2023 ODAV Pavement Evaluation Program Warrenton-Astoria Regional Airport

Astoria, Oregon

December 29, 2023

Prepared for

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TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

1 OVERVIEW

GRI assisted with updating the Oregon Department of Aviation (ODAV) airport pavement management system and developing a 5-year plan comprised of maintenance, surface treatment, rehabilitation, and reconstruction projects for the Warrenton-Astoria Regional Airport in Astoria, Oregon. This project was implemented as part of the ODAV and Federal Aviation Administration (FAA) *Oregon Continuous Aviation System Plan*. The information provided in this report ensures compliance with FAA Grant Assurance Number 11, which outlines that an airport shall have an effective airport pavement maintenance-management program in place to receive federal financial assistance for the construction, reconstruction, or repair of airport pavements.

GRI conducted surveys of the airside pavement at Warrenton-Astoria Regional Airport in 2023 in accordance with the procedures of Advisory Circular 150/5380-7B and ASTM International (ASTM) D5340. We uploaded the survey data into the PAVER database and used the software to provide a rapid calculation of the pavement condition index (PCI) rating. The PCI is a numerical indicator that defines the functional condition of the pavement based on visual inspection. The scale ranges from zero to 100, where zero represents a pavement in the worst possible condition with no remaining functional life and 100 represents a pavement in the best possible condition with no defects.

2 PAVEMENT INVENTORY

Warrenton-Astoria Regional Airport is located in Astoria, Oregon, and is owned and operated by the Port of Astoria. The airport consists of two runways, multiple primary taxiways, and multiple connector taxiways, taxilanes, and aprons that serve a variety of general aviation, air taxi, and military aircraft. The general location of the airport is shown below on the Warrenton-Astoria Regional Airport Location Map, Figure 2.1.

Figure 2.1: WARRENTON-ASTORIA REGIONAL AIRPORT LOCATION MAP

The airside pavements at the Warrenton-Astoria Regional Airport are comprised of asphalt concrete (AC), AC overlaid with AC (AAC), portland cement concrete (PCC) and PCC overlaid with AC (APC). The airport pavements, delineated by surface type and branch use, are shown on the Warrenton-Astoria Regional Airport Percent of Pavement Area by Surface Type, Figure 2.2, and on the Warrenton-Astoria Pavement Area by Branch Use, Figure 2.3, shown below. The pavement inventory, including work history for each pavement section, is displayed spatially on the Warrenton-Astoria Regional Airport Pavement Inventory, Figure 2.4. The pavement facilities summarized by branch and section are listed in Tables 1A and 2A, respectively, in Appendix A. The sample unit layout for each section is shown on Figure 1A in Appendix A. We used the sampling rates outlined in Table 3A of Appendix A in our survey. The pavement inventory, including work history for individual airport pavement sections, is provided in the work history report, Table 1F.

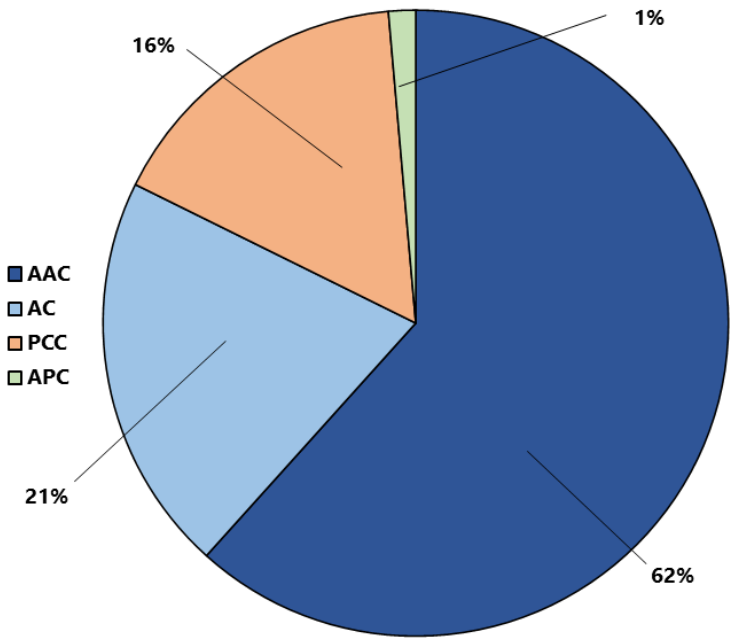


Figure 2.2: WARRENTON-ASTORIA REGIONAL AIRPORT PERCENT OF PAVEMENT AREA BY SURFACE TYPE

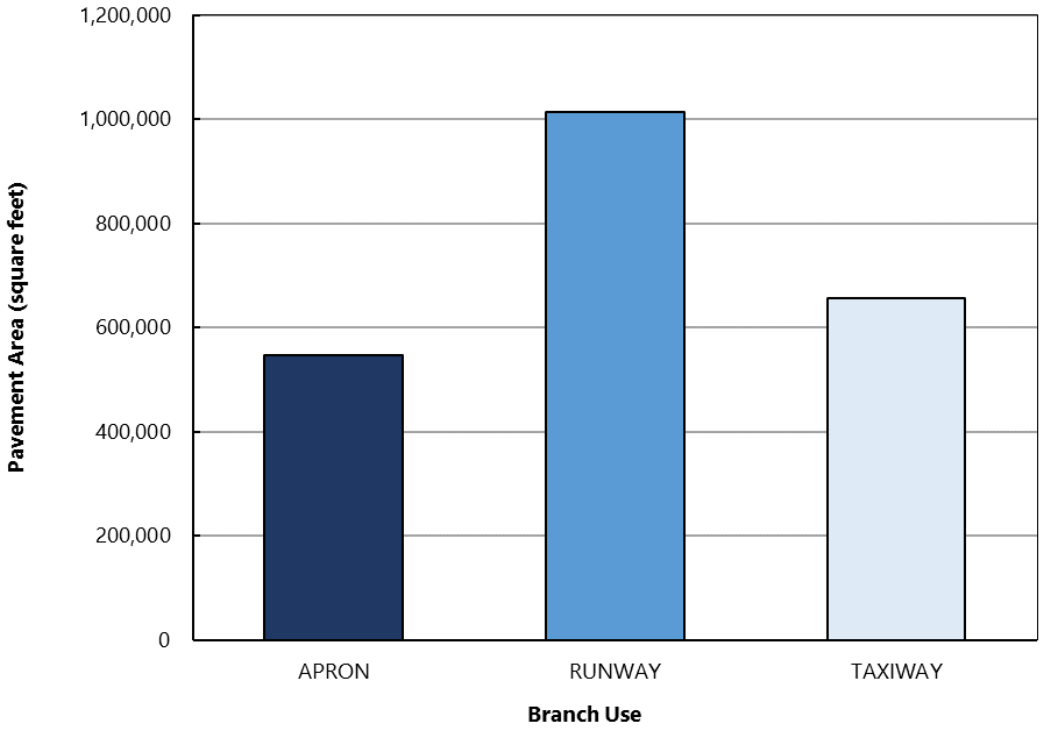
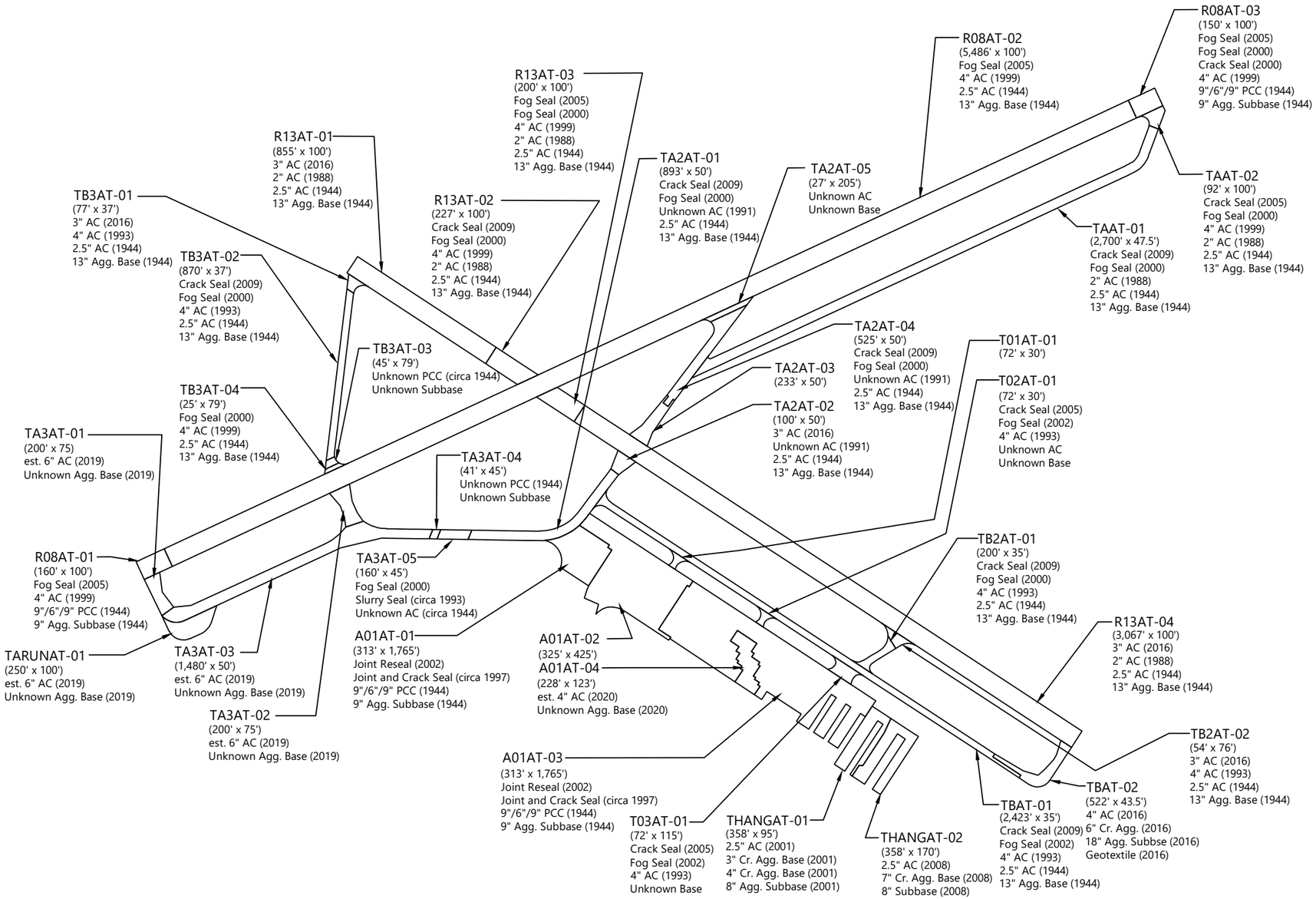


Figure 2.3: WARRENTON-ASTORIA REGIONAL AIRPORT PAVEMENT AREA BY BRANCH USE



ABBREVIATIONS: AC = ASPHALT CONCRETE; PCC = PORTLAND CEMENT CONCRETE; Cr. = CRUSHED; Agg. = AGGREGATE; est. = ESTIMATED

N

0 600 1200 FEET

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STATEWIDE PAVEMENT EVALUATION PROGRAM

WARRENTON-ASTORIA REGIONAL AIRPORT PAVEMENT INVENTORY

DEC. 2023 JOB NO. 6593-F FIG. 2.4

3 PAVEMENT CONDITION INSPECTION RESULTS

3.1 Introduction

GRI conducted a visual PCI survey of the airside pavements at Warrenton-Astoria Regional Airport in July 2023. The 2023 survey work was performed on sections last inspected in 2018 in order to update the Warrenton-Astoria Regional Airport inspection data. GRI performed the 2023 PCI survey in accordance with the methods described in FAA Advisory Circular 150/5380-6C and ASTM D5340 and further discussed in Appendix B of this report.

The PCI is based on the type, severity, and quantity of each distress found in an inspected sample unit. Further discussion of distress types for flexible and rigid pavement is provided in Appendix B and summarized in Table 1B in Appendix B. The results of the PCI survey are displayed using a seven-category rating scale in accordance with ASTM D5340. Details of the ASTM PCI rating scale are provided in Table 3-1 below.

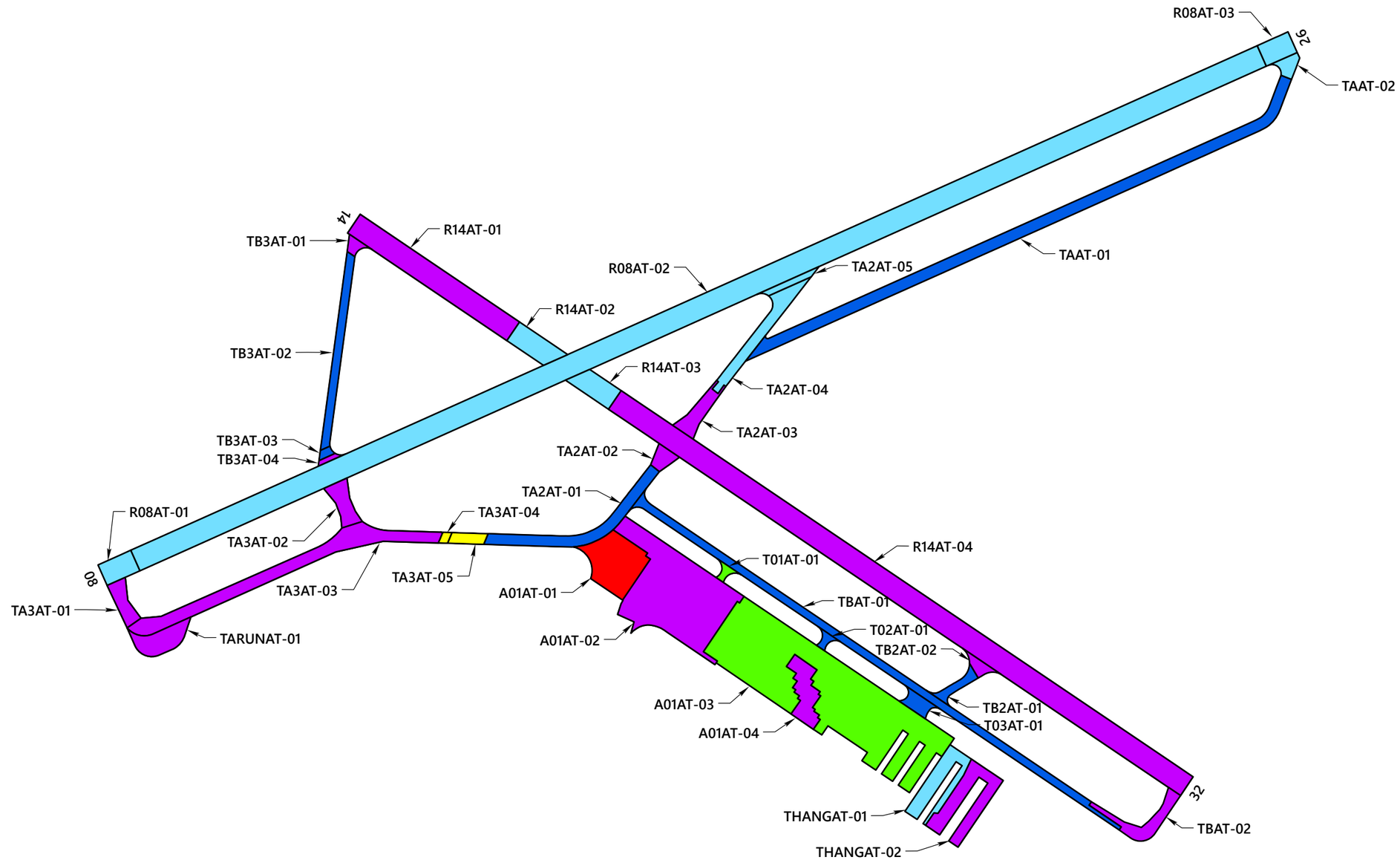
Table 3-1: ASTM PCI RATING SCALE

PCI Color Legend	PCI Range	PCI Rating and Definition
	86 – 100	GOOD: Pavement has minor or no distresses and should require only routine maintenance.
	71 – 85	SATISFACTORY: Pavement has scattered low-severity distresses that should require only routine maintenance.
	56 – 70	FAIR: Pavement has a combination of generally low- and medium-severity distresses. Maintenance and repair needs may range from routine to major.
	41 – 55	POOR: Pavement has low-, medium-, and high-severity distresses that probably cause some operational problems. M&R needs will be major.
	26 – 40	VERY POOR: Pavement has predominantly medium- and high-severity distresses that cause considerable maintenance and operational problems. M&R needs will be major.
	11 – 25	SERIOUS: Pavement has mainly high-severity distresses that may affect operational safety; immediate repairs are needed.
	0 – 10	FAILED: Pavement deterioration has progressed to the point that safe aircraft operations are no longer possible; complete reconstruction is required.

3.2 Pavement Condition Index Survey Results

The area-weighted average PCI for all airport pavements at Warrenton-Astoria Regional Airport is approximately 77. The section PCIs ranged from a low of 8 to a high of 100. The primary distresses observed during the inspection were weathering, longitudinal and transverse cracking, depression, block cracking, and patching on AC-surfaced pavements; and linear cracking, corner and joint spalling, shattered slabs, joint seal damage, and patching on PCC pavements. Section PCIs following our pavement survey are displayed

below spatially on the Warrenton-Astoria Regional Airport 2023 PCI Survey Results, Figure 3.1.



SECTION PCI

- (86 - 100) GOOD
- (71 - 85) SATISFACTORY
- (56 - 70) FAIR
- (41 - 55) POOR
- (26 - 40) VERY POOR
- (11 - 25) SERIOUS
- (0 - 10) FAILED

N

0 500 1,000 Feet

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WARRENTON-ASTORIA REGIONAL AIRPORT
2023 PCI SURVEY RESULTS

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The condition distribution of the network by percent of total pavement area is provided on the Warrenton-Astoria Regional Airport Pavement Condition Rating by Percent of Area, Figure 3.2. A summary of the pavement condition results by branch and section is included in Tables 2B and 3B of Appendix B, respectively. A comparison between the previous inspection and the 2023 inspection is provided in Table 4B in Appendix B. The re-inspection report that includes inspection details for individual sample units is provided in Table 1E in Appendix E.

