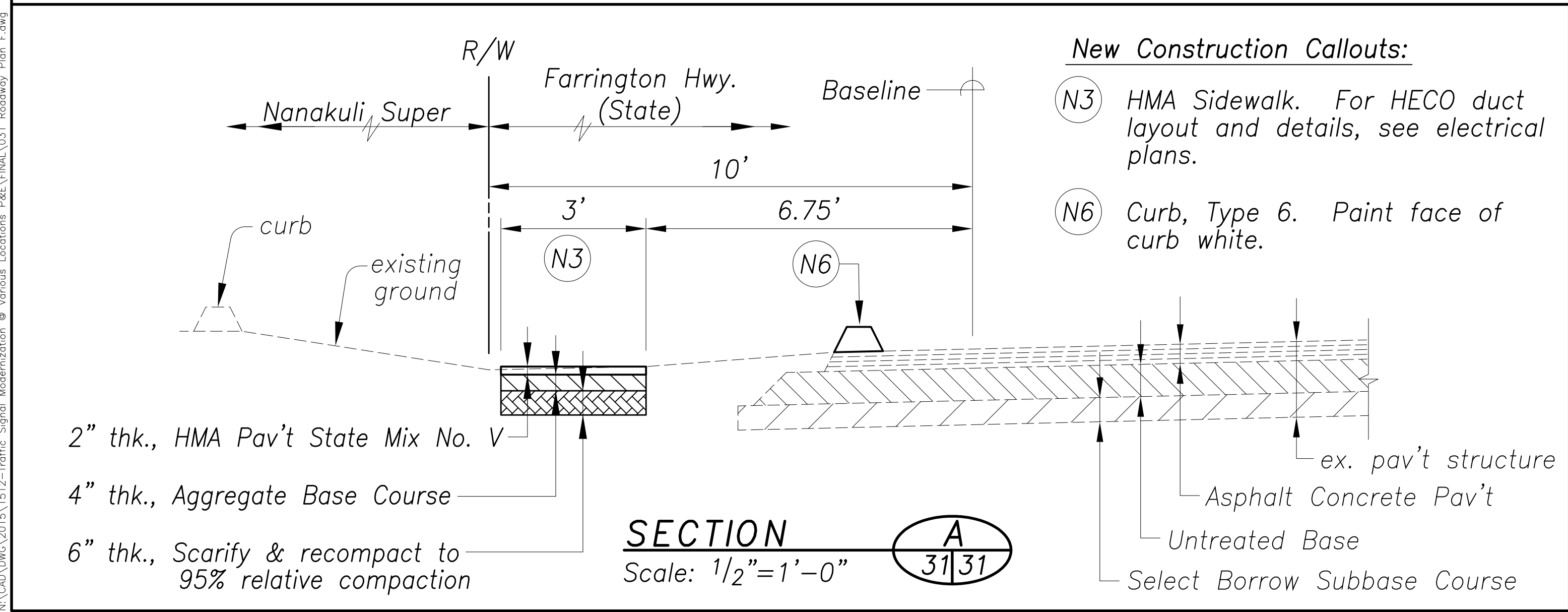
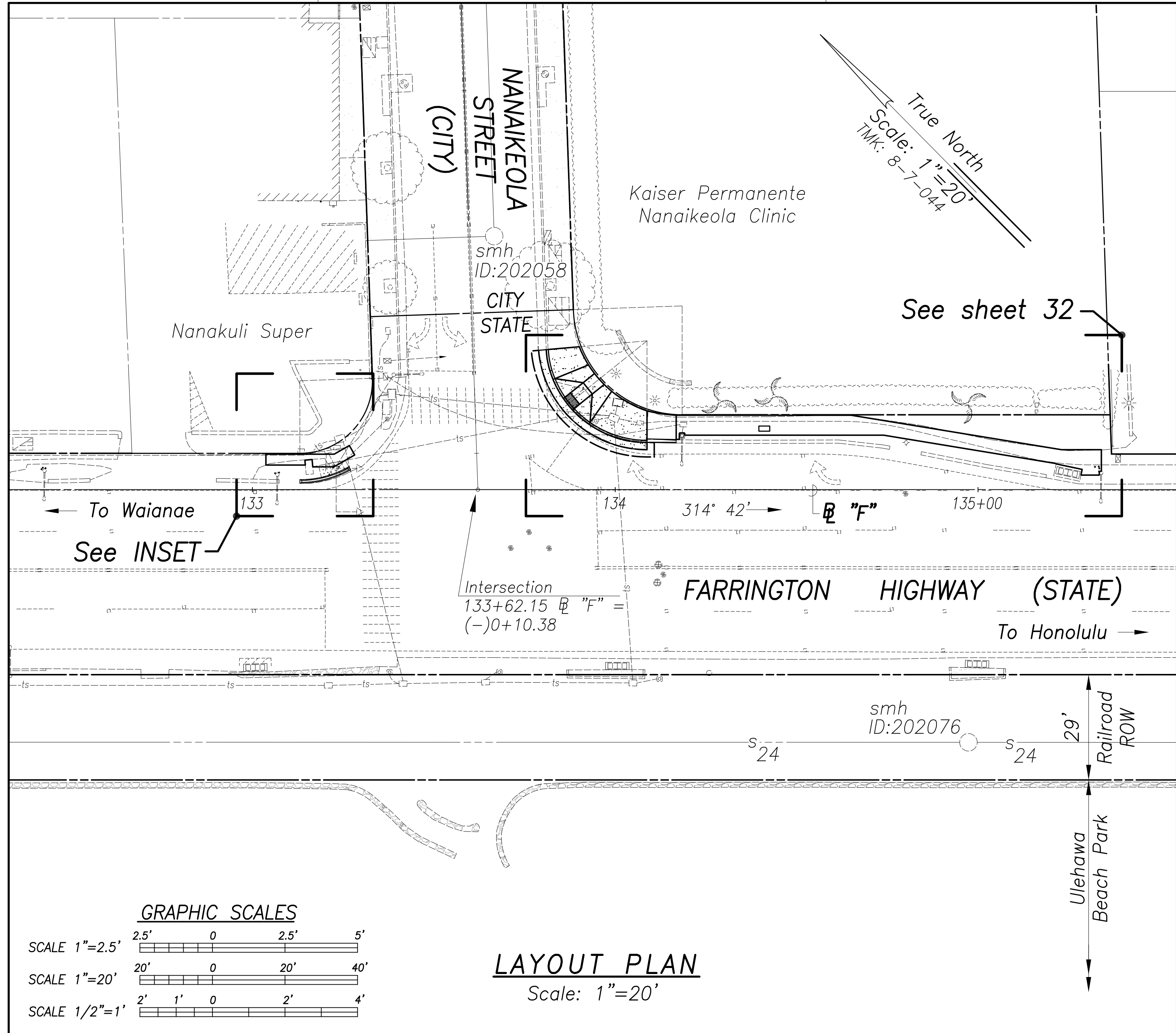
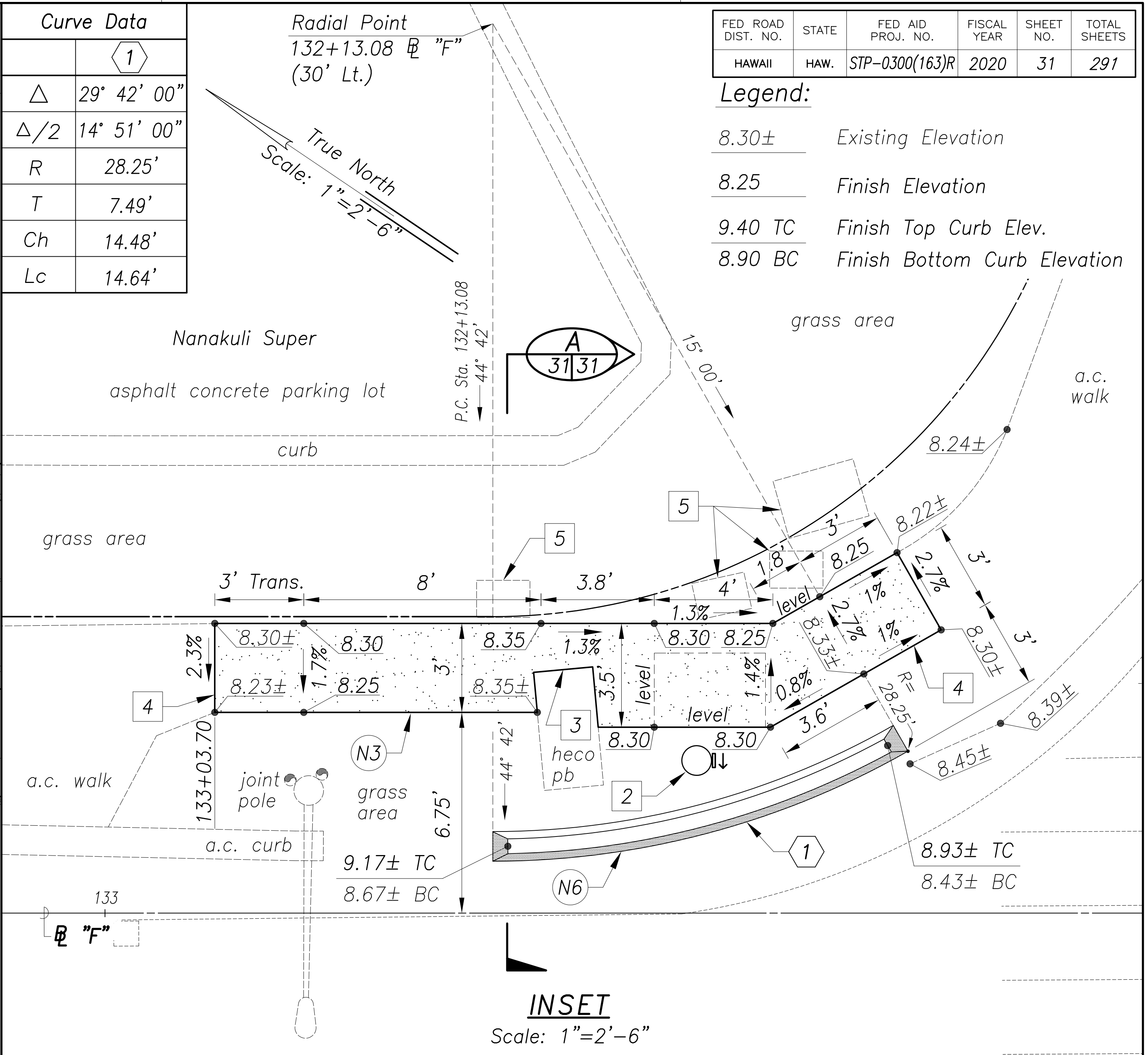




Curve Data	
1	
Δ	29° 42' 00"
$\Delta/2$	14° 51' 00"
R	28.25'
T	7.49'
Ch	14.48'
Lc	14.64'



Notes:

- For Bench Mark, control points, and survey ties; see Demolition Plan sheet 22.
- New Type II Traffic Signal Standard with pedestrian push button PPB-3, see traffic signal plans.
- Provide smooth riding connection to heco box.
- Neat saw cut. Provide smooth riding connection.
- Traffic signal pull boxes to remain.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
Farrington Hwy & Nanaieola St

BASE BID
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: As shown Date: Oct. 2020
SHEET No. R-10 OF 81 SHEETS

