

STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD.2	52

STANDARD 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 CAN DETAILS	05/31/07
B-12A	PRESTRESSED CONCRETE PILES, PILE & COMPRESSION SPLICE CAN DETAILS & NOTES	05/31/07
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 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 FRAME AND GRATES	05/31/07
H-16	TYPE 61614, 61614P, 61616, 61616P STEEL FRAME AND GRATES	05/31/07
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 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 GUIDE SIGNS	07/11/08
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 ACCESSORY DETAILS	05/31/07
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	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

STANDARD PLAN NO.	TITLE	DATE
TE-31	PAVEMENT ALPHABETS, NUMBERS & SYMBOLS	07/11/08
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 ●)

1/17/12  Added D-19 & D-22

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
STANDARD PLANS SUMMARY
MOKAPU SADDLE ROAD AND
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to North Kalaheo Ave.
M.P. 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)
Date: April 2011

SHEET No. 1 OF 1 SHEETS

ADD.2

ORIGINAL PLAN
DESIGNED BY
CHECKED BY
DATE
1/17/12

GENERAL NOTES

1. The scope of work for this project consists of resurfacing, replacing existing damage curb and gutter, reconstructing existing drainage structures, adjusting utility manholes and pullboxes, upgrading guardrails, installing concrete bus pads, curb ramps, sidewalks, underdrains, landscaping, irrigations, loop detectors, striping and pavement markings.
2. The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts, which requires him to perform work amounting 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 of the Special Provisions : Subsection 104.09 - Maintenance of Traffic; 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.
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 Contractor shall verify the presence of existing aerial and underground utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocations, as necessary. All costs associated with temporary relocations shall be borne by the Contractor.
7. The exact locations and limits or areas to be filled with leveling course, reconstructed and cold planed shall be determined in the field by the Engineer.
8. The Contractor shall notify in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (ph. #848-4571) seven (7) days prior to any paving operations.
9. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
10. 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 Asphalt Concrete Pavement, with Warm Mix Processes and will not be paid for separately.
11. All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete Pavement, Warm Mix Processes prior to resurfacing. This work will be paid for under Asphalt Concrete Pavement, with Warm Mix Processes.
12. Tack coat shall be incidental to the various Asphalt Concrete Pavement items.
13. 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. This work shall be considered incidental to the various contract items.
14. Existing drainage system shall be kept functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.

15. Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
16. The Contractor shall provide for vehicles and pedestrians access to and from all existing side streets and driveways at all times.
17. All saw cutting work will not be measured or paid for separately, but shall be incidental to the various contract items.
18. Existing facilities and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition at no cost to the State.
19. All regraded areas and all grassed areas damaged by construction activities shall be planted in accordance with Specifications Section 619 - Planting. Contractor shall restore to its original condition at no cost to the State.
20. The Contractor shall be held liable for any damages incurred to the existing landscaping as a result of his operations.
21. No material or equipment shall be stockpiled or otherwise stored within highway right-of-way except at locations designated in writing and approved by the Engineer.
22. Contractor shall dispose or deliver any removed material at no cost to the State.
23. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the Standards and Specifications of the affected utility company at no cost to the State.
24. All work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to the other various contract items and shall not be paid for separately.
25. The Contractor shall provide and maintain for access to and from all existing sidewalks, ADA access routes complying with ADAAG Section 4.3, and cross streets at all times. This work shall be considered incidental to Asphalt Concrete Pavement and will not be paid for separately.
26. Removal and disposal of existing curb and gutter, guardrail, sidewalk and asphalt concrete pavement, and any debris shall be considered incidental to their respective bid items.
27. The Contractor might encounter cement treated base when cold planing from Sta. 62+00± to Sta. 73+04.30±. Any additional costs shall be considered incidental to the various contract items.
28. The bus pads shall have dowels into the existing curb and gutter.

PAVING AROUND MANHOLES

1. The Contractor shall place hot asphalt concrete around manholes and compact properly with a vibrating plate compactor.
2. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole which is not rolled by the steel roller.
3. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD.3	52

