,							FED. ROAD STATE FED. AID FISCAL SHEET TOT
SHEET		-	SHEET			SHEET	DIST. NO.   STATE   PROJ. NO.   YEAR   NO.   SHE
SHEET NO.	TITLE	SHEET	NO	TITLE	SHEET	<u>NO.</u>	TITLE HAWAII HAW. I-H3-1(75) 1994 2 35
		-					
1. GENERAL		STF	RUCTURA	<u>L</u> _	99	2E27	PANEL SCHEDULES-4
	·	•	004		100	2E28	GROUNDING PLAN-1
1 1G1	TITLE SHEET	48	2\$1	GENERAL PLAN-1	101	2E29	GROUNDING PLAN-2
2 1G2	LIST OF PLANS-1	49	2\$2	GENERAL PLAN-2	102	2E30	GROUNDING PLAN-3
3 163	LIST OF PLANS-2	50	2\$3	GENERAL PLAN-3			
4 1G4	LIST OF PLANS-3	51	2\$4	TYPICAL TUNNEL SECTIONS	SY	STEMS	
5 1G5	LIST OF PLANS-4	52	2\$5	TYP. SECTS AT PASSING POCKETS AND TURNOUTS	103	2T1	CONDUIT/CABLE SCHEDULE & NOTES-SYSTEMS
•	STANDARD PLANS SUMMARY	53	2\$6	CROSSPASSAGE NO. 1 CONNECTION PLANS & SECTION			
6 166		54	287	CROSSPASSAGE NO. 3 CONNECTION PLANS & SECTION	104	2T2	BLOCK DIAGRAM-1 SYSTEMS
7 167	KEY PLAN-1	55	2\$8	CROSSPASSAGE NO. 5 CONNECTION PLANS & SECTION	105	2T3	BLOCK DIAGRAM-2 SYSTEMS
8 168	KEY PLAN-2	56	289	CROSSPASSAGE NO. 7 CONNECTION PLANS & SECTION	106		BLOCK DIAGRAM-3 SYSTEMS
9 169	KEY PLAN-3	57	2\$10	CROSSPASSAGE NO. 9 CONNECTION PLANS & SECTION	107	2T5	BLOCK DIAGRAM-4 SYSTEMS
10 1G10	ABBREVIATIONS, LEGEND & NOTES			SHAFT LINING SECTIONS AND DETAIL	108	2T6	BLOCK DIAGRAM RADIO SYSTEMS
11 1G11	CIVIL ABBREVIATIONS, SYMBOLS & GEN. NOTES	58	2811		109	2T7	SYSTEMS PLAN-1
12 1G12	STRUCTURAL GEN. NOTES & ABBREVIATIONS	59	2\$12	TYPICAL STAIR SECTIONS	110	2T8	SYSTEMS PLAN-2
13 1G13	MECHANICAL ABBREVIATIONS AND LEGEND	60	2\$13	MISCELLANEOUS DETAILS & SECTIONS	111	2T9	SYSTEMS PLAN-3
14 1G14	ELECTRICAL SYMBOLS AND LEGENDS	61	2\$14	TURNOUT PLAN, SECTIONS AND DETAILS	112	2T10	SYSTEMS PLAN HALAWA
15 1G15	SYSTEMS LEGEND AND ABBREVIATIONS	62	2\$15	Y-INTERSECTION PLAN SECTIONS AND DETAILS	113	2T11	SYSTEMS PLAN HAIKU
16 1G16	CONSTRUCTION MILESTONE SCHEDULE	63	2\$16	HALAWA GATE PLANS AND SECTIONS	114	2T12	SYSTEMS PLAN HAIKU-DETAILS
16S-1 1G16A		64	2817	HAIKU GATE PLANS AND SECTIONS	<del>-</del>	2T13	CROSSPASSAGE 3 & 7 CONNECTIONS
103-1 1010A	, INFDES GENERAL NOTES				115		
		ME	CHANICA	<u>L</u>	116	2T14	CROSSPASSAGE 1, 5 & 9 CONNECTIONS
2 EVDI OD	RATORY TUNNEL IMPROVEMENTS				117	2T15	MISCELLANEOUS DETAILS-1 SYSTEMS
Z. EXPLUR	ATORT TOMMEL TWIFKOVEWIENTS	65	2M1	VENTILATION EQUIPMENT SCHEDULE	118	2T16	MISCELLANEOUS DETAILS-2 SYSTEMS
CIVIL		66	2M2	AIR FLOW AND CONTROL DIAGRAM	119	2T17	MISCELLANEOUS DETAILS-3 SYSTEMS
<u> </u>		67	2M3	VENTILATION AND PIPING PLAN-1	120	2T18	MISCELLANEOUS DETAILS-4 SYSTEMS
17 2C1	GENERAL PLAN-1	68	2M4	VENTILATION AND PIPING PLAN-2	121	2T19	MISCELLANEOUS DETAILS-5 SYSTEMS
18 202	GENERAL PLAN-2	69	2 <b>M</b> 5	VENTILATION AND PIPING PLAN-3	122	2T20	MISCELLANEOUS DETAILS-6 SYSTEMS
19 2C3	GENERAL PLAN-3 AND TYPICAL SECTION	70	2M6	VENTILATION AND PIPING SECTIONS	123	2T21	MISCELLANEOUS DETAILS-7 SYSTEMS
20 204	ALIGNMENT PLAN AND PROFILE	71	2M7	VENTILATION AND PIPING DETAILS			
21 205	HALAWA SITE PLAN	72	2M8	CROSSPASSAGE ELEVATOR MACHINE ROOM VENTILATION	3. TF	RAFFI(	C OPERATION CENTER EXPANSION
22 206	HAIKU SITE PLAN	_	-				
		FIF	CTRICA		CI	<u>VIL</u>	
27 207	MATCACI I ANICALIC DETATI C						
23 207	MISCELLANEOUS DETAILS						CDADING AND DDAINAGE
24 2C8	DRAINAGE PROFILES	73	2E1	ONE LINE DIAGRAM	124	3C1	GRADING AND DRAINAGE
24 2C8 25 2C9	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE				124 125	3C1 3C2	DRAINAGE PROFILES
24 2C8	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE	73	2E1	ONE LINE DIAGRAM	124	3C1 3C2	
24 2C8 25 2C9	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE	73 74	2E1 2E2	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1	124 125	3C1 3C2	DRAINAGE PROFILES
24 2C8 25 2C9 26 2C10	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2	73 74 75	2E1 2E2 2E3 2E4	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2	124 125 126 127	3C1 3C2 3C3 3C4	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING
24 2C8 25 2C9 26 2C10 27 2C11	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2  CATHODIC PROTECTION TYPICAL DETAILS-3	73 74 75 76 77	2E1 2E2 2E3 2E4 2E5	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-1	124 125 126 127	3C1 3C2 3C3	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2  CATHODIC PROTECTION TYPICAL DETAILS-3  DOMESTIC & FIRE WATER TYPICAL DETAILS	73 74 75 76 77 78	2E1 2E2 2E3 2E4 2E5 2E6	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2	124 125 126 127 <u><b>GE</b></u>	3C1 3C2 3C3 3C4 OTECHN	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA	73 74 75 76 77 78 79	2E1 2E2 2E3 2E4 2E5 2E6 2E7	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3	124 125 126 127 <u>GE</u> 128	3C1 3C2 3C3 3C4 OTECHN 3F1	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL PLAN-EXCAVATION AND RETAINING WALLS
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA	73 74 75 76 77 78 79 80	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN	124 125 126 127 <u>GE</u> 128 129	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS	73 74 75 76 77 78 79 80 81	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1	124 125 126 127 <b>GE</b> 128 129 130	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL	73 74 75 76 77 78 79 80 81 82	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 2	124 125 126 127 <b>GE</b> 128 129 130 131	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN 32 2F1	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2  CATHODIC PROTECTION TYPICAL DETAILS-3  DOMESTIC & FIRE WATER TYPICAL DETAILS  AS-BUILT SURVEY DATA  GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 2  POWER HALAWA PORTAL IB-LEVEL 3	124 125 126 127 <u>GE</u> 128 129 130 131 132	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2  CATHODIC PROTECTION TYPICAL DETAILS-3  DOMESTIC & FIRE WATER TYPICAL DETAILS  AS-BUILT SURVEY DATA  GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT  CROSSPASSAGE NO. 3 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83 84	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 2  POWER HALAWA PORTAL IB-LEVEL 3  POWER HALAWA PORTAL IB-LEVEL 4	124 125 126 127 <u>GE</u> 128 129 130 131	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN 32 2F1	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2  CATHODIC PROTECTION TYPICAL DETAILS-3  DOMESTIC & FIRE WATER TYPICAL DETAILS  AS-BUILT SURVEY DATA  GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 2  POWER HALAWA PORTAL IB-LEVEL 3	124 125 126 127 <u>GE</u> 128 129 130 131 132	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN 32 2F1 33 2F2	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE  CATHODIC PROTECTION TYPICAL DETAILS-1  CATHODIC PROTECTION TYPICAL DETAILS-2  CATHODIC PROTECTION TYPICAL DETAILS-3  DOMESTIC & FIRE WATER TYPICAL DETAILS  AS-BUILT SURVEY DATA  GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT  CROSSPASSAGE NO. 3 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83 84	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-3  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 2  POWER HALAWA PORTAL IB-LEVEL 3  POWER HALAWA PORTAL IB-LEVEL 4	124 125 126 127 <u>GE</u> 128 129 130 131 132 133	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3	DRAINAGE PROFILES  CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83 84 85	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83 84 85 86	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL POWER PLAN-1  TUNNEL POWER PLAN-2  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 2  POWER HALAWA PORTAL IB-LEVEL 3  POWER HALAWA PORTAL IB-LEVEL 4  POWER HALAWA PORTAL SECTIONS  POWER HALAWA PORTAL-SECTIONS	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL-SECTIONS POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  MICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 4 POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION
24 208 25 209 26 2010 27 2011 28 2012 29 2013 30 2014 31 2015   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL POWER PLAN-3  TUNNEL POWER PLAN-3  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 3  POWER HALAWA PORTAL IB-LEVEL 4  POWER HALAWA PORTAL IB-LEVEL 4  POWER HALAWA PORTAL IB-LEVEL 4  POWER HALAWA PORTAL IB-LEVEL A  POWER HAIKU APPROACH PLAN  POWER HAIKU PORTAL IB-LEVEL 1  POWER HAIKU PORTAL IB-LEVEL 3  POWER HAIKU PORTAL IB-LEVEL 1	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION
24 208 25 209 26 2010 27 2011 28 2012 29 2013 30 2014 31 2015   CEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION PASSING POCKET NO. 3 CONNECTION	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20	ONE LINE DIAGRAM  TUNNEL LIGHTING PLAN-1  TUNNEL LIGHTING PLAN-2  TUNNEL POWER PLAN-3  TUNNEL POWER PLAN-3  TUNNEL POWER PLAN-3  POWER HALAWA APPROACH PLAN  POWER HALAWA PORTAL IB-LEVEL 1  POWER HALAWA PORTAL IB-LEVEL 3  POWER HALAWA PORTAL IB-LEVEL 4  POWER HALAWA PORTAL IB-LEVEL 4  POWER HALAWA PORTAL IB-LEVEL A  POWER HAIKU APPROACH PLAN  POWER HAIKU PORTAL IB-LEVEL A  POWER HAIKU PORTAL IB-LEVEL 1  POWER HAIKU PORTAL IB-LEVEL 1  POWER HAIKU PORTAL IB-LEVEL 1  POWER HAIKU PORTAL IB-LEVEL 3  POWER HAIKU PORTAL IB-LEVEL 3  POWER HAIKU PORTAL IB-LEVEL 4  POWER HAIKU PORTAL IB-LEVEL 3	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION
24 208 25 209 26 2010 27 2011 28 2012 29 2013 30 2014 31 2015   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E20 2E21	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL-SECTIONS POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER BLIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  STATE OF HAWAII DEPARTMENT OF TRANSPORTATION INGENIAVES DIVISION
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E21	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 1 POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 2 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1
24 208 25 209 26 2010 27 2011 28 2012 29 2013 30 2014 31 2015   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E22 2E23	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 1 POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 2 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  IICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  STATE OF MANVAIL DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12 44 2F13	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E22 2E23 2E24	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HAIKU APPROACH PLAN POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 2 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE PANEL SCHEDULES-1	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  MICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  BETATE OF HAMAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1 GENERAL
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E22 2E23	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL POWER PLAN-1 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 2 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 1 POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 2 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  MICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1  GENERAL H-3 FINISH (UNIT III)
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12 44 2F13	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E22 2E23 2E24	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HAIKU APPROACH PLAN POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 2 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE PANEL SCHEDULES-1	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHMAYS DIVISION  LIST OF PLANS-1  GENERAL H-3 FINISH (UNIT III) FAIP NO. I-H3-1(75), UNIT III
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15  GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12 44 2F13  ARCHITEC	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT  CTURAL HALAWA GATE	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E20 2E21 2E22 2E23 2E24 2E25	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL A POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE PANEL SCHEDULES-1 PANEL SCHEDULES-2	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEQUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  STATE OF MANANI DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  THIS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  THIS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  TILS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  TILS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  TILS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  THIS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  THE TILD IT IN INCIDENCE OF DATES  TO THIS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  TILS WORK WAS PREPARED BY ME OR LINGER MY SUFFERVISION  THE TILD IT IN INCIDENCE OF DATES  THE TILD IN INCIDENCE OF DATES  THE TILD IN INCIDENCE OF
24 208 25 209 26 2010 27 2011 28 2012 29 2013 30 2014 31 2015   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12 44 2F13  ARCHITEC  45 2A1	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 5 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT  CTURAL  HALAWA GATE HAIKU GATE	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E20 2E21 2E22 2E23 2E24 2E25	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL A POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE PANEL SCHEDULES-1 PANEL SCHEDULES-2	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SCOUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  BATAL OF HANNEY DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1  GENERAL H-3 FINISH (UNIT III) FAIP NO. I-H3-1(75), UNIT III T.K. TUNNEL/ACCESS ROADS SCALE: NONE DATE: JAN 199
24 208 25 209 26 2010 27 2011 28 2012 29 2013 30 2014 31 2015   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12 44 2F13   ARCHITEC  45 2A1 46 2A2 47 2A3	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT  CTURAL  HALAWA GATE HAIKU GATE DOOR & RAILING DETAILS	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E20 2E21 2E22 2E23 2E24 2E25	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL A POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE PANEL SCHEDULES-1 PANEL SCHEDULES-2	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SEOUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1  GENERAL H-3 FINISH (UNIT III) FAIP NO. I-H3-1(75), UNIT III T.K. TUNNEL/ACCESS ROADS SCALE: NONE DATE: JAN 199 SHEET NO. 1G2 OF 16 SHEETS
24 2C8 25 2C9 26 2C10 27 2C11 28 2C12 29 2C13 30 2C14 31 2C15   GEOTECHN  32 2F1 33 2F2 34 2F3 35 2F4 36 2F5 37 2F6 38 2F7 39 2F8 40 2F9 41 2F10 42 2F11 43 2F12 44 2F13  ARCHITEC  45 2A1 46 2A2	DRAINAGE PROFILES CATHODIC PROTECTION FIRE WATER LINE CATHODIC PROTECTION TYPICAL DETAILS-1 CATHODIC PROTECTION TYPICAL DETAILS-2 CATHODIC PROTECTION TYPICAL DETAILS-3 DOMESTIC & FIRE WATER TYPICAL DETAILS AS-BUILT SURVEY DATA GRADING DETAILS  NICAL  CROSSPASSAGE NO. 1 CONNECTION/TURNOUT CROSSPASSAGE NO. 3 CONNECTION/TURNOUT CROSSPASSAGE NO. 7 CONNECTION/TURNOUT CROSSPASSAGE NO. 9 CONNECTION/TURNOUT SUGGESTED EXCAVATION & SUPPORT SEQUENCE TUNNEL WATERPROOFING PASSING POCKET NO. 1 CONNECTION PASSING POCKET NO. 2 CONNECTION Y-INTERSECTION AT EXPLORATORY TUNNEL RAMP EXISTING GROUND SUPPORT TYPE C TUNNEL HALAWA AND HAIKU FAN ENLARGEMENT  CTURAL  HALAWA GATE HAIKU GATE DOOR & RAILING DETAILS	73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97	2E1 2E2 2E3 2E4 2E5 2E6 2E7 2E8 2E9 2E10 2E11 2E12 2E13 2E14 2E15 2E16 2E17 2E18 2E19 2E20 2E21 2E20 2E21 2E22 2E23 2E24 2E25	ONE LINE DIAGRAM TUNNEL LIGHTING PLAN-1 TUNNEL LIGHTING PLAN-2 TUNNEL LIGHTING PLAN-3 TUNNEL POWER PLAN-3 TUNNEL POWER PLAN-2 TUNNEL POWER PLAN-3 POWER HALAWA APPROACH PLAN POWER HALAWA PORTAL IB-LEVEL 1 POWER HALAWA PORTAL IB-LEVEL 3 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL 4 POWER HALAWA PORTAL IB-LEVEL A POWER HAIKU APPROACH PLAN POWER HAIKU PORTAL IB-LEVEL A POWER HAIKU PORTAL IB-LEVEL 1 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 3 POWER HAIKU PORTAL IB-LEVEL 4 POWER & LIGHTING C.P. CONNECTION PLAN SECTIONS & DETAILS ELEMENTARY DIAGRAM LIGHTING FIXTURE SCHEDULE PANEL SCHEDULES-1 PANEL SCHEDULES-2	124 125 126 127 <u>GE</u> 128 129 130 131 132 133 134	3C1 3C2 3C3 3C4 OTECHN 3F1 3F2 3F3 3F4 3F5 3F6 3F6 3F7	DRAINAGE PROFILES MISCELLANEOUS DETAILS STRIPING AND SIGNING  ICAL  PLAN-EXCAVATION AND RETAINING WALLS EXISTING GROUND SUPPORT PIT EXCAVATION EXCAVATION AND RETAINING WALL, EL 1040 PIT EXCAVATION BELOW EL 1040-1 PIT EXCAVATION BELOW EL 1040-2 SUGGESTED PIT EXCAVATION SCOUENCE PIT EXCAVATION INSTRUMENTATION SOLDIER PILE & LAGGING WALL DESIGN CRITERIA  10/13/95 ADDENDUM 1 DATE REVISION  BATAL OF HANNEY DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  LIST OF PLANS-1  GENERAL H-3 FINISH (UNIT III) FAIP NO. I-H3-1(75), UNIT III T.K. TUNNEL/ACCESS ROADS SCALE: NONE DATE: JAN 199

