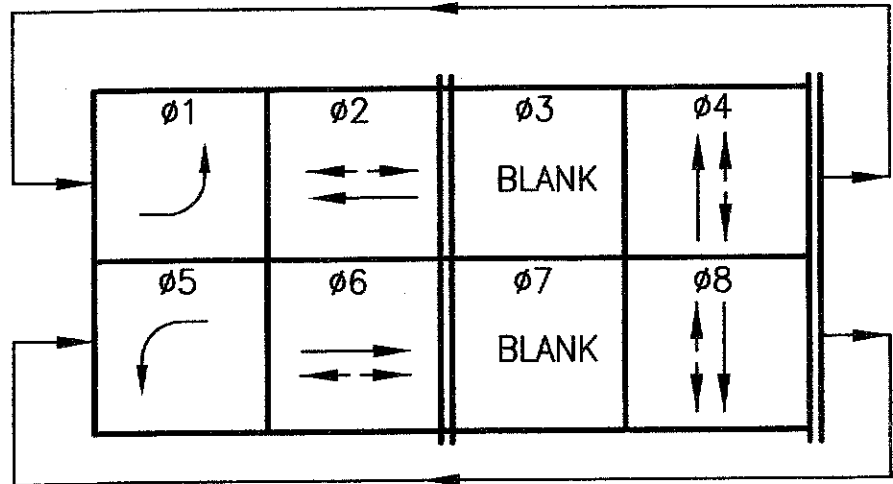
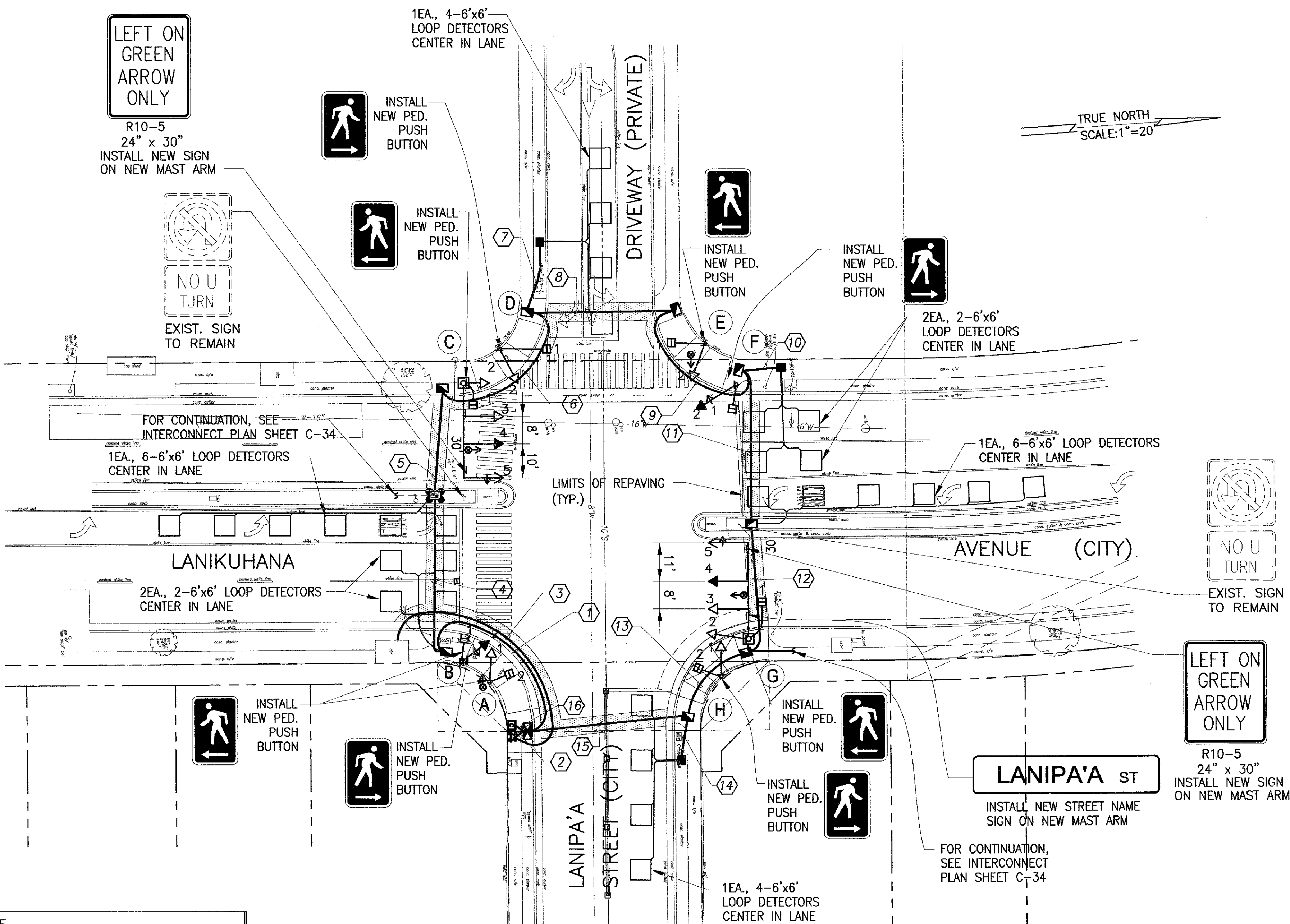


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001(36)	2008	28	42

SIGNAL INDICATIONS

* INDICATES PROGRAMMABLE VISIBILITY HEAD.



