STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
AVIATION OFFICE

Statewide Airfield Pavement Management Program
Zephyrhills Municipal Airport – ZPH
(General Aviation)
Zephyrhills, Florida
(District 7)

February 6, 2007

Prepared for:
Florida Department of Transportation
Aviation Office

by:
URS Corporation Inc. / MACTEC Engineering & Consulting, Inc. / Planning Technology, Inc. / ASC Geosciences, Inc.

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EXECUTIVE SUMMARY

URS Corporation, Inc., MACTEC Engineering and Consulting, Inc. (MACTEC), Planning Technology, Inc. (PTI), and ASC Geosciences, Inc. (ASCG) were awarded with a contract to provide services in support of the Florida Department of Transportation (FDOT) Aviation Office for Phase II of the Statewide Aviation Pavement Management program. As part of this contract, MACTEC conducted pavement condition survey for airside pavements at Zephyrhills Municipal Airport, evaluated the condition and developed a maintenance and rehabilitation program to improve conditions to prescribed minimum levels.

The total pavement area in 2007 at Zephyrhills Municipal Airport is 1,979,122 square feet. The breakdown of pavement area for each pavement use is provided as follows:

Pavement Area by Pavement Use

Use	Area, SqFt	% of Total Area
Runway	1,003,200	51
Taxiway	775,930	39
Apron	199,992	10
Total	**1,979,122**	**100**

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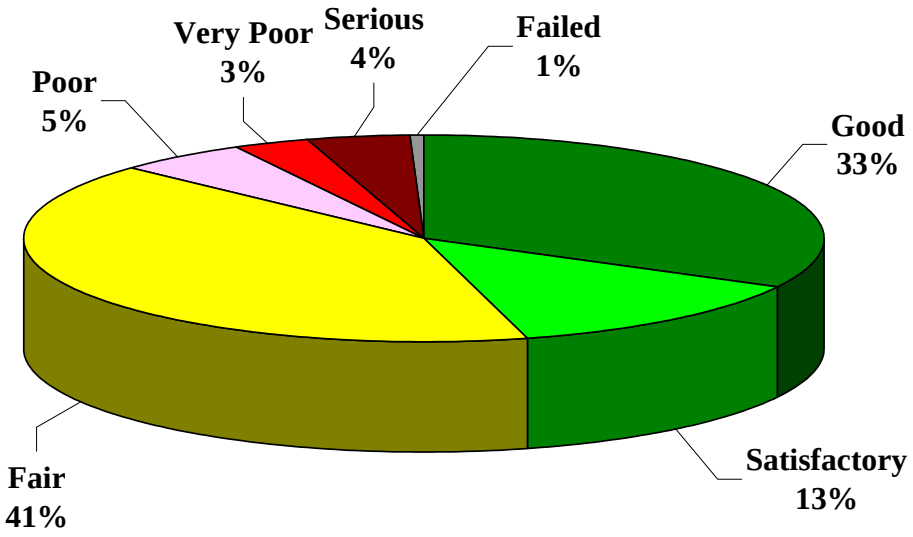
The overall area-weighted Pavement Condition Index (PCI) of the areas in 2007 is 73, representing a Satisfactory overall network condition.

The figure below provides the PCI distribution by rating category for the network. Approximately 46% of the network is in Good and Satisfactory condition while 13% of the network is in Poor to Failed condition.

The condition summary by pavement use table illustrates the area-weighted PCI computed individually for each use. On average, the runways, taxiways, and aprons are in Satisfactory, Fair, and Fair condition, respectively.

Network PCI Distribution by Rating Category



Prepared by BX *Checked by TH*

Condition Summary by Pavement Use

Use	Area-Weighted PCI
Runway	79
Taxiway	61
Apron	62
All	**73**

Prepared by BX *Checked by TH*

The immediate M&R needs include parts of Runway 18-36 and Runway 4-22 and several large areas of Taxiway B. These taxiways may not be the highest priority for funding but would need to be programmed over several years. These immediate needs are summarized in the following table.

Immediate Major M&R Needs

Branch	Section	Section Area, SqFt	Major M&R Funded**	PCI Before	Maintenance	PCI After
AP E	5405	33,600	$211,344	41	Major M&R < Critical	100
AP NE	5105	12,825	$174,677	12	Major M&R < Critical	100
AP NE	5110	12,825	$174,677	0	Major M&R < Critical	100
AP NW	4105	2,112	$12,072	52	Major M&R < Critical	100
AP TW D	5205	28,800	$181,152	49	Major M&R < Critical	100
RW 18-36	6215	28,000	$111,832	58	Major M&R < Critical	100
RW 4-22	6110	41,200	$223,675	53	Major M&R < Critical	100
TW A	120	3,011	$10,298	60	Major M&R < Critical	100
TW A-2	310	9,500	$27,303	62	Major M&R < Critical	100
TW B	205	52,450	$714,369	1	Major M&R < Critical	100
TW B	210	140,000	$880,600	46	Major M&R < Critical	100
TW B	212	17,600	$110,704	42	Major M&R < Critical	100
TW B	215	8,000	$50,320	45	Major M&R < Critical	100
TW B	230	14,250	$194,085	14	Major M&R < Critical	100
TW B	235	2,280	$31,054	0	Major M&R < Critical	100
TW C	320	48,250	$374,227	38	Major M&R < Critical	100
TW C-1	505	10,325	$41,238	58	Major M&R < Critical	100
TW D	405	25,200	$65,545	63	Major M&R < Critical	100
		Total	**$3,589,171**	**73***	**← Network Avg. PCI →**	**92***

* This table shows the area-weighted PCI before and after Major M&R and routine maintenance work for the first year of the 10-year plan. It includes all pavement sections at Zephyrhills Municipal Airport, including those sections not shown in this table.
** Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.

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A forecast of Major M&R needs for a 10-year period was developed using an unlimited budget. The analysis identified ongoing maintenance needs and major M&R during that interval.

10 Year M&R Costs under Unlimited Funding Scenario

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	$58,152	$0	$3,589,171	$3,647,324
2009	$67,875	$0	$1,522,123	$1,589,998
2010	$85,549	$0	$12,693	$98,242
2011	$110,374	$0	$0	$110,374
2012	$133,464	$0	$0	$133,464
2013	$167,701	$0	$0	$167,701
2014	$209,580	$0	$0	$209,580
2015	$206,924	$0	$543,998	$750,922
2016	$251,431	$0	$0	$251,431
2017	$306,987	$0	$33,937	$340,924
Total	**$1,598,038**	**$0**	**$5,701,923**	**$7,299,960**

Note: Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.

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The 10 year analysis suggests an annual budget on the order of $730 thousand would be expected to provide an improvement in the overall condition, where the area-weighted PCI would increase from 73 in 2007 to 79 in 2017. However, as stated above, a number of large projects exist that would need to be programmed over multiple years.

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 Zephyrhills Municipal Airport pavements in 2017 may remain near 79. 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 Zephyrhills Municipal 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. These public airports range from small general aviation airports to large international hub airports. These airports serve business travelers, tourism, and cargo operations crucial to the daily life of the people of Florida.

There are millions of square yards of pavement for the runways, taxiways, aprons and other areas 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, FDOT has implemented pavement management system technology.

This report describes the procedures used to ensure that the appropriate engineering and scientific standards of care, quality, budget, and schedule requirements are implemented at your airport as a result of your participation in the Statewide Aviation Pavement Management Program.

1.1 Purpose

This Florida Airport Pavement Evaluation Report is intended to:

- Describe, briefly, the Florida Department of Transportation (FDOT) Aviation Office Statewide Pavement Management Program and the roles and responsibilities of the program's participants
- Provide background information on pavement management principles, objectives, and benefits to the participating airport
- Outline the procedures used to collect, evaluate and report pavement inspection results at your airport
- Present the findings from the inspection and analysis of the needs for maintenance and rehabilitation activities for this airport.

1.2 FDOT Aviation PMS Program

In 1992, FDOT implemented a Pavement Management System (PMS) program 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 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 was implemented and condition surveys performed in 1992 and 1993 and again updated in 1998 and 1999. The proprietary system, AIRPAV, is no longer supported.

In 2004, the FDOT Aviation Office undertook a project to update the PMS Program software utilized for the PMS program. The Aviation Office selected a consultant team consisting of URS Corporation, Inc., MACTEC Engineering and Consulting, Inc. (MACTEC), Planning Technology, Inc. (PTI), and ASC Geosciences, Inc. (ASCG) to aid with the implementation of the program update. This project involved a review of the AIRPAV software and other available

PMS software. As a result of this review, MicroPAVER was selected as the software for the update project. Condition data from the 1998/1999 surveys were converted to the MicroPAVER system.

The inventory of the pavement systems and drawings of the pavements were updated to reflect maintenance, rehabilitation, and construction activities since 1998/1999 to the extent that information was available. Detailed, specific procedures for the inspection and collection of pavement data were developed for this project. A web-site (www.floridaairportpavement.com) was developed for the input of data under secure procedures. The site also has a public section for dissemination of information to the general public.

1.3 Organization

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

1.3.1 *Consultant Role*

The Consultant (MACTEC Engineering and Consulting/URS Corporation/Planning Technology/ASC Geosciences) developed the PMS based upon procedures outlined in FAA Advisory Circular 150/5380-6B Guidelines and Procedures for Maintenance of Airport Pavements (FAA/AC) and ASTM D 5340 Standard Test Method for Airport Pavement Condition Index Surveys (2004). The Consultant provides technical and administrative assistance to the Aviation Office PM, during the execution of this program, which involves the continuing evaluation of airport pavements and updating of the PMS. A website is available to view and update airport information, including construction activities and pavement condition data. In addition, pavement evaluation reports will be available for viewing and download from the site (www.floridaairportpavement.com).

1.3.2 *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 FDOT Aviation Office. The airport should review system inventory drawings in their folder in the pavement management website and add maintenance and rehabilitation activities conducted on airside pavements on the website system inventory form.

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 asphalt concrete (AC) surface, and
- Rigid pavement composed of 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 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, the base or subbase layer is mainly constructed to provide a smooth and continuous platform for the concrete. Due to the different nature of both 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.

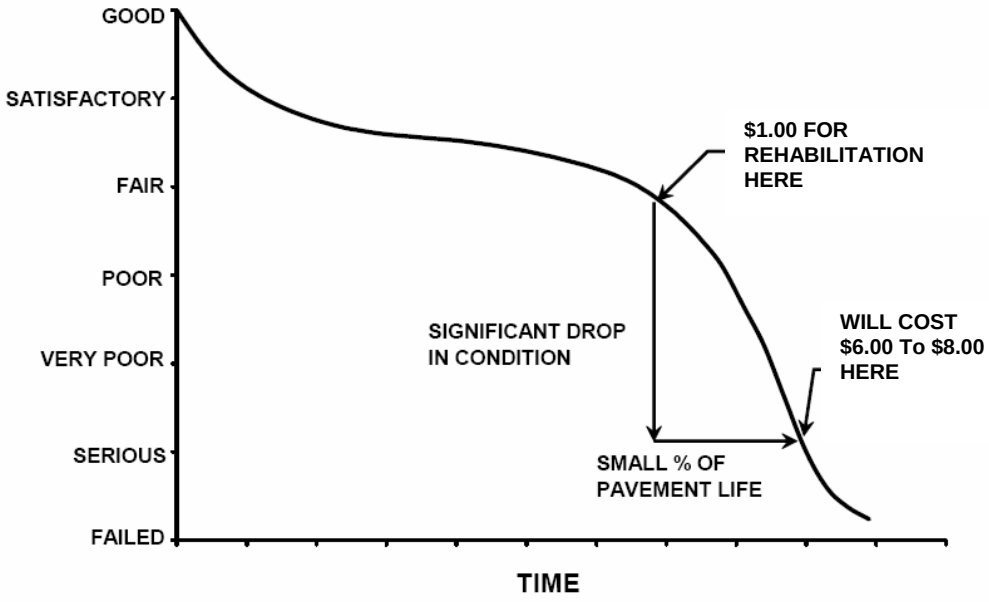
1.4.2 *Pavement Management System Concept*

A pavement management system (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, taken from FAA/AC 5380-7A Pavement Management System, 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 "Satisfactory" condition depends on how well it is maintained. The illustration demonstrates the cost of maintaining the pavement above a critical condition before rapid deterioration occurs is much less compared to maintaining pavements after substantial deterioration has occurred.

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 stretch and 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.

Figure 1-1: Pavement Life Cycle



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Pavements deteriorate even if they do not carry any traffic. Pavement distresses may be attributed to climate, environment, materials, construction or traffic. Knowing the cause, extent and predominance of pavement distresses helps determine the most appropriate maintenance or rehabilitation work needed. Planning and applying preventive maintenance prolongs pavement life and minimizes future pavement repair costs. By projecting the rate of deterioration, a life cycle cost analysis can be performed for various alternatives, and the optimal time of application of the most feasible alternative can be determined. Such a decision is critical in order to avoid higher M&R costs at a later date.

A PMS enables the managing agency to identify and maintain the pavement conditions, keeping them at the upper end of the service life-condition curve. At this point, the total annual costs between maintaining a good pavement above a critical condition is much less than rehabilitating a poor pavement that has rapidly deteriorated beyond a critical condition level.

A PMS is a long-term planning tool that will result in an overall improvement of the pavement network condition and will also result in savings by applying the appropriate maintenance and rehabilitation activity at the appropriate time. Accurate estimates and timely M&R decisions and budgeting are of great importance when managing approximately 300 million square feet of Florida airside pavements.