	9	SHEET			SHEET			SHEET		DIST. NO. PROJ. NO. YEAR NO. SHEETS
SH	EET	NO.	TITLE	SHEET	NO.	TITLE	SHEET	NO.	TITLE	HAWAII HAW. I-H3-1(75) 1994 3 353
•							224	5C12	TYPICAL ROADWAY SECTIONS-2	OI411 III
3.	TRA	FFIC	OPERATION CENTER EXPANSION	183	3M4	HVAC- PARTIAL PLAN AND SECTION	225	5C13	CROSS SECTIONS	
				184	3M5	HVAC SECOND LEVEL PLAN	226	5C14	PCC PAVEMENT JOINT DETAILS	
	ARCH	HITECTU	JRAL					No.		
				185	3M6	HVAC MECH. ROOM PARTIAL PLAN, SECTIONS AND DETAILS	2265-	I 5CI4A	(DELETED)	
	136	3A1	LEGENDS AND SCHEDULES	186	3M7	PIPING PARTIAL PLANS	227	5C15	SITE PAVEMENT DETAILS-1	
	137	3A2	SITE PLAN	187	3M8	PIPING SECTIONS AND DETAILS	228	5C16	SITE PAVEMENT DETAILS-2	
				188	3M9	HVAC DETAILS	229	5C17	MISCELLANEOUS DETAILS-1	
	138	3A3	LOWER LEVEL PLAN	.00	0.0.0					
	139	<b>3A4</b>	PARKING LEVEL PLAN		CTDICAL		230	5C18	MISCELLANEOUS DETAILS-2	
	140	3A5	SECOND LEVEL PLAN	ELE	CTRICA		231	5C19	DRAINAGE DETAILS	
	141	3A6	ROOF PLAN	189	3E1	LIGHTING-LOWER LEVEL PLAN	232	5C20	PROFILES-1, AR1, AR2, & AR5 LINES	
		3A7	WEST ELEVATION				233	5C21	PROFILES-2, AR3 & AR4 LINES	
	142			190	3E2	LIGHTING-PARKING LEVEL PLAN	234	5C22	PROFILES-3, R3 & R5 LINES	
	143	3A8	SOUTH ELEVATIION	191	3E3	LIGHTING-SECOND LEVEL PLAN		5C23	EROSION AND SEDIMENT CONTROL MEASURE	
	144	3A9	EAST ELEVATION	192	3E4	LIGHTING-ROOF LEVEL PLAN	235			
	145	3A10	LONGITUDINAL SECTION AT CONTROL BUILDING	193	3E5	POWER-LOWER LEVEL PLAN	236	5C24	STEAM RESTORATION AND ACCESS ROAD P	PLAN-1
	146	3A11	LONGITUDINAL SECTION AT PORTAL SECTION				237	5C25	STEAM RESTORATION AND ACCESS ROAD F	PLAN-2
				194	3E6	POWER-PARKING LEVEL PLAN	238	5C26	STEAM RESTORATION AND ACCESS ROAD F	PLAN-3
	147	3A12	SECTION AT OB PORTAL	195	3E7	POWER-SECOND LEVEL PLAN		5C27	STREAM RESTORATION AND ACCESS ROAD	
	148	3A13	STAIR/ELEVATOR PLANS AND SECTIONS	196	3E8	POWER-ROOF LEVEL PLAN	239	-		
	149	3A14	STAIR/ELEVATOR ELEVATIONS AND SECTIONS	197	3E9	LIGHTING SECTIONS & DETAILS	240	5C28	STREAM RESTORATION AND ACCESS ROAD	SECTIONS-2
	150	3A15	REFLECTED CEILING PLAN-PARKING LEVEL				241	5C29	(DELETED)	
				198	3E10	LIGHTING FIXTURE SCHEDULE	242	5030	CROSSOVER STRIPING PLAN	
	151	3A16	REFLECTED CEILING PLAN-SECOND LEVEL	199	3E11	PANEL SCHEDULES	243	5C31	(DELETED)	
	152	3A17	INTERIOR ELEVATIONS							
	153	3A18	DETAILS-1	SYS	TEMS		244	5032	SYSTEMS CONDUIT-ROADWAY LEVEL	
	154	3A19	DETAILS-2				245	5C33	SYSTEMS VEHICLE DETECTION DETAILS	
				200	3T1	CONDUIT/CABLE SCHEDULE & NOTES-1, SYSTEMS				
	155	3A20	DETAILS-3	201	3T2	CONDUIT/CABLE SCHEDULE & NOTES-2, SYSTEMS	STR	RUCTURA	AL	
	156	3A21	DETAILS-4	2015-1	1 3T2A	CONDUIT/CABLE SCHEDULE & NOTES-3, SYSTEMS				
	157	3A22	DETAILS-5	202	3T3	LOWER LEVEL PLAN, SYSTEMS	246	5\$1	OB PORTAL EMERGENCY STAIR PLAN & SE	ECTION
	157S-I	3A22A	DETAILS-6			·	247	5\$2	OB PORTAL EMERGENCY STAIR ELEVATION	
	STRU	<b>JCTURA</b> I		203	3T4	PARKING LEVEL PLAN, SYSTEMS				
				204	3T5	SECOND LEVEL PLAN, SYSTEMS	248	5\$3	OB PORTAL EMERGENCY STAIR SECTIONS	
	158	3\$1	STANDARD DETAILS	205	<b>3T6</b>	ROOF LEVEL PLAN, SYSTEMS	249	5\$4	DRILLED SHAFT SUPPORT WALL	
•	159	3\$2	FOUNDATION PLAN	206	3T7	RISER DIAGRAMS-1, SYSTEMS				
₹ 1					•					
	160	383	FOUNDATION SECTIONS AND DETAILS-1	207	3T8	RISER DIAGRAMS-2, SYSTEMS	MEC	CHANIC	Δι	
	161	3\$4	FOUNDATION SECTIONS AND DETAILS-2	208	<b>3T9</b>	MISCELLANEOUS DETAILS-1, SYSTEMS		7117107		
	162	3\$5	SECOND LEVEL FRAMING PLAN	209	3T10	MISCELLANEOUS DETAILS-2, SYSTEMS	250	5M1	(DELETED)	
	163	386	ROOF LEVEL FRAMING PLAN					•	•	
				A KNIC	אוו ס	EMEDIATION	C1 C	CTRICA	<b>\ 1</b>	
	164	357	SECTIONS AND DETAILS	7. KIV		ENEDIATION		CINICA	<u> </u>	
	165	388	LOWER LEVEL PLANS	CTD		•	251	5E1	HALAWA ACCESS ROAD OVERHEAD POWER	LINE
	166	389	LOWER LEVEL SECTIONS AND DETAILS	318	RUCTURA		201	JLI	DEMOLITION PLAN	
	167	3510	TYPICAL SLAB REINFORCEMENT LAYOUT	210	4\$1	SITE PLAN			DEMOCITION TEAM	
•	168	3S11	BEAM AND GIRDER REINFORCEMENT LAYOUT					T. /	NITE CINIONES	
				211	4\$2	SECTIONS AND DETAILS-1	6. HA	IKU S	SITE FINISHES	
	169	3\$12	BEAM AND GIRDER REBAR SCHEDULE	212	4\$3	SECTIONS AND DETAILS-2				
	170	3\$13	TYPICAL COLUMN REINFORCEMENT LAYOUT				CIV	IL		
	171	3\$14	WALL ELEVATIONS ALONG COL. LINES A AND E	5 HAI	$\Delta W \Lambda$	SITE FINISHES	- ·			
	172	3\$15	WALL ELEVATIONS ALONG COL. LINES 1 AND 4	<u> </u>			252	6C1	SITE LAYOUT PLAN	
				CIV	TI		253	6C2	GENERAL PLAN AND PROFILE	
	173	3\$16	WALL ELEVATIONS ALONG COL. LINE 2 AND AT ELEVATOR	CIV	<u></u>		254	6C3	SITE PLAN-GEOMETRY-1	
	174	3\$17	SECTIONS AND DETAILS	213	5C1	SITE LAYOUT PLAN	255	6C4	SITE PLAN-GEOMETRY-2	
	175	3\$18	STAIR PLANS							5/12/97 DCN 75-018: DELETED SHT. NO. 5C14A
	176	3\$19	STAIR SECTIONS AND DETAILS	214	5C2	GENERAL PLAN AND PROFILE	256	6C5	SITE PLAN-GRADING AND DRAINAGE-1	
	177	3\$20	SECTIONS AND DETAILS	215	5C3	SITE PLAN-GEOMETRY-1	257	606	SITE PLAN-GRADING AND DRAINAGE-2	6/24/96 DCN 75-004: ADDED SHT. NO. 5C14A
				216	5C4	SITE PLAN-GEOMETRY-2	258	6C7	FENCE LAYOUT PLAN	10/27/95 ADDENDUM 2 - ADDED SHT. NO. 3A22A
	178	3\$21	BEAM-COLUMN JOINT DETAIL	217	505	SITE PLAN-GEOMETRY-3	259	608	SITE PAVEMENT SECTIONS AND DETAILS	10/13/95 ADDENDUM 1
	179	3\$22	RETAINING WALL PLAN AND SECTIONS	218	5C6	SITE PLAN-GRADING AND DRAINAGE-1				DATE REVISION
							260	609	MISCELLANEOUS DETAILS	STATE OF HAWAII
,	MECH	HANICA	L	219	5C7	SITE PLAN-GRADING AND DRAINAGE-2	261	6C10	CHANNEL DROP STRUCTURE	DEPARTMENT OF TRANSPORTATION
				220	5C8	SITE PLAN-GRADING AND DRAINAGE-3	262	6C11	SITE PLAN-SIGNING AND STRIPING	HIGHWAYS DIVISION
	180	3M1	HVAC EQUIPMENT SCHEDULES	221	5C9	FENCE LAYOUT-1			W KO M	
	181	3M2	MECHANICAL EQUIPMENT SCHEDULE	222	5C10	FENCE LAYOUT-2			TOWNS TO THE PARTY OF THE PARTY	LIST OF PLANS-2
	182	3M3	AIR FLOW AND CONTROL DIAGRAM						PROFESSIONAL ENGINEER *	
	- <del></del>	<i>•</i>		223	5C11	TYPICAL ROADWAY SECTIONS-1				GENERAL
									No. 8040-C	H-3 FINISH (UNIT III)
				,					WAII, U.	FAIP NO. I-H3-1(75), UNIT III
									THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	T.K. TUNNEL/ACCESS ROADS
									V. Vo 111 0	SCALE: NONE DATE: JUN 1995
									Opportion the same	
									/	SHEET NO. 1G3 OF 16 SHEETS
NANDEZ FLWOOD	: 24 I D: I DWG IG	DOZ. FGB. I FDITE	ED_060CT95=15, 12, 30							

