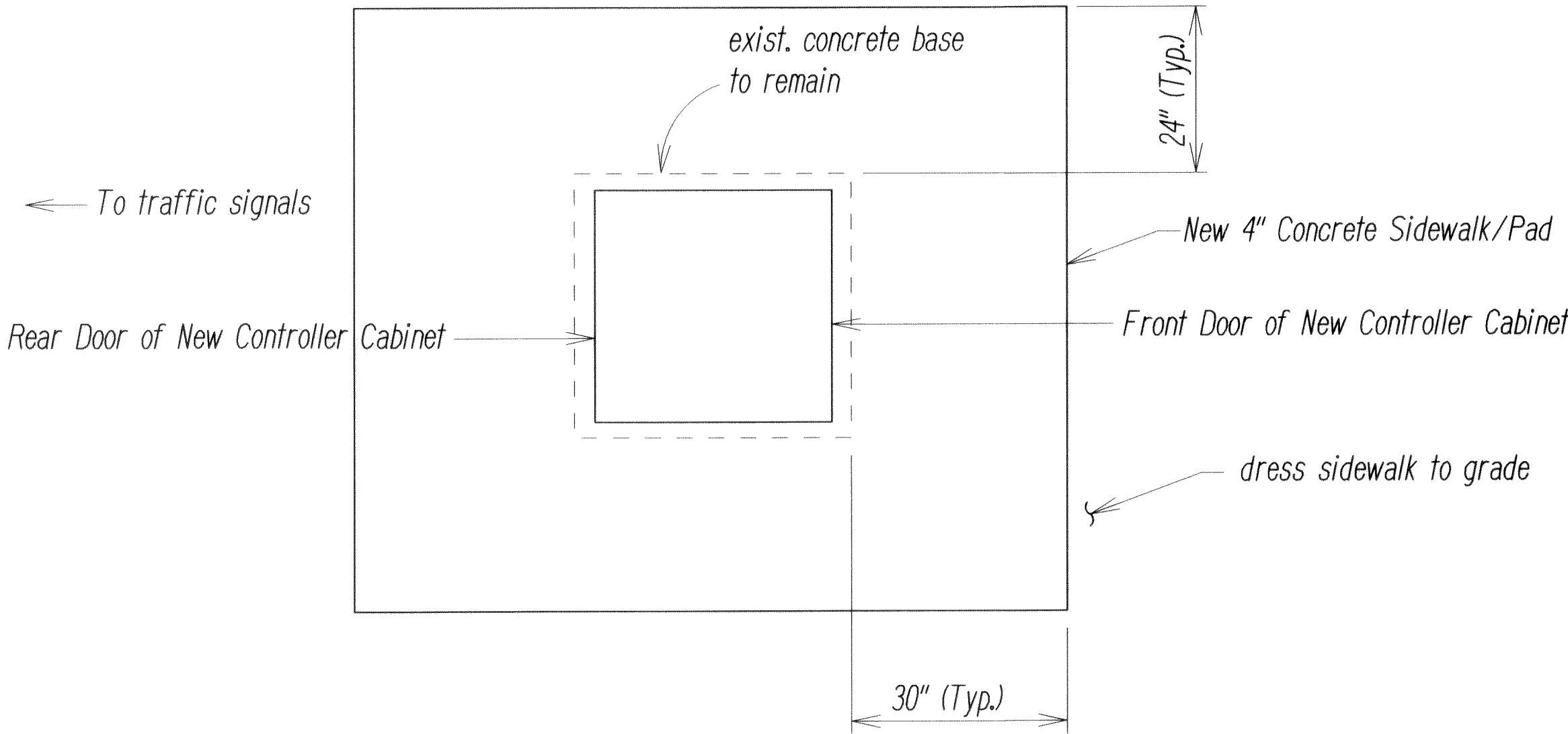
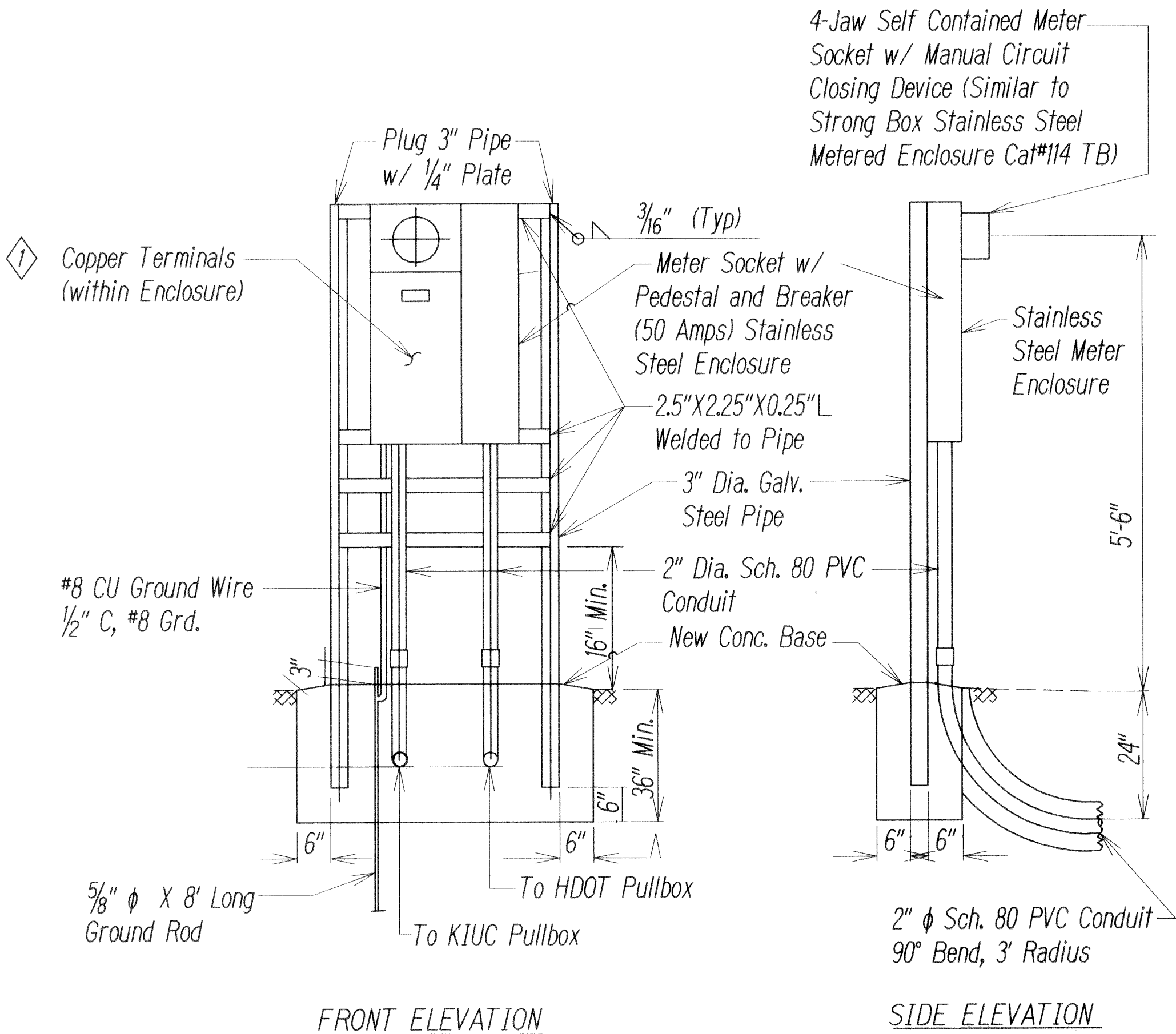