1.4.3 *Pavement Inspection Methodology for PMS*

Pavement condition assessment is one of the primary decision variables in any airport pavement management system. 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.

Pavement sections are broken down into sample units as established in FAA AC 150/5380-6B and ASTM D 5340. Sample unit sizes are approximately 5000 ± 2000 square feet for AC-surfaced pavements and 20 ± 8 slabs for PCC-surfaced pavements. Before 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 FDOT Statewide Pavement Management Program is provided in Table 1-1 below.

Table 1-1: Sampling Rate for FDOT Condition Surveys

AC Pavements			PCC Pavements		
N	n		N	n	
	Runway	Others		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
≥51	20% but ≤20	10% but ≤10	31-40	8	4
			41-50	10	5
			≥51	20% but ≤20	10% but ≤10

Where *N = total number of sample units in section*
n = number of sample units to inspect

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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. MicroPAVER provides a rating scale that relates PCI to pavement condition, with a PCI between 0 and 10 considered 'Failed' pavement and a PCI between 86 and 100 considered 'Good' pavement, with five other conditions for PCI values between 11 and 85. Figure 1-2 shows the PCI scale.

Figure 1-2: PCI Rating Scale

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1.5 Definitions

Aviation Office - 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 worked closely with FDOT District Aviation Specialists, during development of this project. District Aviation Specialists will consult with airport owners in implementation of project recommendations.

Base Course - 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.

Branch – (Facility in prior system) - A runway, taxiway or apron is called a Branch. This is an easy reference to a recognizable component of airport pavement. In this report, Branch ID maintains the original AirPAV identification where 100 series through 3000 series facilities are taxiways, 4000 and 5000 series facilities are aprons (the 5000 series represent runup aprons and turnarounds), and 6000 series facilities are runways. It also includes the common designation for the item e.g. RW 18-36.

Category - 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

Critical PCI – 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.

Distress Type - 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.

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

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.

Global M&R- 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.

MicroPAVER – 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 system requirements described by FAA in Advisory Circular 150/5380-7A.

Minimum Condition Level - 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 General Aviation airports.

Major M&R (e.g. Rehabilitation) – 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.

Network Definition – (Airport Sketch in prior system) – A Network Definition is a CAD drawing which shows the airport pavement outline with Branch and Section boundaries. This sketch is intended to assist the user of the report to quickly associate information from the text to a location on the airport. 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 in this report is in Appendix A along with a table of inventory data.

Pavement Condition Index (PCI) – The Pavement Condition Index is a number which represents the condition of a pavement segment at an instant 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 5340-04, "Standard Test Method for Airport Pavement Condition Index Surveys," published by ASTM International.

Pavement Evaluation – 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.

Pavement Management – Pavement management is a broad function that uses pavement evaluation and pavement performance trends as a basis for planning, programming, financing, and maintaining a pavement system.

Rank – 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

Reconstruction – 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.

Rehabilitation – 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.

Sample Unit – 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 ± 2,000 square feet for AC-surfaced pavements and 20 ± 8 slabs for PCC-surfaced pavements.

Section – (Feature in prior system) - 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.

Section ID – 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.

Use – 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

Zephyrhills Municipal Airport (ZPH) is located approximately 1 mile southeast of Zephyrhills, Florida. Directly regulated by the Zephyrhills City Council, this airport focuses primarily on serving general aviation aircraft. The airport facility includes two runways: Runway 4-22, and Runway 18-36. Runway 4-22 is served by a parallel taxiway. Zephyrhills Municipal Airport is designated as a General Aviation (GA) airport and is located in District 7 of the Florida Department of Transportation.

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. The airport pavement network is subdivided into separate branches (runways, taxiways, or aprons) that have distinctly different uses. Branches are then 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.

The network definition is used to identify changes in the network since the most recent update in 1998/1999 and also to plan the field inspection activities for 2007 survey. Prior to the field inspection process, the network definition drawing was updated. The purpose of this update is to compare the previous airport configuration and history with the current airport configuration and history and update the existing drawing showing network branch, section and sample unit designations to match the current configuration. This drawing serves not only as a primary guide for the airfield inspectors but also as an important history record.

The updated network definition fields of Zephyrhills Municipal Airport are provided in Table 2-1 and the updated network definition drawing of the airport is given in Appendix A. The field of ***Rank*** in Table 2-1 is defined in the definitions section in section 1.

Table 2-1: Zephyrhills Municipal Airport Network Definition

Name	Section ID	Rank
EAST APRON	5405	P
	5105	P
	5110	P
NORTHWEST APRON	4105	P
	4110	P
	4115	P
APRON T-HANGARS	5305	P
	5310	P
APRON AT END OF TW D	5205	P
RUNWAY 18-36	6205	P
	6207	P
	6215	P
	6220	P
RUNWAY 4-22	6105	P
	6110	P

Table 2-1: Zephyrhills Municipal Airport Network Definition

Name	Section ID	Rank
TAXIWAY A	105	P
	107	P
	110	P
	112	P
	120	P
TAXIWAY A-1	115	P
TAXIWAY A-2	310	P
	305	T
TAXIWAY B	210	P
	212	P
	215	P
	230	P
	235	P
	240	P
	245	P
	205	T
TAXIWAY C	315	P
	320	P
TAXIWAY C-1	505	P
TAXIWAY D	405	P
TAXIWAY E	610	P
TAXIWAY F	630	P

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3. PAVEMENT INVENTORY

The detailed pavement inventory was updated to reflect the network definition update and field inspection results.

The total pavement area in 2007 at Zephyrhills Municipal Airport is 1,979,122 square feet. The breakdown of pavement area for each pavement use is provided in Table 3-1.

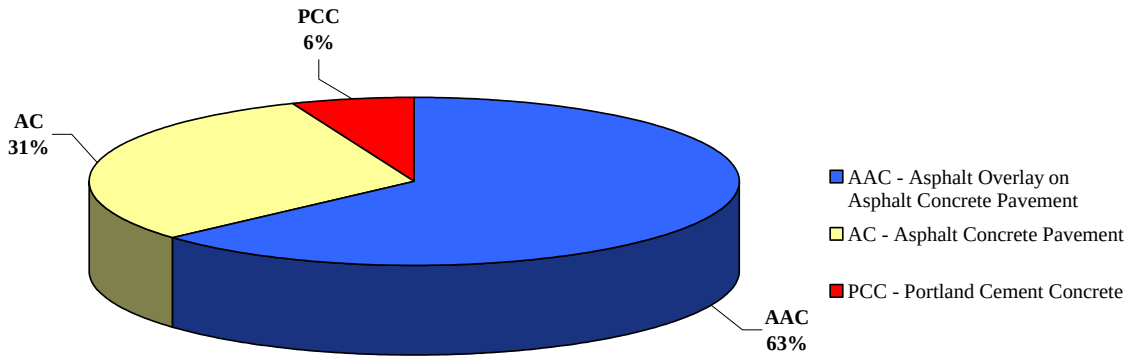
Table 3-1: Pavement Area by Pavement Use

Use	Area, SqFt	% of Total Area
Runway	1,003,200	51
Taxiway	775,930	39
Apron	199,992	10
Total	**1,979,122**	**100**

Prepared by BX *Checked by TH*

Figure 3-1 presents the breakdown of the pavement area at Zephyrhills Municipal Airport by surface type.

Figure 3-1: Pavement Area by Surface Type



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Details of pavement section information including section dimensions, rank, surface type, last construction date and last inspection date are given in Appendix A.

4. PAVEMENT CONDITION

Pavement conditions were inspected in accordance with the methods outlined in FAA AC 150/5380-6B and ASTM D 5340 "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).

Pavement condition inspections at Zephyrhills Municipal Airport were performed in July 2007. Data were recorded in the field using hand-held PDA (personal digital assistant) technology. The identifying information for each sample unit was pre-loaded into the PDA, and the survey results were entered directly, at the time of inspection. This simplified data handling and management.

During the inspections Global Positioning System (GPS) coordinates were recorded 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 tables on updated Network Definition drawings available from the website.

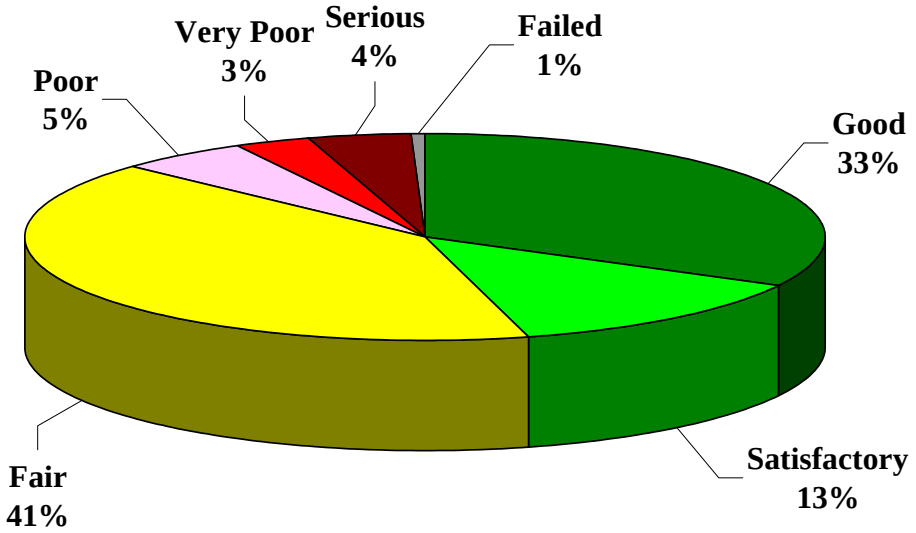
After the completion of data collection, the data were imported into MicroPAVER and PCI values were calculated for the pavement sections.

Appendix B includes detailed distress data generated by MicroPAVER, Appendix C contains a table and a map of PCI results by section inspected in 2007, and Appendix D contains a table of PCI results by branch.

According to the 2007 survey, the overall area-weighted PCI at Zephyrhills Municipal Airport is 73, representing a Satisfactory overall network condition.

Figure 4-1 provides the PCI distribution by rating category for the network.

Figure 4-1: Network PCI Distribution by Rating Category



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Approximately 46% of the network is in Good and Satisfactory condition while 13% of the network is in Poor to Failed condition. Table 4-1 illustrates the area-weighted PCI computed individually for each pavement use.

Table 4-1: Condition by Pavement Use

Use	Area-Weighted PCI
Runway	79
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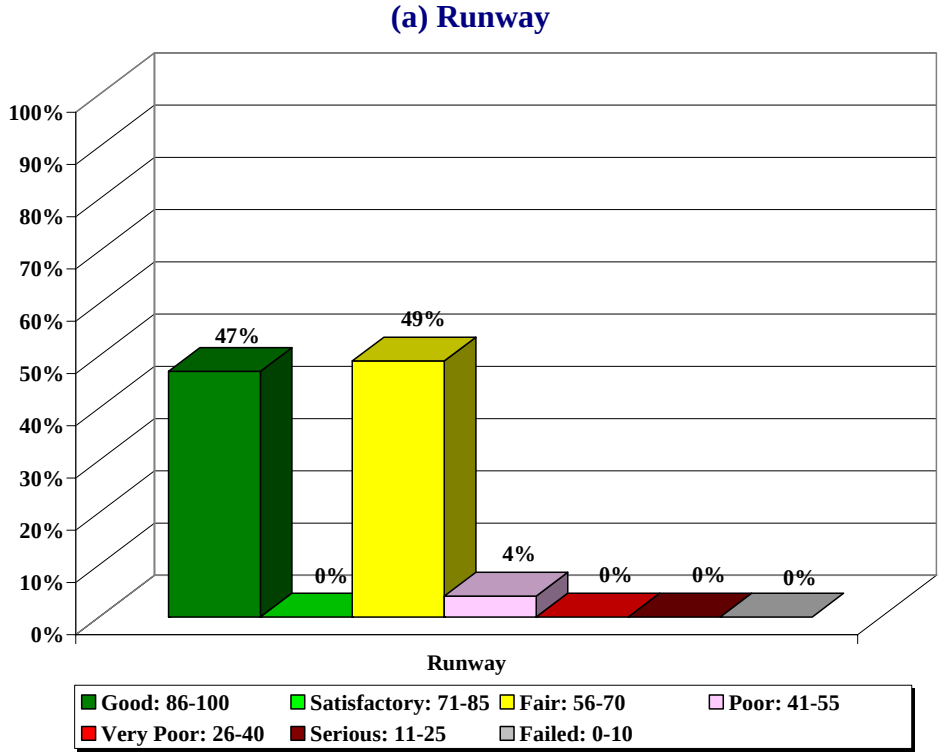
Apron	62
All	**73**

Prepared by BX *Checked by TH*

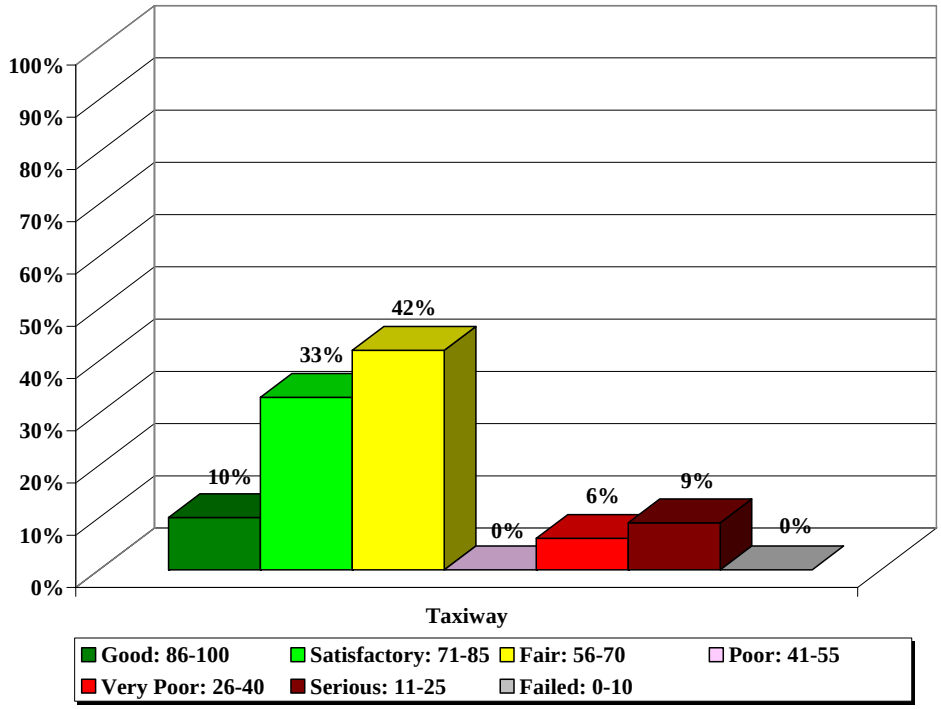
On average, the runways, taxiways, and aprons are in Satisfactory, Fair, and Fair condition, respectively.

