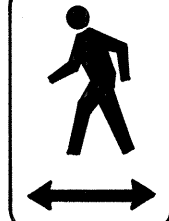


TRAFFIC SIGNAL STANDARD SCHEDULE	
POLE LETTER	DESCRIPTION
E	Install Type I Traffic Signal Standard with Signal and Pedestrian Heads

Install Sign

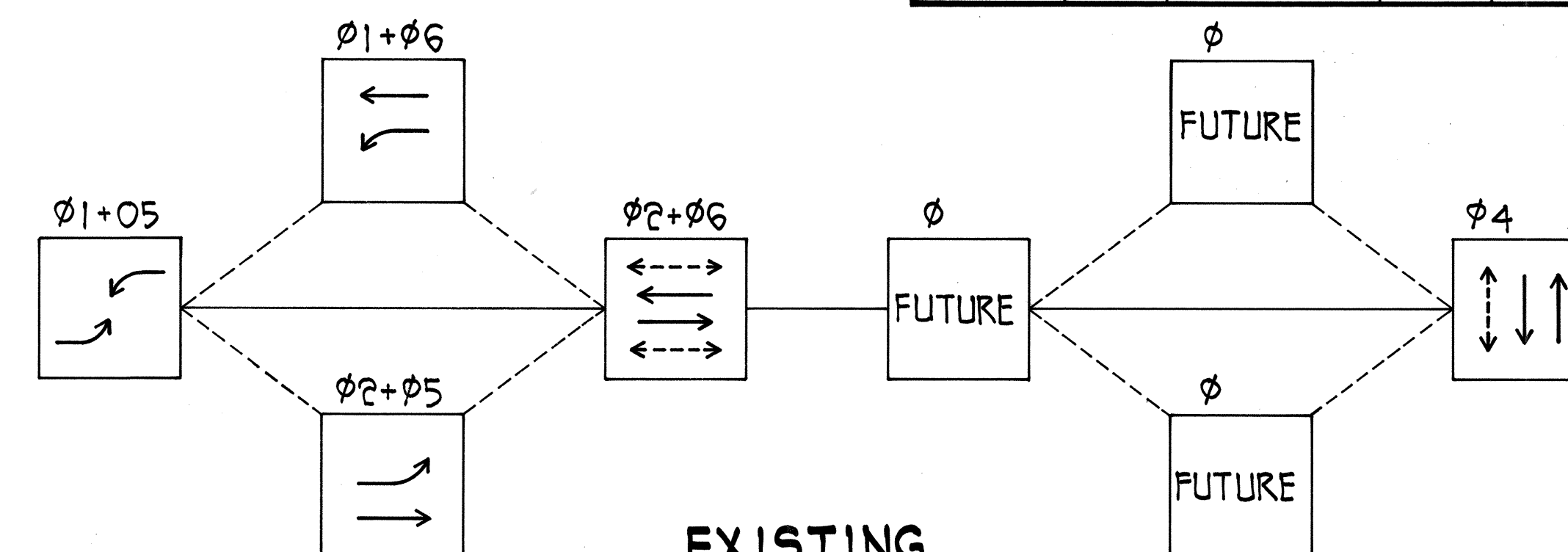


 E II (→) R10-4B (L)

