

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H-1(118)16	1975	54	209

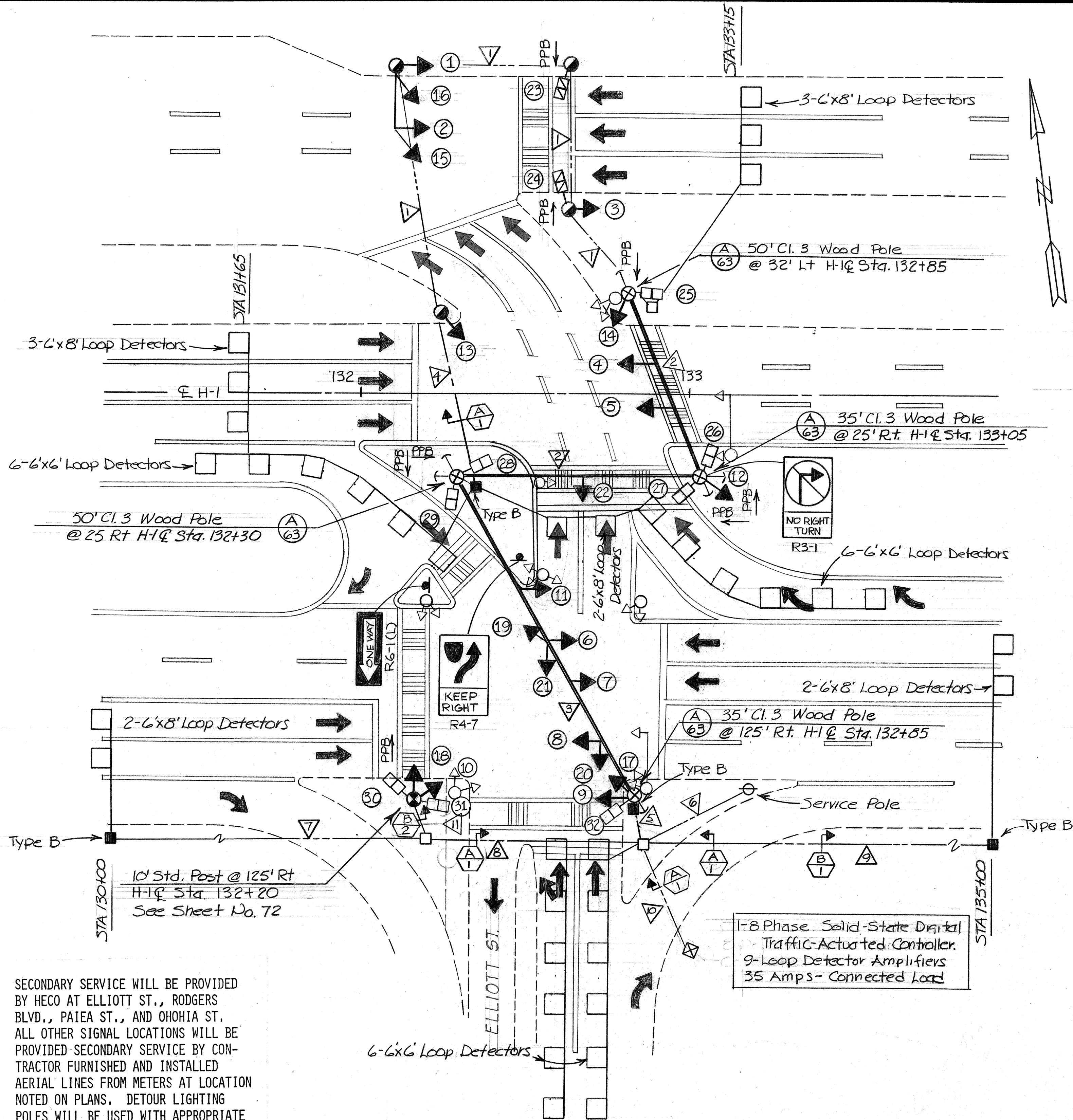
LEGEND

- NEW OR RELOCATED SIGNAL FACE
- SIGNAL FACE IN PLACE
- EXISTING SIGNAL TO BE REMOVED
- EXISTING CONTROLLER
- NEW CONTROLLER
- EXISTING PULLBOX
- NEW PULLBOX
- EXISTING SIGNAL POST TO BE REMOVED
- SIGNAL POST OR POLE IN PLACE
- NEW SIGNAL POST
- NEW OR RELOCATED SIGNAL POLE WITH GUY WIRE
- NEW OR RELOCATED PED SIGNAL
- PED SIGNAL IN PLACE
- EXISTING CONDUIT (CABLE & CONDUIT)
- NEW 2" PVC CONDUIT (TYPE & NUMBER)
- SPAN WIRE IN PLACE
- NEW OR RELOCATED SPAN WIRE
- EXISTING PAVEMENT ARROW
- NEW PAVEMENT ARROW
- NEW LOOP DETECTOR
- EXISTING LOOP DETECTOR
- PEDESTRIAN PUSHBUTTON (DIRECTION) W/SIGN

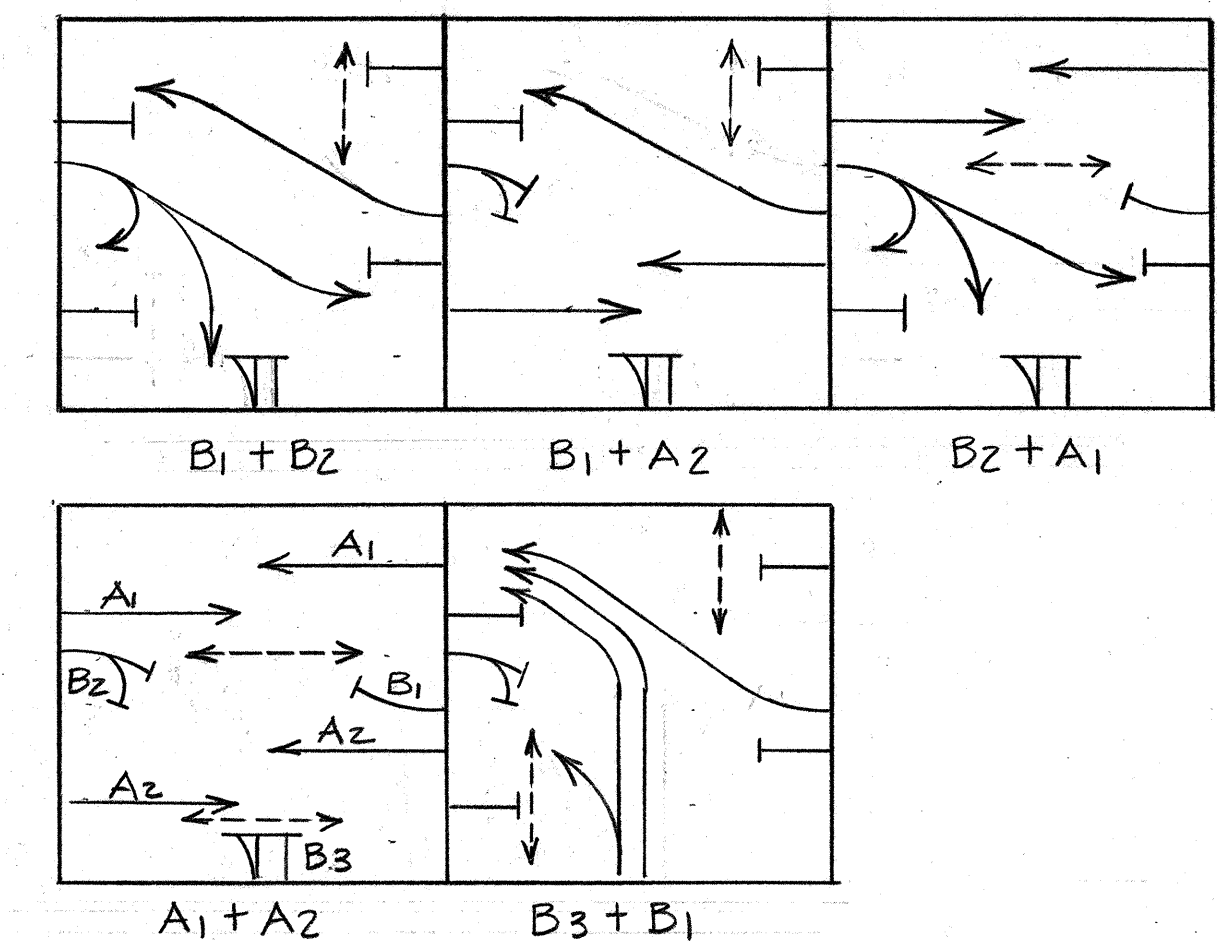
GENERAL NOTES FOR SIGNAL PLANS

- CHECK UTILITY LINE LOCATIONS BEFORE PLACING SIGNAL POLES.
- ALL 50-FOOT WOOD POLES SHALL HAVE A 400-WATT LUMINAIRE MOUNTED AS SHOWN ON DETAIL SHEET NO. 63.
- ALL CIRCULAR SIGNAL FACE LENSES SHALL BE 12 INCHES.
- FINAL HOOKUP AND TIMING BY THE DEPARTMENT OF TRANSPORTATION CITY & COUNTY OF HONOLULU.
- THE EXACT LOCATION OF TRAFFIC SIGNAL STANDARDS, POLES, PULLBOXES, CONDUITS, CONTROLLER CABINETS, AND LOOP DETECTORS SHALL BE DETERMINED BY THE ENGINEER.
- ALL NEW CONDUIT UNDER ROADWAYS SHALL BE PVC SCHEDULE 80. ALL OTHERS-PVC SCHEDULE 40.
- ANY PHASE OR COMBINATION OF PHASES MAY BE SKIPPED SUBJECT TO DETECTED DEMAND.
- SIGNAL INDICATIONS DURING CLEARANCE INTERVAL:
 - ANY GREEN OR WALK INDICATION TO REMAIN GREEN OR WALK DURING NEXT PHASE WILL REMAIN GREEN OR WALK DURING CLEARANCE.
 - ANY GREEN OR WALK INDICATION TO BECOME RED OR DON'T WALK DURING NEXT PHASE WILL BE YELLOW OR FLASHING DON'T WALK DURING CLEARANCE.
 - ANY RED OR DON'T WALK INDICATION TO BE RED OR DON'T WALK DURING NEXT PHASE WILL BE RED OR DON'T WALK DURING CLEARANCE.

- SECONDARY SERVICE WILL BE PROVIDED BY HECO AT ELLIOTT ST., RODGERS BLVD., PAIEA ST., AND OHOHIA ST. ALL OTHER SIGNAL LOCATIONS WILL BE PROVIDED SECONDARY SERVICE BY CONTRACTOR FURNISHED AND INSTALLED AERIAL LINES FROM METERS AT LOCATION NOTED ON PLANS. DETOUR LIGHTING POLES WILL BE USED WITH APPROPRIATE POLE LINE HARDWARE AS APPROVED BY ENGINEER.
- EXISTING PULLBOXES, CONDUITS AND VEHICLE DETECTORS NOT USED WILL BE ABANDONED IN PLACE.
- AT EACH INTERSECTION CABINET ADDITIONAL SPACE WILL BE REQUIRED FOR MASTER INTERCONNECT HARDWARE. CHECK SHEET NO. 62 AND MANUFACTURER SUPPLIER FOR ADDITIONAL EQUIPMENT REQUIRED.
- ALL INTERSECTION CABINETS WILL BE WIRED TO INCLUDE ALL FACILITIES FOR UNUSED VEHICLE AND PEDESTRIAN CAPABILITIES. INCLUDE LOAD SWITCHES.