Figure 4-2 presents the breakdown of PCI by range for each pavement use.

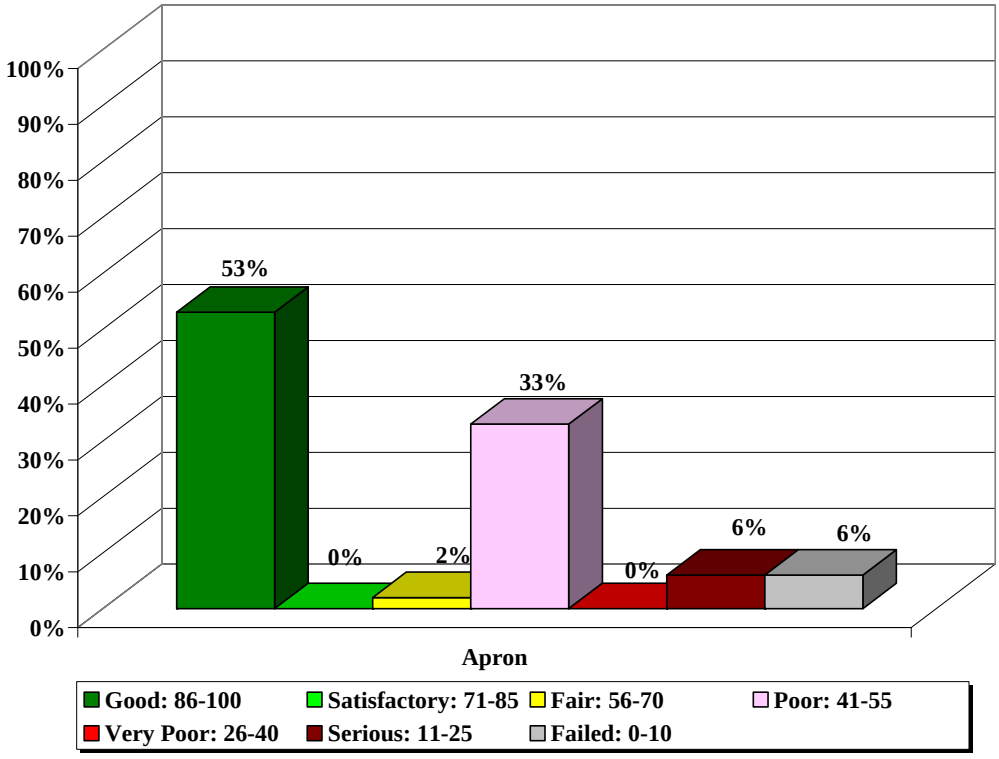
Figure 4-2: Percentage of Pavement Area within Each PCI Range by Pavement Use



(b) Taxiway



(c) Apron



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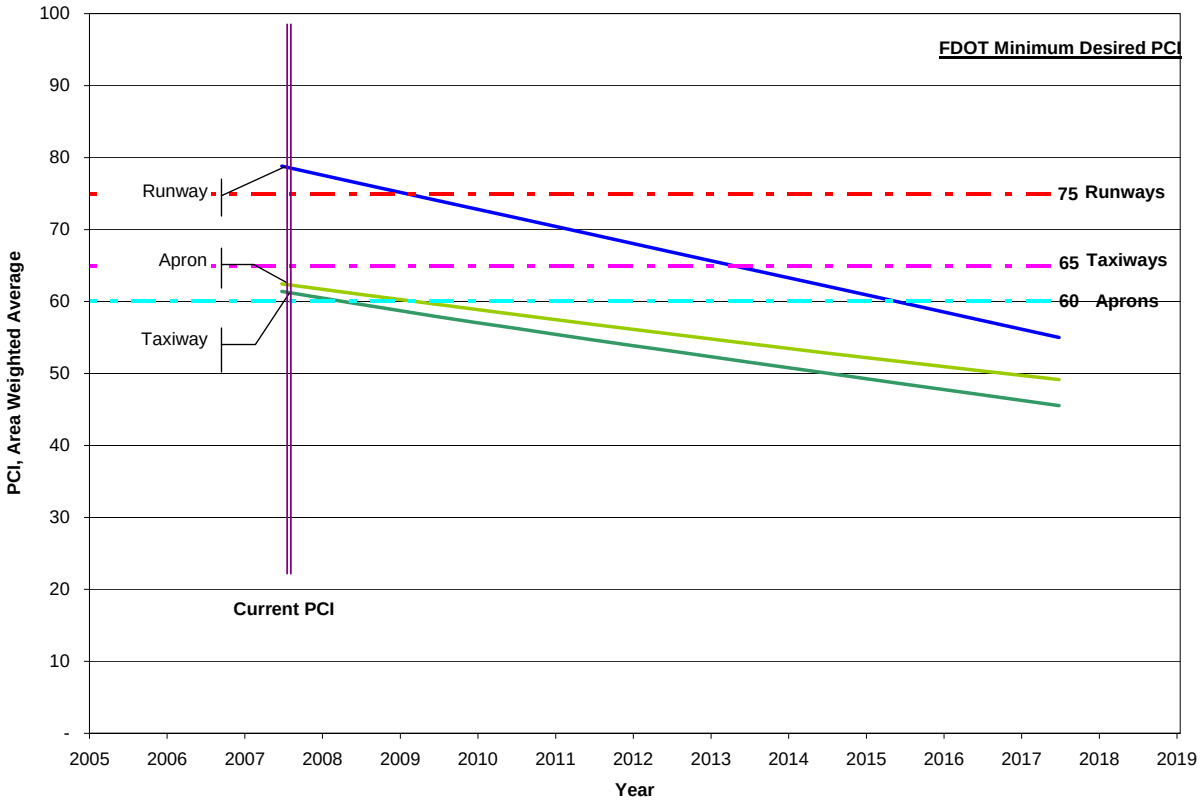
5. PAVEMENT CONDITION PREDICTION

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 5-1 illustrates the predicted performance of pavements at Zephyrhills Municipal 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 condition criteria for General Aviation (GA) airports.

Figure 5-1: Predicted PCI by Pavement Use



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Appendix C presents the tabular summary of the predicted Section PCI for each year from 2008 to 2017.

6. MAINTENANCE POLICIES AND COSTS

6.1 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 6-1 provides the list of the maintenance activities used in MicroPAVER to treat specific distress types. These repairs are used in an analysis only if there is an inspection within one year prior to the first year of the analysis period. MicroPAVER applies repairs to these distresses and adjusts the PCI based on specific rules.

Rehabilitation is warranted when the pavement condition decreases below a critical point such that the deterioration is extensive or 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 Phase I of Statewide Pavement Management Program were reviewed and updated for 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 6-2 gives the critical PCI levels for General Aviation Airports.

Table 6-1: Routine Maintenance Activities for Airfield Pavements

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

*L = Low, M = Medium, H = High

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Table 6-2: Critical PCI for General Aviation Airports

Use	Critical PCI
Runway	65
Taxiway	65
Apron	65

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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 6-3 gives the targeted, or desired, Minimum PCI values for runways, taxiways, and aprons of General Aviation Airports.

Table 6-3: Desired Minimum PCI for General Aviation Airports

Minimum PCI		
Runway	**Taxiway**	**Apron**
75	65	60

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Typical Major M&R activities range from overlays to reconstruction. Based on the critical PCI values in Table 6-2 and our experience with pavement management systems, the PCI trigger range when the likely activity would be a mill and resurface was 31 to 55 and reconstruction at a PCI of 30 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. With this objective, microsurfacing has been recommended to maintain pavements that have a PCI from 56 and 79. Microsurfacing is a surface treatment suggested for pavements in Fair to Satisfactory condition to extend the pavement life by five to seven years.

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 6-4 summarizes the M&R activities for General Aviation Airports based on PCI value.

Table 6-4: M&R Activities for General Aviation Airports

	Activity	PCI Range
Maintenance	Crack Sealing and Full-Depth Patching	80 and 90
Rehabilitation	Microsurfacing (AC) or Concrete Pavement Restoration (PCC)	56 to 79
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	31 to 55
	Reconstruction	30 and less

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6.2 Unit Costs

FDOT cost databases for airports and highway pavement maintenance and rehabilitation were reviewed in Phase I of Statewide Pavement Mangement Program in order to determine meaningful costs for the program. Table 6-5 presents the unit costs summary.

Table 6-5: Maintenance Unit Costs for FDOT

Code	Name	Cost	Unit
PA-AL	Patching – AC Leveling	$2.00	SqFt
PA-AS	Patching – AC Shallow	$4.00	SqFt
PA-PF	Patching – PCC Full Depth	$50.00	SqFt
PA-PP	Patching – Partial Depth	$35.00	SqFt
SL-PC	Slab Replacement	$15.00	SqFt
CS-PC	Crack Sealing – PCC	$2.00	Ft
UN-PC	Undersealing – PCC	$3.00	Ft
CS-AC	Crack Sealing – AC	$2.00	Ft
GR-PP	Grinding (Localized for PCC)	$20.00	Ft
GR-LL	Grinding (Localized for AC)	$6.00	SqFt
JS-LC	Joint Seal (Localized)	$1.75	Ft
JS-SI	Joint Seal – Silicon	$2.50	Ft
PA-AD	Patching – AC Deep	$7.00	SqFt
OL-AT	Overlay – AC Thin	$1.50	SqFt
SS-CT	Surface Seal – Coal Tar	$0.20	SqFt
SS-RE	Surface Seal – Rejuvenating	$0.15	SqFt
ST-SS	Surface Treatment – Slurry Seal	$0.25	SqFt
ST-ST	Surface Treatment – Sand Tar	$0.25	SqFt
MI-AC	Microsurfacing	$0.90	SqFt

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The improvement in condition due to maintenance actions applied to specific distresses is only performed when an inspection is recent 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 PCI. 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 6-6. 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 6-6: M&R Activities and Unit Costs by Condition for General Aviation Airports

	Activity	PCI Trigger	Cost/SqFt
Maintenance	Crack Sealing and Full-Depth Patching	90	$0.06
		80	$0.24
Rehabilitation	Microsurfacing (AC) or Concrete Pavement Restoration (PCC)	70	$0.69
		60	$3.42
	Mill and Overlay (AC) or Concrete Pavement Restoration (PCC)	50	$6.29
		40	$6.29
	Reconstruction	30	$13.62
		20	$13.62

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

7. 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. 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.

Table 7-1 presents the M&R needs list of immediate needs for Major M&R, i.e. Year 1 of the forecast. The importance of this listing is that it points out the major activities triggered by the current condition of the pavements.

The 10 year forecast results are shown in Figure 7-1, 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.

Table 7-1: Summary of Immediate Major M&R Needs

Branch	Section	Section Area, SqFt	Major M&R Funded**	PCI Before	Maintenance	PCI After
AP E	5405	33,600	$211,344	41	Major M&R < Critical	100
AP NE	5105	12,825	$174,677	12	Major M&R < Critical	100
AP NE	5110	12,825	$174,677	0	Major M&R < Critical	100
AP NW	4105	2,112	$12,072	52	Major M&R < Critical	100
AP TW D	5205	28,800	$181,152	49	Major M&R < Critical	100
RW 18-36	6215	28,000	$111,832	58	Major M&R < Critical	100
RW 4-22	6110	41,200	$223,675	53	Major M&R < Critical	100
TW A	120	3,011	$10,298	60	Major M&R < Critical	100
TW A-2	310	9,500	$27,303	62	Major M&R < Critical	100
TW B	205	52,450	$714,369	1	Major M&R < Critical	100
TW B	210	140,000	$880,600	46	Major M&R < Critical	100
TW B	212	17,600	$110,704	42	Major M&R < Critical	100
TW B	215	8,000	$50,320	45	Major M&R < Critical	100
TW B	230	14,250	$194,085	14	Major M&R < Critical	100
TW B	235	2,280	$31,054	0	Major M&R < Critical	100
TW C	320	48,250	$374,227	38	Major M&R < Critical	100
TW C-1	505	10,325	$41,238	58	Major M&R < Critical	100
TW D	405	25,200	$65,545	63	Major M&R < Critical	100
		Total	**$3,589,171**	**73***	**← Network Avg. PCI →**	**92***

* This table shows the area-weighted PCI before and after Major M&R and routine maintenance work for the first year of the 10-year plan. It includes all pavement sections at Zephyrhills Municipal Airport, including those sections not shown in this table.
** Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.

