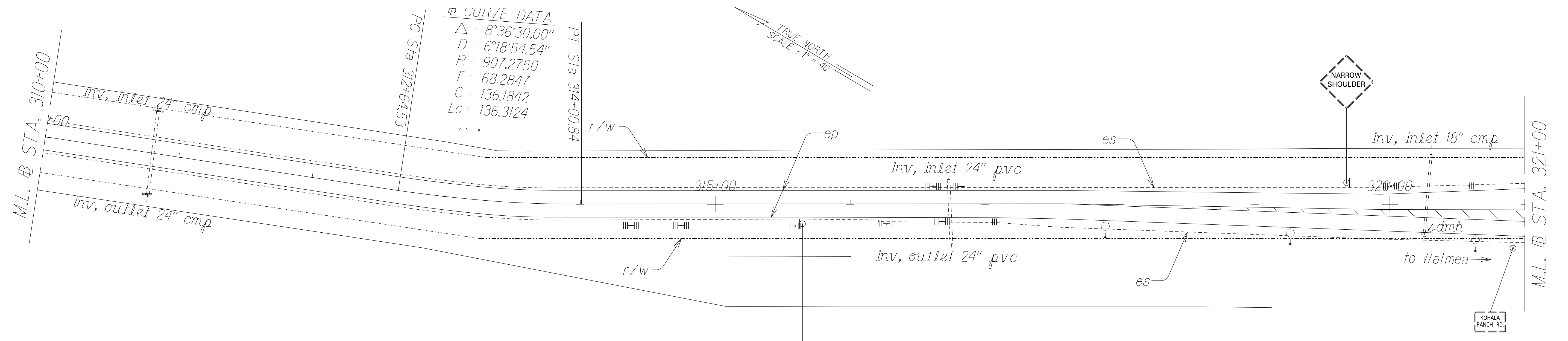
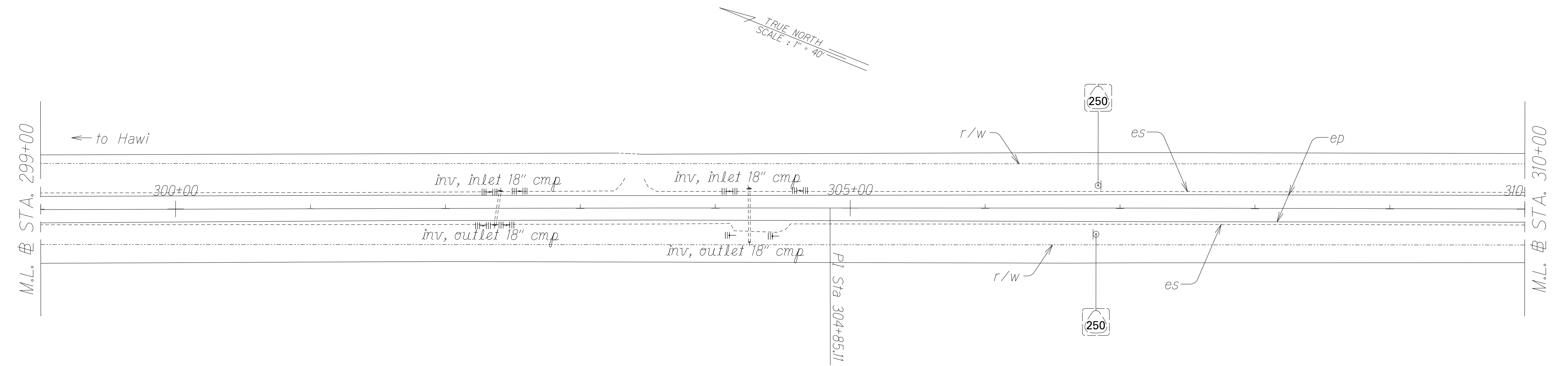
CURVE DATA
 $\Delta = 45^\circ 31' 30.00''$
 $D = 50^\circ 16' 11.98''$
 $R = 113.9761$
 $T = 47.8234$
 $C = 88.1975$
 $Lc = 90.5610$

DATE	BY
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	12	19



⊕ CURVE DATA

$\Delta = 8^{\circ}36'30.00''$
$D = 6^{\circ}18'54.54''$
$R = 907.2750$
$T = 68.2847$
$C = 136.1842$
$Lc = 136.3124$
...

