

## STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AVIATION OFFICE

# Statewide Airfield Pavement Management Program

North Palm Beach County General Aviation Airport– F45 (Regional Reliever) West Palm Beach, Florida (District 4)



May 2012

## **TABLE OF CONTENTS**

## PAGE NO.

| Exec | cutive Summary                            | iii |
|------|---|-----|
| 1.   | Introduction                              | 1   |
| 2.   | Network Definition and Pavement Inventory | 10  |
| 3.   | Pavement Condition                        | 15  |
| 4.   | Pavement Condition Prediction             | 21  |
| 5.   | Maintenance Policies and costs            | 22  |
| 6.   | Pavement Rehabilitation Needs Analysis    | 28  |
| 7.   | Maintenance and Rehabilitation Plan       | 33  |
| 8.   | Visual Aids                               | 34  |
| 9.   | Recommendations                           | 35  |

## LIST OF FIGURES

| Figure 1-1: Pavement Life Cycle  | .4 |
|--|----|
| Figure 1-2: PCI Rating Scale   | .6 |
| Figure 2-1: Pavement Area by Surface Type1                                     | 2  |
| Figure 3-1: Network PCI Distribution by Rating Category1                       | 7  |
| Figure 3-1a: Condition Rating Summary1   | 8  |
| Figure 3-2: Percentage of Pavement Area within Each PCI Range by Pavement Use1 | 9  |
| Figure 4-1: Predicted PCI by Pavement Use2                                     | 21 |
| Figure 6-1: Budget Scenario Analysis3  | 52 |

#### LIST OF TABLES

| iv    |
|-------|
| v     |
| v     |
| vi vi |
| 5     |
| 11    |
| .11   |
| 13    |
| .14   |
| .15   |
| 16    |
| 18    |
| .23   |
| .24   |
| .24   |
| .25   |
| .26   |
| .27   |
| .29   |
|       |

## TABLE OF CONTENTS

## PAGE NO.

| Table 6-1: Summary of Year 1 Maintenance Activities (Continued) |  |
|---|--|
| Table 6-1: Summary of Year 1 Maintenance Activities (Continued) |  |
| Table 7-1: M&R Costs under Unlimited Funding Scenario           |  |

#### APPENDICES

| Appendix A | Network Definition Map  |
|------------|---|
|            | System Inventory Map  |
|            | Pavement Inventory Table                                      |
|            | Work History Report   |
| Appendix B | 2012 Condition Map  |
|            | Pavement Condition Index Table                                |
| Appendix C | Branch Condition Report                                       |
|            | Section Condition Report                                      |
| Appendix D | Pavement Condition Prediction Table                           |
|            | Predicted PCI by Pavement Use Graph                           |
| Appendix E | Year 1 Maintenance Activities Table                           |
| Appendix F | Major M&R Plan by Year under Unlimited Funding Scenario Table |
| Appendix G | 10-Year M&R Map   |
| Appendix H | Photographs   |
| Appendix I | PCI Re-inspection Report                                      |
|            |   |

#### **EXECUTIVE SUMMARY**

In 2010, the Florida Department of Transportation (FDOT) Aviation Office selected a Consultant team consisting of Kimley-Horn and Associates and their Subconsultants, AMEC and All About Pavements, Inc., to provide services in support of FDOT in the continuing evaluation and updating of the existing Statewide Airfield Pavement Management Program (SAPMP) to be completed over fiscal years 2011 and 2012.

The tasks required to achieve this objective at North Palm Beach County General Aviation Airport included:

- Obtain recent construction history from the Airport to update the Pavement Inventory CADD drawings from the previous SAPMP update,
- Perform a visual Pavement Condition Index (PCI) survey of the airfield pavements at the Airport,
- Update the MicroPAVER database to analyze the PCI field data and determine the current condition of the airfield pavements,
- Predict the future deterioration of the pavements,
- Develop a 10-year M&R plan to address the pavement needs at North Palm Beach County General Aviation Airport, and
- Provide the estimated costs associated with the suggested immediate and future M&R activities

During April 2012, the PCI survey was performed at North Palm Beach County General Aviation Airport. The results of the survey indicate that, based on a numerical scale of 0 to 100, the overall area-weighted average PCI of the airfield pavements in 2012 is 77, representing a Satisfactory overall network condition.

Table I below summarizes the overall condition summary by network branch.

| Branch Name          | Area<br>Weighted<br>PCI | PCI<br>Range | Condition<br>Rating | FDOT<br>Minimum<br>Service Level | MicroPAVER<br>Minimum<br>PCI | Action<br>Required |
|----------------------|-------------------------|--------------|---------------------|----------------------------------|------------------------------|--------------------|
| North Apron          | 74                      | 73 - 97      | Satisfactory        | 65                               | 65                           |                    |
| Apron Run-Up         | 76                      | 73 - 79      | Satisfactory        | 65                               | 65                           |                    |
| T-Hangar Apron       | 76                      | 76           | Satisfactory        | 65                               | 65                           |                    |
| T-Hangar Apron East  | 84                      | 83 - 85      | Satisfactory        | 65                               | 65                           |                    |
| T-Hangar Apron North | 89                      | 89 - 100     | Good                | 65                               | 65                           |                    |
| Runway 13-31         | 73                      | 73           | Satisfactory        | 75                               | 65                           |                    |
| Runway 8R-26L        | 75                      | 75           | Satisfactory        | 75                               | 65                           |                    |
| Taxiway Charlie      | 88                      | 88           | Good                | 65                               | 65                           |                    |
| Taxiway Delta        | 80                      | 80 - 81      | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Echo         | 80                      | 80           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Foxtrot      | 79                      | 67 - 80      | Satisfactory        | 65                               | 65                           |                    |
| Taxiway G-1          | 88                      | 88           | Good                | 65                               | 65                           |                    |
| Taxiway Hotel        | 87                      | 87           | Good                | 65                               | 65                           |                    |
| Taxiway Juliet       | 79                      | 70 - 87      | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Kilo         | 81                      | 77 - 86      | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Lima         | 81                      | 81           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Mike         | 79                      | 79           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway November     | 79                      | 79           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Oscar        | 74                      | 74           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Papa         | 79                      | 79           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Quebec       | 78                      | 78           | Satisfactory        | 65                               | 65                           |                    |
| Taxiway Romeo        | 81                      | 81           | Satisfactory        | 65                               | 65                           |                    |

## **Table I: Condition Summary by Branch**

Tables II and III below illustrate the area-weighted PCI computed individually for each pavement use and rank, respectively.

| Use            | Average Area-<br>Weighted PCI | Condition Rating |
|----------------|-------------------------------|------------------|
| Runway         | 74                            | Satisfactory     |
| Taxiway        | 81                            | Satisfactory     |
| Apron          | 77                            | Satisfactory     |
| All (Weighted) | 77                            | Satisfactory     |

## Table II: Condition Summary by Pavement Use

## Table III: Condition Summary by Pavement Rank

| Rank*          | Average Area-<br>Weighted PCI | Condition Rating |
|----------------|-------------------------------|------------------|
| Primary        | 78                            | Satisfactory     |
| Secondary      | 73                            | Satisfactory     |
| All (Weighted) | 77                            | Satisfactory     |

\*The pavement rank for the airport pavement network is listed on Table 2-3.

Based on the PCI values calculated, there are no immediate M&R needs in the first year of the 10-year M&R plan based on an unlimited budged at North Palm Beach County General Aviation Airport. Table F-1 in Appendix F gives the major M&R activity by year for the next ten years.

A forecast of Major M&R needs for a 10-year period, starting from 2012, was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major M&R during that interval. The results of this analysis are provided in Table IV below.

| Year  | Preventative   | Major M&R      | Total Year Cost |
|-------|----------------|----------------|-----------------|
| 2012  | \$391,600.61   | \$0.00         | \$391,600.61    |
| 2013  | \$387,311.88   | \$0.00         | \$387,311.88    |
| 2014  | \$435,789.74   | \$0.00         | \$435,789.74    |
| 2015  | \$489,730.21   | \$19,275.63    | \$509,005.84    |
| 2016  | \$550,254.66   | \$0.00         | \$550,254.66    |
| 2017  | \$381,995.74   | \$2,365,019.26 | \$2,747,014.99  |
| 2018  | \$422,312.27   | \$0.00         | \$422,312.27    |
| 2019  | \$398,032.68   | \$631,132.32   | \$1,029,164.99  |
| 2020  | \$430,114.54   | \$34,659.30    | \$464,773.83    |
| 2021  | \$220,735.63   | \$2,497,642.56 | \$2,718,378.19  |
| Total | \$4,107,877.96 | \$5,547,729.07 | \$9,655,607.00  |

## Table IV: 10-Year M&R Costs under Unlimited Funding Scenario

Note: Costs are adjusted for inflation.

The implementation of the 10-Year Major M&R Plan is expected to provide an improvement in the overall condition of the airfield pavement, where the area-weighted PCI would increase from 77 in 2012 to 87 in 2021. Appendix F lists the Major M&R for the 10-Year program. Appendix G graphically depicts the program activity.

It is important to note that although preventative and some major M&R activities would have to be conducted over several years, the area-weighted PCI value for all North Palm Beach County General Aviation Airport pavements in 2021 may remain near 70. The airport manager should realize that what is most important is that the pavement repair work (preventative and major M&R) that has been identified for North Palm Beach County General Aviation Airport is conducted at some point in the 10-year plan.

## 1. INTRODUCTION

The State of Florida has more than 100 public airports that are vital to the Florida economy as well as the economy of the United States. There are millions of square yards of pavement for the runways, taxiways, aprons and other areas of these airports that support aircraft operations. The timely and proper maintenance and rehabilitation (M&R) of these pavements allows the airports to operate efficiently, economically and without excessive down time.

In order to support the planning, scheduling, and design of the M&R activities based on pavement evaluation and pavement management performance trends, the Florida Department of Transportation (FDOT) Aviation Office implemented the Statewide Airfield Pavement Management Program (SAPMP) in 1992.

In 2010, the FDOT Aviation Office selected a Consultant team consisting of Kimley-Horn and Associates and their Subconsultants, MACTEC Engineering and Consulting and All About Pavements, Inc., to provide services in support of FDOT in the continuing evaluation and updating of the existing SAPMP to be completed over fiscal years 2011 and 2012.

This report discusses the work performed, a summary of the findings, results, and recommendations for M&R planning associated with the update to the SAPMP. It also describes the procedures used to ensure that the appropriate engineering and scientific standards of care, quality, budget, and schedule requirements are implemented during the performance of the SAPMP.

#### 1.1 Purpose

This Florida Airport Pavement Evaluation Report is intended to:

- Describe, briefly, the SAPMP and the roles and responsibilities of the program's participants;
- Provide background information on pavement management principles, objectives, and benefits to this airport;
- Outline the procedures used to collect, evaluate and report pavement inspection results at this airport;
- Present the findings from the pavement inspection;
- Analyze and discuss the needs for Maintenance and Rehabilitation (M&R) activities and associated costs for this airport.

## 1.2 FDOT Statewide Airfield Pavement Management Program

In 1992, the FDOT implemented the SAPMP to improve the knowledge of pavement conditions at public airports in the State system, identify maintenance needs at individual airports, automate information management, and establish standards to address future needs. The 1992 SAPMP provided valuable information for establishing and performing pavement M&R.

In 1992/1993, and 1998/1999, the FDOT Aviation Office participated in the development of a proprietary software pavement management system and developed and populated a pavement management database that provided valuable information for establishing M&R policies, estimating M&R costs, and developing recommendations for performing routine pavement

maintenance. This system, AIRPAV, was implemented, and initial condition surveys were performed in 1992 and 1993. The SAPMP was updated with additional surveys in 1998 and 1999.

In 2004, the FDOT Aviation Office undertook a project to update the pavement management system software utilized for the SAPMP. This project involved a review of the AIRPAV software and other available pavement management system software. As a result of this review, MicroPAVER was selected as the software for the update project. Data from the 1998/1999 condition surveys were converted to the MicroPAVER system, and the inventory of the pavement systems and drawings of the pavements were updated to reflect maintenance, rehabilitation, and construction activities since 1998/1999. The pavements were inspected between 2006 and 2008, and an updated M&R program was developed based on the new condition of the airfield pavements. As part of the update, procedures for the inspection and collection of pavement data were developed, and a website (www.floridaairportpavement.com) was created for the input of data under secure procedures.

Currently, airports using the AIP Grant Program are required by the Federal Aviation Administration (FAA) to develop a pavement maintenance program (FAA/AC 150/5380-6B "Guidelines and Procedures for Maintenance of Airport Pavements") using trained personnel to perform a detailed inspection of airfield pavements. The inspections are required to be performed at least once a year or every 3 years if pavement inspection is characterized in the form of a Pavement Condition Index (PCI) survey (such as ASTM D 5340 "Standard Test Method for Airport Pavement Condition Index Surveys", (2004 edition)). The 2004 edition was utilized in lieu of the 2010 edition to maintain database integrity and benefit of pavement performance curves from the previous inspections.

In 2010, the FDOT Aviation Office selected a team consisting of the Consultant and their Subconsultants to provided services in support of FDOT in the continuing evaluation and updating of the existing SAPMP to be completed over fiscal years 2011 and 2012.

## 1.3 Organization

## **1.3.1** Aviation Office Program Manager Role

The Aviation Office Airport Engineering Manager serves as the Aviation Office Program Manager (AO-PM) monitoring the work of the Consultant. The AO-PM has review and approval authority for each program task and also manages the day-to-day details of the SAPMP and the updates.

#### **1.3.2** Consultant Role

The Consultant (Kimley-Horn and Associates, Inc.) and their Subconsultants (AMEC Engineering and Consulting and All About Pavements, Inc.) provide technical and administrative assistance to the AO-PM during the execution of this program, which involves the continuing evaluation of airport pavements and updating of the SAPMP based upon procedures outlined in FAA Advisory Circular 150/5380-6B "Guidelines and Procedures for Maintenance of Airport Pavements" and ASTM D 5340 "Standard Test Method for Airport Pavement Condition Index Surveys" (2004).

## 1.3.3 Airport Role

The airports are the ultimate client for each of the field inspections and reports. Individual airports will be provided final deliverables prepared by the Consultant that have been reviewed and approved by the AO-PM. The airport should provide a current Airport Layout Plan (ALP) to the Consultant and, if they participated in the previous SAPMP update, indicate any construction activity that has been performed since the previous inspections.

#### **1.4** Pavement Types and Pavement Management

#### 1.4.1 Pavement basics

A pavement is a prepared surface designed to provide a continuous smooth ride at a certain speed and to support an estimated amount of traffic for a certain number of years. Pavements are constructed of a combination of subgrade soils, subbases, bases and surfacing. There are mainly two types of pavements;

- Flexible pavement, composed of an asphalt concrete (AC) surface, and
- Rigid pavement composed of a Portland Cement Concrete (PCC) surface.

Both pavement types use a combination of layered materials and thicknesses in order to support the traffic loads and protect the underlying natural subgrade soil. Flexible pavements (AC) dissipate the load from layer to layer until the load magnitude is small enough to be supported by the subgrade soil. In rigid pavements (PCC), the Portland Cement Concrete supports most of the load, and the base or subbase layer is mainly constructed to provide a smooth and continuous platform for the construction of the concrete surface.

A small percentage of the airport pavements in Florida are composed of asphalt concrete surface over Portland Cement Concrete (APC). This pavement type is known as "composite" pavement.

Due to the different nature of the pavement types and their materials, flexible and rigid pavements have different distresses and failure mechanisms. Understanding the mechanics and failure modes of both pavement types will assist engineers in making adequate and long lasting repairs or rehabilitation to the pavement structures.

#### 1.4.2 Pavement Management System Concept

The SAPMP utilized a Pavement Management System (PMS) to develop the M&R recommendations discussed in this report. A PMS is a tool to assist engineers, planners and managing agencies in making decisions when planning pavement M&R. The management of pavements involves scheduling pavement maintenance and rehabilitation before pavements deteriorate to a condition where reconstruction (the most expensive alternative) is the only solution. Figure 1-1 below, taken from FAA/AC 5380-7A "Airport Pavement Management Program", illustrates how a pavement generally deteriorates and the relative cost of rehabilitation at various times throughout its life. Note that during the first 75 percent of a pavement's life, it performs relatively well. After that, however, it begins to deteriorate rapidly. The number of years a pavement stays in "good" condition depends on how well it is maintained. As the illustration demonstrates, the cost of maintaining the pavement above a critical condition before rapid deterioration has occurred.



## Figure 1-1: Pavement Life Cycle

Source: FAA/AC 150/5380-7A "Airport Pavement Management Program" \*Modified to reflect current construction costs.

Pavements deteriorate at an accelerated rate with increasing traffic and limited M&R resources. Planned maintenance and rehabilitation, essentially preventing pavements from reaching deteriorated conditions, helps managers/owners/agencies maximize the use of their budgets and prolong the life of the pavements. A PMS provides a tool to schedule and plan maintenance and rehabilitation based on engineering information and existing and predicted conditions of pavements.

There are several components or elements that are essential to a PMS. The first steps in the implementation of a PMS are to know and clearly identify what needs to be managed, the limits of the managing agency's responsibilities and the condition of the existing pavements. Once the cause and the extent of pavement problems are known, the appropriate maintenance and/or rehabilitation can be planned. By using local unit costs and expected yearly budgets, a multi-year M&R plan can be determined.

#### **1.4.3** Pavement Inspection Methodology for the SAPMP

Pavement condition assessment is one of the primary decision variables in any airport PMS. Pavement condition assessments generally include visual surveys in accordance with ASTM D 5340, "Standard Test Method for Airport Pavement Condition Index Surveys" and structural evaluation. Pavement condition surveys assess the functional condition of the pavement surface. Typically, most problems within a pavement structure will eventually reflect to the pavement surface. The structural condition and relative support of the pavement layers can be assessed utilizing non-destructive deflection testing (NDT) as well as other in-depth engineering evaluation or sampling and testing methods.

For the Statewide Aviation Pavement Management Program update, only visual surveys were performed. Further structural and geotechnical testing should be conducted to determine the appropriate rehabilitation methods during the design process.

In preparation of the PCI surveys, the airfield pavements are divided into sample units as established in FAA AC 150/5380-6B and ASTM D 5340. Further discussion of how the airport pavements are divided and subdivided into units by construction and use can be found in Section 2 "Network Definition and Pavement Inventory" of this report.

Sample unit sizes are approximately  $5000 \pm 2000$  square feet for AC-surfaced pavements and  $20 \pm 8$  slabs for PCC-surfaced pavements. Prior to conducting the field inspections, the sampling plan was developed based on previous sampling and modified based on the available knowledge of Branches, Sections, use patterns, construction types and history. The sampling rate used for the FDOT Statewide Airfield Pavement Management Program is provided in Table 1-1 below.

| AC Pavements   |                        |                        | PCC Pavements  |                        |             |
|----------------|------------------------|------------------------|----------------|------------------------|-------------|
| N              | n                      |                        | N              | n                      |             |
| IN             | Runway                 | Others                 | IN             | Runway                 | Others      |
| 1-4            | 1                      | 1                      | 1-3            | 1                      | 1           |
| 5-10           | 2                      | 1                      | 4-6            | 2                      | 1           |
| 11-15          | 3                      | 2                      | 7-10           | 3                      | 2           |
| 16-30          | 5                      | 3                      | 11-15          | 4                      | 2           |
| 31-40          | 7                      | 4                      | 16-20          | 5                      | 3           |
| 41-50          | 8                      | 5                      | 21-30          | 7                      | 3           |
| <u>&gt;</u> 51 | 20% but <u>&lt;</u> 20 | 10% but <u>&lt;</u> 10 | 31-40          | 8                      | 4           |
|                |                        |                        | 41-50          | 10                     | 5           |
|                |                        |                        | <u>&gt;</u> 51 | 20% but <u>&lt;</u> 20 | 10% but <10 |

## Table 1-1: Sampling Rate for FDOT Condition Surveys

Where

N = total number of sample units in Section n = number of sample units to inspect

The sample units to inspect are determined by a systematic random sampling technique. This means that the locations are determined such that they are distributed evenly throughout the Section. In the case when nonrepresentive distresses are observed in the field, additional sample units were added.

The distress quantities and severity levels from the sample units are used to compute the PCI value for each Section. PCI values range from 0 to 100. As Figure 1-2 below indicates, MicroPAVER provides a rating scale that relates PCI to pavement condition. A PCI between 0 and 10 is considered 'Failed' pavement, and a PCI between 86 and 100 is considered 'Good' pavement, with five other conditions for PCI values between 11 and 85.

| PCI               | <b>Condition Rating</b> |
|-------------------|-------------------------|
| 86 - 100          | Good                    |
| 71 - 85           | Satisfactory            |
| 56 - 70           | Fair                    |
| 41 – 55           | Poor                    |
| 26 – 40 Very Poor |                         |
| 11 – 25 Serious   |                         |
| 0 - 10            | Failed                  |

## Figure 1-2: PCI Rating Scale

#### **1.5 Definitions**

<u>Aviation Office</u> - The Aviation Office is charged with responsibility for promoting the safe development of aviation to serve the people of the State of Florida. The Aviation Office Program Manager (AO-PM) has review and approval authority for each program task of the SAPMP.

<u>Base Course</u> - Base Course is a layer of manufactured material, usually crushed rock (aggregate) or stabilized material (asphalt or concrete or Florida Limerock), immediately beneath the surface course of a pavement, which provides support to the surface course.

<u>Branch</u> - A Branch designates pavements that have common usage and functionality, such as an entire runway, taxiway, or apron.

<u>Branch ID</u> - A short form identification for the pavement Branch. In this report, Branch includes the common designation for the item e.g. RW 18-36.

<u>Category</u> - The Category classifies the airport according to the type and volume of aircraft traffic, as follows:

- GA for general aviation or community airports;
- RL for regional relievers or small hubs;
- PR for primary (certified under Part 139 requirements).

<u>Critical PCI</u> - The PCI value considered to be the threshold for M&R decisions. PCI above the Critical generate economical activities expected to preserve and prolong acceptable condition. M&R for PCI values less than Critical make sense only for reasons of safety or to maintain a pavement in operable condition. A pavement section is expected to deteriorate very quickly once it reaches the Critical PCI and the unit cost of repair increases significantly.

<u>Distress Type</u> - A distress type is a defined visible defect in pavement evidenced by cracking, vertical displacement or deterioration of material. In PCI technology, 16 distinct distress types for asphalt surfaced and 15 for Portland Cement Concrete surfaced pavements have been described and rated according to the impact their presence has on pavement condition.

<u>Florida DOT (FDOT)</u> - Florida Department of Transportation was represented in this project by the Office of Aviation.

<u>Global M&R</u> - Global M&R is defined as activities applied to entire pavement Sections with the primary objective of slowing the rate of deterioration. These activities are primary for asphalt surfaced pavements, e.g. surface treatments.

Localized M&R (Maintenance and Repair) - Localized M&R is a temporizing activity performed on existing pavement to extend its serviceability and/or to improve rideability. Localized M&R can be applied either as a safety (stop-gap) measure or preventive measure. Common localized maintenance methods include crack sealing, joint sealing, and patching.

<u>Major M&R (e.g. Rehabilitation)</u> - Activities performed over the entire area of a pavement Section that are intended to restore and/or maintain serviceability. This includes asphalt overlays, milling and replacing asphalt pavement, reconstruction with asphalt, reconstruction with Portland Cement Concrete (PCC) pavements, and PCC overlays.

<u>MicroPAVER</u> - A commercially available software subsidized by FAA and agencies in the US Department of Defense developed to support engineered management of pavement assets using a condition based approach. This software has the functionality such that, if properly implemented, maintained, and operated, it meets the pavement management program requirements described by the FAA in Advisory Circular 150/5380-7A.

<u>Minimum Condition Level</u> - A threshold PCI value established by FDOT to represent the targeted minimum pavement condition that is desirable in the Florida Airport System. These values were established with consideration of pavement function and airport type. For instance, runways have higher minimum condition levels than aprons, and Primary airports have higher minimum condition levels than airports.

<u>Network Definition</u> - A Network Definition is a Computer-Aided Drafting & Design (CADD) drawing which shows the airport pavement outline with Branch and Section boundaries. This drawing also includes the PCI sample units and is used to identify those sample units to be surveyed, i.e. the sampling plan. The Network Definition for the airport is in Appendix A along with a table of inventory data.

<u>Pavement Condition Index (PCI)</u> - The Pavement Condition Index is a number which represents the condition of a pavement segment at a specific point in time. It is based on visual identification and measurement of specific distress types commonly found in pavement which has been in service for a period of time. The definitions and procedures for determining the PCI are found in ASTM D 5340, published by ASTM International.

<u>Pavement Evaluation</u> - A systematic approach undertaken by trained and experienced personnel intended for determination of the condition, serviceability, and best corrective action for pavement. Techniques to standardize pavement evaluation include the Pavement Condition Index procedures.

<u>Pavement Management System (PMS)</u> - A Pavement Management System is a broad function that uses pavement evaluation and pavement performance trends as a basis for planning, programming, financing, and maintaining a pavement system.

<u>Pavement Surface Type</u> - The surface of pavement is identified as one of four types:

- AC for asphalt surface pavements;
- PCC for Portland Cement Concrete pavements;
- AAC for asphalt surface pavements that have had an asphalt overlay at some point in their construction history;
- APC for composite pavements, which consist of asphalt over Portland Cement Concrete pavement.
- PAC for composite pavements, which consist of Portland Cement Concrete over asphalt pavement.

<u>Rank</u> - Pavement rank in MicroPAVER determines the priority to be assigned to a pavement Section when developing an M&R plan. Pavement Sections are ranked as follows according to their use:

- P for Primary pavements, such as primary runways, primary taxiways, and primary aprons;
- S or Secondary pavements, such as secondary runways, secondary taxiways, and secondary aprons;
- T for Tertiary pavements such as "T" hangars and slightly used aprons.

<u>Reconstruction</u> - Reconstruction includes removal of existing pavement, preparation of subgrade, and construction of new pavement with new or recycled materials. Reconstruction is indicated when distress types evident at the surface indicate failure in the pavement structure or subgrade of a type, and to an extent, not correctable by less extensive construction.