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.7	18



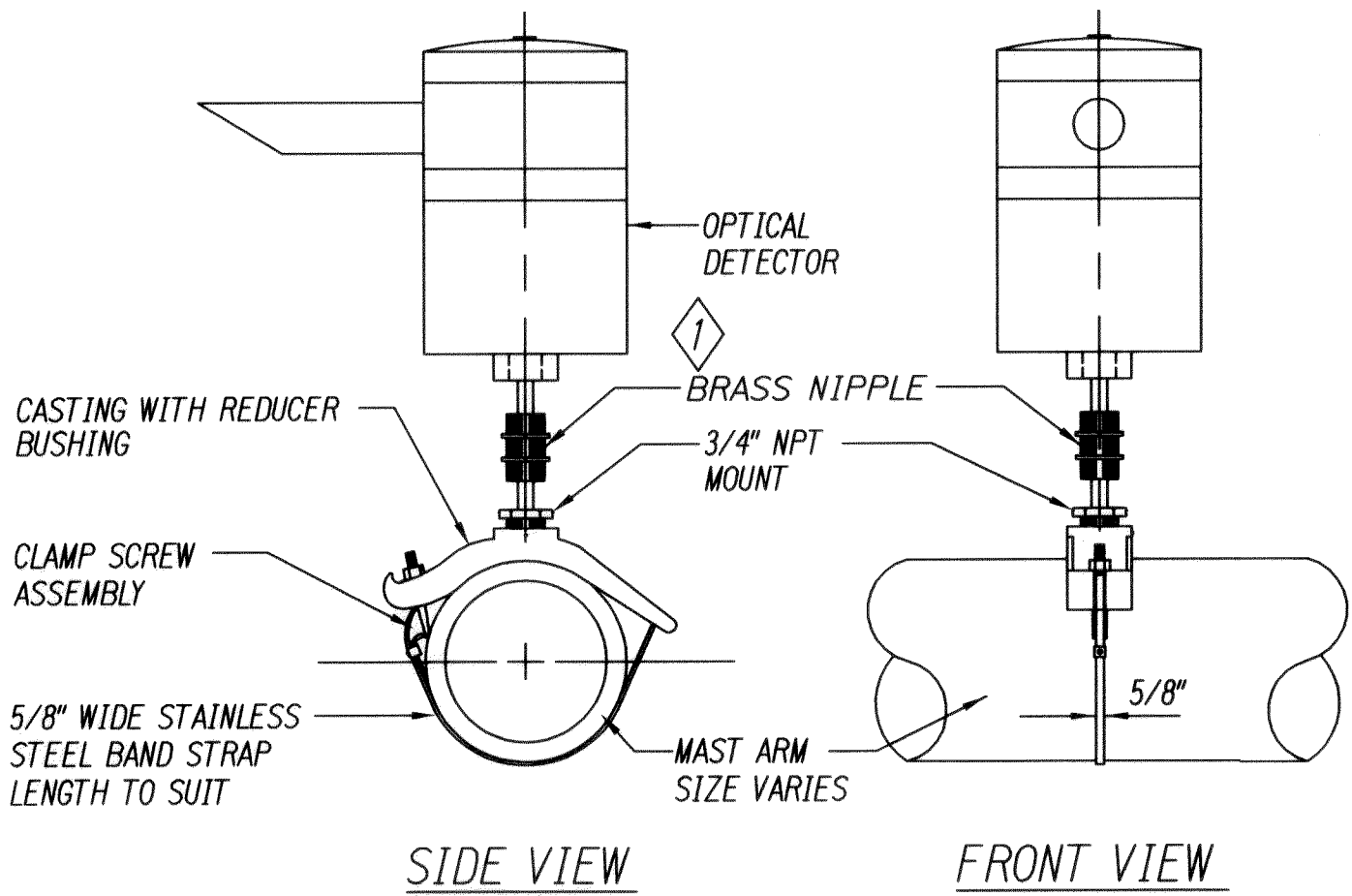
PLAN
NEW CONCRETE PAD AT CONTROLLER CABINET
Not to Scale



FRONT ELEVATION

SIDE ELEVATION

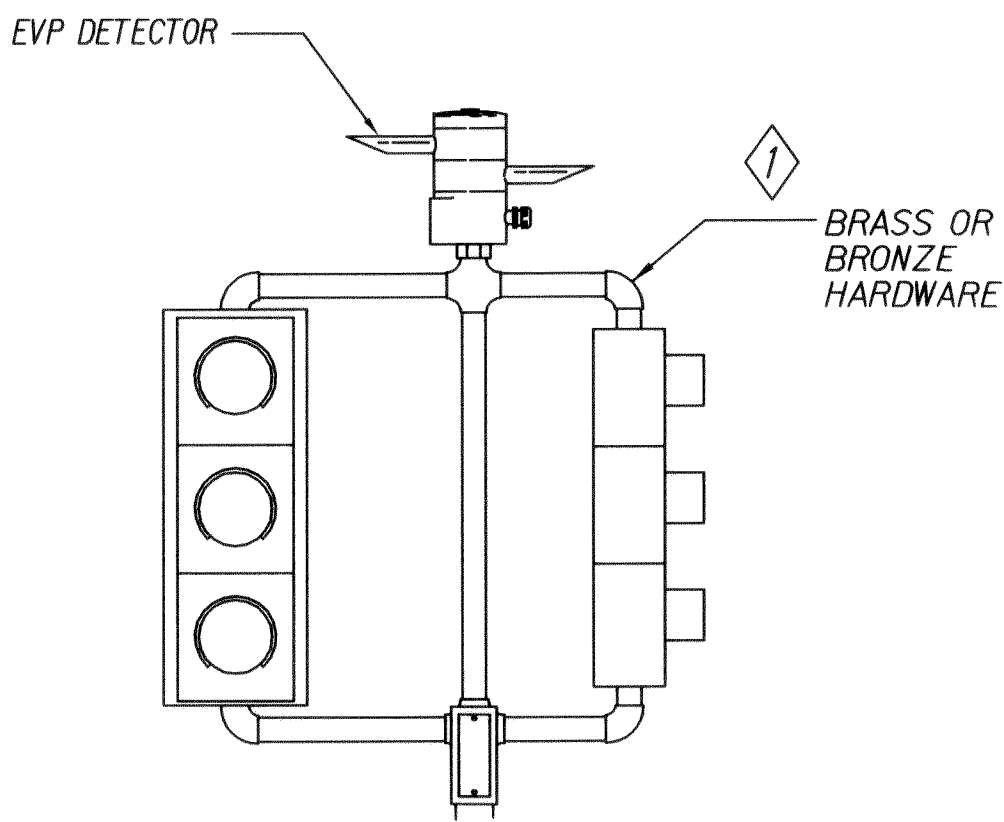
METER PEDESTAL FOR UNDERGROUND SERVICE
Not to Scale



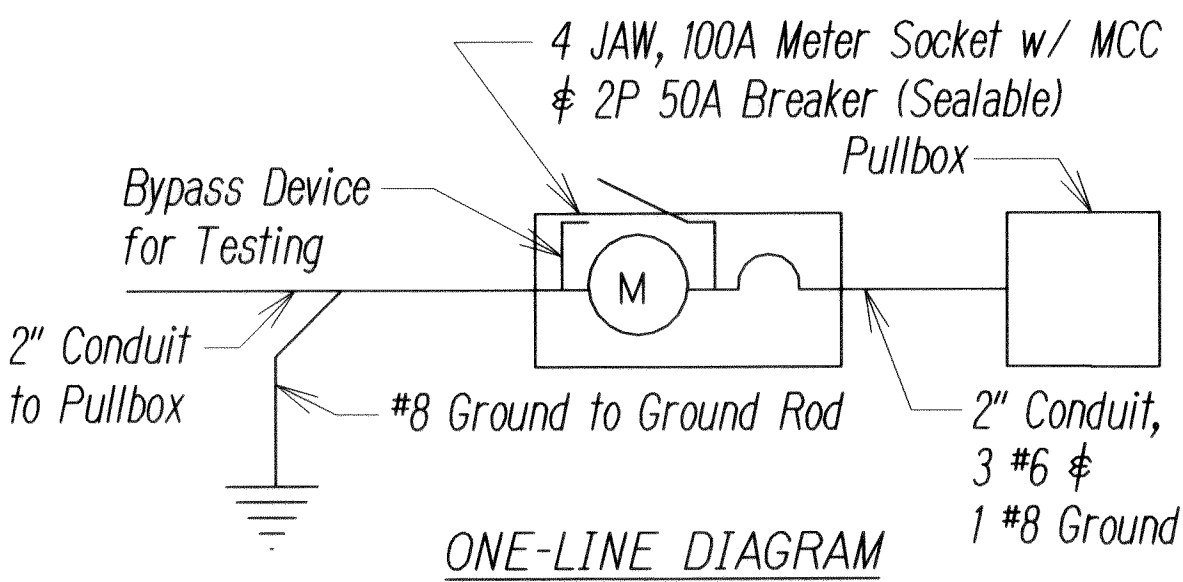
NOTES:

- OPTICAL DETECTOR SHALL BE "OPTICOM M711 OPTICAL DETECTOR", OR APPROVED EQUAL, UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
- SUPPORT SADDLE ASSEMBLY SHALL BE "ASTRO MINI-BRAC, AB-0132-29", OR APPROVED EQUAL, UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.

