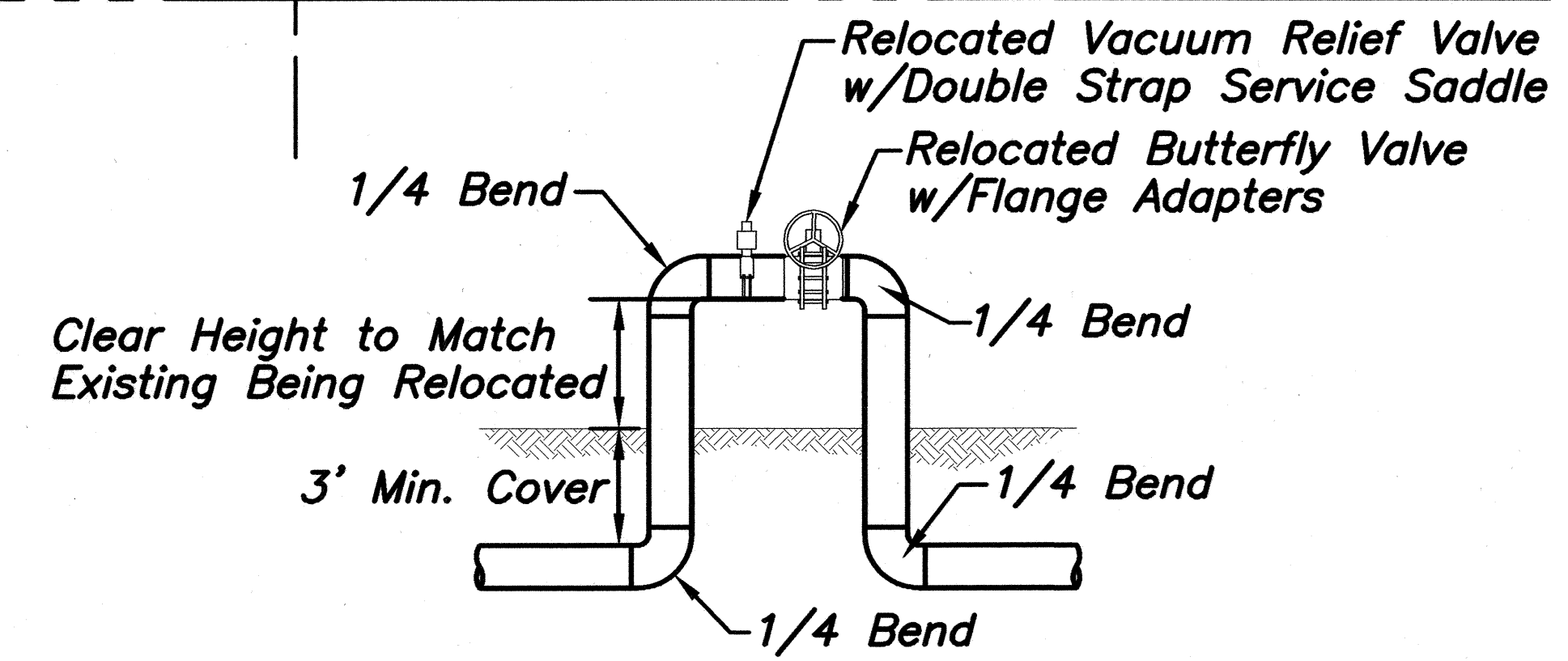
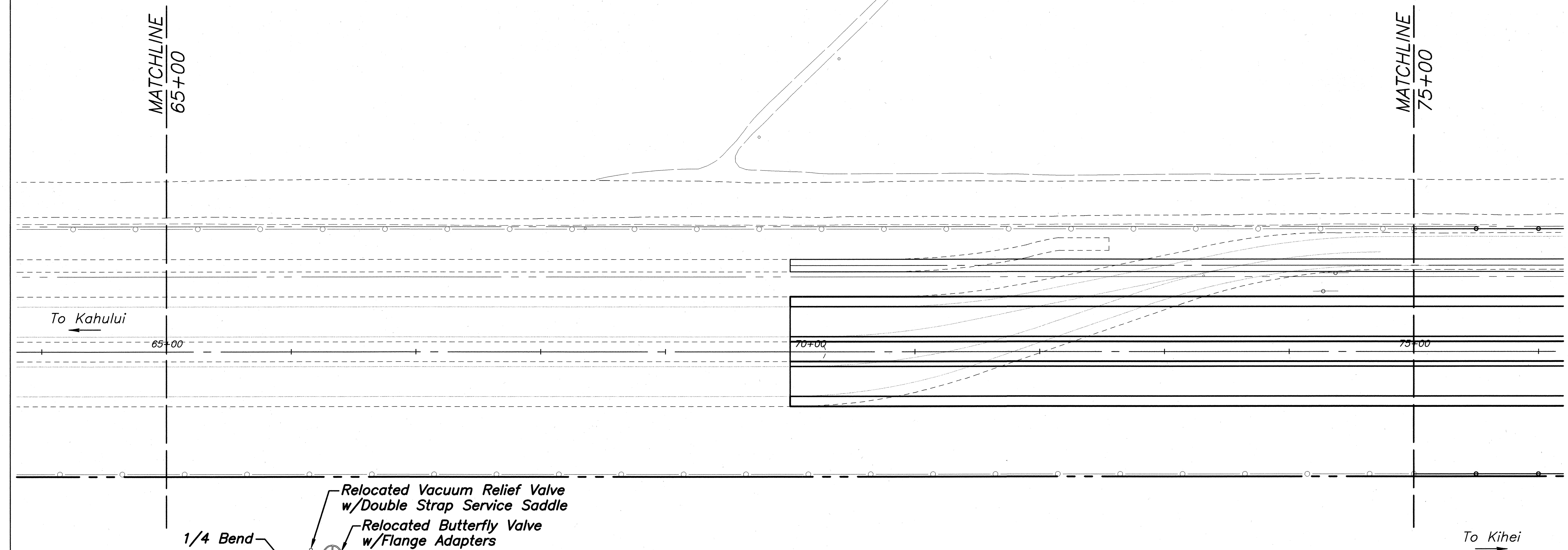
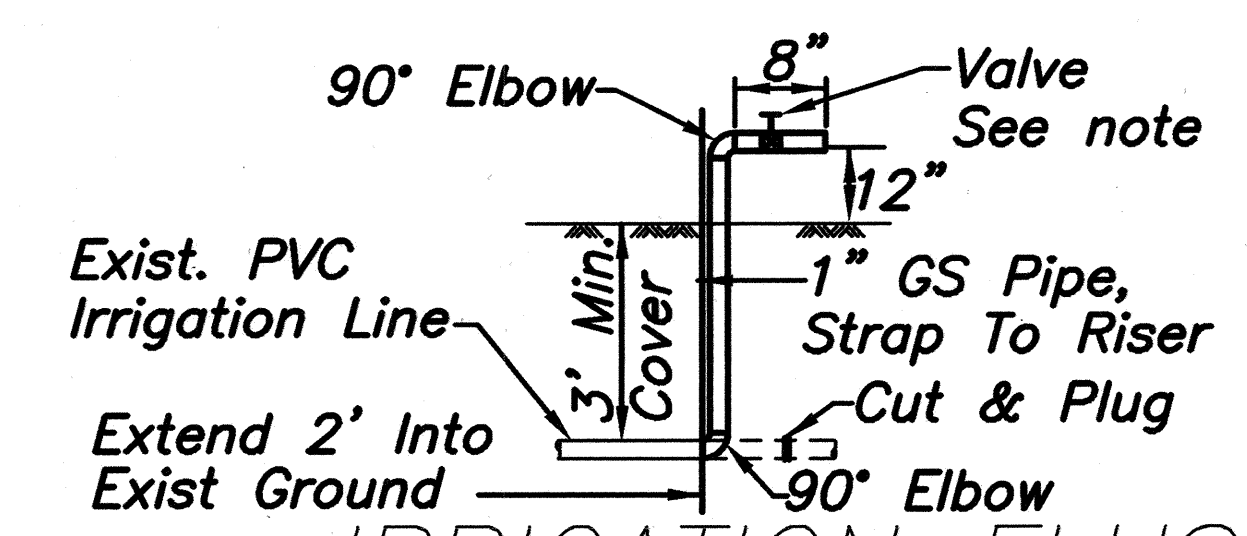


FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	48	189

True North
Scale: 1 inch = 40 feet



VACUUM RELIEF & BUTTERFLY VALVE DETAIL
Not to Scale



IRRIGATION FLUSHOUT DETAIL
Scale: 3/8"=1'-0"

- Note:
1. Pipe valve, and fittings shall be same size as existing PVC irrigation line.
 2. Valves 3" and smaller shall be gate valve. Valves larger than 3" shall be butterfly valve.

NOTE: Utility Plan includes work on HC&S irrigation system.

LEGEND: (HC&S Irrigation Lines)

- i-5"----- Existing to Remain
- i-5"----- Existing to be abandoned
- i-5"----- New Irrigation line (Install w/3' Min Cover)

- Relocated Butterfly Valve
- New Mainline Flushout (Install 15' from New R/W) See Detail This Sht

- Relocated Vacuum Relief Valve
- Relocated Continuous Acting Air Vent and Vacuum Relief Valve

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN

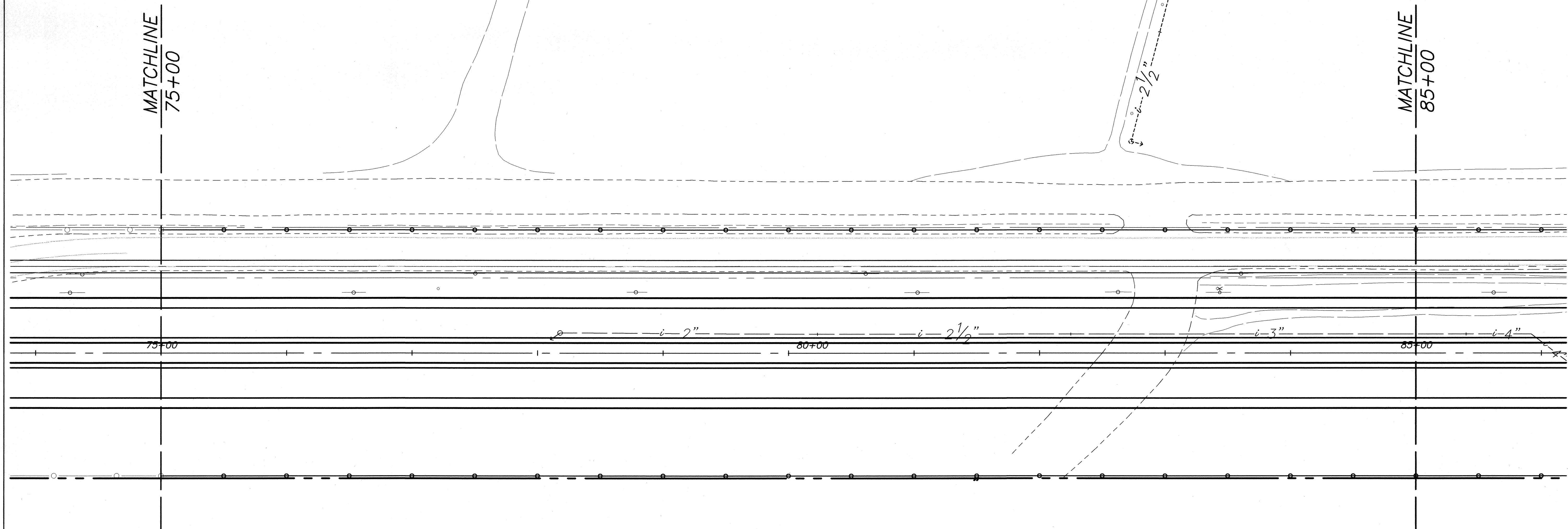
MOKULELE HIGHWAY WIDENING
Vicinity of Cane Haul Road

To
Maui Humane Society
Federal - Aid Project No. NH-0311(5)
Scale: 1"=40' Date: JUNE 2002

SHEET No. 1 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	49	189

True North
Scale: 1 inch = 40 feet



LEGEND: (HC&S Irrigation Lines)

- i-5"----- Existing to Remain
- i-5"--- Existing to be abandoned
- i-5"—— New Irrigation line
(Install w/3' Min Cover)