PHASE DIAGRAM

NEW MODEL 170 CONTROLLER
NEW MODEL 332 CABINET

NOTES:

- REFER TO TRENCH DETAILS ON SHEET C-18.
- IN ORDER TO ADDRESS THE POSSIBILITY THAT HISTORIC SITES MAY BE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL RETAIN AN ARCHAEOLOGICAL MONITOR FROM THE SHPD APPROVED LIST, WHO SHALL BE PRESENT DURING ALL GROUND-DISTURBING ACTIVITIES AT THIS INTERSECTION. SEE SPECIFICATIONS, SECTION 212 AND ARCHAEOLOGICAL MONITORING PLAN FOR DETAILS.

TRAFFIC SIGNAL PLAN

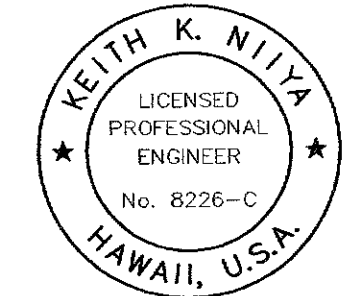
SCALE: 1"=20'

CONDUIT AND CABLE SCHEDULE					
SYMBOL	COND.	DESCRIPTION	SYMBOL	COND.	DESCRIPTION
①	2" CONC.	1-26C#14	⑥	2" CONC.	1-26C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	6-2C#14		2" CONC.	2-2C#14
	2" CONC.	2-EVP		2" CONC.	1-EVP
	2" CONC.	1-3C#4		2" CONC.	SPARE
②	2" CONC.	1-24C#19	⑦	2" CONC.	1-2C#14
	2" CONC.	SPARE		2" CONC.	1-26C#14
				2" CONC.	1-26C#14
				2" CONC.	1-2C#14
				2" CONC.	1-EVP
③	2" CONC.	1-3C#4	⑧	2" CONC.	1-26C#14
				2" CONC.	1-26C#14
				2" CONC.	1-2C#14
				2" CONC.	1-EVP
				2" CONC.	SPARE
④	2" CONC.	1-3C#2	⑨	2" CONC.	1-26C#14
				2" CONC.	1-26C#14
				2" CONC.	SPARE
				2" CONC.	SPARE
				2" CONC.	SPARE
⑤	2" CONC.	1-26C#14	⑩	2" CONC.	1-2C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	3-2C#14		2" CONC.	1-26C#14
	2" CONC.	2-EVP		2" CONC.	2-2C#14
	2" CONC.	SPARE		2" CONC.	SPARE
⑥	2" CONC.	1-26C#14	⑪	2" CONC.	1-26C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	3-2C#14		2" CONC.	2-2C#14
	2" CONC.	2-EVP		2" CONC.	SPARE
	2" CONC.	SPARE		2" CONC.	SPARE
⑦	2" CONC.	1-26C#14	⑫	2" CONC.	1-26C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	6-2C#14		2" CONC.	4-2C#14
	2" CONC.	2-EVP		2" CONC.	1-24C#19
	2" CONC.	SPARE		2" CONC.	SPARE
⑧	2" CONC.	1-26C#14	⑬	2" CONC.	1-26C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	4-2C#14		2" CONC.	4-2C#14
	2" CONC.	1-24C#19		2" CONC.	1-EVP
	2" CONC.	SPARE		2" CONC.	SPARE
⑨	2" CONC.	1-26C#14	⑭	2" CONC.	1-2C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	4-2C#14		2" CONC.	1-26C#14
	2" CONC.	1-24C#19		2" CONC.	6-2C#14
	2" CONC.	SPARE		2" CONC.	1-24C#19
⑩	2" CONC.	1-26C#14	⑮	2" CONC.	1-26C#14
	2" CONC.	1-26C#14		2" CONC.	1-26C#14
	2" CONC.	6-2C#14		2" CONC.	6-2C#14
	2" CONC.	1-24C#19		2" CONC.	1-EVP
	2" CONC.	SPARE		2" CONC.	SPARE
⑪	2" CONC.	1-26C#14	⑯	3" CONC.	2-26C#14
	2" CONC.	1-26C#14		3" CONC.	2-26C#14
	2" CONC.	12-2C#14		3" CONC.	12-2C#14
	2" CONC.	4-EVP		2" CONC.	1-3C#4
	2" CONC.	1-24C#19		2" CONC.	1-24C#19
⑫	2" CONC.	SPARE	⑰	2" CONC.	SPARE

APPROVED

CHIEF, TRAFFIC SIGNALS AND TECHNOLOGY DIVISION,
DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

4/30/10
signature

ATA AUSTIN, TSUTSUMI & ASSOCIATES, INC.

DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

TRAFFIC CONTROL SIGNALIZATION
AT VARIOUS LOCATIONS ON OAHU, PHASE X
FEDERAL-AID NO. STP-0001(36)

