SD Airports

Airport Master Plan

Brown Field Municipal Airport

Pavement Maintenance Management Plan (PMMP)

2018

Prepared by:

C&S COMPANIES®

Notice

This document and its contents have been prepared and are intended solely for the C&S Companies and the City of San Diego's information and use in relation to the Pavement Maintenance and Management Program (PMMP) at the Brown Field Municipal Airport (SDM).

Atkins North America (ANA) assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

Document History

Job number: 100054723.SDM.11			Document ref:			
Revision	**Purpose description**	**Originated**	**Checked**	**Reviewed**	**Authorized**	**Date**
Draft	For Internal Review	Katie Chou	Manuel Bejarano	Manuel Bejarano	Kent McLemore	12/1/17
Pre-Final	For Internal Re-review	Katie Chou	Manuel Bejarano	Manuel Bejarano	Kent McLemore	12/26/17
Final	For Issuance	Katie Chou	Manuel Bejarano	Manuel Bejarano	Kent McLemore	1/12/18
Final (Reformat)	For Issuance	Katie Chou	Manuel Bejarano	Manuel Bejarano	Kent McLemore	2/14/18

Table of Contents

Figures

Tables

Intentionally Left Blank

Executive Summary

Atkins North America was retained by C&S Companies to prepare a Pavement Maintenance Management Plan (PMMP) report as part of the Airport Master Plan study for the Brown Field Municipal Airport (SDM).

Available information from as-built drawings and reports was entered in the PAVER pavement management software to prepare a pavement inventory for Brown Field Municipal Airport as shown in **Table 2-1**. To facilitate the evaluation process, a pavement network definition was established in accordance with ASTM Standard D5340 as shown on **Figure 2-3** and **Figure 2-4**. The detailed PAVER reports (i.e. branch listing, branch condition and section condition reports) are included in Appendices A to C.

To understand the existing pavement condition, a visual pavement inspection was conducted in August 2017. The collected condition data such as distress types, severities and quantities were entered in the PAVER software to calculate the current Pavement Condition Index (PCI). The PCI is a numerical score ranging from 100 (new) to 0 (failed) to rate the general condition of a pavement. The majority (58%) of airfield pavements at Brown Field Municipal Airport are in fair to good condition and the remaining 42% are in poor condition. The average PCI values for runways, taxiways and aprons are 64, 51, and 51, respectively as of August 2017. The current PCI value of each section is shown on **Figure 3-4**.

A Non-Destructive Testing (NDT) utilizing a Heavy Weight Deflectometer (HWD) was conducted to assess the subgrade strength. As part of the evaluation, five pavement cores were also taken to supplement the existing cross section information. The Pavement Classification Number (PCN) was calculated using the FAA COMFAA program based on analysis of traffic data, non-destructive testing, pavement cross section data and available subsurface information. Three sections of Runway 8L-26R were analyzed and the smallest numerical PCN value was used in Runway 8L-26R PCN reporting. The numerical PCN value for Runway 8R-26L was estimated using the "Using Aircraft Method". The PCN codes of both runways are listed in **Table 4-5.**

A typical pavement performance curve was presented on **Figure 5-1** and the "right" timing of treatment was explained on **Figure 5-2**. Since the most economic maintenance option is to keep good pavements in good repair, preventative maintenance activities are strongly recommended to be applied to pavements when the PCI falls within 5 points of the critical value (i.e. 70) as shown in **Table 5-1**. For pavements with PCI below 70 (i.e. the threshold of good condition), either restoration/rehabilitation and/or major reconstruction are needed. illustrates the areas recommended for preventative treatment, rehabilitation and reconstruction. The estimated costs of preventative treatment and rehabilitation/restoration for the next 5 years are summarized in **Table 5-5** and **Table 5-6**. Although the cost estimates provide a useful network-level planning tool, they are not a comprehensive Engineer's estimate as the cost is only pertinent to pavement construction cost. A detailed engineering study and the project specific cost estimates shall be developed on a case-by-case basis to ensure the most appropriate rehabilitation strategy is chosen at the time of implementation.

Because an unlimited budget is unlikely to be available to support all identified rehabilitation and reconstruction needs shown in **Table 5-6**, a prioritized short-list of the Capital Improvement Program (CIP) is proposed in **Table 6-1**. The prioritization is based on the existing pavement condition, the operational importance and the known maintenance need expressed by the Airport. The five-year CIP exhibit for Brown Field Municipal Airport is shown on **Figure 6-2**. The Airport can begin the grant application process at the earliest opportunity and apply stopgap treatment listed in

Table 5-2 while waiting for the funding approval. It is noted that the estimated CIP cost excludes any administration cost, non-pavement related improvements (e.g. utilities), professional engineering fee, construction observation/inspection fees, annual escalation and contingencies. Cost estimates presented in this report are based on November 2017 dollars.

1 Introduction and Scope

This Pavement Maintenance Management Plan (PMMP) report was prepared for the C&S Companies as part of the Airport Master Plan study for Brown Field Municipal Airport. The report organization and study effort are described in Section 1.1. The scope of work for the PMMP, is outlined in Section 1.2.

1.1 Report Organization

The report is divided into six Chapters and seven Appendices.

- Chapter 1 "Introduction and Scope" – This chapter provides a brief background, report organization, and scope of work for Task 11, PMMP.

- Chapter 2 "Pavement Inventory and Network Definition" – This chapter presents the details of airfield pavement inventory and the network definition used in the pavement management program, PAVER 7.0.2.

- Chapter 3 "Pavement Condition Index" – This chapter documents the field visual inspection to rate the existing pavement conditions. An overall existing Pavement Condition Index (PCI) map is prepared for Brown Field Municipal Airport.

- Chapter 4 "Pavement Classification Number" – This chapter reviews the existing and future traffic data. A non-destructive Heavy Weight Deflectometer (HWD) testing was conducted to facilitate the assessment of subgrade strength. The Pavement Classification Number (PCN) values for runways are calculated using the FAA Advisory Circular 150/5335-5C.

- Chapter 5 "Maintenance and Rehabilitation Plans and Budget Requirements" – This chapter suggests the viable near future maintenances options and provides the cost estimates for the longer-term rehabilitation and reconstruction using the existing PCI information presented in Chapter 3. It's noted that the presented cost reflects the material costs associated with the maintenance and rehabilitation strategies. All project overheads, administration, mobilization and professional engineering fees are EXCLUDED in the estimate.

- Chapter 6 "Recommended Capital Improvement Program and Prioritization" – This chapter recommends the prioritization of Capital Improvement Projects based on the operational importance of pavements, existing pavement conditions and available inputs from Airport managers.

- Appendix A: Branch Listing Report
- Appendix B: Branch Condition Report
- Appendix C: Section Condition Report
- Appendix D: Pavement Inspection Report
- Appendix E: Heavy Weight Deflectometer Testing Plan and Location
- Appendix F: Pavement Coring Data
- Appendix G: PCN Calculation Output (Runway 8L-26R Interior)

1.2 Scope of Work

Specific items of work included in Task 11 Pavement Maintenance Management Program are outlined below.

a. Prepare a Pavement Maintenance Management Plan (PMMP) for Brown Field Municipal Airport. The PMMP should include the following:

   i. Pavement inventory, structure and maintenance and rehabilitation (M&R) history;
   ii. Pavement condition and traffic;
   iii. Prediction of current and future Pavement Condition Index;
   iv. Determine optimum M&R Plans and budget requirements; and
   v. Formulate and prioritize M&R projects.

b. Determine the Pavement Classification Number values using the FAA Advisory Circular 150/5335-5C, Standardized Method of Reporting Airport Pavement Strength – PCN.

2.1 Record Research and Pavement Inventory

To establish pavement inventory, available as-built drawings and record information such as pavement surface types, pavement thicknesses and composition, construction dates, and known M&R histories, were obtained from the Airport. The collected information was reviewed and entered in the PAVER 7.0.2 pavement management software.

Using imagery from a recent aerial photogrammetry update for the Brown Field Municipal Airport, a layout of the airfield pavement edges was created in AutoCAD software and served as the base map for the PMMP.

The pavement distribution by surface type is summarized in **Figure 2-1**. A recent overlay construction between 2015 to 2016 converted the pavement surface type from concrete to asphalt for the end of Runway 26R. This reduced the concrete surfaced pavements to 29 percent (approximately 775,185 square feet). The existing Airport diagram of Brown Field Municipal Airport is shown on **Figure 2-2**.

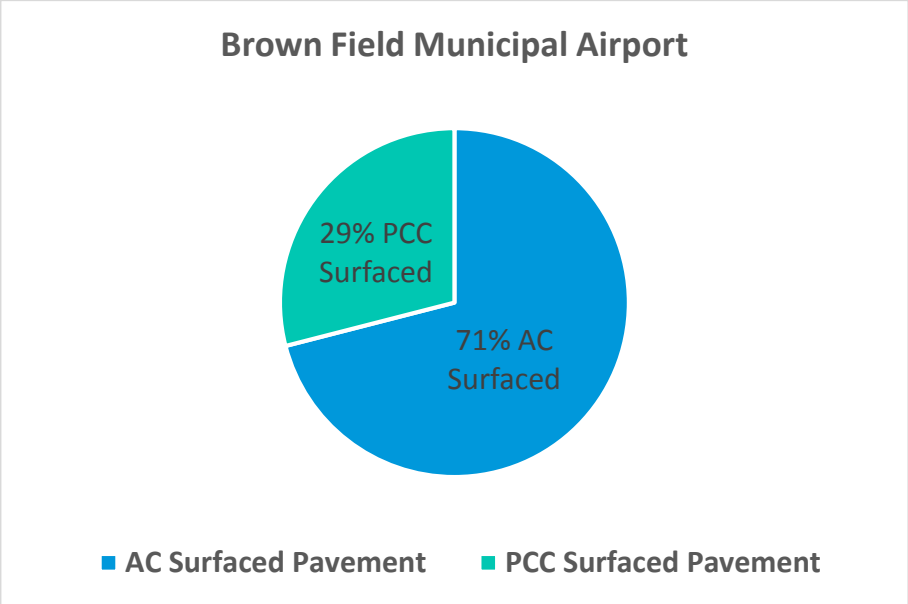
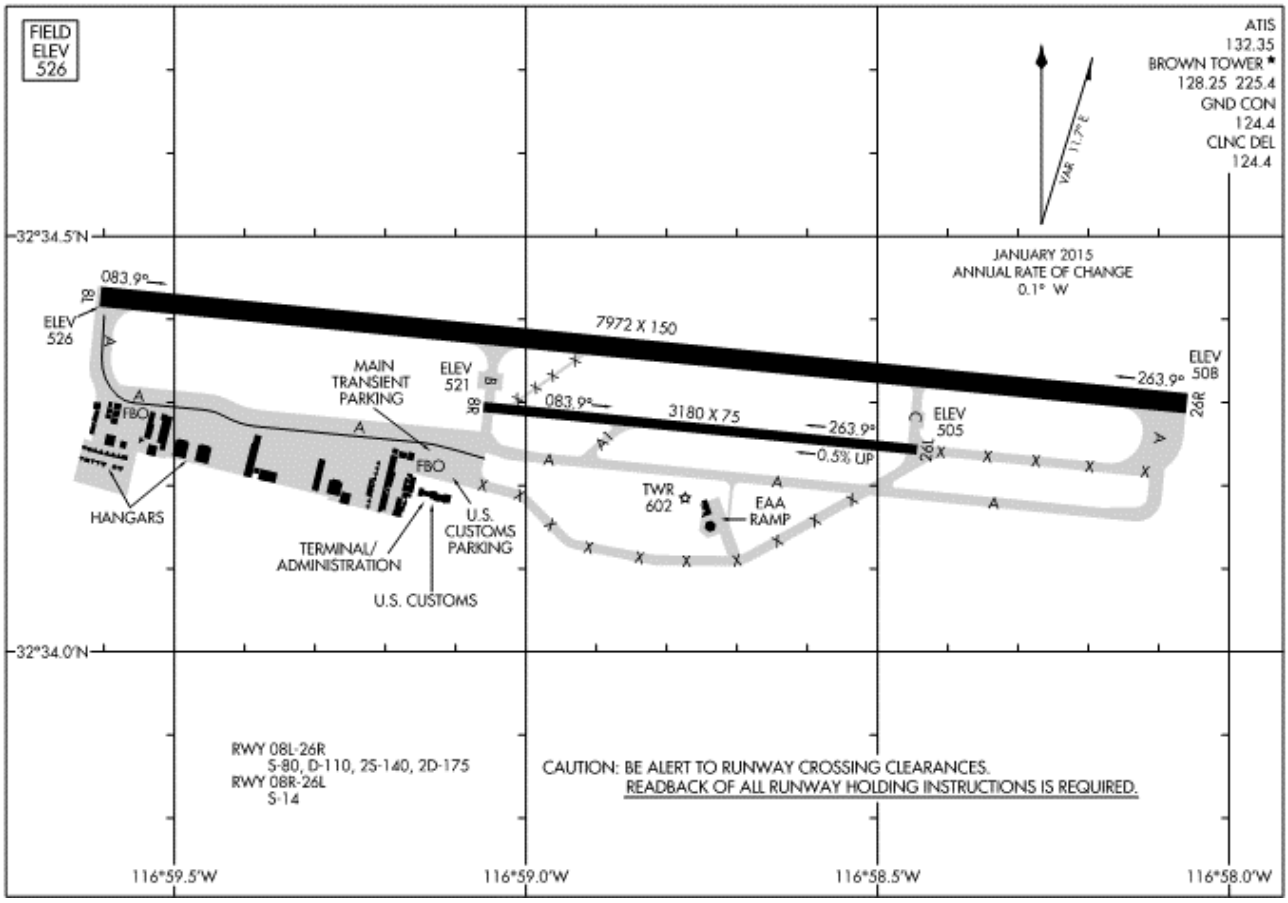


Figure 2-1 Pavement Area by Surface Type



Source: Photo taken from https://www.sandiego.gov/airports/brown website.

Figure 2-2 Existing Airfield Facilities

The pavement inventory summary for Brown Field Municipal Airport is shown in **Table 2-1**.

Table 2-1 Pavement Inventory

Network ID	Branch ID	Branch Name	Branch Use	Section ID	Surface	True Area (SF)	Last Construction Date
SDM	R8L26R	RWY 8L-26R	RUNWAY	01L	PCC	48750	7/1/1951[2]
SDM	R8L26R	RWY 8L-26R	RUNWAY	01K	PCC	48750	7/1/1951[2]
SDM	R8L26R	RWY 8L-26R	RUNWAY	01R	PCC	48750	7/1/1951[2]
SDM	R8L26R	RWY 8L-26R	RUNWAY	02L	APC[2]	247600	1/1/1997[1]
SDM	R8L26R	RWY 8L-26R	RUNWAY	02K	APC[2]	247600	1/1/1997[1]
SDM	R8L26R	RWY 8L-26R	RUNWAY	02R	APC[2]	247600	1/1/1997[1]
SDM	R8L26R	RWY 8L-26R	RUNWAY	03L	APC[2]	18750	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	03K	APC[2]	18750	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	03R	APC[2]	18750	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	04L	AC	76500	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	04K	AC	76500	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	04R	AC	68250	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	05L	AC	9200	7/27/2016
SDM	R8L26R	RWY 8L-26R	RUNWAY	05K	AC	9200	7/27/2016

Network ID	Branch ID	Branch Name	Branch Use	Section ID	Surface	True Area (SF)	Last Construction Date
SDM	R8L26R	RWY 8L-26R	RUNWAY	05R	AC	17450	7/27/2016
SDM	R8R26L	RWY 8R-26L	RUNWAY	01	AAC	5625	6/1/2009[1]
SDM	R8R26L	RWY 8R-26L	RUNWAY	02	AAC	66300	7/1/1951[2]
SDM	R8R26L	RWY 8R-26L	RUNWAY	03	AAC	24375	7/1/1951[2]
SDM	R8R26L	RWY 8R-26L	RUNWAY	04	AAC	110400	6/1/2009[1]
SDM	R8R26L	RWY 8R-26L	RUNWAY	05	AAC	32250	7/1/1951[2]
SDM	TWA	Taxiway A	TAXIWAY	01	PCC	101250	7/1/1951[2]
SDM	TWA	Taxiway A	TAXIWAY	02	PCC	77250	4/22/1994[2]
SDM	TWA	Taxiway A	TAXIWAY	03	PCC	127500	4/22/1994[2]
SDM	TWA	Taxiway A	TAXIWAY	04	AC	223500	4/22/1994[2]
SDM	TWA	Taxiway A	TAXIWAY	05	AC	171750	1/1/1997[1]
SDM	TWA	Taxiway A	TAXIWAY	06	PCC	36750	7/1/1951[2]
SDM	TWA	Taxiway A	TAXIWAY	07	PCC	52500	7/1/1951[2]
SDM	ATWA	Taxiway A Warm Up	APRON	01	PCC	19600	7/1/1951[2]
SDM	ATERM	Terminal Apron	APRON	01	PCC	51750	4/22/1994[2]
SDM	ATERM	Terminal Apron	APRON	02	PCC	64125	4/22/1994[2]
SDM	ATERM	Terminal Apron	APRON	03	PCC	78400	4/22/1994[2]
SDM	TWB	Taxiway B	TAXIWAY	01	AAC	23250	1/1/1997[1]
SDM	TWB	Taxiway B	TAXIWAY	02	AAC	18750	6/1/2009[1]
SDM	TWB	Taxiway B	TAXIWAY	03	AAC	10125	6/1/2009[1]
SDM	ATWB	Taxiway B Warm Up	APRON	01	AAC	7920	5/1/1994[1]
SDM	ATWB	Taxiway B Warm Up	APRON	02	AAC	5760	1/1/1997[1]
SDM	TWA1	Taxiway A1	TAXIWAY	01	AC	10500	4/22/1994[2]
SDM	TWA1	Taxiway A1	TAXIWAY	02	AC	12300	4/22/1994[2]
SDM	TWC	Taxiway C	TAXIWAY	01	APC[2]	31875	1/1/1997[1]
SDM	TWC	Taxiway C	TAXIWAY	02	APC[2]	28500	4/22/1994[2]
SDM	ATWC	Taxiway C Warm Up	APRON	01	AC	3720	1/1/1997[1]
SDM	TWEAA	Taxiway EAA	TAXIWAY	01	AC	7500	4/22/1994[2]

Note 1: Pavement history (i.e. pavement surface types and approximate construction dates) obtained from Google Earth.
Note 2: Pavement history obtained from the 2006 SDM Airport Pavement Management System (APMS) Report.