LEGEND

	Resurfacing Limits		Existing 6" Sewer Line
	AC Reconstruction Areas		Existing 8" Sewer Line
	New PCC Bus Pad Pavement		Existing 24" Sewer Line
	Existing Electrical Line		Existing Sewer Manhole
	Existing Electrical Overhead Line		Adjusted Sewer MH Frame/Cover
	Existing Electric Pole		Existing 6" Gas Line
	Existing Joint Pole		Existing Gas Valve Box
	Existing Power Pole		Adjusted Gas Valve Box
	Existing Electric Manhole		Existing Gas Manhole
	Adjusted Elec. MH Frame/Cover		Adjusted Gas MH Frame/Cover
	Existing Telephone Line		Existing Monument
	Existing Telephone Pole		Adjusted Monument
	Existing Telephone Manhole		Existing 24" Drain Line
	Adjusted Tele. MH Frame/Cover		Existing 36" Drain Line
	Existing Signal Corps Line		Existing 48" Drain Line
	Existing Oceanic Cable		Existing Storm Drain Manhole
	Existing TV Cable		Adjusted Storm Drain MH Frame/Cover
	Existing 4" Water Line		Existing Grated Drop Inlet
	Existing 8" Water Line		Existing Catch Basin
	Existing 12" Water Line		Existing Traffic Signal Box
	Existing 20" Water Line		Existing Traffic Signal Pole
	Existing 24" Water Line		Existing Traffic Sign
	Existing Water Manhole		Existing Highway Lighting Standard
	Adjusted Water MH Frame/Cover		Existing Irrigation Controller And Valve
	Existing Water Air Valve		Mokapu Saddle Road
	Adjusted Water Air Valve		Mokapu Boulevard
	Existing Water Valve Box		
	Adjusted Water Valve Box		
	Existing Water Meter		
	Adjusted Water Meter		
	Existing Fire Hydrant		

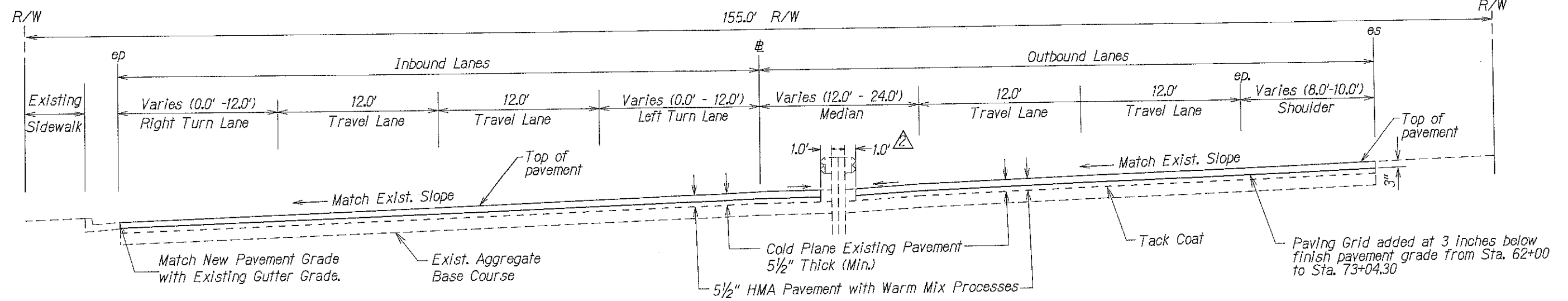
1/17/12 Added General Note #28.

DATE REVISION

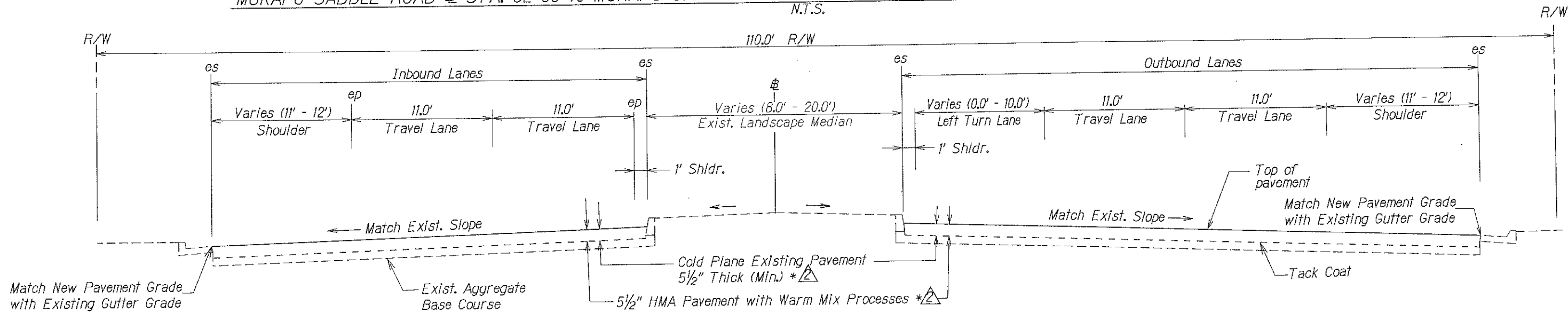
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES AND LEGEND	
MOKAPU SADDLE ROAD and MOKAPU BOULEVARD RESURFACING Kapaa Quarry Road to North Kalaheo Avenue M.P. 2.97 to M.P. 4.15 Federal Aid Project No. STP-065-1(010) Scale: None Date: April, 2011	
SHEET No. 1 OF 1 SHEETS	

ADD.3

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD.1	52



MOKAPU SADDLE ROAD @ STA. 62+00 to MOKAPU SADDLE ROAD @ STA. 73+04.30(BK) = MOKAPU BOULEVARD @ STA. 51+93.17(AH) N.T.S.