FED. ROAD STATE

FED. AID FISCAL SHEET TOTAL PROJ. NO. YEAR NO. SHEETS

	SHEET	FED. ROAD STATE FED. AID FISCAL SHEET TOTAL DIST. NO. DIST. NO. YEAR NO. SHEETS
SHEET NO. TITLE	SHEET NO. TITLE	SHEET   DIST. NO.   PROJ. NO.   VEAR   NO.   SHEETS
6. HAIKU SITE FINISHES (CONT.)	7. COMMON WORK (CONT'D)	
O. HAIRO STIL TINISHLS (CONT.)	ELECTRICAL	8. HALAWA ACCESS ROAD (CONT'D)
ARCHITECTURAL	296 7EI HALAWA POTABLE WATER TREATMENT POWER PLAN	323 8C18 ACCESS ROAD "F2" PROFILE
262S-1 6A1 STAINLESS STEEL RAILINGS	297 7E2 HAIKU POTABLE WATER TREATMENT POWER PLAN	324 8C19 ACCESS ROAD "F2" TYPICAL DETAILS 325 8C20 ACCESS ROAD "F2" TYPICAL ACCESS ROAD BRIDGES
STRUCTURAL	298 7E3 PANEL SCHEDULES	326 8C20 ACCESS ROAD F2 TYPICAL ACCESS ROAD BRIDGES  326 8C21 ACCESS ROAD "F2" CROSS SECTIONS
	299 7E4 CONTROL BLDG. ELECT. ROOM VENTILATION POWER PLAN 300 7E5 CONTROL BLDG. ELECTRONICS SHOP POWER PLAN	
263 6S1 IB PORTAL EMERGENCY STAIR PLAN & SECTION 264 6S2 IB PORTAL EMERGENCY STAIR ELEVATION	301 7E6 FUEL OIL SYSTEM LEAK DETECTORS POWER PLAN	9. HAIKU ACCESS ROAD
265 6S3 OB PORTAL EMERGENCY STAIR PLAN & SECTION	301S-1 7E6A FLAG POLE GROUNDING	<u>CIVIL</u>
266 684 OB PORTAL EMERGENCY STAIR ELEVATION	301S-2 7E6B PANEL SCHEDULES-DEHUMIDIFIERS 301S-3 7E6C CONTROL BUILDING PLANS AND SECTION	
267 6S5 PORTAL EMERGENCY STAIR DETAIL & SECTIONS	301S-4 7E6D PANEL SCHEDULES AND MAIN ONE LINE DIAGRAM	327 9C1 HAIKU ACCESS ROAD RESTORATION TYPICAL RESTORATION SECTION
ELECTRICAL	SYSTEMS	328 9C2 HAIKU ACCESS ROAD RESTORATION PLAN-1
268 6E1 HAIKU ACCESS ROAD OVERHEAD POWER LINE	302 7T1 (DELETED)	329 9C3 HAIKU ACCESS ROAD RESTORATION PLAN-2
DEMOLITION PLAN	303 7T2 (DELETED)	330 9C4 HAIKU ACCESS ROAD RESTORATION PLAN-3
7. COMMON WORK	304 7T3 IDENTIFYING DEVICES-1	331 9C5 HAIKU ACCESS ROAD RESTORATION PROFILE-1 332 9C6 HAIKU ACCESS ROAD RESTORATION PROFILE-2
	305 7T4 IDENTIFYING DEVICES-2 305S-1 7T4A BLOCK DIAGRAM RADIO EQUIPMENT	333 9C7 HAIKU ACCESS ROAD RESTORATION PROFILE-2
ARCHITECTURAL	305S-1 714A BLOCK DIAGRAM RADIO ECOIPMENT 305S-2 7T4B RADIO EQUIPMENT LAYOUT CONTROL CENTER	334 9C8 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-1
269 7A1 ROOF WALKWAYS	3058-3 7T4C 800 MHz RADIO REBROADCAST CONDUITS SECTION B	335 9C9 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-2
270 7A2 STORAGE ROOM SECURITY FENCE	305S-4 7T4D 800 MHz RADIO REBROADCAST CONDUITS LEVEL 3	336 9C10 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-3
271 7A3 RAILING AND DETAILS-1	3058-5 7T4E 800 MHz RADIO REBROADCAST CONDUITS SECTION B	337 9C11 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-4
272 7A4 RAILING AND DETAILS-2	305S-6 7T4F 800 MHz RADIO REBROADCAST CONDUITS LEVEL 3	338 9C12 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-5
273 7A5 RAILING AND DETAILS-3	3058-7 7T4G 800 MHz RADIO REBROADCAST CONDUITS SECTION B	339 9C13 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-6
STRUCTURAL	305S-8 7T4H 800 MHz RADIO REBROADCAST CONDUITS LEVEL 3	340 9C14 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-7
274 7S1 ACCESS OPENING SAFETY RAILING-HALAWA	305S-9 7T4I 800 MHz RADIO REBROADCAST CONDUITS SECTION B	341 9C15 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-8 342 9C16 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-9
274 7S1 ACCESS OPENING SAFETY RAILING-HALAWA 275 7S2 ACCESS OPENING SAFETY RAILING-HAIKU	305S-10 7T4J 800 MHz RADIO REBROADCAST CONDUITS LEVEL 3 305S-11 7T4K 800 MHz RADIO REBROADCAST REPEATERSTATION (STATION 426+80)	343 9C17 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-10
276 752 ACCESS OPENING SAFETY RAILING HARO  276 753 ACCESS OPENING SAFETY RAILING-DETAILS	305S-12 7T4L DETAILS SYSTEMS EQUIPMENT-1	344 9C18 HAIKU ACCESS ROAD RESTORATION CROSS SECTION-11
277 7S4 HALAWA POTABLE WATER TANK - PLAN	305S-13 7T4M DETAILS SYSTEMS EQUIPMENT-2	STRUCTURAL
278 7S5 HAIKU POTABLE WATER TANK - PLAN	305S-14 7T4N INTRUSION DETECTOR CONDUIT LEVEL 2	
279 786 POTABLE WATER TANK - SECTIONS & DETAILS	305S-15 7T40 DETAILS SYSTEMS EQUIPMENT - 3 305S-16 7T4P DETAILS SYSTEMS EQUIPMENT - 4	345 9S1 HAIKU ACCESS ROAD RESTORATION PLAN AND ELEVATION
MECHANICAL	305S-17 7T4Q DETAILS SYSTEMS EQUIPMENT - 5	346 9S2 HAIKU ACCESS ROAD RESTORATION BRIDGE DETAILS-1 347 9S3 HAIKU ACCESS ROAD RESTORATION BRIDGE DETAILS-2
	305S-18 7T4R DETAILS SYSTEMS EQUIPMENT - 6 305S-19 7T4S DETAILS SYSTEMS EQUIPMENT - 7	
280 7M1 HALAWA POTABLE WATER TREATMENT - P&ID 281 7M2 HAIKU POTABLE WATER TREATMENT - P&ID		10. LANDSCAPE
282 7M3 WATER TREATMENT/TANK ACCESS ROOM VENTILATION	8. HALAWA ACCESS ROAD	348 10L1 PLANTING PLAN-HALAWA KNOLL
283 7M4 HALAWA POTABLE WATER TREATMENT - PLAN	CIVIL	349 10L2 PLANTING PLAN-NORTH PANEL WALLS
284 7M5 HALAWA POTABLE WATER TREATMENT - SECTIONS		350 10L3 PLANTING PLAN-SOUTH PANEL WALLS 351 10L4 PLAN-SLIDE REPAIR NHV ACCESS RD.
285 7M6 HAIKU POTABLE WATER TREATMENT - PLAN	306 8C1 GRADING NOTES EROSION AND SEDIMENT CONTROL MEASURES	351 10L4 PLAN-SLIDE REPAIR NHV ACCESS RD. 352 10L5 PLANTING PLAN-HAIKU KNOLL
286 7M7 HAIKU POTABLE WATER TREATMENT - SECTIONS	307 8C2 MUCK DISPOSAL & ACCESS ROAD RELOCATION TYP. SECTIONS & DETAILS	353 10L6 SECTION, DETAILS AND PLANT LIST
287 7M8 POTABLE WATER TREATMENT DETAILS-1	308 8C3 MUCK DISPOSAL & ACCESS ROAD RELOCATION PLAN	
288 7M9 POTABLE WATER TREATMENT DETAILS-2 289 7M10 CONTROL BUILDING ELECTRICAL ROOM VENTILATION	309 8C4 MUCK DISPOSAL & ACCESS ROAD RELOCATION PROFILE-1	
290 7M11 CONTROL BUILDING ELECTRONICS SHOP HVAC	310 8C5 MUCK DISPOSAL & ACCESS ROAD RELOCATION PROFILE-2	5/1/97 DCN 75-017: ADDED SHT. NO. 7M13G
291 7M12 FUEL OIL SYSTEM LEAK DETECTORS	311 8C6 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-1	10/27/95 ADDENDUM 2 - ADDED SHT.
292 7M13 CROSSPASSAGE VENTILATION	312 8C7 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-2	NO. 7M13F, 7T4M, 7T4N
2925-1 7M13A DEHUMIDIFIERS DETAILS AND SCHEDULES	313 8C8 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-3	10/13/95 ADDENDUM 1
2925-2 7M13B DEHUMIDIFIERS HAIKU PORTAL BUILDING - IB	314 8C9 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-4 315 8C10 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-5	DATE REVISION
2925-3 7M13C DEHUMIDIFIERS HAIKU PORTAL BUILDING - OB	315 8C10 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-5 316 8C11 MUCK DISPOSAL & ACCESS ROAD RELOCATION CROSS SECTION-6	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
292S-4 7M13D DEHUMIDIFIERS HAIKU PORTAL MECH. RM OB 292S-5 7M13E MISCELLANEOUS WORK ITEMS	317 8C12 ACCESS ROAD "F2" PLAN NORTH HALAWA STREAM IMPROVEMENTS	HIGHWAYS DIVISION
292S-6 7MI3F MISCELLANEOUS WORK ITEMS 292S-7 7MI3G MISCELLANEOUS WORK ITEMS	318 8C13 ACCESS ROAD "F2" CROSS SECTIONS NORTH HALAWA STREAM	LIST OF PLANS-3
2925-8 7MI3H EQUIPMENT SCHEDULES	IMPROVEMENTS	★ ENGINEER ★
2925-9 7MI3I CONTROL CENTER PARTIAL PLAN, SECTION & DIAGRAMS 293 7MI4 PRESSURE REDUCING HOSE VALVE TESTING AND CALIBRATION - I	319 8C14 ACCESS ROAD "F2" GRADING PLAN IB STA. 595+50 TO 599+50	No. 8048-C  Mo. 80
294 7MI5 PRESSURE REDUCING HOSE VALVE TESTING AND CALIBRATION - 2 295 7MI6 PRESSURE REDUCING HOSE VALVE TESTING AND CALIBRATION - 3	320 8C15 ACCESS ROAD "F2" PLAN REMOVAL OF PANEL BRIDGE & STREAM RESTORATION	THIS WORK WAS PREPARED BY ME  H-3 FINISH (UNIT III)  FAIP NO. I-H3-1(75), UNIT III
	321 8C16 ACCESS ROAD "F2" DETAILS STREAM IMPROVEMENTS	OR UNDER MY SUPERVISION T.K. TUNNEL /ACCESS ROADS
	322 8C17 ACCESS ROAD "F2" PLAN	Scale: NONE DATE: SEP 1995
ERNANDEZ ELWOOD:: EZATO: ID MG 16003.FGB) T EDITED 200C195-09.18.10		SHEET NO. 1G4 OF 16 SHEETS

ADD. 4

	REFERENC	E PLA	NS_	
		TAL SHE		TITLE
	EXPLORATOR	Y I UNINE	L-F.A.I.	PROJ. NO. I-H3-1(37)
		26 1 OF		ERHEAD POWER LINE 11.5 KV LAYOUT-HALAWA
				ERHEAD POWER LINE 11.5 KV LAYOUT-HALAWA
				ERHEAD POWER LINE 11.5 KV LAYOUT-HALAWA
		26 4 0		ERHEAD POWER LINE 11.5 KV LAYOUT-HALAWA
		26 1 OF		ERHEAD POWER LINE 12.47 KV LAYOUT-HAIKU
		26 20 26 30		ERHEAD POWER LINE 12.47 KV LAYOUT-HAIKU ERHEAD POWER LINE 12.47 KV LAYOUT-HAIKU
				ERHEAD POWER LINE 12.47 KV LAYOUT-HAIKU
		26	- OVE	ERHEAD POWER LINE POLE METERING DETAILS  _AWA AND HAIKU
	25 2	?6	- OVE	ERHEAD POWER POWER LINE DETAILS
	26 2	26 ·		LAWA AND HAIKU ERHEAD POWER SUBSTATION LAYOUT
	20 2	•		LAWA AND HAIKU
	HAIKU APPROAG	CH AND	I UNNELS-	-F.A.I. PROJ. NO. I-H3-1(61)
	CIVIL			
	C.O. ADD. 46 4	24 C	B10 SIT	E PLAN UTILITIES-SERVICE LEVEL
	ARCHITECT	URAL		
	44.7	40.4	<b>A 5</b>	AATOOFI I AAIFOUG DETATI O O
	113	424	A5	MISCELLANEOUS DETAILS-2 LEVEL A PLAN
	ADD. 118 ADD. 119	424 424	AM1 AM2	LEVEL A PLAN
	ADD. 119	424	AM3	LEVEL 2 PLAN
	ADD. 121	424	AM4	LEVEL 3 PLAN
	125	424	AM8	EAST ELEVATIONS
	ADD. 128	424	<b>AM11</b>	LONGITUDINAL SECTION A
	ADD. 129	424	AM12	LONGITUDINAL SECTION B
	ADD. 130	424	<b>AM13</b>	TRANSVERSE SECTION C
	131	424	AM14	LONGITUDINAL SECTION D
	ADD. 133	424	AM16	DETAIL SECTION AT LOADING DOCK FACE
	ADD. 134	424	AM17	PARTIAL PLANS AND INTERIOR ELEVATIONS
4	137 138	424 424	AM20 AM21	STAIR-1 STAIR-2
	139	424	AN22	STAIR-3
	140	424	AM23	SECTIONS AT ELEVATOR
	C.O. 141	424	A01	LEVEL A PLAN
	ADD. 142	424	A02	LEVEL 1 PLAN
	ADD. 143	424	A03	LEVEL 2 PLAN
	ADD. 144	424	A04	LEVEL 3 PLAN
	C.O. 148	424	A06	EAST ELEVATION
	ADD. 152	424	A012	LONGITUDINALSECTION B
	153 154	424	A013	TRANVERSE SECTION C
	154 156	424 424	A014 A016	LONGITUDINAL SECTION D  DETAIL SECTION AT LOADING DOCK FACE
,	156 C.O. ADD. 157		A016 A017	PARTIAL PLANS AND INTERIOR ELEVATIONS
	C.O. AUD. 137	767	AUIT	ATTENDA

A020

STAIRS-1

STAIRS-2

STAIRS-3

SECTIONS AT ELEVATOR

FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT III	1994	5	353

FIRE PROTECTION-P&ID 1

FIRE PROTECTION-P&ID 2

FIRE PROTECTION-P&ID 3

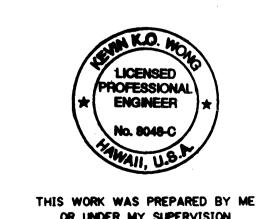
GROUNDING

TOTAL SHEET **PROJECT** SHEET NO. SHEETS NO. TITLE

HALAWA APPRO	ACH AND TUNNE	ELS-F.A.I. PROJ.	NO. I-H3-1(64)
	· · · · · · · · · · · · · · · · · · ·		

# MECHANICAL, ELECTRICAL AND ARCHITECTURAL FINISH - F.A.I. PROJ. NO. I-H3-1(66)

				F.A.I. PROJ.	NO. I-	H3-1(66
ELECTRIC	CAL			MECHAN	ITCAL	
323	424	EM1	GROUNDING-1	IVILVIIOI	ICAL	
324	424	EM2	GROUNDING-2	30	440	M20
341	424	EQ1	GROUNDING-1	31	440	M21
342	424	EQ2	GROUNDING-2	32	440	M22
CIVIL				ELECTR	<u>ICAL</u>	
37	531	CA1	SITE PLAN GEOMETRY -1	98	440	E4
ADD. 40	531	CA4	SITE PLAN-GRADING AND DRAINAGE-1			
ADD. 41	531	CA5	SITE PLAN-GRADING AND DRAINAGE-2			
42	531	CA6	SITE PLAN-GRADING AND DRAINAGE-3			
43	531	CA7	SITE PLAN-UTILITIES-1			
44	531	CA8	SITE PLAN-UTILITIES-2			
45	531	CA9	CATHODIC PROTECTION-FIRE WATER/DRAIN LINES	,		
100	531	CA64	RETAINING WALL LAYOUT DATA			
ADD. 100S-1	531	CA64A	SPUR ROAD-PLAN & PROFILE			
ADD. 100S-2	531	CA64B	SPUR ROAD-GEOTEXTILE REINF. ABUTMENT			
ADD. 100S-3	531	CA64C	SPUR ROAD-BRIDGE & ROADWAY			
GEOTECH	HNICAL					
C.O. 138	531	FA28	PORTAL DEVELOPMENT PLAN-1			
C.O. ADD. 139	531	FA29	PORTAL DEVELOPMENT PLAN-2			
C.O. 140	531	FA30	OB-ELEVATIONS & SECTIONS			
C.O. 141	531	FA31	IB-ELEVATIONS & SECTIONS			
158	531	FT6	UTILITY TUNNEL-GROUND SUPPORT			
ARCHITE	CTURAL	-				
166	531	A2	ROOF & MISCELLANEOUS DETAILS			
181	531	AN5	ROOF LEVEL PLAN			
187	531	AN11	LONGITUDINAL SECTION B			
STRUCTU	JRAL					
C.O. 242	531	SV1	PLAN AND ELEVATION	i.		1
C.O. 243	531	SV2	FOUNDATION LAYOUT			
276	531	SA9	FACADE WALL RW-C4 PLAN AND ELEVATION			
277	531	SA10	FACADE WALL RW-C4 DETAILS			
280	531	SA13	RETAINING WALL RW-V6, PLAN, ELEV. & DETAIL			
282	531	SA15	RETAINING WALL RW-S1 & S2 PLANS, ELEVATION	NS & DETAILS		
283	531	SA16	RETAINING WALL-TYPE 1			
293	531	SA26	EXPLORATORY TUNNEL ACCESS-STRUCTURE-1			
	÷					



REVISION STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION LIST OF PLANS-4

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

T.K. TUNNEL/ACCESS ROADS

SCALE: NONE

SHEET NO. 105

10/13/95 ADDENDUM 1

# STANDARD PLANS SUMMARY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT Ⅲ	1994	6	353

STANDARD PLAN NO.	TITLE	DATE
B-01	Notes and Miscellaneous Details	07/01/86
B-02		
B-03 ●	Typical Structure Excavation and Backfill Pay Limits	07/01/86
B-04		
B-05		
B-06	Concrete Box Girder	07/01/86
B-07	Concrete Box Girder	07/01/86
B-08	Concrete Box Girder	07/01/86
B-09		
B-10		
B-11		
B-12	Prestressed Concrete Piles	r07/16/90
B-13	Prestressed Concrete Piles	r07/16/90

D-01 •	Chain Link Fence With Toprail	r03/06/87
D-02	Chain Link Fence Without Toprail	r07/26/90
D-03	Wire Fence With Metal Posts	07/01/86
D-04	Typical Details of Curbs and/or Gutters	07/01/86
D-05	Typical Details of Reinforced Concrete Drop Driveway	07/01/86
D-06	Centerline and Reference Survey Monument	07/01/86
D-07	Street Survey Monument	07/01/86
D-08	Landscaping Shrub and Tree Planting	07/01/86
D-09	Field Office	07/01/86
D-10	Field Office	07/01/86
D-11 ·	Project Site Laboratory	07/01/86
D-12	Project Site Laboratory	07/01/86
D-13	Field Office & Project Site Laboratory	07/01/86

