

STATE OF HAWAII
Air Carrier Consultation Meeting
Information Package
for the

2012 PASSENGER FACILITY CHARGE APPLICATION

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I. EXECUTIVE SUMMARY

A notification letter dated **August 24, 2012**, is being distributed to all air carriers operating at Honolulu International Airport, Kahului Airport, Kona International Airport at Keahole, Lihue Airport, and Hilo International Airport. The letter details proposed actions regarding the Passenger Facility Charge (PFC) program to be administered by the State of Hawaii.

The State intends to file an application to impose a **\$4.50 PFC** at Honolulu International Airport (HNL), Kahului Airport (OGG), Kona International Airport at Keahole (KOA), Lihue Airport (LIH), and Hilo International Airport (ITO) for use for projects at Honolulu International Airport (HNL), Kahului Airport (OGG), Kona International Airport at Keahole (KOA), and Hilo International Airport (ITO), in accordance with Federal Aviation Regulations (14 CFR Part 158).

PFC Application No. 1 has completed the use of funds for all projects.

On September 30, 2008, upon FAA's Final Agency Decision (FAD) of PFC Application No. 3, the State's PFC Application No. 2, (FAD dated November 27, 2006) was terminated and incorporated into PFC Application No. 3.

PFC Application No. 3 completed its collection upon the Charge Expiration Date of January 1, 2010.

On October 13, 2009, upon FAA's Final Agency Decision (FAD) of PFC Application No. 4, the State began collections on January 1, 2010 with an estimated Charge Expiration Date of February 1, 2014.

The estimated Charge Effective Date is February 1, 2014 for PFC Application No. 5 with a Charge Expiration Date of June 30, 2033.

II. CIP - PROJECTED SOURCES OF FUNDS

This PFC Application proposes to impose Passenger Facility Charges (PFC) at the Honolulu International Airport (HNL), Kahului Airport (OGG), Kona International Airport at Keahole (KOA), Lihue Airport (LIH), and Hilo International Airport (ITO) for use at HNL, OGG, KOA, and ITO in accordance with Federal Aviation Regulations (14 CFR Part 158).

This PFC application contains the following proposed “Impose and Use” projects:

- Taxiway ‘Z’ Structural Improvements (Design only) at Honolulu International Airport
- Runway 26L Pavement Improvements at Honolulu International Airport
- Runway 4R Pavement Reconstruction at Honolulu International Airport
- Runway 4L Edge Lighting at Honolulu International Airport
- Runway 8L Widening & Misc. Improvements at Honolulu International Airport
- Loading Bridges - Ewa Concourse at Honolulu International Airport
- HNL OST 2nd Level Roadway Improvements at Honolulu International Airport
- Wiki-Wiki Shuttle Station Improvements at Honolulu International Airport
- OST Terminal Metal Roof Replacement at Honolulu International Airport
- NDWP IIT Mauka Extension at Honolulu International Airport
- NDWP Taxilanes G & L Widening - Phases 1 and 2 at Honolulu International Airport
- NDWP Hawaiian/Aloha Facility Demolition at Honolulu International Airport
- Access Controls and CCTV Systems at Hilo International Airport
- ARFF Facilities Improvements at Hilo International Airport
- Access Controls and CCTV Systems at Kona International Airport at Keahole
- ARFF Station Relocation at Kona International Airport at Keahole
- Stand-Alone PFC Administrative Costs

“Impose Only” Projects:

- Spencer Properties Acquisition at Kahului Airport
- Runway 22 Runway Safety Area at Honolulu International Airport

This application applies to each of the State of Hawaii’s five (5) airports imposing PFC’s. The State’s intent is to collect a pro-rata share of the total amount at each imposing airport, HNL, OGG, KOA, LIH, and ITO. Based on the projected estimate of revenue collections at each of the five airports, each airport is estimated to collect the following percentage of the total approved amount:

<u>Airport</u>	<u>% of collections</u>
Honolulu International Airport (HNL)	68.36%
Kahului Airport (OGG)	18.44%
Kona International Airport at Keahole (KOA)	5.66%
Lihue Airport (LIH)	3.88%
Hilo International Airport (ITO)	<u>3.65%</u>
Total:	100.00 %

A total of approximately \$762.1 million in PFC revenues will be applied to fund projects totaling approximately \$997.8 million. The proposed earliest Charge Effective Date is estimated to be February 1, 2014 and PFC revenues will be applied to all PFC funded projects listed above.

See Table A-1 for PFC Financial Plan for the PFC projects in this application.

TABLE A-1

State of Hawaii, Department of Transportation, Airports Division

PFC Application No. 12-05-C-00-*
PFC Financial Plan**

IMPOSE & USE

PFC Projects Funding Summary	State Project No.	CWE and Financing	Fund Type	Amount	Financing Costs
Taxiway Z Structural Improvements - Design only (Note: Construction portion approved in Appl #4)	AO1021-21	5,000,000	Cash	-	-
			Federal AIP	3,750,000	-
			PFC Pay Go	1,250,000	-
Impose & Use match			PFC Bonds	-	-
			Rev. Bonds	-	-
Runway 26L Pavement Improvements Honolulu International Airport	AO1021-23	17,320,000	Cash	-	-
			Federal AIP	12,750,000	-
			PFC Pay Go	4,570,000	-
			PFC Bonds	-	-
			Rev. Bonds	-	-
Runway 4R Pavement Reconstruction Honolulu International Airport	AO1021-24	21,400,000	Cash	-	-
			Federal AIP	16,000,000	-
			PFC Pay Go	5,400,000	-
Impose & Use match			PFC Bonds	-	-
			Rev. Bonds	-	-
Runway 8L Widening & Misc. Improvements Honolulu International Airport	AO1021-25	16,080,000	Cash	-	-
			Federal AIP	-	-
			PFC Pay Go	16,080,000	-
Impose & Use match			PFC Bonds	-	-
			Rev. Bonds	-	-
Runway 4L Edge Lighting Honolulu International Airport	AO1022-15	3,132,500	Cash	275,000	-
			Federal AIP	1,650,000	-
			PFC Pay Go	1,207,500	-
Impose & Use match			PFC Bonds	-	-
			Rev. Bonds	-	-
HNL OST 2nd Level Roadway Improvements Honolulu International Airport	AO1033-21	7,833,342	Cash	200,000	-
			Federal AIP	-	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	3,000,000	4,633,342
			Rev. Bonds	-	-
Wiki Wiki Shuttle Station Improvements (formerly Planter Roofs & Rainscreens @ WikiWiki Station)	AO1041-13	8,501,950	Cash	-	-
			Federal AIP	2,700,000	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	2,500,000	3,301,950
			Rev. Bonds	-	-
OST Terminal Metal Roof Replacement Honolulu International Airport	AO1043-28	16,307,632	Cash	-	-
			Federal AIP	8,475,000	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	3,375,000	4,457,632
			Rev. Bonds	-	-
Loading Bridges - Ewa Concourse Honolulu International Airport	AO1103-16	31,910,723	Cash	-	-
			Federal AIP	-	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	13,750,000	18,160,723
			Rev. Bonds	-	-
NDWP Taxiways G & L Widening - Phases 1 & 2 Honolulu International Airport (includes design, construction & construction management)	AO1121-22 AO1121-23 AO1121-24	109,016,621	Cash	-	-
Impose & Use			Federal AIP	-	-
			PFC Pay Go	-	-
			PFC Bonds	42,844,910	66,171,711
			Rev. Bonds	-	-
NDWP IIT Mauka Extension Honolulu International Airport (includes design, construction & construction management)	AO1123-30 AO1123-32 AO1123-33	610,667,383	Cash	-	-
Impose & Use			Federal AIP	-	-
			PFC Pay Go	-	-
			PFC Bonds	184,639,429	285,165,892
			Rev. Bonds	55,360,571	85,501,491
NDWP Hawaiian/Aloha Facility Demolition Honolulu International Airport	AO1125-18	34,441,640	Cash	-	-
			Federal AIP	-	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	13,536,000	20,905,640
			Rev. Bonds	-	-

IMPOSE & USE (continued)

PFC Projects Funding Summary	State Project No.	CWE and Financing	Fund Type	Amount	Financing Costs
ARFF Facilities Improvements @ KOA & ITO (Design) Statewide	AS1032-12	5,228,780	Cash	2,908,000	-
			Federal AIP	-	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	1,000,000	1,320,780
			Rev. Bonds	-	-
ARFF Facilities Improvements Hilo International Airport	AH1031-14	20,000,303	Cash	-	-
			Federal AIP	9,412,000	-
			PFC Pay Go	45,000	-
Impose & Use match			PFC Bonds	4,543,000	6,000,303
			Rev. Bonds	-	-
Access Control & CCTV Systems Hilo International Airport	AH1052-03	2,765,000	Cash	5,000	-
			Federal AIP	-	-
			PFC Pay Go	2,760,000	-
Impose & Use			PFC Bonds	-	-
			Rev. Bonds	-	-
ARFF Station Relocation Kona International Airport at Keahole	AH2044-19	19,638,011	Cash	-	-
			Federal AIP	14,232,915	-
			PFC Pay Go	-	-
Impose & Use			PFC Bonds	2,329,000	3,076,096
			Rev. Bonds	-	-
Access Control & CCTV Systems Kona International Airport at Keahole	AH2050-05	5,904,000	Cash	5,000	-
			Federal AIP	-	-
			PFC Pay Go	5,899,000	-
Impose & Use			PFC Bonds	-	-
			Rev. Bonds	-	-
PFC Administration Cost-Application No. 5	N/A	700,000	Cash	-	-
			Federal AIP	-	-
			PFC Pay Go	700,000	-
Impose & Use			PFC Bonds	-	-
			Rev. Bonds	-	-
Sub-Total - Proposed PFC Impose & Use Projects:		935,847,887	Cash	3,393,000	-
			Federal AIP	68,969,915	-
			PFC Pay Go	37,911,500	-
			PFC Bonds	271,517,339	413,194,070
			Rev. Bonds	55,360,571	85,501,491
			Total:	437,152,325	498,695,562
				935,847,887	

Impose Only Projects

PFC Projects Funding Summary	State Project No.	CWE and Financing	Fund Type	Amount	Financing Costs
Spencer Properties Acquisition (IMPOSE ONLY) Kahului Airport	AM2021-09	20,000,000	Cash	-	-
			Federal AIP	-	-
			PFC Pay Go	20,000,000	-
			PFC Bonds	-	-
			Rev. Bonds	-	-
Runway 22 Culvert Runway Safety Area (IMPOSE ONLY) Honolulu International Airport	AO1027-17	41,983,356	Cash	-	-
			Federal AIP	22,500,000	-
			PFC Pay Go	400,000	-
match			PFC Bonds	7,500,000	11,583,356
			Rev. Bonds	-	-
Sub - Total: Impose Only Projects:		61,983,356	Cash	-	-
			Federal AIP	22,500,000	-
			PFC Pay Go	20,400,000	-
			PFC Bonds	7,500,000	11,583,356
			Rev. Bonds	-	-
			Total:	50,400,000	11,583,356
				61,983,356	

OVERVIEW

Total - Project CWE & Financings: \$ 997,831,242		Total by Fund Type:	
Total PFC Funding (Pay Go & PFC Bonds):	337,328,839	Cash	\$ 3,393,000 \$ -
Total PFC Debt Service:	424,777,426	Federal AIP	91,469,915 -
Total PFC Funding (Pay Go & PFC Bonds with Debt Service): \$ 762,106,265		PFC Pay Go	58,311,500 -
		PFC Bonds	279,017,339 424,777,426
		Rev. Bonds	55,360,571 85,501,491
		Total:	\$ 487,552,325 510,278,917

III. PFC REVENUE FORECAST

The State is requesting a PFC authority to impose PFC charge fees totaling **\$762.1 million**. This collection amount is based on a forecast of eligible enplaned passengers over a collection period from approximately February 1, 2014 through June 30, 2033.

A reduction of 17% has been applied to the total enplaned passengers to account for future ineligible passengers, and the PFC Revenue Forecast also contains a reduction of \$0.11 per eligible enplaned passenger to account for the airline administration fee.

See Table A-2 for the detailed PFC Revenue Forecast.

Table A-2

State of Hawaii Statewide Airports System
PFC Revenue Forecast (by fiscal year)

	<u>FY 2014</u>	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u>	<u>FY 2022</u>	<u>FY 2023</u>
Overseas enplanements ⁽¹⁾										
Honolulu International Airport	6,362,843	6,433,471	6,723,908	6,798,544	6,874,007	6,950,309	7,027,457	7,105,462	7,184,333	7,264,079
Kahului Airport	1,653,263	1,677,070	1,775,776	1,801,348	1,827,287	1,853,600	1,880,292	1,907,368	1,934,834	1,962,696
Kona International Airport at Keahole	520,927	529,158	537,518	545,259	553,874	562,625	571,514	580,544	589,717	599,034
Lihue Airport	377,790	383,961	390,232	395,851	402,317	408,888	415,566	422,353	429,252	436,263
Hilo International Airport	358,940	361,704	364,489	368,791	371,630	374,492	377,376	380,281	383,210	386,160
Total - applicable enplanements	9,273,764	9,385,364	9,791,924	9,909,792	10,029,115	10,149,913	10,272,205	10,396,009	10,521,345	10,648,232
After allowance for non-eligible PFC passengers ⁽²⁾										
Honolulu International Airport	5,281,160	5,339,781	5,580,844	5,642,791	5,705,426	5,768,756	5,832,790	5,897,534	5,962,996	6,029,185
Kahului Airport	1,372,209	1,391,968	1,473,894	1,495,118	1,516,648	1,538,488	1,560,642	1,583,115	1,605,912	1,629,037
Kona International Airport at Keahole	432,369	439,201	446,140	452,565	459,715	466,979	474,357	481,852	489,465	497,199
Lihue Airport	313,566	318,687	323,892	328,556	333,923	339,377	344,920	350,553	356,279	362,098
Hilo International Airport	297,920	300,214	302,526	306,096	308,453	310,828	313,222	315,634	318,064	320,513
Total	7,697,224	7,789,852	8,127,297	8,225,127	8,324,166	8,424,428	8,525,930	8,628,688	8,732,716	8,838,033
Projected PFC revenue @ \$4.50										
Honolulu International Airport	\$23,765,220	\$24,029,013	\$25,113,797	\$25,392,560	\$25,674,418	\$25,959,404	\$26,247,553	\$26,538,901	\$26,833,483	\$27,131,334
Kahului Airport	6,174,939	6,263,858	6,632,525	6,728,033	6,824,917	6,923,196	7,022,890	7,124,019	7,226,605	7,330,668
Kona International Airport at Keahole	1,945,663	1,976,404	2,007,631	2,036,541	2,068,718	2,101,404	2,134,606	2,168,333	2,202,593	2,237,394
Lihue Airport	1,411,046	1,434,093	1,457,516	1,478,504	1,502,653	1,527,195	1,552,139	1,577,490	1,603,255	1,629,441
Hilo International Airport	1,340,641	1,350,964	1,361,367	1,377,433	1,388,040	1,398,728	1,409,498	1,420,351	1,431,288	1,442,308
Total projected gross PFC revenue at \$4.50	\$34,637,509	\$35,054,334	\$36,572,837	\$37,013,073	\$37,458,746	\$37,909,928	\$38,366,687	\$38,829,095	\$39,297,225	\$39,771,147
less airline collection fee (\$0.11 per PFC)	<u>(\$846,695)</u>	<u>(\$856,884)</u>	<u>(\$894,003)</u>	<u>(\$904,764)</u>	<u>(\$915,658)</u>	<u>(\$926,687)</u>	<u>(\$937,852)</u>	<u>(\$949,156)</u>	<u>(\$960,599)</u>	<u>(\$972,184)</u>
Estimated net PFC revenue @ \$4.50	\$33,790,814	\$34,197,450	\$35,678,834	\$36,108,309	\$36,543,088	\$36,983,241	\$37,428,835	\$37,879,939	\$38,336,626	\$38,798,963
Cumulative Total:	\$33,790,814	\$67,988,264	\$103,667,098	\$139,775,407	\$176,318,495	\$213,301,736	\$250,730,571	\$288,610,510	\$326,947,136	\$365,746,099

Notes:

- (1) Enplaned passenger projections based upon actual CY 2005 collection and Aries Consultants, Ltd. passenger forecasts as shown below.
- (1) Enplaned passenger projections obtained from 2010 Actual Enplanements from the State of Hawaii, Airports Division with compound annual growth rates based upon the FAA Terminal Area Forecast (TAF) 2011.
- (2) Assumes approximately 17% of the passengers are assumed to flying on a frequent flier award or are considered as non-revenue passenger:

	<u>FAA TAF</u>
Estimated passenger growth rates ⁽¹⁾	10 to 40*
Honolulu International - Overseas	1.1%
Kahului - Overseas	1.4%
Kona International Airport at Keahole - Overseas	1.6%
Lihue - Overseas	0.8%
Hilo International - Overseas	0.1%