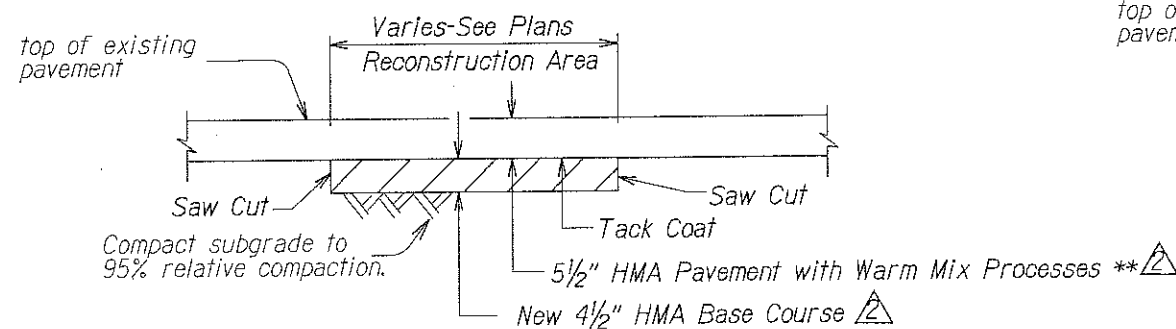


MOKAPU SADDLE ROAD @ STA. 73+04.30(BK) = MOKAPU BOULEVARD @ STA. 51+93.17(AH) to MOKAPU BOULEVARD @ STA. 4+81± N.T.S.

- * Notes: @ Sta. 51+93.17 (AH) to @ Sta. 47+50±
 (1) 8 1/2" Thick (Min.) Cold Plan Existing Pavement
 (2) 8 1/2" HMA Pavement with Warm Mix Processes

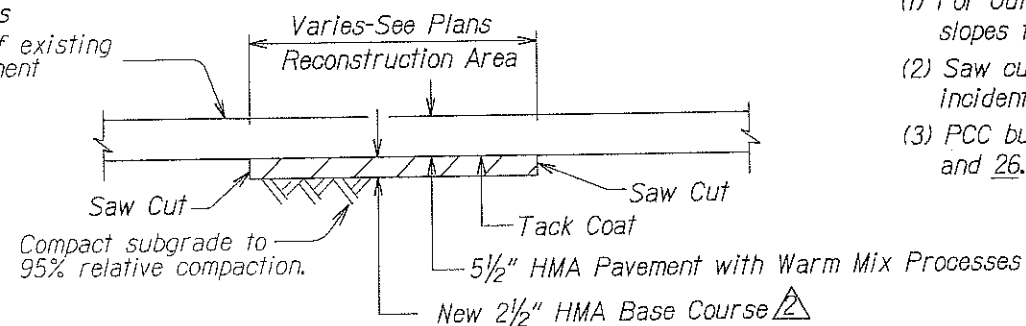
Notes:

- (1) For Outbound @ Sta. 32+50 to @ Sta. 27+00, the pavement grade slopes towards the median.
 (2) Saw cuts, compaction of subgrade, tack coat shall be considered incidental to the various contract items.
 (3) PCC bus pad locations are shown on Roadway Plans Sht. No. 24, 25 and 26. For details, see Standard Plan D-16 and D-17.



A.C. PAVEMENT RECONSTRUCTION DETAIL
 Kapaa Quarry Road to Oneawa Street
 N.T.S.

- ** Notes: @ Sta. 51+93.17 (AH) to @ Sta. 47+50±
 8 1/2" HMA Pavement with Warm Mix Processes



A.C. PAVEMENT RECONSTRUCTION DETAIL
 Oneawa Street to North Kalaheo Avenue
 N.T.S.

DATE	1/17/12	REVISION	2 HMA Base Course and Paving Limits Revised. And added Notes.
------	---------	----------	---