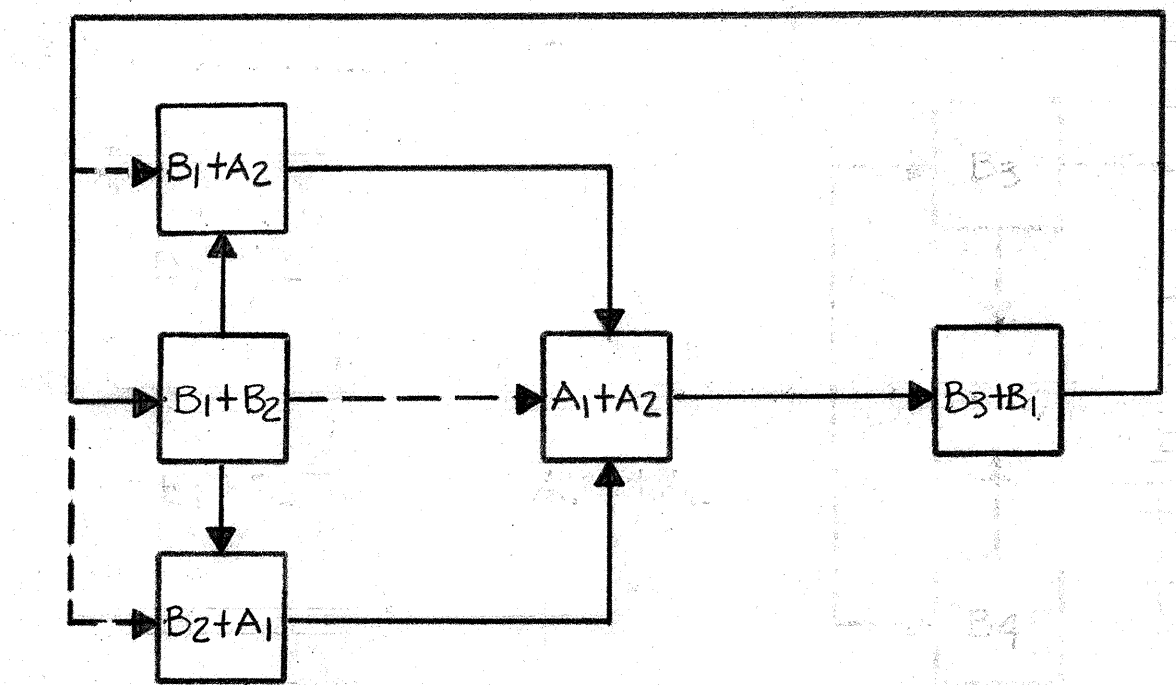


SIGNAL INDICATIONS				
7 10 17	1 2 3 4	15 16	11	23 24 25
18 19 21	5 6 8 9		Programmed Visibility Signal	26 27 28
	12 13 14 20			29 30 31
	22			32



LEGEND	CABLE	CONDUIT
1	1-24c #14	Exist. 2"
2	1-24c #14	Overhead
	1-2c #14	"
3	2-24c #14	"
	5-2c #14	"
4	1-24c #14	2"
	1-24c #14	2"
5	1-24c #14	2"
	5-2c #14	2"
6	1-2c #6	Exist. 1 1/4"
7	1-2c #14	Exist. 2"
	1-24c #14	Exist. 2"
8	1-24c #14	Exist. 2"
	1-2c #14	2"
9	1-2c #14	2"
	1-2c #6	Exist. 1 1/4"
	1-24c #14	Exist. 2"
	1-24c #14	Exist. 2"
	9-2c #14	2"
	1-24c #14	2"
	1-24c #14	2"

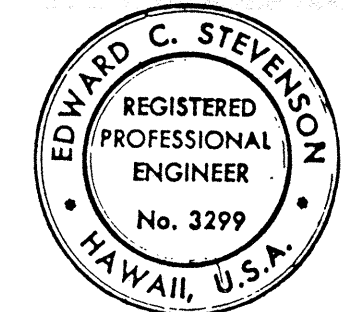
24c #14 Cable shall conform to Sect. 712.34(B)(6)
2c #14 Cable as recommended by the Manufacturer of Loop Detector



PHASING DIAGRAM

SIGNAL	PHASES									
	A ₁	A ₂	B ₁	B ₂	B ₃	B ₁ +B ₂	B ₁ +A ₂	B ₂ +A ₁	A ₁ +A ₂	B ₃ +B ₁
1, 2, 3, 4, 5	↑	R	R	R	R	R	R	↑	↑	R
6, 7, 8, 9, 10	R	W/G	R	R	R	R	↑/G	R	↑/G	R
11, 12, 13, 14, 15, 16	R	R	←/W	R	R	←/W	←/W	R	R	←/W
17, 18, 19	R	R	R	G	R	G	R	G	R	R
20, 21, 22	R	R	R	R	G/↑	R	R	R	G/↑	R
23, 24, 25, 26	DW	DW	W/FDW	DW	W/FDW	W/FDW	DW	DW	DW	W/FDW
27, 28, 31, 32	W/FDW	W/FDW	DW	DW	DW	DW	DW	W	W/FDW	DW
29, 30	DW	DW	DW	DW	W/FDW	DW	DW	DW	DW	W/FDW

3-1-75
Changed Controller to Full-Actuated. Added Loops, Cable, PPB & Conduit.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASES I, II & III
ELLIOTT STREET

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-H-1(118):16

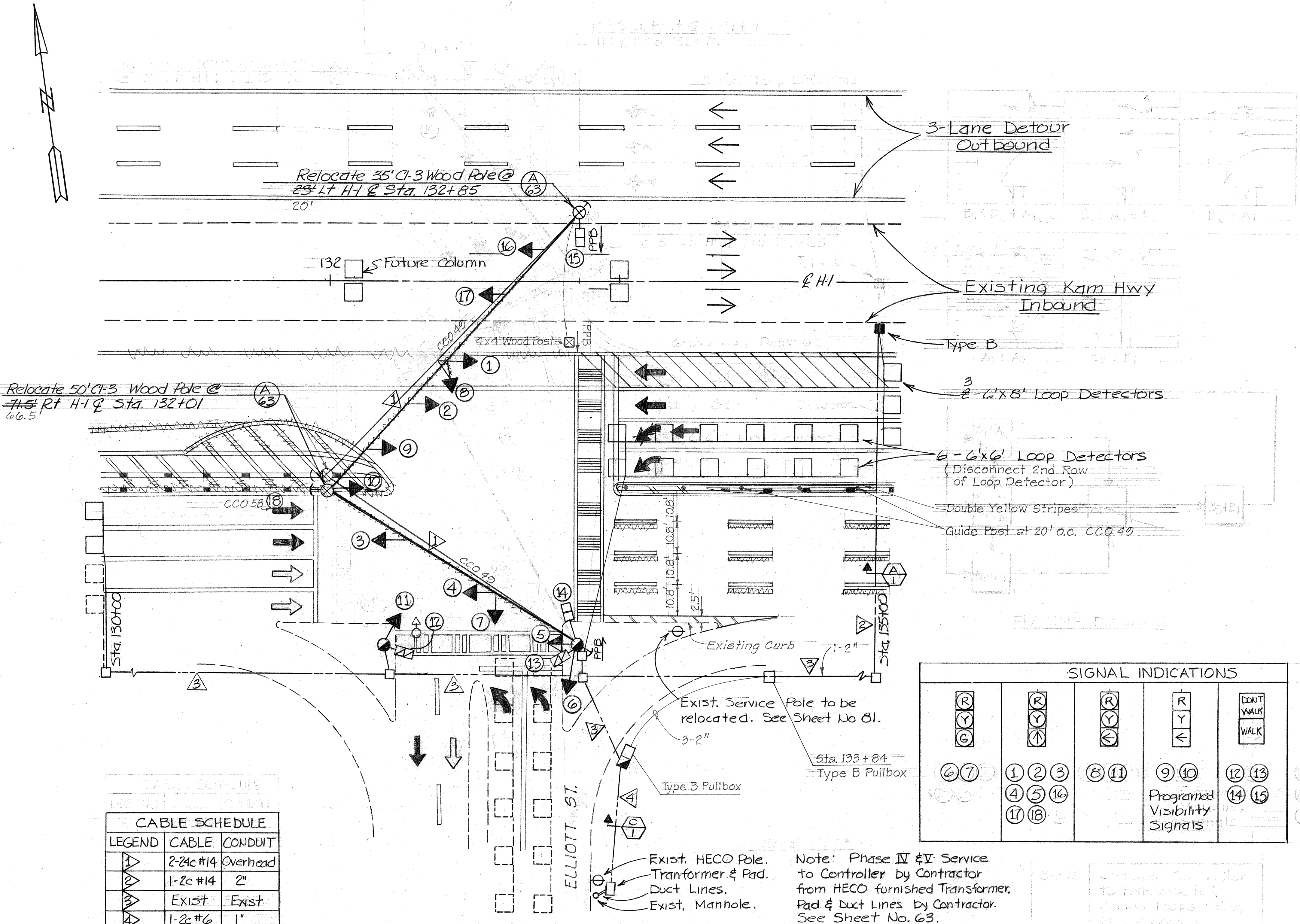
SCALE: 1"=20' DATE: JUNE 15, 1974

SHEET No. 1 OF 10 SHEETS

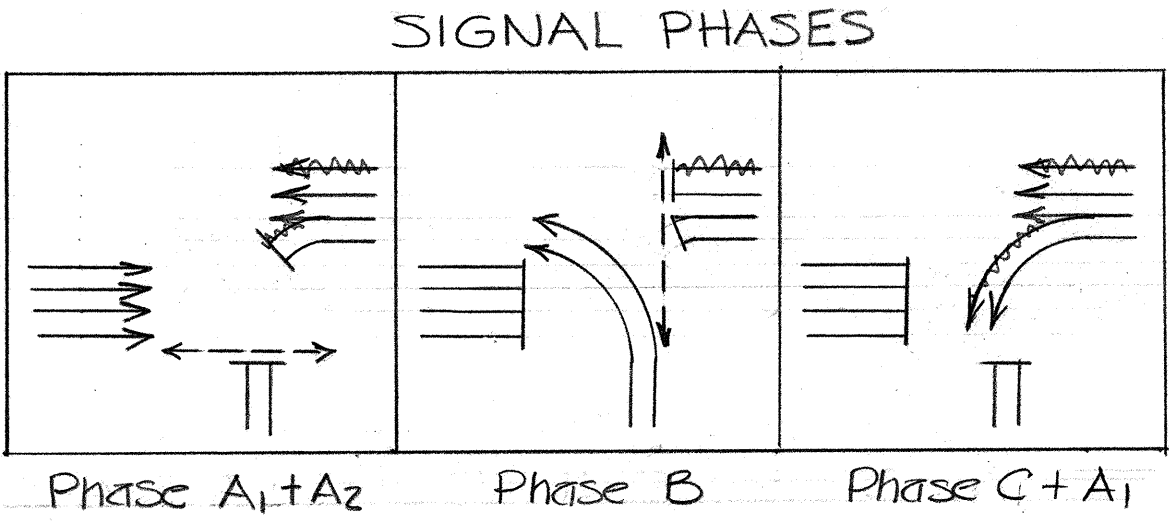
CO 54

DATE	
SURVEY PLANNED BY	
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(118)16	1975	55	209



Date	Revision
8-4-76	Provided Ped. Push Button on 4 x 4 Wood Post
7-26-76	Added Signal Head ⑧
6-1-76	Revised Lanes
4-12-76	Changed Phasing & Intersection Layout. Relocated Wood Poles, Loops & Walk Striping. Deleted Std Post & Pullbox.
3-1-75	Changed Controller to Full-Actuated Added Loops, Cable, PPB & Conduit.



LEGEND	CABLE	CONDUIT
①	2-24c #14	Overhead
②	1-2c #14	2"
③	Exist.	Exist.
④	1-2c #6	1"

24c #14 Cable - Existing.
2c #14 Cable as Recommended by the Manufacturer of Loop Detector

SIGNAL	PHASES					
	A1	A2	B	C	A1+A2	C+A1
1, 2	↑	↑	R	R	↑	↑
3, 4, 5	R	↑	R	R	↑	R
6, 7, 8	R	R	←/G	R	R	R
9, 10, 11	R	R	R	←	R	←
12, 13	DW	W/FDW	R	R	W/FDW	R
14, 15	DW	DW	W/FDW	DW	DW	DW

Signals 16 & 17 to be phased as directed by the Engineer.

