

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-03-97	2000	3	110

STANDARD DETAILS FOR COUNTY PUBLIC WORKS CONSTRUCTION

R-1	●	PRE-CAST CONCRETE CURB
R-2	●	PRE-CAST CONCRETE DRIVEWAY CURB
R-3	●	PRE-CAST CONCRETE DROP CURB BLOCK
R-4	●	INTEGRAL CURB & GUTTER, INTEGRAL DRIVEWAY CURB & GUTTER (R. JAN 1995)
R-5	●	ROLLED CURB
R-6	●	ROLLED CURB TRANSITION TO CURBS AND CATCH BASINS
R-7	●	DRIVEWAY APRON WITH ROLLED CURB
R-8	●	THRU GUTTER
R-9	●	CONCRETE PAVEMENT
R-10	●	CONCRETE PAVEMENT JOINT DETAILS
R-11	●	CONCRETE PAVEMENT JOINT DETAILS
R-12	●	STREET SURVEY MONUMENT
R-13	●	STREET SURVEY MONUMENT CASTINGS
R-14	●	CENTERLINE MONUMENT
R-15	●	TEMPORARY WOODEN BARRICADES
R-16	●	SIDEWALK REINFORCEMENT DETAILS AT UTILITY BOXES OR OPENINGS
R-17	●	TREE WELL WITH CONCRETE COVER
R-18	●	THREE FT. OR FOUR FT. CHAIN LINK FENCE
R-19	●	SIX FT. CHAIN LINK FENCE
R-20	●	TYPICAL SINGLE GATE
R-21	●	TYPICAL DOUBLE GATE
R-22	●	METAL GUARDRAIL DETAILS
R-23	●	METAL GUARDRAIL DETAILS
R-24	●	METAL GUARDRAIL DETAILS
R-25	●	WHEELCHAIR RAMP
R-26	●	PRIVATE DRIVEWAY RAMP
R-27	●	FULL-WIDTH SIDEWALK AT CURB RETURN
R-28	●	SIDEWALK DETAILS
R-29	●	DRIVEWAY APRON
R-30	●	DRIVEWAY LAYOUT
R-31	●	GRADE ADJUSTMENT WALLS
R-32	●	STREET CROSS-SECTIONS WITH SIDEWALK
R-33	●	STREET CROSS-SECTIONS WITHOUT SIDEWALK
R-34	●	ROAD PAVEMENT AND SHOULDERS
R-35	●	TYPICAL ROADWAY UTILITY LOCATION WITH SIDEWALK
R-36	●	TYPICAL ROADWAY UTILITY LOCATION WITHOUT SIDEWALK
R-37	●	RESIDENTIAL DRIVEWAY WITHOUT CURB AND GUTTER
R-38	●	DRIVEWAY LAYOUT
R-39	●	NON-DEDICABLE STREETS
R-40	●	DRY WELL COVER
R-41	●	STREET CROSS-SECTIONS WITH CURB AND GUTTER
R-42	●	STREET CROSS-SECTIONS WITHOUT CURB AND GUTTER
R-43	●	ROAD PAVEMENTS AND SHOULDERS
R-44	●	CUL-DE-SAC
R-45	●	TAPERED ROAD INTERSECTION
R-46	●	TYPICAL ROADWAY UTILITY LOCATION
R-47	●	SPACE ALLOCATION FOR UNDERGROUND UTILITIES
R-48	●	RESIDENTIAL DRIVEWAY WITHOUT CURB AND GUTTER
R-49	●	DRIVEWAY LAYOUTS FOR CONCRETE CURB STREETS
R-50	●	DRIVEWAY LAYOUTS FOR NON-CURB STREETS
R-51	●	CONCRETE DRIVEWAY WITH EXISTING SIDEWALK
R-52	●	ROADWAY TYPICAL SECTIONS
R-53	●	ROADWAY TYPICAL SECTIONS
R-54	●	ROADWAY TYPICAL SECTIONS
R-55	●	ROADWAY SWALES
R-56	●	SIDEWALK DETAILS
R-57	●	CUL-DE-SAC
R-58	●	SPACE ALLOCATION FOR UNDERGROUND UTILITIES
R-59	●	SPACE ALLOCATION FOR UNDERGROUND UTILITIES
D-1	●	TYPE "A" CATCH BASIN
D-2	●	TYPE "A" CATCH BASIN REINFORCEMENT DETAILS
