2023 ODAV Pavement Evaluation Program Stark's Twin Oaks Airpark

Hillsboro, Oregon

December 29, 2023

Prepared for

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1 OVERVIEW

GRI assisted with updating the Oregon Department of Aviation (ODAV) airport pavement management system and developing a five-year plan comprised of maintenance, surface treatment, rehabilitation, and reconstruction projects for Stark's Twin Oaks Airpark in Hillsboro, 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 Stark's Twin Oaks Airpark 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

Stark's Twin Oaks Airpark is located in Hillsboro, Oregon, and is owned and operated by Robert C. and Betty Stark. The airport consists of a single runway, a taxiway, multiple connector taxiways, and aprons that serve a variety of general aviation aircraft. The general location of the airport is shown below on Stark's Twin Oaks Airpark Location Map, Figure 2.1.

Figure 2.1: STARK'S TWIN OAKS AIRPARK LOCATION MAP

The airside pavements at Stark's Twin Oaks Airpark are comprised of asphalt concrete (AC), AC overlaid with AC (AAC), and portland cement concrete (PCC). The airport pavements, delineated by surface type and branch use, are shown on the Stark's Twin Oaks Airpark Percent of Pavement Area by Surface Type, Figure 2.2, and on the Stark's Twin Oaks Pavement Area by Branch Use, Figure 2.3. The pavement inventory, including work history for each pavement section, is displayed spatially on Stark's Twin Oaks Airpark 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.

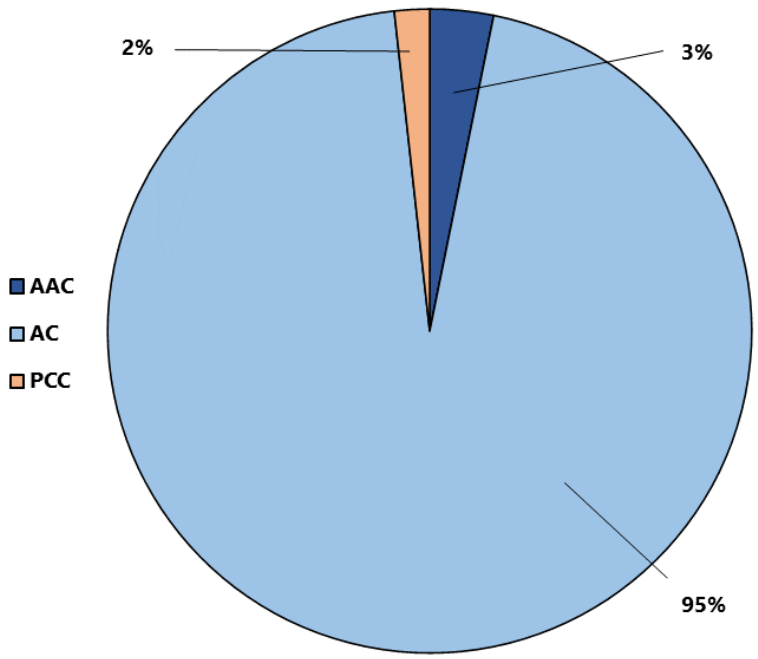


Figure 2.2: STARK'S TWIN OAKS AIRPARK PERCENT OF PAVEMENT AREA BY SURFACE TYPE

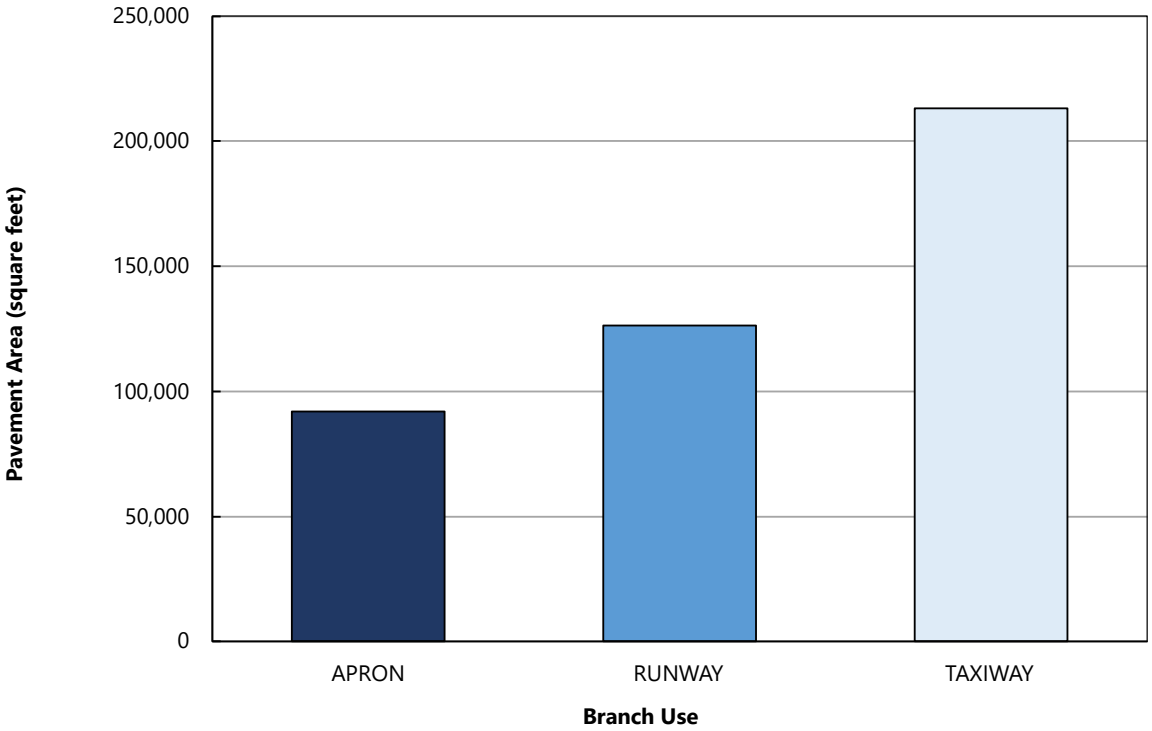
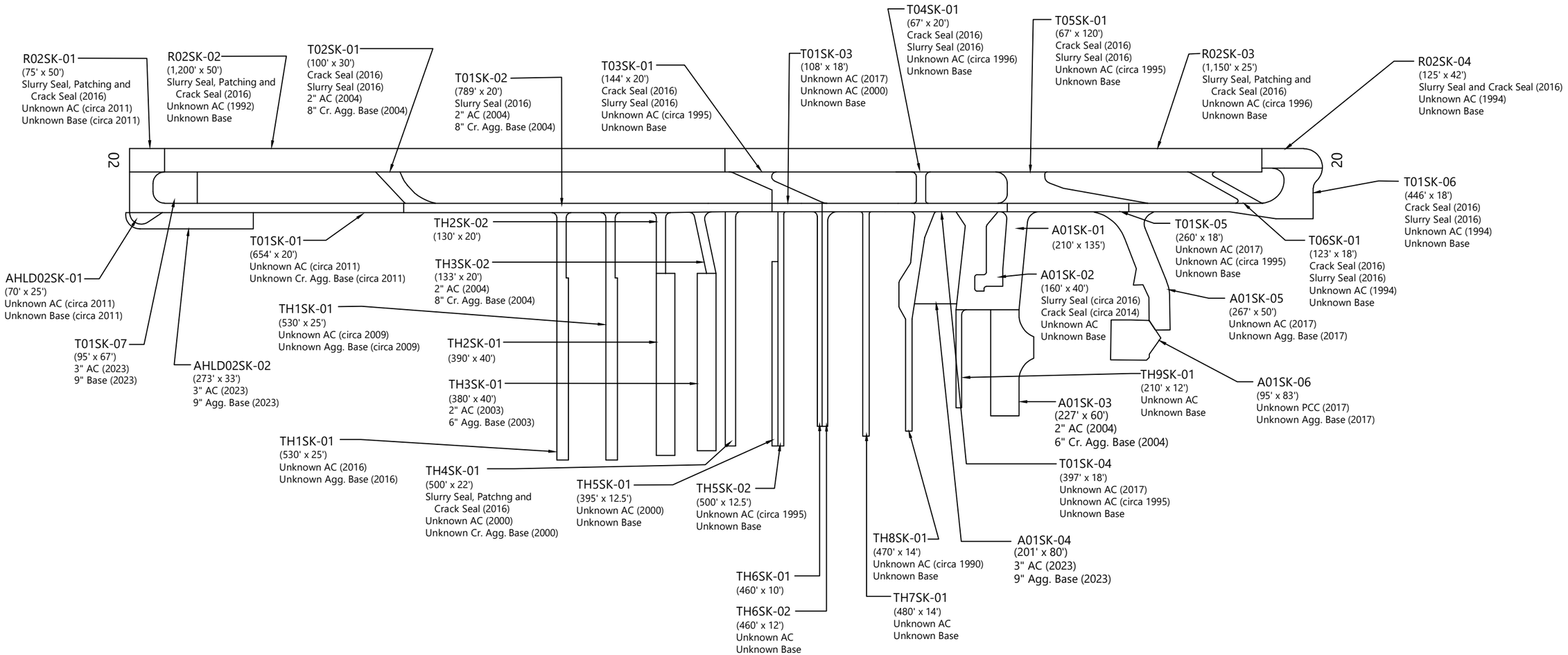
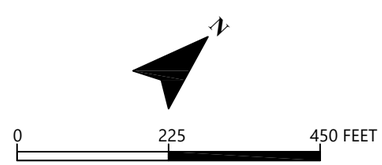


Figure 2.3: STARK'S TWIN OAKS AIRPARK PAVEMENT AREA BY BRANCH USE



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



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STATEWIDE PAVEMENT EVALUATION PROGRAM

STARK'S TWIN OAKS AIRPARK PAVEMENT INVENTORY

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

3 PAVEMENT CONDITION INSPECTION RESULTS

3.1 Introduction

GRI conducted a visual PCI survey of the airside pavements at Stark's Twin Oaks Airpark in July 2023. The 2023 survey work was performed on sections last inspected in 2018 in order to update Stark's Twin Oaks Airpark 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.

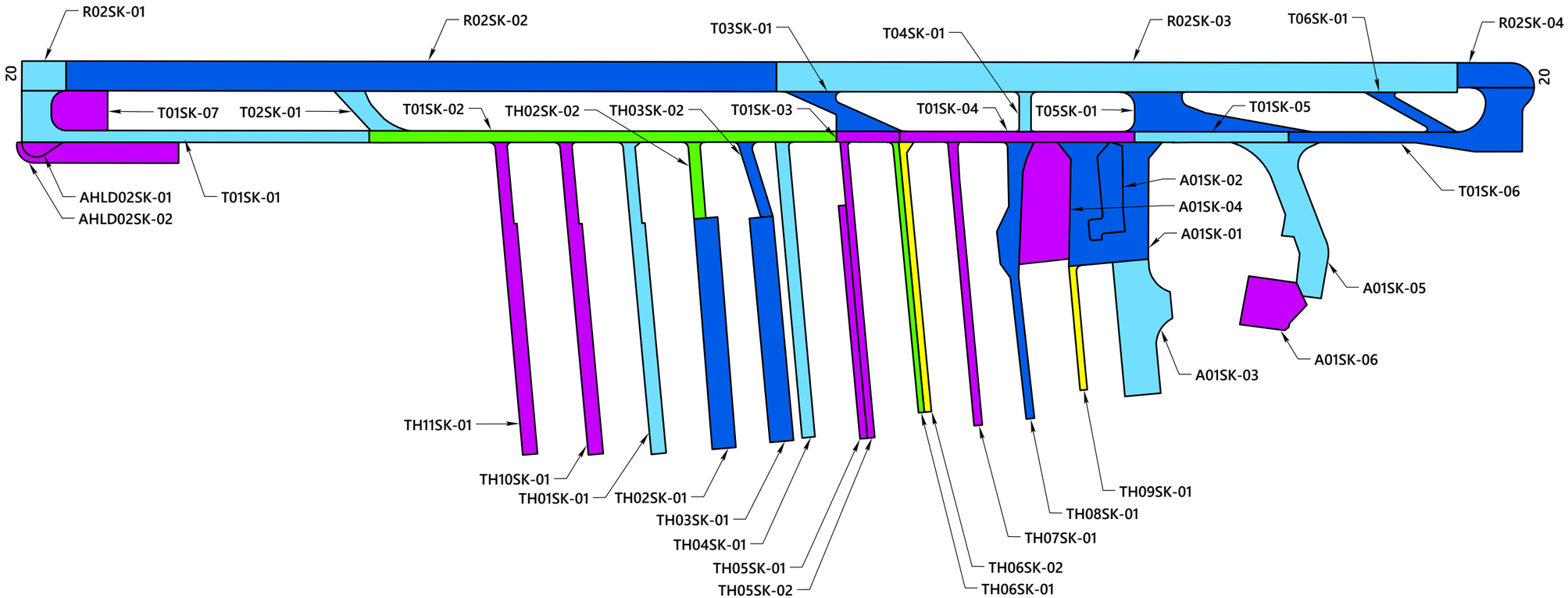
The PCI is based on the type, severity, and quantity of each distress found in an inspected sample unit. Further discussion of distress types for flexible and rigid pavement is provided in Appendix B and summarized in Table 1B in Appendix B. The results of the PCI survey are displayed using a seven-category 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 Stark's Twin Oaks Airpark is approximately 74. The section PCIs ranged from a low of 30 to a high of 100. The primary distresses observed during the inspection were weathering, longitudinal and transverse cracking, fatigue (alligator) cracking, and patching on AC-surfaced pavements, and joint seal damage on PCC pavements. Section PCIs following our pavement survey are displayed below spatially on the Stark's Twin Oaks Airpark 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

0 200 400 Feet

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STARK'S TWIN OAKS AIRPARK
2023 PCI SURVEY RESULTS

DEC. 2023 JOB NO. 6593-E FIG. 3.1

The condition distribution of the network by percent of total pavement area is provided on Stark's Twin Oaks Airpark 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.

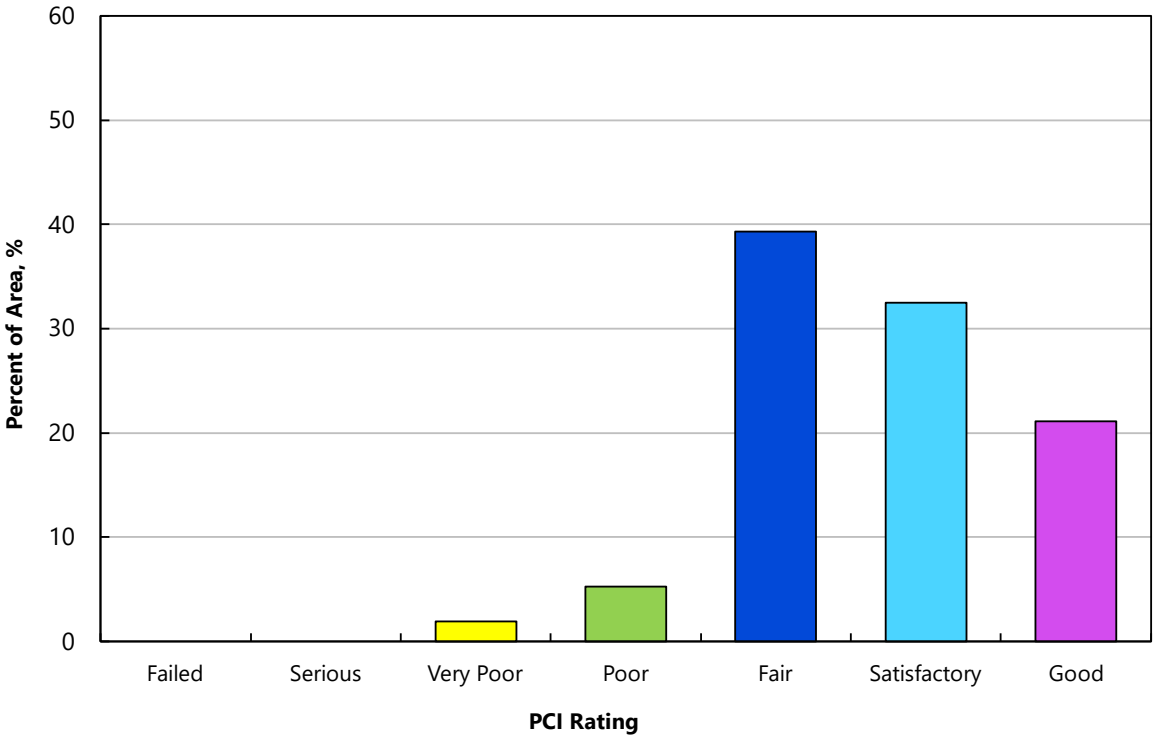


Figure 3.2: STARK'S TWIN OAKS AIRPARK PAVEMENT CONDITION RATING BY PERCENT OF AREA

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 Stark's Twin Oaks Airpark 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 74 to a value of 68 in 2028 and 62 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 Stark's Twin Oaks Airpark is displayed spatially on the Stark's Twin Oaks Airpark 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.