Relocated Butterfly Valve



New Mainline Flushout
(Install 15' from New R/W)
See Detail on Sht 48



Relocated Vacuum Relief Valve



Relocated Continuous Acting Air Vent
and Vacuum Relief Valve

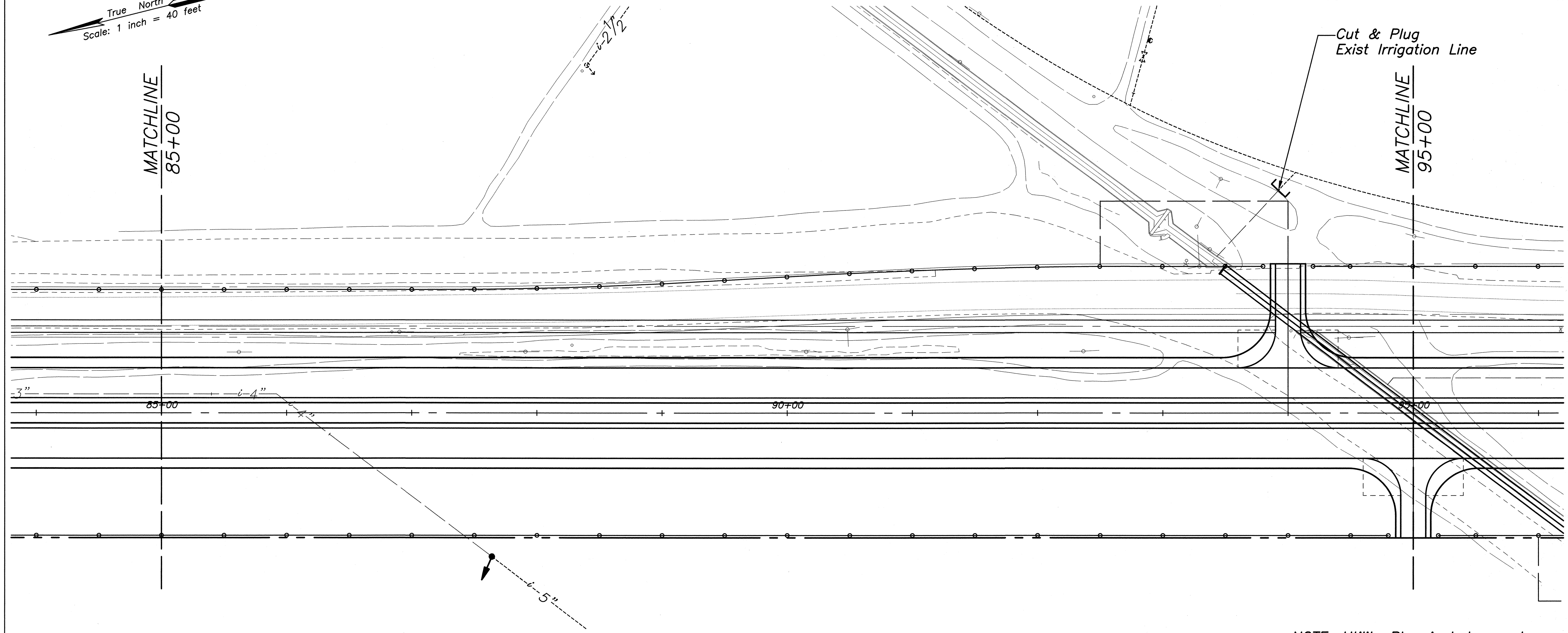
NOTE: Utility Plan includes work on
HC&S irrigation system.

 THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION UTILITY PLAN MOKULELE HIGHWAY WIDENING Vicinity of Cane Haul Road To Maui Humane Society Federal - Aid Project No. NH-0311(5) Scale: 1"=40' Date: JUNE 2002
	SHEET No. 2 OF 13 SHEETS
	49

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
TRACED BY		
DESIGNED BY		
CHECKED BY		
No.		

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	50	189

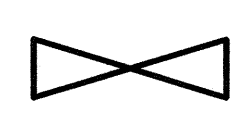
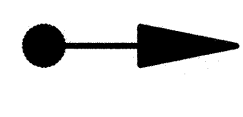
True North
Scale: 1 inch = 40 feet





NOTE: Utility Plan includes work on HC&S irrigation system.

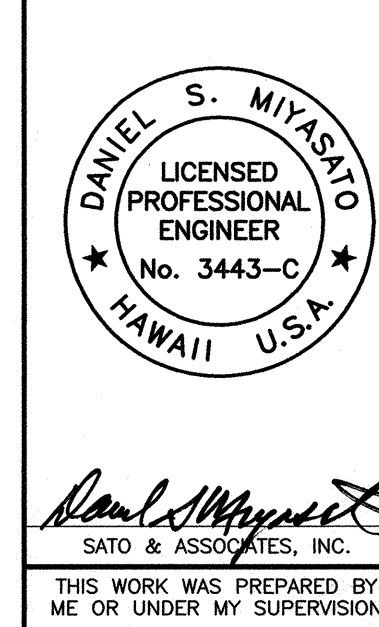
LEGEND: (HC&S Irrigation Lines)

- i-5"----- Existing to Remain
- i-5"----- Existing to be abandoned
- i-5"----- New Irrigation line (Install w/3' Min Cover)

-  Relocated Butterfly Valve
-  New Mainline Flushout (Install 15' from New R/W) See Detail on Sht 48

-  Relocated Vacuum Relief Valve
-  Relocated Continuous Acting Air Vent and Vacuum Relief Valve

