OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	3	816

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

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX - 1

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No. AC0.2 OF 350 SHEETS

RMTC JOB NO.: 1-19369-0E

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	4	816

OVERALL INDEX

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

GREG H. HIYAKUMOTO
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 2

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. AC0.3 OF 350 SHEETS

RMTC JOB NO.: 1-19369-OE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 5	816

OVERALL INDEX

GREGG H. HIYAKUMOTO
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ORIGINAL PLAN
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DATE
NOTE BOOK
No.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 3

INTERSTATE ROUTE H–3
H–3 FINISH (UNIT VIII)
F.A.I. Proj. No. I–H3–1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No. AC0.4 OF 350 SHEETS

DATE	REVISION
10/16/03	(5) Added Sheets.

RMTC JOB NO.: 1–19369–0E

ADD. 5

OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 6	818

LEGEND FOR AS–BUILT POSTINGS

~~WWWW~~	Squiggly line for as–built deletion
~~100.00~~	Double line for as–built deletion
Roadway	Text for as–built posting

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 4

INTERSTATE ROUTE H–3
H–3 FINISH (UNIT VIII)
F.A.I. Proj. No. I–H3–1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. AC0.5 OF 350 SHEETS

DATE	REVISION
10/16/03	5 Added Sheets.
6/20/03	3 Revised Description; Added Sheet AC17.14A

ORIGINAL PLAN
NOTE BOOK
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SURVEY PLOTTED BY
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QUANTITIES BY
CHECKED BY
DATE

RMTC JOB NO.: 1–19369–OE

"AS–BUILT" **ADD. 6**

OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	7	818

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

LEGEND FOR AS-BUILT POSTINGS

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Roadway	Text for as-built posting

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX - 5

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No. AC0.6 OF 350 SHEETS

RMTC JOB NO.: 1-19369-0E

"AS-BUILT" 7

OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 8	816

LEGEND FOR AS-BUILT POSTINGS

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Roadway	Text for as-built posting

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DATE	REVISION
6/20/03	3 Revised Descriptions.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 6

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No. AC0.7 OF 350 SHEETS

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

RMTC JOB NO.: 1-19369-0E

"AS-BUILT" **ADD. 8**

OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 9	816

SURVEY PLOTTED BY _____ DATE _____
DRAWN BY _____
TRACED BY _____
DESIGNED BY _____
QUANTITIES BY _____
CHECKED BY _____

ORIGINAL PLAN
NOTE BOOK _____ No. _____

RMTC JOB NO.: 1–19369–0E

LEGEND FOR AS–BUILT POSTINGS

~~WWW~~	Squiggly line for as–built deletion
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Roadway	Text for as–built posting

DATE	REVISION
10/16/03	(5) Revised Description; Added Sheets.

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EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 7

INTERSTATE ROUTE H–3
H–3 FINISH (UNIT VIII)
F.A.I. Proj. No. I–H3–1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. AC0.8 OF 350 SHEETS

"AS–BUILT" ADD. 9

OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 10	816

LEGEND FOR AS-BUILT POSTINGS

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Roadway	Text for as-built posting

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 8

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. AC0.9 OF 350 SHEETS

DATE	REVISION
10/16/03	5 Revised Description; Added Sheets.

SURVEY PLOTTED BY
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CHECKED BY
DATE

ORIGINAL PLAN
NOTE BOOK
No.

RMTC JOB NO.: 1-19369-OE

"AS-BUILT" ADD. 10

OVERALL INDEX

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 11	616

DATE	REVISION
10/16/03	5 Revised Description; Added Sheets.

LEGEND FOR AS-BUILT POSTINGS

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Roadway	Text for as-built posting

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

OVERALL INDEX – 9

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. AC0.10 OF 350 SHEETS

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

RMTC JOB NO.: 1-19369-0E

"AS-BUILT" **ADD. 11**

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 VIII	2003	12	816

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

H-01 ●	Type A, B, C and D Catch Basin	07/01/86
H-02	Type A1, B1, C1 and D1 Catch Basin	07/01/86
H-03	Type A2, B2, C2 and D2 Catch Basin	07/01/86
H-04 ●	Typical Reinforcing Details for Catch Basins	07/01/86
H-05 ●	Type A, B and C Storm Drain Manhole	07/01/86
H-06 ●	Type D and E Storm Drain Manhole	07/01/86
H-07	Type F Storm Drain Manhole	07/01/86
H-08 ●	Catch Basin and Manhole Casting	07/01/86
H-09 ●	Type A-9 and A-9P Frames and Grates	07/01/86
H-10	Type A-9B Frames and Grates	07/01/86
H-11 ●	Type 61614 and 61214 Grated Drop Inlet	07/01/86
H-12	Type 61616 Grated Drop Inlet	07/01/86
H-13	61214, 61614 & 61616 Steel Frames and Grates	07/01/86
H-14	61214B Steel Frame and Grates	07/01/86
H-15	61614B Steel Frame and Grates	07/01/86
H-16	Concrete and Cement Rubble Masonry Structures	r10/16/90
H-17	Inlet Structures	r10/16/90
H-18	Flared End Section for Culverts	07/01/86
H-19	Outlet Structures	r02/15/91
H-20	Concrete Spillway Inlet	07/01/86
H-21	18" Slotted C.M.P. Drain	07/01/86
H-22	C.M.P. Coupling Details Standard Joint	r10/16/90
H-23	Hat Shaped Coupling Band	r10/16/90

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 Pavement 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

DATE	REVISION
02/15/91	Revised Standard Plan H-19
10/16/90	Revised Standard Plans H-16,H-17, H-22 & H-23.
07/26/90	Revised Standard Plan D-02.
07/16/90	Revised Standard Plans B-12, B-13.
05/09/90	Revised Standard Plans TE-30,TE-31, & TE-32.
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, TE-59, TE-61, TE-64, TE-68 & TE-69. Added TE-57A to Standard Plans
09/01/87	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.

NOTE:

Standard Plans applicable to this project are indicated by a " ● " next to the Standard Plan No. (D-07 ●)

ORIGINAL PLAN

NOTE BOOK No.

SURVEY PLOTTED BY
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HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. AC0.11 OF 350 SHEETS