SIGNAL INDICATIONS					
⑥ ⑦	① ② ③ ④ ⑤ ⑬ ⑭ ⑮	⑧ ⑩ ⑪	⑨ ⑫ ⑬ ⑭ ⑮	⑯ ⑰ ⑱ ⑲ ⑳	㉑ ㉒ ㉓ ㉔ ㉕
			Programmed Visibility Signals		



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Signature

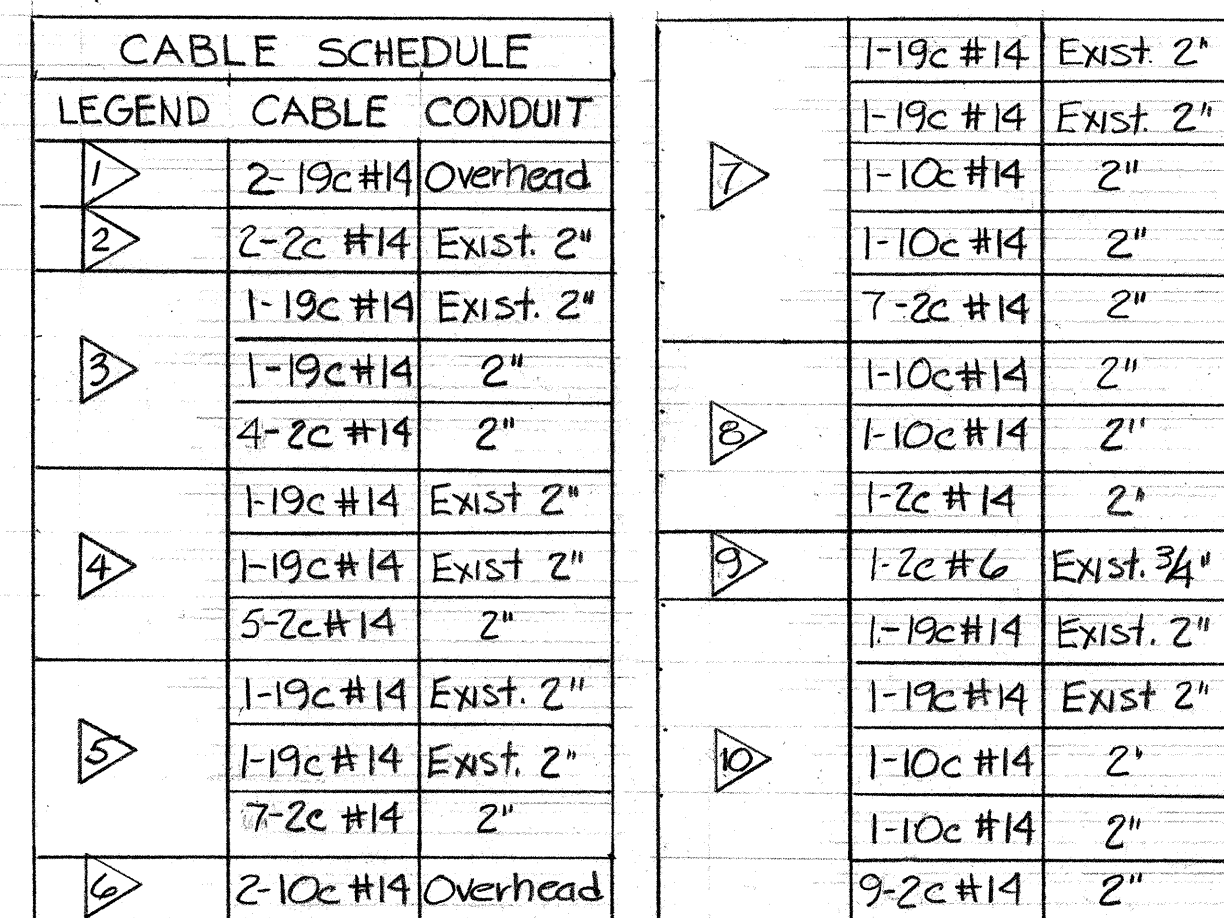
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASES IV & V
ELLIOTT STREET

AIRPORT INTERCHANGE
FAI PROJ NO I-H-1(118)16
SCALE: 1"=20' DATE: JUNE 15, 1974
SHEET No. 2 OF 10 SHEETS

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

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



LEGEND

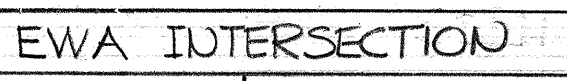
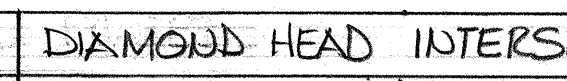
	NEW OR RELOCATED SIGNAL FACE
	SIGNAL FACE IN PLACE
	EXISTING SIGNAL TO BE REMOVED
	EXISTING CONTROLLER.
	NEW CONTROLLER
	EXISTING PULLBOX
	NEW PULLBOX
	EXISTING SIGNAL POST TO BE REMOVED
	SIGNAL POST OR POLE IN PLACE
	NEW SIGNAL POST
	NEW OR RELOCATED SIGNAL POLE WITH GUY WIRE

2-4 Phase Solid-State, Digital,
Traffic-Actuated Controllers
7- Loop Detector Amplifiers
35 Amps - Connected Load.



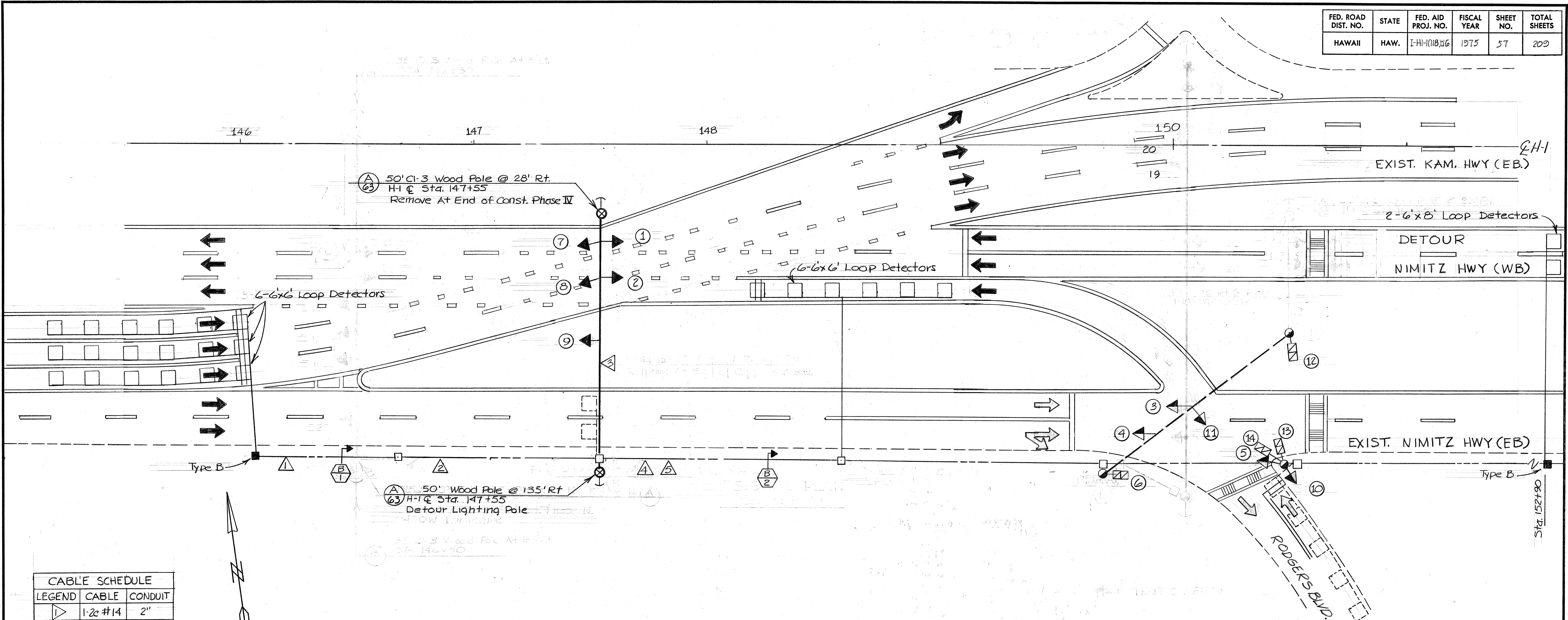
SIGNAL INDICATIONS				

SIGNAL PHASES

EWA INTERSECTION	DIAMOND HEAD INTERSECTION
 PHASE A₁	 PHASE A₂
 PHASE B₁	 PHASE B₂

CO 56

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1118X16	1975	57	209

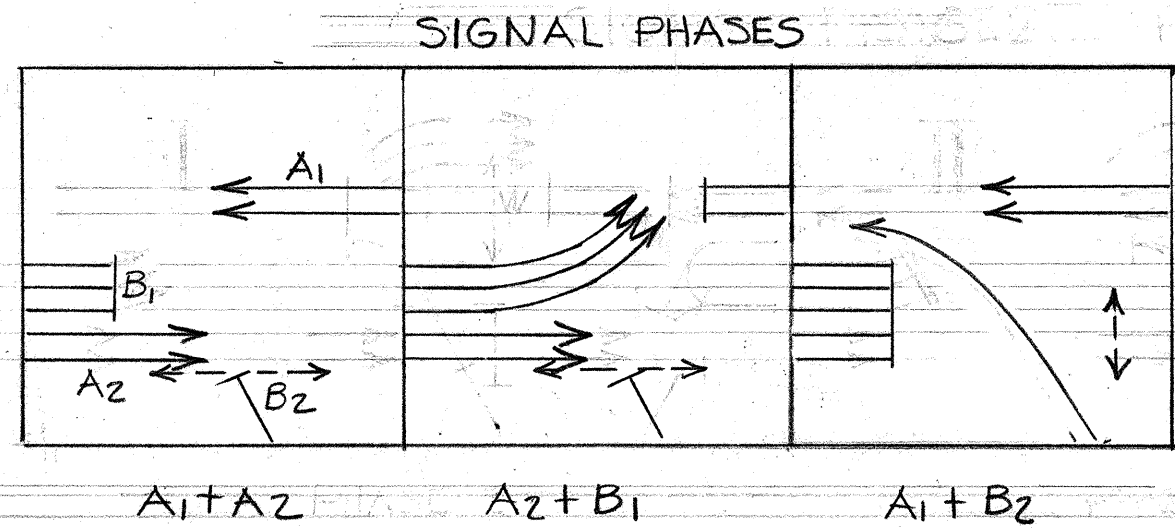


CABLE SCHEDULE		
LEGEND	CABLE	CONDUIT
1	1-2c #14	2"
2	1-2c #14	Exist.
3	2-19c #14	Overhead
4	1-19c #14	2"
5	1-19c #14	2"
6	Exist. 2-2c	Exist.