12/23/02	Added Access Road at Baseline Station 94+00 and 95+00
DATE	REVISION



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN

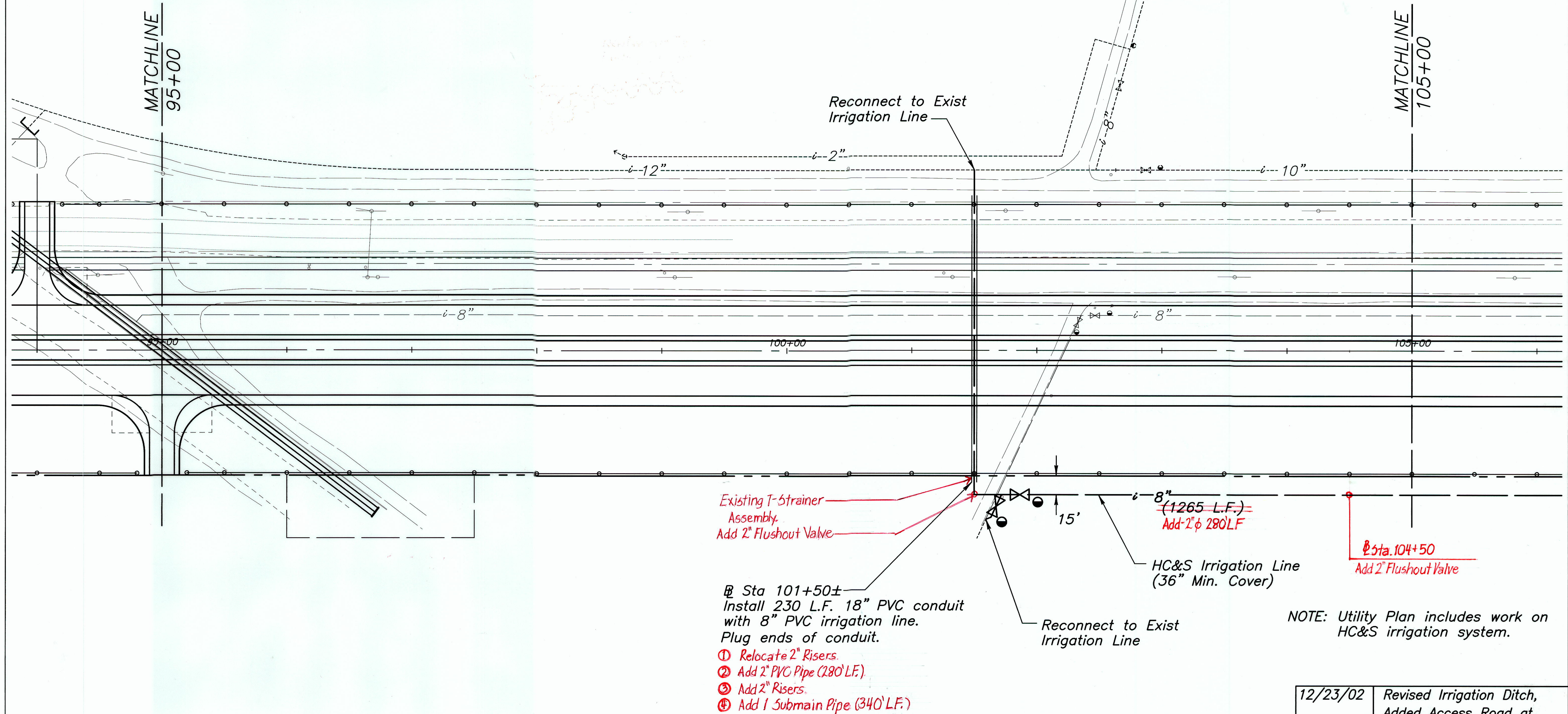
MOKULELE HIGHWAY WIDENING
Vicinity of Cane Haul Road
To
Maui Humane Society
Federal - Aid Project No. NH-0311(5)
Scale: 1"=40' Date: JUNE 2002

SHEET No. 3 OF 13 SHEETS
ADD. 50

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

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	51	189

True North
Scale: 1 inch = 40 feet



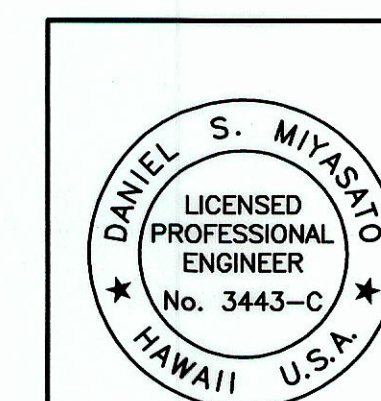
LEGEND: (HC&S Irrigation Lines)

- i-5"----- Existing to Remain
- i-5"----- Existing to be abandoned
- i-5"----- New Irrigation line (Install w/3' Min Cover)

- Relocated Butterfly Valve
- New Mainline Flushout (Install 15' from New R/W) See Detail on Sht 48

- Relocated Vacuum Relief Valve
- Relocated Continuous Acting Air Vent and Vacuum Relief Valve

12/23/02	Revised Irrigation Ditch, Added Access Road at Baseline Station 95+00
DATE	REVISION



SATO & ASSOCIATES, INC.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
UTILITY PLAN	
MOKULELE HIGHWAY WIDENING Vicinity of Cane Haul Road To Maui Humane Society Federal - Aid Project No. NH-0311(5) Scale: 1"=40' Date: JUNE 2002	
SHEET No. 4	OF 13 SHEETS

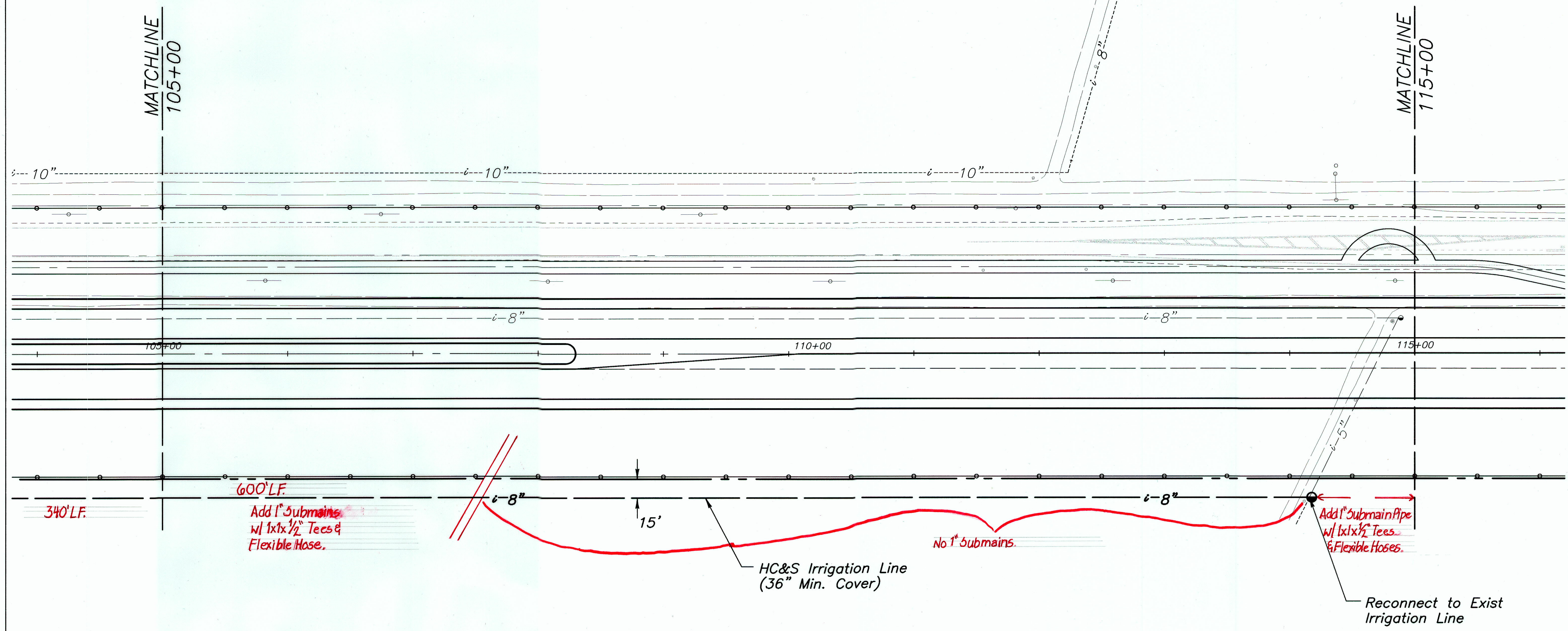
"AS-BUILT"