RMTC JOB NO.: 1-19369-0E

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	13	816

LEGEND

- Cold Planing and Resurfacing Limits
- Pavement Reconstruction Areas
- Leveling Concrete Areas
- Transition Areas
- Grass/Mulch Areas
- Gravel Blanket
- ——e—— Existing Electrical Line
- ——E—— New Electrical Line
- ○ jp Existing Joint Pole
- ○ pp Existing Power Pole
- ○ gp Existing Guy Pole
- ☼ lp Existing Light Pole
- ○ emh Existing Electrical Manhole
- ▭ slb Existing Street Light Box
- ▭ tsb Existing Traffic Signal Box
- °EMH Adjust Elec. MH Frame and Cover
- •EMH New Electrical Manhole
- ⊕ tl Existing Traffic Light
- ——t—— Existing Telephone Line
- ——T—— New Telephone Line
- ○ tp Existing Telephone Pole
- ○ tmh Existing Telephone Manhole
- °TMH Adjust Tele. MH Frame and Cover
- •TMH New Telephone Manhole
- ——sc—— Existing Signal Corps Line
- ——SC—— New Signal Corps Line
- ——tv—— Existing TV Cable
- ——TV—— New TV Cable
- ——w12—— Existing 12" Water Line
- ——W12—— New 12" Water Line
- ○ wmh Existing Water Manhole
- °WMH Adjust Water MH Frame and Cover
- •WMH New Water Manhole
- ○ av Existing Water Air Valve
- °AV Adjust Water Air Valve
- •AV New Water Air Valve
- ○ wv Existing Water Valve Box
- °WV Adjust Water Valve Box
- •WV New Water Valve Box
- ▭ wm Existing Water Meter
- ⊠ WM Adjust Water Meter
- ■ WM New Water Meter
- ⊹ fh Existing Fire Hydrant
- ⊹ FH New Fire Hydrant
- ——s12—— Existing Sewer Line
- ——S12—— New 12" Sewer Line
- ○ smh Existing Sewer Manhole
- °SMH Adjust Sewer MH Frame and Cover
- •SMH New Sewer Manhole
- ——g6—— Existing 6" Gas Line
- ——G6—— New 6" Gas Line
- ○ gv Existing Gas Valve Box
- °GV Adjust Gas Valve Box
- •GV New Gas Valve Box
- ○ gmh Existing Gas Manhole
- °GMH Adjust Gas MH Frame and Cover
- •GMH New Gas Manhole
- ◎ mon. Existing Monument
- ◎ MON. Adjust Monument
- • MON. New Monument
- ——d24—— Existing 24" Drain Line
- ——D24—— New 24" Drain Line
- ○ sdmh Existing Storm Drain Manhole
- ○ SDMH Adjust Storm Drain MH Frame and Cover
- • SDMH New Storm Drain Manhole
- ▭ gdi Existing Grated Drop Inlet
- ▭ cb Existing Catch Basin
- ⊦ Existing Traffic Sign
- ♀ Existing Highway Lighting Standard
- util box Existing Utility Box
- UTIL BOX Adjust Utility Box
- □ □ □ Existing Guardrail
- ■ ■ ■ New Guardrail
- ○ ○ ○ Existing Chain link Fence
- ○ ○ ○ New Chain link Fence

ORIGINAL PLAN	SURVEY PLOTTED BY
	DRAWN BY
NOTE BOOK	TRACED BY
	DESIGNED BY
No.	QUANTITIES BY
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HIGHWAYS DIVISION

LEGEND

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No.AC0.12 OF 350 SHEETS

RMTC JOB NO.: 1-19369-0E

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 14	816

GENERAL NOTES

1. The Project Scope of Work involves: widening of the Insterstate Route H–1 Freeway in the westbound direction from the Pearl City Off–Ramp to the Kaonohi Street overcrossing, including: widening of the Waimalu Viaduct bridge structure; installation of retaining walls; installation of noise barrier walls; placing of portland cement concrete pavement; installation of highway lighting, power, storm drainage and subsurface underdrainage systems; stabilization of deep soft soils; installation of a weigh–in–motion station; landscaping; and modifications to surface streets and acquired parcels below the viaduct.

2. The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 105.06 – Cooperation Between Contractors; Subsection 107.13 – Public Convenience and Safety; Subsection 107.21 – Contractor's Responsibility For Utility Property And Services; and Section 645 – Work Zone Traffic Control.

3. The Contractor shall follow all work hours, conditions and other restrictions as specified in the approved noise variance.

4. At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic.

5. The existence and location of underground utilities, manholes, monuments, buried railroad tracks and concrete pavements, and other structures as shown on the plans are from the latest available data but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall make an independent check on the ground by probing and/or with the various utility companies and governmental agencies to verify the exact locations and depths of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating and cold planing in the area. Whenever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavating for the new lines. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.

6. The exact locations and limits or areas to be filled with leveling course, reconstructed and/or cold planed shall be determined in the field by the Engineer.

7. The Contractor shall notify in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (Ph.# 848–4571) seven (7) days prior to any paving operations.

8. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.

9. The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to Asphalt Concrete Pavement and will not be paid for separately.

10. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.

11. Dressing of shoulder and sidewalk shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.

12. Existing drainage system shall be kept functional at all times during construction. The Contractor shall to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.

13. For traffic and pedestrian access, the Contractor shall provide for access to and from all existing side streets at all times.

14. All saw cutting work shall be considered incidental to the Pavement Reconstruction and to Pavement Resurfacing, as applicable.

15. Contractor shall notify owners of their driveway adjustments two (2) weeks prior to construction.

△3 16. Contractor shall dispose or deliver any removed material, as described in Section 201 – Clearing and Grubbing, at no cost to the State.

17. Contractor shall exercise caution when cold planing over existing structures.

18. The Contractor is to take special measures to reduce dust from cold planing operations including but not limited to use of water misters on cold planing equipment and vacuum sweepers. Use of power brooms to sweep road is not allowed if a dust nuisance is created.

19. The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at the Contractor's expense.

20. Prime Coat and Tack Coat shall be incidental to the various Asphalt Concrete Pavement items.

21. The Contractor shall be held liable for any damages incurred to the existing landscaping as a result of the Contractor's operations. △5

△3 22. After the project is completed, the Contractor shall restore grades and ground cover disturbed as a result of the project to a condition equal or better than existing before such damage or injury was done.

23. All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. Any damage to the existing utilities shall be repaired and paid for by the Contractor.

24. Existing utilities shall remain in service and in place at all times. If relocation of the existing utilities is required by the Contract Documents or for the Contractor's convenience, interruption of service shall be kept to a minimum and shall be done at the Contractor's expense with the approval of the affected utility company.

25. The Contractor shall field verify the operational status of all existing utilities to be removed or abandoned in place. Any discrepancy shall be brought to the attention of the Engineer.

26. The Contractor shall verify all dimensions and details shown on the drawings prior to the start of construction. Any discrepancy shall be immediately brought to the attention of the Engineer.

27. Construction outside the State Department of Transportation (SDOT) right–of–way and State acquired parcels are subject to approval by SDOT and the affected owner.

28. All construction work shall be done in accordance with the standards and specifications of the State Department of Transportation as amended, unless otherwise specified by the contract plans and specifications.

DATE	REVISION
10/16/03	△5 Deleted City Approval Block
6/20/03	△3 Revised Notes 16 and 22.

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE _____ April 30, 2004
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 1

INTERSTATE ROUTE H–3
H–3 FINISH (UNIT VIII)
F.A.I. Proj. No. I–H3–1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. ACO.13 OF 350 SHEETS

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

RMTC JOB NO.: 1–19369–0E

ADD. 14

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 15	816

GENERAL NOTES (Cont.)

29. The Contractor shall notify the Engineer upon uncovering any potential historical artifacts or items of archaeological significance.

30. The existing improvements on the premises and in adjacent area that are not to be removed shall be preserved and protected. Any and all damages resulting from the Contractor's construction operations shall be replaced and repaired to original condition, to the satisfaction of the owner.

31. For benchmarks see sheets AC2.1 through AC2.7 and AC4.17 through AC4.19.

32. Azimuths and coordinates are referred to Hawaii State Plane Coordinate System (Zone 3).

33. Elevations shown on these plans are referenced to Mean Sea Level (MSL).

34. The Contractor shall adjust centerline and reference survey monuments to the finished pavement grade.

35. All steel plates shall have a non-skid surface. Steel plates shall not be used at locations where the posted speed limit exceeds 35 mph.

36. The Contractor shall coordinate construction of electrical, telephone, cable television, water, sewer and gas line relocation work with Hawaiian Electric Company, Verizon, Oceanic Cable, Board of Water Supply, Department of Environmental Services, and The Gas Co., respectively. All coordination shall be considered incidental to Roadway Excavation work.

37. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer. If use of a location is approved by the Engineer a permit, which may entail rental fees, to use the property within the highway right-of-way shall be obtained from the State Highways Right-Of-Way Branch.