	<u>FY 2024</u>	<u>FY 2025</u>	<u>FY 2026</u>	<u>FY 2027</u>	<u>FY 2028</u>	<u>FY 2029</u>	<u>FY 2030</u>	<u>FY 2031</u>	<u>FY 2032</u>	<u>FY 2033</u>	<u>TOTAL</u>
Overseas enplanements ⁽¹⁾											
Honolulu International Airport	7,344,710	7,426,236	7,508,668	7,592,014	7,676,285	7,761,492	7,847,645	7,934,753	8,022,829	8,111,883	145,950,928
Kahului Airport	1,990,958	2,019,628	2,048,711	2,078,212	2,108,139	2,138,496	2,169,290	2,200,528	2,232,216	2,264,359	39,524,071
Kona International Airport at Keahole	608,499	618,114	627,880	637,800	647,877	658,114	668,512	679,075	689,804	700,703	12,126,548
Lihue Airport	443,388	450,630	457,990	465,471	473,073	480,800	488,653	496,634	504,745	512,989	8,836,846
Hilo International Airport	389,134	392,130	395,149	398,192	401,258	404,348	407,461	410,599	413,760	416,946	7,756,051
Total - applicable enplanements	10,776,690	10,906,738	11,038,398	11,171,689	11,306,632	11,443,249	11,581,561	11,721,589	11,863,354	12,006,881	214,194,444
After allowance for non-eligible PFC passengers ⁽²⁾											
Honolulu International Airport	6,096,109	6,163,776	6,232,194	6,301,371	6,371,317	6,442,038	6,513,545	6,585,845	6,658,948	6,732,863	121,139,270
Kahului Airport	1,652,496	1,676,291	1,700,430	1,724,916	1,749,755	1,774,952	1,800,511	1,826,438	1,852,739	1,879,418	32,804,979
Kona International Airport at Keahole	505,054	513,034	521,140	529,374	537,738	546,235	554,865	563,632	572,537	581,583	10,065,035
Lihue Airport	368,012	374,023	380,132	386,341	392,651	399,064	405,582	412,206	418,939	425,781	7,334,582
Hilo International Airport	322,981	325,468	327,974	330,499	333,044	335,609	338,193	340,797	343,421	346,065	6,437,522
Total	8,944,652	9,052,593	9,161,870	9,272,502	9,384,505	9,497,897	9,612,695	9,728,918	9,846,584	9,965,711	177,781,388
Projected PFC revenue @ \$4.50											
Honolulu International Airport	\$27,432,492	\$27,736,993	\$28,044,874	\$28,356,172	\$28,670,925	\$28,989,172	\$29,310,952	\$29,636,304	\$29,965,267	\$30,297,881	\$545,126,716
Kahului Airport	7,436,230	7,543,312	7,651,935	7,762,123	7,873,898	7,987,282	8,102,299	8,218,972	8,337,325	8,457,382	147,622,407
Kona International Airport at Keahole	2,272,745	2,308,654	2,345,131	2,382,184	2,419,822	2,458,055	2,496,893	2,536,344	2,576,418	2,617,125	45,292,658
Lihue Airport	1,656,055	1,683,103	1,710,593	1,738,533	1,766,928	1,795,787	1,825,118	1,854,928	1,885,224	1,916,015	33,005,618
Hilo International Airport	1,453,414	1,464,606	1,475,883	1,487,247	1,498,699	1,510,239	1,521,868	1,533,586	1,545,395	1,557,294	28,968,850
Total projected gross PFC revenue at \$4.50	\$40,250,937	\$40,736,668	\$41,228,417	\$41,726,259	\$42,230,273	\$42,740,537	\$43,257,130	\$43,780,134	\$44,309,630	\$44,845,700	\$800,016,249
less airline collection fee (\$0.11 per PFC)	<u>(\$983,912)</u>	<u>(\$995,785)</u>	<u>(\$1,007,806)</u>	<u>(\$1,019,975)</u>	<u>(\$1,032,296)</u>	<u>(\$1,044,769)</u>	<u>(\$1,057,396)</u>	<u>(\$1,070,181)</u>	<u>(\$1,083,124)</u>	<u>(\$1,096,228)</u>	<u>(\$19,555,953)</u>
Estimated net PFC revenue @ \$4.50	\$39,267,025	\$39,740,883	\$40,220,611	\$40,706,284	\$41,197,977	\$41,695,768	\$42,199,734	\$42,709,953	\$43,226,506	\$43,749,472	\$780,460,296
Cumulative Total:	\$405,013,124	\$444,754,007	\$484,974,618	\$525,680,903	\$566,878,880	\$608,574,648	\$650,774,383	\$693,484,336	\$736,710,841	\$780,460,296	

Notes:

- (1) Enplaned passenger projections based upon actual CY 2005 collection and Aries Consultants, Ltd. passenger forecasts as shown below.
(1) Enplaned passenger projections obtained from 2010 Actual Enplanements from the State of Hawaii, Airports Division with compound annual growth rates based upon the FAA Terminal Area Forecast (TAF) 2011.
(2) Assumes approximately 17% of the passengers are assumed to flying on a frequent flier award or are considered as non-revenue passenger:

	<u>FAA TAF</u>
Estimated passenger growth rates ⁽¹⁾	10 to 40*
Honolulu International - Overseas	1.1%
Kahului - Overseas	1.4%
Kona International Airport at Keahole - Overseas	1.6%
Lihue - Overseas	0.8%
Hilo International - Overseas	0.1%

PROJECT DESCRIPTIONS AND JUSTIFICATIONS

1. TAXIWAY ‘Z’ STRUCTURAL IMPROVEMENTS (DESIGN COSTS ONLY) HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for reimbursement of the State’s matching funds for the design grant as required for the reconstruction of Taxiway ‘Z’ as approved in a previous PFC application. PFC Application No. 09-04-C-00-HNL will provide the funding for the construction and construction management costs for this project.

The project will reconstruct Taxiway ‘Z’. The project work area is approximately 75-feet by 6,500-feet and includes a 10-foot wide asphalt concrete pavement transition area of approximately 135,000 square feet, and a Portland cement concrete (PCC) pavement area of approximately 567,000 square feet. Other work items include sawcutting, cold milling, excavation, painting and striping, and other related improvements.

Significant Contribution:

This project provides a significant contribution to preserving the safety of the national air transportation system by preserving the ability of aircraft to move onto the airfield especially providing a critical access between the Overseas Terminal gates and Runway 08L. This project also preserves safety by eliminating the potential threat of foreign object debris (FOD).

Project Objective:

Implementation of this project will preserve the safety of the national air transportation system by extending the useful life of the taxiway pavement, by improving its riding quality, and by providing a critical access between the Overseas Terminal gates and Runway 08L.

Project Justification:

The Pavement Condition Index (PCI) for Taxiway Z is overall rated a 63, with seven of the twelve sections having a PCI less than 70. Taxiway Z receives a significant amount of both departing and arriving aircraft originating from, or arriving at, the Overseas Terminal. Additionally, the portion of Taxiway Z adjacent to the terminal apron receives a significant amount of static aircraft loading from aircraft that have been pushed back from their departure gate onto the taxiway pavement. This is a contributing factor to the significant amount of load-related distress including “alligator” cracking and rutting that is currently present on Taxiway Z. On the PCC-surfaced pavement section of Taxiway Z, there is high-severity distress present as seen in corner breaks and spalling, joint spalling, joint seal damage, linear cracking and shrinkage cracking. Similar stresses are exhibited in other areas of the taxiway as well.

Estimated Project Implementation Date (Month and Year): October 2013

Estimated Project Completion Date (Month and Year): October 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 1,250,000
	Bond Capital	\$
	Bond Financing & Interest	\$ _____

***Subtotal PFC Funds: \$ 1,250,000

Existing AIP Funds:

Anticipated AIP Funds: \$ 3,750,000

Fiscal Year: 2012

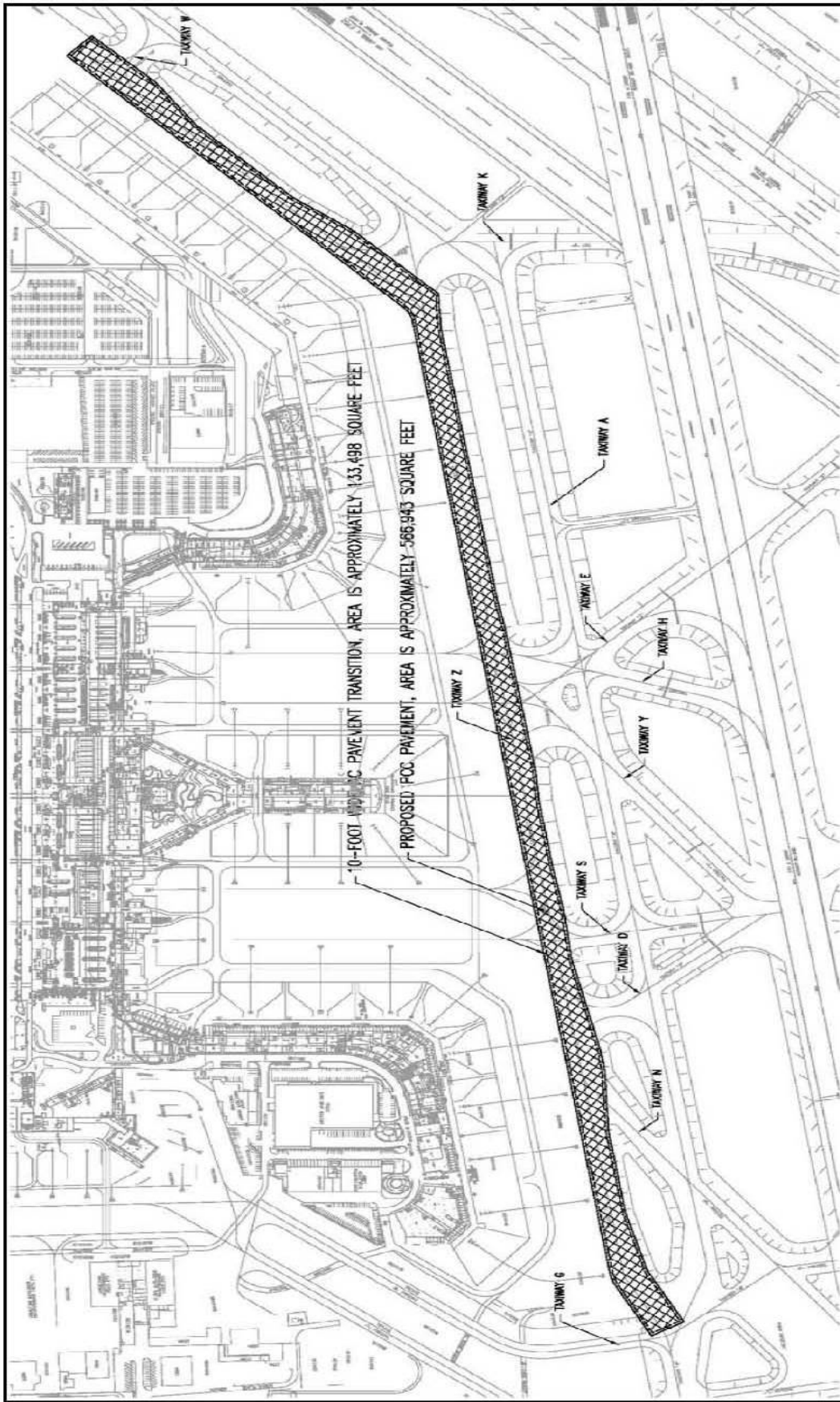
AIP Project No. 3-15-0005-XX

***Subtotal Anticipated AIP Funds: \$ 3,750,000

Other Funds: State Special Funds \$

***Subtotal Other Funds: \$

Total Project Cost: \$ 5,000,000



Taxiway 'Z' Structural Improvements
 Honolulu International Airport

2. **RUNWAY 26L PAVEMENT IMPROVEMENTS**
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for reimbursement of the State's matching funds for design and construction as required for rehabilitation of Runway 26L. Construction management services are also included.

The scope of work includes milling out approximately 5 to 6-inches of asphalt concrete pavement (approximately 71,000 tons) from the existing pavement surface, replacing with approximately 92,000 tons of asphalt concrete adjustment of pavement runway edge light fixtures, temporary wiring, runway marking and grooving, and minor fine grading in the infield areas and other related improvements.

Significant Contribution:

This project provides a significant contribution to preserving the safety of the national air transportation system by increasing the ability of aircraft to move on the airfield. This project also preserves safety by eliminating the potential threat of foreign object debris (FOD) as well as bringing the airport into compliance with 14 CFR Part 139 safety requirements for airfield marking and lighting for Runway 26L, and other related improvements.

Project Objective:

The objective of this project is to preserve safety at Honolulu International Airport by constructing structural improvements to Runway 26L and bringing the runway into compliance with Part 139 requirements. This project will eliminate FOD, improve the structural integrity and extend the life of Runway 26L AC pavement by approximately 15 years.

Project Justification:

This project will reimburse the State's matching funds for design and construction costs AIP Project No. 3-15-0005-102 (design) and 3-15-0005-112 (construction).

FAA inspections held on December 23, 2011, revealed discrepancies with Part 139 requirements as noted in the FAA letter dated January 12, 2012. Runway 8R-26L is 200-foot wide by 12,000-foot long. The current condition of the runway pavement is exhibiting signs of high distress in the form of longitudinal and transverse cracking, alligator cracking, block cracking, depressions, raveling, rutting and slippage. The pavement distresses are contributing to the presence of FOD on the runway surface. This is creating a situation where asphalt patching repairs are occurring at an ever increasing rate.

Estimated Project Implementation Date (Month and Year): March 2013

Estimated Project Completion Date (Month and Year): March 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$	4,570,000
	Bond Capital	\$	
	Bond Financing & Interest	\$	_____

***Subtotal PFC Funds: \$ 4,570,000

Existing AIP Funds:

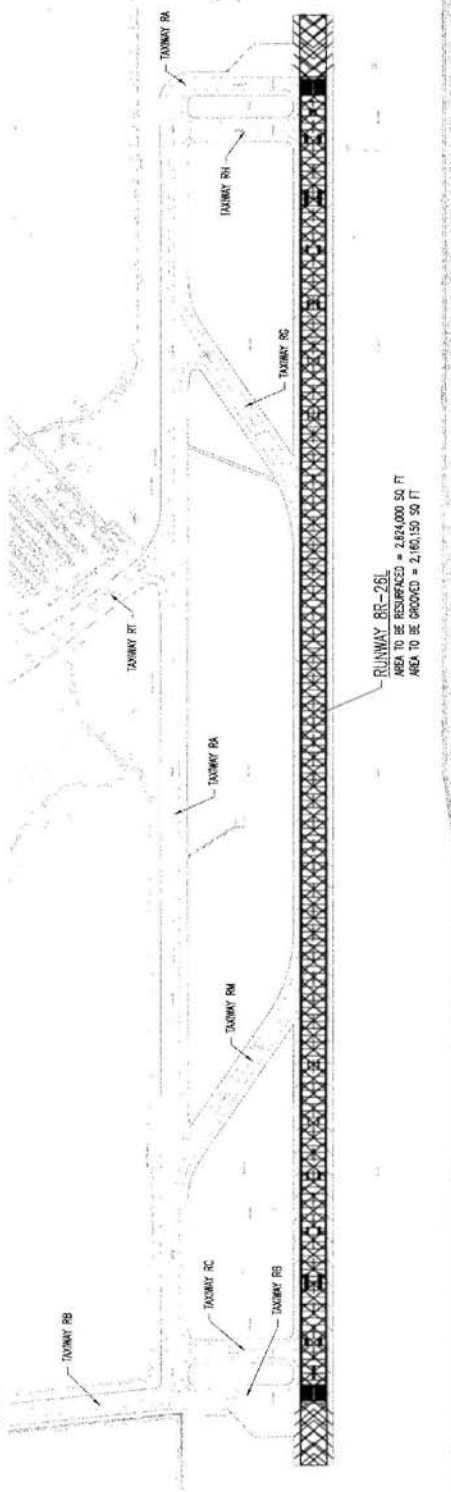
Anticipated AIP Funds: \$ 12,750,000

***Subtotal Anticipated AIP Funds: \$ 12,750,000

Other Funds: State Special Funds

***Subtotal Other Funds: \$

Total Project Cost: \$ 17,320,000



Airports Division
 DEPARTMENT OF TRANSPORTATION
 STATE OF HAWAII

This sheet was prepared by the Office of the Engineer and Surveyor under the supervision of the State Engineer.

DATE: 01/26/12
 DRAWN BY: [Name]
 CHECKED BY: [Name]
 DESIGNED BY: [Name]

KEY PLAN / NOTES:

NO.	DATE	REVISIONS

PROJECT TITLE:
RUNWAY 8R-26L PAVEMENT RESURFACING

AT
 HONOLULU INTERNATIONAL AIRPORT
 ISLAND OF OAHU

PROJECT NO.:

STATE PROJECT NO. A01021-23

SHEET TITLE:

PAVEMENT STRUCTURAL
 IMPROVEMENT SCOPING
 PLAN

DATE:
 DWG. NO.: **SK-1**

3. RUNWAY 4R PAVEMENT RECONSTRUCTION
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project will provide reimbursement of the State's matching funds for design and construction for the reconstruction of Runway 4R pavement.

This project will excavate approximately 4-inches of the existing asphalt concrete (AC) pavement and replace with new AC pavement at Runway 4R. The project also includes design, construction, and construction management services. The scope of work includes pavement rehabilitation, surface markings and surface regrooving on Runway 4R and related improvements.

Significant Contribution:

This project provides a significant contribution to preserving the safety of the national air transportation system by increasing the ability of aircraft to move on the airfield. This project also preserves safety by eliminating the potential threat of foreign object debris (FOD) as well as bringing the airport into compliance with 14 CFR Part 139 safety requirements for paved areas, grooving, and airfield marking.