TRAFFIC SIGNAL PLAN
LANIKUHANA AVENUE/LANIPA'A STREET

DESIGN LHY
DRAWN LHY
CHECKED KKN
DATE 08/04/08

C-28

SHEET 28

OF 42 SHEETS

PROJECT NO. FILE DRAW FOLDER

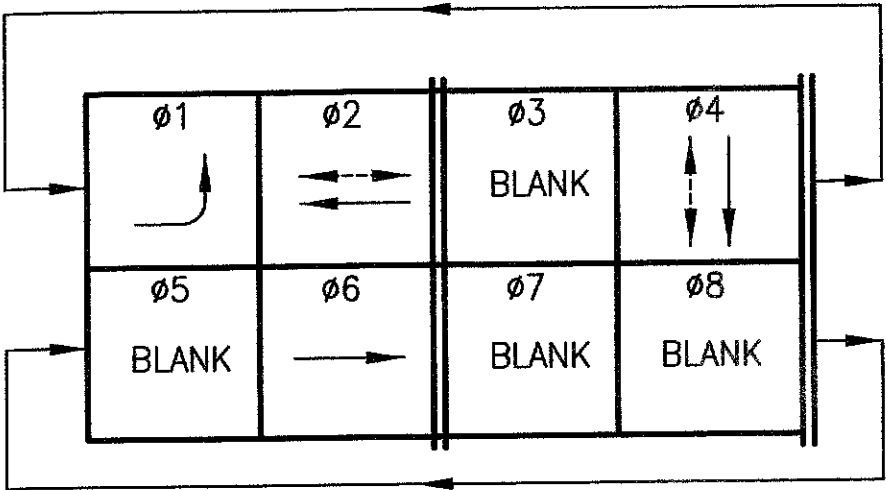
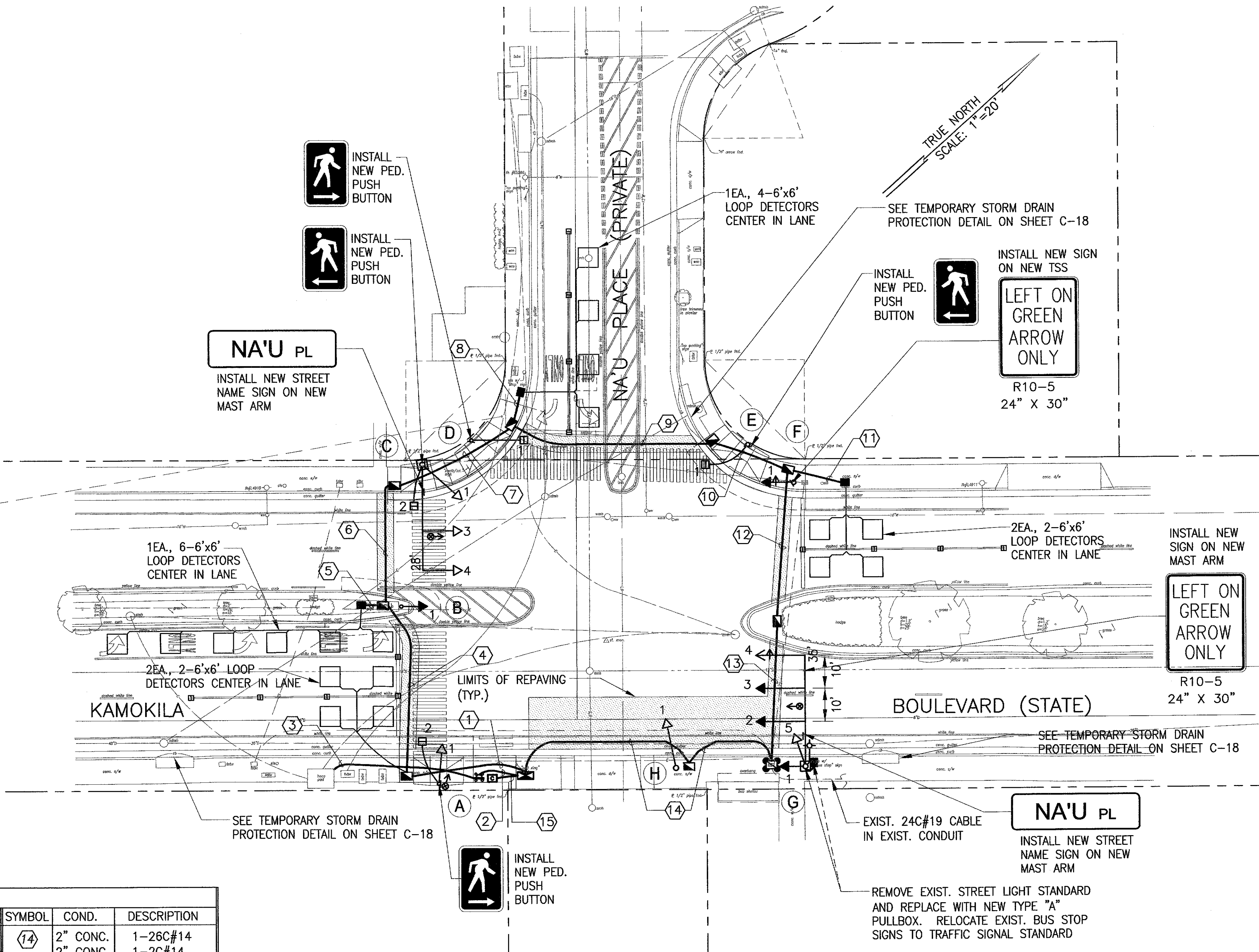
FILE POCKET FOLDER NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001(36)	2008	29	42

R Y G	← ← ←	R ↑ ↑	⬆ ⬆ ⬆
A-1 C-1 C-3	G-4* F-1 G-5	B-1 C-2 C-3 C-1	A-2 C-2 D-1 E-1

SIGNAL INDICATIONS

* INDICATES PROGRAMMABLE VISIBILITY HEAD.



PHASE DIAGRAM

NEW MODEL 170 CONTROLLER
NEW MODEL 332 CABINET

NOTES:

- REFER TO TRENCH DETAILS ON SHEET C-18.
- IN ORDER TO ADDRESS THE POSSIBILITY THAT HISTORIC SITES MAY BE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL RETAIN AN ARCHAEOLOGICAL MONITOR FROM THE SHPD APPROVED LIST, WHO SHALL BE PRESENT DURING ALL GROUND-DISTURBING ACTIVITIES AT THIS INTERSECTION. SEE SPECIFICATIONS, SECTION 212 AND ARCHAEOLOGICAL MONITORING PLAN FOR DETAILS.