07/01/86

Type A, B, C and D Catch Basin

H-02	Type A1, B1, C1 and D1 Catch Basin	07/01/
H-03	Type A2, B2, C2 and D2 Catch Basin	07/01/
H-04	Typical Reinforcing Details for Catch Basins	07/01/
H-05 ●	Type A, B and C Storm Drain Manhole	07/01/
H-06	Type D and E Storm Drain Manhole	07/01/
H-07 ●	Type F Storm Drain Manhole	07/01/
H-08 •	Catch Basin and Manhole Casting	07/01/
H-09	Type A-9 and A-9P Frames and Grates	07/01/
H-10	Type A-9B Frames and Grates	07/01/
H-11	Type 61614 and 61214 Grated Drop Inlet	07/01/
H-12	Type 61616 Grated Drop Inlet	07/01/
H−13 ●	61214, 61614 & 61616 Steel Frames and Grates	07/01/
H-14	61214B Steel Frame and Grates	07/01/
H-15	61614B Steel Frame and Grates	07/01/
H−16 ●	Concrete and Cement Rubble Masonry Structures	r10/16/9
H-17	Inlet Structures	r10/16/9
H-18	Flared End Section for Culverts	07/01/
H-19	Outlet Structures	r02/15/9
H-20	Concrete Spillway Inlet	07/01/
H-21	18" Slotted C.M.P. Drain	07/01/
H-22	C.M.P. Coupling Details Standard Joint	r10/16/9
H-23	Hat Shaped Coupling Band	r10/16/9

STANDARD PLAN NO.	TITLE	DATE
TE-01 ●	Miscellaneous Sign Details	07/01/86
TE-02 ●	Galvanized Flanged Channel Sign Post Mounting	07/01/86
TE-03 ●	Galvanized Square Tube Sign Post Mounting	07/01/86
TE-04	Regulatory Signs	r09/01/87
TE-05 ●	Warning Signs	07/01/86
TE-06	Miscellaneous Signs	r11/03/89
TE-07	Reserved	07/01/86
TE-08	Construction Signs	r09/01/87
TE-09	Miscellaneous Intersection Signs	r03/06/87
TE-10	Reserved	07/01/86
TE-11	Bike Route Sign and Supplementary Plates	07/01/86
TE-12	State Route Marker and Auxiliary Markers	07/01/86
TE-13	Interstate Route Marker	07/01/86
TE-14	State Route Marker and Border Detail for Guide Signs	07/01/86
TE-15	Route Marker Assemblies	07/01/86
TE-16 ●	Miscellaneous Reflector Markers	07/01/86
TE-17	Type II Object Markers	07/01/86
TE-18	Mileposts	07/01/86
TE-19	Reserved	07/01/86
TE-20	Overhead Sign Supports	07/01/86
TE-21	Overhead Sign Support, Box Truss Type, Aluminum	07/01/86
TE-22	Foundation Details and Schedules	07/01/86
TE-23	Supports for Ground Mounted Guide Sign	r11/03/89
TE-24	Breakaway Sign Supports for Ground Mounted Guide Signs	07/01/86
TE-25	Laminated Aluminum Sign Panels (Overhead)	07/01/86
TE-26	Laminated Aluminum Sign Panels (Ground Mounted)	07/01/86
TE-27	Solid Aluminum Extruded Sign Panel and Accessory Details	07/01/86
TE-28	Guide Signs Luminaire Mountings	07/01/86
TE-29	Reserved	07/01/86
TE-30 ●	Raised Pavernent Markers and Striping	r05/09/90
TE-31	Miscellaneous Pavement Markings	r05/09/90
TE-32	Miscellaneous Pavement Markings	r05/09/90
TE-33	Miscellaneous Pavement Markings	r11/03/89
TE-34	Reserved	07/01/86
TE-35	Pavement Alphabets, Numbers & Symbols	07/01/86
TE-36	Pavement Alphabets, Numbers & Symbols	07/01/86
TE-37	Reserved	07/01/86
TE-38	Traffic Signal System, Miscellaneous Details	r11/03/89
TE-39 ●	Traffic Signal System, Miscellaneous Details	07/01/86
TE-40	Loop Detectors	r11/03/89
TE-41 ●	Pullboxes	07/01/86
TE-42	Type III Traffic Signal Standard	07/01/86
TE-43	Concrete Pullbox (2' x 3')	07/01/86
TE-44	Reserved	07/01/86

STANDARD PLAN NO.	TITLE	DATE
TE-45	Reserved	07/01/86
TE-46	Reserved	07/01/86
TE-47	Reserved	07/01/86
TE-48	Reserved	07/01/86
TE-49	Reserved	07/01/86
TE-50 ●	Metal Guardrail	r03/06/87
TE-51 ●	Metal Guardrail	r09/01/87
TE-52 ●	Metal Guardrail with Rubrail	r11/03/89
TE-53	Metal Guardrail with Rubrail at Obstruction	r09/01/87
TE-54	Beam Type Guardrail with Rubrail at Obstruction (Shoulder Installation)	r11/03/89
TE-55	Metal Guardrail Connection to Concrete Barrier	r11/03/89
TE-56	Concrete Barrier Transition	07/01/86
TE-57	Guardrail Type 3, Thrie Beam	r11/03/89
TE-57A	Guardrail Type 3, Modified Thrie Beam	11/03/89
TE-58	Approach End Flare, One & Two Way Roadway	07/01/86
TE-59	Trailing End Flare, One & Two Way Roadway	r11/03/89
TE-60	Anchor Block Details	07/01/86
TE-61	Breakaway Cable Terminal (BCT)	r11/03/89
TE-62	Breakaway Cable Terminal (BCT)	r09/01/87
TE-63	Guardrail Type 4 (Rigid Barrier)	r09/01/87
TE-64	Portable Concrete Barrier	r11/03/89
TE-65	Guardrail Type 4, Miscellaneous	r09/01/87
TE-66	Barricades	07/01/86
TE-67	Delineation & Pavement Markings at Bridges	07/01/86
TE-68	Wheelchair Ramps	r11/03/89
TE-69	Wheelchair Ramps	r11/03/89



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

TE-59, TE-61, TE-64, TE-68 & TE-69.
ADDED TE-57A TO STANDARD PLANS
REVISED STANDARD PLANS TE-04, TE-06,
TE-08, TE-32, TE-51, TE-53, TE-54,
TE-55, TE-57, TE-59, TE-62, TE-63, TE-65 & TE-69.
03/06/87 REVISED STANDARD PLANS D-01, TE-09, TE-40, TE-50, TE-51, TE-57, TE-59, TE-61, TE-63 & TE-64.

02/15/91 | REVISED STANDARD PLANS H-19 10/16/90 | REVISED STANDARD PLANS H-16,H-17,

07/26/90 REVISED STANDARD PLANS D-02. 07/16/90 REVISED STANDARD PLANS B-12,B-13, 05/09/90 REVISED STANDARD PLANS TE-30,TE-31,

11/03/89 REVISED STANDARD PLANS TE-06,TE-23, TE-30, TE-31, TE-32, TE-33, TE-38,

TE-40, TE-52, TE-54, TE-55, TE-57,

**REVISION** 

H-22 & H-23.

& TE-32.

NOTE:

STANDARD PLANS APPLICABLE TO THIS PROJECT ARE INDICATED BY A " . " NEXT TO THE STANDARD PLAN NO. (D-07 **●** )

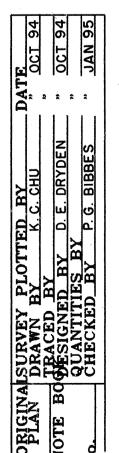
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