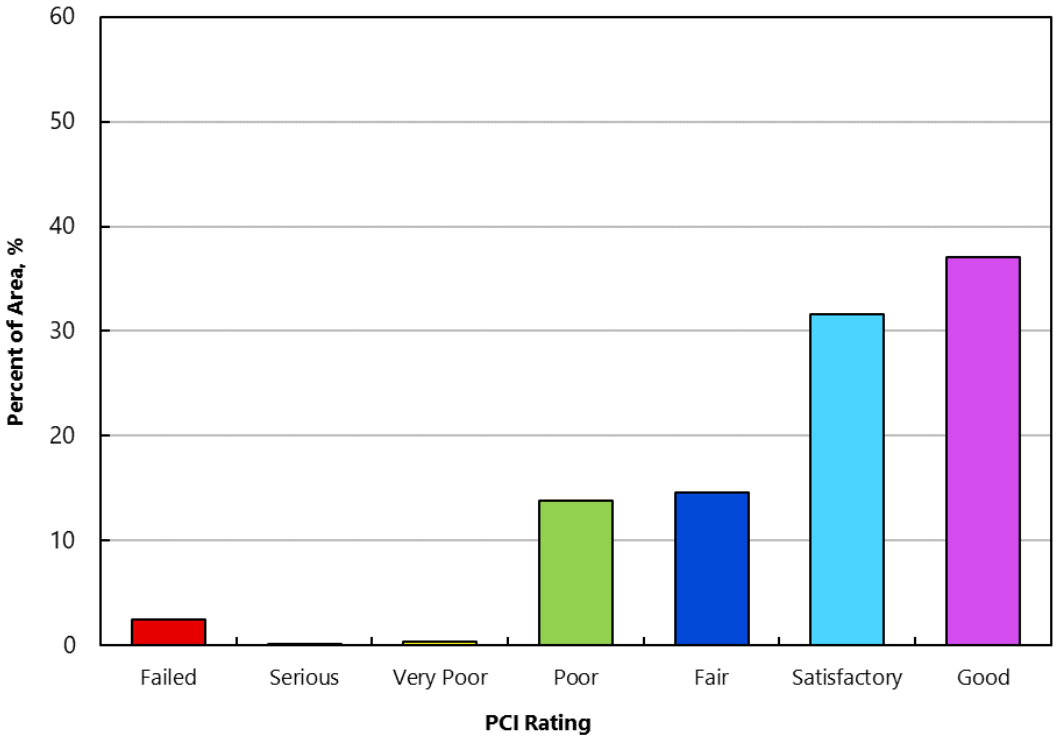


Figure 3.2: WARRENTON-ASTORIA REGIONAL AIRPORT PAVEMENT CONDITION RATING BY PERCENT OF AREA

4 FUTURE PAVEMENT CONDITION ANALYSIS

4.1 Introduction

In addition to assessing the current condition of a pavement, it is very important from a planning standpoint to be able to predict with reasonable accuracy the future condition. Additional details regarding our future pavement condition analysis, including pavement condition prediction models, are provided in Appendix C. PCI performance curves developed for Warrenton-Astoria Regional Airport are displayed on Figures 1C through 4C in Appendix C.

4.2 Future Condition Analysis

Using the condition prediction models discussed above, the projected condition of each pavement section was determined for 5- and 10-year periods. Based on this analysis, we project the PCI to decrease from a current value of 77 to a value of 71 in 2028 and 66 in 2033 if no maintenance or rehabilitation work is performed. The projected pavement condition in 5 years and 10 years for each pavement section at Warrenton-Astoria Regional Airport is displayed spatially on the Warrenton-Astoria Regional Airport Future Pavement Condition, Figure 4.1, and listed in Table 1C in Appendix C, along with the past and present PCI values for the pavement network.

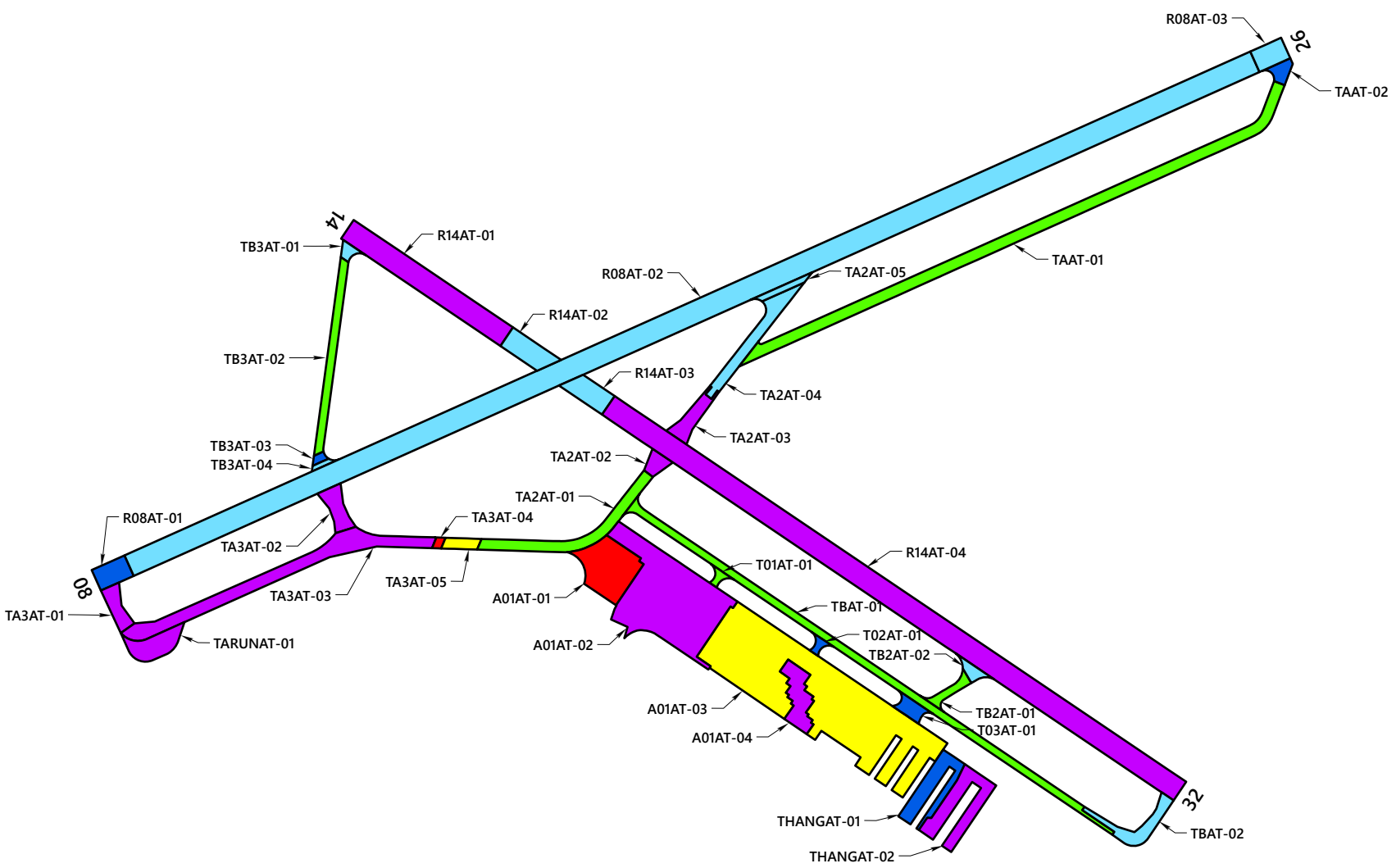
4.3 Functional Remaining Life

Functional remaining life is the practical amount of time a pavement is in service before requiring rehabilitation, as estimated solely based on visual condition. This is not to be confused with structural remaining life, which requires analysis of the structural capacity of a pavement and typically a field exploration and testing program that includes core explorations and falling weight deflectometer (FWD) deflection tests.

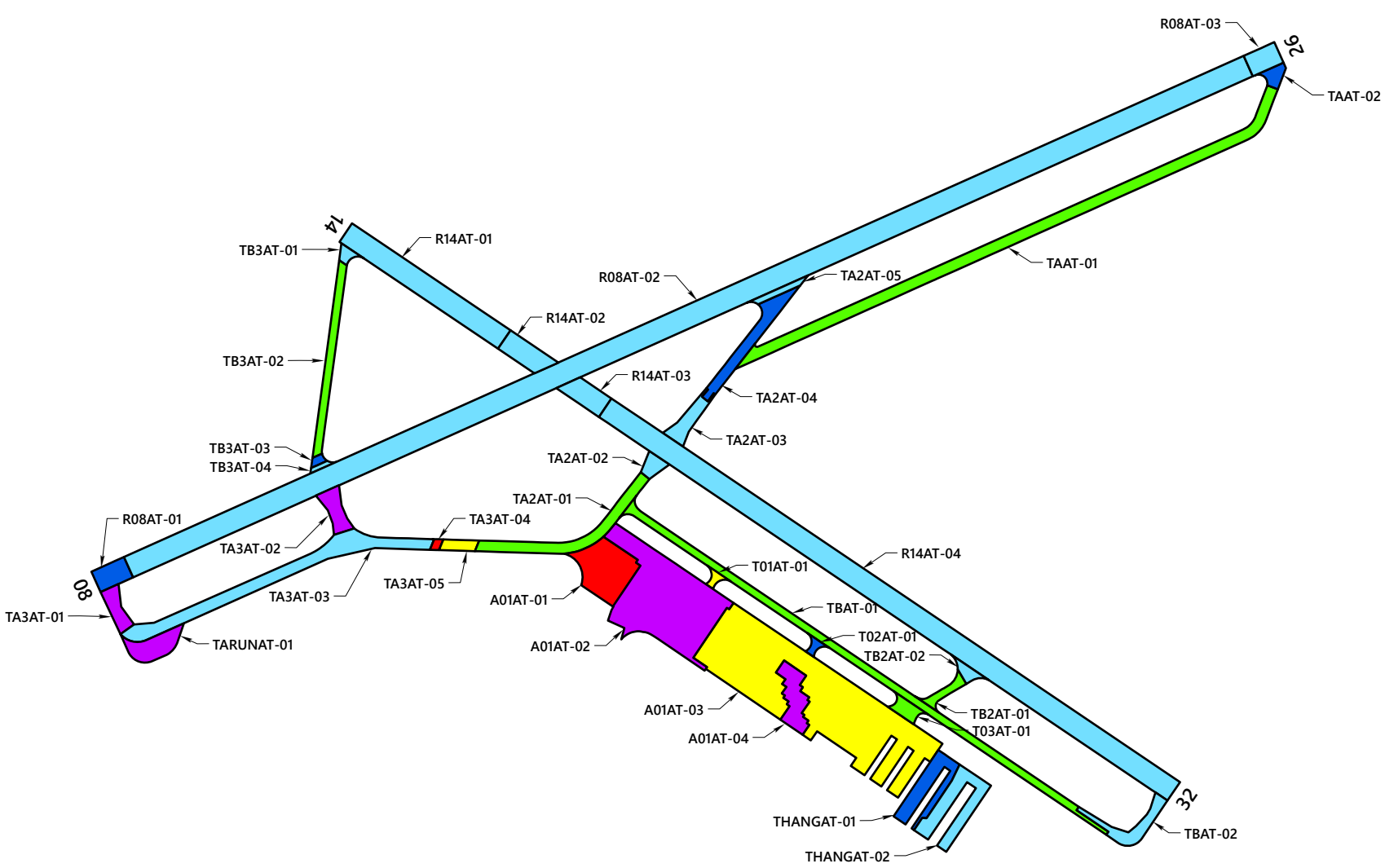
We calculated two forms of functional remaining life based on the current visual condition surveys of the pavement at Warrenton-Astoria Regional Airport. The first type of functional remaining life is the time until rehabilitation, such as an overlay, is needed. The critical PCI, further discussed in Section C.3 of Appendix C, is the threshold used for this type of functional remaining-life analysis. The second type of functional remaining life is the time until the pavement is no longer operational due to high foreign object debris (FOD) potential and increased safety concerns for trafficking aircraft. A PCI of 40 was set as the trigger point for the end of the pavement's functional service life with regard to FOD potential.

The two types of functional remaining life for each section at Warrenton-Astoria Regional Airport are summarized in Table 2C in Appendix C.

PREDICTED CONDITION IN 2028



PREDICTED CONDITION IN 2033



SECTION PCI

- (86 - 100) GOOD
- (71 - 85) SATISFACTORY
- (56 - 70) FAIR
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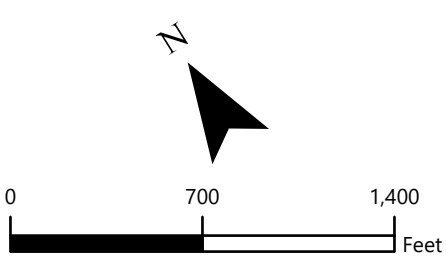

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WARRENTON-ASTORIA REGIONAL AIRPORT
FUTURE PAVEMENT CONDITION

DEC. 2023 JOB NO. 6593-F FIG. 4.1

5 MAINTENANCE AND REHABILITATION PROJECT RECOMMENDATIONS

5.1 Introduction

We evaluated M&R needs, as determined from the PAVER analysis results, in order to develop localized maintenance, surface treatment, rehabilitation, and reconstruction needs. Details of our M&R work priorities and unit costs for work activities are provided in Tables 1D and 2D, respectively, in Appendix D.

5.2 Recommended Localized Maintenance

Localized maintenance refers to activities such as crack sealing and patching, which should be performed annually in order to properly maintain aging pavements. Using the PAVER Localized Distress Maintenance Analysis tool, we developed a list of recommended localized maintenance. This list is shown in Table 3D in Appendix D and is independent of the surface treatments, rehabilitation, and reconstruction projects associated with the five-year surface treatment and rehabilitation work plan. A summary of total localized maintenance quantities is provided in Table 5-1 below.

Table 5-1: LOCALIZED MAINTENANCE QUANTITIES

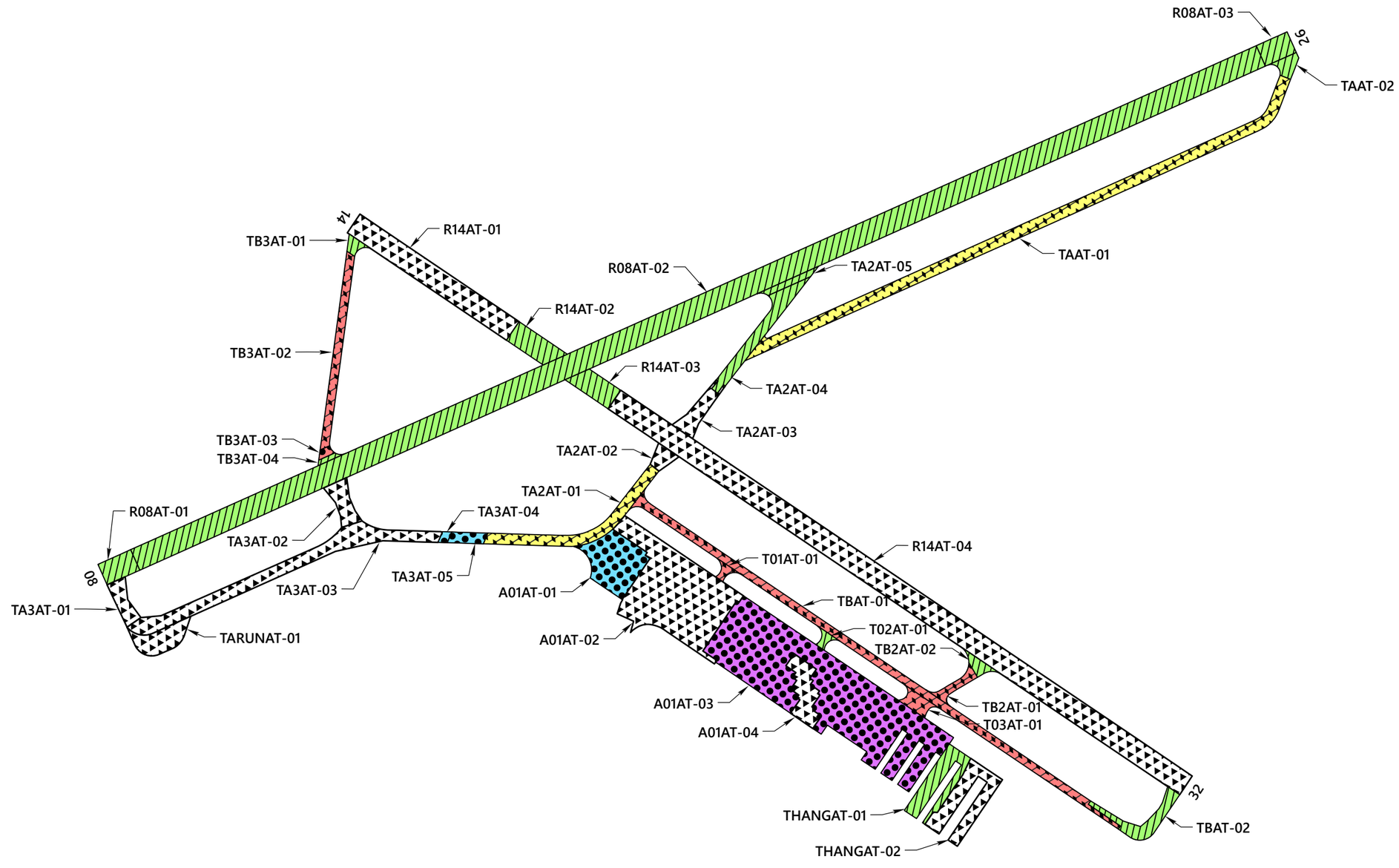
Localized Maintenance Operation	Quantity
Asphalt Concrete Crack Sealing	122,179 linear feet
Portland Cement Concrete Crack Sealing	24,976 linear feet
Asphalt Concrete Full-Depth Patching	580 square feet
Portland Cement Concrete Partial Depth Patching	119 square feet
Portland Cement Concrete Full-Depth Patching	9,520 square feet
Joint Sealing	8,760 linear feet

5.3 Surface Treatment, Rehabilitation, and Reconstruction Plan

To develop the five-year work plan, we first ran the eliminate backlog scenario with the PAVER M&R Work Planning Module in order to generate a list, organized by year, of surface treatment, rehabilitation, and reconstruction projects. We then reviewed the project list and refined it into practical construction projects for each year. A summary of surface treatment, rehabilitation, and reconstruction quantities is provided in Table 5-2 below, and maps of the project locations by year are shown on the Warrenton-Astoria Regional Airport 5-Year Pavement Management Plant, Figure 5.1. The complete list of recommended surface treatment, rehabilitation, and reconstruction projects is presented in Table 4D in Appendix D.

Table 5-2: SURFACE TREATMENT, REHABILITATION, AND RECONSTRUCTION QUANTITIES

Treatment Type	Quantity, square feet
Reconstruction	369,313
Overlay	320,476
Fog Seal	0
Slurry Seal	739,539



ACTION TIMING

- 2024
- 2025
- 2026
- 2027
- 2028

ACTION

- FOG SEAL
- SLURRY SEAL
- OVERLAY
- RECONSTRUCTION
- ROUTINE MAINTENANCE

N

0 500 1,000 Feet

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WARRENTON-ASTORIA REGIONAL AIRPORT

5-YEAR PAVEMENT MANAGEMENT PLAN

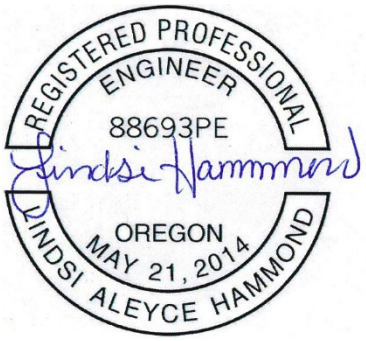
DEC. 2023 JOB NO. 6593-F FIG. 5.1

6 LIMITATIONS

This report has been prepared to assist the ODAV with pavement-related project planning for the Warrenton-Astoria Regional Airport. The scope is limited to the specific pavement areas described within this report. The conclusions and recommendations provided in this report are based on information provided by the ODAV, estimated costs, and an understanding of the pavement conditions based solely on visual assessment. The surface treatment, rehabilitation, and reconstruction recommendations and project selections provided in this report, as well as their corresponding cost estimates, are based on a practical grouping of projects and an estimate of the structural requirements. It is possible that recommendations based on a structural evaluation would differ materially from the recommendations given within this report. Therefore, the information included in this report should be used solely for project planning purposes, and it should be understood that rehabilitation costs may vary from the cost estimates given within this report.

Because the condition of the airport pavement network is dynamic, an effective maintenance and rehabilitation program should be reviewed and updated on a regular basis. In addition to regularly surveying and updating the pavement condition, completed construction activities should be tracked in the PAVER database. If Warrenton-Astoria Regional Airport would like to know more about the results presented in this report, please contact the undersigned.