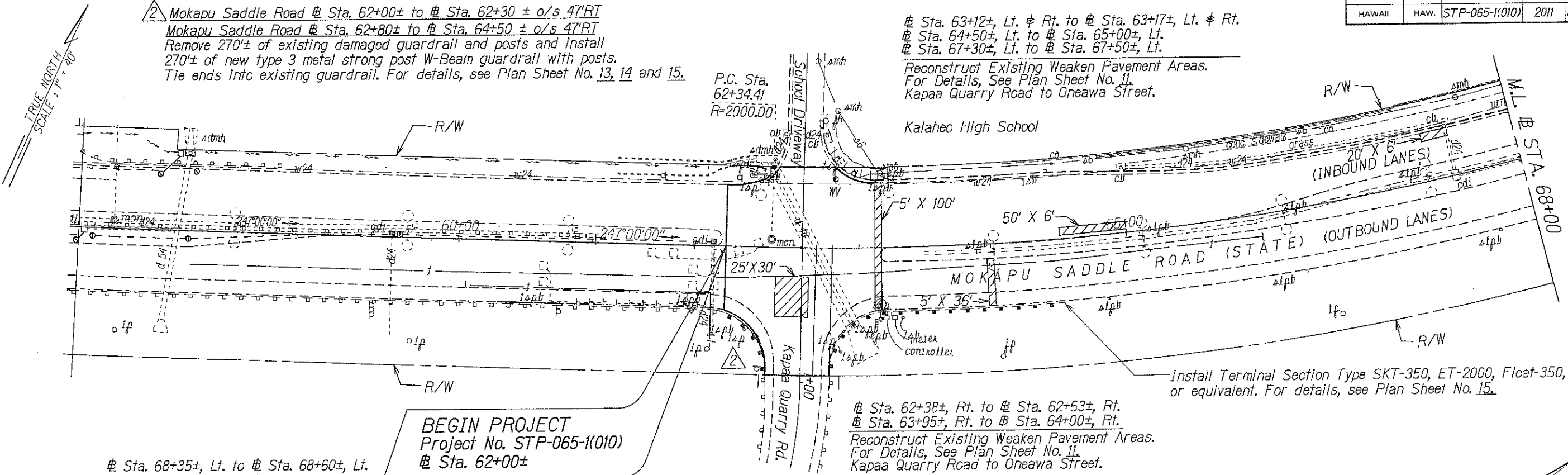
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TYPICAL SECTIONS
 MOKAPU SADDLE ROAD and
 MOKAPU BOULEVARD RESURFACING
 Kapaa Quarry Road to North Kalaheo Avenue
 M.P. 2.97 to M.P. 4.15
 Federal Aid Project No. STP-065-1(010)
 Scale: Not To Scale Date: April 2011
 SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD.23	52

2 Mokapu Saddle Road @ Sta. 62+00± to @ Sta. 62+30 ± o/s 47'RT
Mokapu Saddle Road @ Sta. 62+80± to @ Sta. 64+50 ± o/s 47'RT
Remove 270± of existing damaged guardrail and posts and install
270± of new type 3 metal strong post W-Beam guardrail with posts.
Tie ends into existing guardrail. For details, see Plan Sheet No. 13, 14 and 15.

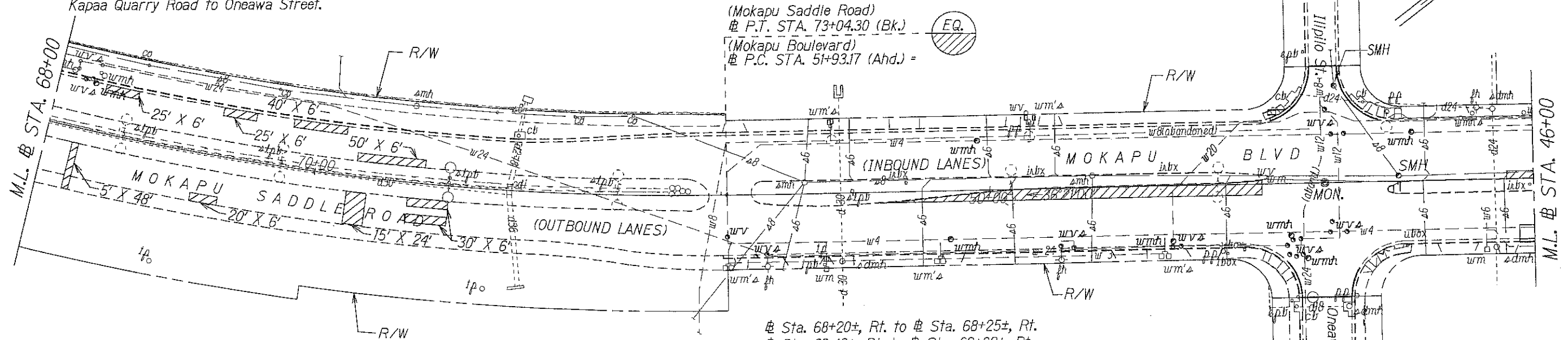
@ Sta. 63+12±, Lt. & Rt. to @ Sta. 63+17±, Lt. & Rt.
@ Sta. 64+50±, Lt. to @ Sta. 65+00±, Lt.
@ Sta. 67+30±, Lt. to @ Sta. 67+50±, Lt.
Reconstruct Existing Weaken Pavement Areas.
For Details, See Plan Sheet No. 11.
Kapaa Quarry Road to Oneawa Street.



@ Sta. 68+35±, Lt. to @ Sta. 68+60±, Lt.
@ Sta. 69+25±, Lt. to @ Sta. 69+50±, Lt.
@ Sta. 69+80±, Lt. to @ Sta. 70+20±, Lt.
@ Sta. 70+30±, Lt. to @ Sta. 70+80±, Lt.
Reconstruct Existing Weaken Pavement Areas.
For Details, See Plan Sheet No. 11.
Kapaa Quarry Road to Oneawa Street.