<u>Rehabilitation</u> - Rehabilitation represents construction using existing pavement for a foundation. Rehabilitation most commonly consists of an overlay of existing pavement with a new asphalt or concrete surface. Recently, technology has expanded the options to include recycling of existing pavement and incorporating engineering fabrics or thin layers of elasticized materials to retard reflection of distress types through the new surface.

<u>Sample Unit</u> - Uniformly sized portions of a Section as defined in ASTM D 5340. Sample units are a means to reduce the total amount of pavement actually surveyed using statistics to select and survey enough area to provide a representative measure of Section PCI. Sample Unit sizes are  $5,000 \pm 2,000$  square feet for AC-surfaced pavements and  $20 \pm 8$  slabs for PCC-surfaced pavements.

<u>Section</u> - Sections subdivide Branches into portions of similar pavement. Sections are prescribed by pavement structure, age, condition, and use. Sections are identified on the airport Network Definition. They are the smallest unit used for determining M&R requirements based on condition.

<u>Section ID</u> - A short form identification for the pavement Section that maintains the original AirPAV identification where 100 series through 3000 series Sections are taxiways, 4000 and 5000 series Sections are aprons (the 5000 series represent run-up aprons and turnarounds), and 6000 series Sections are runways.

<u>Statewide Airfield Pavement Management Program (SAPMP)</u> – The Statewide Airfield Pavement Management Program is a program implemented in 1992 by the Florida Department of Transportation to plan, schedule, and design the maintenance and rehabilitation activities

necessary for the airfield pavement on Florida's public airports to allow the airports to operate efficiently, economically, and without excessive down time.

<u>System Inventory</u> - A System Inventory is a Computer-Aided Drafting & Design (CADD) drawing which shows the airport pavement outline and identifies airfield construction activities since the last inspection. The System Inventory for the airport is included in Appendix A.

<u>Use</u> - In MicroPAVER, Use is the term for the function of the pavement area. This is either Runway, Taxiway, or Apron for purposes of the FDOT Statewide Aviation Pavement Management System.

## 2. NETWORK DEFINITION AND PAVEMENT INVENTORY

North Palm Beach County General Aviation Airport (F45) is located northwest of West Palm Beach, in Palm Beach County, Florida. It is owned by Palm Beach County and operated by the Department of Airports. The Airport is served by two paved runways. Runway 8R-26L is 100-ft wide by 4,300-ft long. Runway 13-31 is 75-ft wide by 4,300-ft long. Runway 8L-26R is a turf runway. Runway 8R-26L is served by parallel Taxiway Kilo. Runway 13-31 is served by parallel Taxiway Foxtrot. There is an apron at the center of the Airport with t-hangar aprons on the east and north areas of the Airport. This airport is designated as a Regional Reliever airport and is located in District 4 of the Florida Department of Transportation.

It is important to note that the aforementioned runway data in addition to the remaining airfield pavement facilities geometric dimensions may vary slightly from the geometry used in the condition and M & R analysis based on field measurements.

North Palm Beach County General Aviation Airport was established in 1994. It is the county's newest airport and is a designated reliever for Palm Beach International Airport. It serves both reciprocating engine and jet aircrafts. Airport services include FBO's, flight schools, aircraft and avionics maintenance, and aircraft storage hangars.

## 2.1 Network Definition

The pavements within the network are defined in MicroPAVER in terms of manageable units that help to organize the data into similar groups. An organizational hierarchy is used to establish these units.

## 2.1.1 Branch Section Identification

The airport pavement network is subdivided into separate Branches (runways, taxiways, or aprons) that have distinctly different uses. Branches are then further divided into Sections with similar pavement construction and performance that may share other common attributes.

Sections are manageable units used to organize the data collection and are treated individually during the rehabilitation planning stage. A pavement rank, consisting of primary, secondary, and tertiary levels, is assigned to each Section based on their level and type of use. The pavement rankings that were designated for each Section in the previous SAPMP update were again used for this update.

As discussed in Section 1.4.3 "Pavement Inspection Methodology for the SAPMP", the sections are sub-divided into sample units, which are the smallest subdivision in a pavement network, only for the purpose of conducting the pavement condition survey.

## 2.1.2 System Inventory and Network Definition Update

The System Inventory and Network Definition drawings are used to identify changes in the network since the most recent update from the 2006/2008 inspections and also to plan the field inspection activities for the 2012 survey. Prior to the field inspection process, the System Inventory drawing was updated from the previous inspection with notes indicating recent construction projects on the various Sections of pavement throughout the airfield. This System Inventory drawing is used to update the Network Definition drawing.

The Network Definition drawing shows the airport pavement outline with Branch and Section boundaries. This drawing also includes the PCI sample units and is used to identify those sample units to be surveyed, i.e. the sampling plan. The previous airport configuration and history was compared with the current airport configuration, and the existing network branch, section and sample unit designations were revised to match the current configuration. This drawing serves not only as a primary guide for the airfield inspectors but also as an important historical record.

Due to recent and anticipate construction history; pavement area sections may have been consolidated or created which will affect the total number of sample units to be inspected based on the ASTM 5340 criteria.

The updated System Inventory and Network Definition drawings for North Palm Beach County General Aviation Airport are provided in Appendix A. Table 2-1 below lists the recent construction projects at the airport.

## Table 2-1: Construction Since Last Inspection & Anticipated Construction Activity

| Construction<br>Year | Location      | Work Type / Pavement Section |
|----------------------|---------------|------------------------------|
| 2013                 | Taxiway Delta | New Taxiway Construction     |

#### 2.2 Pavement Inventory

The detailed pavement inventory was updated to reflect the network definition update and field inspection results. The total number of sample units designated to be inspected at the airport is 99 sample units.

The total airfield pavement area in 2012 at North Palm Beach County General Aviation Airport is 2,579,244 square feet. The breakdown of pavement area for each pavement use is provided in Table 2-2.

| Use            | Area (ft <sup>2</sup> ) | % of Total Area |
|----------------|-------------------------|-----------------|
| Runway         | 751,908                 | 29%             |
| Taxiway        | 589,068                 | 23%             |
| Apron          | 1,238,269               | 48%             |
| All (Weighted) | 2,579,244               | 100%            |

## Table 2-2: Pavement Area by Pavement Use

Figure 2-1 presents the breakdown of the pavement area at North Palm Beach County General Aviation Airport by surface type.



**Figure 2-1: Pavement Area by Surface Type** 

Details of pavement Branch and Section information including Branch name (which indicates pavement use), Branch ID, Section ID, section area, rank, surface type, last construction date, number of samples inspected, and number of samples in each Section are given in Table 2-3 below. A more detailed Pavement Inventory Table may be found in Appendix A of this report.

| Branch Name      | Branch ID  | Section<br>ID | True<br>Area<br>(ft <sup>2</sup> ) | Section<br>Rank | Surface<br>Type | Last<br>Const.<br>Date | Total<br>Samples<br>Inspected | Sample<br>Units in<br>Section |
|------------------|------------|---------------|------------------------------------|-----------------|-----------------|------------------------|-------------------------------|-------------------------------|
| North Apron      | AP N       | 4105          | 657,596                            | Р               | AC              | 1/1/1994               | 10                            | 132                           |
| North Apron      | AP N       | 4110          | 4,320                              | Р               | PCC             | 1/1/1994               | 1                             | 1                             |
| North Apron      | AP N       | 4115          | 8,250                              | Р               | PCC             | 1/1/1994               | 1                             | 2                             |
| North Apron      | AP N       | 4120          | 172,695                            | Р               | AC              | 1/1/1996               | 4                             | 36                            |
| Apron Run-Up     | AP RU      | 5105          | 27,416                             | Р               | AC              | 1/1/1994               | 1                             | 5                             |
| Apron Run-Up     | AP RU      | 5110          | 27,136                             | Р               | AC              | 1/1/1994               | 1                             | 5                             |
| T-Hangar Apron   | AP T-HANG  | 4205          | 87,823                             | Р               | AC              | 1/1/1994               | 3                             | 21                            |
| T-Hangar Apron E | AP T-HANGE | 4415          | 7,892                              | Р               | AC              | 1/1/1996               | 1                             | 2                             |
| T-Hangar Apron E | AP T-HANGE | 4420          | 77,198                             | Р               | AC              | 1/1/1996               | 5                             | 29                            |
| T-Hangar Apron N | AP T-HANGN | 4305          | 138,701                            | Р               | AC              | 1/1/2004               | 5                             | 43                            |
| T-Hangar Apron N | AP T-HANGN | 4310          | 19,855                             | Р               | AC              | 1/1/2004               | 1                             | 5                             |
| T-Hangar Apron N | AP T-HANGN | 4315          | 9,386                              | Р               | AC              | 1/1/2010               | 1                             | 2                             |
| Runway 13-31     | RW 13-31   | 6205          | 329,838                            | S               | AC              | 1/1/1994               | 18                            | 88                            |
| Runway 8R-26L    | RW 8R-26L  | 6105          | 422,070                            | Р               | AC              | 1/1/1994               | 17                            | 85                            |
| Taxiway Charlie  | TW C       | 305           | 44,337                             | Р               | AC              | 1/1/2004               | 2                             | 12                            |
| Taxiway Delta    | TW D       | 405           | 14,861                             | Р               | AC              | 1/1/1994               | 1                             | 3                             |
| Taxiway Delta    | TW D       | 410           | 21,306                             | Р               | AC              | 1/1/1996               | 1                             | 6                             |
| Taxiway Echo     | TW E       | 505           | 17,143                             | Р               | AC              | 1/1/1994               | 1                             | 5                             |
| Taxiway Foxtrot  | TW F       | 605           | 166,311                            | Р               | AC              | 1/1/1994               | 5                             | 45                            |
| Taxiway Foxtrot  | TW F       | 610           | 22,478                             | Р               | AC              | 1/1/1994               | 1                             | 5                             |
| Taxiway Foxtrot  | TW F       | 615           | 6,198                              | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway G-1      | TW G1      | 705           | 14,241                             | Р               | AC              | 1/1/2004               | 1                             | 3                             |
| Taxiway Hotel    | TW H       | 805           | 8,310                              | Р               | AC              | 1/1/2004               | 1                             | 2                             |
| Taxiway Juliet   | TW J       | 1005          | 8,967                              | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway Juliet   | TW J       | 1010          | 6,812                              | Р               | AC              | 1/1/1994               | 1                             | 1                             |
| Taxiway Kilo     | TW K       | 1105          | 158,522                            | Р               | AC              | 1/1/1994               | 5                             | 43                            |
| Taxiway Kilo     | TW K       | 1110          | 11,576                             | Р               | AC              | 1/1/1994               | 1                             | 3                             |
| Taxiway Kilo     | TW K       | 1115          | 12,183                             | Р               | AC              | 1/1/1994               | 1                             | 3                             |
| Taxiway Lima     | TW L       | 1205          | 9,384                              | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway Mike     | TW M       | 1305          | 10,520                             | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway November | TW N       | 1405          | 10,756                             | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway Oscar    | TW O       | 1505          | 10,654                             | Р               | AC              | 1/1/1994               | 1                             | 2                             |

## **Table 2-3: Branch and Section Inventory**

## Table 2-3: Branch and Section Inventory (Continued)

| Branch Name    | Branch ID | Section<br>ID | True<br>Area<br>(ft <sup>2</sup> ) | Section<br>Rank | Surface<br>Type | Last<br>Const.<br>Date | Total<br>Samples<br>Inspected | Sample<br>Units in<br>Section |
|----------------|-----------|---------------|------------------------------------|-----------------|-----------------|------------------------|-------------------------------|-------------------------------|
| Taxiway Papa   | TW P      | 1605          | 10,265                             | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway Quebec | TW Q      | 1705          | 9,384                              | Р               | AC              | 1/1/1994               | 1                             | 2                             |
| Taxiway Romeo  | TW R      | 1805          | 14,861                             | Р               | AC              | 1/1/1994               | 1                             | 5                             |

Note: If a new construction, then survey date = last construction date and PCI is set to 100 by MicroPAVER.

Sections not surveyed due to reasons such as re-sectioning, no escort, not accessible at the time of survey.

#### 3. PAVEMENT CONDITION

Pavement conditions were inspected in accordance with the methods outlined in FAA AC 150/5380-6B and ASTM D 5340-04 "Standard Practice for Airport Pavement Condition Index Surveys." These procedures define distress type, severity and quantity for sampling areas within each section to determine the Pavement Condition Index (PCI).

#### 3.1 Inspection Methodology

A PCI survey is performed by measuring the amount and severity of pavement distresses, which are caused by traffic load, climate, and other factors, observed within a sample unit. This data is imported into MicroPAVER, which calculates PCI values for the pavement sections. Tables 3-1 and 3-2 below list the pavement distress types and related causes for asphalt concrete (AC) and Portland Cement Concrete (PCC), respectively.

| Table 3-1: Pavement Distresse | s for Asphalt Concrete Surfaces |
|-------------------------------|---------------------------------|
|-------------------------------|---------------------------------|

| Code  | Distress                         | Mechanism                        |  |  |
|---|----------------------------------|----------------------------------|--|--|
| 41  | Alligator Cracking               | Load                             |  |  |
| 42  | Bleeding                         | Construction Quality/ Mix Design |  |  |
| 43  | Block Cracking                   | Climate / Age                    |  |  |
| 44  | Corrugation                      | Load / Construction Quality      |  |  |
| 45  | Depression                       | Subgrade Quality                 |  |  |
| 46  | Jet Blast                        | Aircraft                         |  |  |
| 47  | Joint Reflection - Cracking      | Climate / Prior Pavement         |  |  |
| 48  | Longitudinal/Transverse Cracking | Climate / Age                    |  |  |
| 49  | Oil Spillage                     | Aircraft / Vehicle               |  |  |
| 50  | Patching                         | Utility / Pavement Repair        |  |  |
| 51  | Polished Aggregate               | Load                             |  |  |
| 52  | Weathering/Raveling              | Climate / Load                   |  |  |
| 53  | Rutting                          | Load                             |  |  |
| 54  | Shoving                          | Pavement Growth                  |  |  |
| 55  | Slippage Cracking                | Load / Pavement Bond             |  |  |
| 56  | Swelling                         | Climate / Subgrade Quality       |  |  |
| Source: U.S. Army CERL, FDOT Airfield Inspection Reference Manual |                                  |                                  |  |  |

| Code  | Distress                | Mechanism                   |  |  |
|---|-------------------------|-----------------------------|--|--|
| 61  | Blow-up                 | Climate                     |  |  |
| 62  | Corner Break            | Load                        |  |  |
| 63  | Linear Cracking         | Load                        |  |  |
| 64  | Durability Cracking     | Climate                     |  |  |
| 65  | Joint Seal Damage       | Climate                     |  |  |
| 66  | Small Patch             | Pavement Repair             |  |  |
| 67  | Large Patch/Utility Cut | Utility / Pavement Repair   |  |  |
| 68  | Popout                  | Climate                     |  |  |
| 69  | Pumping                 | Load                        |  |  |
| 70  | Scaling/Crazing         | Construction Quality        |  |  |
| 71  | Faulting                | Subgrade Quality            |  |  |
| 72  | Shattered Slab          | Load                        |  |  |
| 73  | Shrinkage Cracking      | Construction Quality / Load |  |  |
| 74  | Joint Spalling          | Load                        |  |  |
| 75  | Corner Spalling         | Load                        |  |  |
| Source: U.S. Army CERL, FDOT Airfield Inspection Reference Manual |                         |                             |  |  |

## Table 3-2: Pavement Distresses for Portland Cement Concrete Surfaces

Prior to conducting the inspections, Global Positioning System (GPS) coordinates were recorded using CADD at the centroid of each sample unit. The centroid is usually the geometric center of the area, but in cases where sample units are irregular in shape, this is the center of mass. These data are presented in a table on the updated Network Definition Map in Appendix A of this report.

Pavement condition inspections at North Palm Beach County General Aviation Airport were performed in April 2012. Data was recorded in the field in accordance with FAA Advisory Circular 150/5380-6B "Guidelines and Procedures for Maintenance of Airport Pavements" and ASTM D 5340 "Standard Test Method for Airport Pavement Condition Index Surveys" (2004).

After the completion of data collection, the data was imported into MicroPAVER, and PCI values were calculated for the pavement sections.

## **3.2** Pavement Condition Index Results

According to the 2012 survey, the overall area-weighted PCI at North Palm Beach County General Aviation Airport is 77, representing a Satisfactory overall network condition.

The Airport exhibited overall pavement distresses associated with climate and age. Most pavements are nearly twenty years old and exhibit distresses typical for this age and loading conditions. However, no pavement sections require immediate major maintenance and rehabilitation. Typical asphalt concrete pavement distresses include: weathering and raveling and longitudinal and transverse cracking. Very few portland cement concrete (PCC) pavement distresses were observed.

Runway 13-31 was in Satisfactory condition with a PCI of 73. The pavements exhibited distresses associated with climate and age. Distresses include low severity weathering and raveling; low severity longitudinal and transverse cracking; and low severity patching.

Runway 8R-26L was in Satisfactory condition with a PCI of 75. The pavements exhibited distresses associated with climate and age. Distresses include low and medium severity weathering and raveling; low and medium severity longitudinal and transverse cracking; and low severity patching.

Most taxiway pavements were in Good to Satisfactory condition, with moderate amounts of low severity weathering and raveling and longitudinal and transverse cracking. The two connectors from Taxiway Foxtrot to the North Apron were in Fair condition. They exhibited some medium severity weathering and raveling and longitudinal and transverse cracking. They also exhibited larger amounts of low severity weathering and raveling.

Most apron pavements were in Good to Satisfactory condition. Moderate amounts of low severity longitudinal and transverse cracking, weathering and raveling, and oil spillage were observed on the asphalt concrete pavements. Small amounts of joint spalling; patching; longitudinal, transverse, and diagonal cracking; and shrinkage cracking were observed on the portland cement concrete pavements. The North T-Hangar Apron was in Good condition due to its recent construction in 2004.

Appendix B contains a table and a Condition Map which depicts the PCI results by Section, and Appendix C contains a table of PCI results by Branch. Appendix I includes detailed distress data generated by MicroPAVER for each inspected sample unit.

Figure 3-1 provides the PCI distribution by rating category for North Palm Beach County General Aviation Airport.



## Figure 3-1: Network PCI Distribution by Rating Category

| Condition Rating | Total Area<br>(ft <sup>2</sup> ) | Percent |
|------------------|----------------------------------|---------|
| Good             | 268,550                          | 10%     |
| Satisfactory     | 2,297,685                        | 89%     |
| Fair             | 13,010                           | 1%      |
| Poor             | 0                                | 0%      |
| Very Poor        | 0                                | 0%      |
| Serious          | 0                                | 0%      |
| Failed           | 0                                | 0%      |

## Figure 3-1a: Condition Rating Summary

Approximately 99% of the network is in Good and Satisfactory condition while 1% of the network is in Fair condition. Table 3-3 illustrates the area-weighted PCI computed individually for each pavement use.

## **Table 3-3: Condition by Pavement Use**

| Use            | Average Area-<br>Weighted PCI | Condition Rating |
|----------------|-------------------------------|------------------|
| Runway         | 74                            | Satisfactory     |
| Taxiway        | 81                            | Satisfactory     |
| Apron          | 77                            | Satisfactory     |
| All (Weighted) | 77                            | Satisfactory     |

Figure 3-2 presents the breakdown of PCI by range for each pavement use.

## Figure 3-2: Percentage of Pavement Area within Each PCI Range by Pavement Use



(a) Runway



| ■ Good: 86-100    | Satisfactory: 71-85 | <mark>–</mark> Fair: 56-70 | <b>Poor: 41-55</b> |
|-------------------|---------------------|----------------------------|--------------------|
| □Very Poor: 26-40 | Serious: 11-25      | ■Failed: 0-10              |                    |

## (c) Apron



| <b>Good: 86-100</b> | Satisfactory: 71-85 | <mark>–</mark> Fair: 56-70 |
|---------------------|---------------------|----------------------------|
| <b>Poor: 41-55</b>  | □Very Poor: 26-40   | Serious: 11-25             |
| □Failed: 0-10       | -                   |                            |

#### 4. PAVEMENT CONDITION PREDICTION

Performance prediction models or deterioration curves for PCI were used to develop a condition forecast. The performance models were developed for combinations of variables such as pavement use (runway, taxiway or apron), surface type (AC or PCC) and airport category (GA, RL, or PR). Figure 4-1 illustrates the predicted performance of pavements at North Palm Beach County General Aviation Airport based on current condition, age since last construction and the deterioration model appropriate for the type of pavement. The figure presents the forecast for each pavement use and displays the FDOT minimum service level for Regional Reliever (RL) airports.



## Figure 4-1: Predicted PCI by Pavement Use

Appendix D presents the tabular summary of the predicted Section PCI for each year from 2012 to 2021.

#### 5. MAINTENANCE POLICIES AND COSTS

#### 5.1 Policies

Maintenance and rehabilitation (M&R) policies are sets of rules used to develop repair recommendations for distresses encountered during the visual inspections.

Maintenance refers to repair-type activities that are applied to specific distress types on the pavement. These activities are preventative and/or corrective in nature and are recommended to help achieve the performance goal.

Table 5-1 provides the list of the maintenance activities used in MicroPAVER to treat specific distress types. MicroPAVER applies repairs to these distresses and adjusts the PCI based on specific rules. These repairs are used only in the first year of an analysis.

Rehabilitation is warranted when the pavement condition decreases below a critical point such that the deterioration is extensive or the rate of deterioration is so great that routine maintenance is no longer cost-efficient. This critical point is called "Critical PCI." The critical PCI levels for different pavement and branch types established in the previous SAPMP update were used in this update for the development of the M&R plan for the airport. Sections above critical PCI levels receive routine maintenances while pavements predicted to deteriorate below their respective critical PCI level during the analysis period will be identified for Major M&R. Table 5-2 gives the critical PCI levels for Regional Reliever Airports.

The maintenance rehabilitation policy and activity costs have been updated based on the study of readily available construction cost data at the time of this study. The costs depicted in this report are intended for planning purposes.

| Surface | Distress         | Severity* | Work Type                      | Code  | Work Unit |
|---------|------------------|-----------|--------------------------------|-------|-----------|
|         | Alligator Crack  | М, Н      | Patching - AC Deep             | PA-AD | SqFt      |
|         | Bleeding         | N/A       | No Localized M&R               | NONE  | N/A       |
|         | Block Crack      | М, Н      | Crack Sealing – AC             | CS-AC | SqFt      |
|         | Corrugation      | L, M, H   | Patching - AC Deep             | PA-AD | SqFt      |
|         | Depression       | М, Н      | Patching - AC Deep             | PA-AD | SqFt      |
|         | Jet Blast        | N/A       | Patching - AC Deep             | PA-AD | SqFt      |
|         | Joint Ref. Crack | М, Н      | Crack Sealing – AC             | CS-AC | Ft        |
|         | L & T Crack      | М, Н      | Crack Sealing – AC             | CS-AC | Ft        |
|         | Oil Spillage     | N/A       | Patching - AC Shallow          | PA-AS | SqFt      |
| AC      | Patching         | М, Н      | Patching - AC Deep             | PA-AD | SqFt      |
|         | Polished Agg.    | N/A       | No Localized M&R               | NONE  | N/A       |
|         | Povoling /       | L         | Surface Sealing - Rejuvenating | SS-RE | SqFt      |
|         | Weathering       | М         | Surface Seal - Coal Tar        | SS-CT | SqFt      |
|         | weathering       | Н         | Microsurfacing                 | MI-AC | SqFt      |
|         | Rutting          | М, Н      | Patching - AC Deep             | PA-AD | SqFt      |
|         | Shoving          | М, Н      | Grinding (Localized)           | GR-LL | SqFt      |
|         | Slippage Crack   | N/A       | Patching - AC Shallow          | PA-AS | SqFt      |
|         | Swelling         | M, H      | Patching - AC Deep             | PA-AD | SqFt      |
|         | Blow-Up          | L, M, H   | Patching - PCC Full Depth      | PA-PF | SqFt      |
|         | Corner Break     | M, H      | Patching - PCC Full Depth      | PA-PF | SqFt      |
|         | Linear Crack     | M, H      | Crack Sealing – PCC            | CS-PC | Ft        |
|         | Durability Crack | H         | Slab Replacement – PCC         | SL-PC | SqFt      |
|         |                  | М         | Patching - PCC Full Depth      | PA-PF | SqFt      |
|         | Jt. Seal Damage  | М, Н      | Joint Seal (Localized)         | JS-LC | Ft        |
|         | Small Patch      | M, H      | Patching - PCC Partial Depth   | PA-PP | SqFt      |
| PCC     | Large Patch      | М, Н      | Patching - PCC Full Depth      | PA-PF | SqFt      |
| ice     | Popouts          | N/A       | No Localized M&R               | NONE  | N/A       |
|         | Pumping          | N/A       | No Localized M&R               | NONE  | N/A       |
|         | Scaling          | Н         | Slab Replacement – PCC         | SL-PC | SqFt      |
|         | Faulting         | M, H      | Grinding (Localized)           | GR-PP | Ft        |
|         | Shattered Slab   | M, H      | Slab Replacement – PCC         | SL-PC | SqFt      |
|         | Shrinkage Crack  | N/A       | No Localized M&R               | NONE  | N/A       |
|         | Joint Spall      | M, H      | Patching - PCC Partial Depth   | PA-PP | SqFt      |
|         | Corner Spall     | М, Н      | Patching - PCC Partial Depth   | PA-PP | SqFt      |

## Table 5-1: Routine Maintenance Activities for Airfield Pavements

L = Low, M = Medium, H = High

| Use     | Critical PCI |
|---------|--------------|
| Runway  | 65           |
| Taxiway | 65           |
| Apron   | 65           |

## Table 5-2: Critical PCI for Regional Reliever Airports

It should be noted that critical PCI is not the same as Minimum PCI or Minimum Condition. The Minimum PCI is a value set by the user so pavement sections are rehabilitated before they fall below the set minimum. Table 5-3 gives the targeted, or desired, Minimum PCI values for runways, taxiways, and aprons of Regional Reliever Airports.