COLD PLANING NOTES

1. Prior to cold planing over an existing structure, the Contractor shall determine the actual depth of the existing asphalt concrete pavement. The Contractor shall take several cross section measurements throughout the structure. If the thickness of the existing pavement is less than the proposed resurfacing thickness, the Contractor shall remove the existing pavement to the level of the structure and resurface to the original thickness. This work shall be considered incidental to Cold Planing, and will not be paid for separately.

2. In cold planing the pavement over a structure, the Contractor shall exercise care not to damage any portion of the structure (especially the slab, joints, drain pipes or reinforcement). Any damage to the structure during the cold planing operations shall be repaired by the Contractor at the Contractor's own expense. Repair work shall be as directed by the Engineer. The Contractor shall verify the existing pavement thickness by hand digging at various locations. This work shall be considered incidental to Cold Planing, and will not be paid for separately.

3. The Contractor shall pave over exposed existing aggregate base with the new asphalt concrete base course and reopen lanes to traffic at the end of construction hours. Contractor shall compact the existing aggregate base in accordance with Section 304-Aggregate Base Course and apply Prime Coat in accordance with Section 408-Prime Coat, prior to laying the new Plant Mix Glassphalt Concrete Base Course. This work shall be considered incidental to the new Plant Mix Glassphalt Concrete Base Course, and will not be paid for separately.

4. The vertical pavement drop-off shall not exceed 3 inches. If a vertical pavement drop-off exists at the end of each day's cold planing and paving, the Contractor shall provide temporary transition tapers with maximum slopes of 48:1 for travel in the longitudinal direction and 6:1 for transverse movements. These slopes shall be removed before paving. This work shall be considered incidental to Cold Planing.

WATER NOTES

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the Standard Specifications for Road and Bridge Construction, dated 1994, as amended, of Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu, Board of Water Supply's "Water System Standards", dated 2002, and the "Water System External Corrosion Control Standards," Volume 3, dated 1991, and all subsequent amendments and additions.

2. All plans approved by the Board of Water Supply (BWS) are based solely on the adequacy of the water supply. All other features of the water system such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the BWS.

3. The Contractor shall notify the BWS Maintenance Unit – Engineering, Construction Section, in writing and submit five sets of approved construction plans, one week prior to commencing work on the water system.

4. The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth behind the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his/her construction methods.

5. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.

6. Prior to installation, the Contractor shall submit for approval by BWS, the manufacturer's certification that all cast iron (gray or ductile) fittings for the project conform in all respects to the "Water System Standards", dated 2002.

7. Test pressure shall be 150 psi.

8. Relocation of water meters shall be performed in the presence of State and BWS personnel.

9. All fire hydrants to be removed shall be cleaned and returned to the BWS baseyard as directed by the Engineer.

10. Polygon shape for mechanical joint glands as described in AWWA Standard C111 shall be "straight-sided" or an approved equal on a job to job basis.

11. Re-approval shall be required if this project is not under construction within a period of two years.

APPROVED: (5)

M. Fujiyama — 8/25/03
Director, Department of Planning and Permitting
City and County of Honolulu
(For Construction Within City R/W Only) — Date

Joseph W Kaahea — 7/8/03
Principal Executive
Maintenance Unit, BWS_DD — Date

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Greg H. Hiyakumoto — April 30, 2004
SIGNATURE — EXPIRATION DATE OF THE LICENSE

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

DATE	REVISION
10/16/03	(5) OBTAINED CITY APPROVALS
6/20/03	(3) Revised Cold Planing Note No. 3.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 2

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No.AC0.14 OF 350 SHEETS

RMTC JOB NO.: 1-19369-OE

ADD. 15

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 16	816

WATER NOTES (Cont.)

12. The Contractor shall chlorinate the entire inside surface of each pipe and fitting with disinfection solution of 5 ounces of Sodium Hyperchlorite mixed with 10 gallons of water. (For Connection Only)

13. Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.

14. The Contractor shall verify all existing service lateral locations whether shown or not shown on plans prior to commencing with any of the work and shall not assume that where no services are shown, none exist.

15. Contractor shall cut and plug all existing unused laterals at the main whether or not shown on the plans. Meter and valve boxes to be or already abandoned shall be demolished or removed and properly disposed of. The damaged area shall be repaired to an equal or better condition than the immediate area. All work shall be done at the expense of the Contractor.

16. The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area. Prior to resurfacing, BWS and/or SDOT will initially locate all water manholes/valve boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments. The cost for adjustments shall be made at their respective unit prices in the Bid based on the actual number adjusted. Cost for referencing shall be incidental and shall not be paid directly. Any additional request to BWS to again locate the manholes/valve boxes shall be done at the expense of the Contractor. (BWS will charge and bill the Contractor for all costs for said additional work.)

17. At the electrical/signal ductline water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all waterlines (12" clear for all electrical/signal ductline structures larger then 16") at no cost to BWS.

18. Maintain 3'-0" min. horizontal clear separation between all waterline systems and nearest electrical/signal ductlines paralleling the water system at no cost to BWS.

19. Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The Contractor shall probe the waterline and service laterals and submit the probing data to BWS Construction Section. Any adjustments to the existing water system to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS or SDOT.

20. Maintain 3'-0" min. horizontal clear separation between street light/traffic signal standards (including modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the Engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to BWS or SDOT.

21. Two-way blue reflective hydrant markers Type DB shall be installed at all fire hydrant installations. Contractor shall verify the exact locations of hydrant markers with the nearest Honolulu Fire Department Battalion Chief and SDOT.

22. The Contractor shall coordinate the securing of existing water system with the BWS prior to excavating behind or removing any existing thrust blocks, structural struts or reaction beams, or any fittings such as tees, plugs, caps, bends, offsets, and valves, or any other pipeline appurtenance. The Contractor shall be responsible for all associated damages resulting from failure to adequately secure the existing system.

23. All waterline construction requiring shutdown connection shall be scheduled for normal working hours at six (6) hours maximum downtime. Shutdown shall not be done after hours.

24. The Contractor shall obtain a NPDES permit prior to chlorination and/or dewatering. A copy of the permit shall be submitted to BWS Maintenance Unit – Engineering, Construction Section and SDOT.

25. Pipe cushion shall be of high resistivity material. The Contractor shall submit a soil certification that high resistant cushion material has a resistivity greater than 5,000 OHM-CM. Remainder of the backfill material shall be as specified in the Volume 1 of Water System Standards. Pipe cushion and backfill material shall contain no hazardous substances above regulatory action levels including but not limited to lead, asbestos, mercury, chromium, cadmium, zinc, strontium, and polychlorinated biphenyls (PCB).

26. Cleaning shall be by the use of "pigs" introduced into the pipeline and run completely through all installed pipelines and all branch lines for fire hydrants. "Pigging" of service laterals is not required. Bare foam "pigs" shall be used to swab piping clean as each length of the pipeline is installed. Each "pig" shall consist of a cylindrical piece of polyurethane foam with a density of 3-7 pounds per cubic foot and a vinyl-coated nose. Outside diameter of the "pig" shall be equal to 1-1/4 to 1-1/2 times the inside diameter of the pipe being installed. The length of the "pig" shall be 1-1/2 to 2 times its diameter. Prior to use, the "pig" shall be submerged in a chlorine solution of 1 oz. of 5% chlorine bleach in 5 gallons of water. "Pigging" of the pipeline shall be considered incidental to the installation of the new pipeline.

27. All ductline iron pipe, fittings, and valves shall be wrapped with two layers of 8 mil. polyethylene wrap.

28. Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the BWS or SDOT.

29. All valves to be abandoned shall be removed, cleaned and returned to BWS. Demolish all valve boxes to be abandoned. Salvage, clean and return to BWS all abandoned manhole Cast Iron Frames and Covers.