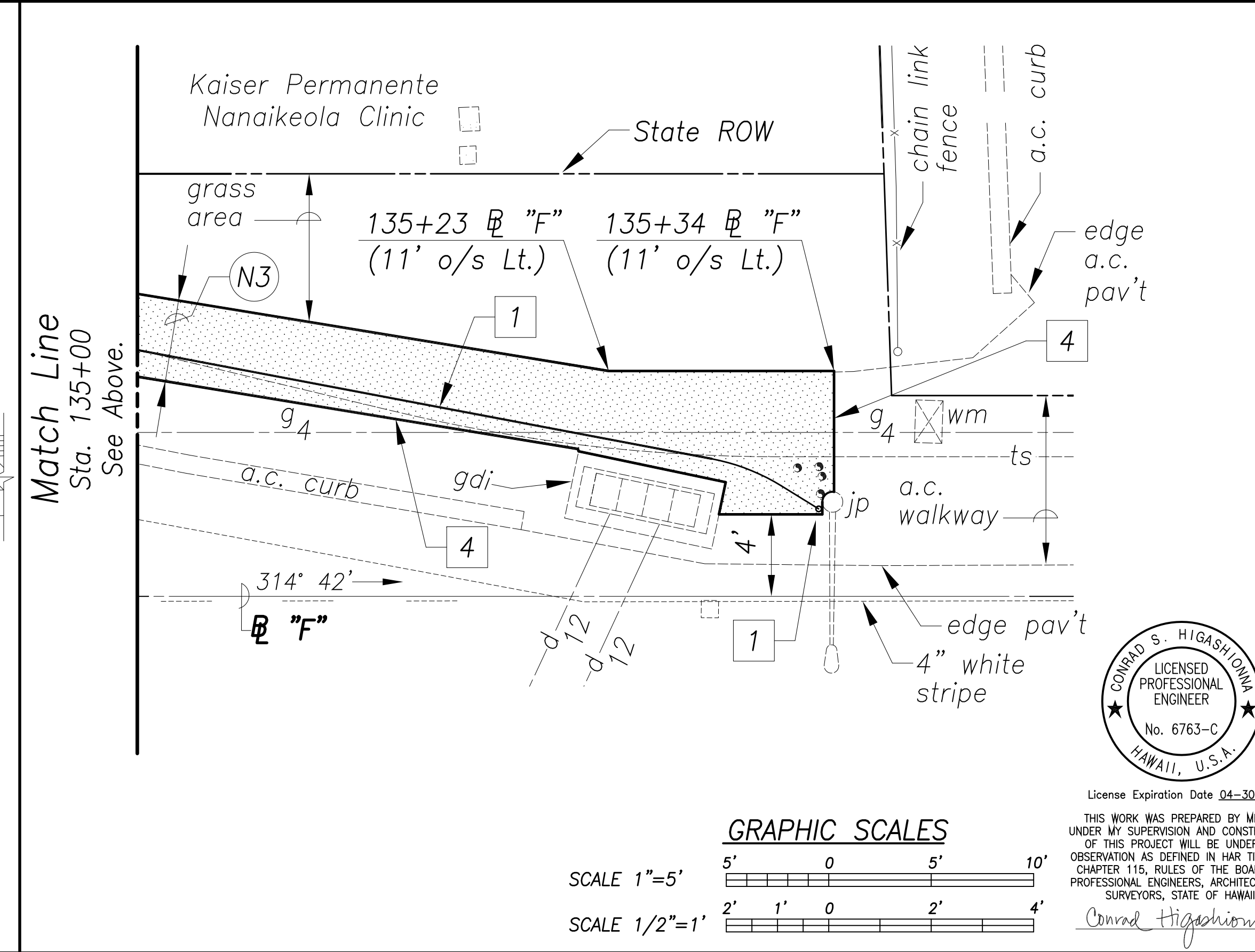
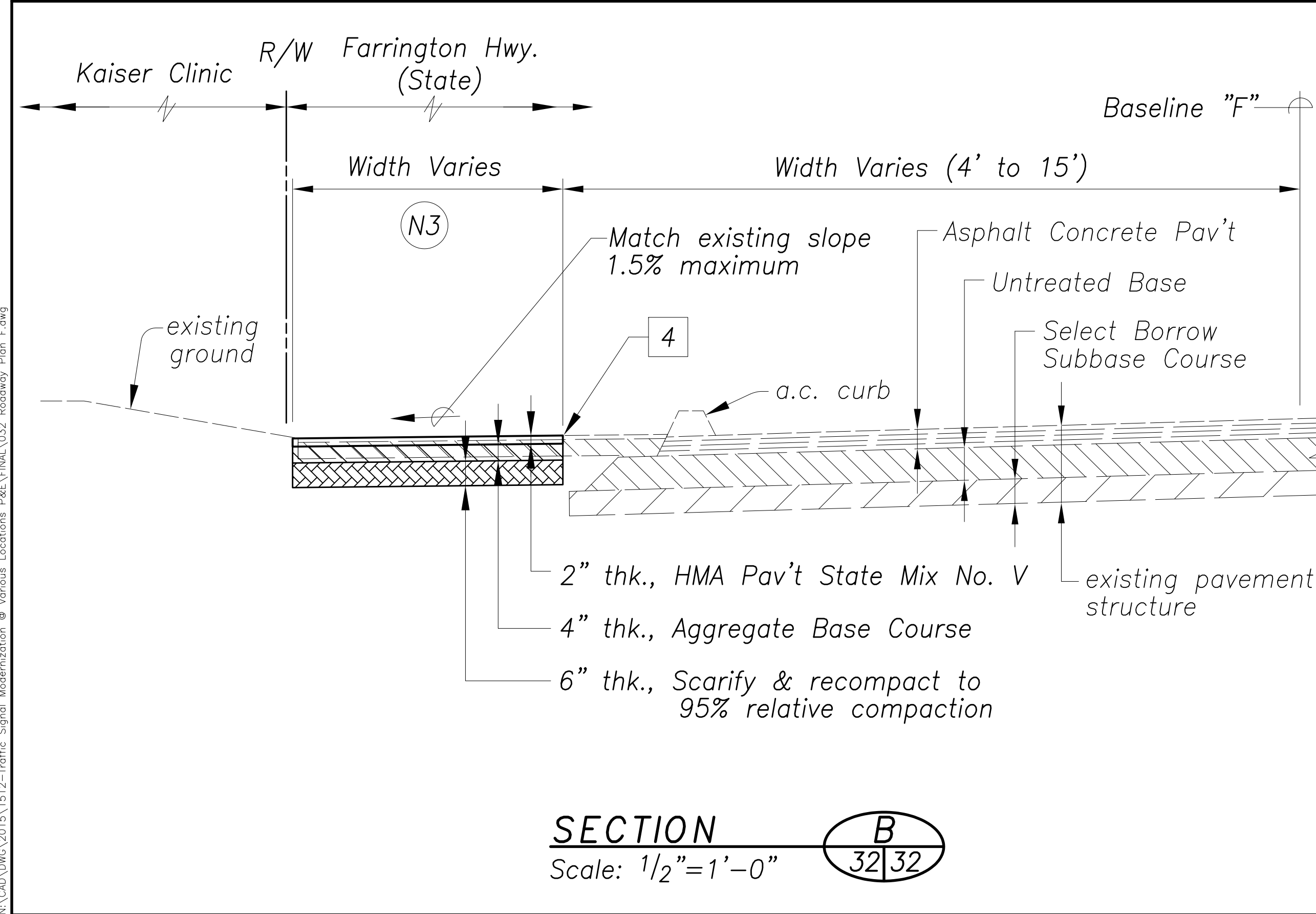
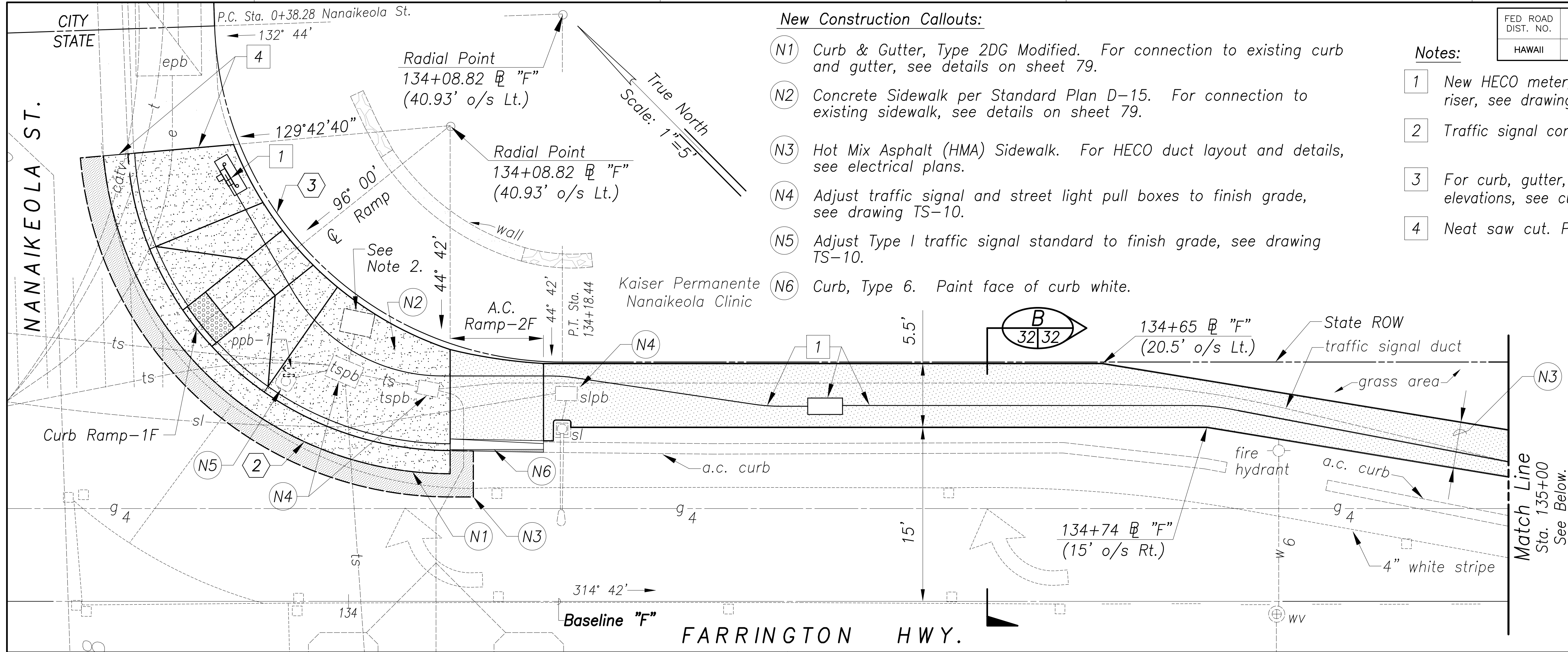
CONRAD S. HIGASHIYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6763-C
HAWAII, U.S.A.
License Expiration Date: 04-30-22

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Conrad Higashiyama

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

New 18, 2020-Edcom
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\031 Roadway Plan F.dwg



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
Farrington Hwy & Nanaikeola St

BASE BID
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: As Noted Date: Oct. 2020
SHEET No. R-11 OF 81 SHEETS

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LICENSED PROFESSIONAL ENGINEER
No. 6763-C
HAWAII, U.S.A.
License Expiration Date 04-30-22

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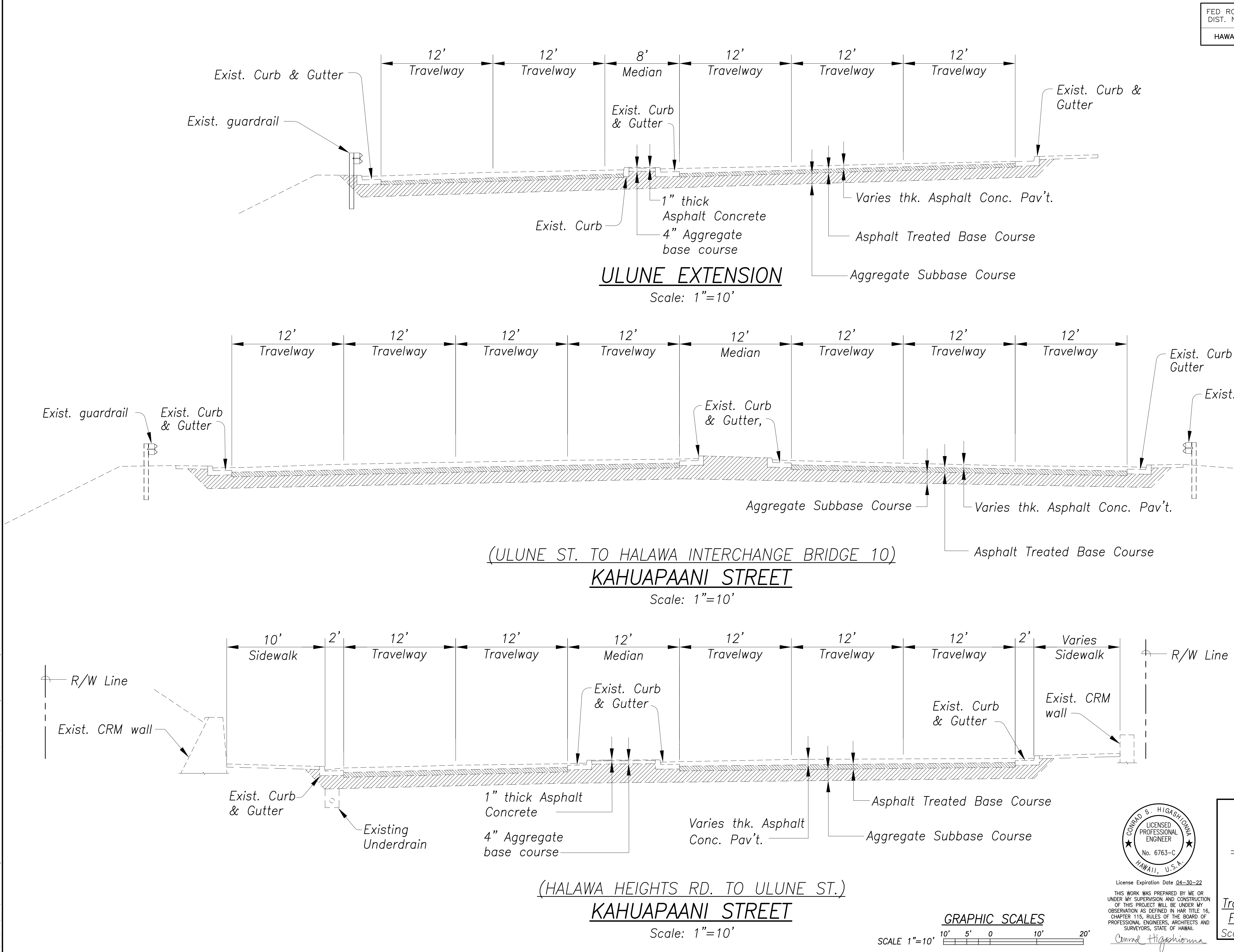
Conrad Higashiomwa

GRAPHIC SCALES
SCALE 1"=5'
SCALE 1/2"=1'

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

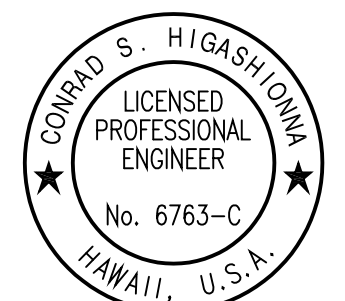
New 18, 2020-10-13am
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\032 Roadway Plan F.dwg

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	33	291

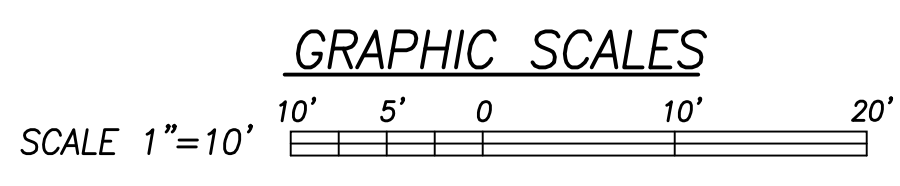


SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

New 18, 2020-Ex-10m
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\033 Existing Conditions U.dwg



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Conrad Higashimura



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXISTING CONDITIONS

Kahuapaani St & Ulune St

BASE BID

Traffic Signal Modernization, Oahu, Phase 1

Federal-Aid Project No. STP-0300(163)R

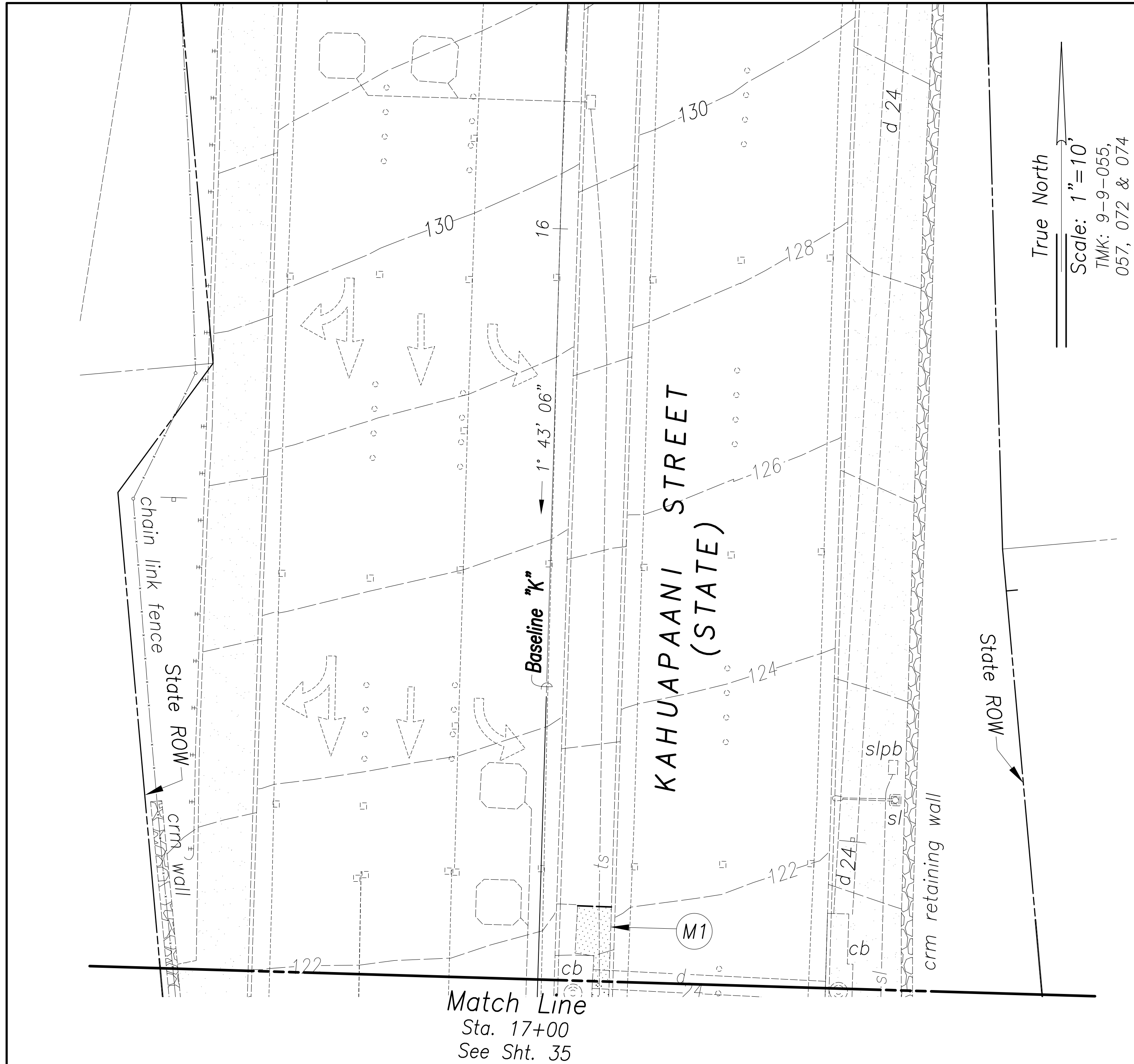
Scale: 1"=10' Date: Oct. 2020

SHEET No. R-12 OF 81 SHEETS

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

New 18, 2020-400mm
N:\CADD\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\034_Roadway Plan U 1.dwg