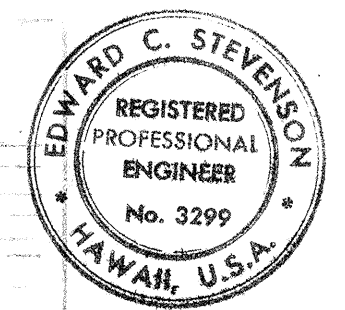
19c #14 Cable shall conform to Section 712.34(B)(6)
2c #14 Cable as Recommended by Manufacturer of Loop Detector

SIGNAL INDICATIONS			
R Y G	R Y G	R Y G	FOOT WALK WALK
1 2 3 7 8 10 11	4 5	9	12 13 6 14
Programed Visibility Signal			

SIGNAL	PHASES						
	A ₁	A ₂	B ₁	B ₂	A ₁ +A ₂	A ₂ +B ₁	A ₁ +B ₂
1, 2	↑	R	R	R	↑	R	↑
3, 4, 5	R	↑/G	R	R	↑/G	↑/G	R
7, 8, 9	R	R	↑/G	R	R	↑/G	R
10, 11	R	R	R	↑	R	R	↑
12, 13	DW	DW	DW	W/FDW	DW	DW	W/FDW
6, 14	DW	W	W/FDW	DW	W	W/FDW	DW



3-1-75	Changed Controller to Full-Actuated. Added Loops, Cable & Conduit.
Date	Revision



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Edward C. Stevenson
Signature

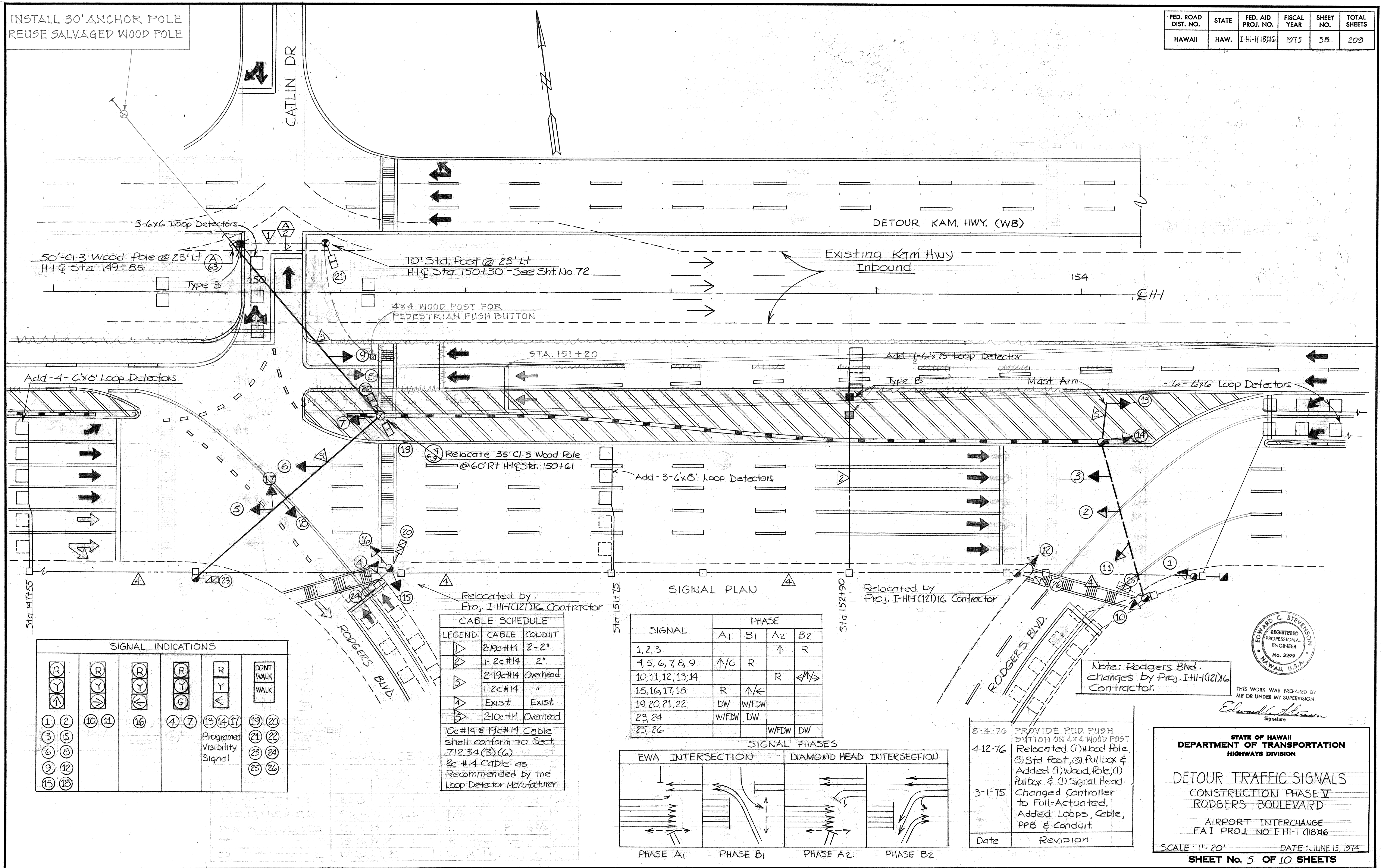
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASE IV
RODGERS BOULEVARD
AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-HI-1118X16
SCALE: 1"=20'
DATE: JUNE 15, 1974
SHEET No. 4 OF 10 SHEETS

DATE	_____
SURVEY PLATTED BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
NO.	_____

INSTALL 30' ANCHOR POLE
REUSE SALVAGED WOOD POLE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(118)16	1975	58	209

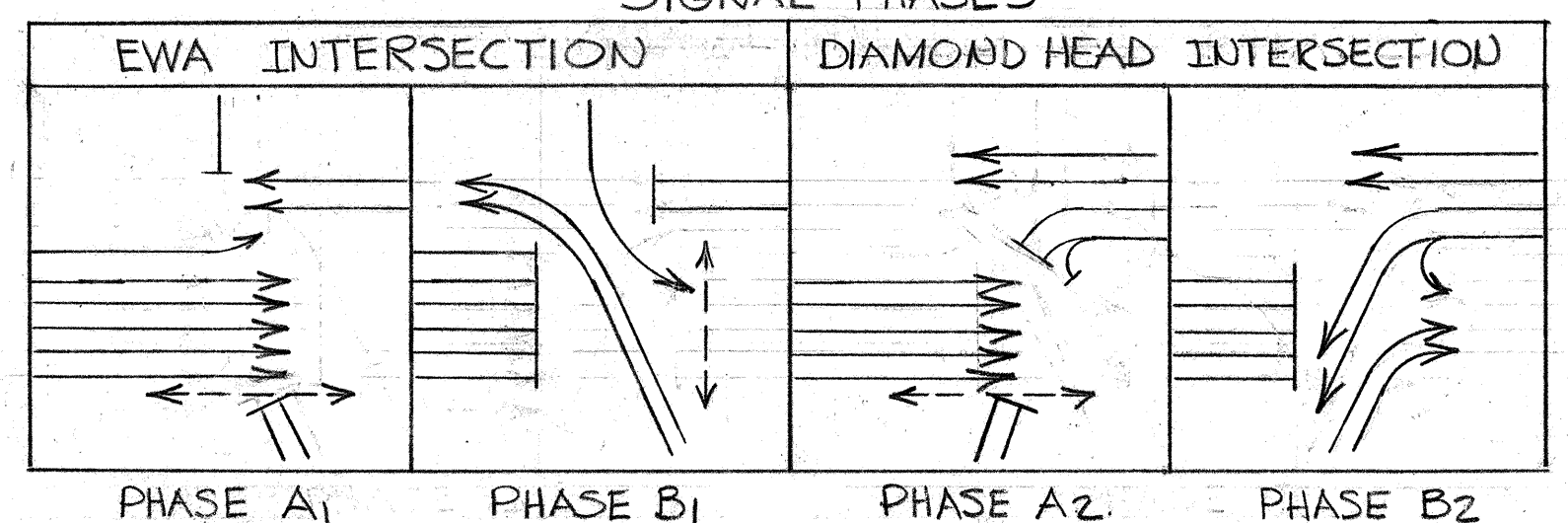


DESIGNED BY	DATE
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

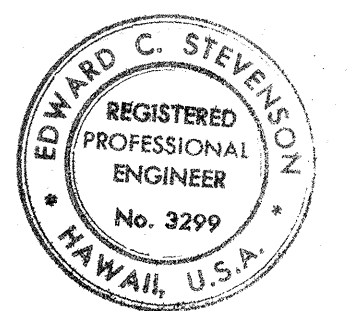
SIGNAL INDICATIONS									
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)	(A)
(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)	(B)
(C)	(C)	(C)	(C)	(C)	(C)	(C)	(C)	(C)	(C)
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)
(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)	(F)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
(H)	(H)	(H)	(H)	(H)	(H)	(H)	(H)	(H)	(H)
(I)	(I)	(I)	(I)	(I)	(I)	(I)	(I)	(I)	(I)
(J)	(J)	(J)	(J)	(J)	(J)	(J)	(J)	(J)	(J)
(K)	(K)	(K)	(K)	(K)	(K)	(K)	(K)	(K)	(K)
(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)
(M)	(M)	(M)	(M)	(M)	(M)	(M)	(M)	(M)	(M)
(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)	(O)
(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)
(Q)	(Q)	(Q)	(Q)	(Q)	(Q)	(Q)	(Q)	(Q)	(Q)
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
(T)	(T)	(T)	(T)	(T)	(T)	(T)	(T)	(T)	(T)
(U)	(U)	(U)	(U)	(U)	(U)	(U)	(U)	(U)	(U)
(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)	(V)
(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)
(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)	(X)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)

CABLE SCHEDULE		
LEGEND	CABLE	CONDUIT
(1)	2-12c#14	2-2"
(2)	1-2c#14	2"
(3)	2-19c#14	Overhead
(4)	1-2c#14	"
(5)	Exist	Exist
(6)	2-10c#14	Overhead
10c#14 & 19c#14 Cable shall conform to Sect. 712.34(B)(6) 2c#14 Cable as Recommended by the Loop Detector Manufacturer		

SIGNAL	PHASE			
	A1	B1	A2	B2
1, 2, 3			↑	R
4, 5, 6, 7, 8, 9	↑/G	R		
10, 11, 12, 13, 14			R	←/M
15, 16, 17, 18	R	↑/←		
19, 20, 21, 22	DW	W/FDW		
23, 24	W/FDW	DW		
25, 26			W/FDW	DW



Date	Revision
3-4-76	PROVIDE PED. PUSH BUTTON ON 4x4 WOOD POST
4-12-76	Relocated (1) Wood Pole, (3) Std. Post, (3) Pullbox & Added (1) Wood Pole, (1) Pullbox & (1) Signal Head
3-1-75	Changed Controller to Full-Actuated, Added Loops, Cable, PPB & Conduit.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Edward C. Stevenson
Signature

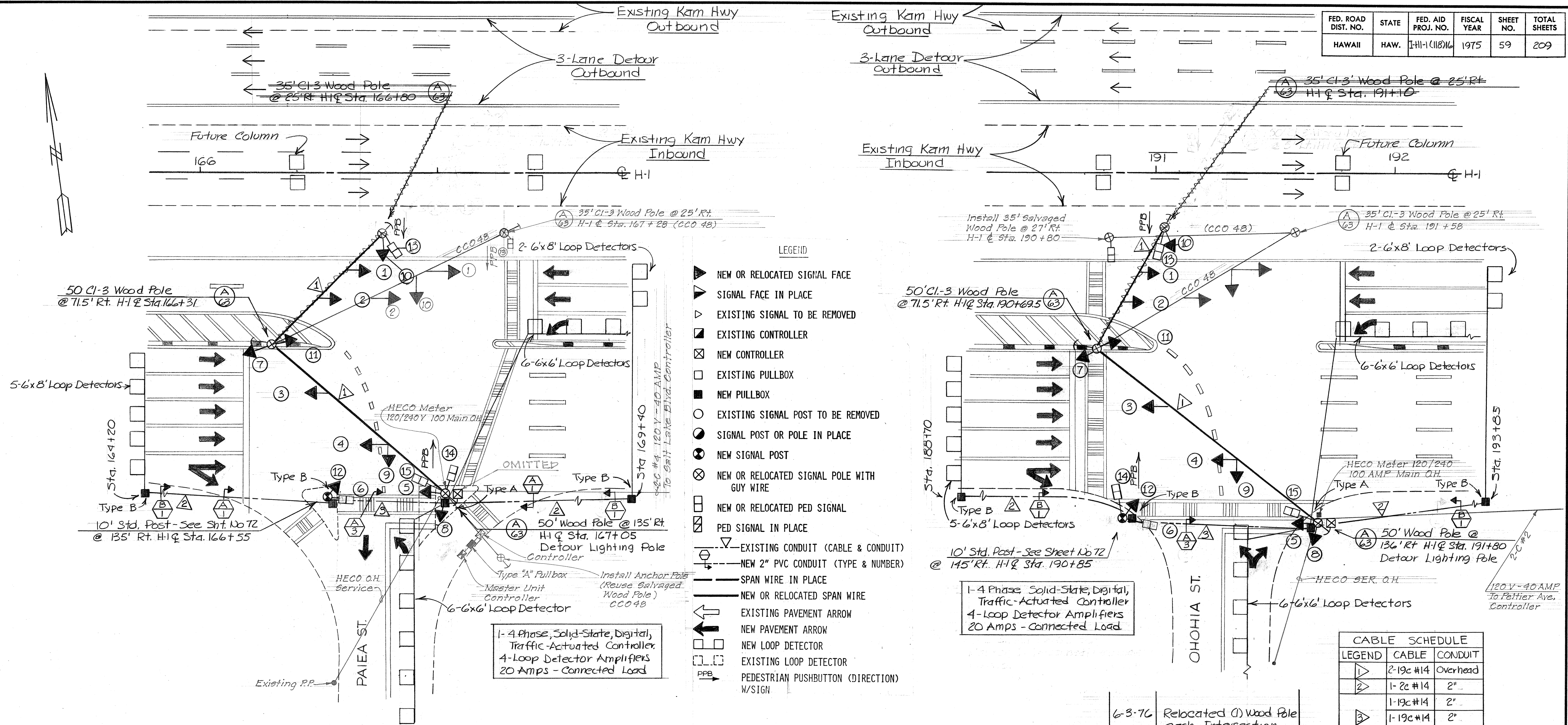
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASE V
RODGERS BOULEVARD

