Alaska DOT&PF

Statewide Design and Engineering Services
Pavement Management and Preservation Office
5800 East Tudor Road, Anchorage AK 99507-1286

Pavement Inspection Report
Dillingham Airport

Airport Name	IATA	ICAO	Latitude	Longitude	Elevation (ft)
Dillingham Airport	DLG	PADL	59° 2' 40.8" N	158° 30' 19.8" W	82

Please refer all questions or for further information about this report, please contact the AKDOT&PF Pavement Management and Preservation Office as follows:

Point of Contact	Phone	Email	Date Inspected	Date Published
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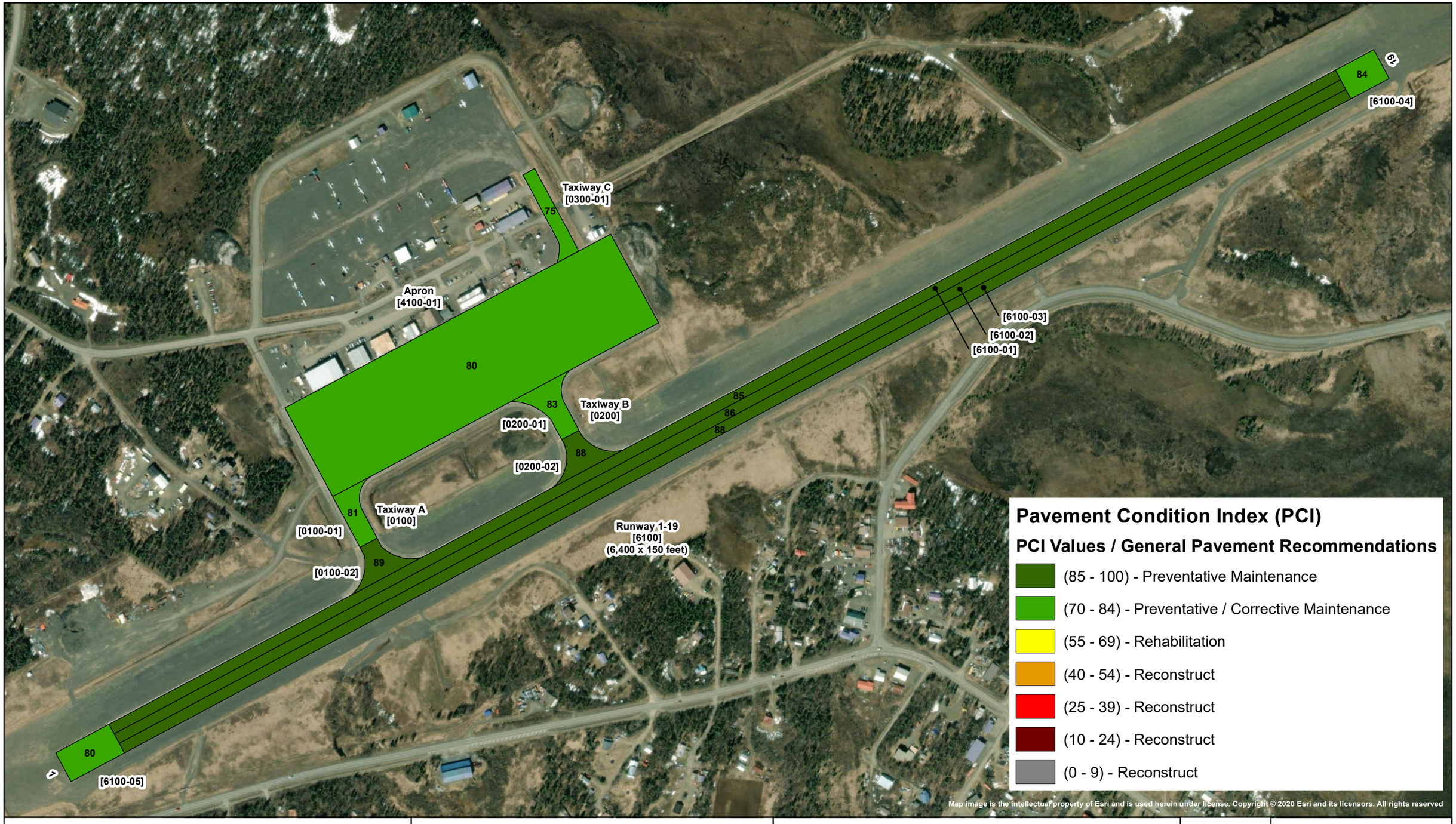


Dillingham Airport

Airport Code: DLG
Site Number: 50153.*A

Pavement Condition Index (PCI)

Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

N W E S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Dillingham Airport

Airport Code: DLG
Site Number: 50153.*A

Sample Unit
Pavement Condition Index (PCI)

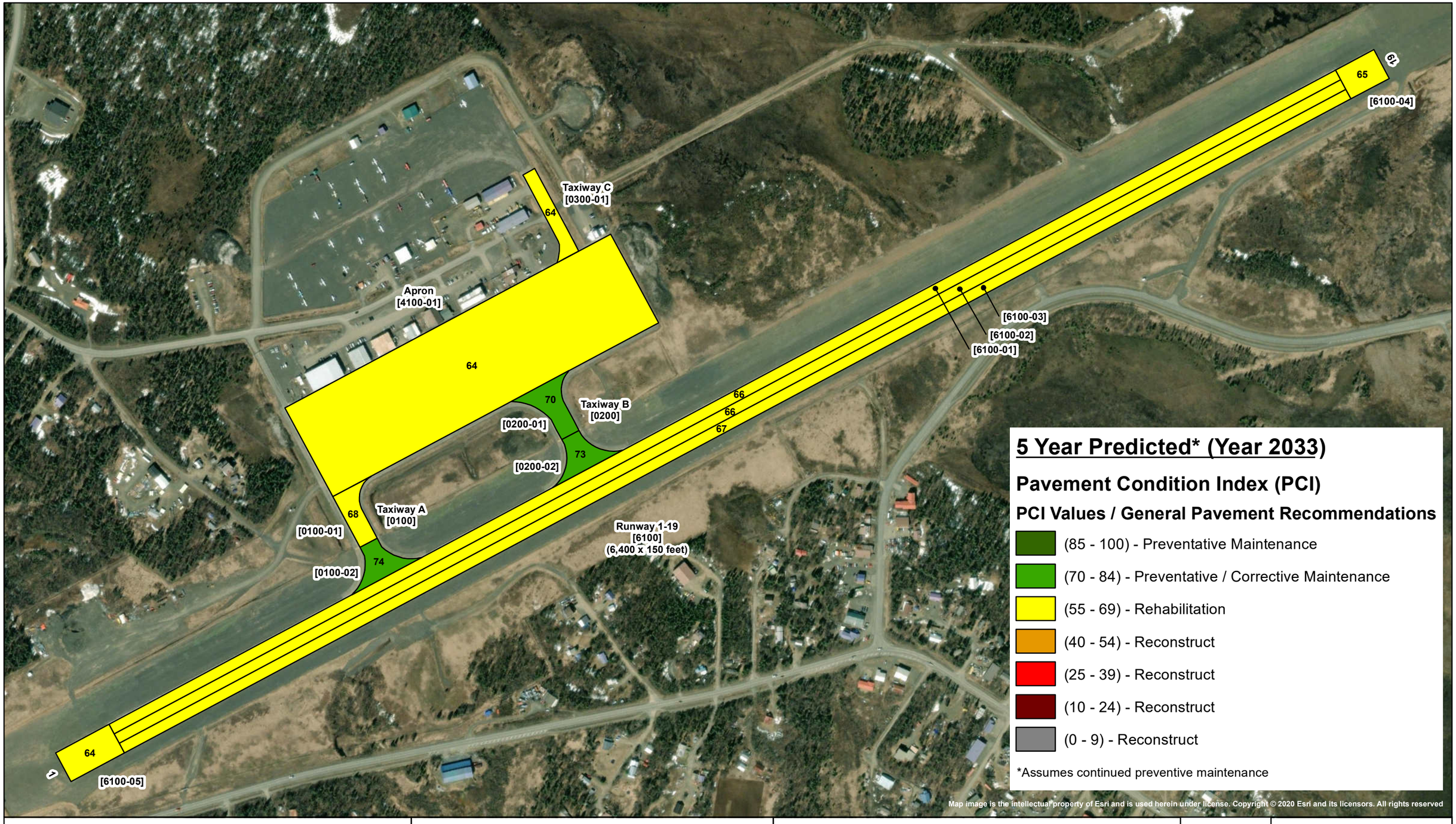
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 2 of 6



