

DATE  
JAN 2022

SURVEY PLOTTED BY  
DRAWN BY

NOTE BOOK  
DESIGNED BY  
CHECKED BY

ORIGINAL  
PLAN  
No. 9HLE

# STANDARD PLANS SUMMARY

|                        |       |                       |                |              |                 |
|------------------------|-------|-----------------------|----------------|--------------|-----------------|
| FED. ROAD<br>DIST. NO. | STATE | FED. AID<br>PROJ. NO. | FISCAL<br>YEAR | SHEET<br>NO. | TOTAL<br>SHEETS |
| HAWAII                 | HAW.  | NH-037-1(028)         | 2022           | 2            | 42              |

| STANDARD<br>PLAN NO. | TITLE                                           | DATE     |
|----------------------|-------------------------------------------------|----------|
| B-01                 | NOTES & MISCELLANEOUS DETAILS                   | 05/31/07 |
| B-03                 | BACKFILL DETAILS AT EARTH RETAINING STRUCTURES  | 05/31/07 |
| B-12                 | PRESTRESSED CONCRETE PILES & COMPRESSION SPLICE | 05/31/07 |
|                      | CAN DETAILS                                     |          |
| B-12A                | PRESTRESSED CONCRETE PILES, PILE & COMPRESSION  | 05/31/07 |
|                      | SPLICE CAN DETAILS & NOTES                      |          |
| B-12B                | PILE INTERACTION DIAGRAM                        | 05/31/07 |
| B-13                 | PRESTRESSED CONCRETE PILE BUILD-UP DETAILS      | 05/31/07 |
|                      |                                                 |          |
|                      |                                                 |          |

|      |                                                     |          |
|------|-----------------------------------------------------|----------|
| D-01 | CATTLE GATE                                         | 05/31/07 |
| D-02 | CHAIN LINK FENCE WITH TOPRAIL                       | 05/31/07 |
| D-03 | CHAIN LINK FENCE WITHOUT TOPRAIL                    | 05/31/07 |
| D-04 | WIRE FENCE WITH METAL POSTS                         | 05/31/07 |
| D-05 | TYPICAL DETAILS OF CURBS AND/OR GUTTERS             | 05/31/07 |
| D-06 | TYPICAL DETAIL OF REINFORCED CONCRETE DROP DRIVEWAY | 05/31/07 |
| D-07 | CENTERLINE AND REFERENCE SURVEY MONUMENTS           | 05/31/07 |
| D-08 | STREET SURVEY MONUMENT                              | 05/31/07 |
| D-15 | CONCRETE SIDEWALK                                   | 05/31/07 |
| D-16 | P.C.C. BUS PAD                                      | 05/31/07 |
| D-17 | P.C.C. BUS PAD                                      | 05/31/07 |
| D-18 | P.C.C. PAVEMENT LAYOUT                              | 05/31/07 |
| D-19 | P.C.C. PAVEMENT W/ PERMEABLE BASE JOINT DETAILS     | 05/31/07 |
| D-20 | P.C.C. PAVEMENT W/ PERMEABLE BASE JOINT DETAILS     | 05/31/07 |
| D-21 | P.C.C. LONGITUDINAL JOINT DETAILS                   | 05/31/07 |
| D-22 | P.C.C. CONNECTION TO CURBS AND GUTTERS              | 05/31/07 |
| D-23 | JOINTS                                              | 05/31/07 |
|      |                                                     |          |

|      |                    |          |
|------|--------------------|----------|
| L-01 | TREE PLANTING      | 08/16/06 |
| L-02 | TREE PLANTING      | 08/16/06 |
| L-03 | TREE TRANSPLANTING | 08/16/06 |
| L-04 | PALM PLANTING      | 08/16/06 |
| L-05 | SHRUB PLANTING     | 08/16/06 |
| L-06 | LANDSCAPE DETAILS  | 08/16/06 |
| L-07 | LANDSCAPE DETAILS  | 08/16/06 |
| L-08 | LANDSCAPE DETAILS  | 08/16/06 |
| L-09 | LANDSCAPE DETAILS  | 08/16/06 |
| L-10 | LANDSCAPE DETAILS  | 08/16/06 |
| L-11 | PLANTING NOTES     | 08/16/06 |
| L-12 | IRRIGATION DETAILS | 08/16/06 |
| L-13 | IRRIGATION DETAILS | 08/16/06 |
| L-14 | IRRIGATION DETAILS | 08/16/06 |
| L-15 | IRRIGATION DETAILS | 08/16/06 |
| L-16 | IRRIGATION DETAILS | 08/16/06 |
| L-17 | IRRIGATION DETAILS | 08/16/06 |
| L-18 | IRRIGATION DETAILS | 08/16/06 |
| L-19 | IRRIGATION DETAILS | 08/16/06 |
| L-20 | IRRIGATION DETAILS | 08/16/06 |
| L-21 | IRRIGATION DETAILS | 08/16/06 |
| L-22 | IRRIGATION DETAILS | 08/16/06 |
| L-23 | IRRIGATION DETAILS | 08/16/06 |
| L-24 | IRRIGATION NOTES   | 08/16/06 |
|      |                    |          |

