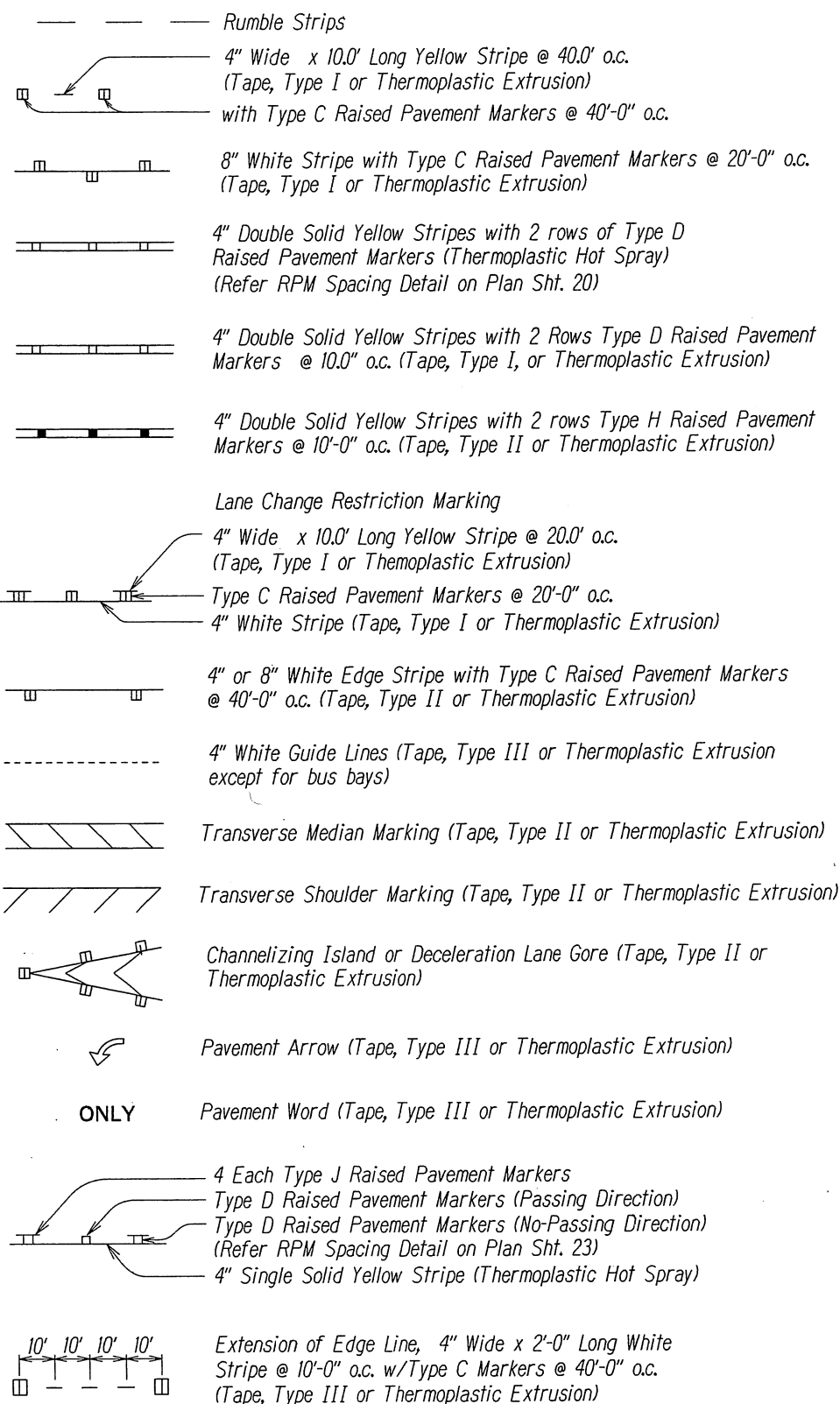
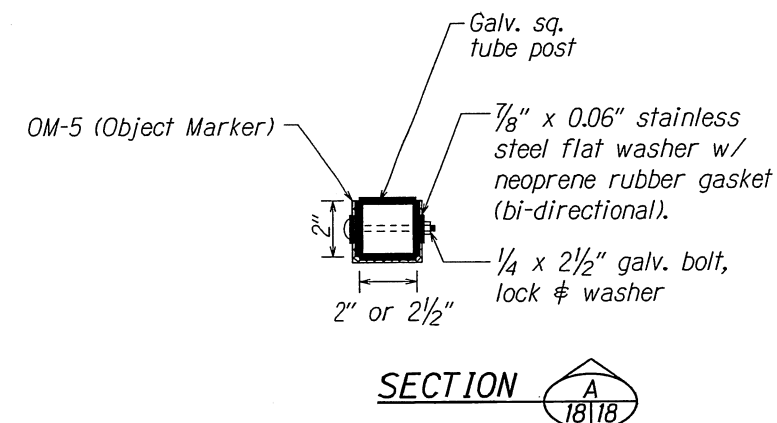