AIRPORT INTERCHANGE
FAI PROJ. NO. I-HI-1(118)16

SCALE: 1" = 20' DATE: JUNE 15, 1974
SHEET No. 5 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	111-1(118)16	1975	59	209



- LEGEND
- ▲ NEW OR RELOCATED SIGNAL FACE
 - ▶ SIGNAL FACE IN PLACE
 - ▷ EXISTING SIGNAL TO BE REMOVED
 - EXISTING CONTROLLER
 - ☒ NEW CONTROLLER
 - EXISTING PULLBOX
 - NEW PULLBOX
 - EXISTING SIGNAL POST TO BE REMOVED
 - SIGNAL POST OR POLE IN PLACE
 - NEW SIGNAL POST
 - ⊗ NEW OR RELOCATED SIGNAL POLE WITH GUY WIRE
 - NEW OR RELOCATED PED SIGNAL
 - ☒ PED SIGNAL IN PLACE
 - EXISTING CONDUIT (CABLE & CONDUIT)
 - NEW 2" PVC CONDUIT (TYPE & NUMBER)
 - SPAN WIRE IN PLACE
 - NEW OR RELOCATED SPAN WIRE
 - EXISTING PAVEMENT ARROW
 - NEW PAVEMENT ARROW
 - NEW LOOP DETECTOR
 - EXISTING LOOP DETECTOR
 - PEDESTRIAN PUSHBUTTON (DIRECTION) W/SIGN

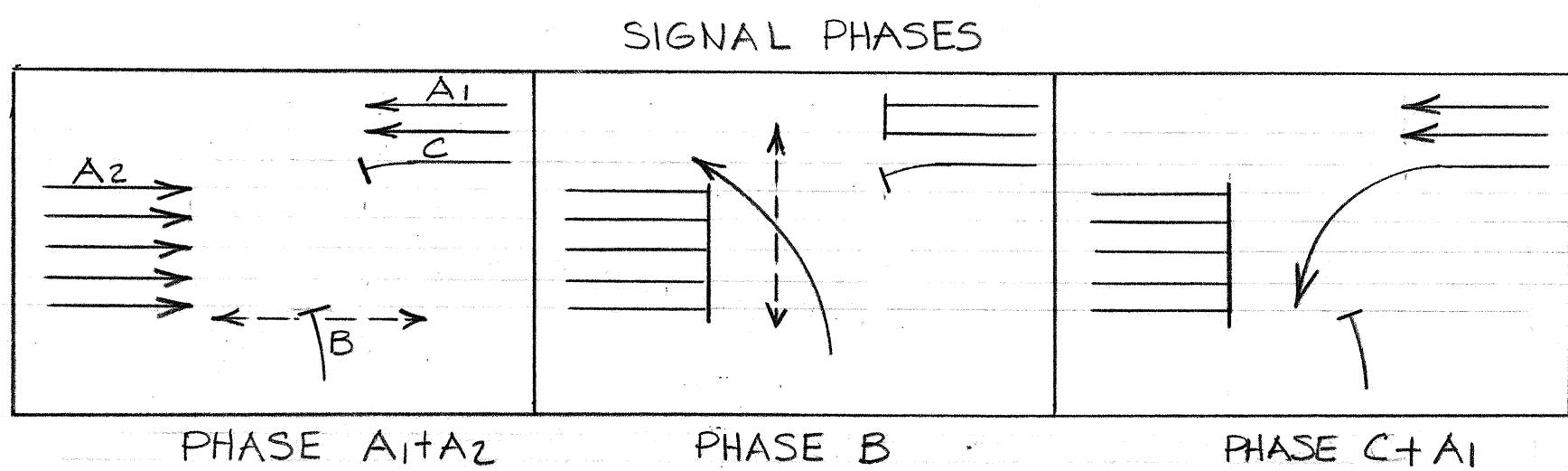
LEGEND	CABLE	CONDUIT
▶	2-19c #14	Overhead
▶	1-2c #14	2"
▶	1-19c #14	2"
▶	1-19c #14	2"
▶	1-2c #14	2"

19c #14 Cable shall conform to Sect. 712.34 (B)(6)
2c #14 Cable as Recommended by the Manufacturer of Loop Detector

Date	Revision
6-3-76	Relocated (1) Wood Pole each Intersection.
4-12-76	Relocated (1) Wood Pole each Intersection.
3-1-75	Changed Controllers to Full-Actuated. Added Loops, Cables, PPB & Conduit.

SIGNAL INDICATIONS				
R Y G	R Y G	R Y G	R Y G	DON'T WALK WALK
5, 8, 9	1, 2, 3	10, 12	11	13, 14
	4, 7		Programmed Visibility Signal	6, 15

SIGNAL	PHASES					
	A1	A2	B	C	A1+A2	C+A1
1, 2	↑	R	R	R	↑	↑
3, 4, 5, 7	R	↑/G	R	R	↑	R
8, 9, 10	R	R	G/←	R	R	R
11, 12	R	R	R	←	R	←
13, 14	DW	DW	W/FDW	DW	DW	DW
6, 15	DW	W/FDW	DW	DW	W/FDW	DW



EDWARD C. STEVENSON
REGISTERED PROFESSIONAL ENGINEER
No. 3299
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

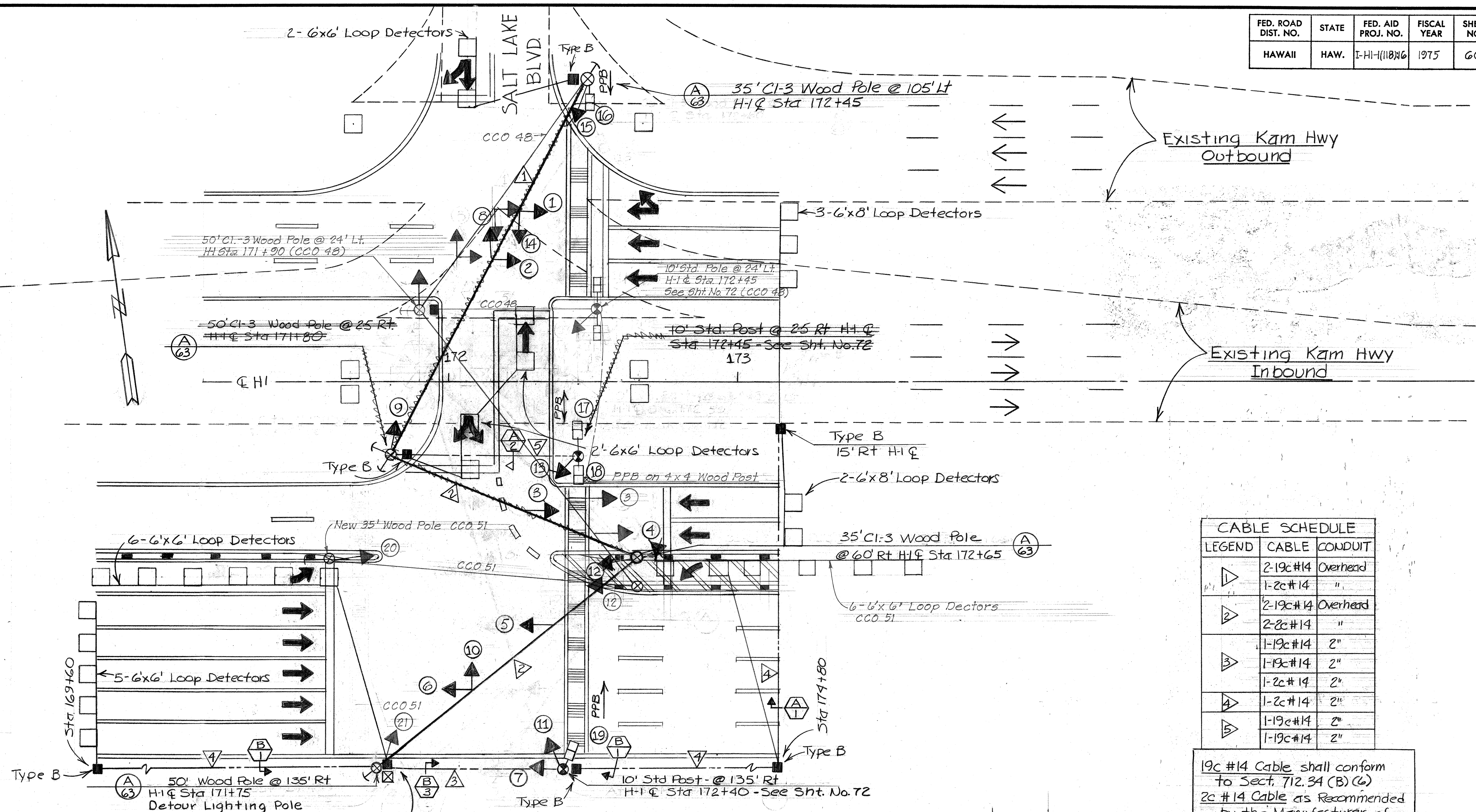
DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASE IV
PAIEA STREET
OHOHIA STREET
AIRPORT INTERCHANGE
FAI PROJ. NO. 111-1(118)16

SCALE: 1"=20' DATE: JUNE 15, 1975
SHEET No. 6 OF 10 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1118N6	1975	60	209

- LEGEND
- ▶ NEW OR RELOCATED SIGNAL FACE
 - ▶ SIGNAL FACE IN PLACE
 - ▷ EXISTING SIGNAL TO BE REMOVED
 - EXISTING CONTROLLER
 - ⊠ NEW CONTROLLER
 - EXISTING PULLBOX
 - NEW PULLBOX
 - EXISTING SIGNAL POST TO BE REMOVED
 - SIGNAL POST OR POLE IN PLACE
 - ⊙ NEW SIGNAL POST
 - ⊗ NEW OR RELOCATED SIGNAL POLE WITH GUY WIRE
 - NEW OR RELOCATED PED SIGNAL
 - ⊠ PED SIGNAL IN PLACE
 - EXISTING CONDUIT (CABLE & CONDUIT)
 - - - NEW 2" PVC CONDUIT (TYPE & NUMBER)
 - SPAN WIRE IN PLACE
 - NEW OR RELOCATED SPAN WIRE
 - ← EXISTING PAVEMENT ARROW
 - NEW PAVEMENT ARROW
 - NEW LOOP DETECTOR
 - EXISTING LOOP DETECTOR
 - PPB → PEDESTRIAN PUSHBUTTON (DIRECTION) W/SIGN



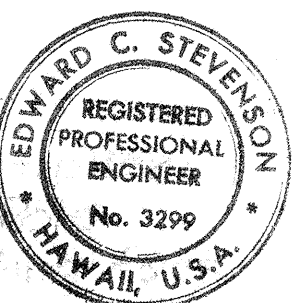
LEGEND	CABLE	CONDUIT
1	2-19c #14	Overhead
2	1-2c #14	"
3	2-19c #14	Overhead
4	2-2c #14	"
5	1-19c #14	2"
6	1-19c #14	2"
7	1-2c #14	2"
8	1-19c #14	2"
9	1-19c #14	2"
10	1-19c #14	2"

19c #14 Cable shall conform to Sect. 712.34 (B) (6)
2c #14 Cable as Recommended by the Manufacturer of Loop Detector

1- 4 Phase, Solid-State, Digital, Traffic-Actuated Controller
5- Loop Detector Amplifiers
20 Amps - Connected Load

Note: Secondary Aerial Cables to Controller Pole from Meter at Paiea St. by Contractor.