ADD. 51

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

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	52	189

True North
Scale: 1 inch = 40 feet



LEGEND: (HC&S Irrigation Lines)

- i-5"--- Existing to Remain
- i-5"--- Existing to be abandoned
- i-5"— New Irrigation line (Install w/3' Min Cover)

- Relocated Butterfly Valve
- New Mainline Flushout (Install 15' from New R/W) See Detail on Sht 48

- Relocated Vacuum Relief Valve
- Relocated Continuous Acting Air Vent and Vacuum Relief Valve

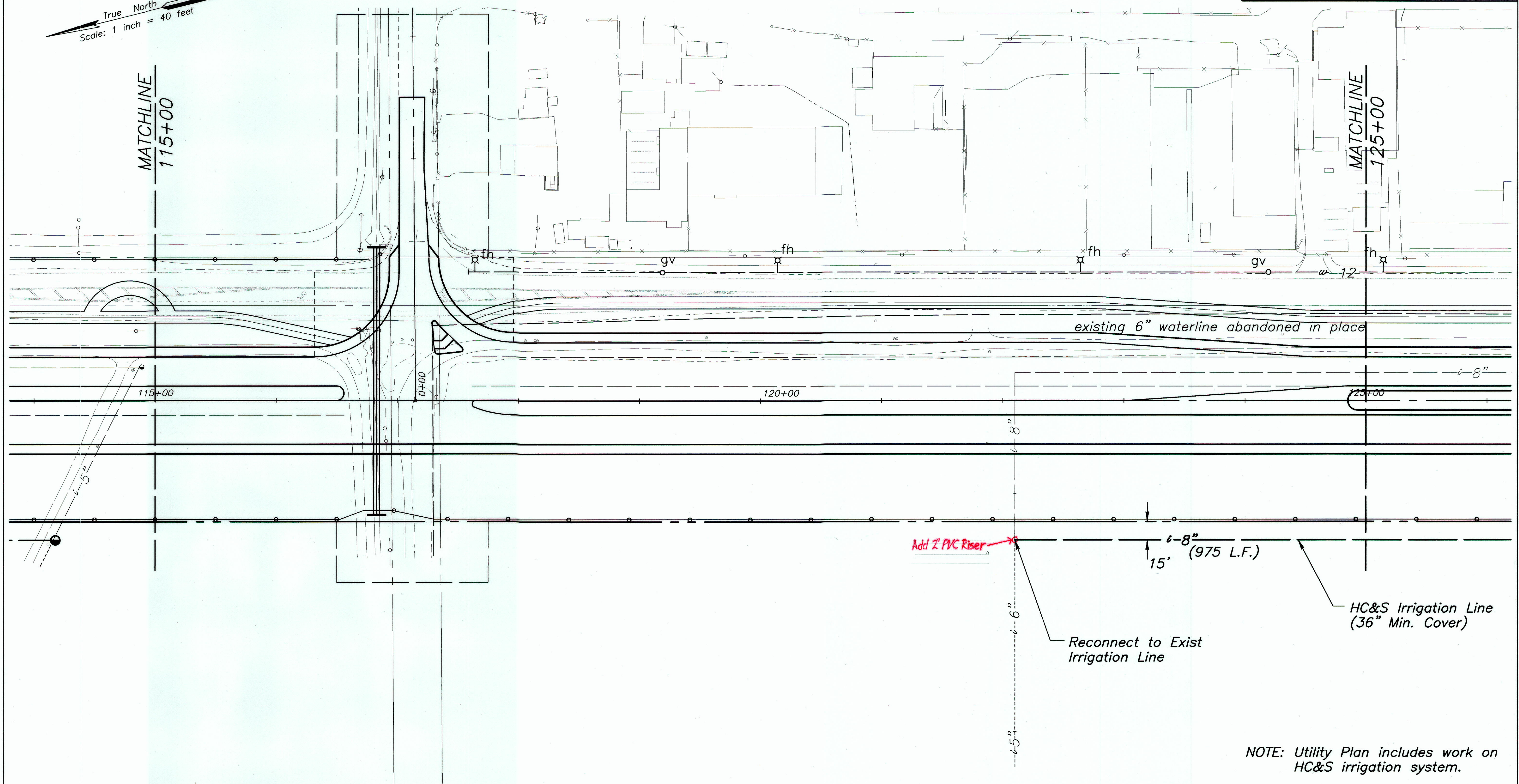
NOTE: Utility Plan includes work on HC&S irrigation system.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
UTILITY PLAN
MOKULELE HIGHWAY WIDENING
Vicinity of Cane Haul Road
To
Maui Humane Society
Federal - Aid Project No. NH-0311(5)
Scale: 1"=40' Date: JUNE 2002
SHEET No. 5 OF 13 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	53	189

True North
Scale: 1 inch = 40 feet



LEGEND: (HC&S Irrigation Lines)

- i-5"--- Existing to Remain
- i-5"--- Existing to be abandoned
- i-5"— New Irrigation line (Install w/3' Min Cover)

- Relocated Butterfly Valve
- Relocated Vacuum Relief Valve
- Relocated Continuous Acting Air Vent and Vacuum Relief Valve
- New Mainline Flushout (Install 15' from New R/W See Detail on Sht 48)

NOTE: Utility Plan includes work on HC&S irrigation system.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