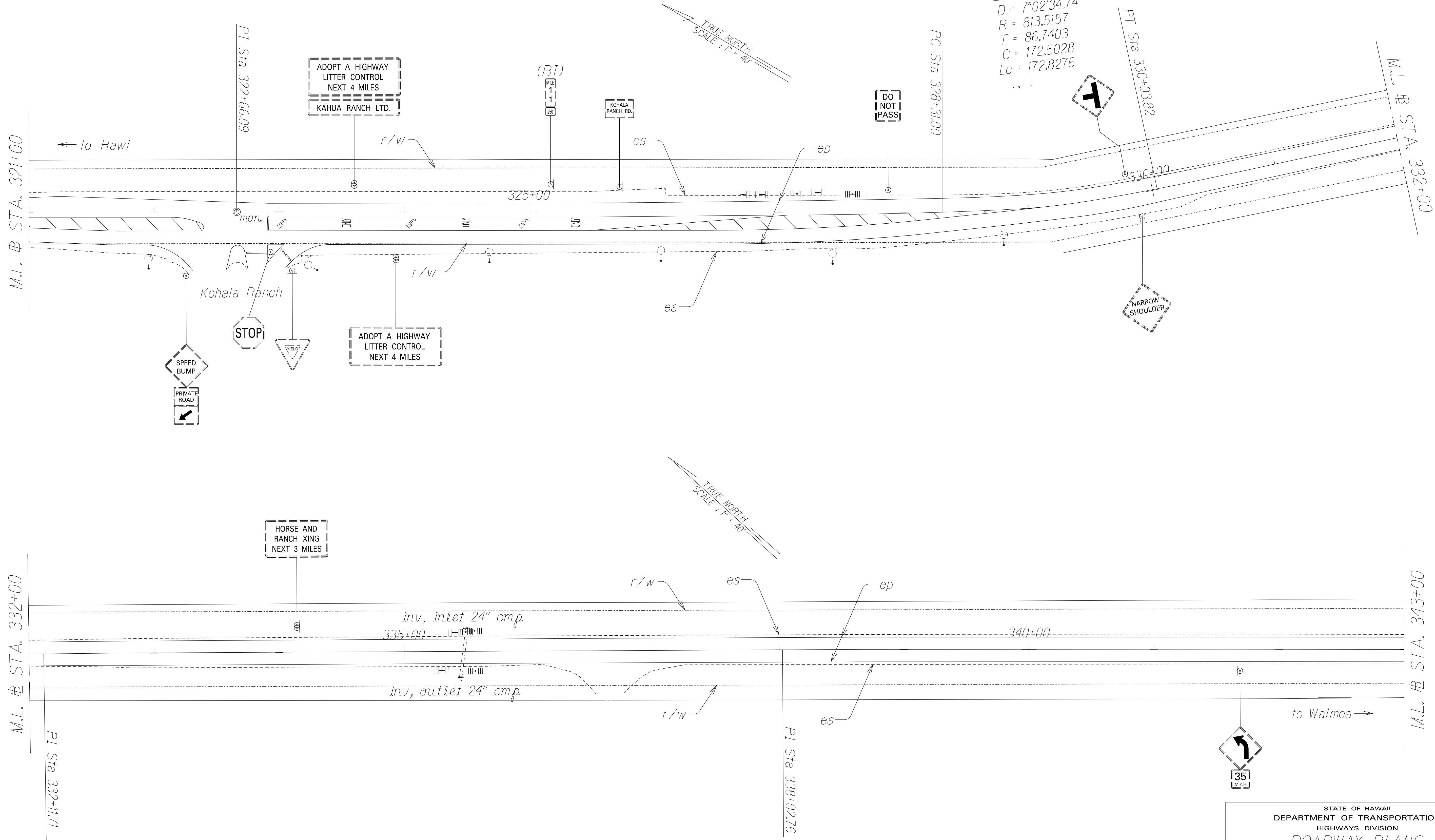
DATE	✓
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
NO.	250-64-10
APP.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	13	19

CURVE DATA
 $\Delta = 12^{\circ}10'20.00''$
 $D = 7^{\circ}02'34.74''$
 $R = 813.5157$
 $T = 86.7403$
 $C = 172.5028$
 $Lc = 172.8276$
 ...