Curve Data (at Intersection of Kahuapaani St., Ulune St., & Ulune Ext.)							
	1	2	3	4	5	6	7
Δ	1° 18' 57"	96° 34' 46"	7° 05' 41.76"	159° 52' 35.84"	13° 00' 42.4"	93° 23' 02.6"	10° 51' 30"
Δ/2	0° 39' 28.5"	48° 17' 23"	3° 32' 50.88"	79° 56' 17.92"	6° 30' 21.2"	46° 41' 31.3"	5° 25' 45"
R	850.00'	30.00'	63.00'	3.00'	63.00'	35.00'	75.00'
T	9.76'	33.66'	3.91'	16.92'	7.18'	37.13'	10.45'
Ch	19.52'	44.79'	7.80'	5.91'	14.28'	50.94'	20.69'
Lc	19.52'	50.57'	7.80'	8.37'	14.31'	57.05'	20.76'



Notes:

- 1 For Bench Mark, control points, and survey ties; see Demolition Plan sheet 23.
- 2 For 2 & 6 curb return profiles, see sheets 37 & 38.
- 3 See curb ramp plans for additional sidewalk, curb, and gutter details.
- 4 The cost for reconstruction over traffic signal ductlines shall be incidental to the installation of Traffic Signal Ductlines and will not be paid for separately. This includes the following reconstruction callouts: R1 R2 R3 R4 R5 M1 A1

Reconstruction Over Traffic Signal Ductline Callouts:

- R1 Curb & Gutter, Type 2DG Modified. 4 L.F. min. or as noted. For connection to existing curb and gutter, see details on sheet 79.
- R2 Concrete Sidewalk (per Standard Plan D-15).
- R3 Limits of asphalt pavement restoration over trenching. See State detail A 34,35,36,66,80.
- R4 Curb, Type 2D Modified. 4 L.F. min. or as noted. For connection to existing curb, see details on sheet 80.
- R5 (8-inch) Reinforced Concrete Driveway per Standard Plan D-06.
- M1 Hot Mix Asphalt (HMA) Sidewalk at medians and islands. For detail, see this sheet.
- A1 Limits of surface restoration over trenching in Utility Access Road. For detail, see this sheet.

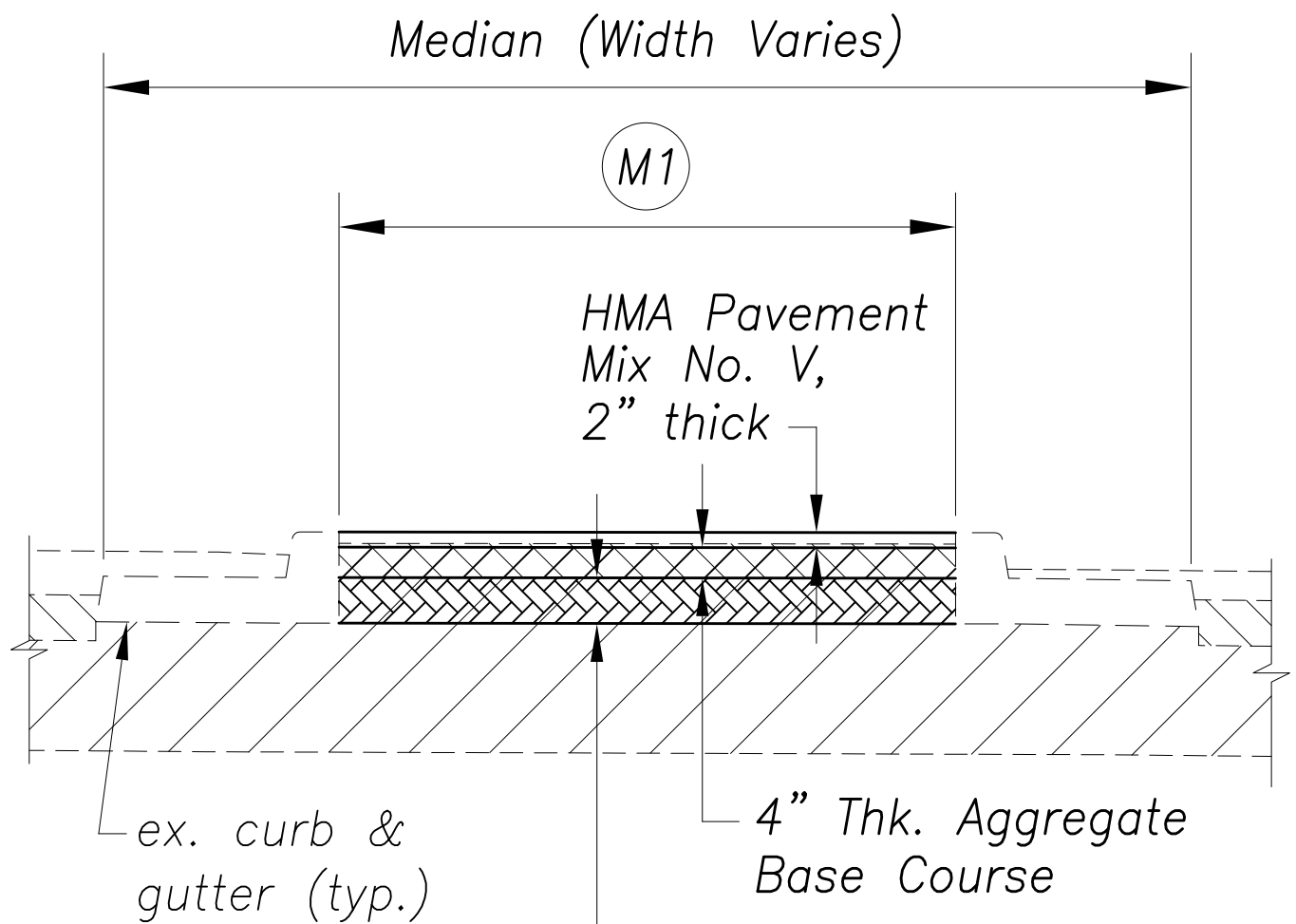
New Construction Callouts:

- N1 Curb & Gutter, Type 2DG Modified. For connection to existing curb and gutter, see details on sheet 81.
- N2 Concrete Sidewalk per Standard Plan D-15. For connection to existing sidewalk, see details on sheet 81.
- N3 Limits of asphalt pavement restoration for installation of curb ramps, curb and gutter, and curb. For details, see sheet 81 and curb ramp plans.
- N4 Curb, Type 2D Modified. For connection to existing curb and gutter, see details on sheet 81.
- N5 Curb & Gutter, Type 2DG Modified. For connection to existing curb and gutter, see details on sheet 81. See Typical Median Section A 34,35,66,36.
- N6 Install new Detectable Warning Mat at existing curb ramp to remain. The work includes removing existing detectable warning mat and patching of concrete ramp, if needed. The cost for removal and ramp repair shall be incidental to this contract item and shall not be paid for separately.

GRAPHIC SCALES

SCALE 1"=10' 10' 5' 0 10' 20'

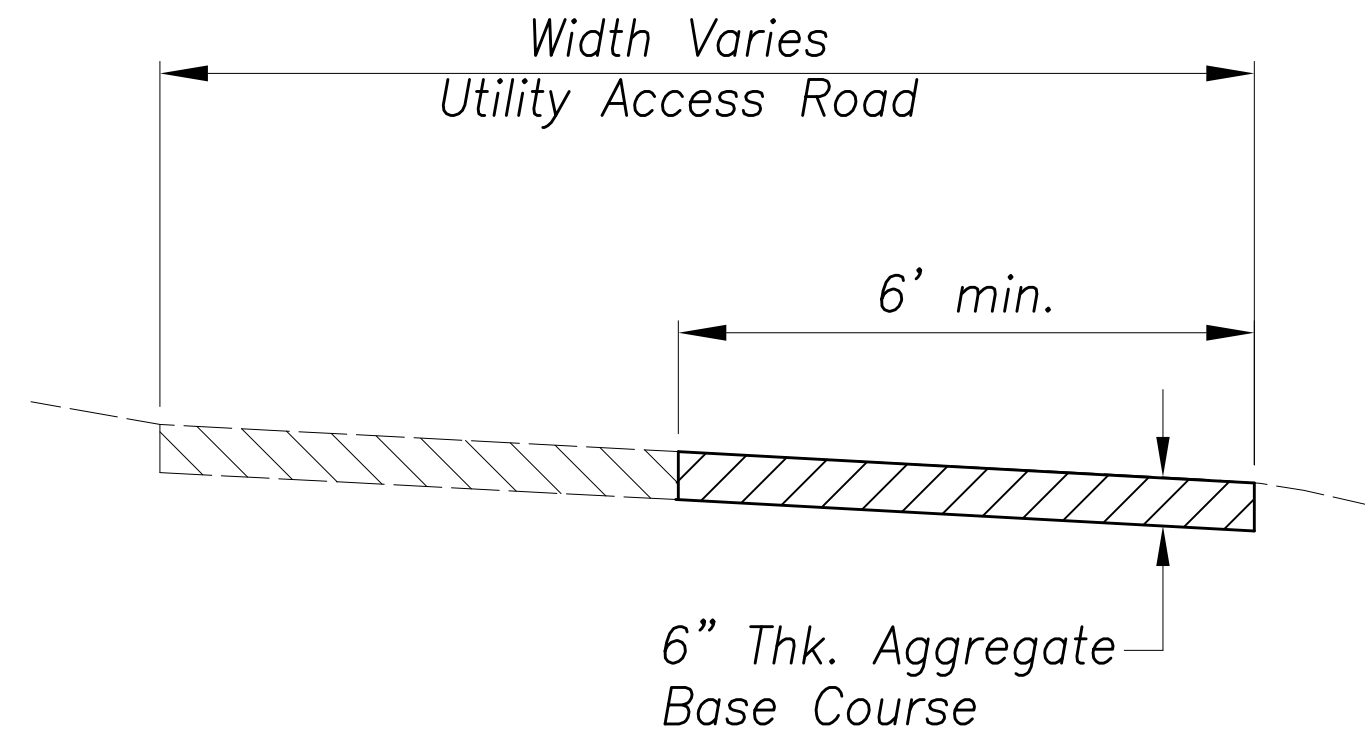
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	34	291



Note: The Contractor shall grade HMA Pavement to drain. Scarify and recompact to 95% relative compaction 6" minimum thickness

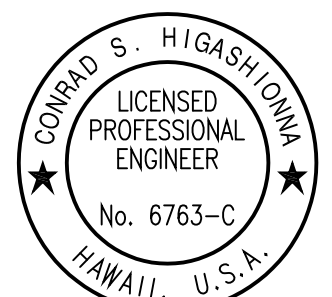
MEDIAN AND ISLAND RECONSTRUCTION DETAIL A 34,35,36,66,80

No Scale



UTILITY ACCESS ROAD RECONSTRUCTION DETAIL B 34,35,34

No Scale



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

Kahuapaani St & Ulune St

BASE BID

Traffic Signal Modernization, Oahu, Phase 1

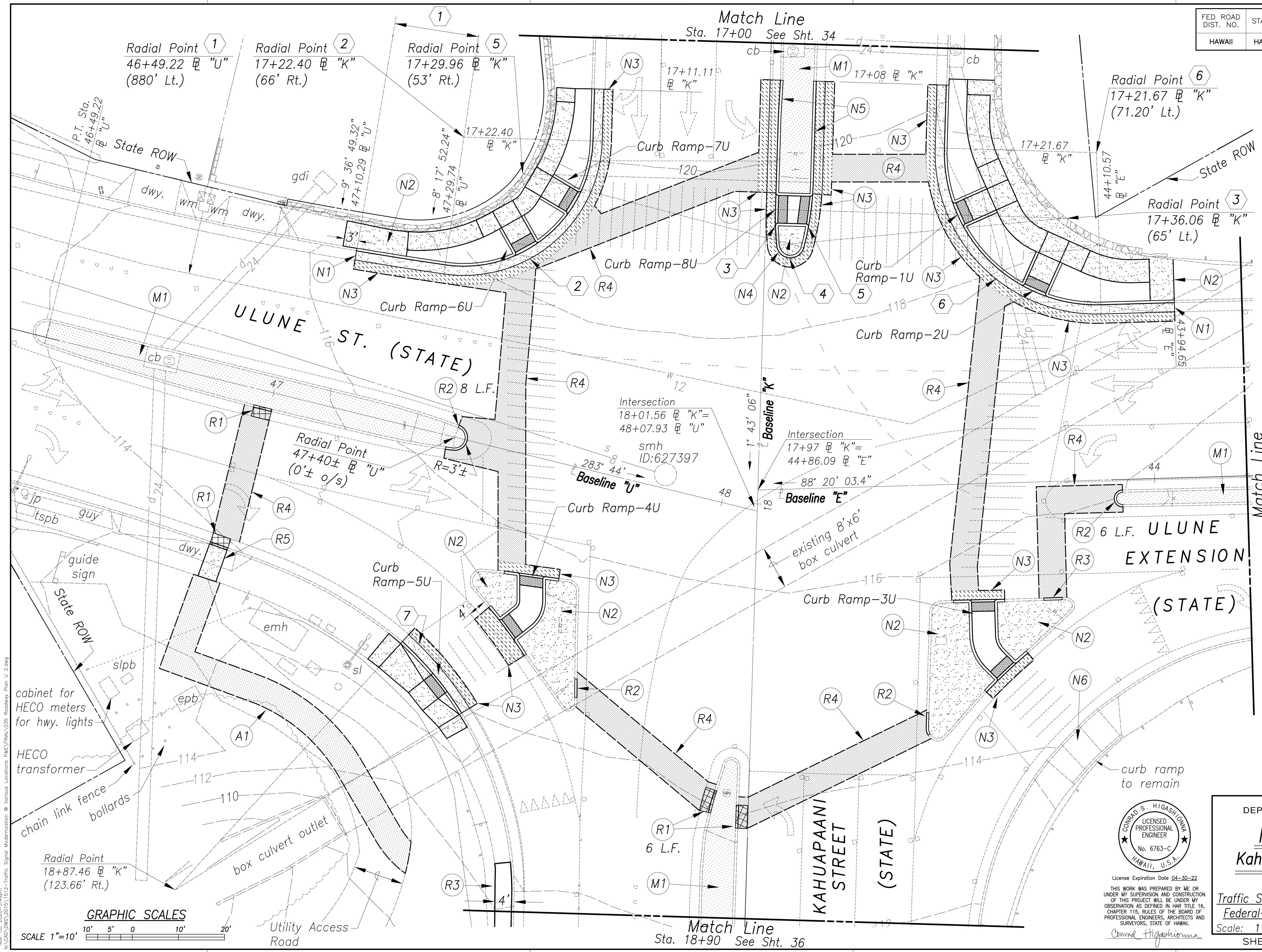
Federal-Aid Project No. STP-0300(163)R

Scale: 1"=10' Date: Oct. 2020

SHEET No. R-13 OF 81 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	35	291

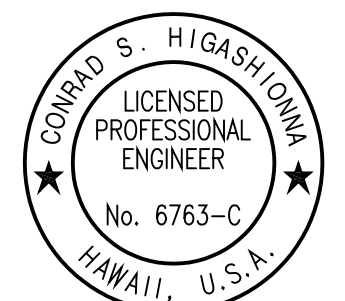
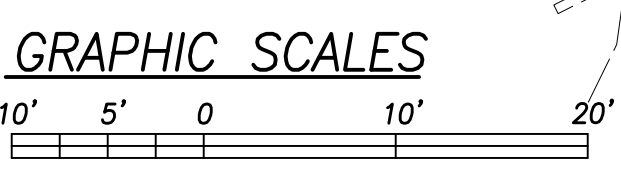
True North
Scale: 1"=10'
TMK: 9-9-055,
057, 072 & 074