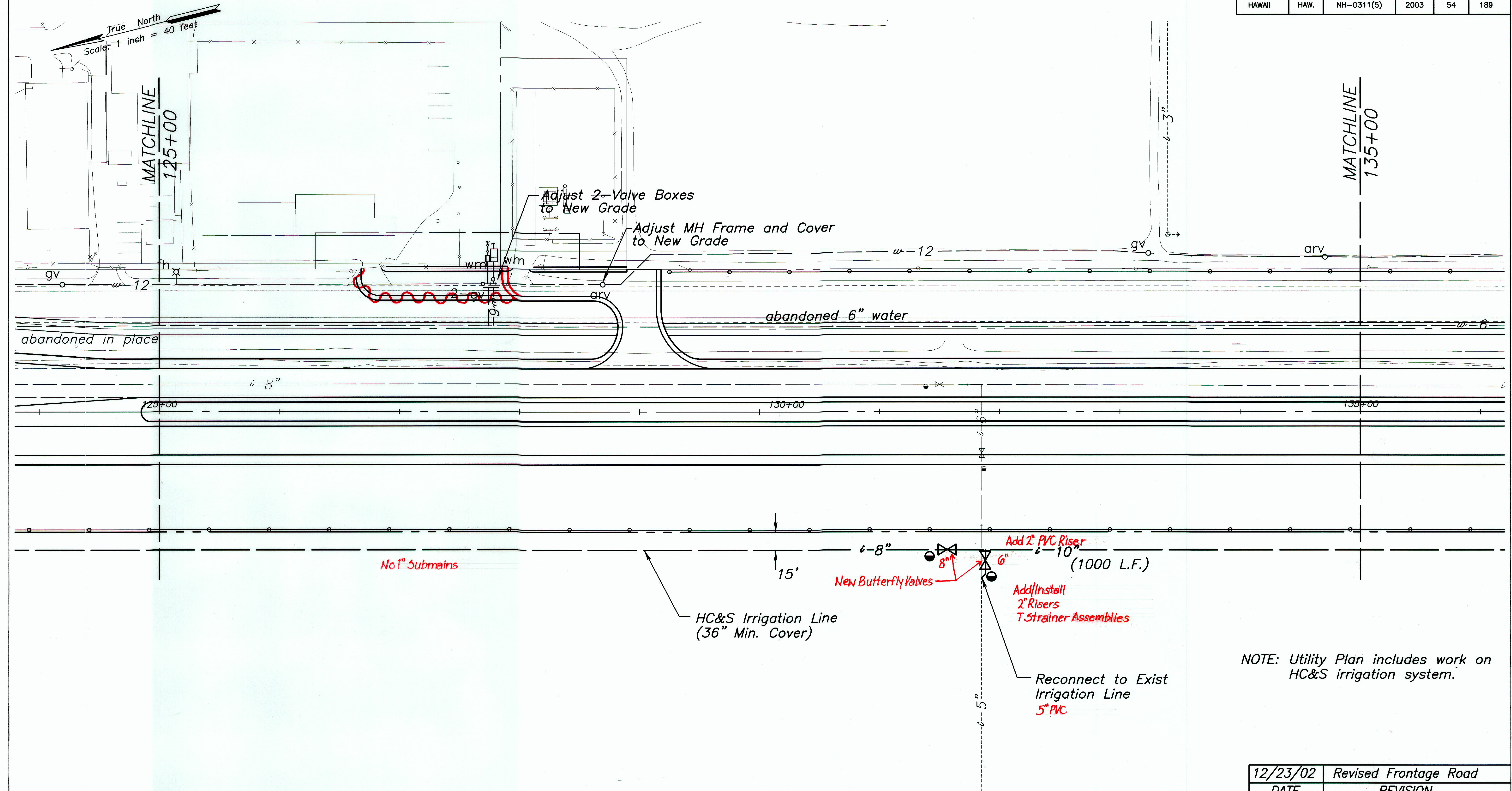
UTILITY PLAN

MOKULELE HIGHWAY WIDENING
Vicinity of Cane Haul Road
To
Maui Humane Society
Federal - Aid Project No. NH-0311(5)
Scale: 1"=40' Date: JUNE 2002

SHEET No. 6 OF 13 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	54	189



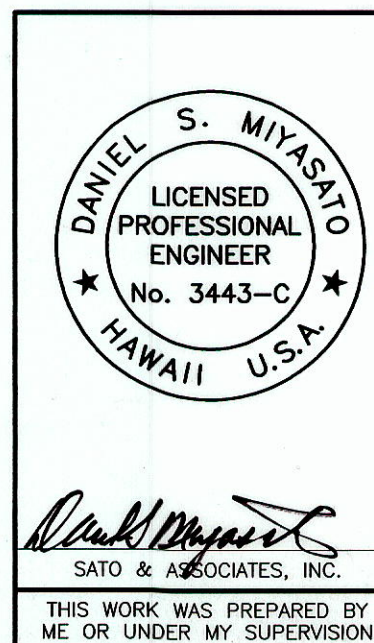
NOTE: Utility Plan includes work on HC&S irrigation system.

LEGEND: (HC&S Irrigation Lines)

- i-5"----- Existing to Remain
- i-5"----- Existing to be abandoned
- i-5"----- New Irrigation line (Install w/3' Min Cover)

- Install (2) New Relocated Butterfly Valves
- New Mainline Flushout (Install 15' from New R/W See Detail on Sht 48)

- Relocated Vacuum Relief Valve
- Relocated Continuous Acting Air Vent and Vacuum Relief Valve