@ Sta. 62+38±, Rt. to @ Sta. 62+63±, Rt.
@ Sta. 63+95±, Rt. to @ Sta. 64+00±, Rt.
Reconstruct Existing Weaken Pavement Areas.
For Details, See Plan Sheet No. 11.
Kapaa Quarry Road to Oneawa Street.

Install Terminal Section Type SKT-350, ET-2000, Fleet-350,
or equivalent. For details, see Plan Sheet No. 15.



(Mokapu Saddle Road)
@ P.T. STA. 73+04.30 (Bk.)
(Mokapu Boulevard)
@ P.C. STA. 51+93.17 (Ahd.) =

Mokapu Saddle Road @ Sta. 64+17±, Lt. to Mokapu Boulevard @ Sta. 49+45±, Lt.
Mokapu Boulevard @ Sta. 46+00±, Lt. to Mokapu Boulevard @ Sta. 46+93±, Lt.
Mokapu Saddle Road @ Sta. 73+01±, Rt. to Mokapu Boulevard @ Sta. 47+94±, Rt.
Reconstruct Type 2DG Curb & Gutter. Demolition and disposal of existing curb
& gutter shall be considered incidental to New Type 2DG Curb & Gutter.

@ Sta. 68+20±, Rt. to @ Sta. 68+25±, Rt.
@ Sta. 69+12±, Rt. to @ Sta. 69+32±, Rt.
@ Sta. 70+25±, Rt. to @ Sta. 70+40±, Rt.
@ Sta. 70+70±, Rt. to @ Sta. 71+00±, Rt.
@ Sta. 50+80±, Rt. to @ Sta. 48+00±, Rt. (Left Turn Lane)
Reconstruct Existing Weaken Pavement Areas.
For Details, See Plan Sheet No. 11.
Kapaa Quarry Road to Oneawa Street.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLANS

MOKAPU SADDLE ROAD and
MOKAPU BOULEVARD RESURFACING

Kapaa Quarry Road to North Kalaheo Avenue

M.P. 2.97 to M.P. 4.15

Federal Aid Project No. STP-065-1(010)