Dillingham Airport

Airport Code: DLG
Site Number: 50153.*A

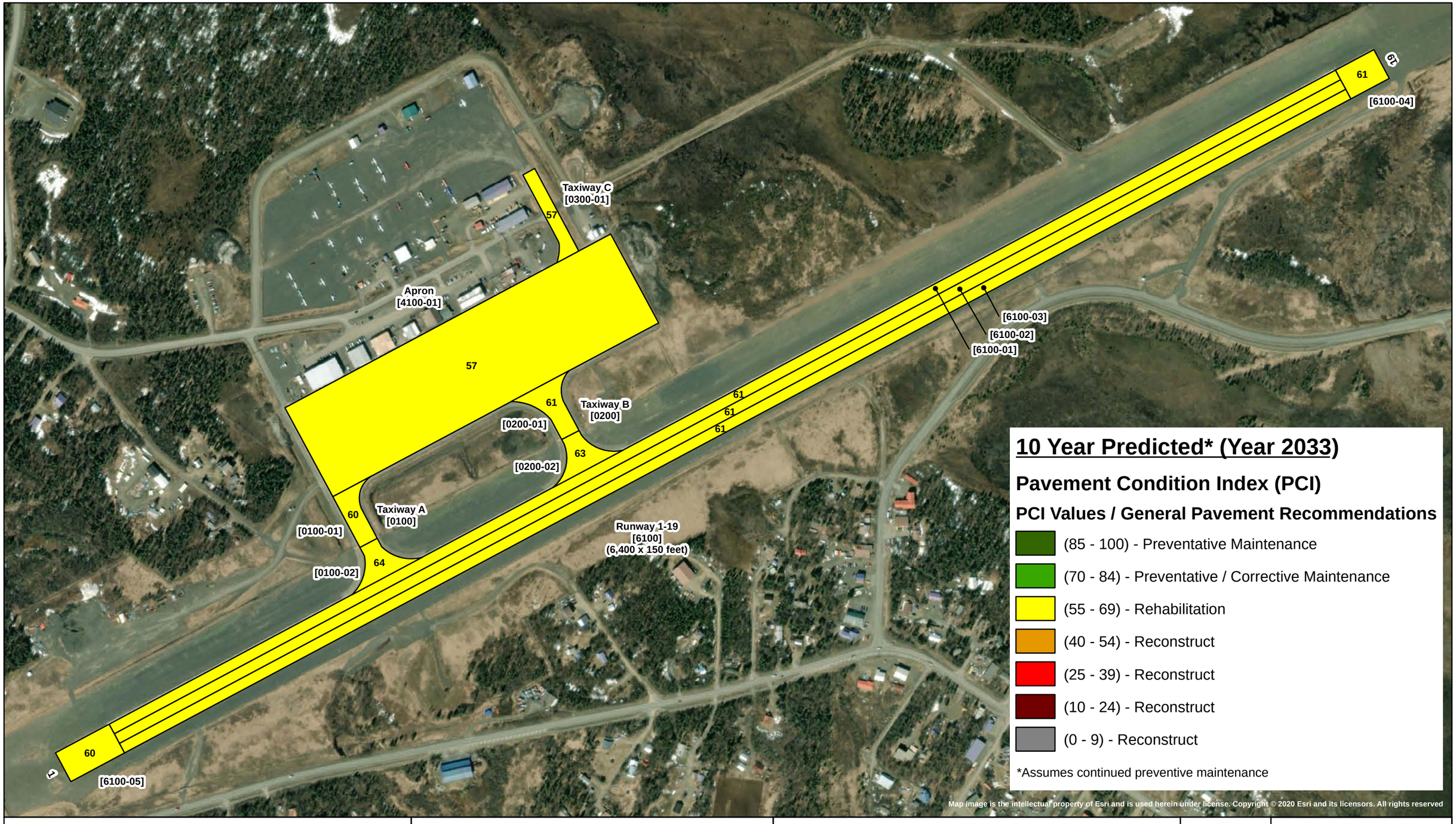
5 Year Predicted
Pavement Condition Index (PCI)
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 3 of 6