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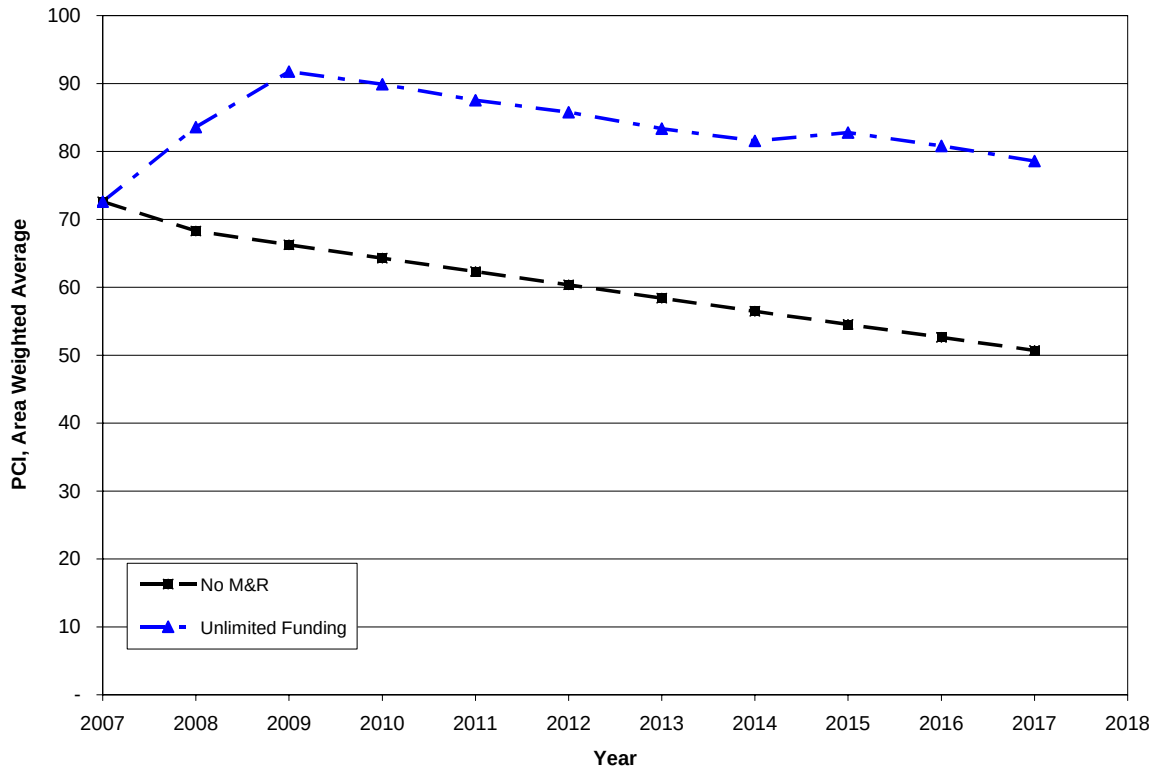
Figure 7-1: Budget Scenario Analysis



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

- The PCI will deteriorate from 73 to 51 in ten years if no M&R activities are performed.
- The PCI will remain at or above 79 through the 10-year analysis period under the unlimited budget scenario. A 2017 PCI of 79 with this scenario is 28 PCI points higher than a "No M&R" scenario. The total cost for Major M&R over this 10-year period is about $5.7 million.

8. 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 PCI 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 8-1 provides the summary results under the critical PCI scenario.

Table 8-1: M&R Costs under Unlimited Funding Scenario

Year	Preventive	Major M&R >= Critical	Major M&R < Critical	Total
2008	$58,152	$0	$3,589,171	$3,647,324
2009	$67,875	$0	$1,522,123	$1,589,998
2010	$85,549	$0	$12,693	$98,242
2011	$110,374	$0	$0	$110,374
2012	$133,464	$0	$0	$133,464
2013	$167,701	$0	$0	$167,701
2014	$209,580	$0	$0	$209,580
2015	$206,924	$0	$543,998	$750,922
2016	$251,431	$0	$0	$251,431
2017	$306,987	$0	$33,937	$340,924
Total	**$1,598,038**	**$0**	**$5,701,923**	**$7,299,960**

Note: Cost figures are rounded down. Sum may be different. Costs are adjusted for inflation.

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Approximately 63% of the total Major M&R cost is required in the first year (2008). This is a consequence of parts of Runway 4-22 and Runway 18-36 and several very large areas of Taxiway B being below Critical PCI.

Runway 4-22 is currently in Fair condition with weighted average PCI value of 67 while Runway 18-36 is currently in Good condition with weighted average PCI value of 91. Only small portions of these runways have immediate needs for repair. In addition, several large areas of Taxiway B need further evaluation to identify capital project(s) that may be funded separately. The unlimited budget scenario provides the basis for estimating the total repair cost. In reality, it is neither operationally nor fiscally prudent.

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

9. VISUAL AIDS

9.1 GIS Linked Shape File

The pavement inventory data and pavement condition were linked to the airport's shape file to 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.

Selected digital photographs taken during the pavement inspection were provided in an Appendix G to provide visual support to special pavement conditions or distress observed during the inspection of the facility.

10. RECOMMENDATIONS

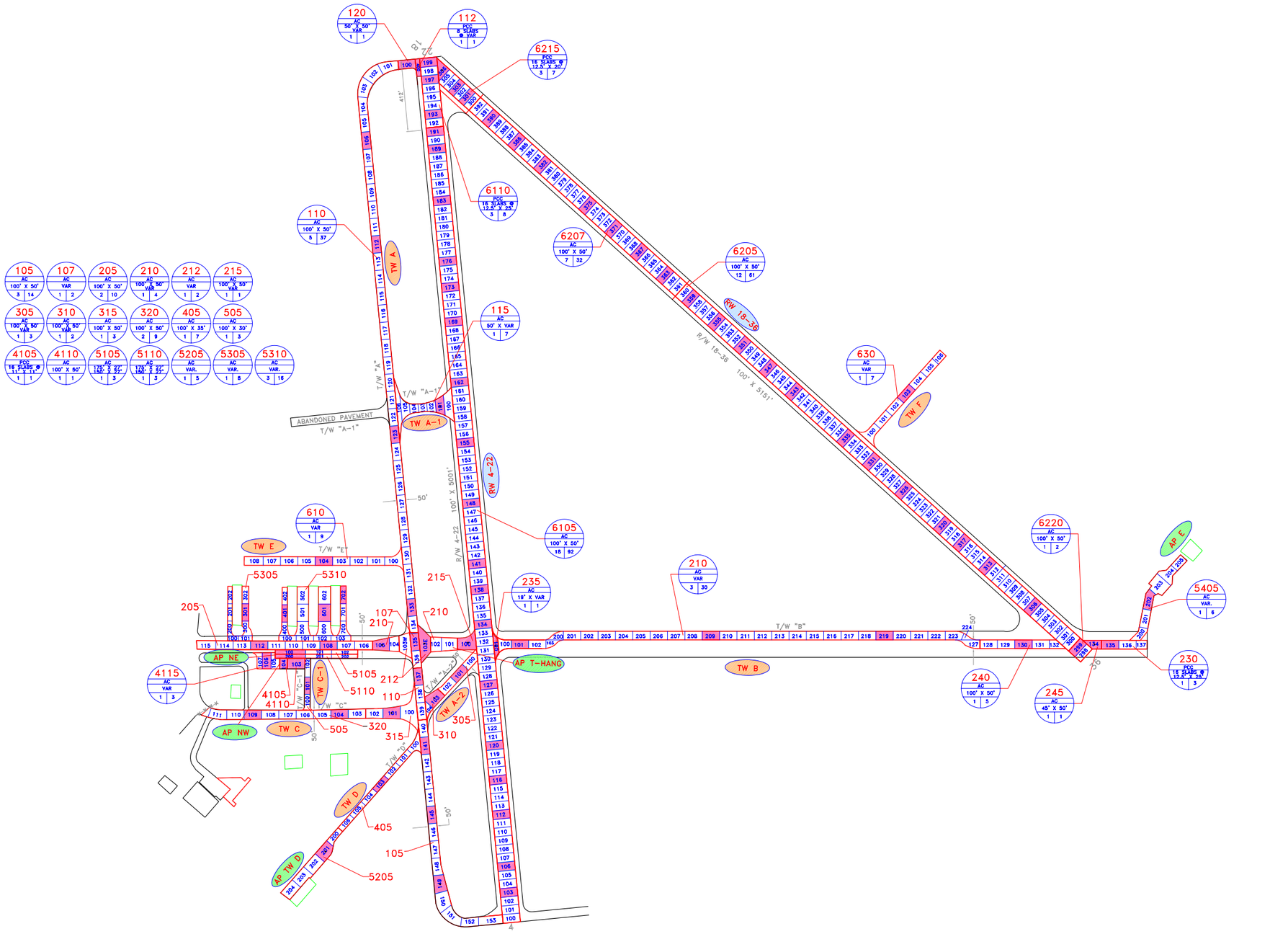
Pavement condition inspections were performed at Zephyrhills Municipal Airport and a 10-year M&R plan was developed based on the unlimited funding scenario.

The following recommendations were made based on 2007 condition inspections and M&R analysis results:

- Runway 4-22 and Runway 18-36 are in Fair and Good condition, respectively. Only small portions of these runways have immediate needs for repair. The remaining area of Runway 4-22 is forecasted to have a repair need in 2009.
- Several large areas of Taxiway B were identified that will require significant funding to improve them above Minimum PCI levels. Further evaluation of these features is necessary in order to develop repair plans and timing for future budgets. These needs can not be addressed with typical annual expenditures as they amount to over half million dollars.

APPENDIX A

NETWORK DEFINITION MAP
AND
PAVEMENT INVENTORY TABLE



GPS COORDINATES - ZEPHYRHILLS MUNICIPAL AIRPORT				
Location	Section	Sample	Latitude	Longitude
TW A	105	141	28.2270796	-82.16233595
TW A	105	145	28.22628548	-82.16322595
TW A	105	149	28.22547223	-82.16407075
TW A	107	135	28.22830739	-82.16112826
TW A	110	106	28.23417432	-82.15500611
TW A	110	112	28.23293958	-82.15627963
TW A	110	123	28.23074849	-82.1585808
TW A	110	133	28.22870949	-82.16070497
TW A	110	137	28.22790566	-82.16153613
TW A	115	101	28.23044401	-82.15770584
TW A	120	100	28.2344616	-82.15356422
AP NE	205	108	28.22923463	-82.16224066
AP NE	205	112	28.23005821	-82.16304478
TW B	210	101	28.22699957	-82.15998084
TW B	210	105	28.22863142	-82.16161024
TW B	210	209	28.22480919	-82.15761394
TW B	210	219	28.22276445	-82.15556843
TW B	212	103	28.22812482	-82.16109431
TW B	215	100	28.22762314	-82.16059441
TW B	230	135	28.2200422	-82.15302572
TW B	235	100	28.2272938	-82.16026132
TW B	240	130	28.22105812	-82.15403491
TW B	245	134	28.22019162	-82.15317629
TW C	305	101	28.22739675	-82.1610839
TW C	310	103	28.2274061	-82.16167612
TW C	315	101	28.22777456	-82.16241458
TW C	320	104	28.22840241	-82.16304734
TW C	320	109	28.22942678	-82.16406221
TW D	405	103	28.22713603	-82.16351107
TW E	505	101	28.22908893	-82.16300289
TW F	610	104	28.23054889	-82.1608139
TW F	620	102	28.23145628	-82.15896507
TW F	630	103	28.22472571	-82.15210906
AP NE	4105	104	28.22959345	-82.16299139
AP NE	4110	103	28.22944859	-82.16284776
AP NE	4115	106	28.22981541	-82.16315274
AP NE	5110	100	28.22962179	-82.16277961
AP NE	5110	200	28.22957177	-82.16283775
AP TW D	5205	201	28.22715456	-82.16503449
AP E	5305	202	28.21991251	-82.15202428
AP E	5305	301	28.23057384	-82.162796
AP T-HANG	5310	401	28.23012509	-82.16234521
AP T-HANG	5310	601	28.22967873	-82.16185984
AP T-HANG	5310	702	28.22963299	-82.16139209
RW 4 Center	-	-	28.2416676	-82.16375164
RW 4 Right	-	-	28.22407352	-82.16364832
RW 4 Left	-	-	28.22426481	-82.16386568
RW 4/22	6105	103	28.22452631	-82.1633838
RW 4/22	6105	106	28.22482443	-82.16306098
RW 4/22	6105	112	28.22542572	-82.16244201
RW 4/22	6105	116	28.2258372	-82.16201105
RW 4/22	6105	120	28.22622827	-82.16158272
RW 4/22	6105	127	28.22694299	-82.16083016
RW 4/22	6105	134	28.22764261	-82.16012398
RW 4/22	6105	138	28.22804699	-82.15970709
RW 4/22	6105	141	28.22833984	-82.15937478
RW 4/22	6105	148	28.22905696	-82.15863838
RW 4/22	6105	155	28.22976539	-82.1579278
RW 4/22	6105	162	28.23045399	-82.15720078
RW 4/22	6105	169	28.23116129	-82.1564633
RW 4/22	6105	173	28.23157713	-82.15605075
RW 4/22	6105	176	28.23186673	-82.15573237
RW 4/22	6105	183	28.23259093	-82.15498227
RW 4/22	6105	189	28.23316627	-82.15436874
RW 4/22	6105	191	28.23338524	-82.15416226
RW 4/22	6110	193	28.23359173	-82.15394777
RW 4/22	6110	197	28.23402781	-82.15347727
RW 4/22	6110	199	28.23420295	-82.15328506
RW 4/22	6112	400	28.234306	-82.1534678
RW 22 Center	-	-	28.23425023	-82.15323421
RW 22 Right	-	-	28.23434842	-82.15334194
RW 18 Center	-	-	28.23311526	-82.15329587
RW 18 Left	-	-	28.23313011	-82.15314107
RW 18 Right	-	-	28.23311648	-82.15345469
RW 18/36	6205	306	28.22126669	-82.15338868
RW 18/36	6205	313	28.22224201	-82.15336525
RW 18/36	6205	317	28.22277418	-82.15335175
RW 18/36	6205	320	28.22319245	-82.15333903
RW 18/36	6205	326	28.22401902	-82.15333851
RW 18/36	6205	331	28.2246868	-82.1533678
RW 18/36	6205	335	28.22525106	-82.15334518
RW 18/36	6205	343	28.22634248	-82.15332806
RW 18/36	6205	347	28.22689228	-82.15333394
RW 18/36	6205	351	28.22745655	-82.15334653
RW 18/36	6205	355	28.22799775	-82.15333361
RW 18/36	6205	359	28.228552	-82.15332277
RW 18/36	6207	363	28.22909127	-82.15330539
RW 18/36	6207	371	28.23018862	-82.15330944
RW 18/36	6207	375	28.23073557	-82.1533051
RW 18/36	6207	382	28.23170411	-82.15329179
RW 18/36	6207	386	28.23225571	-82.15328554
RW 18/36	6207	390	28.23278507	-82.15328653
RW 18/36	6207	367	28.22963326	-82.15329762
RW 18/36	6215	301	28.23331531	-82.15329883
RW 18/36	6215	303	28.23352772	-82.15329788
RW 18/36	6220	299	28.22029848	-82.15337308
RW 36 Approach Right	-	-	28.22023952	-82.15321972
RW 36 Approach Center	-	-	28.22024597	-82.15331677
RW 36 Approach Left	-	-	28.22023716	-82.15354161
RW 36 Center	-	-	28.22107985	-82.15338539
RW 36 Left	-	-	28.22109513	-82.15353846
RW 36 Right	-	-	28.22106692	-82.1532377