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

New 18, 2020-1-14-20m
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\035 Roadway Plan U 2.dwg

cabinet for HECO meters for hwy. lights
HECO transformer
chain link fence bollards
slpb
epb
sl
emh
guy
tspb
jp



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Conrad Higashimura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN
Kahuapaani St & Ulune St

BASE BID

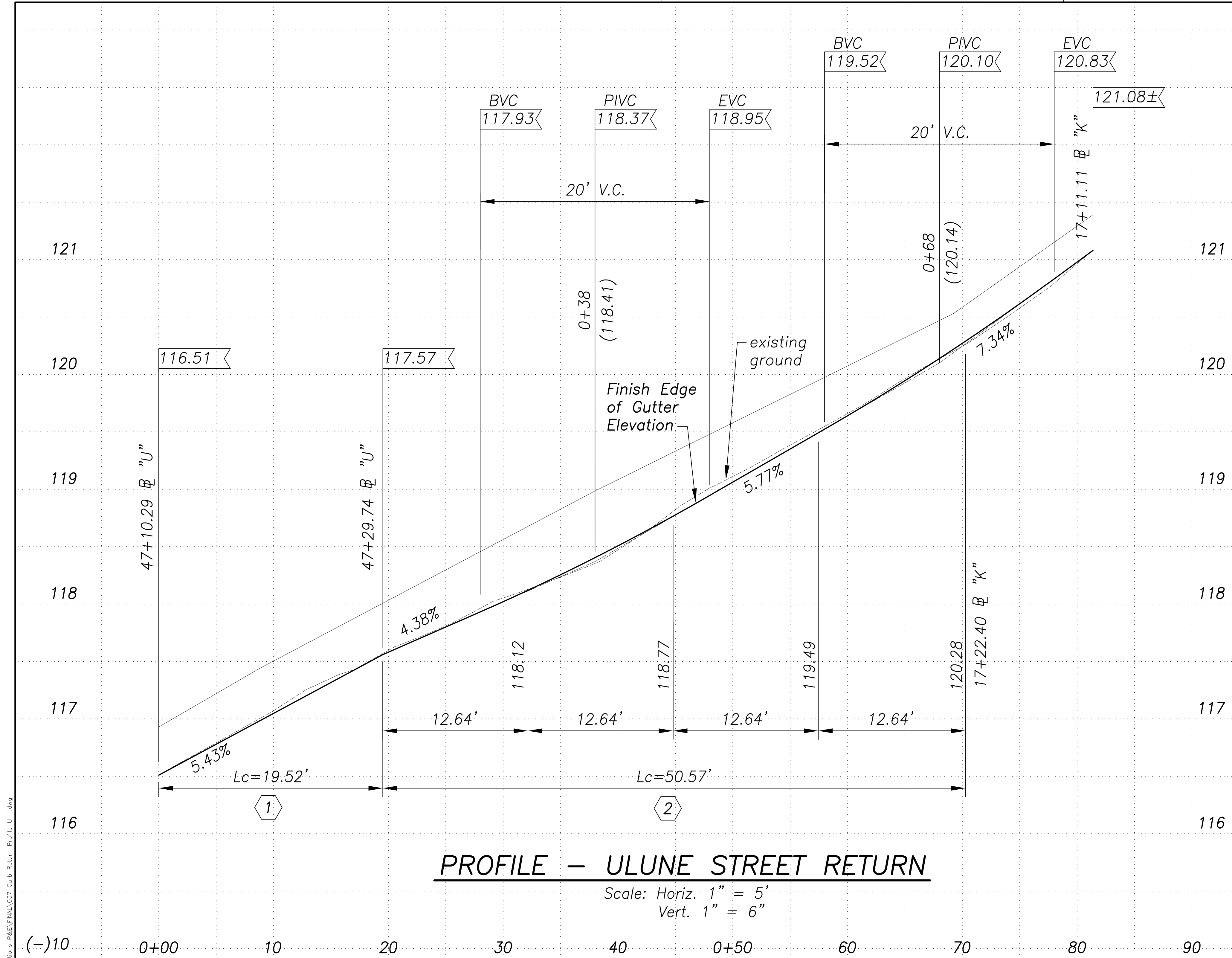
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R

Scale: 1"=10' Date: Oct. 2020

SHEET No. R-14 OF 81 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	37	291

Curve Data		
Curve	1	2
Δ	1° 18' 57"	96° 34' 46"
$\Delta/2$	0° 39' 28.5"	48° 17' 23"
R	850.00'	30.00'
T	9.76'	33.66'
Ch	19.52'	44.79'
Lc	19.52'	50.57'

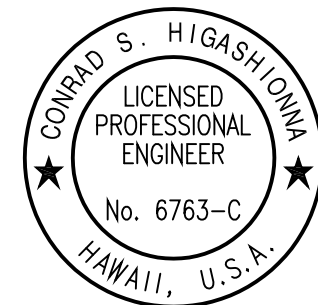
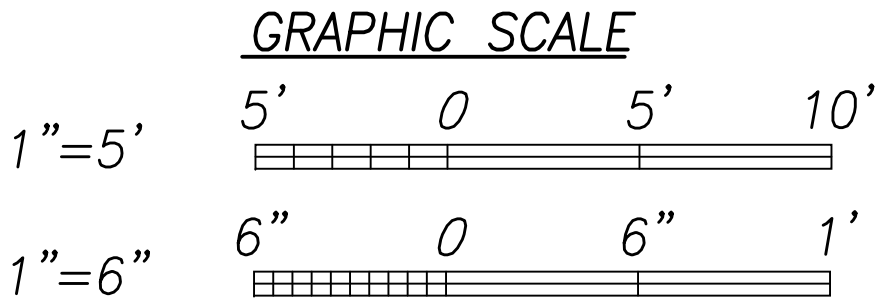


PROFILE — ULUNE STREET RETURN

Scale: Horiz. 1" = 5'
Vert. 1" = 6"

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

New 18, 2020-10-20
N:\CADD\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\037 Curb Return Profile U 1.dwg



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Conrad Higashimura

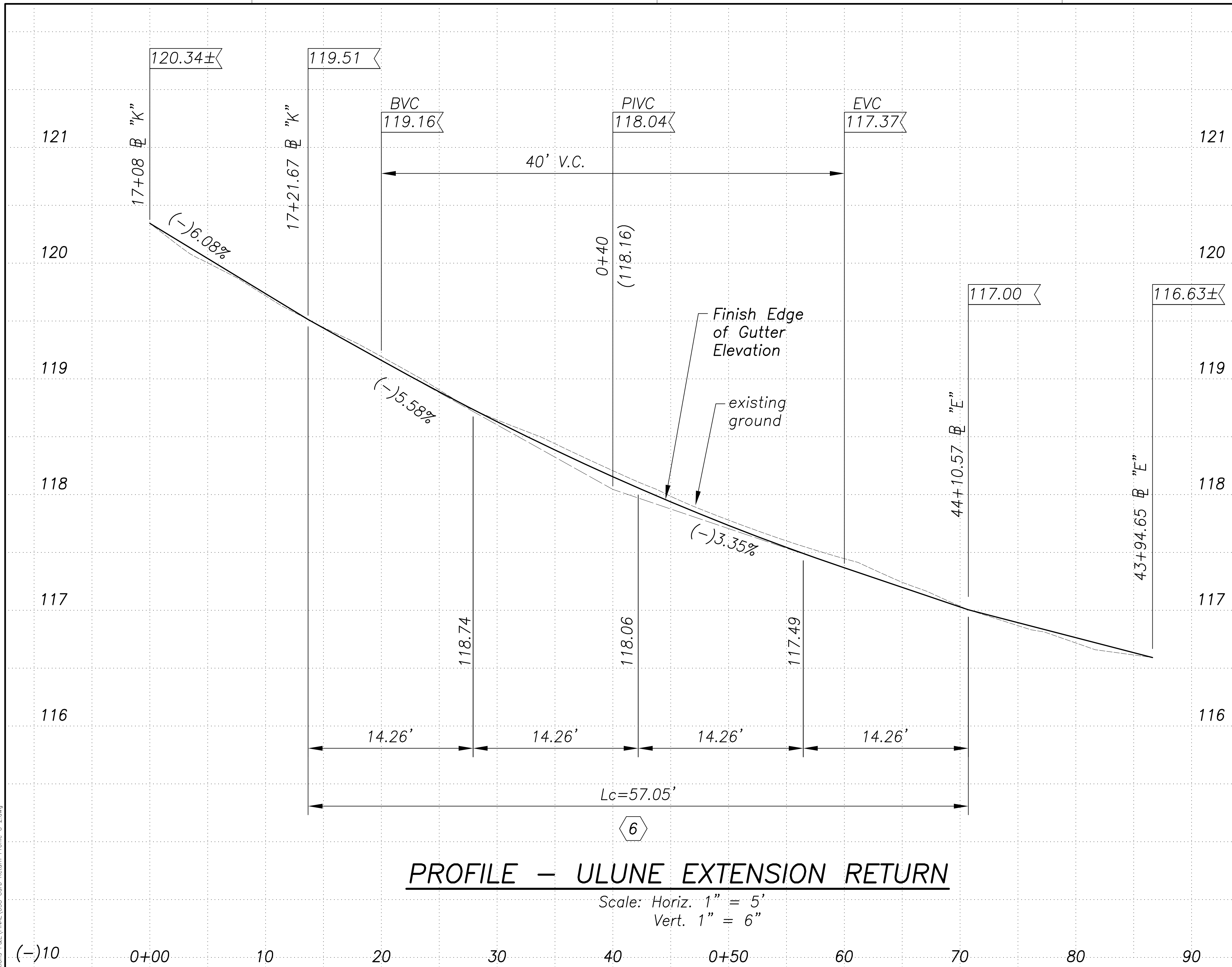
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RETURN PROFILES
Kahuapaani St & Ulune St

BASE BID
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: As shown Date: Oct. 2020
SHEET No. R-16 OF 81 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	38	291

Curve Data	
Curve	6
Δ	93° 23' 02.6"
$\Delta/2$	46° 41' 31.3"
R	35.00'
T	37.13'
Ch	50.94'
Lc	57.05'

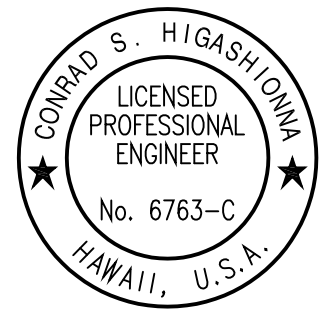
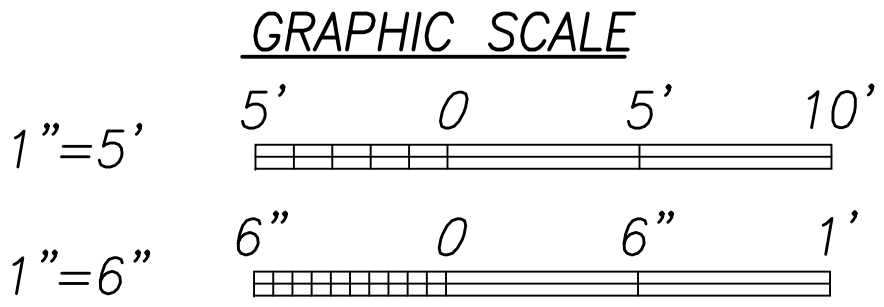


PROFILE — ULUNE EXTENSION RETURN

Scale: Horiz. 1" = 5'
Vert. 1" = 6"

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
No.	

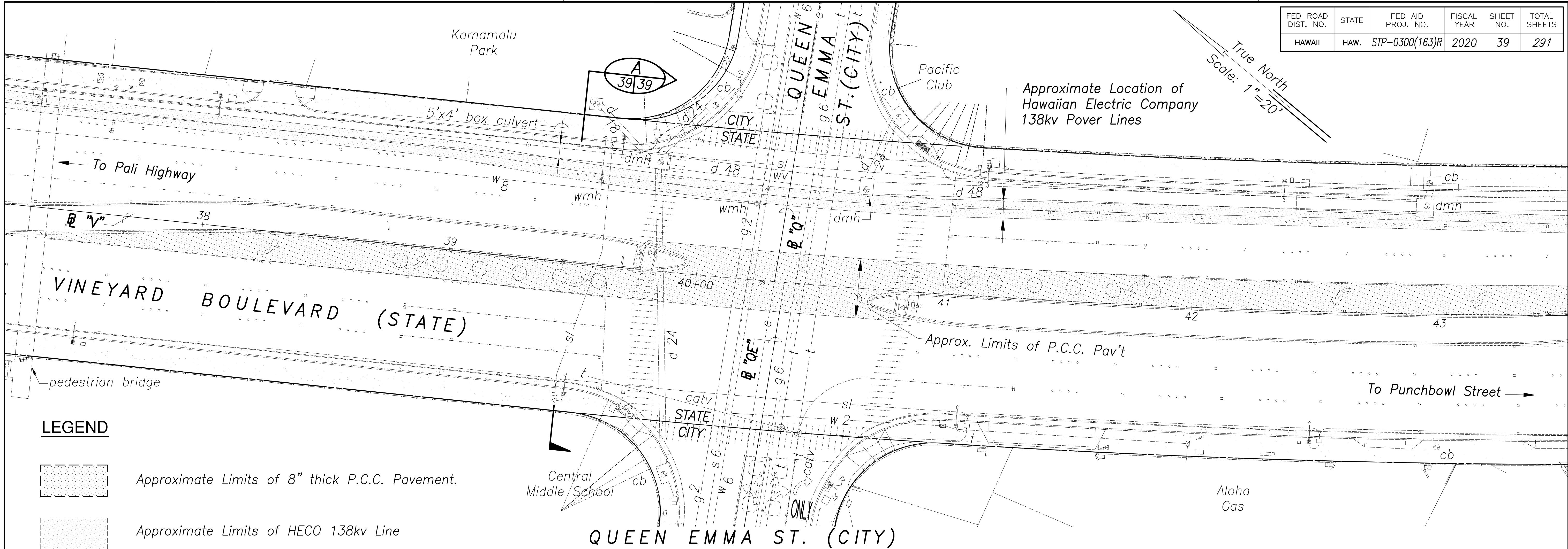
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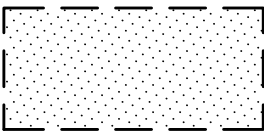
License Expiration Date 04-30-22
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Conrad Higashimura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CURB RETURN PROFILES
Kahuapaani St & Ulune St
BASE BID
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: As shown Date: Oct. 2020
SHEET No. R-17 OF 81 SHEETS

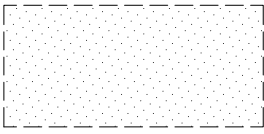
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	39	291



LEGEND



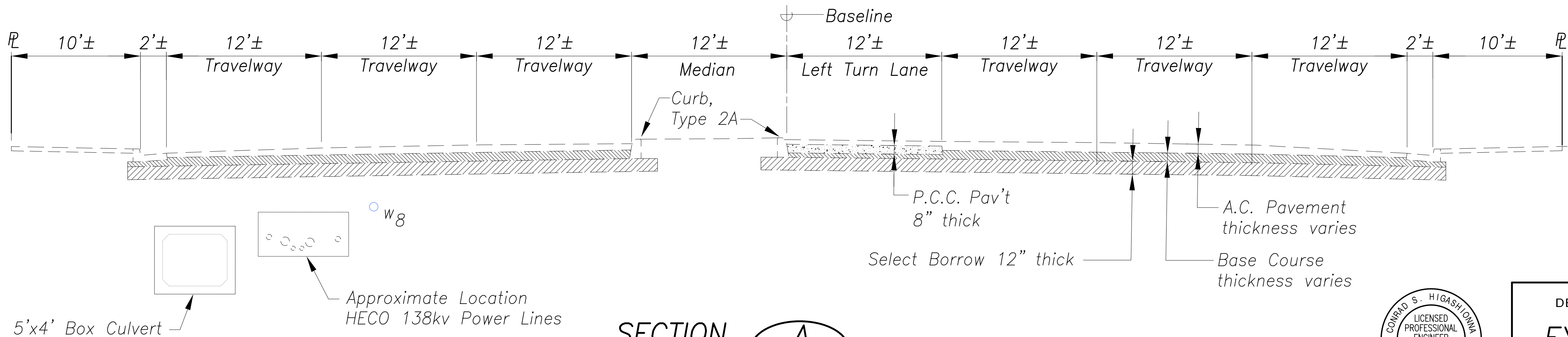
Approximate Limits of 8" thick P.C.C. Pavement.