CONDUIT AND CABLE SCHEDULE							
SYMBOL	COND.	DESCRIPTION	SYMBOL	COND.	DESCRIPTION	SYMBOL	COND.
①	2" CONC.	1-26C#14	⑧	2" CONC.	1-2C#14	⑭	2" CONC.
	2" CONC.	6-2C#14		2" CONC.	1-26C#14		2" CONC.
	2" CONC.	2-EVP		2" CONC.	1-2C#14		2" CONC.
	2" CONC.	SPARE		2" CONC.	SPARE		2" CONC.
②	2" CONC.	1-3C#4	⑩	2" CONC.	1-26C#14	⑮	3" CONC.
③	2" CONC.	1-3C#2		2" CONC.	SPARE		3" CONC.
④	2" CONC.	1-26C#14		2" CONC.	SPARE		2" CONC.
	2" CONC.	5-2C#14		2" CONC.	SPARE		2" CONC.
	2" CONC.	1-EVP	⑪	2" CONC.	1-2C#14		2" CONC.
	2" CONC.	SPARE		2" CONC.	1-26C#14	⑫	2" CONC.
⑤	2" CONC.	2-2C#14		2" CONC.	1-2C#14		2" CONC.
	2" CONC.	1-26C#14		2" CONC.	SPARE		2" CONC.
	2" CONC.	3-2C#14		2" CONC.	SPARE	⑬	2" CONC.
	2" CONC.	1-EVP		2" CONC.	SPARE		2" CONC.
⑥	2" CONC.	SPARE		2" CONC.	1-26C#14		2" CONC.
	2" CONC.	1-26C#14		2" CONC.	1-2C#14		2" CONC.
	2" CONC.	2-2C#14		2" CONC.	SPARE		2" CONC.
	2" CONC.	SPARE		2" CONC.	SPARE		2" CONC.
⑦	2" CONC.	1-26C#14		2" CONC.	1-26C#14		2" CONC.
	2" CONC.	2-2C#14		2" CONC.	1-2C#14		2" CONC.
	2" CONC.	SPARE		2" CONC.	SPARE		2" CONC.
	2" CONC.	SPARE		2" CONC.	SPARE		2" CONC.

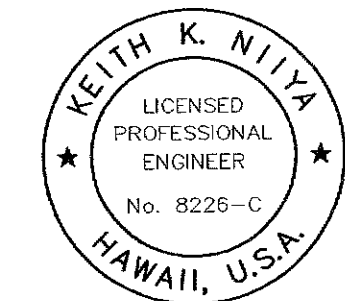
TRAFFIC SIGNAL PLAN

SCALE: 1"=20'

APPROVED

CHIEF, TRAFFIC SIGNALS AND TECHNOLOGY DIVISION,
DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Signature: *Keith K. Niya* 4/30/10
Date of the license: 4/30/10

ATA, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, ARCHITECTS, PLANNERS
HONOLULU, HAWAII

REVISION	DATE	DESCRIPTION	ENGINEER	APPROVED

DEPARTMENT OF TRANSPORTATION SERVICES CITY & COUNTY OF HONOLULU

TRAFFIC CONTROL SIGNALIZATION
AT VARIOUS LOCATIONS ON OAHU, PHASE X
FEDERAL-AID NO. STP-0001(36)

TRAFFIC SIGNAL PLAN KAMOKILA BOULEVARD/NA'U PLACE

DESIGN	LHY
DRAWN	LHY
CHECKED	KKN
DATE	08/04/08

C-29

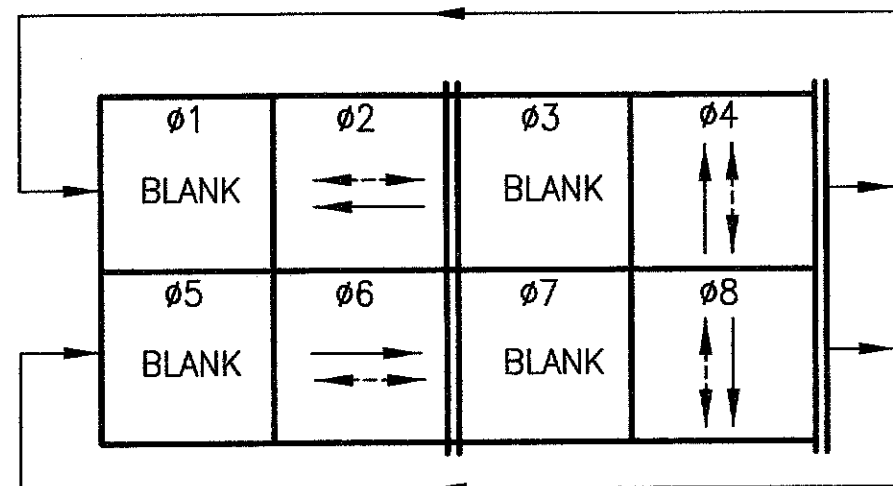
SHEET 29

OF 42 SHEETS

PROJECT NO.	FILE	DRAW	FOLDER

FILE	POCKET	FOLDER	NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001(36)	2008	30	42