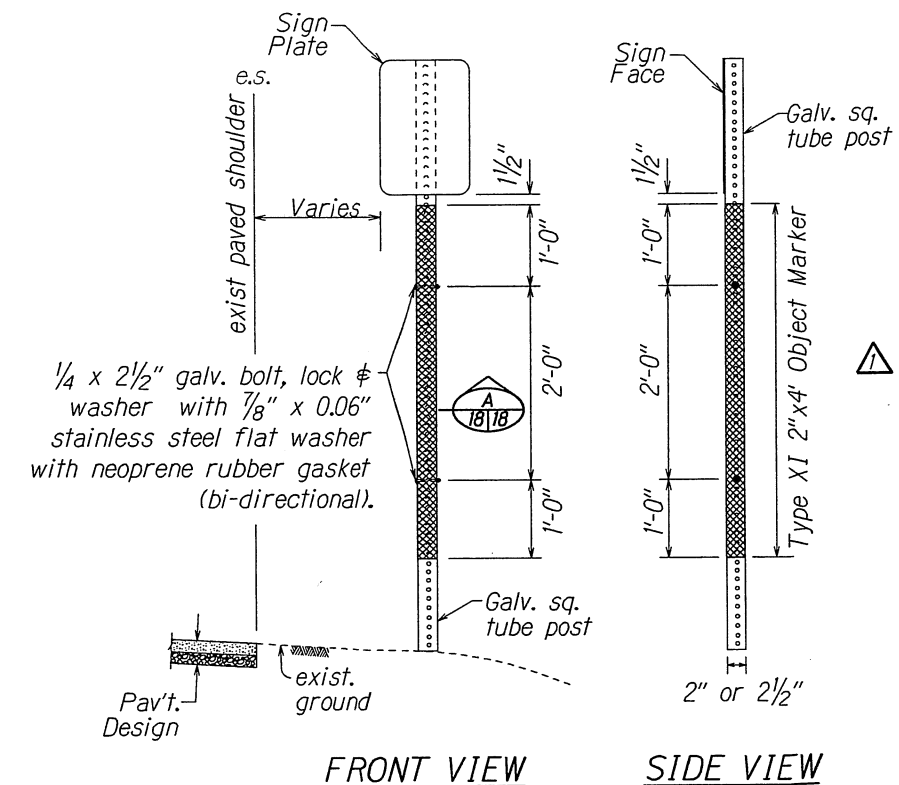