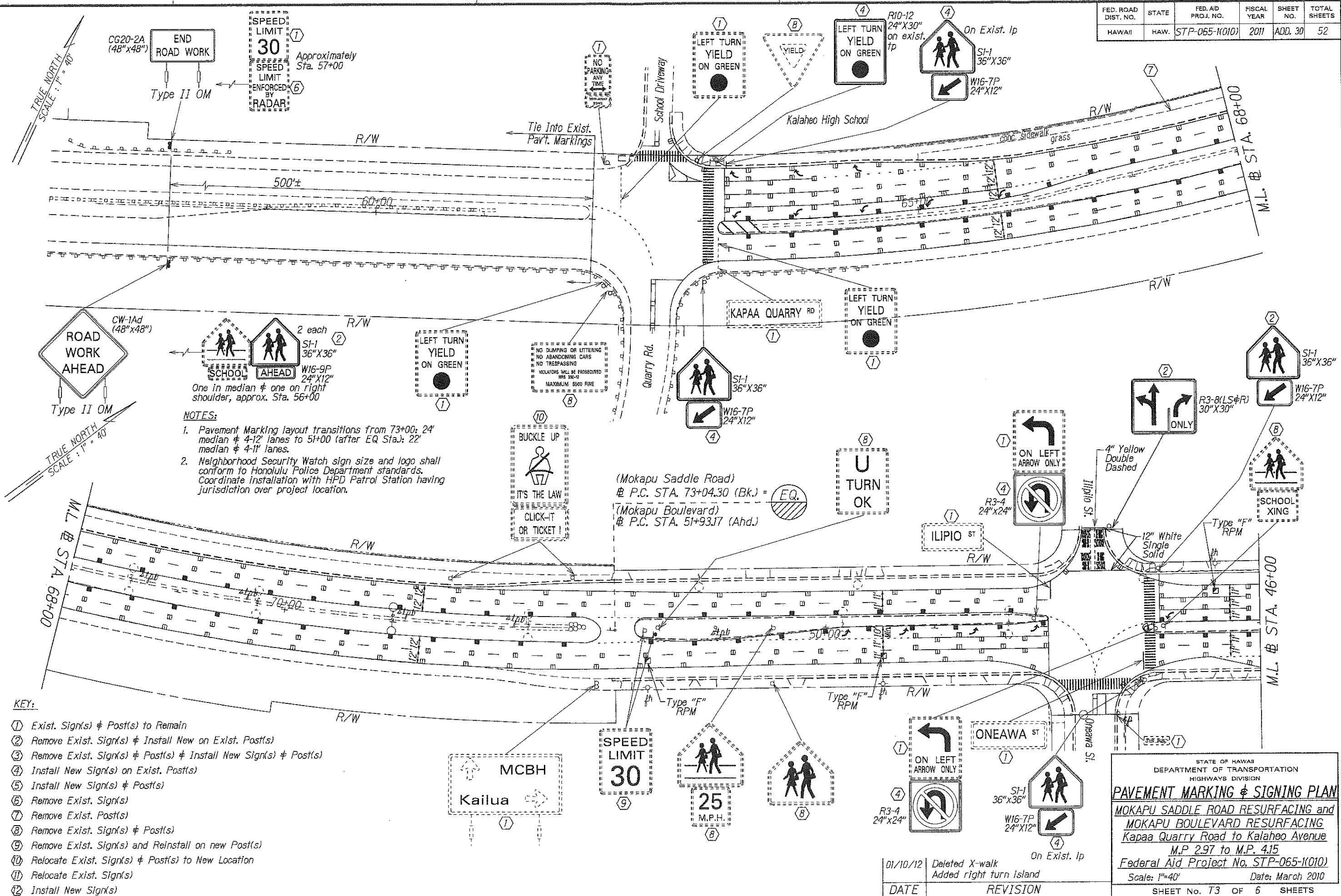
Scale: 1"=40' Date: April 2011

SHEET No. 1 OF 4 SHEETS

1/18/12	2 Revised Guardrail Installation Limits
DATE	REVISION

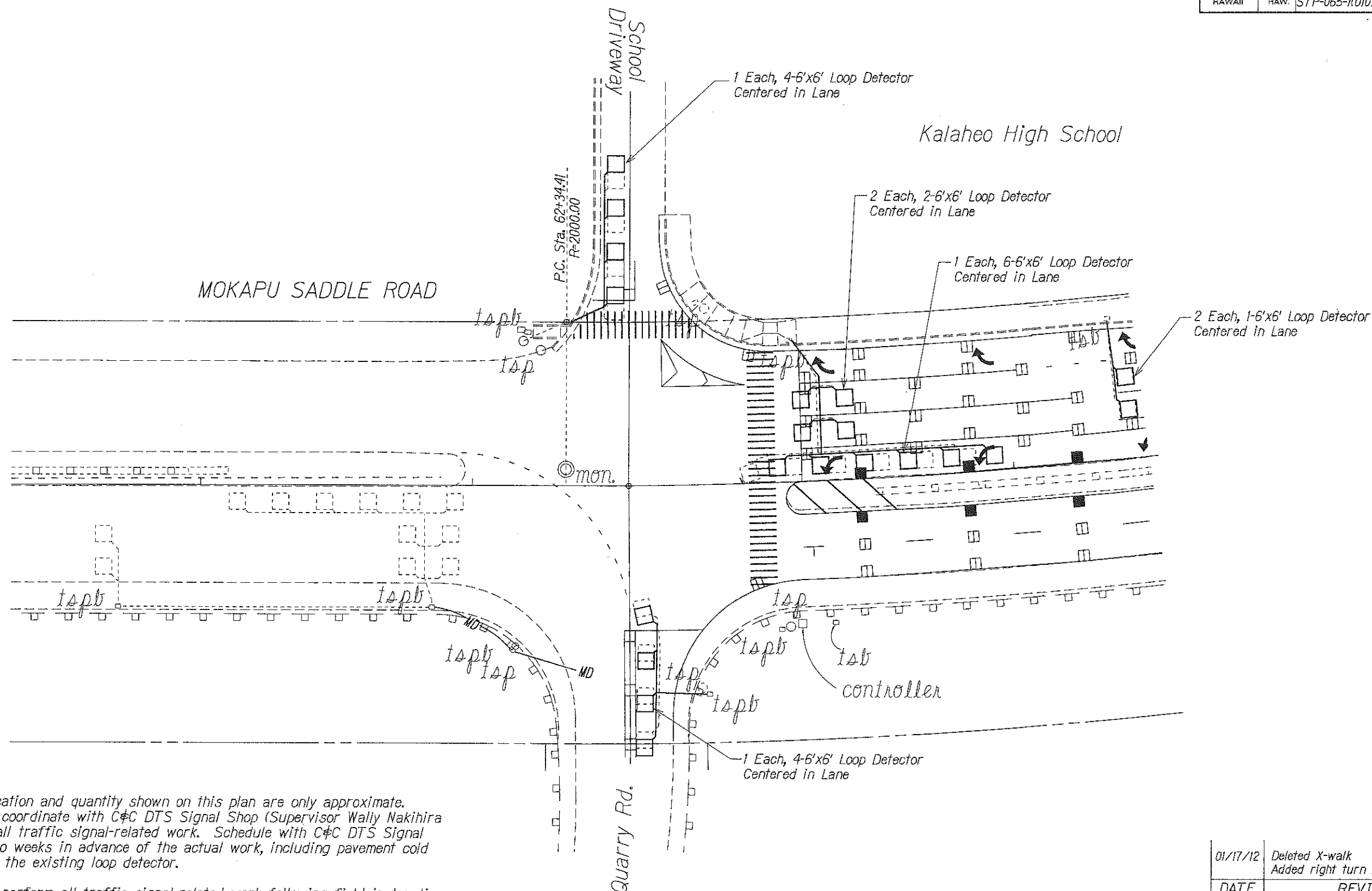
SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
REVISION	
DATE	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD. 30	52