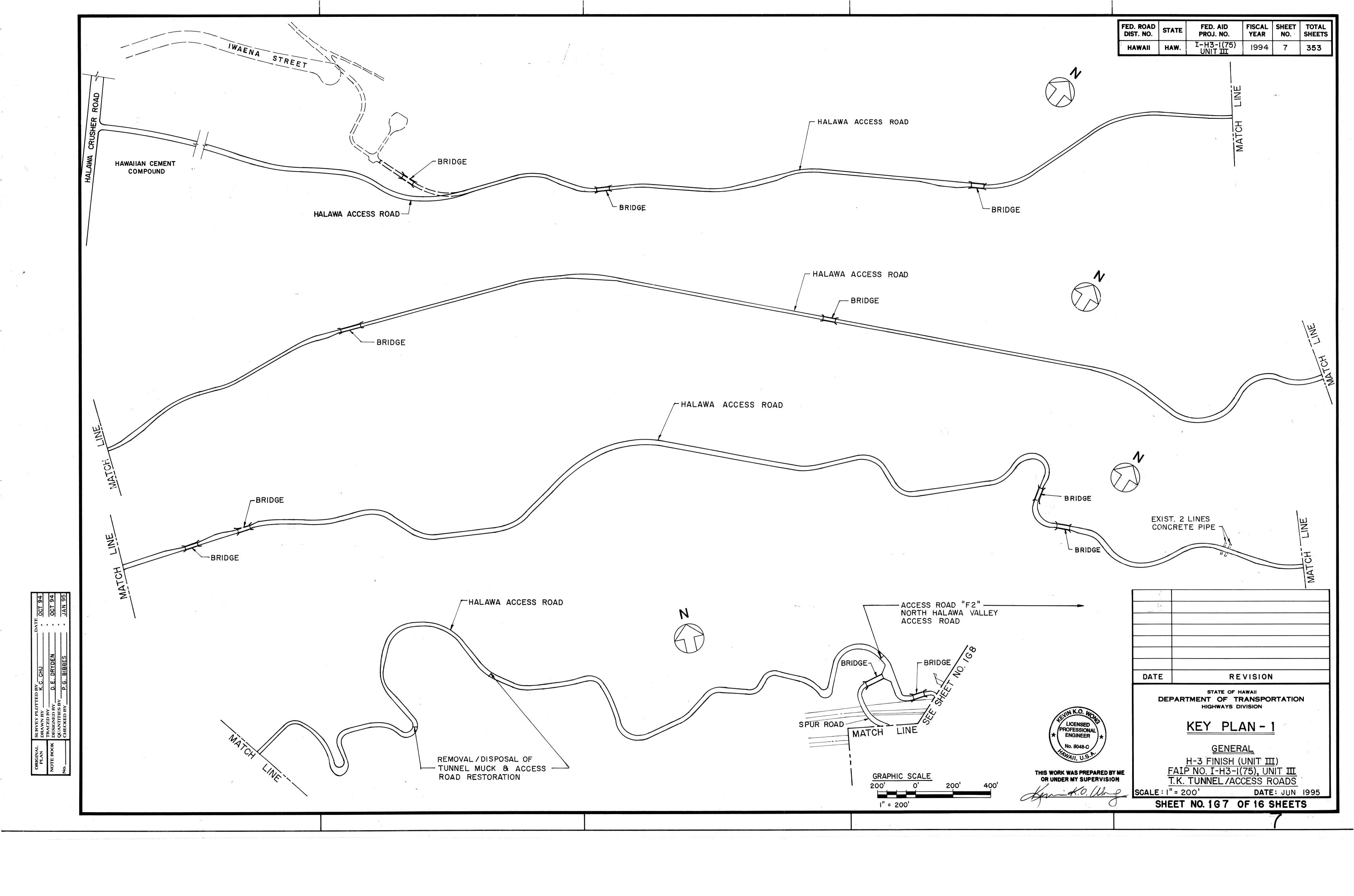
### STANDARD PLANS SUMARY

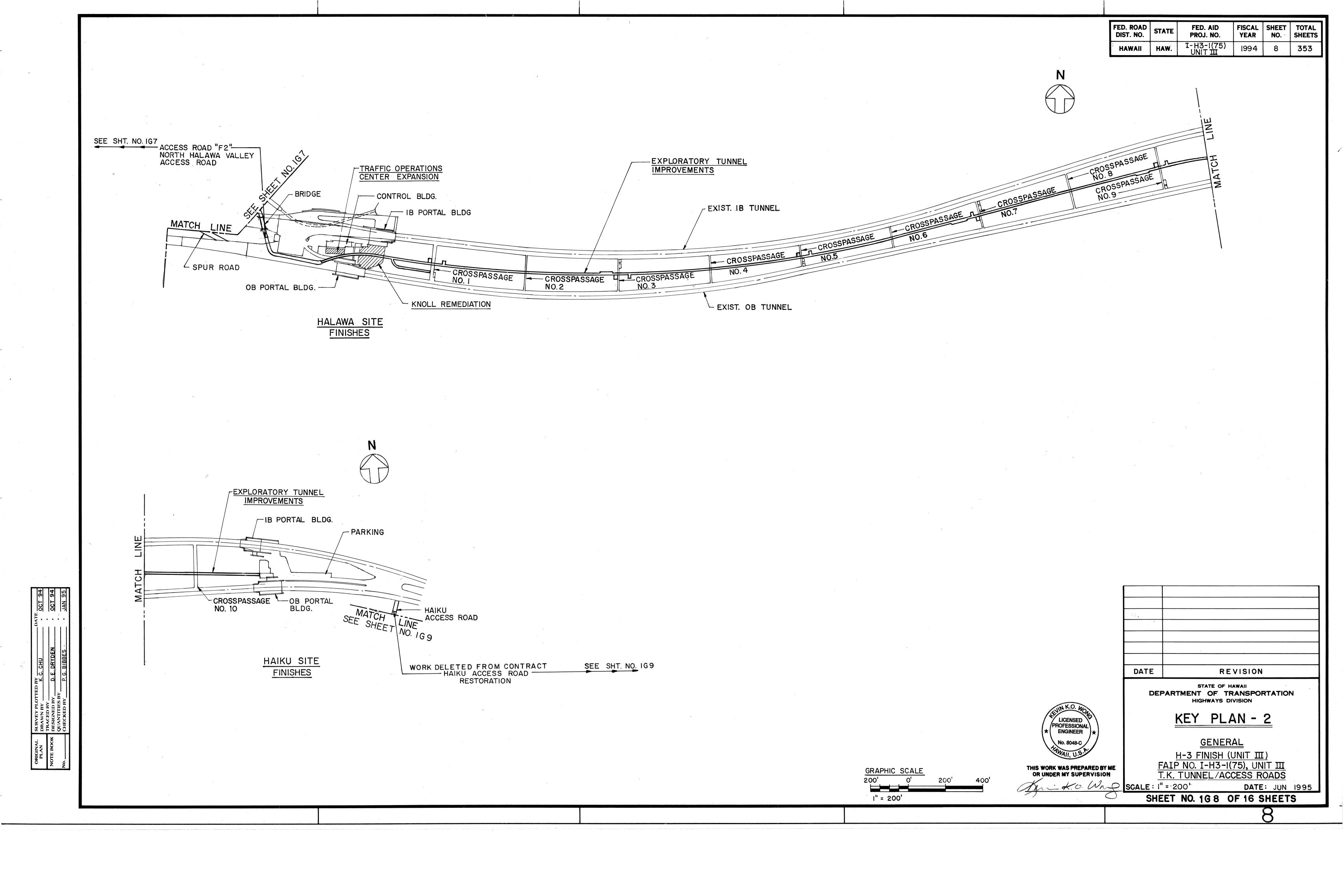
<u>GENERAL</u>

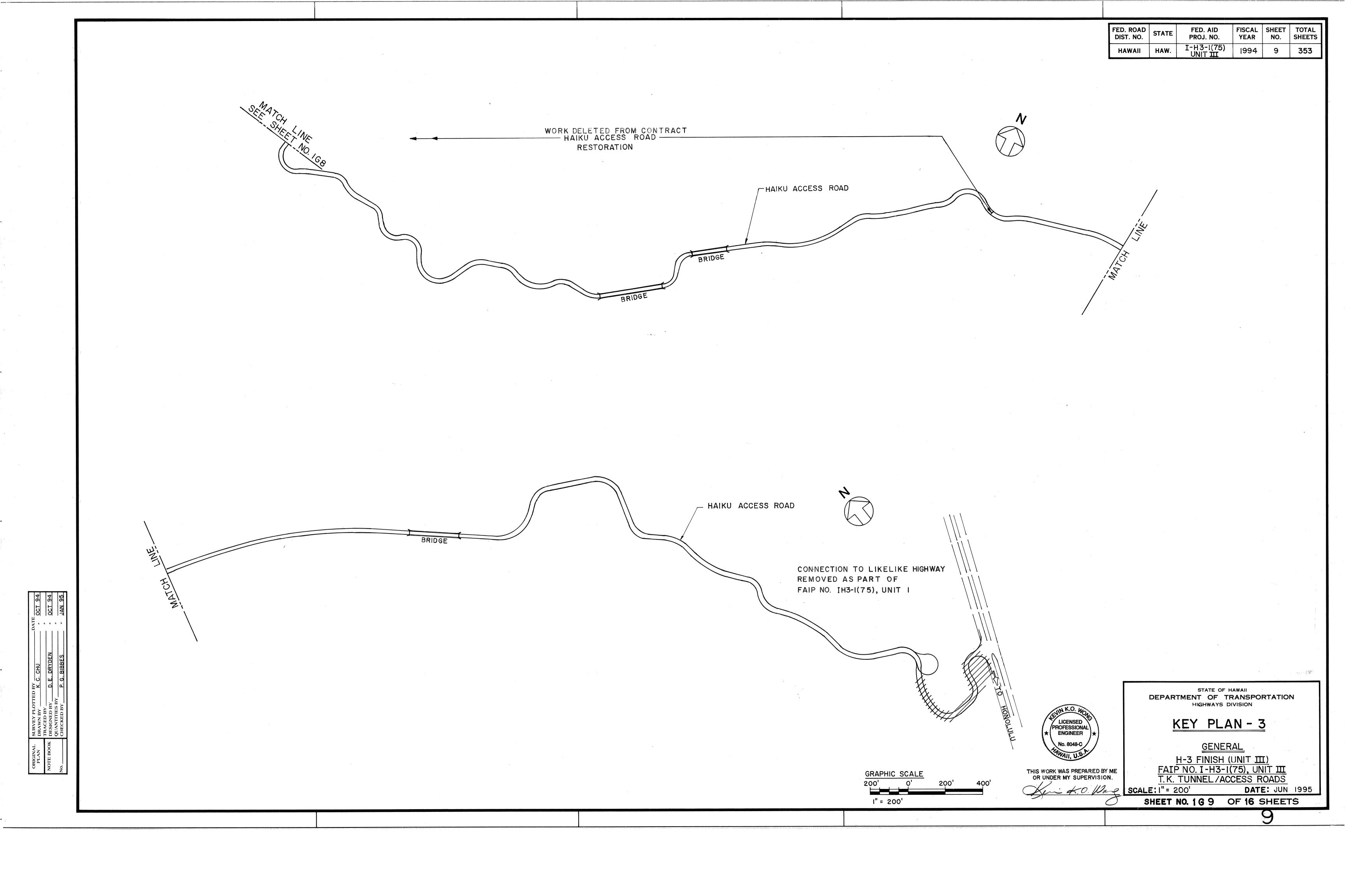
H-3 FINISH (UNIT III)
FAIP NO. I-H3-I(75), UNIT III
T.K. TUNNEL/ACCESS ROADS

SCALE: NONE SHEET No.1G6 OF 16 SHEETS









	ABBREVIATIONS						
AACH. A ARGHTECTURAL A.C., A.C. ASPHALT CONORTE A.I.S.I. AMERICAN IRON AND STEEL INSTITUTE MIN. MISC.	ALT.	ALTERNATE	MiH	MANHOLE			
A.I.S.I. AMERICAN IRON AND STEEL INSTITUTE  ASTM AMERICAN SOCIETY FOR TESTING MATERIAL  AZ. AZIMUTH  AMERICAN SOCIETY FOR TESTING MATERIAL  AZ. AZIMUTH  BEG  BEG BEGIN  NO., # MAMBER TO PROCEED  NITP  BACK  BAC			•				
ASTM AZEMATINA SOCIETY FOR TESTING MATERIAL AZ. AZIMUTH AZ. AZIMUTH N NOT IN NORTH NOT IN MOT IN MOTH NOT IN MOTH MOTH MATERIAL BEG BEG BEGIN NO., # NIMBER RK. BACK NTP NOTICE TO PROCEED NTS NOT TO SCALE BOTTOM OF FOOTING BOLKHO. BULKHO. BULKHO. BULKHO. BULKHO. BULKHO. BULKHOL	A.C., AC	ASPHALT CONCRETE	MIN.	MINIMUM			
AZ. AZIMUTH NN MORTH NIC NOT IN CONTRACT  BEG BEG IN NO. "NUMBER BE. BACK NTP NOTICE TO PROCEED BE. BACK NTP NOTICE TO PROCEED BE.O.F. BOTTOM OF FOOTING BULKHO. BULKHEAD BULKHEAD OF CATCHER BY NOTICE TO PROCEED BULKHO. BULKHEAD OF CATCHER BY OVER CHAPTER	A.I.S.I.	AMERICAN IRON AND STEEL INSTITUTE	MISC.	MISCELLANEOUS			
BEG	ASTM	AMERICAN SOCIETY FOR TESTING MATERIAL	MSL	MEAN SEA LEVEL			
BEC	AZ.	AZIMUTH	N	NORTH			
BK.   BACK   NTP   NOTICE TO PROCEED			NIC	NOT IN CONTRACT			
BOTT, BOTTON   BOTTON OF FOOTING	BEG	BEGIN	•				
BULKHON   C.B.   CATCH BASIN   O.H.   OPPOSITE HAND	a a constant of the constant o		•				
BULNHO.   BULNHEAD	The state of the s		NTS	NOT TO SCALE			
C.B. CATCH BASIN	<b>X</b>		OD	OUTDOUND			
C.B.   CATCH BASIN   O.H.   OPPOSITE HAND	BULKHU.	BULKHEAD					
CRIME   CRIMET RUBBLE MASONRY   O/H OVERHEAD	CB	CATCH BASIN		•			
CONTENTINE							
C. J.   CONSTRUCTION JOINT   C. C. CLASS   CONC.   CONCRETE   C. CLASS   CONC.   CONCRETE   PAVT.   PAVEMENT   COND.   CONDUIT   PERF.   PERFORATED   PERF.   PERFORATED   COND.   CONDUIT   PERF.   PERFORATED   COND.   CONDUIT   PERF.   PERFORATED   COUL   CULVERT   PC   POINT OF CURVATURE, PREAST   PC   POINT OF CURVATURE, PREAST   PROJ.   PROJ.   POINT OF CURVATURE   PREAST   PROJ.							
CONC.  CONCRETE COND.  COND.  COND.  COND.  CONDUCTED  PEFF. PERFORATED  PC PC POINT OF COMPOUND CURVATURE. PC PC POINT OF COMPOUND CURVATURE. PB PULBOX PORTLAND CEMENT CONCRETE  PB PULBOX PROJECT DIM.  DIAM. Ø DIAMETER DIM. DIMENSION PT. POOL. PROJECT PD. DIM. DIMENSION PT. POOL. PROJECT POLYVINYL CHLORIDE  E ASAT EASHENT EASHENT EASHENT EASHENT EASHENT E.P. EDGE OF PAVEMENT E.P. EDGE OF PAVEMENT E.P. EDGE OF PAVEMENT E.P. EDGE OF PAVEMENT ENGINEER ET EXALORATORY TUNNEL ET EXALORATORY TUNNEL ET ET EXALORATORY TUNNEL ET ET EXALORATORY TUNNEL EXALORATORY TUNNEL EXALORATORY EXPERIENCE EXCLORATORY TUNNEL EXALORATORY EXPERIENCE EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATION EXPLORATION EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATION EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATORY EXPLORATION EXPLORATORY E			,				
COND.		CLASS					
CMP		CONCRETE	PAVT.	PAVEMENT			
CF			PERF.				
CULV.   DETAIL   PB   PULLBOX   DET.   DETAIL   PL. R   PL. R   D. DIA., Ø DIAMETER   PROJ.   PROJECT   DIM. DIAMETER   PROJ.   PROJECT   DIM. DIAMETER   PROJ.   PROJECT   DIM. DIAMETER   PVC   POLYVINYL CHLORIDE   E.A.   EAST   RADIUS   E.A.   EAST   RESEMENT   RC   REINFORCED CONCRETE   E.A.   EASEMENT   RCP   REINFORCED CONCRETE   E.P.   EDGE OF PAVEMENT   RCP   REFERENCE   E.M.   EMBANAMENT   REINF   REINFORCING   EMB.   EMBANAMENT   REINF   REINFORCING   ENG., ENGR.   ENGINEER   REO., REO'D.   REOUIRED   E.O.   EOUAL   RGS   RIGID GALVANIZED STEEL   E.T.   EPAPLORATORY TUNNEL   RT.   RIGHT   F.A.I.   FEDERAL AID INTERSTATE   R/W   RIGHT OF WAY   F.T.   FEET, FOOT   F.W.   FIRE WATER LINE   SECT.   SECTION   FWY.   FREEWAY   SIMM.   SIMILAR   F.W.   GALVANIZED STEEL PIPE   SHT.   SHEET   GSP   GALVANIZED STEEL PIPE   SHT.   SHEET   GA.   GAUGE, GAGE   SPC.   SPACING   GCL   GRADE CONTROL LINE   STA.   STATION   FECO   HAWAII ELECTRIC COMPANY   SY.   SUMBET VARIES   H.T.   HEIGHT   HIGH POINT   H.P.   HIGH POINT   HIGH POINT   H.P.   HIGH WAY   TABB   TOP AND BOTTOM   H.P.   HIGH POINT   TOP OF CONCRETE   H.W.   HIGH POINT   TOP OF CONCRETE   H.W.   HIGH POINT   HIGH POINT   H.W.   HIGH POINT   TOP OF CONCRETE   H.W.   WALL   L.T.   LEFT   WW WEST   MAX.   MAXIMUM   WINDWARD VIADUCT   HMAX.   MAXIMUM	CMP	CORRUGATED METAL PIPE	PC	POINT OF CURVATURE, PRECAST			
DET	CF	CUBIC FEET	PCC	POINT OF COMPOUND CURVATURE			
DETAIL   PL. R	CULV.	CULVERT		•			
D. D. D. D. LAMETER							
DIM.   DIMENSION							
PVC							
EAST EA. EACH EASMT. EASEMENT EA. EACH EASMT. EASEMENT E.P. EDGE OF PAVEMENT E.P. EDGE OF PAVEMENT E.P. ELEV. ELEVATION ELLEC. ELECTRICAL EMB. EMBANKENT ENG., ENGR. ENGINEER EMG. ENGLANKENT ENG., ENGR. ENGINEER EO. EOUAL EXT. EXTERIOR EXT. EXTERIOR EXT. EXTERIOR ET. FOOT FH. FIRE WATER LINE FW. FIRE WATER LINE GSP GALVANIZED STEEL PIPE GALV. GALVANIZED STEEL PIPE GALV. GALVANIZED STEEL PIPE GA. GAUGE, GAGE GCL GRADE CONTROL LINE ENG. GRADE CONTROL LINE EXT. HIGHT HT. HEIGHT H.P. HIGH POINT	DIM.	DIMENSION					
EAS EACH RASEMIT RC REINFORCED CONCRETE PIPE EL, ELEV. EDSE OF PAVEMENT RCP REINFORCED CONCRETE PIPE EL, ELEV. ELEVATION RD. RCP REINFORCED CONCRETE PIPE EL, ELEV. ELEVATION RD. RCF. REFERENCE EMB. EMBANKMENT REINFORCING REINF. REINFORCING REINF. REINFORCING REINF. REINFORCING REINF. REINFORCING REINF. REINFORCING REO. EMBANKMENT RCD. RCO. EMBER RCD. RCO'D.	c	EACT	PVC .	POLYVINYL CHLORIDE			
EASMT			D	PANTIIS			
E.P.   EDEC OF PAVEMENT   RCP   REINFORCED CONCRETE PIPE							
ELEV.   ELEVATION   RD.   ROAD							
ELEC.         ELECTRICAL         REF.         REFERENCE           EMB.         EMBANKMENT         REINF.         REINFOR.         REINFORCING           ENO., ENGR.         ENGINEER         REO., REO'D.         REOUIRD           EO.         EOUAL         RGS         RIGID GALVANIZED STEEL           EXT.         EXTERIOR         RN         REFERENCE NORTH           ET.         EXPLORATORY TUNNEL         RT.         RIGHT OF WAY           F.A.1.         FEDERAL AID INTERSTATE         R.W         RIGHT OF WAY           FT.         FEET, FOOT         FETT.         FIGHT OF WAY           FH         FIRE HYDRANT         S         SOUTH           FWY.         FREEWAY         SF         SOUARE FEET           GALV.         GALVANIZED         SIM.         SIMILAR           GSP         GALVANIZED STEEL PIPE         SHT.         SHEET           GA.         GAUGE, GAGE         SPC.         SPACING           GCL         GRADE CONTROL LINE         STA.         STATION           HT.         HEIGHT         SYM.         SYMMETRICAL           HT.         HEIGHT         SYM.         SYMMETRICAL           HT.         HIGH POINT         THICK							
ENG., ENGR.   ENGINEER   EO.   REO.   REOUIRED							
EO. EOUAL RGS RIGID GALVANIZED STEEL EXT. EXTERIOR ET EXPLORATORY TUNNEL RT. RIGHT F.A.I. FEDERAL AID INTERSTATE F.A.I. FEDERAL AID INTERSTATE F.A.I. FEET, FOOT FH FIRE HYDRANT FW FIRE WATER LINE FWY FREEWAY GALV. GALVANIZED STEEL PIPE GA. GAUGE, GAGE GCL GRADE CONTROL LINE FECO HAWAII ELECTRIC COMPANY H.P. HIGH POINT HWY. HIGHWAY HOR., HORIZ. HORIZONTAL HOR., HORIZ. HORIZONTAL HAIKU VALLEY BRIDGE LINE B INBOUND IN CHARACTER LINE LINE LINE LINE LINE LINE LINE LINE			REINF.				
EXT. EXTERIOR EXPLORATORY TUNNEL RT. RIGHT F.A.I. FEDERAL AID INTERSTATE F.A.I. FEDERAL AID INTERSTATE F.A.I. FEDERAL AID INTERSTATE FT., FEET, FOOT FH FIRE HYDRANT S SOUTH FW FIRE WATER LINE FWY. FREEWAY GALV. GALVANIZED GSP GALVANIZED STEEL PIPE GA. GAUGE, GAGE GCL GRADE CONTROL LINE FMC. HIGH POINT H.P. HIGH POINT H.P. HIGH POINT HWY. HIGHWAY HOR., HORIZ. HORIZONTAL HOR, HORIZ. HORIZONTAL IN INCH IN INCH IN INCH INCH INCH INCH INCH INCH IN INTERIOR  L. LFNGTH LF STA  LF NGTH VARIES LINE LF NGTH WAX. WALLE MAX. MATERIAL MAX. MAZIMUM  MATERIAL MAX. MAZIMUM  RT. REFERENCE NORTH RT. RIGHT R	ENG., ENGR.	ENGINEER	REQ., REQ'D.	REQUIRED			
ET EXPLORATORY TUNNEL RT, RIGHT F.A.I. FEDERAL AID INTERSTATE R/W RIGHT OF WAY F.T., FEET, FOOT FH FIRE HYDRANT S SOUTH FW FIRE HYDRANT SFREWAY FALV. GALVANIZED SEEL PIPE SHT. SHEET GA. GAUGE, GAGE SPC. SPACING GCL GRADE CONTROL LINE STA. STATION HECO HAWAII ELECTRIC COMPANY SY SOUARE YARDS HT. HIGH POINT H.P. HIGH POINT HWY. HIGHWAY TOB TORK THICK HORD, HORIZ. HORIZONTAL HOR., HORIZ. HORIZONTAL IN BUNDO TOC TRAFFIC OPERATIONS CENTER IN INCH IN INCH IN INCH IN INCH IN INCH IN INCH LF LINEAR FOOT LG	EO.	EOUAL	RGS	RIGID GALVANIZED STEEL			
F.A.I. FEDERAL AID INTERSTATE FIT. FEET, FOOT FH FIRE HYDRANT FW FIRE WATER LINE FWY, FREEWAY GALV. GALVANIZED GSP GALVANIZED SHT. SHEET GA. GAUGE, GAGE GCL GRADE CONTROL LINE HECC HAWAII ELECTRIC COMPANY HT. HIGH POINT HWY, HIGHWAY HOR, HORIZ. HORIZONTAL HOR, HORIZ. HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL HORIZONTAL  HORIZONT			RN	REFERENCE NORTH			
FT.,							
FH			R/W	RIGHT OF WAY			
FW			•	0011711			
FWY.   FREEWAY   SF   SQUARE FEET							
GALV. GALVANIZED STEEL PIPE SIM. SIMILAR GSP GALVANIZED STEEL PIPE SHT. SHEET GA. GAUGE, GAGE SPC. SPACING GCL GRADE CONTROL LINE STA. STATION  HECO HAWAII ELECTRIC COMPANY SY SOUARE YARDS HT. HEIGHT SYM. SYM. SYMMETRICAL  H.P. HIGH POINT HWY. HIGHWAY TOP CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK IN "INCH INTERIOR IN "INCH UN.O. UNLESS NOTED OTHERWISE INT. INTERIOR INV. INVERT VARIABLE, VARIES  L. LFNGTH VENT. VENTICAL  LINEAR FOOT VENT. VERTICAL  MALL  MAZIMUM  MATERIAL MAYENAL WWY WINDWARD VIADUCT  MAX. MAXIMUM							
GSP GALVANIZED STEEL PIPE SHT. SHET GA. GAUGE, GAGE SPC. SPACING GCL GRADE CONTROL LINE STA. STATION STD. STANDARD HECO HAWAII ELECTRIC COMPANY SY SOUARE YARDS HT. HEIGHT SYM. SYMMETRICAL H.P. HIGH POINT HWY. HIGHWAY TSB TOP AND BOTTOM HOR., HORIZ. HORIZONTAL T.O.C. TOP OF CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK TYP. TYPICAL IB INBOUND TOC TRAFFIC OPERATIONS CENTER IN INCH U.N.O. UNLESS NOTED OTHERWISE INT. INTERIOR INV. INVERT VALVE LF LINEAR FOOT VERT. VENTILATION LF LINEAR FOOT LG LONG LIN. LINEAR LT. LEFT LTG. LIGHTING W.P. WORK POINT MAX. MAXIMUM							
GA. GAUGE, GAGE GCL GRADE CONTROL LINE GCL GRADE CONTROL LINE STA. STATION STD. STANDARD  HECO HAWAII ELECTRIC COMPANY SY SOUARE YARDS HT. HEIGHT SYM. SYMMETRICAL  H.P. HIGH POINT  HWY. HIGHWAY T8B TOP AND BOTTOM  HORI., HORIZ. HORIZONTAL T.O.C. TOP OF CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK TYP. TYPICAL  IB INBOUND TOC TRAFFIC OPERATIONS CENTER  INT. INTERIOR INT. INTERIOR INV. INVERT V VALVE  L. LFNGTH VENT. VENTILATION  LF LINEAR FOOT LG LONG LIN. LINEAR LT. LEFT W W WEST  LTG. LIGHTING WAY. WAY PIPE  MAT'L MATERIAL WAY. WAY WAY WINDWARD VIADUCT  MAX. MAXIMUM							
GCL GRADE CONTROL LINE STA. STATION STD. STANDARD  HECO HAWAII ELECTRIC COMPANY SY SOUARE YARDS HT. HEIGHT SYM. SYMMETRICAL  H.P. HIGH POINT HWY. HIGHWAY T8B TOP AND BOTTOM HOR., HORIZ. HORIZONTAL T.O.C. TOP OF CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK TYP. TYPICAL  IB INBOUND TOC TRAFFIC OPERATIONS CENTER IN " INCH U.N.O. UNLESS NOTED OTHERWISE  INT. INTERIOR INV. INVERT VAR. VARIABLE, VARIES  L. LFNGTH VENT. VENTILATION  LF LINEAR FOOT VERT. VERTICAL  LG LONG LIN. LINEAR LT. LEFT LTG. LIGHTING W.P. WORK POINT  MAT'L MATERIAL WWV WINDWARD VIADUCT  MAX. MAXIMUM							
HECO HAWAII ELECTRIC COMPANY SY SOUARE YARDS HT. HEIGHT SYM. SYMMETRICAL H.P. HIGH POINT HWY. HIGHWAY T&B TOP AND BOTTOM HOR., HORIZ. HORIZONTAL T.O.C. TOP OF CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK TYP. TYPICAL IB INBOUND TOC TRAFFIC OPERATIONS CENTER IN "INCH U.N.O. UNLESS NOTED OTHERWISE INT. INTERIOR INV. INVERT VAR. VARIABLE, VARIES L. LFNGTH VENT. VENTILATION LF LINEAR FOOT VERT. VERTICAL LG LONG LIN. LINEAR W. WALL LT. LEFT W W WEST LTG. LIGHTING WAY WINDWARD VIADUCT MAX. MAXIMUM		-					
HECO HAWAII ELECTRIC COMPANY SY SQUARE YARDS HT. HEIGHT SYM. SYMMETRICAL H.P. HIGH POINT HWY. HIGHWAY TO.C. TOP OF CONCRETE HORIZONTAL T.O.C. TOP OF CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK TYP. TYPICAL IB INBOUND TOC TRAFFIC OPERATIONS CENTER IN " INCH UN.O. UNLESS NOTED OTHERWISE INT. INTERIOR INV. INVERT VAR. VARIABLE, VARIES L. LFNGTH VENT. VENTILATION LF LINEAR FOOT VERT. LG LONG LIN. LINEAR W. WALL LT. LEFT W W WEST LTG. LIGHTING WAY WAY WINDWARD VIADUCT MAX. MAXIMUM							
H.P. HIGH POINT HWY. HIGHWAY T8B TOP AND BOTTOM HOR., HORIZ. HORIZONTAL T.O.C. TOP OF CONCRETE HVB HAIKU VALLEY BRIDGE THK. THICK TYP. TYPICAL IB INBOUND TOC TRAFFIC OPERATIONS CENTER IN "INCH U.N.O. UNLESS NOTED OTHERWISE INT. INTERIOR INV. INVERT VARIABLE, VARIES  L. LFNGTH VENT. VENTILATION LF LINEAR FOOT VERT. VERTICAL LG LONG LIN. LINEAR W. WALL LT. LEFT W W WEST LTG. LIGHTING W.P. WORK POINT WSP WET STAND PIPE MAT'L MATERIAL WWV WINDWARD VIADUCT	HECO	HAWAII ELECTRIC COMPANY	SY	SQUARE YARDS			
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MAT'L MATERIAL WWV WINDWARD VIADUCT MAX. MAXIMUM	LTG.	LIGHTING	· ·				
MAX. MAXIMUM	A A A — I.						
		•	WWV	WINDWARD VIADUCT			
MECH. MECHANICAL							
	MECH.	MECHANICAL					

	FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
	DIST. NO.		PROJ. NO. I-H3-1(75)	YEAR	NO.	SHEETS
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	EGEND					-
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. THE ABBREVIATIONS ON THIS	PLAN API	PLY TO	) ALL PI ΔN	S. IINI	LESS	
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WIN K.O. NO.	455	·	HEMMAYS SMISION	. = = =		
LICENSED	ABB	REVI		LEGE	<u>.ND</u>	
(★ ENGINEER )★)		<u>8</u>	R NOTES			
No. 8048-C	<u>.</u> -	=	SENERAL	• •• ·		
	FAIP		<u>NISH (UN</u> [-H3-I(75]			
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION	T.K.		EL/ACCES		ADS	-
Amiko. Ware	SCALE: NO			DATE:		995
	QUEET M		O 05	46	OLIEE	

SHEET NO. 1G10

**OF** 16

SHEETS

2410Y103 24:0: V103 SS0236.FGB/1 1JAN90 1 .19.50

	A	3 B R	EVIATIONS			SY	MBOLS		FED. ROAD STATE FED. AID FISCAL SHEET TO NO. SHEET NO. SHEET IT NO. SHEET NO
ABS	ACRYLONITRILE-BUTADIENE-STYRENE	FIG.	FIGURE	PI	POINT OF INTERSECTION OF				
AC	ASPHALT CONCRETE	FIN. GR	. FINISH GRADE		TANGENTS		GROUTED RUBBLE PAVING (GRP)	ll S	YMBOLS
AGG.	AGGREGATE	gam ungan	FIRE HYDRANT	PIVC	POINT OF INTERSECTION OF		SOIL		SYSTEM CONDUIT PULL BOX
APPROX.	APPROXIMATE	FT 		POC	VERTICAL CURVE POINT OF CURVE		ROCK		OR FW VALVE BOX
AWG	AMERICAN WIRE GAUGE	FT	FOOT	PRC	POINT OF REVERSE CURVE			<del></del>	FIRE WALL VALVE BOX
AZ	AZIMUTH	FUT.	FUTURE	PROJ.	PROJECT	(808.69)	EXISTING GRADE ELEVATION		
	•	FW	FIRE WATER	PT	POINT OF TANGENCY, POINT POLYVINYL CHLORIDE	809.70	NEW GRADE ELEVATION		TEST BOX FOR CATHODIC PROTECTIO
BC	BEGINNING OF HORIZ. CURVE	GALS	GALLONS	r v C	POLIVINIE CHEORIDE		GRADE TO DRAIN		- CENTERLINE OF SYSTEM CONDUIT
BEG.	BEGIN	GALV.	GALVANIZED	R	RADIUS				DIELECTRIC EXPOSED INSULATORS
BLDG.	BUILDING	GCL	GRADE CONTROL LINE	RC	REINFORCED CONCRETE		APPROXIMATE LIMIT OF GRADING		WITH WALL MOUNTED JUNCTION BOX
вм	BENCH MARK	GEN.	GENERAL	RCP	REINFORCED CONCRETE PIPE		EXISTING CONTOUR		DIELECTRIC BURIED INSULATORS
вот.	BOTTOM			RD	ROAD	850	NEW GRADING		WITH WALL MOUNTED JUNCTION BOX
BVC	BEGINNING OF VERTICAL CURVE	GND.	GROUND	RDWY.	ROADWAY			GENE	RAL NOTES
			GRATE	REF.	REFERENCE		CUT SECTION		
CB	CATCH BASIN	GRP HAR	GROUTED RUBBLE PAVING HALAWA ACCESS ROAD	REQ.	REQUIRED				
cc	COMPOUND CURVE, CENTER OF CURVE	HMWPE		RET.	RETAINING		FILL SECTION		SYSTEM IS BASED ON THE HAWAII
СН	CHORD		POLYETHYLENE	RT	RIGHT	———D—————	EXISTING DRAIN LINE	STATE PLANE C	OORDINATE SYSTEM - ZONE 3.
CL.	CLASS	HORIZ. HQV	HORIZOTAL HALAWA QUARRY VIADUCT	R/W	RIGHT OF WAY	CHARGE OF THE THE STREET, SAT THE SAT	PERFORATED UNDERDRAIN PIPE	2. ALL AZIMUTHS	ARE TURNED CLOCKWISE FROM TRUE SOUTH
<u>&amp;</u>	CENTERLINE	I B	INBOUND	#	POUND		SEWED LINE	1	WN ARE FROM ELEVATION DATUM OF MEAN
СМР	CORRUGATED METAL PIPE	ID	INSIDE DIAMETER	<i>w</i> -	1 00140			SEA LEVEL AS I	DEFINED BY U.S. COAST AND GEODETIC
СО	CLEANOUT	IN.	INCH	S	SOUTH, SEWER		FIRE WATER LINE		
CONC.	CONCRETE	INV.	INVERT	SD	STORM DRAIN	D4"	DRAIN LINE	3. GCL - GRADE C	
CONT.	CONTINUATION, CONTINUOUS			SECT.	SECTION	SD12"	STORM DRAIN LINE		SERVES AS THE REFERENCE LINE FOR THE TICALLY - REPRESENTS THE TOP OF FINISI
CONSTR.	CONSTRUCTION	L	LENGTH	SHLD	SHOULDER			GRADE.	
COORD.	COORDINATE	LC	LONG CORD	SHT.	SHEET	OD 4"	OVERFLOW DRAIN LINE		
СР	CROSSPASSAGE	LIN.FT.	LINEAR FEET	SMH	SEWER MANHOLE	DW 2"	DOMESTIC WATER LINE		
CULV.	CULVERT	LT	LEFT	STA.	STATION		WELL WATER		
CU.YD.	CUBIC YARD	MAX.	MAXIMUM	STD.	STANDARD		MATCH LINE		
		MH	MANHOLE	SE	SUPERELEVATION	P9			
D	DRAIN	MIN.	MINIMUM	SW	SAFETY WALK		STORMDRAIN PROFILE NO. 9		
DET.	DETAIL	MSL	MEAN SEA LEVEL	SYM	SYMMETRICAL	——O <sup>CO-6</sup>	CLEAN OUT		
DIA.	DIAMETER		MANWAY	31141	3 HANAIC TITLOAC	Ŏ <sub>FH-2</sub>	FIRE HYDRANT		
DI	DROP INLET	MW	MANVA	TAN.	TANGENT				
DIP	DUCTILE IRON PIPE	N	NORTH	T&B	TOP AND BOTTOM		CATCH BASIN		• •
DW	DOMESTIC WATER	NHVV	NORTH HALAWA VALLEY VIADUCT	TC	TOP OF CURB	0	MANHOLE		
DWG.	DRAWING		(CONTRACT NO. 59)	TEMP.	TEMPORARY		WORK POINT		
E	EAST	NIC	NOT IN CONTRACT	T.O.W.	TOP OF WALL		RIGHT OF WAY LINE		
EA.	EACH	NO.	NUMBER	TYP.	TYPICAL				
EASMT.	EASEMENT	NOS.	NUMBERS	ШС	UNDERGROUND	Δ	CENTRAL ANGLE, POINT OF INTERSECTION		
EC EC	END OF HORIZ, CURVE	NTS	NOT TO SCALE	UG.			SURVEY POINT		5/12/97 DCN75-018: DELETED REVISIONS MADE UNDER DCN75-004
·				UD.	UNDERDRAIN		STATION EQUATION		DCN 75-004 PEVISED LIMITS OF A
EL.	ELEVATION	OB	OUTBOUND	V	VALVE				6/24/96 AND PCC PAVING
ELEC.	ELECTRICAL	o.c.	ON CENTER	VAR.	VARIABLE, VARIES		CHAIN LINK FENCE		DATE REVISION
EMB.	EMBANKMENT  EDGE OF DAY/ENENT	OD	OVERFLOW DRAIN, OUTSIDE DIAMETER	VB	VALVE BOX	(2465)	CURVE NUMBER		STATE OF HAWAII DEPARTMENT OF TRANSPORTATION
E.P.	EDGE OF PAVEMENT	0/\$	OFF SET	VC	VERTICAL CURVE			IIN K.O. 4	HIGHWAYS DIVISION
EQ.	EQUAL	J. <u>J</u>		VERT.	VERTICAL	3801	WALL LAYOUT POINT		CIVIL ABBREVIATIONS
EVC	END OF VERTICAL CURVE	PAVT.	PAVEMENT	V\$	VALVE STATION	4	DRAINAGE/UTILITY NETWORK NODE	PROFESSIONAL ENGINEER	SYMBOLS & GEN. NOTES
EXC.	EXCAVATION	PB.	PULL BOX	<b>\A</b> /	WEST		The troise of th	No. 8048-C	HALAWA SITE FINISHES
EXIST.	EXISTING	PC	POINT OF CURVATURE, PRECAST	W		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	LIMIT OF AC PAVING	THE WALL U.S.	H-3 FINISH (UNIT III) FAIP NO. I-H3-I(75), UNIT III
		PCC	POINT OF COMPOUND CURVATURE,	W/	WITH WORK BOINT		LIMIT OF PCC PAVING	THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.	T.K. TUNNEL/ACCESS ROADS
F.A.I. PRO	J. FEDERAL AID INTERSTATE	•	PORTLAND CEMENT CONCRETE	W.P.	WORK POINT		LIMIT OF FCC FAVING	Link O. Wong	SCALE: NONE DATE: JUN 199
<b>XI</b>	PROJECT			WSP	WET STANDPIPE	A CONTRACTOR OF THE CONTRACTOR	de l'acceptant de la constant de la		SHEET NO 1G11 OF 16 SHEETS

WSP

WET STANDPIPE

FISCAL SHEET TOTAL YEAR NO. SHEETS

353

### OTES

- THE HAWAII ZONE 3.
- SE FROM TRUE SOUTH. TION DATUM OF MEAN AND GEODETIC
- RENCE LINE FOR THE THE TOP OF FINISH

### REVIATIONS GEN. NOTES

SHEET NO. 1G11

DATE: JUN 1995 OF 16 SHEETS

2410V111 2410: V111 CS0001.FGB;1 26JLY90-06.44.00

PROJECT

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#### STRUCTURAL NOTES

#### DESIGN SPECIFICATIONS:

STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE FOLLOWING APPLICABLE CODES. STANDARD. SPECIFICATIONS AND OTHER REFERENCES:

ICBO, "UNIFORM BUILDING CODE" VOLUME 2, STRUCTURAL ENGINEERING DESIGN PROVISIONS, 1994 EDITION.

AMERICAN CONCRETE INSTITUTE, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". ACI(318R-89), REVISED 1992.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN, NINTH EDITION.

AMERICAN WELDING SOCIETY, "STRUCTURAL WELDING CODE", AWS ANSI/AWS D1.1-94.

#### LIVE LOADS

STRUCTURAL AREAS ARE DESIGNED TO ACCOMODATE THE FOLLOWING UNIFORMLY DISTRIBUTED LIVE LOADS OR CONCENTRATED LOADS WHICHEVER PRODUCES HIGHER STRESSES.