Date	Revision
7-26-76	Provided Ped Push Button on 4 x 4 Post
6-18-76	Provided for U-Turn Movement
6-3-76	Relocated (1) Wood Pole & (1) Std Post.
4-12-76	Relocated (2) Wood Poles, (1) Std Post & (3) Pullboxes.
3-1-75	Changed Controller to Full-Actuated. Added Loops, Cable, PPB & Conduit.

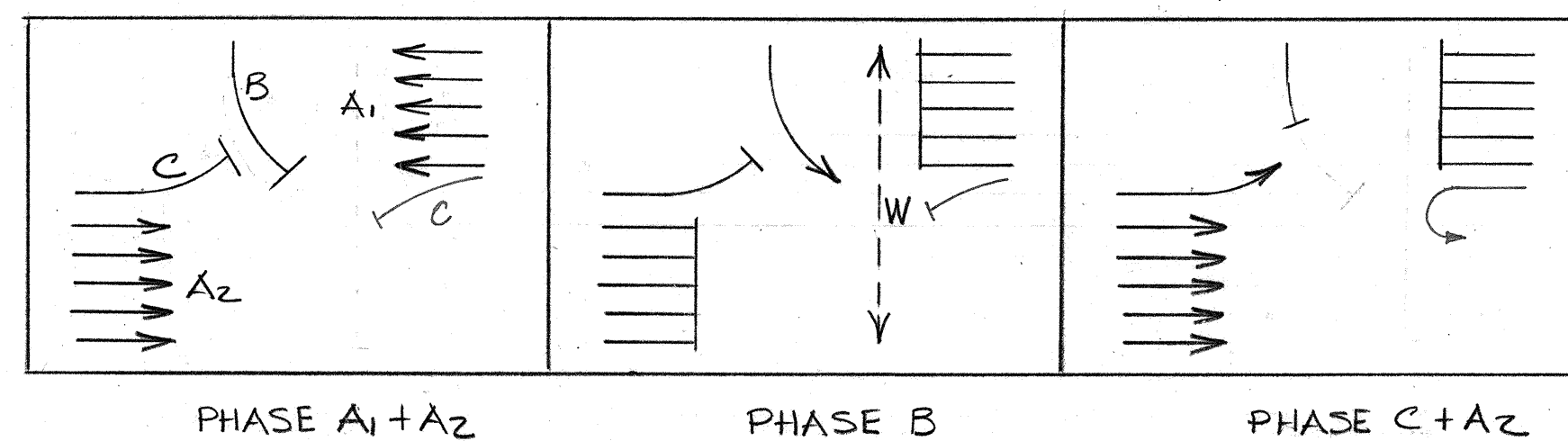


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Signature: Edward C. Stevenson

SIGNAL INDICATIONS				
1 (R) 2 (Y) 3 (G)	4 (R) 5 (Y) 6 (G)	7 (R) 8 (Y) 9 (G)	10 (R) 11 (Y) 12 (G)	13 (R) 14 (Y) 15 (G)
16 (R) 17 (Y) 18 (G)	19 (R) 20 (Y) 21 (G)	22 (R) 23 (Y) 24 (G)	25 (R) 26 (Y) 27 (G)	28 (R) 29 (Y) 30 (G)

SIGNAL	PHASES							
	A1	A2	B	C	A1+A2	C+A2	C+A1	C+A2
1, 2, 3, 4	G/↑	R	R	R	G/↑	R	R	R
5, 6, 7	R	↑	R	R	↑	↑	↑	↑
8, 9, 10, 11	R	R	G/←	R	R	R	R	R
12, 13, 14, 15, 20, 21	R	R	R	G/←	R	G/←	G/←	G/←
16, 17, 18, 19	DW	DW	W/FDW	DW	DW	DW	DW	DW

SIGNAL PHASES



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

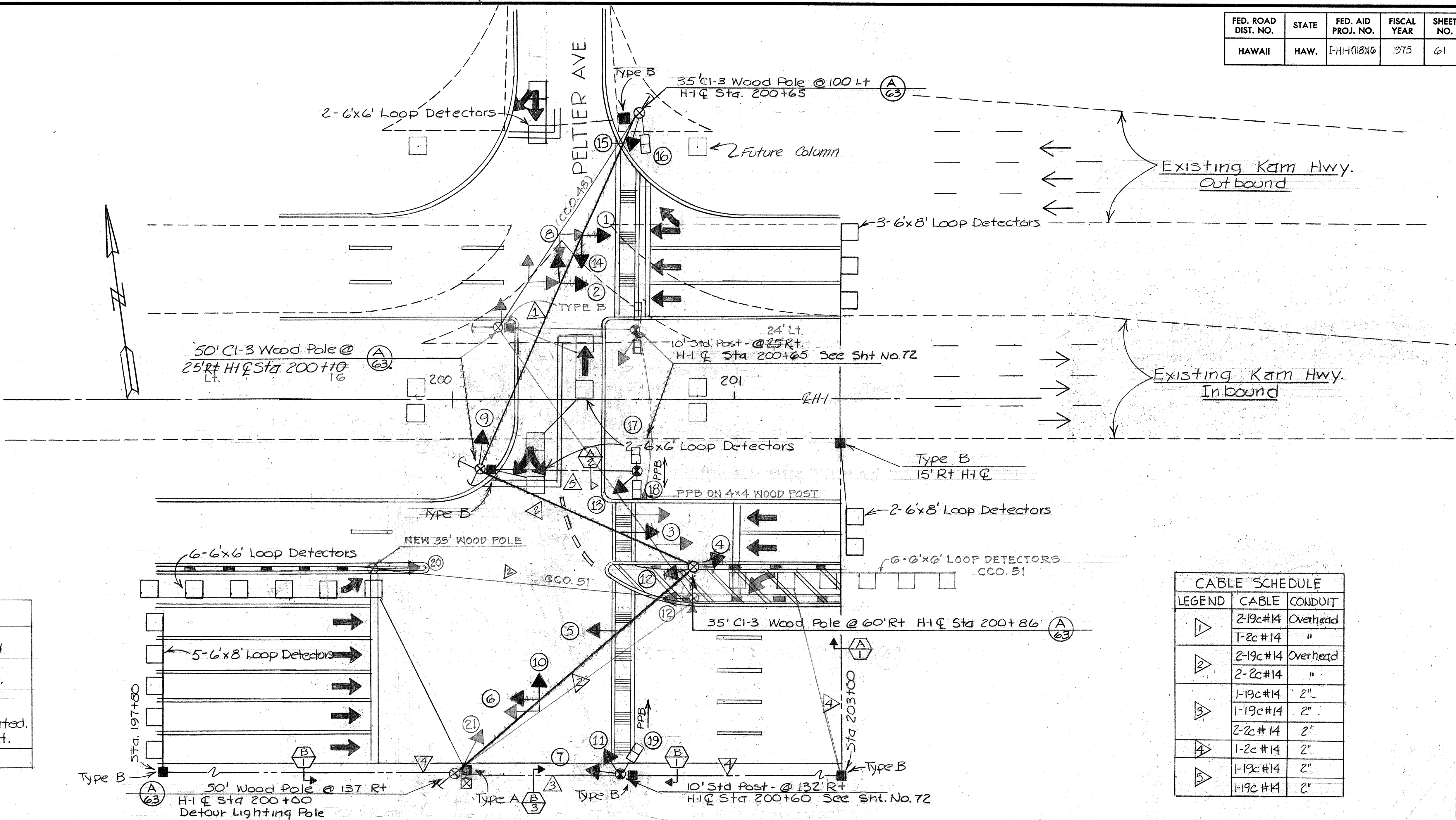
DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASE IV
SALT LAKE BOULEVARD

AIRPORT INTERCHANGE
F.A.I. PROJ. NO. I-HI-1118N6

SCALE: 1"=20' DATE: JUNE 15, 1974

SHEET No. 7 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-111816	1975	61	200



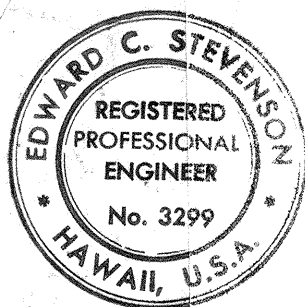
CCO.58	7-20-76	PROVIDED PEDESTRIAN PUSH BUTTON ON 4x4 WOOD POST
CCO.51	6-18-76	PROVIDED FOR U-TURN MOVEMENT
	6-3-76	Relocated (1) Wood Pole & (1) Std. Post.
	4-12-76	Relocated (2) Wood Poles, (1) Std. Post & (3) Pullboxes.
	3-1-75	Changed Controller to Full-Actuated. Added Loops, Cable, PPB & Conduit.
Date	Revision	

CABLE SCHEDULE		
LEGEND	CABLE	CONDUIT
1	2-19c #14	Overhead
2	1-2c #14	"
3	2-19c #14	Overhead
4	2-2c #14	"
5	1-19c #14	2"
	1-19c #14	2"
	2-2c #14	2"
	1-2c #14	2"
	1-19c #14	2"
	1-19c #14	2"

1-4 Phase Solid-State, Digital, Traffic-Actuated Controller
5-Loop Detector Amplifiers
20 Amps - Connected Load

Note: Secondary Aerial Cables to Controller Pole from Meter at Ohia St. by Contractor.

19c #14 Cable shall conform to Sect. 712.34 (B) (6)
2c #14 Cable as Recommended by the Manufacturer of Loop Detector



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Edward C. Stevenson
Signature

SIGNAL INDICATIONS				
1 8 9	2 3 4	11	20 12 21	16 17 18
10 13 14	5 6 7		Programed Visibility Signal	19
15				

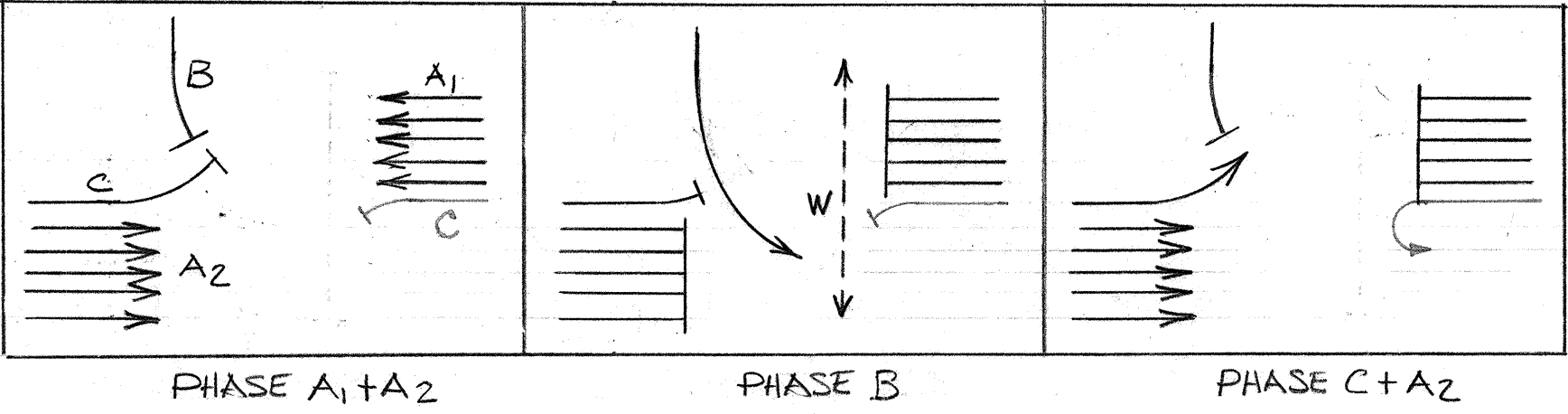
CCO.51

SIGNAL	PHASES					
	A1	A2	B	C	A1+A2	C+A2
1, 2, 3, 4	G/↑	R	R	R	G/↑	R
5, 6, 7	R	↑	R	R	↑	↑
8, 9, 10, 11	R	R	G/←	R	R	R
12, 13, 14, 15, 20, 21	R	R	R	G/←	R	G/←
16, 17, 18, 19	DW	DW	W/FDW	DW	DW	DW