Dillingham Airport

Airport Code: DLG
Site Number: 50153.*A

10 Year Predicted
Pavement Condition Index (PCI)

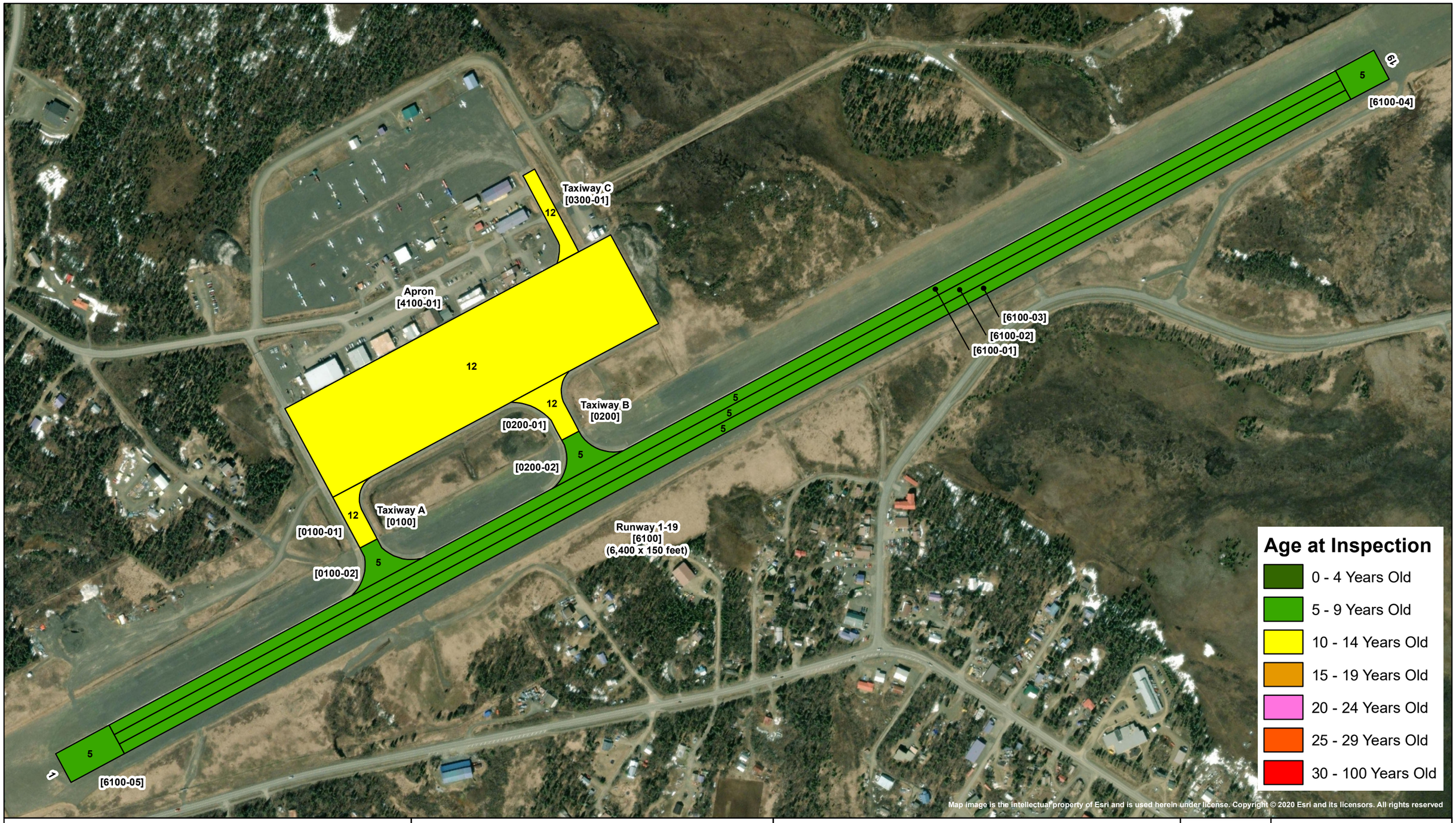
Target PCI Range for Runways: 70 to 100
Target PCI Range for Taxiways and Aprons: 60 to 100