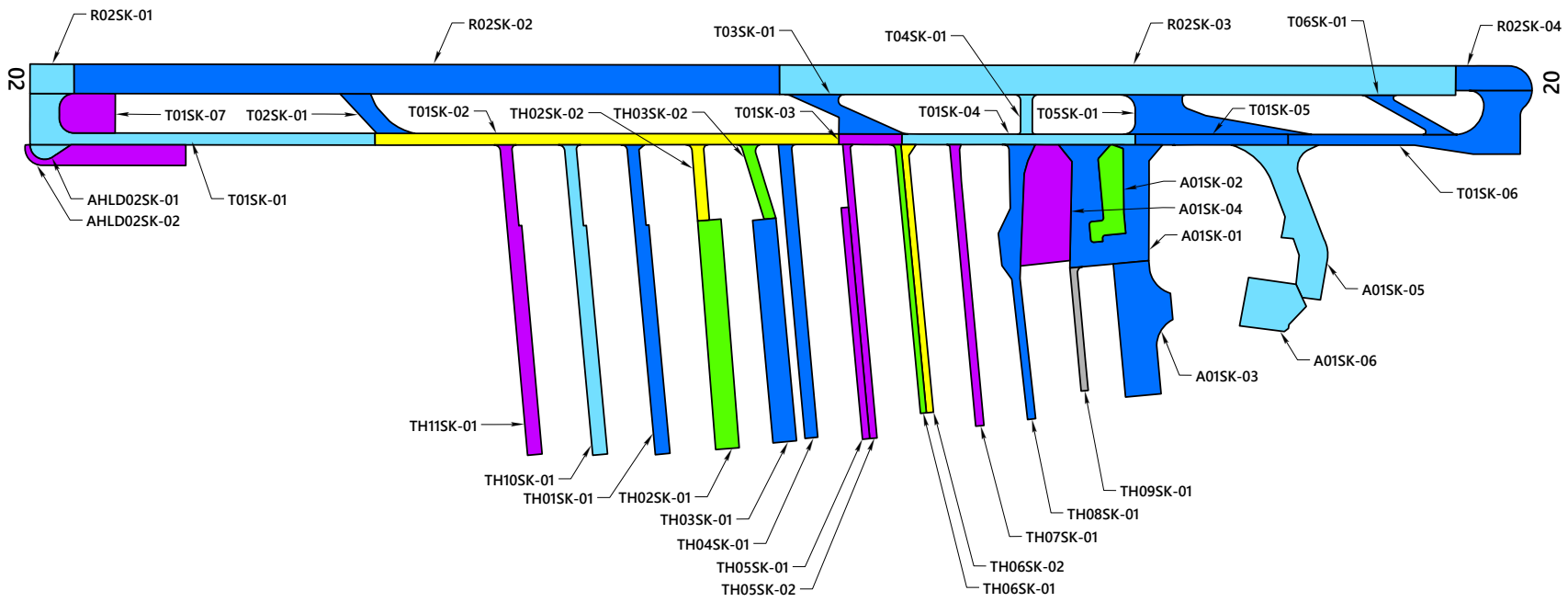
4.3 Functional Remaining Life

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.

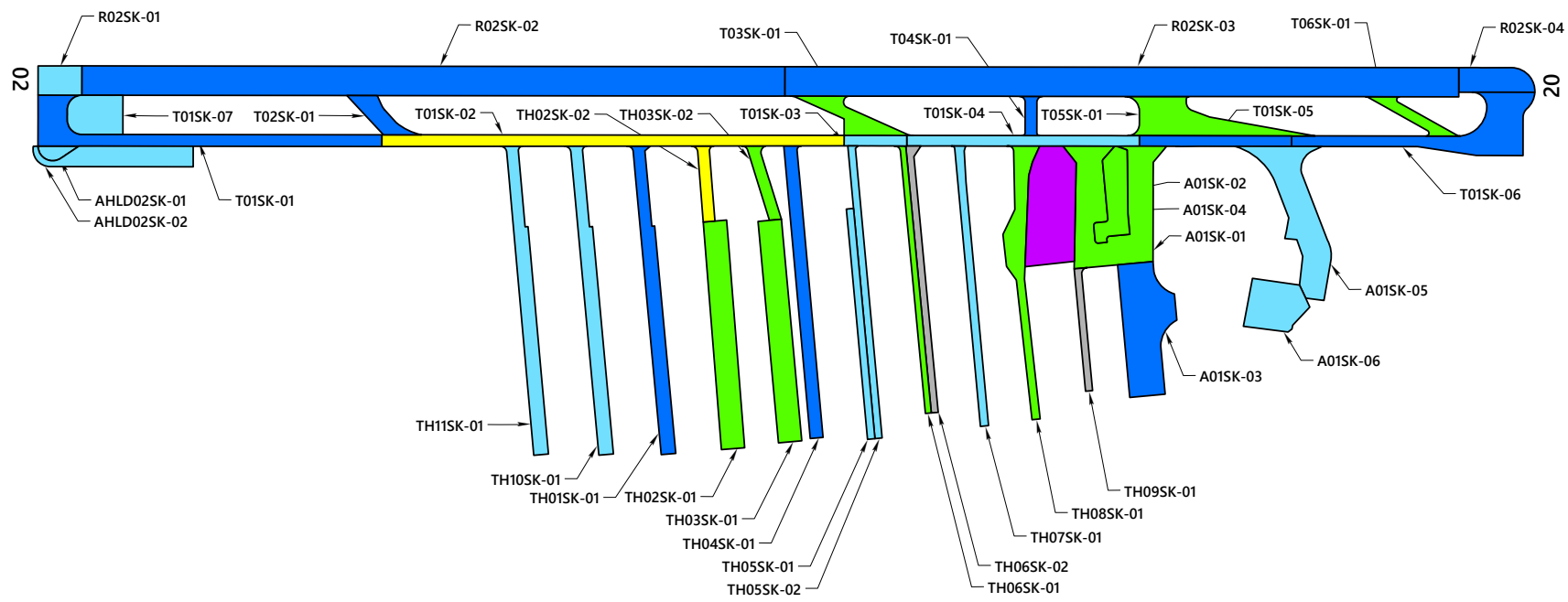
We calculated two forms of functional remaining life based on the current visual condition surveys of the pavement at Stark's Twin Oaks Airpark. The first type of functional remaining life is the time until rehabilitation, such as an overlay, is needed. The critical PCI, further discussed in Section 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 Stark's Twin Oaks Airpark are summarized in Table 2C in Appendix C.

PREDICTED CONDITION IN 2028

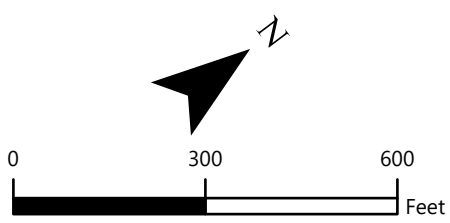


PREDICTED CONDITION IN 2033



SECTION PCI

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



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STARK'S TWIN OAKS AIRPARK
FUTURE PAVEMENT CONDITION

DEC. 2023 JOB NO. 6593-E 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 priority 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

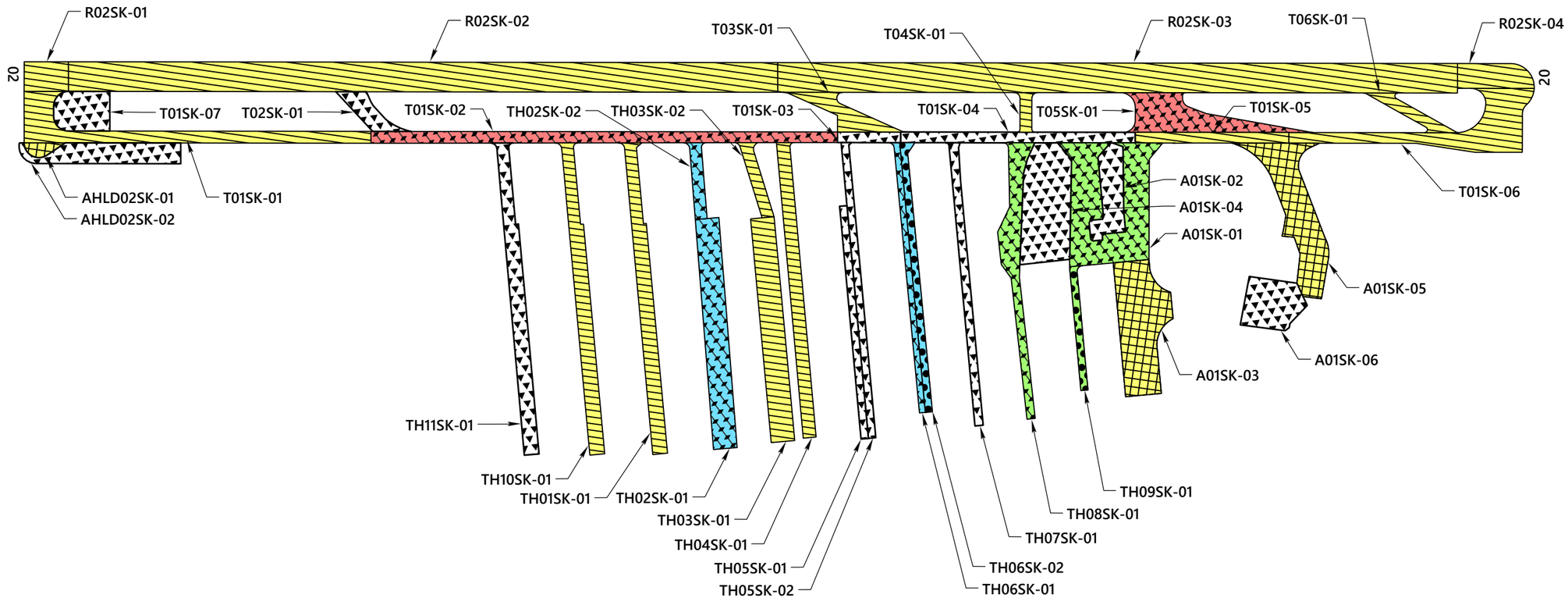
Localized Maintenance Operation	Quantity
Asphalt Concrete Crack Sealing	25,466 linear feet
Asphalt Concrete Wide Crack Sealing	11 linear feet
Portland Cement Concrete Crack Sealing	88 linear feet

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 Stark's Twin Oaks Airpark 5-Year Pavement Management Plan, 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	18,211
Overlay	70,478
Fog Seal	31,912
Slurry Seal	223,939



ACTION TIMING

- 2024
- 2025
- 2026
- 2027
- 2028

ACTION

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

N

0 200 400 Feet

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STATEWIDE PAVEMENT EVALUATION PROGRAM

STARK'S TWIN OAKS AIRPARK

5-YEAR PAVEMENT MANAGEMENT PLAN

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

6 LIMITATIONS

This report has been prepared to assist the Oregon Department of Aviation (ODAV) with pavement-related project planning for Stark's Twin Oaks Airpark. 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 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 Stark's Twin Oaks Airpark 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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This document has been submitted electronically.

APPENDIX A

Pavement Inventory Reports and Maps

APPENDIX A

PAVEMENT INVENTORY REPORTS AND MAPS

A.1 PAVEMENT NETWORK

Stark's Twin Oaks Airpark is located in Hillsboro, Oregon, and is owned and operated by Robert C. and Betty Stark. The pavement network/facilities at Stark's Twin Oaks Airpark serve a variety of general aviation aircraft. Stark's Twin Oaks Airpark consists of a single runway, a taxiway, multiple connector taxiways, and aprons. The types of airside pavements include asphalt concrete (AC), AC overlaid with AC (AAC), and portland cement concrete (PCC).

The current airport pavement management system (APMS) network at Stark's Twin Oaks Airpark has an approximate area of 431,453 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 Stark's Twin Oaks Airpark contains 20 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 Stark's Twin Oaks Airpark contains 39 sections that are managed by Robert C. and Betty Stark, 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 Stark's Twin Oaks Airpark 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 Stark's Twin Oaks Airpark 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: STARK'S TWIN OAKS AIRPARK PAVEMENT BRANCHES

Facility Designation (Branch ID)	Branch Name	Number of Sections	Approximate Area, square feet
A01SK	Apron 01 Stark's	6	82,560
AHLD02SK	Hold Apron RW 02 Stark's	2	9,385
R02SK	Runway 02/20 Stark's	4	126,367
T01SK	Taxiway 01 Stark's	7	65,514
T02SK	Taxiway 02 Stark's	1	3,029
T03SK	Taxiway 03 Stark's	1	4,509
T04SK	Taxiway 04 Stark's	1	1,394
T05SK	Taxiway 05 Stark's	1	10,065
T06SK	Taxiway 06 Stark's	1	2,570
TH1SK	Hangar Taxiway 1 Stark's	1	12,593
TH2SK	Hangar Taxiway 2 Stark's	2	18,242
TH3SK	Hangar Taxiway 3 Stark's	2	17,966
TH4SK	Hangar Taxiway 4 Stark's	1	11,065
TH5SK	Hangar Taxiway 5 Stark's	2	11,217
TH6SK	Hangar Taxiway 6 Stark's	2	10,226
TH7SK	Hangar Taxiway 7 Stark's	1	6,744
TH8SK	Hangar Taxiway 8 Stark's	1	10,313
TH9SK	Hangar Taxiway 9 Stark's	1	2,541
TH10SK	Hangar Taxiway 10 Stark's	1	12,592
TH11SK	Hangar Taxiway 11 Stark's	1	12,561