Submitted for GRI,



RENEWS: 06/2025

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APPENDIX A

Pavement Inventory Reports and Maps

APPENDIX A

PAVEMENT INVENTORY REPORTS AND MAPS

A.1 PAVEMENT NETWORK

Warrenton-Astoria Regional Airport is located in Astoria, Oregon, and is owned and operated by the Port of Astoria. The pavement network/facilities at Warrenton-Astoria Regional Airport serve a variety of general aviation, air taxi, and military aircraft. Warrenton-Astoria Regional Airport consists of two runways, two primary parallel taxiways, and multiple connector taxiways, taxilanes, and aprons. The types of airside pavements include asphalt concrete (AC), AC overlaid with AC (AAC), portland cement concrete (PCC), and portland cement concrete overlaid with AC (APC).

The current airport pavement management system (APMS) network at Warrenton-Astoria Regional Airport has an approximate area of 2,218,275 square feet of paved airside facilities. The pavement network has previously been divided (by others) into a hierarchical order of branches, sections, and sample units that facilitate inspection and maintenance planning. The pavement facilities summarized by branch and section are listed in Tables 1A and 2A, respectively. Pavement sections and the sample unit layout for each section are shown on Figure 1A in this appendix.

A.2 BRANCHES

A branch, as defined in the PAVER system, is a facility that is a readily identifiable part of the pavement system and has a distinct function. For airports, branches typically consist of individual runways, taxiways, and aprons. The current pavement network for Warrenton-Astoria Regional Airport contains 14 branches, tabulated in Table 1A and shown on Figure 1A.

A.3 SECTIONS AND SAMPLE UNITS

A pavement section is the smallest management unit used when considering the application and selection of maintenance and rehabilitation (M&R) repairs and treatments and is defined by Section 2.1.8 of ASTM International (ASTM) D5340 as *"a contiguous pavement area having uniform construction, maintenance, usage history, and condition."* All sections should also have the same traffic volume and load intensity. The current pavement network included in the PAVER database for Warrenton-Astoria Regional Airport contains 37 sections that are managed by the Port of Astoria, which are tabulated in Table 2A and shown spatially on Figure 1A.

PAVER assigns a rank, which designates that pavement's prioritization in receiving maintenance and repair. The highest use or priority pavements, such as runways, taxiways, and terminal aprons, are ranked *Primary*, while the surrounding aprons and shoulders are

ranked *Secondary* and low-use areas are ranked *Tertiary*. The ranks for all sections are shown on Table 2A.

To facilitate the visual survey of the airport pavement, each section is further subdivided into smaller areas called sample units. Similar sizing of these units is critical, and studies have found that maintaining the size of the sample units to within 40% of the established normal distribution reduces the standard error of the average pavement condition index (PCI) values. To meet this criterion, the ASTM method recommends sample units for flexible pavements be 5,000 ± 2,000 square feet and 20 slabs ± 8 slabs for rigid pavements. The delineation of sample units for each section is displayed on Figure 1A.

A.4 SAMPLE UNIT DELINEATION

For an APMS survey, a PCI confidence level of 92% and an allowable error (e) of eight PCI points are used for all airport pavements. To determine the number of sample units that need to be inspected to achieve the required confidence level and allowable error, the following equation is used:

$$n = \frac{N \times s^2}{\left(e^2/_4\right)(N-1)+s^2} \qquad \text{(Equation 1)}$$

where:

n = number of sample units to be inspected
N = total number of samples in the pavement sections
e = allowable error
s = section standard deviation

For the 2023 Warrenton-Astoria Regional Airport PCI survey, Table 3A was used as a guideline in developing sampling rates for flexible and rigid pavement that reflect similar rates used for other large airport pavement networks. In general, this sampling rate distribution provides a 92% confidence level with a standard error of eight PCI points.

Sample unit locations at Warrenton-Astoria Regional Airport were selected using a systematic random sampling model method. This technique is implemented by first determining the number of sample units needed based on the confidence interval calculated using Equation 1. The first sample unit is randomly placed in the section and then the remaining sample units are systematically spaced throughout the section at an equal distance apart.

Table 1A: WARRENTON-ASTORIA REGIONAL AIRPORT PAVEMENT BRANCHES

Facility Designation (Branch ID)	Branch Name	Number of Sections	Approximate Area, square feet
A01AT	Apron 01 Astoria	4	546,073
R08AT	Runway 08/26 Astoria	3	579,600
R14AT	Runway 14/32 Astoria	4	434,994
T01AT	Taxiway 01 Astoria	1	3,396
T02AT	Taxiway 02 Astoria	1	3,355
T03AT	Taxiway 03 Astoria	1	9,227
TA2AT	Taxiway A2 Astoria	5	107,325
TA3AT	Taxiway A3 Astoria	5	126,641
TAAT	Taxiway A Astoria	2	143,421
TARUNAT	Taxiway A Run-Up Apron	1	22,810
TB2AT	Taxiway B2 Astoria	2	14,770
TB3AT	Taxiway B3 Astoria	4	41,037
TBAT	Taxiway B Astoria	2	108,601
THANGAT	Hangar Taxiway Astoria	2	77,025

Table 2A: WARRENTON-ASTORIA REGIONAL AIRPORT CURRENT PAVEMENT INVENTORY

BranchID	Branch Name	Branch Use	SectionID	From	To	Rank	Length, feet	Width, feet	Approximate Area, square feet	LCD	Surface Type	Approximate Slab Length, feet	Approximate Slab Width, feet	Number of Slabs
A01AT	Apron 01 Astoria	APRON	01	US Coast Guard Ramp	Office, FBO, T-Hangars	P	250	240	55,558	8/2/1944	PCC	15	12.5	296
A01AT	Apron 01 Astoria	APRON	02	US Coast Guard Ramp	Office, FBO, T-Hangars	P	410	325	162,373	9/1/2021	AC	0	0	0
A01AT	Apron 01 Astoria	APRON	03	US Coast Guard Ramp	Office, FBO, T-Hangars	P	1,140	268	301,741	8/2/1994	PCC	15	12.5	1708
A01AT	Apron 01 Astoria	APRON	04	A01AT-03	A01AT-03	P	120	220	26,401	9/1/2020	AC	0	0	0
R08AT	Runway 08/26 Astoria	RUNWAY	01	Runway 08 End (West)	Section 02	P	160	100	16,000	9/13/1999	APC	0	0	0
R08AT	Runway 08/26 Astoria	RUNWAY	02	Section 01	Section 03	P	5,486	100	548,600	9/13/1999	AAC	0	0	0
R08AT	Runway 08/26 Astoria	RUNWAY	03	Section 02	Runway 26 End (East)	P	150	100	15,000	9/13/1999	APC	0	0	0
R14AT	Runway 14/32 Astoria	RUNWAY	01	Runway 13 End	Section 02	P	855	100	85,500	8/29/2016	AAC	0	0	0
R14AT	Runway 14/32 Astoria	RUNWAY	02	Section 01	Runway 08/26	P	227	100	22,732	9/13/1999	AAC	0	0	0
R14AT	Runway 14/32 Astoria	RUNWAY	03	Runway 08/26	Section 04	P	200	100	19,993	9/13/1999	AAC	0	0	0
R14AT	Runway 14/32 Astoria	RUNWAY	04	Section 03	Section 05	P	3,067	100	306,769	9/1/2016	AAC	0	0	0
T01AT	Taxiway 01 Astoria	TAXIWAY	01	Taxiway B	US Coast Guard Ramp	P	72	30	3,396	8/1/1993	AC	0	0	0
T02AT	Taxiway 02 Astoria	TAXIWAY	01	Taxiway B	Apron 01	P	72	30	3,355	8/1/1993	AC	0	0	0
T03AT	Taxiway 03 Astoria	TAXIWAY	01	Taxiway B	Apron 01	P	72	115	9,227	8/1/1993	AC	0	0	0
TA2AT	Taxiway A2 Astoria	TAXIWAY	01	Taxiway A3	Runway 13/31	P	893	50	43,925	8/1/1991	AAC	0	0	0
TA2AT	Taxiway A2 Astoria	TAXIWAY	02	Section 01	Runway	P	100	50	8,087	8/29/2016	AAC	0	0	0
TA2AT	Taxiway A2 Astoria	TAXIWAY	03	Runway	Section 04	P	233	50	16,832	8/29/2016	AAC	0	0	0
TA2AT	Taxiway A2 Astoria	TAXIWAY	04	PCC	Section 05	P	525	50	31,854	8/1/1991	AAC	0	0	0
TA2AT	Taxiway A2 Astoria	TAXIWAY	05	Runway 8/26	Section 04	P	27	205	6,627	9/13/1999	AC	0	0	0
TA3AT	Taxiway A3 Astoria	TAXIWAY	01	Runway 08/26	Section 03	P	200	75	13,782	9/1/2019	AC	0	0	0
TA3AT	Taxiway A3 Astoria	TAXIWAY	02	Runway 08	Section 03	P	200	75	16,070	9/1/2019	AC	0	0	0
TA3AT	Taxiway A3 Astoria	TAXIWAY	03	Section 02	Section 04	P	1,480	50	87,104	9/1/2019	AC	0	0	0
TA3AT	Taxiway A3 Astoria	TAXIWAY	04	Section 03	Section 05	P	41	45	1,981	8/1/1944	PCC	11.5	15.0	12
TA3AT	Taxiway A3 Astoria	TAXIWAY	05	Section 04	Taxiway A2	P	160	45	7,704	8/1/1944	AC	0.0	0.0	0
TAAT	Taxiway A Astoria	TAXIWAY	01	Taxiway A2	Runway 26 End (East)	P	2,700	48	136,063	8/1/1988	AAC	0.0	0.0	0
TAAT	Taxiway A Astoria	TAXIWAY	02	Section 01	Runway 26 End (East)	P	92	100	7,358	9/13/1999	AAC	0.0	0.0	0
TARUNAT	Taxiway A Run-Up Apron	TAXIWAY	01	TA3AT-03	End	P	250	100	22,810	9/1/2019	AC	0.0	0.0	0
TB2AT	Taxiway B2 Astoria	TAXIWAY	01	Runway 13/31	Taxiway B	P	200	35	8,740	8/1/1993	AAC	0.0	0.0	0
TB2AT	Taxiway B2 Astoria	TAXIWAY	02	TB-01	Runway 13-31	P	54	76	6,030	8/29/2016	AAC	0.0	0.0	0
TB3AT	Taxiway B3 Astoria	TAXIWAY	01	Runway	Section 02	P	77	37	4,346	8/29/2016	AAC	0.0	0.0	0
TB3AT	Taxiway B3 Astoria	TAXIWAY	02	Section 01	Section 03	P	870	37	32,262	8/1/1993	AAC	0.0	0.0	0
TB3AT	Taxiway B3 Astoria	TAXIWAY	03	Section 02	Section 04	P	45	79	2,329	8/1/1944	PCC	11.5	15.0	20
TB3AT	Taxiway B3 Astoria	TAXIWAY	04	Section 03	Runway 08/26	P	25	79	2,100	9/13/1999	AAC	0	0	0
TBAT	Taxiway B Astoria	TAXIWAY	01	Taxiway A2	Section 02	P	2,423	35	86,863	8/1/1993	AAC	0	0	0
TBAT	Taxiway B Astoria	TAXIWAY	02	Section 01	Runway End	P	522	44	21,738	8/29/2016	AC	0	0	0
THANGAT	Hangar Taxiway Astoria	TAXIWAY	01	Apron 01	T-Hangars	S	355	115	33,806	10/4/2001	AC	0	0	0
THANGAT	Hangar Taxiway Astoria	TAXIWAY	02	THANGAT-01	T-Hangars	S	358	170	43,219	8/3/2008	AC	0	0	0

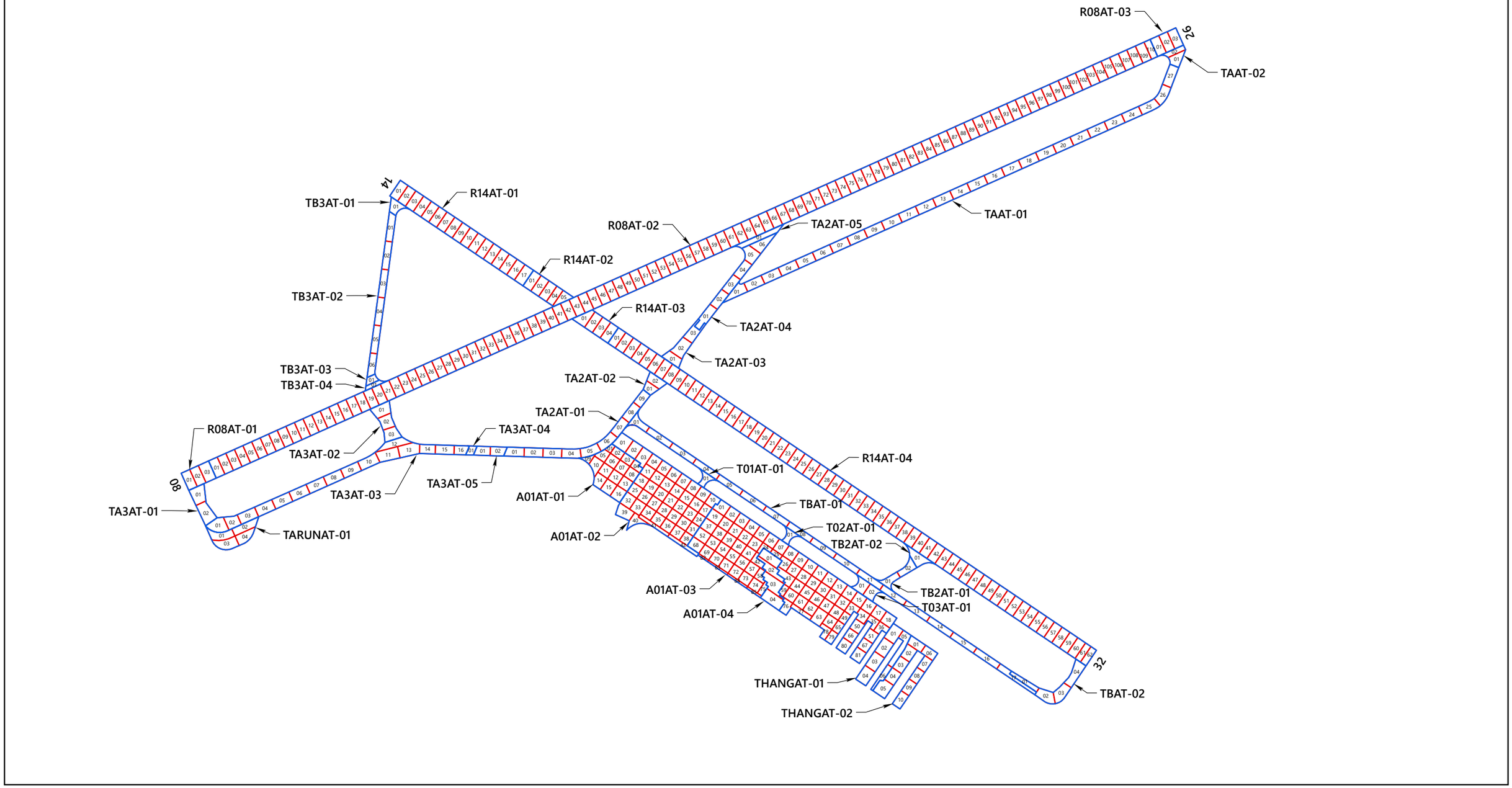
Abbreviations:
P = Primary pavement, S = Secondary pavement
LCD = Last Construction Date. The date of the last major rehabilitation (e.g. overlay)
AC = Asphalt Concrete, AAC = AC overlaid AC, PCC = Portland Cement Concrete

Table 3A: EXAMPLE SAMPLE RATES FOR AC AND PCC PAVEMENTS

AC Sampling Rate	
Total Number of Sample Units, N	Sample Units to Survey, n
1	1
2-3	2
4-6	3
7-13	4
14-38	5
39+	6

PCC Sampling Rate	
Total Number of Sample Units, N	Sample Units to Survey, n
1	1
2	2
3-4	3
5-6	4
7-8	5
9-11	6
12-14	7
15-19	8
20-27	9
28-38	10
39-58	11
59-104	12
105-313	13
314+	14

Note: AC = Asphalt Concrete
PCC = Portland Cement Concrete



LEGEND

SECTION

SAMPLE UNIT

N

0 500 1,000 Feet

GRI

WARRENTON-ASTORIA REGIONAL AIRPORT

SAMPLE UNIT LAYOUT

DEC. 2023 JOB NO. 6593-F FIG. 1A

APPENDIX B

Pavement Condition Index Survey Results

APPENDIX B

PAVEMENT CONDITION INDEX SURVEY RESULTS

B.1 METHODOLOGY

As previously discussed, the PCI is a measure of the pavement's functional surface condition and provides a methodology for assessing the causes of distress and whether the distress is related to a load or climatic conditions. Although the PCI is not a direct measure of structural capacity, it provides a suggestion of the structural needs of the pavement.

The PCI is based on the type, severity, and quantity of each distress found in an inspected sample unit. The results are displayed using a seven-category rating scale in accordance with ASTM D5340. Flexible pavement (e.g., AC and AAC) and rigid pavement (e.g., PCC) distress types are presented in Table 1B. A summary of the pavement condition results by branch and section is included in Tables 2B and 3B of Appendix B, respectively.

Table 1B: PAVER DISTRESS CODES FOR FLEXIBLE AND RIGID PAVEMENT

Flexible Pavement			Rigid Pavement		
PAVER Code	Pavement Distress	Related Cause	PAVER Code	Pavement Distress	Related Cause
41	Alligator Cracking	Load	61	Blow-Up	Load
42	Bleeding	Other	62	Corner Break	Load
43	Block Cracking	Climate/ Durability	63	Longitudinal, Transverse, & Diagonal Cracks	Climate/ Durability
44	Corrugation	Other	64	Durability Cracking	Climate/ Durability
45	Depression	Other	65	Joint Seal Damage	Other
46	Jet Blast	Other	66	Small Patch	Other
47	Joint Reflection Cracking	Climate/ Durability	67	Large Patch	Other
48	Longitudinal & Transverse Cracking	Climate/ Durability	68	Pop Outs	Other
49	Oil Spillage	Other	69	Pumping	Other
50	Patching	Climate/ Durability	70	Scaling	Other
51	Polished Aggregate	Other	71	Faulting	Other
52	Raveling	Climate/ Durability	72	Shattered Slab	Load

Flexible Pavement		
PAVER Code	Pavement Distress	Related Cause
53	Rutting	Load
54	Shoving	Other
55	Slippage Cracking	Other
56	Swelling	Other
57	Weathering	Climate/ Durability

Rigid Pavement		
PAVER Code	Pavement Distress	Related Cause
73	Shrinkage Cracking	Other
74	Joint Spalls	Other
75	Corner Spalls	Other
76	Alkali-Silica Reactivity (ASR)	Other

To obtain the section PCI, we extrapolated the PCI of each selected sample unit over the entire section area. Distresses found in sample units classified as "additional"– defined as nonrepresentative instead of random- are not extrapolated over the entire section but merely added to the extrapolated quantity. The PCI rating scale presented previously in Table 3-1 of Section 3.1 is based on ASTM D5340.

Section 4.1 of ASTM D5340, governing PCI surveys, offers this caution:

"The PCI is a numerical indicator that rates the surface condition of the pavement. The PCI provides a measure of the **present condition** of the pavement based on the distress observed on the surface of the pavement, which also indicates the structural integrity and surface operational condition (localized roughness and safety). The PCI **cannot** measure structural capacity, nor does it provide a direct measurement of skid resistance or roughness. It provides an objective and rational basis for determining maintenance and repair needs and priorities. Continuous monitoring of the PCI is used to establish the rate of pavement deterioration, which permits early identification of major rehabilitation needs. The PCI provides feedback on pavement performance for validation or improvement of current pavement design and maintenance procedures."