30. A. The following chlorination and water sample collection procedure shall apply to all water pipeline projects:

Step 1: Chlorinate main by filling with water and introducting chlorine in sufficient quantity to obtain a minimum chlorine concentration of 50 parts per million. Leave chlorinated water in main overnight.

Step 2: Flush main with fresh water until all chlorine has been flushed out as evidenced by the ortho-tolidine test, then collect a water sample while continuing to flush the main.

Step 3: Repeat Steps 1 and 2. After collecting the second water sample, stop flushing and allow the water to stand in the main overnight.

Step 4: Thoroughly flush the main with fresh water until all water that had been standing in the main overnight has been flushed out. Stop flushing and let the water stand in the main for one hour. Collect a water sample.

B. The main is deemed acceptable and certified when (1) two consecutive water samples, collected 24 hours apart under Steps 1 and 2, show no total and fecal coliform and less than 200 colony forming units (CFU) of total bacteria and (2) the sample of water held in the main for one hour, collected under Step 4, also shows no total and fecal coliform and less than 200 CFU of total bacteria.

C. Chlorination, flushing, sampling and testing will be extended should unsatisfactory results be encountered. Any sample that shows positive coliform presence or total bacteria greater than 200 CFU is unsatisfactory.

APPROVED: (2)

Joseph W Kaahea 7/8/03

Principal Executive Maintenance Unit, BWS OD — Date

GREG H. HIYAKUMOTO LICENSED PROFESSIONAL ENGINEER No. 6662-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — April 30, 2004 EXPIRATION DATE OF THE LICENSE

DATE	REVISON
10/16/03	(2) OBTAINED CITY APPROVAL

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 3

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No. ACO.15 OF 350 SHEETS

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

RMTC JOB NO.: 1-19369-0E

ADD. 16

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 17	816

WATER NOTES (Cont.)

D. Steps 1 and 2 may be repeated as directed by the Engineer before collecting the one hour hold sample specified in Step 4. Repeating Steps 1 and 2 is recommended in the event samples show the presence of coliforms and/or increasing total bacterial results from one sample to the next.

E. Water samples that show the presence of a typical colonies, debries or results inconsistent with existing water are subject to reconfirmation. BWS and SDOT reserve the right to request and test additional water samples in the interest of safeguarding public health and safety.

31. Install 4 mil thick, no-metallic, blue colored, 6 inch wide warning tape over centerline of the pipe and below the base course along the entire length of trench. Tape should be marked with "CAUTION WATER LINE BURIED BELOW".

32. Ball corp and ball stop shall be used in lieu of a corporation stop and stopcock, respectively.

33. The Contractor shall furnish and install polyethylene wrap, 3 feet minimum at all taps (for DI pipe and copper lateral combination only) and plastic pipe (PE tubing) 3 feet long after meters for all service lateral connections.

34. The Contractor shall adjust all manhole frames/valve boxes within the resurfaced area prior to resurfacing. The Contractor shall be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments.

35. Board of Water Supply approval of these plans does not constitute a water commitment. Availability of water will be determined when building permit is presented to the department. Water commitment will depend upon the status of the water system at that time. Should water service be made available, the water commitment will be effective when the project receives an approved building permit from the Building Department. All water commitment will be cancelled in the event the building permit is canceled.

DRAINAGE NOTES

1. The Contractor shall verify the locations of all existing culverts and drainage facilities in the field. Any existing culverts and drainage facilities damaged during construction shall be repaired or replaced by the contractor at his/her own expense.

2. Storm drain pipes shall be high density polyethylene (HDPE) or reinforced concrete pipe (RCP), Class III, unless noted otherwise.

3. All drain lines shall have 3 feet minimum cover under paved areas and 2 foot cover in other areas.

SEWER NOTES

1. All sewer construction shall be performed in accordance with the City's Standard Specifications, Sept. 1986, the Department of Public Works Standard Details, Sept. 1984, current City practices and Revised Ordinances of Honolulu, 1990 as amended, and the Design Standards of the Department of Wastewater Management Vol. 1, July 1993.

2. The Contractor shall notify the Inspection Section, Wastewater Branch, DDC, at 527-5842 or 523-4345 to arrange for inspection services and submit four (4) sets of approved construction plans seven (7) days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.

3. The underground pipes, cables or ductlines known to exist by the Design Engineer from his/her research of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities, including and affecting sewer lines, in the presence of the Wastewater Inspector and exercise proper care in excavating the area. The Contractor shall be responsible and shall pay for all damaged utilities.

SEWER NOTES (Cont.)

4. The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.

5. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify SDOT and the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notifications and press releases.

6. Confined Space

For entry by City and State personnel, including inspectors, into a permit required confined space as defined in 29 CFR Part 1910.146(b), the Contractor shall be responsible for providing:

1. All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include, but not limited to, the following:

   a. Full body harnesses for up to two personnel.
   b. Lifeline and associated clips.
   c. Ingress/egress and fall protection equipment.
   d. Two-way radios (walkie-talkies) if out of line-of-sight.
   e. Emergency (escape) respirator (10 minute duration).
   f. Cellular telephone to call for emergency assistance.
   g. Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammable (capable of monitoring at a distance at least 20-feet away).
   h. Personal multi-gas detector to be carried by the inspector.

2. Continuous forced air ventilation adequate to provide safe entry conditions.

3. One attendant/rescue personnel topside (two, if conditions warrant it or requested by the Engineer).

7. At the electrical/signal ductline sewer crossings, adjust all electrical/signal ductline elevations to maintain 24 inches vertical clear separation from all sewer lines, at no cost to the City or SDOT.

8. Maintain 3'-0" minimum horizontal clear separation between all sewer lines systems and nearest electrical/signal ductlines, pullboxes/handholes, paralleling the sewer system at no cost to the City or SDOT.

9. Maintain 5'-0" minimum horizontal clear separation between street light/traffic signal standards (including modular units), and the nearest sewer system. The Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the Engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the City or SDOT.

WATER POLLUTION AND EROSION CONTROL NOTES:

1. General:

The Contractor is reminded of the requirements of Section 209 – Water Pollution and Erosion Control, in the "Hawaii Standard Specifications for Road, Bridge and Public Works Construction," as amended. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the Engineer; construction requirements; method of measurement; and basis of payment. No work shall commence without a BMP plan approved by the Department of Health.

The Contractor shall follow the guidelines in the "Best Management Practices Manual for Construction Sites in Honolulu," dated May 1999 in developing, installing and maintaining the best management practices (BMPs) for the project. The Contractor may submit alternate methods to the Engineer for acceptance.

APPROVED: (5)

Wayne Nakamura — 7/22/03
Chief, Wastewater Branch, DPP — Date

Joseph W Kealoha — 7/8/03
Principal Executive Maintenance Unit, BWS DD — Date

GREG H. HIYAKUMOTO LICENSED PROFESSIONAL ENGINEER No. 6662-C HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Greg H. Hiyakumoto — April 30, 2004
SIGNATURE — EXPIRATION DATE OF THE LICENSE

DATE	REVISION
10/16/03	(5) OBTAINED CITY APPROVALS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 4

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No.AC0.16 OF 350 SHEETS

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

RMTC JOB NO.: 1-19369-OE

ADD. 17

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 18	816

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.)

The Contractor shall keep a copy of the approved BMP, NOI, etc. on the project site. The BMP shall be updated to reflect any changes made during the course of construction for the duration of the project.

The Engineer may assess liquidated damages of up to $27,500 for non-compliance of each BMP requirement and each requirement stated in Section 209, for every day of non-compliance. There is no maximum limit on the amount assessed per day.

The Engineer will deduct the cost from the progress payment for all citations received by the department for non-compliance, or the Contractor shall reimburse the State for the full amount of the outstanding cost incurred by the State, whichever is greater.