CCO.51

CCO.51

SIGNAL PHASES



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

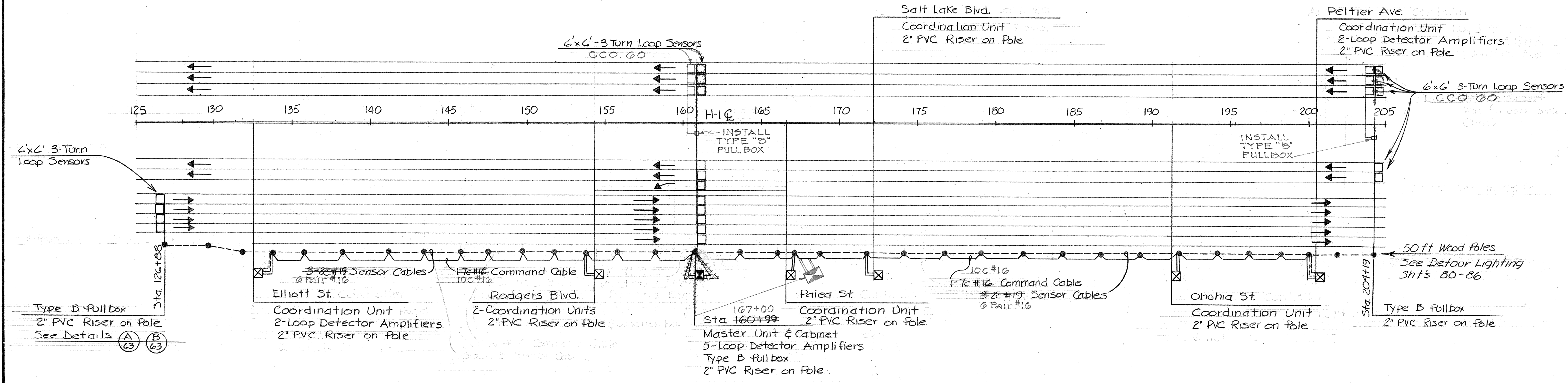
DETOUR TRAFFIC SIGNALS
CONSTRUCTION PHASE V
PELTIER AVENUE

AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-H-111816

SCALE: 1"=20' DATE: JUNE 15, 1974
SHEET No. 8 OF 10 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IHI-1(118)16	1975	62	209



LOCATION PLAN
No Scale

GENERAL NOTES

1. Command and Sensor Cables shall be tied together and supported by spiral wrap to appropriate messenger cable.
2. Telephone type pole line hardware shall be used to fasten cable to wood poles.
3. Cable Specifications, Loop Sensor grounding, Junction Boxes and all incidental materials shall be as recommended by Master Controller Manufacturer.
4. See Sheet No 63 for details.

LEGEND

- 50 ft. Wood Poles Placed in Detour Lighting Portion of Contract

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
NO.	

3-1-75	Added Sheet
Date	Revision

EDWARD C. STEVENSON
REGISTERED PROFESSIONAL ENGINEER
No. 3299
HAWAII, U.S.A.

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Edward C. Stevenson
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

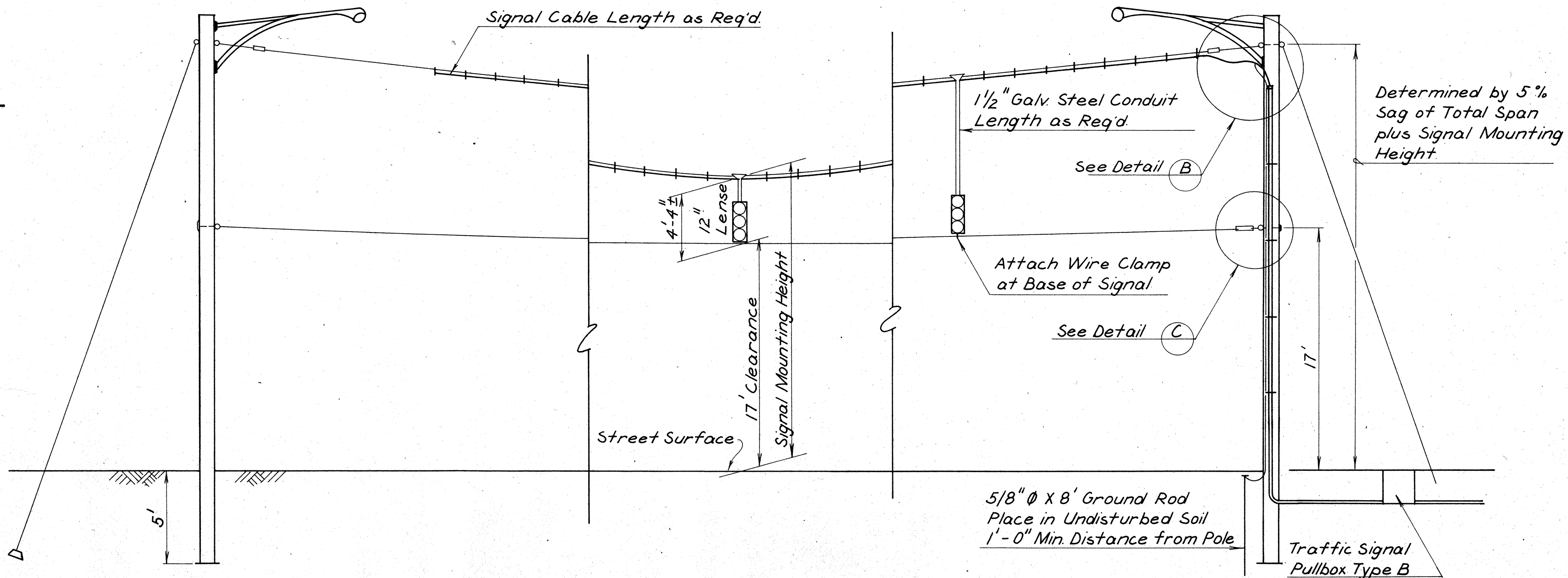
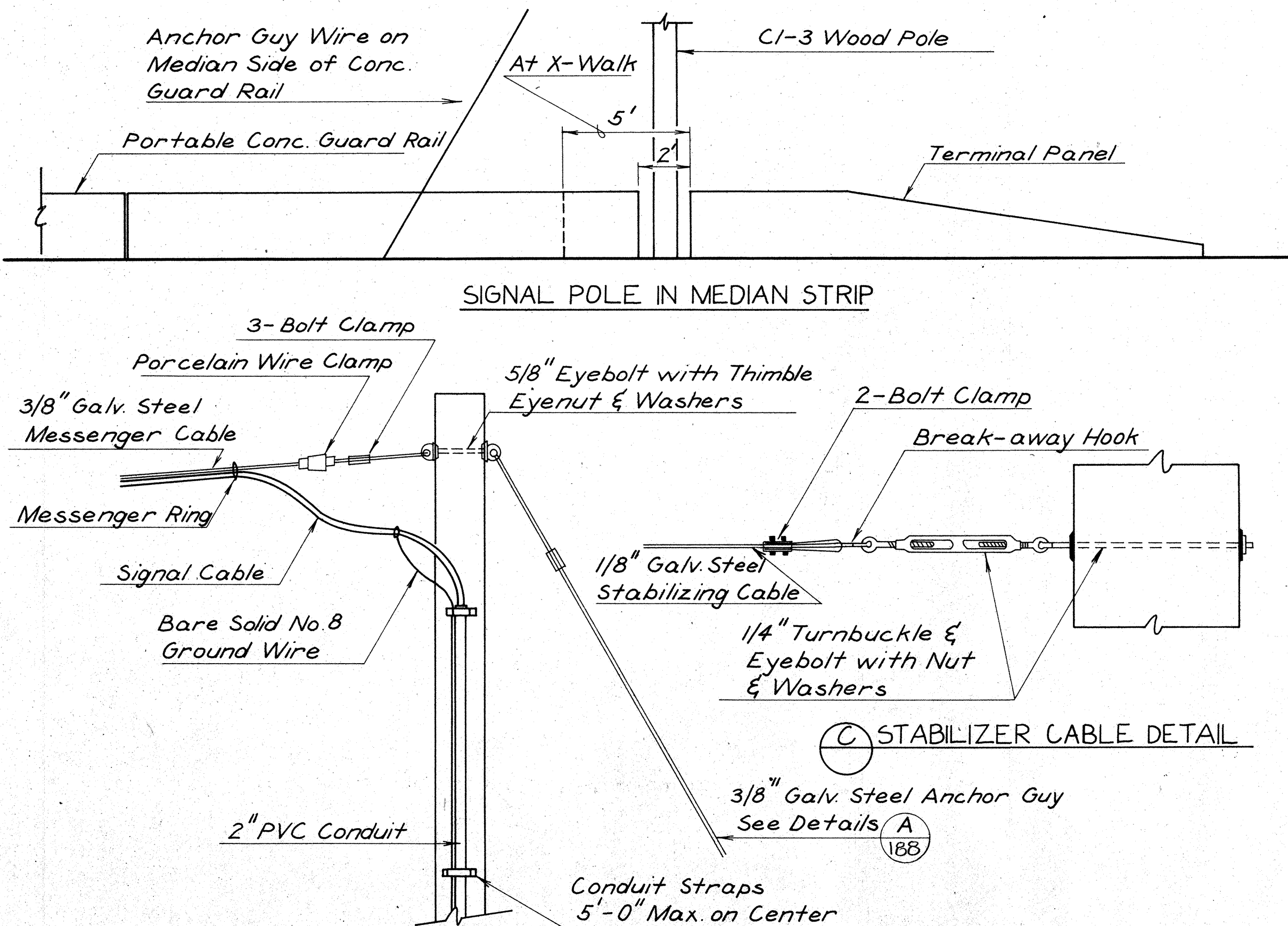
DETOUR TRAFFIC SIGNALS
MASTER INTERCONNECT SYSTEM
PHASE V