2.2 Network Definition

To facilitate the evaluation process, the pavement network was subdivided into manageable units in accordance with ASTM Standard D5340, Standard Test Method for Airport Pavement Condition Index Surveys. Network definition establishes an organized hierarchy system when dividing the airfield pavements into branches, sections and sample units. The subdivided pavement divisions are further explained as follows.

- Network: One single pavement network is established for all airfield pavements including runways, taxiways and aprons for each Airport. For example, the network ID for Brown Field Municipal Airport is SDM.

- Branch: A branch is any identifiable part of the pavement network that serves a distinct function. For example, airfield pavements for individual runways, taxiways and aprons are typically considered as separate branches.

- Section: A section is a subdivision of a branch that shares common characteristics such as pavement section, construction history, traffic and pavement condition.

- Sample Unit: A sample unit is a randomly selected portion of a pavement section for conducting visual inspections. It is the smallest subdivision in a pavement network. For asphalt surfaced pavements, each sample unit is typically 5,000 ± 2,000 square feet. For concrete surfaced pavements, each sample unit is typically 20 ± 8 slabs.

The network definition for Brown Field Municipal Airport is illustrated on **Figure 2-3**. The sample units map used in the PCI survey (to be further discussed in Chapter 3) is shown on **Figure 2-4**. The detailed PAVER reports including branch listing report, branch condition report and section condition report are included in Appendices A, B and C, respectively.

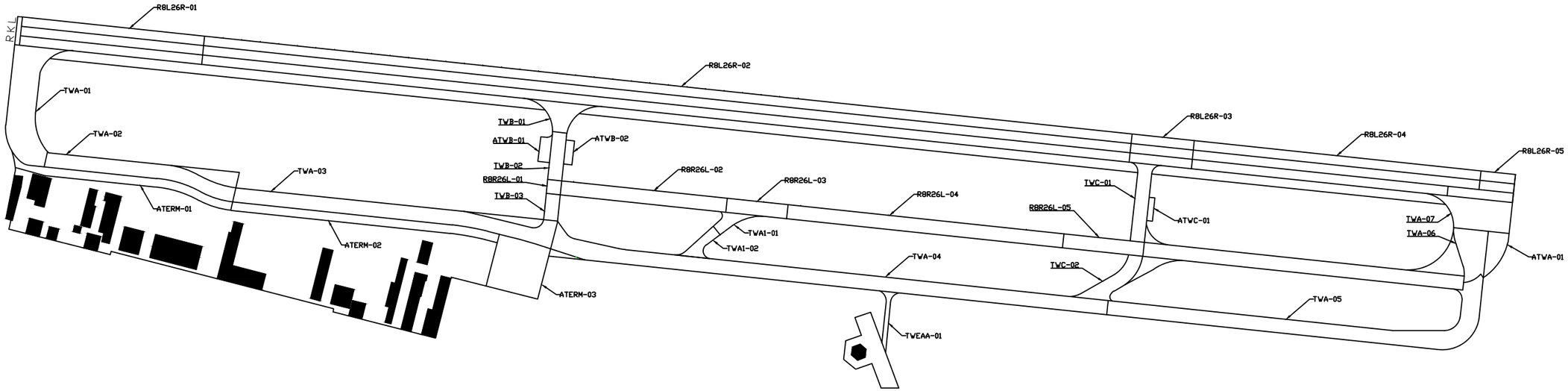
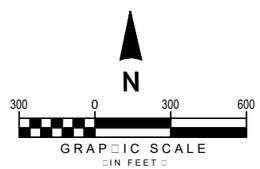


Figure 2-3 Network Definition Map



BROWN FIELD MUNICIPAL AIRPORT
CITY OF SAN DIEGO, CALIFORNIA

NETWORK DEFINITION - BRANCH AND SECTION DESIGNATION

ATKINS

12/1/2017

LEGEND

R□L2□R-01: BRANC□ NAME AND SECTION N□MBER

001: SAMPLE □NIT N□MBER

□: ASP□ALT S□RFACE PA□EMENT SAMPLE

□: CONCRETE S□RFACE PA□EMENT SAMPLE

□: SAMPLE □NIT S□R□EYED ON A□G□ST 21-24, 2017

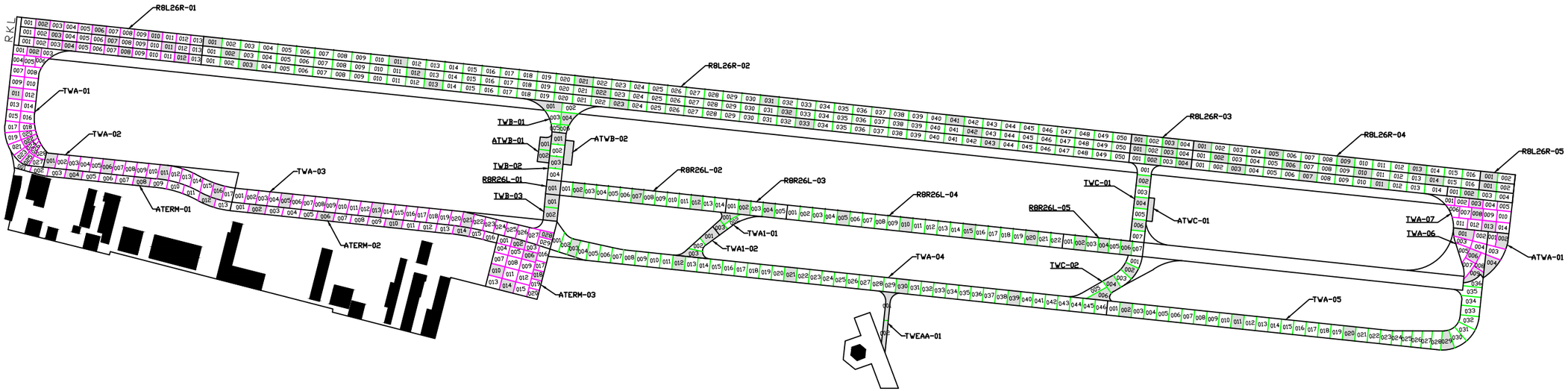


Figure 2-4 Sample Units Map

N

300 0 300 600

GRAP□IC SCALE

□IN FEET□

BROWN FIELD MUNICIPAL AIRPORT

CITY OF SAN DIEGO, CALIFORNIA

NETWOR□ DEFINITION - PCI INSPECTION SAMPLES

ATKINS

12□1□2017

3.1 Visual Pavement Condition Survey

The Atkins team conducted a visual pavement inspection at Brown Field Municipal Airport in August 2017. The collected condition data during the PCI inspections were entered in the PAVER 7.0.2 software to calculate the current PCI for each surveyed sample unit and section. The PCI is a numerical score ranging from 100 (new) to 0 (failed) to rate the general condition of a pavement. Three PCI categories used in this report are shown on **Figure 3-1**.

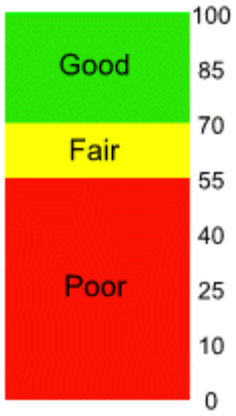


Figure 3-1 PCI Legend

The pavement area and the percentage of use for each branch of Brown Field Municipal Airport are summarized in **Table 3-2**.

Table 3-2 Pavement Area and Percentage of Use

Branch Use	Area (square feet)	Percentage
Runway	1,441,350	54.4%
Taxiway	974,988	36.8%
Apron	233,617	8.8%
Total	2,649,955	100.0%

The commonly found distresses of asphalt surfaced pavements for Brown Field Municipal Airport include the following:

- Longitudinal and transverse cracks
- Raveling and/or weathering
- Fatigue (alligator) cracking
- Patching
- Reflective cracking
- Block cracking
- Depression

The commonly found distresses of Portland Cement Concrete (PCC) surfaced pavements for Brown Field Municipal Airport include the following.

- Joint seal damage
- Line cracking (transverse, longitudinal or linear)
- Corner breaks
- Shattered slabs
- Spalling
- Patching and utility cuts

The detailed pavement inspection report including the distress types and severities for Brown Field Municipal Airport pavements is included in Appendix D.

3.2 Pavement Condition Index in 2017

The overall condition of the airfield pavements at Brown Field Municipal Airport in 2017 is shown in **Figure 3-2**. The majority (58%) of airfield pavements are in fair to good condition. The remaining 42% of airfield pavements are in poor condition and need a rehabilitation or reconstruction. As shown in **Figure 3-3**, the average PCI values for runways/taxiways/aprons are 64, 51, and 51 respectively. The area-weighted PCI for combined airfield pavements including runways, taxiways and aprons is 58.

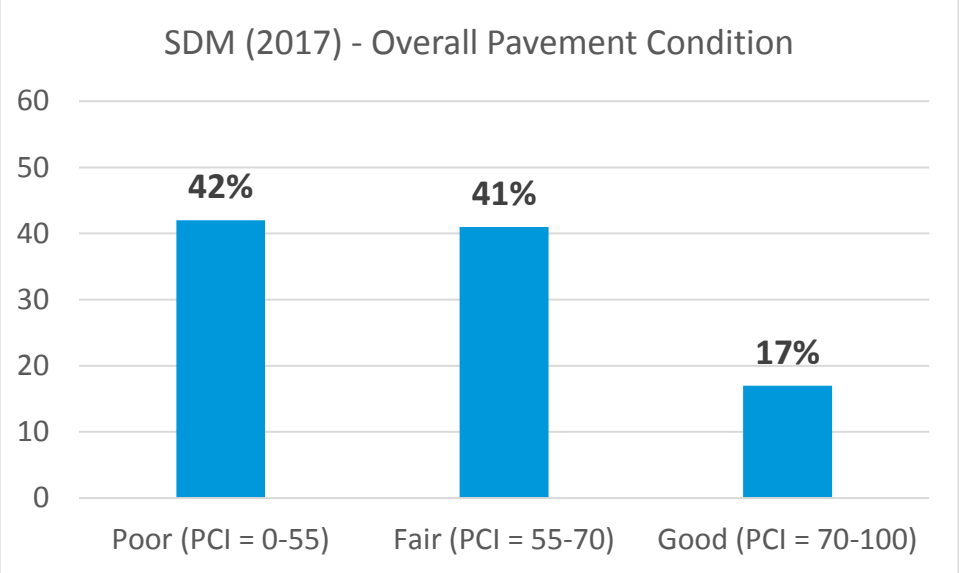


Figure 3-2 Overall Pavement Condition (August 2017)

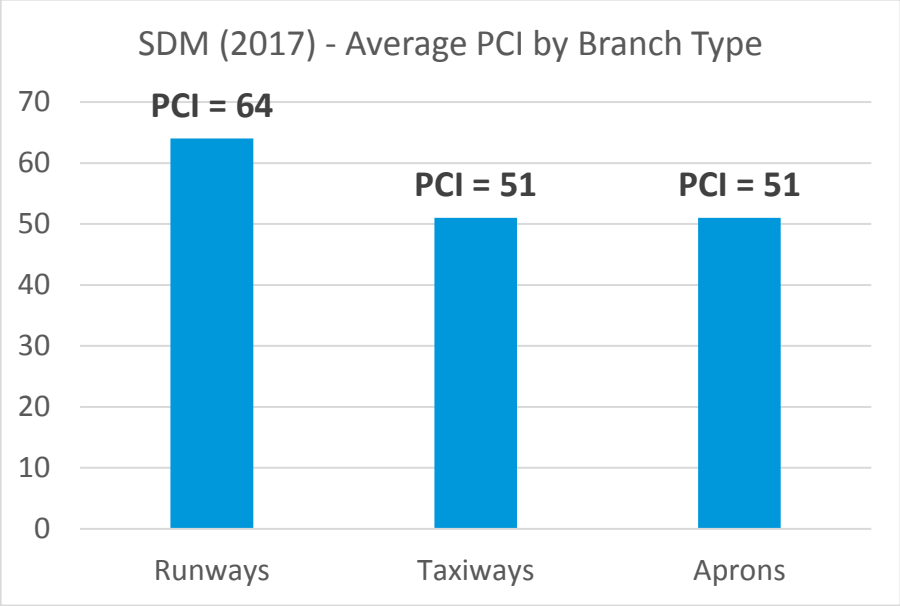


Figure 3-3 Area-Weighted Pavement Condition by Branch Use (August 2017)

The current PCI value of each section for Brown Field Municipal Airport is shown on **Figure 3-4**.

NOTES

1□T□E RATING OF EXISTING PA□EMENT CONDITION INDEX □PCI□ IS BASED ON LIMITED □IS□AL S□R□EY PERFORMED ON A□G□ST 14-17, 2017 AND T□E A□AILABLE AS-B□ILT INFORMATION. ASS□MPTIONS WERE MADE AS NECESSARY W□EN AN EXACT CONSTR□CTION COMPLETION DATE AND□OR MAINTENANCE TREATMENT DATE ARE □N□NOWN.

2□APPROXIMATE 230-FT FAILED R□NWAY 2□L PA□EMENT D□E TO ISS□ES RELATED TO WATER. BECA□SE T□E LOCALI□ED FAIL□RE IS NOT REPRESENTATI□E FOR T□E ENTIRE SECTION, T□E FAILED AREA WAS NOT SAMPLED FOR CONDITION ASSESSMENT AND PCI CALC□LATION. T□E REPAIR EXPECTS TO BE DONE IN A SEPERATE PROJECT AND IS EXCL□DED IN T□E RECOMMENDED CIP.

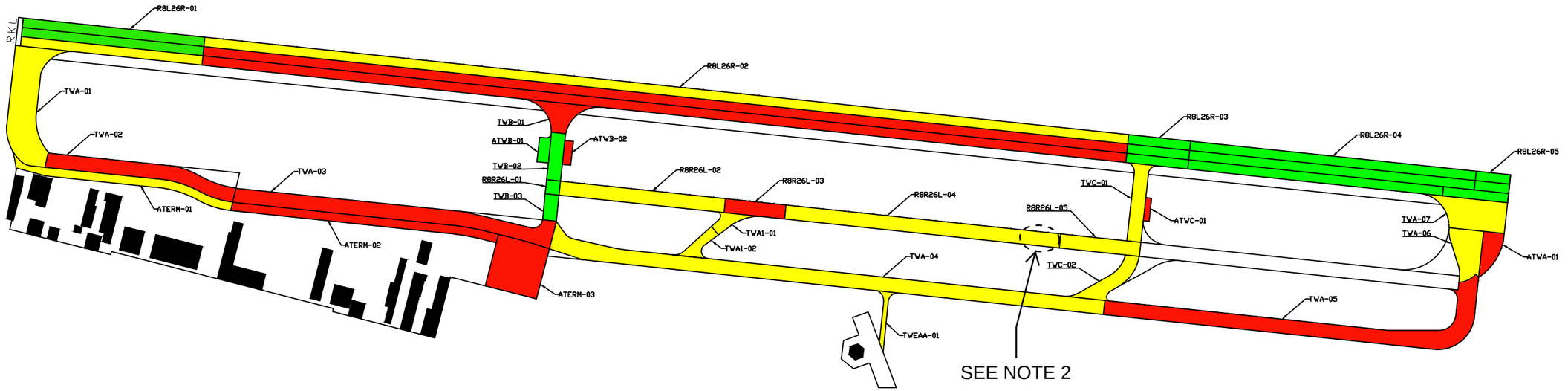
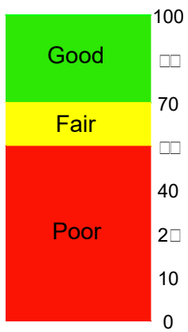
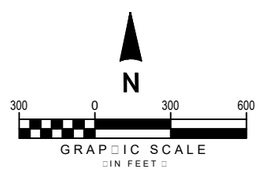


Figure 3-4 2017 Pavement Condition Index Map





BROWN FIELD MUNICIPAL AIRPORT
CITY OF SAN DIEGO, CALIFORNIA

PA□EMENT CONDITION INDEX □PCI□

ATKINS

12□1□2017

4.1 Traffic

Per the City of San Diego Airport Master Plans – Initial Environmental Review report prepared in October 2017, the modeled 2017 average daily departures at the Brown Field Municipal Airport is shown in **Table 4-1**. It is assumed that the traffic mix and departures will not change significantly in the foreseeable future. Thus, the aircraft types and departure data shown in **Table 4-1** can be used to determine Pavement Classification Number.