Based on the limitations of the PCI method, it is imperative that engineers and planners treat the PCI as a tool that will assist them during the M&R planning process. Any major project should always be preceded by an up-to-date, detailed, 100% project-level inspection of the pavement in order to reevaluate maintenance needs prior to the project design process.

B.2 DISTRESS TYPES

Distress tends to fall into one of the following four cause categories:

- **Load-related:** Flexible pavement distresses include alligator/fatigue cracking, corrugation, depression, polished aggregate, rutting, and slippage cracking. Rigid

pavement distresses include corner breaks, longitudinal cracking, divided slabs, polished aggregate, pumping, and joint spalling.

- **Climate- and durability-related:** Flexible pavement distresses include bleeding, block cracking, joint reflection cracking, longitudinal and transverse (L&T) cracking, swelling, and raveling/weathering. Rigid pavement distress includes blow-ups, durability cracking, longitudinal cracking, pop-outs, pumping, scaling, shrinkage cracks, and joint and corner spalling.

- **Moisture- and drainage-related:** Flexible pavement distresses include alligator/ fatigue cracking, depressions, potholes, and swelling. Rigid pavement distresses include corner breaks, divided slabs, and pumping.

- **Other factors:** Includes oil spillage, jet blast erosion, bleeding, patching, and concrete slab joint faulting.

As described above, distress may be the result of more than one cause. For example, depressions may be caused by incorrect compaction during construction or by subgrade softening due to environmental factors. In addition, distress may be initiated by one cause but may progress to a distress of higher severity by another cause. Therefore, engineering judgment is critical in analyzing the actual cause or causes of the distress.

B.3 PAVEMENT CONDITION INDEX SURVEY RESULTS

The evaluated Warrenton-Astoria Regional Airport pavement network consists of 14 branches and 37 sections. A total of 113 sample units were visually inspected in the field. Data from the inspected sample units was input into the PAVER database, and a resultant PCI for each section was computed. Additional details regarding the PCI and distress types observed for each surveyed sample unit are provided in the re-inspection report, Table 1E, in Appendix E. Based on the 2023 PCI survey, the area-weighted average PCI for the entire pavement network at Warrenton-Astoria Regional Airport is approximately 77, which corresponds to a PCI rating of Satisfactory.

To investigate the rate of deterioration of each pavement section, we compared the PCI results from the 2023 survey to the PCI results from the previous inspection. The variation in PCI between inspections for Warrenton-Astoria Regional Airport pavement sections is outlined in Table 4B in this appendix.

Table 2B: WARRENTON-ASTORIA REGIONAL AIRPORT CURRENT BRANCH CONDITION REPORT

Branch ID	Number of Sections	Approximate Area, square feet	Use	Area Weighted Average Branch PCI	PCI Category
A01AT	4	546,073	APRON	59	Fair
R08AT	3	579,600	RUNWAY	85	Satisfactory
R14AT	4	434,994	RUNWAY	91	Good
T01AT	1	3,396	TAXIWAY	50	Poor
T02AT	1	3,355	TAXIWAY	68	Fair
T03AT	1	9,227	TAXIWAY	61	Fair
TA2AT	5	107,325	TAXIWAY	73	Satisfactory
TA3AT	5	126,641	TAXIWAY	92	Good
TAAT	2	143,421	TAXIWAY	60	Fair
TARUNAT	1	22,810	TAXIWAY	100	Good
TB2AT	2	14,770	TAXIWAY	72	Satisfactory
TB3AT	4	41,037	TAXIWAY	65	Fair
TBAT	2	108,601	TAXIWAY	65	Fair
THANGAT	2	77,025	TAXIWAY	85	Satisfactory

Use Category	Number of Sections	Total Area, square feet	Area Weighted Average PCI
APRON	4	546,073	59
RUNWAY	7	1,014,594	88
TAXIWAY	26	657,608	74
ALL	**37**	**2,218,275**	**77**

Abbreviation: PCI = Pavement Condition Index

Table 3B: WARRENTON-ASTORIA REGIONAL AIRPORT 2023 PAVEMENT CONDITION INDEX SURVEY RESULTS

BranchID	SectionID	Last Construction Date	Surface Type	Use	Last Inspection Date	Age at Inspection	PCI	PCI Category	PCI % Climate	PCI % Load	PCI % Other
A01AT	01	8/2/1944	PCC	APRON	7/1/2023	79	8	Failed	8	90	2
A01AT	02	9/1/2021	AC	APRON	7/1/2023	2	100	Good	0	0	0
A01AT	03	8/2/1994	PCC	APRON	7/1/2023	29	43	Poor	8	83	9
A01AT	04	9/1/2020	AC	APRON	7/1/2023	3	100	Good	0	0	0
R08AT	01	9/13/1999	APC	RUNWAY	7/1/2023	24	74	Satisfactory	100	0	0
R08AT	02	9/13/1999	AAC	RUNWAY	7/1/2023	24	85	Satisfactory	100	0	0
R08AT	03	9/13/1999	APC	RUNWAY	7/1/2023	24	85	Satisfactory	100	0	0
R14AT	01	8/29/2016	AAC	RUNWAY	7/1/2023	7	93	Good	100	0	0
R14AT	02	9/13/1999	AAC	RUNWAY	7/1/2023	24	82	Satisfactory	100	0	0
R14AT	03	9/13/1999	AAC	RUNWAY	7/1/2023	24	83	Satisfactory	92	0	8
R14AT	04	9/1/2016	AAC	RUNWAY	7/1/2023	7	92	Good	100	0	0
T01AT	01	8/1/1993	AC	TAXIWAY	7/1/2023	30	50	Poor	89	0	11
T02AT	01	8/1/1993	AC	TAXIWAY	7/1/2023	30	68	Fair	100	0	0
T03AT	01	8/1/1993	AC	TAXIWAY	7/1/2023	30	61	Fair	100	0	0
TA2AT	01	8/1/1991	AAC	TAXIWAY	7/1/2023	32	58	Fair	100	0	0
TA2AT	02	8/29/2016	AAC	TAXIWAY	7/1/2023	7	92	Good	100	0	0
TA2AT	03	8/29/2016	AAC	TAXIWAY	7/1/2023	7	93	Good	86	0	14
TA2AT	04	8/1/1991	AAC	TAXIWAY	7/1/2023	32	76	Satisfactory	100	0	0
TA2AT	05	9/13/1999	AC	TAXIWAY	7/1/2023	24	82	Satisfactory	73	0	27
TA3AT	01	9/1/2019	AC	TAXIWAY	7/1/2023	4	100	Good	0	0	0
TA3AT	02	9/1/2019	AC	TAXIWAY	7/1/2023	4	100	Good	0	0	0
TA3AT	03	9/1/2019	AC	TAXIWAY	7/1/2023	4	96	Good	100	0	0
TA3AT	04	8/1/1944	PCC	TAXIWAY	7/1/2023	79	12	Serious	9	88	3
TA3AT	05	8/1/1944	AC	TAXIWAY	7/1/2023	79	39	Very Poor	47	53	0
TAAT	01	8/1/1988	AAC	TAXIWAY	7/1/2023	35	59	Fair	100	0	0
TAAT	02	9/13/1999	AAC	TAXIWAY	7/1/2023	24	75	Satisfactory	99	0	1
TARUNAT	01	9/1/2019	AC	TAXIWAY	7/1/2023	4	100	Good	0	0	0
TB2AT	01	8/1/1993	AAC	TAXIWAY	7/1/2023	30	59	Fair	100	0	0
TB2AT	02	8/29/2016	AAC	TAXIWAY	7/1/2023	7	90	Good	100	0	0
TB3AT	01	8/29/2016	AAC	TAXIWAY	7/1/2023	7	89	Good	100	0	0
TB3AT	02	8/1/1993	AAC	TAXIWAY	7/1/2023	30	60	Fair	94	0	6
TB3AT	03	8/1/1944	PCC	TAXIWAY	7/1/2023	79	64	Fair	24	72	4
TB3AT	04	9/13/1999	AAC	TAXIWAY	7/1/2023	24	87	Good	100	0	0
TBAT	01	8/1/1993	AAC	TAXIWAY	7/1/2023	30	59	Fair	100	0	0
TBAT	02	8/29/2016	AC	TAXIWAY	7/1/2023	7	89	Good	50	0	50
THANGAT	01	10/4/2001	AC	TAXIWAY	7/1/2023	22	75	Satisfactory	100	0	0
THANGAT	02	8/3/2008	AC	TAXIWAY	7/1/2023	15	92	Good	100	0	0

Abbreviations:
PCI = Pavement Condition Index, AC = Asphalt Concrete, AAC = AC overlaid AC, PCC = Portland Cement Concrete

Table 4B: WARRENTON-ASTORIA REGIONAL AIRPORT COMPARISON OF PREVIOUS INSPECTION AND 2023 RESULTS

					2018 Survey			2023 Survey				
Branch ID	Section ID	Surface Type[1]	Approximate Area, square feet	LCD[2]	PCI[3]	PCI Category	Inspection Date	PCI	PCI Category	Age[4]	Δ PCI/yr[5]	Rate of Deterioration
A01AT	01	PCC	55,558	8/2/1944	-	-	-	8	Failed	-	-	N/A[6]
A01AT	02	AC	162,373	9/1/2021	-	-	-	100	Good	-	-	N/A
A01AT	03	PCC	301,741	8/2/1994	65	Fair	5/10/2018	43	Poor	24	-4.20	HIGH
A01AT	04	AC	26,401	9/1/2020	-	-	-	100	Good	-	-	N/A
R08AT	01	APC	16,000	9/13/1999	74	Satisfactory	5/10/2018	74	Satisfactory	19	0.00	NONE
R08AT	02	AAC	548,600	9/13/1999	83	Satisfactory	5/10/2018	85	Satisfactory	19	0	NONE
R08AT	03	APC	15,000	9/13/1999	80	Satisfactory	5/10/2018	85	Satisfactory	19	0.97	NONE
R14AT	01	AAC	85,500	8/29/2016	100	Good	5/10/2018	93	Good	2	-1	NORMAL
R14AT	02	AAC	22,732	9/13/1999	90	Good	5/10/2018	82	Satisfactory	19	-1.55	NORMAL
R14AT	03	AAC	19,993	9/13/1999	90	Good	5/10/2018	83	Satisfactory	19	-1	NORMAL
R14AT	04	AAC	306,769	9/1/2016	100	Good	5/10/2018	92	Good	2	-1.55	NORMAL
T01AT	01	AC	3,396	8/1/1993	66	Fair	5/10/2018	50	Poor	25	-3	NORMAL
T02AT	01	AC	3,355	8/1/1993	66	Fair	5/10/2018	68	Fair	25	0.39	NONE
T03AT	01	AC	9,227	8/1/1993	60	Fair	5/10/2018	61	Fair	25	0	NONE
TA2AT	01	AAC	43,925	8/1/1991	55	Poor	5/10/2018	58	Fair	27	0.58	NONE
TA2AT	02	AAC	8,087	8/29/2016	100	Good	5/10/2018	92	Good	2	-2	NORMAL
TA2AT	03	AAC	16,832	8/29/2016	100	Good	5/10/2018	93	Good	2	-1.36	NORMAL
TA2AT	04	AAC	31,854	8/1/1991	81	Satisfactory	5/10/2018	76	Satisfactory	27	-1	NORMAL
TA2AT	05	AC	6,627	9/13/1999	83	Satisfactory	5/10/2018	82	Satisfactory	19	-0.19	NORMAL
TA3AT	01	AC	13,782	9/1/2019	91	Good	5/10/2018	100	Good	-1	2	NONE
TA3AT	02	AC	16,070	9/1/2019	93	Good	5/10/2018	100	Good	-1	1.36	NONE
TA3AT	03	AC	87,104	9/1/2019	56	Fair	5/10/2018	96	Good	-1	8	NONE
TA3AT	04	PCC	1,981	8/1/1944	36	Very Poor	5/10/2018	12	Serious	74	-4.66	HIGH
TA3AT	05	AC	7,704	8/1/1944	56	Fair	5/10/2018	39	Very Poor	74	-3	NORMAL
TAAT	01	AAC	136,063	8/1/1988	52	Poor	5/10/2018	59	Fair	30	1.36	NONE
TAAT	02	AAC	7,358	9/13/1999	87	Good	5/10/2018	75	Satisfactory	19	-2	NORMAL
TARUNAT	01	AC	22,810	9/1/2019	-	-	-	100	Good	-	-	N/A
TB2AT	01	AAC	8,740	8/1/1993	59	Fair	5/10/2018	59	Fair	25	0	NONE
TB2AT	02	AAC	6,030	8/29/2016	100	Good	5/10/2018	90	Good	2	-1.94	NORMAL
TB3AT	01	AAC	4,346	8/29/2016	100	Good	5/10/2018	89	Good	2	-2	NORMAL
TB3AT	02	AAC	32,262	8/1/1993	65	Fair	5/10/2018	60	Fair	25	-0.97	NORMAL
TB3AT	03	PCC	2,329	8/1/1944	65	Fair	5/10/2018	64	Fair	74	0	NORMAL
TB3AT	04	AAC	2,100	9/13/1999	96	Good	5/10/2018	87	Good	19	-1.75	NORMAL
TBAT	01	AAC	86,863	8/1/1993	62	Fair	5/10/2018	59	Fair	25	-1	NORMAL
TBAT	02	AC	21,738	8/29/2016	100	Good	5/10/2018	89	Good	2	-2.14	NORMAL
THANGAT	01	AC	33,806	10/4/01	90	Good	5/10/2018	75	Satisfactory	17	-3	NORMAL
THANGAT	02	AC	43,219	8/3/08	100	Good	5/10/2018	92	Good	10	-1.55	NORMAL

Abbreviations:

[1] AC = Asphalt Concrete, AAC = Asphalt Overlay AC, PCC = Portland Cement Concrete

[2] LCD = Last construction date. The date of the last major pavement rehabilitation (e.g. AC overlay)

[3] PCI = Pavement Condition Index

[4] Age = Pavement age in years at the time of the PCI survey in 2018

[5] Δ PCI/yr = Change in PCI points per year between 2018 survey and 2023 survey

[6] N/A = Not applicable due to changes in sectioning

APPENDIX C

Future Pavement Condition Analysis

APPENDIX C

PAVEMENT CONDITION ANALYSIS

C.1 METHODOLOGY

In addition to assessing the current condition of a pavement, it is very important from a planning standpoint to be able to predict with reasonable accuracy its future condition. In a pavement management plan (PMP), this is done with the aid of a prediction model. When an APMS is initially implemented, the default models are typically used to predict the future condition of a pavement. However, after PCI surveys are completed, the historical data are then used to refine the models, so they better represent the deterioration of a particular class of pavement based on local climatic conditions, loading, material sources, construction procedures, etc. The importance of accurate prediction models is part of the reason it is essential to conduct periodic, routine surveys in order to track the rate of deterioration.

In PAVER, the pavement deterioration curves are developed based on the "family" model procedure. A pavement "family" is defined as a group of pavements with similar deterioration characteristics. The procedure for developing the prediction models is:

1) Define the pavement families.
2) Review the data.
3) Conduct a data-outlier analysis.
4) Model the data.

C.2 PREDICTION MODELS

We developed separate condition prediction models for each pavement "family" at Warrenton-Astoria Regional Airport. The delineation is based on branch use, surface type, section rank, and structural design life. We use four distinct models for the following "families" of pavements at Warrenton-Astoria Regional Airport. For each model, we reviewed the data in order to filter out any inconsistent or inaccurate data or any data that fell outside boundary values set by PAVER. After outliers are removed and the data are checked for accuracy and reasonableness, the PAVER program calculates a best-fit curve using a polynomial-constrained, least-squares analysis procedure. This best-fit curve for each family is used in the analysis to predict the average behavior of all sections within each "family." Our condition prediction models for each "family" are provided on Figures 1C through 4C below.

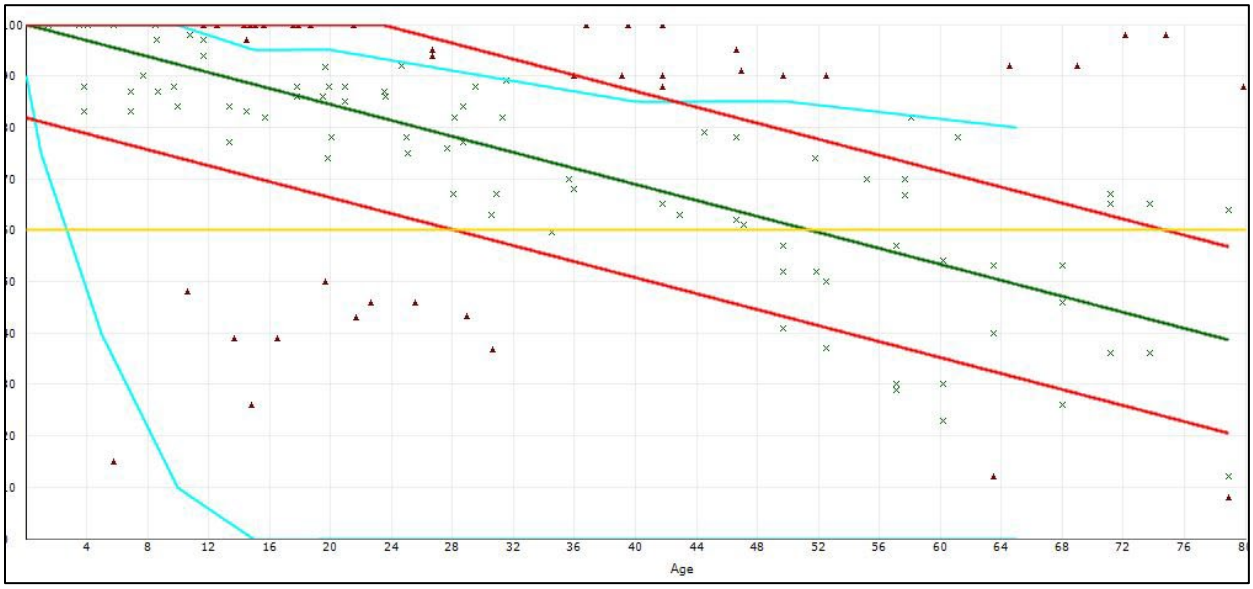


Figure 1C: CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 1/2 PCC RUNWAYS, TAXIWAYS, AND APRONS