Notes: Geodetics represent decimal degrees (GS - 84 Datum)
All GPS coordinates are at the centroid of the sample units.

LEGEND

- RW 13-31 — TYPICAL RUNWAY BRANCH ID
- TW A — TYPICAL TAXIWAY BRANCH ID
- AP S — TYPICAL APRON BRANCH ID
- 4105 / AC - / 100' X 50' / 5 14 — SECTION NUMBER; PAVEMENT TYPE; TYPICAL SAMPLE UNIT INFORMATION (FLEXIBLE (AC) PAVEMENT LENGTH & WIDTH; RIGID (PCC) PAVEMENT NO. OF SLABS AND SLAB SIZE); NUMBER OF SAMPLE UNITS IN SECTION; NUMBER OF SAMPLE UNITS TO BE INSPECTED
- 100 — DESIGNATED SAMPLE UNITS. GPS COORDINATES ARE AT THE CENTROID OF THE SAMPLE UNIT.
- 100+ — DOT ON A ODD SHAPED SAMPLE UNIT INIDCATES THE CENTROID LOCATION.
- SOURCE: — SYSTEM INVENTORY DRAWING PREPARED BY URS CORPORATION, JUNE 2005.

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

NUMBER	DATE	REVISIONS
2	Feb-01	Draft Report
1	May-06	Revised per FDOT comments
0	Feb-06	Initial Submittal

DESIGNED: FL | DRAWN: GB | CHECKED: | DATE: 3-2-2006

MACTEC
Engineering and Consulting, Inc.
Tallahassee, Florida
850-656-1293

NETWORK DEFINITION DRAWING

ZEPHYRHILLS MUNICIPAL AIRPORT
PASCO COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

96

IDENTIFIER: ZPH

FDOT DISTRICT: 7

Table A-1: Pavement Inventory

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	EAST APRON	AP E	5405	600	50	33,600	P	PCC	12/25/1999	7/24/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHEAST APRON	AP NE	5105	475	27	12,825	P	AC	1/1/1942	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHEAST APRON	AP NE	5110	475	27	12,825	P	AC	1/1/1942	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHWEST APRON	AP NW	4105	40	50	2,112	P	PCC	1/1/1970	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHWEST APRON	AP NW	4110	100	50	4,600	P	AC	1/1/1982	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHWEST APRON	AP NW	4115	130	95	15,930	P	AC	1/1/2004	1/1/2004*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	APRON T-HANGARS	AP T-HANG	5305	600	30	21,500	P	AC	12/25/1999	12/25/1999*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	APRON T-HANGARS	AP T-HANG	5310	1,200	50	67,800	P	AC	12/25/1999	12/25/1999*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	APRON AT END OF TW D	AP TW D	5205	460	60	28,800	P	AC	12/25/1999	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6205	3,050	100	305,000	P	AAC	1/1/2002	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6207	1,600	100	160,000	P	AAC	1/1/2002	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6215	280	100	28,000	P	PCC	1/1/1942	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6220	100	100	10,000	P	AAC	1/1/1996	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 4-22	RW 4-22	6105	4,590	100	459,000	P	AAC	1/1/1986	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 4-22	RW 4-22	6110	412	100	41,200	P	PCC	1/1/1942	7/25/2007

See note at end of table.

Table A-1: Pavement Inventory

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	105	1,360	50	68,000	P	AAC	1/1/1990	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	107	150	50	7,500	P	AAC	1/1/1990	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	110	3,800	50	190,000	P	AC	1/1/1989	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	112	100	21	2,175	P	PCC	1/1/1942	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	120	50	50	3,011	P	AAC	1/1/1996	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A-1	TW A-1	115	325	45	32,000	P	AC	1/1/1996	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A-2	TW A-2	305	267	50	13,350	T	AAC	1/1/1987	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A-2	TW A-2	310	160	50	9,500	P	AAC	1/1/1990	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	205	1,049	50	52,450	T	AC	1/1/1942	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	210	2,800	50	140,000	P	AAC	1/1/1989	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	212	280	60	17,600	P	AAC	1/1/1990	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	215	110	70	8,000	P	AAC	1/1/1989	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	230	250	50	14,250	P	PCC	1/1/1942	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	235	120	19	2,280	P	AAC	1/1/1986	11/8/1998*
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	240	485	50	24,250	P	AAC	1/1/2002	7/25/2007

See note at end of table.

Table A-1: Pavement Inventory

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	245	100	50	4,005	P	AAC	1/1/2002	7/24/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY C	TW C	315	250	50	22,500	P	AAC	1/1/1990	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY C	TW C	320	965	50	48,250	P	AC	1/1/1942	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY C-1	TW C-1	505	344	30	10,325	P	AC	1/1/1982	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY D	TW D	405	720	35	25,200	P	AC	12/25/1999	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY E	TW E	610	900	50	46,545	P	AC	1/1/2002	7/25/2007
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY F	TW F	630	700	50	34,739	P	AC	1/1/2002	7/24/2007

Note: If 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 B

PCI RE-INSPECTION REPORT

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP E Name: EAST APRON Use: APRON Area: 33,600.00 SqFt

Section: 5405 of 1 From: - To: - Last Const.: 12/25/199
Surface: PCC Family: FDOT-GA-PCC Zone: Category: Rank: P
Area: 33,600.00 SqFt Length: 600.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/24/2007 Total Samples: 4 Surveyed: 1
Conditions: PCI:42.00 |
Inspection Comments:

Sample Number: 202 Type: R Area: 4.00 Count PCI = 42
Sample Comments:
72 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP NE Name: NORTHEAST APRON Use: APRON Area: 25,650.00 SqFt

Section: 5105 of 2 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 12,825.00 SqFt Length: 475.00 Ft Width: 27.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 3 Surveyed: 1
Conditions: PCI:20.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 100 Type: R Area: 4,375.00 SqFt PCI = 20
Sample Comments:
41 M 43 L 52 H

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP NE Name: NORTHEAST APRON Use: APRON Area: 25,650.00 SqFt

Section: 5110 of 2 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 12,825.00 SqFt Length: 475.00 Ft Width: 27.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 3 Surveyed: 1
Conditions: PCI:4.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 100 Type: R Area: 4,725.00 SqFt PCI = 4
Sample Comments:
41 H 41 M 43 M 43 L 50 L 52 H

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP NW Name: NORTHWEST APRON Use: APRON Area: 22,642.00 SqFt

Section: 4105 of 3 From: - To: - Last Const.: 1/1/1970
Surface: PCC Family: FDOT-GA-PCC Zone: Category: Rank: P
Area: 2,112.00 SqFt Length: 40.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 7/25/2007 Total Samples: 1 Surveyed: 1
Date:
Conditions: PCI:53.00 |
Inspection Comments:

Sample Number: 104 Type: R Area: 16.00 Count PCI = 53
Sample Comments:
65 H 74 M 75 H 70 L 68 L 62 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP NW Name: NORTHWEST APRON Use: APRON Area: 22,642.00 SqFt

Section: 4110 of 3 From: - To: - Last Const.: 1/1/1982
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 4,600.00 SqFt Length: 100.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 7/25/2007 Total Samples: 1 Surveyed: 1
Date:
Conditions: PCI:68.00 |
Inspection Comments:

Sample Number: 103 Type: R Area: 5,000.00 SqFt PCI = 68
Sample Comments:
48 L 45 L 52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP NW Name: NORTHWEST APRON Use: APRON Area: 22,642.00 SqFt

Section: 4115 of 3 From: To: Last Const.: 1/1/2004
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 15,930.00 SqFt Length: 130.00 Ft Width: 95.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 1/1/2004 Total Samples: 0 Surveyed: 0
Date:
Conditions: PCI:100.00 |
Inspection Comments: Construction/Major M&R inspection record.

Sample Number: Type: Area: 0.00
<NO SAMPLE RECORDS>

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP T-HANG Name: APRON T-HANGARS Use: APRON Area: 89,300.00 SqFt

Section: 5305 of 2 From: - To: - Last Const.: 12/25/199
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 21,500.00 SqFt Length: 600.00 Ft Width: 30.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 12/25/1999 Total Samples: 0 Surveyed: 0
Date:
Conditions: PCI:100.00 |
Inspection Comments: Construction/Major M&R inspection record.

Sample Number: Type: Area: 0.00
<NO SAMPLE RECORDS>

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP T-HANG Name: APRON T-HANGARS Use: APRON Area: 89,300.00 SqFt

Section: 5310 of 2 From: - To: - Last Const.: 12/25/199
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 67,800.00 SqFt Length: 1,200.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 12/25/1999 Total Samples: 0 Surveyed: 0
Conditions: PCI:100.00 |
Inspection Comments: Construction/Major M&R inspection record.