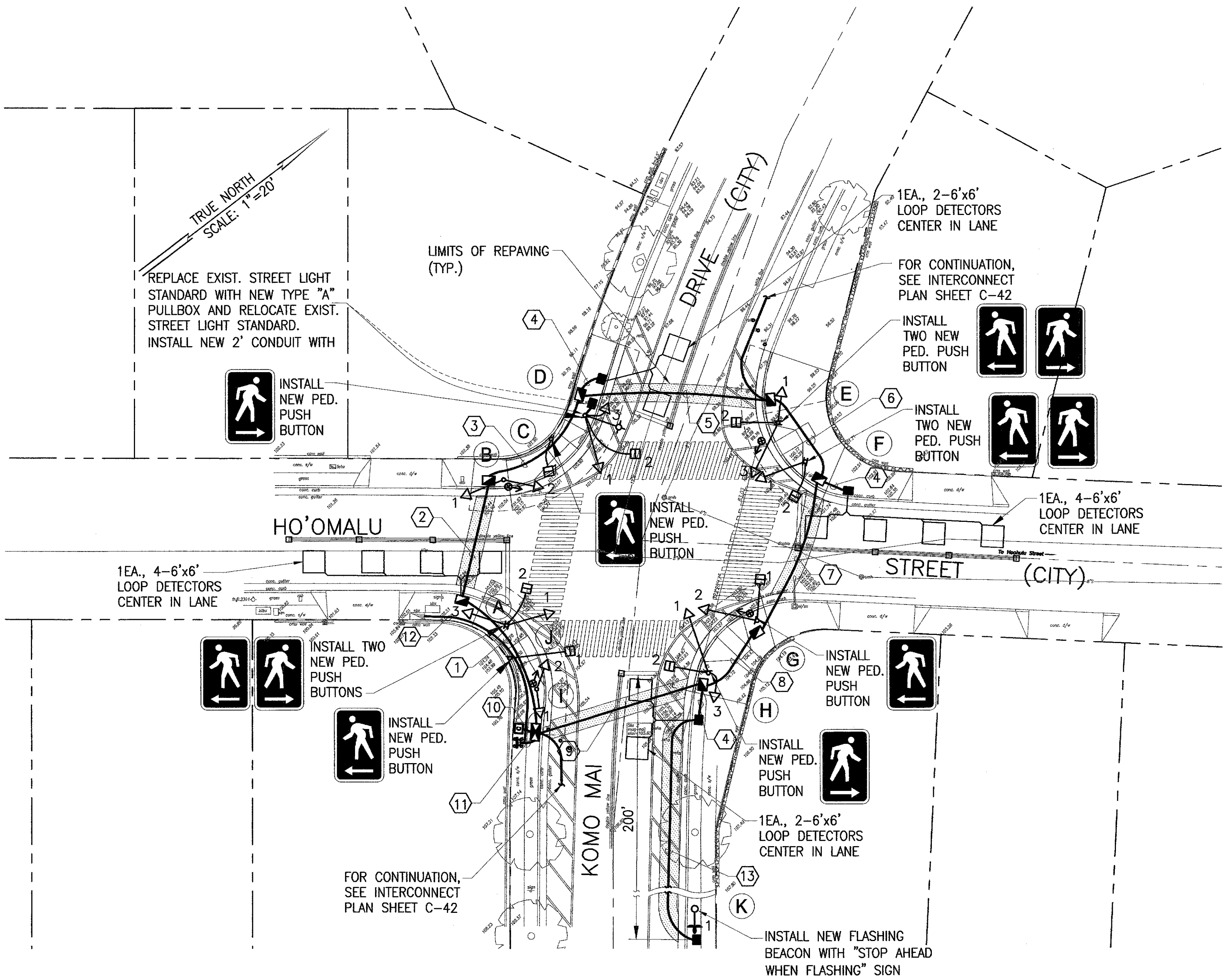
PHASE DIAGRAM
NEW MODEL 170 CONTROLLER
NEW MODEL 332 CABINET

NOTES:

1. REFER TO TRENCH DETAILS ON SHEET C-18.
2. IN ORDER TO ADDRESS THE POSSIBILITY THAT HISTORIC SITES MAY BE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL RETAIN AN ARCHAEOLOGICAL MONITOR FROM THE SHPD APPROVED LIST, WHO SHALL BE PRESENT DURING ALL GROUND-DISTURBING ACTIVITIES AT THIS INTERSECTION. SEE SPECIFICATIONS, SECTION 212 AND ARCHAEOLOGICAL MONITORING PLAN FOR DETAILS.

(R)	A-1	E-3	(Y)	K-1	(A)	A-2	F-2
(Y)	A-3	F-1			(G)	C-1	G-1
(G)	B-1	G-2				D-2	H-2
	B-2	H-1				E-2	J-1
	D-1	H-3					
	D-3	I-1					
	E-1	I-2					

SIGNAL INDICATIONS



TRAFFIC SIGNAL PLAN

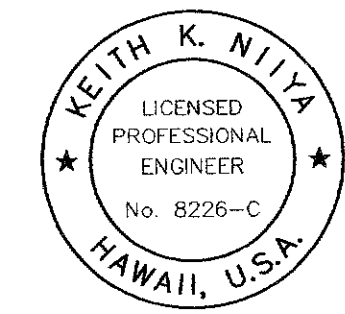
SCALE: 1"=20'