Approximate Limits of HECO 138kv Line

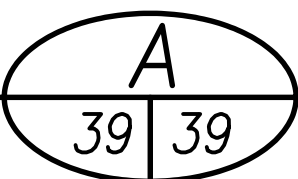
P L A N

Scale: 1"=20'

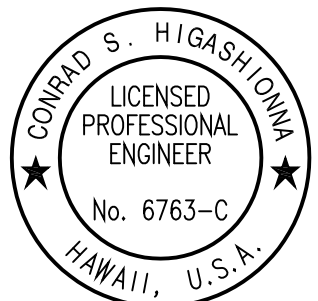


SECTION

Scale: 1"=10'



GRAPHIC SCALES



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Conrad Higashimura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
EXISTING CONDITION
Vineyard Blvd & Queen Emma St
ADDITIVE ALTERNATE #1
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: As shown Date: Oct. 2020
SHEET No. R-18 OF 81 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
No.	

New 18, 2020-10-08m
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\039 Existing Conditions V.dwg

A HECO standby inspector must be on-site anytime the excavation is within 10 feet of the outside face of the FTB enclosure surrounding 138kV cable pipes.

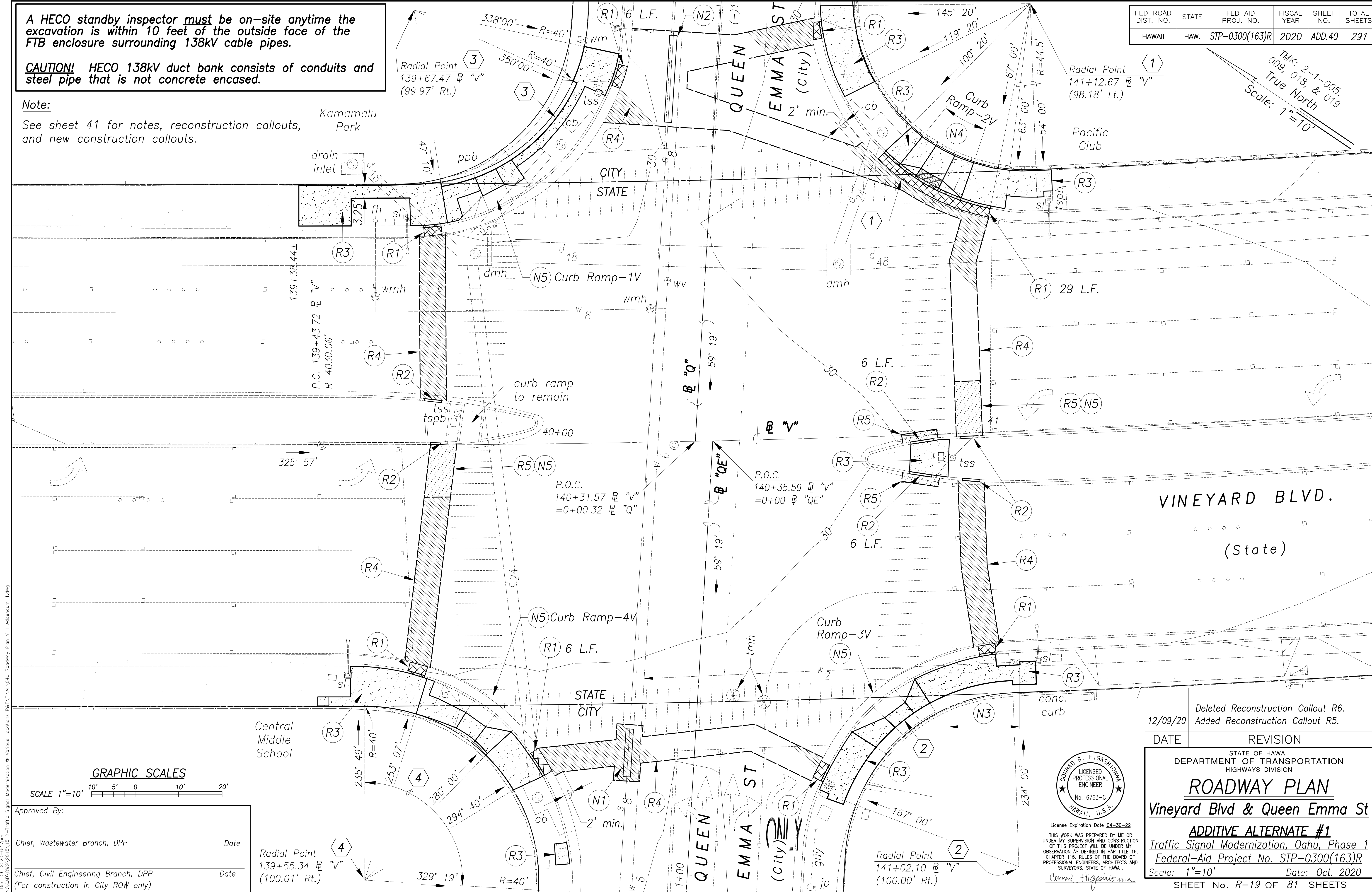
CAUTION! HECO 138kV duct bank consists of conduits and steel pipe that is not concrete encased.

Note:

See sheet 41 for notes, reconstruction callouts, and new construction callouts.

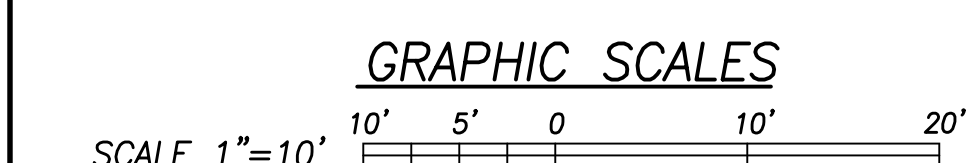
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	ADD.40	291

TMK: 2-1-005, 009, 018, & 019
True North
Scale: 1"=10'



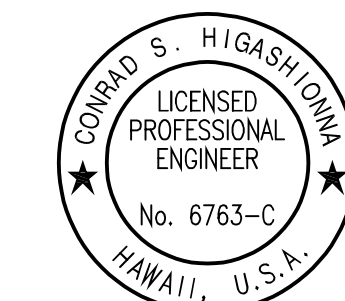
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

Dec 09, 2020-11:27am
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\040 Roadway Plan V 1 Addendum 1.dwg



Approved By: _____ Date _____
Chief, Wastewater Branch, DPP

Chief, Civil Engineering Branch, DPP
(For construction in City ROW only) _____ Date _____



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Conrad Higashi

12/09/20	Deleted Reconstruction Callout R6. Added Reconstruction Callout R5.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
Vineyard Blvd & Queen Emma St	
ADDITIVE ALTERNATE #1	
Traffic Signal Modernization, Oahu, Phase 1	
Federal-Aid Project No. STP-0300(163)R	
Scale: 1"=10'	Date: Oct. 2020
SHEET No. R-19 OF 81 SHEETS	

ADD. 40

ORIGINAL PLAN

NOTE BOOK

No.

SURVEY PLOTTED BY

DRAWN BY

DESIGNED BY

QUANTITIES BY

CHECKED BY

DATE

Dec 09, 2020-16:07pm
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\041 Roadway Plan V 2 Addendum 1.dwg

Curve Data (at Intersection of Vineyard Blvd., Queen Emma St.)				
	1	2	3	4
Δ	33° 20' 00"	67° 00' 00"	57° 10' 00"	93° 30' 00"
Δ/2	16° 40' 00"	33° 30' 00"	28° 35' 00"	46° 45' 00"
R	50.00'	42.80'	41.00'	40.00'
T	14.97'	28.33'	22.34'	43.52'
Ch	28.68'	47.25'	39.23'	58.27'
Lc	29.09'	50.05'	40.91'	65.28'

Notes:

- 1
- For Bench Mark, control points, and survey ties; see Demolition Plan sheet 24.
- 2
- See curb ramp plans for additional sidewalk, curb, and gutter details.
- 3
- The cost for reconstruction over traffic signal ductlines shall be incidental to the installation of Traffic Signal Ductlines and will not be paid for separately. This includes the following reconstruction callouts:

R1R2R3R4R5
- 4
- The cost for 14-inch Concrete Pavement shall be paid for under Section 411 – Portland Cement Concrete Pavement. This includes the following new construction callout:

N5
- 5
- The Contractor shall hire an ISA Certified Arborist to assist in tree root and branch pruning work necessary to facilitate construction. The certified arborist must assure that work performed does not destabilize the trees and does not cause the failure or demise of the trees.

New Construction Callouts:

- N1
- 11 L.F. Reinforced Concrete Jacket on 8" sewer per City Standard Detail S-5. See duct line profiles on sheet 157.
- N2
- 20 L.F. Reinforced Concrete Jacket on 8" sewer per City Standard Detail S-5. See duct line profiles on sheets 154 & 158.
- N3
- Relocate 2" water lateral. For details, see sheet 56.
- N4
- Curb Ramp-2V, see plan on sheet 70.
- N5
- 14-inch Concrete Pavement. See details on sheet 80.
- N6
- Install new Detectable Warning Mat at existing curb ramp to remain. The work includes removing existing detectable warning mat and patching of concrete ramp, if needed. The cost for removal and ramp repair shall be incidental to this contract item and shall not be paid for separately.

Reconstruction Over Traffic Signal Ductline Callouts:

- R1
- Curb & Gutter, Type 2DG Modified. 4 L.F. or as noted. For connection to existing, see details on sheets 79 & 80.
- R2
- Curb, Type 2A. 4 L.F. or as noted. For connection to existing, see details on sheet 81.
- R3
- Concrete Sidewalk per Standard Plan D-15. For connection to existing sidewalk, see details on sheet 81 and 82.
- R4
- Limits of asphalt pavement restoration over trenching. See State detail

A4080

 and City detail

B4080

.
- R5
- Limits of asphalt pavement restoration over trenching and over concrete pavement. See detail

C4080

.

Approved By:

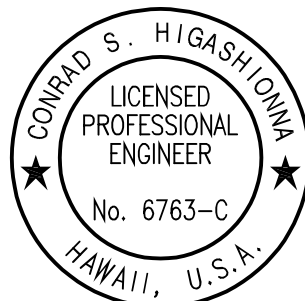
Chief, Wastewater Branch, DPP

Date

Chief, Civil Engineering Branch, DPP

Date

(For construction in City ROW only)



License Expiration Date 04-30-22
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.
Conrad Higashimura

12/09/20

Deleted Reconstruction Callout R6.
Revised Note 3. Added Note 5.

DATE	REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

Vineyard Blvd & Queen Emma St

ADDITIVE ALTERNATE #1

Traffic Signal Modernization, Oahu, Phase 1

Federal-Aid Project No. STP-0300(163)R

Scale: 1"=10' Date: Oct. 2020

SHEET No. R-20 OF 81 SHEETS

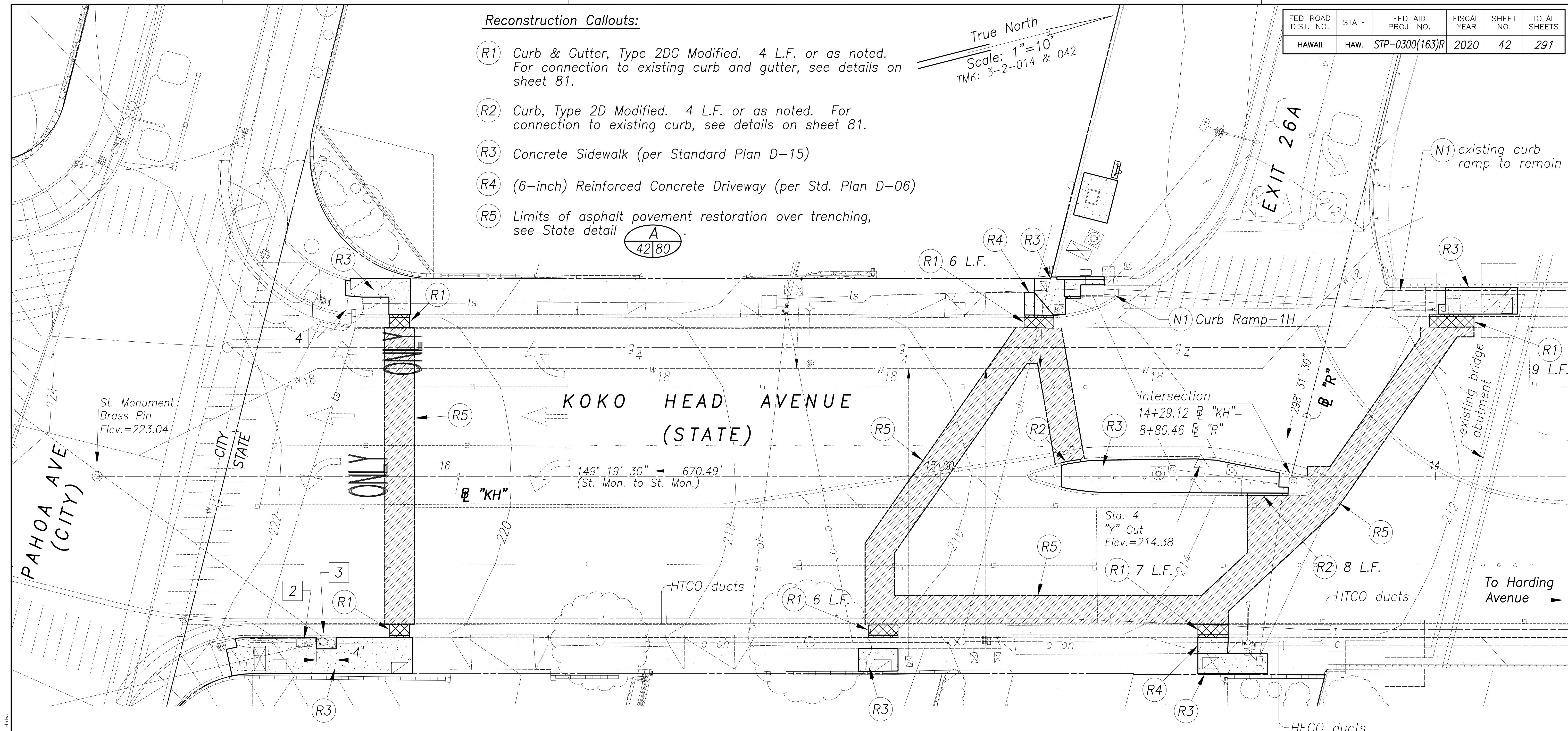
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	ADD.41	291

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	42	291

Reconstruction Callouts:

- R1 Curb & Gutter, Type 2DG Modified. 4 L.F. or as noted. For connection to existing curb and gutter, see details on sheet 81.
- R2 Curb, Type 2D Modified. 4 L.F. or as noted. For connection to existing curb, see details on sheet 81.
- R3 Concrete Sidewalk (per Standard Plan D-15)
- R4 (6-inch) Reinforced Concrete Driveway (per Std. Plan D-06)
- R5 Limits of asphalt pavement restoration over trenching, see State detail

True North
Scale: 1"=10'
TMK: 3-2-014 & 042



Notes:

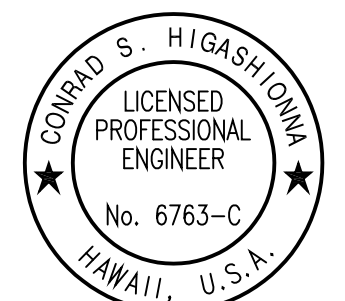
- 1 For Bench Mark, control points, and survey ties; see Demolition Plan sheet 25.
- 2 Existing HTCO pullbox to remain. Match into top of pullbox. Provide smooth riding connection.
- 3 Existing joint poles to remain. Provide 2'-3" x 4' planting area surrounding poles. The clear distance between edge of new sidewalk and outside of poles shall be 6-inches.
- 4 Existing traffic signal pullbox to remain. Match into top of pullbox. Provide smooth riding connection.
- 5 The cost for reconstruction over traffic signal ductlines shall be incidental to the installation of Traffic Signal Ductlines and will not be paid for separately. This includes the following reconstruction callouts:

- R1 R2 R3 R4 R5

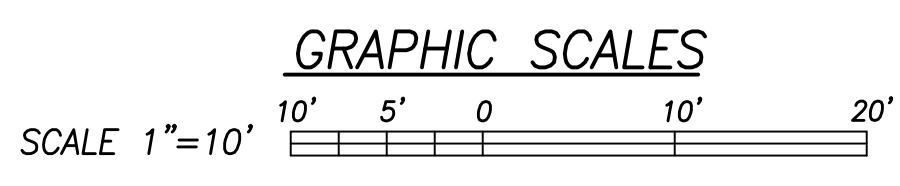
New Construction Callouts:

- N1 Install new Detectable Warning Mat at existing curb ramp to remain. The work includes removing existing detectable warning mat and patching of concrete ramp, if needed. The cost for removal and ramp repair shall be incidental to this contract item and shall not be paid for separately.