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 4 of 6



Dillingham Airport

Airport Code: DLG
Site Number: 50153.*A

Pavement Age at Inspection

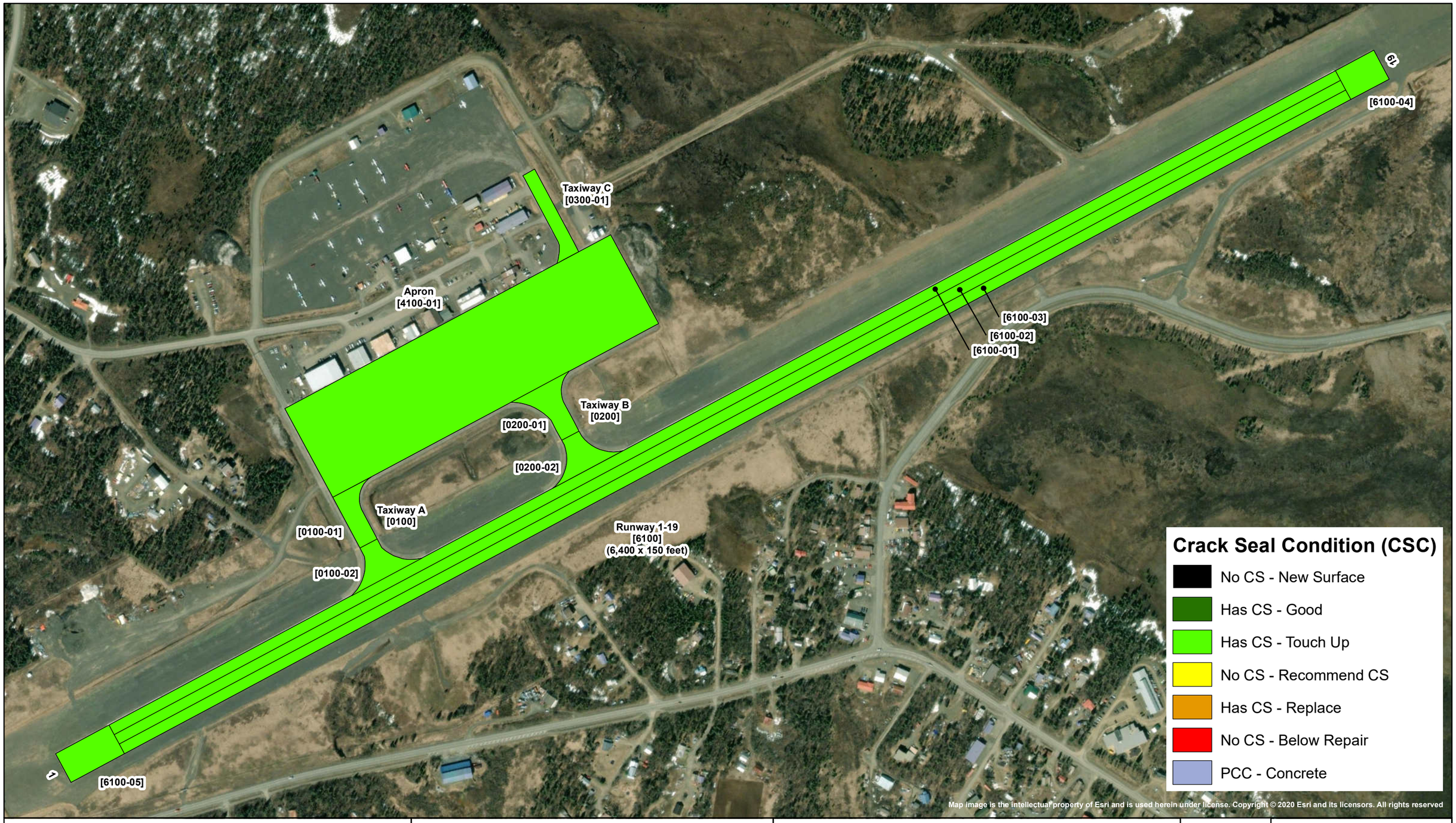
N W E S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

Map 5 of 6



Dillingham Airport

Airport Code: DLG
Site Number: 50153.*A

Pavement Crack Seal Condition (CSC)

N W E S

2023 Pavement Inspection Results

0 250 500 1,000
Feet

Map Created by Duval Engineering for AK DOT&PF

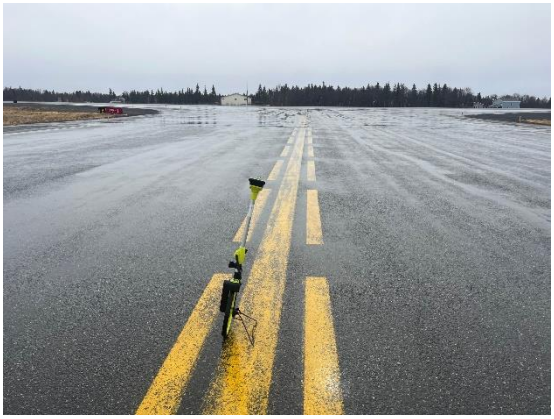
Map 6 of 6

AIRPORT PAVEMENT INSPECTION NOTES BY BRANCH

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0100	Taxiway A	Taxiway	2	54,464	85

Taxiway A was initially constructed in 1987 and had surface reconstruction in 2011. Additionally, the taxiway had a partial reconstruction when the runway underwent a surface reconstruction in 2018. Annual crack seal operations have been performed on the branch. The most common distresses observed are low to medium severity longitudinal and transverse cracking and low severity weathering. Field observations include wearing surface course, development of new unfilled cracks, and widening of previously filled cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0200	Taxiway B	Taxiway	2	61,516	85



Like Taxiway A, Taxiway was initially constructed in 1987 and had surface reconstruction in 2011. Additionally, the taxiway had a partial reconstruction when the runway underwent a surface reconstruction in 2018. Annual crack seal operations have been performed on the branch. The most common distresses observed are low to medium severity longitudinal and transverse cracking and low severity weathering. Field observations include wearing surface course, development of new unfilled cracks, and widening of previously filled cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
0300	Taxiway C	Taxiway	1	28,420	75