Table 2A: STARK'S TWIN OAKS AIRPARK 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
A01SK	Apron 01 Stark's	APRON	01	Taxiway 01	Section 03	P	210	135	21,840	8/1/1985	AC	0	0	0
A01SK	Apron 01 Stark's	APRON	02	Taxiway 01	Section 01	P	160	40	6,617	8/1/1980	AC	0	0	0
A01SK	Apron 01 Stark's	APRON	03	Section 01	Hangar	P	227	60	16,016	8/2/2004	AC	0	0	0
A01SK	Apron 01 Stark's	APRON	04	Taxiway	A01SK-01	P	200	80	15,753	6/2/2023	AC	0	0	0
A01SK	Apron 01 Stark's	APRON	05	Taxiway	A01SK-06	P	270	52	14,753	9/2/2017	AC	0	0	0
A01SK	Apron 01 Stark's	APRON	06	A01SK-05	End	P	105	82	7,581	9/2/2017	PCC	11	11	73
AHLD02SK	Hold Apron RW 02 Stark's	APRON	01	Taxiway 06	End	P	70	25	1,143	9/1/2011	AC	0	0	0
AHLD02SK	Hold Apron RW 02 Stark's	APRON	02	AHLD02SK-01	Taxiway 02	P	270	35	8,242	4/2/2023	AC	0	0	0
R02SK	Runway 02/20 Stark's	RUNWAY	01	Runway 02 End	Section 02	P	75	50	3,750	9/1/2011	AC	0	0	0
R02SK	Runway 02/20 Stark's	RUNWAY	02	Section 01	Section 03	P	1,200	50	60,000	8/1/1992	AC	0	0	0
R02SK	Runway 02/20 Stark's	RUNWAY	03	Taxiway 02	Section 04	P	1,150	50	57,500	8/1/1996	AC	0	0	0
R02SK	Runway 02/20 Stark's	RUNWAY	04	Section 03	Runway 20 End	P	125	42	5,117	8/1/1994	AC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	01	Runway 02	Taxiway 02	P	654	20	15,358	9/1/2011	AC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	02	Taxiway 02	TH1	P	789	20	15,462	8/2/2004	AC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	03	Taxiway 03	Intersection	P	108	18	1,926	9/1/2017	AAC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	04	Taxiway 03	Taxiway 05	P	397	18	7,146	9/1/2017	AAC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	05	Taxiway 05	Intersection	P	260	18	4,680	9/1/2017	AAC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	06	Taxiway 06	Runway 20 End	P	446	18	14,845	8/1/1994	AC	0	0	0
T01SK	Taxiway 01 Stark's	TAXIWAY	07	Runway 02	Taxiway 02	P	67	95	6,097	4/2/2023	AC	0	0	0
T02SK	Taxiway 02 Stark's	TAXIWAY	01	Runway 02/20	Taxiway 06	P	90	50	3,029	8/2/2004	AC	0	0	0
T03SK	Taxiway 03 Stark's	TAXIWAY	01	Runway 02/20	Taxiway 01	P	144	20	4,509	8/1/1995	AC	0	0	0
T04SK	Taxiway 04 Stark's	TAXIWAY	01	Runway 02/20	Taxiway 01	P	67	20	1,394	8/1/1996	AC	0	0	0
T05SK	Taxiway 05 Stark's	TAXIWAY	01	Runway 02/20	Taxiway 01	P	67	120	10,065	8/1/1995	AC	0	0	0
T06SK	Taxiway 06 Stark's	TAXIWAY	01	Runway 02/20	Taxiway 01	P	123	18	2,570	8/1/1994	AC	0	0	0
TH10SK	Hangar Taxiway 10 Stark's	TAXIWAY	01	Taxiway 01	Hangars	P	530	25	12,592	9/1/2016	AC	0	0	0
TH11SK	Hangar Taxiway 11 Stark's	TAXIWAY	01	T01SK-02	End	P	530	25	12,561	9/1/2020	AC	0	0	0
TH1SK	Hangar Taxiway 1 Stark's	TAXIWAY	01	Taxiway 01 Stark's	East End	S	530	25	12,593	6/1/2009	AC	0	0	0
TH2SK	Hangar Taxiway 2 Stark's	TAXIWAY	01	TH2SK-01	Hangars	P	390	40	15,600	9/2/2003	AC	0	0	0
TH2SK	Hangar Taxiway 2 Stark's	TAXIWAY	02	T01SK-02	Hangars	P	130	20	2,642	8/2/2004	AC	0	0	0
TH3SK	Hangar Taxiway 3 Stark's	TAXIWAY	01	TH3SK-01	Hangars	P	380	40	15,200	9/2/2003	AC	0	0	0
TH3SK	Hangar Taxiway 3 Stark's	TAXIWAY	02	T01SK-02	Hangars	P	133	20	2,766	8/2/2004	AC	0	0	0
TH4SK	Hangar Taxiway 4 Stark's	TAXIWAY	01	Taxiway 01	Hangars	S	500	22	11,065	8/1/2000	AC	0	0	0
TH5SK	Hangar Taxiway 5 Stark's	TAXIWAY	01	Section 02	Hangars	S	395	13	4,937	8/1/2000	AC	0	0	0
TH5SK	Hangar Taxiway 5 Stark's	TAXIWAY	02	Taxiway 01	Hangars	S	500	13	6,280	8/1/1995	AC	0	0	0
TH6SK	Hangar Taxiway 6 Stark's	TAXIWAY	01	Taxiway 01	Hangars	S	460	10	4,621	8/1/1990	AC	0	0	0
TH6SK	Hangar Taxiway 6 Stark's	TAXIWAY	02	Taxiway 01	Hangars	S	460	12	5,605	8/1/1990	AC	0	0	0
TH7SK	Hangar Taxiway 7 Stark's	TAXIWAY	01	Taxiway 01	Hangars	S	480	14	6,744	8/1/1990	AC	0	0	0
TH8SK	Hangar Taxiway 8 Stark's	TAXIWAY	01	Taxiway 01	Hangars	S	470	14	10,313	8/1/1990	AC	0	0	0
TH9SK	Hangar Taxiway 9 Stark's	TAXIWAY	01	Apron 01	Hangars	S	210	12	2,541	8/1/1985	AC	0	0	0

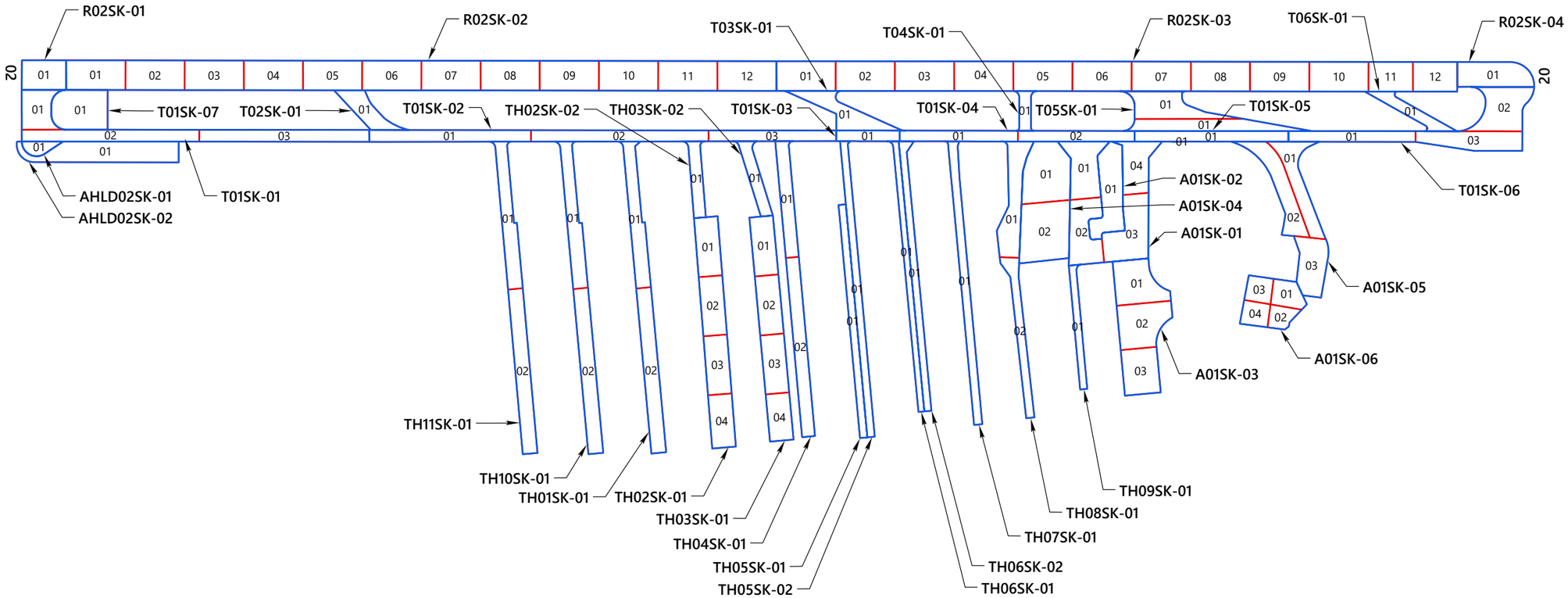
Abbreviations:
P = Primary pavement, S = Secondary pavement
LCD = Last Construction Date. The date of the last major rehabilitation (e.g. overlay)
AC = Asphalt Concrete, AAC = AC overlaid AC, PCC = Portland Cement Concrete

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

0 200 400 Feet

GRI

STARK'S TWIN OAKS AIRPARK
SAMPLE UNIT LAYOUT

DEC. 2023 JOB NO. 6593-E 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		
PAVER Code	Pavement Distress	Related Cause
41	Alligator Cracking	Load
42	Bleeding	Other
43	Block Cracking	Climate/ Durability
44	Corrugation	Other
45	Depression	Other
46	Jet Blast	Other
47	Joint Reflection Cracking	Climate/ Durability
48	Longitudinal & Transverse Cracking	Climate/ Durability
49	Oil Spillage	Other
50	Patching	Climate/ Durability
51	Polished Aggregate	Other
52	Raveling	Climate/ Durability

Rigid Pavement		
PAVER Code	Pavement Distress	Related Cause
61	Blow-Up	Load
62	Corner Break	Load
63	Longitudinal, Transverse, & Diagonal Cracks	Climate/ Durability
64	Durability Cracking	Climate/ Durability
65	Joint Seal Damage	Other
66	Small Patch	Other
67	Large Patch	Other
68	Pop Outs	Other
69	Pumping	Other
70	Scaling	Other
71	Faulting	Other
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 distresses include 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:** 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 Stark's Twin Oaks Airpark pavement network consists of 20 branches and 39 sections. A total of 69 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 Stark's Twin Oaks Airpark is approximately 74, 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 Stark's Twin Oaks Airpark pavement sections is outlined in Table 4B in this appendix.

Table 2B: STARK'S TWIN OAKS AIRPARK CURRENT BRANCH CONDITION REPORT

Branch ID	Number of Sections	Approximate Area, square feet	Use	Area Weighted Average Branch PCI	PCI Category
A01SK	6	82,560	APRON	78	Satisfactory
AHLD02SK	2	9,385	APRON	93	Good
R02SK	4	126,367	RUNWAY	72	Satisfactory
T01SK	7	65,514	TAXIWAY	73	Satisfactory
T02SK	1	3,029	TAXIWAY	76	Satisfactory
T03SK	1	4,509	TAXIWAY	69	Fair
T04SK	1	1,394	TAXIWAY	79	Satisfactory
T05SK	1	10,065	TAXIWAY	64	Fair
T06SK	1	2,570	TAXIWAY	68	Fair
TH1SK	1	12,593	TAXIWAY	77	Satisfactory
TH2SK	2	18,242	TAXIWAY	56	Fair
TH3SK	2	17,966	TAXIWAY	67	Fair
TH4SK	1	11,065	TAXIWAY	73	Satisfactory
TH5SK	2	11,217	TAXIWAY	94	Good
TH6SK	2	10,226	TAXIWAY	45	Poor
TH7SK	1	6,744	TAXIWAY	94	Good
TH8SK	1	10,313	TAXIWAY	63	Fair
TH9SK	1	2,541	TAXIWAY	30	Very Poor
TH10SK	1	12,592	TAXIWAY	88	Good
TH11SK	1	12,561	TAXIWAY	94	Good

Use Category	Number of Sections	Total Area, square feet	Area Weighted Average PCI
APRON	8	91,945	80
RUNWAY	4	126,367	72
TAXIWAY	26	213,141	73
ALL	**38**	**431,453**	**74**

Table 3B: STARK'S TWIN OAKS AIRPARK 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
A01SK	01	8/1/1985	AC	APRON	7/1/2023	38	63	Fair	36	64	0
A01SK	02	8/1/1980	AC	APRON	7/1/2023	43	56	Fair	72	28	0
A01SK	03	8/2/2004	AC	APRON	7/1/2023	19	75	Satisfactory	75	25	0
A01SK	04	6/2/2023	AC	APRON	7/1/2023	0	100	Good	0	0	0
A01SK	05	9/2/2017	AC	APRON	7/1/2023	6	84	Satisfactory	100	0	0
A01SK	06	9/2/2017	PCC	APRON	7/1/2023	6	90	Good	16	74	10
AHLD02SK	01	9/1/2011	AC	APRON	7/1/2023	12	86	Good	100	0	0
AHLD02SK	02	4/2/2023	AC	APRON	7/1/2023	0	94	Good	100	0	0
R02SK	01	9/1/2011	AC	RUNWAY	7/1/2023	12	83	Satisfactory	100	0	0
R02SK	02	8/1/1992	AC	RUNWAY	7/1/2023	31	67	Fair	69	31	0
R02SK	03	8/1/1996	AC	RUNWAY	7/1/2023	27	76	Satisfactory	100	0	0
R02SK	04	8/1/1994	AC	RUNWAY	7/1/2023	29	67	Fair	100	0	0
T01SK	01	9/1/2011	AC	TAXIWAY	7/1/2023	12	83	Satisfactory	98	0	2
T01SK	02	8/2/2004	AC	TAXIWAY	7/1/2023	19	47	Poor	43	57	0
T01SK	03	9/1/2017	AAC	TAXIWAY	7/1/2023	6	95	Good	100	0	0
T01SK	04	9/1/2017	AAC	TAXIWAY	7/1/2023	6	92	Good	100	0	0
T01SK	05	9/1/2017	AAC	TAXIWAY	7/1/2023	6	76	Satisfactory	67	33	0
T01SK	06	8/1/1994	AC	TAXIWAY	7/1/2023	29	70	Fair	66	34	0
T01SK	07	4/2/2023	AC	TAXIWAY	7/1/2023	0	94	Good	100	0	0
T02SK	01	8/2/2004	AC	TAXIWAY	7/1/2023	19	76	Satisfactory	100	0	0
T03SK	01	8/1/1995	AC	TAXIWAY	7/1/2023	28	69	Fair	100	0	0
T04SK	01	8/1/1996	AC	TAXIWAY	7/1/2023	27	79	Satisfactory	100	0	0
T05SK	01	8/1/1995	AC	TAXIWAY	7/1/2023	28	64	Fair	45	55	0
T06SK	01	8/1/1994	AC	TAXIWAY	7/1/2023	29	68	Fair	100	0	0
TH10SK	01	9/1/2016	AC	TAXIWAY	7/1/2023	7	88	Good	100	0	0
TH11SK	01	9/1/2020	AC	TAXIWAY	7/1/2023	3	94	Good	100	0	0
TH1SK	01	6/1/2009	AC	TAXIWAY	7/1/2023	14	77	Satisfactory	100	0	0
TH2SK	01	9/2/2003	AC	TAXIWAY	7/1/2023	20	58	Fair	50	50	0
TH2SK	02	8/2/2004	AC	TAXIWAY	7/1/2023	19	46	Poor	46	48	6
TH3SK	01	9/2/2003	AC	TAXIWAY	7/1/2023	20	68	Fair	76	24	0
TH3SK	02	8/2/2004	AC	TAXIWAY	7/1/2023	19	62	Fair	63	37	0
TH4SK	01	8/1/2000	AC	TAXIWAY	7/1/2023	23	73	Satisfactory	76	24	0
TH5SK	01	8/1/2000	AC	TAXIWAY	7/1/2023	23	94	Good	100	0	0
TH5SK	02	8/1/1995	AC	TAXIWAY	7/1/2023	28	94	Good	100	0	0
TH6SK	01	8/1/1990	AC	TAXIWAY	7/1/2023	33	55	Poor	51	49	0
TH6SK	02	8/1/1990	AC	TAXIWAY	7/1/2023	33	37	Very Poor	38	62	0
TH7SK	01	8/1/1990	AC	TAXIWAY	7/1/2023	33	94	Good	100	0	0
TH8SK	01	8/1/1990	AC	TAXIWAY	7/1/2023	33	63	Fair	31	69	0
TH9SK	01	8/1/1985	AC	TAXIWAY	7/1/2023	38	30	Very Poor	27	59	14

Abbreviations:

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

Table 4B: STARK'S TWIN OAKS AIRPARK COMPARISON OF PREVIOUS INSPECTION AND 2023 RESULTS

Branch ID	Section ID	Surface Type[1]	Approximate Area, square feet	LCD[2]	2018 Survey PCI	2018 Survey PCI Category	2018 Survey Inspection Date	2023 Survey PCI	2023 Survey PCI Category	Age[3]	Δ PCI/yr[4]	Rate of Deterioration
A01SK	01	AC	21,840	8/1/85	90	Good	7/8/2018	63	Fair	33	-5.42	HIGH
A01SK	02	AC	6,617	8/1/80	87	Good	7/8/2018	56	Fair	38	-6	HIGH
A01SK	03	AC	16,016	8/2/04	84	Satisfactory	7/8/2018	75	Satisfactory	14	-1.81	NORMAL
A01SK	04	AC	15,753	6/2/23	-	Good	-	100	Good	-	-	N/A
A01SK	05	AC	14,753	9/2/17	-	Good	-	84.1	Satisfactory	-	-	N/A
A01SK	06	PCC	7,581	9/2/17	-	Good	-	89.8	Good	-	-	N/A
AHLD02SK	01	AC	1,143	9/1/11	100	Good	7/8/2018	86	Good	7	-2.81	NORMAL
AHLD02SK	02	AC	8,242	4/2/23	-	Good	-	94	Good	-	-	N/A
R02SK	01	AC	3,750	9/1/11	100	Good	7/8/2018	83	Satisfactory	7	-3.41	NORMAL
R02SK	02	AC	60,000	8/1/92	82	Satisfactory	7/8/2018	67	Fair	26	-3	NORMAL
R02SK	03	AC	57,500	8/1/96	90	Good	7/8/2018	76	Satisfactory	22	-2.81	NORMAL
R02SK	04	AC	5,117	8/1/94	79	Satisfactory	7/8/2018	67	Fair	24	-2	NORMAL
T01SK	01	AC	15,358	9/1/11	94	Good	7/8/2018	83	Satisfactory	7	-2.21	NORMAL
T01SK	02	AC	15,462	8/2/04	88	Good	7/8/2018	47	Poor	14	-8	HIGH
T01SK	03	AAC	1,926	9/1/17	100	Good	7/8/2018	94.5	Good	1	-1.10	NORMAL
T01SK	04	AAC	7,146	9/1/17	100	Good	7/8/2018	92	Good	1	-2	NORMAL
T01SK	05	AAC	4,680	9/1/17	100	Good	7/8/2018	76	Satisfactory	1	-4.82	HIGH
T01SK	06	AC	14,845	8/1/94	86	Good	7/8/2018	70	Fair	24	-3	NORMAL
T01SK	07	AC	6,097	4/2/23	-	Good	-	94	Good	-	-	N/A
T02SK	01	AC	3,029	8/2/04	90	Good	7/8/2018	76	Satisfactory	14	-3	NORMAL
T03SK	01	AC	4,509	8/1/95	79	Satisfactory	7/8/2018	69.3	Fair	23	-1.95	NORMAL
T04SK	01	AC	1,394	8/1/96	91	Good	7/8/2018	79	Satisfactory	22	-2	NORMAL
T05SK	01	AC	10,065	8/1/95	89	Good	7/8/2018	64	Fair	23	-5.02	HIGH
T06SK	01	AC	2,570	8/1/94	80	Satisfactory	7/8/2018	68	Fair	24	-2	NORMAL
TH10SK	01	AC	12,592	9/1/16	100	Good	7/8/2018	88	Good	2	-2.41	NORMAL
TH11SK	01	AC	12,561	9/1/20	-	Good	-	94	Good	-	-	N/A
TH1SK	01	AC	12,593	6/1/09	77	Satisfactory	7/8/2018	77	Satisfactory	9	0.00	NONE
TH2SK	01	AC	15,600	9/2/03	68	Fair	7/8/2018	58	Fair	15	-2	NORMAL
TH2SK	02	AC	2,642	8/2/04	47	Poor	7/8/2018	46	Poor	14	-0.20	NORMAL
TH3SK	01	AC	15,200	9/2/03	68	Fair	7/8/2018	68	Fair	15	0	NONE
TH3SK	02	AC	2,766	8/2/04	78	Satisfactory	7/8/2018	62	Fair	14	-3.21	NORMAL
TH4SK	01	AC	11,065	8/1/00	81	Satisfactory	7/8/2018	73	Satisfactory	18	-2	NORMAL
TH5SK	01	AC	4,937	8/1/00	51	Poor	7/8/2018	94	Good	18	8.63	NONE
TH5SK	02	AC	6,280	8/1/95	34	Very Poor	7/8/2018	94	Good	23	12	NONE
TH6SK	01	AC	4,621	8/1/90	64	Fair	7/8/2018	55	Poor	28	-1.81	NORMAL
TH6SK	02	AC	5,605	8/1/90	54	Poor	7/8/2018	37	Very Poor	28	-3	NORMAL
TH7SK	01	AC	6,744	8/1/90	17	Serious	7/8/2018	94	Good	28	15.45	NONE
TH8SK	01	AC	10,313	8/1/90	50	Poor	7/8/2018	63	Fair	28	3	NONE
TH9SK	01	AC	2,541	8/1/85	64	Fair	7/8/2018	30	Very Poor	33	-6.82	HIGH

Abbreviations:

[1] AC = Asphalt Concrete, AAC = Asphalt Overlay AC, PCC = Portland Cement Concrete, PCI = Pavement Condition Index

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

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

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

[5] 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 Stark's Twin Oaks Airpark. 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 Stark's Twin Oaks Airpark. For each model, we reviewed the data in order to filter out any inconsistent or inaccurate data or any data that fell outside the 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.

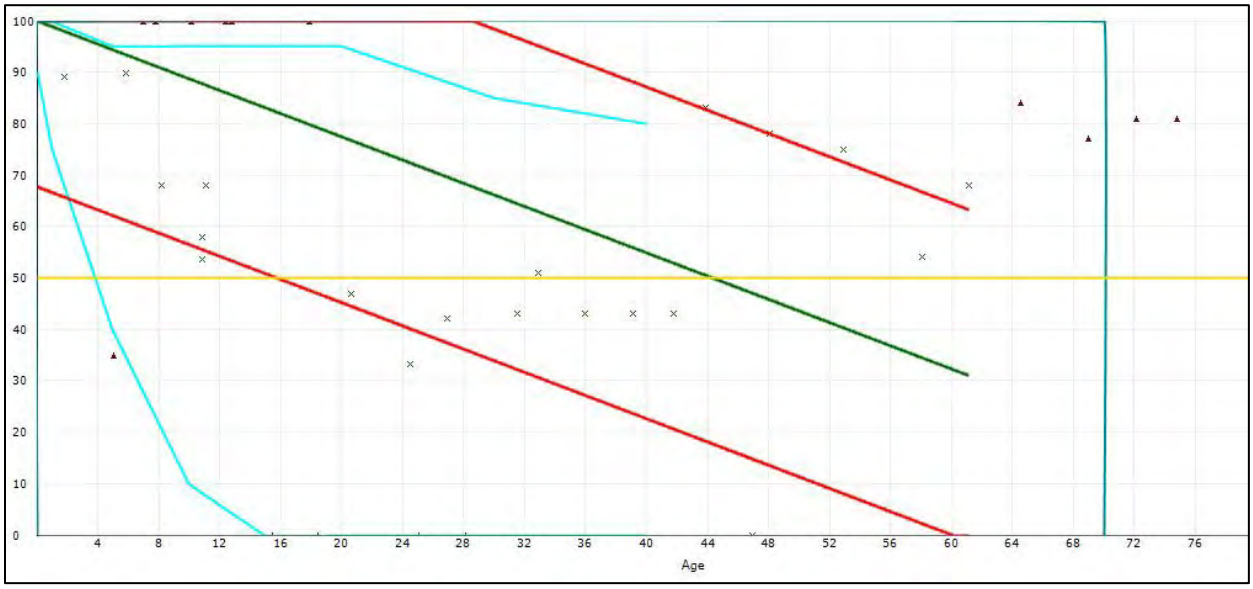


Figure 1C - CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 5 PCC RUNWAYS, TAXIWAYS, AND APRONS

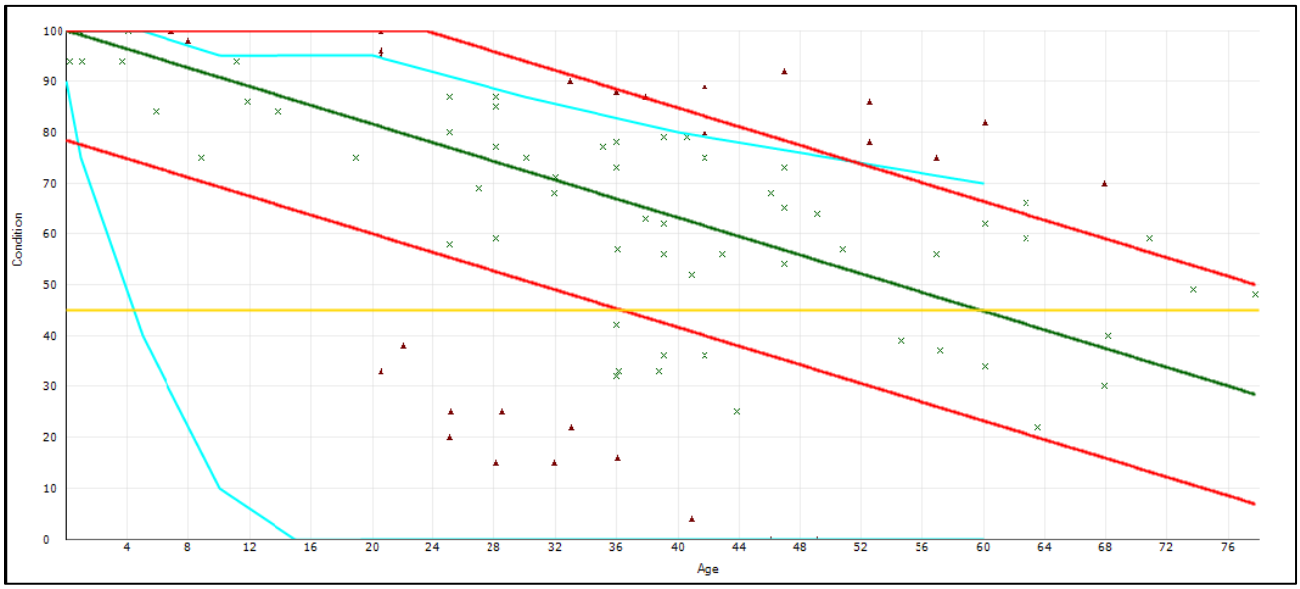


Figure 2C - CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 5 AC APRONS

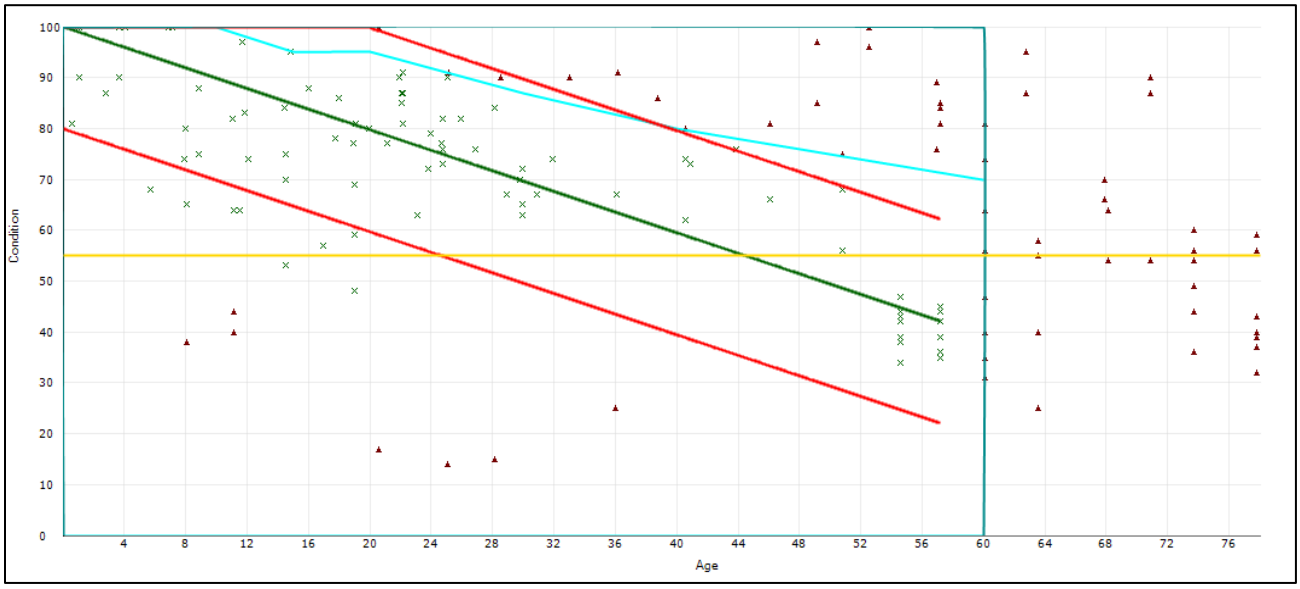


Figure 3C - CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 5 AC RUNWAYS

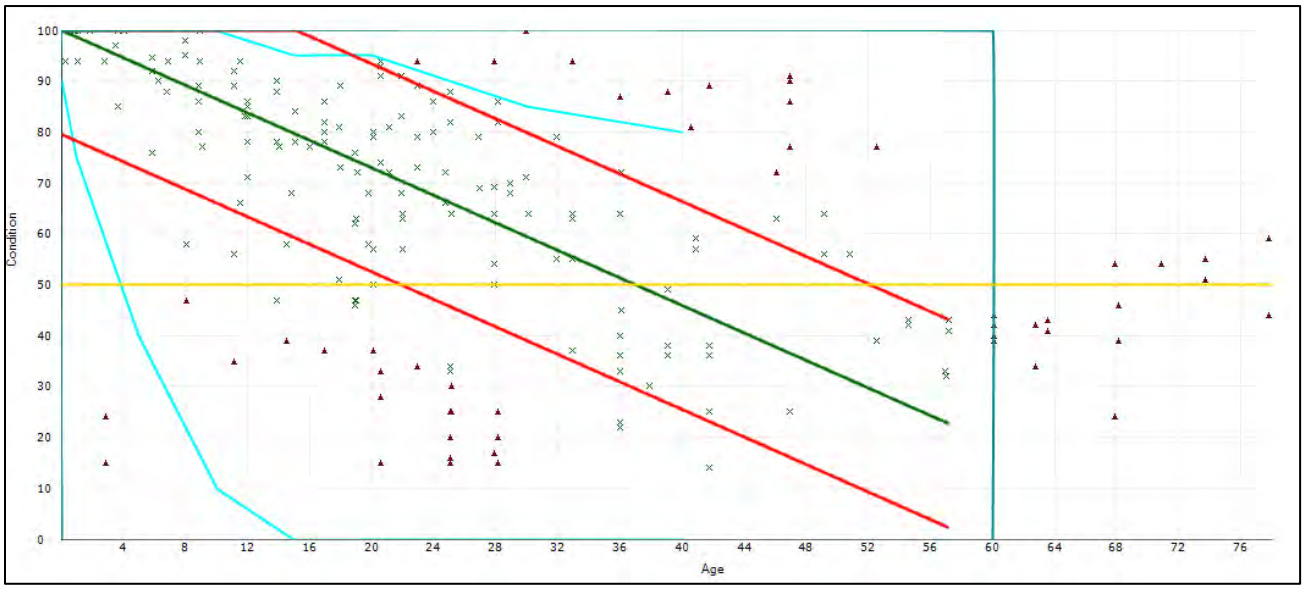


Figure 4C - CONDITION PREDICTION MODEL FOR NORTHWESTERN CATEGORY 5 AC TAXIWAYS

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 Stark's Twin Oaks Airpark:

- Runways – 55
- Taxiways/Taxilanes – 50
- Aprons – 45

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 Stark's Twin Oaks Airpark, 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 Stark's Twin Oaks Airpark: 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

