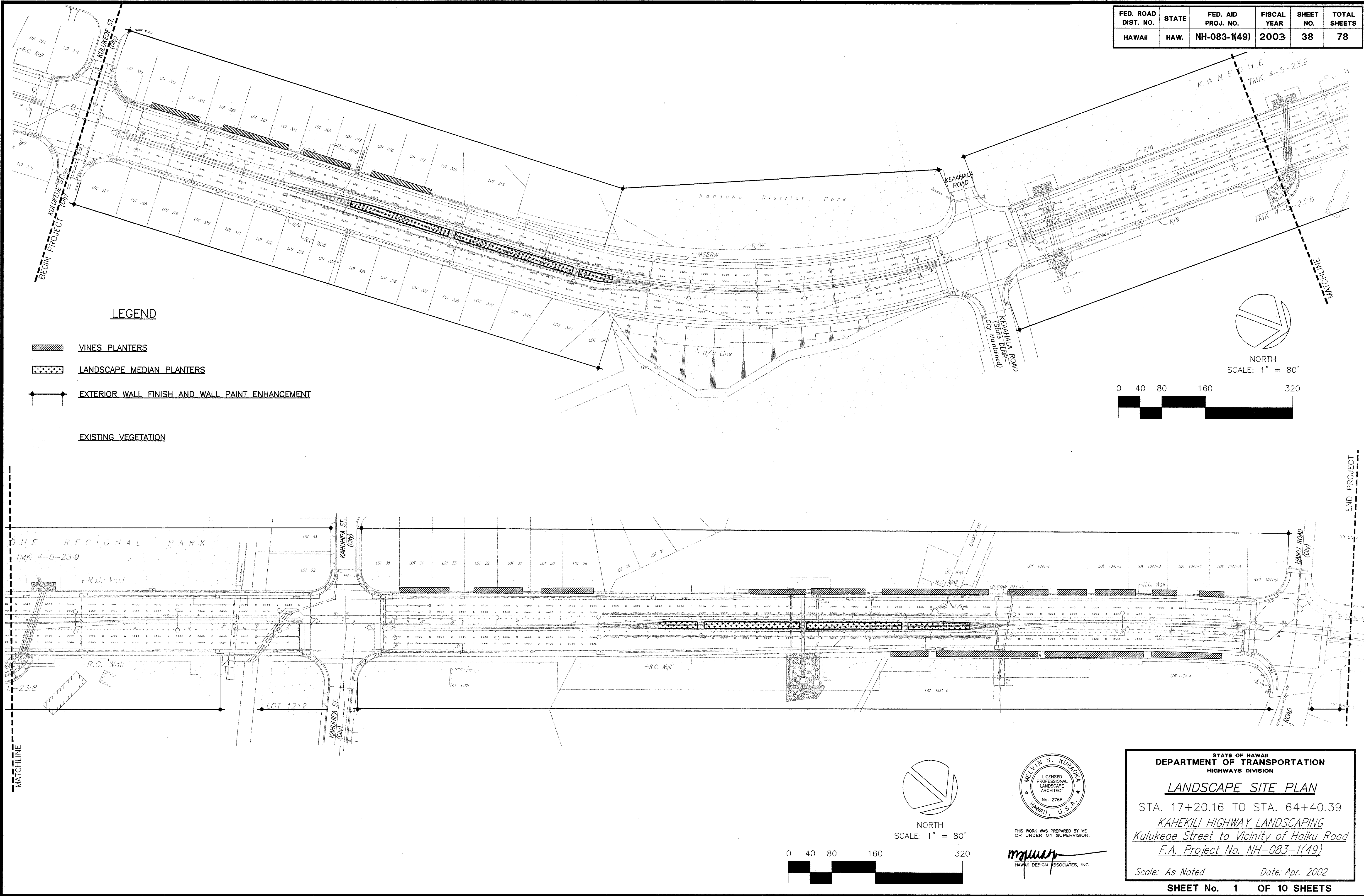


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	38	78



ORIGINAL PLAN	DATE
NOTED BY	12/02
DESIGNED BY	12/02
QUANTITIES BY	12/02
CHECKED BY	12/02

MELVIN S. KURAKA
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 2768
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

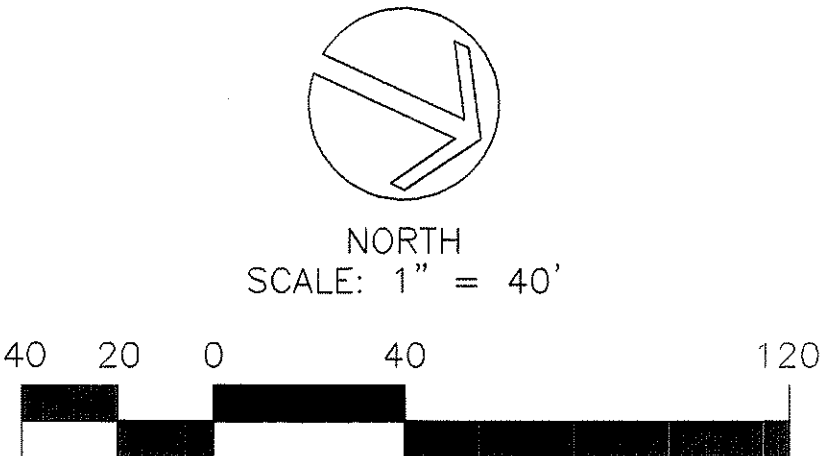
mjmurphy
HAWAII DESIGN ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

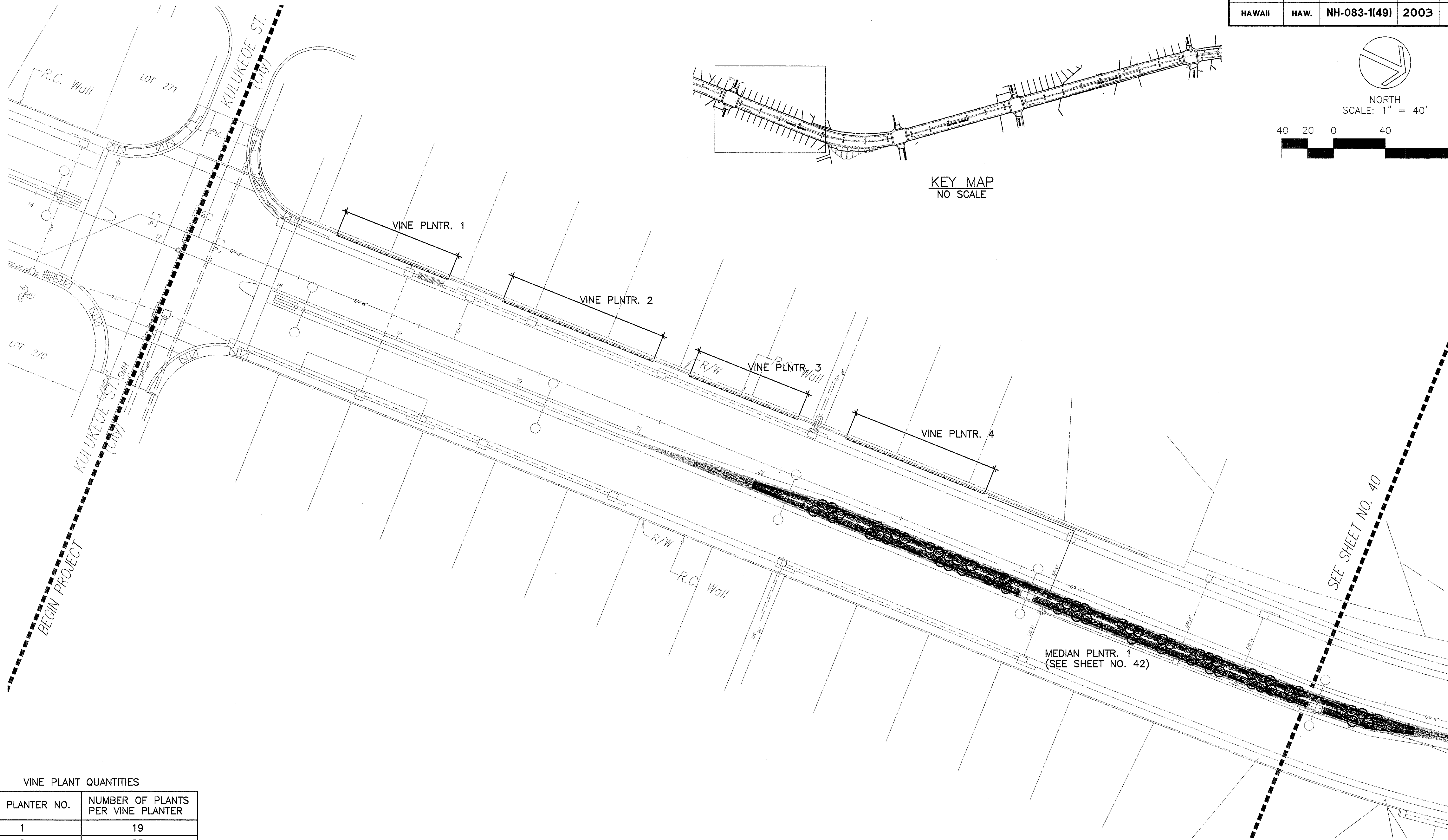
LANDSCAPE SITE PLAN
STA. 17+20.16 TO STA. 64+40.39
KAHEKILI HIGHWAY LANDSCAPING
Kulukee Street to Vicinity of Haiku Road
F.A. Project No. NH-083-1(49)
Scale: As Noted Date: Apr. 2002