| STANDARD<br>PLAN NO. | TITLE                                               | DATE     |
|----------------------|-----------------------------------------------------|----------|
| H-01A                | TYPE A CATCH BASIN                                  | 05/31/07 |
| H-01B                | TYPE B CATCH BASIN                                  | 05/31/07 |
| H-01C                | TYPE C CATCH BASIN                                  | 05/31/07 |
| H-01D                | TYPE D CATCH BASIN                                  | 05/31/07 |
| H-01E                | CATCH BASIN SECTIONS                                | 05/31/07 |
| H-02A                | TYPE A1 CATCH BASIN                                 | 05/31/07 |
| H-02B                | TYPE B2 CATCH BASIN                                 | 05/31/07 |
| H-02C                | TYPE C1 CATCH BASIN                                 | 05/31/07 |
| H-02D                | TYPE D1 CATCH BASIN                                 | 05/31/07 |
| H-02E                | CATCH BASIN SECTION                                 | 05/31/07 |
| H-03                 | TYPE A,B, AND C STORM DRAIN MANHOLE                 | 05/31/07 |
| H-04                 | TYPE D STORM DRAIN MANHOLE                          | 05/31/07 |
| H-05                 | TYPICAL REINFORCING DETAILS FOR DRAINAGE STRUCTURES | 05/31/07 |
| H-06                 | TYPICAL REINFORCING DETAILS FOR DRAINAGE STRUCTURES | 05/31/07 |
| H-07                 | CATCH BASIN AND MANHOLE CASTINGS                    | 05/31/07 |
| H-08                 | TYPE 1A-9 AND 1A-9P GRATED DROP INLET               | 05/31/07 |
| H-09                 | TYPE 2A-9 AND 2A-9P GRATED DROP INLET               | 05/31/07 |
| H-10                 | TYPE A-9 OR A-9P STEEL FRAMES                       | 05/31/07 |
| H-11                 | TYPE A-9 AND A-9P STEEL GRATES                      | 05/31/07 |
| H-12                 | TYPE 61614P AND 1211214P GRATED DROP INLET          | 05/31/07 |
| H-13                 | TYPE 61616P AND 1211216P GRATED DROP INLET          | 05/31/07 |
| H-14                 | TYPE 61214P GRATED DROP INLET                       | 05/31/07 |
| H-15                 | TYPE 1211214, 1211214P, 1211216, 1211216P STEEL     | 05/31/07 |
|                      | FRAME AND GRATES                                    |          |
| H-16                 | TYPE 61614, 61614P, 61616, 61616P STEEL FRAME       | 05/31/07 |
|                      | AND GRATES                                          |          |
| H-17                 | TYPE 61214 STEEL FRAMES AND GRATES                  | 05/31/07 |
| H-18                 | TYPE 61214P STEEL GRATES                            | 05/31/07 |
| H-19                 | TYPE 61614B STEEL FRAME AND GRATES                  | 05/31/07 |
| H-20                 | CEMENT RUBBLE MASONRY STRUCTURES                    | 05/31/07 |
| H-21                 | CONCRETE AND CEMENT RUBBLE MASONRY STRUCTURES       | 05/31/07 |
| H-22                 | INLET/OUTLET STRUCTURE                              | 05/31/07 |
| H-23                 | INLET/OUTLET STRUCTURE                              | 05/31/07 |
| H-24                 | FLARED END SECTION FOR CULVERTS                     | 05/31/07 |
| H-25                 | FLARED END SECTION FOR CULVERTS                     | 05/31/07 |
| H-26                 | CONCRETE SPILLWAY INLET                             | 05/31/07 |
| H-27                 | CAP COUPLING DETAILS STANDARD JOINT                 | 05/31/07 |
| H-28                 | REINFORCED CONCRETE COLLAR & JACKET                 | 05/31/07 |
| H-29                 | UNDERDRAIN CLEANOUT STEEL FRAME AND COVER           | 05/31/07 |
| H-30                 | UNDERDRAIN CONNECTION TO DRAINAGE STRUCTURE         | 05/31/07 |
|                      |                                                     |          |