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

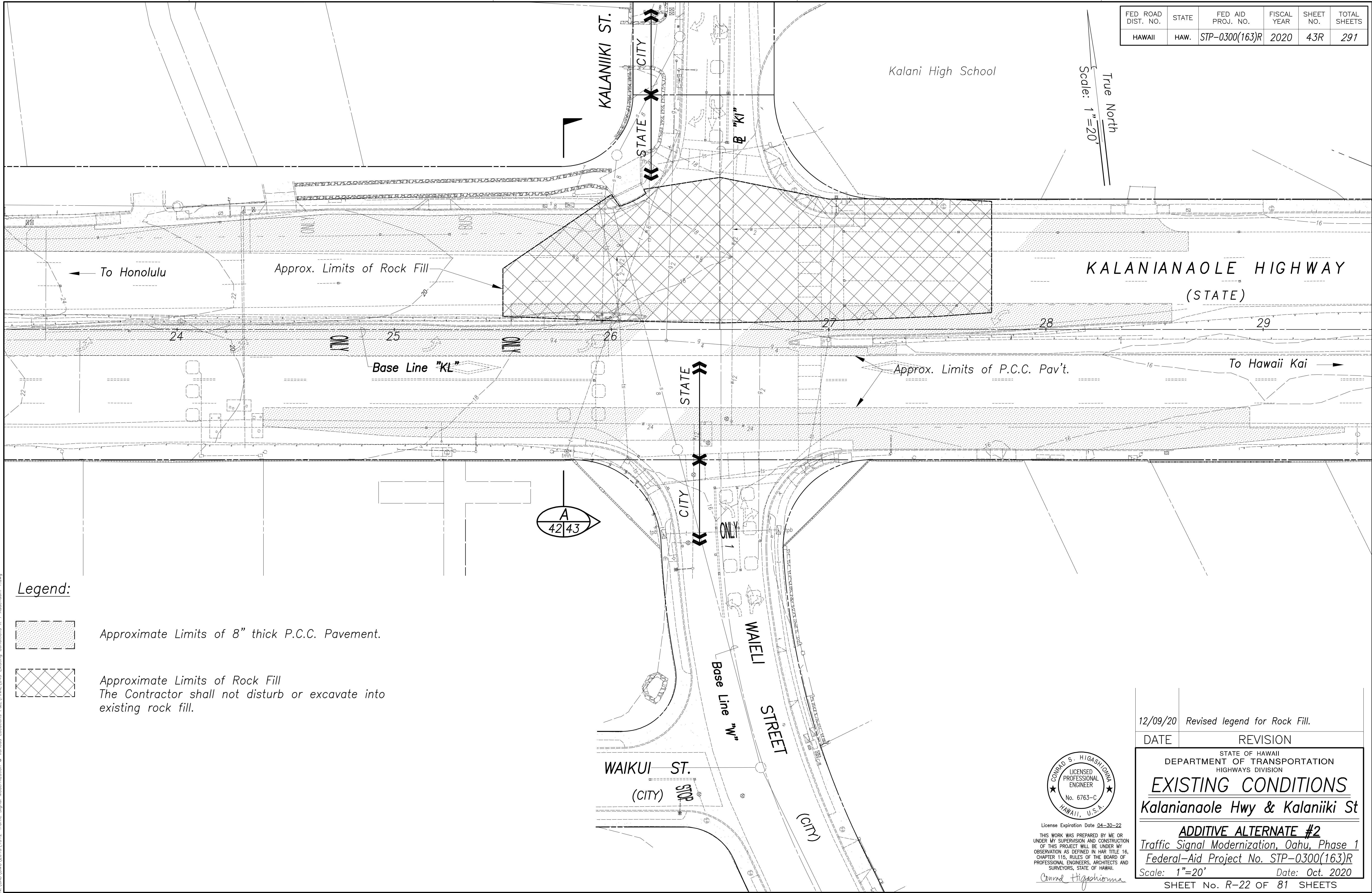


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Conrad Higashimura

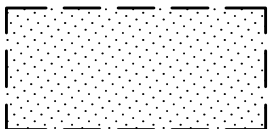


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
H-1 Exit 26A & Koko Head Ave
ADDITIVE ALTERNATE #3
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: 1"=10' Date: Oct. 2020
SHEET No. R-21 OF 81 SHEETS

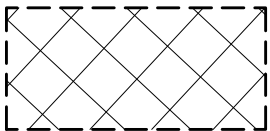
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	43R	291



Legend:



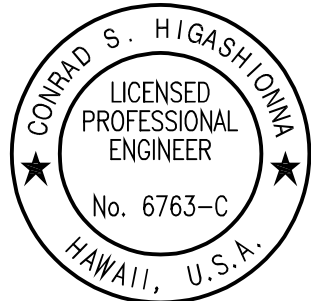
Approximate Limits of 8" thick P.C.C. Pavement.



Approximate Limits of Rock Fill
The Contractor shall not disturb or excavate into existing rock fill.

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

Dec 06, 2020-14:52pm
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\043 Existing Conditions K 1 Addendum 1.dwg



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Conrad Higashimura

12/09/20 Revised legend for Rock Fill.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXISTING CONDITIONS

Kalanianaʻole Hwy & Kalaniiki St

ADDITIVE ALTERNATE #2
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R

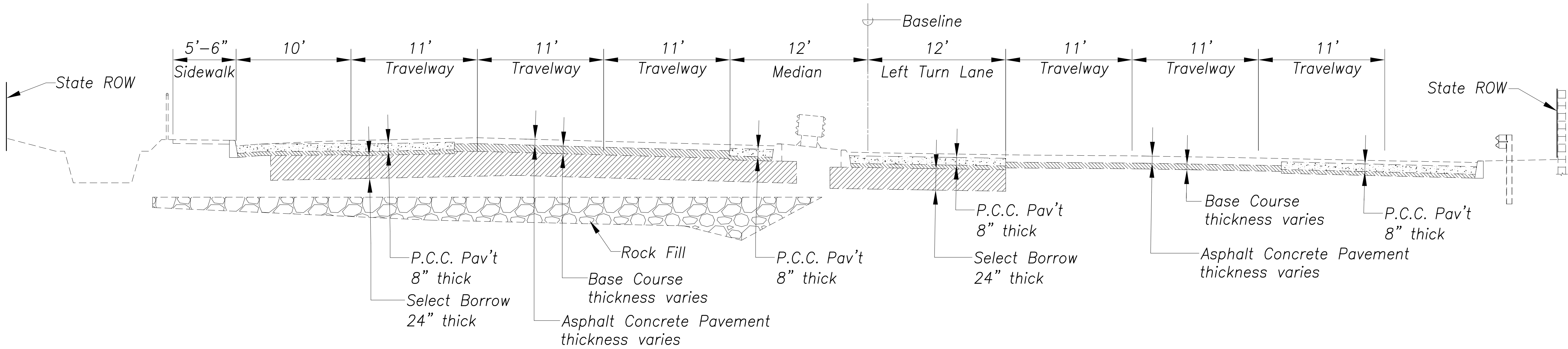
Scale: 1"=20' Date: Oct. 2020

SHEET No. R-22 OF 81 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	44R	291

Note:

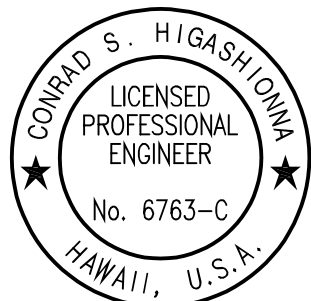
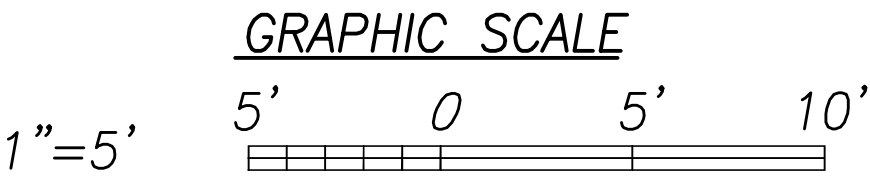
The Contractor shall not disturb or excavate into existing rock fill.



SECTION A
Scale: 1"=5'

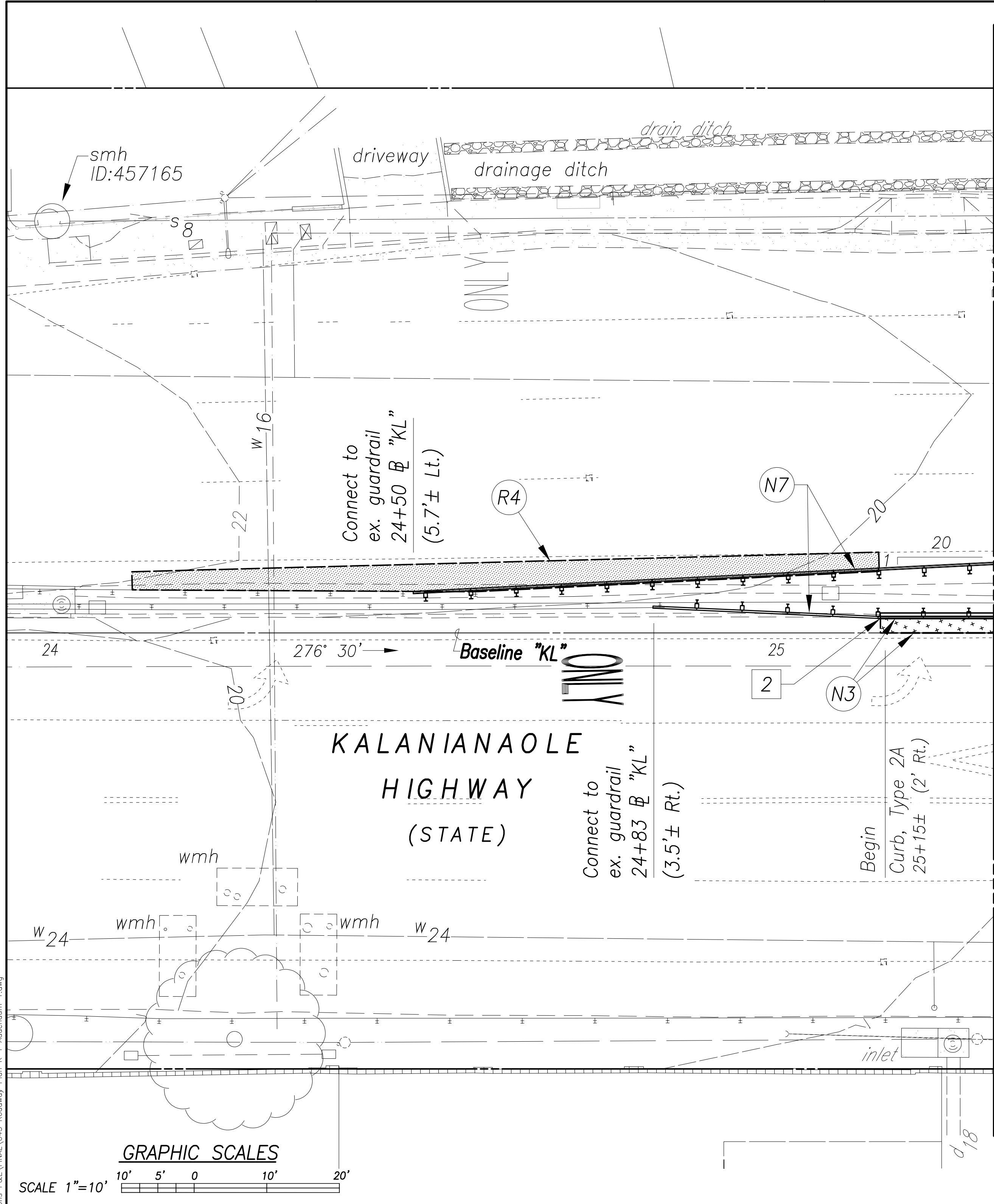
SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
No.	

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Conrad Higashimura

12/09/20	Added note on rock fill.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION EXISTING CONDITIONS Kalaniana'ole Hwy & Kalaniiki St ADDITIVE ALTERNATE #2 Traffic Signal Modernization, Oahu, Phase 1 Federal-Aid Project No. STP-0300(163)R Scale: 1"=5' Date: Oct. 2020 SHEET No. R-23 OF 81 SHEETS	



Curve Data (at Intersection of Kalanianaʻole Hwy., Kalaniiki St., and Waieli St.)										
	1	2	3	4	5	6	7	8	9	10
Δ	2° 34' 58.68"	90° 56' 24.5"	4° 00' 00"	78° 00' 00"	20° 10' 16"	141° 02' 32"	18° 47' 12"	22° 46' 16"	137° 37' 03"	19° 37' 41"
$\Delta/2$	1° 17' 29.34"	45° 28' 12.25"	2° 00' 00"	39° 00' 00"	10° 05' 08"	70° 31' 46"	9° 53' 36"	11° 23' 08"	68° 48' 31.5"	9° 48' 50.5"
R	367.00'	32.00'	120.00'	40.00'	58.00'	1.00'	48.00'	43.00'	1.00'	48.00'
T	8.27'	32.53'	4.19'	32.39'	10.32'	2.83'	7.94'	8.66'	2.58'	8.30'
Ch	16.54'	45.62'	8.38'	50.35'	20.31'	1.89'	15.69'	16.98'	1.86'	16.35'
Lc	16.54'	50.79'	8.38'	54.45'	20.42'	2.46'	15.74'	17.09'	2.40'	16.43'

Reconstruction Callouts:

- R1 Curb & Gutter, Type 2DG. 4 L.F. min. unless noted on plan. For connection to existing curb and gutter, see details on sheets 80 and 81.
- R2 Curb, Type 2D Modified. 4 L.F. unless noted on plan.
- R3 Concrete Sidewalk (per Standard Plan D-15)
- R4 Limits of asphalt pavement restoration over trenching. See State detail $\frac{A}{45, 46, 47|80}$ and City detail $\frac{B}{46|80}$.
- R5 Limits of asphalt concrete pavement restoration over trenching and over concrete pavement. See detail $\frac{C}{46|80}$.
- R6 Limits of asphalt concrete pavement restoration for concrete jacket over existing 36-inch drain line. See Pavement Restoration over Concrete Jacket Detail on sheet 47 and concrete jacket details on sheet 191.