Project Objective:

This project is intended to preserve safety at Honolulu International Airport by reducing the risk of damage to aircraft due to FOD, and bringing the airport into compliance with Title 14 CFR Part 139, the Airport Certification Manual and the Airport Operating Certificate requirements.

Project Justification:

An inspection held on December 23, 2011, by the FAA, found that the airport was not in compliance with all of the requirements of Part 139. A copy of the Letter of Correction from the FAA dated January 12, 2012 is attached. Discrepancies were noted in the following areas:

1. 139.305A paved areas and AC 150/5320-12C.
2. 139.311A Marking and AC150/5340-1K.
3. 139.311D Marking – Runway 4R centerlines at the approach end are obscured and are not clearly visible both day and night.

The rehabilitation of Runway 4R will extend the functional life of the asphalt concrete pavement by approximately 15 years.

Estimated Project Implementation Date (Month and Year): October 2013

Estimated Project Completion Date (Month and Year): October 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$	5,400,000
	Bond Capital	\$	
	Bond Financing & Interest	\$	_____

***Subtotal PFC Funds: \$ 5,400,000

Existing AIP Funds: \$ 16,000,000
Grant # 3-15-0005-104 dated 9/8/11

***Subtotal Anticipated AIP Funds: \$ 16,000,000

Other Funds: State Special Funds \$

***Subtotal Other Funds: \$

Total Project Cost: \$ 21,400,000

4. RUNWAY 8L WIDENING & MISC. IMPROVEMENTS
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project will provide for the reimbursement of the State's matching funds for the design, construction and construction management services required to construct the widening of Runway 08L from 150-feet to 200-feet and upgrade associated striping, lighting, pavement and other improvements to both the runway and surrounding taxiways to meet the federal airport certification requirements under 14 CFR Part 139.

Significant Contribution:

This project provides a significant contribution to preserving the safety of the national air transportation system by increasing the ability of aircraft to move on the airfield. This project also preserves safety by eliminating the potential threat of foreign object debris (FOD) as well as bringing the airport into compliance with 14 CFR Part 139 safety requirements for paved areas, grooving, airfield marking and lighting.

Project Objective:

This project is intended to preserve safety at Honolulu International Airport by bringing Runway 8L into compliance with Title 14 CFR Part 139 regulations and reducing the risk of damage to aircraft due to FOD.

Project Justification:

Runway 08L was documented as 200-feet wide on the 1981 Airport Layout Plan (ALP). Since that time, the runway was essentially reduced to 150-feet wide with 25-foot shoulders on either side to save on maintenance costs. DOTA proposes to reestablish the full 200-foot runway width to accommodate Airplane Design Group (ADG) VI aircraft and bring runway lighting into compliance with FARs.

Runway 08L is one of two primary landing runways under trade wind conditions (which occur 89 percent of the time) and is equipped with an instrument landing system precision approach. The precision instrumentation allows aircraft to land in inclement weather or night-time conditions when instrument flight rules (IFR) apply. The second landing runway available for trade wind conditions is Runway 04R - 22L, which is 150-foot wide and not approved for ADG VI aircraft landings. Runway 08R - 26L (Reef Runway) is primarily used for departures as it lacks a precision approach, and serves as an emergency alternate runway for landing under trade wind conditions.

Estimated Project Implementation Date (Month and Year): October 2013

Estimated Project Completion Date (Month and Year): October 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 16,080,000
	Bond Capital	\$
	Bond Financing & Interest	\$ _____

***Subtotal PFC Funds: \$ 16,080,000

Existing AIP Funds: \$

***Subtotal Anticipated AIP Funds: \$

Other Funds: State Special Funds \$

***Subtotal Other Funds: \$

Total Project Cost: \$ 16,080,000

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ATTACHMENT A

HONOLULU INTERNATIONAL AIRPORT

 Project Location

PROJECT NAME
Runway 8L Widening



5. **RUNWAY 4L EDGE LIGHTING**
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for reimbursement of design, construction and construction management services as required to construct airfield lighting improvements for Runway 4L at Honolulu International Airport as necessary to bring Runway 4L into compliance with 14 CFR Part 139 Airport Certification requirements.

The scope of work consists of installation of new underground electrical duct banks, new runway edge lighting fixtures, new REIL System for Runway 4L and Runway 22R, threshold lights for Runway 4L and Runway 22R and Displaced Threshold. Work also includes demolition of the existing edge lighting, electrical lines, REIL system and threshold lights, trenching, backfilling, pavement restoration with surface painting, restoration of other unpaved areas, and other related improvements.

Significant Contribution:

This project provides a significant contribution to preserving the safety of the national air transportation system by increasing the ability of aircraft to move on the airfield. This project also preserves safety by bringing Runway 4L into compliance with 14 CFR Part 139 safety requirements for airfield lighting.

Project Objective:

The objective of this project is to preserve safety at Honolulu International Airport by constructing airfield lighting improvements to bring the airport into compliance with Title 14 CFR Part 139 requirements for airfield lighting.

Project Justification:

An inspection held on December 23, 2011, by the FAA, found that the airport was not in compliance with all of the requirements of 14 CFR Part 139. A copy of the Letter of Correction from the FAA dated January 12, 2012 is attached. Discrepancies were noted in the following areas:

1. 14 CFR Part 139.311A Marking and AC150/5340-1K.
2. 14 CFR Part 139.311B signs and AC 150/5320-12C.

Currently, lighting at Runway 4L does not meet applicable FAA Part 139 requirements. The runway edge lights at Runway 4L are currently located more than 10 feet from the edge of the runway. End lights and threshold lights at Runway 4L are also located more than 10 feet from the runway threshold. Various runway edge, end and threshold lights are also broken or missing parts at Runway 4L. All of these lighting deficiencies need to be brought into compliance with all applicable FAA Part 139 requirements.

Estimated Project Implementation Date (Month and Year): January 2013

Estimated Project Completion Date (Month and Year): January 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 1,207,500
	Bond Capital	\$
	Bond Financing & Interest	\$ _____

***Subtotal PFC Funds: \$ 1,207,500

Existing AIP Funds:

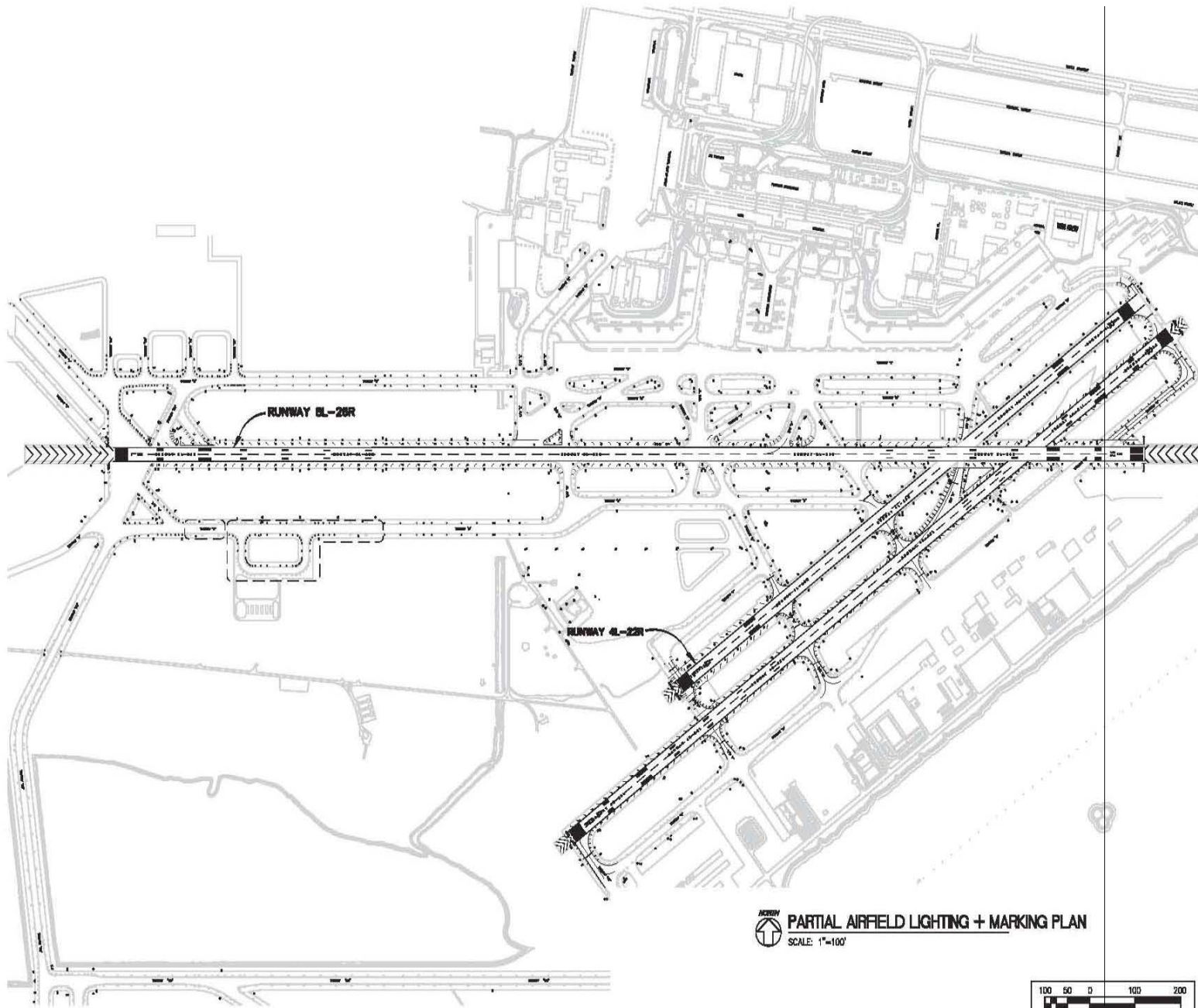
Anticipated AIP Funds: \$ 1,650,000

***Subtotal Anticipated AIP Funds: \$ 1,650,000

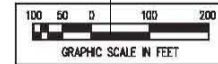
Other Funds: State Special Funds \$ 275,000

***Subtotal Other Funds: \$ 275,000

Total Project Cost: \$ 3,132,500



PARTIAL AIRFIELD LIGHTING + MARKING PLAN
SCALE: 1"=100'

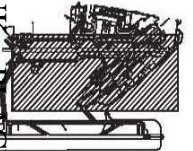


Airports Division
HONOLULU, HAWAII

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DATE	DRWN.	CHK'D.	APP'D.

PLAN / NOTES :



NO.	DATE	REVISIONS

PROJECT TITLE :

HONOLULU RUNWAY 8L & 4L
EDGE LIGHTING
AT
HONOLULU INTERNATIONAL AIRPORT
HONOLULU, OAHU, HAWAII

PROJECT NO. :

AO1022-15

SHEET TITLE :

PARTIAL AIRFIELD
LIGHTING & MARKING PLAN

DATE :

12/16/10

DWG. NO. :

SHT 1 of 1

OVERALL

6. **OVERSEAS TERMINAL (OST) 2ND LEVEL ROADWAY IMPROVEMENTS**
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides construction, construction management services, and financing costs necessary to construct renovations on the elevated 2nd level roadway fronting the Ticket Lobby area of the Overseas Terminal. The scope of work includes renovation of the concrete roadway, adjacent parapet walls and railings, supporting concrete columns and beams, and related improvements in the 2nd Level roadway area; replacement of the expansion joints, drain inlets and drain lines in the existing roadway drainage system and related drainage work; and replacement of the existing roadway lighting fixtures, and other related improvements.

Work also includes any required abatement of lead and other potential hazardous materials (e.g. asbestos, arsenic, mercury, etc.) as necessary to complete this scope of work.

Replacement of the existing planter boxes placed on the north side of the roadway is included; however, this work is ineligible for PFC funding.

Significant Contribution:

This work provides no significant contribution.

Project Objective:

The objective of this project is to preserve the safety of passengers who access the airport via the airport access roadway system. This roadway serves as the drop off/pick up area for passengers entering the ticket lobbies, security checkpoints and gates of the Overseas Terminal.

Project Justification:

This elevated roadway was originally constructed in the 1970s. The roadway has undergone subsequent modifications, extension, and repairs. In its present day condition, the roadway cracks, adjacent parapet walls and railings, and supporting concrete columns show evidence of cracks and spalling. Worn expansion joints and blocked drain inlets in the roadway leak profusely during rainy weather and drip onto the sidewalk and pedestrians on the ground level below. The drain inlets within the roadway exhibit varying signs of deterioration and require full replacement. Several roadway lighting fixtures are also damaged and corroded, requiring full replacement.

Estimated Project Implementation Date (Month and Year): September 2014

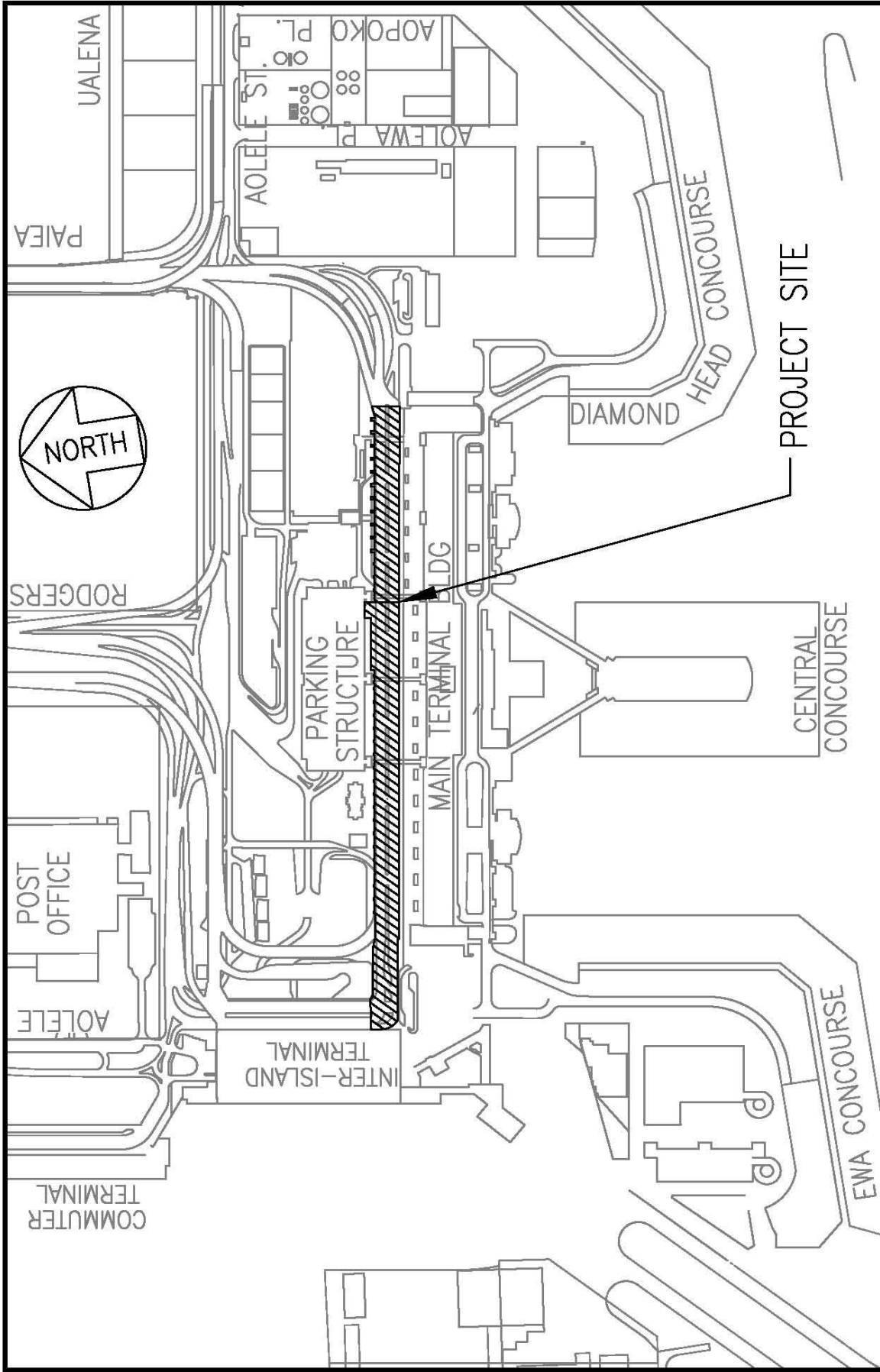
Estimated Project Completion Date (Month and Year): September 2015

PFC Type: Impose & Use

Level of Collection: \$3.00

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 3,000,000
	Bond Financing & Interest	\$ <u>4,633,342</u>
***Subtotal PFC Funds:		\$ 7,633,342
Existing AIP Funds:		
Anticipated AIP Funds:		\$
***Subtotal Anticipated AIP Funds:		\$
Other Funds:	State Special Funds	\$ <u>200,000</u>
***Subtotal Other Funds:		\$ 200,000
Total Project Cost:		\$ 7,833,342



TRN xxx

CPN xxxx

HNL OST 2ND LEVEL ROADWAY IMPROVEMENTS

STATE PROJECT NO. A01033-21

HONOLULU INTERNATIONAL AIRPORT

SCALE: 1"=500'

7. **WIKI-WIKI SHUTTLE STATION IMPROVEMENTS**
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for construction, construction management services and financing costs for the following scope of work:

At the Diamond Head and Ewa Bus Stations, construction of wind screens along the perimeter roof line; increase the overall floor slope for drainage purposes, and reroof both stations.