Table 4-1 2017 Average Daily Departures (from Table 4-30 Initial Environmental Review report dated October 2017)

Aircraft Type	Engine	Taxi Time (Seconds)	Stage Length	Annual Average Day Operations –Departures			
				Day	Evening	Night	Total
LEAR35	TFE731-2-2B	600	1	1.412	0.074	0.075	1.561
LEAR35	TFE731-3	600	1	1.412	0.074	0.075	1.563
CL600	CF34-3B	600	1	3.204	0.168	0.169	3.541
GV	BR700-710A2-20	600	1	0.234	0.012	0.012	0.259
F-18	F404-GE-400	600	1	1.012	0.065	0.032	1.109
CNA208	PT6A-67B	600	1	0.602	0.046	0.034	0.683
CNA172	O-320	600	1	9.002	0.146	0.112	9.260
COMSEP	TIO-540-J2B2[13]	600	1	1.029	0.017	0.013	1.058
GASEPV	TIO-540-J2B2[13]	600	1	1.200	0.019	0.015	1.235
GASEPV	TIO-540-J2B2[13]	600	1	6.566	0.106	0.082	6.754
GASEPV	TSIO36	600	1	9.849	0.159	0.123	10.131
BEC58P	TSIO-360C	600	1	0.281	0.015	0.004	0.300
BEC58P	IO-360-B	600	1	0.281	0.015	0.004	0.300
BEC58P	TIO540[14]	600	1	3.937	0.204	0.056	4.197
BEC58P	TIO-540-J2B2	600	1	3.374	0.175	0.048	3.597
BEC58P	TIO540[14]	600	1	2.812	0.146	0.040	2.998
DHC6	PT6A-42[15]	600	1	1.118	0.086	0.064	1.268
DHC6	PT6A-42[15]	600	1	0.748	0.057	0.043	0.848
EC130	TPE331-3	600	1	0.336	0.067	0.000	0.403
R44	TIO-540-J2B2	600	1	0.224	0.045	0.000	0.268
S70	T700-GE-700	600	1	0.083	0.166	0.582	0.832
Subtotal				48.718	1.864	1.581	52.163

[13] Repeated GASEPV aircraft with engine type TIO-540-J2B2 indicate multiple AEDT equipment IDs used for airframe identification.
[4] Repeated BEC58P aircraft with engine type TIO540 indicate multiple AEDT equipment IDs used for airframe identification.
[5] Repeated DHC6 aircraft with engine type TIO540 indicate multiple AEDT equipment IDs used for airframe identification.

Note: Totals may not match exactly due to rounding. Repeated Aircraft and engine type indicates change in AEDT equipment ID.

4.2 Heavy Weight Deflectometer Testing

To better assess the structural integrity and the load-carrying capacity of Brown Field Municipal Airport pavements, a Non-Destructive Testing (NDT) utilizing a Heavy Weight Deflectometer (HWD)

as shown on **Figure 4-1** was performed. The detailed testing plan and location can be found in Appendix E.

Source: Photo taken from https://www.dynatest.com/hwd website.

Figure 4-1 Dynatest Heavy Weight Deflectometer

The HWD creates an impulse load by dropping weights from a range of heights. This simulates the magnitude and duration of a moving aircraft wheel load. Three test loads (25, 35 and 45 kips) were applied in this study. The deflections were measured by sensors located at 0", 12", 18", 24", 36", 48", 60", 72" and 84" from the center of the load plate. The HWD test was conducted in general accordance with FAA Advisory Circular 150/5370-11, Use of Nondestructive Testing in the Evaluation of Airport Pavements.

The testing results (i.e. deflection data) and the pavement cross section information were used to back-calculate the in-situ material properties such as the subgrade characteristics. Together with the traffic data presented in Section 4.1, the pavement classification number was determined.

4.3 Pavement Cores

Five pavements cores were also taken in locations where the pavement cross section information cannot be obtained from historical review and prior geotechnical investigation. The pavement coring data is included in Appendix F.

4.4 Runway PCN Calculation

4.4.1 Traffic for PCN Calculation

A representative aircraft for each aircraft group/type is shown in **Table 4-2** for the calculation of Pavement Classification Number (PCN). The annual departures were calculated using the total daily departures shown in **Table 4-1** and were rounded to the next highest integer.

Table 4-2 Fleet Mix and Traffic for Runway PCN Calculation

Aircraft Type per Table 4-1	Representative Aircraft in PCN Calculation	Gross Weight (lbs)	Annual Departures
LEAR35	Learjet-35A	18,000	1141
CL600	Challenger-CL-650	48,200	1293
GV	Gulfstream-G-V	90,900	95
F-18	Boeing F-18 Super Hornet/Single Wheel Aircraft	66,000	405
CNA208	Cessna 208 Caravan/Single Wheel Aircraft	8,000	250
CNA172	Cessna 172/Single Wheel Aircraft	2,450	3380
GASEPV	Beechcraft Bonanza 36/Bonanza-F-36	3,650	6615
BEC58P	Beechcraft Baron/Baron-E-55	5,100	4160
DHC6	de Havilland Canada DHC-6 Twin Otter/Single Wheel Aircraft	12,500	773
EC-130	Lockheed EC-130/C-130	165,000	148
S70	Sikorsky S-70 (helicopter)/Single Wheel Aircraft	22,000	304
R44	Robinson R44 (helicopter)/Single Wheel Aircraft	2,500	98
COMSEP	Single Wheel Aircraft	2,440	387

4.4.2 PCN for Runways

Computation of the PCN requires a subgrade modulus input for each section. The subgrade modulus was computed from the NDT deflection data using the FAA BAKFAA program. The data is summarized in **Table 4-3**.

Table 4-3 Back-calculation Results Using the FAA BAKFAA Program

Location	Surface Type	Estimated Existing Thicknesses[1]	Subgrade Modulus[2] (psi)	CBR[3] or K[3]
8L-26R West Touchdown	Portland Cement Concrete (PCC)	8" PCC + 10" PCC	11,846	K = 61 pci
8L-26R Interior	Asphalt Concrete (AC)	9" AC + 10" PCC	19,451	CBR = 4.3
8L-26R East Touchdown	Asphalt Concrete (AC)	12.5" AC + 10" Rubberized PCC	18,920	CBR = 4.2

Note 1: The existing pavement thicknesses were estimated using available as-builts, past geotechnical and project reports, and pavement coring data shown in Appendix F.
Note 2: The modulus is calculated using the FAA BAKFAA program.
Note 3: The value is estimated based on experience and back-calculation results.

During the report preparation, the Runway 8L-26R geotechnical report prepared by Allied Geotechnical Engineers on April 17, 2014, was reviewed. In the report, 15 laboratory test results of California Bearing Ratio (CBR) ranging from 0.7 to 3 were reported. The subgrade soil was classified as CH (highly plastic clay) per six tests. Based on the traffic information, back-calculation results, available geotechnical information and engineering judgements, the subgrade CBR is assumed/estimated to be 3.0 for the asphalt surfaced Runway 8L-26R. For the concrete surfaced Runway 8L-26R (west touchdown), the estimated subgrade modulus (K) is 60 pci. The obtained numerical PCN values of three Runway 8L-26R sections using the FAA COMFAA program are summarized in **Table 4-4**. The smallest value of three sections (i.e. 43) is selected to be the numerical

PCN value. The PCN calculation of Runway 8L-26R interior section in included in Appendix G.

Table 4-4 PCN Results Using the FAA COMFAA Program

Runway Location	Numerical PCN by COMFAA Program
8L-26R West Touchdown	> 100
8L-26R Interior	43
8L-26R East Touchdown	59

Since there is not a separate traffic forecast for Runway 8R-26L, the numerical PCN value for Runway 8R-26L is estimated using the "Using Aircraft Method". As a result, the numerical PCN value is the largest Aircraft Classification Number (ACN) of the mix traffic that uses Runway 26L. Due to the shortened runway length, the EC-130, Gulfstream V, and other heavier aircrafts cannot take off using Runway 26L. Instead, Runway 26L is restricted for lighter general aviation aircrafts with single wheels. The ACN for the single-wheel aircraft of 12,500 lbs is 5 (i.e. round up from 4.7) as shown in Table 3 of Appendix G and is selected to be the numerical PCN of Runway 8R-26L. Due to the proximity to the main Runway 8L-26R, it is assumed that the subsurface condition and subgrade strength of Runway 26L are similar to the conditions of the main runway. The full PCN codes of both runways are included in **Table 4-5**. For the main Runway 8L-26R, the highest tire pressure (i.e. 188 psi) comes from the Gulfstream V aircraft. For the shorter Runway 8R-26L, the highest tire pressure for the single-wheel aircraft up to 12,500 lbs may be 56 psi (e.g. Beechcraft Baron).

Table 4-5 Runway PCN Codes

Runway	PCN Code[1-5]
8L-26R	43/F/D/X/T
8R-26L	5/F/D/Z/U

Note 1: The first part of PCN code is a numerical value computed by the FAA COMFAA program.
Note 2: The second part of PCN code reports the pavement type. "F" denotes "flexible pavement".
Note 3: The third part of PCN code reports the subgrade strength category. "D" denotes "ultra-low" strength with subgrade CBR of 4 and below for flexible pavements.
Note 4: The fourth part of PCN code reports the allowable tire pressure. "X" denotes "high" tire pressure with pressure limited to 254 psi. "Z" denotes "low" tire pressure with pressure limited to 73 psi.
Note 5: The last part of PCN code reports the method used to determine PCN. "T" denotes a technical evaluation method is used. "U" denotes a "Using Aircraft" experience is used.

5.1 Predicted Future (5-yr) Pavement Condition Index

A typical pavement performance curve is illustrated on **Figure 5-1**. The pavement deterioration rate in general is slow when the condition is newer. It takes approximately three-quarters of the pavement life to reduce its condition by 40%. However, it only takes a short amount of time (e.g. 12% of its life) to decrease an additional 40% of its condition. Assuming no budget is available for maintenance and rehabilitation, the predicted PCIs for all airfield pavements of Brown Field Municipal Airport in the next 5 years are shown in **Table 5-1**. The predicted PCIs for each branch of airfield pavements are shown on **Figure 5-2**.

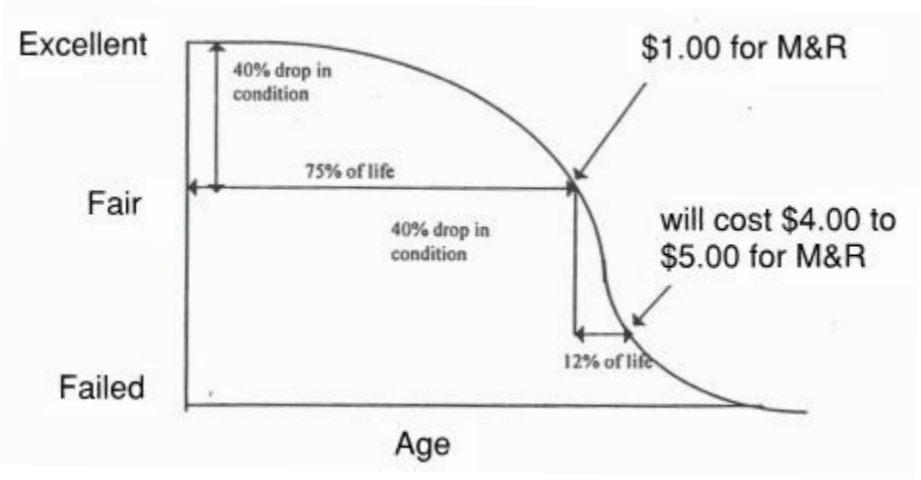


Figure 5-1 Standard Pavement Deterioration Curve

Table 5-1 Area-Weighted PCI for All Airfield Pavements (No Budget, Zero Maintenance)

Year	Area-weighted PCI
2017	58
2018 (Year 1)	56
2019 (Year 2)	54
2020 (Year 3)	52
2021 (Year 4)	50
2022 (Year 5)	47

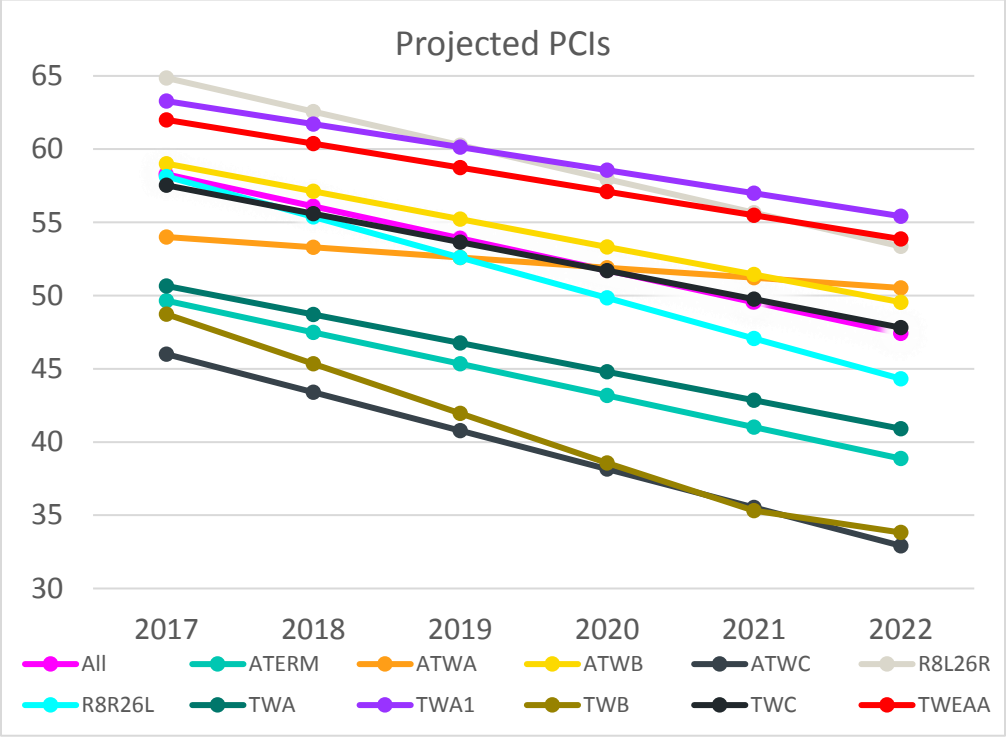


Figure 5-2 Area-Weighted PCI for Each Branch (No Budget, Zero Maintenance)

5.2 Maintenance and Rehabilitation Options

5.2.1 Timing of Treatment

The most economic approach for pavement maintenance is to keep good pavements in good repair. As illustrated on **Figure 5-3**, it is more cost effective to apply a low-cost Treatment 1 when a trigger point (critical PCI value) for Treatment 1 is reached. In other words, treatment 1 can be applied multiple times throughout the pavement life once the critical PCI value is reached. If missing the right timing of treatment, costly Treatment 2 will need to be applied to restore the pavement condition and to extend the pavement life. As shown on **Figure 5-3**, both options (Treatments 1 and 2) would extend the same amount of the pavement life. The higher cost Treatment 2 does not warrant a longer pavement life as the rate of deterioration increases significantly after the PCI drops below the critical value.

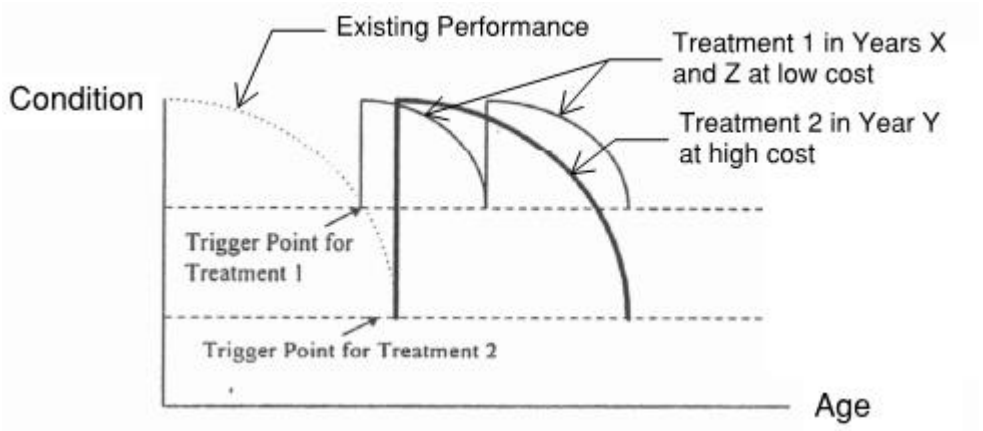


Figure 5-3 Timing of Treatment

5.2.2 Critical PCI Value, Maintenance Options and Cost Estimates

For the Brown Field Municipal Airport, the critical PCI is set at 70. Once the airfield pavement falls within 5 points of the critical PCI (i.e. right above and below the threshold of good condition), those pavements will have a high priority to be maintained to stay within good condition. Applicable preventative treatments and unit costs are shown in **Table 5-2**.

Table 5-2 Preventative/Stopgap Maintenance Options and Costs

Treatment Type Name	Unit Cost[1, 2]	
Crack Sealing – AC	$1.29/Ft	
Crack Sealing – PCC	$1.29/Ft	
Grinding (Localized)	$3.86/Ft	
Joint Seal (Localized)	$2.25/Ft	
Patching – AC Deep	$15.43/SqFt	$138.87/SqYd
Patching – AC Shallow	$12.86/SqFt	$115.74/SqYd
Patching – PCC Full Depth	$19.29/SqFt	$173.61/SqYd
Patching – PCC Partial Depth	$64.29/SqFt	$578.61/SqYd
Slab Replacement – PCC	$19.29/SqFt	$173.61/SqYd
Surface Treatment	$0.34/SqFt	$3.06/SqYd

Note 1: The unit costs were collected from bid tabs from nearby Airports in the FAA Western-Pacific Region and were escalated per Turner Building Cost Index – 2017 Third Quarter Forecast.
Note 2: The unit cost only reflects pavement related items. Non-pavement related costs such as electrical, drainage and geotechnical investigation etc. are EXCLUDED. The unit cost also EXCLUDES overhead, mobilization, engineering and construction observation fees, as well as contingencies.