CONDUIT AND CABLE SCHEDULE					
SYMBOL	COND.	DESCRIPTION	SYMBOL	COND.	DESCRIPTION
(1)	2" CONC.	1-26C#14	(7)	2" CONC.	1-26C#14
	2" CONC.	4-2C#14		2" CONC.	2-2C#14
	2" CONC.	1-24C#19		2" CONC.	SPARE
	2" CONC.	2-EVP		2" CONC.	SPARE
	2" CONC.	SPARE			
(2)	2" CONC.	1-26C#14	(8)	2" CONC.	1-26C#14
	2" CONC.	3-2C#14		2" CONC.	2-2C#14
	2" CONC.	1-24C#19		2" CONC.	1-EVP
	2" CONC.	2-EVP		2" CONC.	SPARE
	2" CONC.	SPARE			
(3)	2" CONC.	1-26C#14	(9)	2" CONC.	1-26C#14
	2" CONC.	2-2C#14		2" CONC.	4-2C#14
	2" CONC.	1-24C#19		2" CONC.	1-EVP
	2" CONC.	1-EVP		2" CONC.	SPARE
	2" CONC.	SPARE			
(4)	2" CONC.	1-2C#14	(10)	3" CONC.	2-26C#14
				3" CONC.	8-2C#14
(5)	2" CONC.	1-26C#14		2" CONC.	2-24C#19
	2" CONC.	1-2C#14		2" CONC.	1-3C#4
	2" CONC.	1-24C#19		2" CONC.	4-EVP
	2" CONC.	1-EVP		2" CONC.	SPARE
	2" CONC.	SPARE	(11)	2" CONC.	1-3C#4
			(12)	2" CONC.	1-3C#2
(6)	2" CONC.	1-26C#14	(13)	2" CONC.	1-4C#14
	2" CONC.	SPARE			
	2" CONC.	SPARE			
	2" CONC.	SPARE			

APPROVED

CHIEF, TRAFFIC SIGNALS AND TECHNOLOGY DIVISION,
DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

signature
ATA AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, ARCHITECTS

DEPARTMENT OF TRANSPORTATION SERVICES CITY & COUNTY OF HONOLULU

TRAFFIC CONTROL SIGNALIZATION
AT VARIOUS LOCATIONS ON OAHU, PHASE X
FEDERAL-AID NO. STP-0001(36)