At the Ewa Station, install glazed canopies over the open landscape areas adjacent to the escalators at the station.

Significant Contribution:

No significant contribution.

Project Objective:

The objective of this project is to preserve safety by ensuring compliance with ADA requirements and providing for the safe movement of passengers by reducing slip hazards throughout the terminal buildings of Honolulu International Airport.

Project Justification:

The Wiki-Wiki bus shuttle system at the Honolulu International Airport provides intra-terminal transportation for passengers throughout the Overseas and Interisland Terminals, on the secured airside from Gate 6 to Gate 62. There are two stations on the third level linked by escalators and elevators to gates and ticket lobbies below. One station is located at the Ewa (west) end of the terminal accessing the International Arrivals Building, Lobby 4, and Lobby 5, and the other station is located at the Diamond Head (east) end of the terminal accessing Lobbies 6, 7, and 8.

During wet and windy weather conditions, the two Wiki-Wiki Shuttle Stations are routinely subject to wet and slippery conditions. The flooring surface of the Wiki Wiki Shuttle Stations can best be described as flat. Any moisture that enters the transit stations tend to form "ponds" and at times, overflows causing damage to the escalators and elevators.

By replacing the roof, incorporating rain screens, and altering the flooring slope of the transit stations (from "level" to the maximum permissible by Americans with Disabilities Act [ADA] standards), pedestrian safety levels will be increased. A portion of the wind driven rain will be "blocked" from entering the transit stations. Any moisture that enters the transit station would flow towards designated drain inlets, thereby eliminating ponding conditions, and will convey rainwater away from all mechanical/electrical equipment.

Estimated Project Implementation Date (Month and Year): September 2014

Estimated Project Completion Date (Month and Year): June 2015

PFC Type: Impose & Use

Level of Collection: \$3.00

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 2,500,000
	Bond Financing & Interest	\$ <u>3,301,950</u>

***Subtotal PFC Funds: \$ 5,801,950

Existing AIP Funds:

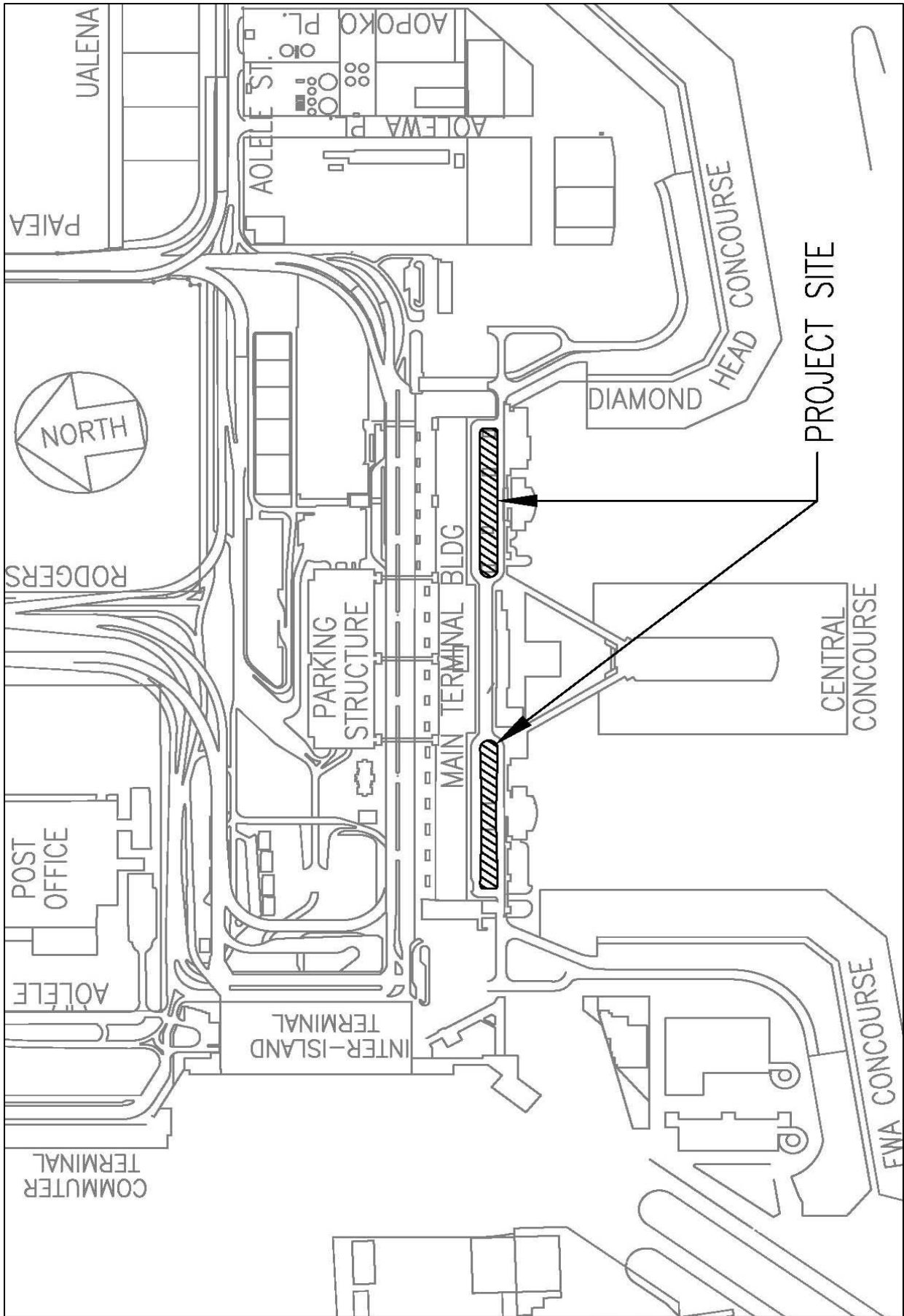
Anticipated AIP Funds: \$ 2,700,000

***Subtotal Anticipated AIP Funds: \$ 2,700,000

Other Funds: State Special Funds \$

***Subtotal Other Funds: \$

Total Project Cost: \$ 8,501,950



WIKI-WIKI SHUTTLE STATION IMPROVEMENTS
 PROJECT NO. AO1041-13
 HONOLULU INTERNATIONAL AIRPORT

8. **OST TERMINAL METAL ROOF REPLACEMENT**
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for the construction, construction management services, and bond financing costs necessary to replace and reconfigure the metal roof canopy and the sidewalk area used as the passenger loading/unloading area along the 2nd level roadway (also known as the “departure” roadway).

The scope of work includes replacement and reconfiguration of the metal roof canopy and structural framing. The canopy height will be increased and slightly extended. Along the entire length of the canopy, all lighting and signage will be replaced. The existing planter boxes will be demolished and the area restored to provide additional sidewalk space. The scope of work also includes concrete spall repairs, expansion joint replacement, drainage work, painting, electrical and other related work.

Significant Contribution:

No significant contribution.

Project Objective:

The objective of this project is to preserve safety during the movement of passengers and baggage into the airport terminal building areas. This sidewalk area serves as the drop off/pick up area for passengers entering the ticket lobbies of the Overseas Terminal.

The metal roof canopy was designed to provide shelter at the passenger drop-off area. During peak departure periods, there is insufficient sidewalk space causing the sidewalk adjacent to the roadway to fill to capacity, causing accessibility problems.

The metal roof canopy requires replacement due to corrosion of both the structural elements and the peripheral metal items, and degradation of the roof drainage system.

The second level area fronting the International Arrivals Building is currently used as a bus pick-up for many of the arriving international Group Tour visitors. The relatively low height clearance of the metal roof canopy prevents the oversized buses from parking near the curb line. As a result, the boarding passengers must either first step onto the roadway (off from the sidewalk) or take a big step from the sidewalk to board these buses.

Project Justification:

This walkway and the canopy run the length of the terminal building and are an integral part of the terminal facility. The sidewalk provides the loading/unloading area for passengers accessing the Ticket Lobbies in the Overseas Terminal building. The canopy over the sidewalk area is necessary to protect passengers from weather in the loading/unloading area.

The existing metal roof canopy is corroding. Both the structural elements and peripheral metal items of the existing roof require repair. The roof drainage system has degraded, and gutter, roof drains and associated drain piping require extensive repair and/or replacement to restore proper drainage. Signage and roadway lighting is insufficient for motorist orientation to the Ticket Lobbies and Airlines.

The existing canopy's low clearance prevents oversized buses from parking near the curb, requiring passengers to step into the roadway to board the bus. During heavy rains, puddles form curbside creating additional hazards for passengers boarding the buses. The sidewalk area is limited where groups congregate; removal of the planter boxes will allow widening of the sidewalk area.

Estimated Project Implementation Date (Month and Year): September 2014

Estimated Project Completion Date (Month and Year): December 2015

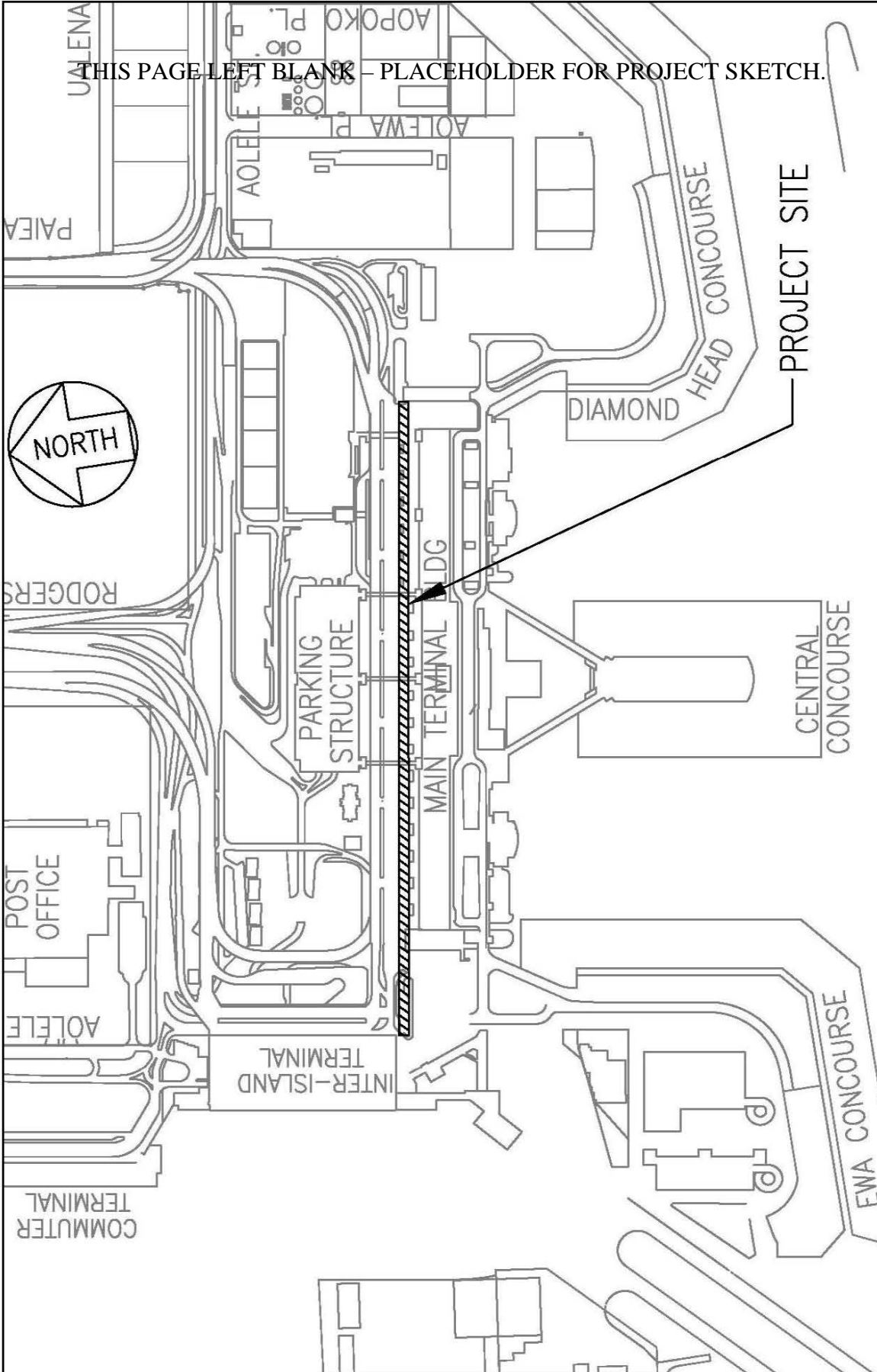
PFC Type: Impose & Use

Level of Collection: \$3.00

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 3,375,000
	Bond Financing & Interest	\$ <u>4,457,632</u>
***Subtotal PFC Funds:		\$ 7,832,632
Existing AIP Funds:		
Anticipated AIP Funds:		\$ <u>8,475,000</u>
***Subtotal Anticipated AIP Funds:		\$ 8,475,000
Other Funds:	Revenue Bonds	\$
	Bond Financing & Interest	\$
***Subtotal Other Funds:		\$
Total Project Cost:		\$ 16,307,632

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OST TERMINAL METAL ROOF REPLACEMENT
PROJECT NO. AO1043-28
HONOLULU INTERNATIONAL AIRPORT

9. **LOADING BRIDGES – EWA CONCOURSE**
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for the construction, construction management services and financing costs necessary to replace a total of twelve (12) loading bridges at Gates 29, 30, 31, 32, 33, and 34 at the Ewa Concourse of Honolulu International Airport. The scope of work also includes related improvements to the common-use boarding areas at the gates where the bridges are being replaced, such as electrical work, restriping of the aircraft lead-in and safety envelope lines, and removal and re-installation of the electronic card access readers at the service entrances and control consoles.

Significant Contribution:

Replacement of the existing aging and deteriorating passenger loading bridges in the Overseas Terminal will improve safety and also enhance and preserve capacity by accommodating newer aircraft at the airport.

Project Objective:

The objective of this project is to preserve capacity by upgrading common-use areas, specifically the passenger loading bridges in the Overseas Terminal at Honolulu International Airport, and replace aged, deteriorating bridges to new bridges that are able to accommodate the new aircraft types.

Project Justification:

Replacement of the aged, deteriorating passenger loading bridges in the Overseas Terminal will improve safety and provide increased capacity by allowing for air carriers utilizing the A330 aircraft to utilize the new loading bridges. Each of the existing passenger loading bridges will have reached, or exceeded, its useful life of twenty (20) years by the implementation of this project.

Estimated Project Implementation Date (Month and Year): October 2013

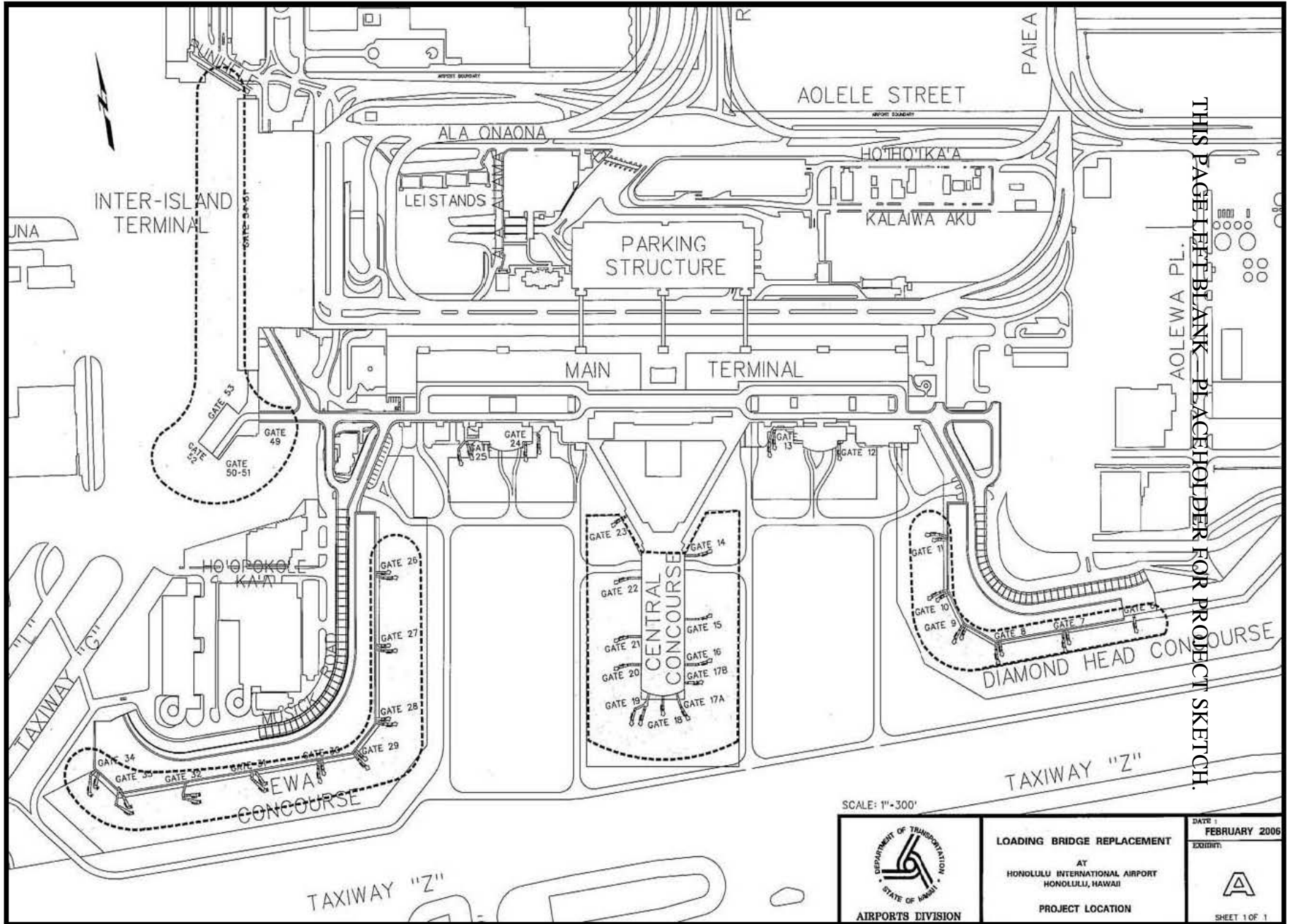
Estimated Project Completion Date (Month and Year): October 2014

PFC Type: Impose & Use

Level of Collection: \$4.50



Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 13,750,000
	Bond Financing & Interest	\$ <u>18,160,723</u>
***Subtotal PFC Funds:		\$ 31,910,723
Existing AIP Funds:		
Anticipated AIP Funds:		\$
***Subtotal Anticipated AIP Funds:		\$
Other Funds:	State Special Funds	\$
***Subtotal Other Funds:		\$ _____
Total Project Cost:		\$ 31,910,723



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SCALE: 1"=300'

 DEPARTMENT OF TRANSPORTATION STATE OF HAWAII	LOADING BRIDGE REPLACEMENT	DATE: FEBRUARY 2006
	AT HONOLULU INTERNATIONAL AIRPORT HONOLULU, HAWAII	EXHIBIT: 
AIRPORTS DIVISION	PROJECT LOCATION	SHEET 1 OF 1

10. NDWP WIDEN TAXILANES G & L
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project provides for the construction, construction management and bond financing costs required to reconstruct, realign and widen existing Taxilanes G and L located parallel to the existing Interisland Terminal, and will result in continuous dual taxilanes that provides increased separation for Group V aircraft.