DATE	REVISION
01/10/12	Deleted X-walk Added right turn island

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-065-1(010)	2011	ADD. 36	52



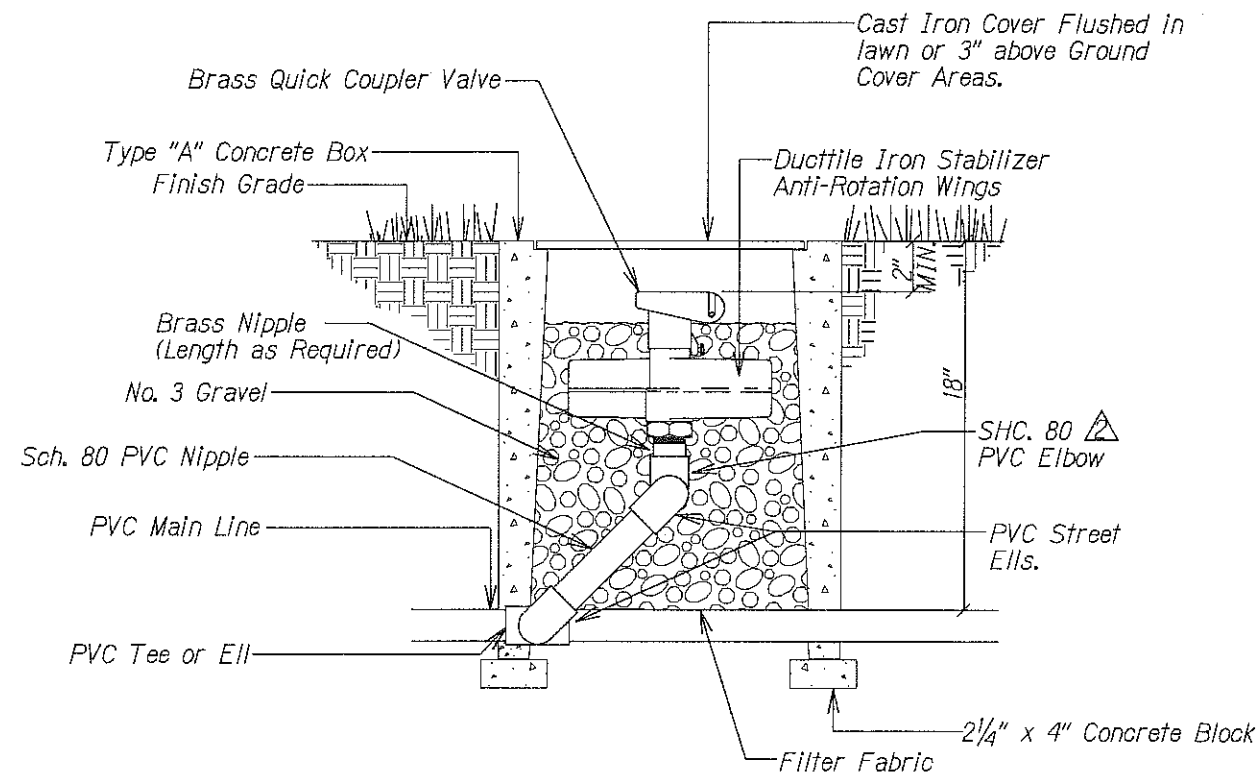
NOTES:

1. Loop detector location and quantity shown on this plan are only approximate. Contractor shall coordinate with C&C DTS Signal Shop (Supervisor Wally Nakihira @ 564-6101) for all traffic signal-related work. Schedule with C&C DTS Signal Shop at least two weeks in advance of the actual work, including pavement cold planing removing the existing loop detector.
2. Contractor shall perform all traffic signal-related work following field instructions from DTS Signal Shop personnel. Such field instructions shall include, but not limited to, the final location and quantity of the temporary microwave sensors and permanent detector loops. DTS Signal Shop personnel will be responsible for traffic signal controller programming at the traffic signal cabinet to accommodate the temporary and permanent operations.
3. Contractor shall promptly take down and turnover the temporary microwave sensors to DTS when the permanent detector loops are in place and operational. Contractor shall perform all necessary work to restore traffic signal system back to a neat appearance of the electrical trade.