BranchID	SectionID	Past Inspection PCI 2018	Current PCI 2023	Predicted Future PCI 2028	Predicted Future PCI 2033
A01SK	01	90	63	58	54
A01SK	02	87	56	51	47
A01SK	03	84	75	70	66
A01SK	04	-	100	95	91
A01SK	05	-	84	79	75
A01SK	06	-	90	84	78
AHLD02SK	01	100	86	81	77
AHLD02SK	02	-	94	89	85
R02SK	01	100	83	78	73
R02SK	02	82	67	62	57
R02SK	03	90	76	71	66
R02SK	04	79	67	62	57
T01SK	01	94	83	76	69
T01SK	02	88	47	40	33
T01SK	03	100	95	87	81
T01SK	04	100	92	85	78
T01SK	05	100	76	69	62
T01SK	06	86	70	63	56
T01SK	07	-	94	87	80
T02SK	01	90	76	69	62
T03SK	01	79	69	62	55
T04SK	01	91	79	72	65
T05SK	01	89	64	57	50
T06SK	01	80	68	61	54
TH1SK	01	100	77	70	63
TH2SK	01	-	58	51	44
TH2SK	02	77	46	39	32
TH3SK	01	68	68	61	54
TH3SK	02	47	62	55	48
TH4SK	01	68	73	66	59
TH5SK	01	78	94	87	80
TH5SK	02	81	94	87	80
TH6SK	01	51	55	48	41
TH6SK	02	34	37	30	23
TH7SK	01	64	94	87	80
TH8SK	01	54	63	56	49
TH9SK	01	17	30	23	16
TH10SK	01	50	88	81	74
TH11SK	01	64	94	87	80

Abbreviation: PCI = Pavement Condition Index

Table 2C: STARK'S TWIN OAKS AIRPARK 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
A01SK	01	AC	63	> 20	45	> 20
A01SK	02	AC	56	11 - 15	45	16 - 20
A01SK	03	AC	75	> 20	45	> 20
A01SK	04	AC	100	> 20	45	> 20
A01SK	05	AC	84	> 20	45	> 20
A01SK	06	PCC	90	> 20	45	> 20
AHLD02SK	01	AC	86	> 20	45	> 20
AHLD02SK	02	AC	94	> 20	45	> 20
R02SK	01	AC	83	> 20	55	> 20
R02SK	02	AC	67	11 - 15	55	> 20
R02SK	03	AC	76	> 20	55	> 20
R02SK	04	AC	67	11 - 15	55	> 20
T01SK	01	AC	83	> 20	50	> 20
T01SK	02	AC	47	0 - 5	50	0 - 5
T01SK	03	AAC	95	> 20	50	> 20
T01SK	04	AAC	92	> 20	50	> 20
T01SK	05	AAC	76	16 - 20	50	> 20
T01SK	06	AC	70	11 - 15	50	> 20
T01SK	07	AC	94	> 20	50	> 20
T02SK	01	AC	76	16 - 20	50	> 20
T03SK	01	AC	69	11 - 15	50	> 20
T04SK	01	AC	79	> 20	50	> 20
T05SK	01	AC	64	6 - 10	50	16 - 20
T06SK	01	AC	68	11 - 15	50	> 20
TH1SK	01	AC	46	> 20	50	> 20
TH2SK	01	AC	68	0 - 5	50	11 - 15
TH2SK	02	AC	62	0 - 5	50	0 - 5
TH3SK	01	AC	73	11 - 15	50	> 20
TH3SK	02	AC	94	6 - 10	50	16 - 20
TH4SK	01	AC	94	16 - 20	50	> 20
TH5SK	01	AC	55	> 20	50	> 20
TH5SK	02	AC	37	> 20	50	> 20
TH6SK	01	AC	94	0 - 5	50	6 - 10
TH6SK	02	AC	63	0 - 5	50	0 - 5
TH7SK	01	AC	30	> 20	50	> 20
TH8SK	01	AC	88	6 - 10	50	16 - 20
TH9SK	01	AC	94	0 - 5	50	0 - 5
TH10SK	01	AC	77	> 20	50	> 20
TH11SK	01	AC	58	> 20	50	> 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 Stark's Twin Oaks Airpark 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) 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 Stark's Twin Oaks Airpark 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 Stark's Twin Oaks Airpark. 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	$17.32	Sq Ft
	Cold Mill and Overlay – 2 Inches Thick	$7.64	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: STARK'S TWIN OAKS AIRPARK NETWORK MAINTENANCE REPORT

Branch ID	Section ID	Distress	Severity	Action	Work Quantity	Unit	Unit Cost	Work Cost	Section Total
A01SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,230	Ft	$3.12	$3,837	$54,995
A01SK	01	Alligator Cracking	Medium	Patching - AC Deep	656	SqFt	$78.00	$51,158	
A01SK	02	Block Cracking	Low	Crack Sealing - AC	305	Ft	$3.12	$951	$7,241
A01SK	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	823	Ft	$3.12	$2,568	
A01SK	02	Alligator Cracking	Medium	Patching - AC Deep	47	SqFt	$78.00	$3,722	
A01SK	03	Long. & Trans. Cracking	Medium	Crack Sealing - AC	71	Ft	$3.12	$221	$3,818
A01SK	03	Long. & Trans. Cracking	Low	Crack Sealing - AC	672	Ft	$3.12	$2,097	
A01SK	03	Alligator Cracking	Medium	Patching - AC Deep	19	SqFt	$78.00	$1,500	
A01SK	05	Long. & Trans. Cracking	Low	Crack Sealing - AC	518	Ft	$3.12	$1,616	$1,616
A01SK	06	Linear Cracking	Low	Crack Sealing - PCC	88	Ft	$23.40	$2,059	$2,059
AHLD02SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	31	Ft	$3.12	$97	$97
R02SK	01	Long. & Trans. Cracking	Medium	Crack Sealing - AC	14	Ft	$3.12	$44	$190
R02SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	47	Ft	$3.12	$147	
R02SK	02	Long. & Trans. Cracking	Medium	Crack Sealing - AC	246	Ft	$3.12	$768	$21,121
R02SK	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	5,775	Ft	$3.12	$18,018	
R02SK	02	Alligator Cracking	High	Patching - AC Deep	30	SqFt	$78.00	$2,336	
R02SK	03	Long. & Trans. Cracking	High	Crack Seal - Wide Cracks	11	Ft	$51.48	$592	$10,916
R02SK	03	Long. & Trans. Cracking	Medium	Crack Sealing - AC	115	Ft	$3.12	$359	
R02SK	03	Long. & Trans. Cracking	Low	Crack Sealing - AC	3,194	Ft	$3.12	$9,966	
R02SK	04	Long. & Trans. Cracking	Low	Crack Sealing - AC	519	Ft	$3.12	$1,619	$1,675
R02SK	04	Long. & Trans. Cracking	Medium	Crack Sealing - AC	18	Ft	$3.12	$56	
T01SK	01	Long. & Trans. Cracking	Medium	Crack Sealing - AC	29	Ft	$3.12	$90	$1,265
T01SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	377	Ft	$3.12	$1,176	
T01SK	02	Long. & Trans. Cracking	Medium	Crack Sealing - AC	74	Ft	$3.12	$231	$80,009
T01SK	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,420	Ft	$3.12	$4,430	
T01SK	02	Alligator Cracking	Medium	Patching - AC Deep	966	SqFt	$78.00	$75,348	
T01SK	05	Long. & Trans. Cracking	Low	Crack Sealing - AC	225	Ft	$3.12	$702	$1,792
T01SK	05	Alligator Cracking	Medium	Patching - AC Deep	14	SqFt	$78.00	$1,090	
T01SK	06	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,368	Ft	$3.12	$4,270	$8,306
T01SK	06	Alligator Cracking	Medium	Patching - AC Deep	52	SqFt	$78.00	$4,037	
T02SK	01	Long. & Trans. Cracking	Medium	Crack Sealing - AC	27	Ft	$3.12	$84	$530
T02SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	143	Ft	$3.12	$446	
T03SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	540	Ft	$3.12	$1,686	$1,686
T04SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	20	Ft	$3.12	$62	$62
T05SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	665	Ft	$3.12	$2,075	$22,333
T05SK	01	Long. & Trans. Cracking	Medium	Crack Sealing - AC	27	Ft	$3.12	$84	
T05SK	01	Alligator Cracking	Medium	Patching - AC Deep	258	SqFt	$78.00	$20,174	
T06SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	340	Ft	$3.12	$1,061	$1,061
TH10SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	214	Ft	$3.12	$668	$668
TH1SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	832	Ft	$3.12	$2,596	$2,596
TH2SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,953	Ft	$3.12	$6,092	$6,092
TH2SK	01	Alligator Cracking	Medium	Patching - AC Deep	274	SqFt	$78.00	$21,410	$21,410

Table 3D: STARK'S TWIN OAKS AIRPARK NETWORK MAINTENANCE REPORT

Branch ID	Section ID	Distress	Severity	Action	Work Quantity	Unit	Unit Cost	Work Cost	Section Total
TH2SK	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	162	Ft	$3.12	$505	$6,197
TH2SK	02	Long. & Trans. Cracking	Medium	Crack Sealing - AC	22	Ft	$3.12	$69	
TH2SK	02	Alligator Cracking	Medium	Patching - AC Deep	72	SqFt	$78.00	$5,623	
TH3SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	1,220	Ft	$3.12	$3,806	$6,223
TH3SK	01	Alligator Cracking	Medium	Patching - AC Deep	31	SqFt	$78.00	$2,417	
TH3SK	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	141	Ft	$3.12	$440	$2,593
TH3SK	02	Long. & Trans. Cracking	Medium	Crack Sealing - AC	22	Ft	$3.12	$69	
TH3SK	02	Alligator Cracking	Medium	Patching - AC Deep	27	SqFt	$78.00	$2,085	
TH4SK	01	Long. & Trans. Cracking	Medium	Crack Sealing - AC	44	Ft	$3.12	$137	$3,577
TH4SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	606	Ft	$3.12	$1,891	
TH4SK	01	Alligator Cracking	Medium	Patching - AC Deep	19	SqFt	$78.00	$1,549	
TH6SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	683	Ft	$3.12	$2,131	$10,336
TH6SK	01	Alligator Cracking	Medium	Patching - AC Deep	105	SqFt	$78.00	$8,205	
TH6SK	02	Long. & Trans. Cracking	Low	Crack Sealing - AC	344	Ft	$3.12	$1,073	$30,357
TH6SK	02	Long. & Trans. Cracking	Medium	Crack Sealing - AC	15	Ft	$3.12	$47	
TH6SK	02	Alligator Cracking	Medium	Patching - AC Deep	375	SqFt	$78.00	$29,237	
TH8SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	188	Ft	$3.12	$587	$42,658
TH8SK	01	Alligator Cracking	High	Patching - AC Deep	539	SqFt	$78.00	$42,072	
TH9SK	01	Long. & Trans. Cracking	Low	Crack Sealing - AC	187	Ft	$3.12	$583	$24,479
TH9SK	01	Alligator Cracking	Medium	Patching - AC Deep	307	SqFt	$78.00	$23,896	

Abbreviations:

Long. = Longitudinal; Trans. = Transverse; AC = Asphalt 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	T01SK	02	TAXIWAY	AC	47	Overlay	15,462	$7.64	$118,130
	T05SK	01	TAXIWAY	AC	64	Overlay	10,065	$7.64	$76,900
2025	A01SK	03	APRON	AC	74	Fog Seal	16,016	$0.31	$4,965
	A01SK	05	APRON	AC	83	Fog Seal	14,753	$0.31	$4,573
	AHLD02SK	01	APRON	AC	85	Fog Seal	1,143	$0.31	$354
	R02SK	01	RUNWAY	AC	82	Slurry Seal	3,750	$0.52	$1,950
	R02SK	02	RUNWAY	AC	66	Slurry Seal	60,000	$0.52	$31,200
	R02SK	03	RUNWAY	AC	75	Slurry Seal	57,500	$0.52	$29,900
	R02SK	04	RUNWAY	AC	66	Slurry Seal	5,117	$0.52	$2,661
	T01SK	01	TAXIWAY	AC	82	Slurry Seal	15,358	$0.52	$7,986
	T01SK	05	TAXIWAY	AAC	75	Slurry Seal	4,680	$0.52	$2,434
	T01SK	06	TAXIWAY	AC	69	Slurry Seal	14,845	$0.52	$7,719
	T03SK	01	TAXIWAY	AC	68	Slurry Seal	4,509	$0.52	$2,345
	T04SK	01	TAXIWAY	AC	78	Slurry Seal	1,394	$0.52	$725
	T06SK	01	TAXIWAY	AC	67	Slurry Seal	2,570	$0.52	$1,336
	TH10SK	01	TAXIWAY	AC	84	Slurry Seal	12,592	$0.52	$6,548
	TH1SK	01	TAXIWAY	AC	76	Slurry Seal	12,593	$0.52	$6,548
	TH3SK	01	TAXIWAY	AC	67	Slurry Seal	15,200	$0.52	$7,904
	TH3SK	02	TAXIWAY	AC	61	Slurry Seal	2,766	$0.52	$1,438
	TH4SK	01	TAXIWAY	AC	72	Slurry Seal	11,065	$0.52	$5,754
2026	A01SK	01	APRON	AC	63	Overlay	21,840	$7.64	$166,865
	TH8SK	01	TAXIWAY	AC	63	Overlay	10,313	$7.64	$78,795
	TH9SK	01	TAXIWAY	AC	30	Reconstruction	2,541	$17.32	$44,010
2027	TH2SK	01	TAXIWAY	AC	58	Overlay	15,600	$7.64	$119,189
	TH2SK	02	TAXIWAY	AC	46	Overlay	2,642	$7.64	$20,185
	TH6SK	01	TAXIWAY	AC	55	Overlay	4,621	$7.64	$35,306
	TH6SK	02	TAXIWAY	AC	37	Reconstruction	5,605	$17.32	$97,078

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

Cost Summary	
2024 Total Project Cost	$195,030
2025 Total Project Cost	$126,340
2026 Total Project Cost	$289,670
2027 Total Project Cost	$271,758
2028 Total Project Cost	$0
Total 5-Year Project Cost	**$882,798**

APPENDIX E

Reinspection Report

Re-Inspection Report

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

Network: Starks **Name:** Stark's Twin Oaks

Branch: A01SK **Name:** Apron 01 Stark's **Use:** APRON **Area:** 82,560 SqFt

Section: 01 of 6 **From:** Taxiway 01 **To:** Section 03 **Last Const.:** 8/1/1985

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 21,840 SqFt **Length:** 210 Ft **Width:** 135 Ft

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

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

Section Comments:

Work Date: 8/1/1985 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2016 **Work Type:** Oregon Slurry Seal **Code:** OR-SS **Is Major M&R:** False

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

Conditions: **PCI:** 63

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 5408.00 SqFt **PCI:** 41

Sample Comments:

41	ALLIGATOR CR	M	314.00	SqFt
48	L & T CR	L	428.00	Ft
48	L & T CR	L	152.00	Ft
57	WEATHERING	L	5408.00	SqFt

Sample Number: 03 **Type:** R **Area:** 4589.00 SqFt **PCI:** 52

Sample Comments:

41	ALLIGATOR CR	M	104.00	SqFt
48	L & T CR	L	68.00	Ft
48	L & T CR	L	231.00	Ft
57	WEATHERING	L	4589.00	SqFt

Sample Number: 04 **Type:** R **Area:** 6396.00 SqFt **PCI:** 90

Sample Comments:

48	L & T CR	L	44.00	Ft
57	WEATHERING	L	6396.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: A01SK **Name:** Apron 01 Stark's **Use:** APRON **Area:** 82,560 SqFt

Section: 02 of 6 **From:** Taxiway 01 **To:** Section 01 **Last Const.:** 8/1/1980

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 6,617 SqFt **Length:** 160 Ft **Width:** 40 Ft