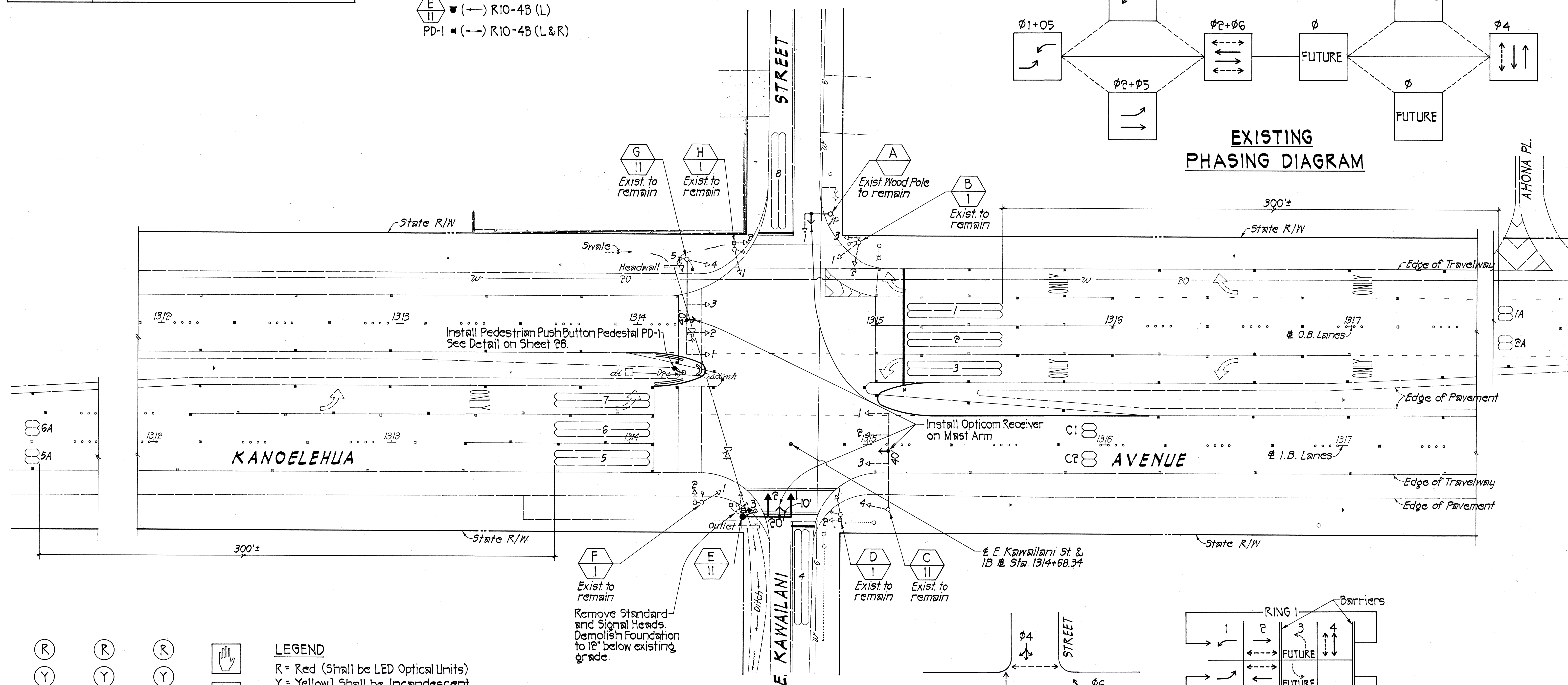
 PD-1 (→) R10-4B (L & R)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(32)	1999	12	34

TRUE NORTH
Scale: 1" = 20'