OPTICAL DETECTOR FOR
MAST ARM MOUNTING
NOT TO SCALE



POST TOP TP-EVP MOUNTING
NOT TO SCALE



ONE-LINE DIAGRAM

Service Data

- Service Voltage: 1 Phase, 3 Wire 120/240 V
- Load Data: Connected - 5 KVA, Estimated Demand - 2 KVA

TRAFFIC SIGNAL LEGEND

- Remove and Install New Traffic Signal Head Mounted on Existing Type II Signal Standard
- Remove and Install New 12" RYG Standard Traffic Signal Head
- New Replacement Traffic Signal Heads Mounted on Type II Signal Standard, Arm Spread Shown 26' and Distance Between Signal Heads shown is 12'
- Remove and Install New 12" RYG $\leftarrow Y/G$ Traffic Signal Bi-Modal LED Head for Left Turn
- Remove and Install New 12" RY \uparrow Traffic Signal Head
- Remove and Install New EVP Detector (Opticom)
- Existing Pullbox to remain
- Remove Existing, and Install New Type "A" Traffic Pullbox
- Remove Existing, and Install New Type "B" Traffic Pullbox
- Remove Existing, and Install New Type "C" Traffic Pullbox
- Remove Existing, and Install New Controller and Cabinet on Existing Concrete Base
- Existing Loop Detectors to remain

- NOTES:
- Pedestal shall be new, hot-dipped galvanized after fabrication. ①
 - All fastening bolts, nuts, and washers shall be new, stainless steel.
 - Concrete base for meter pedestal shall be new. Remove portions of conduits, re-route to new pedestal with new conduit splices. Remove and demolish old pedestal and concrete base, backfill and compact immediately following removal.
 - Provide 4 feet minimum clearance in front of meter.
 - Install new pull box in the same location and on the same day as removal of old pull box.
 - Contractor shall notify KIUC at least 5 days in advance to schedule disconnect/reconnect of meter socket. Please call 246-4334 to schedule work.
 - All signal head mountings shall be brass or bronze. ①
 - Remove existing, and replace with new pullboxes shall be performed at Locations 1 through 4 only (refer to Title Sheet). ①

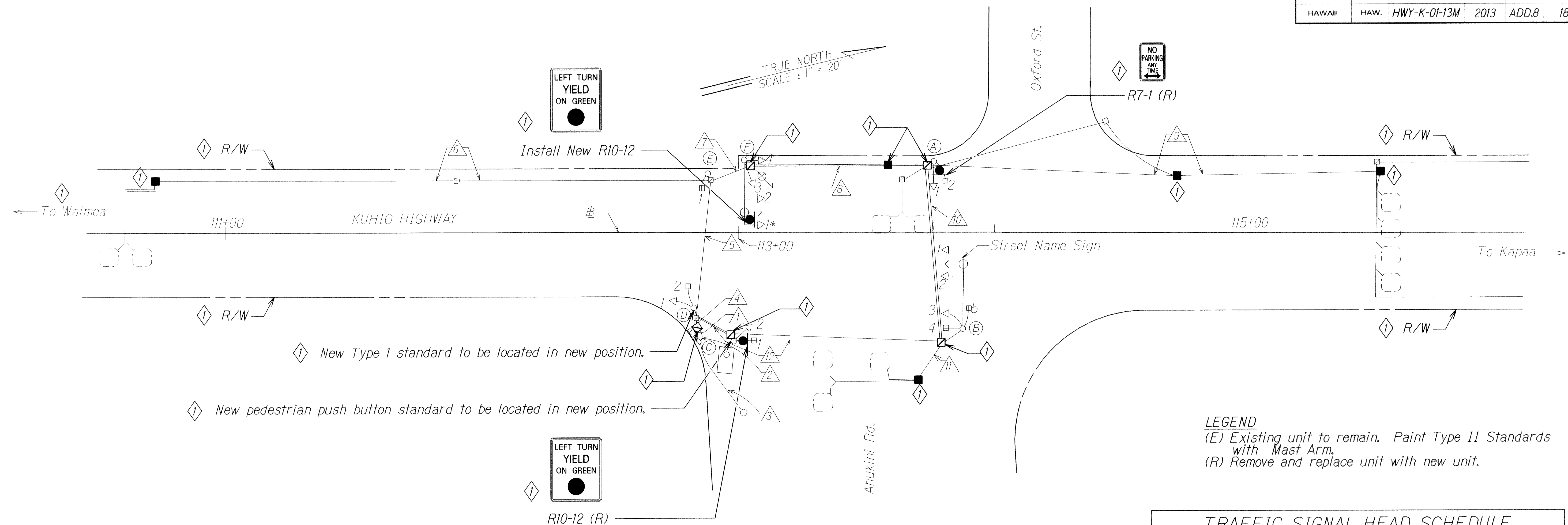
6/14/13	① Revised Notes.
	① Added Notes 7 and 8.
	① Added Call-outs to Details.

DATE	REVISION
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STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION TRAFFIC SIGNAL LEGEND & DETAILS KUHO HIGHWAY Traffic Signal Rehabilitation at Various Locations Project No. HWY-K-01-13M Scale: Not to Scale Date: May, 2013 SHEET No. 1 OF 1 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.8	18



DESCRIPTION OF EXISTING TRAFFIC SIGNALS			
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	SIGNAL HEAD MOUNTING
A	1 2	I-10' (R)	Three Section Head Top of Pole Bracket Pedestrian Signal With Side of Pole Bracket Pedestrian Push Button
B	1#2 3 4	II-30' (E)	Three Section Head With Astro Bracket Opticom With Astro Bracket Street Name Sign With Astro Bracket Three Section Head With Side of Pole Bracket Pedestrian Signal Side of Pole Bracket
C	1 2	I-10' (R)	Four Section Head With Top of Pole Bracket Pedestrian Signal Side of Pole Bracket
D	1 2	I-10' (R)	Three Section Head With Top of Pole Bracket Pedestrian Signal Side of Pole Bracket
E	1	I-8' (E)	Pedestrian Signal Top of Pole Bracket Pedestrian Push Button
F	1#2 3#4	II-25' (E)	Four Section Head With Astro Bracket Three Section Head With Astro Bracket Opticom Receiver with Astro Bracket Street Name Sign With Astro Brackets Three Section Heads With Side of Pole Brackets Opticom Receiver With Side of Pole Bracket

CABLE SCHEDULE												
DESCRIPTION	DELTA ITEM NO. (Δ)											
	1	2	3	4	5	6	7	8	9	10	11	12
EXISTING CABLE												
Quantity of 26C #14 Traffic Control Cable (E)	2			2	1		1	1		1		1
Quantity of 26C #14 Loop Detector # Pedestrian Push Button Lead-in Cable (R)	8			8	3	2			1	3	1	5
Quantity of 24C #20 Conductor Interconnect Cable (R)	1	1		1					1	1		1
Quantity of 3C #6 Power Cable (R)	1	1	1									
CABLE IN EXIST. 2" CONDUIT (SPARE)												
Quantity of Type 7 Cable (R)									2			
CABLE												
Quantity of Type 7 Cable (R)	3			3						2		3

TRAFFIC SIGNAL HEAD SCHEDULE			
Traffic Signal Head Type and Description			
Pole Letter Signal Head Number	A-1 B-1, 2, #3 D-1 F-2, 3, #4 (R)	C-2 F-1 (R)	A-2 B-4#5 C-1 D-2 E-1 (E)

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

6/14/13	Added Signs. Revised Description of Existing Traffic Signals for Poles D # E. Added Callouts for Traffic Items. Revised Traffic Pullbox Symbolology. Changed "To Lihue Town" to "To Waimea".
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