TRAFFIC SIGNAL PLAN KOMO MAI DRIVE/HO'OMALU STREET

DESIGN LHY
DRAWN LHY
CHECKED KKN
DATE 08/04/08

C-30

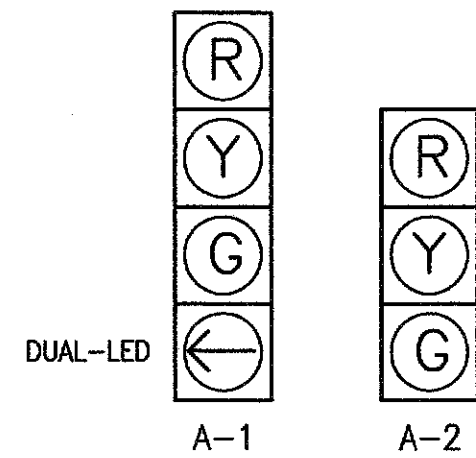
SHEET 30

OF 42 SHEETS

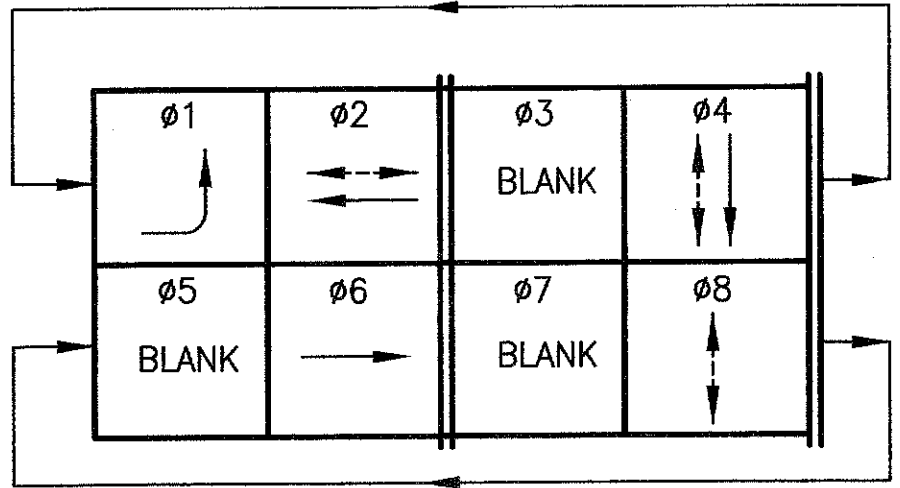
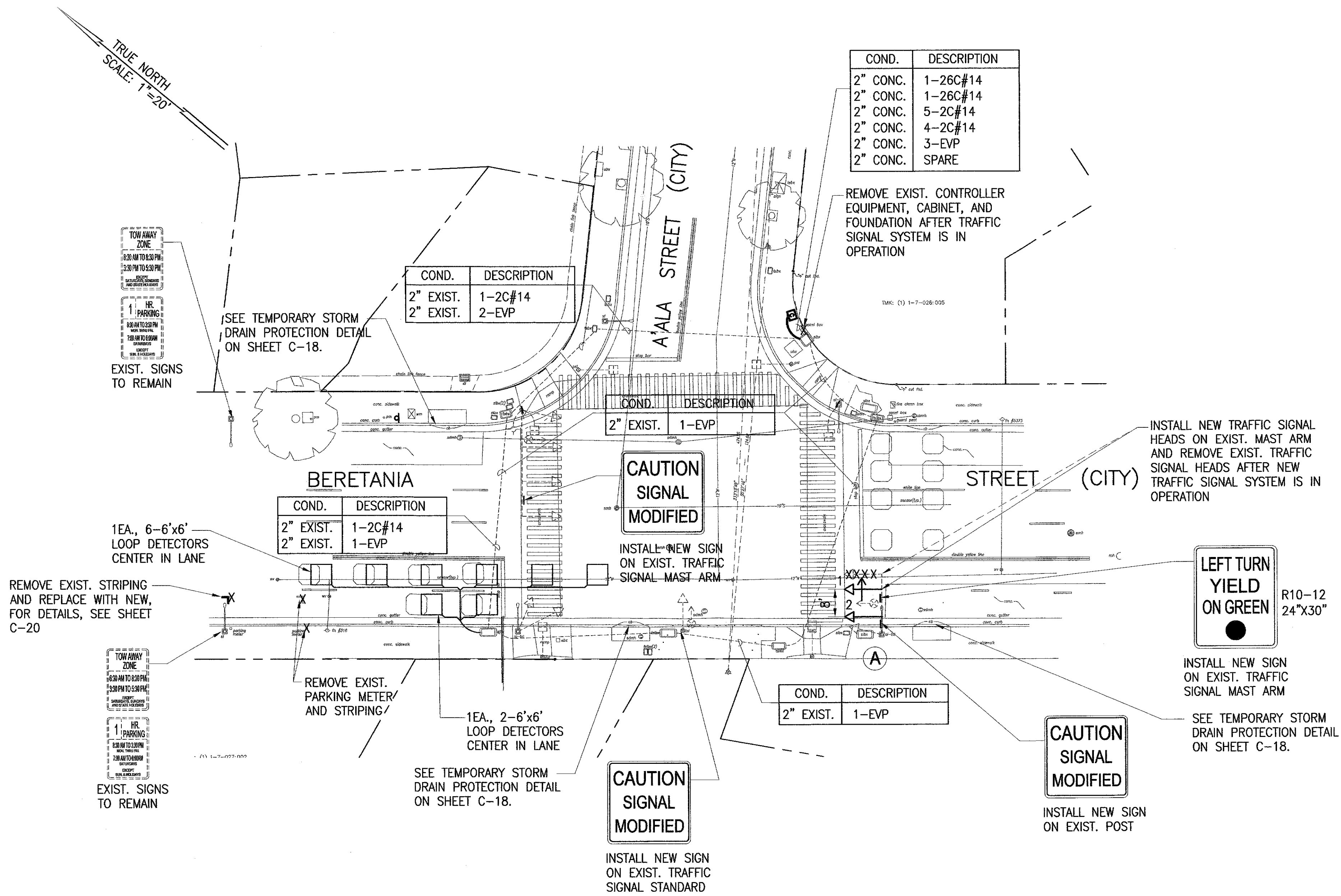
PROJECT NO. FILE DRAW FOLDER

FILE POCKET FOLDER NO.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001(36)	2008	32	42



SIGNAL INDICATIONS



NOTES:

- REFER TO TRENCH DETAILS ON SHEET C-18.
- IN ORDER TO ADDRESS THE POSSIBILITY THAT HISTORIC SITES MAY BE ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL RETAIN AN ARCHAEOLOGICAL MONITOR FROM THE SHPD APPROVED LIST, WHO SHALL BE PRESENT DURING ALL GROUND-DISTURBING ACTIVITIES AT THIS INTERSECTION. SEE SPECIFICATIONS, SECTION 212 AND ARCHAEOLOGICAL MONITORING PLAN FOR DETAILS.

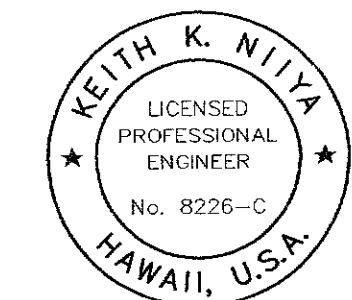
TRAFFIC SIGNAL PLAN

SCALE: 1"=20'

APPROVED

CHIEF, TRAFFIC SIGNALS AND TECHNOLOGY DIVISION,
DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

Signature: [Signature] 8/30/10
Date of License: 8/30/10

ATA, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, ARCHITECTS, PLANNERS

DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

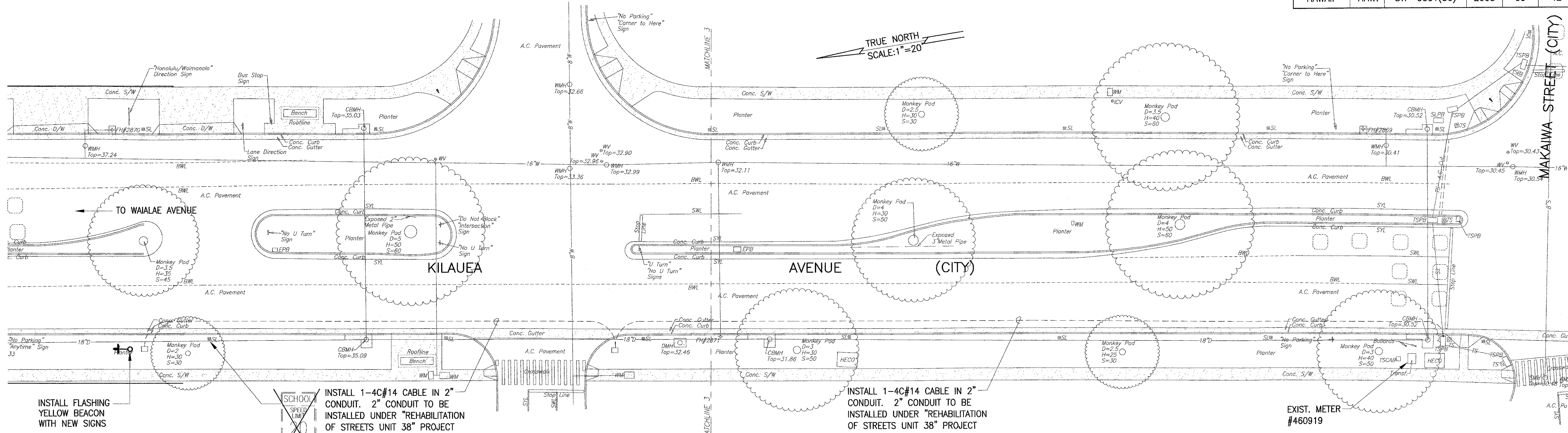
TRAFFIC CONTROL SIGNALIZATION
AT VARIOUS LOCATIONS ON OAHU, PHASE X
FEDERAL-AID NO. STP-0001(36)