# Table 5-3: FDOT Minimum Service Level PCI for Regional RelieverAirports

| Minimum PCI |         |       |  |  |  |
|-------------|---------|-------|--|--|--|
| Runway      | Taxiway | Apron |  |  |  |
| 75          | 65      | 65    |  |  |  |

Typical Major M&R activities range from overlays to reconstruction. Based on the critical PCI values in Table 5-2 the PCI trigger range when the likely activity would be a mill and resurface was 40 to 79 and reconstruction at a PCI of 39 or lower. One important concept of pavement management systems is that it is cost effective to maintain pavements that are already in good condition rather than wait for them to get worse and require more expensive rehabilitation.

Crack sealing and full-depth patching are the M&R activities recommended to repair pavements with PCI values between 80 and 90. MicroPAVER considers these as preventative M&R with their primary objective being to slow the rate of pavement deterioration. While the trigger PCI for mill and overlay has been set to 55, MicroPAVER also assigns mill and overlay to sections with a PCI greater than 55 if they exhibit some structural distress. Table 5-4 summarizes the M&R activities for Regional Reliever Airports based on PCI value.

|                | Activity  | PCI Range   |
|----------------|---|-------------|
| Maintenance    | Crack Sealing and Full-Depth Patching                           | 80 and 90   |
| Rehabilitation | Mill and Overlay (AC) or<br>Concrete Pavement Restoration (PCC) | 40 to 79    |
|                | Reconstruction  | 39 and less |

## Table 5-4: M&R Activities for Regional Reliever Airports

#### 5.2 Unit Costs

FDOT cost databases for airports and highway pavement maintenance and rehabilitation were updated from the previous SAPMP study based on current construction cost trends in order to determine meaningful costs for the program. Table 5-5 presents the unit costs summary.

## 5.3 M&R Activities

FDOT recognizes that although Mill and Overlay work is recommended for asphalt pavements within a PCI range from 40 to 79, it is conceivable that airports may not have adequate funding to perform this type of rehabilitation. Microsurfacing treatment is a maintenance/rehabilitation measure that can be used in lieu of asphalt pavement mill and overlay; however it should be understood that this measure is intended for short term pavement life extension. While the cost of microsurfacing is significantly lower than that of pavement mill and overlay, it is not intended to be a full rehabilitative measure for long term benefit.

| Code  | Name                              | Cost    | Unit |  |
|-------|-----------------------------------|---------|------|--|
| GR-LL | Grinding (Localized for AC)       | \$2.10  | SqFt |  |
| PA-AL | Patching – AC Leveling            | \$2.30  | SqFt |  |
| PA-AS | Patching – AC Shallow             | \$2.90  | SqFt |  |
| PA-PF | Patching – PCC Full Depth         | \$38.11 | SqFt |  |
| PA-PP | Patching – PCC Partial Depth      | \$19.06 | SqFt |  |
| SL-PC | Slab Replacement – PCC            | \$39.11 | SqFt |  |
| CS-PC | Crack Sealing – PCC               | \$4.24  | Ft   |  |
| UN-PC | Undersealing – PCC                | \$3.40  | Ft   |  |
| CS-AC | Crack Sealing – AC                | \$2.25  | Ft   |  |
| GR-PP | Grinding (Localized for PCC)      | \$22.51 | Ft   |  |
| JS-LC | Joint Seal (Localized)            | \$2.00  | Ft   |  |
| SH-LE | Shoulder Leveling                 | \$2.81  | Ft   |  |
| JS-SI | Joint Seal – Silicon              | \$2.81  | Ft   |  |
| PA-AD | Patching – AC Deep                | \$4.90  | SqFt |  |
| OL-AT | Overlay – AC Thin                 | \$2.80  | SqFt |  |
| SS-CT | Surface Seal – Coal Tar           | \$0.40  | SqFt |  |
| SS-FS | Surface Seal – Fog Seal           | \$0.40  | SqFt |  |
| SS-RE | Surface Seal – Rejuvenating       | \$0.40  | SqFt |  |
| ST-SB | Surface Treatment – Single Bitum. | \$0.30  | SqFt |  |
| ST-SS | Surface Treatment – Slurry Seal   | \$0.55  | SqFt |  |
| ST-ST | Surface Treatment – Sand Tar      | \$0.28  | SqFt |  |
| MI-AC | Microsurfacing - AC               | \$0.65  | SqFt |  |

## **Table 5-5: Maintenance Unit Costs for FDOT**

The improvement in condition due to maintenance actions applied to specific distresses is only performed when an inspection was performed recently and only in the first year of the M&R analysis. In subsequent years, MicroPAVER calculates M&R costs based on expected unit costs for pavements in a range of PCIs. That is, for low PCI, it is expected that the repair would be significant (e.g. reconstruction) and therefore very costly.

Using available unit cost data, the Major M&R Cost by Condition table was set up as shown in Table 5-6. The cost assigned to each range of PCI is based on a Transportation Cost Report provided by Office of Planning Policy of FDOT where the unit costs of reconstruction and resurfacing of airfield pavements were included. These costs were then assigned to the appropriate PCI range to arrive at a cost per square foot necessary to restore pavements at that PCI level to new condition, i.e. a PCI of 100.

## Table 5-6: M&R Activities and Unit Costs by Condition for Regional Reliever Airports

|                | Activity  | PCI Trigger | Cost/SqFt |
|----------------|---|-------------|-----------|
| Maintananca    | Creek Seeling and Full Donth Patching                           | 90          | \$0.10    |
| Maintenance    | Clack Seaming and Full-Deput Fatching                           | 80          | \$0.40    |
| Rehabilitation |   | 70          | \$0.90    |
|                | Mill and Overlay (AC) or<br>Concrete Pavement Restoration (PCC) | 60          | \$3.68    |
|                |   | 50          | \$7.61    |
|                |   | 40          | \$18.57   |
|                | Bassanstruction   | 30          | \$18.57   |
|                | Reconstruction  | 20          | \$18.57   |

A 3% inflation rate per year was applied to the unit costs during the M&R analysis.

#### 6. PAVEMENT REHABILITATION NEEDS ANALYSIS

Maintenance and Rehabilitation (M&R) analyses were performed after the condition data were calculated and MicroPAVER was customized with the maintenance policies and cost settings described in the previous section.

The objective of the M&R analysis is to observe the effect of different fiscal scenarios on the network condition, over a period of ten years, starting from 2012. The analysis was conducted using an unlimited budget. An unlimited budget allows all M&R needs to be identified along with the associated cost regardless of priority.

Maintenance activities for pavement areas above critical PCI have been recommended by MicroPAVER for Year 1 and are shown in Table 6-1 below. The costs provided in Table 5-5 were used to calculate the costs associated with this work, which is intended to treat specific distress types. A more detailed table is provided in Appendix E.

| Branch Name      | Branch ID  | Section<br>ID | Distress<br>Description | Distress<br>Severity | Work Description            | Work<br>Quantity | Work<br>Unit | Unit<br>Cost | Work<br>Cost |
|------------------|------------|---------------|-------------------------|----------------------|-----------------------------|------------------|--------------|--------------|--------------|
| North Apron      | AP N       | 4105          | OIL SPILLAGE            | N                    | Patching - AC Shallow       | 283.8            | SqFt         | \$2.90       | \$822.92     |
| North Apron      | AP N       | 4105          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 289,831.70       | SqFt         | \$0.40       | \$115,933.65 |
| North Apron      | AP N       | 4105          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 1,488.60         | SqFt         | \$0.40       | \$595.46     |
| North Apron      | AP N       | 4120          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 103.6            | SqFt         | \$0.40       | \$41.45      |
| North Apron      | AP N       | 4120          | OIL SPILLAGE            | Ν                    | Patching - AC Shallow       | 347.2            | SqFt         | \$2.90       | \$1,006.92   |
| North Apron      | AP N       | 4120          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 94,981.70        | SqFt         | \$0.40       | \$37,992.99  |
| Apron Run-Up     | AP RU      | 5105          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 8,224.90         | SqFt         | \$0.40       | \$3,289.98   |
| Apron Run-Up     | AP RU      | 5110          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 13,568.10        | SqFt         | \$0.40       | \$5,427.30   |
| T-Hangar Apron   | AP T-HANG  | 4205          | OIL SPILLAGE            | Ν                    | Patching - AC Shallow       | 37.9             | SqFt         | \$2.90       | \$109.79     |
| T-Hangar Apron   | AP T-HANG  | 4205          | L & T CR                | М                    | Crack Sealing - AC          | 352.2            | Ft           | \$2.25       | \$792.54     |
| T-Hangar Apron   | AP T-HANG  | 4205          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 27,613.50        | SqFt         | \$0.40       | \$11,045.48  |
| T-Hangar Apron E | AP T-HANGE | 4415          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 788.5            | SqFt         | \$0.40       | \$315.40     |
| T-Hangar Apron E | AP T-HANGE | 4420          | OIL SPILLAGE            | Ν                    | Patching - AC Shallow       | 29.7             | SqFt         | \$2.90       | \$86.27      |
| T-Hangar Apron E | AP T-HANGE | 4420          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 7,125.90         | SqFt         | \$0.40       | \$2,850.39   |
| T-Hangar Apron N | AP T-HANGN | 4305          | OIL SPILLAGE            | Ν                    | Patching - AC Shallow       | 43.9             | SqFt         | \$2.90       | \$127.40     |
| T-Hangar Apron N | AP T-HANGN | 4305          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 10,029.10        | SqFt         | \$0.40       | \$4,011.66   |
| T-Hangar Apron N | AP T-HANGN | 4310          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 1,338.80         | SqFt         | \$0.40       | \$535.53     |
| Runway 13-31     | RW 13-31   | 6205          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 187,702.90       | SqFt         | \$0.40       | \$75,081.78  |
| Runway 8R-26L    | RW 8R-26L  | 6105          | L & T CR                | М                    | Crack Sealing - AC          | 303              | Ft           | \$2.25       | \$681.70     |
| Runway 8R-26L    | RW 8R-26L  | 6105          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 185,709.40       | SqFt         | \$0.40       | \$74,284.39  |
| Runway 8R-26L    | RW 8R-26L  | 6105          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 248.3            | SqFt         | \$0.40       | \$99.31      |
| Taxiway Charlie  | TW C       | 305           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 5,700.40         | SqFt         | \$0.40       | \$2,280.19   |
| Taxiway Delta    | TW D       | 405           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 3,714.30         | SqFt         | \$0.40       | \$1,485.75   |

## Table 6-1: Summary of Year 1 Maintenance Activities
| Branch Name      | Branch ID | Section<br>ID | Distress<br>Description | Distress<br>Severity | Work Description              | Work<br>Quantity | Work<br>Unit | Unit<br>Cost | Work<br>Cost |
|------------------|-----------|---------------|-------------------------|----------------------|-------------------------------|------------------|--------------|--------------|--------------|
| Taxiway Delta    | TW D      | 410           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 8,522.40         | SqFt         | \$0.40       | \$3,408.97   |
| Taxiway Echo     | TW E      | 505           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 5,142.80         | SqFt         | \$0.40       | \$2,057.12   |
| Taxiway Foxtrot  | TW F      | 605           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 38,488.80        | SqFt         | \$0.40       | \$15,395.65  |
| Taxiway Foxtrot  | TW F      | 610           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 8,989.60         | SqFt         | \$0.40       | \$3,595.86   |
| Taxiway Foxtrot  | TW F      | 615           | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar       | 45.3             | SqFt         | \$0.40       | \$18.13      |
| Taxiway Foxtrot  | TW F      | 615           | L & T CR                | М                    | Crack Sealing - AC            | 157.7            | Ft           | \$2.25       | \$354.76     |
| Taxiway Foxtrot  | TW F      | 615           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 1,239.30         | SqFt         | \$0.40       | \$495.74     |
| Taxiway G-1      | TW G1     | 705           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 1,425.40         | SqFt         | \$0.40       | \$570.18     |
| Taxiway Hotel    | TW H      | 805           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 830.4            | SqFt         | \$0.40       | \$332.15     |
| Taxiway Juliet   | TW J      | 1005          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 564.7            | SqFt         | \$0.40       | \$225.89     |
| Taxiway Juliet   | TW J      | 1010          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar       | 109              | SqFt         | \$0.40       | \$43.60      |
| Taxiway Juliet   | TW J      | 1010          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 1,703.00         | SqFt         | \$0.40       | \$681.20     |
| Taxiway Kilo     | TW K      | 1105          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 38,044.90        | SqFt         | \$0.40       | \$15,218.08  |
| Taxiway Kilo     | TW K      | 1110          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 1,984.50         | SqFt         | \$0.40       | \$793.80     |
| Taxiway Kilo     | TW K      | 1110          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar       | 26.5             | SqFt         | \$0.40       | \$10.58      |
| Taxiway Kilo     | TW K      | 1115          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 2,436.60         | SqFt         | \$0.40       | \$974.63     |
| Taxiway Lima     | TW L      | 1205          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 1,876.00         | SqFt         | \$0.40       | \$750.40     |
| Taxiway Mike     | TW M      | 1305          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 3,156.10         | SqFt         | \$0.40       | \$1,262.44   |
| Taxiway November | TW N      | 1405          | WEATH/RAVEL             | L                    | L Surface Seal - Rejuvenating |                  | SqFt         | \$0.40       | \$1,290.82   |
| Taxiway Oscar    | TW O      | 1505          | WEATH/RAVEL             | L                    | L Surface Seal - Rejuvenating |                  | SqFt         | \$0.40       | \$1,278.61   |
| Taxiway Oscar    | TW O      | 1505          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar       | 55.9             | SqFt         | \$0.40       | \$22.37      |

### Table 6-1: Summary of Year 1 Maintenance Activities (Continued)

### Table 6-1: Summary of Year 1 Maintenance Activities (Continued)

| Branch Name    | Branch ID | Section<br>ID | Distress<br>Description | Distress<br>Severity | Work Description              | Work<br>Quantity | Work<br>Unit | Unit<br>Cost | Work<br>Cost |
|----------------|-----------|---------------|-------------------------|----------------------|-------------------------------|------------------|--------------|--------------|--------------|
| Taxiway Papa   | TW P      | 1605          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating   | 3,079.10         | SqFt         | \$0.40       | \$1,231.67   |
| Taxiway Quebec | TW Q      | 1705          | WEATH/RAVEL             | L                    | L Surface Seal - Rejuvenating |                  | SqFt         | \$0.40       | \$1,500.81   |
| Taxiway Romeo  | TW R      | 1805          | WEATH/RAVEL             | L                    | L Surface Seal - Rejuvenating |                  | SqFt         | \$0.40       | \$1,188.92   |
|                |           |               |                         |                      |                               |                  |              | Total =      | \$391,600.63 |

The 10 year forecast results are shown in Figure 6-1, illustrating the effect on pavement condition (PCI) of doing no maintenance versus having unlimited funds and performing all M&R actions based on the policies.



**Figure 6-1: Budget Scenario Analysis** 

The following network level observations can be made from the figure above:

- The PCI will deteriorate from an average of 77 in 2012 to an average of 63 in ten years if no M&R activities are performed. Specific pavement sections may be closer to critical condition as identified by the immediate needs in Table IV. Estimated PCI ratings are presented in Appendix D.
- The PCI will remain at or above an average of 70 through the 10-year analysis period under the unlimited budget scenario. A 2021 PCI average of 87 with this scenario is 24 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about \$5.5 million.

#### 7. MAINTENANCE AND REHABILITATION PLAN

The M&R analysis results include activities that likely exceed a typical annual budget level. These activities would need to be evaluated for feasibility and desirability based on the airport's future plans. In an effort to identify appropriate budget levels, the 10 year M&R analysis was evaluated to determine levels needed to address several specific areas: preventive maintenance, major activities for pavements in poor condition (Major M&R for PCIs less than Critical), and activities that would be desirable to preserve good pavement conditions where they exist (Major M&R for PCI greater than or equal to Critical).

Table 7-1 provides the summary results under the critical PCI unlimited funding scenario.

| Year  | Preventative   | Major M&R      | Total Year Cost |
|-------|----------------|----------------|-----------------|
| 2012  | \$391,600.61   | \$0.00         | \$391,600.61    |
| 2013  | \$387,311.88   | \$0.00         | \$387,311.88    |
| 2014  | \$435,789.74   | \$0.00         | \$435,789.74    |
| 2015  | \$489,730.21   | \$19,275.63    | \$509,005.84    |
| 2016  | \$550,254.66   | \$0.00         | \$550,254.66    |
| 2017  | \$381,995.74   | \$2,365,019.26 | \$2,747,014.99  |
| 2018  | \$422,312.27   | \$0.00         | \$422,312.27    |
| 2019  | \$398,032.68   | \$631,132.32   | \$1,029,164.99  |
| 2020  | \$430,114.54   | \$34,659.30    | \$464,773.83    |
| 2021  | \$220,735.63   | \$2,497,642.56 | \$2,718,378.19  |
| Total | \$4,107,877.96 | \$5,547,729.07 | \$9,655,607.00  |

### Table 7-1: M&R Costs under Unlimited Funding Scenario

Note: Costs are adjusted for inflation.

The unlimited budget scenario provides the basis for estimating the total repair cost.

Appendix F provides details of M&R plan by year under the unlimited funding scenario, and the map of the 10-year M&R plan is provided in Appendix G. It is important to understand that the SAPMP is a network level tool and the M&R costs provided in this report are only for planning purposes.

### 8. VISUAL AIDS

#### 8.1 System Inventory and Network Definition Drawings

The System Inventory and Network Definition CADD drawings, which show the airport pavement outline with Branch and Section boundaries and identify changes in the network pavement since the last inspection and the sampling plan, respectively, are included in Appendix A of this report.

#### 8.2 Condition Map

A Condition Map that has been prepared based on data linked to the airport's shape file is included in Appendix B. The Condition Map graphically show the inventory and condition of the airport via color coding shown on the shape file. The coding provides a visual representation that illustrates the PCIs for each pavement section.

#### 8.3 10-Year M&R Map

A 10-Year M&R Map that shows the summary of the M&R plan is attached in Appendix G.

#### 8.4 Photographs

Selected digital photographs taken during the pavement inspection are provided in Appendix H to provide visual support to special pavement conditions or distress observed during the inspection of the airport.

### 9. RECOMMENDATIONS

Pavement condition inspections were performed at North Palm Beach County General Aviation Airport, and a 10-year M&R plan was developed based on the unlimited funding scenario.

The following recommendations were made based on the 2012 condition inspection and M&R analysis results:

- (2015) Taxiway Foxtrot Asphalt pavement mill and overlay
- (2017) Runway 13-31 Asphalt pavement mill and overlay
- (2017) Runway 8-26 Asphalt pavement mill and overlay
- (2017) Taxiway Juliet Asphalt pavement mill and overlay

Further evaluation of these features is necessary in order to develop repair plans and timing for future budgets since these needs cannot be addressed with typical annual expenditures.

# **APPENDIX A**

# NETWORK DEFINITION MAP SYSTEM INVENTORY MAP PAVEMENT INVENTORY TABLE WORK HISTORY REPORT







- TYPICAL APRON BRANCH ID

- SECTION NUMBER

(RW 13-3)- TYPICAL RUNWAY BRANCH ID

TW A

AP S

410







| Branch    | Section | Sample | Latitude    | Longitude    | ]    | Branch  | Section | Sample | Latitude    | Longitude    |
|-----------|---------|--------|-------------|--------------|------|---------|---------|--------|-------------|--------------|
| RW 13-31  | 6205    | 186    | 26.84996664 | -80.22705774 | APN  | N       | 4120    | 104    | 26.84841497 | -80.22201785 |
| RW 13-31  | 6205    | 149    | 26.84634673 | -80.22307000 | APN  | N       | 4120    | 206    | 26.84870965 | -80.22255802 |
| RW 13-31  | 6205    | 155    | 26.84693375 | -80.22371664 | APN  | N       | 4105    | 609    | 26.84565691 | -80.21970405 |
| RW 13-31  | 6205    | 158    | 26.84722726 | -80.22403997 | APN  | N       | 4105    | 204    | 26.84624861 | -80.22121804 |
| RW 13-31  | 6205    | 161    | 26.84752076 | -80.22436329 | APN  | N       | 4105    | 704    | 26.84673197 | -80.22067268 |
| RW 13-31  | 6205    | 167    | 26.84810778 | -80.22500995 | APN  | N       | 4105    | 406    | 26.84605060 | -80.22056881 |
| RW 13-31  | 6205    | 173    | 26.84869479 | -80.22565661 | APN  | N       | 4105    | 208    | 26.84546590 | -80.22035588 |
| RW 13-31  | 6205    | 179    | 26.84928180 | -80.22630328 | APN  | N       | 4105    | 702    | 26.84712333 | -80.22110377 |
| RW 13-31  | 6205    | 132    | 26.84468349 | -80.22123788 | APN  | N       | 4105    | 403    | 26.84663763 | -80.22121544 |
| RW 13-31  | 6205    | 137    | 26.84517268 | -80.22177674 | APN  | N       | 4105    | 811    | 26.84544324 | -80.21903758 |
| RW 13-31  | 6205    | 143    | 26.84575970 | -80.22242337 | APN  | N       | 4105    | 117    | 26.84485477 | -80.21789907 |
| RW 13-31  | 6205    | 115    | 26.84302023 | -80.21940582 | APN  | N       | 4105    | 516    | 26.84538085 | -80.21825441 |
| RW 13-31  | 6205    | 120    | 26.84350942 | -80.21994466 | APN  | N       | 4110    | 99     | 26.84701637 | -80.22201418 |
| RW 13-31  | 6205    | 122    | 26.84370510 | -80.22016019 | TW   | L       | 1205    | 101    | 26.84316090 | -80.22682949 |
| RW 13-31  | 6205    | 125    | 26.84399862 | -80.22048350 | TW   | М       | 1305    | 200    | 26.84278795 | -80.22636812 |
| RW 13-31  | 6205    | 102    | 26.84174831 | -80.21800487 | TW   | N       | 1405    | 301    | 26.84344747 | -80.22325582 |
| RW 13-31  | 6205    | 105    | 26.84204183 | -80.21832816 | TW   | E       | 505     | 101    | 26.84340694 | -80.22086642 |
| RW 13-31  | 6205    | 109    | 26.84243319 | -80.21875922 | TW   | 0       | 1505    | 400    | 26.84348613 | -80.21679513 |
| RW 8R-26L | 6105    | 184    | 26.84346606 | -80.21394889 | TW   | Р       | 1605    | 501    | 26.84409462 | -80.21430151 |
| RW 8R-26L | 6105    | 162    | 26.84322100 | -80.21731107 | TW   | Q       | 1705    | 600    | 26.84372096 | -80.21383083 |
| RW 8R-26L | 6105    | 168    | 26.84328784 | -80.21639411 | AP I | RU      | 5105    | 100    | 26.84355397 | -80.22687910 |
| RW 8R-26L | 6105    | 174    | 26.84335468 | -80.21547716 | APN  | N       | 4115    | 751    | 26.84568414 | -80.21799344 |
| RW 8R-26L | 6105    | 177    | 26.84338810 | -80.21501868 | AP I | RU      | 5110    | 101    | 26.84449013 | -80.21404164 |
| RW 8R-26L | 6105    | 180    | 26.84342151 | -80.21456020 | APT  | ſ-HANGE | 5115    | 200    | 26.84469389 | -80.21420316 |
| RW 8R-26L | 6105    | 156    | 26.84315414 | -80.21822803 | APT  | ſ-HANGE | 5120    | 706    | 26.84607304 | -80.21350992 |
| RW 8R-26L | 6105    | 140    | 26.84297585 | -80.22067324 | APT  | ſ-HANGE | 5120    | 602    | 26.84581288 | -80.21480757 |
| RW 8R-26L | 6105    | 144    | 26.84302043 | -80.22006193 | AP   | ſ-HANGE | 5120    | 102    | 26.84504295 | -80.21476860 |
| RW 8R-26L | 6105    | 101    | 26.84254107 | -80.22663341 | APT  | ſ-HANGE | 5120    | 202    | 26.84519127 | -80.21424821 |
| RW 8R-26L | 6105    | 104    | 26.84257452 | -80.22617494 | AP   | ſ-HANGE | 5120    | 204    | 26.84573963 | -80.21429788 |
| RW 8R-26L | 6105    | 107    | 26.84260797 | -80.22571646 | AP   | ſ-HANG  | 4205    | 101    | 26.84492108 | -80.21693744 |
| RW 8R-26L | 6105    | 111    | 26.84265257 | -80.22510516 | APT  | ſ-HANG  | 4205    | 302    | 26.84525369 | -80.21668604 |
| RW 8R-26L | 6105    | 116    | 26.84270832 | -80.22434104 | AP   | ſ-HANG  | 4205    | 405    | 26.84561395 | -80.21600333 |
| RW 8R-26L | 6105    | 122    | 26.84277521 | -80.22342409 | AP   | ſ-HANGN | 4305    | 205    | 26.85078354 | -80.22128017 |
| RW 8R-26L | 6105    | 128    | 26.84284210 | -80.22250714 | AP   | ſ-HANGN | 4305    | 501    | 26.85126774 | -80.22097968 |
| RW 8R-26L | 6105    | 134    | 26.84290897 | -80.22159019 | AP   | ſ-HANGN | 4305    | 703    | 26.85187895 | -80.22016738 |
| AP N      | 4120    | 501    | 26.84744125 | -80.22180750 | AP   | ſ-HANGN | 4305    | 201    | 26.85087270 | -80.22005748 |
| AP N      | 4120    | 302    | 26.84783027 | -80.22180490 | AP   | ſ-HANGN | 4305    | 801    | 26.85136180 | -80.21968974 |