2. Waste Disposal:

A. Waste Materials: All waste materials shall be collected and stored in a securely lidded metal dumpster that does not leak. The dumpster shall meet all local and State solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or as often as is deemed necessary. No construction waste materials shall be buried onsite. The Contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the office trailer and the Contractor shall be responsible for seeing that these procedures are followed.

B. Hazardous Waste: All hazardous waste materials shall be disposed of in the manner specified by local or State regulation or by the manufacturer. The Contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.

C. Sanitary Waste: All sanitary waste shall be collected from the portable units a minimum of once per week, or as required.

3. Erosion and Sediment Control Inspection and Maintenance Practices:

A. All control measures shall be inspected at least once each week and following any rainfall event of 0.5 inches or greater. The Contractor shall provide and maintain a rain gauge and install it at a location agreed to by the State. The Engineer will choose the type of rain gauge.

B. All measures shall be maintained in good working order. If repair is necessary, it shall be initiated within 24 hours after the inspection.

C. Built-up sediment shall be removed from silt fence when it has reached one-third the height of the fence.

D. Silt screen or fence shall be inspected for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground.

E. Temporary and permanent seeding and planting shall be inspected for bare spots, washouts and healthy growth.

F. The Contractor shall submit to the Engineer a maintenance inspection report promptly after each weekly inspection.

G. The Contractor shall select a minimum of three personnel who shall be responsible for inspections, maintenance and repair activities and filling out the inspection and maintenance report.

H. Personnel selected for the inspection and maintenance responsibilities shall receive training from the Contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.)

3 I. All slopes and exposed areas shall be grassed as soon as final grades have been established. Grading to final grade shall be continuous, and any area in which work has been interrupted or delayed or exposed for more than 15 days shall be grassed in order to prevent dust, erosion and silt runoff. Areas with imported soils shall be grassed not more than 5 working days after final grades have been established.

J. Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.

4. Good Housekeeping Best Management Practices:

A. Materials Pollution Prevention Plan:

(1) Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory of the Construction Contractor's site-specific BMP plan.

Concrete	Fertilizers
Detergents	Petroleum Based Products
Paints (enamel and latex)	Cleaning Solvents
Metal Studs	Wood
Tar	Masonry Block

(2) Material management practices shall be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff. An effort shall be made to store only enough product as is required to do the job.

(3) All materials stored onsite shall be stored in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.

(4) Products shall be kept in their original containers with the original manufacturer's label.

(5) Substances shall not be mixed with one another unless recommended by the manufacturer.

(6) A product shall be used up completely before disposing of the container.

(7) Manufacturer's recommendations for proper use and disposal shall be followed.

(8) The Contractor shall conduct a daily inspection to ensure proper use and disposal of materials onsite.

B. Hazardous Material Pollution Prevention Plan

(1) Products shall be kept in original containers unless they are not resealable.

(2) Original labels and Material Safety Data Sheets (MSDS) shall be retained and made available to the Engineer upon request.

(3) Surplus products shall be disposed of according to manufacturers' instructions or local and state recommended methods.

C. Onsite and Offsite Products Specific Plan

(1) The following product specific practices shall be followed onsite:

a. Petroleum Based Products: All onsite vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used onsite shall be applied according to the manufacturer's recommendation.

DATE	REVISION
6/20/03	3 Revised Note No. 3I.

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE 7/31/03 — April 30, 2004 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 5

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No.ACO.17 OF 350 SHEETS

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

RMTC JOB NO.: 1-19369-OE

ADD. 18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 19	816

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.)

b. *Fertilizers: Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to storm water. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.*

c. *Paints: All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the highway drainage system but shall be properly disposed of according to manufacturers' instructions or State and local regulations.*

d. *Concrete Trucks: Concrete trucks shall be allowed to wash out or drum wash water only at designated site. Water shall not be discharged in the highway drainage system or waters of the United States (i.e. streams, rivers, harbors). The Contractor shall contact Drinking Water Branch, Department of Health at 586-4258 to receive permission to designate a disposal site. The Contractor shall clean the disposal site as required or as requested by the Engineer at no cost to the owner or the State.*

(2) *Offsite Vehicle Tracking: A stabilized construction entrance shall be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance shall be cleaned daily or as required to remove any excess mud, cold planed materials, dirt or rock tracked from the site. Pollutants shall not be discharged to the drainage system. Dump trucks hauling material from the construction site shall be covered with a tarpaulin.*

D. *Spill Control Plan:*

(1) *The Contractor shall have a spill prevention plan which shall be posted and adjusted to include a description and cause of each spill, measures to prevent and clean up each spill.*

(2) *The Contractor shall be the spill prevention and cleanup coordinator. The Contractor shall designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel shall be posted in the material storage area and in the office trailer onsite.*

(3) *Manufacturers' recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of the information and cleanup supplies.*

(4) *Materials and equipment necessary for spill cleanup shall be kept in the material storage area onsite.*

(5) *All spills shall be cleaned up immediately after discovery.*

(6) *The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.*

(7) *Spills of toxic hazardous material shall be reported to the appropriate State or local government agency, regardless of the size.*

5. *Permit Requirements:*

A. *The Contractor shall submit to the Engineer six (6) sets of the water pollution and erosion control submittals as detailed in Subsection 209.04 of the specifications. No work shall begin until the submittal has been reviewed and approved by the Engineer.*

WATER POLLUTION AND EROSION CONTROL NOTES (Cont.)

B. *The Contractor shall comply with all applicable State and Federal permit conditions. Permits may include but are not limited to the following:*

NPDES Permit for Construction Activities

6. *The Contractor shall be responsible for conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control of Title 11, Administrative Rules of the State Department of Health.*

7. *The Contractor, at the Contractor's own expense, shall keep the project area and surrounding areas free from dust nuisance and any material tracked on to the roadways. The work shall be in conformance with the Air and Water Pollution Control Standards and Regulations of the State Department of Health.*

⚠5 SIGNS AND MARKING NOTES FOR WORK WITHIN CITY AND STATE R/W:

1. *All traffic sign and pavement marking installations shall be done in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", 2000 Edition, as amended, the latest specifications from the Traffic Review Branch, Department of Planning and Permitting, and as shown on the plans.*

⚠3 2. *Contractor shall notify and coordinate work with the Traffic Review Branch, Department of Planning and Permitting at 527-5087 and SDOT, one (1) week in advance of commencing work.*

3. *Contractor shall submit material brochures for all signs and paint materials to the Traffic Review Branch, Department of Planning and Permitting and SDOT.*

4. *The Contractor shall keep one (1) set of approved signing and/or striping plans at the project site at all times during construction work.*

5. *Contractor shall paint temporary guidelines and outline of arrows, legends, and crosswalks with four inch (4") wide brushed taped line on the day the roadway is opened to traffic. These markings must be approved by the inspector from the Traffic Review Branch, Department of Planning and Permitting and SDOT.*

6. *Contractor shall notify the Traffic Review Branch, Department of Planning and Permitting and SDOT, three (3) days in advance of final inspection.*

7. *Contractor shall meet with the inspector from the Traffic Review Branch, Department of Planning and Permitting and SDOT during the final inspection.*

8. *Within ten (10) days following notification of award of contract, the Contractor shall submit to the Department of Planning and Permitting (phone: 523-4881) and SDOT for approval, a list of any signing and pavement marking material which he proposes to install. The list shall be complete as to the name of the manufacturer, catalog number, and shall be supplemented with material brochures.*

9. *Before installing the Contractor shall submit a letter of certification for all traffic signing and pavement marking material installed.*

10. *Signs shall be installed with at least two (2) feet of clearance from sign edge to curb face.*

11. *All traffic signs shall be reflectorized.*

12. *Raised pavement markers shall be installed in accordance with the Department of Planning and Permitting and SDOT standards.*

APPROVED:

Chief, Traffic Review Branch, DPP *Date*

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — April 30, 2004 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES - 6

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No.AC0.18 OF 350 SHEETS

DATE	REVISION
6/20/03	⚠5 Revised Title for Notes and Note No. 2

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

RMTC JOB NO.: 1-19369-0E

ADD. 19

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 20	816

SIGNS AND MARKING NOTES (Cont.)

