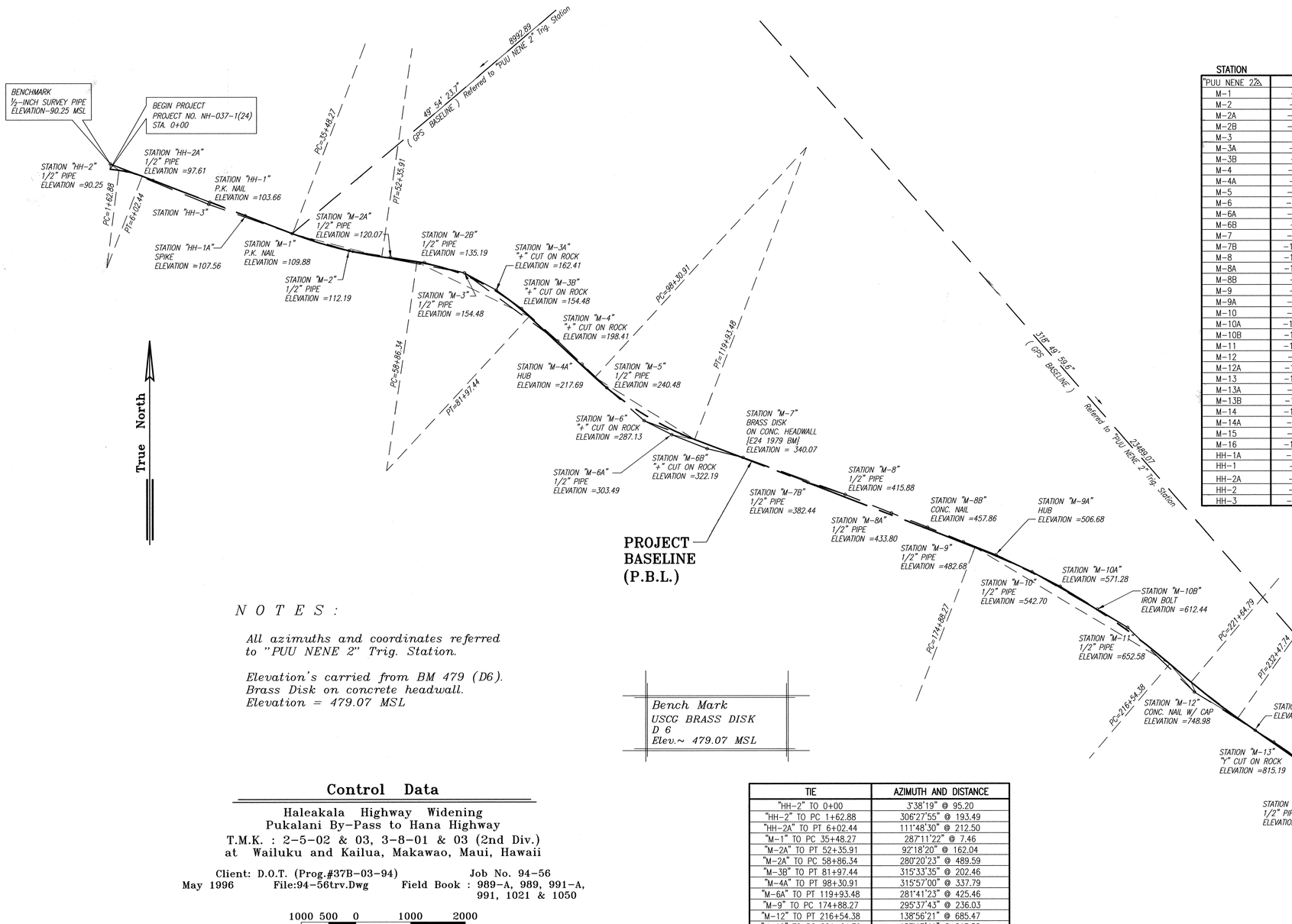
FED.ROAD DIST.NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-037-1(24)	2005	7	288



STATION	NORTHING	EASTING
"PUU NENE 2"	0.00	0.00
M-1	-5791.75	-6879.51
M-2	-6107.89	-5839.96
M-2A	-6227.75	-5081.03
M-2B	-6325.43	-4462.58
M-3	-6511.12	-3729.78
M-3A	-6821.47	-3146.22
M-3B	-7153.60	-2687.65
M-4	-7743.57	-2024.60
M-4A	-8165.10	-1582.13
M-5	-8598.41	-1127.28
M-6	-9203.83	-446.11
M-6A	-9458.78	60.37
M-6B	-9714.39	704.68
M-7	-9878.52	1362.43
M-7B	-10336.05	2551.16
M-8	-10558.92	3231.25
M-8A	-10895.23	4075.89
M-8B	-11158.41	4736.86
M-9	-11419.01	5391.35
M-9A	-11656.50	5988.94
M-10	-11966.45	6646.88
M-10A	-12230.00	7163.14
M-10B	-12644.15	7843.36
M-11	-12980.09	8395.11
M-12	-14159.74	9616.61
M-12A	-14859.97	10728.48
M-13	-15073.90	11068.18
M-13A	-15615.46	11868.76
M-13B	-16323.19	12873.82
M-14	-16764.49	13500.51
M-14A	-17188.94	14280.09
M-15	-17414.23	14750.61
M-16	-17682.46	15462.05
HH-1A	-5462.81	-7740.16
HH-1	-5215.35	-8387.60
HH-2A	-4815.31	-9424.16
HH-2	-4514.95	-10202.42
HH-3	-5254.53	-8405.60

