LEGEND:				
——е—	Existing Electrical Line	° SDMH	Adjusted Storm Drain MH Frame/Cover	
———E———	New Electrical Line	∞ bfp	Existing Water Backflow Preventer	
°jp	Existing Joint Pole	— s —12 —	- Existing Sewer Line	
° pp	Existing Power Pole	— S — 12 —	- New 12" Sewer Line	
°emh	Existing Electric Manhole	°smh	Existing Sewer Manhole	
EMH	Adjusted Elec. MH Frame/Cover			
•EMH	New Electric Manhole	SMH	Adjusted Sewer MH Frame/Cover	
<i>†</i>	Existing Telephone Line	•SMH	New Sewer Manhole	
——————————————————————————————————————	New Telephone Line	— g — 6 —	g	
4p	Existing Telephone Pole	G 6 °g∨	- New 6" Gas Line Existing Gas Valve Box	
9tmh	Existing Telephone Manhole	GV		
4pb	Existing Telephone Pullbox	•GV	Adjusted Gas Valve Box	
T MH	Adjusted Tele. MH Frame/Cover		New Gas Valve Box	
•⊤MH	New Telephone Manhole	°gmh	Existing Gas Manhole	
SC	Existing Signal Corps Line	*GMH	Adjusted Gas MH Frame/Cover	
SC	New Signal Corps Line	*GMH	New Gas Manhole	
		o _{mon.}	Existing Monument	
	New TV Cable	MON.	Adjusted Monument	
		MON.	New Monument	
—— W——12 ——		— d —24 —	Existing 24" Drain Line	
	New 12" Water Line	<u> 24" RCP</u>	New 24" RCP Drain Line	
%mh	Existing Water Manhole	°sdmh	Existing Storm Drain Manhole	
W MH	Adjusted Water MH Frame/Cover	° SDMH		
W MH	New Water Manhole	•SDMH	New Storm Drain Manhole	
°av	Existing Water Air Valve	⊟gdI	Existing Grated Drop Inlet	
AV	Adjusted Water Air Valve	<u>cb</u>	Existing Catch Basin	
*AV	New Water Air Valve	þ	Existing Traffic Sign With 1 Post	
WV	Existing Water Valve Box	þ	New Traffic Sign With 1 Post	
W V	Adjusted Water Valve Box	β	Existing Traffic Sign With 2 Posts	
W V	New Water Valve Box	 	New Traffic Sign With 2 Posts	
\Box_{WM}	Existing Water Meter	B	Existing Traffic Sign With 3 Posts	
\bowtie_{WM}	Adjusted Water Meter	B	New Traffic Sign With 3 Posts	
- WM	New Water Meter	*	Existing Highway Lighting Standard	
-6- _{fb}	Evicting Fire Hydront	Ţ	Entering ingitivaly Lighting Standard	

SURVEY PLOTTE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

-b-fh

 $+_{FH}$

Existing Fire Hydrant

New Fire Hydrant

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	ER-15(19)	2009	7	59

- '	
Max	Maximum
Min	Minimum
MPH	Miles Per Hour
No.	Number
N.T.S.	Not To Scale
O.C.	On Center
0/5	Offset
P.C.	Point Of Curvature
psi	Pounds Per Square Inch
P.C.C.	Point Of Compound Curve
<i>P.T.</i>	Point Of Tangency
PVC	Polyvinyl Chloride
Rein.	Reinforcement
<i>R.O.W</i>	Right Of Way
RPM	Raised Pavement Marker
Sht.	Sheet
Sim	Similar
Sta.	Station
T.M.K.	Tax Map Key
Tel	Telephone
\mathcal{T}	Thickness
TRV	Traverse
TW	Top Of Wall
Тур.	Typical
Vert.	Vertical
WM	Water Meter
WV	Water Valve

Linear Feet

Left

L†

LICENSED PROFESSIONAL ENGINEER
NO. 8681-C

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

LICENSED HIGH
PROFESSIONAL ENGINEER
NO. 8681-C

LEGEND \$

04/30/10

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EMERGENCY EARTHQUAKE ROCKFALL REPAIRS

Various Locations on Hawaii, Unit 1 Federal Aid Project No. ER-15(19)

Scale: AS NOTED Date: Dec. 18, 2009
SHEET No. 1 OF 1 SHEETS

SIGNATURE

Existing Double Metal Guardrail

New Double Metal Guardrail

Existing Traffic Signal Box

Existing Traffic Signal Pole

Existing Street Lamp Pullbox

Existing Fence

New Fence

ABBREVIATION LIST:

Abandoned

Asphalt Concrete

Approximately

And Materials

Baseline

Center Line

Bottom

Cleanout

Concrete

Diameter

Demolition

Downspout

Each Face

Electric

Elevation

Existing

Galvanized

Horizontal

Foot

Hawaii

Invert

Length

Edge Of Pavement

Detail

Continous

Air Relief Valve

Asphalt Concrete Base

American Disability Act

Bottom Of Concrete Curb

Concrete Masonry Unit

Corrugated Metal Pipe

Concrete Rubble Masonry

Double Corrosion Protection

Department Of Transportation

Department Of Water Supply

Grouted Rubble Pavement

Kilopounds Per Square Inch

American Society For Testing

4sb

cj *tsp*

 $c \supset lpb$

Aband.

ADA

Approx.

ASTM

ARV

CMU

CO

Conc.

Cont.

CRM

DCP

Demo

Det.

D.O.T

DS.

E.F

E.P.

Elec.

Elev.

Ft.

Galv.

GRP

Haw.

Horiz.

Inv.

ksi

Existing Single Metal Guardrail

New Single Metal Guardrail

exist./ext'g

D.W.S.

D/Dia.

C.M.P.

EXPIRATION DATE OF THE LICENSE