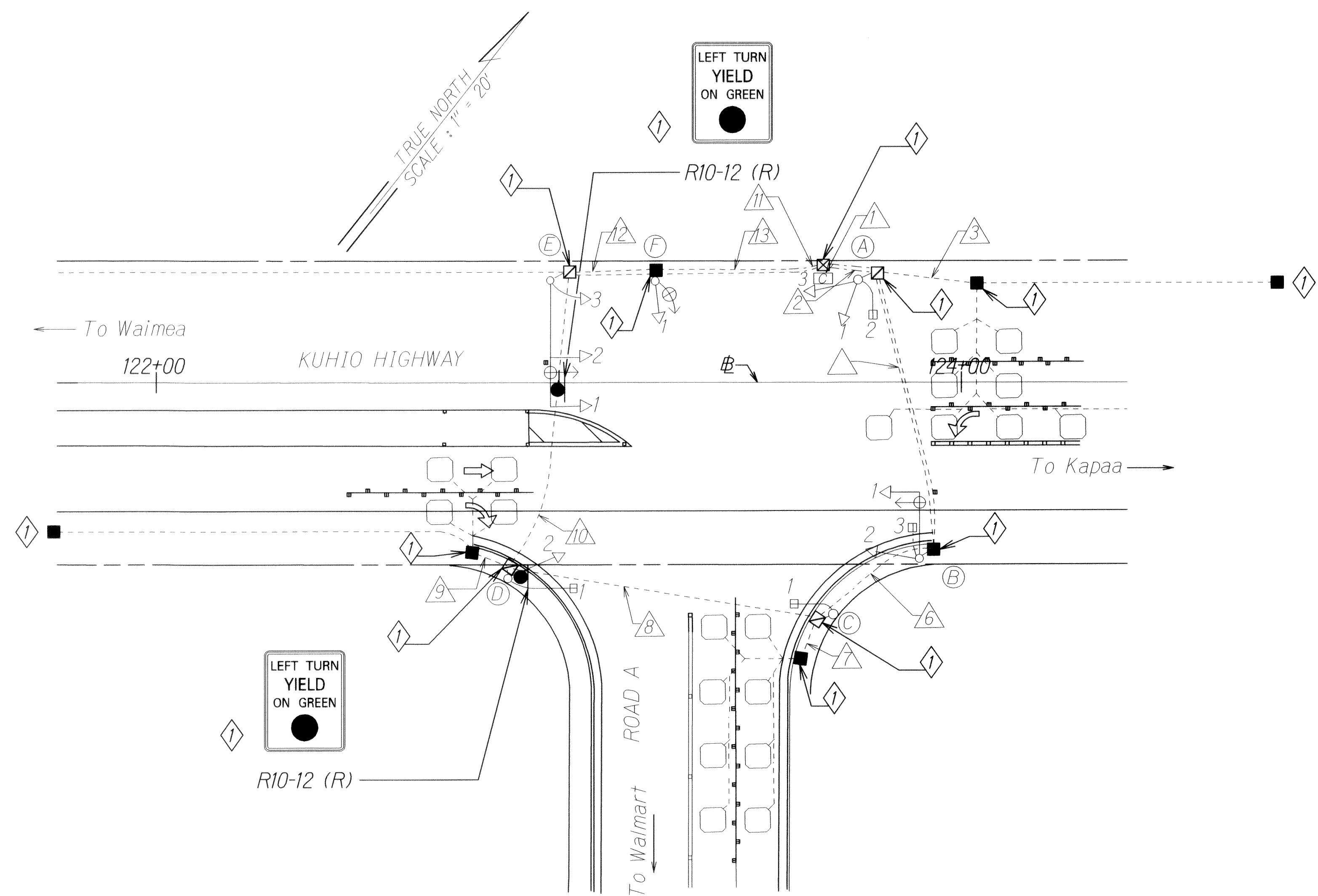
TRAFFIC SIGNAL PLAN

KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M

Scale: 1" = 20' Date: May, 2013

SHEET No. 1 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.9	18



CONDUIT AND CABLE SCHEDULE													
DESCRIPTION	DELTA ITEM NO. (Δ)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
EXISTING CONDUIT AND CABLE													
Quantity of 2" Conduit (E)	6	3	2	2	2	2	1	2	1	2	1	3	3
Quantity of Spare 2" Conduit (E)													
Quantity of 26C #14 Traffic Control Cable (R)	2	1			1	1	1	1		1		1	1
Quantity of Type 2 Loop Detector & Pedestrian Push Button Lead-in Cable (R)	8	6	3	2	3	2		1	2	2		2	2
Quantity of 6-Pairs #19 Conductor, Interconnect Cable (R)	1	1	1	1								1	1
Quantity of 3C#6 Power Cable (R)	1										1		
Quantity of 2" Conduit (E)	1	1			1							1	1
Quantity of Type 7 Cable (R)	3	1			1							1	2

TRAFFIC SIGNAL HEAD SCHEDULE					
Traffic Signal Head Type and Description					
	12" RYG Traffic Signal Head	12" RYG Traffic Signal Head	12" RYG Traffic Signal Head	12" RY Traffic Signal Head	Pedestrian Signal Head
Pole Letter	A-1	D-2	E-1	A-3	A-2
Signal Head Number	B-2	(R)	(R)	E-2	B-3
	E-3			(R)	C-1
	F-1				D-1
	(R)				(E)

LEGEND
(E) Existing unit to remain. Paint Type II Standards with Mast Arm.
(R) Remove and replace unit with new unit.

DESCRIPTION OF EXISTING TRAFFIC SIGNALS			
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	SIGNAL HEAD MOUNTING
A	1#3 2	I-10' (R)	Slipfitter, One-way Pole Bracket, One-way
B	1 2#3	II-16' (E)	Mast Arm, One-way Pole Bracket, Two-way
C	1	I-8' (E)	Slipfitter, One-way
D	1 2	I-10' (R)	Pole Bracket, One-way Slipfitter, One-way
E	1#2 3	II-30' (E)	Mast Arm, One-way Pole Bracket, One-way
F	1	I-10' (R)	Slipfitter, One-way

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
DATE	

6/14/13	Added Signs. Revised Traffic Pullbox Symbolology. Revised Description of Existing Traffic Signals for Pole C.
DATE	REVISION

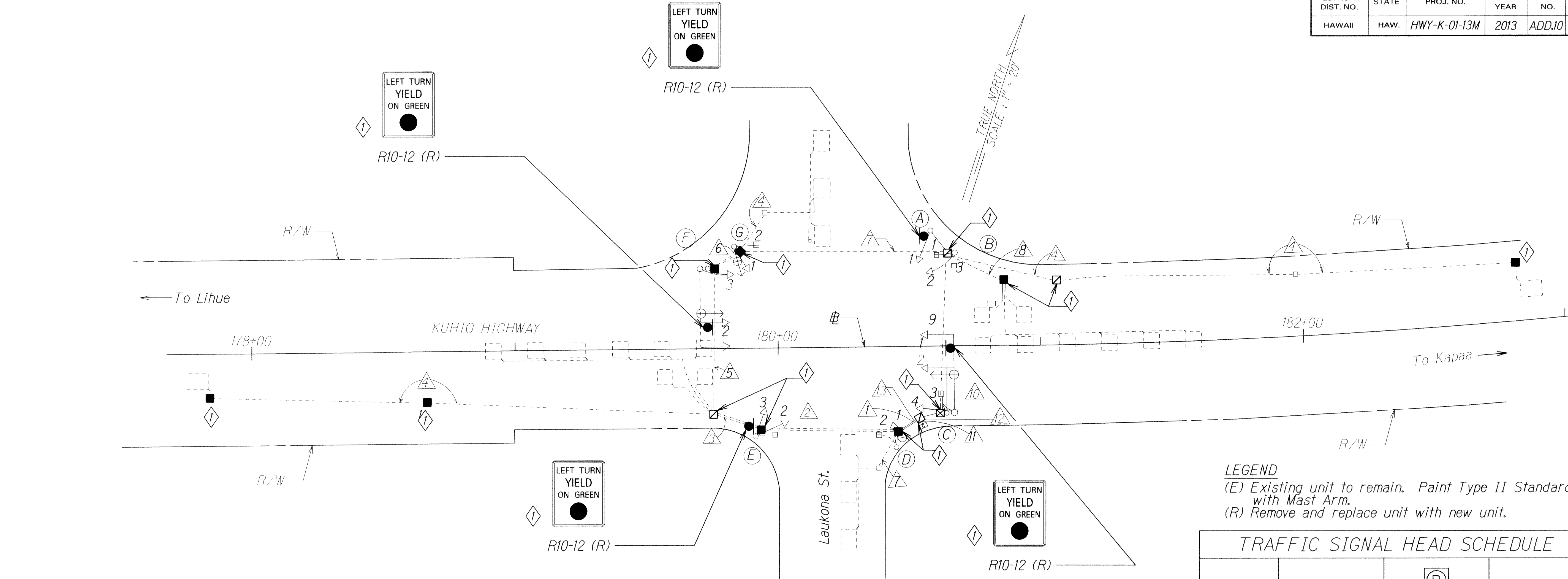
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL PLAN
KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M

Scale: 1" = 20' Date: May, 2013

SHEET No. 2 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.10	18



LEGEND
 (E) Existing unit to remain. Paint Type II Standards with Mast Arm.
 (R) Remove and replace unit with new unit.