AIRPORT INTERCHANGE
F.A.I. PROJ. NO I-HI-1(118)16

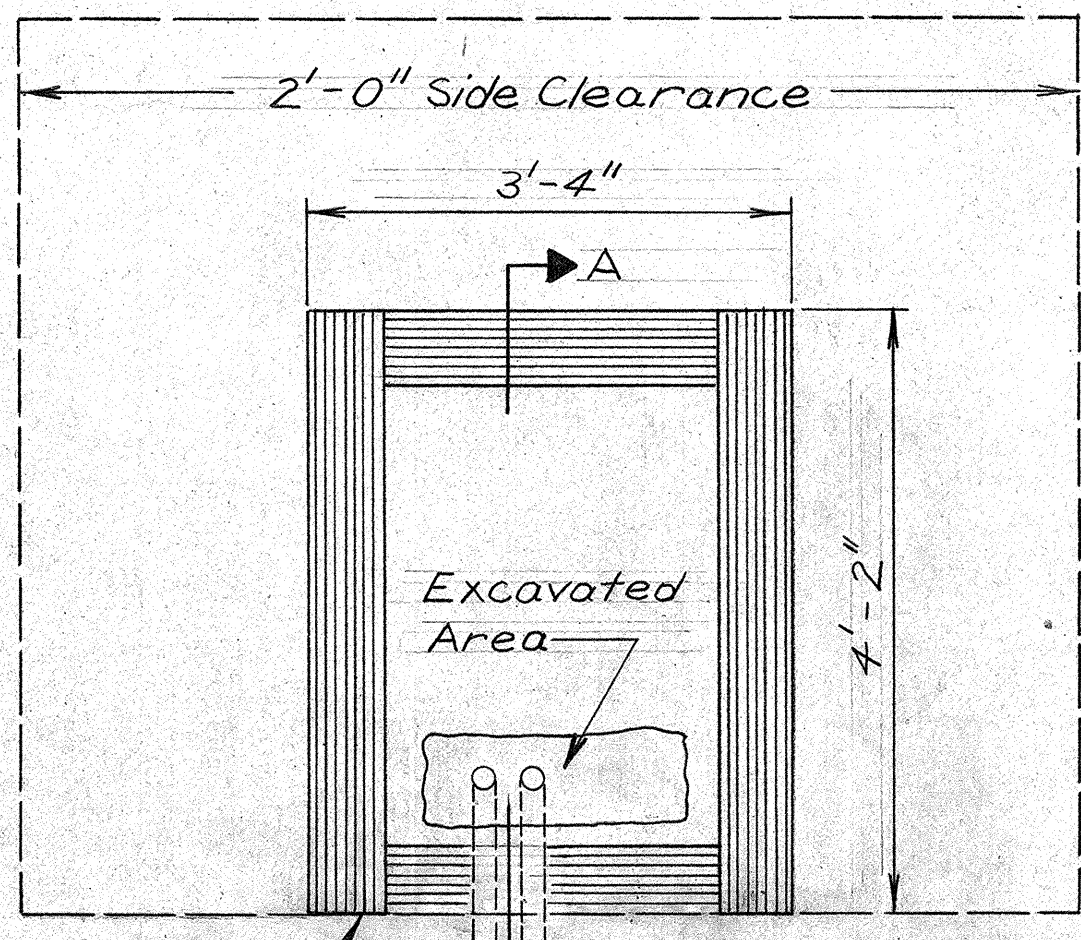
SCALE: AS SHOWN DATE: JUNE 15, 1974

SHEET No. 9 OF 10 SHEETS

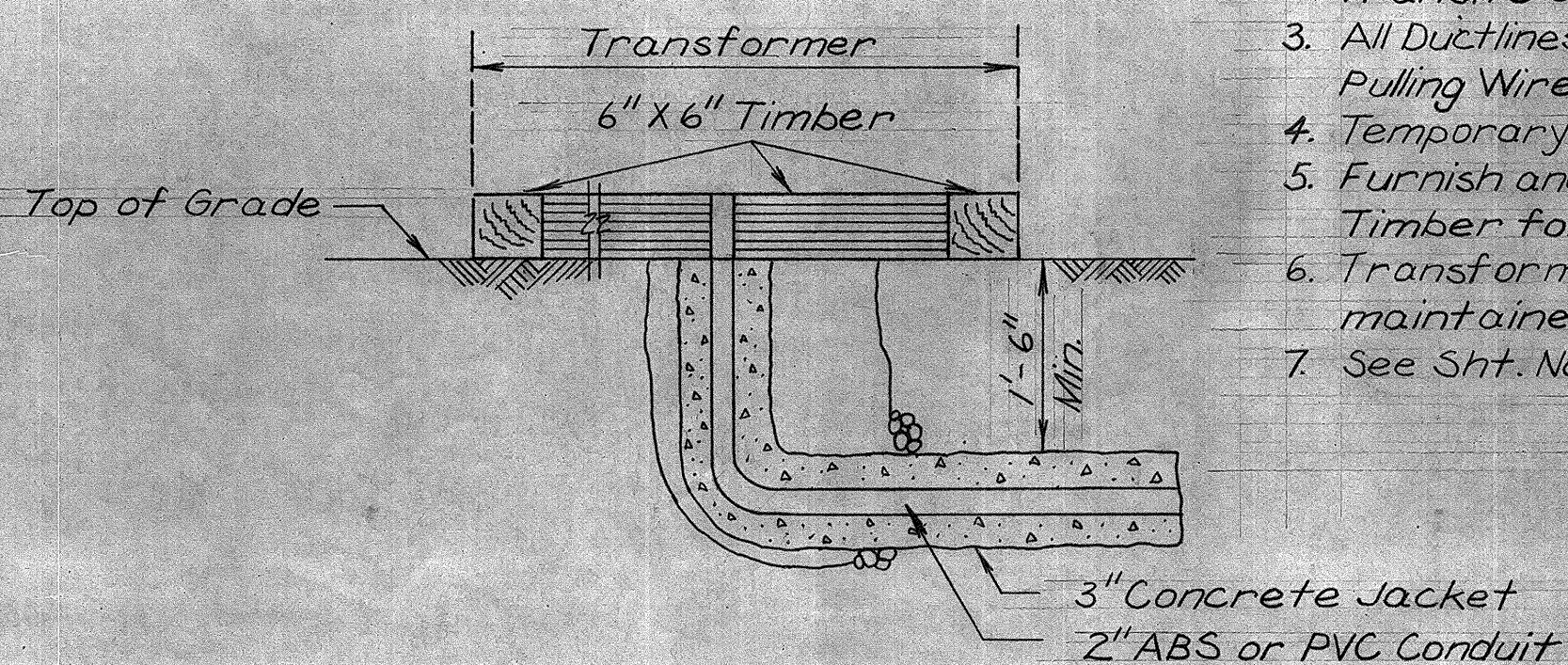
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	EH-1(118)16	1975	63	209



(B) TRAFFIC SIGNAL POLE DETAIL

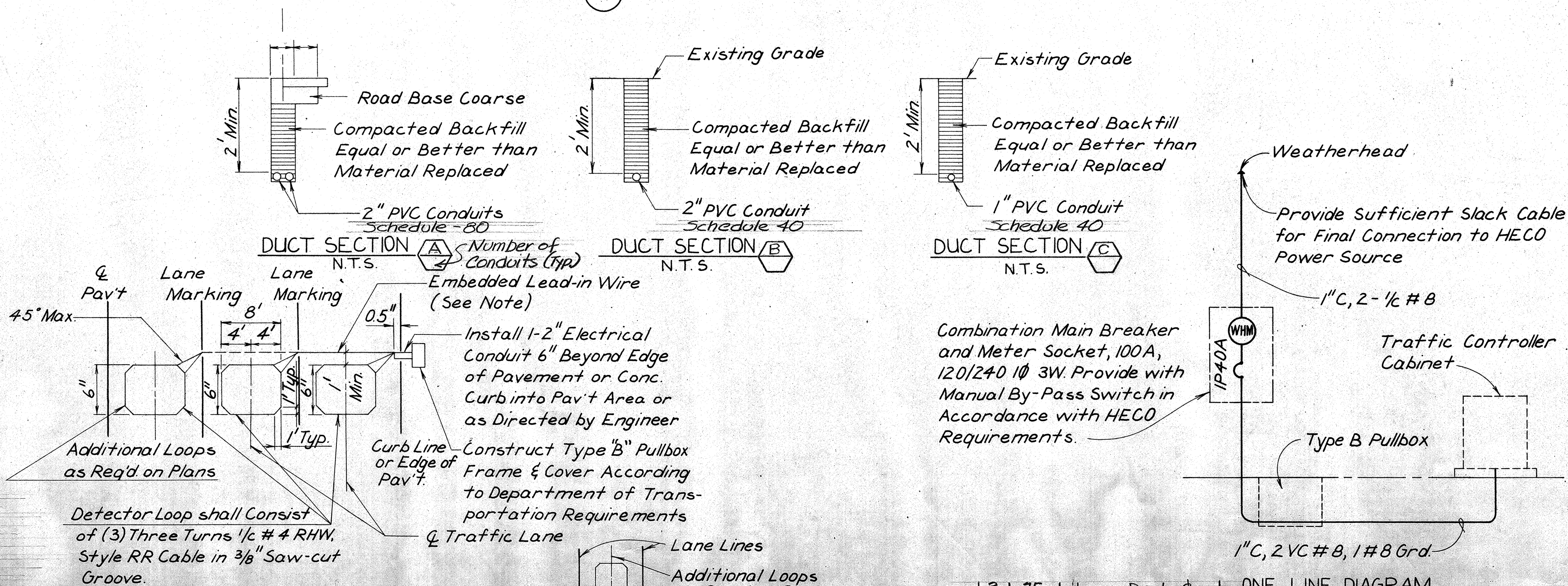


* 1 Ø PADMOUNT INSTALLATION AT ELLIOTT ST.

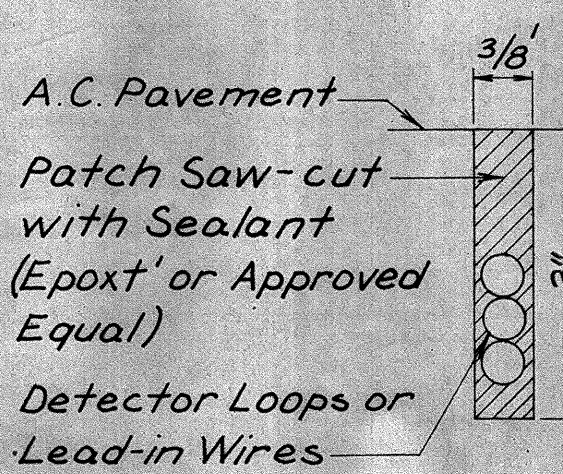


* NOTES

1. Do all necessary Excavation and Backfilling of trenches as per the Hawaiian Electric Co. Inc. specifications.
2. Furnish and install ABS or PVC Conduits, Transite or Fiber Ducts per detail.
3. All Ductlines shall contain a #12 AWG Steel Pulling Wire or a Polyolefin Pull Line
4. Temporary Pole complete with Meter Loop.
5. Furnish and install the necessary 6" X 6" Timber for Transformer support.
6. Transformer to be furnished, installed & maintained by Hawaiian Electric Co. Inc.
7. See Sht. No. 55 for location.



TYPICAL LAYOUT PLAN-THRU LANES

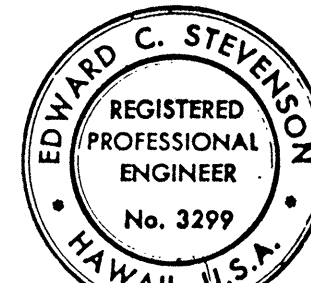
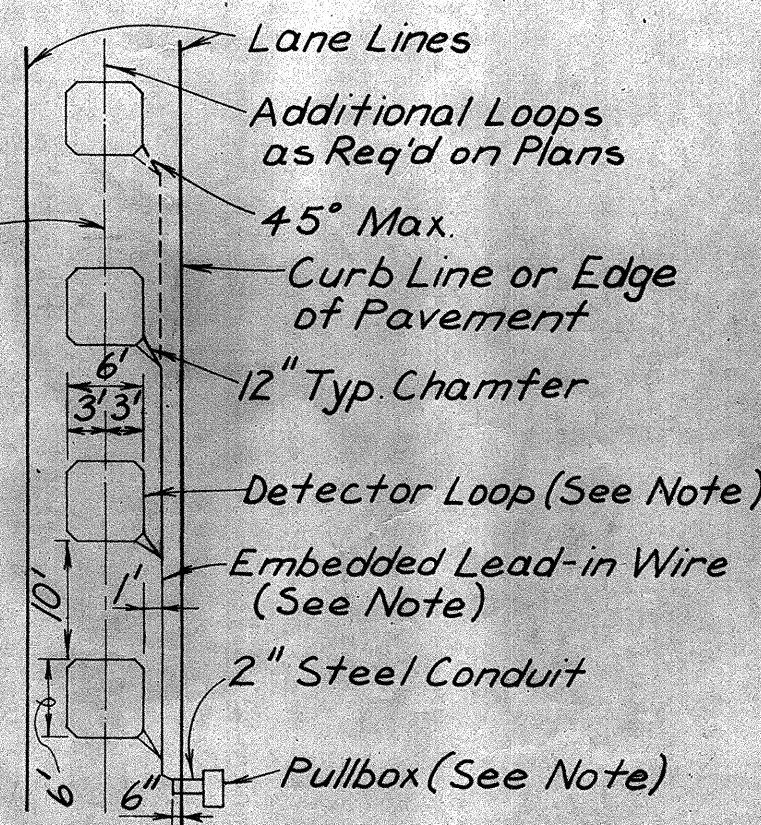


DETECTOR LOOP DETAILS N.T.S.

NOTES:

1. Install Detector Loop 3 Turns of 1-1/2" # 4 RHW Style RR Cable in Saw-Cut
2. Embedded Lead-in Wire shall be Turned 2 Turns per Ft.
3. Wiring in Pullbox shall be as Recommended by the Loop Detector Manufacturer
4. Exact Location of Detector Loops shall be Directed by Engineer

TYPICAL LAYOUT PLAN- TURN LANES & CROSS STREET



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Signature