|        |                                               |          |
|--------|-----------------------------------------------|----------|
| TE-01  | SIGN HEIGHT AND LOCATION                      | 07/11/08 |
| TE-1A  | SIGN INSTALLATION                             | 07/11/08 |
| TE-02A | GALVANIZED FLANGED CHANNEL SIGN POST MOUNTING | 05/31/07 |
| TE-02B | GALVANIZED FLANGED CHANNEL SIGN POST MOUNTING | 05/31/07 |
| TE-02C | GALVANIZED FLANGED CHANNEL SIGN POST MOUNTING | 05/31/07 |
| TE-03A | GALVANIZED SQUARE TUBE SIGN POST MOUNTING     | 05/31/07 |
| TE-03B | GALVANIZED SQUARE TUBE SIGN POST MOUNTING     | 05/31/07 |
| TE-04  | REGULATORY SIGNS                              | 07/11/08 |
| TE-05  | WARNING SIGNS                                 | 07/11/08 |
| TE-06  | MISCELLANEOUS SIGNS                           | 07/11/08 |
| TE-07  | CONSTRUCTION SIGNS                            | 07/11/08 |
| TE-08  | MISCELLANEOUS INTERSECTION SIGNS              | 07/11/08 |

| STANDARD<br>PLAN NO. | TITLE                                           | DATE     |
|----------------------|-------------------------------------------------|----------|
| TE-09                | BIKE ROUTE SIGN & SUPPLEMENTARY PLATES          | 07/11/08 |
| TE-10                | INTERSTATE ROUTE MARKER                         | 07/11/08 |
| TE-11                | STATE ROUTE MARKER AND AUXILIARY MARKERS        | 07/11/08 |
| TE-12                | STATE ROUTE MARKER AND BORDER DETAIL FOR        | 07/11/08 |
|                      | GUIDE SIGNS                                     |          |
| TE-12A               | ROUTE SIGN ASSEMBLIES                           | 07/11/08 |
| TE-13                | STREET NAME SIGN ON MAST ARM                    | 07/11/08 |
| TE-14                | MISCELLANEOUS REFLECTOR MARKERS                 | 07/11/08 |
| TE-15                | OBJECT MARKERS                                  | 07/11/08 |
| TE-16                | MILE POSTS                                      | 07/11/08 |
| TE-17A               | CANTILEVER OVERHEAD SIGN ELEVATION & DETAILS    | 05/31/07 |
| TE-17B               | CANTILEVER SIGN FRAME DETAIL AND SECTION        | 05/31/07 |
| TE-17C               | CANTILEVER SIGN FRAME DETAIL                    | 05/31/07 |
| TE-17D               | CANTILEVER SIGN FRAME SECTION                   | 05/31/07 |
| TE-17E               | CANTILEVER SIGN FRAME DETAILS                   | 05/31/07 |
| TE-18A               | TWO POST OVERHEAD SIGN FRAME ELEVATIONS         | 05/31/07 |
| TE-18B               | TWO POST SIGN FRAMING PLAN SECTION              | 05/31/07 |
| TE-18C               | TWO POST SIGN FRAMING SECTIONS AND DETAILS      | 05/31/07 |
| TE-18D               | TWO POST SIGN FRAME DETAILS                     | 05/31/07 |
| TE-18E               | TWO POST SIGN FRAME DETAILS                     | 05/31/07 |
| TE-19A               | OVERHEAD SIGN FRAMING SCHEDULE                  | 05/31/07 |
| TE-19B               | SIGN POST DRILLED SHAFT FOUNDATION              | 05/31/07 |
| TE-19C               | SPREAD FOOTING                                  | 05/31/07 |
| TE-19D               | SIGN FRAME FOUNDATION SCHEDULE                  | 05/31/07 |
| TE-19D.1             | SIGN FRAME FOUNDATION SCHEDULE                  | 05/31/07 |
| TE-19D.2             | SIGN FRAME FOUNDATION SCHEDULE                  | 05/31/07 |
| TE-19D.3             | SIGN FRAME FOUNDATION SCHEDULE                  | 05/31/07 |
| TE-19D.4             | SIGN FRAME FOUNDATION SCHEDULE                  | 05/31/07 |
| TE-19D.5             | SIGN FRAME FOUNDATION SCHEDULE                  | 05/31/07 |
| TE-19E               | ANCHORAGE DETAILS                               | 05/31/07 |
| TE-19F               | ANCHORAGE DETAILS                               | 05/31/07 |
| TE-19G               | MISCELLANEOUS SIGN FRAME DETAILS                | 05/31/07 |
| TE-19H               | LUMINAIRE WALKWAY SUPPORT                       | 05/31/07 |
| TE-19J               | FIXED MESSAGE LUMINAIRE SUPPORT                 | 05/31/07 |
| TE-19K               | MISCELLANEOUS SIGN DETAILS                      | 05/31/07 |
| TE-19L               | MISCELLANEOUS SIGN DETAILS                      | 05/31/07 |
| TE-19M               | MISCELLANEOUS SIGN FRAME DETAILS                | 05/31/07 |
| TE-20                | SUPPORTS FOR GROUND MOUNTED GUIDE SIGN          | 05/31/07 |
| TE-20A               | SUPPORTS FOR GROUND MOUNTED GUIDE SIGN          | 05/31/07 |
| TE-20B               | SUPPORTS FOR GROUND MOUNTED GUIDE SIGN          | 05/31/07 |
| TE-20C               | SUPPORTS FOR GROUND MOUNTED GUIDE SIGN          | 05/31/07 |
| TE-21A               | SIGN BREAKAWAY MOUNTS                           | 05/31/07 |
| TE-21B               | SIGN BREAKAWAY MOUNTS                           | 05/31/07 |
| TE-22                | LAMINATED ALUMINUM SIGN PANELS (OVERHEAD)       | 05/31/07 |
| TE-23                | LAMINATED ALUMINUM SIGN PANELS (GROUND MOUNTED) | 07/11/08 |
| TE-24                | SOLID ALUMINUM EXTRUDED SIGN PANEL AND          | 05/31/07 |
|                      | ACCESSORY DETAILS                               |          |
| TE-25                | GUIDE SIGNS LUMINAIRE MOUNTINGS                 | 05/31/07 |
| 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 |