## Sample Unit Centroid Coordinates

| Branch     | Section | Sample | Latitude    | Longitude    |
|------------|---------|--------|-------------|--------------|
| AP T-HANGN | 4310    | 302    | 26.85146312 | -80.22208508 |
| AP T-HANGN | 4315    | 809    | 26.85222864 | -80.22214678 |
| TW D       | 405     | 300    | 26.84882054 | -80.22555148 |
| TW D       | 410     | 103    | 26.84899020 | -80.22373154 |
| TW F       | 605     | 104    | 26.84254400 | -80.21784665 |
| TW F       | 605     | 110    | 26.84373642 | -80.21916004 |
| TW F       | 605     | 118    | 26.84530185 | -80.22088434 |
| TW F       | 605     | 142    | 26.84999876 | -80.22606040 |
| TW F       | 605     | 134    | 26.84843264 | -80.22433309 |
| TW F       | 610     | 402    | 26.84948795 | -80.22600828 |
| TW F       | 615     | 200    | 26.84449087 | -80.21986170 |
| TW J       | 1005    | 200    | 26.84614182 | -80.22254276 |
| TW J       | 1010    | 100    | 26.84657407 | -80.22205508 |
| TW K       | 1105    | 118    | 26.84375938 | -80.22128268 |
| TW K       | 1105    | 110    | 26.84358103 | -80.22372790 |
| TW K       | 1105    | 102    | 26.84340263 | -80.22617311 |
| TW K       | 1105    | 128    | 26.84398226 | -80.21822614 |
| TW K       | 1105    | 136    | 26.84416051 | -80.21578091 |
| TW K       | 1110    | 301    | 26.84447816 | -80.21776495 |
| TW K       | 1115    | 401    | 26.84461319 | -80.21591268 |
| TW R       | 1805    | 101    | 26.84234268 | -80.21800156 |
| TW C       | 305     | 102    | 26.85031060 | -80.22379138 |
| TW C       | 305     | 105    | 26.85024371 | -80.22470839 |
| TW G-1     | 705     | 200    | 26.85022263 | -80.22325417 |
| тw н       | 805     | 100    | 26.85048463 | -80.21961532 |

## Sample Unit Centroid Coordinates





## CONSTRUCTION SINCE LAST INSPECTION & ANTICIPATED CONSTRUCTION ACTIVITY

| CONSTRUCTION<br>YEAR | LOCATION      | WORK TYPE / PAVEMENT SECTION |
|----------------------|---------------|------------------------------|
| 2013                 | TAXIWAY DELTA | NEW TAXIWAY CONSTRUCTION     |



RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.



| SYSTEM INVENTORY MAP   |              |
|--|--------------|
| NORTH PALM BEACH COUNTY G.A.   | FDOT DISTRIC |
| FALM BLACK COUNTY, FLORIDA<br>FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE | 4            |

| Branch Name          | Branch ID  | Branch<br>Use | Section<br>ID | Length<br>(ft) | Width<br>(ft) | True<br>Area<br>(ft2) | Section<br>Rank | Surface<br>Type | Last<br>Const.<br>Date | Last<br>Insp.<br>Date | Sample<br>Units<br>in<br>Section |
|----------------------|------------|---------------|---------------|----------------|---------------|-----------------------|-----------------|-----------------|------------------------|-----------------------|----------------------------------|
| North Apron          | AP N       | APRON         | 4105          | 1,400          | 450           | 657,596               | Р               | AC              | 1/1/1994               | 4/23/2012             | 132                              |
| North Apron          | AP N       | APRON         | 4110          | 80             | 50            | 4,320                 | Р               | PCC             | 1/1/1994               | 4/23/2012             | 1                                |
| North Apron          | AP N       | APRON         | 4115          | 135            | 60            | 8,250                 | Р               | PCC             | 1/1/1994               | 4/23/2012             | 2                                |
| North Apron          | AP N       | APRON         | 4120          | 800            | 180           | 172,695               | Р               | AC              | 1/1/1996               | 4/23/2012             | 36                               |
| Apron Run-Up         | AP RU      | APRON         | 5105          | 250            | 100           | 27,416                | Р               | AC              | 1/1/1994               | 4/23/2012             | 5                                |
| Apron Run-Up         | AP RU      | APRON         | 5110          | 250            | 100           | 27,136                | Р               | AC              | 1/1/1994               | 4/23/2012             | 5                                |
| T-Hangar Apron       | AP T-HANG  | APRON         | 4205          | 4,000          | 20            | 87,823                | Р               | AC              | 1/1/1994               | 4/23/2012             | 21                               |
| T-Hangar Apron East  | AP T-HANGE | APRON         | 4415          | 200            | 35            | 7,892                 | Р               | AC              | 1/1/1996               | 4/23/2012             | 2                                |
| T-Hangar Apron East  | AP T-HANGE | APRON         | 4420          | 2,400          | 30            | 77,198                | Р               | AC              | 1/1/1996               | 4/23/2012             | 29                               |
| T-Hangar Apron North | AP T-HANGN | APRON         | 4305          | 3,800          | 35            | 138,701               | Р               | AC              | 1/1/2004               | 4/23/2012             | 43                               |
| T-Hangar Apron North | AP T-HANGN | APRON         | 4310          | 520            | 35            | 19,855                | Р               | AC              | 1/1/2004               | 4/23/2012             | 5                                |
| T-Hangar Apron North | AP T-HANGN | APRON         | 4315          | 200            | 35            | 9,386                 | Р               | AC              | 1/1/2010               | 1/1/2010              | 2                                |
| Runway 13-31         | RW 13-31   | RUNWAY        | 6205          | 4,366          | 75            | 329,838               | S               | AC              | 1/1/1994               | 4/23/2012             | 88                               |
| Runway 8R-26L        | RW 8R-26L  | RUNWAY        | 6105          | 4,220          | 100           | 422,070               | Р               | AC              | 1/1/1994               | 4/23/2012             | 85                               |
| Taxiway Charlie      | TW C       | TAXIWAY       | 305           | 1,110          | 35            | 44,337                | Р               | AC              | 1/1/2004               | 4/23/2012             | 12                               |
| Taxiway Delta        | TW D       | TAXIWAY       | 405           | 280            | 35            | 14,861                | Р               | AC              | 1/1/1994               | 4/23/2012             | 3                                |
| Taxiway Delta        | TW D       | TAXIWAY       | 410           | 600            | 35            | 21,306                | Р               | AC              | 1/1/1996               | 4/23/2012             | 6                                |
| Taxiway Echo         | TW E       | TAXIWAY       | 505           | 300            | 35            | 17,143                | Р               | AC              | 1/1/1994               | 4/23/2012             | 5                                |
| Taxiway Foxtrot      | TW F       | TAXIWAY       | 605           | 4,600          | 35            | 166,311               | Р               | AC              | 1/1/1994               | 4/23/2012             | 45                               |
| Taxiway Foxtrot      | TW F       | TAXIWAY       | 610           | 250            | 75            | 22,478                | Р               | AC              | 1/1/1994               | 4/23/2012             | 5                                |
| Taxiway Foxtrot      | TW F       | TAXIWAY       | 615           | 120            | 50            | 6,198                 | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |

| Branch Name      | Branch ID | Branch<br>Use | Section<br>ID | Length<br>(ft) | Width<br>(ft) | True<br>Area<br>(ft2) | Section<br>Rank | Surface<br>Type | Last<br>Const.<br>Date | Last<br>Insp.<br>Date | Sample<br>Units<br>in<br>Section |
|------------------|-----------|---------------|---------------|----------------|---------------|-----------------------|-----------------|-----------------|------------------------|-----------------------|----------------------------------|
| Taxiway G-1      | TW G1     | TAXIWAY       | 705           | 400            | 35            | 14,241                | Р               | AC              | 1/1/2004               | 4/23/2012             | 3                                |
| Taxiway Hotel    | TW H      | TAXIWAY       | 805           | 230            | 35            | 8,310                 | Р               | AC              | 1/1/2004               | 4/23/2012             | 2                                |
| Taxiway Juliet   | TW J      | TAXIWAY       | 1005          | 200            | 35            | 8,967                 | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway Juliet   | TW J      | TAXIWAY       | 1010          | 80             | 75            | 6,812                 | Р               | AC              | 1/1/1994               | 4/23/2012             | 1                                |
| Taxiway Kilo     | TW K      | TAXIWAY       | 1105          | 4,300          | 35            | 158,522               | Р               | AC              | 1/1/1994               | 4/23/2012             | 43                               |
| Taxiway Kilo     | TW K      | TAXIWAY       | 1110          | 260            | 35            | 11,576                | Р               | AC              | 1/1/1994               | 4/23/2012             | 3                                |
| Taxiway Kilo     | TW K      | TAXIWAY       | 1115          | 260            | 35            | 12,183                | Р               | AC              | 1/1/1994               | 4/23/2012             | 3                                |
| Taxiway Lima     | TW L      | TAXIWAY       | 1205          | 240            | 35            | 9,384                 | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway Mike     | TW M      | TAXIWAY       | 1305          | 240            | 35            | 10,520                | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway November | TW N      | TAXIWAY       | 1405          | 240            | 35            | 10,756                | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway Oscar    | TW O      | TAXIWAY       | 1505          | 240            | 35            | 10,654                | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway Papa     | TW P      | TAXIWAY       | 1605          | 260            | 35            | 10,265                | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway Quebec   | TW Q      | TAXIWAY       | 1705          | 240            | 35            | 9,384                 | Р               | AC              | 1/1/1994               | 4/23/2012             | 2                                |
| Taxiway Romeo    | TW R      | TAXIWAY       | 1805          | 300            | 35            | 14,861                | Р               | AC              | 1/1/1994               | 4/23/2012             | 5                                |

### Table A-1: Pavement Inventory (Continued)

Note: If a new construction, then survey date = last construction date and PCI is set to 100 by MicroPAVER.

Sections not surveyed due to reasons such as re-sectioning, no escort, not accessible at the time of survey.

| Date:05/                       | Date:05/07/2012 Work History Report 1 of 5 |                         |                     |           |   |  |  |  |
|--------------------------------|--|-------------------------|---------------------|-----------|---|--|--|--|
| <b>Network:</b> F <sup>2</sup> | 45 <b>Br</b>                               | anch: APN (NORTH)       | APRON <b>)</b>      | Width:    | <b>Section:</b> 4105 <b>Surface:</b> AC                       |  |  |  |
| L.C.D.: 01/01                  | 1/1994 <b>Use:</b> AF                      | PRON Rank PLength:      | 1,400.00 Ft         |           | 450.00 Ft <b>True Area:</b> 657,595.93 SqF                    |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1994                     | IMPORTED                                   | BUILT                   |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211                       |  |  |  |
| <b>Network:</b> F <sup>2</sup> | 45 Br                                      | anch: APN (NORTH)       | APRON <b>)</b>      | Width:    | Section: 4110 Surface: PCC                                    |  |  |  |
| <b>L.C.D.:</b> 01/01           | 1/1994 <b>Use:</b> AF                      | PRON Rank PLength:      | 80.00 Ft            |           | 50.00 Ft True Area: 4.320.00 SaF                              |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1994                     | IMPORTED                                   | BUILT                   |                     | 6.00      | True 1994: 6 INCH P501 PCC PAVEMENT ON<br>4 INCH P154 SUBBASE |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: APN (NORTH)       | APRON <b>)</b>      | Width:    | Section: 4115 Surface: PCC                                    |  |  |  |
| <b>L.C.D.:</b> 01/01           | 1/1994 Use: AF                             | PRON Rank PLength:      | 135.00 Ft           |           | 60.00 Ft True Area: 8,250.00 SqF                              |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1994                     | IMPORTED                                   | BUILT                   |                     | 6.00      | True 1994: 6 INCH P501 PCC PAVEMENT ON 4 INCH P154 SUBBASE    |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: APN (NORTH)       | APRON <b>)</b>      | Width:    | <b>Section:</b> 4120 <b>Surface:</b> AC                       |  |  |  |
| <b>L.C.D.:</b> 01/01           | 1/1996 Use: AF                             | PRON Rank PLength:      | 800.00 Ft           |           | 180.00 Ft <b>True Area:</b> 172.695.42 SqF                    |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1996                     | IMPORTED                                   | BUILT                   |                     |           | True 1996 AC PAVEMENT   |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: AP RU (APRON      | RUN-UP <b>)</b>     | Width:    | <b>Section:</b> 5105 <b>Surface:</b> AC                       |  |  |  |
| <b>L.C.D.:</b> 01/01           | 1/1994 Use: AF                             | PRON Rank P Length:     | 250.00 Ft           |           | 100.00 Ft <b>True Area:</b> 27.416.50 SqF                     |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1994                     | IMPORTED                                   | BUILT                   |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211                       |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: AP RU (APRON      | RUN-UP <b>)</b>     | Width:    | <b>Section:</b> 5110 <b>Surface:</b> AC                       |  |  |  |
| <b>L.C.D.:</b> 01/01           | 1/1994 Use: AF                             | PRON Rank P Length:     | 250.00 Ft           |           | 100.00 Ft <b>True Area:</b> 27,136.50 SqF                     |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1994                     | IMPORTED                                   | BUILT                   |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211                       |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: AP T-HANG (T-HANG | AR APRON <b>)</b>   | Width:    | <b>Section:</b> 4205 <b>Surface:</b> AC                       |  |  |  |
| <b>L.C.D.:</b> 01/07           | 1/1994 <b>Use:</b> AF                      | PRON Rank P Length:     | 4.000.00 Ft         |           | 20.00 Ft <b>True Area:</b> 87,822.76 SqF                      |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1994                     | IMPORTED                                   | BUILT                   |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211                       |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: AP T-HANGE (APRON | T-HANGAR E <b>)</b> | Width:    | Section: 4415 Surface: AC                                     |  |  |  |
| <b>L.C.D.:</b> 01/01           | 1/1996 <b>Use:</b> AF                      | PRON Rank P Length:     | 200.00 Ft           |           | 35.00 Ft True Area: 7,891.73 SqF                              |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1996                     | INITIAL                                    | Initial Construction    | \$0                 | 0.00      | True 1996 AC PAVEMENT   |  |  |  |
| <b>Network:</b> F4             | 45 Br                                      | anch: AP T-HANGE (APRON | T-HANGAR E)         | Width:    | Section: 4420 Surface: AC                                     |  |  |  |
| <b>L.C.D.:</b> 01/07           | 1/1996 Use: AF                             | PRON Rank PLength:      | 2.400.00 Ft         |           | 30.00 Ft True Area: 77,197.93 SaF                             |  |  |  |
| Work                           | Work                                       | Work                    | Cost                | Thickness | Major   |  |  |  |
| Date                           | Code                                       | Description             |                     | (in)      | M&R Comments  |  |  |  |
| 01/01/1996                     | INITIAL                                    | Initial Construction    | \$0                 | 0.00      | True 1996 AC PAVEMENT   |  |  |  |

| Date:05/                                   | Date:05/07/2012 Work History Report 2 of 5<br>Pavement Database: |   |                     |           |  |  |  |  |  |  |
|--|--|---|---------------------|-----------|--|--|--|--|--|--|
| Network: E                                 | 15 Br  |   |                     |           | Section: 4305 Surface: AC  |  |  |  |  |  |
| L.C.D.: 01/01                              | 1/2004 Use: AF   | PRON Rank P Length:                       | 3,800.00 Ft         | Width:    | 35.00 Ft <b>True Area:</b> 138,701.02 SqF  |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/2004                                 | INITIAL  | Initial Construction                      | \$0                 | 0.00      | True 2004 AC PAVEMENT  |  |  |  |  |  |
| <b>Network:</b> F4                         | 45 Br  | anch: AP T-HANGN (APRON)                  | T-HANGAR N <b>)</b> | Width:    | <b>Section:</b> 4310 <b>Surface:</b> AC  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/01                       | 1/2004 Use: AF   | PRON Rank P Length:                       | 520.00 Ft           |           | 35.00 Ft <b>True Area:</b> 19.855.38 SqF   |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/2004                                 | INITIAL  | Initial Construction                      | \$0                 | 0.00      | True 2004 AC PAVEMENT  |  |  |  |  |  |
| Network: F4                                | 45 Br  | anch: AP T-HANGN (APRON                   | T-HANGAR N <b>)</b> | Width:    | <b>Section:</b> 4315 <b>Surface:</b> AC  |  |  |  |  |  |
| L.C.D.: 01/07                              | 1/2010 Use: AF   | PRON Rank P Length:                       | 200.00 Ft           |           | 35.00 Ft <b>True Area:</b> 9,385.51 SqF  |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/2010                                 | INITIAL  | Initial Construction                      | \$0                 | 0.00      | True 2010 AC PAVEMENT  |  |  |  |  |  |
| <b>Network:</b> F4                         | 45 Br  | anch:RW13-31 (RUNWA)                      | Y 13-31 <b>)</b>    | Width:    | <b>Section:</b> 6205 <b>Surface:</b> AC  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07                       | 1/1994 Use: Rl   | JNWAY Rank SLength:                       | 4.366.00 Ft         |           | 75.00 Ft <b>True Area:</b> 329.837.55 SqF  |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/1994                                 | IMPORTED   | BUILT                                     |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| Network: F4                                | 45 Br  | anch: RW 8R-26L (RUNWA                    | Y 8R-26L <b>)</b>   | Width:    | <b>Section:</b> 6105 <b>Surface:</b> AC  |  |  |  |  |  |
| L.C.D.: 01/01                              | 1/1994 Use: Rl   | JNWAY Rank P Length:                      | 4.220.00 Ft         |           | 100.00 Ft <b>True Area:</b> 422.070.39 SqF   |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/1994                                 | IMPORTED   | BUILT                                     |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| <b>Network:</b> F4                         | 45 Br  | anch:TWC (TAXIWA                          | Y C <b>)</b>        | Width:    | Section: 305 Surface: AC   |  |  |  |  |  |
| <b>L.C.D.:</b> 01/01                       | 1/2004 Use: TA   | AXIWAY Rank PLength:                      | 1,110.00 Ft         |           | 35.00 Ft True Area: 44,336.97 SqF  |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | ( in)     | M&R Comments   |  |  |  |  |  |
| 01/01/2004                                 | INITIAL  | Initial Construction                      | \$0                 | 0.00      | True 2004 AC PAVEMENT  |  |  |  |  |  |
| <b>Network:</b> F4                         | 45 Br  | anch: TWD (TAXIWA                         | Y D <b>)</b>        | Width:    | <b>Section:</b> 405 <b>Surface:</b> AC   |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07                       | 1/1994 Use: TA   | AXIWAY Rank P Length:                     | 280.00 Ft           |           | 35.00 Ft <b>True Area:</b> 14.861.44 SqF   |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/1994                                 | IMPORTED   | BUILT                                     |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| <b>Network:</b> F4                         | 45 Br  | anch: TW D (TAXIWA                        | Y D <b>)</b>        | Width:    | <b>Section:</b> 410 <b>Surface:</b> AC   |  |  |  |  |  |
| <b>L.C.D.:</b> 01/01                       | 1/1996 Use: TA   | XIWAY Rank P Length:                      | 600.00 Ft           |           | 35.00 Ft <b>True Area:</b> 21,306.08 SqF   |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/1996                                 | IMPORTED   | BUILT                                     |                     |           | True 1996 AC PAVEMENT  |  |  |  |  |  |
| <b>Network:</b> F4<br><b>L.C.D.:</b> 01/07 | 45 Br<br>1/1994 Use: TA  | anch: TWE (TAXIWA<br>AXIWAY Rank PLength: | Y E)<br>300.00 Ft   | Width:    | Section:         505         Surface:         AC           35.00         Ft         True Area:         17.142.68         SaF |  |  |  |  |  |
| Work                                       | Work   | Work                                      | Cost                | Thickness | Major  |  |  |  |  |  |
| Date                                       | Code   | Description                               |                     | (in)      | M&R Comments   |  |  |  |  |  |
| 01/01/1994                                 | IMPORTED   | BUILT                                     |                     | 2.00      | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |

| Date:05/                            | Date:05/07/2012 Work History Report 3 of 5<br>Pavement Database: |  |               |                    |  |  |  |  |  |  |  |
|-------------------------------------|--|--|---------------|--------------------|--|--|--|--|--|--|--|
| <b>Network:</b> F4<br>L.C.D.: 01/01 | 45 <b>Br</b> a<br>1/1994 <b>Use:</b> TA                          | an ch:TWF (TAXIWA<br>XIWAY Bank Plength: | Y F <b>)</b>  | Width:             | Section: 605 Surface: AC                 |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | ( in)              | M&R Comments                             |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |
| <b>Network:</b> F4                  | 45 <b>Br</b> a   | anch: TW F (TAXIWA                       | Y F <b>)</b>  | Width:             | <b>Section:</b> 610 <b>Surface:</b> AC   |  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07                | 1/1994 <b>Use:</b> TA  | XIWAY Rank P Length:                     | 250.00 Ft     |                    | 75.00 Ft <b>True Area:</b> 22.477.64 SqF |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | (in)               | M&R Comments                             |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |
| <b>Network:</b> F4                  | 45 Bra   | anch: TW F (TAXIWA                       | Y F <b>)</b>  | Width:             | Section: 615 Surface: AC                 |  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/01                | 1/1994 Use: TA   | XIWAY Rank P Length:                     | 120.00 Ft     |                    | 50.00 Ft True Area: 6.198.15 SqF         |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | ( in)              | M&R Comments                             |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |
| <b>Network:</b> F4                  | 45 Bra   | anch: TW G1 (TAXIWA                      | Y G1 <b>)</b> | Width:             | <b>Section:</b> 705 <b>Surface:</b> AC   |  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07                | 1/2004 Use: TA   | XIWAY Rank P Length:                     | 400.00 Ft     |                    | 35.00 Ft <b>True Area:</b> 14.241.32 SaF |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | (in)               | M&R Comments                             |  |  |  |  |  |  |
| 01/01/2004                          | INITIAL  | Initial Construction                     | \$0           | 0.00               | True 2004 AC PAVEMENT                    |  |  |  |  |  |  |
| Network: F4                         | 45 Bra   | anch:TWH (TAXIWA                         | Y H <b>)</b>  | Width:             | Section: 805 Surface: AC                 |  |  |  |  |  |  |
| L.C.D.: 01/07                       | 1/2004 Use: TA   | XIWAY Rank PLength:                      | 230.00 Ft     |                    | 35.00 Ft True Area: 8.309.56 SqF         |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | (in)               | M&R Comments                             |  |  |  |  |  |  |
| 01/01/2004                          | INITIAL  | Initial Construction                     | \$0           | 0.00               | True 2004 AC PAVEMENT                    |  |  |  |  |  |  |
| <b>Network:</b> F4                  | 45 Bra   | anch: TW J (TAXIWA                       | Y J <b>)</b>  | Width:             | Section: 1005 Surface: AC                |  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07                | 1/1994 Use: TA   | XIWAY Rank P Length:                     | 200.00 Ft     |                    | 35.00 Ft True Area: 8,967.17 SqF         |  |  |  |  |  |  |
| Work<br>Date                        | Work<br>Code   | Work<br>Description                      | Cost          | Thickness<br>( in) | Major<br>M&R<br>Comments                 |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |
| Network: F4                         | 45 Bra   | anch: TW J (TAXIWA                       | Y J <b>)</b>  | Width:             | <b>Section:</b> 1010 <b>Surface:</b> AC  |  |  |  |  |  |  |
| L.C.D.: 01/01                       | 1/1994 Use: TA   | XIWAY Rank P Length:                     | 80.00 Ft      |                    | 75.00 Ft <b>True Area:</b> 6.811.55 SqF  |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | (in)               | M&R Comments                             |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |
| Network: F4                         | 45 Bra   | anch: TWK (TAXIWA                        | Y K <b>)</b>  | Width:             | Section: 1105 Surface: AC                |  |  |  |  |  |  |
| L.C.D.: 01/07                       | 1/1994 Use: TA   | XIWAY Rank P Length:                     | 4,300.00 Ft   |                    | 35.00 Ft True Area:158,521.71 SqF        |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | ( in)              | M&R Comments                             |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |
| <b>Network:</b> F4                  | 45 Bra   | anch: TWK (TAXIWA                        | Y K)          | Width:             | <b>Section:</b> 1110 <b>Surface:</b> AC  |  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07                | 1/1994 Use: TA   | XIWAY Rank P Length:                     | 260.00 Ft     |                    | 35.00 Ft <b>True Area:</b> 11.576.18 SqF |  |  |  |  |  |  |
| Work                                | Work   | Work                                     | Cost          | Thickness          | Major                                    |  |  |  |  |  |  |
| Date                                | Code   | Description                              |               | ( in)              | M&R Comments                             |  |  |  |  |  |  |
| 01/01/1994                          | IMPORTED   | BUILT                                    |               | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |  |

| Date:05/  | Date:05/07/2012 Work History Report 4 of 5<br>Pavement Database: |                      |              |                    |  |  |  |  |  |  |
|---|--|----------------------|--------------|--------------------|--|--|--|--|--|--|
| <b>Network:</b> F <sup>4</sup>  | 45 Br  | anch: TWK (TAXIWA    | Y K)         | Width:             | Section: 1115 Surface: AC                |  |  |  |  |  |
| <b>L.C.D.:</b> 01/01  | 1/1994 Use: TA   | XIWAY Rank PLength:  | 260.00 Ft    |                    | 35.00 Ft True Area: 12,182.91 SqF        |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| <b>Network:</b> F4  | 45 Br  | anch:TWL (TAXIWA     | Y L)         | Width:             | <b>Section:</b> 1205 <b>Surface:</b> AC  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07  | 1/1994 Use: TA   | XIWAY Rank PLength:  | 240.00 Ft    |                    | 35.00 Ft <b>True Area:</b> 9.383.53 SqF  |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| Network:         F45         Branch:         TW M         (TAXIWAY M)         Section:         1305         Surface:         AC           L.C.D.:         01/01/1994         Use:         TAXIWAY         Rank P Length:         240.00 Ft         Width:         35.00 Ft         True Area:         10.519.58 SqF                 |  |                      |              |                    |  |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| Network:         F45         Branch: TW N         (TAXIWAY N)         Section:         1405         Surface:         AC           L.C.D.:         01/01/1994         Use:         TAXIWAY         Rank P Length:         240.00         Ft         Width:         35.00         Ft         True Area:         10.755.64         SqF |  |                      |              |                    |  |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| Network: F4   | 45 Br  | anch: TWO (TAXIWA    | Y O)         | Width:             | <b>Section:</b> 1505 <b>Surface:</b> AC  |  |  |  |  |  |
| L.C.D.: 01/01   | 1/1994 <b>Use:</b> TA  | XIWAY Rank P Length: | 240.00 Ft    |                    | 35.00 Ft <b>True Area:</b> 10.654.35 SqF |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| <b>Network:</b> F4  | 45 Br  | anch: TWP (TAXIWA    | Y P <b>)</b> | Width:             | Section: 1605 Surface: AC                |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07  | 1/1994 Use: TA   | XIWAY Rank PLength:  | 260.00 Ft    |                    | 35.00 Ft True Area: 10,265.06 SqF        |  |  |  |  |  |
| Work<br>Date  | Work<br>Code   | Work<br>Description  | Cost         | Thickness<br>( in) | Major<br>M&R<br>Comments                 |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| <b>Network:</b> F4  | 45 Br  | anch:TWQ (TAXIWA     | Y Q)         | Width:             | <b>Section:</b> 1705 <b>Surface:</b> AC  |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07  | 1/1994 Use: TA   | XIWAY Rank PLength:  | 240.00 Ft    |                    | 35.00 Ft <b>True Area:</b> 9.383.53 SqF  |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |
| <b>Network:</b> F4  | 45 Br  | anch: TWR (TAXIWA    | Y R)         | Width:             | Section: 1805 Surface: AC                |  |  |  |  |  |
| <b>L.C.D.:</b> 01/07  | 1/1994 Use: TA   | XIWAY Rank PLength:  | 300.00 Ft    |                    | 35.00 Ft True Area: 14,861.44 SqF        |  |  |  |  |  |
| Work  | Work   | Work                 | Cost         | Thickness          | Major                                    |  |  |  |  |  |
| Date  | Code   | Description          |              | (in)               | M&R Comments                             |  |  |  |  |  |
| 01/01/1994  | IMPORTED   | BUILT                |              | 2.00               | True 1994: 2 INCH P-401 ON 8 INCH P-211  |  |  |  |  |  |