D-3	●	TYPE "F" CATCH BASIN
D-4	●	TYPE "F" CATCH BASIN REINFORCEMENT DETAILS
D-5	●	TYPE "B" CATCH BASIN
D-6	●	TYPE "B" CATCH BASIN REINFORCEMENT DETAILS
D-7	●	TYPE "F" CATCH BASIN
D-8	●	TYPE "F" CATCH BASIN REINFORCEMENT DETAILS
D-9	●	TYPE "C" CATCH BASIN
D-10	●	TYPE "C" CATCH BASIN REINFORCEMENT DETAILS
D-11	●	TYPE "D" CATCH BASIN
D-12	●	TYPE "D" CATCH BASIN REINFORCEMENT DETAILS
D-13	●	CATCH BASIN DETAILS
D-14	●	DETAILS FOR CATCH BASIN WITH 5" CURB
D-15	●	DEFLECTOR INLET FOR CATCH BASIN
D-16	●	MONOLITHIC CONSTRUCTION OF CATCH BASIN TOP SLAB AND SIDEWALK
D-17	●	SHALLOW DRAIN MANHOLE FOR SIDEWALK AREA
D-18	●	SHALLOW DRAIN MANHOLE FOR PAVEMENT AREA
D-19	●	PRE-CAST TOP SLAB FOR SHALLOW DRAIN MANHOLE
D-20	●	CONCRETE WALL DRAIN MANHOLE
D-21	●	BRICK WALL DRAIN MANHOLE
D-22	●	PRE-CAST CONCRETE DRAIN MANHOLE
D-23	●	PRE-CAST CONCRETE DRAIN MANHOLE DETAILS
D-24	●	PRE-CAST CONCRETE DRAIN MANHOLE DETAILS
D-25	●	PRE-CAST CONCRETE DRAIN MANHOLE DETAILS
D-26	●	CHANNELIZING DETAILS FOR DRAIN MANHOLE
D-27	●	RUNGS FOR CATCH BASINS AND MANHOLES
D-28	●	TYPE "DA" FRAME FOR CATCH BASIN AND MANHOLE
D-29	●	TYPE "DB" FRAME FOR CATCH BASIN AND MANHOLE
D-30	●	CATCH BASIN AND MANHOLE COVER
D-31	●	PAYMENT TRENCH WIDTH AND REPAVING FOR DRAIN PIPES
D-32	●	SIDEWALK CULVERT

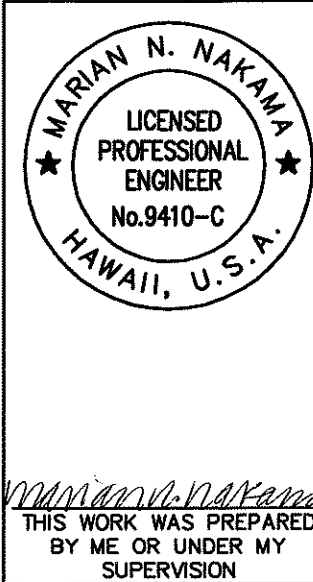
D-33	●	DRIVEWAY DRAINAGE - BOX CULVERT
D-34	●	DRIVEWAY DRAINAGE - PIPE CULVERT
D-35	●	DRIVEWAY DRAINAGE - SWALE
D-36	●	REINFORCED CONCRETE TYPE A MANHOLE - MISCELLANEOUS DETAILS
D-37	●	TYPE G1 AND G2 DRAINAGE INLETS
D-38	●	TYPE G3 DRAINAGE INLET
D-39	●	TYPE G4 DRAINAGE INLET
D-40	●	STANDARD FRAME AND GRATE
D-41	●	LOCAL DEPRESSION WITHOUT CURB AND GUTTER
D-42	●	JUNCTION STRUCTURE "B"
D-43	●	JUNCTION STRUCTURE "C"
D-44	●	JUNCTION STRUCTURE "D"
D-45	●	MONOLITHIC CATCH BASIN CONNECTION FOR PIPES 12" TO 72"
D-46	●	CONCRETE COLLAR DETAILS
D-47	●	SINGLE BOX CULVERTS
D-48	●	DOUBLE BOX CULVERTS
D-49	●	TRIPLE BOX CULVERTS
D-50	●	RECTANGULAR TRANSITION
D-51	●	CIRCULAR TRANSITION
D-52	●	PARAPET DETAILS FOR BOX CULVERTS
D-53	●	SUPPORT FOR DRAIN AND SEWER PIPES ACROSS TRENCHES
T-1	●	STREET NAME AND STOP SIGN DETAILS
T-2	●	HEIGHT AND LATERAL LOCATION OF SIGN
T-3	●	TYPICAL LOCATION FOR STOP SIGNS
T-4	●	TYPICAL DETAIL FOR CROSSWALK AND STOP LINES
T-5	●	TYPICAL SIGN INSTALLATIONS IN CUL-DE-SACS
T-6	●	ROAD MARKER
T-7	●	RAISED PAVEMENT MARKERS