New Construction Callouts:

- N1 Curb & Gutter, Type 2DG Modified. For connection to existing curb and gutter, see details on sheet 81 and 82.
- N2 Concrete Sidewalk per Standard Plan D-15. For connection to existing sidewalk, see details on sheets 81 and 82.
- N3 Curb, Type 2A Modified and limits of asphalt concrete pavement restoration for installation of curb. For details, see sheet 51.
- N4 Limits of asphalt pavement restoration for installation of curb ramps, curb and gutter, and curb. For details, see sheets 81 and 82 and curb ramp plans.
- N5 14-inch Concrete Pavement. For details, see sheet 49.
- N6 Curb, Type 2D Modified. For connection to existing curb, see details on sheet 81.
- N7 Guardrail, MASH compliant.
- N8 Terminal Impact Attenuator – HDOT Approved MASH Compliant, TL-3; and Transition Section. The Transition Section shall be incidental to the Terminal Impact Attenuator and will not be paid for separately.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	45R	291

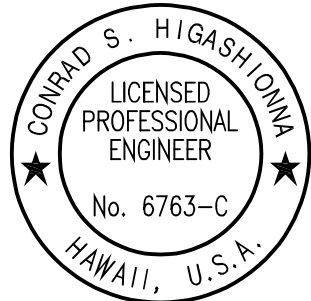
New Construction Callouts continued:

- N9 11 L.F. Reinforced Concrete Jacket on 8-inch sewer. See duct line profiles and concrete jacket details on sheets 198 and 201.
- N10 Relocate water meter, see sheet 57.
- N11 HMA Pavement State Mix No. V, 2-inch min. thick
- N12 HMA Pavement State Mix No. V, 4-inch± thickness
- N13 Apply Tack Coat either SS-1 or SS-1H Emulsified Asphalt
- N14 Hot Mix Asphalt (HMA) Sidewalk 2-inch thick, HMA Pavement State Mix No. V 4-inch thick, Aggregate Base Course 6-inch thick, Scarify and re-compact to 95% relative compaction
- N15 Fill void with Aggregate Base Course
- N16 Install new Detectable Warning Mat at existing curb ramp to remain. The work includes removing existing detectable warning mat and patching of concrete ramp, if needed. The cost for removal and ramp repair shall be incidental to this contract item and shall not be paid for separately.
- N17 14-inch Concrete Pavement. For details, see sheet 80.

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

ORIGINAL PLAN	No.
NOTE BOOK	

Dec 09, 2020 - 4:31pm
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\045 Roadway Plan K 1 Addendum 1.dwg



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Conrad Higashimura

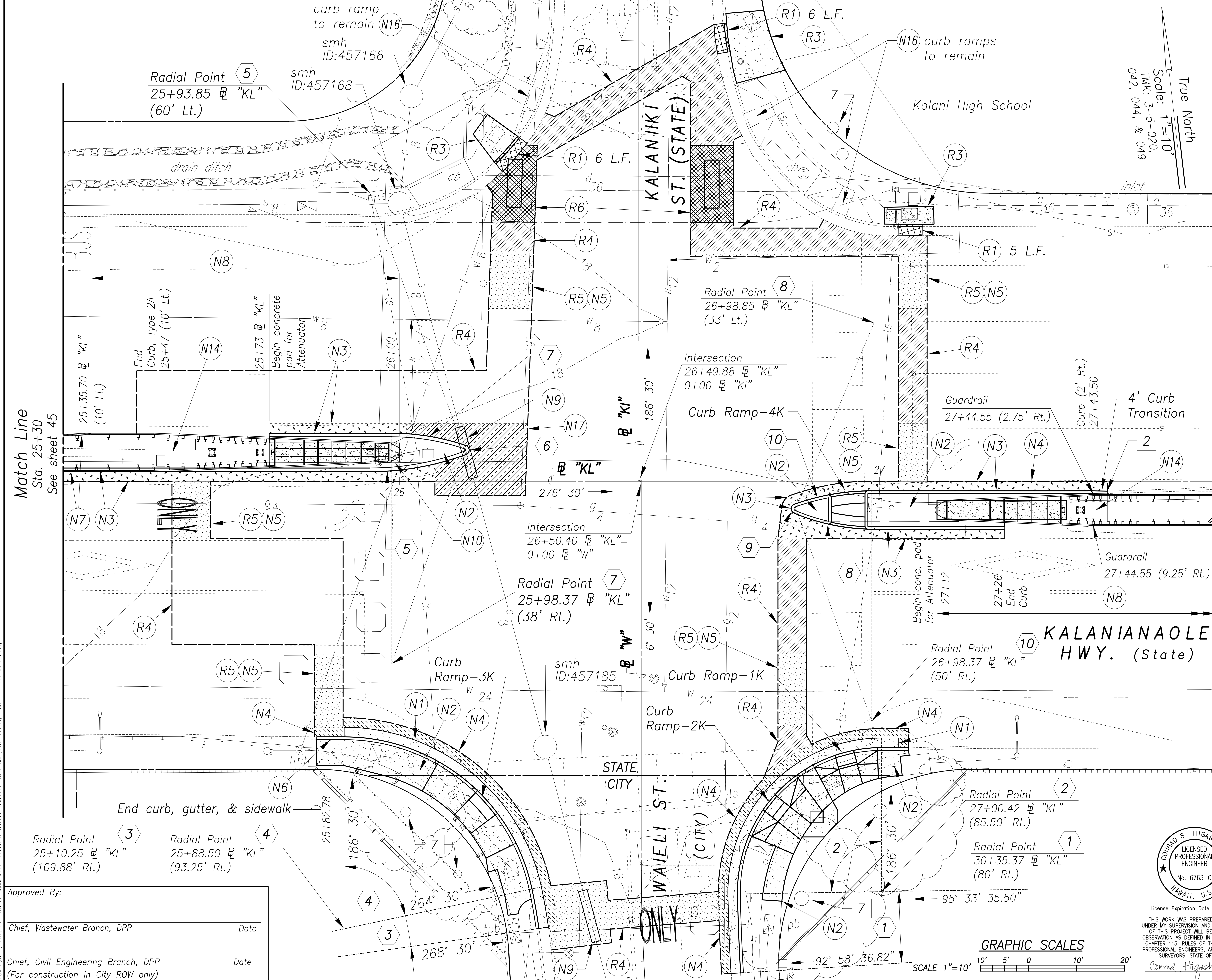
12/09/20 Revised New Construction Callout N8.

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
ROADWAY PLAN
Kalanianaʻole Hwy & Kalaniiki St
ADDITIVE ALTERNATE #2
Traffic Signal Modernization, Oahu, Phase 1
Federal-Aid Project No. STP-0300(163)R
Scale: 1"=10' Date: Oct. 2020
SHEET No. R-24 OF 81 SHEETS

Dec 06, 2020-5:50pm
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DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
CHECKED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

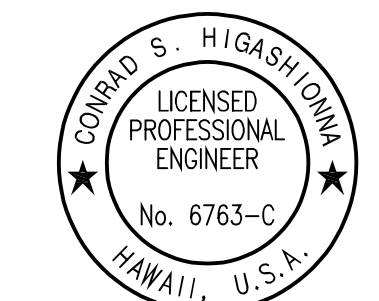


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	ADD.46	291

- Notes:
- For Bench Mark, control points, and survey ties; see Demolition Plan sheet 26.
 - Match into existing curb. Provide smooth connection.
 - See curb ramp plans for additional sidewalk, curb, and gutter details.
 - For 2 & 4 curb return profiles, see sheet 48.
 - The cost for reconstruction over traffic signal ductlines shall be incidental to the installation of Traffic Signal Ductlines and will not be paid for separately. This includes the following reconstruction callouts:
R1 R2 R3 R4 R5 R6
 - The cost for 14-inch P.C.C. pavement shall be paid for under Section 411 - Portland Cement Concrete Pavement. This includes the following new construction callouts:
N5 N17
 - Existing tree(s) to remain. The Contractor shall establish tree protection zones.

Approved By: _____ Date _____
Chief, Wastewater Branch, DPP

Chief, Civil Engineering Branch, DPP
(For construction in City ROW only)



License Expiration Date 04-30-22
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Conrad Higashimura

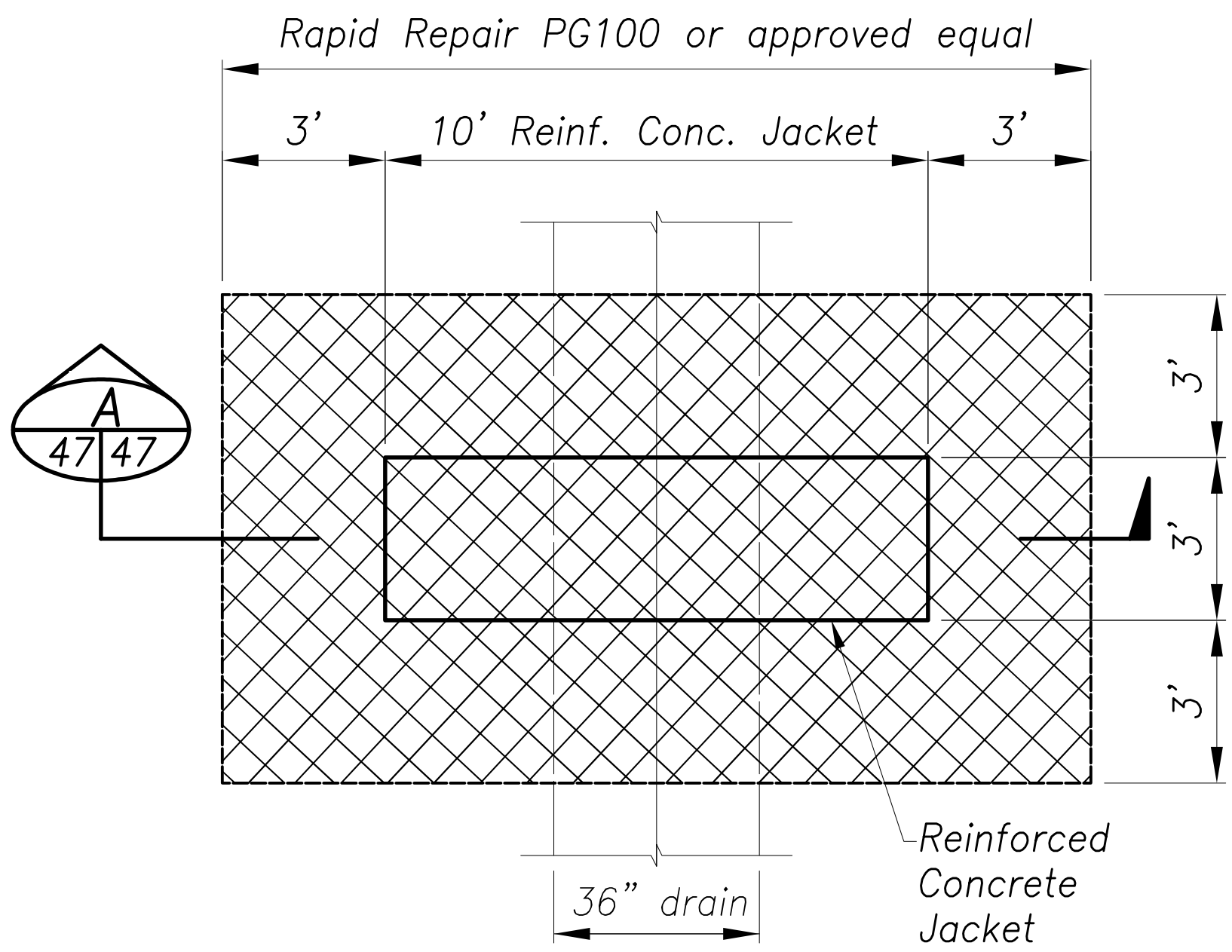
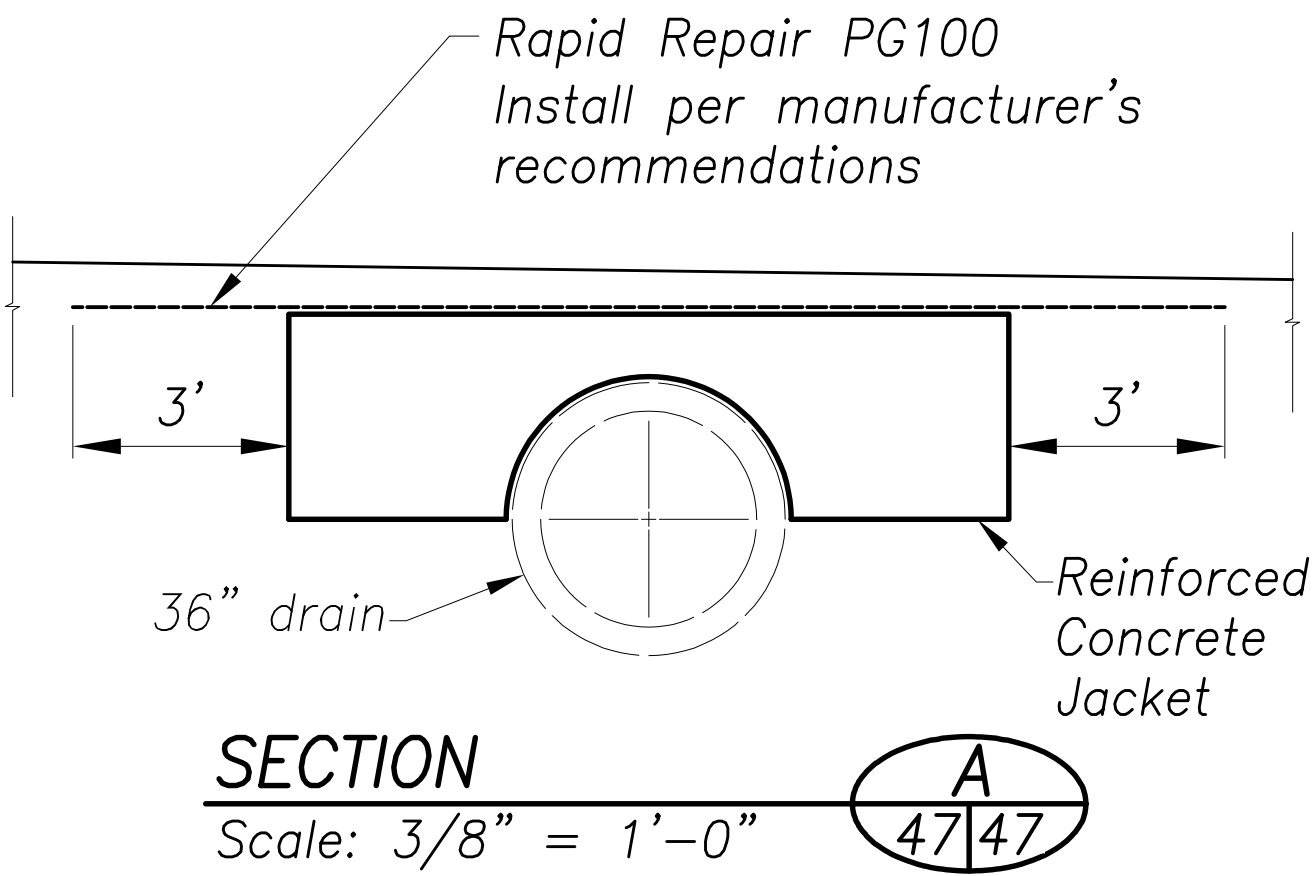