LEGEND



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. Costs shall be incidental to the various pavement marking 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.
- 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.
- Final locations of all stop lines shall be approved by the Engineer prior to installation.
- All pavement striping shall be as noted on the legend or plans.
- Pavement marking (Tape or Thermoplastic Extrusion) over existing and new pavement shall be applied with an approved primer as recommended by the 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 at the beginning of the project and at the end of the project advance construction warning signs 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. The advance construction warning signs shall be new and become the property of the Contractor.
- 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 of Special Provisions and the latest editions and amendments of the following FHWA publications:
 - "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD)
 - "Standard Highway Signs"
 - "Standard Alphabets for Highway Signs"
- State Route Marker Symbols, borders, messages, arrows, symbols and shields shall conform to details as shown on the plans and as specified in the MUTCD.
- All new and relocated signs and markers installed on pipe posts, light standard or expressway sign post are to be mounted with band brackets and steel braces.
- Object marker shall be Vis-Z-Shield, manufactured by "Zumar" or approved equal.
- Background of object marker shall be retroreflectorized with Type XI retroreflective sheeting.
- The color of the object marker retroreflective sheeting shall be red for "STOP" (R1-1) and "YIELD" (R1-2) signs, others shall be yellow retroreflective sheeting.
- Removal and disposal of existing signs and posts shall be considered incidental to various contract items.



OBJECT MARKER (OM-5) DETAIL @ TRAFFIC SIGN POST
Not to Scale

11/21/17	△ - Revise Dimension
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
PAVEMENT MARKING LEGEND, DETAILS, NOTES & SUMMARY	
KUHIU HIGHWAY RESURFACING Kapule Highway to North Leho Drive Federal-Aid Proj. No. NH-56-1(058)	
Date: Nov. 2017	
SHEET No. T1 OF 10 SHEETS	

GENERAL NOTES

1. The scope of work for this project includes reconstructing weakened pavement areas; cold planing; resurfacing; removing existing pavement markers, traffic signs and rumble strips; installing new pavement markers, traffic signs and milled rumble strips; cleaning existing culvert and drainage structures and dressing of shoulders.
2. The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts.
3. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 107.06 - Contractor Duty Regarding Public Convenience; Subsection 104.11 - Utilities and Services; 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.
5. 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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6. The exact locations and limits or areas to be excavated, reconstructed and cold planed shall be determined in the field by the Engineer.
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
8. All lanes shall be open to traffic during the hours from 5:00 AM to 8:00 PM. Only one lane of highway shall be closed at any time. Night working hours are specified in Section 107 of the Special Provisions. Failure of the Contractor to open all lanes of traffic beyond the allowable lane closure hours specified above shall result in assessment of rental fees as specified in Section 108.09 - Rental Fees for Unauthorized Lane closure or Occupancy of the Special Provisions.
9. The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to various contract items and shall not be paid for separately.
10. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans.
11. Trimming and dressing of shoulder, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. Suitable materials shall include materials from roadway excavation, including topsoil and base material therefrom, and if necessary, additional materials from borrow outside the limits of the right of way. Asphalt concrete removed from cold planing, reconstruction and roadway excavation shall not be used for dressing of shoulder, sidewalk or bus turnout. This work shall be considered incidental to the various contract items.
12. The Contractor, at his own expense shall hydro-mulch and maintain per Section 641 of the HDOT Standard Specification all areas disturbed by his operations.
13. Existing drainage system will 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 various contract items.
14. The Contractor shall provide 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 the various contract items, and will not be paid for separately.
15. All saw cutting work shall be considered incidental to Item 401.0100 - HMA Pavement, Mix No. IV and will not be paid for separately.