T-8	●	TYPICAL INSTALLATION OF RAISED PAVEMENT MARKERS
T-9	●	TYPICAL INTERSECTION DETAIL FOR STRIPING
T-10	●	STRIPING DETAILS
T-11	●	STREET NAME AND STOP SIGN DETAILS
T-12	●	PARKING DESIGN STANDARD, ONE-WAY TRAFFIC
T-13	●	PARKING DESIGN STANDARD, TWO-WAY TRAFFIC
T-14	●	STANDARD STREET NAME SIGN
S-1	●	ROCK CRADLE FOR SEWER PIPE
S-2	●	CONCRETE CRADLE FOR VITRIFIED CLAY PIPE
S-3	●	METHOD OF LAYING PIPE
S-4	●	PRE-CAST CONCRETE PIPE BLOCK
S-5	●	CONCRETE JACKET, REINFORCED CONCRETE CRADLE
S-6	●	LATERALS
S-7	●	ADVANCE RISER CONNECTION
S-8	●	METHOD OF BACKFILL
S-9	●	CHIMNEY
S-10	●	INDEX OF SEWER MANHOLE DETAILS
S-11	●	MANHOLE NOTES
S-12	●	MANHOLE NOTES
S-13	●	PRE-CAST CONCRETE PLAIN MANHOLE
S-14	●	PRE-CAST CONCRETE PLAIN MANHOLE - SECTION AND ALTERNATE BASE
S-15	●	PRE-CAST CONCRETE SHALLOW DROP MANHOLE
S-16	●	PRE-CAST CONCRETE SHALLOW DROP MANHOLE - BUTT JOINT DETAILS
S-17	●	PRE-CAST CONCRETE DROP MANHOLE
S-18	●	PRE-CAST CONCRETE DROP MANHOLE - SECTIONS
S-19	●	PRE-CAST CONCRETE PLAIN MANHOLE FOR 27" TO 48" R.C. PIPE
S-20	●	PRE-CAST CONCRETE PLAIN MANHOLE FOR 27" TO 48" R.C. PIPE - SEC
S-21	●	PRE-CAST CONCRETE MANHOLE WALL
S-22	●	PRE-CAST CONCRETE ECCENTRIC MANHOLE CONE
S-23	●	PRE-CAST CONCRETE MANHOLE WALL TO BRICK WALL ADAPTER RING
S-24	●	PRE-CAST CONCRETE MANHOLE WALL JOINTS
S-25	●	PRE-CAST CONCRETE - DETAIL AT TOP RUNG
S-26	●	BRICK MANHOLE
S-27	●	PLAIN MANHOLE
S-28	●	SHALLOW DROP MANHOLE
S-29	●	DROP MANHOLE
S-30	●	DROP MANHOLE - SECTIONS
S-31	●	MANHOLE COVER - TYPE SA
S-32	●	MANHOLE FRAME - TYPE SA
S-33	●	MANHOLE COVER - TYPE SB, TOP VIEW
S-34	●	MANHOLE COVER - TYPE SB, BOTTOM VIEW
S-35	●	MANHOLE FRAME - TYPE SB
S-36	●	MODIFIED TYPE SB PRESSURE MANHOLE FRAME AND COVER
S-37	●	PRESSURE MANHOLE COVER - TYPE SC
S-38	●	PRESSURE MANHOLE COVER - TYPE SC
S-39	●	PRESSURE MANHOLE FRAME AND COVER - TYPE SC
S-40	●	MANHOLE FRAME - TYPE SD
S-41	●	DROP MANHOLE CHIMNEY CASTING
S-42	●	MANHOLE RUNG DETAILS - TYPE SA
S-43	●	MANHOLE RUNG DETAILS - TYPE SC
S-44	●	MANHOLE RUNG DETAILS - TYPE SD
S-45	●	MANHOLE RUNG DETAILS - TYPE SE
S-46	●	MANHOLE RUNG DETAILS - TYPE SF
S-47	●	PVC PIPE - BEDDING REQUIREMENTS
S-48	●	PVC PIPE - RESILIENT MANHOLE CONNECTION
P-1	●	BACKFLOW PREVENTOR
P-2	●	FENCE AND GATE DETAILS
P-3	●	OIL SEALS AND RELATED PIPING
P-4	●	OIL SEALS AND RELATED PIPING
P-5	●	OIL SEALS AND RELATED PIPING
P-6	●	REMOVABLE POST AND CHAIN DETAILS
P-7	●	REMOVABLE RAILING DETAILS