	AREA	UNIFORM LOADS PSF	CONCENTRATED LOADS, LBS
1.	OFFICES	50	2000
2.	MECHANICAL	125	2000
3.	ACCESS FLOOR SYSTEM		
	OFFICE USE	50	2000
4.	ROOFS (SUBJECTED TO AREA REDUCTION)	20	1000
5.	SLAB-ON-GRADE	250	HS20-44
6	CEILING FRAMING	20	1000
7.	STAIRS, BALCONIES AND EXITS	100	300
8.	VEHICLE TRAFFIC AREAS		HS20-44
9.	RETAINING WALL IN VEHICLE TRAFFIC AREAS	240	

LIVE LOADS LESS THAN 100 PSF IS SUBJECTED TO AREA REDUCTION AS PERMITTED IN SECTION 1606 OF UBC.

#### 2. MATERIALS:

A. THE FOLLOWING CONCRETE CLASS AND DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, f'c SHALL BE USED UNLESS NOTED OTHERWISE.

CLASS	Α	BD
f'c(PSI)	3000	3750
USAGE	CONCRETE FILL, SLAB-ON-GRADE SPREAD FOOTINGS	TRAFFIC OPERATIONS CENTER, RAILINGS AND BARRIERS, MANHOLES AND U.N.O.

- B. REINFORCING STEEL (NON-PRESTRESSED) SHALL CONFORM TO ASTM A615 (AASHTO M31), GRADE 60 DEFORMED BARS (fy=60 KSI)
- C. ALL STRUCTURAL STEEL SHALL BE ASTM A36, HOT DIPPED GALVANIZED UNLESS NOTED OTHERWISE.

- D. WELDED WIRE FABRICS (WWF) SHALL CONFORM TO ASTM A185 FOR SMOOTH WIRE AND ASTM A497 FOR DEFORMED WIRES.
- E. ALL BOLTED CONNECTIONS SHALL BE MADE USING 3/4" DIA. HIGH STRENGTH BOLTS CONFORMING TO ASTM A325, SLIP-CRITICAL CONNECTION CLASS A TYPE (FRICTION), UNLESS OTHERWISE NOTED.
- F. ALL WELDED CONNECTIONS SHALL BE MADE USING ELECTRODES CONFORMING TO AWS A5.1 OR 5.5, E70XX.
- G. ANCHOR BOLTS SHALL CONFORM TO ASTM A36 STEEL UNLESS NOTED OTHERWISE.
- H. ALL REINFORCING STEEL HOOKS SHALL BE STANDARD HOOKS AS DEFINED BY ACI 318-89 UNLESS OTHERWISE NOTED ON DESIGN DRAWINGS.
- K. ALL REINFORCING STEEL LAP SPLICE LENGHTS SHALL BE CLASS "B" CONFORMING TO THE TABLE BELOW UNLESS OTHERWISE NOTED ON DESIGN DRAWINGS.

BAR	f'c - 30	OO PSI	f'c - 37	50 PSI
SIZE	OTHER	TOP	OTHER	TOP
	BARS_	BARS	_BARS_	<b>BARS</b>
#3	12	12	12	12
#4	16	21	14	18
#5	25	32	22	28
#6	36	46	31	40
#7	48	63	42	54
#8	63	82	55	71
#9	80	104	<sub>,</sub> 69	90
#10	102	132	88	115
#11	125	162	108	141

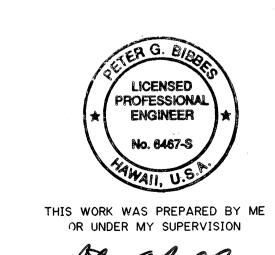
3. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

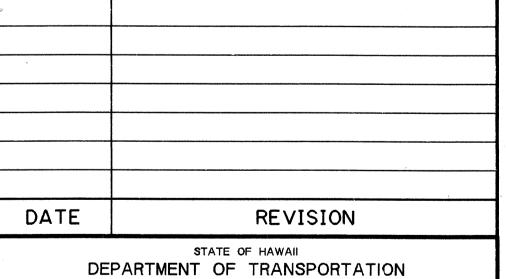
	MINIMUM COVER (INCHES)
CONCRETE CAST AGAINST AND PERMANENTLY	
EXPOSED TO EARTH	3
CONCRETE EXPOSED TO EARTH OR WEATHER PRIMARY REINFORCEMENT STIRRUPS, TIES AND SPIRALS	
CONCRETE BRIDGE DECK SLABS	
TOP REINFORCEMENT	1½
BOTTOM REINFORCEMENT	1¼
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND	
PRIMARY REINFORCEMENT	1½
STIRRUPS, TIES AND SPIRALS	1

- 4. FOR LOCATION AND DETAILS OF SLEEVES FOR PIPE PENETRATION THRU WALL AND/OR FLOORS, SEE CIVIL AND MECHANICAL PLANS.
- 5. PRIOR TO PLACING CONCRETE VERIFY PLACEMENT OF CONDUITS, PIPES, PULLBOXES, JUNCTION BOXES, AND OTHER EMBEDDED ITEMS SHOWN ON CIVIL, MECHANICAL, ARCHITECTURAL, ELECTRICAL, AND SYSTEM PLANS.

<b>ABB</b>	REV	ΊΔ	TI	ONS

A.B.	ANCHOR BOLT	K	KIP, KIPS (1000 LBS.)
&	AND	KLF	KIPS PER LINEAR FOOT
<b>@</b>	AT	KSF	KIPS PER SQUARE FOOT
ADD'L	ADDITIONAL	KSI	KIPS PER SQUARE INCH
ВМ	BEAM	OD	OUTSIDE DIAMETER
BOTT.	BOTTOM	OPN'G.	OPENING
B.O.	BOTTOM OF		
		LB., LBS.	POUND, POUNDS
<b>E</b>	CENTERLINE	PSI	POUNDS PER SQUARE
CONC.	CONCRETE		INCH
c.c.	CENTER TO CENTER		
CIP	CAST IN PLACE	REINF.	REINFORCED
CL., CLR.	CLEAR, CLEARANCE	R.W.	RETAINING WALL
COL.	COLUMN		
CONN.	CONNECTION	STL.	STEEL
CONST.	CONSTRUCTION	STIFF.	STIFFENER
CONST. JT., C.J.	CONSTRUCTION JOINT	STD.	STANDARD
CONT.	CONTINUOUS	SQ.	SQUARE
C.F., CU.FT.	CUBIC FEET	STIRR.	STIRRUP
C.Y., CU.YD.	CUBIC YARD	SYM.	SYMMETRICAL
		SHT.	SHEET
DIAG.	DIAGONAL	3H1.	SHEET
D.L.	DEAD LOAD	TRANSV	TDANCVEDCE
DET.	DETAIL	TRANSV.	TRANSVERSE
DIA.	DIAMETER	T.O.	TOP OF
		T.O.C.	TOP OF CONCRETE
DN.	DOWN	T.O.S.	TOP OF STEEL
		TYP.	TYPICAL
E.F.	EACH FACE	T&B	TOP AND BOTTOM
E.W.	EACH WAY		
EXP.	EXPANSION	U.N.O.	UNLESS NOTED
EA.	EACH		OTHERWISE
EQ.	EQUAL		
EL., ELEV.	ELEVATION	VERT.	VERTICAL
FL.	FLOOR	w.w.F.	WELDED WIRE FABRIC
FTG.	FOOTING	W.P.	WORKING POINT
FDN.	FOUNDATION	W	WITH
. 5.00		WT.	WEIGHT
H.S.	HIGH STRENGTH	<b>YV 1.</b>	WEIGHT
ID	INSIDE DIAMETER		
JT.	JOINT		





STRUCTURAL GEN. NOTES

& ABBREVIATIONS

**GENERAL** H-3 FINISH (UNIT III) FAIP NO. I-H3-1(75), UNIT III T.K. TUNNEL/ACCESS ROADS DATE: JUN 1995

SCALE: NO SCALE SHEET NO. 1G12

OF 16

CARZON ELWOOD::2410:[DWG.STRUCT]SS0243.FGB;1 25JAN95-11.05.40

SHEETS

	ABBREVIA	TIONS		ABBREVIATIONS (Cont'd.)	SYMBOLS (Cont'd.)	FED. ROAD DIST. NO. STATE FED. AID FISCAL SHEET TOTAL PROJ. NO. YEAR NO. SHEETS
ABBR	ABBREVIATION	HP	HORSE POWER	V VENT WB WET BULB	FIDE DECTION AND DEATNACE WATER	HAWAII HAW. I-H3-1(75) 1994 13 353
ABV	ABOVE	Hz	HERTZ	VB VALVE BOX WG WATER GAUGE	FIRE PROTECTION AND DRAINAGE WATER	
AC	AIR CONDITIONING UNIT	IB	INBOUND	VT VENT TERMINATION WH WATER HEATER		GENERAL NOTES
AD	ACCESS DOOR	ΙE	INVERT ELEVATION	VS VALVE STATION W/O WITHOUT		
AFF	ABOVE FINISH FLOOR	IN	INCHES	VTR VENT THROUGH ROOF	D DRAINAGE	1. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET INCLUDE ITEMS
АН	AIR HANDLING UNIT	KW	KILOWATT			WHICH MAY NOT BE PRESENTLY PART OF THIS CONTRACT.
AP	ACCESS PANEL	LBS	POUNDS		PLAN PIPE UP PIPE DOWN	
ARCH	ARCHITECTURAL	MAX	MAXIMUM		——————————————————————————————————————	
ASSY	ASSEMBLY	MECH	MECHANICAL		——————————————————————————————————————	
ATM	ATMOSPHERE	MIN	MINIMUM	CYNADOLC	TEE	
ВНР	BRAKE HORSEPOWER	ML	MATCH LINE	SYMBOLS		
BOD	BOTTOM OF DUCT	NC	NORMALLY CLOSED			
BOP	BOTTOM OF PIPE	NIC	NOT IN CONTRACT	\( C \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SYMBOL ABBR. DESCRIPTION	
ВТИН	BRITISH THERMAL UNITS PER HOU		NORMALLY OPEN	VENTILATION	——————————————————————————————————————	
CFM	CAST IDON	NPT	NATIONAL PIPE THREAD	CEILING SUPPLY DIFFUSER	FLANGED JOINT	
CI	CAST IRON	NTS	NOT TO SCALE		CAP ON END OF PIPE	
CLG c	CEILING CENTERLINE	OA OB	OUTSIDE AIR OUTBOUND	CSD-X XXX- AIR FLOW (CFM)	DIRECTION OF SLOPE	
CONN	CONNECTION/CONNECT	OC	ON CENTER	9x9 NECK SIZE	BALL VALVE	
CONT	CONTINUATION	PD	PRESSURE DROP	CEILING RETURN REGISTER	GV GATE VALVE  GLV GLOBE VALVE	
CP	CONTROL PANEL, CROSSPASSAGE	PDI	PLUMBING DRAINAGE	SIZE/AIR FLOW DESIGNATOR	GLV GLOBE VALVE  CV CHECK VALVE	
cu	CONDENSING UNIT	. 01	INSTITUTE	$\frac{1}{100} \frac{CRR - X}{9x9} \times XX - AIR FLOW (CFM)$	HB HOSE BIBB	
dB	DECIBEL	PL	PLATE	NECK SIZE	EQUIPMENT IDENTIFICATION TAG	
DB	DRY BULB	POC	POINT OF CONNECTION	NOT DUCTED	X Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	
DET	DETAIL	PSI	POUNDS PER SQUARE INCH	ELBOW WITH TURNING VANES	FDC ROOF FIRE DEPT. OUTLET CONNECTION	
D.I.	DUCTILE IRON	PVC	POLYVINYL CHLORIDE		FIRE HOSE VALVE	
DIA	DIAMETER	RA	RETURN AIR	TEE WITH TURNING VANES		
DIM	DIMENSION	RAD	RETURN AIR DAMPER		FHC-S FIRE HOSE CABINET-SURFACE MOUNTED	
DL	DOOR LOUVER	REO'D	REQUIRED	FLEXIBLE CONNECTION		
DN	DOWN	RF	RETURN FAN	SUPPLY AIR DUCT SECTION		
DX	DIRECT EXPANSION	RM	ROOM	RETURN AIR/EXHAUST AIR DUCT SECTION		
EA	EXHAUST AIR	RPM	REVOLUTIONS PER MINUTE	E RECTANGULAR-ROUND TRANSITION	CONTROLS AND INSTRUMENTATION	
EF	EXHAUST FAN	SA	SUPPLY AIR	AIR EXTRACTOR		
ELEC	ELECTRICAL	SAT	SOUND ATTENUATOR	DUCT RISE IN DIRECTION OF AIR FLOW		
ELEV	ELEVATION	SF	SUPPLY FAN	DUCT DROP IN DIRECTION OF AIR FLOW	(FS) FLOW SWITCH	
EQUIP	EQUIPMENT	SP	STATIC PRESSURE, SPRINKLER, SET POINT	MANUAL VOLUME DAMPER		
ЕТ	EXPLORATORY TUNNEL		STRINNLER, SEI PUINI	DOOR LOUVER (DL)	(LSHL) LEVEL SWITCH-HIGH, LOW	
ЕХН	EXHAUST	SPEC	SPECIFICATION	(SEE ARCH. PLANS. FOR SIZE)		
۰F	DEGREES FAHRENHEIT	STD	STANDARD	XXX	(LAH) LEVEL ALARM-HIGH	
FH	FIRE HYDRANT	STRUCT	STRUCTURAL	CFM SUPPLY AIR FLOW	LEVEL ALAMVI HIGH	
FHC	FIRE HOSE CABINET	STL	STEEL	RETURN/EXHAUST AIR FLOW		
FLEX	FLEXIBLE	SS	SERVICE SINK	THERMOSTAT, TEMPERATURE CONTROL	(LAL) LEVEL ALARM-LOW	DATE REVISION STATE OF HAWAII
FLR	FLOOR	TEMP	TEMPERATURE	IN-LINE CENTRIFUGAL FAN		DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
FIN	FINISHED	TG	TRANSFER GRILL	EQUIPMENT IDENTIFICATION TAG	(LALL) LEVEL ALARM-LOW, LOW	MECHANICAL ABBREVIATIONS
FP	FIRE PROTECTION	TOC	TRAFFIC OPERATIONS CENTER			ENGINEER AND LEGEND
FT	FEET	T.C.			(FCV) FLOW CONTROL VALVE	* NO. 7707-M *  GENERAL
GALV	GAUGE	IP	TOTAL PRESSURE, TRAP PRIMER			H-3 FINISH (UNIT III)
GALV	GALLONS DEP MINUTE	T∨₽	TYPICAL		M MOTOR OPERATOR	THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION  FAIP NO. I-H3-1(75), UNIT III  T.K. TUNNEL/ACCESS ROADS
GPM	GALLONS PER MINUTE	TYP	I ITIUAL			SCALE: NONE DATE: JUN 1995
HE DNIANINE -	ELWOOD:::2410:[DWG.MECH]MT030.FGB;1 08JUN9	05-08 *2 24		1		SHEET NO. 1G13 OF 16 SHEETS
HEIMMANUEZ I	UOUD2¬IU.LUMU.MLUNIMIUJU.FUDJI USJUNS	JJ UU.JZ.ZU				13