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

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

Section Comments:

Work Date: 8/1/1980 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2016 **Work Type:** Oregon Slurry Seal **Code:** OR-SS **Is Major M&R:** False

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

Conditions: **PCI:** 56

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6617.00 SqFt **PCI:** 56

Sample Comments:

41	ALLIGATOR CR	M	24.00	SqFt
43	BLOCK CR	L	1000.00	SqFt
48	L & T CR	L	823.00	Ft
57	WEATHERING	L	6617.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: A01SK **Name:** Apron 01 Stark's **Use:** APRON **Area:** 82,560 SqFt

Section: 04 of 6 **From:** Taxiway **To:** A01SK-01 **Last Const.:** 6/2/2023

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** **Category:** **Rank:** P

Area: 15,753 SqFt **Length:** 200 Ft **Width:** 80 Ft

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

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

Section Comments:

Work Date: 6/1/2023 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 6/2/2023 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 100

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 7575.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Sample Number: 02 **Type:** R **Area:** 8177.00 SqFt **PCI:** 100

Sample Comments:

<No Distress>

Network: Starks **Name:** Stark's Twin Oaks

Branch: A01SK **Name:** Apron 01 Stark's **Use:** APRON **Area:** 82,560 SqFt

Section: 05 of 6 **From:** Taxiway **To:** A01SK-06 **Last Const.:** 9/2/2017

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** **Category:** **Rank:** P

Area: 14,753 SqFt **Length:** 270 Ft **Width:** 52 Ft

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

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

Section Comments:

Work Date: 9/1/2017 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 9/2/2017 **Work Type:** Complete Reconstruction - AC **Code:** CR-AC **Is Major M&R:** True

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

Conditions: **PCI:** 84

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4815.00 SqFt **PCI:** 87

Sample Comments:

48	L & T CR	L	105.00	Ft
57	WEATHERING	L	4815.00	SqFt

Sample Number: 02 **Type:** R **Area:** 5330.00 SqFt **PCI:** 88

Sample Comments:

48	L & T CR	L	105.00	Ft
57	WEATHERING	L	5330.00	SqFt

Sample Number: 03 **Type:** R **Area:** 4608.00 SqFt **PCI:** 77

Sample Comments:

48	L & T CR	L	308.00	Ft
57	WEATHERING	L	4608.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: A01SK **Name:** Apron 01 Stark's **Use:** APRON **Area:** 82,560 SqFt

Section: 06 of 6 **From:** A01SK-05 **To:** End **Last Const.:** 9/2/2017

Surface: PCC **Family:** 2023_Region1_Cat3/4/5_AllPCC **Zone:** **Category:** **Rank:** P

Area: 7,581 SqFt **Length:** 105 Ft **Width:** 82 Ft

Slabs: 73 **Slab Length:** 11 Ft **Slab Width:** 11 Ft **Joint Length:** 1,606 Ft

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

Section Comments:

Work Date: 9/1/2017 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 9/2/2017 **Work Type:** Complete Reconstruction - PCC **Code:** CR-PC **Is Major M&R:** True

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

Conditions: **PCI:** 90

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 23.00 Slabs **PCI:** 87

Sample Comments:

63	LINEAR CR	L	2.00	Slabs
65	JT SEAL DMG	L	23.00	Slabs
75	CORNER SPALL	L	2.00	Slabs

Sample Number: 02 **Type:** R **Area:** 13.00 Slabs **PCI:** 79

Sample Comments:

63	LINEAR CR	L	5.00	Slabs
65	JT SEAL DMG	L	13.00	Slabs

Sample Number: 03 **Type:** R **Area:** 19.00 Slabs **PCI:** 93

Sample Comments:

63	LINEAR CR	L	1.00	Slabs
65	JT SEAL DMG	L	19.00	Slabs

Sample Number: 04 **Type:** R **Area:** 18.00 Slabs **PCI:** 98

Sample Comments:

65	JT SEAL DMG	L	18.00	Slabs

Network: Starks **Name:** Stark's Twin Oaks

Branch: A01SK **Name:** Apron 01 Stark's **Use:** APRON **Area:** 82,560 SqFt

Section: 03 of 6 **From:** Section 01 **To:** Hangar **Last Const.:** 8/2/2004

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 16,016 SqFt **Length:** 227 Ft **Width:** 60 Ft

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

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

Section Comments:

Work Date: 8/1/2004 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/2/2004 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 75

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5474.00 SqFt **PCI:** 79

Sample Comments:

48	L & T CR	L	162.00	Ft
48	L & T CR	L	23.00	Ft
48	L & T CR	M	50.00	Ft
57	WEATHERING	L	5474.00	SqFt

Sample Number: 02 **Type:** R **Area:** 5846.00 SqFt **PCI:** 71

Sample Comments:

41	ALLIGATOR CR	M	4.00	SqFt
48	L & T CR	L	204.00	Ft
48	L & T CR	L	86.00	Ft
52	RAVELING	M	4.00	SqFt
57	WEATHERING	L	5846.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: AHLD02SK **Name:** Hold Apron RW 02 Stark's **Use:** APRON **Area:** 9,385 SqFt

Section: 02 of 2 **From:** AHLD02SK-01 **To:** Taxiway 02 **Last Const.:** 4/2/2023

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** **Category:** **Rank:** P

Area: 8,242 SqFt **Length:** 270 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: 4/1/2023 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 4/2/2023 **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:** 94

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 8242.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	8242.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: AHLD02SK **Name:** Hold Apron RW 02 Stark's **Use:** APRON **Area:** 9,385 SqFt

Section: 01 of 2 **From:** Taxiway 06 **To:** End **Last Const.:** 9/1/2011

Surface: AC **Family:** 2023_Region1_Cat5_Apron_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 1,143 SqFt **Length:** 70 Ft **Width:** 25 Ft

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

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

Section Comments:

Work Date: 9/1/2011 **Work Type:** New Construction - Initial **Code:** NC-IN **Is Major M&R:** True

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

Conditions: **PCI:** 86

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 1143.00 SqFt **PCI:** 86

Sample Comments:

48	L & T CR	L	31.00	Ft
57	WEATHERING	L	1143.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: R02SK **Name:** Runway 02/20 Stark's **Use:** RUNWAY **Area:** 126,367 SqFt

Section: 02 of 4 **From:** Section 01 **To:** Section 03 **Last Const.:** 8/1/1992

Surface: AC **Family:** 2023_Region1_Cat5_Runway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 60,000 SqFt **Length:** 1,200 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: 8/1/1992	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 6/1/2010	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Patching - AC Full Depth	**Code:** PA-AF	**Is Major M&R:** False
Work Date: 9/3/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 12 **Surveyed:** 4

Conditions: **PCI:** 67

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5000.00 SqFt **PCI:** 72

Sample Comments:

48	L & T CR	L	238.00	Ft
48	L & T CR	L	248.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 04 **Type:** R **Area:** 5000.00 SqFt **PCI:** 68

Sample Comments:

48	L & T CR	L	170.00	Ft
48	L & T CR	L	278.00	Ft
48	L & T CR	M	15.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 08 **Type:** R **Area:** 5000.00 SqFt **PCI:** 62

Sample Comments:

41	ALLIGATOR CR	H	4.00	SqFt
48	L & T CR	L	230.00	Ft
48	L & T CR	L	260.00	Ft
48	L & T CR	M	8.00	Ft
48	L & T CR	M	42.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 11 **Type:** R **Area:** 5000.00 SqFt **PCI:** 67

Sample Comments:

48	L & T CR	L	229.00	Ft
48	L & T CR	L	272.00	Ft
48	L & T CR	M	4.00	Ft
48	L & T CR	M	13.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: R02SK **Name:** Runway 02/20 Stark's **Use:** RUNWAY **Area:** 126,367 SqFt

Section: 03 of 4 **From:** Taxiway 02 **To:** Section 04 **Last Const.:** 8/1/1996

Surface: AC **Family:** 2023_Region1_Cat5_Runway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 57,500 SqFt **Length:** 1,150 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: 8/1/1996	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 6/1/2010	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Patching - AC Full Depth	**Code:** PA-AF	**Is Major M&R:** False
Work Date: 9/3/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

Last Insp. Date: 7/1/2023 **TotalSamples:** 12 **Surveyed:** 4

Conditions: **PCI:** 76

Inspection Comments:

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

Sample Comments:

48	L & T CR	L	397.00	Ft
48	L & T CR	M	32.00	Ft
48	L & T CR	H	4.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 04 **Type:** R **Area:** 5000.00 SqFt **PCI:** 76

Sample Comments:

48	L & T CR	L	167.00	Ft
48	L & T CR	L	61.00	Ft
50	PATCHING	L	240.00	SqFt
50	PATCHING	L	116.00	SqFt
57	WEATHERING	L	5000.00	SqFt

Sample Number: 08 **Type:** R **Area:** 5000.00 SqFt **PCI:** 75

Sample Comments:

48	L & T CR	L	267.00	Ft
48	L & T CR	M	8.00	Ft
57	WEATHERING	L	5000.00	SqFt

Sample Number: 11 **Type:** R **Area:** 5000.00 SqFt **PCI:** 82

Sample Comments:

48	L & T CR	L	219.00	Ft
57	WEATHERING	L	5000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: R02SK **Name:** Runway 02/20 Stark's **Use:** RUNWAY **Area:** 126,367 SqFt

Section: 04 of 4 **From:** Section 03 **To:** Runway 20 End **Last Const.:** 8/1/1994

Surface: AC **Family:** 2023_Region1_Cat5_Runway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 5,117 SqFt **Length:** 125 Ft **Width:** 42 Ft

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

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

Section Comments:

Work Date: 8/1/1994	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 6/1/2010	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 67

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5117.00 SqFt **PCI:** 67

Sample Comments:

48	L & T CR	L	519.00	Ft
48	L & T CR	M	18.00	Ft
57	WEATHERING	L	5117.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: R02SK **Name:** Runway 02/20 Stark's **Use:** RUNWAY **Area:** 126,367 SqFt

Section: 01 of 4 **From:** Runway 02 End **To:** Section 02 **Last Const.:** 9/1/2011

Surface: AC **Family:** 2023_Region1_Cat5_Runway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 3,750 SqFt **Length:** 75 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: 9/1/2011	**Work Type:** New Construction - Initial	**Code:** NC-IN	**Is Major M&R:** True
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Patching - AC Full Depth	**Code:** PA-AF	**Is Major M&R:** False
Work Date: 9/3/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 83

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3750.00 SqFt **PCI:** 83

Sample Comments:

48	L & T CR	L	47.00	Ft
48	L & T CR	M	14.00	Ft
57	WEATHERING	L	3750.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 05 of 7 **From:** Taxiway 05 **To:** Intersection **Last Const.:** 9/1/2017

Surface: AAC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 4,680 SqFt **Length:** 260 Ft **Width:** 18 Ft

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

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

Section Comments:

Work Date: 8/1/1995 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2017 **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:** 76

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4680.00 SqFt **PCI:** 76

Sample Comments:

41	ALLIGATOR CR	M	3.00	SqFt
48	L & T CR	L	127.00	Ft
48	L & T CR	L	98.00	Ft
57	WEATHERING	L	4680.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 06 of 7 **From:** Taxiway 06 **To:** Runway 20 End **Last Const.:** 8/1/1994

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 14,845 SqFt **Length:** 446 Ft **Width:** 18 Ft

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

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

Section Comments:

Work Date: 8/1/1994	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 70

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6400.00 SqFt **PCI:** 70

Sample Comments:

41	ALLIGATOR CR	M	21.00	SqFt
48	L & T CR	L	452.00	Ft
48	L & T CR	L	47.00	Ft
57	WEATHERING	L	6400.00	SqFt

Sample Number: 02 **Type:** R **Area:** 5196.00 SqFt **PCI:** 70

Sample Comments:

48	L & T CR	L	570.00	Ft
57	WEATHERING	L	5196.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 04 of 7 **From:** Taxiway 03 **To:** Taxiway 05 **Last Const.:** 9/1/2017

Surface: AAC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 7,146 SqFt **Length:** 397 Ft **Width:** 18 Ft

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

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

Section Comments:

Work Date: 8/1/1995 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2017 **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:** 3600.00 SqFt **PCI:** 89

Sample Comments:

50	PATCHING	L	75.00	SqFt
57	WEATHERING	L	3600.00	SqFt

Sample Number: 02 **Type:** R **Area:** 3978.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	3978.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 03 of 7 **From:** Taxiway 03 **To:** Intersection **Last Const.:** 9/1/2017

Surface: AAC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 1,926 SqFt **Length:** 108 Ft **Width:** 18 Ft

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

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

Section Comments:

Work Date: 8/1/2000 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2017 **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:** 95

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 2812.00 SqFt **PCI:** 95

Sample Comments:

57	WEATHERING	L	1926.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 07 of 7 **From:** Runway 02 **To:** Taxiway 02 **Last Const.:** 4/2/2023

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** **Category:** **Rank:** P

Area: 6,097 SqFt **Length:** 67 Ft **Width:** 95 Ft

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

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

Section Comments:

Work Date: 4/1/2022 **Work Type:** New Construction - Initial **Code:** NC-IN **Is Major M&R:** True

Work Date: 4/1/2023 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 4/2/2023 **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:** 94

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6097.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	6097.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 01 of 7 **From:** Runway 02 **To:** Taxiway 02 **Last Const.:** 9/1/2011

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 15,358 SqFt **Length:** 654 Ft **Width:** 20 Ft

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

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

Section Comments:

Work Date: 9/1/2011 **Work Type:** New Construction - Initial **Code:** NC-IN **Is Major M&R:** True

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

Conditions: **PCI:** 83

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3618.00 SqFt **PCI:** 89

Sample Comments:

48	L & T CR	L	55.00	Ft
57	WEATHERING	L	3618.00	SqFt

Sample Number: 02 **Type:** R **Area:** 6000.00 SqFt **PCI:** 80

Sample Comments:

45	DEPRESSION	L	6.00	SqFt
48	L & T CR	L	181.00	Ft
48	L & T CR	M	18.00	Ft
57	WEATHERING	L	6000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T01SK **Name:** Taxiway 01 Stark's **Use:** TAXIWAY **Area:** 65,514 SqFt

Section: 02 of 7 **From:** Taxiway 02 **To:** TH1 **Last Const.:** 8/2/2004

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 15,462 SqFt **Length:** 789 Ft **Width:** 20 Ft

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

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

Section Comments:

Work Date: 8/1/2004 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/2/2004 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2016 **Work Type:** Oregon Slurry Seal **Code:** OR-SS **Is Major M&R:** False

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

Conditions: **PCI:** 47

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5464.00 SqFt **PCI:** 30

Sample Comments:

41	ALLIGATOR CR	M	36.00	SqFt
41	ALLIGATOR CR	M	336.00	SqFt
41	ALLIGATOR CR	M	56.00	SqFt
41	ALLIGATOR CR	M	261.00	SqFt
41	ALLIGATOR CR	M	60.00	SqFt
48	L & T CR	L	272.00	Ft
48	L & T CR	L	185.00	Ft
57	WEATHERING	L	5464.00	SqFt

Sample Number: 02 **Type:** R **Area:** 6000.00 SqFt **PCI:** 54

Sample Comments:

41	ALLIGATOR CR	M	60.00	SqFt
41	ALLIGATOR CR	M	12.00	SqFt
48	L & T CR	L	100.00	Ft
48	L & T CR	L	250.00	Ft
48	L & T CR	L	336.00	Ft
48	L & T CR	M	28.00	Ft
57	WEATHERING	L	6000.00	SqFt

Sample Number: 03 **Type:** R **Area:** 3998.00 SqFt **PCI:** 61

Sample Comments:

41	ALLIGATOR CR	M	24.00	SqFt
48	L & T CR	L	97.00	Ft
48	L & T CR	L	18.00	Ft
48	L & T CR	L	162.00	Ft
48	L & T CR	M	18.00	Ft
48	L & T CR	M	28.00	Ft
57	WEATHERING	L	3998.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T02SK **Name:** Taxiway 02 Stark's **Use:** TAXIWAY **Area:** 3,029 SqFt