CABLE SCHEDULE													
DESCRIPTION	DELTA ITEM NO. (Δ)												
	1	2	3	4	5	6	7	8	9	10	11	12	13
INSTALL NEW CABLE AND EXISTING CONDUIT													
Quantity of 19C #14 Traffic Control Cable (R)	1	1	1		1	1	1		1	1	2		
Quantity of 2C #14 Loop Detector & Pedestrian Push Button Lead-in Cable (R)	4	3	2	1	2	1	2		3	3	7		
INSTALL NEW CABLE IN EXIST. 2" CONDUIT (SPARE)													
Quantity of 26C#14 Traffic Control Cable (Type 1) (R)													2
Quantity of Type 2 Loop Detector Lead-In Cable (Type 2) (R)	2	2	2					2	2	2			11
Quantity of 3C#6 Power Cable (Type 6) (R)												1	1
Quantity of 4C #20 Cable (Type 7) (R)	3	2	2		2	1				1			4
INSTALL NEW CABLE													
Quantity of 26C#14 Traffic Control Cable (Type 1) (R)	1	1	1		1	1	1		1	1	2		

DESCRIPTION OF EXISTING TRAFFIC SIGNALS				
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	QUANTITY	SIGNAL HEAD MOUNTING
A	1	I-10' (R)	1	Slipfitter One-Way
B	1 & 3	II-20' (E)	1	Pole Bracket, One-Way
	2		1	Slipfitter, One Way
C	1 & 2	II-30' (E)	1	Mast Arm, One-Way
	3		1	Pole Bracket, One-Way
	4		1	Pole Bracket, One-Way
D	1	I-10' (R)	2	Slipfitter, One Way
	2			Pole Bracket, One-Way
E	1	I-10'(R)	1	Pole Bracket, One-Way
	2 & 3		1	Slipfitter, One Way
F	1 & 2	II-30' (E)	1	Mast Arm, One-Way
	3		1	Pole Bracket, One-Way
G	1	I-10' (R)	1	Slipfitter, One Way
	2		1	Pole Bracket, One-Way

TRAFFIC SIGNAL HEAD SCHEDULE			
Traffic Signal Head Type and Description			
Pole Letter	A-1	B-2	B-1, & 3
Signal Head Number	C-2, & 4	C-1	C-3
	D-1	E-2	D-2
	E-3	F-2	E-1
	F-2, & 3	(R)	G-2
	G-1 (R)		(E)

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

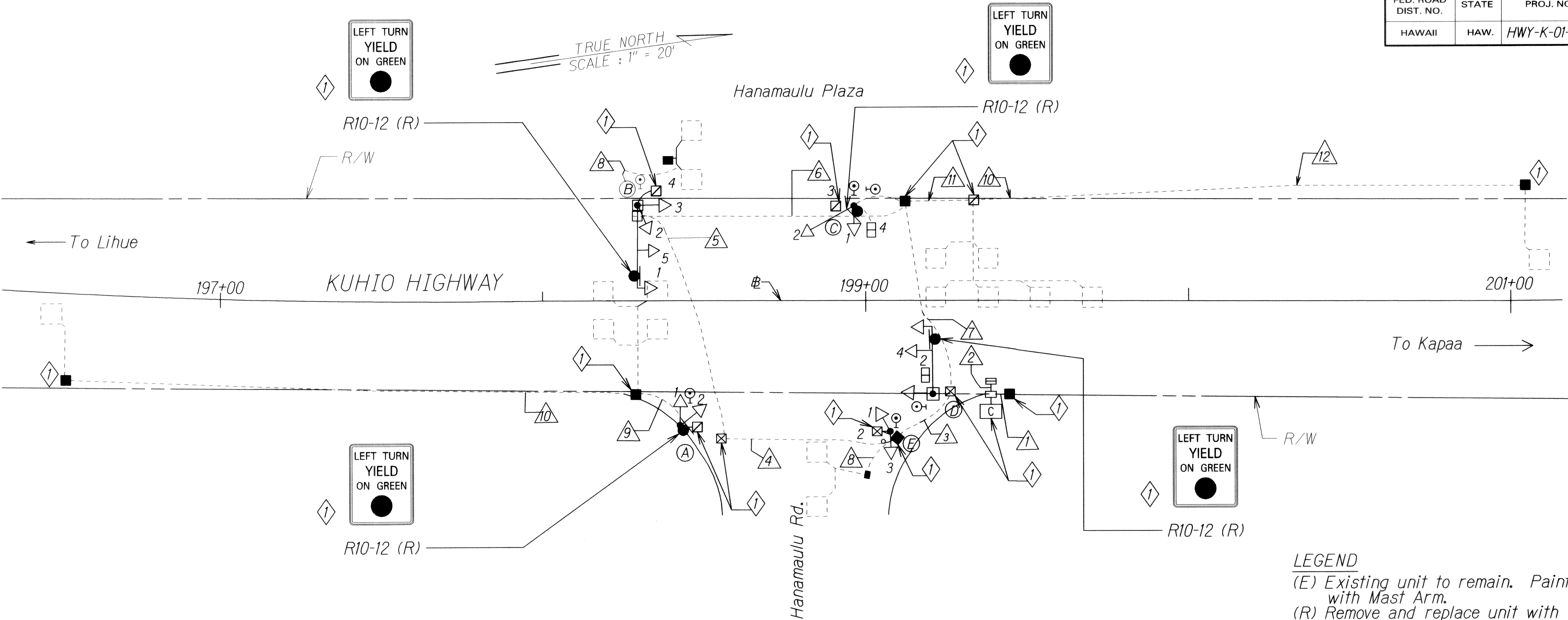
TRAFFIC SIGNAL PLAN
 KUHIO HIGHWAY
 Traffic Signal Rehabilitation
 at Various Locations
 Project No. HWY-K-01-13M

Scale: 1" = 20'
 Date: May, 2013

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
REVISIONS BY	

6/14/13	Added Signs.
	Revised Traffic Pullbox Symbolology.
	Revised Description of Existing Traffic Signals.
DATE	REVISION

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.11	18



LEGEND
(E) Existing unit to remain. Paint Type II Standards with Mast Arm.
(R) Remove and replace unit with new unit.

CABLE SCHEDULE												
DESCRIPTION	DELTA ITEM NO. (Δ)											
	1	2	3	4	5	6	7	8	9	10	11	12
Quantity of 2" Conduit (E)	1	6	3	3	2	3	4	1	1	1	1	1
Quantity of Spare 2" Conduit (E)		2	2	2	1	1	2		1	1	1	1
Quantity of 19C #14 Traffic Control Cable (R)		2	1	1	1	1	1					
Quantity of 2C #14 Loop Dectector & Pedestrian Push Button Lead-In Cable (R)		10	4	3		2	6	1	2	1	3	1
Quantity of 4C #20 (Type 7) Cable (R)	1											
Quantity 26C #14 Traffic Control Cable, Type 1 (R)	2	2	1	1	1	1	1	1				
Quantity of 2" Conduit (E)	1	1						1				

DESCRIPTION OF EXISTING TRAFFIC SIGNALS				
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	QUANTITY	SIGNAL HEAD MOUNTING
A	1 φ 3	I-10' (R)	1	Pole Bracket, One Way
	2		1	Slipfitter, One-Way
B	1 φ 2	II-20' (E)	1	Mast Arm, One-Way
	3 φ 4		1	Pole Bracket, Two-Way
	5		1	Pole Bracket, One-Way
C	1	I-10' (R)	1	Slipfitter, One-Way
D	1 φ 2	II-30' (E)	1	Mast Arm, One-Way
	3		1	Pole Bracket, One-Way
	4		1	Pole Bracket, One-Way