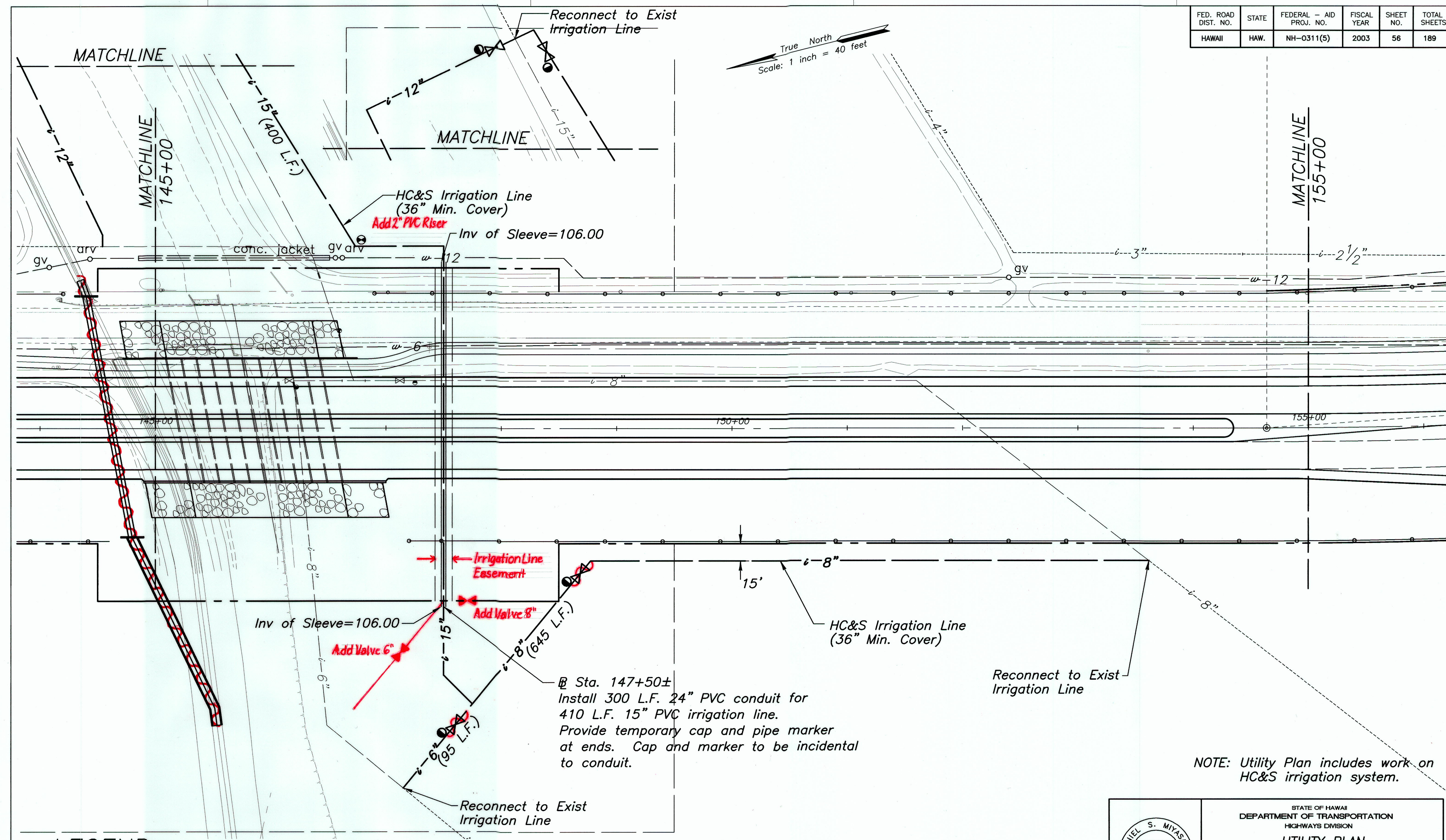
DATE	REVISION
12/23/02	Revised Frontage Road
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION UTILITY PLAN MOKULELE HIGHWAY WIDENING Vicinity of Cane Haul Road To Maui Humane Society Federal - Aid Project No. NH-0311(5) Scale: 1"=40' Date: JUNE 2002	
SHEET No. 7 OF 13 SHEETS	

"AS-BUILT"

ADD. 54

SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	56	189



LEGEND: (HC&S Irrigation Lines)

- 5" --- Existing to Remain
- 5" --- Existing to be abandoned
- 5" --- New Irrigation line (Install w/3' Min Cover)

- Relocated Butterfly Valve & Install 2\"/>
- New Mainline Flushout (Install 15' from New R/W) See Detail on Sht 48

- Relocated Vacuum Relief Valve
- Relocated Continuous Acting Air Vent and Vacuum Relief Valve

NOTE: Utility Plan includes work on HC&S irrigation system.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

UTILITY PLAN

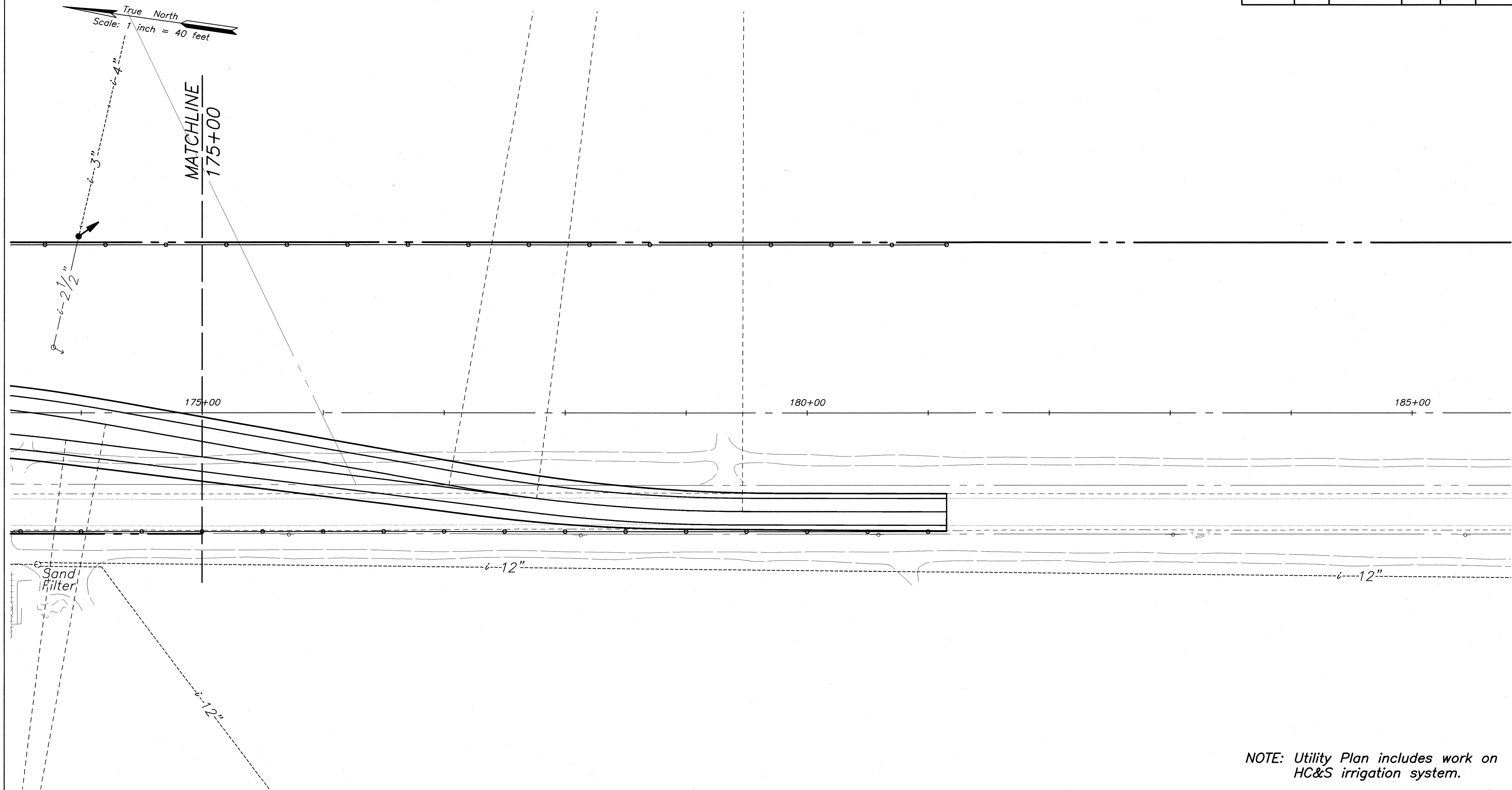
MOKULELE HIGHWAY WIDENING
Vicinity of Cane Haul Road
To
Maui Humane Society
Federal - Aid Project No. NH-0311(5)
Scale: 1"=40' Date: JUNE 2002