EXISTING
PHASING DIAGRAM

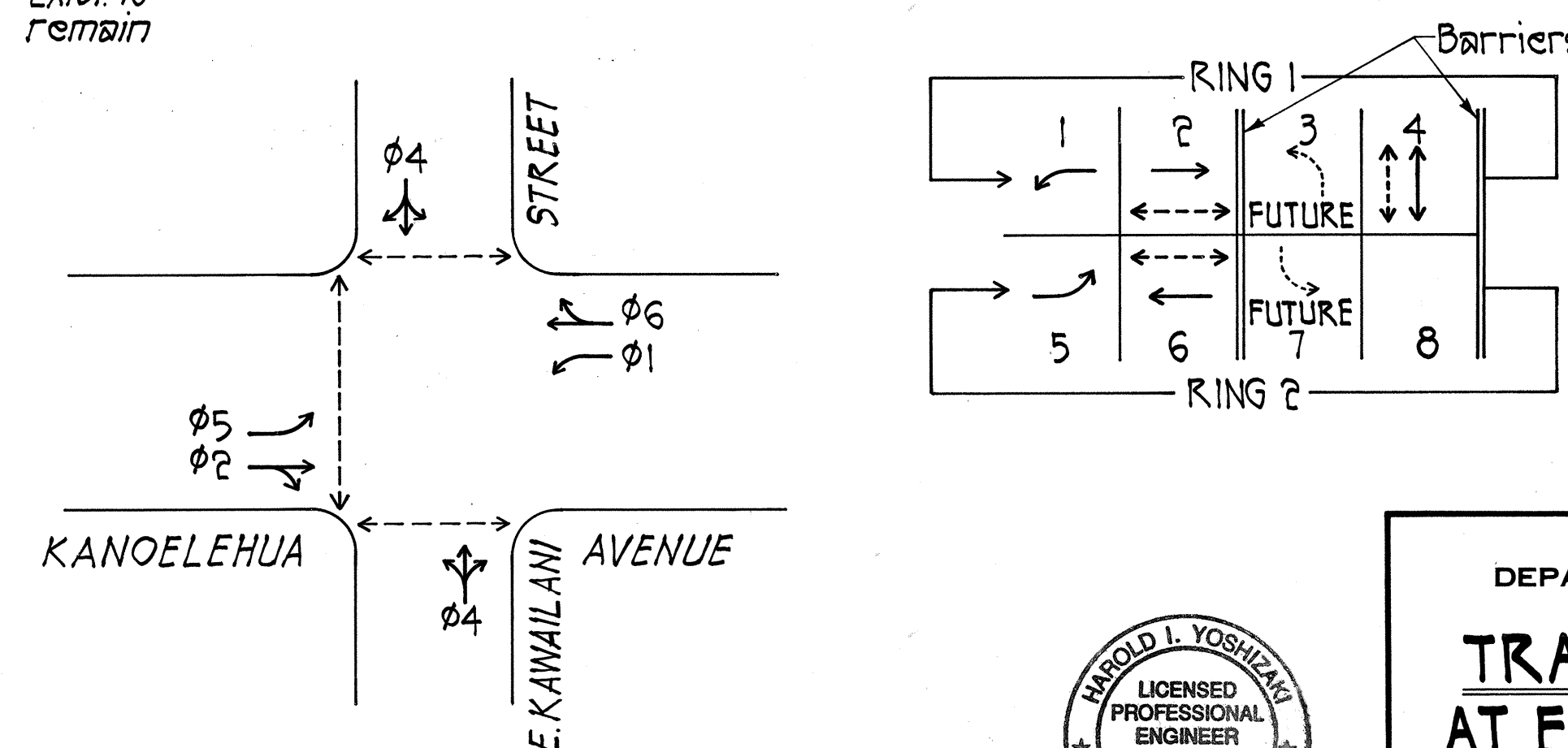


(R)	(R)	(R)	(H)	LEGEND	
(Y)	(Y)	(Y)	(P)		
(G)	(G)	(G)	(P)		
A-1 VI	C-2 VI	B-1 II	B-3 VII	Pole I.D.	A-2 VI
B-2 II	G-2 VI	*C-1 VI	D-2 VII		
C-3 VI		F-1 I	E-3 VII (New)	Type of Mount	
C-4 V		*G-1 VI	F-2 VII		
D-1 I			G-5 VII		
E-1 VI (NEW)			H-2 VII		
E-2 VI (NEW)					
G-3 VI					
G-4 V					
H-1 I					

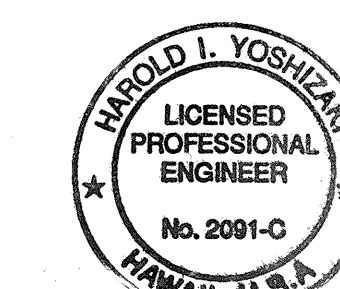
SIGNAL ARRANGEMENT AND MOUNTING

TRAFFIC SIGNAL PLAN
Scale: 1" = 20'

- NOTES: 1. Contractor shall deliver removed signal heads and Type I Standard to County of Hawaii, Dept. of Public Works, Traffic Division Baseyard.
2. Contractor shall replace all existing red ball incandescent optical units with LED red ball optical units.
3. Install adhesive Type II Object Markers on pole standard E. Install 2 each markers.
4. All traffic signal & pedestrian heads are existing unless otherwise noted.