SHEET No. 1 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	39	78



KEY MAP
NO SCALE



VINE PLANT QUANTITIES

VINE PLANTER NO.	NUMBER OF PLANTS PER VINE PLANTER
1	19
2	25
3	18
4	23
TOTAL	85

VINES SHALL BE PLANTED AT 5' O.C.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	12/02
No.	DESIGNED BY	12/02
	QUANTITIES BY	12/02
	CHECKED BY	



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Melvin S. Kurakia
HAWAII DESIGN ASSOCIATES, INC.

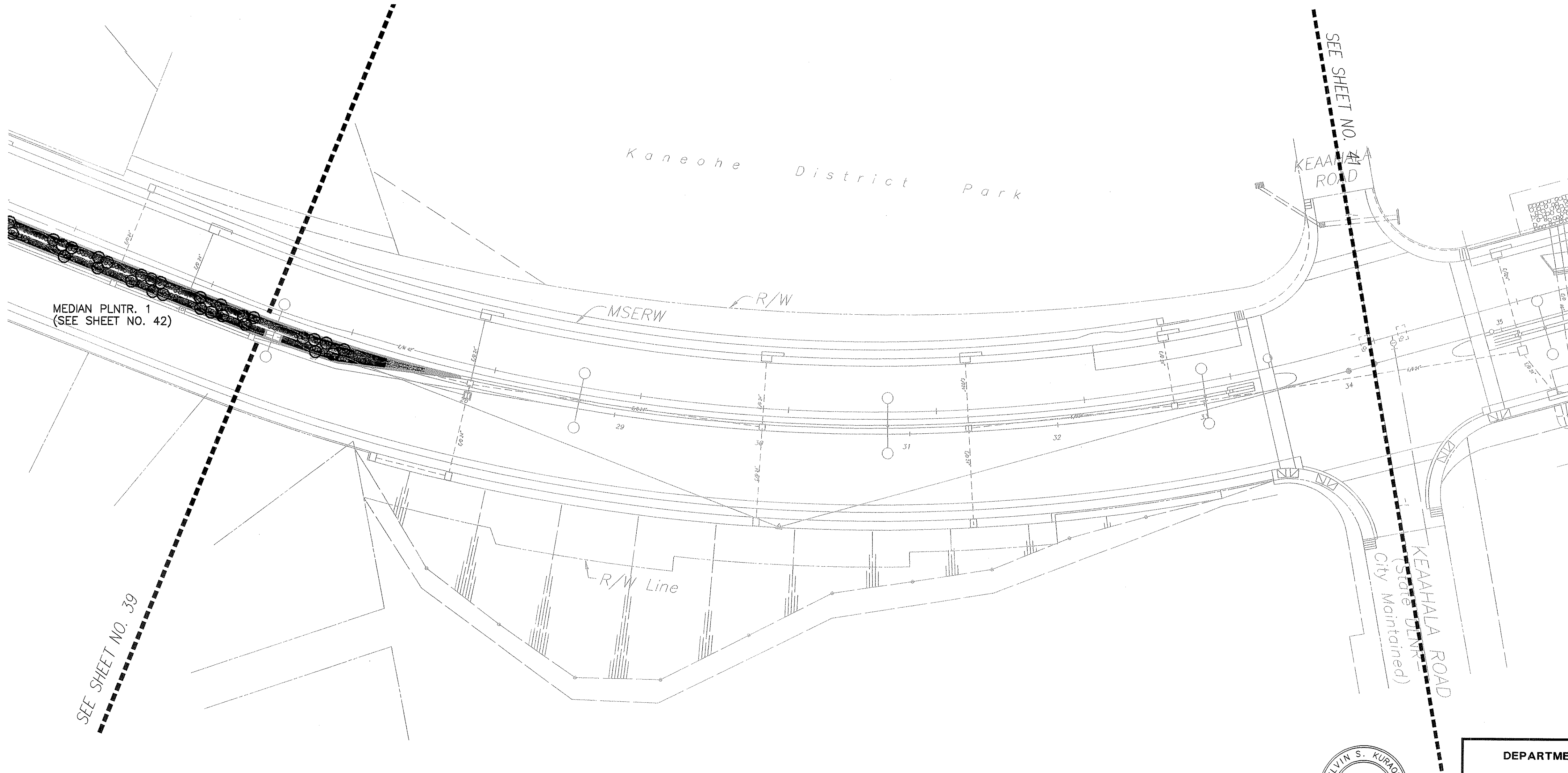
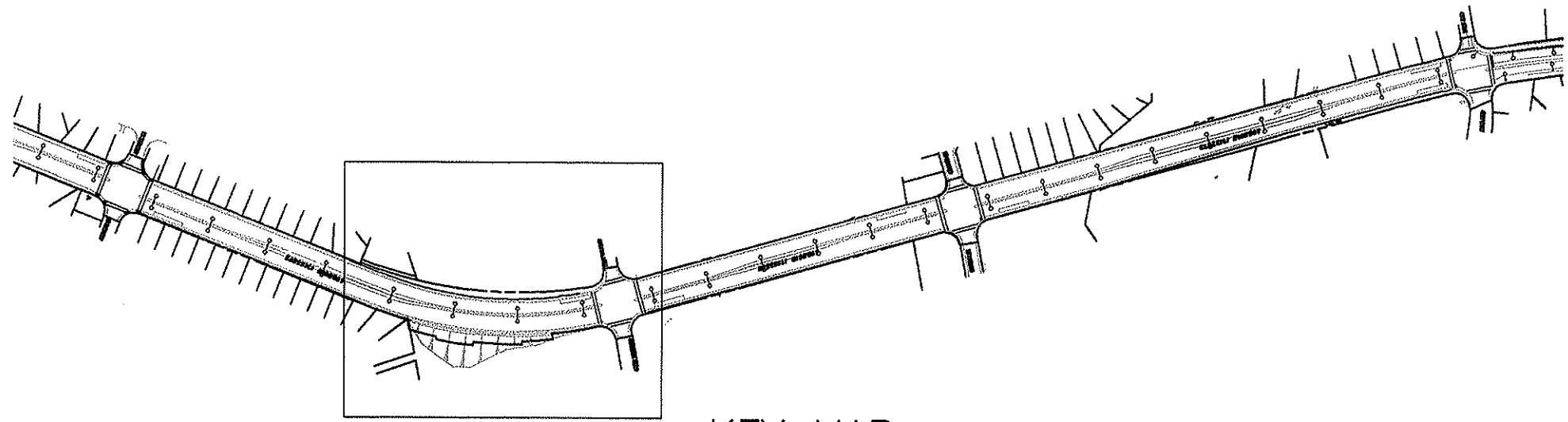
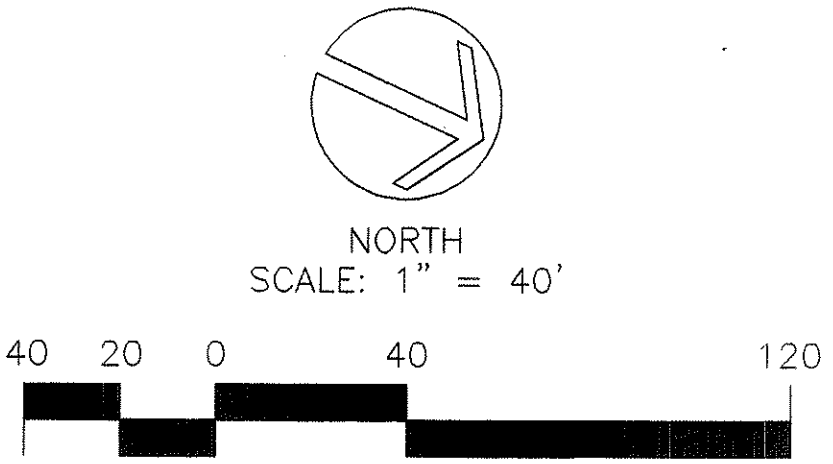
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