Significant Contribution:

The project will preserve and enhance taxilane safety by reconstructing Taxilanes G and L to correct deteriorating pavement conditions caused by the age of the pavement and use by aircraft heavier than the original pavement design. The project will also provide uniform centerline to centerline separation between the two taxiways for enhanced operational safety for taxiing aircraft, and widening to accommodate ADG V aircraft reducing current congestion and improved safety by eliminating need for tow-in/tow-out operations on the taxilanes.

Project Objective:

The objective of this project is to meet safety requirements for the reconstruction, realignment and widening of Taxilanes G and L necessary due to current pavement conditions, increased movement of Group IV aircraft to the Interisland Terminal, and the potential increase in use of the heavier Group V aircraft when the Interisland Terminal Mauka Extension is constructed.

Project Justification:

Reconstruction is necessary to improve safety due to deteriorating pavement conditions. Current pavement conditions require the reconstruction of Taxilanes G and L. As shown in the State's Pavement Management System, the majority of both taxilanes are indicated to have less than a 5-year structural life remaining. In April 2010, a pavement failure on Taxilane G occurred, resulting in an emergency closure and repair project over a length of 152 feet.

Realignment will preserve safety by increasing the taxiway centerline to centerline separation to allow aircraft up to Group V size to utilize the taxiways. The widening of Taxilanes G and L from the existing intersection at Taxiway Z will enable unrestricted use of Group IV and Group V aircraft on these taxilanes. Inadequate taxilane centerline separation distance requires tow-in/tow-out operations for ADG IV aircraft using the Interisland Terminal, such as the Boeing 767. Towing between a gate at the Interisland Terminal and Taxiway A causes

delays as long as six to ten minutes as well as causes queuing and delays for all aircraft waiting behind these towed aircraft on Taxiway A and Taxilanes G and L.

The realigning and widening of Taxilanes G and L will also improve safety and capacity due to the construction of the Mauka Extension to the Interisland Terminal. The Mauka Extension will increase the number and size of aircraft movement on Taxilanes G and L due to the addition of twelve (12) new gates. Both the geometry of the taxilanes and the strength of the existing pavement need to be upgraded to accommodate ADG V aircraft.

Covering of the Manuwai Canal near Taxiway A is included as part of this scope of work as required to accommodate the ADG V aircraft. ADG V aircraft require compliance with FAA AC 150/5300-13, Paragraph 403, Taxiway Safety Area and Paragraph 404, Taxiway and Taxilane Object Free Area. To comply with AC150/5300-13, the Safety Area for ADG V aircraft must be at least 107 feet on both sides of the centerline for Taxilane L, and the Object Free Area must be at least 138 feet on both sides of the centerline for Taxilane L. Portions of the Manuwai Canal fall within these two areas.

Estimated Project Implementation Date (Month and Year): October 2013

Estimated Project Completion Date (Month and Year): October 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 42,844,910
	Bond Financing & Interest	\$ <u>66,171,711</u>

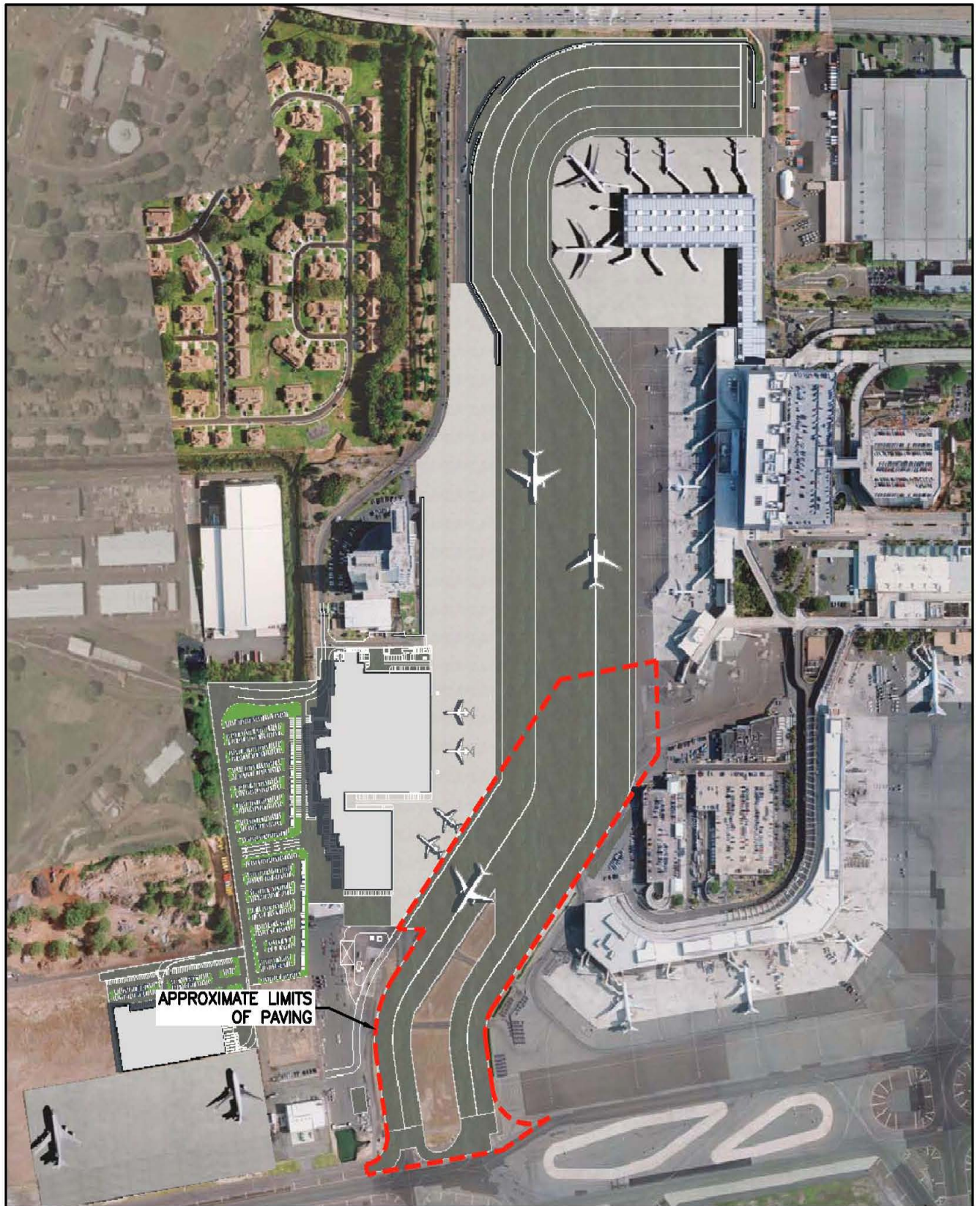
***Subtotal PFC Funds: \$ 109,016,621

Existing AIP Funds:

Anticipated AIP Funds:	\$
***Subtotal Anticipated AIP Funds:	\$

Other Funds:	Revenue Bonds	\$
	Bond Financing & Interest	\$
***Subtotal Other Funds:		\$

Total Project Cost: \$ 109,016,621



APPROXIMATE LIMITS OF PAVING

STATE PROJECT NO. A01121-24
WIDEN TAXIWAYS G & L PHASE 1



APPROXIMATE LIMITS
OF PAVING

STATE PROJECT NO. A01121-25
WIDEN TAXIWAYS G & L PHASE 2

11. NDWP IIT MAUKA EXTENSION

HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

This project will provide for design, construction and construction management services and financing costs required to construct a new eleven-gate concourse extension integral with, and to the north of, the Interisland Terminal building.

The Mauka Extension will be approximately 280,000 square feet in size and consist of airline gates capable of accommodating either six (6) wide-body aircraft or eleven (11) narrow body aircraft, 6 new hold rooms, operations areas, new security screening lanes, concessions, a restroom and service core, common areas and public area furnishings, space for an airline Premier Club, fixtures and equipment, aircraft parking apron, airfield pavement, jet blast fencing, an extension of the fuel hydrant system, and other associated work.

This project includes demolition of the existing commuter terminal building and ground level parking lot to allow for the construction of the new concourse and modifications to the existing roadways. Each gatehouse accommodates two (2) loading bridges.

The project will also provides for the procurement and installation of thirteen (13) passenger loading bridges for gates at the Mauka Extension including pre-conditioned air, potable water and 400 Hz systems to support the bridges. Twelve (12) new bridges will be installed at the new gate houses and one (1) new bridge will be installed at Gate 61. Gate 61 requires a new, modified bridge to accommodate the revised aircraft parking layout at the Interisland Terminal.

Based upon the space eligibility analysis, approximately 84 percent of the Mauka Extension building and associated expenses are PFC-eligible. One hundred percent of the costs of the passenger loading bridges, demolition of the Commuter Terminal, the aircraft parking apron and airfield paving are assumed to be 100 percent PFC-eligible.

Significant Contribution:

This project provides a significant contribution by reducing congestion and preserving the capacity of Honolulu International Airport by providing flexible gates at a new concourse extension to the Interisland Terminal building.

Additional gates will provide greater efficiency for concourse facilities to significantly increase airport capacity by enhancing enplaning and deplaning of passengers and thereby reducing aircraft turnaround time and flight scheduling delays. Turnaround time of each aircraft directly affects the number of aircraft that can utilize each gate over the course of a day.

Project Objective:

This project will provide twelve (12) additional gates at the Interisland end of the airport complex to allow increased gate capacity in other areas of the airport. The new gates are designed to accommodate six (6) wide body aircraft or twelve (12) narrow body aircraft. Each of the 12 passenger loading bridges installed at the 6 gatehouses at the Mauka Concourse would be capable of handling either the larger Aircraft Design Group (ADG) IV/V aircraft or smaller ADG III aircraft.

Project Justification:

Presently, during the peak hours of operations, all aircraft gates are in use. The November 2010 Honolulu International Airport Master Plan Update forecasts of an increase in passenger growth to 27 million annual passengers by year 2020. Also, Honolulu International Airport is a hub for Hawaiian Airlines. Currently, Hawaiian Airlines is operating in three locations: the Interisland Terminal, Ewa and Central Concourses based on gate availability. The additional gates in the Mauka Concourse Extension would assist in the consolidation of Hawaiian Airlines operations, and in turn, provide additional vacant gates for other air carriers at the Overseas Terminal gates.

Due to the constraints of airport operations during construction, the location of the Mauka Extension to the Interisland Terminal would provide minimal disruption. The increased number of gates provided by the Mauka Extension would assist in accommodating the peak traffic period at HNL.

Estimated Project Implementation Date (Month and Year): February 2014

Estimated Project Completion Date (Month and Year): February 2016

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 184,639,429
	Bond Financing & Interest	\$ <u>285,165,892</u>

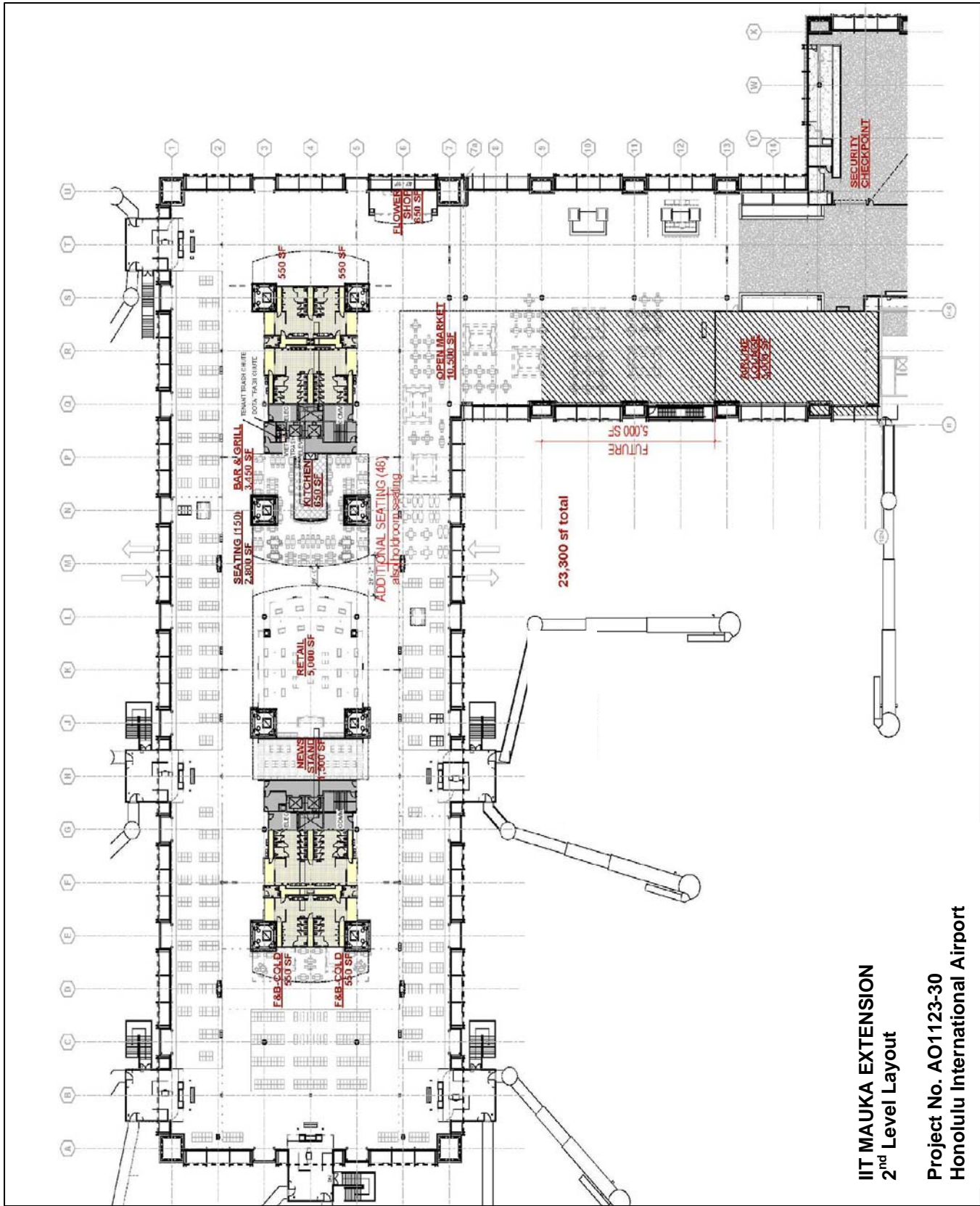
***Subtotal PFC Funds: \$ 469,805,321

Existing AIP Funds:

Anticipated AIP Funds: \$

***Subtotal Anticipated AIP Funds: \$

Other Funds:	Revenue Bonds	\$ 55,360,571
	Bond Financing & Interest	\$ <u>85,501,491</u>
***Subtotal Other Funds:		\$ 140,862,062
Total Project Cost:		\$ 610,667,383



**IIT MAUKA EXTENSION
2nd Level Layout**

**Project No. AO1123-30
Honolulu International Airport**

12. NDWP HAWAIIAN/ALOHA FACILITY DEMOLITION
HONOLULU INTERNATIONAL AIRPORT, OAHU, HAWAII

Project Description:

The project will provide for design, construction, construction management and financing costs necessary to demolish the existing structures, utilities, and will remediate any hazardous materials within the project site.