12/09/20	Added Note 7.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
ROADWAY PLAN	
Kalaniana'ole Hwy & Kalaniiki St	
ADDITIVE ALTERNATE #2	
Traffic Signal Modernization, Oahu, Phase 1	
Federal-Aid Project No. STP-0300(163)R	
Scale: 1"=10'	Date: Oct. 2020
SHEET No. R-25 OF 81 SHEETS	

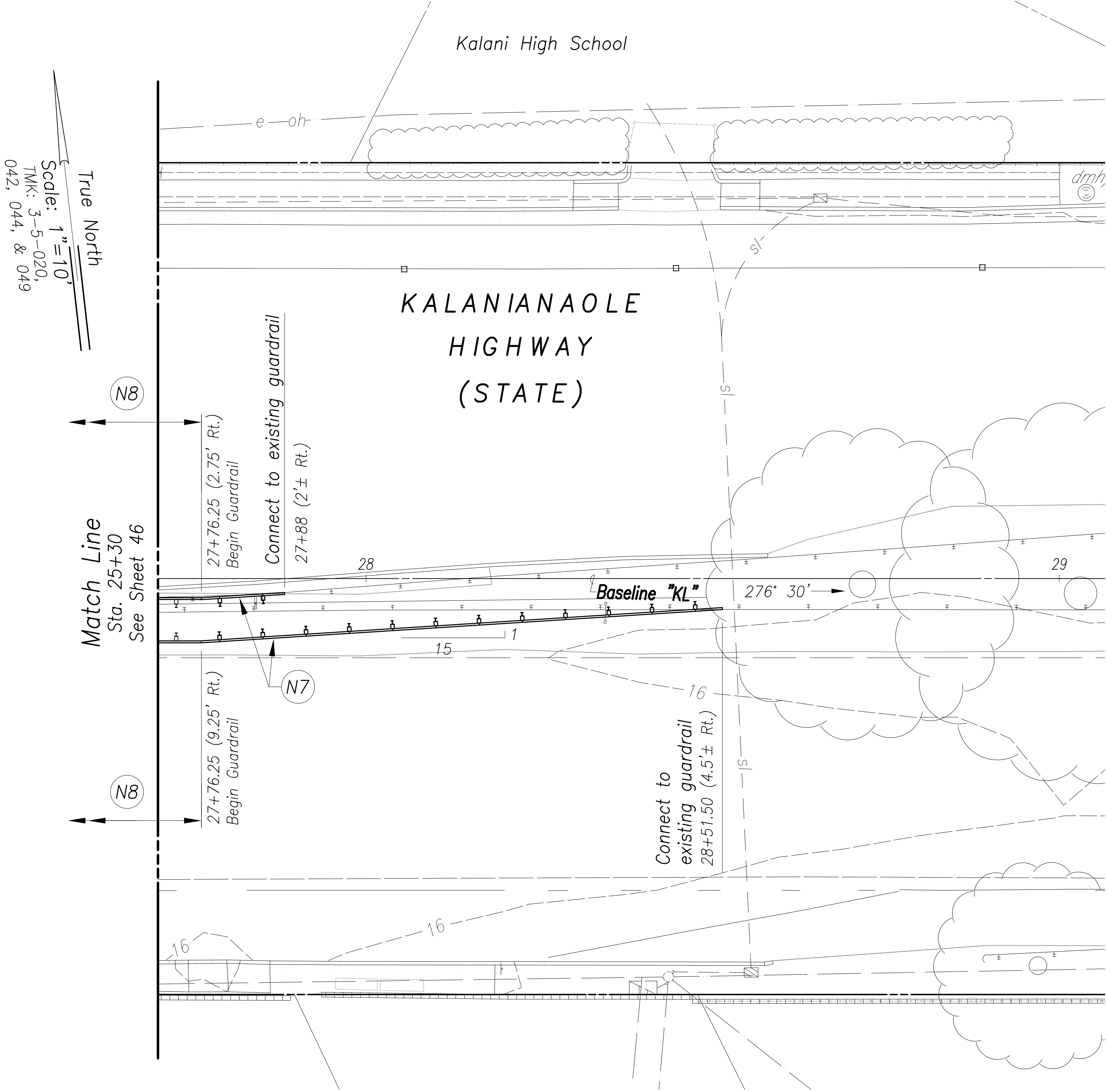
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	47R	291

Notes:

1. The cost for furnishing and installation of Rapid Repair PG100 or approved equal shall be incidental to the Reinforced Concrete Jacket.
3. For Reinforced Concrete Jacket details, see sheet 191.

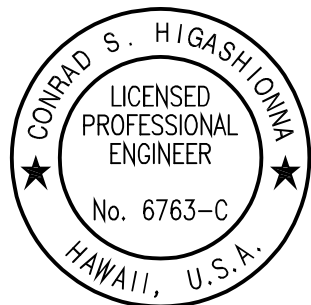
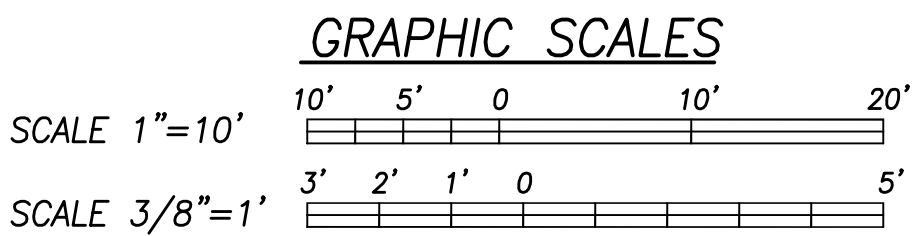


PAVEMENT RESTORATION OVER CONCRETE JACKET DETAIL
Scale: 3/8" = 1'-0"



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

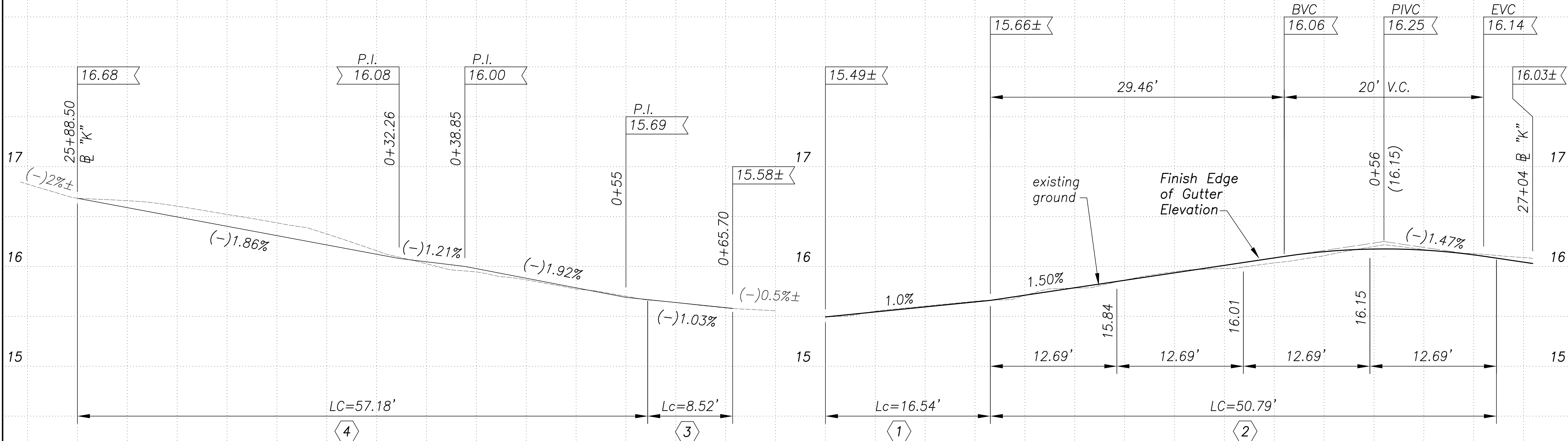
Dec 09, 2020--3:28pm
N:\CAO\DWG\2015\1512-Traffic Signal Modernization @ Various Locations PAVE\FINAL\047 Roadway Plan K 3 Addendum 1.dwg



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Conrad Higashimura

12/09/20	Called out beginning of new guardrail. Added New Construction Callout N8.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION ROADWAY PLAN Kalaniana'ole Hwy & Kalaniiki St ADDITIVE ALTERNATE #2 Traffic Signal Modernization, Oahu, Phase 1 Federal-Aid Project No. STP-0300(163)R Scale: 1"=10' Date: Oct. 2020 SHEET No. R-26 OF 81 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	48	291



PROFILE — WAIELI ST. WEST RETURN

Scale: Horiz. 1" = 5'
Vert. 1" = 6"

PROFILE — WAIELI ST. EAST RETURN

Scale: Horiz. 1" = 5'
Vert. 1" = 6"

Curve Data				
	1	2	3	4
Δ	2° 34' 58.68"	90° 56' 24.5"	4° 00' 00"	78° 00' 00"
Δ/2	1° 17' 29.34"	45° 28' 12.25"	2° 00' 00"	39° 00' 00"
R	367.00'	32.00'	122.00'	42.00'
T	8.27'	32.53'	4.26'	34.01'
Ch	16.54'	45.62'	8.52'	52.86'
Lc	16.54'	50.79'	8.52'	57.18'

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
No.	

New 18, 2020-Edison
N:\CADD\DWG\2015\1512-Traffic Signal Modernization @ Various Locations P&E\FINAL\048 Curb Return Waieli.dwg

GRAPHIC SCALE

1"=5'

1"=6"

5' 0 5' 10'

6" 0 6" 1'

Approved By:

Chief, Civil Engineering Branch, DPP

(For construction in City ROW only)

Date

CONRAD S. HIGASHIOWA

LICENSED PROFESSIONAL ENGINEER

No. 6763-C

HAWAII, U.S.A.

License Expiration Date 04-30-22

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Conrad Higashinoma

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

CURB RETURN PROFILES

Kalanianaʻole Hwy & Kalaniki St

ADDITIVE ALTERNATE #2

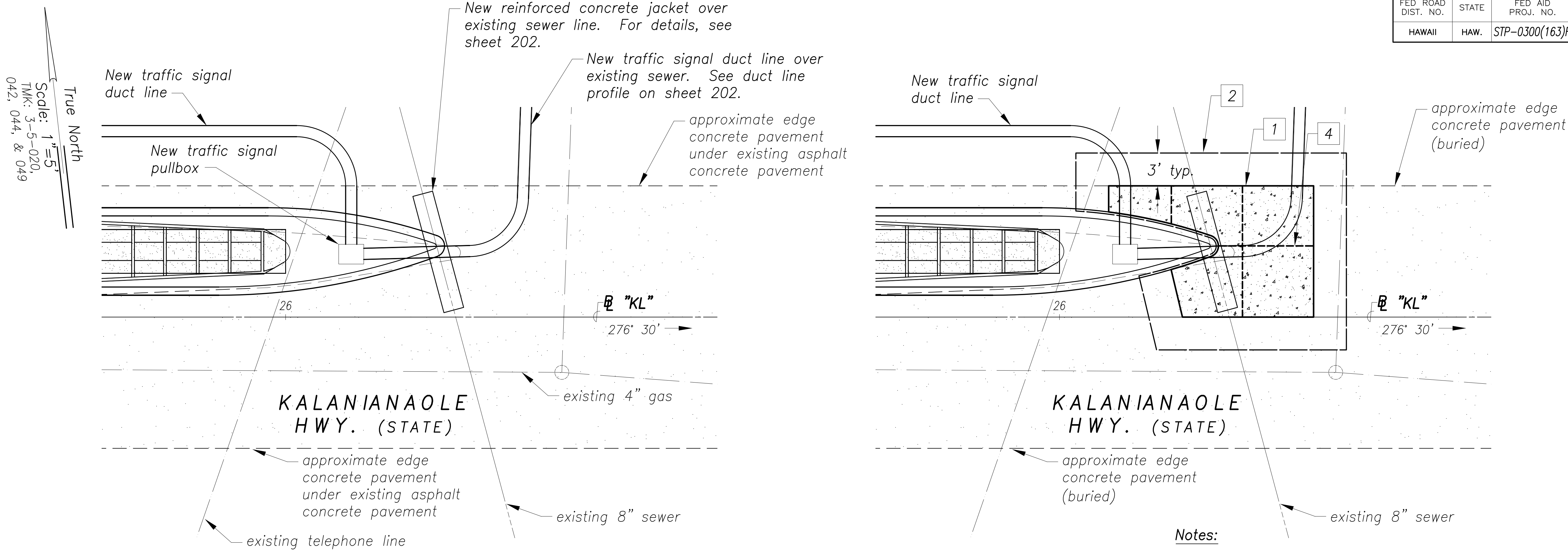
Traffic Signal Modernization, Oahu, Phase 1

Federal-Aid Project No. STP-0300(163)R

Scale: As shown Date: Oct. 2020

SHEET No. R-27 OF 81 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0300(163)R	2020	49	291



PORTLAND CEMENT CONCRETE PAVEMENT REPLACEMENT

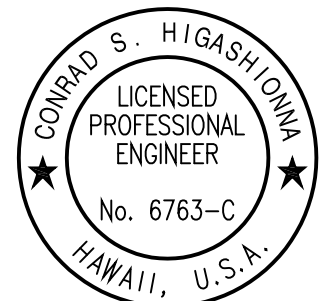
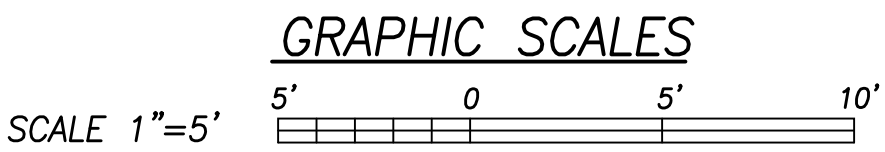
Scale: 1" = 5'

Notes:

- 1 New Portland Cement Concrete pavement, 14" thick, with #5 @ 12" o.c. each way.
- 2 HMA Pavement State Mix No. V, 4-inch minimum thickness or match existing thickness whichever is greater; and Rapid Repair PG100, furnish and install per manufacturer's recommendations.
- 3 The Contractor shall install construction and expansion joints in P.C.C. pavement, to match existing joints in P.C.C. pavement.
- 4 Expansion Joint (typical)
- 5 The Contractor shall dowel all connections to existing P.C.C. pavement. For details, see sheet 80. The Contractor shall dowel at joints between new slabs.

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

New 20_2020-12-31.mxd N:\CADD\DWG\2020\101512-Traffic Signal Modernization @ Various Locations P&E\FINAL\049 Roadway Plan.dwg



License Expiration Date 04-30-22
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN HAWAII TITLE 16, CHAPTER 115, RULES OF THE BOARD OF PROFESSIONAL ENGINEERS, ARCHITECTS AND SURVEYORS, STATE OF HAWAII.

Conrad Higashimura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ROADWAY PLAN

Kalanianaʻole Hwy & Kalaniiki St

ADDITIVE ALTERNATE #2

Traffic Signal Modernization, Oahu, Phase 1

Federal-Aid Project No. STP-0300(163)R

Scale: 1"=10' Date: Oct. 2020

SHEET No. R-28 OF 81 SHEETS