VINE PLANTING PLAN-1
STA. 17+20.16 TO STA. 26+54.95
KAHEKILI HIGHWAY LANDSCAPING
Kulukeoe Street to Vicinity of Haiku Road
F.A. Project No. NH-083-1(49)

Scale: As Noted
Date: Apr. 2002

SHEET No. 2 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	40	78



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	12/02
	DESIGNED BY	12/02
	QUANTITIES BY	12/02
NOTE BOOK	CHECKED BY	
	No.	



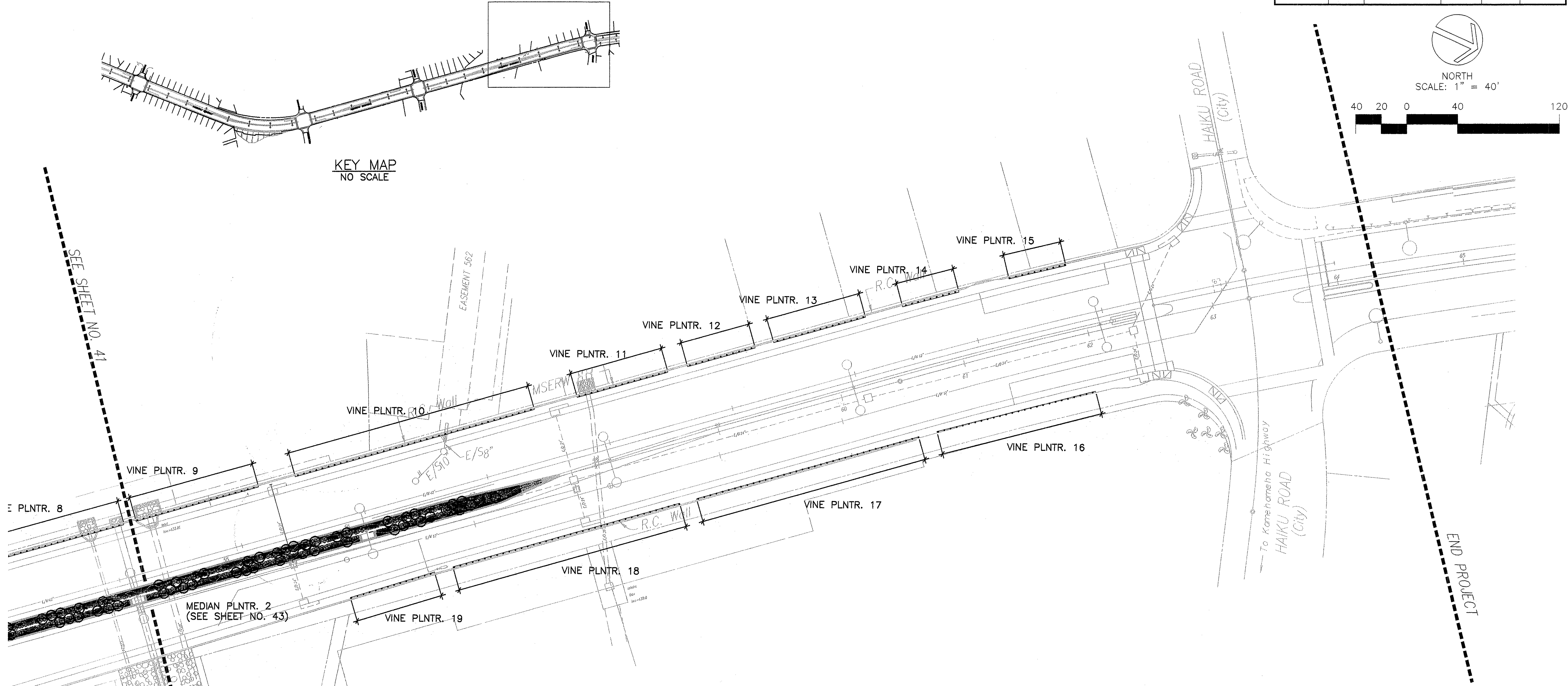
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

Melvin S. Kuroki
HAWAII DESIGN ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

VINE PLANTING PLAN-2
STA. 26+54.95 TO STA. 34+17.10
KAHEKILI HIGHWAY LANDSCAPING
Kulukeoe Street to Vicinity of Haiku Road
F.A. Project No. NH-083-1(49)
Scale: As Noted Date: Apr. 2002
SHEET No. 3 OF 10 SHEETS

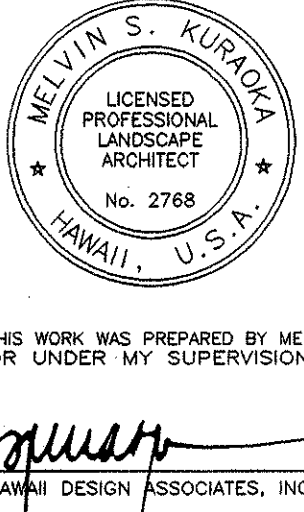
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	42	78



SURVEY PLOTTED BY	DATE
DESIGNED BY	12/02
NOTED BY	12/02
CHECKED BY	12/02

VINE PLANT QUANTITIES	
VINE PLANTER NO.	NUMBER OF PLANTS PER VINE PLANTER
8	SEE SHEET NO. 41
9	20
10	39
11	15
12	11
13	15
14	9
15	10
16	26
17	37
18	38
19	14
TOTAL	248

VINES SHALL BE PLANTED AT 5' O.C.