The demolition involves the complete removal of approximately 181,000 square feet of building structures inclusive of hauling and disposal at a local landfill. The project also includes removal of a waste recycling station; two (2) above ground fueling stations, one (1) gas station and one (1) propane station, a paint booth and structure, an oil storage facility and a compressor building.

The structures to be demolished include:

Building No. 153 – Hawaiian/Aloha Air Cargo Joint Maintenance Facility Hangar
Building No. 158 – Hawaiian Engine Shop
Building No. 159 – Hawaiian Maintenance Facility
Buildings No. 161 & 162 (adjoined) – Hawaiian Multipurpose Buildings
Building No. 163 – Hawaiian Cargo Facility and the attached sprung structure
Hawaiian Credit Union Building
All temporary storage structures

Utilities to be removed include overhead and underground electric lines, lighting, sewer, drainage, potable water, fire suppression systems, and non-potable water. A temporary AOA fence will be installed and the site returned to existing grade.

Construction of replacement facilities will be funded under separate projects. Construction of the new aircraft parking apron and the realignment and widening of Taxilanes G and L will also be funded under separate projects.

Significant Contribution:

The project will preserve and enhance taxilane safety by reconstructing Taxilanes G and L to correct deteriorating pavement conditions caused by the age of the pavement and use by aircraft heavier than the original pavement design. The project will also provide uniform centerline to centerline separation between the two taxiways for enhanced operational safety for taxiing aircraft, and widening to accommodate ADG V aircraft reducing current congestion and improved safety by eliminating need for tow-in/tow-out operations on the taxilanes.

Project Objective:

The objective of this project enhances safety by demolishing old buildings to allow for the realignment and widening of Taxilanes G and L necessary due to current pavement conditions, increased movement of Group IV aircraft to the Interisland Terminal, and the

potential increase in use of the heavier Group V aircraft when the Interisland Terminal Mauka Extension is constructed.

The project will also preserve capacity by constructing a new Remain Overnight (RON) aircraft hardstand to provide aircraft parking for ADG II, III, IV and V aircraft which are being displaced by other projects at Honolulu International Airport such as construction of the new Diamond Head Commuter Terminal facility, the new Interisland Terminal Mauka Extension, relocation of the Aloha Cargo and Hawaiian Airlines facilities, and the realignment and widening of Taxilanes G and L.

Project Justification:

Demolition of the existing Joint Maintenance (Hawaiian/Aloha) Facility, Hawaiian Airlines maintenance structures and cargo facilities is required to allow for the widening and realignment of Taxilanes G & L while also providing an area for construction of apron parking for ADG II, III, IV and V aircraft.

Estimated Project Implementation Date (Month and Year): April 2014

Estimated Project Completion Date (Month and Year): February 2015

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 13,536,000
	Bond Financing & Interest	\$ <u>20,905,640</u>
***Subtotal PFC Funds:		\$ 34,441,640
Existing AIP Funds:		
	Anticipated AIP Funds:	\$
***Subtotal Anticipated AIP Funds:		\$
Other Funds:		
	Revenue Bonds	\$
	Bond Financing & Interest	\$
***Subtotal Other Funds:		\$ _____
Total Project Cost:		\$ 34,441,640



NDWP HAWAIIAN/ALOHA FACILITY DEMOLITION

STATE PROJECT NO. AO1125-18
HONOLULU INTERNATIONAL AIRPORT

**13. ARFF FACILITIES IMPROVEMENTS AT ITO & KOA (DESIGN)
STATEWIDE AIRPORTS**

Project Description:

This project provides for reimbursement of the State's share of the design costs for the following two projects:

1. AH1031-14 – ITO ARFF Station Improvements
2. AH2044-19 – KOA ARFF Station Improvements

The scope of work for this project includes designing two new ARFF stations for both Hilo and Kona Airports. The scope of work includes conducting a statewide site selection study, planning services to conduct a job task analysis for the new ARFF stations and future Regional ARFF Training Facility to be located at KOA, and establishing a Business Plan for the future Regional ARFF Training Facility to be located at KOA.

Significant Contribution:

This project provides a significant contribution to improving safety at Hilo International Airport and Kona International Airport at Keahole by bringing the airports into compliance with 14 CFR Part 139, which is mandatory for airport certification requirements.

Project Objective:

This project will preserve and enhance safety of the national air transportation system by improving the ARFF facilities at Hilo International Airport and Kona International Airports to be in compliance with the 49 CFR Part 139 certification requirements and providing updated facilities as required in AC 150/5210-15A – Aircraft Rescue and Firefighting Station Building Design.

Project Justification:

Currently both ARFF facilities at Hilo International Airport and Kona International Airport at Keahole do not meet the requirements set by FAA (Advisory Circular - Part 139). These buildings also do not meet the current dimensional requirements of the new fire trucks. The existing openings for garage doors are thirteen (13) feet and clearance from the top of the trucks are less than one (1) foot. OSHA requires eighteen (18) feet opening and minimum of five (5) feet clearance from the top of the trucks. Structurally, it is impractical to alter the buildings to meet these dimensions; therefore, new building construction is required. Other factors for constructing new ARFF buildings include insufficient and deteriorating facilities including utilities, restrooms, and office spaces.

Estimated Project Implementation Date (Month and Year): January 2013

Estimated Project Completion Date (Month and Year): January 2014

PFC Level: \$4.50

Type of Collection: Impose & Use

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 1,000,000
	Bond Financing & Interest	\$ <u>1,320,780</u>

***Subtotal PFC Funds: \$ 2,320,780

Existing AIP Funds:

Anticipated AIP Funds: \$

***Subtotal Anticipated AIP Funds: \$

Other Funds:	Cash	\$ 2,908,000
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	Bond Financing & Interest	\$ <u> </u>
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***Subtotal Other Funds: \$ 2,908,000

Total Project Cost: \$ 5,228,780

14. ARFF STATION IMPROVEMENTS

HILO INTERNATIONAL AIRPORT, HILO, ISLAND OF HAWAII, HAWAII

Project Description:

This project provides for the design, reimbursement of the State's matching funds of the construction, construction management, and financing costs necessary for a new, relocated Aircraft Rescue and Fire Fighting (ARFF) Station facility to meet the requirements of the Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5210-15A Aircraft Rescue and Firefighting Station Building Design, for continued FAA certification.

The new station will consist of fire fighting vehicle space, fire equipment storage, emergency medical services equipment storage, hazardous materials decontamination and a redundant airport emergency command center. The scope of work also includes construction of a parking area for the ARFF vehicles, and a new connecting road from the ARFF station to the airfield.

Significant Contribution:

This project provides a significant contribution to improving **safety** at Hilo International Airport (ITO) by bringing the airport into compliance with 14 CFR Part 139 to meet airport certification requirements for the ARFF Station. By meeting the certification requirements, the project will provide adequate space to house the airport's required ARFF equipment and train the ARFF personnel at ITO.

Project Objective:

This project will preserve and enhance safety of the national air transportation system by bringing Hilo International Airport into compliance with the 49 CFR Part 139 certification requirements and providing updated facilities as required in AC 150/5210-15A – Aircraft Rescue and Firefighting Station Building Design. This project will also provide for the safety and security of persons and property on an aircraft operating in air transportation or intrastate air transportation system against an act of criminal violence, aircraft piracy, and the introduction of deadly or dangerous weapons, explosive or incendiary, onto an aircraft.

Project Justification:

The original ARFF station was built in 1966 with modifications in 1978 and 1994. The ARFF station at ITO is assigned an ARFF Index C. Currently, this ARFF station does not meet the requirements set by FAA 49 CFR Part 139.

The existing site is centrally located on the airport to provide quick access to all areas of the airfield; however, due to the distance from the taxiway and narrow access roads, the site is deficient for access of multiple vehicles in a quick response event. The relocated site will be closer to the parallel taxiway than the existing building site providing improved access and sight lines from the observation tower on the second floor of the building. Replacement of the existing building is a more cost-effective alternative than renovation.

The existing station does not meet the current dimensional requirements of the new fire trucks as required Part 139.319. The existing openings for garage doors are thirteen (13) feet and clearance from the top of the trucks are less than one (1) foot. OSHA requires sixteen (16) feet opening and minimum of five (5) feet clearance from the top of the trucks. Structurally, it is impractical to alter the buildings to meet these dimensions and hence the construction of new buildings. Portions of the existing building contain hazardous materials such as lead paint and asbestos that raise concerns about the potential of associated health risks.

Estimated Project Implementation Date (Month and Year): January 2013

Estimated Project Completion Date (Month and Year): January 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 45,000
	Bond Capital	\$ 4,543,000
	Bond Financing & Interest	\$ <u>6,000,303</u>

***Subtotal PFC Funds: \$ 10,588,303

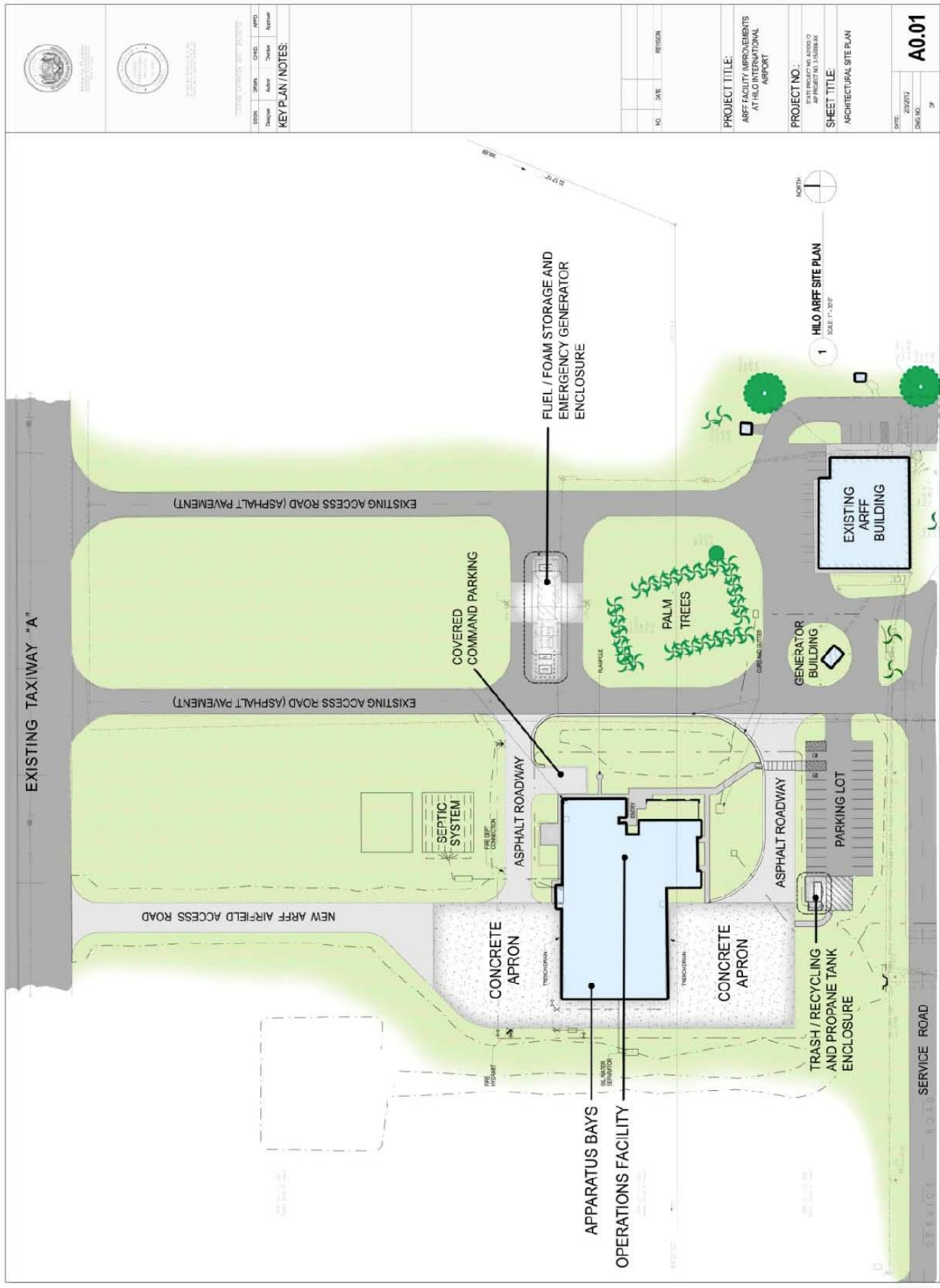
Existing AIP Funds:		
Anticipated AIP Funds:		\$ <u>9,412,000</u>

***Subtotal Anticipated AIP Funds: \$ 9,412,000

Other Funds:	Revenue Bonds	\$
	Bond Financing & Interest	\$

***Subtotal Other Funds: \$

Total Project Cost: \$ 20,000,303



DESIGN	DATE	BY	CHKD.	APP'D.
Designer		Author	Checker	Reviewer

KEY PLAN / NOTES:

NO.	DATE	REVISION

PROJECT TITLE:
ARFF FACILITY IMPROVEMENTS
AT HILO INTERNATIONAL
AIRPORT

PROJECT NO.:
STATE PROJECT NO. 2022-01
FUNDING NO. 13-10000A

SHEET TITLE:
ARCHITECTURAL SITE PLAN

DATE: 03/2022
DRAWING NO.: **A0.01**

15. **ACCESS CONTROL & CCTV SYSTEMS**

HILO INTERNATIONAL AIRPORT, ISLAND OF HAWAII, HAWAII

Project Description:

This project will provide for construction and construction management services required to upgrade the existing Access Control System (ACS) and Video Monitoring System (VMS) at Hilo International Airport (ITO). The systems are antiquated and are in need of replacement. The project includes upgrading the ACS to a proximity card and PIN system, as well as upgrading the VMS, also known as closed circuit television (CCTV) system, from the existing analog video recording system to a digital video recording system with enhanced features.

Significant Contribution:

This project upgrades the existing Access Control System (ACS) and Video Monitoring System (VMS) at Hilo International Airport (ITO) to meet the significant contribution requirement for enhancing the safety of ITO. The new AC & VM systems will fully comply with FAA Advisory Circular 150/5210-15 and Title 14 CFR Part 139 requirements. This project will also provide for the safety and security of persons and property on an aircraft operating in air transportation or intrastate air transportation system against an act of criminal violence, aircraft piracy, and the introduction of deadly or dangerous weapons, explosive or incendiary, onto an aircraft.

Project Objective:

The objective of this project is to preserve and enhance safety with upgrades to the existing Access Control System (ACS) and Video Monitoring System (VMS) in accordance with the requirements of Title 49 CFR Part 1542 and contained in the approved security program. For the AIP basis of eligibility, please refer to paragraph 542 of FAA Order 5100.38C, AIP Handbook, (June 28, 2005).

Project Justification:

The existing ACS and VMS are obsolete and independent of each other so there is no communication and data sharing between them. The ACS, as required by the Airport Security Program (ASP) and the Transportation Security Administration (TSA), is designed to restrict access to sterile and secured areas in accordance with Transportation Security Regulation (TSR) 1542.207. To enter these areas, an individual must either pass a TSA security-screening checkpoint or go through an access point controlled by TSR 1542.207. The ACS maintains records of all accessor's activity and consists of cardreaders, field control panels, computer hardware, software, locking devices, wiring and related work. Subsystems of the ACS include the badging system and alarm monitoring system (AMS) which is operated 24 hours a day by security personnel. The AMS is important because it indicates when a door is forced open, left ajar, or when an unauthorized person is attempting to enter. The new ACS will be proximity card-based with the capability for biometric operation to comply with future TSA requirements.

Both systems were originally installed in the early 1990s, with partial upgrades to readers and other equipment occurring in the previous ten to fifteen years. Due to the system's age, it has become increasingly difficult and expensive to obtain replacement parts for equipment requiring repair and replacement. Due to the after effects of September 11, increased airport security requirements such as biometric access control are being proposed that the current systems are unable to comply with. The new ACS and VMS systems will meet these increased security requirements of 14 CFR Part 1542.

In addition to the improved performance and capabilities, the new systems will also reduce the operation and maintenance costs of the airport. A new systems will provide many cost saving benefits including a reduction in the manpower required to patrol the airport, respond to alarms, review playback of security breaches, and enhance security measures pursuant to the ASP; thereby reducing the risk of monetary fines from TSA for security lapses.