P-8	●	TYPICAL WALL SLEEVE
P-9	●	SPRINKLER VALVE CONTROL
P-10	●	MOTOR SHAFT AND COUPLING
P-11	●	TYPICAL PUMP MOTOR DRIVE SHAFT GUARD
P-12	●	TYPICAL PUMP COUPLING GUARD
P-13	●	TYPICAL HORIZONTAL SHAFT GUARD NO. 1
P-14	●	TYPICAL HORIZONTAL SHAFT GUARD NO. 2
P-15	●	SAFETY GUARD GENERAL NOTES
P-16	●	1-1/2" STAND PIPE DETAIL

STANDARD DETAILS FOR COUNTY WATER SYSTEM CONSTRUCTION

1	●	TYPE A MANHOLE FOR BEVEL GEARED GATE VALVE
2	●	TYPE A MANHOLE FOR BUTTERFLY VALVE
3	●	REINFORCED CONCRETE TYPE A MANHOLE FOR BUTTERFLY VALVE
4	●	REINFORCED CONCRETE TYPE A MANHOLE - MISCELLANEOUS DETAILS
5	●	TYPE A MANHOLE FOR SPUR GEARED GATE VALVES
6	●	TYPE A MANHOLE - DETAIL OF RUNG, LINTEL, AND FILLER
7	●	MANHOLE FRAME & COVER - CAST IRON - 6" SIZE
8	●	MANHOLE FRAME & COVER - CAST IRON - 24" SIZE
9	●	TYPE B & C MANHOLES - GENERAL ARRANGEMENT
10	●	TYPE B & C MANHOLES - DETAILS
11	●	PRECAST TYPE C MANHOLE
12	●	VALVE BOX INSTALLATION FOR GATE VALVE
13	●	VALVE BOX INSTALLATION FOR GATE VALVE
14	●	VALVE BOX INSTALLATION FOR BEVEL GEARED GATE VALVE
15	●	VALVE BOX INSTALLATION FOR BGVV AND BUTTERFLY VALVES
16	●	12-INCH VALVE BOX - FRAME & COVER
17	●	IDENTIFICATION TAG FOR MANHOLE OR VALVE BOX COVER
18	●	SLIDING VALVE BOX ASSEMBLY
19	●	CAST IRON VALVE BOX DETAILS
20	●	CORPORATION STOP-LAYOUT AND SIZES
21	●	AIR RELIEF VALVE BOX FOR 3/4" AIR RELIEF VALVE
22	●	1" AIR VALVE UNIT DETAIL
23	●	AIR RELIEF VALVE CONNECTION IN MANHOLE
24	●	OFFSET MANHOLE FOR AIR RELIEF VALVE
25	●	AIR RELIEF VALVE MANHOLE (OFFSET)
26	●	AUTOMATIC PRESSURE RELIEF VALVE
27	●	HYDRANT CONNECTION - STRAIGHT RUN
28	●	HYDRANT CONNECTION - LAYOUT "B"
29	●	HYDRANT CONNECTION WITH ELBOW
30	●	HYDRANT CONNECTION - LAYOUT "A"
31	●	HYDRANT CURB GUARD AND VALVE MARKER
32	●	DETAIL OF HYDRANT CURB GUARD
33	●	HYDRANT GUARD AND VALVE MARKER
34	●	STANDPIPE CONNECTION
35	●	2-1/2-INCH STANDPIPE DETAIL
36	●	TYPE "A" VALVE BOX
37	●	METER BOX - TYPE "B"
38	●	CAST IRON COVER FOR TYPE "B" METER BOX
39	●	METER BOX AND COVER - TYPE "X"
40	●	5/8" AND 3/4" CAST IRON METER BOX
41	●	1" CAST IRON METER BOX
42	●	METER BOX TYPE III FOR 1-1/2-INCH AND 2-INCH METERS
43	●	METER BOX FRAME AND COVER - CAST IRON, TYPE III
44	●	READING HOLE COVER
45	●	1-1/2" AND 2" METER MANHOLE (STANDARD)
46	●	STANDARD 1-1/2" AND 2" METER AND BOX INSTALLATION
47	●	STANDARD METER BOX COVERS
48	●	MANHOLE COVER (NON-TRAFFIC LOADING)