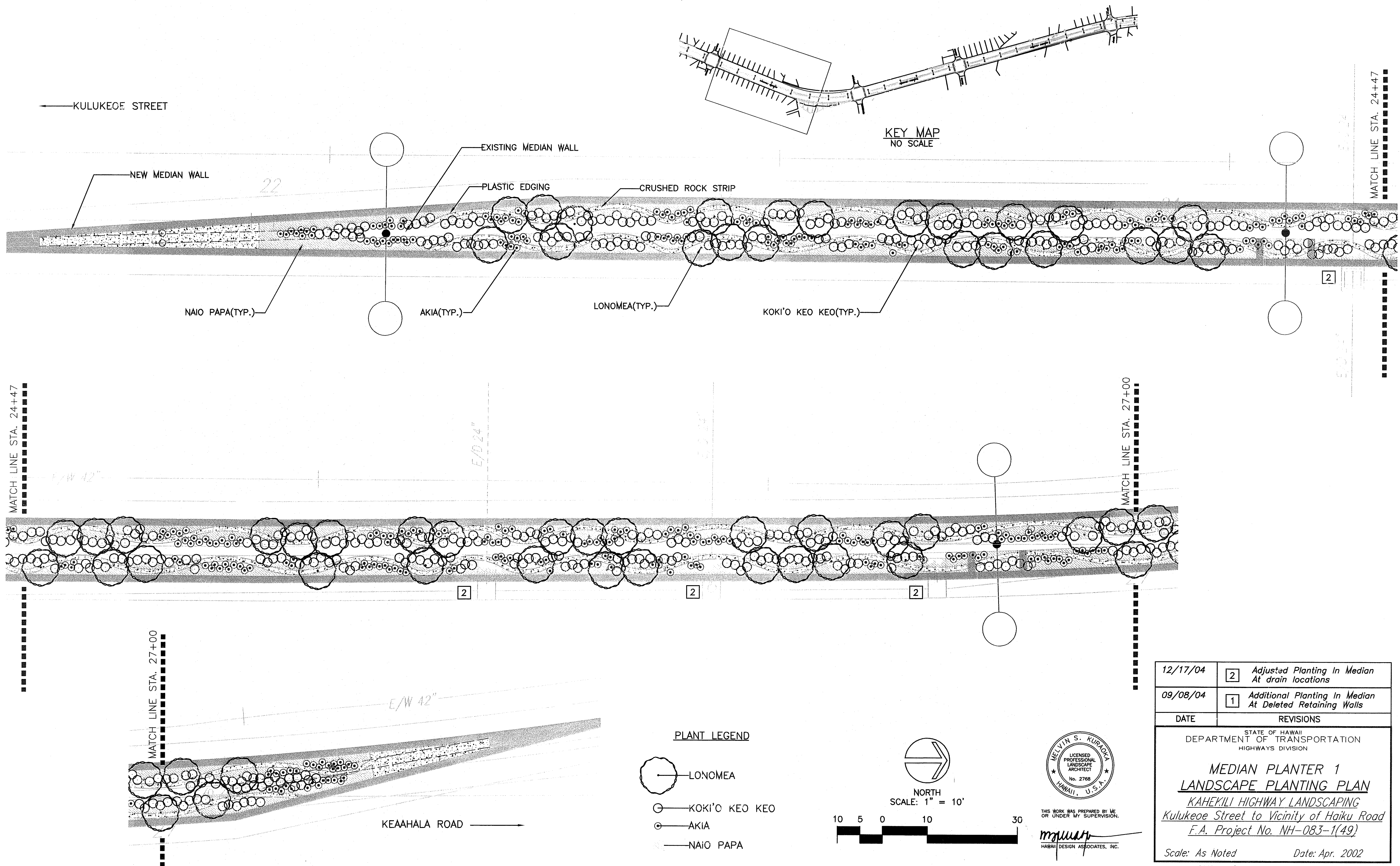


STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

VINE PLANTING PLAN-4
STA. 54+33.80 TO STA. 64+16.39
KAHEKILI HIGHWAY LANDSCAPING
Kulukee Street to Vicinity of Haiku Road
F.A. Project No. NH-083-1(49)

Scale: As Noted
Date: Apr. 2002

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	C.O.43	78



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	12/02
	DESIGNED BY	12/02
	QUANTITIES BY	12/02
	CHECKED BY	12/02

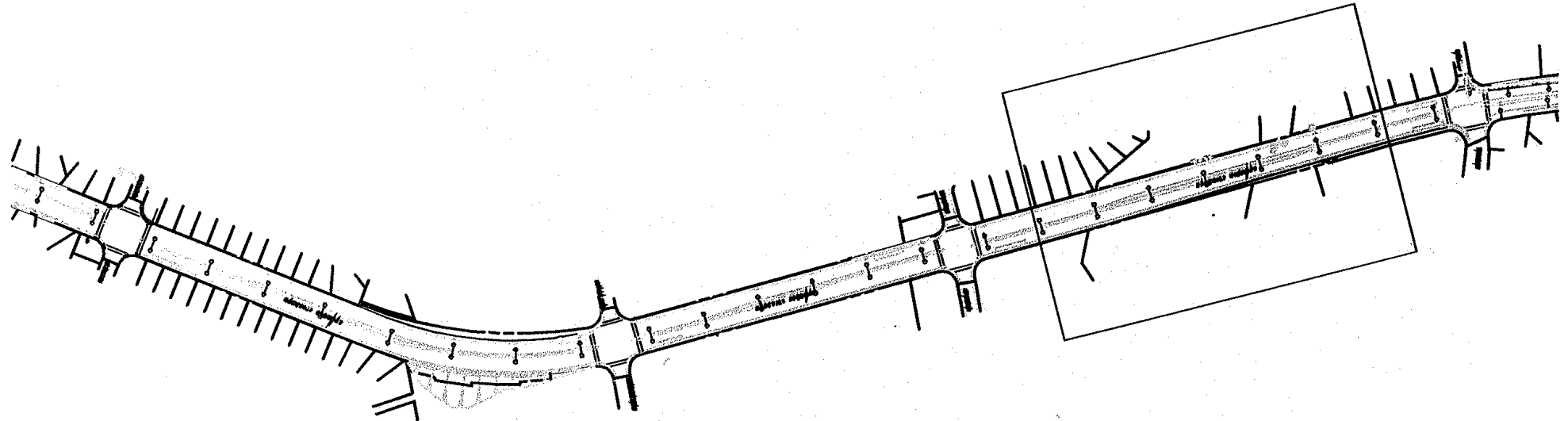
12/17/04	2	Adjusted Planting In Median At drain locations
09/08/04	1	Additional Planting In Median At Deleted Retaining Walls
DATE	REVISIONS	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION MEDIAN PLANTER 1 <u>LANDSCAPE PLANTING PLAN</u> <u>KAHEKILI HIGHWAY LANDSCAPING</u> <u>Kuluakeoe Street to Vicinity of Haiku Road</u> <u>F.A. Project No. NH-083-1(49)</u> Scale: As Noted Date: Apr. 2002	
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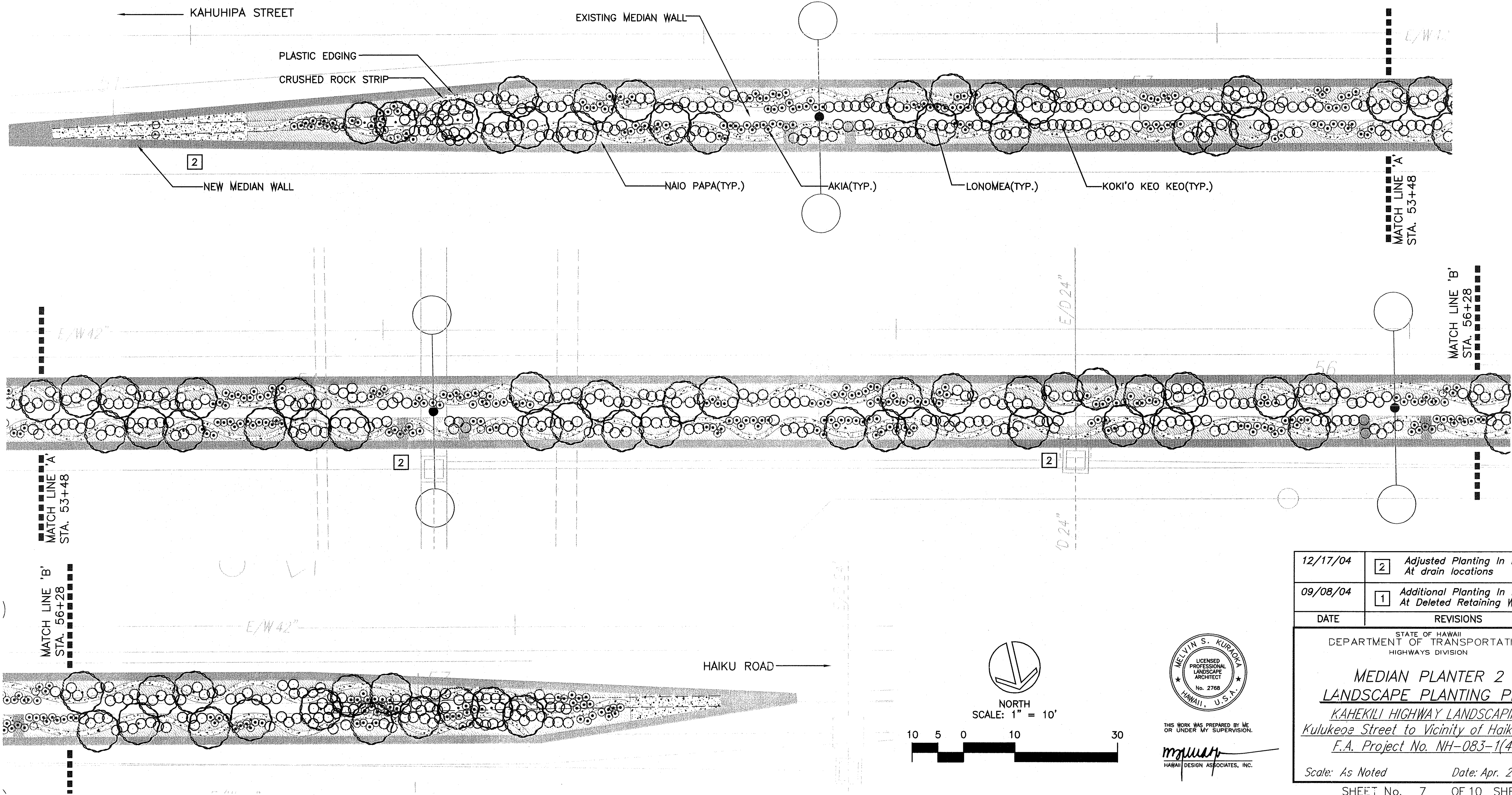
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	C.O.44	78