Estimated Project Implementation Date (Month and Year): October 2012

Estimated Project Completion Date (Month and Year): October 2014

PFC Level: \$4.50

Type of Collection: \$4.50 Impose & Use

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 2,760,000
	Bond Capital	\$
	Bond Financing & Interest	\$ _____

***Subtotal PFC Funds: \$ 2,760,000

Existing AIP Funds:

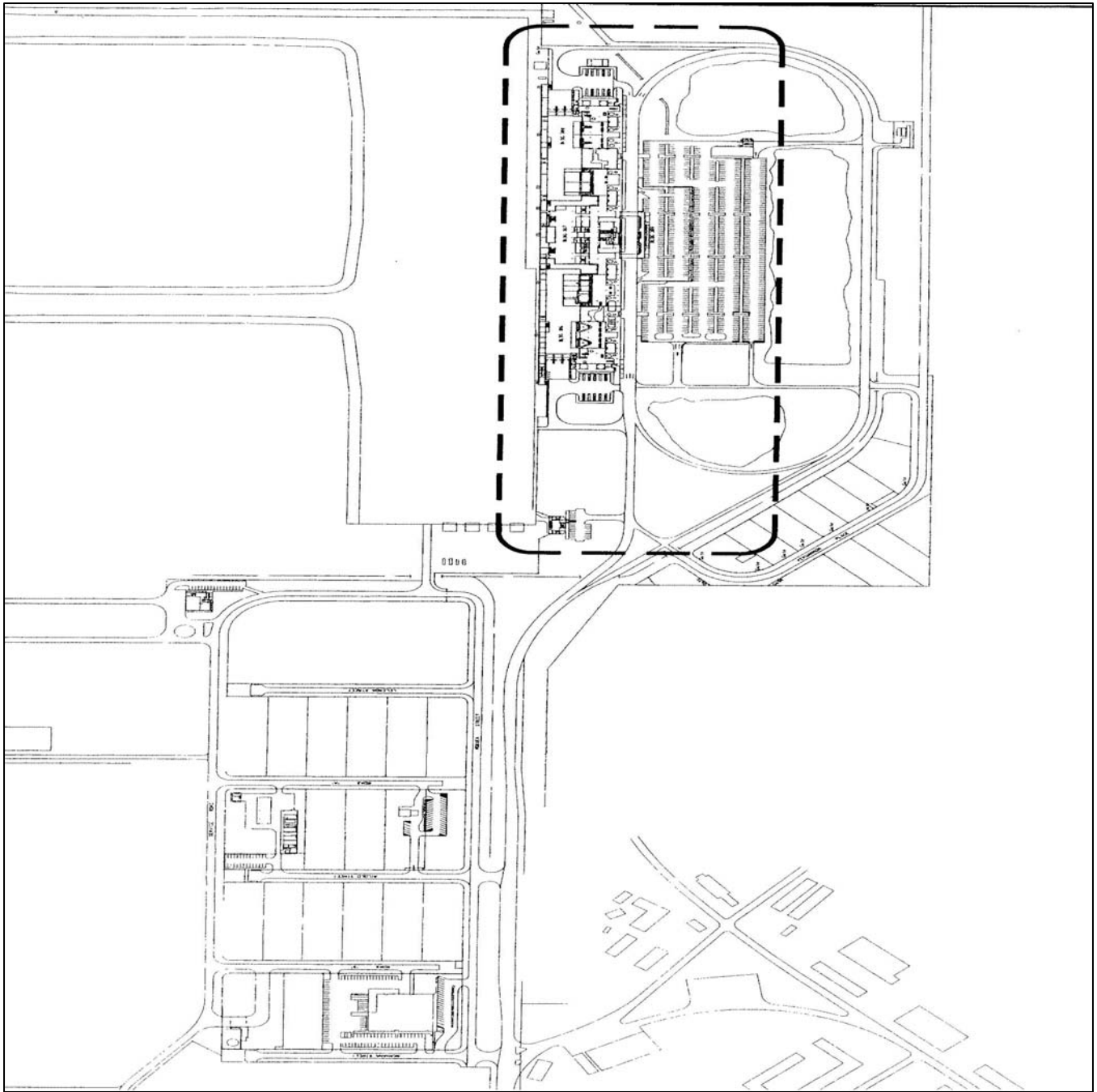
Anticipated AIP Funds: \$

***Subtotal Anticipated AIP Funds: \$

Other Funds: Cash \$ 5,000

***Subtotal Other Funds: \$ 5,000

Total Project Cost: \$ 2,765,000



**ITO ACCESS CONTROL & CCTV SYSTEMS
STATE PROJECT NO. AH11052-03**

HILO INTERNATIONAL AIRPORT

16. **ARFF STATION RELOCATION**

KONA INTERNATIONAL AIRPORT AT KEAHOLE, ISLAND OF HAWAII, HAWAII

Project Description:

This project provides for reimbursement of the State's matching funds for construction and construction management services necessary to construct a new Aircraft Rescue and Fire Fighting (ARFF) Station in a new location. The building includes fire fighting vehicle space, storage areas for fire equipment and emergency medical services, an area for hazardous material decontamination and a redundant airport emergency command center as well as administration areas, living and training accommodations for firefighters.

The scope of work also includes construction of new parking area for the ARFF vehicles, a new connecting road from the ARFF station to the airfield, realignment of the access road that currently runs through the site of the proposed ARFF station, relocation of the Airport Operations Area (AOA) fence, and installation of additional vehicle and personnel access gates.

Significant Contribution:

This project provides a significant contribution to preserving **safety** at KOA by bringing the airport into compliance with 14 CFR Part 139 to meet airport certification requirements for the ARFF Station. By meeting the certification requirements, the project will provide adequate space to house the airport's required ARFF equipment and train the ARFF personnel at KOA. This project will also provide for the safety and security of persons and property on an aircraft operating in air transportation or intrastate air transportation system against an act of criminal violence, aircraft piracy, and the introduction of deadly or dangerous weapons, explosive or incendiary, onto an aircraft.

Project Objective:

This project will preserve and enhance safety of the national air transportation system by bringing Kona International Airport at Keahole into compliance with the 49 CFR Part 139 certification requirements and providing updated facilities as required in AC 150/5210-15A – Aircraft Rescue and Firefighting Station Building Design.

Project Justification:

The original ARFF station was built in 1971 with modifications and additions in 1981 and training facilities in 1996. A temporary ARFF vehicle structure was done in 2009. The ARFF Station at KOA is assigned by FAA an ARFF Index D.

The existing conditions at the KOA ARFF Station are deteriorating and a majority of the station is not in compliance with current FAA Advisory Circular No: 150/5210-15A design standards. The existing site does not provide any area for expansion and is close to the terminal area and aircraft parking area. There is excessive aircraft traffic in from to the

existing ARFF Building. Firefighters have to negotiate around the physical training equipment to gain access to the vehicles because the building space is too small.

The new site offers good sightlines of the runways, taxiways and the terminal building. It provides a location that allows response to the midpoint of the farthest runway within the required 3-minute response time. Construction of the new Aircraft Rescue and Fire Fighting (ARFF) Station in a new location will meet the requirements of the Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5210-15A Aircraft Rescue and Firefighting Station Building Design, for continued FAA certification.

Estimated Project Implementation Date (Month and Year): January 2013

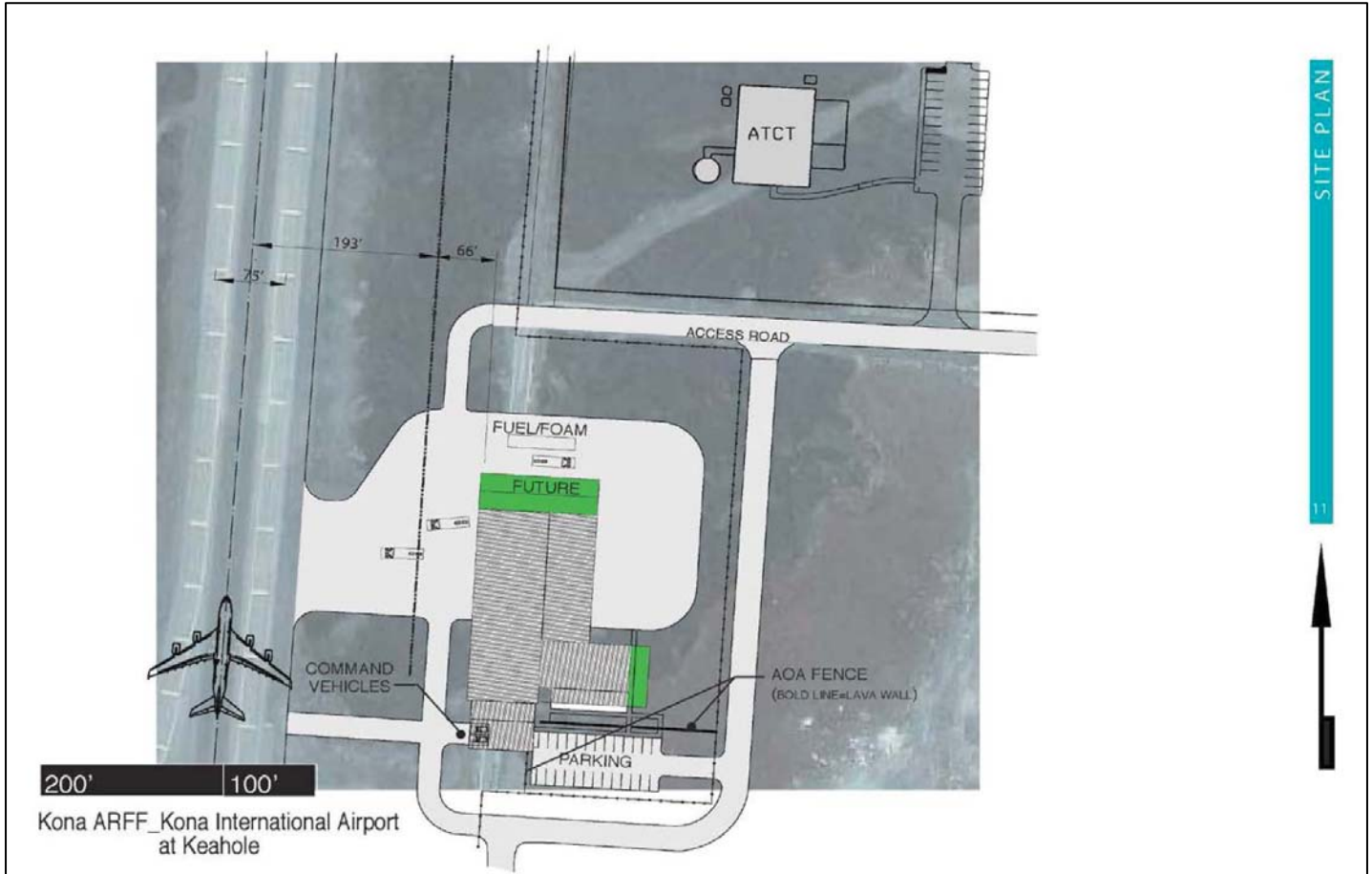
Estimated Project Completion Date (Month and Year): January 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$
	Bond Capital	\$ 2,329,000
	Bond Financing & Interest	\$ <u>3,076,096</u>
***Subtotal PFC Funds:		\$ 5,405,096
Existing AIP Funds:		
	Anticipated AIP Funds:	\$ <u>14,232,915</u>
***Subtotal Anticipated AIP Funds:		\$ 14,232,915
Other Funds:	Revenue Bonds	\$
	Bond Financing & Interest	\$
***Subtotal Other Funds:		\$
Total Project Cost:		\$ 19,638,011



ARFF STATION RELOCATION
STATE PROJECT NO. AH2044-19

KONA INTERNATIONAL AIRPORT AT KEAOLE

17. **ACCESS CONTROL & CCTV SYSTEMS**

KONA INTERNATIONAL AIRPORT AT KEAHOLE, ISLAND OF HAWAII, HAWAII

Project Description:

This project will reimburse the State for construction and construction management services required to upgrade the existing Access Control System (ACS) and Video Monitoring System (VMS) at Kona International Airport at Keahole (KOA). The systems are antiquated and are in need of replacement. The project includes upgrading the ACS to a proximity card and PIN system, as well as upgrading the VMS, also known as closed circuit television (CCTV) system, from the existing analog video recording system to a digital video recording system with enhanced features.

Significant Contribution:

This project upgrades the existing Access Control System (ACS) and Video Monitoring System (VMS) at Kona International Airport at Keahole (KOA) to meet the significant contribution requirement for enhancing the safety of KOA. The new AC & VM systems will fully comply with Title 14 CFR Part 139 requirements. This project will also provide for the safety and security of persons and property on an aircraft operating in air transportation or intrastate air transportation system against an act of criminal violence, aircraft piracy, and the introduction of deadly or dangerous weapons, explosive or incendiary, onto an aircraft.

Project Objective:

The objective of this project is to preserve and enhance safety with upgrades to the existing Access Control System (ACS) and Video Monitoring System (VMS) at Kona International Airport at Keahole (KOA) in accordance with the requirements of Title 49 CFR Part 1542 and contained in the approved security program.

Project Justification:

The existing ACS and VMS are obsolete and independent of each other so there is no communication and data sharing between them. The ACS, as required by the Airport Security Program (ASP) and the Transportation Security Administration (TSA), is designed to restrict access to sterile and secured areas in accordance with Transportation Security Regulation (TSR) 1542.207. To enter these areas, an individual must either pass a TSA security-screening checkpoint or go through an access point controlled by TSR 1542.207. The ACS maintains records of all accessor's activity and consists of cardreaders, field control panels, computer hardware, software, locking devices, wiring and related work. Subsystems of the ACS include the badging system and alarm monitoring system (AMS) which is operated 24 hours a day by security personnel. The AMS is important because it indicates when a door is forced open, left ajar, or when an unauthorized person is attempting to enter. The new ACS will be proximity card-based with the capability for biometric operation to comply with future TSA requirements.

Both systems were originally installed in the early 1990s, with partial upgrades to readers and other equipment occurring in the previous ten to fifteen years. Due to the system's age, it has become increasingly difficult and expensive to obtain replacement parts for equipment requiring repair and replacement. Due to the after effects of September 11, increased airport security requirements such as biometric access control are being proposed that the current systems are unable to comply with. The new ACS and VMS systems will meet these increased security requirements of 14 CFR Part 1542.

In addition to the improved performance and capabilities, the new systems will also reduce the operation and maintenance costs of the airport. A new systems will provide many cost saving benefits including a reduction in the manpower required to patrol the airport, respond to alarms, review playback of security breaches, and enhance security measures pursuant to the ASP; thereby reducing the risk of monetary fines from TSA for security lapses.

Estimated Project Implementation Date (Month and Year): October 2012

Estimated Project Completion Date (Month and Year): October 2014

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 5,899,000
	Bond Capital	\$
	Bond Financing & Interest	\$_____

***Subtotal PFC Funds: \$ 5,899,000

Existing AIP Funds:

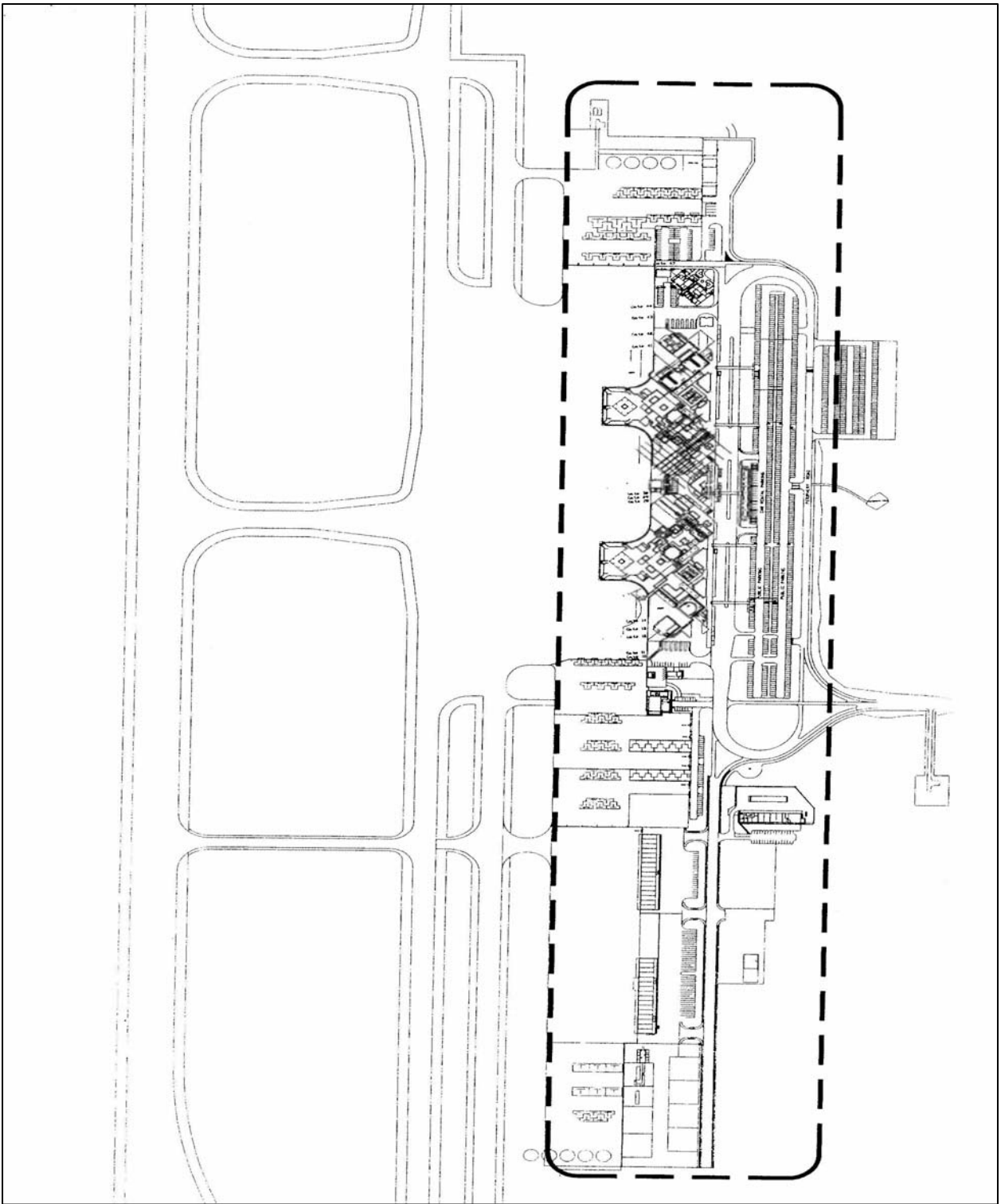
Anticipated AIP Funds:

***Subtotal Anticipated AIP Funds: \$

Other Funds:	Cash	\$ <u>5,000</u>
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***Subtotal Other Funds: \$ 5,000

Total Project Cost: \$ 5,904,000



ACCESS CONTROL & CCTV SYSTEMS
STATE PROJECT NO. AH2050-05

KONA INTERNATIONAL AIRPORT AT KEAHOLE

18. **STAND-ALONE PFC ADMINISTRATIVE COSTS**

(“Impose and Use” PFC Project)

Project Description:

This project provides for the costs associated with the preparation of the PFC applications and the accounting, quarterly reporting, and the auditing of the PFCs relating to this application. The project includes the cost of outside consultants, auditors and airport accounting staff to prepare PFC reports over the life of the PFC program for this application.