# Work History Report

Pavement Database:

### Summary:

| Work Description     | Section<br>Count | Area Total<br>(SqFt) | Thickness Avg<br>(in) | Thickness STD<br>(in) |  |
|----------------------|------------------|----------------------|-----------------------|-----------------------|--|
| BUILT                | 27               | 2,259,324.72         | 2.32                  | 1.11                  |  |
| Initial Construction | 8                | 319,919.42           | .00                   | .00                   |  |

STD = Standard Deviation

# **APPENDIX B**

## 2012 CONDITION MAP PAVEMENT CONDITION INDEX TABLE







RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.



| 2012 CONDITION MAP   |   |
|--|---|
| NORTH PALM BEACH COUNTY G.A.<br>PALM BEACH COUNTY, FLORIDA |   |
| FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE     | 4 |

| Table B-1: Pavement | <b>Condition Index</b> |
|---------------------|------------------------|
|---------------------|------------------------|

| Branch Name          | Branch ID  | Branch<br>Use | Section<br>ID | True<br>Area<br>(ft <sup>2</sup> ) | Section<br>Rank | Surface<br>Type | Total<br>Samples<br>Inspected | Total<br>Samples | PCI | PCI<br>Category |
|----------------------|------------|---------------|---------------|------------------------------------|-----------------|-----------------|-------------------------------|------------------|-----|-----------------|
| North Apron          | AP N       | APRON         | 4105          | 657,596                            | Р               | AC              | 10                            | 132              | 75  | Satisfactory    |
| North Apron          | AP N       | APRON         | 4110          | 4,320                              | Р               | PCC             | 1                             | 1                | 97  | Good            |
| North Apron          | AP N       | APRON         | 4115          | 8,250                              | Р               | PCC             | 1                             | 2                | 88  | Good            |
| North Apron          | AP N       | APRON         | 4120          | 172,695                            | Р               | AC              | 4                             | 36               | 73  | Satisfactory    |
| Apron Run-Up         | AP RU      | APRON         | 5105          | 27,416                             | Р               | AC              | 1                             | 5                | 79  | Satisfactory    |
| Apron Run-Up         | AP RU      | APRON         | 5110          | 27,136                             | Р               | AC              | 1                             | 5                | 73  | Satisfactory    |
| T-Hangar Apron       | AP T-HANG  | APRON         | 4205          | 87,823                             | Р               | AC              | 3                             | 21               | 76  | Satisfactory    |
| T-Hangar Apron East  | AP T-HANGE | APRON         | 4415          | 7,892                              | Р               | AC              | 1                             | 2                | 83  | Satisfactory    |
| T-Hangar Apron East  | AP T-HANGE | APRON         | 4420          | 77,198                             | Р               | AC              | 5                             | 29               | 85  | Satisfactory    |
| T-Hangar Apron North | AP T-HANGN | APRON         | 4305          | 138,701                            | Р               | AC              | 5                             | 43               | 89  | Good            |
| T-Hangar Apron North | AP T-HANGN | APRON         | 4310          | 19,855                             | Р               | AC              | 1                             | 5                | 92  | Good            |
| T-Hangar Apron North | AP T-HANGN | APRON         | 4315          | 9,386                              | Р               | AC              | 1                             | 2                | 100 | Good            |
| Runway 13-31         | RW 13-31   | RUNWAY        | 6205          | 329,838                            | S               | AC              | 18                            | 88               | 73  | Satisfactory    |
| Runway 8R-26L        | RW 8R-26L  | RUNWAY        | 6105          | 422,070                            | Р               | AC              | 17                            | 85               | 75  | Satisfactory    |
| Taxiway Charlie      | TW C       | TAXIWAY       | 305           | 44,337                             | Р               | AC              | 2                             | 12               | 88  | Good            |
| Taxiway Delta        | TW D       | TAXIWAY       | 405           | 14,861                             | Р               | AC              | 1                             | 3                | 80  | Satisfactory    |
| Taxiway Delta        | TW D       | TAXIWAY       | 410           | 21,306                             | Р               | AC              | 1                             | 6                | 81  | Satisfactory    |
| Taxiway Echo         | TW E       | TAXIWAY       | 505           | 17,143                             | Р               | AC              | 1                             | 5                | 80  | Satisfactory    |
| Taxiway Foxtrot      | TW F       | TAXIWAY       | 605           | 166,311                            | Р               | AC              | 5                             | 45               | 80  | Satisfactory    |
| Taxiway Foxtrot      | TW F       | TAXIWAY       | 610           | 22,478                             | Р               | AC              | 1                             | 5                | 76  | Satisfactory    |
| Taxiway Foxtrot      | TW F       | TAXIWAY       | 615           | 6,198                              | Р               | AC              | 1                             | 2                | 67  | Fair            |
| Taxiway G-1          | TW G1      | TAXIWAY       | 705           | 14,241                             | Р               | AC              | 1                             | 3                | 88  | Good            |

| Branch Name      | Branch ID | Branch<br>Use | Section<br>ID | True<br>Area<br>(ft <sup>2</sup> ) | Section<br>Rank | Surface<br>Type | Total<br>Samples<br>Inspected | Total<br>Samples | PCI | PCI<br>Category |
|------------------|-----------|---------------|---------------|------------------------------------|-----------------|-----------------|-------------------------------|------------------|-----|-----------------|
| Taxiway Hotel    | TW H      | TAXIWAY       | 805           | 8,310                              | Р               | AC              | 1                             | 2                | 87  | Good            |
| Taxiway Juliet   | TW J      | TAXIWAY       | 1005          | 8,967                              | Р               | AC              | 1                             | 2                | 87  | Good            |
| Taxiway Juliet   | TW J      | TAXIWAY       | 1010          | 6,812                              | Р               | AC              | 1                             | 1                | 70  | Fair            |
| Taxiway Kilo     | TW K      | TAXIWAY       | 1105          | 158,522                            | Р               | AC              | 5                             | 43               | 82  | Satisfactory    |
| Taxiway Kilo     | TW K      | TAXIWAY       | 1110          | 11,576                             | Р               | AC              | 1                             | 3                | 77  | Satisfactory    |
| Taxiway Kilo     | TW K      | TAXIWAY       | 1115          | 12,183                             | Р               | AC              | 1                             | 3                | 86  | Good            |
| Taxiway Lima     | TW L      | TAXIWAY       | 1205          | 9,384                              | Р               | AC              | 1                             | 2                | 81  | Satisfactory    |
| Taxiway Mike     | TW M      | TAXIWAY       | 1305          | 10,520                             | Р               | AC              | 1                             | 2                | 79  | Satisfactory    |
| Taxiway November | TW N      | TAXIWAY       | 1405          | 10,756                             | Р               | AC              | 1                             | 2                | 79  | Satisfactory    |
| Taxiway Oscar    | TW O      | TAXIWAY       | 1505          | 10,654                             | Р               | AC              | 1                             | 2                | 74  | Satisfactory    |
| Taxiway Papa     | TW P      | TAXIWAY       | 1605          | 10,265                             | Р               | AC              | 1                             | 2                | 79  | Satisfactory    |
| Taxiway Quebec   | TW Q      | TAXIWAY       | 1705          | 9,384                              | Р               | AC              | 1                             | 2                | 78  | Satisfactory    |
| Taxiway Romeo    | TW R      | TAXIWAY       | 1805          | 14,861                             | Р               | AC              | 1                             | 5                | 81  | Satisfactory    |

### Table B-1: Pavement Condition Index (Continued)

Note: If a new construction, then survey date = last construction date and PCI is set to 100 by MicroPAVER.

Sections not surveyed due to reasons such as re-sectioning, no escort, not accessible at the time of survey.

# **APPENDIX C**

## **BRANCH CONDITION REPORT SECTION CONDITION REPORT**

| Date: 5 /7/2012                  |                       | Bra                                    | nch Co               | ndition R                            | eport          |                | 1 of 3                       |                            |  |
|----------------------------------|-----------------------|--|----------------------|--------------------------------------|----------------|----------------|------------------------------|----------------------------|--|
| Branch ID                        | Number of<br>Sections | Paven<br>Sum Section<br>Length<br>(Ft) | Avg Section<br>Width | ase: NetworkI<br>True Area<br>(SqFt) | D: F-45<br>Use | Average<br>PCI | PCI<br>Standard<br>Deviation | Weighted<br>Average<br>PCI |  |
| AP N (NORTH APRON)               | 4                     | 2,415.00                               | 185.00               | 842,861.35                           | APRON          | 83.25          | 9.81                         | 74.83                      |  |
| AP RU (APR ON RUN-UP)            | 2                     | 500.00                                 | 100.00               | 54,553.00                            | APRON          | 76.00          | 3.00                         | 76.02                      |  |
| AP T-HANG (T-HANGAR APRON)       | 1                     | 4,000.00                               | 20.00                | 87,822.76                            | APRON          | 76.00          | 0.00                         | 76.00                      |  |
| AP T-HANGE (APRON T-HANGAR<br>E) | 2                     | 2,600.00                               | 32.50                | 85,089.66                            | APRON          | 84.00          | 1.00                         | 84.81                      |  |
| AP T-HANGN (APRON T-HANGAR<br>N) | 3                     | 4,520.00                               | 35.00                | 167,941.91                           | APRON          | 93.67          | 4.64                         | 89.97                      |  |
| RW 13-31 (RUNWAY 13-31)          | 1                     | 4,366.00                               | 75.00                | 329,837.55                           | RUNWAY         | 73.00          | 0.00                         | 73.00                      |  |
| RW 8R-26L (RUNWAY 8R-26L)        | 1                     | 4,220.00                               | 100.00               | 422,070.39                           | RUNWAY         | 75.00          | 0.00                         | 75.00                      |  |
| TW C (TAXIWAY C)                 | 1                     | 1,110.00                               | 35.00                | 44,336.97                            | TAXIWAY        | 88.00          | 0.00                         | 88.00                      |  |
| TW D (TAXIWAY D)                 | 2                     | 880.00                                 | 35.00                | 36,167.52                            | TAXIWAY        | 80.50          | 0.50                         | 80.59                      |  |
| TW E (TAXIWAY E)                 | 1                     | 300.00                                 | 35.00                | 17,142.68                            | TAXIWAY        | 80.00          | 0.00                         | 80.00                      |  |
| TW F (TAXIWAY F)                 | 3                     | 4,970.00                               | 53.33                | 194,986.82                           | TAXIWAY        | 74.33          | 5.44                         | 79.13                      |  |
| TW G1 (TAXIWAY G1)               | 1                     | 400.00                                 | 35.00                | 14,241.32                            | TAXIWAY        | 88.00          | 0.00                         | 88.00                      |  |
| ΤΨ Η (ΤΑΧΙΨΑΥ Η)                 | 1                     | 230.00                                 | 35.00                | 8,309.56                             | TAXIWAY        | 87.00          | 0.00                         | 87.00                      |  |
| TW J (TAXIWAY J)                 | 2                     | 280.00                                 | 55.00                | 15,778.72                            | TAXIWAY        | 78.50          | 8.50                         | 79.66                      |  |
| ΤW Κ (ΤΑΧΙWΑΥ Κ)                 | 3                     | 4,820.00                               | 35.00                | 182,280.80                           | TAXIWAY        | 81.67          | 3.68                         | 81.95                      |  |
| TW L (TAXIWAY L)                 | 1                     | 240.00                                 | 35.00                | 9,383.53                             | TAXIWAY        | 81.00          | 0.00                         | 81.00                      |  |

| Date: 5 /7/2012  |                       | Bra                           | 2 of 3                       |                     |         |                |                              |                            |
|------------------|-----------------------|-------------------------------|------------------------------|---------------------|---------|----------------|------------------------------|----------------------------|
| Branch ID        | Number of<br>Sections | Sum Section<br>Length<br>(Ft) | Avg Section<br>Width<br>(Ft) | True Area<br>(SqFt) | Use     | Average<br>PCI | PCI<br>Standard<br>Deviation | Weighted<br>Average<br>PCI |
| TW M (TAXIWAY M) | 1                     | 240.00                        | 35.00                        | 10,519.58           | TAXIWAY | 79.00          | 0.00                         | 79.00                      |
| TW N (TAXIWAY N) | 1                     | 240.00                        | 35.00                        | 10,755.64           | TAXIWAY | 79.00          | 0.00                         | 79.00                      |
| TW O (TAXIWAY O) | 1                     | 240.00                        | 35.00                        | 10,654.35           | TAXIWAY | 74.00          | 0.00                         | 74.00                      |
| TW P (TAXIWAY P) | 1                     | 260.00                        | 35.00                        | 10,265.06           | TAXIWAY | 79.00          | 0.00                         | 79.00                      |
| TW Q (TAXIWAY Q) | 1                     | 240.00                        | 35.00                        | 9,383.53            | TAXIWAY | 78.00          | 0.00                         | 78.00                      |
| TW R (TAXIWAY R) | 1                     | 300.00                        | 35.00                        | 14,861.44           | TAXIWAY | 81.00          | 0.00                         | 81.00                      |

Date: 5 /7/2012

# **Branch Condition Report**

Pavement Database:

| Use<br>Category | Number<br>of<br>Sections | Total<br>Area<br>(SqFt) | Arithmetic<br>Average<br>PCI | Average<br>PCI<br>STD. | Weighted<br>Average<br>PCI |  |
|-----------------|--------------------------|-------------------------|------------------------------|------------------------|----------------------------|--|
| APRON           | 12                       | 1,238,268.68            | 84.17                        | 8.87                   | 77.70                      |  |
| RUNWAY          | 2                        | 751,907.94              | 74.00                        | 1.00                   | 74.12                      |  |
| TAXIWAY         | 21                       | 589,067.52              | 80.00                        | 5.37                   | 81.08                      |  |
| All             | 35                       | 2,579,244.14            | 81.09                        | 7.15                   | 77.43                      |  |
|                 |                          |                         | 1                            |                        |                            |  |

STD = Standard Deviation

3 of 3

| Date: 5 /7/2012                  | Section Condition Report Pavement Database: NetworkID: F45 |                        |         |         |      |       |                     |                            | 1 of                    | 3      |
|----------------------------------|--|------------------------|---------|---------|------|-------|---------------------|----------------------------|-------------------------|--------|
| Branch ID                        | Section ID   | Last<br>Const.<br>Date | Surface | Use     | Rank | Lanes | True Area<br>(SqFt) | Last<br>Inspection<br>Date | Age<br>At<br>Inspection | PCI    |
| AP N (NORTH APRON)               | 4105   | 01/01/1994             | AC      | APRON   | Р    | 0     | 657,595.93          | 04/23/2012                 | 18                      | 75.00  |
| AP N (NORTH APRON)               | 4110   | 01/01/1994             | PCC     | APRON   | Ρ    | 0     | 4,320.00            | 04/23/2012                 | 18                      | 97.00  |
| APN (NORTH APRON)                | 4115   | 01/01/1994             | PCC     | APRON   | Р    | 0     | 8,250.00            | 04/23/2012                 | 18                      | 88.00  |
| APN (NORTH APRON)                | 4120   | 01/01/1996             | AC      | APRON   | Ρ    | 0     | 172,695.42          | 04/23/2012                 | 16                      | 73.00  |
| AP RU (APRON RUN-UP)             | 5105   | 01/01/1994             | AC      | APRON   | Ρ    | 0     | 27,416.50           | 04/23/2012                 | 18                      | 79.00  |
| AP RU (APRON RUN-UP)             | 5110   | 01/01/1994             | AC      | APRON   | Р    | 0     | 27,136.50           | 04/23/2012                 | 18                      | 73.00  |
| AP T-HANG (T-HANGAR APRON)       | 4205   | 01/01/1994             | AC      | APRON   | Ρ    | 0     | 87,822.76           | 04/23/2012                 | 18                      | 76.00  |
| AP T-HANGE (APRON<br>T-HANGAR E) | 4415   | 01/01/1996             | AC      | APRON   | Ρ    | 0     | 7,891.73            | 04/23/2012                 | 16                      | 83.00  |
| AP T-HANGE (APRON<br>T-HANGAR E) | 4420   | 01/01/1996             | AC      | APRON   | Р    | 0     | 77,197.93           | 04/23/2012                 | 16                      | 85.00  |
| AP T-HANGN (APRON<br>T-HANGAR N) | 4305   | 01/01/2004             | AC      | APRON   | Р    | 0     | 138,701.02          | 04/23/2012                 | 8                       | 89.00  |
| AP T-HANGN (APRON<br>T-HANGAR N) | 4310   | 01/01/2004             | AC      | APRON   | Р    | 0     | 19,855.38           | 04/23/2012                 | 8                       | 92.00  |
| AP T-HANGN (APRON<br>T-HANGAR N) | 4315   | 01/01/2010             | AC      | APRON   | Р    | 0     | 9,385.51            | 01/01/2010                 | 0                       | 100.00 |
| RW 13-31 (RUNWAY 13-31)          | 6205   | 01/01/1994             | AC      | RUNWAY  | S    | 0     | 329,837.55          | 04/23/2012                 | 18                      | 73.00  |
| RW 8R-26L (RUNWAY 8R-26L)        | 6105   | 01/01/1994             | AC      | RUNWAY  | Ρ    | 0     | 422,070.39          | 04/23/2012                 | 18                      | 75.00  |
| TW C (TAXIWAY C)                 | 305  | 01/01/2004             | AC      | TAXIWAY | Ρ    | 0     | 44,336.97           | 04/23/2012                 | 8                       | 88.00  |
| TW D (TAXIWAY D)                 | 405  | 01/01/1994             | AC      | TAXIWAY | Ρ    | 0     | 14,861.44           | 04/23/2012                 | 18                      | 80.00  |
| TW D (TAXIWAY D)                 | 410  | 01/01/1996             | AC      | TAXIWAY | Ρ    | 0     | 21,306.08           | 04/23/2012                 | 16                      | 81.00  |
| TW E (TAXIWAY E)                 | 505  | 01/01/1994             | AC      | TAXIWAY | Ρ    | 0     | 17,142.68           | 04/23/2012                 | 18                      | 80.00  |
| TW F (TAXIWAY F)                 | 605  | 01/01/1994             | AC      | TAXIWAY | Ρ    | 0     | 166,311.03          | 04/23/2012                 | 18                      | 80.00  |
| TW F (TAXIWAY F)                 | 610  | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 22,477.64           | 04/23/2012                 | 18                      | 76.00  |
| TW F (TAXIWAY F)                 | 615  | 01/01/1994             | AC      | TAXIWAY | Ρ    | 0     | 6,198.15            | 04/23/2012                 | 18                      | 67.00  |
| TW G1 (TAXIWAY G1)               | 705  | 01/01/2004             | AC      | TAXIWAY | Ρ    | 0     | 14,241.32           | 04/23/2012                 | 8                       | 88.00  |
| TW H (TAXIWAY H)                 | 805  | 01/01/2004             | AC      | TAXIWAY | Ρ    | 0     | 8,309.56            | 04/23/2012                 | 8                       | 87.00  |
| TW J (TAXIWAY J)                 | 1005   | 01/01/1994             | AC      | TAXIWAY | Ρ    | 0     | 8,967.17            | 04/23/2012                 | 18                      | 87.00  |
| TW J (TAXIWAY J)                 | 1010   | 01/01/1994             | AC      | TAXIWAY | Ρ    | 0     | 6,811.55            | 04/23/2012                 | 18                      | 70.00  |

| Date: 5 /7/2012  |            |                        | 2 of 3  |         |      |       |                     |                            |                         |       |
|------------------|------------|------------------------|---------|---------|------|-------|---------------------|----------------------------|-------------------------|-------|
| Branch ID        | Section ID | Last<br>Const.<br>Date | Surface | Use     | Rank | Lanes | True Area<br>(SqFt) | Last<br>Inspection<br>Date | Age<br>At<br>Inspection | PCI   |
| ΤW Κ (ΤΑΧΙΨΑΥ Κ) | 1105       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 158,521.71          | 04/23/2012                 | 18                      | 82.00 |
| ΤΨ Κ (ΤΑΧΙΨΑΥ Κ) | 1110       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 11,576.18           | 04/23/2012                 | 18                      | 77.00 |
| ΤΨ Κ (ΤΑΧΙΨΑΥ Κ) | 1115       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 12,182.91           | 04/23/2012                 | 18                      | 86.00 |
| TW L (TAXIWAY L) | 1205       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 9,383.53            | 04/23/2012                 | 18                      | 81.00 |
| TW M (TAXIWAY M) | 1305       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 10,519.58           | 04/23/2012                 | 18                      | 79.00 |
| TW N (TAXIWAY N) | 1405       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 10,755.64           | 04/23/2012                 | 18                      | 79.00 |
| TW O (TAXIWAY O) | 1505       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 10,654.35           | 04/23/2012                 | 18                      | 74.00 |
| TW P (TAXIWAY P) | 1605       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 10,265.06           | 04/23/2012                 | 18                      | 79.00 |
| TW Q (TAXIWAY Q) | 1705       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 9,383.53            | 04/23/2012                 | 18                      | 78.00 |
| TW R (TAXIWAY R) | 1805       | 01/01/1994             | AC      | TAXIWAY | Р    | 0     | 14,861.44           | 04/23/2012                 | 18                      | 81.00 |

Date: 5 /7/2012

## **Section Condition Report**

3 of 3

Pavement Database:

| Age<br>Category | Average<br>Age At<br>Inspection | Total<br>Area<br>(SqFt) | Number<br>of<br>Sections | Arithmetic<br>Average<br>PCI | PCI<br>Standard<br>Deviation | Weighted<br>Average<br>PCI |
|-----------------|---------------------------------|-------------------------|--------------------------|------------------------------|------------------------------|----------------------------|
| 0-02            | 0.00                            | 9,385.51                | 1                        | 100.00                       | 0.00                         | 100.00                     |
| 06-10           | 8.00                            | 225,444.25              | 5                        | 88.80                        | 1.72                         | 88.93                      |
| 16-20           | 17.72                           | 2,344,414.38            | 29                       | 79.10                        | 5.89                         | 76.24                      |
| All             | 15.83                           | 2,579,244.14            | 35                       | 81.09                        | 7.15                         | 77.43                      |

# **APPENDIX D**

## PAVEMENT CONDITION PREDICTION TABLE PREDICTED PCI BY PAVEMENT USE GRAPH

| Dava ak Nama a       | Branch ID Section |      | Current | Current PCI Forecast |      |      |      |      |               |      |      |      |    |
|----------------------|-------------------|------|---------|----------------------|------|------|------|------|---------------|------|------|------|----|
| Branch Name          | Branch ID         | ID   | PCI     | 2012                 | 2013 | 2014 | 2015 | 2016 | 016 2017 2018 | 2019 | 2020 | 2021 |    |
| North Apron          | AP N              | 4105 | 75      | 75                   | 73   | 72   | 71   | 69   | 68            | 67   | 66   | 65   | 64 |
| North Apron          | AP N              | 4110 | 97      | 97                   | 96   | 95   | 94   | 93   | 92            | 91   | 90   | 89   | 88 |
| North Apron          | AP N              | 4115 | 88      | 88                   | 87   | 86   | 85   | 84   | 83            | 82   | 81   | 80   | 79 |
| North Apron          | AP N              | 4120 | 73      | 73                   | 71   | 70   | 69   | 68   | 67            | 65   | 64   | 63   | 62 |
| Apron Run-Up         | AP RU             | 5105 | 79      | 79                   | 77   | 76   | 74   | 73   | 72            | 70   | 69   | 68   | 67 |
| Apron Run-Up         | AP RU             | 5110 | 73      | 73                   | 71   | 70   | 69   | 68   | 67            | 65   | 64   | 63   | 62 |
| T-Hangar Apron       | AP T-HANG         | 4205 | 76      | 76                   | 74   | 73   | 72   | 70   | 69            | 68   | 67   | 66   | 64 |
| T-Hangar Apron East  | AP T-HANGE        | 4415 | 83      | 83                   | 81   | 79   | 78   | 76   | 75            | 73   | 72   | 71   | 69 |
| T-Hangar Apron East  | AP T-HANGE        | 4420 | 85      | 85                   | 83   | 81   | 79   | 78   | 76            | 75   | 73   | 72   | 71 |
| T-Hangar Apron North | AP T-HANGN        | 4305 | 89      | 89                   | 87   | 85   | 83   | 81   | 80            | 78   | 76   | 75   | 74 |
| T-Hangar Apron North | AP T-HANGN        | 4310 | 92      | 92                   | 89   | 87   | 85   | 84   | 82            | 80   | 79   | 77   | 76 |
| T-Hangar Apron North | AP T-HANGN        | 4315 | 100     | 94                   | 92   | 90   | 88   | 86   | 84            | 82   | 80   | 79   | 77 |
| Runway 13-31         | RW 13-31          | 6205 | 73      | 73                   | 71   | 69   | 67   | 65   | 63            | 61   | 59   | 57   | 56 |
| Runway 8R-26L        | RW 8R-26L         | 6105 | 75      | 75                   | 72   | 70   | 68   | 66   | 64            | 63   | 61   | 59   | 57 |
| Taxiway Charlie      | TW C              | 305  | 88      | 88                   | 86   | 84   | 82   | 81   | 79            | 78   | 76   | 75   | 74 |
| Taxiway Delta        | TW D              | 405  | 80      | 80                   | 78   | 77   | 75   | 74   | 73            | 71   | 70   | 69   | 68 |
| Taxiway Delta        | TW D              | 410  | 81      | 81                   | 79   | 78   | 76   | 75   | 73            | 72   | 71   | 70   | 68 |
| Taxiway Echo         | TW E              | 505  | 80      | 80                   | 78   | 77   | 75   | 74   | 73            | 71   | 70   | 69   | 68 |
| Taxiway Foxtrot      | TW F              | 605  | 80      | 80                   | 78   | 77   | 75   | 74   | 73            | 71   | 70   | 69   | 68 |
| Taxiway Foxtrot      | TW F              | 610  | 76      | 76                   | 74   | 73   | 72   | 70   | 69            | 68   | 67   | 66   | 65 |
| Taxiway Foxtrot      | TW F              | 615  | 67      | 67                   | 66   | 65   | 63   | 62   | 61            | 60   | 59   | 58   | 57 |
| Taxiway G-1          | TW G1             | 705  | 88      | 88                   | 86   | 84   | 82   | 81   | 79            | 78   | 76   | 75   | 74 |