Section: 01 of 1 **From:** Runway 02/20 **To:** Taxiway 06 **Last Const.:** 8/2/2004

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 3,029 SqFt **Length:** 90 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: 8/1/2004	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 8/2/2004	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 76

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3029.00 SqFt **PCI:** 76

Sample Comments:

48	L & T CR	L	51.00	Ft
48	L & T CR	L	92.00	Ft
48	L & T CR	M	27.00	Ft
57	WEATHERING	L	3029.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T03SK **Name:** Taxiway 03 Stark's **Use:** TAXIWAY **Area:** 4,509 SqFt

Section: 01 of 1 **From:** Runway 02/20 **To:** Taxiway 01 **Last Const.:** 8/1/1995

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 4,509 SqFt **Length:** 144 Ft **Width:** 20 Ft

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

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

Section Comments:

Work Date: 8/1/1995	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 69

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 3622.00 SqFt **PCI:** 69

Sample Comments:

48	L & T CR	L	434.00	Ft
57	WEATHERING	L	3622.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T04SK **Name:** Taxiway 04 Stark's **Use:** TAXIWAY **Area:** 1,394 SqFt

Section: 01 of 1 **From:** Runway 02/20 **To:** Taxiway 01 **Last Const.:** 8/1/1996

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 1,394 SqFt **Length:** 67 Ft **Width:** 20 Ft

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

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

Section Comments:

Work Date: 8/1/1996	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 79

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 1394.00 SqFt **PCI:** 79

Sample Comments:

48	L & T CR	L	20.00	Ft
50	PATCHING	L	82.00	SqFt
57	WEATHERING	L	1394.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T05SK **Name:** Taxiway 05 Stark's **Use:** TAXIWAY **Area:** 10,065 SqFt

Section: 01 of 1 **From:** Runway 02/20 **To:** Taxiway 01 **Last Const.:** 8/1/1995

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 10,065 SqFt **Length:** 67 Ft **Width:** 120 Ft

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

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

Section Comments:

Work Date: 8/1/1995	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Oregon Slurry Seal	**Code:** OR-SS	**Is Major M&R:** False

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

Conditions: **PCI:** 64

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5692.00 SqFt **PCI:** 83

Sample Comments:

48	L & T CR	L	210.00	Ft
57	WEATHERING	L	5692.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4373.00 SqFt **PCI:** 39

Sample Comments:

41	ALLIGATOR CR	M	18.00	SqFt
41	ALLIGATOR CR	M	110.00	SqFt
41	ALLIGATOR CR	M	16.00	SqFt
41	ALLIGATOR CR	M	54.00	SqFt
48	L & T CR	L	130.00	Ft
48	L & T CR	L	220.00	Ft
48	L & T CR	L	105.00	Ft
48	L & T CR	M	27.00	Ft
57	WEATHERING	L	4373.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: T06SK **Name:** Taxiway 06 Stark's **Use:** TAXIWAY **Area:** 2,570 SqFt

Section: 01 of 1 **From:** Runway 02/20 **To:** Taxiway 01 **Last Const.:** 8/1/1994

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 2,570 SqFt **Length:** 123 Ft **Width:** 18 Ft

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

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

Section Comments:

Work Date: 8/1/1994 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

Work Date: 9/1/2016 **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:** 2570.00 SqFt **PCI:** 68

Sample Comments:

48	L & T CR	L	340.00	Ft
57	WEATHERING	L	2570.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH10SK **Name:** Hangar Taxiway 10 Stark's **Use:** TAXIWAY **Area:** 12,592 SqFt

Section: 01 of 1 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 9/1/2016

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 12,592 SqFt **Length:** 530 Ft **Width:** 25 Ft

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

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

Section Comments:

Work Date: 9/1/2016 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 88

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5592.00 SqFt **PCI:** 89

Sample Comments:

48	L & T CR	L	74.00	Ft
57	WEATHERING	L	5592.00	SqFt

Sample Number: 02 **Type:** R **Area:** 7000.00 SqFt **PCI:** 88

Sample Comments:

48	L & T CR	L	97.00	Ft
48	L & T CR	L	43.00	Ft
57	WEATHERING	L	7000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH11SK **Name:** Hangar Taxiway 11 Stark's **Use:** TAXIWAY **Area:** 12,561 SqFt

Section: 01 of 1 **From:** T01SK-02 **To:** End **Last Const.:** 9/1/2020

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** **Category:** **Rank:** P

Area: 12,561 SqFt **Length:** 530 Ft **Width:** 25 Ft

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

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

Section Comments:

Work Date: 9/1/2020 **Work Type:** New Construction - Initial **Code:** NC-IN **Is Major M&R:** True

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

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5584.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	5584.00	SqFt

Sample Number: 02 **Type:** R **Area:** 6977.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	6977.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH1SK **Name:** Hangar Taxiway 1 Stark's **Use:** TAXIWAY **Area:** 12,593 SqFt

Section: 01 of 1 **From:** Taxiway 01 Stark's **To:** East End **Last Const.:** 6/1/2009

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 12,593 SqFt **Length:** 530 Ft **Width:** 25 Ft

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

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

Section Comments:

Work Date: 6/1/2009 **Work Type:** New Construction - Initial **Code:** NC-IN **Is Major M&R:** True

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

Conditions: **PCI:** 77

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5593.00 SqFt **PCI:** 74

Sample Comments:

48	L & T CR	L	264.00	Ft
48	L & T CR	L	192.00	Ft
57	WEATHERING	L	5593.00	SqFt

Sample Number: 02 **Type:** R **Area:** 7000.00 SqFt **PCI:** 79

Sample Comments:

48	L & T CR	L	70.00	Ft
48	L & T CR	L	306.00	Ft
57	WEATHERING	L	7000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH2SK **Name:** Hangar Taxiway 2 Stark's **Use:** TAXIWAY **Area:** 18,242 SqFt

Section: 02 of 2 **From:** T01SK-02 **To:** Hangars **Last Const.:** 8/2/2004

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 2,642 SqFt **Length:** 130 Ft **Width:** 20 Ft

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

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

Section Comments:

Work Date: 8/1/2004 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/2/2004 **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:** 46

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 2642.00 SqFt **PCI:** 46

Sample Comments:

41	ALLIGATOR CR	M	42.00	SqFt
45	DEPRESSION	L	18.00	SqFt
48	L & T CR	L	138.00	Ft
48	L & T CR	L	24.00	Ft
48	L & T CR	M	22.00	Ft
57	WEATHERING	L	2642.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH2SK **Name:** Hangar Taxiway 2 Stark's **Use:** TAXIWAY **Area:** 18,242 SqFt

Section: 01 of 2 **From:** TH2SK-01 **To:** Hangars **Last Const.:** 9/2/2003

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 15,600 SqFt **Length:** 390 Ft **Width:** 40 Ft

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

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

Section Comments:

Work Date: 9/1/2003 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 9/2/2003 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 58

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4000.00 SqFt **PCI:** 62

Sample Comments:

41	ALLIGATOR CR	M	26.00	SqFt
48	L & T CR	L	378.00	Ft
48	L & T CR	L	150.00	Ft
57	WEATHERING	L	4000.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4000.00 SqFt **PCI:** 59

Sample Comments:

41	ALLIGATOR CR	M	45.00	SqFt
48	L & T CR	L	356.00	Ft
48	L & T CR	L	137.00	Ft
57	WEATHERING	L	4000.00	SqFt

Sample Number: 03 **Type:** R **Area:** 4000.00 SqFt **PCI:** 52

Sample Comments:

41	ALLIGATOR CR	M	36.00	SqFt
41	ALLIGATOR CR	M	56.00	SqFt
48	L & T CR	L	368.00	Ft
48	L & T CR	L	68.00	Ft
48	L & T CR	L	45.00	Ft
57	WEATHERING	L	4000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH3SK **Name:** Hangar Taxiway 3 Stark's **Use:** TAXIWAY **Area:** 17,966 SqFt

Section: 02 of 2 **From:** T01SK-02 **To:** Hangars **Last Const.:** 8/2/2004

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 2,766 SqFt **Length:** 133 Ft **Width:** 20 Ft

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

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

Section Comments:

Work Date: 8/1/2004 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 8/2/2004 **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:** 62

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 2766.00 SqFt **PCI:** 62

Sample Comments:

41	ALLIGATOR CR	M	10.00	SqFt
48	L & T CR	L	141.00	Ft
48	L & T CR	M	22.00	Ft
50	PATCHING	L	20.00	SqFt
57	WEATHERING	L	2766.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH3SK **Name:** Hangar Taxiway 3 Stark's **Use:** TAXIWAY **Area:** 17,966 SqFt

Section: 01 of 2 **From:** TH3SK-01 **To:** Hangars **Last Const.:** 9/2/2003

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** P

Area: 15,200 SqFt **Length:** 380 Ft **Width:** 40 Ft

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

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

Section Comments:

Work Date: 9/1/2003 **Work Type:** Base Course - Aggregate **Code:** BA-AG **Is Major M&R:** False

Work Date: 9/2/2003 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 68

Inspection Comments:

Sample Number: 02 **Type:** R **Area:** 4000.00 SqFt **PCI:** 66

Sample Comments:

48	L & T CR	L	407.00	Ft
50	PATCHING	L	74.00	SqFt
57	WEATHERING	L	4000.00	SqFt

Sample Number: 03 **Type:** R **Area:** 4000.00 SqFt **PCI:** 68

Sample Comments:

48	L & T CR	L	242.00	Ft
48	L & T CR	L	115.00	Ft
50	PATCHING	L	74.00	SqFt
57	WEATHERING	L	4000.00	SqFt

Sample Number: 04 **Type:** R **Area:** 4000.00 SqFt **PCI:** 68

Sample Comments:

41	ALLIGATOR CR	M	10.00	SqFt
48	L & T CR	L	199.00	Ft
50	PATCHING	L	74.00	SqFt
57	WEATHERING	L	4000.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH4SK **Name:** Hangar Taxiway 4 Stark's **Use:** TAXIWAY **Area:** 11,065 SqFt

Section: 01 of 1 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 8/1/2000

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 11,065 SqFt **Length:** 500 Ft **Width:** 22 Ft

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

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

Section Comments:

Work Date: 8/1/2000	**Work Type:** New Construction - AC	**Code:** NC-AC	**Is Major M&R:** True
Work Date: 8/1/2000	**Work Type:** Base Course - Aggregate	**Code:** BA-AG	**Is Major M&R:** False
Work Date: 9/1/2016	**Work Type:** Crack Sealing - AC	**Code:** CS-AC	**Is Major M&R:** False
Work Date: 9/2/2016	**Work Type:** Patching - AC Deep	**Code:** PA-AD	**Is Major M&R:** False

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

Conditions: **PCI:** 73

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4377.00 SqFt **PCI:** 74

Sample Comments:

41	ALLIGATOR CR	M	6.00	SqFt
48	L & T CR	L	78.00	Ft
48	L & T CR	L	106.00	Ft
50	PATCHING	L	42.00	SqFt
57	WEATHERING	L	4377.00	SqFt

Sample Number: 02 **Type:** R **Area:** 6688.00 SqFt **PCI:** 73

Sample Comments:

48	L & T CR	L	131.00	Ft
48	L & T CR	L	254.00	Ft
48	L & T CR	L	37.00	Ft
48	L & T CR	M	14.00	Ft
48	L & T CR	M	30.00	Ft
57	WEATHERING	L	6688.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH5SK **Name:** Hangar Taxiway 5 Stark's **Use:** TAXIWAY **Area:** 11,217 SqFt

Section: 02 of 2 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 8/1/1995

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 6,280 SqFt **Length:** 500 Ft **Width:** 13 Ft

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

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

Section Comments:

Work Date: 8/1/1995 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6280.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	6280.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH5SK **Name:** Hangar Taxiway 5 Stark's **Use:** TAXIWAY **Area:** 11,217 SqFt

Section: 01 of 2 **From:** Section 02 **To:** Hangars **Last Const.:** 8/1/2000

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 4,937 SqFt **Length:** 395 Ft **Width:** 13 Ft

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

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

Section Comments:

Work Date: 8/1/2000 **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:** 94

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4937.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	4937.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH6SK **Name:** Hangar Taxiway 6 Stark's **Use:** TAXIWAY **Area:** 10,226 SqFt

Section: 02 of 2 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 8/1/1990

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 5,605 SqFt **Length:** 460 Ft **Width:** 12 Ft

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

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

Section Comments:

Work Date: 8/1/1990 **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:** 37

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 5605.00 SqFt **PCI:** 37

Sample Comments:

41	ALLIGATOR CR	M	250.00	SqFt
41	ALLIGATOR CR	M	26.00	SqFt
41	ALLIGATOR CR	M	25.00	SqFt
48	L & T CR	L	212.00	Ft
48	L & T CR	L	132.00	Ft
48	L & T CR	M	15.00	Ft
57	WEATHERING	L	5605.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH6SK **Name:** Hangar Taxiway 6 Stark's **Use:** TAXIWAY **Area:** 10,226 SqFt

Section: 01 of 2 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 8/1/1990

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 4,621 SqFt **Length:** 460 Ft **Width:** 10 Ft

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

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

Section Comments:

Work Date: 8/1/1990 **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:** 55

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 4621.00 SqFt **PCI:** 55

Sample Comments:

41	ALLIGATOR CR	M	56.00	SqFt
41	ALLIGATOR CR	M	12.00	SqFt
48	L & T CR	L	615.00	Ft
48	L & T CR	L	68.00	Ft
57	WEATHERING	L	4621.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH7SK **Name:** Hangar Taxiway 7 Stark's **Use:** TAXIWAY **Area:** 6,744 SqFt

Section: 01 of 1 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 8/1/1990

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 6,744 SqFt **Length:** 480 Ft **Width:** 14 Ft

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

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

Section Comments:

Work Date: 8/1/1990 **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:** 94

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6744.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	6744.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH8SK **Name:** Hangar Taxiway 8 Stark's **Use:** TAXIWAY **Area:** 10,313 SqFt

Section: 01 of 1 **From:** Taxiway 01 **To:** Hangars **Last Const.:** 8/1/1990

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 10,313 SqFt **Length:** 470 Ft **Width:** 14 Ft

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

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

Section Comments:

Work Date: 8/1/1990 **Work Type:** New Construction - AC **Code:** NC-AC **Is Major M&R:** True

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

Conditions: **PCI:** 63

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 6128.00 SqFt **PCI:** 94

Sample Comments:

57	WEATHERING	L	6128.00	SqFt

Sample Number: 02 **Type:** R **Area:** 4185.00 SqFt **PCI:** 18

Sample Comments:

41	ALLIGATOR CR	H	450.00	SqFt
48	L & T CR	L	188.00	Ft
57	WEATHERING	M	4185.00	SqFt

Network: Starks **Name:** Stark's Twin Oaks

Branch: TH9SK **Name:** Hangar Taxiway 9 Stark's **Use:** TAXIWAY **Area:** 2,541 SqFt

Section: 01 of 1 **From:** Apron 01 **To:** Hangars **Last Const.:** 8/1/1985

Surface: AC **Family:** 2023_Region1_Cat5_Taxiway_AC **Zone:** 7S3 **Category:** E **Rank:** S

Area: 2,541 SqFt **Length:** 210 Ft **Width:** 12 Ft

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

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

Section Comments:

Work Date: 8/1/1985 **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:** 30

Inspection Comments:

Sample Number: 01 **Type:** R **Area:** 2541.00 SqFt **PCI:** 30

Sample Comments:

41	ALLIGATOR CR	M	240.00	SqFt
45	DEPRESSION	L	64.00	SqFt
48	L & T CR	L	187.00	Ft
57	WEATHERING	L	2541.00	SqFt

APPENDIX F

Work History Report

Pavement Database: ODA_2023Survey_MASTER DB-12-11-2023_4pm

Network: Stark's Twin Oaks **Branch:** A01SK Apron 01 Stark's **Section:** 01 **Surface:**AC
L.C.D. 8/1/1985 **Use:** APRON **Rank:** P **Length:** 210.00 (Ft) **Width:** 135.00 (Ft) **True Area:** 21840 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
8/1/1985	NC-AC	New Construction - AC	0.00	0.00	☑	UKNOWN

Network: Stark's Twin Oaks **Branch:** A01SK Apron 01 Stark's **Section:** 02 **Surface:**AC
L.C.D. 8/1/1980 **Use:** APRON **Rank:** P **Length:** 160.00 (Ft) **Width:** 40.00 (Ft) **True Area:** 6617 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
8/1/1980	NC-AC	New Construction - AC	0.00	0.00	☑	UNKNOWN

Network: Stark's Twin Oaks **Branch:** A01SK Apron 01 Stark's **Section:** 03 **Surface:**AC
L.C.D. 8/2/2004 **Use:** APRON **Rank:** P **Length:** 227.00 (Ft) **Width:** 60.00 (Ft) **True Area:** 16016 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/2/2004	NC-AC	New Construction - AC	0.00	2.00	☑	
8/1/2004	BA-AG	Base Course - Aggregate	0.00	6.00	☐	

Network: Stark's Twin Oaks **Branch:** A01SK Apron 01 Stark's **Section:** 04 **Surface:**AC
L.C.D. 6/2/2023 **Use:** APRON **Rank:** P **Length:** 200.00 (Ft) **Width:** 80.00 (Ft) **True Area:** 15753 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/2/2023	NC-AC	New Construction - AC	0.00	3.00	☑	
6/1/2023	BA-AG	Base Course - Aggregate	0.00	9.00	☐	9-12"AB

Network: Stark's Twin Oaks **Branch:** A01SK Apron 01 Stark's **Section:** 05 **Surface:**AC
L.C.D. 9/2/2017 **Use:** APRON **Rank:** P **Length:** 270.00 (Ft) **Width:** 52.00 (Ft) **True Area:** 14753 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2017	CR-AC	Complete Reconstruction - AC	73,765.00	3.00	☑	Thickness estimated based on sections
9/1/2017	BA-AG	Base Course - Aggregate	0.00	9.00	☐	Thickness estimated based on sections

Network: Stark's Twin Oaks **Branch:** A01SK Apron 01 Stark's **Section:** 06 **Surface:**PCC
L.C.D. 9/2/2017 **Use:** APRON **Rank:** P **Length:** 105.00 (Ft) **Width:** 82.00 (Ft) **True Area:** 7581 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2017	CR-PC	Complete Reconstruction - PCC	75,810.00	0.00	☑	Unknown Thickness
9/1/2017	BA-AG	Base Course - Aggregate	0.00	0.00	☐	Unknown Thickness

Network: Stark's Twin Oaks **Branch:** AHLD02SK Hold Apron RW 0 **Section:** 01 **Surface:**AC
L.C.D. 9/1/2011 **Use:** APRON **Rank:** P **Length:** 70.00 (Ft) **Width:** 25.00 (Ft) **True Area:** 1143 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2011	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** AHLD02SK Hold Apron RW 0 **Section:** 02 **Surface:** AC
L.C.D. 4/2/2023 **Use:** APRON **Rank:** P **Length:** 270.00 (Ft) **Width:** 35.00 (Ft) **True Area:** 8242 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
4/2/2023	NC-AC	New Construction - AC	0.00	3.00	☑	
4/1/2023	BA-AG	Base Course - Aggregate	0.00	9.00	☐	9-12" AB

Network: Stark's Twin Oaks **Branch:** R02SK Runway 02/20 Star **Section:** 01 **Surface:** AC
L.C.D. 9/1/2011 **Use:** RUNWAY **Rank:** P **Length:** 75.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 3750 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/3/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/2/2016	PA-AF	Patching - AC Full Depth	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
9/1/2011	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** R02SK Runway 02/20 Star **Section:** 02 **Surface:** AC
L.C.D. 8/1/1992 **Use:** RUNWAY **Rank:** P **Length:** 1,200.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 60000 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/3/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/2/2016	PA-AF	Patching - AC Full Depth	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
6/1/2010	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1992	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth

Network: Stark's Twin Oaks **Branch:** R02SK Runway 02/20 Star **Section:** 03 **Surface:** AC
L.C.D. 8/1/1996 **Use:** RUNWAY **Rank:** P **Length:** 1,150.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 57500 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/3/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/2/2016	PA-AF	Patching - AC Full Depth	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
6/1/2010	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1996	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** R02SK Runway 02/20 Star **Section:** 04 **Surface:** AC
L.C.D. 8/1/1994 **Use:** RUNWAY **Rank:** P **Length:** 125.00 (Ft) **Width:** 42.00 (Ft) **True Area:** 5117 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
6/1/2010	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1994	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth

Pavement Database: ODA_2023Survey_MASTER DB-12-11-2023_4pm

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 01 **Surface:**AC

L.C.D. 9/1/2011 **Use:** TAXIWAY **Rank:** P **Length:** 654.00 (Ft) **Width:** 20.00 (Ft) **True Area:** 15358 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2011	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 02 **Surface:**AC

L.C.D. 8/2/2004 **Use:** TAXIWAY **Rank:** P **Length:** 789.00 (Ft) **Width:** 20.00 (Ft) **True Area:** 15462 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
8/2/2004	NC-AC	New Construction - AC	0.00	2.00	☑	
8/1/2004	BA-AG	Base Course - Aggregate	0.00	8.00	☐	

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 03 **Surface:**AAC

L.C.D. 9/1/2017 **Use:** TAXIWAY **Rank:** P **Length:** 108.00 (Ft) **Width:** 18.00 (Ft) **True Area:** 1926 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2017	OL-AS	Overlay - AC Structural	4,218.00	0.00	☑	Unknown thickness and assumed date
8/1/2000	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 04 **Surface:**AAC

L.C.D. 9/1/2017 **Use:** TAXIWAY **Rank:** P **Length:** 397.00 (Ft) **Width:** 18.00 (Ft) **True Area:** 7146 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2017	OL-AS	Overlay - AC Structural	0.00	0.00	☑	Unknown thickness and assumed date
8/1/1995	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 05 **Surface:**AAC

L.C.D. 9/1/2017 **Use:** TAXIWAY **Rank:** P **Length:** 260.00 (Ft) **Width:** 18.00 (Ft) **True Area:** 4680 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2017	OL-AS	Overlay - AC Structural	0.00	0.00	☑	Unknown thickness and assumed date
8/1/1995	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 06 **Surface:**AC

L.C.D. 8/1/1994 **Use:** TAXIWAY **Rank:** P **Length:** 446.00 (Ft) **Width:** 18.00 (Ft) **True Area:** 14845 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1994	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth

Network: Stark's Twin Oaks **Branch:** T01SK Taxiway 01 Stark's **Section:** 07 **Surface:**AC
L.C.D. 4/2/2023 **Use:** TAXIWAY **Rank:** P **Length:** 67.00 (Ft) **Width:** 95.00 (Ft) **True Area:** 6097 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
4/2/2023	NC-AC	New Construction - AC	0.00	3.00	☑	
4/1/2023	BA-AG	Base Course - Aggregate	0.00	9.00	☐	9-12" AB
4/1/2022	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** T02SK Taxiway 02 Stark's **Section:** 01 **Surface:**AC
L.C.D. 8/2/2004 **Use:** TAXIWAY **Rank:** P **Length:** 90.00 (Ft) **Width:** 50.00 (Ft) **True Area:** 3029 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/2/2004	NC-AC	New Construction - AC	0.00	2.00	☑	
8/1/2004	BA-AG	Base Course - Aggregate	0.00	8.00	☐	

Network: Stark's Twin Oaks **Branch:** T03SK Taxiway 03 Stark's **Section:** 01 **Surface:**AC
L.C.D. 8/1/1995 **Use:** TAXIWAY **Rank:** P **Length:** 144.00 (Ft) **Width:** 20.00 (Ft) **True Area:** 4509 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1995	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** T04SK Taxiway 04 Stark's **Section:** 01 **Surface:**AC
L.C.D. 8/1/1996 **Use:** TAXIWAY **Rank:** P **Length:** 67.00 (Ft) **Width:** 20.00 (Ft) **True Area:** 1394 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1996	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** T05SK Taxiway 05 Stark's **Section:** 01 **Surface:**AC
L.C.D. 8/1/1995 **Use:** TAXIWAY **Rank:** P **Length:** 67.00 (Ft) **Width:** 120.00 (Ft) **True Area:** 10065 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	OR-SS	Oregon Slurry Seal	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1995	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** T06SK Taxiway 06 Stark's **Section:** 01 **Surface:**AC
L.C.D. 8/1/1994 **Use:** TAXIWAY **Rank:** P **Length:** 123.00 (Ft) **Width:** 18.00 (Ft) **True Area:** 2570 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/1994	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth

Network: Stark's Twin Oaks **Branch:** TH10SK Hangar Taxiway 1 **Section:** 01 **Surface:** AC
L.C.D. 9/1/2016 **Use:** TAXIWAY **Rank:** P **Length:** 530.00 (Ft) **Width:** 25.00 (Ft) **True Area:** 12592 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2016	NC-AC	New Construction - AC	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** TH11SK Hangar Taxiway 1 **Section:** 01 **Surface:** AC
L.C.D. 9/1/2020 **Use:** TAXIWAY **Rank:** P **Length:** 530.00 (Ft) **Width:** 25.00 (Ft) **True Area:** 12561 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/1/2020	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** TH1SK Hangar Taxiway 1 **Section:** 01 **Surface:** AC
L.C.D. 6/1/2009 **Use:** TAXIWAY **Rank:** S **Length:** 530.00 (Ft) **Width:** 25.00 (Ft) **True Area:** 12593 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
6/1/2009	NC-IN	New Construction - Initial	0.00	0.00	☑	

Network: Stark's Twin Oaks **Branch:** TH2SK Hangar Taxiway 2 **Section:** 01 **Surface:** AC
L.C.D. 9/2/2003 **Use:** TAXIWAY **Rank:** P **Length:** 390.00 (Ft) **Width:** 40.00 (Ft) **True Area:** 15600 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2003	NC-AC	New Construction - AC	0.00	2.00	☑	
9/1/2003	BA-AG	Base Course - Aggregate	0.00	6.00	☐	

Network: Stark's Twin Oaks **Branch:** TH2SK Hangar Taxiway 2 **Section:** 02 **Surface:** AC
L.C.D. 8/2/2004 **Use:** TAXIWAY **Rank:** P **Length:** 130.00 (Ft) **Width:** 20.00 (Ft) **True Area:** 2642 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/2/2004	NC-AC	New Construction - AC	0.00	2.00	☑	
8/1/2004	BA-AG	Base Course - Aggregate	0.00	8.00	☐	

Network: Stark's Twin Oaks **Branch:** TH3SK Hangar Taxiway 3 **Section:** 01 **Surface:** AC
L.C.D. 9/2/2003 **Use:** TAXIWAY **Rank:** P **Length:** 380.00 (Ft) **Width:** 40.00 (Ft) **True Area:** 15200 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2003	NC-AC	New Construction - AC	0.00	2.00	☑	
9/1/2003	BA-AG	Base Course - Aggregate	0.00	6.00	☐	

Network: Stark's Twin Oaks **Branch:** TH3SK Hangar Taxiway 3 **Section:** 02 **Surface:** AC
L.C.D. 8/2/2004 **Use:** TAXIWAY **Rank:** P **Length:** 133.00 (Ft) **Width:** 20.00 (Ft) **True Area:** 2766 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/2/2004	NC-AC	New Construction - AC	0.00	2.00	☑	
8/1/2004	BA-AG	Base Course - Aggregate	0.00	8.00	☐	

Network: Stark's Twin Oaks **Branch:** TH4SK Hangar Taxiway 4 **Section:** 01 **Surface:** AC
L.C.D. 8/1/2000 **Use:** TAXIWAY **Rank:** S **Length:** 500.00 (Ft) **Width:** 22.00 (Ft) **True Area:** 11065 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
9/2/2016	PA-AD	Patching - AC Deep	0.00	0.00	☐	
9/1/2016	CS-AC	Crack Sealing - AC	0.00	0.00	☐	
8/1/2000	NC-AC	New Construction - AC	0.00	0.00	☑	unknown depth
8/1/2000	BA-AG	Base Course - Aggregate	0.00	0.00	☐	unknown depth

Network: Stark's Twin Oaks **Branch:** TH5SK Hangar Taxiway 5 **Section:** 01 **Surface:** AC
L.C.D. 8/1/2000 **Use:** TAXIWAY **Rank:** S **Length:** 395.00 (Ft) **Width:** 12.50 (Ft) **True Area:** 4937 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/2000	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown Depth

Network: Stark's Twin Oaks **Branch:** TH5SK Hangar Taxiway 5 **Section:** 02 **Surface:** AC
L.C.D. 8/1/1995 **Use:** TAXIWAY **Rank:** S **Length:** 500.00 (Ft) **Width:** 12.50 (Ft) **True Area:** 6280 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1995	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1995

Network: Stark's Twin Oaks **Branch:** TH6SK Hangar Taxiway 6 **Section:** 01 **Surface:** AC
L.C.D. 8/1/1990 **Use:** TAXIWAY **Rank:** S **Length:** 460.00 (Ft) **Width:** 10.00 (Ft) **True Area:** 4621 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1990	NC-AC	New Construction - AC	0.00	0.00	☑	UNKNOWN

Network: Stark's Twin Oaks **Branch:** TH6SK Hangar Taxiway 6 **Section:** 02 **Surface:** AC
L.C.D. 8/1/1990 **Use:** TAXIWAY **Rank:** S **Length:** 460.00 (Ft) **Width:** 12.00 (Ft) **True Area:** 5605 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1990	NC-AC	New Construction - AC	0.00	0.00	☑	UNKNOWN

Network: Stark's Twin Oaks **Branch:** TH7SK Hangar Taxiway 7 **Section:** 01 **Surface:** AC
L.C.D. 8/1/1990 **Use:** TAXIWAY **Rank:** S **Length:** 480.00 (Ft) **Width:** 14.00 (Ft) **True Area:** 6744 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1990	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1990

Network: Stark's Twin Oaks **Branch:** TH8SK Hangar Taxiway 8 **Section:** 01 **Surface:** AC
L.C.D. 8/1/1990 **Use:** TAXIWAY **Rank:** S **Length:** 470.00 (Ft) **Width:** 14.00 (Ft) **True Area:** 10313 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1990	NC-AC	New Construction - AC	0.00	0.00	☑	Unknown depth, date; circa 1990

Network: Stark's Twin Oaks **Branch:** TH9SK Hangar Taxiway 9 **Section:** 01 **Surface:** AC
L.C.D. 8/1/1985 **Use:** TAXIWAY **Rank:** S **Length:** 210.00 (Ft) **Width:** 12.00 (Ft) **True Area:** 2541 (SqFt)

Work Date	Work Code	Work Description	Cost	Thickness (in)	Major M&R	Comments
8/1/1985	NC-AC	New Construction - AC	0.00	2.00	☑	UNKNOWN

Summary:

Work Description	Section Count	Area Total (SqFt)	Thickness Avg (in)	Thickness STD (in)
Base Course - Aggregate	13	134,206.00	6.62	3.03
Complete Reconstruction - AC	1	14,753.00	3.00	0.00
Complete Reconstruction - PCC	1	7,581.00	0.00	0.00
Crack Sealing - AC	14	296,461.01	0.00	0.00
New Construction - AC	32	363,714.00	0.78	1.11
New Construction - Initial	6	51,502.00	0.00	0.00
Oregon Slurry Seal	12	204,128.00	0.00	0.00
Overlay - AC Structural	3	13,752.00	0.00	0.00
Patching - AC Deep	1	11,065.00	0.00	0.00
Patching - AC Full Depth	3	121,250.00	0.00	0.00