Sample Number: Type: Area: 0.00
<NO SAMPLE RECORDS>

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: AP TW D Name: APRON AT END OF TW D Use: APRON Area: 28,800.00 SqFt

Section: 5205 of 1 From: - To: - Last Const.: 12/25/199
Surface: AC Family: FDOT-GA-AP-AC Zone: Category: Rank: P
Area: 28,800.00 SqFt Length: 460.00 Ft Width: 60.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 7/25/2007 Total Samples: 1 Surveyed: 1
Date:
Conditions: PCI:50.00 |
Inspection Comments:

Sample Number: 201 Type: R Area: 7,000.00 SqFt PCI = 50
Sample Comments:
52 M 52 L 48 L 50 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: RW 18-36 Name: RUNWAY 18-36 Use: RUNWAY Area: 503,000.00 SqFt

Section: 6205 of 4 From: - To: - Last Const.: 1/1/2002
Surface: AAC Family: FDOT-GA-RW-AAC Zone: Category: Rank: P
Area: 305,000.00 SqFt Length: 3,050.00 Ft Width: 100.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 6 Surveyed: 12
Conditions: PCI:93.00 |
Inspection Comments:

Sample Number: 306 Type: R Area: 5,000.00 SqFt PCI = 76
Sample Comments:
50 L 52 L

Sample Number: 313 Type: R Area: 5,000.00 SqFt PCI = 83
Sample Comments:
52 L 50 L 48 L

Sample Number: 317 Type: R Area: 5,000.00 SqFt PCI = 93
Sample Comments:
48 L 52 L

Sample Number: 320 Type: R Area: 5,000.00 SqFt PCI = 96
Sample Comments:
52 L

Sample Number: 326 Type: R Area: 5,000.00 SqFt PCI = 89
Sample Comments:
52 L 48 L

Sample Number: 331 Type: R Area: 5,000.00 SqFt PCI = 98
Sample Comments:
52 L

Sample Number: 335 Type: R Area: 5,000.00 SqFt PCI = 99
Sample Comments:
52 L

Sample Number: 343 Type: R Area: 5,000.00 SqFt PCI = 94
Sample Comments:
52 L

Sample Number: 347 Type: R Area: 5,000.00 SqFt PCI = 99
Sample Comments:
52 L

Sample Number: 351 Type: R Area: 5,000.00 SqFt PCI = 100
Sample Comments:
<NO DISTRESSES>

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Sample Number: 355 Type: R Area: 5,000.00 SqFt PCI = 92
Sample Comments:
52 L 48 L

Sample Number: 359 Type: R Area: 5,000.00 SqFt PCI = 94
Sample Comments:
52 L 56 L 48 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: RW 18-36 Name: RUNWAY 18-36 Use: RUNWAY Area: 503,000.00 SqFt

Section: 6207 of 4 From: - To: - Last Const.: 1/1/2002
Surface: AAC Family: FDOT-GA-RW-AAC Zone: Category: Rank: P
Area: 160,000.00 SqFt Length: 1,600.00 Ft Width: 100.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 3 Surveyed: 7
Conditions: PCI:92.00 |
Inspection Comments:

Sample Number: 363 Type: R Area: 5,000.00 SqFt PCI = 92
Sample Comments:
52 L

Sample Number: 367 Type: R Area: 5,000.00 SqFt PCI = 95
Sample Comments:
48 L 52 L

Sample Number: 371 Type: R Area: 5,000.00 SqFt PCI = 98
Sample Comments:
52 L

Sample Number: 375 Type: R Area: 5,000.00 SqFt PCI = 87
Sample Comments:
52 L

Sample Number: 382 Type: R Area: 5,000.00 SqFt PCI = 96
Sample Comments:
52 L 50 L

Sample Number: 386 Type: R Area: 5,000.00 SqFt PCI = 96
Sample Comments:
50 L 52 L

Sample Number: 390 Type: R Area: 5,000.00 SqFt PCI = 79
Sample Comments:
52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: RW 18-36 Name: RUNWAY 18-36 Use: RUNWAY Area: 503,000.00 SqFt

Section: 6215 of 4 From: - To: - Last Const.: 1/1/2002
Surface: PCC Family: FDOT-GA-PCC Zone: Category: Rank: P
Area: 28,000.00 SqFt Length: 280.00 Ft Width: 100.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 7 Surveyed: 3
Conditions: PCI:59.00 |
Inspection Comments:

Sample Number: 301 Type: R Area: 16.00 Count PCI = 63
Sample Comments:
63 L 72 L 65 L

Sample Number: 303 Type: R Area: 16.00 Count PCI = 42
Sample Comments:
63 M 63 L 65 L 63 H 74 L

Sample Number: 306 Type: R Area: 12.00 Count PCI = 76
Sample Comments:
65 L 63 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: RW 18-36 Name: RUNWAY 18-36 Use: RUNWAY Area: 503,000.00 SqFt

Section: 6220 of 4 From: - To: - Last Const.: 1/1/1996
Surface: AAC Family: FDOT-GA-RW-AAC Zone: Category: Rank: P
Area: 10,000.00 SqFt Length: 100.00 Ft Width: 100.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:88.00 |
Inspection Comments:

Sample Number: 299 Type: R Area: 5,000.00 SqFt PCI = 88
Sample Comments:
48 L 52 L 56 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: RW 4-22 Name: RUNWAY 4-22 Use: RUNWAY Area: 500,200.00 SqFt

Section: 6105 of 2 From: - To: - Last Const.: 1/1/1986
Surface: AAC Family: FDOT-GA-RW-AAC Zone: Category: Rank: P
Area: 459,000.00 SqFt Length: 4,590.00 Ft Width: 100.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 115 Surveyed: 18
Conditions: PCI:68.00 |
Inspection Comments:

Sample Number: 103 Type: R Area: 5,000.00 SqFt PCI = 64
Sample Comments:
41 L 56 L 48 M 48 L

Sample Number: 106 Type: R Area: 5,000.00 SqFt PCI = 61
Sample Comments:
48 M 48 L 41 L

Sample Number: 112 Type: R Area: 5,000.00 SqFt PCI = 70
Sample Comments:
48 M 48 L

Sample Number: 116 Type: R Area: 5,000.00 SqFt PCI = 71
Sample Comments:
50 L 48 L 48 M

Sample Number: 120 Type: R Area: 5,000.00 SqFt PCI = 63
Sample Comments:
48 M 48 L 41 L

Sample Number: 127 Type: R Area: 5,000.00 SqFt PCI = 71
Sample Comments:
48 L 48 M

Sample Number: 134 Type: R Area: 5,000.00 SqFt PCI = 73
Sample Comments:
48 M 48 L

Sample Number: 138 Type: R Area: 5,000.00 SqFt PCI = 61
Sample Comments:
48 M 48 L 53 L 41 L

Sample Number: 141 Type: R Area: 5,000.00 SqFt PCI = 71
Sample Comments:
48 L 48 M

Sample Number: 148 Type: R Area: 5,000.00 SqFt PCI = 80
Sample Comments:
48 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Sample Number: 155 Type: R Area: 5,000.00 SqFt PCI = 67
Sample Comments:
48 M 43 L 48 L

Sample Number: 162 Type: R Area: 5,000.00 SqFt PCI = 64
Sample Comments:
41 L 48 M 48 L

Sample Number: 169 Type: R Area: 5,000.00 SqFt PCI = 73
Sample Comments:
48 M 48 L

Sample Number: 173 Type: R Area: 5,000.00 SqFt PCI = 73
Sample Comments:
48 L 48 M

Sample Number: 176 Type: R Area: 5,000.00 SqFt PCI = 79
Sample Comments:
48 M 48 L

Sample Number: 183 Type: R Area: 5,000.00 SqFt PCI = 66
Sample Comments:
45 M 48 L 43 L 48 M

Sample Number: 189 Type: R Area: 5,000.00 SqFt PCI = 59
Sample Comments:
43 L 48 H 48 L 48 M

Sample Number: 191 Type: R Area: 5,000.00 SqFt PCI = 67
Sample Comments:
48 L 48 M 50 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: RW 4-22 Name: RUNWAY 4-22 Use: RUNWAY Area: 500,200.00 SqFt

Section: 6110 of 2 From: - To: - Last Const.: 1/1/1942
Surface: PCC Family: FDOT-GA-PCC Zone: Category: Rank: P
Area: 41,200.00 SqFt Length: 412.00 Ft Width: 100.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 8 Surveyed: 3
Conditions: PCI:54.00 |
Inspection Comments:

Sample Number: 193 Type: R Area: 16.00 Count PCI = 50
Sample Comments:
63 M 65 M 63 L

Sample Number: 197 Type: R Area: 16.00 Count PCI = 52
Sample Comments:
63 L 65 M 63 M 74 M 75 L 73 L

Sample Number: 199 Type: R Area: 16.00 Count PCI = 59
Sample Comments:
63 M 65 M 63 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A Name: TAXIWAY A Use: TAXIWAY Area: 270,686.00 SqFt

Section: 105 of 5 From: - To: - Last Const.: 1/1/1990
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 68,000.00 SqFt Length: 1,360.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 17 Surveyed: 3
Conditions: PCI:67.00 |
Inspection Comments:

Sample Number: 141 Type: R Area: 5,000.00 SqFt PCI = 69
Sample Comments:
52 L 48 L

Sample Number: 145 Type: R Area: 5,000.00 SqFt PCI = 69
Sample Comments:
52 L 48 L

Sample Number: 149 Type: R Area: 6,000.00 SqFt PCI = 63
Sample Comments:
41 L 48 L 52 L 48 M

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A Name: TAXIWAY A Use: TAXIWAY Area: 270,686.00 SqFt

Section: 107 of 5 From: - To: - Last Const.: 1/1/1990
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 7,500.00 SqFt Length: 150.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 2 Surveyed: 1
Conditions: PCI:68.00 |
Inspection Comments:

Sample Number: 135 Type: R Area: 5,000.00 SqFt PCI = 68
Sample Comments:
48 L 52 L 45 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A Name: TAXIWAY A Use: TAXIWAY Area: 270,686.00 SqFt

Section: 110 of 5 From: - To: - Last Const.: 1/1/1989
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 190,000.00 SqFt Length: 3,800.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 46 Surveyed: 5
Conditions: PCI:74.00 |
Inspection Comments:

Sample Number: 106 Type: R Area: 5,000.00 SqFt PCI = 75
Sample Comments:
48 L 52 L

Sample Number: 112 Type: R Area: 5,000.00 SqFt PCI = 75
Sample Comments:
52 L 48 L

Sample Number: 123 Type: R Area: 5,000.00 SqFt PCI = 75
Sample Comments:
52 L 48 L

Sample Number: 133 Type: R Area: 5,000.00 SqFt PCI = 76
Sample Comments:
48 L 52 L

Sample Number: 137 Type: R Area: 5,000.00 SqFt PCI = 69
Sample Comments:
48 L 52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A Name: TAXIWAY A Use: TAXIWAY Area: 270,686.00 SqFt

Section: 112 of 5 From: - To: - Last Const.: 1/1/1942
Surface: PCC Family: FDOT-GA-PCC Zone: Category: Rank: P
Area: 2,175.00 SqFt Length: 100.00 Ft Width: 21.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:75.00 |
Inspection Comments:

Sample Number: 400 Type: R Area: 8.00 Count PCI = 75
Sample Comments:
63 L 65 L 66 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A Name: TAXIWAY A Use: TAXIWAY Area: 270,686.00 SqFt

Section: 120 of 5 From: - To: - Last Const.: 1/1/1996
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 3,011.00 SqFt Length: 50.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:62.00 |
Inspection Comments:

Sample Number: 100 Type: R Area: 2,500.00 SqFt PCI = 62
Sample Comments:
48 L 41 L 45 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A-1 Name: TAXIWAY A-1 Use: TAXIWAY Area: 32,000.00 SqFt

Section: 115 of 1 From: - To: - Last Const.: 1/1/1996
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 32,000.00 SqFt Length: 325.00 Ft Width: 45.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:85.00 |
Inspection Comments:

Sample Number: 101 Type: R Area: 3,500.00 SqFt PCI = 85
Sample Comments:
45 L 48 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A-2 Name: TAXIWAY A-2 Use: TAXIWAY Area: 22,850.00 SqFt

Section: 305 of 2 From: - To: - Last Const.: 1/1/1987
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: T
Area: 13,350.00 SqFt Length: 267.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 3 Surveyed: 1
Conditions: PCI:68.00 |
Inspection Comments:

Sample Number: 101 Type: R Area: 5,000.00 SqFt PCI = 68
Sample Comments:
52 L 45 L 48 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW A-2 Name: TAXIWAY A-2 Use: TAXIWAY Area: 22,850.00 SqFt

Section: 310 of 2 From: - To: - Last Const.: 1/1/1990
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 9,500.00 SqFt Length: 160.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 2 Surveyed: 1
Conditions: PCI:64.00 |
Inspection Comments:

Sample Number: 103 Type: R Area: 6,500.00 SqFt PCI = 64
Sample Comments:
50 M 52 L 48 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 205 of 8 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: T
Area: 52,450.00 SqFt Length: 1,049.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 13 Surveyed: 2
Conditions: PCI:20.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 108 Type: R Area: 5,000.00 SqFt PCI = 20
Sample Comments:
43 M 43 L 52 H

Sample Number: 112 Type: R Area: 5,000.00 SqFt PCI = 20
Sample Comments:
43 M 43 L 52 H

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 210 of 8 From: - To: - Last Const.: 1/1/1989
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 140,000.00 SqFt Length: 2,800.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 4 Surveyed: 1
Conditions: PCI:64.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 105 Type: R Area: 5,000.00 SqFt PCI = 64
Sample Comments:
48 L 52 H 52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 212 of 8 From: - To: - Last Const.: 1/1/1990
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 17,600.00 SqFt Length: 280.00 Ft Width: 60.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 2 Surveyed: 1
Conditions: PCI:60.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 103 Type: R Area: 6,300.00 SqFt PCI = 60
Sample Comments:
52 H 52 M 52 L 53 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 215 of 8 From: - To: - Last Const.: 1/1/1989
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 8,000.00 SqFt Length: 110.00 Ft Width: 70.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 2 Surveyed: 1
Conditions: PCI:63.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 100 Type: R Area: 6,445.00 SqFt PCI = 63
Sample Comments:
48 L 52 M 52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 230 of 8 From: - To: - Last Const.: 1/1/1942
Surface: PCC Family: FDOT-GA-PCC Zone: Category: Rank: P
Area: 14,250.00 SqFt Length: 250.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 3 Surveyed: 1
Conditions: PCI:15.00 |
Inspection Comments:

Sample Number: 135 Type: R Area: 16.00 Count PCI = 15
Sample Comments:
63 L 63 M 70 L 65 H 73 L 75 L 72 M

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 235 of 8 From: - To: - Last Const.: 1/1/1986
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 2,280.00 SqFt Length: 120.00 Ft Width: 19.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 11/8/1998 Total Samples: 1 Surveyed: 1
Conditions: PCI:16.00 |
Inspection Comments: IMPORTED FROM AIRPAV

Sample Number: 100 Type: R Area: 1,425.00 SqFt PCI = 16
Sample Comments:
43 L 48 L 52 H 52 M

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 240 of 8 From: - To: - Last Const.: 1/1/2002
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 24,250.00 SqFt Length: 485.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:98.00 |
Inspection Comments:

Sample Number: 130 Type: R Area: 5,000.00 SqFt PCI = 98
Sample Comments:
50 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW B Name: TAXIWAY B Use: TAXIWAY Area: 262,835.00 SqFt

Section: 245 of 8 From: - To: - Last Const.: 1/1/2002
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 4,005.00 SqFt Length: 100.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/24/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:90.00 |
Inspection Comments:

Sample Number: 134 Type: R Area: 2,250.00 SqFt PCI = 90
Sample Comments:
45 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 70,750.00 SqFt

Section: 315 of 2 From: - To: - Last Const.: 1/1/1990
Surface: AAC Family: FDOT-GA-TW-AAC Zone: Category: Rank: P
Area: 22,500.00 SqFt Length: 250.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 3 Surveyed: 1
Conditions: PCI:67.00 |
Inspection Comments:

Sample Number: 101 Type: R Area: 5,000.00 SqFt PCI = 67
Sample Comments:
48 L 50 L 52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW C Name: TAXIWAY C Use: TAXIWAY Area: 70,750.00 SqFt

Section: 320 of 2 From: - To: - Last Const.: 1/1/1942
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 48,250.00 SqFt Length: 965.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 12 Surveyed: 2
Conditions: PCI:40.00 |
Inspection Comments:

Sample Number: 104 Type: R Area: 5,000.00 SqFt PCI = 37
Sample Comments:
50 L 52 L 43 M

Sample Number: 109 Type: R Area: 5,000.00 SqFt PCI = 42
Sample Comments:
52 L 43 M

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW C-1 Name: TAXIWAY C-1 Use: TAXIWAY Area: 10,325.00 SqFt

Section: 505 of 1 From: - To: - Last Const.: 1/1/1982
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 10,325.00 SqFt Length: 344.00 Ft Width: 30.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 7/25/2007 Total Samples: 3 Surveyed: 1
Date:
Conditions: PCI:59.00 |
Inspection Comments:

Sample Number: 101 Type: R Area: 3,000.00 SqFt PCI = 59
Sample Comments:
48 L 48 M 52 M 52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW D Name: TAXIWAY D Use: TAXIWAY Area: 25,200.00 SqFt

Section: 405 of 1 From: - To: - Last Const.: 12/25/199
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 25,200.00 SqFt Length: 720.00 Ft Width: 35.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. 7/25/2007 Total Samples: 1 Surveyed: 1
Date:
Conditions: PCI:64.00 |
Inspection Comments:

Sample Number: 103 Type: R Area: 4,000.00 SqFt PCI = 64
Sample Comments:
52 L 48 L 45 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW E Name: TAXIWAY E Use: TAXIWAY Area: 46,545.00 SqFt

Section: 610 of 1 From: To: Last Const.: 1/1/2002
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 46,545.00 SqFt Length: 900.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/25/2007 Total Samples: 1 Surveyed: 1
Conditions: PCI:97.00 |
Inspection Comments:

Sample Number: 104 Type: R Area: 3,500.00 SqFt PCI = 97
Sample Comments:
52 L

Re-inspection Report

FDOT
Report Generated Date: 2/6/2008
Site Name:

Network: ZPH Name: ZEPHYRHILLS MUNICIPAL AIRPORT

Branch: TW F Name: TAXIWAY F Use: TAXIWAY Area: 34,739.00 SqFt

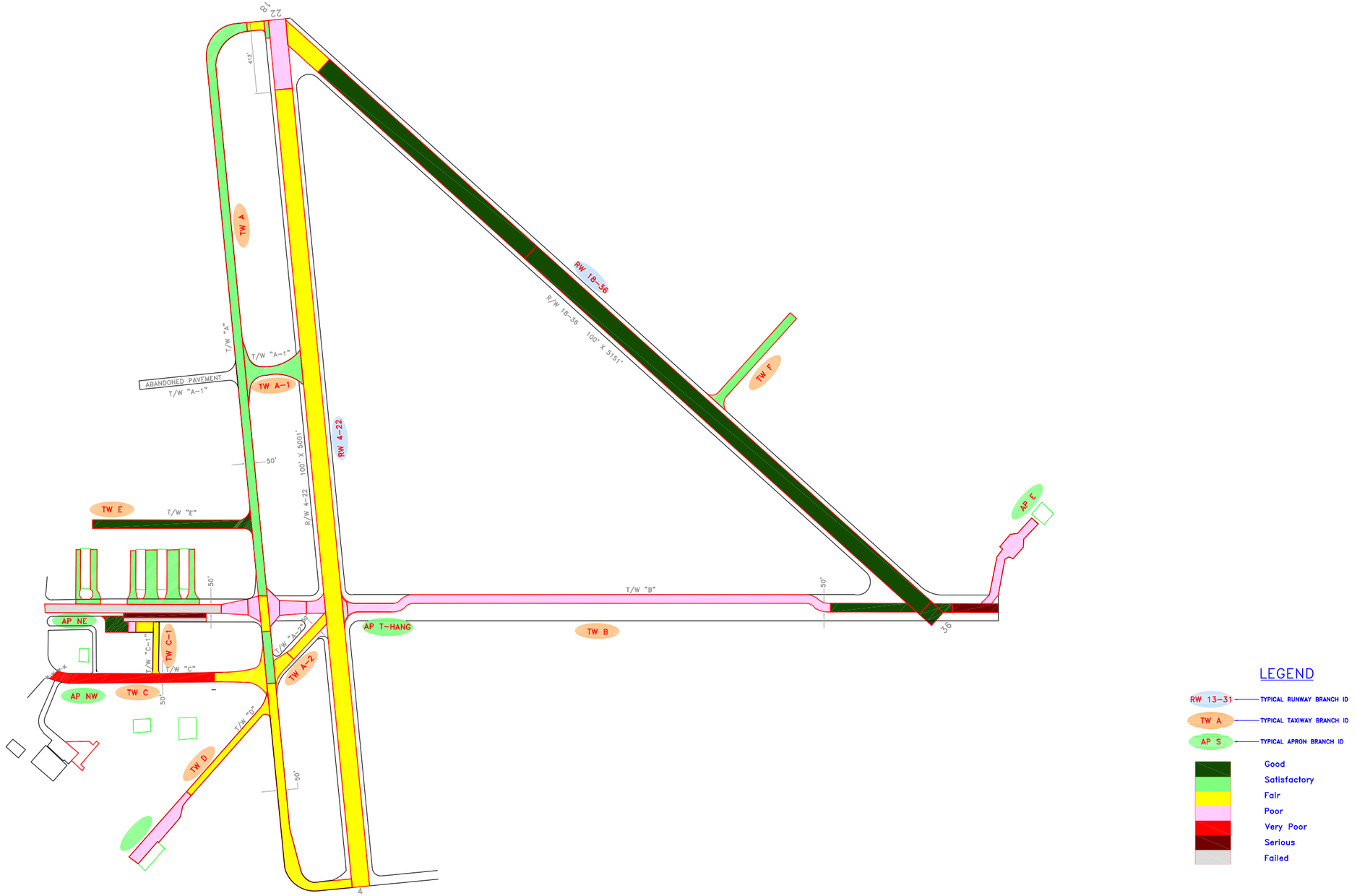
Section: 630 of 1 From: - To: - Last Const.: 1/1/2002
Surface: AC Family: FDOT-GA-TW-AC Zone: Category: Rank: P
Area: 34,739.00 SqFt Length: 700.00 Ft Width: 50.00 Ft
Shoulder: Street Type: Grade: 0.00 Lanes: 0
Section Comments:

Last Insp. Date: 7/24/2007 Total Samples: 7 Surveyed: 1
Conditions: PCI:85.00 |
Inspection Comments:

Sample Number: 103 Type: R Area: 5,000.00 SqFt PCI = 85
Sample Comments:
52 L 48 L

APPENDIX C

2007 CONDITION MAP AND TABLES



LEGEND

RW 13-31 — TYPICAL RUNWAY BRANCH ID

TW A — TYPICAL TAXIWAY BRANCH ID

AP S — TYPICAL APRON BRANCH ID

- Good
- Satisfactory
- Fair
- Poor
- Very Poor
- Serious
- Failed

0 150 300

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

NUMBER	DATE	REVISIONS
2	Feb-01-08	Draft Report
1	May-06	Revised per FDOT comments
0	Feb-06	Initial Submittal

DESIGNED: FL | DRAWN: | CHECKED: | DATE: 3-2-2006

URS

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PLANNING TECHNOLOGY INC | PANTHER INTERNATIONAL, LLC

MACTEC
Engineering and Consulting, Inc.
Tallahassee, Florida
850-656-1293

2007 Condition Map

ZEPHYRHILLS MUNICIPAL AIRPORT
PASCO COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

IDENTIFIER: ZPH

FDOT DISTRICT: 7

Table C-1: Pavement Condition Index

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date	2007 PCI
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	EAST APRON	AP E	5405	600	50	33,600	P	PCC	12/25/1999	7/24/2007	42
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHEAST APRON	AP NE	5105	475	27	12,825	P	AC	1/1/1942	11/8/1998*	12
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHEAST APRON	AP NE	5110	475	27	12,825	P	AC	1/1/1942	11/8/1998*	0
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHWEST APRON	AP NW	4105	40	50	2,112	P	PCC	1/1/1970	7/25/2007	53
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHWEST APRON	AP NW	4110	100	50	4,600	P	AC	1/1/1982	7/25/2007	68
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	NORTHWEST APRON	AP NW	4115	130	95	15,930	P	AC	1/1/2004	1/1/2004*	93
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	APRON T-HANGARS	AP T-HANG	5305	600	30	21,500	P	AC	12/25/1999	12/25/1999*	85
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	APRON T-HANGARS	AP T-HANG	5310	1,200	50	67,800	P	AC	12/25/1999	12/25/1999*	85
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	APRON AT END OF TW D	AP TW D	5205	460	60	28,800	P	AC	12/25/1999	7/25/2007	50
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6205	3,050	100	305,000	P	AAC	1/1/2002	7/25/2007	93
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6207	1,600	100	160,000	P	AAC	1/1/2002	7/25/2007	92
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6215	280	100	28,000	P	PCC	1/1/1942	7/25/2007	59
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 18-36	RW 18-36	6220	100	100	10,000	P	AAC	1/1/1996	7/25/2007	88
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 4-22	RW 4-22	6105	4,590	100	459,000	P	AAC	1/1/1986	7/25/2007	68
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	RUNWAY 4-22	RW 4-22	6110	412	100	41,200	P	PCC	1/1/1942	7/25/2007	54

See note at end of table.

Table C-1: Pavement Condition Index

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date	2007 PCI
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	105	1,360	50	68,000	P	AAC	1/1/1990	7/25/2007	67
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	107	150	50	7,500	P	AAC	1/1/1990	7/25/2007	68
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	110	3,800	50	190,000	P	AC	1/1/1989	7/25/2007	74
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	112	100	21	2,175	P	PCC	1/1/1942	7/25/2007	75
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A	TW A	120	50	50	3,011	P	AAC	1/1/1996	7/25/2007	62
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A-1	TW A-1	115	325	45	32,000	P	AC	1/1/1996	7/25/2007	85
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A-2	TW A-2	305	267	50	13,350	T	AAC	1/1/1987	7/25/2007	68
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY A-2	TW A-2	310	160	50	9,500	P	AAC	1/1/1990	7/25/2007	64
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	205	1,049	50	52,450	T	AC	1/1/1942	11/8/1998*	3
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	210	2,800	50	140,000	P	AAC	1/1/1989	11/8/1998*	47
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	212	280	60	17,600	P	AAC	1/1/1990	11/8/1998*	43
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	215	110	70	8,000	P	AAC	1/1/1989	11/8/1998*	46
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	230	250	50	14,250	P	PCC	1/1/1942	7/25/2007	15
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	235	120	19	2,280	P	AAC	1/1/1986	11/8/1998*	0
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	240	485	50	24,250	P	AAC	1/1/2002	7/25/2007	98

See note at end of table.

Table C-1: Pavement Condition Index

Network Name	Network ID	Branch Name	Branch ID	Section ID	Length, Ft	Width, Ft	Area, SqFt	Rank	Surface	Last Const. Date	Last Insp. Date	2007 PCI
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY B	TW B	245	100	50	4,005	P	AAC	1/1/2002	7/24/2007	90
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY C	TW C	315	250	50	22,500	P	AAC	1/1/1990	7/25/2007	67
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY C	TW C	320	965	50	48,250	P	AC	1/1/1942	7/25/2007	40
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY C-1	TW C-1	505	344	30	10,325	P	AC	1/1/1982	7/25/2007	59
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY D	TW D	405	720	35	25,200	P	AC	12/25/1999	7/25/2007	64
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY E	TW E	610	900	50	46,545	P	AC	1/1/2002	7/25/2007	97
ZEPHYRHILLS MUNICIPAL AIRPORT	ZPH	TAXIWAY F	TW F	630	700	50	34,739	P	AC	1/1/2002	7/24/2007	85

Note: If 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.