EXISTING
PHASE ASSIGNMENTS

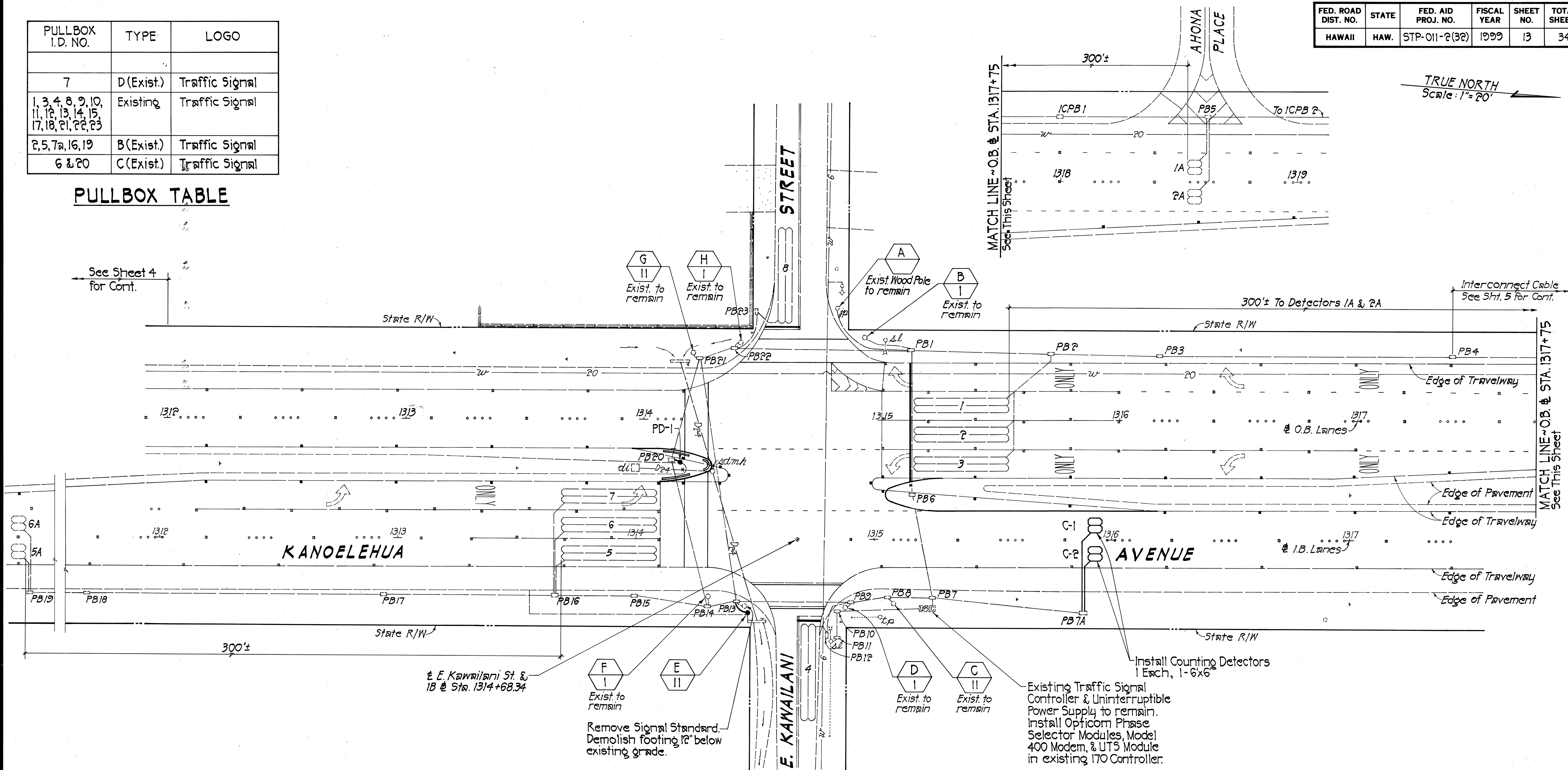


THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Harold L. Yoshizaki
SHIMADZU, ENDO & YOSHIZAKI, INC.
1176 12th Avenue
Honolulu, Hawaii 96816

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
TRAFFIC SIGNAL PLAN AT E. KAWAILANI STREET KANOELEHUA AVENUE TRAFFIC SIGNAL MODERNIZATION F.A. PROJ. NO. STP-011-2(32)	
SCALE: AS SHOWN	DATE: OCT. 1998
SHEET NO. 1 OF 3 SHEETS	