DATE	✓
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
PROJECT NO.	250-64-10
DATE	

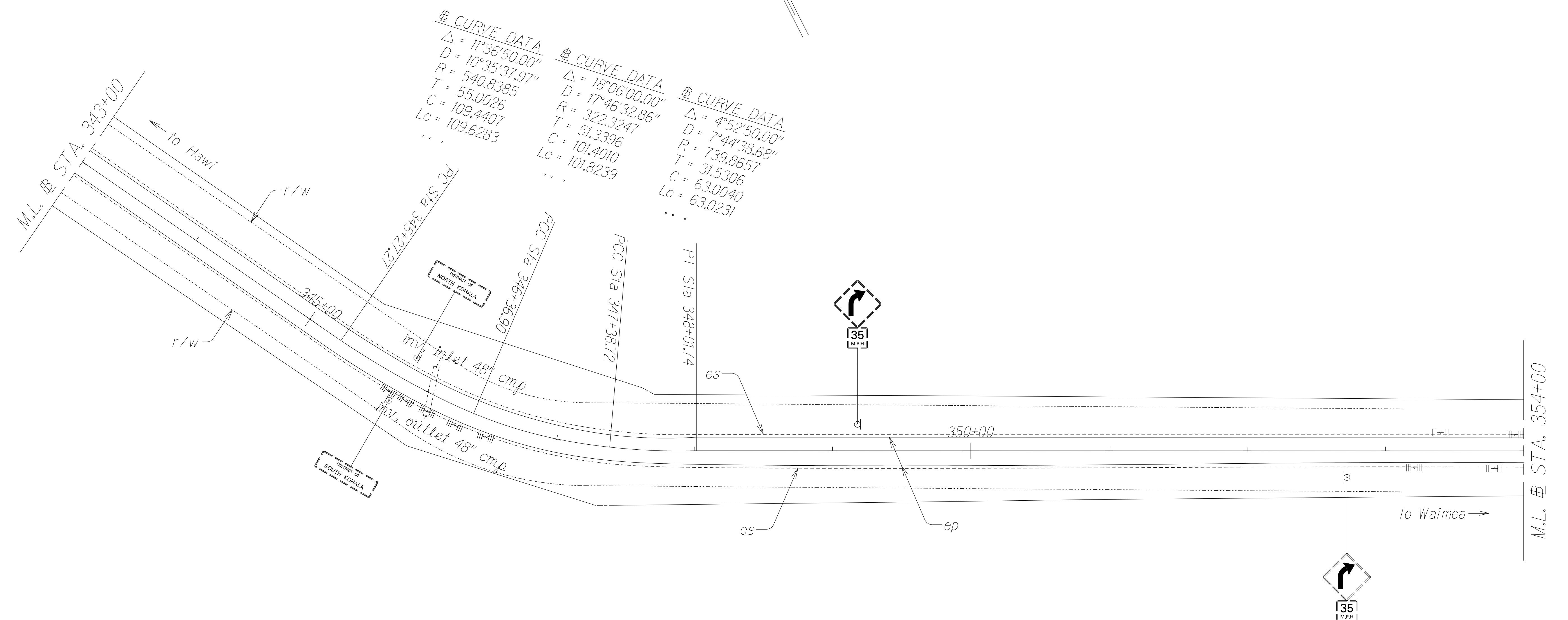
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
 RESURFACING AND RECONSTRUCTION
 ROUTE 250, MP 6.4 TO 10.43
 Federal-Aid Project No. STP-0250(008)
 Scale: 1" = 40' Date: April, 2022

SHEET No. 6 OF 12 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	14	19

TRUE NORTH
SCALE: 1" = 40'