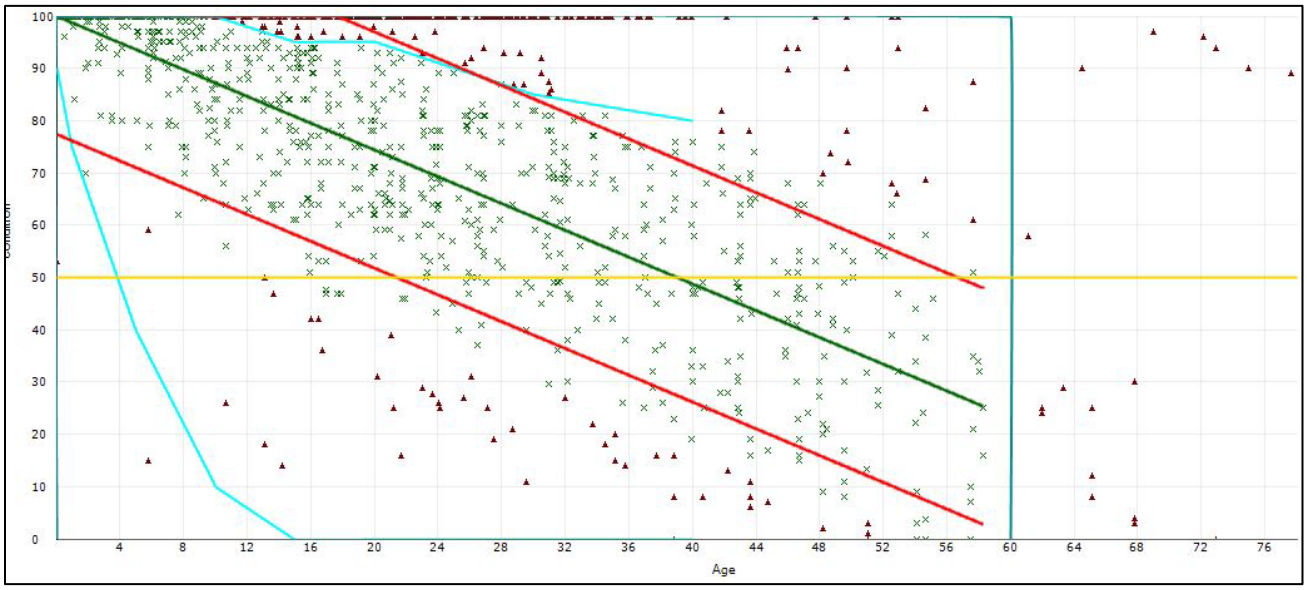


Figure 2C: CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 1/2 AC APRONS

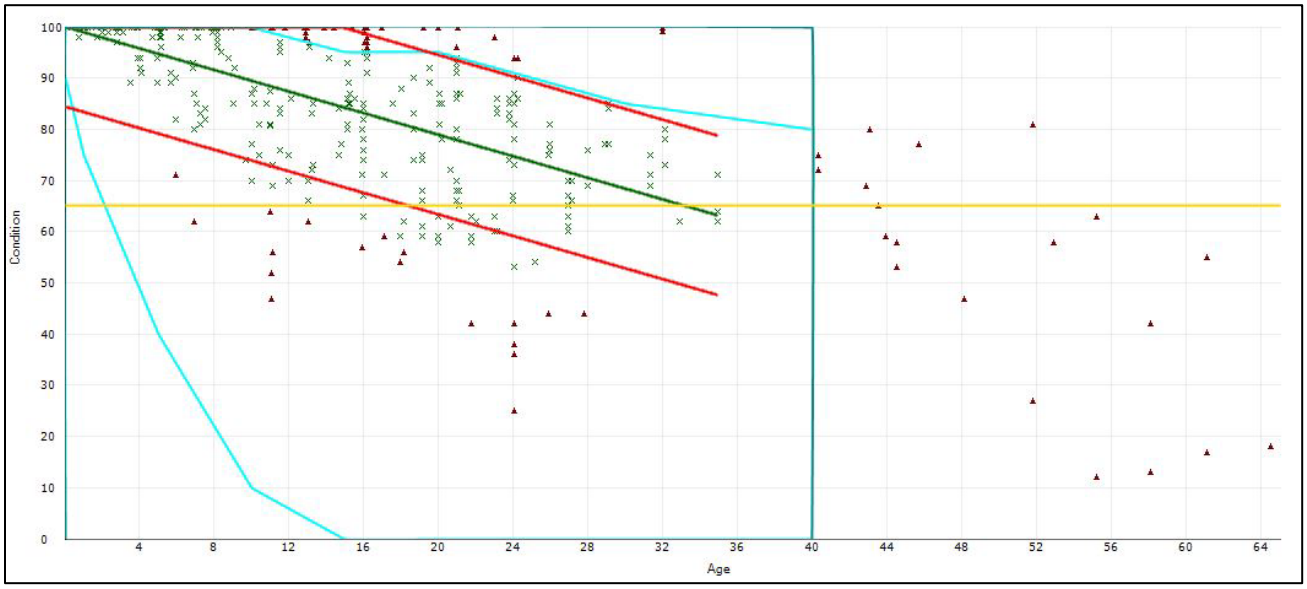


Figure 3C: CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 1/2 AC RUNWAYS

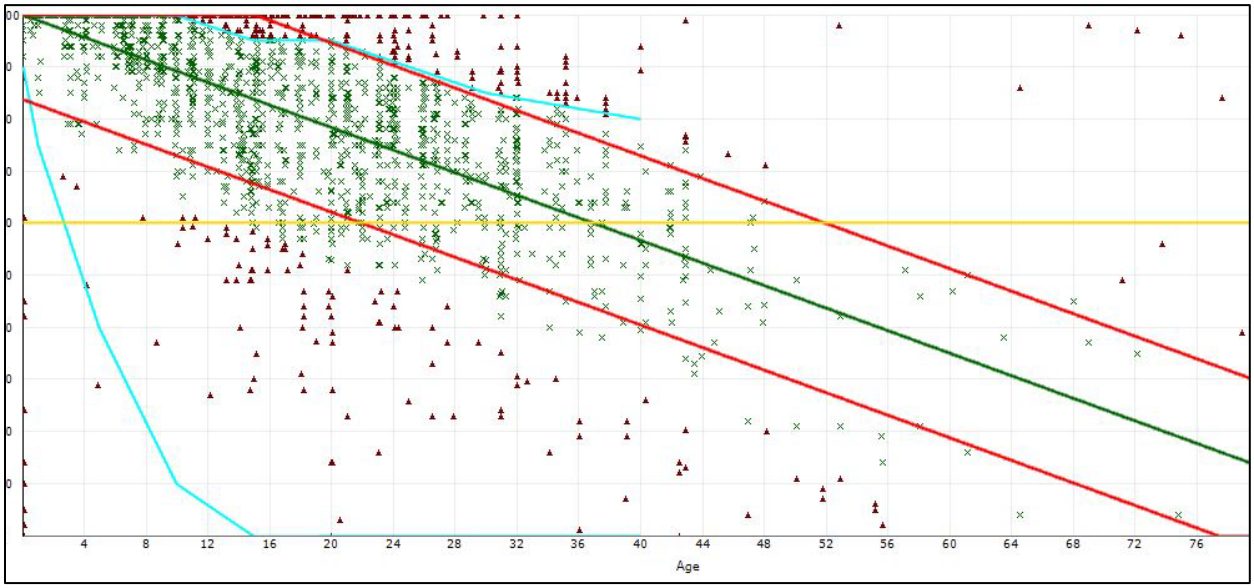


Figure 4C: CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 1/2 AC TAXIWAYS

C.3 CRITICAL PCI

Each of the condition-prediction models has an assigned critical PCI. The critical PCI is the point at which the pavement condition begins to deteriorate more quickly over time. As the condition deteriorates to a worse state, major M&R (rehabilitation/reconstruction) is triggered because the cost to apply localized M&R increases significantly. Pavement sections with PCI above the critical value are given a higher priority for funding during budget analysis in order to prevent them from deteriorating to the point where more

costly rehabilitation is necessary. We used the following critical PCI values at Warrenton-Astoria Regional Airport:

- Runways – 65
- Taxiways/Taxilanes – 60
- Aprons – 50

C.4 FUTURE CONDITION ANALYSIS

As previously discussed, the projected condition of each pavement section was determined for 5- and 10-year periods. The projected pavement conditions in 5 years and 10 years for each pavement section at Warrenton-Astoria Regional Airport, along with the conditions at the previous inspection, are listed in Table 1C.

C.5 FUNCTIONAL REMAINING LIFE

As mentioned above, functional remaining life is the practical amount of time a pavement is in service before requiring rehabilitation, as estimated based solely on visual condition. This is not to be confused with structural remaining life, which requires analysis of the structural capacity of a pavement.

We calculated two forms of functional remaining life based on the current visual condition surveys of the pavement at Warrenton-Astoria Regional Airport: the time until rehabilitation and the time until the pavement is no longer operational due to high foreign object debris potential and increased safety concerns for trafficking aircraft (PCI less than 40). The results of the functional life analysis are provided in Table 2C.

Table 1C: PAST, PRESENT AND FUTURE PCI

		Past Inspection PCI	Current PCI	Predicted Future PCI	
BranchID	SectionID	2018	2023	2028	2033
A01AT	01	-	8	4	0
A01AT	02	-	100	94	87
A01AT	03	65	43	40	36
A01AT	04	-	100	94	87
R08AT	01	74	74	69	63
R08AT	02	83	85	80	74
R08AT	03	80	85	80	74
R14AT	01	100	93	88	82
R14AT	02	90	82	77	71
R14AT	03	90	83	78	72
R14AT	04	100	92	87	81
T01AT	01	66	50	45	39
T02AT	01	66	68	63	57
T03AT	01	60	61	56	50
TA2AT	01	55	58	53	47
TA2AT	02	100	92	87	81
TA2AT	03	100	93	88	82
TA2AT	04	81	76	71	65
TA2AT	05	83	82	77	71
TA3AT	01	91	100	95	89
TA3AT	02	93	100	95	89
TA3AT	03	56	96	90	85
TA3AT	04	36	12	8	4
TA3AT	05	56	39	34	28
TAAT	01	52	59	54	48
TAAT	02	87	75	70	64
TARUNAT	01	-	100	94	87
TB2AT	01	59	59	54	48
TB2AT	02	100	90	85	79
TB3AT	01	100	89	84	78
TB3AT	02	65	60	55	49
TB3AT	03	65	64	60	56
TB3AT	04	96	87	82	76
TBAT	01	62	59	54	48
TBAT	02	100	89	84	78
THANGAT	01	90	75	70	64
THANGAT	02	100	92	87	81

Abbreviation: PCI = Pavement Condition Index

Table 2C: WARRENTON-ASTORIA REGIONAL AIRPORT FUNCTIONAL REMAINING LIFE ANALYSIS

Branch ID	Section ID	Surface Type	Current PCI	Years to Major M&R	Major M&R Trigger PCI[1]	Years to End of Functional Service Life
A01AT	01	PCC	8	0 - 5	50	0 - 5
A01AT	02	AC	100	> 20	50	> 20
A01AT	03	PCC	43.4	0 - 5	50	0 - 5
A01AT	04	AC	100	> 20	50	> 20
R08AT	01	APC	74	6 - 10	65	> 20
R08AT	02	AAC	85	16 - 20	65	> 20
R08AT	03	APC	85	16 - 20	65	> 20
R14AT	01	AAC	93	> 20	65	> 20
R14AT	02	AAC	82	16 - 20	65	> 20
R14AT	03	AAC	83	16 - 20	65	> 20
R14AT	04	AAC	92	> 20	65	> 20
T01AT	01	AC	50	0 - 5	60	6 - 10
T02AT	01	AC	68	6 - 10	60	> 20
T03AT	01	AC	61	0 - 5	60	> 20
TA2AT	01	AAC	58	0 - 5	60	16 - 20
TA2AT	02	AAC	92	> 20	60	> 20
TA2AT	03	AAC	93	> 20	60	> 20
TA2AT	04	AAC	76	11 - 15	60	> 20
TA2AT	05	AC	82	> 20	60	> 20
TA3AT	01	AC	100	> 20	60	> 20
TA3AT	02	AC	100	> 20	60	> 20
TA3AT	03	AC	95.6	> 20	60	> 20
TA3AT	04	PCC	12	0 - 5	60	0 - 5
TA3AT	05	AC	39	0 - 5	60	0 - 5
TAAT	01	AAC	59	0 - 5	60	16 - 20
TAAT	02	AAC	75	11 - 15	60	> 20
TARUNAT	01	AC	100	> 20	60	> 20
TB2AT	01	AAC	59	0 - 5	60	16 - 20
TB2AT	02	AAC	90	> 20	60	> 20
TB3AT	01	AAC	89	> 20	60	> 20
TB3AT	02	AAC	60	0 - 5	60	16 - 20
TB3AT	03	PCC	64	0 - 5	60	> 20
TB3AT	04	AAC	87	> 20	60	> 20
TBAT	01	AAC	59	0 - 5	60	16 - 20
TBAT	02	AC	89	> 20	60	> 20
THANGAT	01	AC	75	11 - 15	60	> 20
THANGAT	02	AC	92	> 20	60	> 20

Abbreviations:
PCI = Pavement Condition Index, AC = Asphalt Concrete, AAC = AC overlaid AC,
PCC = Portland Cement Concrete

[1] Major M&R (Maintenance and Rehabilitation) Trigger PCI = Critical PCI

APPENDIX D

Unit Cost Data and Maintenance and Rehabilitation Plan

APPENDIX D

UNIT COST DATA AND MAINTENANCE AND REHABILITATION PLAN

D.1 ANALYSIS METHODOLOGY

We evaluated the M&R needs, as determined from the PAVER analysis results, in order to develop project recommendations for the next five years. The purpose of this analysis is to determine the M&R needs of the Warrenton-Astoria Regional Airport pavement network condition over time. We used PAVER v7.1.1 software to develop network-level project recommendations for the next five years.

The PAVER M&R Work Planning Module identifies when and where M&R is required and how much it will cost. M&R plans can be developed either by assuming an annual budget or by identifying specific constraints, such as a condition goal, to determine the budget required to meet the goal. The M&R work planning analysis was based on a five-year period beginning on August 1, 2024. A backlog elimination analysis scenario was selected to generate a list of surface treatment, rehabilitation, and reconstruction projects in order to optimize the allocation of capital and establish preservation-based project recommendations. The repair strategies considered for pavement sections in our analysis are as follows:

- Reconstruction – Considered for pavements with a PCI less than 40.
- Rehabilitation (AC Overlay) – Considered for pavements between 40 PCI and the critical PCI and for pavements exhibiting significant load-related distresses.
- Surface Treatment – Treatments (fog seal, slurry seal, thin AC overlay) are applied to an entire pavement section with the intent of slowing the rate of deterioration.
- Localized Maintenance – Maintenance performed on a routine basis, such as crack sealing, wide crack repair, and patching.

It should be noted that the five-year list of recommended projects only includes the highest-cost maintenance items and does not include routine localized maintenance (e.g., crack sealing) work that should also be conducted in addition to and concurrently with the five-year work plan.

D.1.1 Pavement Rank and Use Prioritization

Pavement sections are assigned a rank to establish their relative importance in the overall pavement network, which is most commonly defined by their use (e.g., Taxiway, Apron, Runway). The PAVER analysis uses the combination of the section rank and the branch use

to define the priority of each section during the M&R analysis. Table 1D displays the branch use and section rank prioritization schema we used for analysis.

Table 1D: M&R WORK PRIORITY BY BRANCH USE AND SECTION RANK

Branch Use	Section Rank		
	Primary	Secondary	Tertiary
RUNWAY	1	3	6
TAXIWAY	2	5	8
APRON	4	7	9

D.2 MAINTENANCE POLICIES AND UNIT COSTS

Distress-maintenance policies are policies that determine what type of work should be applied to a specific distress type and severity. For example, on an AC pavement, a medium-severity longitudinal/transverse crack would be repaired by crack sealing. Policies for all the distress types and severities are established by ASTM D5340.

Although our work scope does not include budget analysis, we did assign construction costs to the maintenance work so that PAVER would allocate M&R projects that were approximately equal in costs for each year of the five-year period. The anticipated cost of performing M&R is based on cost tables that relate M&R work type costs to PCI. We reviewed the unit costs from the 2018 report and updated them by reviewing the bid tabulations for recent projects within the vicinity of Warrenton-Astoria Regional Airport and information provided by the ODAV Pavement Maintenance Program (PMP) project team. The costs for reconstruction are based on the existing pavement sections present within each branch use at Warrenton-Astoria Regional Airport. The costs represent the fully-loaded costs and include aspects of the project such as administration, contingencies, mobilization, and striping. The cost tables used in the analysis are presented in Table 2D below.

Table 2D: REGION 1 UNIT COST DATA

Type of M&R	Work Type	Unit Cost	Work Unit
Major M&R	Complete Reconstruction with AC	$28.86	Sq Ft
	Cold Mill and Overlay – 3 Inches Thick	$11.39	Sq Ft
Surface Treatment (Global) M&R	Surface Treatment - Slurry Seal	$0.52	Sq Ft
	Surface Treatment - Fog Seal	$0.31	Sq Ft
Localized Preventive M&R	Crack Sealing - AC	$3.12	Ft
	Crack Sealing - PCC	$23.4	Ft
	Crack Sealing – Wide Cracks	$51.48	Ft
	Joint Sealing – PCC	$7.80	Ft
	AC Patching – Full Depth	$78.00	Sq Ft
	PCC Patching – Full Depth	$156.00	Sq Ft

D.3 RECOMMENDED LOCALIZED MAINTENANCE

In order to properly maintain aging pavements, localized M&R activities such as crack sealing and patching should be performed on a routine basis. A list of recommended localized maintenance activities is provided in Table 3D of this appendix.

D.4 RECOMMENDED SURFACE TREATMENT, REHABILITATION, AND RECONSTRUCTION PROJECTS

Surface treatment, rehabilitation, and reconstruction projects refer to activities such as slurry seal/fog seals, AC overlays, and reconstruction. A list of recommended projects is provided in Table 4D of this appendix.

Table 3D: WARRENTON-ASTORIA REGIONAL AIRPORT NETWORK MAINTENANCE REPORT

Branch ID	Section ID	Distress	Severity	Action	Work Quantity	Unit	Unit Cost	Work Cost	Section Total
A01AT	01	Linear Cracking	Low	Crack Sealing - PCC	370	Ft	$23.40	$8,658	$1,584,841
A01AT	01	Linear Cracking	Medium	Crack Sealing - PCC	46	Ft	$23.40	$1,082	
A01AT	01	Shattered Slab	Low	Crack Sealing - PCC	3,608	Ft	$23.40	$84,416	
A01AT	01	Shattered Slab	Medium	Crack Sealing - PCC	2,128	Ft	$23.40	$49,784	
A01AT	01	Joint Seal Damage	High	Joint Sealing	8,140	Ft	$7.80	$63,492	
A01AT	01	Shattered Slab	High	Patching - PCC Full Depth	8,830	SqFt	$156.00	$1,377,409	
A01AT	03	Corner Break	Low	Crack Sealing - PCC	487	Ft	$23.40	$11,402	$455,410
A01AT	03	Shattered Slab	Medium	Crack Sealing - PCC	2,042	Ft	$23.40	$47,787	
A01AT	03	Linear Cracking	Medium	Crack Sealing - PCC	2,042	Ft	$23.40	$47,787	
A01AT	03	Linear Cracking	Low	Crack Sealing - PCC	7,965	Ft	$23.40	$186,369	
A01AT	03	Shattered Slab	Low	Crack Sealing - PCC	6,127	Ft	$23.40	$143,361	
A01AT	03	Joint Spall	High	Patching - PCC Partial Depth	119	SqFt	$156.00	$18,704	
R08AT	01	Long. & Trans. Cracking	Medium	Crack Sealing - AC	112	Ft	$3.12	$349	$3,749
R08AT	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,090	Ft	$3.12	$3,400	
R08AT	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	16,129	Ft	$3.12	$50,322	$50,322
R08AT	03	Long. & Trans. Cracking	Low	Crack Sealing - AC	462	Ft	$3.12	$1,441	$1,441
R14AT	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	72	Ft	$3.12	$224	$224
R14AT	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	947	Ft	$3.12	$2,955	$2,955
R14AT	03	Long. & Trans. Cracking	Low	Crack Sealing - AC	596	Ft	$3.12	$1,859	$1,859
R14AT	04	Long. & Trans. Cracking	Low	Crack Sealing - AC	440	Ft	$3.12	$1,372	$1,372
T01AT	01	Block Cracking	Low	Crack Sealing - AC	1,035	Ft	$3.12	$3,230	$3,230
T02AT	01	Block Cracking	Low	Crack Sealing - AC	376	Ft	$3.12	$1,174	$1,236
T02AT	01	Joint reflection cracking	Low	Crack Sealing - AC	20	Ft	$3.12	$62	
T03AT	01	Block Cracking	Low	Crack Sealing - AC	2,538	Ft	$3.12	$7,920	$7,920
TA2AT	01	Block Cracking	Low	Crack Sealing - AC	13,388	Ft	$3.12	$41,772	$45,048
TA2AT	01	Patching	High	Patching - AC Deep	42	SqFt	$78.00	$3,276	
TA2AT	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	10	Ft	$3.12	$31	$31
TA2AT	04	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,670	Ft	$3.12	$5,211	$5,211
TA2AT	05	Long. & Trans. Cracking	Low	Crack Sealing - AC	100	Ft	$3.12	$312	$312
TA3AT	03	Block Cracking	Low	Crack Sealing - AC	2,854	Ft	$3.12	$8,905	$8,905
TA3AT	04	Corner Break	Medium	Crack Sealing - PCC	6	Ft	$23.40	$128	$110,548
TA3AT	04	Linear Cracking	Medium	Crack Sealing - PCC	18	Ft	$23.40	$413	
TA3AT	04	Shattered Slab	Medium	Crack Sealing - PCC	35	Ft	$23.40	$827	
TA3AT	04	Joint Seal Damage	High	Joint Sealing	198	Ft	$7.80	$1,540	
TA3AT	04	Shattered Slab	High	Patching - PCC Full Depth	690	SqFt	$156.00	$107,640	
TA3AT	05	Block Cracking	Low	Crack Sealing - AC	677	Ft	$3.12	$2,113	$45,126
TA3AT	05	Long. & Trans. Cracking	Low	Crack Sealing - AC	335	Ft	$3.12	$1,045	
TA3AT	05	Alligator Cracking	Medium	Patching - AC Deep	538	SqFt	$78.00	$41,968	
TAAT	01	Block Cracking	Low	Crack Sealing - AC	41,472	Ft	$3.12	$129,392	$129,392
TAAT	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	513	Ft	$3.12	$1,601	$1,601
TB2AT	01	Block Cracking	Low	Crack Sealing - AC	2,664	Ft	$3.12	$8,312	$8,312
TB2AT	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	23	Ft	$3.12	$72	$72