### **Table D-1: Pavement Condition Prediction**

| Duon ah Noma     | Branch ID Section |      | ction Current |      | PCI Forecast |      |      |      |      |      |      |      |      |  |  |
|------------------|-------------------|------|---------------|------|--------------|------|------|------|------|------|------|------|------|--|--|
| Dianch Ivaine    | branch ID         | ID   | PCI           | 2012 | 2013         | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |  |  |
| Taxiway Hotel    | TW H              | 805  | 87            | 87   | 85           | 83   | 82   | 80   | 78   | 77   | 76   | 74   | 73   |  |  |
| Taxiway Juliet   | TW J              | 1005 | 87            | 87   | 85           | 83   | 82   | 80   | 78   | 77   | 76   | 74   | 73   |  |  |
| Taxiway Juliet   | TW J              | 1010 | 70            | 70   | 69           | 67   | 66   | 65   | 64   | 63   | 62   | 61   | 60   |  |  |
| Taxiway Kilo     | TW K              | 1105 | 82            | 82   | 80           | 79   | 77   | 76   | 74   | 73   | 72   | 70   | 69   |  |  |
| Taxiway Kilo     | TW K              | 1110 | 77            | 77   | 75           | 74   | 73   | 71   | 70   | 69   | 68   | 66   | 65   |  |  |
| Taxiway Kilo     | TW K              | 1115 | 86            | 86   | 84           | 82   | 81   | 79   | 78   | 76   | 75   | 73   | 72   |  |  |
| Taxiway Lima     | TW L              | 1205 | 81            | 81   | 79           | 78   | 76   | 75   | 73   | 72   | 71   | 70   | 68   |  |  |
| Taxiway Mike     | TW M              | 1305 | 79            | 79   | 77           | 76   | 74   | 73   | 72   | 70   | 69   | 68   | 67   |  |  |
| Taxiway November | TW N              | 1405 | 79            | 79   | 77           | 76   | 74   | 73   | 72   | 70   | 69   | 68   | 67   |  |  |
| Taxiway Oscar    | TW O              | 1505 | 74            | 74   | 72           | 71   | 70   | 69   | 67   | 66   | 65   | 64   | 63   |  |  |
| Taxiway Papa     | TW P              | 1605 | 79            | 79   | 77           | 76   | 74   | 73   | 72   | 70   | 69   | 68   | 67   |  |  |
| Taxiway Quebec   | TW Q              | 1705 | 78            | 78   | 76           | 75   | 73   | 72   | 71   | 70   | 68   | 67   | 66   |  |  |
| Taxiway Romeo    | TW R              | 1805 | 81            | 81   | 79           | 78   | 76   | 75   | 73   | 72   | 71   | 70   | 68   |  |  |

### Table D-1: Pavement Condition Prediction (Continued)



### Figure D-1: Predicted PCI by Pavement Use

# **APPENDIX E**

## YEAR 1 MAINTENANCE ACTIVITIES TABLE

| Branch Name      | Branch ID  | Section | Distress     | Distress | Work Description            | Work       | Work | Unit   | Work         |
|------------------|------------|---------|--------------|----------|-----------------------------|------------|------|--------|--------------|
|                  |            | ID      | Description  | Severity | -                           | Quantity   | Unit | Cost   | Cost         |
| North Apron      | AP N       | 4105    | OIL SPILLAGE | Ν        | Patching - AC Shallow       | 283.8      | SqFt | \$2.90 | \$822.92     |
| North Apron      | AP N       | 4105    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 289,831.70 | SqFt | \$0.40 | \$115,933.65 |
| North Apron      | AP N       | 4105    | WEATH/RAVEL  | М        | Surface Seal - Coat Tar     | 1,488.60   | SqFt | \$0.40 | \$595.46     |
| North Apron      | AP N       | 4120    | WEATH/RAVEL  | М        | Surface Seal - Coat Tar     | 103.6      | SqFt | \$0.40 | \$41.45      |
| North Apron      | AP N       | 4120    | OIL SPILLAGE | Ν        | Patching - AC Shallow       | 347.2      | SqFt | \$2.90 | \$1,006.92   |
| North Apron      | AP N       | 4120    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 94,981.70  | SqFt | \$0.40 | \$37,992.99  |
| Apron Run-Up     | AP RU      | 5105    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 8,224.90   | SqFt | \$0.40 | \$3,289.98   |
| Apron Run-Up     | AP RU      | 5110    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 13,568.10  | SqFt | \$0.40 | \$5,427.30   |
| T-Hangar Apron   | AP T-HANG  | 4205    | OIL SPILLAGE | N        | Patching - AC Shallow       | 37.9       | SqFt | \$2.90 | \$109.79     |
| T-Hangar Apron   | AP T-HANG  | 4205    | L & T CR     | М        | Crack Sealing - AC          | 352.2      | Ft   | \$2.25 | \$792.54     |
| T-Hangar Apron   | AP T-HANG  | 4205    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 27,613.50  | SqFt | \$0.40 | \$11,045.48  |
| T-Hangar Apron E | AP T-HANGE | 4415    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 788.5      | SqFt | \$0.40 | \$315.40     |
| T-Hangar Apron E | AP T-HANGE | 4420    | OIL SPILLAGE | N        | Patching - AC Shallow       | 29.7       | SqFt | \$2.90 | \$86.27      |
| T-Hangar Apron E | AP T-HANGE | 4420    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 7,125.90   | SqFt | \$0.40 | \$2,850.39   |
| T-Hangar Apron N | AP T-HANGN | 4305    | OIL SPILLAGE | N        | Patching - AC Shallow       | 43.9       | SqFt | \$2.90 | \$127.40     |
| T-Hangar Apron N | AP T-HANGN | 4305    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 10,029.10  | SqFt | \$0.40 | \$4,011.66   |
| T-Hangar Apron N | AP T-HANGN | 4310    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 1,338.80   | SqFt | \$0.40 | \$535.53     |
| Runway 13-31     | RW 13-31   | 6205    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 187,702.90 | SqFt | \$0.40 | \$75,081.78  |
| Runway 8R-26L    | RW 8R-26L  | 6105    | L & T CR     | М        | Crack Sealing - AC          | 303        | Ft   | \$2.25 | \$681.70     |
| Runway 8R-26L    | RW 8R-26L  | 6105    | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 185,709.40 | SqFt | \$0.40 | \$74,284.39  |
| Runway 8R-26L    | RW 8R-26L  | 6105    | WEATH/RAVEL  | М        | Surface Seal - Coat Tar     | 248.3      | SqFt | \$0.40 | \$99.31      |
| Taxiway Charlie  | TW C       | 305     | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 5,700.40   | SqFt | \$0.40 | \$2,280.19   |
| Taxiway Delta    | TW D       | 405     | WEATH/RAVEL  | L        | Surface Seal - Rejuvenating | 3,714.30   | SqFt | \$0.40 | \$1,485.75   |

### Table E-1: Year 1 Maintenance Activities

| Branch Name      | Branch ID | Section<br>ID | Distress<br>Description | Distress<br>Severity | Work Description            | Work<br>Quantity | Work<br>Unit | Unit<br>Cost | Work<br>Cost |
|------------------|-----------|---------------|-------------------------|----------------------|-----------------------------|------------------|--------------|--------------|--------------|
| Taxiway Delta    | TW D      | 410           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 8,522.40         | SqFt         | \$0.40       | \$3,408.97   |
| Taxiway Echo     | TW E      | 505           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 5,142.80         | SqFt         | \$0.40       | \$2,057.12   |
| Taxiway Foxtrot  | TW F      | 605           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 38,488.80        | SqFt         | \$0.40       | \$15,395.65  |
| Taxiway Foxtrot  | TW F      | 610           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 8,989.60         | SqFt         | \$0.40       | \$3,595.86   |
| Taxiway Foxtrot  | TW F      | 615           | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 45.3             | SqFt         | \$0.40       | \$18.13      |
| Taxiway Foxtrot  | TW F      | 615           | L & T CR                | М                    | Crack Sealing - AC          | 157.7            | Ft           | \$2.25       | \$354.76     |
| Taxiway Foxtrot  | TW F      | 615           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 1,239.30         | SqFt         | \$0.40       | \$495.74     |
| Taxiway G-1      | TW G1     | 705           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 1,425.40         | SqFt         | \$0.40       | \$570.18     |
| Taxiway Hotel    | TW H      | 805           | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 830.4            | SqFt         | \$0.40       | \$332.15     |
| Taxiway Juliet   | TW J      | 1005          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 564.7            | SqFt         | \$0.40       | \$225.89     |
| Taxiway Juliet   | TW J      | 1010          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 109              | SqFt         | \$0.40       | \$43.60      |
| Taxiway Juliet   | TW J      | 1010          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 1,703.00         | SqFt         | \$0.40       | \$681.20     |
| Taxiway Kilo     | TW K      | 1105          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 38,044.90        | SqFt         | \$0.40       | \$15,218.08  |
| Taxiway Kilo     | TW K      | 1110          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 1,984.50         | SqFt         | \$0.40       | \$793.80     |
| Taxiway Kilo     | TW K      | 1110          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 26.5             | SqFt         | \$0.40       | \$10.58      |
| Taxiway Kilo     | TW K      | 1115          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 2,436.60         | SqFt         | \$0.40       | \$974.63     |
| Taxiway Lima     | TW L      | 1205          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 1,876.00         | SqFt         | \$0.40       | \$750.40     |
| Taxiway Mike     | TW M      | 1305          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 3,156.10         | SqFt         | \$0.40       | \$1,262.44   |
| Taxiway November | TW N      | 1405          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 3,227.00         | SqFt         | \$0.40       | \$1,290.82   |
| Taxiway Oscar    | TW O      | 1505          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 3,196.50         | SqFt         | \$0.40       | \$1,278.61   |
| Taxiway Oscar    | TW O      | 1505          | WEATH/RAVEL             | М                    | Surface Seal - Coat Tar     | 55.9             | SqFt         | \$0.40       | \$22.37      |

### Table E-1: Year 1 Maintenance Activities (Continued)
| Branch Name    | Branch ID | Section<br>ID | Distress<br>Description | Distress<br>Severity | Work Description            | Work<br>Quantity | Work<br>Unit | Unit<br>Cost | Work<br>Cost |
|----------------|-----------|---------------|-------------------------|----------------------|-----------------------------|------------------|--------------|--------------|--------------|
| Taxiway Papa   | TW P      | 1605          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 3,079.10         | SqFt         | \$0.40       | \$1,231.67   |
| Taxiway Quebec | TW Q      | 1705          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 3,752.00         | SqFt         | \$0.40       | \$1,500.81   |
| Taxiway Romeo  | TW R      | 1805          | WEATH/RAVEL             | L                    | Surface Seal - Rejuvenating | 2,972.30         | SqFt         | \$0.40       | \$1,188.92   |
|                |           |               |                         |                      |                             |                  |              | Total =      | \$391,600.63 |

#### Table E-1: Year 1 Maintenance Activities (Continued)

## **APPENDIX F**

#### MAJOR M&R PLAN BY YEAR UNDER UNLIMITED FUNDING SCENARIO TABLE

| Year | Branch Name     | Section<br>ID | Surface<br>Type | Section<br>Area (ft <sup>2</sup> ) | Major M&R<br>Costs* | PCI<br>Before<br>M&R | M&R Activity     | PCI<br>After<br>M&R |
|------|-----------------|---------------|-----------------|------------------------------------|---------------------|----------------------|------------------|---------------------|
| 2015 | Taxiway Foxtrot | 615           | AC              | 6,198                              | \$19,275.63         | 63                   | Mill and Overlay | 100                 |
| 2017 | Runway 13-31    | 6205          | AC              | 329,838                            | \$1,088,231.04      | 63                   | Mill and Overlay | 100                 |
| 2017 | Runway 8R-26L   | 6105          | AC              | 422,070                            | \$1,256,510.13      | 64                   | Mill and Overlay | 100                 |
| 2017 | Taxiway Juliet  | 1010          | AC              | 6,812                              | \$20,278.09         | 64                   | Mill and Overlay | 100                 |
| 2019 | North Apron     | 4120          | AC              | 172,695                            | \$545,426.68        | 64                   | Mill and Overlay | 100                 |
| 2019 | Apron Run-Up    | 5110          | AC              | 27,137                             | \$85,705.64         | 64                   | Mill and Overlay | 100                 |
| 2020 | Taxiway Oscar   | 1505          | AC              | 10,654                             | \$34,659.30         | 64                   | Mill and Overlay | 100                 |
| 2021 | North Apron     | 4105          | AC              | 657,596                            | \$2,203,378.59      | 64                   | Mill and Overlay | 100                 |
| 2021 | T-Hangar Apron  | 4205          | AC              | 87,823                             | \$294,263.97        | 64                   | Mill and Overlay | 100                 |
|      |                 |               |                 | Total                              | \$5,547,729.07      | 64                   |                  | 100                 |

#### Table F-1: Major M&R Plan by Year under Unlimited Funding Scenario

\* Costs are adjusted for inflation.

# **APPENDIX G**

10-YEAR M&R MAP





#### LEGEND







#### ACTIVITY

|     | MICROSURFACING                   |
|-----|----------------------------------|
|     | MILL AND OVERLAY                 |
|     | RECONSTRUCTION                   |
| 000 | CONCRETE PAVEMENT<br>RESTORATION |

"PLAN YEAR" "BRANCH": "SECTION" "M AND R ACTIVITY" "EST. COST"

RUNWAY LENGTHS DEPICTED IN THIS DRAWING ARE FOR PAVEMENT MANAGEMENT PURPOSES ONLY AND MAY NOT MATCH PUBLISHED RUNWAY LENGTHS.



|  | DENTIFIER    |
|--|--------------|
| 10-YEAR M&R MAP  | F AF         |
| NORTH PALM BEACH COUNTY G.A.                           | F43          |
| PALM BEACH COUNTY, FLORIDA                             | FDOT DISTRIC |
|  | Λ            |
| FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE | - <b>+</b>   |

# **APPENDIX H**

PHOTOGRAPHS



Runway 13-31, Section 6205, Sample Unit 186 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Runway 13-31, Section 6205, Sample Unit 120 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Runway 13-31, Section 6205, Sample Unit 105– Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Runway 8R-26L, Section 6105, Sample Unit 101 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



Runway 8R-26L, Section 6105, Sample Unit 128 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



Apron Run-Up, Section 5110, Sample Unit 101– Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (50) Patching



Taxiway Oscar, Section 1505, Sample Unit 400 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



Taxiway Kilo, Section 1105, Sample Unit 110 - Low severity (52) Weathering and Raveling



T-Hangar Apron E, Section 4420, Sample Unit 706 - Low severity (52) Weathering and Raveling, low severity (50) Patching



Taxiway Foxtrot, Section 605, Sample Unit 142 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling



North Apron, Section 4115, Sample Unit 751 - low severity (63) Longitudinal, Transverse and Diagonal Cracking



North Apron, Section 4105, Sample Unit 704 – Low severity (48) Longitudinal and Transverse Cracking, low and medium severity (52) Weathering and Raveling



North Apron, Section 4120, Sample Unit 206 – Low severity (48) Longitudinal and Transverse Cracking, low severity (52) Weathering and Raveling, low severity (56) Swelling



T-Hangar Apron N, Section 4305, Sample Unit 801 - Low severity (52) Weathering and Raveling

# APPENDIX I

PCI RE-INSPECTION REPORT

| Network: F45 Name: NORTH PALM BEACH   | COUNTY GENI               | ERAL AVIATION  |  |                       |
|---|---------------------------|--|--|-----------------------|
| Branch: AP N Name: NORTH APRON  |                           | Use: APR   | ON Area:   | 842,861.35SqFt        |
| Section:4105of4From: -Surface:ACFamily:FDOT-RL-AP-ACArea:657,595.93SqFtLength:1,400.00FtShoulder:Street Type:Grade:0.00Section Comments:              | Zo<br>W<br>Lanes: 0       | To: -<br>catego<br>7idth: 450.00Ft                         | ry: Rank: P  | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012 Total Samples: 132 Sur<br>Conditions: PCI:75.00  <br>Inspection Comments:  | rveyed: 10                |  |  |                       |
| Sample Number: 117 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING<br>52 WEATHERING/RAVELING             | Area:<br>L<br>M<br>L      | 5,000.00SqFt<br>35.01 E<br>23.00 S<br>1,749.99 S           | PCI = 73<br>Ft Comment<br>SqFt Comment<br>SqFt Comment                 | .s:<br>.s:            |
| Sample Number: 204 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING                                       | Area:<br>L                | 5,000.00SqFt<br>75.02 E<br>1,999.98 S                      | PCI = 76<br>Ft Comment<br>SqFt Comment                                 | .s:<br>.s:            |
| Sample Number: 208 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING                                       | Area:<br>L<br>L           | 5,000.00SqFt<br>57.01 F<br>1,999.98 S                      | PCI = 76<br>Ft Comment<br>SqFt Comment                                 | .s:<br>.s:            |
| Sample Number: 403 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING                                       | Area:<br>L<br>L           | 5,000.00SqFt<br>36.01 E<br>2,499.98 S                      | PCI = 75<br>Ft Comment<br>SqFt Comment                                 | .s:                   |
| Sample Number: 406 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING<br>45 DEPRESSION                      | Area:<br>L<br>L<br>L      | 5,000.00SqFt<br>46.01 F<br>1,499.99 S<br>36.00 S           | PCI = 74<br>Ft Comment<br>SqFt Comment<br>SqFt Comment                 | .s:<br>.s:            |
| Sample Number: 516 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING<br>49 OIL SPILLAGE<br>49 OIL SPILLAGE | Area:<br>L<br>L<br>N<br>N | 5,000.00SqFt<br>181.05 F<br>1,999.98 S<br>4.00 S<br>1.00 S | PCI = 74<br>Ft Comment<br>SqFt Comment<br>SqFt Comment<br>SqFt Comment | .s:<br>.s:<br>.s:     |
| Sample Number: 609 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING<br>49 OIL SPILLAGE                    | Area:<br>L<br>L<br>N      | 5,000.00SqFt<br>62.02 F<br>500.00 S<br>12.00 S             | PCI = 82<br>Ft Comment<br>SqFt Comment<br>SqFt Comment                 | .s:<br>.s:            |
| Sample Number: 702 Type: R<br>Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING                                       | Area:<br>L                | 5,000.00SqFt<br>211.05 F<br>1,999.98 S                     | PCI = 76<br>Ft Comment<br>SqFt Comment                                 | .s:<br>.s:            |

| Sample Number: 704 Type: R          | Area: | 5,000.00SqFt  | PCI = 67    |
|-------------------------------------|-------|---------------|-------------|
| 48 LONGITUDINAL/TRANSVERSE CRACKING | L     | 330.08 Ft     | Comments:   |
| 52 WEATHERING/RAVELING              | М     | 92.00 SqFt    | Comments:   |
| 52 WEATHERING/RAVELING              | L     | 3,499.97 SqFt | Comments:   |
| Sample Number: 811 Type: P          | Area: | 5 800 00SaEt  | PCI – 71    |
| Sample Comments:                    | mea.  | 5,800.005q11  | 1 C I - 7 I |
| 48 LONGITUDINAL/TRANSVERSE CRACKING | L     | 50.01 Ft      | Comments:   |
| 48 LONGITUDINAL/TRANSVERSE CRACKING | L     | 266.07 Ft     | Comments:   |
| 52 WEATHERING/RAVELING              | L     | 4,639.96 SqFt | Comments:   |

| Network: F45  | Name: NORTH PALM BEAG   | CH COUNTY GENERAL              | AVIATION                               |                                  |                       |
|---|---|--------------------------------|--|----------------------------------|-----------------------|
| Branch: AP N  | Name: NORTH APRON   |                                | Use: APRON                             | Area: 8                          | 342,861.35SqFt        |
| Section: 4110<br>Surface: PCC<br>Area: 4,320.0056<br>Shoulder: Str<br>Section Comments: | of 4 From: -<br>Family: FDOT-RL-PCC<br><sub>I</sub> Ft Length: 80.00<br>eet Type: Grade: 0.00 | Zone:<br>Ft Width:<br>Lanes: 0 | To: -<br>Category:<br>50.00Ft          | Rank: P                          | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2<br>Conditions: PCI:97.0<br>Inspection Comments:                   | 2012 Total Samples: 1<br>20   | Surveyed: 1                    |  |                                  |                       |
| Sample Number: 9<br>Sample Comments:<br>74 JOINT SPAL<br>66 SMALL PATC                  | 9 Type: R<br>LING<br>H  | Area:<br>L<br>L                | 24.00Slabs<br>2.00 Slabs<br>1.00 Slabs | PCI = 97<br>Comments<br>Comments | :                     |

| Network: F45  | Name: NORTH PALM BEAC   | H COUNTY GENERAL                          | AVIATION                      |          |                       |
|---|---|---|-------------------------------|----------|-----------------------|
| Branch: AP N  | Name: NORTH APRON   |   | Use: APRON                    | Area:    | 842,861.35SqFt        |
| Section: 4115<br>Surface: PCC<br>Area: 8,250.00SqFt<br>Shoulder: Stree<br>Section Comments: | of 4 From: -<br>Family: FDOT-RL-PCC<br>Length: 135.00F<br>t Type: Grade: 0.00 | Zone:<br><sup>5t</sup> Width:<br>Lanes: 0 | To: -<br>Category:<br>60.00Ft | Rank: P  | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/201<br>Conditions: PCI:88.00<br>Inspection Comments:                    | 2 Total Samples: 2 S  | Surveyed: 1                               |                               |          |                       |
| Sample Number: 751<br>Sample Comments:  | Туре: к   | Area:                                     | 20.00Slabs                    | PCI = 88 |                       |
| 63 LINEAR CRACE   | KING  | L   | 2.00 Slabs                    | Comments | 3:                    |
| 74 JOINT SPALL  | ING   | $\mathbf{L}$                              | 1.00 Slabs                    | Comments | 3:                    |
| 73 SHRINKAGE CH   | RACKING   | Ν   | 1.00 Slabs                    | Comments | 3:                    |

| Network: F45 Name: NORTH PALM BEACH  | COUNTY G  | ENEI           | RAL AVIATION                  |             |           |                       |
|--|-----------|----------------|-------------------------------|-------------|-----------|-----------------------|
| Branch: AP N Name: NORTH APRON   |           |                | Use: AP                       | RON         | Area: 842 | ,861.35SqFt           |
| Section:4120of4From: -Surface:ACFamily:FDOT-RL-AP-ACArea:172,695.42SqFtLength:800.00FtShoulder:Street Type:Grade:0.00Section Comments:Grade:0.00 | Lanes:    | Zon<br>Wi<br>0 | To: -<br>Categ<br>dth: 180.00 | gory:<br>Ft | Rank: P   | Last Const.: 1/1/1996 |
| Last Insp. Date4/23/2012 Total Samples: 36 Sur<br>Conditions: PCI:73.00  <br>Inspection Comments:  | rveyed: 4 |                |                               |             |           |                       |
| Sample Number: 104 Type: R   | Area:     |                | 5,000.00SqFt                  |             | PCI = 69  |                       |
| 48 LONGTTUDINAL/TRANSVERSE CRACKING  |           | т.             | 179.05                        | Ft          | Comments: |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | L              | 80.02                         | Ft          | Comments: |                       |
| 52 WEATHERING/RAVELING   |           | L              | 4,999.96                      | SqFt        | Comments: |                       |
| Sample Number: 206 Type: R<br>Sample Comments:   | Area:     |                | 5,000.00SqFt                  |             | PCI = 68  |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | L              | 266.07                        | Ft          | Comments: |                       |
| 52 WEATHERING/RAVELING   |           | L              | 3,499.97                      | SqFt        | Comments: |                       |
| 56 SWELLING  |           | L              | 46.00                         | SqFt        | Comments: |                       |
| 56 SWELLING  |           | L              | 14.00                         | SqFt        | Comments: |                       |
| Sample Number: 302 Type: R<br>Sample Comments:   | Area:     |                | 5,000.00SqFt                  |             | PCI = 79  |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | L              | 99.03                         | Ft          | Comments: |                       |
| 52 WEATHERING/RAVELING   |           | L              | 1,499.99                      | SqFt        | Comments: |                       |
| Sample Number: 501 Type: R<br>Sample Comments:   | Area:     |                | 5,000.00SqFt                  |             | PCI = 75  |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | L              | 15.00                         | Ft          | Comments: |                       |
| 52 WEATHERING/RAVELING   |           | L              | 999.99                        | SqFt        | Comments: |                       |
| 49 OIL SPILLAGE  |           | Ν              | 12.00                         | SqFt        | Comments: |                       |
| 52 WEATHERING/RAVELING   |           | М              | 12.00                         | SqFt        | Comments: |                       |
| 49 OIL SPILLAGE  |           | Ν              | 20.00                         | SqFt        | Comments: |                       |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                                  |  |                         |  |                      |                       |  |  |  |
|--|--|-------------------------|--|----------------------|-----------------------|--|--|--|
| Branch: AP RU  | Name: APRON RUN-UP   |                         | Use: APRON                             | Area:                | 54,553.00SqFt         |  |  |  |
| Section: 5105<br>Surface: AC<br>Area: 27,416.50SqFt<br>Shoulder: Street<br>Section Comments: | of 2 From: -<br>Family: FDOT-RL-AP-AC<br>Length: 250.00Ft<br>Type: Grade: 0.00 | Zone<br>Wid<br>Lanes: 0 | To: -<br>e: Category:<br>dth: 100.00Ft | Rank: P              | Last Const.: 1/1/1994 |  |  |  |
| Last Insp. Date4/23/2012<br>Conditions: PCI:79.00  <br>Inspection Comments:                  | Total Samples: 5 Sur   | veyed: 1                |  |                      |                       |  |  |  |
| Sample Number: 100<br>Sample Comments:   | Type: R  | Area:                   | 5,600.00SqFt                           | PCI = 79             |                       |  |  |  |
| 48 LONGITUDINAL,<br>52 WEATHERING/RA   | TRANSVERSE CRACKING  | L<br>L                  | 211.05 Ft<br>1,679.99 SqFt             | Comments<br>Comments | :                     |  |  |  |