Taxiway C, which connects the general aviation gravel apron to the main paved apron, was originally constructed in 1987 and was reconstructed in 2011 together with Taxiways A and B. Annual crack seal operations have been performed on the branch. The most common distresses observed are low to medium severity longitudinal and transverse cracking, low severity raveling, and low severity weathering. Field observations include the creation of new unfilled cracks along the paving joints and the widening of previously filled cracks.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
4100	Main Apron	Apron	1	790,500	80

The Main Apron was initially constructed in 1987 and underwent a surface reconstruction in 2011. Annual crack seal operations have been performed on the branch. The most common distresses observed are low severity depression, low to medium severity longitudinal and transverse cracking, low severity raveling, and low severity weathering. Field observations include dimpling across the apron creating areas of standing water, the development of new unfilled cracks, and the widening of previously filled cracks. Also, some low to medium rutting has formed where the commercial aviation loading and unloading operations are performed.

Branch ID	Branch Name	Branch Use	No. of Sections	Area (sf)	Weighted Average PCI
6100	Runway 01/19	Runway	5	1,032,000	86




Runway 01/19 was first built in 1987 and underwent surface reconstruction in 2018, including 4 inches of asphalt and 6 inches of foam stabilized base course. The most common distresses observed are low to medium severity longitudinal and transverse cracking, low severity raveling, and low severity weathering. Field pavement observations include development of new unfilled cracks, widening of previously filled cracks, and localized areas of raveling.

BRANCH CONDITION REPORT

Branch ID	No. of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (Sq Ft)	Use	Average PCI	Standard Deviation PCI	Weighted Average PCI
0100	2	440	90	54,464	TAXIWAY	85.00	4.00	85.04
0200	2	440	90	61,516	TAXIWAY	85.50	2.50	85.26
0300	1	430	62	28,420	TAXIWAY	75.00	0.00	75.00
4100	1	1,700	465	790,500	APRON	79.80	0.00	79.80
6100	5	19,680	90	1,032,000	RUNWAY	84.60	2.65	86.01

Note: the dimensions in the Branch Condition Report are derived from area calculations and may not reflect actual dimensions of individual sections. Refer to the maps for actual section dimensions.

BRANCH USE CONDITION REPORT

Use Category	No. of Sections	Total Area (Sq Ft)	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
APRON	1	790,500	79.80	0.00	79.80
RUNWAY	5	1,032,000	84.60	2.65	86.01
TAXIWAY	5	144,400	83.20	5.08	83.16
ALL	11	1,966,900	83.53	4.09	83.30

SECTION CONDITION REPORT

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	True Area (Sq Ft)	Last Inspection Date	Age At Inspection	PCI
0100	0100-01	7/1/2011	AAC	TAXIWAY	P	26,962	6/1/2023	12	81
0100	0100-02	7/1/2018	AC	TAXIWAY	P	27,502	6/1/2023	5	89
0200	0200-01	7/1/2011	AAC	TAXIWAY	P	33,662	6/1/2023	12	83
0200	0200-02	7/1/2018	AC	TAXIWAY	P	27,854	6/1/2023	5	88
0300	0300-01	10/31/1987	AAC	TAXIWAY	P	28,420	6/1/2023	36	75
4100	4100-01	7/1/2011	AAC	APRON	P	790,500	6/1/2023	12	80
6100	6100-01	7/1/2018	AAC	RUNWAY	P	320,000	6/1/2023	5	85
6100	6100-02	7/1/2018	AAC	RUNWAY	P	320,000	6/1/2023	5	86
6100	6100-03	7/1/2018	AAC	RUNWAY	P	320,000	6/1/2023	5	88
6100	6100-04	7/1/2018	AAC	RUNWAY	P	30,000	6/1/2023	5	84
6100	6100-05	7/1/2018	AAC	RUNWAY	P	42,000	6/1/2023	5	80

SECTION CONDITION REPORT (SUMMARY BY AGE CATEGORY)

Age Category	Average Age at Inspection	Total Area (Sq Ft)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
03-05	5	1,087,356	7	85.71	2.86	86.13
11-15	12	851,124	3	81.27	1.32	79.96
36-40	36	28,420	1	75.00	0.00	75.00
ALL	10	1,966,900	11	83.53	4.09	83.30

Work History Report

Pavement Database: Alaska

Network: Dillingham Airport **Branch:** 0100 Taxiway A **Section:** 0100-01 **Surface:**AAC
L.C.D. 7/1/2011 **Use:** TAXIWAY **Rank:** P **Length:** 265.00 (Ft) **Width:** 90.00 (Ft) **True Area:** 26962 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2011	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	3.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 0100 Taxiway A **Section:** 0100-02 **Surface:**AC
L.C.D. 7/1/2018 **Use:** TAXIWAY **Rank:** P **Length:** 175.00 (Ft) **Width:** 90.00 (Ft) **True Area:** 27502 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	NC-AC	New Construction - AC	0.00	0.00	☑	(Funded via AIP)
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours

Network: Dillingham Airport **Branch:** 0200 Taxiway B **Section:** 0200-01 **Surface:**AAC
L.C.D. 7/1/2011 **Use:** TAXIWAY **Rank:** P **Length:** 265.00 (Ft) **Width:** 90.00 (Ft) **True Area:** 33662 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2011	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	3.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 0200 Taxiway B **Section:** 0200-02 **Surface:**AC
L.C.D. 7/1/2018 **Use:** TAXIWAY **Rank:** P **Length:** 175.00 (Ft) **Width:** 90.00 (Ft) **True Area:** 27854 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	NC-AC	New Construction - AC	0.00	0.00	☑	(Funded via AIP)
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours

Network: Dillingham Airport **Branch:** 0300 Taxiway C **Section:** 0300-01 **Surface:**AAC
L.C.D. 7/1/2011 **Use:** TAXIWAY **Rank:** P **Length:** 430.00 (Ft) **Width:** 62.00 (Ft) **True Area:** 28420 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2011	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	0.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 4100 Main Apron **Section:** 4100-01 **Surface:**AAC
L.C.D. 7/1/2011 **Use:** APRON **Rank:** P **Length:** 1,700.00 (Ft) **Width:** 465.00 (Ft) **True Area:** 790500 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2011	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
8/1/2003	PA-AD	Patching - AC Deep	0.00	3.00	☐	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	3.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 6100 01/19 **Section:** 6100-01 **Surface:** AAC

L.C.D. 7/1/2018 **Use:** RUNWAY **Rank:** P **Length:** 6,400.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 320000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours
8/1/2015	CS-AC	Crack Sealing - AC	0.00	0.00	☐	(Funded via AIP)
8/1/2003	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	2.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 6100 01/19 **Section:** 6100-02 **Surface:** AAC

L.C.D. 7/1/2018 **Use:** RUNWAY **Rank:** P **Length:** 6,400.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 320000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours
8/1/2015	CS-AC	Crack Sealing - AC	0.00	0.00	☐	(Funded via AIP)
8/1/2003	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	6.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 6100 01/19 **Section:** 6100-03 **Surface:** AAC

L.C.D. 7/1/2018 **Use:** RUNWAY **Rank:** P **Length:** 6,400.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 320000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours
8/1/2015	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/2003	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	
10/31/1987	NC-IN	New Construction - Initial	0.00	2.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 6100 01/19 **Section:** 6100-04 **Surface:** AAC

L.C.D. 7/1/2018 **Use:** RUNWAY **Rank:** P **Length:** 200.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 30000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours
8/1/2015	CS-AC	Crack Sealing - AC	0.00	0.00	☐	(Funded via AIP)
8/1/2003	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	2.00	☑	(Funded via AIP)

Network: Dillingham Airport **Branch:** 6100 01/19 **Section:** 6100-05 **Surface:** AAC

L.C.D. 7/1/2018 **Use:** RUNWAY **Rank:** P **Length:** 280.00 (Ft) **Width:** 150.00 (Ft) **True Area:** 42000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	4" AC, 6" Foam Stabilized Base Cours
7/1/2018	SR-AC	Surface Reconstruction - AC	0.00	6.00	☑	4" AC, 6" Foam Stabilized Base Cours
8/1/2015	CS-AC	Crack Sealing - AC	0.00	0.00	☐	(Funded via AIP)
8/1/2003	SR-AC	Surface Reconstruction - AC	0.00	4.00	☑	(Funded via AIP)
10/31/1987	NC-IN	New Construction - Initial	0.00	2.00	☑	(Funded via AIP)

Work History Report

Pavement Database: Alaska

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Crack Sealing - AC	5	1,032,000.00	0.00	0.00
New Construction - AC	2	55,356.00	0.00	0.00
New Construction - Initial	9	1,911,544.00	2.56	1.50
Patching - AC Deep	1	790,500.00	3.00	0.00
Surface Reconstruction - AC	23	4,086,256.00	4.61	0.92