STATION	TO	STATION	AZIMUTH AND DISTANCE
M-1	→	HH-1A	110° 55' 01" @ 921.36
HH-1A	→	HH-1	110° 55' 01" @ 693.12
HH-1	→	HH-2A	111° 06' 12" @ 1111.08
HH-2A	→	HH-2	111° 06' 12" @ 834.21
HH-2	→	HH-3	292° 22' 25" @ 1943.08
HH-3	→	M-1	289° 23' 33" @ 1617.89
M-1	→	M-2	286° 54' 55" @ 1086.56
M-2	→	M-2A	278° 58' 30" @ 768.34
M-2A	→	M-2B	278° 58' 30" @ 626.12
M-2B	→	M-3	284° 13' 10" @ 755.95
M-3	→	M-2	100° 49' 05" @ 2148.36
M-3	→	M-3A	298° 00' 20" @ 660.96
M-3A	→	M-3B	305° 54' 45" @ 566.21
M-3B	→	M-4	311° 39' 40" @ 887.54
M-4	→	M-3	125° 51' 30" @ 2103.95
M-4	→	M-4A	313° 36' 40" @ 611.12
M-4A	→	M-5	313° 36' 40" @ 628.21
M-5	→	M-6	311° 37' 50" @ 911.33
M-6	→	M-7	290° 27' 30" @ 1930.29
M-7	→	M-6B	104° 01' 05" @ 677.96
M-6B	→	M-6A	111° 38' 40" @ 693.17
M-6A	→	M-6	116° 43' 10" @ 567.03
M-7	→	M-8	290° 00' 20" @ 1988.83
M-8	→	M-7B	108° 08' 40" @ 715.69
M-7B	→	M-7	111° 03' 05" @ 1273.74
M-8	→	M-8A	291° 42' 40" @ 909.13
M-8A	→	M-8B	291° 42' 40" @ 711.44
M-8B	→	M-9	291° 42' 40" @ 704.46
M-9	→	M-9A	291° 40' 25" @ 643.05
M-9A	→	M-10	295° 13' 20" @ 727.30
M-10	→	M-9	113° 33' 30" @ 1369.69
M-10	→	M-10A	297° 02' 40" @ 579.64
M-10A	→	M-10B	301° 20' 05" @ 796.38
M-10B	→	M-11	301° 20' 05" @ 645.98
M-11	→	M-10	120° 06' 20" @ 2020.83
M-11	→	M-12	314° 00' 05" @ 1698.13
M-12	→	M-12A	302° 12' 06" @ 1313.99
M-12A	→	M-13	302° 12' 06" @ 401.45
M-13	→	M-14	304° 48' 04" @ 2962.16
M-13	→	M-13A	304° 04' 35" @ 966.55
M-14	→	M-13B	125° 09' 08" @ 766.48
M-14	→	M-14A	298° 33' 59" @ 887.63
M-14A	→	M-15	295° 35' 08" @ 521.68
M-15	→	M-16	290° 39' 27" @ 760.32

N O T E S :

All azimuths and coordinates referred to "PUU NENE 2" Trig. Station.

Elevation's carried from BM 479 (D6). Brass Disk on concrete headwall. Elevation = 479.07 MSL

Bench Mark
USCG BRASS DISK
D 6
Elev.~ 479.07 MSL

TIE	AZIMUTH AND DISTANCE
"HH-2" TO 0+00	3°38'19" @ 95.20
"HH-2" TO PC 1+62.88	306°27'55" @ 193.49
"HH-2A" TO PT 6+02.44	111°48'30" @ 212.50
"M-1" TO PC 35+48.27	287°11'22" @ 7.46
"M-2A" TO PT 52+35.91	92°18'20" @ 162.04
"M-2A" TO PC 58+86.34	280°20'23" @ 489.59
"M-3B" TO PT 81+97.44	315°33'35" @ 202.46
"M-4A" TO PT 98+30.91	315°57'00" @ 337.79
"M-6A" TO PT 119+93.48	281°41'23" @ 425.46
"M-9" TO PC 174+88.27	295°37'43" @ 236.03
"M-12" TO PT 216+54.38	138°56'21" @ 685.47
"M-12" TO PC 221+64.79	157°17'41" @ 215.52
"M-12" TO PT 232+47.74	301°00'04" @ 901.30
"M-13B" TO PC 267+68.84	308°46'41" @ 537.38
"M-15" TO PT 288+35.03	296°22'43" @ 418.08
"M-16" TO PT 292+50	314°48'48" @ 77.31

Control Data

Haleakala Highway Widening
Pukalani By-Pass to Hana Highway
T.M.K. : 2-5-02 & 03, 3-8-01 & 03 (2nd Div.)
at Wailuku and Kailua, Makawao, Maui, Hawaii

Client: D.O.T. (Prog.#37B-03-94) Job No. 94-56
May 1996 File:94-56trv.Dwg Field Book : 989-A, 989, 991-A, 991, 1021 & 1050

1000 500 0 1000 2000
Graphic Scale in Feet

Engineers Surveyors Hawaii, Inc.
Civil Engineers ~ Land Surveyors ~ Planners

CONTROL DATA PLAN
SCALE: 1"=1000'

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

\\Eor-1\esh\Engineering\Projects\1994\94-056 Haleakala Hwy\PHASE 2\WORKING\DLDEP\Ph2-94-56TRV-BL.DWG Mon, May 30 2005 - 7:53am
esh

ERIC N. S. HEE
LICENSED PROFESSIONAL ENGINEER
No. 5292-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
ENGINEERS SURVEYORS HAWAII, INC.
LICENSED EXPPIRATION 4/30/2006

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONTROL DATA

HALEAKALA HIGHWAY WIDENING, PHASE 2
HANA HIGHWAY TO PUKALANI BYPASS
FED. AID PROJ. NO. NH-037-1(24)

SCALE: AS NOTED DATE: MAY, 2005

SHEET No. 1 OF 1 SHEETS