01/17/12	Deleted X-walk Added right turn island
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION LOOP DETECTOR PLAN MOKAPU SADDLE ROAD RESURFACING and MOKAPU BOULEVARD RESURFACING Kapaa Quarry Road to Kalaheo Avenue M.P. 2.97 TO M.P. 4.15 Federal Aid Project No. STP-065-1(010) Scale: 1"=20' Date: March 2010	
SHEET No. TS3 OF 5 SHEETS	

ADD. 36

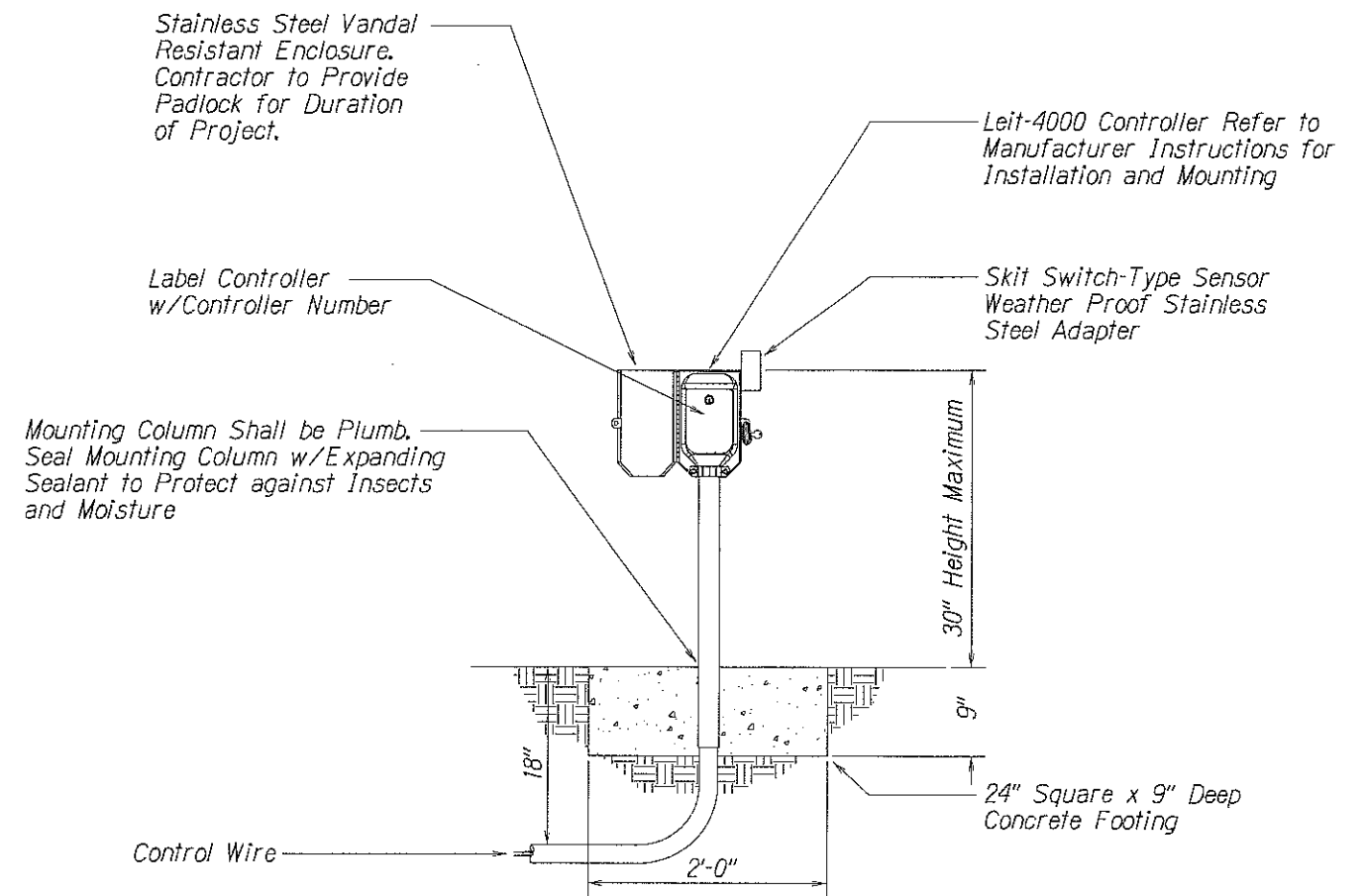
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTES BOOK	DRAWN BY M. Takauchi	
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		



NOTES:

1. Swing Joints subject to approval by Engineer.
2. All Valve Box Cover Shall be Labeled Valve Type, Zone Number, and Controller Number.
3. Controller shall Provide one (1) Quick Coupler Key and one (1) Hose Ell for each Quick Coupler Valve.
4. Minimum one Quick Coupler Valve per Point of Connection.

41 QUICK COUPLER VALVE DETAIL



Note:

Controller location shall be located in an area well protected from vehicles. If the Controller is located in an unprotected area, then four (4) 6" Pipe Bollards filled w/Concrete shall surround Controller. Provide one (1) Leit Key per Controller.

22 SOLAR POWERED CONTROLLER DETAIL

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
REVISION	

1/17/12 Revised Note.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

IRRIGATION DETAIL
MOKAPU SADDLE ROAD and
MOKAPU BOULEVARD RESURFACING
Kapaa Quarry Road to North Kalaheo Avenue
M.P. 2.97 to M.P. 4.15
Federal Aid Project No. STP-065-1(010)
Scale: NTS Date: April, 2011

SHEET No. 2 OF 2 SHEETS
ADD.46