13. Location of "STOP" sign:
    - A. Install "STOP" sign at curb tangent point.
    - B. Install "STOP" sign on metal street light standard if a standard is located within 10 feet of curb return.
    - C. Install "STOP" sign in front of utility pole if a pole is located within 10 feet of curb return.
    - D. Location of a stop sign may be adjusted if it is in conflict with an ADA ramp.
14. Pavement word and symbol markings shall be in accordance with the Department of Planning and Permitting standards.
15. The Contractor shall use thermoplastic material, approved by the Traffic Review Branch, Department of Planning and Permitting, and accepted by SDOT, for all crosswalks, stop bars, pavement arrows, center lanes, lane lines and arc lines, channelized traffic islands and legends.

TRAFFIC NOTES FOR WORK ON CITY AND COUNTY STREETS

1. A permit shall be obtained from the Department of Transportation Services before work on any portion of a public street or highway may begin. Construction traffic control plans approved by the Department of Transportation Services and/or the Department of Planning and Permitting and SDOT must be provided when applying for the permit.
2. The Contractor shall provide, install, and maintain all necessary signs and other protective facilities, which shall conform with the "Hawaii Administrative Rules Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highways Administration's "Manual on Uniform Traffic Control Devices for Streets and Highways."
3. Work on any City street area may be performed only between the hours of 8:30 pm to 3:00 am, Monday through Friday. No work shall be allowed on weekends, holidays and after 6:00 pm unless approved by the Engineer.
4. During working hours, the Contractor shall provide for through traffic. During non-working hours, all trenches shall be covered with a safe non-skid bridging material and all lanes shall be open to traffic.
5. As required by the Department of Transportation Services and SDOT, the Contractor shall provide off-duty police officers to control the flow of traffic.
6. Where pedestrian walkways exist, they shall be maintained in passable and accessible condition, or other facilities for pedestrians shall be provided. Accessible passage between walkways at intersections shall likewise be provided.
7. Driveways shall be kept open unless the owners of the property using these rights-of-way are otherwise provided for satisfactorily.
8. Contractor shall reference, to the approval of the Department of Planning and Permitting and SDOT's acceptance, all existing traffic signs, posts and pavement markings prior to the commencement of construction. The Contractor shall replace or repair all traffic signs, posts and pavement markings disturbed by his activities.
9. The Contractor shall notify the Department of Planning and Permitting and SDOT at 523-4881 one (1) week prior to any work to be done on signs, posts and pavement markings.
10. No material and/or equipment shall be stockpiled or otherwise stored within street rights-of-way except at locations designated in writing and approved by the Department of Transportation Services and found acceptable by SDOT.
11. The Engineer will ensure that the Contractor installs the construction traffic control devices in accordance with the MUTCD and the Hawaii Administrative Rules as specified in Traffic Note #2.

CONSTRUCTION NOTES FOR WORK WITHIN CITY AND STATE R/W:

1. All construction work shall be done in accordance with the Standard Plans and Specifications of the State Department of Transportation as amended, unless otherwise specified by the contract plans and specifications.
2. The underground pipes, cables or duct lines known to exist by the Design Engineer from the Design Engineer's search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
3. No contractor shall perform any construction operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow into existing City drainage systems, or adjoining properties, streets or natural watercourses. Should such violations occur, the Contractor may be cited and the Contractor shall immediately make all remedial actions necessary.
4. The Contractor shall be responsible for conformance with the applicable provisions of the Water Quality and Water Pollution Control Standards contained in Hawaii Administrative Rules, Chapter 11 – 54, "Water Quality Standards" and Chapter 11-55, "Water Pollution Control," as well as Chapter 14 of the Revised Ordinances of Honolulu, as amended. Best Management Practices shall be employed at all times during construction.
5. The Contractor shall notify the Civil Engineering Branch, D.P.P. at 523-4881, and SDOT to arrange for inspectional services and submit three (3) sets of approved construction plans seven (7) days prior to commencement of construction work.
6. Confined Space

For entry by City and SDOT personnel, including inspectors, into a permit required confined space as defined in 29 CFR part 1910.146(b), the Contractor shall be responsible for providing:

1. All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include, but not limited to, the following:
   - a. Full body harnesses for up to two personnel.
   - b. Lifeline and associated clips.
   - c. Ingress/egress and fall protection equipment.
   - d. Two-way radios (walkie-talkies) if out of line-of-sight.
   - e. Emergency (escape) respirator (10 minute duration).
   - f. Cellular telephone to call for emergency assistance.
   - g. Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammable (capable of monitoring at a distance at least 20-feet away).
   - h. Personal multi-gas detector to be carried by the inspector.
2. Continuous forced air ventilation adequate to provide safe entry conditions.
3. One attendant/rescue personnel topside (two, if conditions warrant it)

APPROVED:

M. [signature] 7/18/03
Chief, Civil Engineering Branch, DPP[illegible] Date

[signature] 6/26/03
Chief, Traffic Review Branch, DPP Date

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

[signature] April 30, 2004
SIGNATURE 7/10/03 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 7

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET No. ACO.19 OF 350 SHEETS

DATE	REVISION
6/20/03	3 Revised Title for Notes and Note No's 3 and 10

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

RMTC JOB NO.: 1-19369-OE

ADD. 20

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	21	816

GAS COMPANY NOTES

1. The Gas Company gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.

2. Written clearances must be obtained from The Gas Company, Maps and Records Department, 515 Kamakee Street, at least five (5) working days prior to starting excavation near these gas pipelines.

3. Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1–800–227–2600.

4. The Contractor shall excavate and backfill around gas pipelines in the presence of a representative of The Gas Company and SDOT. All backfill within six inches of any gas pipeline shall be select cushion material approved by The Gas Company.

5. For relocation of any gas pipeline, the Contractor shall notify SDOT and The Gas Company five (5) working days before starting work. The telephone number is 594–5574. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by The Gas Company.

6. The Contractor shall notify SDOT and The Gas Company immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. The telephone number is 535–5933, 24 hours a day. The Contractor shall be liable for any damage to The Gas Company facilities. Repair work on such damage shall be done by The Gas Company with payment for this work to be borne by the Contractor.

7. Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by The Gas Company.

8. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.

PAVING AROUND MANHOLES

1. The Contractor shall place hot asphalt concrete around manholes and compact properly with a vibrating plate compactor.

2. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole which is not rolled by the steel roller.

3. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

4. The Contractor shall adjust manholes prior to Cold Planing, backfill with hot mix and re–adjust after final paving. This work shall be considered incidental to Manhole Adjustments. For adjustment of all BWS manhole frames/valve boxes, see Water Note. 16.

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

GREG H. HIYAKUMOTO
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No. 8662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE — April 30, 2004 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 8

INTERSTATE ROUTE H–3
H–3 FINISH (UNIT VIII)
F.A.I. Proj. No. 1-H3-1(75) Unit VIII

Scale: None Date: Mar. 31, 2003

SHEET NoAC0.20 OF 350 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	22	816

FREE SERVICE FOR LOCATING UNDERGROUND UTILITIES

A free service is available to Contractors for locating underground utilities. Service is provided by Underground Service Alert North, at toll free telephone no. 1-800-227-2600. Call Underground Service Alert North at least two days prior to the start of any excavation work.