PLANT LEGEND

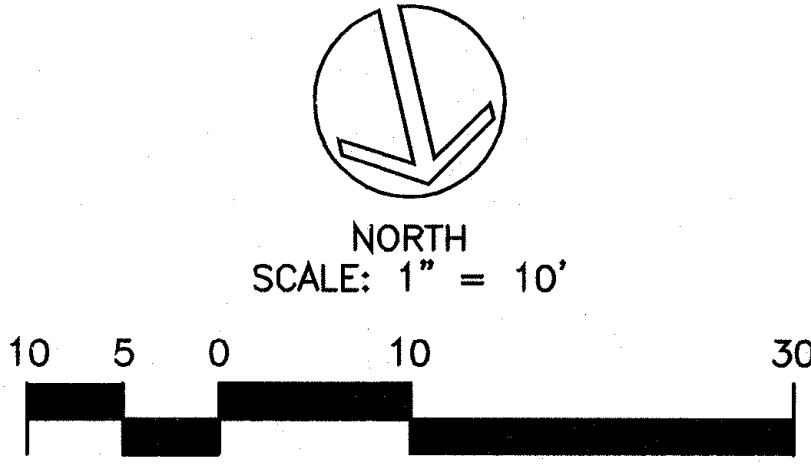
- LONOMEA
- KOKI'O KEO KEO
- AKIA
- NAIO PAPA



KEY MAP
NO SCALE



ORIGINAL PLAN	SURVEY PLATTED BY	DATE
NOTE BOOK	DRAWN BY	12/02
	DESIGNED BY	12/02
	QUANTITIES BY	12/02
	CHECKED BY	12/02



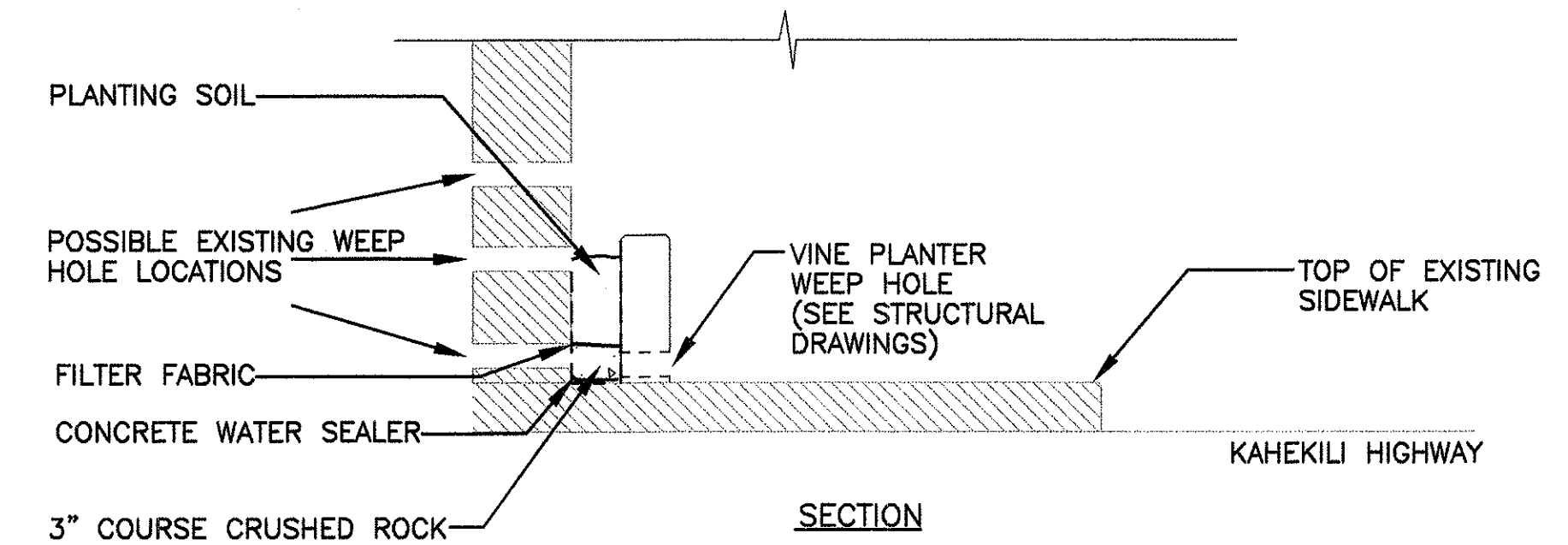
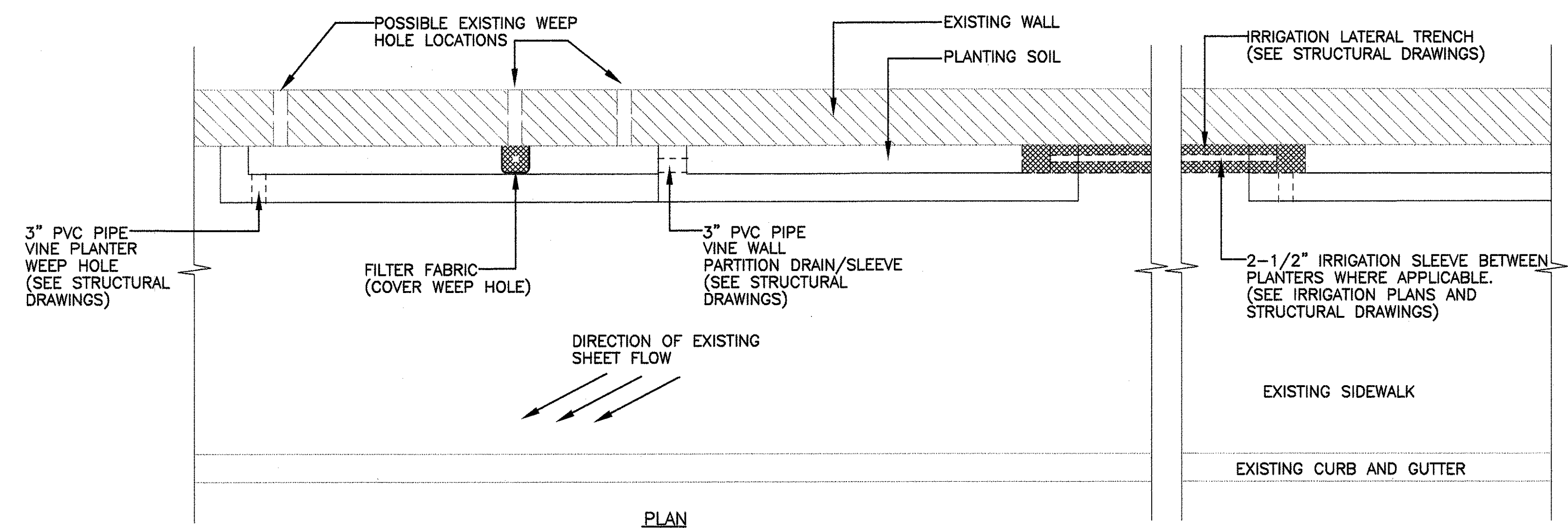
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

 HAWAII DESIGN ASSOCIATES, INC.