The schedule and location to receive preventative treatments for Brown Field Municipal Airport are shown in **Table 5-3**.

Table 5-3 Preventative Treatment Schedule

Year to Begin Preventative Treatment	Branch-Section	Surface Type	2017 PCI
2018[1]	R8R26L-05	Asphalt	66
2018[1]	TWA-01	Concrete	66
2018[1]	TWA1-01	Asphalt	67
2018[1]	ATERM-01	Concrete	67
2018[1]	R8L26R-01R	Concrete	69
2018	ATWB-01	Asphalt	71
2020	R8L26R-01L	Concrete	75
2020	R8L26R-01K	Concrete	76
2021	TWB-02	Asphalt	77
2021	TWC-03	Asphalt	77

Note 1: To be effective, preventative treatments must be applied at the earliest opportunity in 2018 to restore pavements that just fall below the threshold (i.e. critical PCI of 70) back to good condition.

For pavements with a PCI below 70 (i.e. the threshold of good condition), either restoration/rehabilitation and/or major reconstruction are needed in the foreseeable future. Pavements of fair (PCI = 70-55) condition can be restored to the good condition with lesser costs in comparison with pavements of poor condition (PCI = 55 or below). **Figure 5-4** illustrates the areas recommended for preventative treatment, rehabilitation and reconstruction.

The unit costs of major rehabilitation and reconstruction are shown in **Table 5-4**. The cost of major rehabilitation and reconstruction is estimated by multiplying a section's area by the unit cost listed in **Table 5-4**. These costs include pavement removal, subgrade preparation, base course construction and a pavement surface course.

Table 5-4 Maintenance and Rehabilitation/Reconstruction Cost Based on PCI

PCI	Cost AC[1, 2]	Cost PCC[1, 2]
0-40	$12.86/SqFt	$15.43/SqFt
50	$7.07/SqFt	$9.00/SqFt
60	$3.86/SqFt	$5.79/SqFt
70	$2.89/SqFt	$3.86/SqFt
80	$0.96/SqFt	$0.96/SqFt
90	$0.64/SqFt	$0.64/SqFt
100	$0.00/SqFt	$0.00/SqFt

Note 1: The estimated costs were from nearby Airports in Southern CA and were escalated per Turner Building Cost Index – 2017 Third Quarter Forecast.
Note 2: The cost only reflects pavement related items. Non-pavement related costs such as electrical, drainage and geotechnical investigation etc. are EXCLUDED. The unit cost also EXCLUDES overhead, mobilization, engineering and construction observation fees, as well as contingencies.

NOTES

1) APPROXIMATE 230-FT FAILED RUNWAY 26L PAVEMENT DUE TO ISSUES RELATED TO WATER. BECAUSE THE LOCALIZED FAILURE IS NOT REPRESENTATIVE FOR THE ENTIRE SECTION, THE FAILED AREA WAS NOT SAMPLED FOR CONDITION ASSESSMENT AND PCI CALCULATION. THE REPAIR EXPECTS TO BE DONE IN A SEPERATE PROJECT AND IS EXCLUDED IN THE RECOMMENDED CIP.

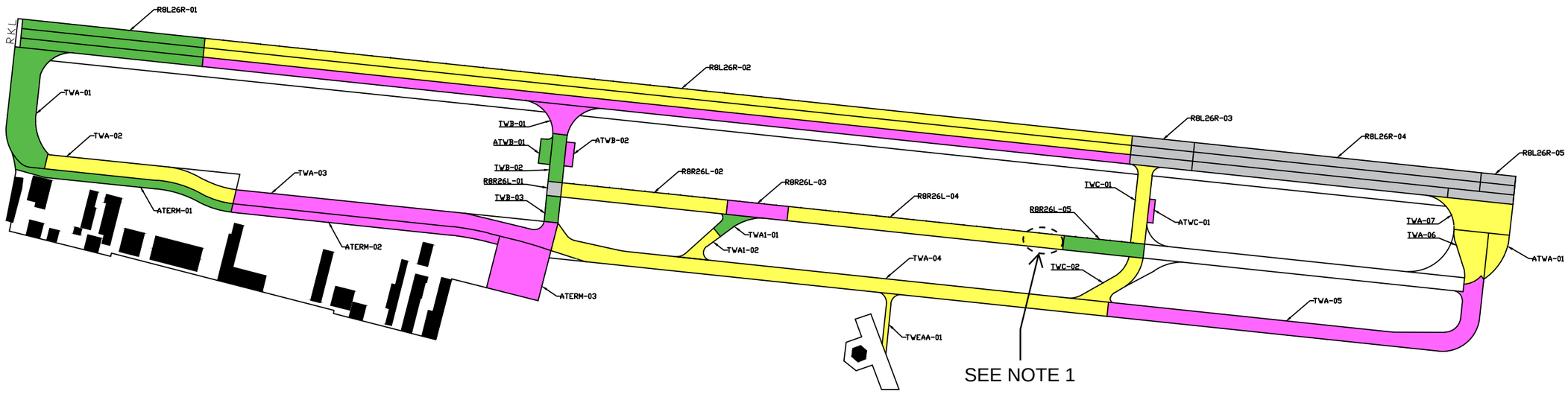


Figure 5-4 Recommended Treatments

Pre□entati□e
Re□abilitation
Reconstruction
None

N

300 0 300 600

GRAP□IC SCALE
□IN FEET□

BROWN FIELD MUNICIPAL AIRPORT
CITY OF SAN DIEGO, CALIFORNIA

LOCALI□ED REPAIR

ATKINS

12□1□□2017

The estimated preventative treatment cost to keep good/fair pavements (i.e. PCI greater than 65) above the threshold (i.e. PCI=70) is shown in **Table 5-5**. This estimate assumes 10% of the asphalt pavement will receive a shallow and a deep asphalt patch in the next 5 years, respectively. The cost also assumes approximately 4,000 feet crack seal and one surface treatment for the asphalt pavements. For the concrete pavement in good/fair condition (i.e. PCI greater than 65), the estimate assumes up to 3%, 2% and 2% concrete will receive a partial depth patch, a full depth patch and a slab replacement, respectively, through 2022. The estimate also assumes approximately 30,000 feet joint/crack seal in concrete pavement.

Table 5-5 Estimated Preventative Treatment Cost (2018-2022)

Plan Years	Annualized Preventative Treatment Cost[1] (Asphalt Pavement)	Annualized Preventative Treatment Cost[1] (Concrete Pavement)
2018-2022	$52,000	$173,000

Note 1: The estimate is based on the unit cost presented in **Table 5-4**. The cost only reflects pavement related items and EXCLUDES any administration, mobilization, utility work, engineering observation, annual escalation and contingencies.

Assuming an unlimited budget is available in the next 5 years, the estimated budget requirements for rehabilitation/reconstruction (i.e. pavement PCI < 70) of each section are shown in **Table 5-6**. While the cost estimates provide a useful network-level planning tool, they are not a comprehensive engineer's estimate as the cost is only pertinent to pavement construction cost. Administration cost, utility improvement (e.g. electrical, drainage etc.), construction phasing, mobilization, non- pavement related items (e.g. subsurface investigation, surveying etc.), professional engineer's fee, annual escalation and contingencies are EXCLUDED in the estimate. A detailed engineering study and the project specific cost estimates shall be developed on a case-by-case basis to ensure the most appropriate rehabilitation strategy is chosen at the time of implementation.

Per recent budgetary information provided by the Airport, it indicated that it can take time for grant application and funding approval to support planned pavement maintenance, rehabilitation and reconstruction. Stopgap treatments as shown in **Table 5-2** can be applied to maintain the Airport pavements safe and operational while application for funding to support the planned maintenance,rehabilitation and reconstruction is being approved.

Table 5-6 Estimated Rehabilitation/Restoration and Reconstruction Costs (2018-2022), Unconstrained Budget

Branch ID	Section ID	Treatment	Total Rehabilitation/ Reconstruction Cost[1] (2018-2022)	Annualized Rehabilitation/ Reconstruction Cost[1] (Over 5 years)
R8R26L	04	Restoration/Rehabilitation	$426,000	$1,400,000
R8R26L	02	Restoration/Rehabilitation	$256,000	
TWEAA	01	Restoration/Rehabilitation	$32,000	
TWA1	02	Restoration/Rehabilitation	$48,000	
TWA	04	Restoration/Rehabilitation	$1,646,000	
R8L26R	02L	Restoration/Rehabilitation	$956,000	
R8L26R	02K	Restoration/Rehabilitation	$1,751,000	
TWC	01	Restoration/Rehabilitation	$227,000	
TWC	02	Restoration/Rehabilitation	$202,000	
TWA	06	Restoration/Rehabilitation	$216,000	
TWA	07	Restoration/Rehabilitation	$321,000	
TWA	02	Restoration/Rehabilitation	$742,000	
ATWA	01	Restoration/Rehabilitation	$177,000	
5-year Subtotal (Restoration/Rehabilitation)			$7,000,000	
R8R26L	03	Reconstruction	$314,000	$2,120,000
TWB	01	Reconstruction	$327,000	
ATWB	02	Reconstruction	$74,000	
TWA	05	Reconstruction	$2,309,000	
ATWC	01	Reconstruction	$49,000	
R8L26R	02R	Reconstruction	$3,184,000	
TWA	03	Reconstruction	$2,116,000	
ATERM	03	Reconstruction	$1,227,000	
ATERM	02	Reconstruction	$1,000,000	
5-year Subtotal (Reconstruction)			$10,600,000	
5-year Grand Total			$17,600,000	$3,520,000

Note 1: The estimate is based on the unit cost presented in **Table 5-2**. The cost only reflects pavement related items and EXCLUDES any administration, mobilization, utility work, detailed engineering, structural observation, annual escalation and contingencies.

6.1 CIP Recommendation and Prioritization

As an unlimited budget is unlikely to be available to support all identified rehabilitation and reconstruction needs shown in **Table 5-6**, a list of the Capital Improvement Program (CIP) projects areproposed in **Table 6-1**. The prioritization is based on the following.

- The existing pavement condition presented on **Figure 3-2.**
- The operational importance presented on **Figure 6-1**. In general, runway pavements will have the highest priority to be maintained follows by the taxiway and apron pavements.
- The existing maintenance need identified by the Airport.

Table 6-1 The Proposed 5-year CIP Program and Priority

Priority	Plan Year	Branch-Section	Cost [1]
1	2018	R8L26R-02	$5,891,000
2	2019	TWB-01	$327,000
3	2019	TWA-03	$2,116,000
4	2020	TWA-05	$2,309,000
5	2020	TWA-02	$742,000
6	2021	R8R26L-03	$314,000
7	2021	ATERM-02	$1,000,000
8	2022	ATERM-02	$1,227,000

Note 1: Refer to Section 5.2.2 for unit costs based on PCIs.

The five-year CIP exhibit for the Brown Field Municipal Airport is shown on **Figure 6-2**.

The Airport can begin the grant application process at the earliest opportunity and apply stopgap treatment as discussed in Section 5.2 while waiting for the funding approval. As iterated in Section 5.2.2, the estimated CIP cost excludes any administration cost, non-pavement related improvements (e.g. utilities), professional engineering fee, construction observation fees, annual escalation and contingencies. Cost estimates presented in this report are based on November 2017 dollars.

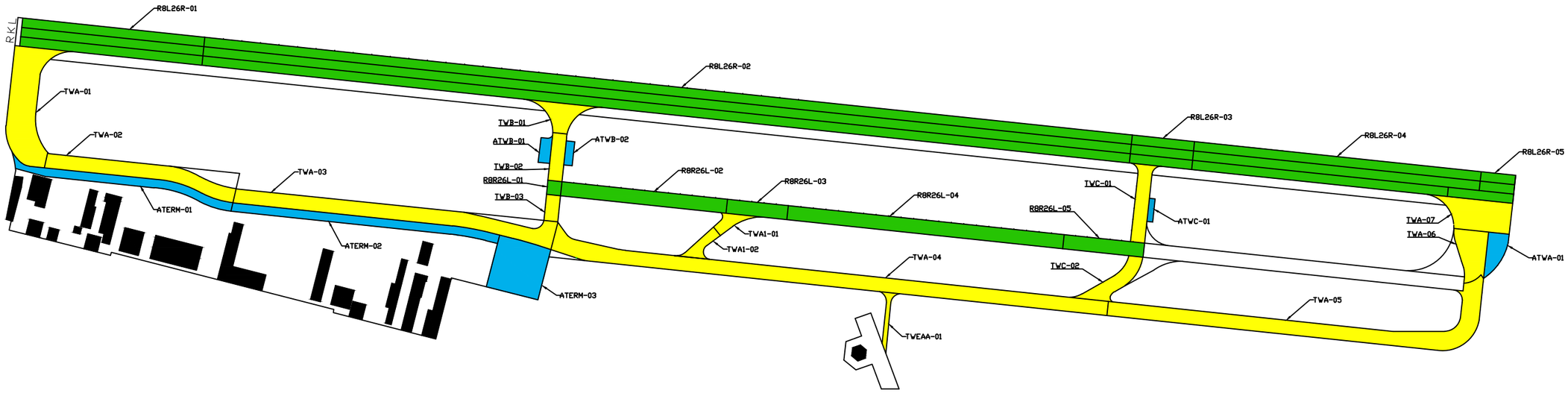


Figure 6-1 Section Ranks

Primary
Secondary
Tertiary

N

300 0 300 600

GRAPHIC SCALE
IN FEET

BROWN FIELD MUNICIPAL AIRPORT
CITY OF SAN DIEGO, CALIFORNIA

SECTION RANKS

ATKINS

12/1/2017

NOTES

1) APPROXIMATE 230-FT FAILED RUNWAY 26L PAVEMENT DUE TO ISSUES RELATED TO WATER. BECAUSE THE LOCALIZED FAILURE IS NOT REPRESENTATIVE FOR THE ENTIRE SECTION, THE FAILED AREA WAS NOT SAMPLED FOR CONDITION ASSESSMENT AND PCI CALCULATION. THE REPAIR EXPECTS TO BE DONE IN A SEPERATE PROJECT AND IS EXCLUDED IN THE RECOMMENDED CIP.

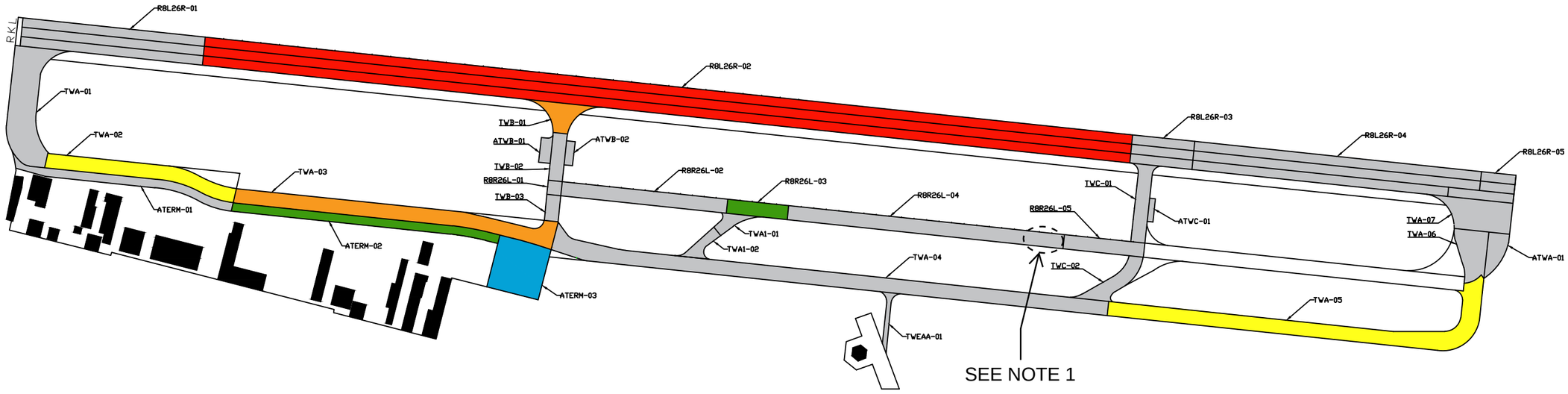


Figure 6-2 Recommended Capital Improvement Program (2018-2022)

201□
201□
2020
2021
2022
None

N

300 0 300 600

GRAP□IC SCALE

□IN FEET□

BROWN FIELD MUNICIPAL AIRPORT

CITY OF SAN DIEGO, CALIFORNIA

CIP □201□ - 2022□

ATKINS

12□1□□2017

Appendix A Branch Listing Report

Branch Listing Report

Pavement Database: SDM 12-01-2017

Network ID	Branch ID	Name	Use	Number of Sections	True Area (SqFt)	Comments
SDM	ATERM	Terminal Apron	APRON	3	196,240.00	
SDM	ATWA	Taxiway A Warm Up	APRON	1	19,622.00	
SDM	ATWB	Taxiway B Warm Up	APRON	2	13,928.00	
SDM	ATWC	Taxiway C Warm Up	APRON	1	3,827.00	
SDM	R8L26R	RWY 8L-26R	RUNWAY	15	1,202,400.00	
SDM	R8R26L	RWY 8R-26L	RUNWAY	5	238,950.00	
SDM	TWA	Taxiway A	TAXIWAY	7	827,443.00	
SDM	TWA1	Taxiway A1	TAXIWAY	2	23,577.00	
SDM	TWB	Taxiway B	TAXIWAY	3	54,855.00	
SDM	TWC	Taxiway C	TAXIWAY	2	60,749.00	
SDM	TWEAA	Taxiway EAA	TAXIWAY	1	8,364.00	