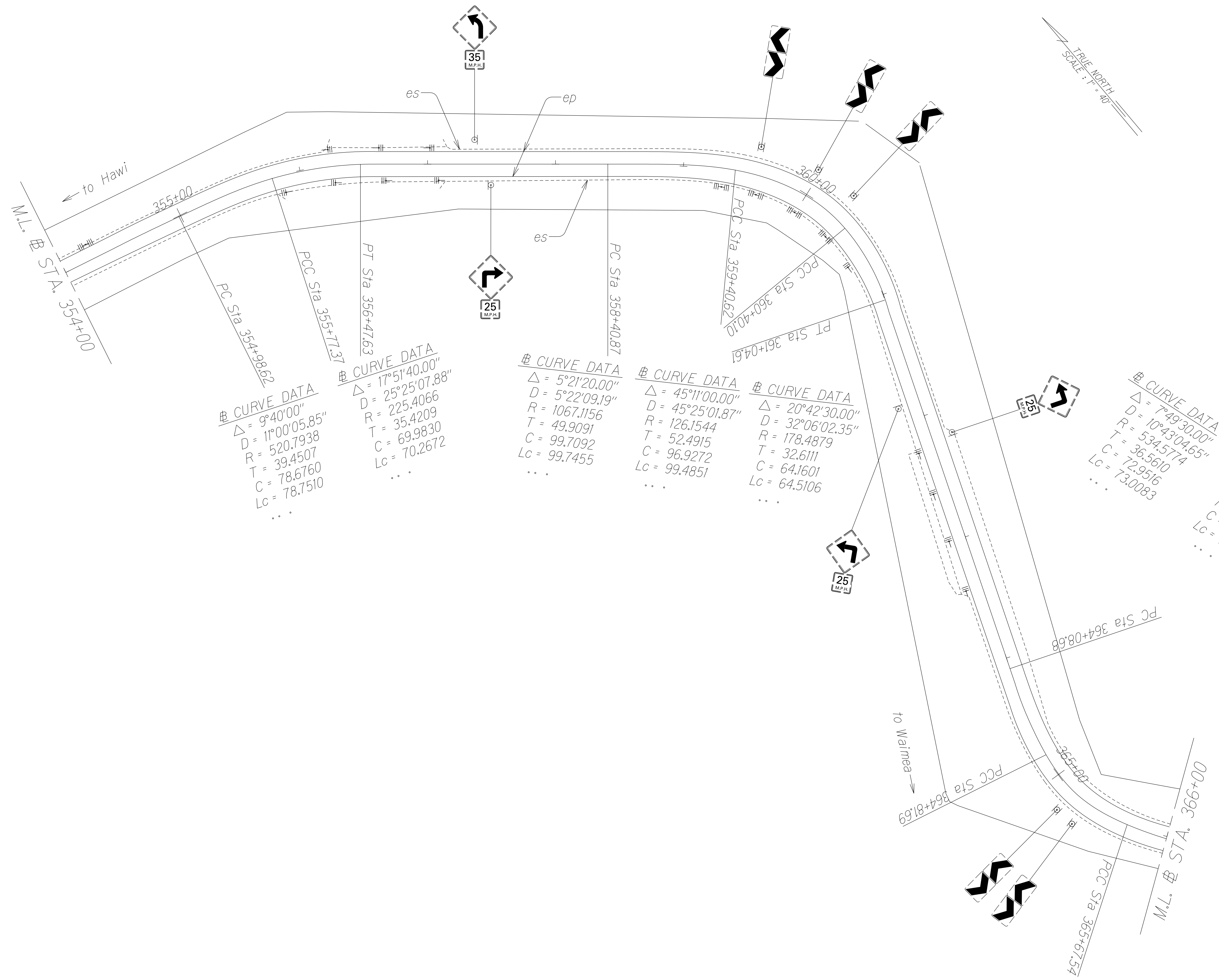


ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
RESURFACING AND RECONSTRUCTION
ROUTE 250, MP 6.4 TO 10.43
Federal-Aid Project No. STP-0250(008)
Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	15	19



CURVE DATA
 $\Delta = 9^{\circ}40'00''$
 $D = 11^{\circ}00'05.85''$
 $R = 520.7938$
 $T = 39.4507$
 $C = 78.6760$
 $Lc = 78.7510$
 ...

CURVE DATA
 $\Delta = 17^{\circ}51'40.00''$
 $D = 25^{\circ}25'07.88''$
 $R = 225.4066$
 $T = 35.4209$
 $C = 69.9830$
 $Lc = 70.2672$
 ...

CURVE DATA
 $\Delta = 5^{\circ}21'20.00''$
 $D = 5^{\circ}22'09.19''$
 $R = 1067.1156$
 $T = 49.9091$
 $C = 99.7092$
 $Lc = 99.7455$
 ...

CURVE DATA
 $\Delta = 45^{\circ}11'00.00''$
 $D = 45^{\circ}25'01.87''$
 $R = 126.1544$
 $T = 52.4915$
 $C = 96.9272$
 $Lc = 99.4851$
 ...

CURVE DATA
 $\Delta = 20^{\circ}42'30.00''$
 $D = 32^{\circ}06'02.35''$
 $R = 178.4879$
 $T = 32.6111$
 $C = 64.1601$
 $Lc = 64.5106$
 ...

CURVE DATA
 $\Delta = 7^{\circ}49'30.00''$
 $D = 10^{\circ}43'04.65''$
 $R = 534.5774$
 $T = 36.5610$
 $C = 72.9516$
 $Lc = 73.0083$
 ...

CURVE DATA
 $\Delta = 45^{\circ}26'00.00''$
 $D = 52^{\circ}55'06.84''$
 $R = 108.2716$
 $T = 45.3280$
 $C = 83.6234$
 $Lc = 85.8552$
 ...

CURVE DATA
 $\Delta = 8^{\circ}19'40.00''$
 $D = 8^{\circ}17'57.65''$
 $R = 690.3650$
 $T = 50.2598$
 $C = 100.2543$
 $Lc = 100.3426$
 ...