Table C-2: Pavement Condition Prediction

Network ID	Branch ID	Section ID	2007 PCI	PCI Forecast									
				2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ZPH	AP E	5405	42	41	40	39	39	38	37	36	35	34	33
ZPH	AP NE	5105	12	11	10	10	9	8	7	6	5	4	3
ZPH	AP NE	5110	0	0	0	0	0	0	0	0	0	0	0
ZPH	AP NW	4105	53	52	51	50	50	49	48	47	46	45	44
ZPH	AP NW	4110	68	66	65	63	62	60	59	57	56	55	54
ZPH	AP NW	4115	93	91	89	87	85	83	81	79	77	75	73
ZPH	AP T-HANG	5305	85	83	81	79	77	75	73	72	70	68	66
ZPH	AP T-HANG	5310	85	83	81	79	77	75	73	72	70	68	66
ZPH	AP TW D	5205	50	49	48	47	46	46	45	44	44	43	42
ZPH	RW 18-36	6205	93	91	88	86	83	81	78	76	73	71	68
ZPH	RW 18-36	6207	92	90	87	85	82	80	77	75	72	70	67
ZPH	RW 18-36	6215	59	58	57	56	56	55	54	53	52	51	50
ZPH	RW 18-36	6220	88	86	83	81	78	76	73	71	68	66	63
ZPH	RW 4-22	6105	68	66	63	61	58	56	53	51	48	46	43
ZPH	RW 4-22	6110	54	53	52	51	51	50	49	48	47	46	45
ZPH	TW A	105	67	65	63	61	59	57	55	54	52	50	48
ZPH	TW A	107	68	66	64	62	60	58	56	55	53	51	49
ZPH	TW A	110	74	73	71	70	69	67	66	65	64	63	61
ZPH	TW A	112	75	74	73	72	72	71	70	69	68	67	66
ZPH	TW A	120	62	60	58	56	54	52	50	49	47	45	43
ZPH	TW A-1	115	85	83	81	79	77	76	74	73	71	70	69
ZPH	TW A-2	305	68	66	64	62	60	58	56	55	53	51	49
ZPH	TW A-2	310	64	62	60	58	56	54	52	51	49	47	45
ZPH	TW B	205	3	1	0	0	0	0	0	0	0	0	0
ZPH	TW B	210	47	45	43	41	39	38	36	34	32	30	28
ZPH	TW B	212	43	41	39	37	35	34	32	30	28	26	24
ZPH	TW B	215	46	44	42	40	38	37	35	33	31	29	27
ZPH	TW B	230	15	14	13	12	12	11	10	9	8	7	6
ZPH	TW B	235	0	0	0	0	0	0	0	0	0	0	0
ZPH	TW B	240	98	96	94	92	90	88	86	85	83	81	79
ZPH	TW B	245	90	88	86	84	82	80	78	76	75	73	71

See note at end of table.

Table C-2: Pavement Condition Prediction

Network ID	Branch ID	Section ID	2007 PCI	PCI Forecast									
				2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
ZPH	TW C	315	67	65	63	61	59	57	55	54	52	50	48
ZPH	TW C	320	40	38	36	34	32	30	28	26	24	22	20
ZPH	TW C-1	505	59	58	56	55	54	52	51	49	47	45	43
ZPH	TW D	405	64	63	62	61	59	58	57	55	54	53	51
ZPH	TW E	610	97	94	91	89	87	84	82	80	78	77	75
ZPH	TW F	630	85	83	81	79	77	76	74	73	71	70	69

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

APPENDIX D

AREA-WEIGHTED PCI RESULTS BY BRANCH

Table D-1 Condition Summary by Branch

Network	Branch Name	2007 PCI
ZEPHYRHILLS MUNICIPAL AIRPORT	EAST APRON	42
ZEPHYRHILLS MUNICIPAL AIRPORT	NORTHEAST APRON	6
ZEPHYRHILLS MUNICIPAL AIRPORT	NORTHWEST APRON	84
ZEPHYRHILLS MUNICIPAL AIRPORT	APRON T-HANGARS	85
ZEPHYRHILLS MUNICIPAL AIRPORT	APRON AT END OF TW D	50
ZEPHYRHILLS MUNICIPAL AIRPORT	RUNWAY 18-36	91
ZEPHYRHILLS MUNICIPAL AIRPORT	RUNWAY 4-22	67
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY A	72
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY A-1	85
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY A-2	66
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY B	41
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY C	49
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY C-1	59
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY D	64
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY E	97
ZEPHYRHILLS MUNICIPAL AIRPORT	TAXIWAY F	85

APPENDIX E

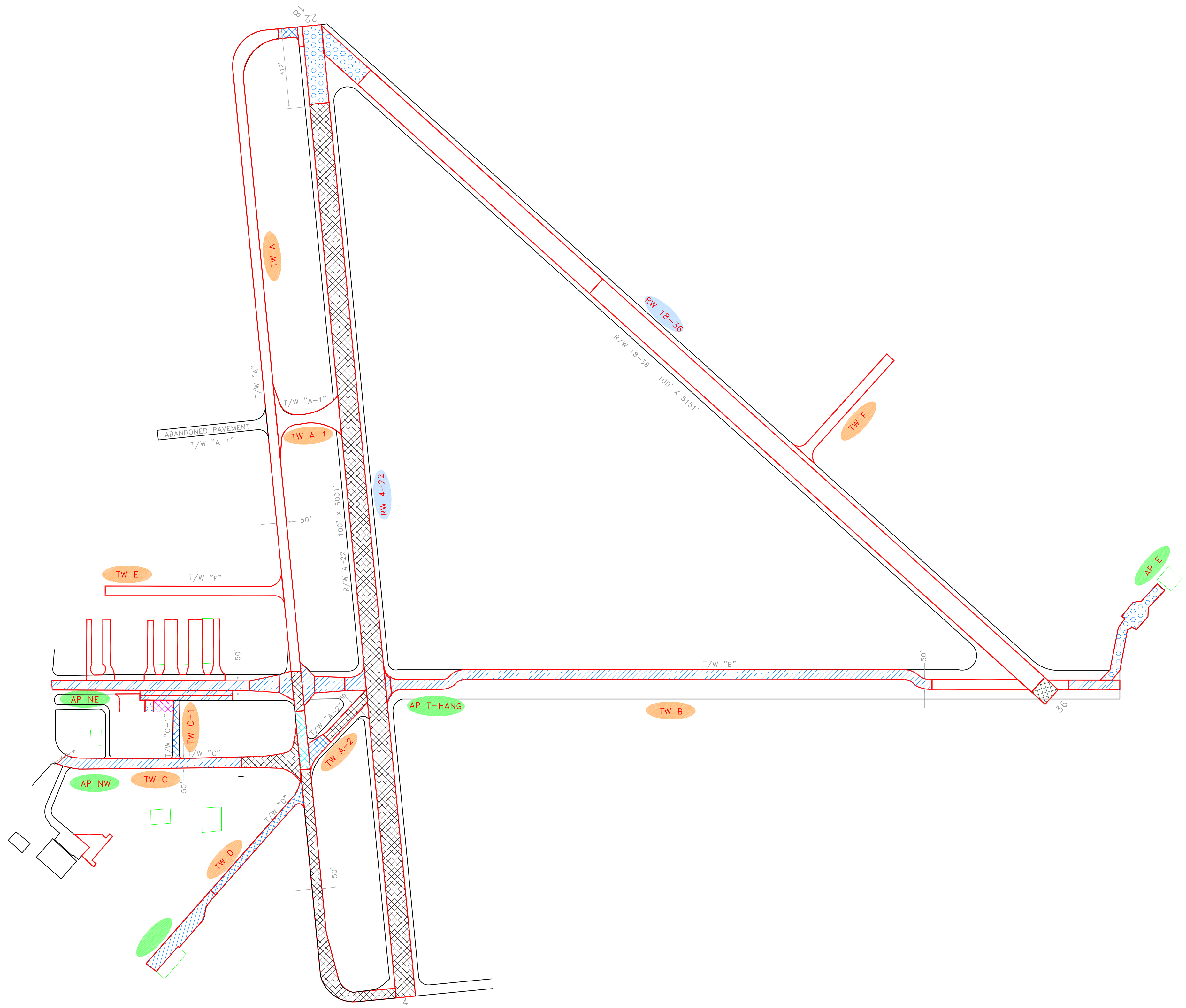
MAJOR M&R PLAN BY YEAR

Table E-1: Major M&R Plan by Year

Network	Branch Use	Branch ID	Section ID	Surface	Area, SqFt	Year	PCI Before Maint.	Activities	PCI After Maint.	Cost
ZPH	APRON	AP E	5405	PCC	33,600	2008	41	PCC Restoration	100	$211,344
ZPH	APRON	AP NE	5105	AC	12,825	2008	12	Reconstruction	100	$174,677
ZPH	APRON	AP NE	5110	AC	12,825	2008	0	Reconstruction	100	$174,677
ZPH	APRON	AP NW	4105	PCC	2,112	2008	52	PCC Restoration	100	$12,072
ZPH	APRON	AP TW D	5205	AC	28,800	2008	49	Mill & Overlay	100	$181,152
ZPH	RUNWAY	RW 18-36	6215	PCC	28,000	2008	58	PCC Restoration	100	$111,832
ZPH	RUNWAY	RW 4-22	6110	PCC	41,200	2008	53	PCC Restoration	100	$223,675
ZPH	TAXIWAY	TW A	120	AAC	3,011	2008	60	Microsurfacing	100	$10,298
ZPH	TAXIWAY	TW A-2	310	AAC	9,500	2008	62	Microsurfacing	100	$27,303
ZPH	TAXIWAY	TW B	205	AC	52,450	2008	1	Reconstruction	100	$714,369
ZPH	TAXIWAY	TW B	210	AAC	140,000	2008	46	Mill & Overlay	100	$880,600
ZPH	TAXIWAY	TW B	212	AAC	17,600	2008	42	Mill & Overlay	100	$110,704
ZPH	TAXIWAY	TW B	215	AAC	8,000	2008	45	Mill & Overlay	100	$50,320
ZPH	TAXIWAY	TW B	230	PCC	14,250	2008	14	Reconstruction	100	$194,085
ZPH	TAXIWAY	TW B	235	AAC	2,280	2008	0	Reconstruction	100	$31,054
ZPH	TAXIWAY	TW C	320	AC	48,250	2008	38	Mill & Overlay	100	$374,227
ZPH	TAXIWAY	TW C-1	505	AC	10,325	2008	58	Microsurfacing	100	$41,238
ZPH	TAXIWAY	TW D	405	AC	25,200	2008	63	Microsurfacing	100	$65,545
ZPH	RUNWAY	RW 4-22	6105	AAC	459,000	2009	63	Microsurfacing	100	$1,229,676
ZPH	TAXIWAY	TW A	105	AAC	68,000	2009	63	Microsurfacing	100	$182,174
ZPH	TAXIWAY	TW A	107	AAC	7,500	2009	64	Microsurfacing	100	$17,984
ZPH	TAXIWAY	TW A-2	305	AAC	13,350	2009	64	Microsurfacing	100	$32,011
ZPH	TAXIWAY	TW C	315	AAC	22,500	2009	63	Microsurfacing	100	$60,278
ZPH	APRON	AP NW	4110	AC	4,600	2010	63	Microsurfacing	100	$12,693
ZPH	TAXIWAY	TW A	110	AC	190,000	2015	64	Microsurfacing	100	$543,998
ZPH	RUNWAY	RW 18-36	6220	AAC	10,000	2017	63	Microsurfacing	100	$33,937

APPENDIX F

10-YEAR M&R MAP



LEGEND

RW 13-31 — TYPICAL RUNWAY BRANCH ID
TW A — TYPICAL TAXIWAY BRANCH ID
AP S — TYPICAL APRON BRANCH ID

Year	Activity
2008	Microsurfacing
2009	Mill & Overlay
2010	Reconstruction
2011	Concrete Pavement Restoration
2012	
2013	
2014	
2015	
2016	
2017	

0 150 300

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

NUMBER	DATE	REVISIONS
2	Feb-01-08	Draft Report
1	May-06	Revised per FDOT comments
0	Feb-06	Initial Submittal

DESIGNED: FL | DRAWN: GB | CHECKED: | DATE: 3-2-2006

P:\COM_SHARED\FDOT AVIATION\CAD DRAWINGS\SYSTEM INVENTORY\AUTOCAD\ZEPHYRHILLSMUNICIPAL.DWG, BB-BB 06/07/06 08:53:32

URS

MACTEC
Engineering and Consulting, Inc.
Tallahassee, Florida
850-656-1293

10-Year M&R Map

ZEPHYRHILLS MUNICIPAL AIRPORT
PASCO COUNTY, FLORIDA

FLORIDA DEPARTMENT OF TRANSPORTATION - AVIATION OFFICE

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IDENTIFIER ZPH

FDOT DISTRICT 7

APPENDIX G

PHOTOGRAPHS

RW 18-36 Section 6220 SU 299: Section Overview (July 25, 2007)

RW 4-22 Section 6105 SU 120: Low to Medium Severity Alligator Cracking (July 25, 2007)

TW E Section 610 SU 104: Low Severity Weathering (July 25, 2007)

TW A Section 107 SU 135: Low Severity Weathering (July 25, 2007)

TW A Section 107 SU 135: Low Severity L/T Cracking (July 25, 2007)

TW A Section 110 SU 137: Low Severity Weathering (July 25, 2007)

TW A Section 105 SU 141: Low Severity Weathering (July 25, 2007)

TW D Section 405 SU 103: Low Severity L/T Cracking (July 25, 2007)

AP TW D Section 5205 SU 201: Low Severity Weathering (July 25, 2007)

TW B Section 240 SU 130: Section Overview (July 25, 2007)

TW B Section 230 SU 135: High Severity Joint Seal Damage (July 25, 2007)

TW B Section 230 SU 135: Medium Severity Linear Cracking (July 25, 2007)