Pavement Database: SDM 12-01-2017

Total Number of Networks:	**1**	
Total Number of Branches:	**11**	
Total Number of Sections:	**42**	
Total True Area:	**2,649,955.00**	**(SqFt)**
Average Branch True Area:	**240,905.00**	**(SqFt)**

Appendix B Branch Condition Report

Branch Condition Report

Pavement Database: SDM 12-01-2017

Branch ID	Number of Sections	Sum Section Length (Ft)	Avg Section Width (Ft)	True Area (SqFt)	Use	Average PCI	Standard Deviation PCI	Weighted Average PCI
ATERM	3	2,855.00	123.33	196,240.00	APRON	51.00	11.78	49.65
ATWA	1	245.00	80.00	19,622.00	APRON	54.00	0.00	54.00
ATWB	2	260.00	52.50	13,928.00	APRON	56.50	14.50	59.01
ATWC	1	124.00	30.00	3,827.00	APRON	46.00	0.00	46.00
R8L26R	15	24,048.00	50.00	1,202,400.00	RUNWAY	81.20	17.60	64.86
R8R26L	5	3,186.00	75.00	238,950.00	RUNWAY	63.80	19.02	60.90
TWA	7	9,095.00	128.57	827,443.00	TAXIWAY	53.14	11.87	50.66
TWA1	2	380.00	60.00	23,577.00	TAXIWAY	63.50	3.50	63.28
TWB	3	695.00	75.00	54,855.00	TAXIWAY	56.67	28.76	48.73
TWC	2	805.00	75.00	60,749.00	TAXIWAY	57.50	0.50	57.53
TWEAA	1	300.00	25.00	8,364.00	TAXIWAY	62.00	0.00	62.00

Pavement Database: SDM 12-01-2017

Use Category	Number of Sections	Total Area (SqFt)	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
APRON	7	233617.000071411	52.29	11.46	50.51
RUNWAY	20	1441350.00044059	76.85	19.48	64.20
TAXIWAY	15	974988.000298031	56.40	15.71	51.38
ALL	42	2649955.00081003	65.45	20.27	58.28

Appendix C Section Condition Report

Section Condition Report

Pavement Database: SDM 12-01-2017

Branch ID	Section ID	Last Const. Date	Surface	Use	Rank	Lanes	True Area (SqFt)	Last Inspection	Age At Inspec	PCI
NetworkId: SDM										
ATERM	01	4/22/1994	PCC	APRON	T	0	51,930.00	8/24/2017	23	67
ATERM	02	4/22/1994	PCC	APRON	T	0	64,820.00	8/24/2017	23	39
ATERM	03	4/22/1994	PCC	APRON	T	0	79,490.00	8/24/2017	23	47
ATWA	01	7/1/1951	PCC	APRON	T	0	19,622.00	8/24/2017	66	54
ATWB	01	5/1/1994	AAC	APRON	T	0	8,168.00	8/24/2017	23	71
ATWB	02	1/1/1997	AAC	APRON	T	0	5,760.00	8/24/2017	20	42
ATWC	01	1/1/1997	AC	APRON	T	0	3,827.00	8/24/2017	20	46
R8L26R	01K	7/1/1951	PCC	RUNWAY	P	0	48,750.00	8/24/2017	66	76
R8L26R	01L	7/1/1951	PCC	RUNWAY	P	0	48,750.00	8/24/2017	66	75
R8L26R	01R	7/1/1951	PCC	RUNWAY	P	0	48,750.00	8/24/2017	66	69
R8L26R	02K	1/1/1997	APC	RUNWAY	P	0	247,600.00	8/24/2017	20	53
R8L26R	02L	1/1/1997	APC	RUNWAY	P	0	247,600.00	8/24/2017	20	61
R8L26R	02R	1/1/1997	APC	RUNWAY	P	0	247,600.00	8/24/2017	20	39
R8L26R	03K	7/27/2016	APC	RUNWAY	P	0	18,750.00	8/24/2017	1	94
R8L26R	03L	7/27/2016	APC	RUNWAY	P	0	18,750.00	8/24/2017	1	94
R8L26R	03R	7/27/2016	APC	RUNWAY	P	0	18,750.00	8/24/2017	1	94
R8L26R	04K	7/27/2016	AC	RUNWAY	P	0	76,500.00	8/24/2017	1	94
R8L26R	04L	7/27/2016	AC	RUNWAY	P	0	76,500.00	8/24/2017	1	93
R8L26R	04R	7/27/2016	AC	RUNWAY	P	0	68,250.00	8/24/2017	1	94
R8L26R	05K	7/27/2016	AC	RUNWAY	P	0	9,200.00	8/24/2017	1	94
R8L26R	05L	7/27/2016	AC	RUNWAY	P	0	9,200.00	8/24/2017	1	94
R8L26R	05R	7/27/2016	AC	RUNWAY	P	0	17,450.00	8/24/2017	1	94
R8R26L	01	6/1/2009	AAC	RUNWAY	P	0	5,625.00	8/24/2017	8	94
R8R26L	02	7/1/1951	AAC	RUNWAY	P	0	66,300.00	8/24/2017	66	62
R8R26L	03	7/1/1951	AAC	RUNWAY	P	0	24,375.00	8/24/2017	66	34
R8R26L	04	6/1/2009	AAC	RUNWAY	P	0	110,400.00	8/24/2017	8	63
R8R26L	05	7/1/1951	AAC	RUNWAY	P	0	32,250.00	8/24/2017	66	66
TWA	01	7/1/1951	PCC	TAXIWAY	S	0	102,714.00	8/24/2017	66	66
TWA	02	4/22/1994	PCC	TAXIWAY	S	0	82,490.00	8/24/2017	23	52
TWA	03	4/22/1994	PCC	TAXIWAY	S	0	137,159.00	8/24/2017	23	31
TWA	04	4/22/1994	AC	TAXIWAY	S	0	232,810.00	8/24/2017	23	58
TWA	05	1/1/1997	AC	TAXIWAY	S	0	179,560.00	8/24/2017	20	41
TWA	06	7/1/1951	PCC	TAXIWAY	S	0	37,298.00	8/24/2017	66	63
TWA	07	7/1/1951	PCC	TAXIWAY	S	0	55,412.00	8/24/2017	66	61
TWA1	01	4/22/1994	AC	TAXIWAY	S	0	11,060.00	8/24/2017	23	67
TWA1	02	4/22/1994	AC	TAXIWAY	S	0	12,517.00	8/24/2017	23	60
TWB	01	1/1/1997	AAC	TAXIWAY	S	0	25,425.00	8/24/2017	20	16
TWB	02	6/1/2009	AAC	TAXIWAY	S	0	19,100.00	8/24/2017	8	77
TWB	03	6/1/2009	AAC	TAXIWAY	S	0	10,330.00	8/24/2017	8	77
TWC	01	1/1/1997	APC	TAXIWAY	S	0	32,132.00	8/24/2017	20	58
TWC	02	4/22/1994	APC	TAXIWAY	S	0	28,617.00	8/24/2017	23	57
TWEAA	01	4/22/1994	AC	TAXIWAY	S	0	8,364.00	8/24/2017	23	62

Section Condition Report (Summary)

Pavement Database: SDM 12-01-2017

Age Category	Average Age at Inspection	Total Area (SqFt)	Number of Sections	Arithmetic Average PCI	Standard Deviation PCI	Weighted Average PCI
00-02	1	313,350.00	9	93.89	0.31	93.76
06-10	8	145,455.00	4	77.75	10.99	67.03
16-20	20	989,504.00	8	44.50	13.18	48.44
21-25	23	717,425.00	11	55.55	11.80	50.19
Over 50	66	484,221.00	10	62.60	11.37	64.77
ALL	27	2,649,955.00	42	65.45	20.27	58.28

Appendix D Pavement Inspection Report

Re-Inspection Report

SDM 12-01-2017
Generated Date 11/14/2017

Network: SDM **Name:** SDM

Branch: ATERM **Name:** Terminal Apron **Use:** APRON **Area:** 196,240 SqFt

Section: 01 of 3 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 51,930 SqFt **Length:** 1,150 Ft **Width:** 45 Ft

Slabs: 277 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 6,395 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 13 **Surveyed:** 3

Conditions: **PCI:** 67

Inspection Comments:

Sample Number: 004 **Type:** R **Area:** 18.00 Slabs **PCI:** 79

Re-Inspection Report

65	JT SEAL DMG	M	18.00	Slabs	Comments:
63	LINEAR CR	L	1.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:

Sample Number: 008 **Type:** R **Area:** 18.00 Slabs **PCI:** 48

Re-Inspection Report

65	JT SEAL DMG	H	18.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:
71	FAULTING	H	4.00	Slabs	Comments:

Sample Number: 012 **Type:** R **Area:** 22.00 Slabs **PCI:** 71

Re-Inspection Report

65	JT SEAL DMG	H	22.00	Slabs	Comments:
63	LINEAR CR	L	5.00	Slabs	Comments:
73	SHRINKAGE CR	N	4.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
66	SMALL PATCH	L	1.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: ATERM **Name:** Terminal Apron **Use:** APRON **Area:** 196,240 SqFt

Section: 02 of 3 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 64,820 SqFt **Length:** 1,425 Ft **Width:** 45 Ft

Slabs: 346 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 7,935 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 16 **Surveyed:** 3

Conditions: **PCI:** 39

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 20.00 Slabs **PCI:** 45

Re-Inspection Report

65	JT SEAL DMG	M	20.00	Slabs	Comments:
73	SHRINKAGE CR	N	2.00	Slabs	Comments:
70	SCALING	H	1.00	Slabs	Comments:
63	LINEAR CR	H	1.00	Slabs	Comments:
63	LINEAR CR	L	1.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
72	SHAT. SLAB	L	1.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
67	LARGE PATCH	M	2.00	Slabs	Comments:

Sample Number: 010 **Type:** R **Area:** 18.00 Slabs **PCI:** 40

Re-Inspection Report

65	JT SEAL DMG	H	18.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
75	CORNER SPALL	L	2.00	Slabs	Comments:
73	SHRINKAGE CR	N	3.00	Slabs	Comments:
63	LINEAR CR	L	2.00	Slabs	Comments:
62	CORNER BREAK	L	1.00	Slabs	Comments:
62	CORNER BREAK	M	6.00	Slabs	Comments:

Sample Number: 014 **Type:** R **Area:** 20.00 Slabs **PCI:** 34

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
63	LINEAR CR	L	2.00	Slabs	Comments:
62	CORNER BREAK	L	2.00	Slabs	Comments:
70	SCALING	L	2.00	Slabs	Comments:
63	LINEAR CR	M	3.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
73	SHRINKAGE CR	N	1.00	Slabs	Comments:
75	CORNER SPALL	H	3.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	H	2.00	Slabs	Comments:
71	FAULTING	M	2.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: ATERM **Name:** Terminal Apron **Use:** APRON **Area:** 196,240 SqFt

Section: 03 of 3 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 79,490 SqFt **Length:** 280 Ft **Width:** 280 Ft

Slabs: 418 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 10,939 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 20 **Surveyed:** 5

Conditions: **PCI:** 47

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 20.00 Slabs **PCI:** 61

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
62	CORNER BREAK	L	2.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:
63	LINEAR CR	M	1.00	Slabs	Comments:
75	CORNER SPALL	H	3.00	Slabs	Comments:

Sample Number: 006 **Type:** R **Area:** 20.00 Slabs **PCI:** 37

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
67	LARGE PATCH	L	4.00	Slabs	Comments:
74	JOINT SPALL	M	3.00	Slabs	Comments:
63	LINEAR CR	L	3.00	Slabs	Comments:
75	CORNER SPALL	H	2.00	Slabs	Comments:
63	LINEAR CR	M	7.00	Slabs	Comments:

Sample Number: 010 **Type:** R **Area:** 25.00 Slabs **PCI:** 51

Re-Inspection Report

65	JT SEAL DMG	H	25.00	Slabs	Comments:
63	LINEAR CR	L	6.00	Slabs	Comments:
70	SCALING	M	1.00	Slabs	Comments:
73	SHRINKAGE CR	N	8.00	Slabs	Comments:
63	LINEAR CR	M	1.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
67	LARGE PATCH	M	1.00	Slabs	Comments:
74	JOINT SPALL	L	2.00	Slabs	Comments:

Sample Number: 014 **Type:** R **Area:** 25.00 Slabs **PCI:** 52

Re-Inspection Report

65	JT SEAL DMG	H	25.00	Slabs	Comments:
62	CORNER BREAK	M	1.00	Slabs	Comments:
71	FAULTING	L	1.00	Slabs	Comments:
63	LINEAR CR	M	1.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
71	FAULTING	M	1.00	Slabs	Comments:
66	SMALL PATCH	L	5.00	Slabs	Comments:
73	SHRINKAGE CR	N	6.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
63	LINEAR CR	L	7.00	Slabs	Comments:

Sample Number: 018 **Type:** R **Area:** 16.00 Slabs **PCI:** 26

Re-Inspection Report

65	JT SEAL DMG	H	16.00	Slabs	Comments:
71	FAULTING	M	2.00	Slabs	Comments:
73	SHRINKAGE CR	N	3.00	Slabs	Comments:
63	LINEAR CR	M	7.00	Slabs	Comments:
63	LINEAR CR	L	4.00	Slabs	Comments:
62	CORNER BREAK	L	2.00	Slabs	Comments:
72	SHAT. SLAB	L	1.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:

74	JOINT SPALL	L	1.00	Slabs	Comments:
67	LARGE PATCH	L	2.00	Slabs	Comments:
75	CORNER SPALL	H	2.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: ATWA **Name:** Taxiway A Warm Up **Use:** APRON **Area:** 19,622 SqFt

Section: 01 of 1 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 19,622 SqFt **Length:** 245 Ft **Width:** 80 Ft

Slabs: 105 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 2,550 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 4 **Surveyed:** 2

Conditions: **PCI:** 54

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 20.00 Slabs **PCI:** 51

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
66	SMALL PATCH	L	1.00	Slabs	Comments:
63	LINEAR CR	L	5.00	Slabs	Comments:
73	SHRINKAGE CR	N	4.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
67	LARGE PATCH	L	4.00	Slabs	Comments:
71	FAULTING	L	1.00	Slabs	Comments:
71	FAULTING	M	3.00	Slabs	Comments:

Sample Number: 004 **Type:** R **Area:** 24.00 Slabs **PCI:** 57

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
73	SHRINKAGE CR	N	4.00	Slabs	Comments:
70	SCALING	L	4.00	Slabs	Comments:
63	LINEAR CR	M	2.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
75	CORNER SPALL	H	3.00	Slabs	Comments:
71	FAULTING	L	3.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: ATWB **Name:** Taxiway B Warm Up **Use:** APRON **Area:** 13,928 SqFt

Section: 01 of 2 **From:** MAP **To:** MAP **Last Const.:** 5/1/1994

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 8,168 SqFt **Length:** 132 Ft **Width:** 60 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 2 **Surveyed:** 2

Conditions: **PCI:** 71

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4140.00 SqFt **PCI:** 70

Re-Inspection Report

52	RAVELING	L	1380.00	SqFt	Comments:
48	L & T CR	M	63.00	Ft	Comments:
48	L & T CR	H	15.00	Ft	Comments:
48	L & T CR	L	46.00	Ft	Comments:
50	PATCHING	L	6.00	SqFt	Comments:

Sample Number: 002 **Type:** R **Area:** 4026.00 SqFt **PCI:** 73

Re-Inspection Report

52	RAVELING	L	1342.00	SqFt	Comments:
48	L & T CR	L	98.00	Ft	Comments:
48	L & T CR	M	34.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: ATWB **Name:** Taxiway B Warm Up **Use:** APRON **Area:** 13,928 SqFt

Section: 02 of 2 **From:** MAP **To:** MAP **Last Const.:** 1/1/1997

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 5,760 SqFt **Length:** 128 Ft **Width:** 45 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 42

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 5760.00 SqFt **PCI:** 42

Re-Inspection Report

48	L & T CR	M	296.00	Ft	Comments:
48	L & T CR	H	43.00	Ft	Comments:
48	L & T CR	L	86.00	Ft	Comments:
52	RAVELING	L	2880.00	SqFt	Comments:
41	ALLIGATOR CR	M	126.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: ATWC **Name:** Taxiway C Warm Up **Use:** APRON **Area:** 3,827 SqFt

Section: 01 of 1 **From:** MAP **To:** MAP **Last Const.:** 1/1/1997

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** T

Area: 3,827 SqFt **Length:** 124 Ft **Width:** 30 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 46

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 3827.00 SqFt **PCI:** 46

Re-Inspection Report

52	RAVELING	L	3827.00	SqFt	Comments:
50	PATCHING	L	12.00	SqFt	Comments:
41	ALLIGATOR CR	L	99.00	SqFt	Comments:
48	L & T CR	L	122.00	Ft	Comments:
48	L & T CR	M	155.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 01L of 15 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 48,750 SqFt **Length:** 975 Ft **Width:** 50 Ft

Slabs: 260 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 6,125 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 13 **Surveyed:** 3

Conditions: **PCI:** 75

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 20.00 Slabs **PCI:** 78

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
75	CORNER SPALL	L	1.00	Slabs	Comments:
74	JOINT SPALL	L	2.00	Slabs	Comments:

Sample Number: 006 **Type:** R **Area:** 20.00 Slabs **PCI:** 71

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
67	LARGE PATCH	L	1.00	Slabs	Comments:
67	LARGE PATCH	M	1.00	Slabs	Comments:
74	JOINT SPALL	L	3.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:

Sample Number: 010 **Type:** R **Area:** 20.00 Slabs **PCI:** 76

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
75	CORNER SPALL	M	2.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 01K of 15 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 48,750 SqFt **Length:** 975 Ft **Width:** 50 Ft

Slabs: 260 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 6,125 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 13 **Surveyed:** 3

Conditions: **PCI:** 76

Inspection Comments:

Sample Number: 003 **Type:** R **Area:** 20.00 Slabs **PCI:** 89

Re-Inspection Report

74	JOINT SPALL	L	2.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:

Sample Number: 007 **Type:** R **Area:** 20.00 Slabs **PCI:** 78

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
66	SMALL PATCH	L	1.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
75	CORNER SPALL	L	1.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:

Sample Number: 011 **Type:** R **Area:** 20.00 Slabs **PCI:** 61

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
63	LINEAR CR	M	2.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
66	SMALL PATCH	L	5.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 01R of 15 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 48,750 SqFt **Length:** 975 Ft **Width:** 50 Ft

Slabs: 260 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 6,125 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 13 **Surveyed:** 3

Conditions: **PCI:** 69

Inspection Comments:

Sample Number: 004 **Type:** R **Area:** 20.00 Slabs **PCI:** 72

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:
75	CORNER SPALL	L	1.00	Slabs	Comments:
75	CORNER SPALL	H	2.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:

Sample Number: 008 **Type:** R **Area:** 20.00 Slabs **PCI:** 63

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
74	JOINT SPALL	H	2.00	Slabs	Comments:
74	JOINT SPALL	M	3.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
66	SMALL PATCH	L	1.00	Slabs	Comments:
66	SMALL PATCH	M	1.00	Slabs	Comments:

Sample Number: 012 **Type:** R **Area:** 20.00 Slabs **PCI:** 72

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 02L of 15 **From:** MAP **To:** MAP **Last Const.:** 1/1/1997

Surface: APC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 247,600 SqFt **Length:** 4,952 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 50 **Surveyed:** 5

Conditions: **PCI:** 61

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4950.00 SqFt **PCI:** 72

Re-Inspection Report

52	RAVELING	L	2400.00	SqFt	Comments:
47	JT REF. CR	L	130.00	Ft	Comments:
48	L & T CR	L	10.00	Ft	Comments:

Sample Number: 011 **Type:** R **Area:** 4950.00 SqFt **PCI:** 55

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
47	JT REF. CR	H	10.00	Ft	Comments:
48	L & T CR	L	58.00	Ft	Comments:
47	JT REF. CR	M	117.00	Ft	Comments:
47	JT REF. CR	L	232.00	Ft	Comments:

Sample Number: 021 **Type:** R **Area:** 4950.00 SqFt **PCI:** 61

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
47	JT REF. CR	H	8.00	Ft	Comments:
47	JT REF. CR	L	239.00	Ft	Comments:
47	JT REF. CR	M	81.00	Ft	Comments:

Sample Number: 031 **Type:** R **Area:** 4950.00 SqFt **PCI:** 54

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
48	L & T CR	L	63.00	Ft	Comments:
43	BLOCK CR	M	105.00	SqFt	Comments:
47	JT REF. CR	L	247.00	Ft	Comments:
47	JT REF. CR	M	78.00	Ft	Comments:

Sample Number: 041 **Type:** R **Area:** 4950.00 SqFt **PCI:** 64

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
47	JT REF. CR	L	195.00	Ft	Comments:
47	JT REF. CR	M	80.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 02K of 15 **From:** MAP **To:** MAP **Last Const.:** 1/1/1997

Surface: APC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 247,600 SqFt **Length:** 4,952 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 50 **Surveyed:** 5

Conditions: **PCI:** 53

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4950.00 SqFt **PCI:** 60

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
47	JT REF. CR	M	24.00	Ft	Comments:
48	L & T CR	M	22.00	Ft	Comments:
47	JT REF. CR	L	140.00	Ft	Comments:

Sample Number: 012 **Type:** R **Area:** 4950.00 SqFt **PCI:** 54

Re-Inspection Report

41	ALLIGATOR CR	L	9.00	SqFt	Comments:
52	RAVELING	L	4950.00	SqFt	Comments:
48	L & T CR	M	15.00	Ft	Comments:
48	L & T CR	L	27.00	Ft	Comments:
47	JT REF. CR	L	294.00	Ft	Comments:
47	JT REF. CR	M	25.00	Ft	Comments:

Sample Number: 022 **Type:** R **Area:** 4950.00 SqFt **PCI:** 66

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
48	L & T CR	L	7.00	Ft	Comments:
47	JT REF. CR	L	400.00	Ft	Comments:

Sample Number: 032 **Type:** R **Area:** 4950.00 SqFt **PCI:** 50

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
41	ALLIGATOR CR	L	75.00	SqFt	Comments:
43	BLOCK CR	L	144.00	SqFt	Comments:
48	L & T CR	L	180.00	Ft	Comments:
47	JT REF. CR	L	26.00	Ft	Comments:
41	ALLIGATOR CR	M	14.00	SqFt	Comments:

Sample Number: 042 **Type:** R **Area:** 4950.00 SqFt **PCI:** 35

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
41	ALLIGATOR CR	M	240.00	SqFt	Comments:
41	ALLIGATOR CR	L	59.00	SqFt	Comments:
48	L & T CR	L	132.00	Ft	Comments:
47	JT REF. CR	L	160.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 02R of 15 **From:** MAP **To:** MAP **Last Const.:** 1/1/1997

Surface: APC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 247,600 SqFt **Length:** 4,952 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 50 **Surveyed:** 5

Conditions: **PCI:** 39

Inspection Comments:

Sample Number: 003 **Type:** R **Area:** 4950.00 SqFt **PCI:** 41

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
43	BLOCK CR	M	1485.00	SqFt	Comments:
47	JT REF. CR	L	104.00	Ft	Comments:
47	JT REF. CR	M	260.00	Ft	Comments:

Sample Number: 013 **Type:** R **Area:** 4950.00 SqFt **PCI:** 42

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
43	BLOCK CR	L	1485.00	SqFt	Comments:
48	L & T CR	L	73.00	Ft	Comments:
48	L & T CR	M	44.00	Ft	Comments:
47	JT REF. CR	L	75.00	Ft	Comments:
47	JT REF. CR	M	224.00	Ft	Comments:

Sample Number: 023 **Type:** R **Area:** 4950.00 SqFt **PCI:** 41

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
43	BLOCK CR	L	2300.00	SqFt	Comments:
48	L & T CR	H	10.00	Ft	Comments:
48	L & T CR	M	36.00	Ft	Comments:
41	ALLIGATOR CR	L	130.00	SqFt	Comments:

Sample Number: 033 **Type:** R **Area:** 4950.00 SqFt **PCI:** 34

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
43	BLOCK CR	M	1188.00	SqFt	Comments:
48	L & T CR	L	52.00	Ft	Comments:
48	L & T CR	M	17.00	Ft	Comments:
41	ALLIGATOR CR	L	40.00	SqFt	Comments:
47	JT REF. CR	M	380.00	Ft	Comments:

Sample Number: 043 **Type:** R **Area:** 4950.00 SqFt **PCI:** 37

Re-Inspection Report

52	RAVELING	L	4950.00	SqFt	Comments:
48	L & T CR	L	10.00	Ft	Comments:
43	BLOCK CR	M	1485.00	SqFt	Comments:
47	JT REF. CR	L	380.00	Ft	Comments:
41	ALLIGATOR CR	M	72.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 03L of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: APC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 18,750 SqFt **Length:** 375 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 4 **Surveyed:** 2

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4150.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4150.00	SqFt	Comments:

Sample Number: 003 **Type:** R **Area:** 4150.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4150.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 03K of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: APC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 18,750 SqFt **Length:** 375 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 4 **Surveyed:** 2

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4150.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4150.00	SqFt	Comments:

Sample Number: 003 **Type:** R **Area:** 4150.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4150.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 03R of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: APC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 18,750 SqFt **Length:** 375 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 4 **Surveyed:** 2

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4150.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4150.00	SqFt	Comments:

Sample Number: 004 **Type:** R **Area:** 4150.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4150.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 04L of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 76,500 SqFt **Length:** 1,530 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 16 **Surveyed:** 4

Conditions: **PCI:** 93

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 005 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 009 **Type:** R **Area:** 4800.00 SqFt **PCI:** 92

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:
48	L & T CR	L	2.00	Ft	Comments:

Sample Number: 013 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 04K of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 76,500 SqFt **Length:** 1,530 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 16 **Surveyed:** 4

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 006 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 010 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 014 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 04R of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 68,250 SqFt **Length:** 1,365 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 14 **Surveyed:** 3

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 003 **Type:** R **Area:** 4800.00 SqFt **PCI:** 93

Re-Inspection Report

45	DEPRESSION	L	12.00	SqFt	Comments:
57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 007 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Sample Number: 011 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 05L of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 9,200 SqFt **Length:** 184 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 2 **Surveyed:** 1

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4600.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4600.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 05K of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 9,200 SqFt **Length:** 184 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 2 **Surveyed:** 1

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4600.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4600.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8L26R **Name:** RWY 8L-26R **Use:** RUNWAY **Area:** 1,202,400 SqFt

Section: 05R of 15 **From:** MAP **To:** MAP **Last Const.:** 7/27/2016

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 17,450 SqFt **Length:** 349 Ft **Width:** 50 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 4 **Surveyed:** 1

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4800.00 SqFt **PCI:** 94

Re-Inspection Report

57	WEATHERING	L	4800.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8R26L **Name:** RWY 8R-26L **Use:** RUNWAY **Area:** 238,950 SqFt

Section: 04 of 5 **From:** MAP **To:** MAP **Last Const.:** 6/1/2009

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 110,400 SqFt **Length:** 1,472 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 22 **Surveyed:** 4

Conditions: **PCI:** 63

Inspection Comments:

Sample Number: 005 **Type:** R **Area:** 5025.00 SqFt **PCI:** 55

Re-Inspection Report

50	PATCHING	M	120.00	SqFt	Comments:
45	DEPRESSION	L	170.00	SqFt	Comments:
48	L & T CR	L	214.00	Ft	Comments:
48	L & T CR	M	228.00	Ft	Comments:
57	WEATHERING	M	5025.00	SqFt	Comments:

Sample Number: 010 **Type:** R **Area:** 5025.00 SqFt **PCI:** 66

Re-Inspection Report

57	WEATHERING	M	5025.00	SqFt	Comments:
48	L & T CR	L	167.00	Ft	Comments:
48	L & T CR	M	225.00	Ft	Comments:

Sample Number: 015 **Type:** R **Area:** 5025.00 SqFt **PCI:** 68

Re-Inspection Report

57	WEATHERING	M	5025.00	SqFt	Comments:
48	L & T CR	L	290.00	Ft	Comments:
48	L & T CR	M	132.00	Ft	Comments:

Sample Number: 020 **Type:** R **Area:** 5025.00 SqFt **PCI:** 65

Re-Inspection Report

57	WEATHERING	M	5025.00	SqFt	Comments:
45	DEPRESSION	L	66.00	SqFt	Comments:
48	L & T CR	L	280.00	Ft	Comments:
48	L & T CR	M	118.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: R8R26L **Name:** RWY 8R-26L **Use:** RUNWAY **Area:** 238,950 SqFt

Section: 01 of 5 **From:** MAP **To:** MAP **Last Const.:** 6/1/2009

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 5,625 SqFt **Length:** 75 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 1 **Surveyed:** 1

Conditions: **PCI:** 94

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 5625.00 SqFt **PCI:** 94

Re-Inspection Report

48	L & T CR	L	75.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: R8R26L **Name:** RWY 8R-26L **Use:** RUNWAY **Area:** 238,950 SqFt

Section: 02 of 5 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 66,300 SqFt **Length:** 884 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 14 **Surveyed:** 3

Conditions: **PCI:** 62

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4725.00 SqFt **PCI:** 75

Re-Inspection Report

48	L & T CR	M	16.00	Ft	Comments:
52	RAVELING	L	2360.00	SqFt	Comments:

Sample Number: 007 **Type:** R **Area:** 4725.00 SqFt **PCI:** 70

Re-Inspection Report

52	RAVELING	L	2360.00	SqFt	Comments:
41	ALLIGATOR CR	L	26.00	SqFt	Comments:
48	L & T CR	L	34.00	Ft	Comments:

Sample Number: 012 **Type:** R **Area:** 4725.00 SqFt **PCI:** 42

Re-Inspection Report

52	RAVELING	L	2360.00	SqFt	Comments:
41	ALLIGATOR CR	L	42.00	SqFt	Comments:
45	DEPRESSION	L	216.00	SqFt	Comments:
48	L & T CR	H	62.00	Ft	Comments:
48	L & T CR	L	23.00	Ft	Comments:
48	L & T CR	M	34.00	Ft	Comments:
45	DEPRESSION	M	80.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: R8R26L **Name:** RWY 8R-26L **Use:** RUNWAY **Area:** 238,950 SqFt

Section: 03 of 5 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 24,375 SqFt **Length:** 325 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 5 **Surveyed:** 2

Conditions: **PCI:** 34

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4875.00 SqFt **PCI:** 34

Re-Inspection Report

52	RAVELING	L	2438.00	SqFt	Comments:
56	SWELLING	L	308.00	SqFt	Comments:
45	DEPRESSION	L	668.00	SqFt	Comments:
48	L & T CR	H	23.00	Ft	Comments:
48	L & T CR	L	8.00	Ft	Comments:
43	BLOCK CR	L	536.00	SqFt	Comments:
43	BLOCK CR	M	1340.00	SqFt	Comments:
48	L & T CR	M	135.00	Ft	Comments:

Sample Number: 004 **Type:** R **Area:** 4875.00 SqFt **PCI:** 35

Re-Inspection Report

52	RAVELING	L	2438.00	SqFt	Comments:
43	BLOCK CR	M	2925.00	SqFt	Comments:
56	SWELLING	L	24.00	SqFt	Comments:
48	L & T CR	L	35.00	Ft	Comments:
45	DEPRESSION	L	85.00	SqFt	Comments:
56	SWELLING	M	364.00	SqFt	Comments:
48	L & T CR	M	102.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: R8R26L **Name:** RWY 8R-26L **Use:** RUNWAY **Area:** 238,950 SqFt

Section: 05 of 5 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** P

Area: 32,250 SqFt **Length:** 430 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 7 **Surveyed:** 3

Conditions: **PCI:** 66

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 4575.00 SqFt **PCI:** 69

Re-Inspection Report

52	RAVELING	L	4575.00	SqFt	Comments:
48	L & T CR	L	8.00	Ft	Comments:
48	L & T CR	M	8.00	Ft	Comments:

Sample Number: 004 **Type:** R **Area:** 4575.00 SqFt **PCI:** 74

Re-Inspection Report

52	RAVELING	L	4575.00	SqFt	Comments:

Sample Number: 006 **Type:** R **Area:** 4575.00 SqFt **PCI:** 55

Re-Inspection Report

52	RAVELING	L	4575.00	SqFt	Comments:
41	ALLIGATOR CR	L	18.00	SqFt	Comments:
47	JT REF. CR	M	85.00	Ft	Comments:
47	JT REF. CR	L	62.00	Ft	Comments:
48	L & T CR	L	50.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 01 of 7 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 102,714 SqFt **Length:** 675 Ft **Width:** 150 Ft

Slabs: 548 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 14,025 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 28 **Surveyed:** 4

Conditions: **PCI:** 66

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 20.00 Slabs **PCI:** 54

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
73	SHRINKAGE CR	N	2.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
62	CORNER BREAK	L	1.00	Slabs	Comments:
63	LINEAR CR	L	1.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
74	JOINT SPALL	H	2.00	Slabs	Comments:

Sample Number: 011 **Type:** R **Area:** 24.00 Slabs **PCI:** 88

Re-Inspection Report

74	JOINT SPALL	L	4.00	Slabs	Comments:
65	JT SEAL DMG	M	24.00	Slabs	Comments:

Sample Number: 022 **Type:** R **Area:** 28.00 Slabs **PCI:** 60

Re-Inspection Report

65	JT SEAL DMG	H	28.00	Slabs	Comments:
71	FAULTING	L	2.00	Slabs	Comments:
75	CORNER SPALL	M	2.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	H	3.00	Slabs	Comments:

Sample Number: 025 **Type:** R **Area:** 18.00 Slabs **PCI:** 58

Re-Inspection Report

65	JT SEAL DMG	H	18.00	Slabs	Comments:
74	JOINT SPALL	H	2.00	Slabs	Comments:
63	LINEAR CR	L	1.00	Slabs	Comments:
71	FAULTING	H	1.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 02 of 7 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 82,490 SqFt **Length:** 1,030 Ft **Width:** 75 Ft

Slabs: 440 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 10,225 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 17 **Surveyed:** 4

Conditions: **PCI:** 52

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 24.00 Slabs **PCI:** 63

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
63	LINEAR CR	L	1.00	Slabs	Comments:
63	LINEAR CR	M	1.00	Slabs	Comments:
74	JOINT SPALL	L	2.00	Slabs	Comments:
75	CORNER SPALL	L	1.00	Slabs	Comments:
62	CORNER BREAK	L	1.00	Slabs	Comments:
67	LARGE PATCH	L	1.00	Slabs	Comments:
67	LARGE PATCH	M	1.00	Slabs	Comments:

Sample Number: 006 **Type:** R **Area:** 24.00 Slabs **PCI:** 51

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
71	FAULTING	L	2.00	Slabs	Comments:
75	CORNER SPALL	L	1.00	Slabs	Comments:
67	LARGE PATCH	L	4.00	Slabs	Comments:
67	LARGE PATCH	M	1.00	Slabs	Comments:
71	FAULTING	M	5.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:

Sample Number: 011 **Type:** R **Area:** 24.00 Slabs **PCI:** 53

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
71	FAULTING	M	1.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
74	JOINT SPALL	H	2.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
71	FAULTING	M	4.00	Slabs	Comments:

Sample Number: 016 **Type:** R **Area:** 24.00 Slabs **PCI:** 39

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
67	LARGE PATCH	M	2.00	Slabs	Comments:
75	CORNER SPALL	M	2.00	Slabs	Comments:
71	FAULTING	M	3.00	Slabs	Comments:
66	SMALL PATCH	L	4.00	Slabs	Comments:
67	LARGE PATCH	M	2.00	Slabs	Comments:
71	FAULTING	M	7.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 03 of 7 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 137,159 SqFt **Length:** 1,700 Ft **Width:** 75 Ft

Slabs: 732 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 16,925 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 29 **Surveyed:** 4

Conditions: **PCI:** 31

Inspection Comments:

Sample Number: 005 **Type:** R **Area:** 24.00 Slabs **PCI:** 28

Re-Inspection Report

63	LINEAR CR	M	8.00	Slabs	Comments:
65	JT SEAL DMG	H	24.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
63	LINEAR CR	L	5.00	Slabs	Comments:
63	LINEAR CR	H	1.00	Slabs	Comments:
62	CORNER BREAK	M	2.00	Slabs	Comments:
66	SMALL PATCH	L	1.00	Slabs	Comments:
72	SHAT. SLAB	L	2.00	Slabs	Comments:
72	SHAT. SLAB	M	1.00	Slabs	Comments:
74	JOINT SPALL	M	3.00	Slabs	Comments:

Sample Number: 013 **Type:** R **Area:** 24.00 Slabs **PCI:** 30

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
72	SHAT. SLAB	M	2.00	Slabs	Comments:
73	SHRINKAGE CR	N	1.00	Slabs	Comments:
63	LINEAR CR	L	4.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
74	JOINT SPALL	M	1.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:
62	CORNER BREAK	M	1.00	Slabs	Comments:
63	LINEAR CR	M	7.00	Slabs	Comments:

Sample Number: 021 **Type:** R **Area:** 24.00 Slabs **PCI:** 38

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
66	SMALL PATCH	L	1.00	Slabs	Comments:
63	LINEAR CR	L	3.00	Slabs	Comments:
62	CORNER BREAK	L	1.00	Slabs	Comments:
62	CORNER BREAK	M	1.00	Slabs	Comments:
66	SMALL PATCH	M	1.00	Slabs	Comments:
66	SMALL PATCH	H	2.00	Slabs	Comments:
62	CORNER BREAK	H	1.00	Slabs	Comments:
73	SHRINKAGE CR	N	1.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
63	LINEAR CR	M	6.00	Slabs	Comments:

Sample Number: 028 **Type:** R **Area:** 15.00 Slabs **PCI:** 26

Re-Inspection Report

65	JT SEAL DMG	H	15.00	Slabs	Comments:
73	SHRINKAGE CR	N	4.00	Slabs	Comments:
62	CORNER BREAK	L	1.00	Slabs	Comments:
63	LINEAR CR	M	2.00	Slabs	Comments:
62	CORNER BREAK	M	1.00	Slabs	Comments:
75	CORNER SPALL	M	3.00	Slabs	Comments:
63	LINEAR CR	L	3.00	Slabs	Comments:
72	SHAT. SLAB	L	2.00	Slabs	Comments:
72	SHAT. SLAB	M	1.00	Slabs	Comments:
75	CORNER SPALL	L	2.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 06 of 7 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 37,298 SqFt **Length:** 245 Ft **Width:** 150 Ft

Slabs: 199 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 4,995 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 9 **Surveyed:** 3

Conditions: **PCI:** 63

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 34.00 Slabs **PCI:** 62

Re-Inspection Report

65	JT SEAL DMG	H	34.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
75	CORNER SPALL	L	1.00	Slabs	Comments:
67	LARGE PATCH	M	6.00	Slabs	Comments:
67	LARGE PATCH	L	3.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:

Sample Number: 006 **Type:** R **Area:** 20.00 Slabs **PCI:** 52

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
71	FAULTING	M	4.00	Slabs	Comments:
75	CORNER SPALL	M	2.00	Slabs	Comments:
63	LINEAR CR	M	1.00	Slabs	Comments:
74	JOINT SPALL	M	5.00	Slabs	Comments:

Sample Number: 009 **Type:** R **Area:** 18.00 Slabs **PCI:** 75

Re-Inspection Report

65	JT SEAL DMG	H	18.00	Slabs	Comments:
71	FAULTING	L	1.00	Slabs	Comments:
73	SHRINKAGE CR	N	4.00	Slabs	Comments:
75	CORNER SPALL	M	2.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 07 of 7 **From:** MAP **To:** MAP **Last Const.:** 7/1/1951

Surface: PCC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 55,412 SqFt **Length:** 175 Ft **Width:** 300 Ft

Slabs: 296 **Slab Length:** 15 Ft **Slab Width:** 12 Ft **Joint Length:** 7,225 Ft

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 14 **Surveyed:** 3

Conditions: **PCI:** 61

Inspection Comments:

Sample Number: 003 **Type:** R **Area:** 20.00 Slabs **PCI:** 63

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
75	CORNER SPALL	M	1.00	Slabs	Comments:
75	CORNER SPALL	H	1.00	Slabs	Comments:
63	LINEAR CR	M	1.00	Slabs	Comments:
75	CORNER SPALL	L	3.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
67	LARGE PATCH	L	3.00	Slabs	Comments:

Sample Number: 008 **Type:** R **Area:** 20.00 Slabs **PCI:** 54

Re-Inspection Report

65	JT SEAL DMG	H	20.00	Slabs	Comments:
74	JOINT SPALL	L	2.00	Slabs	Comments:
75	CORNER SPALL	M	3.00	Slabs	Comments:
74	JOINT SPALL	M	2.00	Slabs	Comments:
75	CORNER SPALL	H	2.00	Slabs	Comments:
74	JOINT SPALL	H	1.00	Slabs	Comments:
71	FAULTING	M	2.00	Slabs	Comments:

Sample Number: 013 **Type:** R **Area:** 24.00 Slabs **PCI:** 65

Re-Inspection Report

65	JT SEAL DMG	H	24.00	Slabs	Comments:
74	JOINT SPALL	L	1.00	Slabs	Comments:
75	CORNER SPALL	H	2.00	Slabs	Comments:
74	JOINT SPALL	H	3.00	Slabs	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 04 of 7 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 232,810 SqFt **Length:** 2,980 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 46 **Surveyed:** 5

Conditions: **PCI:** 58

Inspection Comments:

Sample Number: 003 **Type:** R **Area:** 4350.00 SqFt **PCI:** 54

Re-Inspection Report

52	RAVELING	L	3430.00	SqFt	Comments:
57	WEATHERING	M	920.00	SqFt	Comments:
48	L & T CR	L	44.00	Ft	Comments:
48	L & T CR	M	104.00	Ft	Comments:
45	DEPRESSION	L	368.00	SqFt	Comments:

Sample Number: 012 **Type:** R **Area:** 5045.00 SqFt **PCI:** 67

Re-Inspection Report

48	L & T CR	L	14.00	Ft	Comments:
48	L & T CR	M	44.00	Ft	Comments:
52	RAVELING	L	3525.00	SqFt	Comments:
57	WEATHERING	M	1520.00	SqFt	Comments:

Sample Number: 021 **Type:** R **Area:** 5035.00 SqFt **PCI:** 56

Re-Inspection Report

57	WEATHERING	M	1273.00	SqFt	Comments:
52	RAVELING	L	3762.00	SqFt	Comments:
41	ALLIGATOR CR	L	6.00	SqFt	Comments:
48	L & T CR	M	16.00	Ft	Comments:
48	L & T CR	L	125.00	Ft	Comments:

Sample Number: 030 **Type:** R **Area:** 5020.00 SqFt **PCI:** 60

Re-Inspection Report

48	L & T CR	M	158.00	Ft	Comments:
48	L & T CR	L	145.00	Ft	Comments:
57	WEATHERING	M	2904.00	SqFt	Comments:
52	RAVELING	L	2116.00	SqFt	Comments:
41	ALLIGATOR CR	L	15.00	SqFt	Comments:

Sample Number: 039 **Type:** R **Area:** 5010.00 SqFt **PCI:** 51

Re-Inspection Report

52	RAVELING	L	3756.00	SqFt	Comments:
57	WEATHERING	M	1254.00	SqFt	Comments:
41	ALLIGATOR CR	L	56.00	SqFt	Comments:
48	L & T CR	M	216.00	Ft	Comments:
48	L & T CR	L	84.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: TWA **Name:** Taxiway A **Use:** TAXIWAY **Area:** 827,443 SqFt

Section: 05 of 7 **From:** MAP **To:** MAP **Last Const.:** 1/1/1997

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 179,560 SqFt **Length:** 2,290 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 36 **Surveyed:** 4

Conditions: **PCI:** 41

Inspection Comments:

Sample Number: 002 **Type:** R **Area:** 5000.00 SqFt **PCI:** 30

Re-Inspection Report

52	RAVELING	L	500.00	SqFt	Comments:
41	ALLIGATOR CR	L	186.00	SqFt	Comments:
48	L & T CR	L	144.00	Ft	Comments:
45	DEPRESSION	L	208.00	SqFt	Comments:
45	DEPRESSION	M	352.00	SqFt	Comments:
41	ALLIGATOR CR	M	54.00	SqFt	Comments:

Sample Number: 011 **Type:** R **Area:** 4985.00 SqFt **PCI:** 48

Re-Inspection Report

41	ALLIGATOR CR	M	90.00	SqFt	Comments:
41	ALLIGATOR CR	M	90.00	SqFt	Comments:
48	L & T CR	M	7.00	Ft	Comments:
48	L & T CR	L	198.00	Ft	Comments:

Sample Number: 020 **Type:** R **Area:** 4975.00 SqFt **PCI:** 46

Re-Inspection Report

52	RAVELING	L	2480.00	SqFt	Comments:
41	ALLIGATOR CR	L	330.00	SqFt	Comments:
45	DEPRESSION	L	296.00	SqFt	Comments:
48	L & T CR	L	114.00	Ft	Comments:

Sample Number: 029 **Type:** R **Area:** 5540.00 SqFt **PCI:** 40

Re-Inspection Report

52	RAVELING	L	1860.00	SqFt	Comments:
48	L & T CR	L	256.00	Ft	Comments:
48	L & T CR	M	29.00	Ft	Comments:
41	ALLIGATOR CR	L	94.00	SqFt	Comments:
41	ALLIGATOR CR	M	102.00	SqFt	Comments:
45	DEPRESSION	L	120.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: TWA1 **Name:** Taxiway A1 **Use:** TAXIWAY **Area:** 23,577 SqFt

Section: 01 of 2 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 11,060 SqFt **Length:** 175 Ft **Width:** 60 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 3 **Surveyed:** 2

Conditions: **PCI:** 67

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 3470.00 SqFt **PCI:** 70

Re-Inspection Report

52	RAVELING	L	1730.00	SqFt	Comments:
48	L & T CR	M	114.00	Ft	Comments:
48	L & T CR	L	82.00	Ft	Comments:

Sample Number: 003 **Type:** R **Area:** 3156.00 SqFt **PCI:** 65

Re-Inspection Report

52	RAVELING	L	1578.00	SqFt	Comments:
50	PATCHING	L	128.00	SqFt	Comments:
48	L & T CR	L	78.00	Ft	Comments:
48	L & T CR	M	72.00	Ft	Comments:

Network: SDM **Name:** SDM

Branch: TWA1 **Name:** Taxiway A1 **Use:** TAXIWAY **Area:** 23,577 SqFt

Section: 02 of 2 **From:** MAP **To:** MAP **Last Const.:** 4/22/1994

Surface: AC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 12,517 SqFt **Length:** 205 Ft **Width:** 60 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 3 **Surveyed:** 2

Conditions: **PCI:** 60

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4888.00 SqFt **PCI:** 48

Re-Inspection Report

57	WEATHERING	M	1875.00	SqFt	Comments:
45	DEPRESSION	L	364.00	SqFt	Comments:
48	L & T CR	H	53.00	Ft	Comments:
48	L & T CR	M	175.00	Ft	Comments:
48	L & T CR	L	164.00	Ft	Comments:
52	RAVELING	L	570.00	SqFt	Comments:

Sample Number: 003 **Type:** R **Area:** 4280.00 SqFt **PCI:** 75

Re-Inspection Report

57	WEATHERING	M	2140.00	SqFt	Comments:
48	L & T CR	L	12.00	Ft	Comments:
48	L & T CR	M	35.00	Ft	Comments:
52	RAVELING	L	1070.00	SqFt	Comments:

Network: SDM **Name:** SDM

Branch: TWB **Name:** Taxiway B **Use:** TAXIWAY **Area:** 54,855 SqFt

Section: 02 of 3 **From:** MAP **To:** MAP **Last Const.:** 6/1/2009

Surface: AAC **Family:** DEFAULT **Zone:** **Category:** **Rank:** S

Area: 19,100 SqFt **Length:** 250 Ft **Width:** 75 Ft

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

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

Section Comments:

Last Insp. Date: 8/24/2017 **TotalSamples:** 4 **Surveyed:** 2

Conditions: **PCI:** 77

Inspection Comments:

Sample Number: 001 **Type:** R **Area:** 4800.00 SqFt **PCI:** 80

Re-Inspection Report

57	WEATHERING	M	4800.00	SqFt	Comments:

Sample Number: 003 **Type:** R **Area:** 4800.00 SqFt **PCI:** 75

Re-Inspection Report

57	WEATHERING	M	4800.00	SqFt	Comments:
48	L & T CR	L	112.00	Ft	Comments:

Appendix E Heavy Weight Deflectometer Testing Plan and Location

Dynatest®

HWD Testing at Montgomery-Gibbs Executive and Brow Field Airports in San Diego County, CA

Montgomery-Gibbs Executive Airport	
Montgomery-Gibbs Executive Airport Operations	**Catherine Johnson** **Albert Bejarano**
Brown Field Airport	**Joe Hughey**
Atkins	**Katie Chou, Ph.D., P.E.** **Sr. Project Manager, Aviation Sector**
Dynatest Consulting, Inc.	**Jose Juarez (HWD Operator)** **Dave McLean (HWD Operator)** **Alvaro Ulloa, PhD, PE**
Dynatest Project Number	108B17
Project Location	San Diego County
Mobilization Date	07/17/2017
Testing Dates	Montgomery-Gibbs Executive Airport: 07/18/2017 – 07/19/2017 Brown Field Airport: 07/20/2017
Meeting Location and Time	1) **Montgomery-Gibbs Executive:** Airport Operations (3750 John J. Montgomery Dr., San Diego, CA 92123) 8:45 pm on July 18th, 2017 2) **Brown Field Airport:** 1424 Continental Street, San Diego, CA 92154 8:30pm on July 20th, 2017
Testing Schedule	3) **Montgomery-Gibbs Executive:** 9pm to 5am 4) **Brown Field Airport:** 9pm to 6am

Dynatest®

2) Brown Field Airport

Testing Location

Feature	Length (ft.)	Number of HWD Test Lines	Offset (ft.)	HWD Testing Intervals	Number of HWD Test Points
Brown Municipal Airport					
Runway 8R-26L	3,180	2	10	200	32
Runway 8L-26R (PCC)	971	2	10	100	19
Runway 8L-26R (AC)	7,012	2	10	200	70
Taxiway A (AC)	5,170	2	10	200	52
Taxiway A (PCC)	3,466	2	10	200	35
Taxiway B	612	2	10	100	12
Taxiway C-1	410	2	10	50	16
Taxiway C-2	340	2	10	50	12
Taxiway A1	330	2	10	50	12
Subtotal Number of HWD Test Points					**260**

1) File names: RWY8R26L_R1, RWY8R26L_L1
2) File names: RWY8L26RP_R1, RWY8L26RP_L1
3) File names: RWY8L26RA_R1, RWY8L26RA_L1
4) File names: TWYA1A_R1, TWYA1A_L1
5) File names: TWYA2P_R1, TWYA2P_L1
6) File names: TWYB_R1, TWYB _L1
7) File names: TWYC-1_R1, TWYC-1 _L1
8) File names: TWYC-2_R1, TWYC-2_L1
9) Files names: TWYA1_R1, TWYA1_L1