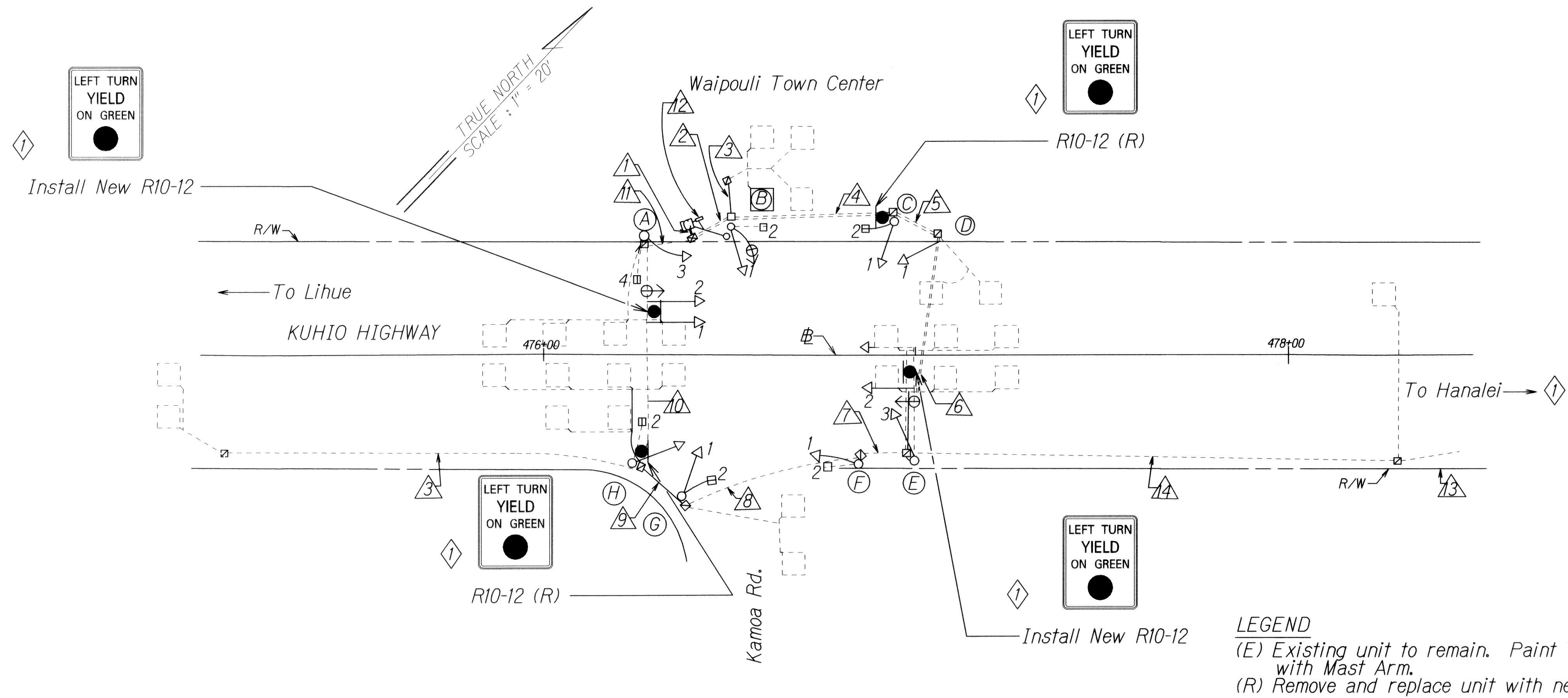
TRAFFIC SIGNAL HEAD SCHEDULE			
Traffic Signal Head Type and Description			
	12" RYG Traffic Signal Head	12" RYG Traffic Signal Head	Pedestrian Signal Head
Pole Letter Signal Head Number	A-1 B-2, 3, φ 5 C-1 D-1, φ 4 E-1, φ 3 (R)	A-2 B-1 C-2 D-3 (R)	A-3 B-4 C-3, φ 4 D-2 E-2 (E)

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
No.	

6/14/13	Added Signs. Revised Traffic Pullbox Symbolology. Added Traffic Item.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC SIGNAL PLAN
KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M
Scale: 1" = 20' Date: May, 2013
SHEET No. 4 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.12	18



CABLE SCHEDULE														
DESCRIPTION	DELTA ITEM NO. (Δ)													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
EXISTING CONDUIT AND CABLE														
Quantity of 2" Conduit (E)	5	3	1	2	1	1	2	2	3	4	4		1	1
Quantity of Spare 2" Conduit (E)														
Quantity of 26C #14 Traffic Control Cable (R)	2	1		1	1	1	1	1	1	1	1			
Quantity of 2C #14 Loop Detector & Pedestrian Push Button Lead-In Cable (R)	12	2	1	1	1		3	4	5	9	10			
Quantity of 6-Pairs #19 Conductor, Interconnect Cable (R)	1	1		1	1	1							1	1
Quantity of 3C #16 Power Cable (R)												1		
Quantity of Type 7 Cable (R)	3	2		1	1	1					1			

DESCRIPTION OF EXISTING TRAFFIC SIGNALS			
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	SIGNAL HEAD MOUNTING
A	1 & 2 3	II-25' (E)	Mast Arm, One-Way Pole Bracket, One Way
B	1 & 2	I-10' (R)	Slipfitter, One-Way Pole Bracket, One Way
C	1 & 2	I-10' (R)	Slipfitter, One-Way
D	1	I-10' (R)	Slipfitter, One-Way
E	1 & 2 3	II-35' (E)	Mast Arm, One-Way Pole Bracket, One-Way
F	1 2	I-10' (R)	Slipfitter, One-Way Pole Bracket, One Way
G	1 2	I-10' (R)	Slipfitter, One-Way Pole Bracket, One Way
H	1 2	I-10' (R)	Slipfitter, One-Way Pole Bracket, One Way

TRAFFIC SIGNAL HEAD SCHEDULE			
Traffic Signal Head Type and Description			
12" RYG Traffic Signal Head	12" RYG Traffic Signal Head	12" RYG Traffic Signal Head	Pedestrian Signal Head
Pole Letter	A-2 & 3 B-1 C-1 E-2 & 3 F-1 H-1 (R)	A-1 D-1 E-1 G-1 (R)	A-4 B-2 C-2 F-2 G-2 H-2 (E)

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	

6/14/13	Changed "To Hanalei" to "To Kapaa".
	Revised Description of Existing Traffic Signals A through D.
	Added Description of Existing Traffic Signals E through H.
	Revised Traffic Signal Head Schedule.
	Added Signs.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