TRAFFIC SIGNAL PLAN
BERETANIA STREET/A'ALA STREET

DESIGN	LHY	C-32	
DRAWN	LHY		
CHECKED	KKN		
DATE	08/04/08		
PROJECT NO.	FILE	DRAW	FOLDER

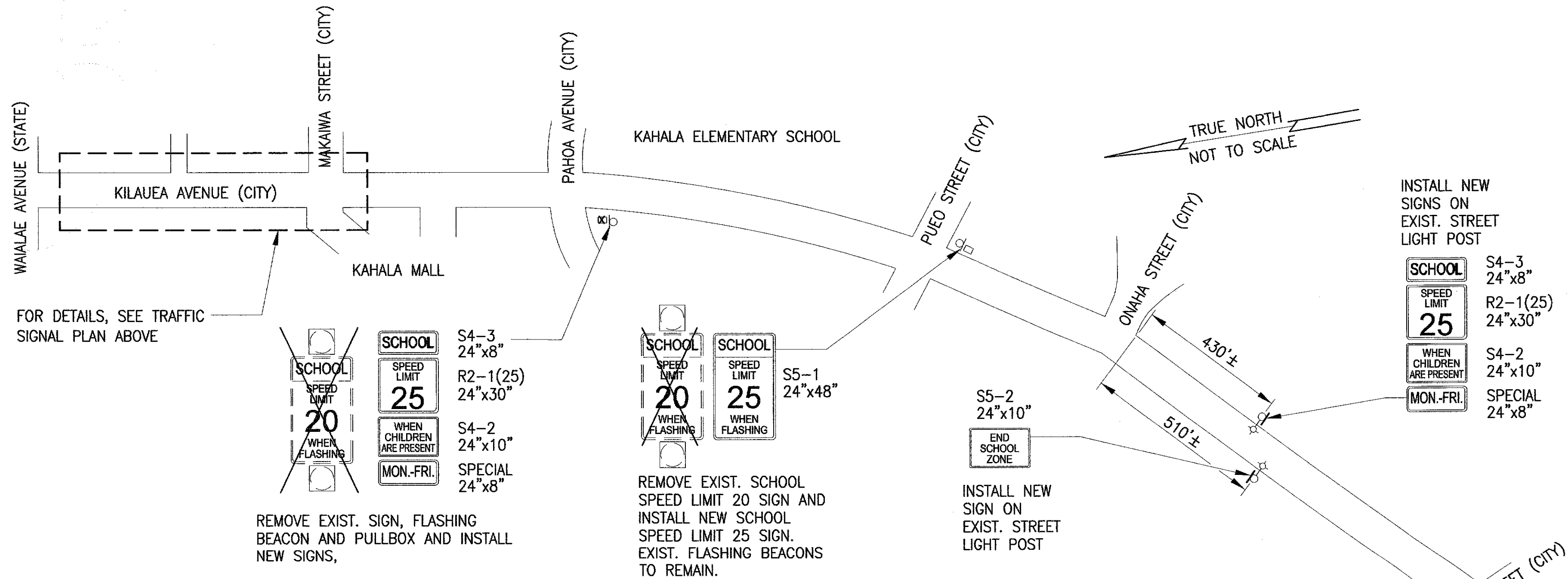
SHEET 32
OF 42 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001(36)	2008	33	42



TRAFFIC SIGNAL PLAN

SCALE: 1"=20'



SIGNING PLAN

NOT TO SCALE

APPROVED

CHIEF, TRAFFIC SIGNALS AND TECHNOLOGY DIVISION,
DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

DATE

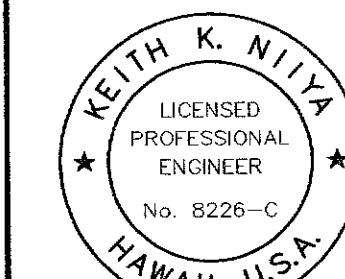
REVISION	DATE	DESCRIPTION	ENGINEER	APPROVED

DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

TRAFFIC CONTROL SIGNALIZATION
AT VARIOUS LOCATIONS ON OAHU, PHASE X
FEDERAL-AID NO. STP-0001(36)

TRAFFIC SIGNAL AND SIGNING PLAN
KILAUEA AVENUE SCHOOL FLASHER

DESIGN	LHY	C-33	
DRAWN	LHY		
CHECKED	KKN		
DATE	08/04/08		
PROJECT NO.	FILE	DRAW	FOLDER
	FILE	POCKET	FOLDER
			NO.



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
signature
DATE 8/30/10
ATA TSUTSUMI & ASSOCIATES, INC.
HONOLULU, HAWAII