Test Setup

- Stagger tests between test lines. Use filenames as shown above.
- For all airport features a seating drop and 3 drops at 25, 35, and 45 kips shall be applied. If excessive deflections are being recorded on 45 kips, test at the nearest maximum load.
- Large Plate
- Sensor Spacing: 0, 12, 18, 24, 36, 48, 60, 72, and 84 in.
- History ON for 3rd drop.
- Smoothing should be ON
- GPS should be ON
- Save all files in MDB format

b) **Aerial View of Brown Field Airport**

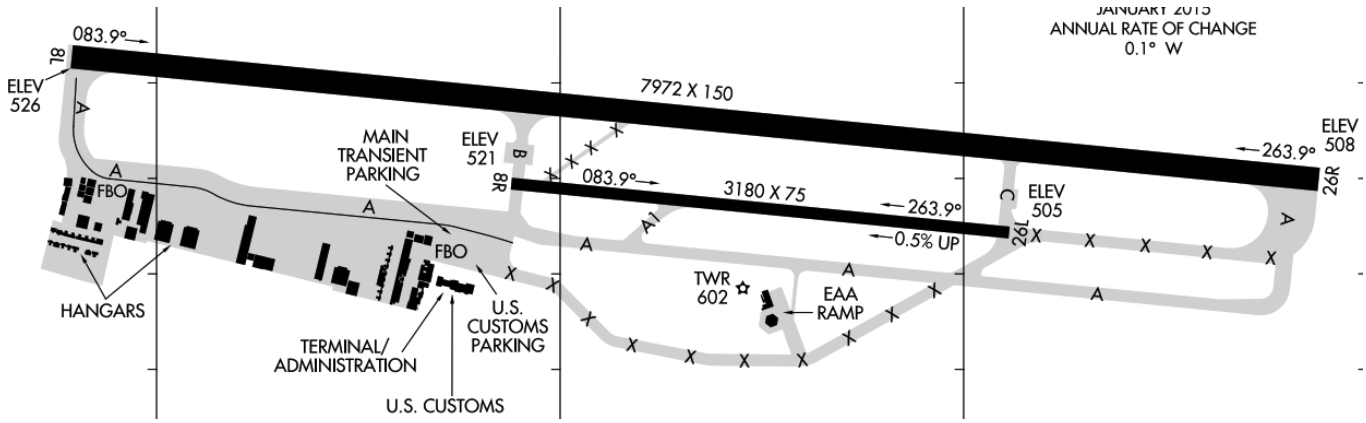


Figure 2. Features Location at Brown Field Airport

Appendix F Pavement Coring Data

SCST, Inc.
Corporate Headquarters
6280 Riverdale Street
San Diego, CA 92120
P 619.280.4321
T 877.215.4321
F 619.280.4717
W www.scst.com

SDVOSB . DVBE

October 23, 2017 **SCST Project No. 170120P3**

Mr. Michael Hotaling
Aviation Practice Leader
C&S Engineers, Inc.
2020 Camino del Rio N., Suite 1000
San Diego, CA 92108

Subject: CORING ASSESSMENT
MASTERPLAN FOR MONTGOMERY-GIBBS AND BROWN AIRFIELDS
SAN DIEGO, CALIFORNIA

Dear Mr. Hotaling:

In accordance with your request, SCST, Inc. provided a geotechnical assessment of the pavement for the subject project (Figures 1 and 2). Our scope of work included a field investigation to assess the thickness of the asphalt concrete pavement section. We performed five cores of the pavement section at each of the two airfields (Figures 2 and 4). The cores were photodocumented (attached) and transported to our geotechnical laboratory to hold. The cores were patched with high strength rapid set concrete. The underlying subgrade was not sampled and laboratory testing was not performed.

We appreciate the opportunity to provide services on this project. If you have any questions or if we may be of further service, please contact our office at 619-280-4321.

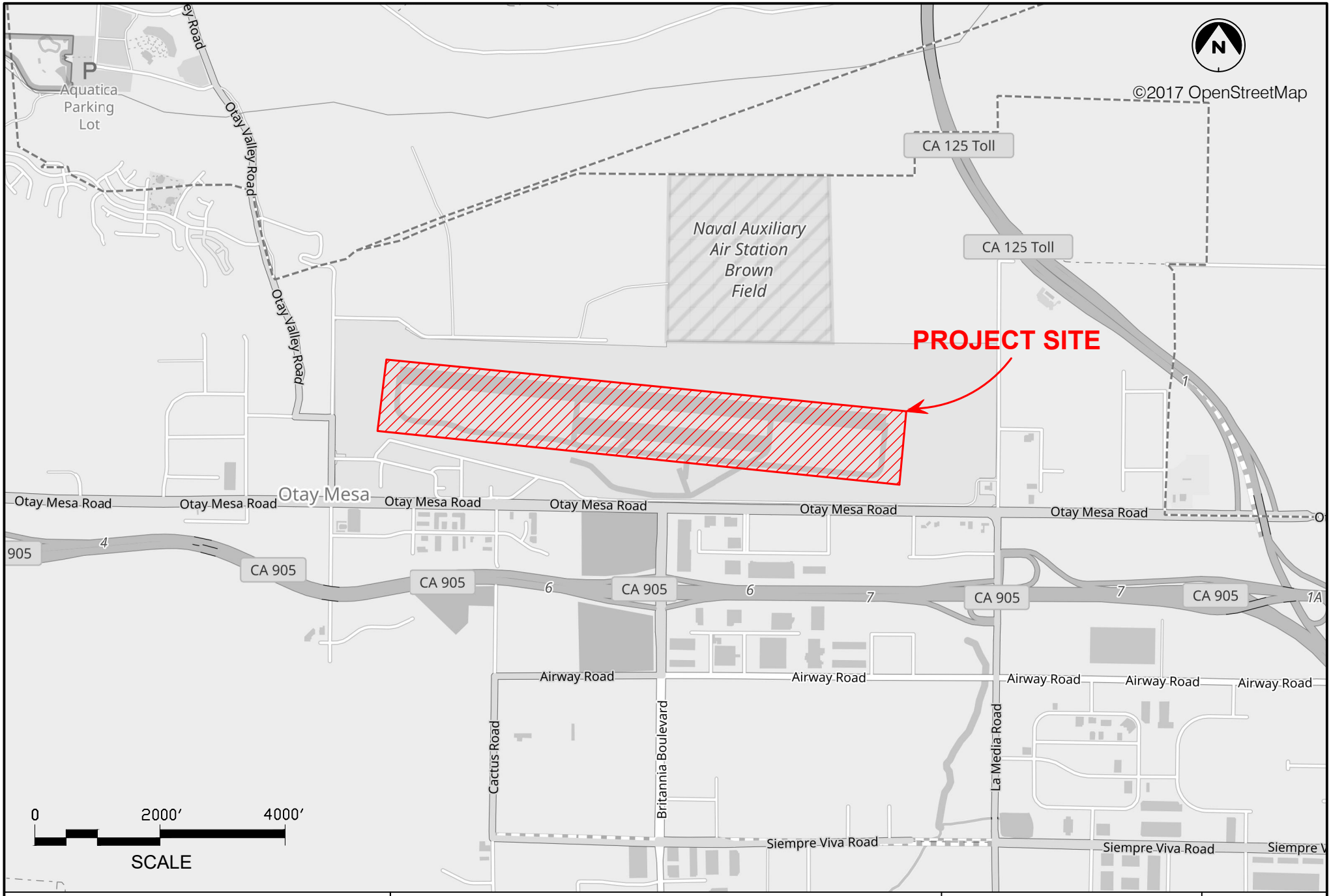
Respectfully Submitted,
SCST, INC.

Emil Rudolph, PE, GE
Principal Engineer

ER:

Attachments: Figures 1 & 3 – Site Vicinity Maps
Figures 2 & 4 – Core Location Map
Core Photographs and Core Data

(1) Addressee via e-mail: mhotaling@cscos.com
(1) Mr. Ralph Redman via e-mail: rredman@cscos.com
(1) Ms. Katie Chow via e-mail: Katie.Chou@atkinsglobal.com



SCST, Inc.	**SITE VICINITY MAP** Airport Master Plan for Brown Field Airport San Diego, California	Date: October, 2017 By: DTC Job No.: 170120P3-1	Figure: 3

SCST, Inc.

CORE LOCATION MAP

Airport Master Plan for Brown Field Airport
San Diego, California

Date: October, 2017
By: DTC
Job No.: 170120P3-1

Figure: 4

Field Memorandum

SCST Inc. - San Diego
LEA: 47, Exp: 04/25/2021
6280 Riverdale Street
San Diego, CA 92120
Phone: (619) 280-4321
Fax: (619) 280-4717

Client:

C&S Companies
2020 Camino Del Rio North, Suite 1000
San Diego, CA 92108

Project:

170120P3
City of SD, Montgomery & Brown Field Master Planning GI - C&S
1424 Continental St. San Diego, CA 92154

Memo By: Dale, Jason

Date: 08/23/2017

Subject: Brown Field Pavement Investigation

Memo: Please see attached for regarding today's work at Brown field.

See Daily_Report_JRD.pdf in the documents section at the end of this report.

Discrepancy: No

cc: Project Architect; Structural Engineer; Project Inspector; DSA Regional Office (If Applicable);

DAILY REPORT OF FIELD OPERATIONS: BROWN FIELD PAVEMENT GI

DATE OF WORK: **8/23/2017**

STAFF: **Jason Dale & Brian Gin**

TOOLS: 6" Coring Machine, 3" Hand Auger, 6" Hand Auger, Rotohammer, Pry Bar

Description of work: Core through pavement at marked locations to identify pavement section. Utilize Rotohammer to break up base material; utilize hand auger to extract material. Difficult digging conditions limited depth of exploration.

Location	Total Depth	Stratification	Notes
C-1	2 Feet	4" AC	
		8" Aggregate Base	
		12" Subbase: SM with GRAVEL	
C-2	2½ Feet	4" AC	
		20" Aggregate Base	
		6" Subgrade: CH	
C-3	2½ Feet	4" AC	
		20" Subbase: SM with GRAVEL	
		6"+ Subbase: SM with GRAVEL with pieces of CH	
C-4	2 Feet	7" AC	
		8" Subbase: SM	
		9"+ Subgrade: CH	
C-5	2 Feet	4" AC	
		7" Aggregate Base	
		13"+ Subbase: SM	


SCST, Inc
Brown Field
Job No.: 170120P3
San Diego, CA
Core No.:
C-1
6"
5"
4"
3"
2"
1"
0"


SCST, Inc
Brown Field
Job No.: 170120P3
San Diego, CA
Core No.:
C-2
5"
4"
3"
2"
1"
0"

SCST ENGINEERING	**SCST, Inc** Brown Field Job No.: 170120P3 San Diego, CA	**Core No.:** **C-3**


SCST, Inc
Brown Field
Job No.: 170120P3
San Diego, CA
Core No.:
C-4

SCST ENGINEERING	**SCST, Inc** Brown Field Job No.: 170120P3 San Diego, CA	**Core No.:** **C-5**

Appendix G PCN Calculation Output (Runway 8L-26R Interior)

Appendix G SDM_R28_Interior_20180111

This file name = PCN Results Flexible 1-11-2018 12;00;26.txt
Library file name = C:\Program Files (x86)\COMFAA 30\SDM Traffic_1.Ext
Units = English

Evaluation pavement type is flexible and design procedure is CBR.
Alpha Values are those approved by the ICAO in 2007.

CBR = 3.00 (Subgrade Category is D(3))
Evaluation pavement thickness = 37.30 in
Pass to Traffic Cycle (PtoTC) Ratio = 1.00
Maximum number of wheels per gear = 2
Maximum number of gears per aircraft = 2

No aircraft have 4 or more wheels per gear. The FAA recommends a reference section assuming
3 inches of HMA and 6 inches of crushed aggregate for equivalent thickness calculations.

Results Table 1. Input Traffic Data

No.	Aircraft Name	Gross Weight	Percent Gross Wt	Tire Press	Annual Deps	20-yr Coverages	6D Thick
1	Learjet-35A/65A	18,000	95.00	171.0	1,141	2,615	14.19
2	Challenger-CL-650	48,200	95.00	145.0	1,293	5,145	24.80
3	Gulfstream-G-V	90,900	95.00	188.0	95	453	28.43
4	S-60	66,000	95.00	105.0	405	1,619	29.78
5	Single Wheel 8	8,000	100.00	50.0	250	735	13.29
6	Single Wheel 2	2,450	100.00	30.0	3,380	7,123	8.42
7	Bonanza-F-36	3,650	95.00	40.0	6,615	10,169	7.64
8	Baron-E-55	5,100	95.00	56.0	4,160	6,389	8.91
9	Single Wheel 12.5	12,500	95.00	50.0	773	1,962	12.59
10	C-130	165,000	95.00	105.0	148	1,320	35.70
11	Single Wheel 20	22,000	95.00	75.0	304	835	15.73
12	Single Wheel 2.5	2,500	100.00	30.0	98	209	6.01
13	Single Wheel 2.4	2,440	100.00	30.0	387	814	6.96

Results Table 2. PCN Values

No.	Aircraft Name	Critical Aircraft Total Equiv. Covs.	Thickness for Total Equiv. Covs.	Maximum Allowable Gross Weight	ACN Thick at Max. Allowable Gross Weight	PCN on CDF	D(3)
1	Learjet-35A/65A	>5,000,000	24.61	40,084	24.21	0.0000	13.5
2	Challenger-CL-650	>5,000,000	37.17	48,518	26.00	0.0000	15.6

3	Gulfstream-G-V	10,334	36.52	94,613	37.23	0.0302	31.9		
4	S-60	24,157	36.47	69,040	35.22	0.0462	28.5		
5	Single Wheel 8	>5,000,000	33.22	10,088	18.64	0.0000	8.0		
6	Single Wheel 2	>5,000,000	17.25	11,450	18.64	0.0000	8.0		
7	Bonanza-F-36	>5,000,000	15.26	21,795	18.64	0.0000	8.0		
8	Baron-E-55	>5,000,000	18.41	20,931	18.64	0.0000	8.0		
9	Single Wheel 12.5	>5,000,000	28.62	21,237	18.64	0.0000	8.0		
10	C-130	1,484	36.09	174,278	43.44	0.6133	43.5		
11	Single Wheel 20	>5,000,000	37.26	22,047	19.41	0.0000	8.7		
12	Single Wheel 2.5	>5,000,000	17.43	11,450	18.64	0.0000	8.0		
13	Single Wheel 2.4	>5,000,000	17.22	11,450	18.64	0.0000	8.0		
					Total CDF =	0.6897			

Results Table 3. Flexible ACN at Indicated Gross Weight and Strength

No.	Aircraft Name	Gross Weight	% GW on Main Gear	Tire Pressure	ACN Thick	ACN on D(3)
1	Learjet-35A/65A	18,000	95.00	171.0	15.63	5.6
2	Challenger-CL-650	48,200	95.00	145.0	25.90	15.5
3	Gulfstream-G-V	90,900	95.00	188.0	36.45	30.6
4	S-60	66,000	95.00	105.0	34.44	27.3
5	Single Wheel 8	8,000	100.00	50.0	16.60	6.3
6	Single Wheel 2	2,450	100.00	30.0	8.62	1.7
7	Bonanza-F-36	3,650	95.00	40.0	7.63	1.3
8	Baron-E-55	5,100	95.00	56.0	9.20	1.9
9	Single Wheel 12.5	12,500	95.00	50.0	14.30	4.7
10	C-130	165,000	95.00	105.0	41.98	40.6
11	Single Wheel 20	22,000	95.00	75.0	19.39	8.7
12	Single Wheel 2.5	2,500	100.00	30.0	8.71	1.7
13	Single Wheel 2.4	2,440	100.00	30.0	8.60	1.7

Results Table 4. Summary Output for Copy and Paste Into the Support Spread Sheet

Num,Plane,GWin,ACNin,ADout,6Dt,COV20yr,COVtoF,CDFt,GWcdf,PCNcdf,EVALt,SUBcode,KorCBR,PtoTC,FlexOrRig

1,Learjet-35A/65A,18000.000,5.6,1141,14.19,2.61477E+003,1.01423E+304,24.61,40084.486
,13.5,37.3,D,3.00,1.00,F
2,Challenger-CL-650,48200.000,15.5,1293,24.80,5.14461E+003,1.26936E+010,37.17,48518.
314,15.6,37.3,D,3.00,1.00,F
3,Gulfstream-G-V,90900.000,30.6,95,28.43,4.52972E+002,1.49819E+004,36.52,94612.624,3
1.9,37.3,D,3.00,1.00,F
4,S-60,66000.000,27.3,405,29.78,1.61927E+003,3.50233E+004,36.47,69039.594,28.5,37.3,
D,3.00,1.00,F
5,Single Wheel
8,8000.000,6.3,250,13.29,7.35326E+002,1.01423E+304,33.22,10087.534,8.0,37.3,D,3.00,1
.00,F
6,Single Wheel
2,2450.000,1.7,3380,8.42,7.12251E+003,1.01423E+304,17.25,11450.138,8.0,37.3,D,3.00,1
.00,F
7,Bonanza-F-36,3650.000,1.3,6615,7.64,1.01691E+004,1.01423E+304,15.26,21795.074,8.0,
37.3,D,3.00,1.00,F
8,Baron-E-55,5100.000,1.9,4160,8.91,6.38882E+003,1.01423E+304,18.41,20931.233,8.0,37
.3,D,3.00,1.00,F
9,Single Wheel
12.5,12500.000,4.7,773,12.59,1.96162E+003,1.01423E+304,28.62,21236.932,8.0,37.3,D,3.
00,1.00,F
10,C-130,165000.000,40.6,148,35.70,1.31966E+003,2.15184E+003,36.09,174278.388,43.5,3
7.3,D,3.00,1.00,F
11,Single Wheel
20,22000.000,8.7,304,15.73,8.35028E+002,8.42940E+019,37.26,22046.948,8.7,37.3,D,3.00
,1.00,F
12,Single Wheel
2.5,2500.000,1.7,98,6.01,2.08595E+002,1.48817E+195,17.43,11450.138,8.0,37.3,D,3.00,1
.00,F
13,Single Wheel
2.4,2440.000,1.7,387,6.96,8.13850E+002,6.04791E+285,17.22,11450.138,8.0,37.3,D,3.00,
1.00,F

Katie Chou, Ph.D., P.E.
Atkins
3780 Kilroy Airport Way, Suite 740
Long Beach, CA 90806

Katie.Chou@atkinsglobal.com
310.893.2048