PHYSICAL PROPERTY DATA

		Pavement		Base		Subbase		Subgrade	
Branch ID	**Section ID**	**Thick (in)**	**Type**	**Thick (in)**	**Type**	**Thick (in)**	**Type**	**Type**	**CBR**
Taxiway A 0100	0100-01	4	P-401	6 5	FATB P-209	15	P-154	SM	8
	0100-02	4	P-401	6 5	FATB P-209	15	P-154	SM	8
Taxiway B 0200	0200-01	4	P-401	6 5	FATB P-209	15	P-154	SM	8
	0200-02	4	P-401	6 5	FATB P-209	15	P-154	SM	8
Taxiway C 0300	0300-01	2	P-401	6	P-209	24	P-154	SM	8
Apron 4100	4100-01	4	P-401	6 5	FATB P-209	24	P-154	SM	8
Runway 01-19 6100	6100-01	4	P-401	6 3	FATB P-209	21	P-154	SM	8
	6100-02	4	P-401	6 3	FATB P-209	21	P-154	SM	8
	6100-03	4	P-401	6 3	FATB P-209	21	P-154	SM	8
	6100-04	3	P-401	6	P-209	36	P-154	SM	8
	6100-05	2	P-401	6	P-209	25	P-154	SM	8

Notes:
1. FATB = Foamed Asphalt Treated Base

AIRCRAFT FLEET MIX

No.	Aircraft	Gross Wt (lb)	% Gross Wt on Main Gear	Tire Pressure (psi)	Annual Departures	20 Yr Coverages
1	Beechcraft Baron 55	5,424	95.00	56	17	39
2	Cessna 206 Stationair	3,612	95.00	52	17	35
3	Beechcraft Bonanza	3,412	95.00	40	3,648	8,029
4	S-5	3,999	95.00	40	163	347
5	PA-32-300	3,400	95.00	50	346	699
6	S-15	17,637	95.00	59	8	31
7	Cessna 208B	8,750	95.00	75	2,366	5,863
8	S-10	10,450	95.00	52	102	314
9	PA-31-325	6,536	95.00	66	277	644
10	D-15	15,000	95.00	55	1,299	6,654
11	King Air B200	12,590	95.00	98	9	35
12	Cessna Citation X	36,000	95.00	189	2	9
13	D-25	25,000	95.00	75	6	33
14	Saab 340B	29,000	95.00	55	1,272	8,476
15	D-100	100,000	95.00	140	82	594
16	Dash 8 Series 100	34,700	94.40	131	356	1,776
17	D-50	50,000	95.00	80	1,152	8,023
18	Gulfstream G-V/G500	90,900	95.00	188	2	13
19	B737-100	111,000	92.00	157	209	1,408
20	B737-300	140,000	90.80	201	91	606
21	B737-400	150,500	93.80	185	130	937
22	B737-7 MAX	177,500	93.60	204	204	1,469
23	EMB-175 STD	83,026	95.00	136	666	4,366
24	MD-83	161,000	94.80	195	122	909
25	DC9-51	122,000	94.00	172	173	1,214
26	L-100-20	155,801	96.40	104	76	807
27	C-130	155,000	95.00	105	113	1,187
28	C-17A	585,000	95.00	138	17	321

PAVEMENT CLASSIFICATION RATINGS

Runway	Critical Aircraft	Max Allowable Wt (lb)	Subgrade Mr (psi)	Evaluation Thickness (in)	Pass to Traffic Cycle Ratio	PCR
01-19	C-17A	702,558	12,000	33.0	1.0	738/F/C/W/T

PCR CALCULATION NOTES

- 1% traffic growth assumed.
- Subgrade strength reduction for frost applied.
- S-5, S-10 and S-15 refer to “generic” single gear aircraft as modeled in FAARFIELD.
- D-15, D-25, D-50, and D-100 refer to “generic” dual gear aircraft as modeled in FAARFIELD.

REFERENCES

Year	Project No.	Document Title
2017	3-02-0078-016-2017, CFAPT00104	Runway Rehabilitation, As-Built Plans
2017	3-02-0078-XXX, CFAPT00104	Engineering Design Report
2012	3-02-0078-013, 59304	Improvements, As-Built Plans
2012	3-02-0078-013, 59304	Geological Report
2010	3-02-0078-012, 52289	Apron, Taxiway A and B, As-Built Plans
2003	53424	Geological Report
2003	3-02-0078-1003, 53424	Runway Rehabilitation, As-Built Plans
1991	3-02-0078-06, 57978	Apron Expansion, As-Built Plans
1991	57978	Geological Report
1986	3-02-0078-02, 53977	Runway, Taxiway, Apron Paving Improvements
1983	3-02-0078-01, D10442	Sand Storage Building
1980	6-02-0078-03	Airport Improvements, As-Built Plans
1980		Geology Report
1979		Geological Report
1973	8-02-0078-01-72	Runway, Taxiway, Apron, As-Built Plans
1970		Geological Report