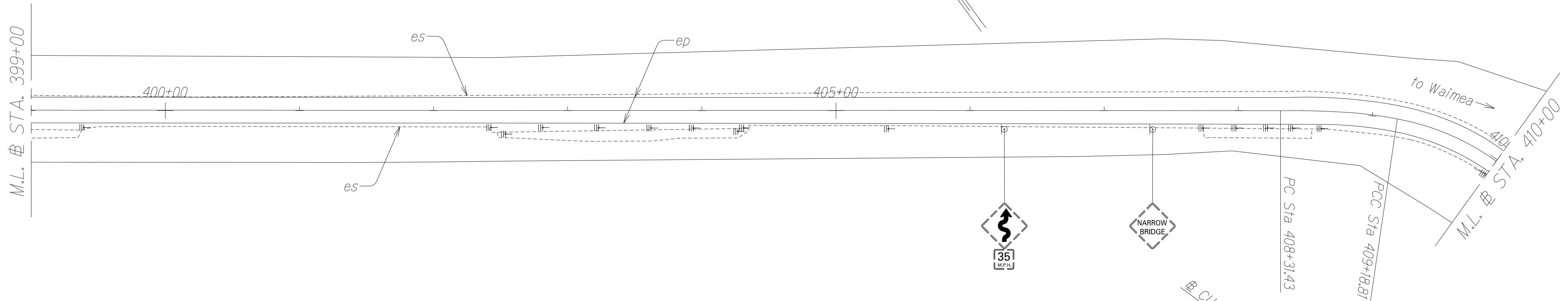
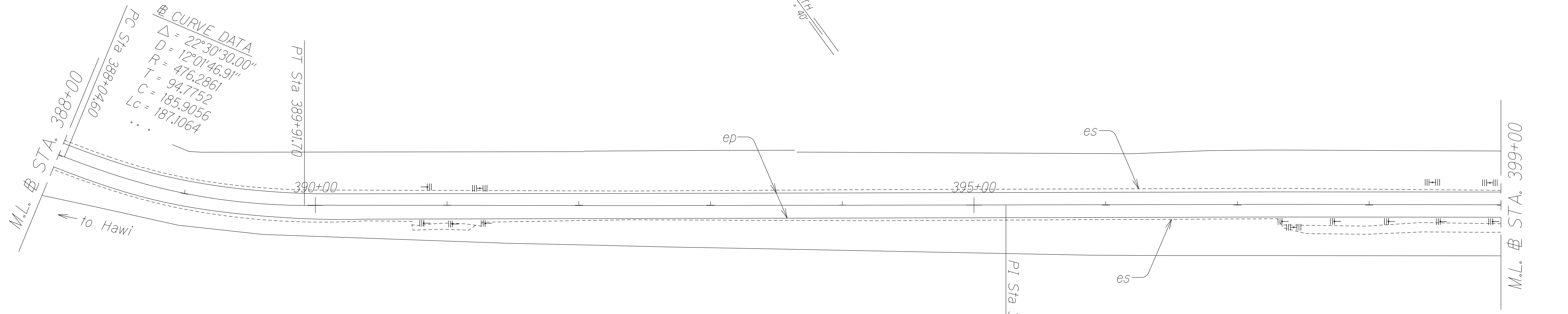
DESIGNED BY	DATE
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
 RESURFACING AND RECONSTRUCTION
 ROUTE 250, MP 6.4 TO 10.43
 Federal-Aid Project No. STP-0250(008)
 Scale: 1" = 40' Date: April, 2022

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0250(008)	2022	17	19

⊕ CURVE DATA
 $\Delta = 22^\circ 30' 30.00''$
 $D = 12^\circ 01' 46.91''$
 $R = 476.2861$
 $T = 94.7752$
 $C = 185.9056$
 $Lc = 187.1064$
 . . .



⊕ CURVE DATA
 $\Delta = 8^\circ 23' 50.00''$
 $D = 9^\circ 36' 37.18''$
 $R = 596.1896$
 $T = 43.7669$
 $C = 87.2989$
 $Lc = 87.3771$
 . . .

DATE	BY
DESIGNED BY	
CHECKED BY	
PROJECT NO.	
DATE	BY
DESIGNED BY	
CHECKED BY	
PROJECT NO.	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ROADWAY PLANS

KOHALA MOUNTAIN ROAD
 RESURFACING AND RECONSTRUCTION
 ROUTE 250, MP 6.4 TO 10.43
 Federal-Aid Project No. STP-0250(008)
 Scale: 1" = 40' Date: April, 2022