PULLBOX I.D. NO.	TYPE	LOGO
7	D(Exist.)	Traffic Signal
1, 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 21, 22, 23	Existing	Traffic Signal
2, 5, 7a, 16, 19	B(Exist.)	Traffic Signal
6 & 20	C(Exist.)	Traffic Signal

PULLBOX TABLE



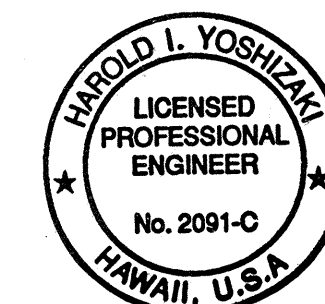
NOTES:

- Contractor shall clean all existing conduits prior to pulling cables.
- Plan with existing facilities was furnished by the Department of Transportation:
 - Federal Aid Project No. NH-011-2(33)
 - Federal Aid Project No. HES-011-2(21)
 - Federal Aid Project No. F-RF-011-2(13)
- Contractor shall remove and dispose of the following existing cables:
 - Main Control Cable (Type 1)
 - Loop Detector Lead-in and Pedestrian Push Button Cable (Type 2)
 - Signal Drop Cable (Type 5)
- Contractor shall install new conduits and conductors as called for in the Conduit-Cable Table on sheet 14.

ELECTRICAL PLAN

Scale: 1" = 20'

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



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 Harold L. Yoshizaki
 SHIMABUKURO, ENDO & YOSHIZAKI, INC.
 1126 12th Avenue
 Honolulu, Hawaii 96816

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL PLAN
AT E. KAWAILANI STREET
 KANOELEHUA AVENUE
 TRAFFIC SIGNAL MODERNIZATION
 F.A. PROJ. NO. STP-011-2(32)
 SCALE: AS SHOWN DATE: OCT. 1998
 SHEET NO. 2 OF 3 SHEETS

DATE: _____
DESIGNED BY: _____
CHECKED BY: _____
ORIGINAL PLAN: _____
NOTE BOOK: _____

INSTALL NEW CONDUCTORS IN EXISTING CONDUITS																		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
FROM	TO	MAIN CONTROL		SIGNAL CONTROL			DETECTORS			POWER		STREET LIGHTS		INTERCONNECT		OPTICOM		SPARE	REMARKS				
		CONDUIT	CONDUCTORS 2-26C #14	CONDUIT	CONDUCTORS		CONDUIT	CONDUCTORS		CONDUIT	CONDUCTORS	CONDUIT	CONDUCTORS 1 - 12pr #19	CONDUIT	CONDUCTORS 3C - #20 1 - #20 GRD	CONDUIT							
					SEE NOTE 1	SEE NOTE 2		2C - #14	PED.								VEH.						
CONT.	PB7	2-EX. 2"	2				3-EX. 2"	3	12					EX. 2"	1	EX. 2"	4						
PB7	PB8	2-EX. 2"	2				3-EX. 2"	2	5							EX. 2"	2	EX. 2"					
PB8	C			EX. 2"	1	13											1		Install opticom conductor in existing 2" signal control conduit.				
PB8	PB9	2-EX. 2"	1				2-EX. 2"	2	5							EX. 2"	1						
PB9	D			EX. 2"	1	7		1											Install pedestrian detector conductor in existing 2" signal control conduit.				
PB9	PB13	2-EX. 2"	1				2-EX. 2"	2	4							EX. 2"	1		Splice pedestrian detector conductors for standards D & E in PB9.				
PB13	PB21	2-EX. 2"	1															EX. 2"					
PB21	G			EX. 2"	1	16		1									1		Install opticom and pedestrian detector conductor in existing 2" signal control conduit.				
PB21	PB22	2-EX. 2"	1													EX. 2"	1						
PB22	H			EX. 2"	1	7		1											Install pedestrian detector conductor in existing 2" signal control conduit.				
PB22	PB1	2-EX. 2"	1				EX. 2"	1	1							EX. 2"	1		Splice pedestrian detector conductors for standards B & H in PB1.				
PB1	A			EX. 1 1/2"	1	4											1		Install opticom conductor in existing 1-1/2" signal control conduit.				
PB1	B			EX. 2"	1	10	EX. 1"	1															
PB1	PB6	2-EX. 2"	1				2-EX. 2"	1	5			EX. 2"		EX. 2"	1	EX. 2"	2	EX. 2"					
PB6	PB7	2-EX. 2"	1				2-EX. 2"	1	5			EX. 2"		EX. 2"	1	EX. 2"	2	EX. 2"					
PB7	PB7A						EX. 2"		2										Install new counting loop detectors C1 and C2.				
PB1	PB2						EX. 2"		4			EX. 2"		EX. 2"	1								
PB2	PB3						EX. 2"		1			EX. 2"		EX. 2"	1								
PB3	PB4						EX. 2"		1			EX. 2"		EX. 2"	1								
PB4	ICPB1						EX. 2"		1					EX. 2"	1								
ICPB1	PB5						EX. 2"		1					EX. 2"	1				Splice vehicle detectors 1A & 2A in PB5.				
PB5	ICPB2											EX. 2"		EX. 2"	1								
PB9	PB12						EX. 2"		1														
PB13	PB14						2-EX. 2"	1	4									3-EX. 2"					
PB14	F			EX. 2"	1	7		1											Install pedestrian detector conductor in existing 2" signal control conduit.				
PB14	PB20						EX. 2"	1										EX. 2"	Splice pedestrian detector conductors for standards F, PD-1 & G in PB14.				
PB20	PB21						EX. 2"	1										2-EX. 2"					
PB14	PB15						EX. 2"		4														
PB15	PB16						EX. 2"		4														
PB16	PB17						EX. 2"		1														
PB17	PB18						EX. 2"		1														
PB18	PB19						EX. 2"		1										Splice vehicle detectors 5A & 6A in PB19.				
PB22	PB23						EX. 2"		1														