Significant Contribution:

This project provides a significant contribution by funding the public agency’s PFC administration and management relating to airport projects that directly contributes to air safety and security, reduces congestion and increases competition among air carriers.

This project includes the cost of outside consultants, auditors and airport accounting and engineering staff to prepare PFC reports over the life of the PFC program for this application as well as the previous approved PFC applications.

Project Objective:

This project is intended to reimburse the State of Hawaii for the reasonable and necessary costs of administering the PFC program for the duration of the PFC collection and use period for this application and previous applications, which is estimated to be from May 2013 through January 2031.

Project Justification:

This project will reimburse the necessary costs associated with the preparation of PFC applications and amendments, the collection, handling and remittance of PFC revenue by air carriers, and reporting and audit requirements for the PFC program. The project includes the cost of outside consultants, auditors and airport accounting and engineering staff to prepare PFC reports over the life of the PFC program for this application.

A letter MUST be submitted to the FAA each year of the PFC collection and/or use certifying that the funds expended for the part and full time positions are directly and exclusively used for PFC administrative tasks during the preceding year, along with a record showing the hours spent on each major PFC related task listed in the description of this project during that year.

Unless authorized by the PFC regulation, these direct costs for administering the PFC program do not include costs associated with operations and maintenance to support the position, general purpose equipment such as computer hardware, nor benefits including, but not limited to leave, retirement, or overhead. It also does not include project management activities.

Estimated Project Implementation Date (Month and Year):

February 2014 (Estimated FAD date)

Estimated Project Completion Date (Month and Year):

June 2033 (Estimated Application closure date)

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 700,000
	Bond Capital	\$
	Bond Financing & Interest	\$ _____
*** Subtotal PFC Funds	:	\$ 700,000
Existing AIP Funds:		
Anticipated AIP Funds:		
*** Subtotal Anticipated AIP Funds:		\$
Other Funds: State Special Funds		\$ _____
*** Subtotal Other Funds:		\$
*** Total Project Cost:		\$ 700,000

19. SPENCER PROPERTIES ACQUISITION
KAHULUI AIRPORT, ISLAND OF MAUI, HAWAII

(“Impose Only” PFC Project)

Description:

This project will reimburse the cost to acquire land adjacent to Kahului Airport. The subject area consists of two (2) parcels of approximately 70 acres including a non-potable water well and pump station.

The property being acquired is located in the described as follows:

Area A: TMK 3-8-01:03 por. (6 lots) equals 22.612 acres. This property is located in the E Paepae Ka Puko’a subdivision.

Area B: TMK 3-8-01:04 (9 lots) equals 55.478 acres. This property is located in the E Paepae Ka Puko’a Subdivision III.

Significant Contribution:

This project provides a significant contribution by mitigating noise impacts within the 65 DNL zone or higher.

Project Objective:

The objective of this project is to mitigate noise impacts from aircraft operations at the airport by providing a noise exposure buffer area between the Airport and developed lands as well as control the lands within the existing Runway Protection Zone for Runway 5-23 of Kahului Airport.

As shown in Kahului Airport’s 1995 Part 150 Noise Compatibility Program (NCP), the land is within the 65 DNL contour.

The property is located within Kahului Airport’s 65 Day-Night Noise Metric (DNL) contours, as shown in the 1993 Noise Exposure Map (NEM) included in the 1995 NCP). The 1995 NCP recommended acquisition of property near the airport to prevent encroachment from noise sensitive users, which may become incompatible.

The 1995 NCP specifically states: “Offer to purchase private properties that are between the 60 to 75 decibel (Ldn) contours whose owners do not wish to participate in the Sound Attenuation Program. The State DOT should offer to purchase privately owned lands and structures between the 60 and 75 Ldn contours of the “No Mitigation” Noise Exposure Map of Kahului Map of Kahului Airport from owners who do not wish to participate in the sound attenuation program providing that the properties have existing noise-sensitive uses or are

vacant but are zoned for noise-sensitive uses. The ultimate purpose of this program is two-fold. The first is to assist in relocation of those residents of Spreckelsville who are between the 60 and 75 Ldn contours and who prefer to relocate rather than to remain in Spreckelsville and participate in the sound attenuation program. The second is to afford owners of vacant properties that are zoned for noise-sensitive uses to sell the properties rather than develop compatible uses and/or structures.”

Under the FAA’s Noise Compatibility guidelines, 65 DNL is the noise level that triggers recommended noise mitigation of noise sensitive uses such as residential housing, schools and churches. HDOTA has guidelines that are more stringent than those adopted by the FAA, and discourages residential uses within the 60 DNL contour. Acquisition of the subject property would allow HDOTA to control the future development of the property in a manner that ensures noise compatible land uses. The current agricultural land use would continue if the property is acquired as HDOTA has no immediate development plans for this area.

Project Justification:

Noise Compatibility: The approved Kahului Airport 1995 Noise Compatibility Program dated September 1995. Noise compatibility measures eligible under 49 U.S.C. 47504.

The land was formerly used for sugar cane production. The land was identified in the 1993 Kahului Airport Master Plan for acquisition to prevent incompatible land use and for future airport developments.

The acquisition includes 83.4 acres of property adjacent to the Kahului Airport. The property is located on the northeastern side of Kahului, in the Wailuku District of Maui. The property is identified as Tax Map Keys (2) 3-8-001:03 por., lots 21A to 21G; and (2) 3-8-001:04, lots 1 to 9. Additionally easements in Lot 27 of tax Map Key (2) 3-8-001:03 would be obtained to potentially provide for the future use of one (1) non-potable water well and related infra-structure. The easements are identified as Easements W3 and W4, and have areas of 533 square feet and 4,782 square feet, respectively.

Runway Protection Zone (RPZ): The property would not be developed in the near future by the Airport Owner, and would remain zoned for agriculture. A portion of the property is within the Runway Protection Zone (RPZ) of Runway 5-23 at Kahului Airport. Once acquired, property ownership would transfer from the private owners to the State of Hawaii, Airports Division, by an Executive Order of the Governor, so that HDOTA can properly maintain the area for the RPZ. The remaining portion of the acquired property would be used as a buffer to mitigate airport encroachment from incompatible land uses. As shown in Kahului Airport’s 1995 Part 150 Noise compatibility Program (NCP), the land is within the 65 DNL contour.

The State of Hawaii undertakes improvements to Kahului Airport as a whole in order to create an airport infrastructure that will support the present and future goals and objectives of the county and State and continue to provide safe, efficient, economical and convenient air

transportation facilities for passenger and cargo service to the residents of and visitors to the State of Hawaii and the island of Maui, respectively.

In accordance with FAA Advisory Circular 150/5300-13, "The RPZ's function is to enhance the protection of people and property on the ground. This is achieved through airport owner control over RPZs. Such control includes clearing RPZ areas (and maintaining them clear) of incompatible objects and activities. Control is preferably exercised through the acquisition of sufficient property interest in the RPZ."

Estimated Project Implementation Date (Month and Year): April 2012

Estimated Project Completion Date (Month and Year): December 2012

PFC Type: Impose only

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 20,000,000
	Bond Capital	\$
	Bond Financing & Interest	\$ _____

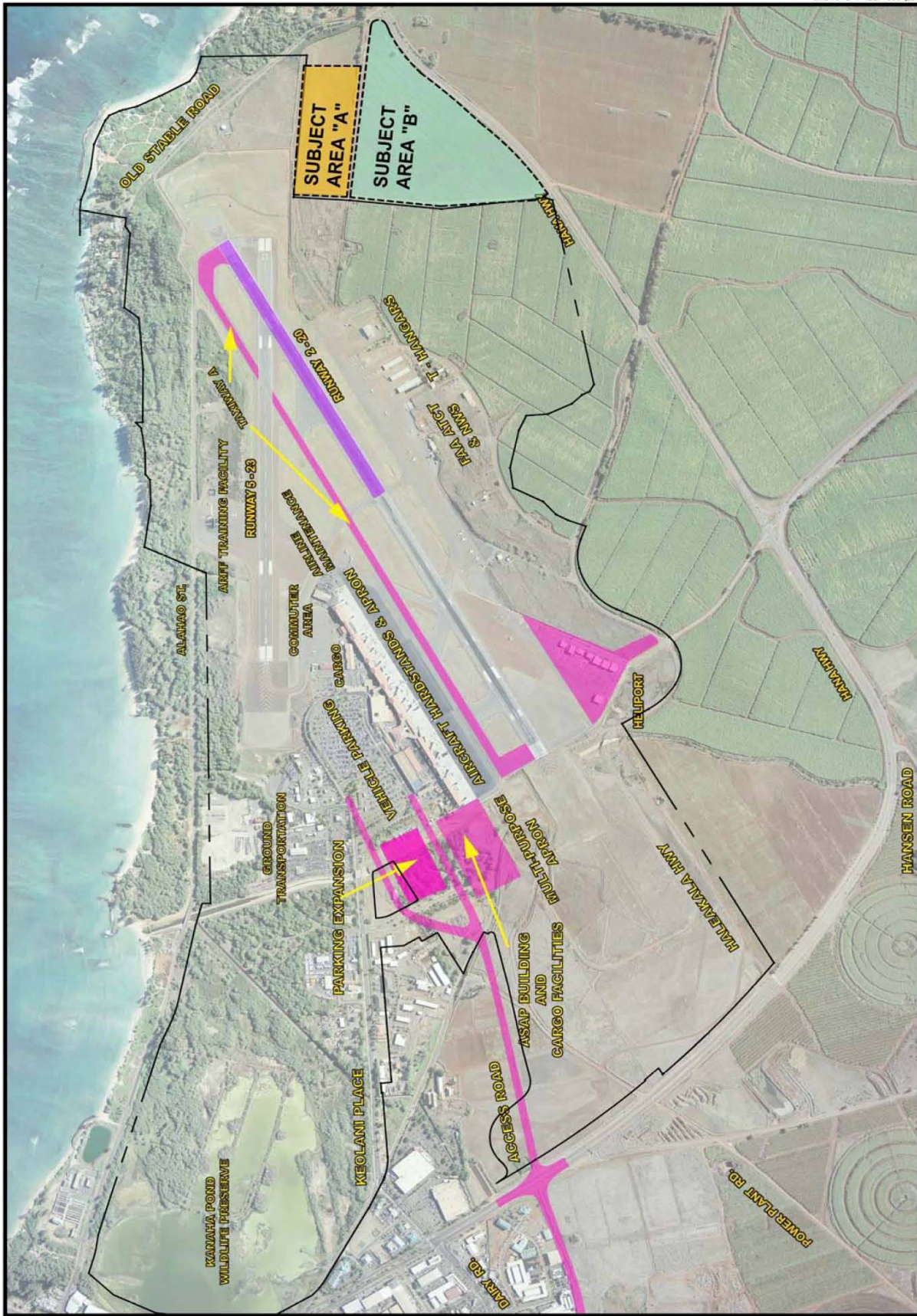
***Subtotal PFC Funds: \$ 20,000,000

Existing AIP Funds:
Anticipated AIP Funds: \$

***Subtotal Anticipated AIP Funds: \$

Other Funds: State Special Funds \$
***Subtotal Other Funds: \$ _____

Total Project Cost: \$ 20,000,000



SPENCER PROPERTIES ACQUISITION
KAHULUI AIRPORT

NOT TO SCALE

KAHULUI AIRPORT



Date : JANUARY, 2011

EXHIBIT:

--- AIRPORT BOUNDARY

SHT. 1 OF 1

20. RUNWAY 22 CULVERT RUNWAY SAFETY AREA
HONOLULU INTERNATIONAL AIRPORT, HONOLULU, OAHU, HAWAII

(“Impose Only” PFC Project)

Project Description:

This project will provide for design, construction, and construction management services necessary to construct improvements to the Runway 22 culvert in the runway safety area (RSA) to meet the required 1,000-ft. length by 500-ft. width.

The scope of work includes site work, installation of a drainage system and box culvert, and other related improvements.

Existing features encroach into the fully dimensioned Runway Safety Area (RSA), including an open canal, perimeter roadway, and precision instrument approach system, will be covered, realigned and relocated.

Alternative options will be explored to determine whether to construct a structural topping or a concrete box culvert.

Significant Contribution:

This project provides a significant contribution to preserving the safety of the national air transportation system by increasing the ability of aircraft to move on the airfield. This project also preserves safety by bringing the airport into compliance with 14 CFR Part 139 requirements for runway safety areas, FAA Order 5200.8 Runway Safety Area Program, and Advisory Circular 150/5300-13. In addition, Congress has mandated that all large hub airports improve their RSA by 2015.

Project Objective:

The objective of the project is to preserve safety by correcting the RSA for Runways 22R and 22L to meet the 1,000-ft. length by 500-ft. width dimension to meet 14 CFR Part 139 requirements to conform to the standards contained in the FAA’s Advisory Circular (AC) 150-5300-13, Airport Design. Congress has mandated that all airports improve their Runway Safety Areas (RSA) by 2015.

Project Justification:

The objective of the project is to preserve safety by correcting the RSA for Runways 22R and 22L to meet the 1,000-ft. length by 500-ft. width dimension requirements set forth in the AC 150-5300-13.

Improving the RSAs will allow the current operations of Runways 22R & 22L to continue. Currently, Runway 4L/22R is 6,952-ft. long and allows for approach category A/B/C aircraft.

If the RSA dimension is not corrected to meet Title 14 CFR Part 139 requirements, the runway will be down-sized for approach category B-III and below aircraft only.

Currently, Runway 4R/22L is 9,000-ft. long and allows for approach category C/D aircraft. If the RSA dimension is not provided, the runway will be restricted to use declared distances for Runway 4R landing/take-off operations, with reductions in Take Off Distance Available (TODA), Take Off Run Available (TORA), and Landing Distance Available (LDA). Runway 4R is one of two runways at HNL with an Instrument Landing System (ILS), used when visual landings cannot be conducted. Runway 8L is the other runway, and when Runway 8L's ILS is not in operation due to maintenance, repairs or other mishaps, then Runway 4R is the only ILS runway available. Runway 4R is also critical for Land And Hold Short Operations (LAHSO) which allows for simultaneous landings of domestic air carriers on Runway 4R and foreign air carriers on Runway 8L, thereby maintaining the efficient and safe flow of air traffic into HNL.

Estimated Project Implementation Date (Month and Year): November 2014

Estimated Project Completion Date (Month and Year): November 2015

PFC Type: Impose & Use

Level of Collection: \$4.50

Financing Plan:

PFC Funds:	Pay-as-you-go	\$ 400,000
	Bond Capital	\$ 7,500,000
	Bond Financing & Interest	\$ <u>11,583,356</u>

***Subtotal PFC Funds: \$ 7,900,000

Existing AIP Funds: \$ 1,250,000
Grant #3-15-0005-103 - Design

Anticipated AIP Funds: \$ 21,250,000

***Subtotal Anticipated AIP Funds: \$ 22,500,000

Other Funds: State Special Funds \$

***Subtotal Other Funds: \$

Total Project Cost: \$ 41,983,356

V. PFC TIMELINE FOR PROPOSED APPLICATION

<u>Action to be Taken</u>	<u>Responsibility</u>	<u>Minimum No. of Days Required</u>	<u>Begin Date</u>	<u>End Date</u>
Notice of Consultation Meeting	DOTA	30-45 days	August 24, 2012	September 27, 2012
Air Carrier acknowledgement of meeting notice	Air Carriers	32 days	August 27, 2012	September 27, 2012
Consultation Meeting	DOTA	1 Day	September 27, 2012	
Air Carrier Comment Period after the Consultation Meeting	Air Carriers	30 days	September 27, 2012	October 27, 2012
State of Hawaii submits PFC Application to the FAA	DOTA	18 days	October 29, 2012	November 16, 2012
FAA review for substantial completion and State of Hawaii to correct, if necessary 2012	FAA/DOTA	30 days	November 16, 2012	December 17,
FAA approval period	FAA	120 days	November 16, 2012	March 18, 2013
FAA Final Agency Decision	FAA	1 day	March 18, 2013 (FAD)	
Notice to Air Carriers of Charge Effective Date	DOTA	45 days	March 18 – March 31, 2013	

Estimated Charge Effective Date: February 1, 2014
(must be the 1st day of the month that is at least 30 days form the date of the FAD)