| Network: F45   | Name: NORTH PALM BEACH | COUNTY GENERAL | AVIATION      |          |               |  |  |
|--|------------------------|----------------|---------------|----------|---------------|--|--|
| Branch: AP RU  | Name: APRON RUN-UP     |                | Use: APRON    | Area:    | 54,553.00SqFt |  |  |
| Section:       5110       of       2       From: -       To: -       Last Const.:         Surface:       AC       Family:       FDOT-RL-AP-AC       Zone:       Category:       Rank: P         Area:       27,136.50SqFt       Length:       250.00Ft       Width:       100.00Ft         Shoulder:       Street Type:       Grade:       0.00       Lanes:       0         Section Comments:       Comments:       Category:       Area:       0 |                        |                |               |          |               |  |  |
| Last Insp. Date4/23/2012<br>Conditions: PCI:73.00  <br>Inspection Comments:  | Total Samples: 5 Su    | irveyed: 1     |               |          |               |  |  |
| Sample Number: 101   | Type: R                | Area: 5,60     | 0.00SqFt      | PCI = 73 |               |  |  |
| 48 LONGITUDINAL  | TRANSVERSE CRACKING    | L              | 150.04 Ft     | Comments | :             |  |  |
| 52 WEATHERING/RA   | AVELING                | L 2            | 2,799.98 SqFt | Comments | :             |  |  |
| 50 PATCHING  |                        | L              | 8.00 SqFt     | Comments | :             |  |  |
| 50 PATCHING  |                        | L              | 5.00 SqFt     | Comments | :             |  |  |

| Network: F45 Name: NORTH PALM BEACH C  | COUNTY GE | ENERAL AVI           | ATION                   |                      |          |                       |
|--|-----------|----------------------|-------------------------|----------------------|----------|-----------------------|
| Branch: AP T-HANG Name: T-HANGAR APRON   |           |                      | Use: AI                 | PRON                 | Area:    | 87,822.76SqFt         |
| Section:4205of1From: -Surface:ACFamily:FDOT-RL-AP-ACArea:87,822.76SqFtLength:4,000.00FtShoulder:Street Type:Grade:0.00Section Comments:Section Comments:Grade:0.00 | Lanes:    | Zone:<br>Width:<br>0 | To: -<br>Cate;<br>20.00 | g <b>ory:</b><br>)Ft | Rank: P  | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012 Total Samples: 21 Sur<br>Conditions: PCI:76.00  <br>Inspection Comments:  | veyed: 3  |                      |                         |                      |          |                       |
| Sample Number: 101 Type: R   | Area:     | 4,725.0              | )SqFt                   |                      | PCI = 71 |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | L                    | 57.01                   | Ft                   | Comments | :                     |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  | 1         | М                    | 41.01                   | Ft                   | Comments | :                     |
| 52 WEATHERING/RAVELING   |           | L 1,8                | 389.98                  | SqFt                 | Comments | :                     |
| Sample Number: 302 Type: R<br>Sample Comments:   | Area:     | 2,000.0              | )SqFt                   |                      | PCI = 77 |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | L                    | 15.00                   | Ft                   | Comments | :                     |
| 52 WEATHERING/RAVELING   |           | L ,                  | 799.99                  | SqFt                 | Comments | :                     |
| Sample Number: 405 Type: R<br>Sample Comments:   | Area:     | 3,500.0              | )SqFt                   |                      | PCI = 80 |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |           | г :                  | L46.04                  | Ft                   | Comments | :                     |
| 49 OIL SPILLAGE  |           | N                    | 2.00                    | SqFt                 | Comments | :                     |
| 52 WEATHERING/RAVELING   |           | Г ;                  | 525.00                  | SqFt                 | Comments | :                     |

| Network:  | Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION   |  |                    |                      |   |  |                       |
|---|---|--|--------------------|----------------------|---|--|-----------------------|
| Branch:   | AP T-HANGE  | Name: APRON T-HANGAR F   | 2                  |                      | Use: APRON                                  | Area:  | 85,089.66SqFt         |
| Section:<br>Surface:<br>Area:<br>Shoulder:<br>Section Con | 4415<br>AC<br>7,891.73SqFt<br>Street Tynnents:                | of 2 From: -<br>Family: FDOT-GA-AP-AC<br>Length: 200.00F<br>ype: Grade: 0.00 | Z<br>t<br>Lanes: ( | Zone:<br>Width:<br>) | To: -<br>Category:<br>35.00Ft               | Rank: P                                      | Last Const.: 1/1/1996 |
| Last Insp.<br>Condition<br>Inspection C                   | . Date4/23/2012<br>as: PCI:83.00  <br>Comments:               | Total Samples: 2 S   | Surveyed: 1        |                      |   |  |                       |
| Sample N<br>Sample Con<br>48 LONO<br>50 PATO<br>52 WEAT   | lumber: 200<br>nments:<br>GITUDINAL/J<br>CHING<br>THERING/RAN | Type: r<br>TRANSVERSE CRACKING<br>VELING                                     | Area:              | 3,923.34S            | qFt<br>13.00 Ft<br>10.00 SqF1<br>92.00 SqF1 | PCI = 83<br>Comments<br>Comments<br>Comments | ::                    |

| Network: F45 Name: NORTH PALM BEACH  | I COUNTY GEN        | ERAL AVIATION                        |                     |                                  |                       |
|--|---------------------|--------------------------------------|---------------------|----------------------------------|-----------------------|
| Branch: AP T-HANGE Name: APRON T-HANGAR E  |                     | Use: AP                              | RON                 | Area:                            | 85,089.66SqFt         |
| Section:4420of2From: -Surface:ACFamily:FDOT-GA-AP-ACArea:77,197.93SqFtLength:2,400.00FtShoulder:Street Type:Grade:0.00Section Comments:Section Comments:Grade:0.00 | Zo<br>W<br>Lanes: 0 | To: -<br>one: Categ<br>Vidth: 30.001 | g <b>ory:</b><br>Ft | Rank: P                          | Last Const.: 1/1/1996 |
| Last Insp. Date4/23/2012 Total Samples: 29 S<br>Conditions: PCI:85.00  <br>Inspection Comments:  | urveyed: 5          |                                      |                     |                                  |                       |
| Sample Number: 102 Type: R   | Area:               | 2,000.00SqFt                         |                     | PCI = 87                         |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  | L<br>L              | 48.01<br>100.00                      | Ft<br>SqFt          | Comments<br>Comments             | :                     |
| Sample Number: 202 Type: R<br>Sample Comments:   | Area:               | 3,500.00SqFt                         |                     | PCI = 87                         |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  | L<br>L              | 8.00<br>350.00                       | Ft<br>SqFt          | Comments<br>Comments             | :                     |
| Sample Number: 204 Type: R   | Area:               | 3,500.00SqFt                         |                     | PCI = 85                         |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  | L<br>L              | 78.02<br>350.00                      | Ft<br>SqFt          | Comments<br>Comments             | :                     |
| Sample Number: 602 Type: R<br>Sample Comments:   | Area:               | 2,000.00SqFt                         |                     | PCI = 78                         |                       |
| <pre>48 LONGITUDINAL/TRANSVERSE CRACKING<br/>52 WEATHERING/RAVELING<br/>49 OIL SPILLAGE</pre>  | L<br>L<br>N         | 98.03<br>200.00<br>2.00              | Ft<br>SqFt<br>SqFt  | Comments<br>Comments<br>Comments | :<br>:<br>:           |
| Sample Number: 706 Type: R   | Area:               | 2,000.00SqFt                         |                     | PCI = 85                         |                       |
| 50 PATCHING  | L                   | 43.00                                | SqFt                | Comments                         | :                     |
| 50 PATCHING<br>52 WEATHERING/RAVELING  | L<br>L              | 63.00<br>200.00                      | SqFt<br>SqFt        | Comments<br>Comments             | :                     |

| Network: F45   | Name: NORTH PALM BEACH  | COUNTY GENE         | ERAL AVIATION                     |              |                        |                       |
|--|---|---------------------|-----------------------------------|--------------|------------------------|-----------------------|
| Branch: AP T-HANGN   | Name: APRON T-HANGAR N  |                     | Use: AF                           | RON          | Area: 167,9            | 941.91SqFt            |
| Section: 4305<br>Surface: AC<br>Area: 138,701.02SqFt<br>Shoulder: Street Ty<br>Section Comments: | of 3 From: -<br>Family: FDOT-GA-AP-AC<br>Length: 3,800.00Ft<br>7pe: Grade: 0.00 | Zo<br>W<br>Lanes: 0 | To: -<br>ne: Categ<br>idth: 35.00 | gory:<br>Ft  | Rank: P                | Last Const.: 1/1/2004 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:89.00  <br>Inspection Comments:                      | Total Samples: 43 Sur   | veyed: 5            |                                   |              |                        |                       |
| Sample Number: 201   | Туре: к   | Area:               | 3,500.00SqFt                      |              | PCI = 86               |                       |
| 48 LONGITUDINAL/T<br>52 WEATHERING/RAV   | RANSVERSE CRACKING<br>ELING   | L<br>L              | 15.00<br>400.00                   | Ft<br>SqFt   | Comments:<br>Comments: |                       |
| Sample Number: 205   | Туре: к   | Area:               | 3,500.00SqFt                      |              | PCI = 88               |                       |
| 48 LONGITUDINAL/T<br>52 WEATHERING/RAV   | RANSVERSE CRACKING<br>ELING   | L<br>L              | 61.02<br>200.00                   | Ft<br>SqFt   | Comments:<br>Comments: |                       |
| Sample Number: 501   | Туре: к   | Area:               | 2,000.00SqFt                      |              | PCI = 91               |                       |
| 49 OIL SPILLAGE<br>52 WEATHERING/RAV   | ELING   | N<br>L              | 2.00<br>100.00                    | SqFt<br>SqFt | Comments:<br>Comments: |                       |
| Sample Number: 703   | Туре: к   | Area:               | 2,000.00SqFt                      |              | PCI = 93               |                       |
| 52 WEATHERING/RAV  | ELING   | L                   | 100.00                            | SqFt         | Comments:              |                       |
| Sample Number: 801<br>Sample Comments:   | Туре: к   | Area:               | 2,000.00SqFt                      |              | PCI = 89               |                       |
| 52 WEATHERING/RAV  | ELING   | $\mathbf{L}$        | 40.00                             | SqFt         | Comments:              |                       |
| 52 WEATHERING/RAV  | ELING   | L                   | 100.00                            | SqFt         | Comments:              |                       |
| 48 LONGITUDINAL/T  | RANSVERSE CRACKING  | $\mathbf{L}$        | 2.00                              | Ft           | Comments:              |                       |

| Network: F45  | Name:  | NORTH PALM BEACH O   | COUNTY GEN         | ERAL AVIATIO              | DN                            |                                  |                       |
|---|--|--|--------------------|---------------------------|-------------------------------|----------------------------------|-----------------------|
| Branch: AP 7  | г-наngn Name:                                      | APRON T-HANGAR N   |                    | Us                        | e: APRON                      | Area:                            | 167,941.91SqFt        |
| Section: 4310<br>Surface: AC<br>Area: 19,85:<br>Shoulder:<br>Section Comments | ) of 3<br>Fami<br>5.38SqFt L<br>Street Type:<br>s: | From: -<br>ly: FDOT-GA-AP-AC<br>ength: 520.00Ft<br>Grade: 0.00 | Z<br>V<br>Lanes: 0 | one:<br>Vidth:            | Го: -<br>Category:<br>35.00Ft | Rank: P                          | Last Const.: 1/1/2004 |
| Last Insp. Date<br>Conditions: PC<br>Inspection Comme                         | 24/23/2012 Total S<br>CI:92.00  <br>ents:          | Samples: 5 Sur   | veyed: 1           |                           |                               |                                  |                       |
| Sample Number<br>Sample Comments<br>52 WEATHER<br>52 WEATHER                  | er: 302 Ty<br>s:<br>ING/RAVELING<br>ING/RAVELING   | ype: R   | Area:<br>L         | 3,500.00SqF<br>136<br>100 | .00 SqFt<br>.00 SqFt          | PCI = 92<br>Comments<br>Comments | s :<br>s :            |

FDOT\_COMB Report Generated Date: 5/7/2012 Site Name:

| Network:  | F45  | Name: NORTH PALM BEAC   | H COUNTY GENERAL A             | VIATION                       |         |                       |
|---|--|---|--------------------------------|-------------------------------|---------|-----------------------|
| Branch:   | AP T-HANGN   | Name: APRON T-HANGAR  | N                              | Use: APRON                    | Area:   | 167,941.91SqFt        |
| Section:<br>Surface:<br>Area:<br>Shoulder:<br>Section Com | 4315<br>AC<br>9,385.51SqFt<br>Street T<br>ments:     | of 3 From: -<br>Family: FDOT-GA-AP-AC<br>Length: 200.00F<br>Yppe: Grade: 0.00 | Zone:<br>St Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P | Last Const.: 1/1/2010 |
| Last Insp.<br>Condition<br>Inspection C                   | Date1/1/2010<br>s: PCI:100.00  <br>Comments: Constru | Total Samples: 0 S  | Surveyed: 0<br>1.              |                               |         |                       |
| Sample N  | umber:   | Туре:   | Area: 0                        | 0.00                          |         |                       |

<NO SAMPLE RECORDS>

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION  |        |                 |                             |                    |                               |                       |
|--|--------|-----------------|-----------------------------|--------------------|-------------------------------|-----------------------|
| Branch: RW 13-31 Name: RUNWAY 13-31  |        |                 | Use: RI                     | JNWAY              | Area:                         | 329,837.55SqFt        |
| Section:6205of1From: -Surface:ACFamily:FDOT-RL-RW-ACArea:329,837.55SqFtLength:4,366.00FtShoulder:Street Type:Grade:0.00Section Comments:Grade:0.00             | Lanes: | Zone:<br>Width: | To: -<br>Categ<br>75.00     | gory:<br>)Ft       | Rank: s                       | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012 Total Samples: 88 Sur<br>Conditions: PCI:73.00  <br>Inspection Comments:  | veyed: | 18              |                             |                    |                               |                       |
| Sample Number: 102 Type: R   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 76                      |                       |
| <ul> <li>Sample Comments:</li> <li>48 LONGITUDINAL/TRANSVERSE CRACKING</li> <li>48 LONGITUDINAL/TRANSVERSE CRACKING</li> <li>52 WEATHERING/RAVELING</li> </ul> |        | L<br>L<br>L 1   | 150.04<br>44.01<br>,649.99  | Ft<br>Ft<br>SqFt   | Comment<br>Comment<br>Comment | 25:<br>25:<br>25:     |
| Sample Number: 105 Type: R   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 73                      |                       |
| Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING<br>52 WEATHERING/RAVELING  |        | L<br>L 2<br>L   | 234.06<br>2,249.98<br>88.00 | Ft<br>SqFt<br>SqFt | Comment<br>Comment<br>Comment | 25:<br>25:<br>25:     |
| Sample Number: 109 Type: R   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 75                      |                       |
| Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |        | L<br>L 1        | 177.05<br>,874.98           | Ft<br>SqFt         | Comment<br>Comment            | 25:<br>25:            |
| Sample Number: 115 Type: R   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 75                      |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |        | L<br>L 1        | 238.06<br>,874.98           | Ft<br>SqFt         | Comment<br>Comment            | cs:<br>cs:            |
| Sample Number: 120 Type: R   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 74                      |                       |
| 52 WEATHERING/RAVELING   |        | L               | 300.00                      | SqFt               | Comment                       | cs:                   |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |        | L               | 220.06                      | Ft                 | Comment                       | s:                    |
| 52 WEATHERING/RAVELING   |        | L 1             | ,874.98                     | SqFt               | Comment                       | :                     |
| Sample Number: 122 Type: R<br>Sample Comments:   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 75                      |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |        | L               | 188.05                      | Ft                 | Comment                       | cs:                   |
| 52 WEATHERING/RAVELING   |        | ь 1             | ,874.98                     | SqFt               | Comment                       | ::                    |
| Sample Number: 125 Type: R<br>Sample Comments:   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 73                      |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |        | L               | 207.05                      | Ft                 | Comment                       | cs:                   |
| 52 WEATHERING/RAVELING   |        | г 2             | 2,249.98                    | SqFt               | Comment                       | cs:                   |
| Sample Number: 132 Type: R<br>Sample Comments:   | Area:  | 3,75            | 0.00SqFt                    |                    | PCI = 73                      |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |        | L               | 197.05                      | Ft                 | Comment                       | s:                    |
| 52 WEATHERING/RAVELING   |        | L 2             | 2,249.98                    | SqFt               | Comment                       | cs:                   |

| Sample Number: 137 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 75  |  |
|--|-------|----|--------------|------|-----------|--|
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 183.05       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 1,874.98     | SqFt | Comments: |  |
| Sample Number: 143 Type: R                     | Area: |    | 3,750.00SqFt |      | PCI = 75  |  |
| 48 LONGTTUDINAL/TRANSVERSE CRACKING            |       | т. | 203 05       | Ft-  | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 1,874.98     | SqFt | Comments: |  |
| Sample Number: 149 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 75  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 160.04       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 1,874.98     | SqFt | Comments: |  |
| Sample Number: 155 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 73  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 193.05       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 2,249.98     | SqFt | Comments: |  |
| Sample Number: 158 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 75  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 176.05       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 1,874.98     | SqFt | Comments: |  |
| Sample Number: 161 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 73  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 205.05       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 2,249.98     | SqFt | Comments: |  |
| Sample Number: 167 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 72  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 251.06       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 2,624.98     | SqFt | Comments: |  |
| Sample Number: 173 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 72  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 320.08       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 2,624.98     | SqFt | Comments: |  |
| Sample Number: 179 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 72  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 314.08       | Ft   | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 2,624.98     | SqFt | Comments: |  |
| Sample Number: 186 Type: R<br>Sample Comments: | Area: |    | 3,750.00SqFt |      | PCI = 68  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L  | 301.08       | Ft   | Comments: |  |
| 50 PATCHING                                    |       | L  | 225.00       | SqFt | Comments: |  |
| 52 WEATHERING/RAVELING                         |       | L  | 2,249.98     | SqFt | Comments: |  |

| Network: F45 Name: NORTH PALM BEACH  | Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION |                    |                                      |                          |  |                       |  |
|--|---|--------------------|--------------------------------------|--------------------------|--|-----------------------|--|
| Branch: RW 8R-26L Name: RUNWAY 8R-26L  |   |                    | Use: RU                              | NWAY                     | Area:                                    | 422,070.39SqFt        |  |
| Section:6105of1From: -Surface:ACFamily:FDOT-RL-RW-ACArea:422,070.39SqFtLength:4,220.00FtShoulder:Street Type:Grade:0.00Section Comments:Grade:0.00 | Lanes   | Zone<br>Wic<br>: 0 | To: -<br>Categ<br>Ith: 100.00        | gory:<br>Ft              | Rank: P                                  | Last Const.: 1/1/1994 |  |
| Last Insp. Date4/23/2012 Total Samples: 85 Su<br>Conditions: PCI:75.00  <br>Inspection Comments:   | rveyed:   | 17                 |                                      |                          |  |                       |  |
| Sample Number: 101 Type: R   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 72                                 |                       |  |
| Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING<br>52 WEATHERING/RAVELING |   | L<br>L<br>M<br>L   | 150.04<br>78.02<br>50.00<br>1,899.98 | Ft<br>Ft<br>SqFt<br>SqFt | Comment<br>Comment<br>Comment<br>Comment | s:<br>s:<br>s:        |  |
| Sample Number: 104 Type: R   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 76                                 |                       |  |
| Sample Comments:<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |   | L<br>L             | 350.09<br>1,249.99                   | Ft<br>SqFt               | Comment<br>Comment                       | s:<br>s:              |  |
| Sample Number: 107 Type: R   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 76                                 |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |   | L<br>L             | 348.09<br>1,499.99                   | Ft<br>SqFt               | Comment<br>Comment                       | s:<br>s:              |  |
| Sample Number: 111 Type: R<br>Sample Comments:   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 71                                 |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING        |   | L<br>L<br>M<br>L   | 250.06<br>85.02<br>11.00<br>1,999.98 | Ft<br>Ft<br>Ft<br>SqFt   | Comment<br>Comment<br>Comment<br>Comment | s:<br>s:<br>s:        |  |
| Sample Number: 116 Type: R   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 76                                 |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |   | L<br>L             | 350.09<br>1,999.98                   | Ft<br>SqFt               | Comment<br>Comment                       | s:<br>s:              |  |
| Sample Number: 122 Type: R<br>Sample Comments:   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 74                                 |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING   |   | L<br>M<br>L        | 281.07<br>50.01<br>1,249.99          | Ft<br>Ft<br>SqFt         | Comment<br>Comment<br>Comment            | s:<br>s:<br>s:        |  |
| Sample Number: 128 Type: R   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 76                                 |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |   | L<br>L             | 350.09<br>1,999.98                   | Ft<br>SqFt               | Comment<br>Comment                       | s:<br>s:              |  |
| Sample Number: 134 Type: R   | Area:   |                    | 5,000.00SqFt                         |                          | PCI = 73                                 |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |   | L<br>L             | 320.08<br>2,999.98                   | Ft<br>SqFt               | Comment<br>Comment                       | s:<br>s:              |  |

| Sample Number: 140 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 75    |
|--|-------|---|--------------|-------------|
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 343.09 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 2,499.98 SqF | t Comments: |
| Sample Number: 144 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 73    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 318.08 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 2,999.98 SqF | t Comments: |
| Sample Number: 156 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 75    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 240.06 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 2,499.98 SqF | t Comments: |
| Sample Number: 162 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 75    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 158.04 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 2,499.98 SqF | t Comments: |
| Sample Number: 168 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 76    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 166.04 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 1,999.98 SqF | t Comments: |
| Sample Number: 174 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 73    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 209.05 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 2,999.98 SqF | t Comments: |
| Sample Number: 177 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 75    |
| 52 WEATHERING/RAVELING                         |       | L | 2,499.98 SqF | t Comments: |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 139.04 Ft    | Comments:   |
| Sample Number: 180 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 75    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 96.02 Ft     | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 2,499.98 SqF | t Comments: |
| Sample Number: 184 Type: R<br>Sample Comments: | Area: |   | 5,000.00SqFt | PCI = 76    |
| 48 LONGITUDINAL/TRANSVERSE CRACKING            |       | L | 110.03 Ft    | Comments:   |
| 52 WEATHERING/RAVELING                         |       | L | 1,999.98 SqF | t Comments: |

| Jetwork: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION  |            |              |           |                       |  |  |  |
|--|------------|--------------|-----------|-----------------------|--|--|--|
| Branch: TW C Name: TAXIWAY C   |            | Use: TAXIWAY | Area: 4   | 14,336.97SqFt         |  |  |  |
| Section: 305 of 1 From: -  |            | To: -        |           | Last Const.: 1/1/2004 |  |  |  |
| Surface: AC Family: FDOT-GA-TW-AC  | Zone:      | Category:    | Rank: P   |                       |  |  |  |
| Area: 44,336.97SqFt Length: 1,110.00Ft   | Width:     | 35.00Ft      |           |                       |  |  |  |
| Shoulder: Street Type: Grade: 0.00 L<br>Section Comments:  | anes: 0    |              |           |                       |  |  |  |
| Last Insp. Date4/23/2012 Total Samples: 12 Survey<br>Conditions: PCI:88.00  <br>Inspection Comments: | ed: 2      |              |           |                       |  |  |  |
| Sample Number: 102 Type: R A<br>Sample Comments:   | Area: 3,50 | 00.00SqFt    | PCI = 87  |                       |  |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  | L          | 3.00 Ft      | Comments: |                       |  |  |  |
| 52 WEATHERING/RAVELING   | L          | 400.00 SqFt  | Comments: |                       |  |  |  |
| Sample Number: 105 Type: R A<br>Sample Comments:   | area: 3,50 | 00.00SqFt    | PCI = 88  |                       |  |  |  |
| 52 WEATHERING/RAVELING   | L          | 500.00 SqFt  | Comments: |                       |  |  |  |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                                 |  |                             |                               |                      |                       |  |  |
|---|--|-----------------------------|-------------------------------|----------------------|-----------------------|--|--|
| Branch: TW D  | Name: TAXIWAY D  |                             | Use: TAXIWAY                  | Area:                | 36,167.52SqFt         |  |  |
| Section: 405<br>Surface: AC<br>Area: 14,861.44SqFt<br>Shoulder: Street<br>Section Comments: | of 2 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 280.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P              | Last Const.: 1/1/1994 |  |  |
| Last Insp. Date4/23/2012<br>Conditions: PCI:80.00  <br>Inspection Comments:                 | Total Samples: 3 Sur   | veyed: 1                    |                               |                      |                       |  |  |
| Sample Number: 300<br>Sample Comments:  | Type: R  | Area: 5,87                  | 3.57SqFt                      | PCI = 80             |                       |  |  |
| 48 LONGITUDINAL,<br>52 WEATHERING/RA  | /TRANSVERSE CRACKING<br>AVELING  | L<br>L 1                    | 209.05 Ft<br>.,467.99 SqFt    | Comments<br>Comments | :                     |  |  |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                                   |  |                             |                               |          |                       |  |
|---|--|-----------------------------|-------------------------------|----------|-----------------------|--|
| Branch: TW D  | Name: TAXIWAY D  |                             | Use: TAXIWAY                  | Area:    | 36,167.52SqFt         |  |
| Section: 410<br>Surface: AC<br>Area: 21,306.08SqFt<br>Shoulder: Street T<br>Section Comments: | of 2 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 600.00Ft<br>Yype: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P  | Last Const.: 1/1/1996 |  |
| Last Insp. Date4/23/2012<br>Conditions: PCI:81.00  <br>Inspection Comments:                   | Total Samples: 6 Sur   | veyed: 1                    |                               |          |                       |  |
| Sample Number: 103<br>Sample Comments:<br>52 WEATHERING/RA                                    | Type: R<br>VELING  | Area: 3,500.0<br>L 1,       | 0SqFt<br>399.99 SqFt          | PCI = 81 |                       |  |