Branch ID	Section ID	Distress	Severity	Action	Work Quantity	Unit	Unit Cost	Work Cost	Section Total
TB3AT	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	60	Ft	$3.12	$187	$187
TB3AT	02	Block Cracking	Low	Crack Sealing - AC	7,087	Ft	$3.12	$22,112	$22,112
TB3AT	03	Shattered Slab	Low	Crack Sealing - PCC	30	Ft	$23.40	$689	$5,704
TB3AT	03	Linear Cracking	Medium	Crack Sealing - PCC	15	Ft	$23.40	$345	
TB3AT	03	Linear Cracking	Low	Crack Sealing - PCC	59	Ft	$23.40	$1,378	
TB3AT	03	Joint Seal Damage	High	Joint Sealing	422	Ft	$7.80	$3,293	
TB3AT	04	Long. & Trans. Cracking	Low	Crack Sealing - AC	45	Ft	$3.12	$140	$140
TBAT	01	Block Cracking	Low	Crack Sealing - AC	26,476	Ft	$3.12	$82,604	$82,604
THANGAT	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	928	Ft	$3.12	$2,896	$2,896
THANGAT	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	60	Ft	$3.12	$188	$188

Abbreviations:

Long. = Longitudinal; Trans. = Transverse; AC = Asphalt Concrete; PCC = Portland Cement Concrete; Ft = Feet; SqFt = Square Feet

Table 4D: FIVE-YEAR GLOBAL MAINTENANCE AND REHABILITATION PLAN

Action Year	Branch ID	Section ID	Branch Use	Surface Type	Current PCI	Action	Area, square feet	Unit Cost per square foot	Total Cost
2024	T01AT	01	TAXIWAY	AC	50	Overlay	3,396	$11.39	$38,680
	T03AT	01	TAXIWAY	AC	61	Overlay	9,227	$11.39	$105,095
	TB2AT	01	TAXIWAY	AAC	59	Overlay	8,740	$11.39	$99,548
	TB3AT	02	TAXIWAY	AAC	60	Overlay	32,262	$11.39	$367,461
	TB3AT	03	TAXIWAY	PCC	64	Reconstruction	2,329	$28.86	$67,215
	TBAT	01	TAXIWAY	AAC	59	Overlay	86,863	$11.39	$989,362
2025	TA2AT	01	TAXIWAY	AAC	58	Overlay	43,925	$11.39	$500,302
	TAAT	01	TAXIWAY	AAC	59	Overlay	136,063	$11.39	$1,549,746
2026	R08AT	01	RUNWAY	APC	74	Slurry Seal	16,000	$0.52	$8,320
	R08AT	02	RUNWAY	AAC	85	Slurry Seal	548,600	$0.52	$285,270
	R08AT	03	RUNWAY	APC	85	Slurry Seal	15,000	$0.52	$7,800
	R14AT	02	RUNWAY	AAC	82	Slurry Seal	22,732	$0.52	$11,821
	R14AT	03	RUNWAY	AAC	83	Slurry Seal	19,993	$0.52	$10,396
	T02AT	01	TAXIWAY	AC	68	Slurry Seal	3,355	$0.52	$1,745
	TA2AT	04	TAXIWAY	AAC	76	Slurry Seal	31,854	$0.52	$16,564
	TA2AT	05	TAXIWAY	AC	82	Slurry Seal	6,627	$0.52	$3,446
	TAAT	02	TAXIWAY	AAC	75	Slurry Seal	7,358	$0.52	$3,826
	TB2AT	02	TAXIWAY	AAC	90	Slurry Seal	6,030	$0.52	$3,136
	TB3AT	01	TAXIWAY	AAC	89	Slurry Seal	4,346	$0.52	$2,260
	TB3AT	04	TAXIWAY	AAC	87	Slurry Seal	2,100	$0.52	$1,092
	TBAT	02	TAXIWAY	AC	89	Slurry Seal	21,738	$0.52	$11,304
	THANGAT	01	TAXIWAY	AC	75	Slurry Seal	33,806	$0.52	$17,579
2027	A01AT	01	APRON	PCC	8	Reconstruction	55,558	$28.86	$1,603,422
	TA3AT	04	TAXIWAY	PCC	12	Reconstruction	1,981	$28.86	$57,172
	TA3AT	05	TAXIWAY	AC	39	Reconstruction	7,704	$28.86	$222,340
2028	A01AT	03	APRON	PCC	43	Reconstruction	301,741	$28.86	$8,708,245

Abbreviations:
PCI = Pavement Condition Index, AC = Asphalt Concrete, AAC = AC overlaid AC; PCC = Portland Cement Concrete

Cost Summary	
2024 Total Project Cost	$1,667,361
2025 Total Project Cost	$2,050,048
2026 Total Project Cost	$384,558
2027 Total Project Cost	$1,882,934
2028 Total Project Cost	$8,708,245
Total 5-Year Project Cost	**$14,693,147**

APPENDIX E

Reinspection Report

Re-Inspection Report

ODA_2023Survey_11-21-23
Generated Date 12/5/2023

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: A01AT **Name:** Apron 01 Astoria **Use:** APRON **Area:** 538,112 SqFt

Section: 01 of 3 **From:** US Coast Guard Ramp **To:** Office, FBO, T-Hangars **Last Const.:** 8/2/1944

Surface: PCC **Family:** 2023_Region1_Cat1/2_All PCC **Zone:** KAST **Category:** A **Rank:** P

Area: 55,558 SqFt **Length:** 250 Ft **Width:** 240 Ft

Slabs: 296 **Slab Length:** 15 Ft **Slab Width:** 13 Ft **Joint Length:** 8,140 Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Subbase - Aggregate	**Code:** SB-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - PCC	**Code:** NC-PC	**Is Major M&R:** True
Work Date: 8/1/1997	**Work Type:** Crack Sealing - PCC	**Code:** CS-PC	**Is Major M&R:** False
Work Date: 8/1/1997	**Work Type:** Joint Sealing - Bituminous	**Code:** JS-BI	**Is Major M&R:** False
Work Date: 8/1/2002	**Work Type:** Joint Seal - Silicon	**Code:** JS-SI	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 16 **Surveyed:** 5

Conditions: **PCI:** 8

Inspection Comments:

Sample Number: 03 **Type:** R **Area:** 15.00 Slabs **PCI:** 1

Sample Comments:

65	JT SEAL DMG	H	15.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
72	SHAT. SLAB	L	5.00	Slabs
72	SHAT. SLAB	M	4.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs
72	SHAT. SLAB	H	1.00	Slabs
72	SHAT. SLAB	H	3.00	Slabs

Sample Number: 04 **Type:** R **Area:** 13.00 Slabs **PCI:** 2

Sample Comments:

65	JT SEAL DMG	H	13.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
72	SHAT. SLAB	L	2.00	Slabs
72	SHAT. SLAB	M	3.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs
72	SHAT. SLAB	H	1.00	Slabs
72	SHAT. SLAB	H	5.00	Slabs
74	JOINT SPALL	M	1.00	Slabs

Sample Number: 11 **Type:** R **Area:** 20.00 Slabs **PCI:** 9

Sample Comments:

63	LINEAR CR	L	1.00	Slabs
63	LINEAR CR	L	3.00	Slabs
65	JT SEAL DMG	H	20.00	Slabs
72	SHAT. SLAB	L	2.00	Slabs
72	SHAT. SLAB	L	3.00	Slabs
72	SHAT. SLAB	M	4.00	Slabs
72	SHAT. SLAB	M	3.00	Slabs
72	SHAT. SLAB	H	2.00	Slabs

Sample Number: 12 **Type:** R **Area:** 20.00 Slabs **PCI:** 5

Sample Comments:

63	LINEAR CR	L	1.00	Slabs
63	LINEAR CR	M	1.00	Slabs
65	JT SEAL DMG	H	20.00	Slabs
72	SHAT. SLAB	L	2.00	Slabs

72	SHAT. SLAB	L	3.00	Slabs
72	SHAT. SLAB	L	5.00	Slabs
72	SHAT. SLAB	M	5.00	Slabs
72	SHAT. SLAB	H	2.00	Slabs

Sample Number: 16 **Type:** R **Area:** 20.00 Slabs **PCI:** 21

Sample Comments:

63	LINEAR CR	L	3.00	Slabs
65	JT SEAL DMG	H	20.00	Slabs
66	SMALL PATCH	M	3.00	Slabs
72	SHAT. SLAB	L	15.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: A01AT **Name:** Apron 01 Astoria **Use:** APRON **Area:** 538,112 SqFt

Section: 03 of 3 **From:** US Coast Guard Ramp **To:** Office, FBO, T-Hangars **Last Const.:** 8/2/1994

Surface: PCC **Family:** 2023_Region1_Cat1/2_All PCC **Zone:** **Category:** **Rank:** P

Area: 320,181 SqFt **Length:** 1,140 Ft **Width:** 268 Ft

Slabs: 1,708 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 46,970 Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Subbase - Aggregate	**Code:** SB-AG	**Is Major M&R:** False
Work Date: 8/2/1994	**Work Type:** New Construction - PCC	**Code:** NC-PC	**Is Major M&R:** True
Work Date: 8/1/1997	**Work Type:** Crack Sealing - PCC	**Code:** CS-PC	**Is Major M&R:** False
Work Date: 8/1/1997	**Work Type:** Joint Sealing - Bituminous	**Code:** JS-BI	**Is Major M&R:** False
Work Date: 8/1/2002	**Work Type:** Joint Seal - Silicon	**Code:** JS-SI	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 83 **Surveyed:** 6

Conditions: **PCI:** 43

Inspection Comments:

Sample Number: 19 **Type:** R **Area:** 20.00 Slabs **PCI:** 40

Sample Comments:

63	LINEAR CR	L	3.00	Slabs
63	LINEAR CR	L	3.00	Slabs
63	LINEAR CR	L	3.00	Slabs
63	LINEAR CR	M	1.00	Slabs
63	LINEAR CR	M	1.00	Slabs
65	JT SEAL DMG	M	20.00	Slabs
66	SMALL PATCH	L	3.00	Slabs
66	SMALL PATCH	L	1.00	Slabs
66	SMALL PATCH	L	1.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs

Sample Number: 20 **Type:** R **Area:** 20.00 Slabs **PCI:** 39

Sample Comments:

62	CORNER BREAK	L	1.00	Slabs
63	LINEAR CR	L	2.00	Slabs
63	LINEAR CR	L	3.00	Slabs
63	LINEAR CR	M	1.00	Slabs
65	JT SEAL DMG	M	20.00	Slabs
67	LARGE PATCH	L	2.00	Slabs
72	SHAT. SLAB	L	5.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
73	SHRINKAGE CR	N	1.00	Slabs
74	JOINT SPALL	M	1.00	Slabs

Sample Number: 21 **Type:** R **Area:** 20.00 Slabs **PCI:** 48

Sample Comments:

63	LINEAR CR	L	1.00	Slabs
63	LINEAR CR	L	4.00	Slabs
63	LINEAR CR	M	3.00	Slabs
65	JT SEAL DMG	M	20.00	Slabs
66	SMALL PATCH	L	3.00	Slabs
67	LARGE PATCH	L	1.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
74	JOINT SPALL	H	1.00	Slabs

Sample Number: 34 **Type:** R **Area:** 15.00 Slabs **PCI:** 59

Sample Comments:

62	CORNER BREAK	L	1.00	Slabs

62	CORNER BREAK	L	1.00	Slabs
63	LINEAR CR	L	3.00	Slabs
63	LINEAR CR	L	1.00	Slabs
63	LINEAR CR	L	1.00	Slabs
63	LINEAR CR	M	1.00	Slabs
65	JT SEAL DMG	M	15.00	Slabs
74	JOINT SPALL	M	1.00	Slabs
75	CORNER SPALL	L	1.00	Slabs

Sample Number: 46 **Type:** R **Area:** 20.00 Slabs **PCI:** 36

Sample Comments:

63	LINEAR CR	L	8.00	Slabs
63	LINEAR CR	L	1.00	Slabs
63	LINEAR CR	M	2.00	Slabs
65	JT SEAL DMG	M	20.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
72	SHAT. SLAB	L	2.00	Slabs
72	SHAT. SLAB	M	2.00	Slabs

Sample Number: 47 **Type:** R **Area:** 20.00 Slabs **PCI:** 42

Sample Comments:

62	CORNER BREAK	L	1.00	Slabs
63	LINEAR CR	L	2.00	Slabs
63	LINEAR CR	L	4.00	Slabs
63	LINEAR CR	M	1.00	Slabs
65	JT SEAL DMG	M	20.00	Slabs
66	SMALL PATCH	L	1.00	Slabs
72	SHAT. SLAB	L	2.00	Slabs
72	SHAT. SLAB	L	2.00	Slabs
72	SHAT. SLAB	M	1.00	Slabs

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: A01AT **Name:** Apron 01 Astoria **Use:** APRON **Area:** 538,112 SqFt

Section: 02 of 3 **From:** US Coast Guard Ramp **To:** Office, FBO, T-Hangars **Last Const.:** 9/1/2021

Surface: AC **Family:** 2023_Region1_Cat1/2_Apron_AC **Zone:** **Category:** **Rank:** P

Area: 162,373 SqFt **Length:** 410 Ft **Width:** 325 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 9/1/2021 **Work Type:** Complete Reconstruction - AC **Code:** CR-AC **Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 42 **Surveyed:** 7

Conditions: **PCI:** 100

Inspection Comments:

Sample Number: 11 **Type:** R **Area:** 3598.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 12 **Type:** R **Area:** 3729.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 13 **Type:** R **Area:** 3759.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 14 **Type:** R **Area:** 3750.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 15 **Type:** R **Area:** 3745.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 16 **Type:** R **Area:** 3750.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 17 **Type:** R **Area:** 2986.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R08AT **Name:** Runway 08/26 Astoria **Use:** RUNWAY **Area:** 579,600 SqFt

Section: 03 of 3 **From:** Section 02 **To:** Runway 26 End (East) **Last Const.:** 9/13/1999

Surface: APC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 15,000 SqFt **Length:** 150 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Subbase - Aggregate	**Code:** SB-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - PCC	**Code:** NC-PC	**Is Major M&R:** True
Work Date: 8/1/1980	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 9/12/1999	**Work Type:** Cold Milling	**Code:** MI-CO	**Is Major M&R:** False
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/2/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 3 **Surveyed:** 2

Conditions: **PCI:** 85

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 86

Sample Comments:

48	L & T CR	L	124.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 02 **Type:** R **Area:** 5000.00 SqFt **PCI:** 83

Sample Comments:

48	L & T CR	L	108.00	Ft
48	L & T CR	L	76.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R08AT **Name:** Runway 08/26 Astoria **Use:** RUNWAY **Area:** 579,600 SqFt

Section: 02 of 3 **From:** Section 01 **To:** Section 03 **Last Const.:** 9/13/1999

Surface: AAC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 548,600 SqFt **Length:** 5,486 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1980	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 9/12/1999	**Work Type:** Cold Milling	**Code:** MI-CO	**Is Major M&R:** False
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 5/2/2005	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 110 **Surveyed:** 6

Conditions: **PCI:** 85

Inspection Comments:

Sample Number: 003 **Type:** R **Area:** 5000.00 SqFt **PCI:** 85

Sample Comments:

48	L & T CR	L	97.00	Ft
48	L & T CR	L	50.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 015 **Type:** R **Area:** 5000.00 SqFt **PCI:** 89

Sample Comments:

48	L & T CR	L	75.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 036 **Type:** R **Area:** 5000.00 SqFt **PCI:** 82

Sample Comments:

48	L & T CR	L	60.00	Ft
48	L & T CR	L	155.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 064 **Type:** R **Area:** 5000.00 SqFt **PCI:** 89

Sample Comments:

48	L & T CR	L	65.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 085 **Type:** R **Area:** 5000.00 SqFt **PCI:** 85

Sample Comments:

48	L & T CR	L	72.00	Ft
48	L & T CR	L	85.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 109 **Type:** R **Area:** 5000.00 SqFt **PCI:** 81

Sample Comments:

48	L & T CR	L	87.00	Ft
48	L & T CR	L	136.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R08AT **Name:** Runway 08/26 Astoria **Use:** RUNWAY **Area:** 579,600 SqFt

Section: 01 of 3 **From:** Runway 08 End (West) **To:** Section 02 **Last Const.:** 9/13/1999

Surface: APC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 16,000 SqFt **Length:** 160 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Subbase - Aggregate	**Code:** SB-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - PCC	**Code:** NC-PC	**Is Major M&R:** True
Work Date: 8/1/1980	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 9/12/1999	**Work Type:** Cold Milling	**Code:** MI-CO	**Is Major M&R:** False
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 5/2/2005	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 3 **Surveyed:** 2

Conditions: **PCI:** 74

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 70

Sample Comments:

48	L & T CR	L	388.00	Ft
48	L & T CR	M	70.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 02 **Type:** R **Area:** 5000.00 SqFt **PCI:** 78

Sample Comments:

48	L & T CR	L	143.00	Ft
48	L & T CR	L	150.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R13AT **Name:** Runway 13/31 Astoria **Use:** RUNWAY **Area:** 434,994 SqFt

Section: 04 of 4 **From:** Section 03 **To:** Section 05 **Last Const.:** 9/1/2016

Surface: AAC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 306,769 SqFt **Length:** 3,067 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1988	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/1/2016	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 62 **Surveyed:** 6

Conditions: **PCI:** 92

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Sample Number: 10 **Type:** R **Area:** 5000.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Sample Number: 20 **Type:** R **Area:** 5000.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Sample Number: 30 **Type:** R **Area:** 5000.00 SqFt **PCI:** 90

Sample Comments:

48	L & T CR	L	37.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 40 **Type:** R **Area:** 5000.00 SqFt **PCI:** 92

Sample Comments:

48	L & T CR	L	3.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 53 **Type:** R **Area:** 5000.00 SqFt **PCI:** 92

Sample Comments:

48	L & T CR	L	3.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R13AT **Name:** Runway 13/31 Astoria **Use:** RUNWAY **Area:** 434,994 SqFt

Section: 03 of 4 **From:** Runway 08/26 **To:** Section 04 **Last Const.:** 9/13/1999

Surface: AAC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 19,993 SqFt **Length:** 200 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1988	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 4 **Surveyed:** 3

Conditions: **PCI:** 83

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 5000.00 SqFt **PCI:** 82

Sample Comments:

45	DEPRESSION	L	40.00	SqFt
48	L & T CR	L	107.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 03 **Type:** R **Area:** 5000.00 SqFt **PCI:** 87

Sample Comments:

48	L & T CR	L	22.00	Ft
48	L & T CR	L	92.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 04 **Type:** R **Area:** 5000.00 SqFt **PCI:** 81

Sample Comments:

48	L & T CR	L	226.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R13AT **Name:** Runway 13/31 Astoria **Use:** RUNWAY **Area:** 434,994 SqFt

Section: 01 of 4 **From:** Runway 13 End **To:** Section 02 **Last Const.:** 8/29/2016

Surface: AAC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 85,500 SqFt **Length:** 855 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1988	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/29/2016	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 18 **Surveyed:** 5

Conditions: **PCI:** 93

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Sample Number: 04 **Type:** R **Area:** 5000.00 SqFt **PCI:** 91

Sample Comments:

48	L & T CR	L	12.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 08 **Type:** R **Area:** 5000.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Sample Number: 12 **Type:** R **Area:** 5000.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Sample Number: 16 **Type:** R **Area:** 5000.00 SqFt **PCI:** 91

Sample Comments:

48	L & T CR	L	9.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: R13AT **Name:** Runway 13/31 Astoria **Use:** RUNWAY **Area:** 434,994 SqFt

Section: 02 of 4 **From:** Section 01 **To:** Runway 08/26 **Last Const.:** 9/13/1999

Surface: AAC **Family:** 2023_Region1_Cat1/2_Runway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 22,732 SqFt **Length:** 227 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1988	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 5 **Surveyed:** 3

Conditions: **PCI:** 82

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 82

Sample Comments:

48	L & T CR	L	220.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 02 **Type:** R **Area:** 5000.00 SqFt **PCI:** 83

Sample Comments:

48	L & T CR	L	197.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 03 **Type:** R **Area:** 5000.00 SqFt **PCI:** 82

Sample Comments:

48	L & T CR	L	208.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: T01AT **Name:** Taxiway 01 Astoria **Use:** TAXIWAY **Area:** 3,396 SqFt

Section: 01 of 1 **From:** Taxiway B **To:** US Coast Guard Ramp **Last Const.:** 8/1/1993

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 3,396 SqFt **Length:** 72 Ft **Width:** 30 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2002	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 50

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3410.00 SqFt **PCI:** 50

Sample Comments:

43	BLOCK CR	L	3410.00	SqFt
45	DEPRESSION	L	40.00	SqFt
50	PATCHING	L	56.00	SqFt
57	WEATHERING	M	3410.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: T02AT **Name:** Taxiway 02 Astoria **Use:** TAXIWAY **Area:** 3,355 SqFt

Section: 01 of 1 **From:** Taxiway B **To:** Apron 01 **Last Const.:** 8/1/1993

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 3,355 SqFt **Length:** 72 Ft **Width:** 30 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2002	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 68

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3397.00 SqFt **PCI:** 68

Sample Comments:

43	BLOCK CR	L	1250.00	SqFt
47	JT REF. CR	L	20.00	Ft
57	WEATHERING	M	3397.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: T03AT **Name:** Taxiway 03 Astoria **Use:** TAXIWAY **Area:** 9,227 SqFt

Section: 01 of 1 **From:** Taxiway B **To:** Apron 01 **Last Const.:** 8/1/1993

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 9,227 SqFt **Length:** 72 Ft **Width:** 115 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2002	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 61

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4472.00 SqFt **PCI:** 62

Sample Comments:

43	BLOCK CR	L	3600.00	SqFt
57	WEATHERING	M	4472.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4478.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4478.00	SqFt
57	WEATHERING	M	4478.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA2AT **Name:** Taxiway A2 Astoria **Use:** TAXIWAY **Area:** 107,325 SqFt

Section: 04 of 5 **From:** PCC **To:** Section 05 **Last Const.:** 8/1/1991

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 31,854 SqFt **Length:** 525 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 8 **Surveyed:** 4

Conditions: **PCI:** 76

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6159.00 SqFt **PCI:** 81

Sample Comments:

48	L & T CR	L	61.00	Ft
48	L & T CR	L	232.00	Ft
57	WEATHERING	L	6159.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4831.00 SqFt **PCI:** 74

Sample Comments:

48	L & T CR	L	90.00	Ft
48	L & T CR	L	185.00	Ft
52	RAVELING	H	1.00	SqFt
57	WEATHERING	L	4831.00	SqFt

Sample Number: 03 **Type:** R **Area:** 4830.00 SqFt **PCI:** 75

Sample Comments:

48	L & T CR	L	107.00	Ft
48	L & T CR	L	80.00	Ft
57	WEATHERING	L	2415.00	SqFt
57	WEATHERING	M	2415.00	SqFt

Sample Number: 04 **Type:** R **Area:** 4817.00 SqFt **PCI:** 72

Sample Comments:

48	L & T CR	L	178.00	Ft
48	L & T CR	L	149.00	Ft
57	WEATHERING	L	2407.00	SqFt
57	WEATHERING	M	2408.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA2AT **Name:** Taxiway A2 Astoria **Use:** TAXIWAY **Area:** 107,325 SqFt

Section: 01 of 5 **From:** Taxiway A3 **To:** Runway 13/31 **Last Const.:** 8/1/1991

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 43,925 SqFt **Length:** 893 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 9 **Surveyed:** 4

Conditions: **PCI:** 58

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 4839.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4839.00	SqFt
57	WEATHERING	M	4839.00	SqFt

Sample Number: 03 **Type:** R **Area:** 4847.00 SqFt **PCI:** 54

Sample Comments:

43	BLOCK CR	L	4847.00	SqFt
50	PATCHING	H	10.00	SqFt
57	WEATHERING	M	4847.00	SqFt

Sample Number: 04 **Type:** R **Area:** 5697.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	5697.00	SqFt
57	WEATHERING	M	4698.00	SqFt
57	WEATHERING	M	999.00	SqFt

Sample Number: 07 **Type:** R **Area:** 6577.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	6577.00	SqFt
57	WEATHERING	M	6577.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA2AT **Name:** Taxiway A2 Astoria **Use:** TAXIWAY **Area:** 107,325 SqFt

Section: 02 of 5 **From:** Section 01 **To:** Runway **Last Const.:** 8/29/2016

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 8,087 SqFt **Length:** 100 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/29/2016	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 92

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3347.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	3347.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4740.00 SqFt **PCI:** 91

Sample Comments:

48	L & T CR	L	10.00	Ft
57	WEATHERING	L	4740.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA2AT **Name:** Taxiway A2 Astoria **Use:** TAXIWAY **Area:** 107,325 SqFt

Section: 03 of 5 **From:** Runway **To:** Section 04 **Last Const.:** 8/29/2016

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 16,832 SqFt **Length:** 233 Ft **Width:** 50 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/29/2016	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 93

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4766.00 SqFt **PCI:** 91

Sample Comments:

45	DEPRESSION	L	25.00	SqFt
57	WEATHERING	L	4766.00	SqFt

Sample Number: 02 **Type:** R **Area:** 6594.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5000.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA2AT **Name:** Taxiway A2 Astoria **Use:** TAXIWAY **Area:** 107,325 SqFt

Section: 05 of 5 **From:** Runway 8/26 **To:** Section 04 **Last Const.:** 9/13/1999

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 6,627 SqFt **Length:** 27 Ft **Width:** 205 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 9/13/1999 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 82

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6627.00 SqFt **PCI:** 82

Sample Comments:

45	DEPRESSION	M	9.00	SqFt
48	L & T CR	L	100.00	Ft
50	PATCHING	L	16.00	SqFt
57	WEATHERING	L	6627.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA3AT **Name:** Taxiway A3 Astoria **Use:** TAXIWAY **Area:** 64,297 SqFt

Section: 03 of 5 **From:** Section 02 **To:** Section 04 **Last Const.:** 8/1/1991

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 37,971 SqFt **Length:** 759 Ft **Width:** 45 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/2/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 8 **Surveyed:** 5

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 04 **Type:** R **Area:** 5000.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 05 **Type:** R **Area:** 5000.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 06 **Type:** R **Area:** 5000.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 07 **Type:** R **Area:** 5000.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 08 **Type:** R **Area:** 3456.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	3456.00	SqFt
57	WEATHERING	M	3456.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA3AT **Name:** Taxiway A3 Astoria **Use:** TAXIWAY **Area:** 64,297 SqFt

Section: 05 of 5 **From:** Section 04 **To:** Taxiway A2 **Last Const.:** 8/1/1944

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 7,704 SqFt **Length:** 160 Ft **Width:** 45 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1993	**Work Type:** Surface Treatment - Slurry Seal	**Code:** ST-SS	**Is Major M&R:** False
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 39

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 32

Sample Comments:

41	ALLIGATOR CR	M	210.00	SqFt
41	ALLIGATOR CR	M	103.00	SqFt
41	ALLIGATOR CR	M	72.00	SqFt
43	BLOCK CR	L	2500.00	SqFt
48	L & T CR	L	87.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 02 **Type:** R **Area:** 3669.00 SqFt **PCI:** 48

Sample Comments:

41	ALLIGATOR CR	M	120.00	SqFt
48	L & T CR	L	290.00	Ft
57	WEATHERING	L	3669.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA3AT **Name:** Taxiway A3 Astoria **Use:** TAXIWAY **Area:** 64,297 SqFt

Section: 04 of 5 **From:** Section 03 **To:** Section 05 **Last Const.:** 8/1/1944

Surface: PCC **Family:** 2023_Region1_Cat1/2_All PCC **Zone:** KAST **Category:** A **Rank:** P

Area: 1,981 SqFt **Length:** 41 Ft **Width:** 45 Ft

Slabs: 12 **Slab Length:** 12 Ft **Slab Width:** 15 Ft **Joint Length:** 197 Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944 **Work Type:** New Construction - PCC **Code:** NC-PC **Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 12

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 18.00 Slabs **PCI:** 12

Sample Comments:

62	CORNER BREAK	M	1.00	Slabs
63	LINEAR CR	M	2.00	Slabs
65	JT SEAL DMG	H	18.00	Slabs
67	LARGE PATCH	L	1.00	Slabs
72	SHAT. SLAB	M	2.00	Slabs
72	SHAT. SLAB	H	2.00	Slabs
72	SHAT. SLAB	H	4.00	Slabs

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA3AT **Name:** Taxiway A3 Astoria **Use:** TAXIWAY **Area:** 64,297 SqFt

Section: 01 of 5 **From:** Runway 08/26 **To:** Section 02 **Last Const.:** 9/13/1999

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 6,298 SqFt **Length:** 22 Ft **Width:** 258 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 100

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6593.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TA3AT **Name:** Taxiway A3 Astoria **Use:** TAXIWAY **Area:** 64,297 SqFt

Section: 02 of 5 **From:** Section 01 **To:** Section 03 **Last Const.:** 8/1/1991

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 10,343 SqFt **Length:** 73 Ft **Width:** 144 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1991	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 100

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3801.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 02 **Type:** R **Area:** 6537.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TAAT **Name:** Taxiway A Astoria **Use:** TAXIWAY **Area:** 143,421 SqFt

Section: 01 of 2 **From:** Taxiway A2 **To:** Runway 26 End (East) **Last Const.:** 8/1/1988

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 136,063 SqFt **Length:** 2,700 Ft **Width:** 48 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1988	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 8/1/2002	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 27 **Surveyed:** 5

Conditions: **PCI:** 59

Inspection Comments:

Sample Number: 03 **Type:** R **Area:** 4750.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4750.00	SqFt
57	WEATHERING	M	4750.00	SqFt

Sample Number: 07 **Type:** R **Area:** 4750.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4750.00	SqFt
57	WEATHERING	M	4750.00	SqFt

Sample Number: 14 **Type:** R **Area:** 4750.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4750.00	SqFt
57	WEATHERING	M	4750.00	SqFt

Sample Number: 19 **Type:** R **Area:** 4750.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4750.00	SqFt
57	WEATHERING	M	4750.00	SqFt

Sample Number: 25 **Type:** R **Area:** 4750.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4750.00	SqFt
57	WEATHERING	M	4750.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TAAT **Name:** Taxiway A Astoria **Use:** TAXIWAY **Area:** 143,421 SqFt

Section: 02 of 2 **From:** Section 01 **To:** Runway 26 End (East) **Last Const.:** 9/13/1999

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 7,358 SqFt **Length:** 92 Ft **Width:** 100 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1988	**Work Type:** Overlay - AC Thin	**Code:** OL-AT	**Is Major M&R:** True
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 75

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4273.00 SqFt **PCI:** 66

Sample Comments:

45	DEPRESSION	L	4.00	SqFt
48	L & T CR	L	108.00	Ft
48	L & T CR	L	237.00	Ft
48	L & T CR	L	118.00	Ft
57	WEATHERING	L	2135.00	SqFt
57	WEATHERING	M	2138.00	SqFt

Sample Number: 02 **Type:** R **Area:** 3085.00 SqFt **PCI:** 89

Sample Comments:

48	L & T CR	L	50.00	Ft
57	WEATHERING	L	3085.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TB2AT **Name:** Taxiway B2 Astoria **Use:** TAXIWAY **Area:** 14,770 SqFt

Section: 01 of 2 **From:** Runway 13/31 **To:** Taxiway B **Last Const.:** 8/1/1993

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 8,740 SqFt **Length:** 200 Ft **Width:** 35 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 5/2/2005	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 59

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4316.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4316.00	SqFt
57	WEATHERING	M	4316.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4424.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	4424.00	SqFt
57	WEATHERING	M	4424.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TB2AT **Name:** Taxiway B2 Astoria **Use:** TAXIWAY **Area:** 14,770 SqFt

Section: 02 of 2 **From:** TB-01 **To:** Runway 13-31 **Last Const.:** 8/29/2016

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 6,030 SqFt **Length:** 54 Ft **Width:** 76 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/29/2016	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 90

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6030.00 SqFt **PCI:** 90

Sample Comments:

48	L & T CR	L	23.00	Ft
57	WEATHERING	L	6030.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TB3AT **Name:** Taxiway B3 Astoria **Use:** TAXIWAY **Area:** 41,037 SqFt

Section: 02 of 4 **From:** Section 01 **To:** Section 03 **Last Const.:** 8/1/1993

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 32,262 SqFt **Length:** 870 Ft **Width:** 37 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 6 **Surveyed:** 3

Conditions: **PCI:** 60

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 5550.00 SqFt **PCI:** 68

Sample Comments:

43	BLOCK CR	L	900.00	SqFt
45	DEPRESSION	L	45.00	SqFt
50	PATCHING	L	4.00	SqFt
57	WEATHERING	M	5550.00	SqFt

Sample Number: 03 **Type:** R **Area:** 5550.00 SqFt **PCI:** 57

Sample Comments:

43	BLOCK CR	L	5550.00	SqFt
50	PATCHING	L	4.00	SqFt
57	WEATHERING	M	5550.00	SqFt

Sample Number: 05 **Type:** R **Area:** 5550.00 SqFt **PCI:** 54

Sample Comments:

43	BLOCK CR	L	5550.00	SqFt
45	DEPRESSION	L	45.00	SqFt
57	WEATHERING	M	5550.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TB3AT **Name:** Taxiway B3 Astoria **Use:** TAXIWAY **Area:** 41,037 SqFt

Section: 04 of 4 **From:** Section 03 **To:** Runway 08/26 **Last Const.:** 9/13/1999

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 2,100 SqFt **Length:** 25 Ft **Width:** 79 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 9/13/1999	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 87

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 2104.00 SqFt **PCI:** 87

Sample Comments:

48	L & T CR	L	45.00	Ft
57	WEATHERING	L	2104.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TB3AT **Name:** Taxiway B3 Astoria **Use:** TAXIWAY **Area:** 41,037 SqFt

Section: 03 of 4 **From:** Section 02 **To:** Section 04 **Last Const.:** 8/1/1944

Surface: PCC **Family:** 2023_Region1_Cat1/2_All PCC **Zone:** KAST **Category:** A **Rank:** P

Area: 2,329 SqFt **Length:** 45 Ft **Width:** 79 Ft

Slabs: 20 **Slab Length:** 12 Ft **Slab Width:** 15 Ft **Joint Length:** 422 Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944 **Work Type:** New Construction - PCC **Code:** NC-PC **Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 64

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 18.00 Slabs **PCI:** 64

Sample Comments:

63	LINEAR CR	L	4.00	Slabs
63	LINEAR CR	M	1.00	Slabs
65	JT SEAL DMG	H	18.00	Slabs
72	SHAT. SLAB	L	1.00	Slabs
74	JOINT SPALL	L	1.00	Slabs

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TB3AT **Name:** Taxiway B3 Astoria **Use:** TAXIWAY **Area:** 41,037 SqFt

Section: 01 of 4 **From:** Runway **To:** Section 02 **Last Const.:** 8/29/2016

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 4,346 SqFt **Length:** 77 Ft **Width:** 37 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/29/2016	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 89

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4346.00 SqFt **PCI:** 89

Sample Comments:

48	L & T CR	L	60.00	Ft
57	WEATHERING	L	4346.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TBAT **Name:** Taxiway B Astoria **Use:** TAXIWAY **Area:** 108,601 SqFt

Section: 01 of 2 **From:** Taxiway A2 **To:** Section 02 **Last Const.:** 8/1/1993

Surface: AAC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 86,863 SqFt **Length:** 2,423 Ft **Width:** 35 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/1944	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/1944	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/1993	**Work Type:** Overlay - AC Structural	**Code:** OL-AS	**Is Major M&R:** True
Work Date: 8/1/2002	**Work Type:** Surface Seal - Fog Seal	**Code:** SS-FS	**Is Major M&R:** False
Work Date: 8/1/2009	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 17 **Surveyed:** 5

Conditions: **PCI:** 59

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 5250.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	5250.00	SqFt
57	WEATHERING	M	5250.00	SqFt

Sample Number: 05 **Type:** R **Area:** 5250.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	5250.00	SqFt
57	WEATHERING	M	5250.00	SqFt

Sample Number: 08 **Type:** R **Area:** 5250.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	5250.00	SqFt
57	WEATHERING	M	5250.00	SqFt

Sample Number: 11 **Type:** R **Area:** 5250.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	5250.00	SqFt
57	WEATHERING	M	5250.00	SqFt

Sample Number: 15 **Type:** R **Area:** 5250.00 SqFt **PCI:** 59

Sample Comments:

43	BLOCK CR	L	5250.00	SqFt
57	WEATHERING	M	5250.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: TBAT **Name:** Taxiway B Astoria **Use:** TAXIWAY **Area:** 108,601 SqFt

Section: 02 of 2 **From:** Section 01 **To:** Runway End **Last Const.:** 8/29/2016

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** P

Area: 21,738 SqFt **Length:** 522 Ft **Width:** 44 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/26/2016	**Work Type:** Geotextile	**Code:** FB-TX	**Is Major M&R:** False
Work Date: 8/27/2016	**Work Type:** Subbase - Aggregate	**Code:** SB-AG	**Is Major M&R:** False
Work Date: 8/28/2016	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/29/2016	**Work Type:** Complete Reconstruction - AC	**Code:** CR-AC	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 4 **Surveyed:** 3

Conditions: **PCI:** 89

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 5545.00 SqFt **PCI:** 88

Sample Comments:

45	DEPRESSION	L	60.00	SqFt
57	WEATHERING	L	5545.00	SqFt

Sample Number: 03 **Type:** R **Area:** 5588.00 SqFt **PCI:** 85

Sample Comments:

45	DEPRESSION	L	100.00	SqFt
57	WEATHERING	L	5588.00	SqFt

Sample Number: 04 **Type:** R **Area:** 6820.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	6820.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: THANGAT **Name:** Hangar Taxiway Astoria **Use:** TAXIWAY **Area:** 77,025 SqFt

Section: 01 of 2 **From:** Apron 01 **To:** T-Hangars **Last Const.:** 10/4/2001

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** S

Area: 33,806 SqFt **Length:** 355 Ft **Width:** 115 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 10/1/2001	**Work Type:** Subbase - Aggregate	**Code:** SB-AG	**Is Major M&R:** False
Work Date: 10/2/2001	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 10/3/2001	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 10/4/2001	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 6 **Surveyed:** 3

Conditions: **PCI:** 75

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5805.00 SqFt **PCI:** 75

Sample Comments:

48	L & T CR	L	93.00	Ft
57	WEATHERING	M	5805.00	SqFt

Sample Number: 03 **Type:** R **Area:** 5805.00 SqFt **PCI:** 75

Sample Comments:

48	L & T CR	L	42.00	Ft
57	WEATHERING	M	5805.00	SqFt

Sample Number: 05 **Type:** R **Area:** 6966.00 SqFt **PCI:** 75

Sample Comments:

48	L & T CR	L	190.00	Ft
48	L & T CR	L	185.00	Ft
57	WEATHERING	M	6966.00	SqFt

Network: Astoria **Name:** Warrenton-Astoria Regional

Branch: THANGAT **Name:** Hangar Taxiway Astoria **Use:** TAXIWAY **Area:** 77,025 SqFt

Section: 02 of 2 **From:** THANGAT-01 **To:** T-Hangars **Last Const.:** 8/3/2008

Surface: AC **Family:** 2023_Region1_Cat1/2_Taxiway_AC **Zone:** KAST **Category:** A **Rank:** S

Area: 43,219 SqFt **Length:** 358 Ft **Width:** 170 Ft

Slabs: **Slab Length:** Ft **Slab Width:** Ft **Joint Length:** Ft

Shoulder: **Street Type:** **Grade:** 0 **Lanes:** 0

Section Comments:

Work Date: 8/1/2008 **Work Type:** Subbase - Aggregate **Code:** SB-AG **Is Major M&R:** False

Work Date: 8/2/2008 **Work Type:** Base Course - Crushed Aggregate **Code:** BA-CA **Is Major M&R:** False

Work Date: 8/3/2008 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Last Insp. Date: 7/1/2023 **TotalSamples:** 10 **Surveyed:** 4

Conditions: **PCI:** 92

Inspection Comments:

Sample Number: 03 **Type:** R **Area:** 4500.00 SqFt **PCI:** 92

Sample Comments:

48	L & T CR	L	4.00	Ft
57	WEATHERING	L	4500.00	SqFt

Sample Number: 04 **Type:** R **Area:** 4500.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	4500.00	SqFt

Sample Number: 07 **Type:** R **Area:** 3750.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	3750.00	SqFt

Sample Number: 09 **Type:** R **Area:** 3750.00 SqFt **PCI:** 90

Sample Comments:

48	L & T CR	L	19.00	Ft
57	WEATHERING	L	3750.00	SqFt

APPENDIX F

Work History Report

Pavement Database: ODA_2023Survey_MASTER DB-12-18-2023_pm

Network: Warrenton-Astoria Re **Branch:** A01AT Apron 01 Astoria **Section:** 01 **Surface:**PCC
L.C.D. 8/2/1944 **Use:** APRON **Rank:** P **Length:** 250.00 (Ft) **Width:** 240.00 (Ft) **True Area:** 55558 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2002	JS-SI	Joint Seal - Silicon	0.00	0.10	☐	
8/1/1997	JS-BI	Joint Sealing - Bituminous	0.00	0.10	☐	Unknown Date, guess circa 1997
8/1/1997	CS-PC	Crack Sealing - PCC	0.00	0.10	☐	Unknown Date, guess circa 1997
8/2/1944	NC-PC	New Construction - PCC	0.00	6.00	☑	
8/1/1944	SB-AG	Subbase - Aggregate	0.00	9.00	☐	

Network: Warrenton-Astoria Re **Branch:** A01AT Apron 01 Astoria **Section:** 02 **Surface:**AC
L.C.D. 9/1/2021 **Use:** APRON **Rank:** P **Length:** 410.00 (Ft) **Width:** 325.00 (Ft) **True Area:** 162373 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2021	CR-AC	Complete Reconstruction - AC	811,865.00	0.00	☑	Unknown Pavement Thickness

Network: Warrenton-Astoria Re **Branch:** A01AT Apron 01 Astoria **Section:** 03 **Surface:**PCC
L.C.D. 8/2/1994 **Use:** APRON **Rank:** P **Length:** 1,140.00 (Ft) **Width:** 268.00 (Ft) **True Area:** 301741 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2002	JS-SI	Joint Seal - Silicon	0.00	0.10	☐	
8/1/1997	JS-BI	Joint Sealing - Bituminous	0.00	0.10	☐	Unknown Date, guess circa 1997
8/1/1997	CS-PC	Crack Sealing - PCC	0.00	0.10	☐	Unknown Date, guess circa 1997
8/2/1994	NC-PC	New Construction - PCC	2,561,448.00	6.00	☑	
8/1/1944	SB-AG	Subbase - Aggregate	0.00	9.00	☐	

Network: Warrenton-Astoria Re **Branch:** A01AT Apron 01 Astoria **Section:** 04 **Surface:**AC
L.C.D. 9/1/2020 **Use:** APRON **Rank:** P **Length:** 120.00 (Ft) **Width:** 220.00 (Ft) **True Area:** 26401 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2020	CR-AC	Complete Reconstruction - AC	132,005.00	0.00	☑	Unknown Thickness

Network: Warrenton-Astoria Re **Branch:** R08AT Runway 08/26 Ast **Section:** 01 **Surface:**APC
L.C.D. 9/13/1999 **Use:** RUNWAY **Rank:** P **Length:** 160.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 16000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
9/12/1999	MI-CO	Cold Milling	0.00	-0.75	☐	
8/1/1980	OL-AT	Overlay - AC Thin	0.00	0.75	☑	
8/2/1944	NC-PC	New Construction - PCC	0.00	6.00	☑	
8/1/1944	SB-AG	Subbase - Aggregate	0.00	9.00	☐	

Network: Warrenton-Astoria Re **Branch:** R08AT Runway 08/26 Ast **Section:** 02 **Surface:** AAC

L.C.D. 9/13/1999 **Use:** RUNWAY **Rank:** P **Length:** 5,486.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 548600 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
9/12/1999	MI-CO	Cold Milling	0.00	-0.75	☐	
8/1/1980	OL-AT	Overlay - AC Thin	0.00	0.75	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** R08AT Runway 08/26 Ast **Section:** 03 **Surface:** APC

L.C.D. 9/13/1999 **Use:** RUNWAY **Rank:** P **Length:** 150.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 15000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/2/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/2000	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
9/12/1999	MI-CO	Cold Milling	0.00	-0.75	☐	
8/1/1980	OL-AT	Overlay - AC Thin	0.00	0.75	☑	
8/2/1944	NC-PC	New Construction - PCC	0.00	6.00	☑	
8/1/1944	SB-AG	Subbase - Aggregate	0.00	9.00	☐	

Network: Warrenton-Astoria Re **Branch:** R14AT Runway 14/32 Ast **Section:** 01 **Surface:** AAC

L.C.D. 8/29/2016 **Use:** RUNWAY **Rank:** P **Length:** 855.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 85500 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/29/2016	OL-AS	Overlay - AC Structural	0.00	3.00	☑	2-4" thickness, P401
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1988	OL-AT	Overlay - AC Thin	0.00	2.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** R14AT Runway 14/32 Ast **Section:** 02 **Surface:** AAC

L.C.D. 9/13/1999 **Use:** RUNWAY **Rank:** P **Length:** 227.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 22732 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
5/2/2005	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/1/1988	OL-AT	Overlay - AC Thin	0.00	2.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** R14AT Runway 14/32 Ast **Section:** 03 **Surface:** AAC
L.C.D. 9/13/1999 **Use:** RUNWAY **Rank:** P **Length:** 200.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 19993 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/1/1988	OL-AT	Overlay - AC Thin	0.00	2.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** R14AT Runway 14/32 Ast **Section:** 04 **Surface:** AAC
L.C.D. 9/1/2016 **Use:** RUNWAY **Rank:** P **Length:** 3,067.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 306769 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2016	OL-AS	Overlay - AC Structural	0.00	3.00	☑	
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1988	OL-AT	Overlay - AC Thin	0.00	2.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** T01AT Taxiway 01 Astori **Section:** 01 **Surface:** AC
L.C.D. 8/1/1993 **Use:** TAXIWAY **Rank:** P **Length:** 72.00 (Ft) **Width:** 30.00 (Ft) **True Area:** 3396 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2002	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	

Network: Warrenton-Astoria Re **Branch:** T02AT Taxiway 02 Astori **Section:** 01 **Surface:** AC
L.C.D. 8/1/1993 **Use:** TAXIWAY **Rank:** P **Length:** 72.00 (Ft) **Width:** 30.00 (Ft) **True Area:** 3355 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2002	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	

Network: Warrenton-Astoria Re **Branch:** T03AT Taxiway 03 Astori **Section:** 01 **Surface:** AC
L.C.D. 8/1/1993 **Use:** TAXIWAY **Rank:** P **Length:** 72.00 (Ft) **Width:** 115.00 (Ft) **True Area:** 9227 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2002	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	

Network: Warrenton-Astoria Re **Branch:** TA2AT Taxiway A2 Astori **Section:** 01 **Surface:** AAC
L.C.D. 8/1/1991 **Use:** TAXIWAY **Rank:** P **Length:** 893.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 43925 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TA2AT Taxiway A2 Astori **Section:** 02 **Surface:** AAC
L.C.D. 8/29/2016 **Use:** TAXIWAY **Rank:** P **Length:** 100.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 8087 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/29/2016	OL-AS	Overlay - AC Structural	0.00	3.00	☑	2-4" overlay thickness, P401
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TA2AT Taxiway A2 Astori **Section:** 03 **Surface:** AAC
L.C.D. 8/29/2016 **Use:** TAXIWAY **Rank:** P **Length:** 233.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 16832 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/29/2016	OL-AS	Overlay - AC Structural	0.00	3.00	☑	2-4" overlay thickness, P401
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TA2AT Taxiway A2 Astori **Section:** 04 **Surface:** AAC
L.C.D. 8/1/1991 **Use:** TAXIWAY **Rank:** P **Length:** 525.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 31854 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TA2AT Taxiway A2 Astori **Section:** 05 **Surface:** AC
L.C.D. 9/13/1999 **Use:** TAXIWAY **Rank:** P **Length:** 27.00 (Ft) **Width:** 205.00 (Ft) **True Area:** 6627 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/13/1999	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown LCD and thickness

Network: Warrenton-Astoria Re **Branch:** TA3AT Taxiway A3 Astori **Section:** 01 **Surface:** AC
L.C.D. 9/1/2019 **Use:** TAXIWAY **Rank:** P **Length:** 200.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 13782 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2019	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown Thickness
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TA3AT Taxiway A3 Astori **Section:** 02 **Surface:** AC
L.C.D. 9/1/2019 **Use:** TAXIWAY **Rank:** P **Length:** 200.00 (Ft) **Width:** 75.00 (Ft) **True Area:** 16070 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2019	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown Thickness
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TA3AT Taxiway A3 Astori **Section:** 03 **Surface:** AC
L.C.D. 9/1/2019 **Use:** TAXIWAY **Rank:** P **Length:** 1,480.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 87104 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2019	CR-AC	Complete Reconstruction - AC	435,520.00	0.00	☑	Unknown Thickness
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1991	OL-AS	Overlay - AC Structural	0.00	0.00	☑	UNKNOWN DEPTH
8/2/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	
8/1/1944	NC-AC	New Construction - AC	0.00	2.50	☑	

Network: Warrenton-Astoria Re **Branch:** TA3AT Taxiway A3 Astori **Section:** 04 **Surface:** PCC
L.C.D. 8/1/1944 **Use:** TAXIWAY **Rank:** P **Length:** 41.00 (Ft) **Width:** 45.00 (Ft) **True Area:** 1981 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1944	NC-PC	New Construction - PCC	0.00	0.00	☑	UNKNOWN PCC, est. circa 1944

Network: Warrenton-Astoria Re **Branch:** TA3AT Taxiway A3 Astori **Section:** 05 **Surface:** AC
L.C.D. 8/1/1944 **Use:** TAXIWAY **Rank:** P **Length:** 160.00 (Ft) **Width:** 45.00 (Ft) **True Area:** 7704 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	ST-SS	Surface Treatment - Slurry Seal	0.00	0.50	☐	Unknown Date
8/1/1944	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown Date

Network: Warrenton-Astoria Re **Branch:** TAAT Taxiway A Astoria **Section:** 01 **Surface:** AAC
L.C.D. 8/1/1988 **Use:** TAXIWAY **Rank:** P **Length:** 2,700.00 (Ft) **Width:** 47.50 (Ft) **True Area:** 136063 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2002	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1988	OL-AT	Overlay - AC Thin	0.00	2.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TAAT Taxiway A Astoria **Section:** 02 **Surface:** AAC
L.C.D. 9/13/1999 **Use:** TAXIWAY **Rank:** P **Length:** 92.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 7358 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/1/1988	OL-AT	Overlay - AC Thin	0.00	2.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TARUNAT Taxiway A Run-U **Section:** 01 **Surface:** AC
L.C.D. 9/1/2019 **Use:** TAXIWAY **Rank:** P **Length:** 250.00 (Ft) **Width:** 100.00 (Ft) **True Area:** 22810 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2019	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown Thickness

Network: Warrenton-Astoria Re **Branch:** TB2AT Taxiway B2 Astori **Section:** 01 **Surface:** AAC
L.C.D. 8/1/1993 **Use:** TAXIWAY **Rank:** P **Length:** 200.00 (Ft) **Width:** 35.00 (Ft) **True Area:** 8740 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
5/2/2005	CS-AC	Crack Sealing - AC	0.00	0.10	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TB2AT Taxiway B2 Astori **Section:** 02 **Surface:** AAC
L.C.D. 8/29/2016 **Use:** TAXIWAY **Rank:** P **Length:** 54.00 (Ft) **Width:** 76.00 (Ft) **True Area:** 6030 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/29/2016	OL-AS	Overlay - AC Structural	0.00	3.00	☑	2-4" overlay, P401
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TB3AT Taxiway B3 Astori **Section:** 01 **Surface:**AAC
L.C.D. 8/29/2016 **Use:** TAXIWAY **Rank:** P **Length:** 77.00 (Ft) **Width:** 37.00 (Ft) **True Area:** 4346 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/29/2016	OL-AS	Overlay - AC Structural	0.00	3.00	☑	2-4" overlay, P401
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TB3AT Taxiway B3 Astori **Section:** 02 **Surface:**AAC
L.C.D. 8/1/1993 **Use:** TAXIWAY **Rank:** P **Length:** 870.00 (Ft) **Width:** 37.00 (Ft) **True Area:** 32262 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TB3AT Taxiway B3 Astori **Section:** 03 **Surface:**PCC
L.C.D. 8/1/1944 **Use:** TAXIWAY **Rank:** P **Length:** 45.00 (Ft) **Width:** 79.00 (Ft) **True Area:** 2329 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1944	NC-PC	New Construction - PCC	0.00	0.00	☑	UNKNOWN PCC, est. circa 1944

Network: Warrenton-Astoria Re **Branch:** TB3AT Taxiway B3 Astori **Section:** 04 **Surface:**AAC
L.C.D. 9/13/1999 **Use:** TAXIWAY **Rank:** P **Length:** 25.00 (Ft) **Width:** 79.00 (Ft) **True Area:** 2100 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2000	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
9/13/1999	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TBAT Taxiway B Astoria **Section:** 01 **Surface:**AAC
L.C.D. 8/1/1993 **Use:** TAXIWAY **Rank:** P **Length:** 2,423.00 (Ft) **Width:** 35.00 (Ft) **True Area:** 86863 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2009	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/2002	SS-FS	Surface Seal - Fog Seal	0.00	0.10	☐	
8/1/1993	OL-AS	Overlay - AC Structural	0.00	4.00	☑	
8/2/1944	NC-AC	New Construction - AC	0.00	2.50	☑	
8/1/1944	BA-AG	Base Course - Aggregate	0.00	13.00	☐	

Network: Warrenton-Astoria Re **Branch:** TBAT Taxiway B Astoria **Section:** 02 **Surface:**AC
L.C.D. 8/29/2016 **Use:** TAXIWAY **Rank:** P **Length:** 522.00 (Ft) **Width:** 43.50 (Ft) **True Area:** 21738 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/29/2016	CR-AC	Complete Reconstruction - AC	0.00	4.00	☑	P401
8/28/2016	BA-AG	Base Course - Aggregate	0.00	6.00	☐	P209
8/27/2016	SB-AG	Subbase - Aggregate	0.00	18.00	☐	P154
8/26/2016	FB-TX	Geotextile	0.00	0.00	☐	

Network: Warrenton-Astoria Re **Branch:** THANGAT Hangar Taxiway A **Section:** 01 **Surface:**AC
L.C.D. 10/4/2001 **Use:** TAXIWAY **Rank:** S **Length:** 355.00 (Ft) **Width:** 115.00 (Ft) **True Area:** 33806 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
10/4/2001	NC-AC	New Construction - AC	0.00	2.50	☑	
10/3/2001	BA-AG	Base Course - Aggregate	0.00	3.00	☐	Crushed Surfacing Top Course
10/2/2001	BA-AG	Base Course - Aggregate	0.00	4.00	☐	Crushed Surfacing Base Course
10/1/2001	SB-AG	Subbase - Aggregate	0.00	8.00	☐	

Network: Warrenton-Astoria Re **Branch:** THANGAT Hangar Taxiway A **Section:** 02 **Surface:**AC
L.C.D. 8/3/2008 **Use:** TAXIWAY **Rank:** S **Length:** 358.00 (Ft) **Width:** 170.00 (Ft) **True Area:** 43219 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/3/2008	NC-AC	New Construction - AC	0.00	2.50	☑	P-403
8/2/2008	BA-CA	Base Course - Crushed Aggregate	0.00	7.00	☐	P-208
8/1/2008	SB-AG	Subbase - Aggregate	0.00	8.00	☐	P-154

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Base Course - Aggregate	23	1,574,360.00	11.87	2.95
Base Course - Crushed Aggregate	1	43,219.00	7.00	0.00
Cold Milling	3	579,600.00	-0.75	0.00
Complete Reconstruction - AC	4	297,616.00	1.00	1.73
Crack Sealing - AC	21	1,597,208.00	0.05	0.05
Crack Sealing - PCC	2	357,299.00	0.10	0.00
Geotextile	1	21,738.00	0.00	0.00
Joint Seal - Silicon	2	357,299.00	0.10	0.00
Joint Sealing - Bituminous	2	357,299.00	0.10	0.00
New Construction - AC	27	1,629,028.00	2.04	0.97
New Construction - PCC	6	392,609.00	4.00	2.83
Overlay - AC Structural	29	1,445,002.00	2.83	1.64
Overlay - AC Thin	9	1,158,015.00	1.58	0.59
Subbase - Aggregate	7	487,062.00	10.00	3.30
Surface Seal - Fog Seal	25	1,562,122.00	0.10	0.00
Surface Treatment - Slurry Seal	1	7,704.00	0.50	0.00