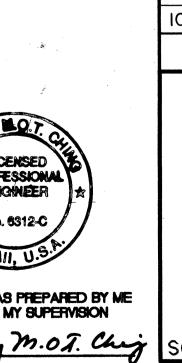
	PLAN SYMBOLS	ONE LINE & ELEMENTARY SYMBOLS	EQUIPMENT MOUNTING HEIGH	IT	FED. ROAD DIST. NO. STATE FED. AID PROJ. NO. FISCAL SHEET TOTAL SHEET NO. SH
FOR THE POINT OF T	DUPLEX RECEPTACLE  SINGLE SPECIAL-PURPOSE RECEPTACLE  FLOOR BOX WITH DUPLEX RECEPTACLE  FLOOR JUNCTION BOX  SINGLE-POLE SWITCH  THREE-WAY SWITCH  MANUAL MOTOR STARTER  MOMENTARY CONTACT SWITCH OR PUSHBUTTON  SUBSCRIPT DENOTES DEVICE CONTROLLED  INCANDESCENT OR HIGH INTENSITY  DISCHARGE FIXTURE  FLUORESCENT FIXTURE  EXIT LIGHT	HOA  SELECTOR SWITCH, HAND-OFF-AUTO UNLESS OTHERWISE NOTED  K  KEY INTERLOCK  S  ELECTRICALLY OPERATED DEVICE, S - SOLENOID, R - RELAY  TRANSFORMER  PUSHBUTTON SWITCH, MOMENTARY CONTACT, N.C.  PUSHBUTTON SWITCH, MOMENTARY CONTACT, N.O.  HECHANICAL CONNECTION  NORMALLY OPEN CONTACT TDC - TIME DELAY TO CLOSE  NORMALLY CLOSED CONTACT TDO - TIME DELAY TO OPEN  CO  COIL, STARTER OR CONTACTOR	2. WALL-MOUNTED TRANSFORMERS  3. WALL-MOUNTED LOCAL CONTROL STATIONS OR LOCAL CONTROL PANELS  4. LOCAL MOTOR STARTERS, DISCONNECT SWITCH AND CIRCUIT BREAKERS  5. POWER RECEPTACLES  4'-6" CENTE	T BREAKER  M OF XFMR.  M OF EQPT.  AT TOP OF  T PUSH BUTTON	
© PB	LETTER SUBSCRIPT DESIGNATES SWITCH CONTROL EMERGENCY LIGHT - FLUORESCENT FIXTURE FLUORESCENT FIXTURE - EMERGENCY/NORMAL LIGHTING PANEL POWER PANEL PULL_BOX JUNCTION BOX MOTOR CONTROLLER, SUBSCRIPT INDICATES NEMA SIZE DISCONNECT, SUBSCRIPT INDICATES SIZE AND NUMBER OF POLES, F - FUSED WITH SIZE SHOWN COMBINATION MOTOR STARTER, FUSED, SUBSCRIPT INDICATES NEMA SIZE MOTOR, INSERT INDICATES HORSEPOWER RACEWAY EMBEDDED IN CEILING, WALL OR FLOOR RACEWAY, EXPOSED GROUND WIRE CONDUIT TURNED UP OR TOWARD VIEWER CONDUIT TURNED DOWN OR AWAY FROM VIEWER CONDUIT BANK, INDICATE TYPE, SIZE, AND NUMBER OF CONDUITS BY CROSS-SECTION, IDENTIFICATION OF EACH RUN OR BY NOTATION GROUND ROD RACEWAY CAPPED	OVERLOAD RELAY CONTACTS  OVERLOAD RELAY  OVERLOAD RELAY  FUSE WITH RATING  GROUND CONNECTION  PILOT LIGHT, R=RED, G=GREEN, A=AMBER, W=WHITE, C=CLEAR, B=BLUE  POWER CIRCUIT BREAKER, ABOVE 600V, DRAW-OUT TYPE  MOLDED CASE CIRCUIT BREAKER, 480V, DRAW-OUT TYPE  MOLDED CASE CIRCUIT BREAKER  MINI-POWER CENTER W/ 30A, 2 POLE  PRIMARY BREAKER  LIGHTING CONTROLLER  STARTER (NEMA SIZE AS SHOWN)  T  DRY TYPE TRANSFORMER	ABBREVIATIONS  AFF ABOVE FINISHED FLOOR AWG AMERICAN WIRE GAUGE CKT CIRCUIT C.O. CONDUIT ONLY ELEV ELEVATION, ELEVATOR GFCI GROUND FAULT CIRCUIT INTERRUPTER GND GROUND GRS GALVANIZED RIGID STEEL CONDUIT HID HIGH INTENSITY DISCHARGE HPS HIGH PRESSURE SODIUM KCMIL 1000 CIRCULAR MILS (FORMERLY MCM) LTG LIGHTING MC METALLIC CONDUIT MH MOUNTING HEIGHT, METAL HALIDE MTD, MTG MOUNTED, MOUNTING +4'-6" MOUNTING HEIGHT TO Q OUTLET AFF NC NORMALLY CLOSED N.I.C. NOT IN CONTRACT NMC NON-METALLIC CONDUIT NTS NOT TO SCALE NO NORMALLY OPEN PNL PANEL Ø, PH. PHASE PWR POWER PVC POLYVINYL CHLORIDE CONDUIT RTU REMOTE TERMINAL UNIT SP SPARE SPDT SINGLE POLE DOUBLE THROW SPST SINGLE POLE SINGLE THROW TEL TELEPHONE		
MH 60 3	FIXTURE TYPE SYMBOL  UPPER LETTER - TYPE OF FIXTURE LOWER NO LAMP WATTS MH - INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR 3 - INDICATES NUMBER OF FIXTURES	SPECIAL IDENTIF  (USED NEXT TO  DP - DRIPPROOF (NEMA 2) F - FLUSH  DT - DUSTTIGHT (NEMA 12) G - GROUND  EP - EXPLOSIONPROOF GP - GENERAL PURPOSE  (NEMA 7, OR 9) R - RECESSED  VT - VAPORTIGHT	XFR TRANSFORMER ZC ZONE CONTROL CP CROSSPASSAGE  FICATION  S Y M B O L )  WP - WEATHERPROOF (NEMA 3R) WT - WATERTIGHT (NEMA 4)	LICENSED PROFESSIONAL ENGINEER  No. 8493-E  No. 8493-E  OR UNDER MY SUPERVISION  Lave Mathiata	DATE  STATE OF HAWAII  DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION  ELECTRICAL SYMBOLS  AND LEGENDS  GENERAL  H-3 FINISH (UNIT III)  FAIP NO. I-H3-I(75), UNIT III  T.K. TUNNEL/ACCESS ROADS  SCALE: NONE  DATE: JUN 1995  SHEET NO. 1G14 OF 16 SHEETS

FED. ROAD STATE

FED. AID FISCAL SHEET TOTAL PROJ. NO. YEAR NO. SHEETS

	ABBREVIATIONS	ABBRI	EVIATIONS (Cont'd.)		SYMBOLS (Cont'd.)
ALUM	ALUMINUM	TC170 TF	RAFFIC CONTROLLER 170	EC	ELEVATOR CONTROLLER
ANNUN	ANNUNCIATOR	TV TE	ELEVISION (CLOSED CIRCUIT)	ES	EXIT DETECTOR
APC	ADVANCED PROCESSING CONTROLLER	TX TF	RANSMITTER		
AV	AUDIBLE/VISUAL ALARM	TYP T	YPICAL		INTERCOM
CCTV	CLOSED CIRCUIT TELEVISION	UNO UN	NLESS NOTED OTHERWISE		
СО	CARBON MONOXIDE MONITOR	URF UN	NDER RAISED FLOOR	ITC	INTERFACE TERMINAL CABINET
СОММ	COMMUNICATIONS	WP W	ORK POINT	;	
CR	CARD READER	X-PSG CF	ROSSPASSAGE	<del></del>	INTRUSION DETECTOR
DS DT	DOOR STRIKE DRIVE TRANSFORMER .	XFMF T	RANSFORMER	<u> </u>	
EC ED	ELEVATOR CONTROLLER EXIT DETECTOR				JUNCTION BOX, SURFACE MOUNTED (SIZE PER NEC CODE)
EL	ELEVATION		SYMBOLS		
EORM ·	EQUIPMENT ROOM	<u> </u>		<u></u>	JUNCTION BOX, IN STRUCTURE (SIZE PER NEC CODE)
ES	EXIT SWITCH				
FACP	FIRE ALARM CONTROL PANEL	A/V	AUDIBLE/VISUAL ALARM	J	JUNCTION BOX, IN STRUCTURE (EXISTING)
FICE	FIBEROPTIC INTERFACE COMMUNICATION EQUIPMENT				
FP	FIRE PROTECTION	APC	ADVANCED PROCESSING CONTROLLER	P	PABX TELEPHONE
HVAC	HEATING, VENTILATION, AIR CONDITIONING				
	INTERCOM		BARE CABLE (NO CONDUIT)	$\langle ullet$	PULL STATION
IB	IN BOUND				
ID	INTRUSION DETECTOR	CR	CARD READER		RADIO REBROADCAST ANTENNA
INT	INTRUSION				
ITC	INTERFACE TERMINAL CABINET		CCTV CAMERA, FIXED POSITION	R/D	RECEIVER/DRIVER
JB	JUNCTION BOX				
LH	LINEAR HEAT PUMP		CCTV CAMERA, PTZ		SMOKE DETECTOR
MAX	MAXIMUM				· · · · · · · · · · · · · · · · · · ·
MDF	MAIN DISTRIBUTION FRAME (TELEPHONE)	Co	CO MONITOR		SURFACE METAL RACEWAY
MHZ	MEGAHERTZ				JOHN AGE METAE NAGEWAT
MIN	MINIMUM	xxx	CONDUIT/CABLE NOTE	- 10	UNI- DIRECTIONAL ANTENNA
ММ	MULTIMODE			•	
NEC	NATIONAL ELECTRICAL CODE	s-xxx	CONDUIT/CABLE NOTE		
NIC	NOT IN CONTRACT				
NTS	NOT TO SCALE		CONDUIT (SURFACE MOUNTED)		
0B	OUTBOUND				
ос	ON CENTER		CONDUIT (EMBEDDED)		
PABX	PRIVATE AUTOMATIC BRANCH EXCHANGE				
PB	PORTAL BUILDING	, wastering the MAA statistististicates and one to handless and the state of the st	CONDUIT (EXISTING)		
PNL	POWER DISTRIBUTION PANEL				
PS	PULL STATION		CONDUIT DOWN OR AWAY		
PTZ	PAN/TILT/ZOOM				
RCF	RAISED COMPUTER FLOOR	<b></b>	CONDUIT UP OR TOWARD		
RGS	RIGID GALVANIZED STEEL				
RTU	REMOTE TERMINAL UNIT	(xxx)	CONSTRUCTION NOTE		
R/D	RECEIVER/DRIVER				
S&C	SUPERVISORY & CONTROL	DS	DOOR STRIKE		
SC	SIGN CONTROLLER				
SD	SMOKE DETECTOR	DT	DRIVE TRANSFORMER		
STA	STATION				
			DRIVE TRANSFORMER		

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ADDENDUM I 10/13/95 REVISION DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SYSTEMS LEGEND AND ABBREVIATIONS

GENERAL

H-3 FINISH (UNIT II)

FAIP NO. I-H3-1(75), UNIT III

T.K. TUNNEL/ACCESS ROADS

SCALE: NONE DATE: JUN 196 DATE: JUN 1995

SHEET NO. 1G15 OF 16 SHEETS

## CONSTRUCTION MILESTONE SCHEDULE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I—H3−1(75), UNIT Ⅲ	1994	16	353

### LEGEND

NTP NOTICE TO PROCEED

COMP CONSTRUCTION COMPLETION

ACTIVITY 75/III NO. SEE PROPOSAL FORM

	_	/	 95			 	1996		, , , , , , , , , , , , , , , , , , , ,	 	, , , , , , , , , , , , , , , , , , , ,		1997		
CONTRACT/ACTIVITY	N. N. S.		3/3/2/3			The Table		\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			4 2 A	ME SE		\$ / 23	
F.A.I. NO. I—H3—1(60) VENTILATION FANS												H-3			
F.A.I. NO. I-H3-1(64) HALAWA APPROACH & TUNNELS												-OPEN			
F.A.I. NO. I-H3-1(65) SYSTEM COMPONENTS															
F.A.I. NO. I—H3—1(66) MECH., ELEC., ARCH. FINISHES															
F.A.I. NO. I-H3-1(68) NHV HIGHWAY UNIT I, PHASE 1B															
F.A.I. NO. I—H3—1(71) NO. HALAWA VALLEY VIADUCT															
F.A.I. NO. I-H3-1(72) KANEONE INTERCHANGE															
F.A.I. NO. I—H3—1(73) HALAWA INTERCHANGE FINAL PHASE															
F.A.I. NO. I-H3-1(74) HALAWA JAIL ACCESS ROAD															
F.A.I. NO. I—H3—1(59) NHV HIGHWAY UNIT I, PHASE 1A				٠											
F.A.I. NO. I-H3-1(69, 70) NHV HIGHWAY UNIT II															
F.A.I. NO. I-H3-1(75) UNIT I FINISHING UNIT I															
F.A.I. NO. I-H3-1(75) UNIT II FINISHING UNIT II															
				NT	P										СОМР
F.A.I. NO. I-H3-1(75) UNIT III T.K. TUNNEL / ACCESS ROADS				[j]											
oET IMPROVEMENTS				[a]											
O TOC EXPANSION				[b]											
OKNOLL REMEDIATION				[c]											
OHALAWA SITE FINISHES				[e]											
EXCEPT															
-AC PAVEMENT				[e1]											
-PCC PAVEMENT W/ LOOPS				[e2]						Г 7	1				
-POWER LINE REMOVAL				Гел						[e3]					
OHAIKU SITE FINISHES				[f]				,							
EXCEPT										[f1]					
-POWER LINE REMOVAL  OCOMMON WORK				[g]											2000 100 100 100 100 100 100 100 100 100
O COMMON WORK  O HALAWA ACCESS ROAD				FA]						[h]					
OHAIKU ACCESS ROAD										[i]					_
OLANDSCAPE				[d]						L'J					
F.A.I. NO. I-H3-1(75) UNIT IV VISITORS CNTR/ARCHAEOLOGICAL				[											
								·							



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

DATE REVISION

CONSTRUCTION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

MILESTONE SCHEDULE

GENERAL

H-3 FINISH (UNIT III)

FAIP NO. I-H3-1(75), UNIT III

T.K. TUNNEL/ACCESS ROADS

SHEET NO. 1G16 OF 16 SHEETS

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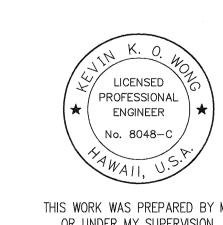
FED. ROAD	STATE	FED. AID	FISCAL	SHEET	TOTAL
DIST. NO.		PROJ. NO.	YEAR	NO.	SHEETS
HAWAII	HAW.	I-H3-1(75), UNIT Ⅲ	1994	ADD.16 S-1	353

### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL NOTES

- (A) Erosion and Sediment Control Inspection and Maintenance Practices.
  - (1) The Contractor shall inspect the erosion and sediment control measures at least once a week or after 0.5 inches of rainfall.
  - (2) The Contractor shall maintain the erosion and sediment control measures according to the contract. If a repair is necessary, the Contractor shall initiate the repairs within twenty four (24) hours after the inspection such as:
    - (a) When sediment build—up reaches one—third (1/3) the height of the silt fence, the Contractor shall remove and dispose of the sediment build—up from the silt fence.
    - (b) When the depth of the sediment basin reaches ten percent (10%) of the design capacity, the Contractor shall remove and dispose of the sediment build—up.
    - (c) When tears are found on the silt fence, the Contractor shall replace the fabric.
    - (d) The Contractor shall check to see if the fabric is securely attached to the fence posts and to see that the fence posts are firmly in the ground.
    - (e) The Contractor shall inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.
  - (3) The Contractor shall have its personnel make a maintenance inspection report promptly after each inspection. The Contractor shall select a minimum of three (3) personnel who will be responsible for inspection, maintenance, repair activities, and filling out the inspection and maintenance report. Personnel selected for the inspection and maintenance responsibilities will receive training from the Contractor. The Contractor shall train these personnel in the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite according to the contract.
- (B) Submittal Requirements:

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- (1) Construction activities of five (5) acres or more.
  - (a) Storm water discharges into State waters due to construction activities of Five (5) acres or more, will require an NPDES permit from the Department of Heath (DOH). The Contractor shall submit to the Engineer four (4) sets of Site—Specific Best Management Plans (BMP). The Plans shall be submitted no later than thirty (30) calendar days after the award of Contract.
  - (b) No construction activities will be authorized until the Contractor's Site—Specific BMP has been approved by the Highways Division.
- (2) Construction activities dewatering and/or hydrotesting water.
  - (a) Discharges into State waters due to dewatering and/or hydrotesting activities will require NPDES Permit(s) from DOH. If the Contractor options to discharge dewatering and/or hydrotesting effluent into State waters, the Contractor shall submit to the Engineer four (4) sets of Site—Specific Dewatering and /or Hydrotesting BMP, and four (4) copies of the Quality of Discharge Test results. The Plans and test results shall be submitted no later than thirty (30) calendar days after the award of Contract.
  - (b) No dewatering and/or hydrotesting activities will be authorized until the receipt of the



NPDES GENERAL NOTES

H-3 FINISH (UNIT Ⅲ) FAIP NO. I-H3-1(75), UNIT III T.K. TUNNEL/ACCESS ROADS

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

SCALE: NO SCALE DATE: SEPTEMBER 1995 SHEET NO.1G16A OF 16 SHEETS

ADD.16S-1

NPDES Permit(s) from DOH.