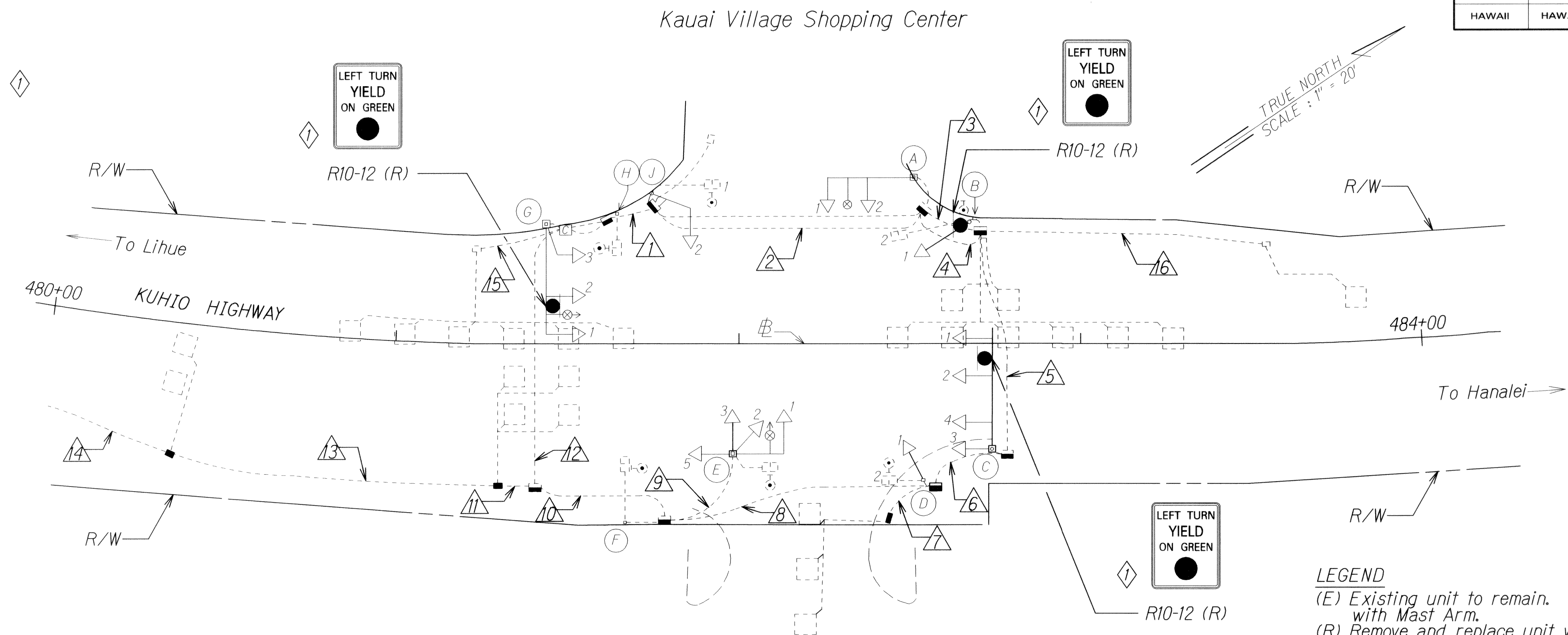
TRAFFIC SIGNAL PLAN

KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M

Scale: 1" = 20' Date: May, 2013

SHEET No. 5 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.13	18



LEGEND
(E) Existing unit to remain. Paint Type II Standards with Mast Arm.
(R) Remove and replace unit with new unit.

CONDUIT AND CABLE SCHEDULE																
DESCRIPTION	DELTA ITEM NO. (Δ)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
EXISTING CONDUIT AND CABLE																
Quantity of 2" Conduit	5	4	3	2	2	3	1	4	1	4	1	4	1	1	1	1
Quantity of Spare 2" Conduit	2	2		2	2	2		2		2	2	2	2	2		
Quantity of 19C #14 Traffic Control Cable																
Quantity of 2C #14 Loop Detector & Pedestrian Push Button Lead-In Cable	6	4	2	2			1	2		2	2	5	1		2	1
Quantity of 6-Pairs #19 Conductor, Interconnect Cable											1		1	1		
Quantity of 3C #16 Power Cable																
Quantity of 26C #14 Traffic Control Cable, Type 1	2	2	2	2	2	2		2		2		2				
INSTALL NEW CABLE IN EXISTING 2" CONDUIT(SPARE)																
Quantity of Type 7 Cable	3	1				1		1	1	2		2				
Quantity of #8 Ground Cable	2	2	2	2	2	2		2		2		2				
Quantity of Type 5 Cable									3							

DESCRIPTION OF EXISTING TRAFFIC SIGNALS				
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	QUANTITY	SIGNAL HEAD MOUNTING
A	1 2	I-10' (E)	*	Mast Arm, One-Way Pole Bracket, One Way
B	1 & 2 3	II-10' (R)	*	Pole Bracket, One-Way Slipfitter, One-Way
C	1, 2, & 4 3	II-35' (E)	*	Mast Arm, One-Way Pole Bracket, One-Way Slipfitter, One-Way
D	1 & 2 1 & 2	I-10' (R)	*	Slipfitter, Two-Way Pole Bracket, One-Way
E	1 & 3 2	II-15' (E)	*	Mast Arm, One-Way Pole Bracket, One-Way
F	1	I-10' (R)	*	Slipfitter, One-Way
G	1 & 2	II-35' (E)	*	Mast Arm, One-Way Pole Bracket, One-Way
J	1 & 2	II-10' (R)	*	Slipfitter, Two-Way Pole Bracket, One-Way

TRAFFIC SIGNAL HEAD SCHEDULE			
Traffic Signal Head Type and Description			
Pole Letter Signal Head Number	A-1,2 C-2,3,4 D-1 E-1,3,5 G-2,3 J-2	B-1 C-1 E-2 G-1	B-2 D-2 E-4 F-1 H-1 J-1

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

6/14/13	Revised Traffic Signal Plan of Intersection. Replaced Conduit And Cable Schedule Table. Replaced Description of Existing Traffic Signals Table. Replaced Traffic Signal Head Schedule Table. Added Signs.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

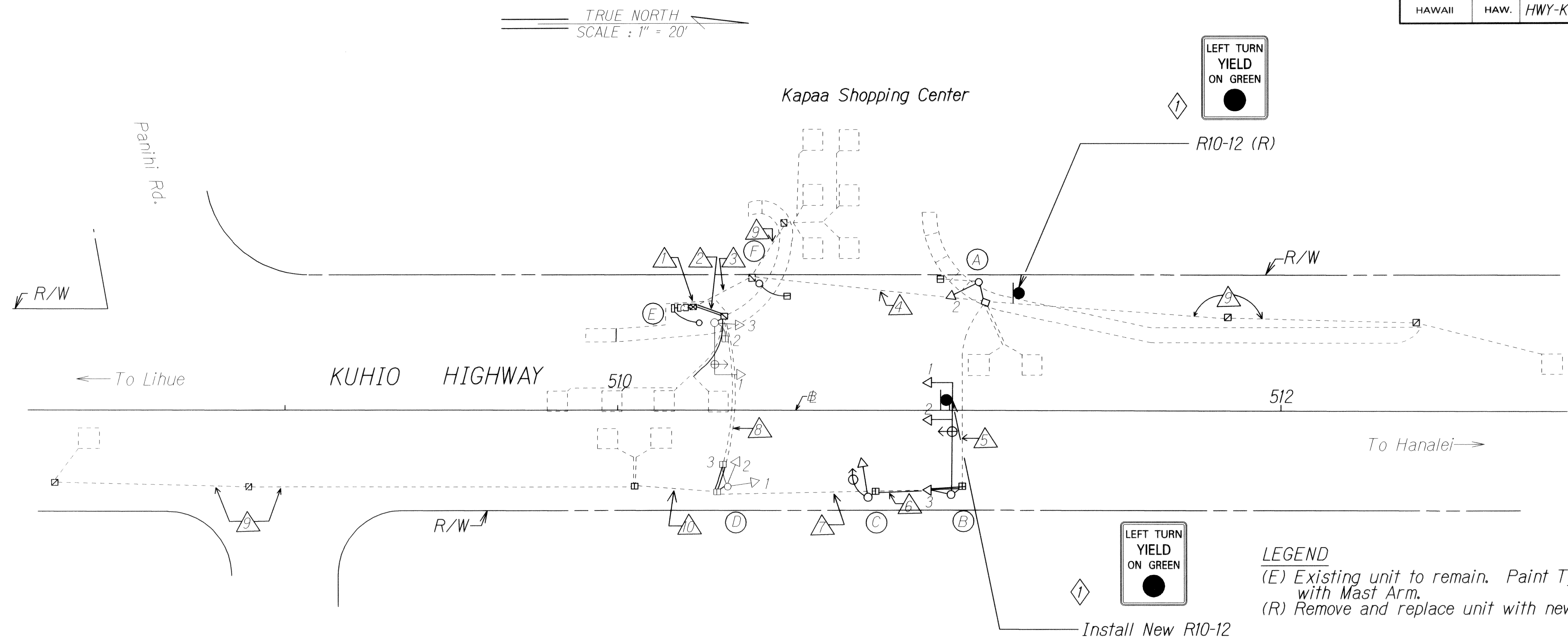
TRAFFIC SIGNAL PLAN

KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M

Scale: 1" = 20' Date: May, 2013

SHEET No. 6 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.14	18



DESCRIPTION OF EXISTING TRAFFIC SIGNALS				
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	QUANTITY	SIGNAL HEAD MOUNTING
A	2	I-10' (R)	1	Four Section Head Top of Pole Bracket
	1		1	Pedestrian Signal w/Side of Pole Bracket Pedestrian Push Button
B	2	II-32' (E)	1	Three Section Head w/Astro Bracket
	1		1	Opticom w/Astro Bracket
	3		1	Street Name Sign w/Astro Bracket Three Section Head w/Side of Pole Bracket
C	1	I-10' (R)	1	Three Section Head Top of Pole Bracket Pedestrian Signal w/Side of Pole Bracket
D	1 & 2	I-10' (R)	1	Three Section Head Top of Pole Bracket
	3		1	Pedestrian Signal w/Side of Pole Bracket
			1	Pedestrian Push Button
E	1	II-15' (E)	1	Three Section head w/Astro Bracket
			1	Opticom Receiver w/Astro Bracket
	3		1	Three Section Head w/Side of Pole Bracket
	2		1	Pedestrian Signal w/Side of Pole Bracket Pedestrian Push Button
F	1	I-10' (R)	1	Pedestrian Signal w/Top of Pole Bracket
			1	Pedestrian Push Button