| Network: F45  | work: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                       |                            |                                  |                      |                       |  |  |
|---|--|----------------------------|----------------------------------|----------------------|-----------------------|--|--|
| Branch: TW E  | Name: TAXIWAY E  |                            | Use: TAXIWAY                     | Area:                | 17,142.68SqFt         |  |  |
| Section: 505<br>Surface: AC<br>Area: 17,142.68SqFt<br>Shoulder: Street<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 300.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width<br>Lanes: 0 | To: -<br>Category:<br>1: 35.00Ft | Rank: P              | Last Const.: 1/1/1994 |  |  |
| Last Insp. Date4/23/2012<br>Conditions: PCI:80.00  <br>Inspection Comments:                 | Total Samples: 5 Sur   | veyed: 1                   |                                  |                      |                       |  |  |
| Sample Number: 101<br>Sample Comments:  | Type: R  | Area: 3,                   | 500.00SqFt                       | PCI = 80             |                       |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING                               |  | L<br>L                     | 10.00 Ft<br>1,049.99 SqFt        | Comments<br>Comments | :                     |  |  |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION   |                     |  |            |                       |  |  |  |  |
|---|---------------------|--|------------|-----------------------|--|--|--|--|
| Branch: TWF Name: TAXIWAYF  |                     | Use: TAXIWA                              | Y Area: 19 | 94,986.82SqFt         |  |  |  |  |
| Section:605of3From: -Surface:ACFamily:FDOT-RL-TW-ACArea:166,311.03SqFtLength:4,600.00FtShoulder:Street Type:Grade:0.00Section Comments:Grade:0.00 | Zo<br>W<br>Lanes: 0 | To: -<br>ne: Category:<br>'idth: 35.00Ft | Rank: P    | Last Const.: 1/1/1994 |  |  |  |  |
| Last Insp. Date4/23/2012 Total Samples: 45 Sur<br>Conditions: PCI:80.00  <br>Inspection Comments:   | veyed: 5            |  |            |                       |  |  |  |  |
| Sample Number: 104 Type: R<br>Sample Comments:  | Area:               | 3,500.00SqFt                             | PCI = 80   |                       |  |  |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING   | L                   | 104.03 Ft                                | Comments:  |                       |  |  |  |  |
| 52 WEATHERING/RAVELING  | L                   | 799.99 SqFt                              | Comments:  |                       |  |  |  |  |
| Sample Number: 110 Type: R<br>Sample Comments:  | Area:               | 3,500.00SqFt                             | PCI = 80   |                       |  |  |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING   | L                   | 79.02 Ft                                 | Comments:  |                       |  |  |  |  |
| 52 WEATHERING/RAVELING  | L                   | 799.99 SqFt                              | Comments:  |                       |  |  |  |  |
| Sample Number: 118 Type: R<br>Sample Comments:  | Area:               | 3,500.00SqFt                             | PCI = 81   |                       |  |  |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING   | L                   | 34.01 Ft                                 | Comments:  |                       |  |  |  |  |
| 52 WEATHERING/RAVELING  | L                   | 699.99 SqFt                              | Comments:  |                       |  |  |  |  |
| Sample Number: 134 Type: R<br>Sample Comments:  | Area:               | 3,500.00SqFt                             | PCI = 79   |                       |  |  |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING   | $\mathbf{L}$        | 105.03 Ft                                | Comments:  |                       |  |  |  |  |
| 52 WEATHERING/RAVELING  | L                   | 1,049.99 SqFt                            | Comments:  |                       |  |  |  |  |
| Sample Number: 142 Type: R<br>Sample Comments:  | Area:               | 3,500.00SqFt                             | PCI = 79   |                       |  |  |  |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING   | L                   | 201.05 Ft                                | Comments:  |                       |  |  |  |  |
| 52 WEATHERING/RAVELING  | L                   | 699.99 SqFt                              | Comments:  |                       |  |  |  |  |
| Network: F45  | Name: NORTH PALM BEACH C   | OUNTY GENERAL A             | AVIATION                      |                      |                       |
|---|--|-----------------------------|-------------------------------|----------------------|-----------------------|
| Branch: TW F  | Name: TAXIWAY F  |                             | Use: TAXIWAY                  | Area:                | 194,986.82SqFt        |
| Section: 610<br>Surface: AC<br>Area: 22,477.64SqFt<br>Shoulder: Street T<br>Section Comments: | of 3 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 250.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>75.00Ft | Rank: P              | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:76.00  <br>Inspection Comments:                   | Total Samples: 5 Surv  | veyed: 1                    |                               |                      |                       |
| Sample Number: 402<br>Sample Comments:  | Туре: к  | Area: 3,91                  | 5.61SqFt                      | PCI = 76             |                       |
| 48 LONGITUDINAL/<br>52 WEATHERING/RA  | TRANSVERSE CRACKING  | L<br>L 1                    | 135.03 Ft<br>L,565.99 SqFt    | Comments<br>Comments | ; :<br>; :            |

| Network:   | F45   | Name: 1                      | NORTH PALM BEACH   | COUNTY GI | ENERAL A             | VIATION                 |              |          |                       |
|--|---|------------------------------|--|-----------|----------------------|-------------------------|--------------|----------|-----------------------|
| Branch:  | TW F  | Name:                        | FAXIWAY F  |           |                      | Use: TA                 | AXIWAY       | Area:    | 194,986.82SqFt        |
| Section:<br>Surface:<br>Area:<br>Shoulder:<br>Section Comm | 615<br>AC<br>6,198.15SqFt<br>Street T<br>nents: | of 3<br>Family<br>Le<br>ype: | From: -<br>7: FDOT-RL-TW-AC<br>ngth: 120.00Ft<br>Grade: 0.00 | Lanes:    | Zone:<br>Width:<br>0 | To: -<br>Cateş<br>50.00 | gory:<br>IFt | Rank: P  | Last Const.: 1/1/1994 |
| Last Insp. I<br>Conditions:<br>Inspection Co               | Date4/23/2012<br>: PCI:67.00  <br>mments:       | Total Sa                     | amples: 2 Su   | rveyed: 1 |                      |                         |              |          |                       |
| Sample Nu  | mber: 200                                       | Typ                          | be: R  | Area:     | 3,145                | .69SqFt                 |              | PCI = 67 |                       |
| 48 LONG  | ITUDINAL/                                       | TRANSVE                      | RSE CRACKING   |           | М                    | 80.02                   | Ft           | Comment  | s:                    |
| 48 LONG  | ITUDINAL/                                       | TRANSVE                      | RSE CRACKING   |           | L                    | 89.02                   | Ft           | Comment  | s:                    |
| 52 WEATH   | HERING/RA                                       | VELING                       |  |           | М                    | 23.00                   | SqFt         | Comment  | s:                    |
| 52 WEATH   | HERING/RA                                       | VELING                       |  |           | L                    | 628.99                  | SqFt         | Comment  | s:                    |

| Network: F45  | Name: NORTH PALM BEACH C   | COUNTY GENERAL              | AVIATION                      |                      |                       |
|---|--|-----------------------------|-------------------------------|----------------------|-----------------------|
| Branch: TW G1   | Name: TAXIWAY G1   |                             | Use: TAXIWAY                  | Area:                | 14,241.32SqFt         |
| Section: 705<br>Surface: AC<br>Area: 14,241.32SqFt<br>Shoulder: Street '<br>Section Comments: | of 1 From: -<br>Family: FDOT-GA-TW-AC<br>Length: 400.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P              | Last Const.: 1/1/2004 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:88.00  <br>Inspection Comments:                   | Total Samples: 3 Sur   | veyed: 1                    |                               |                      |                       |
| Sample Number: 200<br>Sample Comments:  | Type: R  | Area: 4,53                  | 5.84SqFt                      | PCI = 88             |                       |
| 48 LONGITUDINAL/<br>52 WEATHERING/RA  | TRANSVERSE CRACKING  | L<br>L                      | 6.00 Ft<br>454.00 SqFt        | Comments<br>Comments | :                     |

| Network:  | F45   | Name: NORTH PALM BEACH   | COUNTY GENE           | RAL AVIATION                       |          |                       |
|---|---|--|-----------------------|------------------------------------|----------|-----------------------|
| Branch:   | TW H  | Name: ТАХІWАҮ Н  |                       | Use: TAXIWAY                       | Area:    | 8,309.56SqFt          |
| Section:<br>Surface:<br>Area:<br>Shoulder:<br>Section Com | 805<br>AC<br>8,309.56SqFt<br>Street T<br>ments: | of 1 From: -<br>Family: FDOT-GA-TW-AC<br>Length: 230.00Ft<br>Sype: Grade: 0.00 | Zor<br>Wi<br>Lanes: 0 | To: -<br>Category:<br>dth: 35.00Ft | Rank: P  | Last Const.: 1/1/2004 |
| Last Insp.<br>Conditions<br>Inspection Co                 | Date4/23/2012<br>s: PCI:87.00  <br>omments:     | Total Samples: 2 Sur   | veyed: 1              |                                    |          |                       |
| Sample Nu<br>Sample Com                                   | umber: 100<br>ments:                            | Туре: к  | Area:                 | 4,493.18SqFt                       | PCI = 87 |                       |
| 48 LONG<br>52 WEAT  | ITUDINAL/<br>HERING/RA                          | TRANSVERSE CRACKING<br>VELING  | L<br>L                | 9.00 Ft<br>449.00 SqFt             | Comments | :                     |

| Network:   | F45  | 5 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                              |                     |                                    |             |                                  |                       |  |  |
|--|--|---|---------------------|------------------------------------|-------------|----------------------------------|-----------------------|--|--|
| Branch:  | TW J   | Name: TAXIWAY J   |                     | Use: TA                            | XIWAY       | Area:                            | 15,778.72SqFt         |  |  |
| Section:<br>Surface:<br>Area:<br>Shoulder:<br>Section Corr | 1005<br>AC<br>8,967.17SqFt<br>Street Ty<br>uments: | of 2 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 200.00Ft<br>ype: Grade: 0.00 | Zo<br>W<br>Lanes: 0 | To: -<br>ne: Categ<br>'idth: 35.00 | gory:<br>Ft | Rank: P                          | Last Const.: 1/1/1994 |  |  |
| Last Insp.<br>Condition<br>Inspection C                    | Date4/23/2012<br>as: PCI:87.00  <br>comments:      | Total Samples: 2 Sur  | veyed: 1            |                                    |             |                                  |                       |  |  |
| Sample N<br>Sample Com<br>48 LONG<br>52 WEAT               | umber: 200<br>ments:<br>GITUDINAL/J<br>THERING/RAU | Type: R<br>TRANSVERSE CRACKING<br>VELING                                      | Area:<br>L<br>L     | 4,573.01SqFt<br>77.02<br>288.00    | Ft<br>SqFt  | PCI = 87<br>Comments<br>Comments | :                     |  |  |

| Network: F45 Name: NORTH PALM BEACH O   | COUNTY GENER            | AL AVIATION                     |               |                       |
|---|-------------------------|---------------------------------|---------------|-----------------------|
| Branch: TW J Name: TAXIWAY J  |                         | Use: TAX                        | IWAY Area:    | 15,778.72SqFt         |
| Section:1010of2From: -Surface:ACFamily:FDOT-RL-TW-ACArea:6,811.55SqFtLength:80.00FtShoulder:Street Type:Grade:0.00Section Comments:Section Comments:Section Comments: | Zone<br>Wic<br>Lanes: 0 | To: -<br>Catego<br>Ith: 75.00Ft | ry: Rank: P   | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012 Total Samples: 1 Sur<br>Conditions: PCI:70.00  <br>Inspection Comments:  | veyed: 1                |                                 |               |                       |
| Sample Number: 100 Type: R<br>Sample Comments:  | Area:                   | 6,811.55SqFt                    | PCI = 70      |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING   | L                       | 265.07 F                        | 't Comments   | 5:                    |
| 50 PATCHING   | L                       | 170.00 S                        | SqFt Comments | 3:                    |
| 50 PATCHING   | L                       | 4.00 S                          | SqFt Comments | 5:                    |
| 52 WEATHERING/RAVELING  | М                       | 109.00 S                        | SqFt Comments | 5:                    |
| 52 WEATHERING/RAVELING  | L                       | 1,702.99 S                      | SqFt Comments | 3:                    |

| Network: F45 Name: NORTH PALM BEACH C  | COUNTY C | BENE     | RAL AVIATION                       |          |                    |                |                 |
|--|----------|----------|------------------------------------|----------|--------------------|----------------|-----------------|
| Branch: TW K Name: TAXIWAY K   |          |          | Use: TAXIV                         | WAY      | Area:              | 182,280.80SqFt |                 |
| Section:1105of3From: -Surface:ACFamily:FDOT-RL-TW-ACArea:158,521.71SqFtLength:4,300.00FtShoulder:Street Type:Grade:0.00Section Comments: | Lanes    | Zor<br>W | To: -<br>Category<br>idth: 35.00Ft | y: R     | ank: P             | Last Co        | onst.: 1/1/1994 |
| Last Insp. Date4/23/2012 Total Samples: 43 Sur<br>Conditions: PCI:82.00  <br>Inspection Comments:  | veyed:   | 5        |                                    |          |                    |                |                 |
| Sample Number: 102 Type: R   | Area:    |          | 3,500.00SqFt                       | ]        | PCI = 78           |                |                 |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING  |          | L<br>L   | 72.02 Ft<br>1,199.99 Sc            | t<br>qFt | Comment<br>Comment | s:<br>s:       |                 |
| Sample Number: 110 Type: R<br>Sample Comments:   | Area:    |          | 3,500.00SqFt                       | ]        | PCI = 85           |                |                 |
| 52 WEATHERING/RAVELING   |          | L        | 799.99 Sc                          | qFt      | Comment            | .s :           |                 |
| Sample Number: 118 Type: R<br>Sample Comments:   | Area:    |          | 3,500.00SqFt                       | ]        | PCI = 80           |                |                 |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |          | L        | 58.01 Ft                           | t        | Comment            | s:             |                 |
| 52 WEATHERING/RAVELING   |          | L        | 799.99 Sc                          | qFt      | Comment            | s:             |                 |
| Sample Number: 128 Type: R<br>Sample Comments:   | Area:    |          | 3,500.00SqFt                       | ]        | PCI = 84           |                |                 |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |          | L        | 2.00 Ft                            | t        | Comment            | s:             |                 |
| 52 WEATHERING/RAVELING   |          | L        | 699.99 Sc                          | qFt      | Comment            | s:             |                 |
| Sample Number: 136 Type: R<br>Sample Comments:   | Area:    |          | 3,500.00SqFt                       | ]        | PCI = 81           |                |                 |
| 48 LONGITUDINAL/TRANSVERSE CRACKING  |          | L        | 63.02 Ft                           | t        | Comment            | .s :           |                 |
| 52 WEATHERING/RAVELING   |          | L        | 699.99 Sc                          | qFt      | Comment            | .s :           |                 |

| Network: F45 Name: NORTH PALM BEACH   | COUNTY GENERAL A            | AVIATION                      |                      |                       |
|---|-----------------------------|-------------------------------|----------------------|-----------------------|
| Branch: TWK Name: TAXIWAY K   |                             | Use: TAXIWAY                  | Area:                | 182,280.80SqFt        |
| Section:1110of3From: -Surface:ACFamily:FDOT-RL-TW-ACArea:11,576.18SqFtLength:260.00FtShoulder:Street Type:Grade:0.00Section Comments:Grade:0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P              | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012 Total Samples: 3 Su<br>Conditions: PCI:77.00  <br>Inspection Comments:   | rveyed: 1                   |                               |                      |                       |
| Sample Number: 301 Type: R<br>Sample Comments:  | Area: 3,50                  | 0.00SqFt                      | PCI = 77             |                       |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING   | L<br>L                      | 95.02 Ft<br>600.00 SqFt       | Comments<br>Comments | ::                    |
| 52 WEATHERING/RAVELING  | М                           | 8.00 SqFt                     | Comments             | :                     |

| Network: F45   | Name: NORTH PALM BEACH C   | COUNTY GENERAL AV           | IATION                        |                      |                       |
|--|--|-----------------------------|-------------------------------|----------------------|-----------------------|
| Branch: TW K   | Name: TAXIWAY K  |                             | Use: TAXIWAY                  | Area:                | 182,280.80SqFt        |
| Section: 1115<br>Surface: AC<br>Area: 12,182.91SqFt<br>Shoulder: Street 7<br>Section Comments: | of 3 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 260.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P              | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:86.00  <br>Inspection Comments:                    | Total Samples: 3 Sur   | veyed: 1                    |                               |                      |                       |
| Sample Number: 401<br>Sample Comments:<br>52 WEATHERING/RA                                     | Type: R<br>VELING  | Area: 3,500.0               | 0SqFt<br>699.99 SqFt          | PCI = 86<br>Comments | s :                   |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                  |  |                            |                                       |                        |                       |  |  |
|--|--|----------------------------|---------------------------------------|------------------------|-----------------------|--|--|
| Branch: TW L   | Name: TAXIWAY L  |                            | Use: TAXIWAY                          | Area:                  | 9,383.53SqFt          |  |  |
| Section: 1205<br>Surface: AC<br>Area: 9,383.5<br>Shoulder: Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>3SqFt Length: 240.001<br>Street Type: Grade: 0.00 | z Zon<br>Ft Wi<br>Lanes: 0 | To: -<br>e: Category:<br>dth: 35.00Ft | Rank: P                | Last Const.: 1/1/1994 |  |  |
| Last Insp. Date4/2<br>Conditions: PCI:8<br>Inspection Comments               | 23/2012 Total Samples: 2 \$  | Surveyed: 1                |                                       |                        |                       |  |  |
| Sample Number:<br>Sample Comments:   | 101 Type: R  | Area:                      | 5,347.03SqFt                          | PCI = 81               |                       |  |  |
| 48 LONGITUD<br>52 WEATHERII  | INAL/TRANSVERSE CRACKING<br>NG/RAVELING  | L<br>L                     | 108.03 Ft<br>1,068.99 SqFt            | Comments:<br>Comments: |                       |  |  |

| Network: F45   | Name: NORTH PALM BEACH C   | COUNTY GENERAL A            | VIATION                       |                        |                       |
|--|--|-----------------------------|-------------------------------|------------------------|-----------------------|
| Branch: TW M   | Name: TAXIWAY M  |                             | Use: TAXIWAY                  | Area:                  | 10,519.58SqFt         |
| Section: 1305<br>Surface: AC<br>Area: 10,519.58SqFt<br>Shoulder: Street<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 240.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P                | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:79.00  <br>Inspection Comments:                  | Total Samples: 2 Sur   | veyed: 1                    |                               |                        |                       |
| Sample Number: 200<br>Sample Comments:   | Type: R  | Area: 4,573                 | .01SqFt                       | PCI = 79               |                       |
| 48 LONGITUDINAL,<br>52 WEATHERING/RA   | /TRANSVERSE CRACKING<br>AVELING  | L<br>L 1                    | 49.01 Ft<br>,371.99 SqFt      | Comments:<br>Comments: |                       |

| Network: F45   | Name: NORTH PALM BEACH C   | COUNTY GENERAL A            | VIATION                       |                      |                       |
|--|--|-----------------------------|-------------------------------|----------------------|-----------------------|
| Branch: TW N   | Name: TAXIWAY N  |                             | Use: TAXIWAY                  | Area:                | 10,755.64SqFt         |
| Section: 1405<br>Surface: AC<br>Area: 10,755.64SqFt<br>Shoulder: Street<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 240.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft | Rank: P              | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:79.00  <br>Inspection Comments:                  | Total Samples: 2 Sur   | veyed: 1                    |                               |                      |                       |
| Sample Number: 301<br>Sample Comments:   | Type: R  | Area: 6,182                 | 2.63SqFt                      | PCI = 79             |                       |
| 48 LONGITUDINAL,<br>52 WEATHERING/RA   | /TRANSVERSE CRACKING<br>AVELING  | L<br>L 1                    | 164.04 Ft<br>,854.98 SqFt     | Comments<br>Comments | :                     |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                                    |  |                             |  |                                     |                       |
|--|--|-----------------------------|--|-------------------------------------|-----------------------|
| Branch: TW O   | Name: TAXIWAY O  |                             | Use: TAXIWAY                             | Area:                               | 10,654.35SqFt         |
| Section: 1505<br>Surface: AC<br>Area: 10,654.35SqFt<br>Shoulder: Street 7<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 240.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width:<br>Lanes: 0 | To: -<br>Category:<br>35.00Ft            | Rank: P                             | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:74.00  <br>Inspection Comments:                    | Total Samples: 2 Sur   | veyed: 1                    |  |                                     |                       |
| Sample Number: 400   | Туре: к  | Area: 4,5                   | 73.01SqFt                                | PCI = 74                            |                       |
| 48 LONGITUDINAL/<br>52 WEATHERING/RA<br>52 WEATHERING/RA                                       | TRANSVERSE CRACKING<br>VELING<br>VELING  | L<br>L<br>M                 | 109.03 Ft<br>1,371.99 SqFt<br>24.00 SqFt | Comments:<br>Comments:<br>Comments: |                       |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                                    |  |                            |                                  |                       |                       |
|--|--|----------------------------|----------------------------------|-----------------------|-----------------------|
| Branch: TW P   | Name: TAXIWAY P  |                            | Use: TAXIWAY                     | Area:                 | 10,265.06SqFt         |
| Section: 1605<br>Surface: AC<br>Area: 10,265.06SqFt<br>Shoulder: Street 7<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 260.00Ft<br>Type: Grade: 0.00 | Zone:<br>Widtl<br>Lanes: 0 | To: -<br>Category:<br>h: 35.00Ft | Rank: P               | Last Const.: 1/1/1994 |
| Last Insp. Date4/23/2012<br>Conditions: PCI:79.00  <br>Inspection Comments:                    | Total Samples: 2 Sur   | veyed: 1                   |                                  |                       |                       |
| Sample Number: 501<br>Sample Comments:<br>48 LONGITUDINAL/                                     | Type: R<br>TRANSVERSE CRACKING   | Area: 5                    | ,793.99SqFt<br>122.03 Ft         | PCI = 79<br>Comments: |                       |
| 52 WEATHERING/RAVELING   |  | L                          | 1,737.99 SqFt                    | Comments:             |                       |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                              |  |                           |                                   |                        |                       |  |
|--|--|---------------------------|-----------------------------------|------------------------|-----------------------|--|
| Branch: TW Q   | Name: TAXIWAY Q  |                           | Use: TAXIWAY                      | Area:                  | 9,383.53SqFt          |  |
| Section: 1705<br>Surface: AC<br>Area: 9,383.53SqI<br>Shoulder: Stre<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Ft Length: 240.00Ft<br>et Type: Grade: 0.00 | Zone:<br>Widt<br>Lanes: 0 | To: -<br>Category:<br>th: 35.00Ft | Rank: P                | Last Const.: 1/1/1994 |  |
| Last Insp. Date4/23/20<br>Conditions: PCI:78.00<br>Inspection Comments:                  | D12 Total Samples: 2 Sur   | rveyed: 1                 |                                   |                        |                       |  |
| Sample Number: 60<br>Sample Comments:  | 0 Type: R  | Area:                     | 4,036.50SqFt                      | PCI = 78               |                       |  |
| 48 LONGITUDINAL/TRANSVERSE CRACKING<br>52 WEATHERING/RAVELING                            |  | L<br>L                    | 13.00 Ft<br>1,613.99 SqFt         | Comments:<br>Comments: |                       |  |

| Network: F45 Name: NORTH PALM BEACH COUNTY GENERAL AVIATION                                  |  |                            |                                 |          |                       |  |
|--|--|----------------------------|---------------------------------|----------|-----------------------|--|
| Branch: TW R   | Name: TAXIWAY R  |                            | Use: TAXIWAY                    | Area:    | 14,861.44SqFt         |  |
| Section: 1805<br>Surface: AC<br>Area: 14,861.44SqFt<br>Shoulder: Street<br>Section Comments: | of 1 From: -<br>Family: FDOT-RL-TW-AC<br>Length: 300.00Ft<br>Type: Grade: 0.00 | Zone:<br>Width<br>Lanes: 0 | To: -<br>Category:<br>: 35.00Ft | Rank: P  | Last Const.: 1/1/1994 |  |
| Last Insp. Date4/23/2012<br>Conditions: PCI:81.00  <br>Inspection Comments:                  | Total Samples: 5 Sur   | veyed: 1                   |                                 |          |                       |  |
| Sample Number: 101<br>Sample Comments:   | Type: R  | Area: 3,5                  | 500.00SqFt                      | PCI = 81 |                       |  |
| 48 LONGITUDINAL,<br>52 WEATHERING/RA   | /TRANSVERSE CRACKING<br>AVELING  | L<br>L                     | 130.03 Ft<br>699.99 SqFt        | Comments | :                     |  |