| STANDARD<br>PLAN NO. | TITLE                                             | DATE     |
|----------------------|---------------------------------------------------|----------|
| TE-32                | TYPE I & II TRAFFIC SIGNAL SYSTEM MISC. DETAILS   | 05/31/07 |
| TE-33                | TYPE II TRAFFIC SIGNAL SYSTEM                     | 08/16/06 |
| TE-33A.1             | TYPE II TRAFFIC SIGNAL STANDARD                   | 05/31/07 |
| TE-33A.2             | TYPE II TRAFFIC SIGNAL STANDARD                   | 05/31/07 |
| TE-34                | ● LOOP DETECTOR DETAILS                           | 07/11/08 |
| TE-35                | ● LOOP DETECTORS & DUCT DETAILS                   | 07/11/08 |
| TE-36                | TRAFFIC SIGNAL DETAILS                            | 07/11/08 |
| TE-37                | PULLBOX & COVER DETAILS                           | 07/11/08 |
| TE-37A               | TYPE "A" TRAFFIC PULLBOX                          | 05/31/07 |
| TE-37B               | TYPE "A" TRAFFIC PULLBOX REINFORCING              | 05/31/07 |
| TE-37C               | TYPE "B" TRAFFIC PULLBOX                          | 05/31/07 |
| TE-37D               | TYPE "B" TRAFFIC PULLBOX REINFORCING              | 05/31/07 |
| TE-37E               | TYPE "B" TRAFFIC PULLBOX FOUNDATION               | 05/31/07 |
| TE-37F               | TYPE "C" TRAFFIC PULLBOX                          | 05/31/07 |
| TE-37G               | TYPE "C" TRAFFIC PULLBOX REINFORCING              | 05/31/07 |
| TE-37H               | TYPE "C" TRAFFIC PULLBOX FOUNDATION               | 05/31/07 |
| TE-37J               | TRAFFIC PULLBOX COVER AND DETAILS                 | 05/31/07 |
| TE-38                | TYPE III TRAFFIC SIGNAL STANDARD                  | 05/31/07 |
| TE-38A.1             | TYPE III TRAFFIC SIGNAL STANDARD                  | 05/31/07 |
| TE-38A.2             | TYPE III TRAFFIC SIGNAL STANDARD                  | 05/31/07 |
| TE-39                | METAL GUARDRAIL CONNECTION TO CONCRETE BARRIER    | 07/11/08 |
| TE-40                | CONCRETE BARRIER TRANSITION                       | 05/31/07 |
| TE-40A               | CONCRETE BARRIER TRANSITION SECTIONS              | 05/31/07 |
| TE-41                | GUARDRAIL TYPE 4 (RIGID BARRIER)                  | 05/31/07 |
| TE-42                | PORTABLE CONCRETE BARRIER                         | 05/31/07 |
| TE-43                | PORTABLE CONCRETE BARRIER                         | 05/31/07 |
| TE-44                | GUARDRAIL TYPE 4 MISCELLANEOUS DETAILS            | 07/11/08 |
| TE-45                | BARRICADES                                        | 07/11/08 |
| TE-46                | DELINEATION & PAVEMENT MARKINGS AT NARROW BRIDGES | 07/11/08 |
| TE-47                | HIGHWAY LIGHT STANDARD                            | 05/31/07 |
|                      |                                                   |          |
|                      |                                                   |          |
|                      |                                                   |          |

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**  
HALEAKALA HIGHWAY RECONSTRUCTION  
NORTH FIREBREAK ROAD TO  
OLD HALEAKALA HIGHWAY  
FEDERAL AID PROJECT NO. NH-037-1(028)  
Date: June, 2022