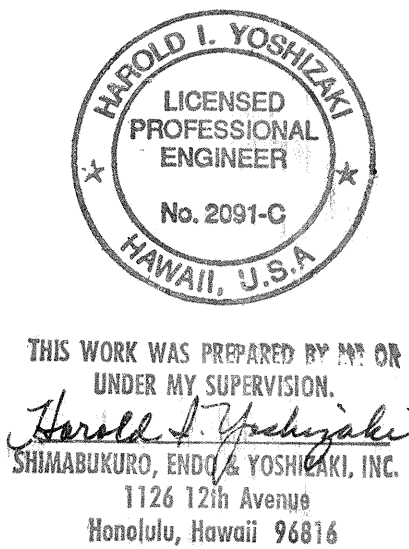
LEGEND:

- New Conduit
- EX. 2" Existing 2" Conduit
- 2-EX. 2" Number of existing 2" Conduits
- PB7 Existing improvements are indicated with slant lettering. (Existing Pullbox 7)
- E New improvements are indicated with vertical and bold lettering. (New Traffic Signal Standard "E")

NOTES:

- Install 1-9 Cond. #14 or 1-26 Cond. #14 cable from pullbox to bottom of traffic signal standard, as required.
- Install #14 conductors (color coded) as indicated on table from bottom of traffic signal standard to traffic and pedestrian signal heads.
- Existing conduits are based on plans furnished by DOT: FAP NO. NH-011-22(32) and FAP NO. HES-011-2(21).

INSTALL NEW CONDUITS AND CONDUCTORS										
FROM	TO	SIGNAL CONTROL			DETECTORS			OPTICOM		REMARKS
		CONDUIT 2"	CONDUCTORS		CONDUIT 2"	CONDUCTORS		CONDUIT 2"	CONDUCTORS 3C - #20 1 -# 20 GRD	
			SEE NOTE 1	SEE NOTE 2		2C - #14				
						PED.	VEH.			
										Install Opticom conductors in 2" detector conduit.
PB13	E	●	1	10	●	1			1	
PB20	PD-1				●	1				



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONDUIT – CABLE TABLE
AT KAWAILANI STREET
KANOELEHUA AVENUE
TRAFFIC SIGNAL MODERNIZATION
F.A. PROJ. NO. STP-011-2(32)
SCALE: AS SHOWN DATE: OCT. 1998
SHEET No. 3 OF 3 SHEETS