12/17/04	2	Adjusted Planting In Median At drain locations
09/08/04	1	Additional Planting In Median At Deleted Retaining Walls
DATE	REVISIONS	

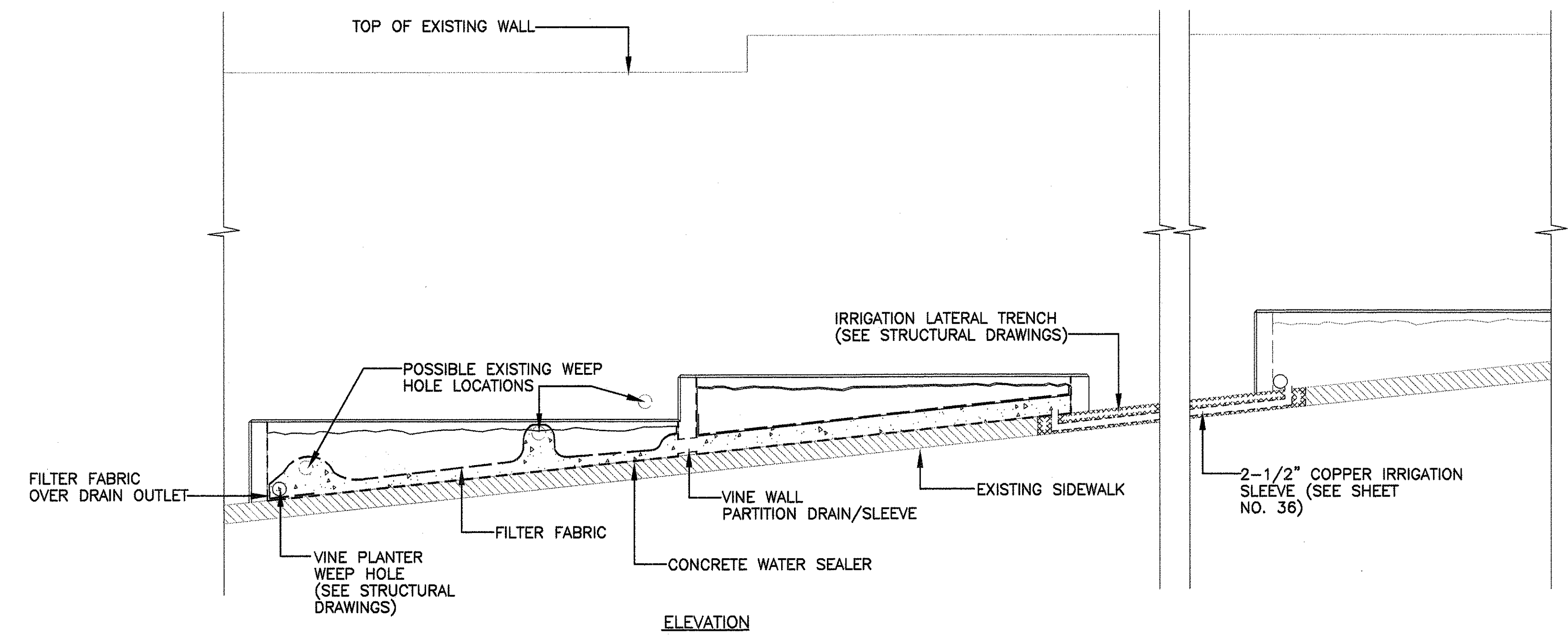
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
MEDIAN PLANTER 2 <u>LANDSCAPE PLANTING PLAN</u> <u>KAHEKILI HIGHWAY LANDSCAPING</u> <u>Kulukeya Street to Vicinity of Haiku Road</u> <u>F.A. Project No. NH-083-1(49)</u>	
Scale: As Noted	Date: Apr. 2002
SHEET No. 7 OF 10 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	45	78



2
45 TYPICAL SECTION OF VINE WALL
SCALE: 1"=20'-0"

NOTE:
SEE STRUCTURAL DRAWINGS
FOR CONSTRUCTION PLANS.



1
45 TYPICAL PLAN AND ELEVATION OF VINE WALL
SCALE: 1"=20'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	12/02
DESIGNED BY	12/02
QUANTITIES BY	12/02
CHECKED BY	12/02



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ME OR UNDER MY SUPERVISION

Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

VINE PLANTER DETAILS

*KAHEKILI HIGHWAY LANDSCAPING
Kulukee Street to Vicinity of Haiku Road
F.A. Project No. NH-083-1(49)*

Scale: As Noted Date: Apr. 2002

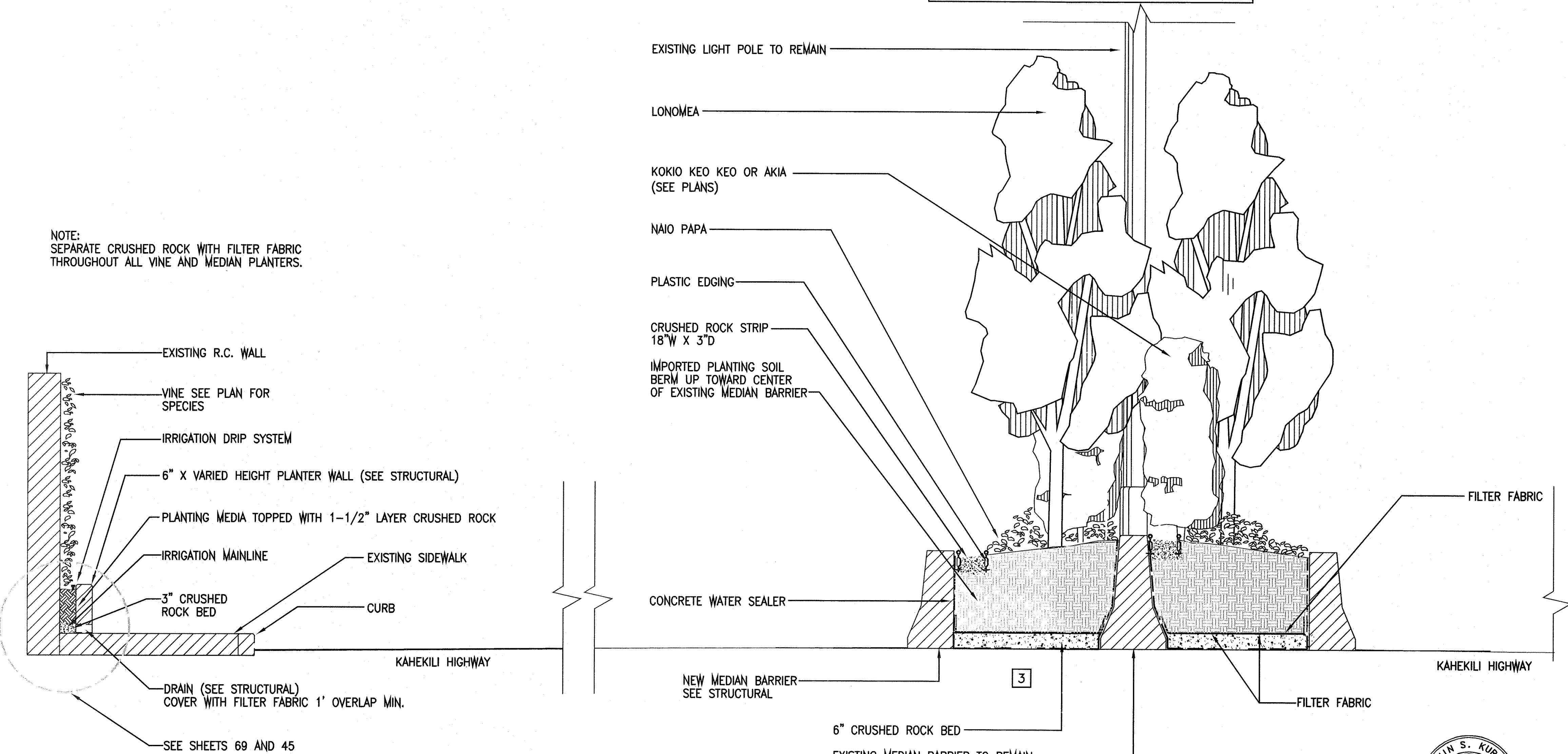
SHEET No. 8 OF 10 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2002	C.O.46	78