CURB RAMP NOTES

1. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
2. Curb ramps shall be installed at 90° to the sidewalk or to the maximum extent feasible, in alterations.
3. Subject to field conditions, the Engineer shall determine the final locations of curb ramps.
4. The maximum slopes of adjoining gutters or road surface immediately fronting the curb ramp shall not exceed 5% for Type A and D ramps and 8.33% for Type B, C, and E ramps. The counter slope may be exceeded when the change of grade does not exceed 13% (11% preferred) over a distance of 2 ft. Exceeding the 13% (11% preferred) change in grade will cause a person in a wheelchair to tip forward and/or fall backward.
5. All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area to the maximum extent feasible.
6. Where necessary, existing pullboxes, handholes, manholes, etc. shall be adjusted to match curb ramp grade. Adjustments shall not be paid for separately but shall be considered incidental to the various curb ramp items unless indicated otherwise.
7. Transitions from ramps to gutters and roadways shall be flush. If needed, a lip with a maximum vertical change in level of 1/4" is allowed.
8. Curb ramps and sidewalks shall be constructed to eliminate pounding to the maximum extent feasible.
9. The pedestrian push button shall meet operational and reach requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG):
   a) Forward Reach. The maximum height for forward reach shall be 48".
   b) Side Reach. The maximum height for side reach shall be 54".
   c) Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf.
10. There shall be a 30"x48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button.
11. Construction joints are required to join curb ramps with sidewalks.
12. Unless otherwise noted, new gutters are required.
13. All curb ramps shall be reinforced with 6x6 W1.4/W1.4 welded wire fabric.
14. Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
15. Bed course material is required for curb ramps, sidewalks, and gutters.
16. If a curb ramp is not constructed according to the plans, the Contractor shall reconstruct the curb ramp at no cost to the State. Construction tolerance for Portland Cement Concrete shall be based on ¼" inch per 10 ft. (0.2%). Remedial measures will not be accepted.
17. Additional information is available from:
   a) Americans with Disabilities Act Accessibility Guidelines (ADAAG), September 1998, The Access Board.
   b) Accessible Rights-of-Way: A Design Guide, November 1999, The Access Board.
   c) Designing Sidewalks and Trails for Access, July 1999, FHWA.

SIDEWALK NOTES

1. All sidewalks shall provide a minimum clear width of 3'-0" (excluding curb) for pedestrian circulation. If this cannot be met, a minimum 32-inch clear width is allowed for a maximum distance of 24 inches.
2. Narrow sidewalks (3'-0" min. width, excluding curb) may prohibit the installation of any sign posts, utility poles, fire hydrants, traffic signal standards, light poles, etc. in the sidewalk.
3. Passing spaces along new sidewalks with 5' clear width or less shall be provided at maximum 200' intervals as required by ADA guidelines. The passing area shall be a minimum 5' wide by 5' long as feasible.
4. For new construction, the minimum sidewalk width shall be 6'-0" (excluding curb). The cross slope shall not exceed 2%.
5. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.
6. Objects protruding from utility poles and walls adjacent to the sidewalks (i.e. wall mounted fire hydrants, telephones, meters on poles, etc.) shall be mounted to meet the current Americans with Disabilities Act Accessibility Guidelines (ADAAG) and will be subject to Engineer's approval.
7. All new wheelchair-accessible curb ramps and flares shall be no steeper than 12H:1V. Ramps and flares shall be lengthened as required to achieve this maximum slope.

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

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

April 30, 2004
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES - 9

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

SHEET No. AC0.21 OF 350 SHEETS

RMTC JOB NO.: 1-19369-OE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	ADD. 23	816

GRADING NOTES

3 1. All grading work shall be done in accordance with Chapter 14, Articles 13, 14, 15 and 16, as related to grading, soil erosion and sediment control of the Revised Ordinances of Honolulu, 1990, as amended, and soils report entitled, "Geotechnical Engineering Exploration, Interstate Route H-1 Widening, Waimalu Viaduct (Westbound), Pearl City Off-Ramp to Kaonohi Street, F.A.I. Project No. IM-HP-H1-1(237), Pearl City to Aiea, Oahu, Hawaii," by Geolabs, Inc., dated March 31, 2003.

2. No contractor shall perform any grading operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural watercourses. Should such violations occur, the Contractor may be cited and the Contractor shall immediately make all remedial actions necessary.

3. The Contractor, at the Contractor's own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with the air pollution control standards contained in the Hawaii Administrative Rules, Title 11, Chapter 60.1, "Air Pollution Control."

4. The underground pipes, cables or ductlines known to exist by the Design Engineer from his/her search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.

5. Surface waters shall not damage the cut face of an excavation or the sloped surfaces of a fill. Furthermore, sediment-laden runoff shall not leave the site.

6. All slopes and exposed areas shall be sodded, planted, or hydromulched, as soon as final grades have been established. Planting shall not be delayed until all grading work has been completed. Grading to final grade shall be continuous, and any area within which work has been interrupted or delayed shall be planted.

7. Fills on slopes steeper than 5:1 shall be keyed.

8. The City shall be informed of the location of the borrow/disposal site for the project when the application for a grading permit is made. The borrow/disposal site must also fulfill the requirements of the grading ordinance.

3 9. No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice and acceptance by the Engineer, provided such grading work is also in conformance with the community noise control standards contained in the Hawaii Administrative Rules, Title 11, Chapter 46, "Community Noise Control."

10. The limits of the area to be graded shall be flagged before the commencement of the grading work.

11. All grading operations shall be performed in conformance with the applicable provisions of the water quality and water pollution control standards contained in Hawaii Administrative Rules, Title 11, Chapter 54, "Water Quality Standards," and Title 11, Chapter 55, "Water Pollution Control" and if applicable, the NPDES permit for the project.

12. The measures to control erosion and other pollutants shall be in place before any earth-moving phase of the grading is initiated.

13. Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.

14. Temporary erosion control procedures shall be submitted for approval prior to application for grading permit.

15. If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable State and Federal requirements.

16. Building permit for retaining walls shall be obtained prior to commencement of grading work on site.

17. For non-City projects, the Contractor shall notify SDOT, the Civil Engineering Branch, D.P.P. at 523-4881 to arrange for inspectional services and submit three (3) sets of approved construction plans seven (7) days prior to commencement of construction work. For City projects, the Contractor shall coordinate inspectional services with the responsible City agency.

18. In the event any artifacts or human remains are uncovered during construction operations, the contractor shall immediately suspend work and notify the Honolulu Police Department, the State Department of Land and Natural Resources-Historic Preservation Division (692-8015). In addition, for non-City projects, the Contractor shall notify SDOT, the Civil Engineering Branch, D.P.P. (523-4881); and for City projects, notify the responsible City agency.

19. Non-compliance to any of the above requirements shall mean immediate suspension of all work, and remedial work shall commence immediately. All costs incurred shall be billed to the violator. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.

20. Place topsoil and irrigation system prior to placement of erosion control matting, in accordance with the requirements of Section 617-Topsoil, 616-Sprinkler System, and Section 663-Erosion Control Matting.