CABLE SCHEDULE										
DESCRIPTION	DELTA ITEM NO. (Δ)									
	1	2	3	4	5	6	7	8	9	10
Quantity of 2" Conduit (E)	4	4	2	2	1	1	1	2	1	1
Quantity of Spare 2" Conduit (E)					1	1	1			
Quantity of 19C #14 Traffic Control Cable (R)	2	2	1	1	1	1	1	1	1	
Quantity of 2C #14 Loop Detector & Pedestrian Push Button Lead-In Cable (R)	8	8	4	3				3		2
Quantity of 4C #20 (Type 7) Cable (R)	3	3				1	2	2		
Quantity of 26C #14 Traffic Control Cabel, Type 1 (R)	2	2	1	1	1	1	1	1	1	
Quantity of 2" Conduit (E)	1	1						1		

TRAFFIC SIGNAL HEAD SCHEDULE			
Traffic Signal Head Type and Description			
Pole Letter	B-2	A-2	A-1
Signal Head Number	C-1 D-1 & 2 E-1 & 3 (R)	B-1 (R)	D-3 E-2 F-1 (E)

6/14/13	Added Signs.
	Revised Description of Existing Traffic Signals.
DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

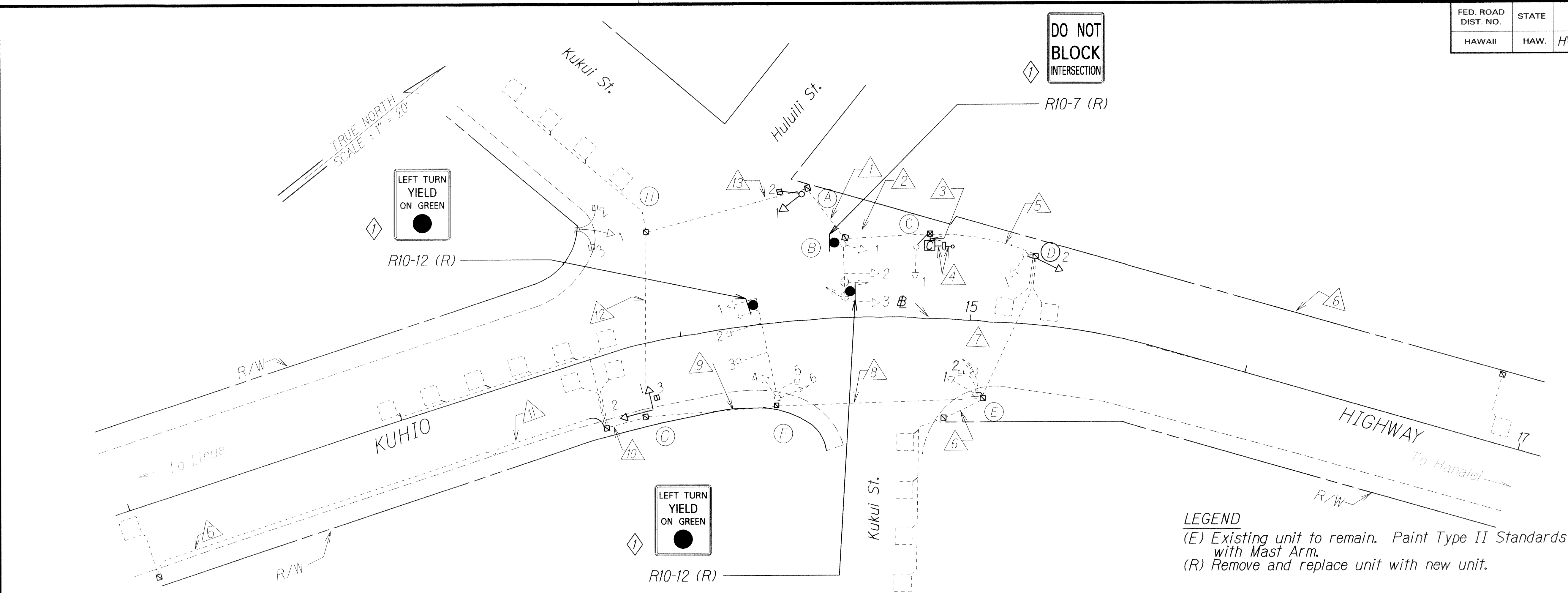
TRAFFIC SIGNAL PLAN

KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M

Scale: 1" = 20' Date: May, 2013

SHEET No. 7 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-01-13M	2013	ADD.15	18



DESCRIPTION OF EXISTING TRAFFIC SIGNALS				
POLE LETTER	SIGNAL HEAD NO.	POLE TYPE	QUANTITY	SIGNAL HEAD MOUNTING
A	1	I-10' (R)	1	Four Section Head Top of Pole Bracket
	1		1	Pedestrian Signal w/Side of Pole Bracket
B	2	II-20' (E)	1	Three Section Head w/Astro Bracket
	1		1	Opticom w/Astro Bracket
	1		1	Street Name Sign w/Astro Bracket
	1		1	Three Section Head w/Side of Pole Bracket
C	1	I-10' (R)	1	Three Section Head Top of Pole Bracket
	2		1	Pedestrian Signal w/Side of Pole Bracket
D	1 & 2	I-10' (R)	2	Three Section Head Top of Pole Bracket
E	1	I-10' (R)	1	Three Section Head Top of Pole Bracket
	2		1	Pedestrian Signal w/Side of Pole Bracket
F	1	II-35' (E)	1	Four Section Head w. Astro Bracket
	2 & 3		2	Three Section head w/Astro Bracket
	1		1	Opticom Receiver w/Astro Bracket
	1		1	Stree Name Sign w/ Astro Bracket
	4		1	Three Section Head w/Side of Pole Bracket
	5		1	Pedestrian Signal w/Side of Pole Bracket
	1		1	Opticom Receiver w/Side Pole Bracket
G	1 & 2	I-10' (R)	1	Two Three Section Head Top of Pole Bracket
	3		1	Pedestrian Signal w/Side of Pole Bracket
H	1	I-10' (R)	1	Three Section Head Top of Pole Bracket
	2 & 3		1	Pedestrian Signal w/Side of Pole Bracket

CABLE SCHEDULE														
DESCRIPTION	DELTA ITEM NO. (Δ)													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
EXISTING CONDUIT AND CABLE														
Quantity of 2" Conduit (E)	5	6	8	1	4	1	4	3	2	2	2	4	5	
Quantity of Spare 2" Conduit (E)														
Quantity of 26C #14 Traffic Control Cable (R)	1	1	2		1		1	1	1			1	1	
Quantity of 2C #14 Loop Dectector & Pedestrian Push Button Lead-In Cable (R)	6	6	10		4	1	2	1		3	1	4	6	
Quantity of 6-Pairs #19 Conductor, Interconnect Cable (R)	1	1	1							1	1	1	1	
Quantity of 3C #16 Power Cable (R)				1										
Quantity of 7 Cable (R)		2	3		1		1			1				

TRAFFIC SIGNAL HEAD SCHEDULE				
Traffic Signal Head Type and Description				
12" RYG Traffic Signal Head	12" RY → Traffic Signal Head	12" RYG ← Traffic Signal Head		Pedestrian Signal Head
Pole Letter Signal Head Number	B-1, # 2 D-2 E-1 F-2, 3, # 4 G-1, # 2 H-1 (R)	C-1 D-1 (R)	A-1 F-1 (R)	A-2 C-2 E-2, 3 F-5 G-3 H-2, 3 (E)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL PLAN

KUHIO HIGHWAY
Traffic Signal Rehabilitation
at Various Locations
Project No. HWY-K-01-13M

Scale: 1" = 20' Date: May, 2013

SHEET No. 8 OF 8 SHEETS

SURVEY PLOTTED BY: _____ DATE: _____

ORIGINAL PLAN: _____

DESIGNED BY: _____

NOTE BOOK: _____

QUANTITIES BY: _____

CHECKED BY: _____

6/14/13 1 Added Signs.

DATE REVISION