PLANT LIST

QUANTITY	COMMON NAME	BOTANICAL NAME	SIZE	REMARKS
127 EA.	LONOEA	SAPINDUS OAHUENSIS	25 GAL.	2' CLEAR, 4' SPREAD
998 EA.	KOKIO KEO KEO	HIBISCUS ARNOTTIANUS	5 GAL.	30" HEIGHT, 18" SPREAD
717 EA.	AKIA	WIKSTROEMIA UVA-URSI	1 GAL.	12" HEIGHT, 6" SPREAD
785 EA.	NAIO PAPA	MYOPORUM SANDWICENSIS VAR. 'PAPA'	1 GAL.	6" HEIGHT, FULL, 30" O.C., STAGGERED
408 EA.	CREEPING FIG	FICUS PUMILA	4" POT	6" HEIGHT, 5' O.C.
1,520 CY.	IMPORTED PLANTING SOIL			PER PLANS
8,786 SF.	ORGANIC SOIL AMENDMENTS			2" DEPTH OVER ALL NEW PLANTING AREAS
62 CY.	COVER MULCH			2" DEPTH, OVER ALL NEW PLANTING AREAS
121 CY.	CRUSHED ROCK			NO. 3 GRADE 'A' FINE, PER DETAILS
2,400 LF.	ROOT BARRIER	'TYPAR' BIOBARRIER		
4,860 LF.	PLASTIC EDGING	COBRA 'HI-TEST'		
32,900 SF.	CONCRETE WATER SEALER			
23,400 SY.	FILTER FABRIC			

QUANTITIES SHOWN ON PLANT LIST ARE FOR REFERENCE ONLY. VERIFY ACTUAL QUANTITIES AS SHOWN ON PLAN.



1 TYPICAL SECTION THROUGH VINE PLANTER AND MEDIAN PLANTER
46 NOT TO SCALE

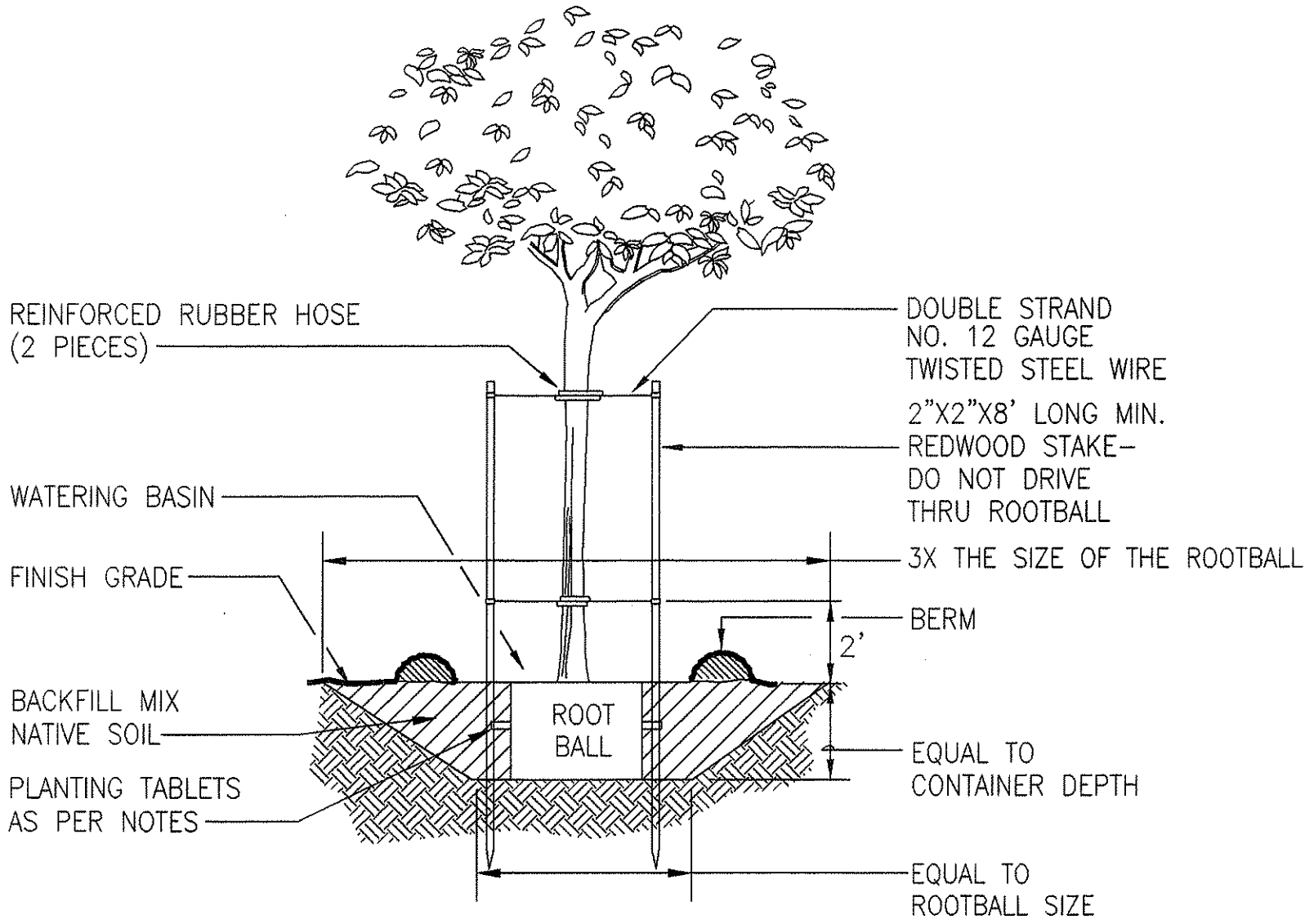
SURVEY PLOTTED BY	DATE
DRAWN BY	12/02
TRACED BY	12/02
CHECKED BY	12/02
ORIGINAL PLAN	
NOTE BOOK	
No.	

MELVIN S. KURAKA
LICENSED PROFESSIONAL LANDSCAPE ARCHITECT
No. 2788
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
HAWAII DESIGN ASSOCIATES, INC.

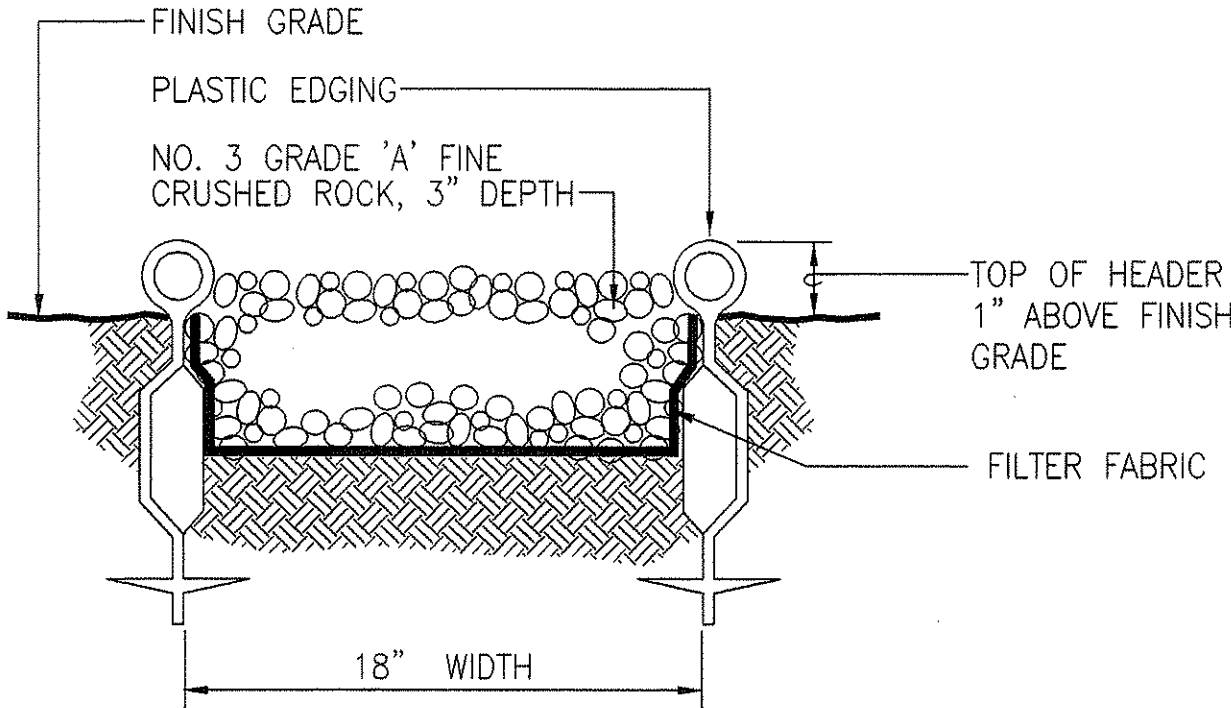
12/17/04	3	<i>Revised planting section</i>
12/17/04	2	<i>Revised Quantities</i>
09/08/04	1	<i>Revised Quantities</i>
DATE	REVISIONS	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION <i>LANDSCAPE SECTION AND PLANT LIST</i> <i><u>KAHEKILI HIGHWAY LANDSCAPING</u></i> <i><u>Kulukee Street to Vicinity of Haiku Road</u></i> <i><u>F.A. Project No. NH-083-1(49)</u></i> <i>Scale: As Noted</i> <i>Date: Apr. 2002</i>	
SHEET No. 9 OF 10 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(49)	2003	47	78