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

GREG H. HIYAKUMOTO
LICENSED PROFESSIONAL ENGINEER
No. 6662-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE 1/9/03 — April 30, 2004 EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES - 10

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: None — Date: Mar. 31, 2003

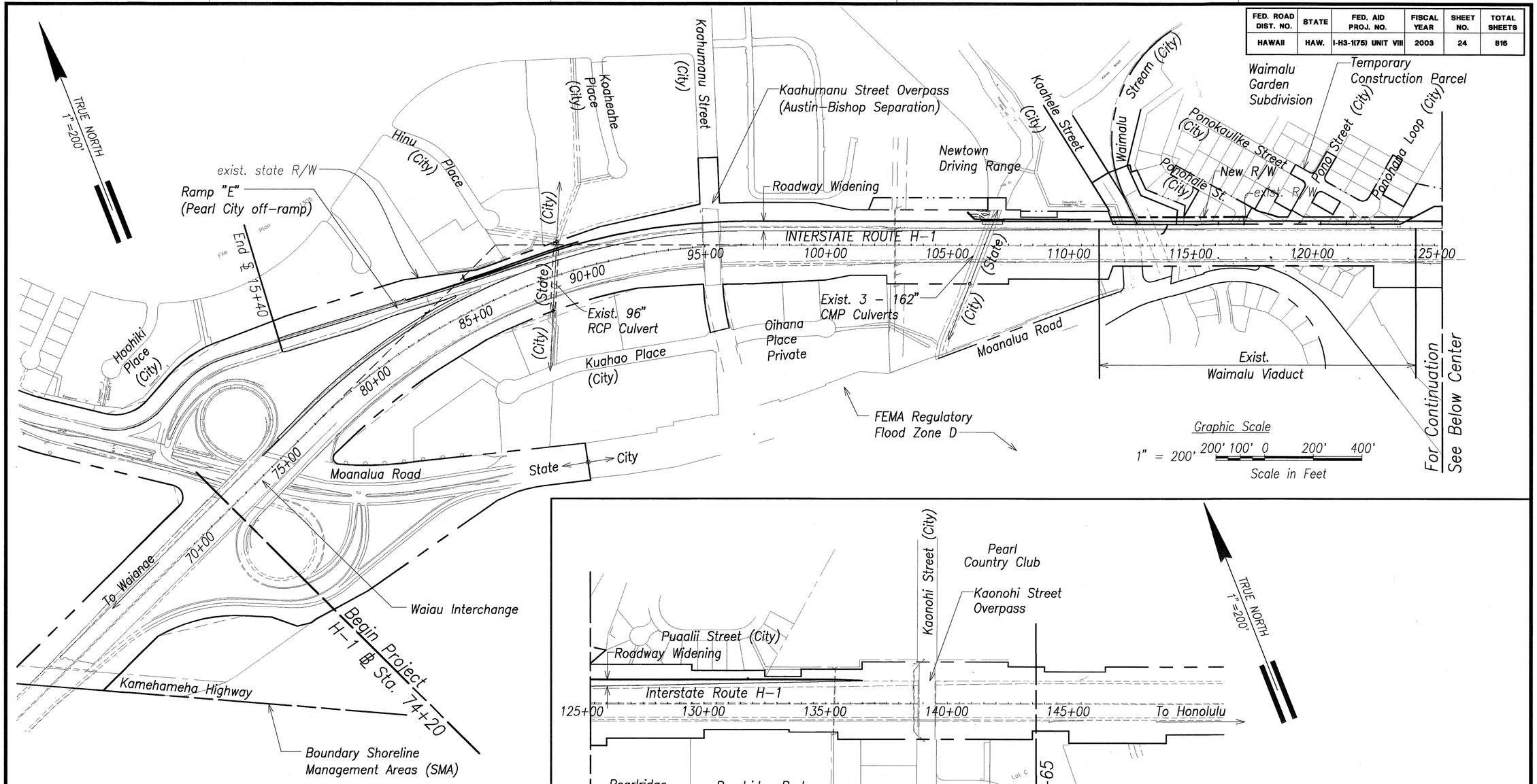
DATE	REVISION
6/20/03	3 Revised Notes 1 and 9.

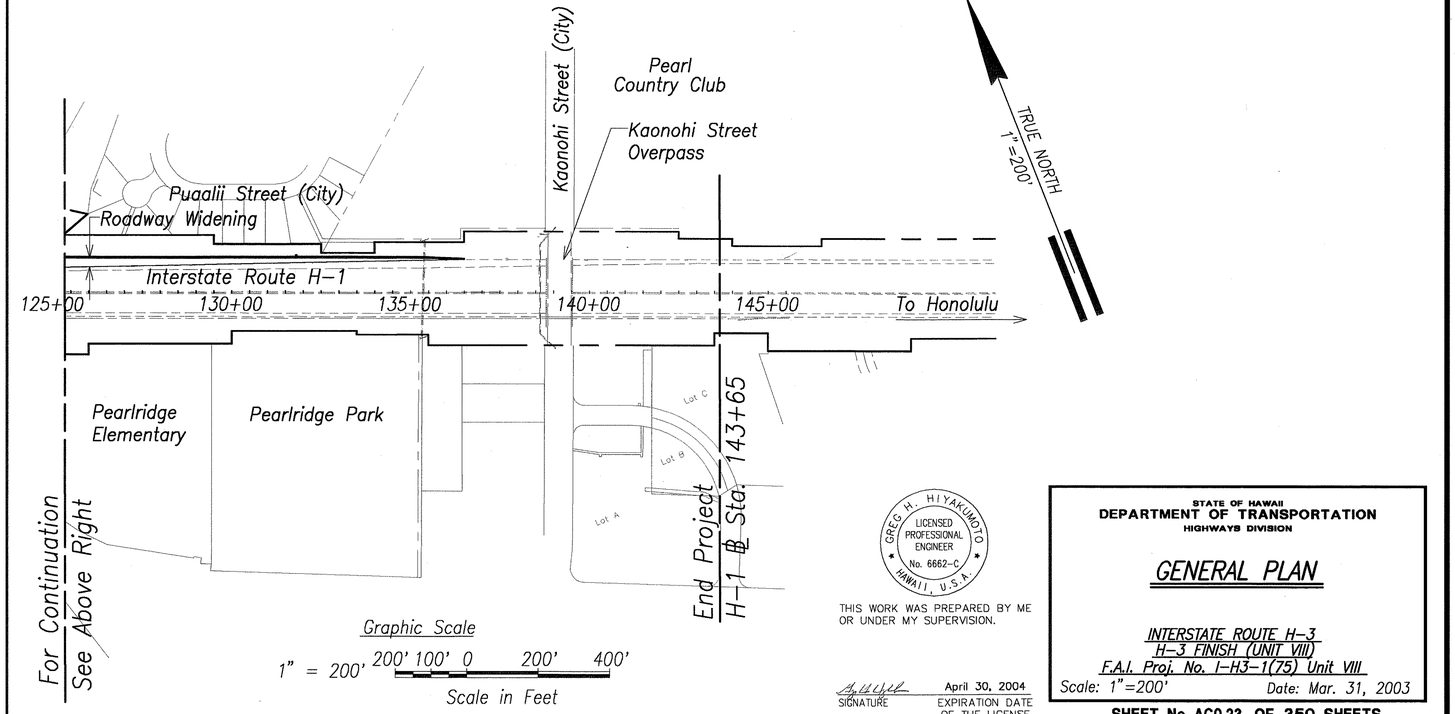
SHEET No.AC0.22 OF 350 SHEETS

RMTC JOB NO.: 1-19369-0E

ADD. 23

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(75) UNIT VIII	2003	24	816





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

GREG H. HIYAKUMOTO
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April 30, 2004
SIGNATURE — EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL PLAN

INTERSTATE ROUTE H-3
H-3 FINISH (UNIT VIII)
F.A.I. Proj. No. I-H3-1(75) Unit VIII

Scale: 1"=200' Date: Mar. 31, 2003

SHEET No. AC0.23 OF 350 SHEETS

RMTC JOB NO.: 1-19369-0E