16. Any work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
17. Prior to his resurfacing operations, the Contractor shall be responsible for locating, preserving and marking all utility & highway facilities that will require adjustments to the new finished pavement grade. Additionally, the Contractor shall submit to the Engineer a list of all items, including water, drainage, sewer, electrical, telephone and cable utilities to be adjusted to the new finished grade.
18. After completion of resurfacing, the Contractor and the Engineer will test for, and determine ponding areas (i.e. low spots within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas at no cost to the State.
19. Contractor shall exercise extreme caution to preserve BENCHMARKS (Survey Monuments). Whenever the center of a Survey Monument is less than three (3) feet from the edge of construction, the Contractor shall retain a Licensed Land Surveyor to reference the location of said Survey Monument.
20. Benchmarks that are disturbed or destroyed shall be restored under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and new values of the new benchmark shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.
- All new reference survey monuments shall be set under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and values of the new survey monuments shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.
21. All asphalt concrete materials from cold planing, reconstruction and roadway excavation operations shall become the property of the State. The Contractor shall deliver these materials to the Lihue Airport's baseyard stockpile area. The Contractor shall separate the clean cold-planed material from the cold-planed material mixed with base course. This work shall be considered incidental to the various contract items.
22. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the State Highways Division at telephone no. 241-3000.
23. Prior to construction, the contractor shall contact the various utility agencies for location of existing utilities within the project limits. The Contractor shall locate and protect all existing utilities whether or not shown on the plans. Any costs incurred by damages to existing utilities will be borne by the Contractor. Contractor shall request from One-Call Center, Ph: 1-866-423-7287. The Contractor shall also call the County of Kauai, Department of Water, Ph: 245-5444 and the Wastewater Division, Ph: 241-6642 for toning waterlines and sewerlines respectively.
24. All workers within the State right-of-way who are exposed to either vehicles using the roadway or to construction equipment shall wear high-visibility safety apparel that meets the Performance Class 2 or 3 requirements of ANSI/ISEA 107-2004. "Workers" is defined as people on foot whose duties place them with the State right-of-way, such as, but not limited to construction and maintenance forces, equipment operators, survey crews, utility crews, responders to incidents (e.g., EMT and firemen), and law enforcement personnel directing traffic, investigating accidents, handling lane closures and obstructed roadways.
25. Install new Type II Object Marker on all utility poles and trees that are shown on the pavement and traffic signing plans. Refer to STandard Plan, TE-15 for details.

26. Should historic remains such as artifacts, burials, concentrations of shell or charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find. The Contractor shall immediately notify the Planning Department at (808) 241-4050 and State Historic Preservation Division at (808) 692-8015, which will assess the significance of the find and recommend the appropriate mitigation measures, if necessary.
27. All works of toning, probing, hand digging and all other means of utility verifications shall not be paid for separately, but shall be considered incidental to the various contract items.

LEGEND

- Reconstruction Areas
- Cold-planing Areas & Resurfacing Limits
- Existing Power Pole
- Existing Electric Manhole
- Adjusted Elec. MH Frame/Cover
- Existing Traffic Signal Pullbox
- Existing Telephone Manhole
- Adjusted Tel. MH Frame/Cover
- Existing Telephone Pullbox
- Existing 12" Water Line
- Existing Water Manhole
- Adjusted Water MH Frame/Cover
- Existing Water Air Valve
- Adjusted Water Air Valve
- Existing Water Valve Box
- Adjusted Water Valve Box
- Existing Water Meter Box
- Adjusted Water Meter Box
- New Type "X" Water Meter Box
- Existing Traffic Sign
- New Traffic Sign
- Existing Metal Guardrail
- New Metal Guardrail
- Adjusted and/or Relocated Metal Guardrail
- Existing Fire Hydrant
- Existing Sewer Line
- New 12" Sewer Line
- Existing Sewer Manhole
- Adjusted Sewer Manhole
- New Sewer Manhole
- Existing Monument
- Adjusted Monument
- New Monument
- Existing 24" Drain Line
- Existing Storm Drain Manhole
- Adjusted Storm Drain Manhole
- Existing Grated Drop Inlet
- New Grated Drop Inlet
- Adjusted/Reconstructed Drain Inlet or Replaced Steel Grate

11/21/17

DATE

REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

KUHIO HIGHWAY RESURFACING
Kapule Highway to North Leho Drive
Federal-aid Proj. No. NH-056-1(058)

Scale: NA

Date: Nov. 2017

SHEET No. 1 OF 1 SHEETS