1 TREE PLANTING AND STAKING DETAIL
47 NOT TO SCALE



4 CRUSHED ROCK STRIP DETAIL
47 NOT TO SCALE

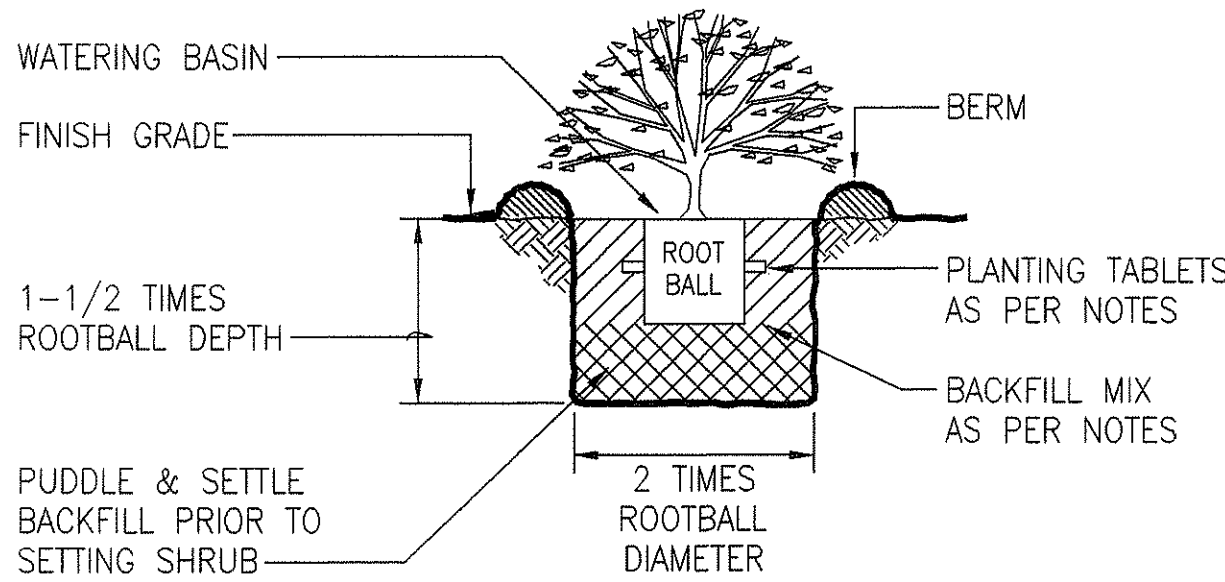
PLANTING NOTES:

- REFER TO "LANDSCAPE SPECIFICATIONS" SECTION 619 PRIOR TO THE START OF WORK. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL; MATERIALS, SCHEDULING, PRODUCTS, WARRANTIES AND METHODS FOR EXECUTION OF WORK WHICH MAY NOT BE INDICATED WITHIN THE DRAWINGS.
- PROVIDE A 2" LAYER OF ORGANIC SOIL CONDITIONER OVER ALL PLANTING AREAS (SEE SPECIFICATIONS).
- BACKFILL MIX SHALL CONSIST OF THREE (3) PARTS OF AMENDED IMPORTED PLANTING SOIL TO ONE (1) PART ORGANIC SOIL CONDITIONER (SEE SPECIFICATIONS). ADD ONE (1) POUND OF 10-30-10 FERTILIZER TO ONE (1) CUBIC YARD OF BACKFILL MIX. MIX THOROUGHLY ON PROJECT SITE PRIOR TO ANY PLANTING OPERATIONS.
- PLANTING TABLETS FOR TREES AND SHRUBS SHALL BE AS FOLLOWS:

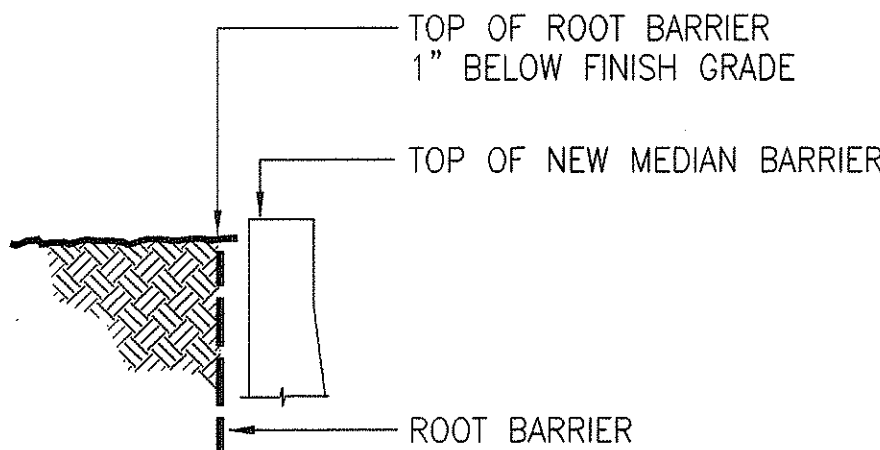
A)	FIELD SPECIMEN	12 TABLETS
B)	25 GALLON	8 TABLETS
C)	15 GALLON	5 TABLETS
D)	5 GALLON	3 TABLETS
E)	3 GALLON	2 TABLETS
F)	1 GALLON	1 TABLET

USE SLOW RELEASE FERTILIZER TABLETS 20-10-5, 21 GRAM SIZE.

- GROUNDCOVER SHALL BE PLANTED UNDER ALL TREES AND SHRUBS (UNLESS OTHERWISE NOTED ON PLANS).
- SUBSTITUTIONS FOR NATIVE PLANTS (*) WILL NOT BE ACCEPTABLE. SUBMIT WRITTEN DOCUMENTATION TO ENGINEER A MINIMUM OF FOUR MONTHS PRIOR TO PLANTING THAT ALL NATIVE PLANTS HAVE BEEN PURCHASED AND TAGGED FOR THIS PROJECT BY THE CONTRACTOR.



2 SHRUB PLANTING DETAIL
47 NOT TO SCALE



NOTE:
INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.

3 ROOT BARRIER DETAIL
47 NOT TO SCALE

SURVEY PLOTTED BY	DATE
DRAWN BY	12/02
DESIGNED BY	12/02
CHECKED BY	12/02
ORIGINAL PLAN	
NOTE BOOK	
No.	



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ME OR UNDER MY SUPERVISION

mjmu
HAWAII DESIGN ASSOCIATES, INC.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LANDSCAPE PLANTING DETAILS
AND NOTES
KAHEKILI HIGHWAY LANDSCAPING
Kuluokee Street to Vicinity of Haiku Road
F.A. Project No. NH-083-1(49)
Scale: As Noted Date: Apr. 2002