49	●	METER BOX FRAME AND COVER - CAST IRON, TYPE IV FOR 3-INCH AND 4-INCH METERS
50	●	METER BOX COVER - CAST IRON, TYPE IV
51	●	METER BOX FRAME AND COVER - CAST IRON, TYPE V FOR 6-INCH AND 8-INCH METERS
52	●	METER BOX COVER - CAST IRON, TYPE V
53	●	COMPOUND METER AND BOX INSTALLATION
54	●	COMPOUND METER COVER DETAILS
55	●	MFM-MCT METER AND BOX INSTALLATION
56	●	MFM-MCT METER AND BOX INSTALLATION
57	●	SINGLE COMPOUND METER INSTALLATION - PLAN
58	●	SINGLE COMPOUND METER INSTALLATION - SECTION
59	●	TURBINE METER INSTALLATION - SECTION
60	●	MODEL DC DETECTOR CHECK AND DC VALVE
61	●	DETECTOR CHECK COVER DETAILS
62	●	SINGLE DETECTOR CHECK METER INSTALLATION
63	●	DETECTOR CHECK METER - DETAIL
64	●	FM METER AND BOX - LAYOUT
65	●	FM METER AND BOX - DETAILS OF BOX
66	●	FM METER AND BOX - FRAME AND COVER DETAILS
67	●	DETECTOR CHECK
68	●	1-INCH METER - PROFILE AND MATERIAL LIST
69	●	1-1/2-INCH METER - PROFILE AND MATERIAL LIST
70	●	2-INCH METER - PROFILE AND MATERIAL LIST
71	●	FABRICATED BRANCH PIPE DETAIL
72	●	LINESETTER DETAIL
73	●	SINGLE SERVICE DETAIL - PLAN, PROFILE AND MATERIAL LIST
74	●	DOUBLE SERVICE DETAIL - PLAN, PROFILE AND MATERIAL LIST
75	●	SERVICE LATERALS AND CONNECTIONS
76	●	COPPER SERVICE LATERAL FOR 5/8" AND 1" METER CONNECTION
77	●	COPPER SERVICE LATERAL FOR MULTIPLE CONNECTION
78	●	SERVICE LATERAL/CONNECTION MATERIAL SCHEDULE
79	●	STABILIZATION OF 5/8 INCH METER EASEMENTS
80	●	SERVICE LATERALS AND CONNECTIONS - STANDARD SIZING ARRANGEMENTS
81	●	SINGLE SERVICE LATERAL (TYPE A, 5/8" AND 3/4" METERS)
82	●	DOUBLE SERVICE LATERAL (TYPE A-1, 5/8" AND 3/4" METERS)
83	●	SINGLE SERVICE LATERAL (TYPE B, 1" METER)
84	●	DOUBLE SERVICE LATERAL (TYPE B-1, 1" METER)
85	●	SINGLE SERVICE LATERAL (TYPE C, 1-1/2" METER)
86	●	DOUBLE SERVICE LATERAL (TYPE C-1, 1-1/2" METER)
87	●	SINGLE SERVICE LATERAL (TYPE D, 2" METER)
88	●	DOUBLE SERVICE LATERAL (TYPE D-1, 2" METER)

89	●	TYPICAL SERVICE LATERAL
90	●	SERVICE LATERALS AND CONNECTIONS - STANDARD SIZING ARRANGEMENTS
91	●	COPPER SERVICE LATERALS FOR CONNECTIONS - TYPE X METER BOX - 5/8", 3/4", AND 1" METER
92	●	COPPER SERVICE LATERAL FOR CONNECTION - TYPE III METER BOX - 1-1/2" AND 2" METER
93	●	COPPER SERVICE LATERAL FOR CONNECTION - MULTIPLE SERVICE
94	●	SERVICE LATERAL AND CONNECTION - FITTING SCHEDULE
95	●	PLASTIC SERVICE LATERAL FOR CONNECTION
96	●	PLASTIC SERVICE LATERAL FOR CONNECTION - ELEVATION