SHEET No. 9 OF 13 SHEETS

"AS-BUILT"

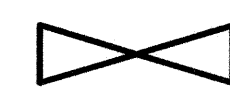
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 2/21/02
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FED. ROAD DIST. NO.	STATE	FEDERAL - AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0311(5)	2003	59	189



LEGEND: (HC&S Irrigation Lines)

- i-5"--- Existing to Remain
- i-5"--- Existing to be abandoned
- i-5"— New Irrigation line (Install w/3' Min Cover)



Relocated Butterfly Valve



New Mainline Flushout (Install 15' from New R/W) See Detail on Sht 48



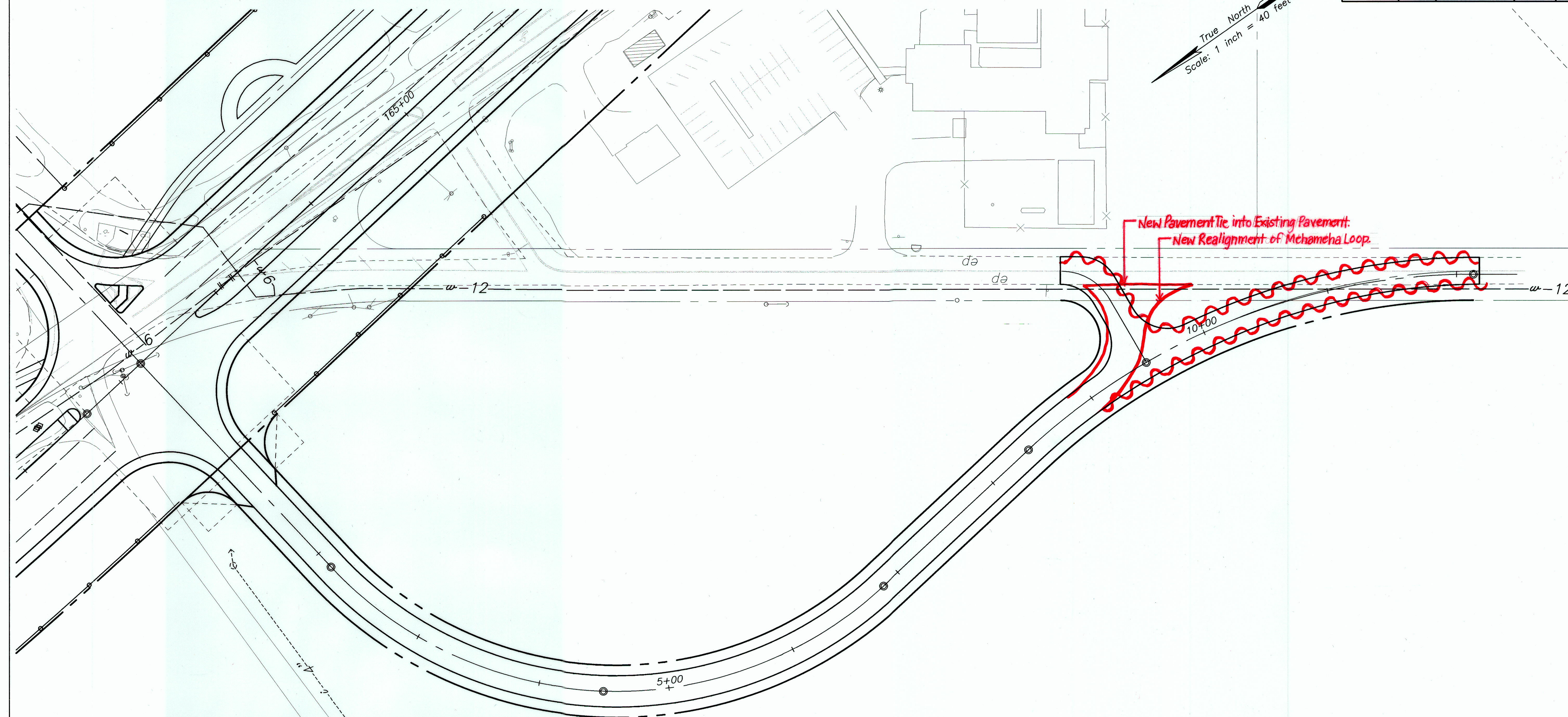
Relocated Vacuum Relief Valve







Relocated Continuous Acting Air Vent and Vacuum Relief Valve


NOTE: Utility Plan includes work on HC&S irrigation system.


	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
	UTILITY PLAN
	MOKULELE HIGHWAY WIDENING Vicinity of Cane Haul Road
	To Maui Humane Society Federal - Aid Project No. NH-0311(5) Scale: 1"=40' Date: JUNE 2002
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	SHEET No. 12 OF 13 SHEETS



	STATE OF HAWAII
	DEPARTMENT OF TRANSPORTATION
	HIGHWAYS DIVISION
	<u>UTILITY PLAN</u>
	<u>MOKULELE HIGHWAY WIDENING</u>
	<u>Vicinity of Cane Haul Road</u>
	To <u>Maui Humane Society</u>
	<u>Federal - Aid Project No. NH-0311(5)</u>
	Scale: 1"=40' Date: JUNE 2002
	SHEET No. 13 OF 13 SHEETS

	Existing to Remain
	Existing to be abandoned
	New Irrigation line (Install w/3' Min Cover)

 *Relocated Butterfly Valve*

 *New Mainline Flushout
(Install 15' from New R/W)
See Detail on Sht 48*

- Relocated Vacuum Relief Valve
- ⊕ Relocated Continuous Acting Air Vent and Vacuum Relief Valve

"AS-BUILT"

64