97	●	MATERIAL LIST FOR COPPER AND PLASTIC LATERALS
98	●	END OF LINE CONNECTION, WATER METER BOX FOR NON-SIDEWALK AREAS
99	●	STOPCOCK
100	●	HORIZONTAL THRUST BLOCK FOR WATER MAINS
101	●	2" CLEANOUT AT DEAD ENDS
102	●	CLEANOUT AND RISER
103	●	CLEANOUT
104	●	REINFORCED CONCRETE JACKET - TYPICAL DETAIL
105	●	HORIZONTAL THRUST BLOCK - MINIMUM BEARING AREAS
106	●	TOP VERTICAL THRUST BLOCK
107	●	TYPICAL THRUST BLOCK - VERTICAL BENDS
108	●	TYPICAL THRUST BLOCK WITH STRAPS FOR CONNECTIONS AT VERTICAL BENDS
109	●	TYPICAL THRUST BLOCK WITH STRUCTURAL STRUT FOR CONNECTIONS
110	●	CONCRETE THRUST BEAM - TYPICAL DETAIL
111	●	TYPICAL THRUST BLOCK PLATE 6"-22 1/2" CONCRETE CYL. BEND FOR CONNECTIONS ONLY 16" - 42"
112	●	TYPICAL THRUST BLOCK PLATE 22 1/2" - 45" CONCRETE CYL. BEND FOR CONNECTIONS ONLY 16" - 42"
113	●	TYPICAL THRUST BLOCK PLATE 45"-67 1/2" CONCRETE CYL. BEND FOR CONNECTIONS ONLY 16" - 42"
114	●	TYPICAL THRUST BLOCK PLATE CONCRETE CYL. TEE CONNECTION (16" - 42")
115	●	CONCRETE CYLINDER PIPE TAP-IN TEE
116	●	CONCRETE CYLINDER PIPE TAP-IN TEE DETAILS
117	●	CONCRETE CYLINDER PIPE - MISCELLANEOUS DETAILS
118	●	CONCRETE CYLINDER PIPE - MISCELLANEOUS DETAILS
119	●	CONCRETE CYLINDER PIPE - MISCELLANEOUS DETAILS
120	●	CONCRETE CYLINDER PIPE - MISCELLANEOUS DETAILS
121	●	CONCRETE CYLINDER PIPE - MISCELLANEOUS DETAILS
122	●	GATE VALVE ANCHOR BLOCK FOR AC AND PVC PIPE
123	●	TRENCH BACKFILL
124	●	WATERLINE TRENCH DETAILS
125	●	EXCAVATION PAYMENT - LIMITS AT CONNECTIONS
126	●	BACKFLOW PREVENTER - TYPICAL INSTALLATION
127	●	AIR GAP - TYPICAL DETAIL
128	●	PRESSURE VACUUM BREAKER - LANDSCAPE IRRIGATION
129	●	ATMOSPHERIC VACUUM BREAKER - LANDSCAPE IRRIGATION - DETAIL
130	●	ATMOSPHERIC VACUUM BREAKER - LANDSCAPE IRRIGATION - LAYOUT
131	●	CHAIN LINK FENCE
132	●	CHAIN LINK FENCE
133	●	CHAIN LINK FENCE
134	●	CHAIN LINK FENCE - SECURITY SWITCH DETAIL

NOTE:  
STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A "●" NEXT TO THE STANDARD PLAN NO. (7●)



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**COUNTY STANDARD**  
**DETAILS LIST**  
KEAAHALA ROAD WIDENING  
KAHEKILI HIGHWAY TO PO'OKELA STREET  
State Project No. HWY-0-03-97  
Scale: As shown Date: April 2000  
SHEET NO. C-3 OF C-55 SHEETS

PM: STY  
OPR: CKY, RMK, MNN, \*RCQ, WSM  
SCALE: 1"=1'  
REVISED: 04/24/00  
FILE: DOT95109  
SCALE: 1"=1'  
BEG: 1/16/96