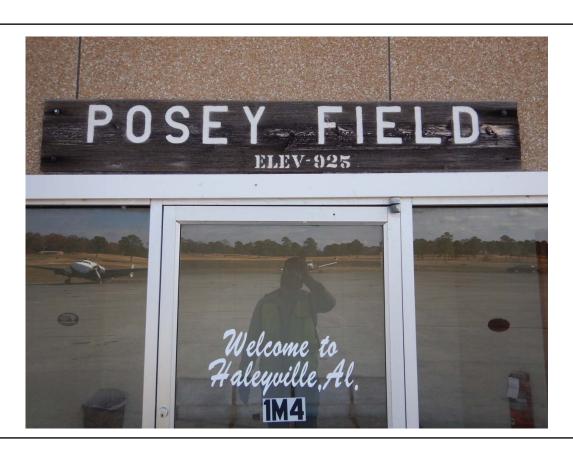


# Alabama Statewide Airport Pavement Management Program Update

Posey Field (1M4)

**Final Report** 

February 2022







Submitted to

**Alabama Aeronautics Bureau** 

Submitted by





Pavement Management - Evaluation - Testing - Design

# ALABAMA STATEWIDE AIRPORT PAVEMENT MANAGEMENT PROGRAM UPDATE

Posey Field (1M4)

# **Executive Summary**

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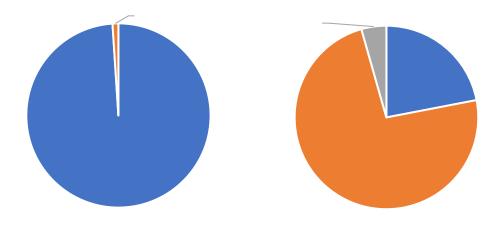
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## **ES.1 Pavement Inventory**

Figure ES-1: Pavement Area (sf) by Surface Type and Branch Use

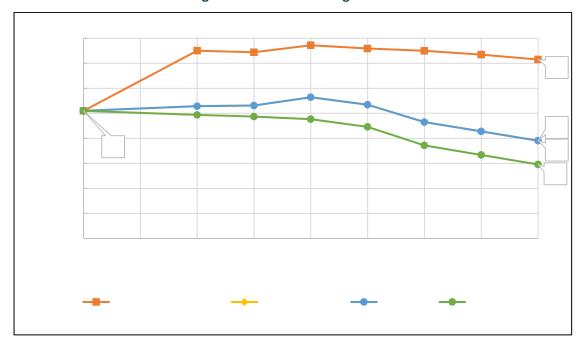


**ES.2 Pavement Condition** 

Table ES-1: 1M4 Section PCI Values and Ratings.

# ES.3 Pavement Maintenance and Repair Funding Levels

Figure ES-2: M&R Funding Levels.



## ES.4 Pavement Capital Improvement Program (PCIP)

Table ES-2: Summary of Pavement Capital Improvement Program.

Total	\$3,353,403		

Table ES-3: Summary of Localized Maintenance Plan.

	Total	\$36,075

.

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3	PAVEMENT CONDITION
4	PAVEMENT CAPITAL IMPROVEMENT PROGRAM4-1

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Appendix C

Appendix D

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# 1 Introduction

## 1.1. Overview

# 1.2. Work Scope

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## 1.3. Pavement Management Concept

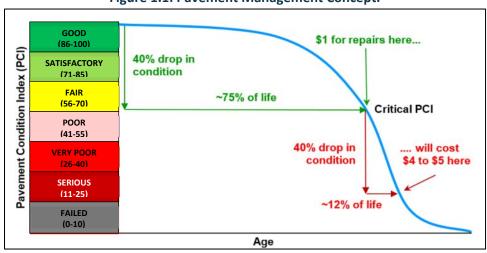


Figure 1.1: Pavement Management Concept.

# 2 Airfield Pavement Inventory

#### 2.1. Introduction





## 2.2. Pavement Inventory

## 2.3. Climatic Conditions

Table 2.1: Average Annual Temperatures and Rainfall for 1M4.

		_					

#### 2.4. Pavement Network Definition

Table 2.2: PCI Sampling Rate for AC Surfaces.

## 2.5. Inventory Summary

Table 2.3: 1M4 Pavement Branches.

	Total	680,232	6

Table 2.4: 1M4 Pavement Age.

Figure 2.2: 1M4 Pavement Area by Surface Type.

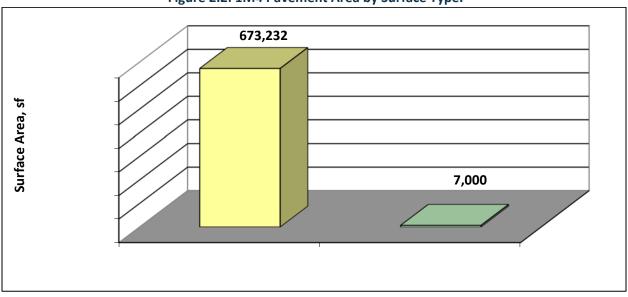
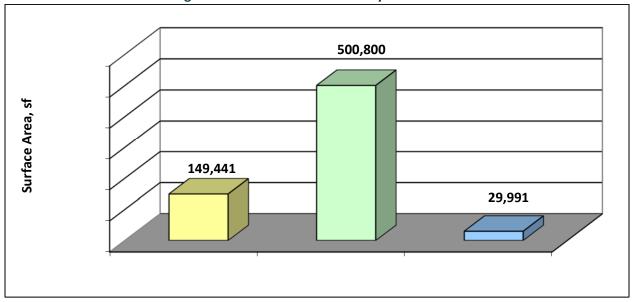


Figure 2.3: 1M4 Pavement Area by Branch Use.



# 3 Pavement Condition

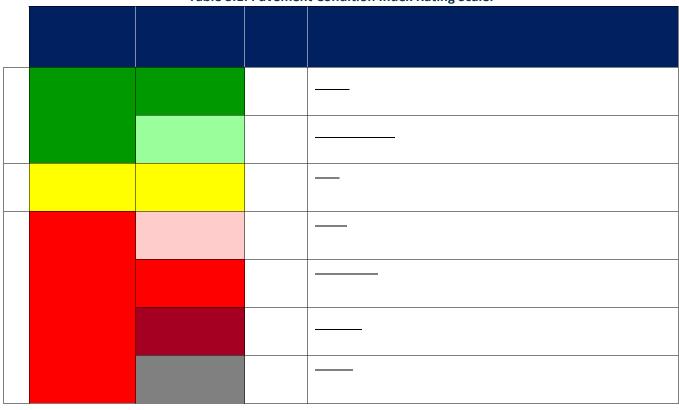
3.1. Introduction

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3.2. Pavement Condition Rating Methodology

**Table 3.1: Pavement Condition Index Rating Scale.** 



## 3.3. Distress Types

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#### 3.4. Additional PCI-based Indices

Figure 3.1: FOD Potential Rating Scale.

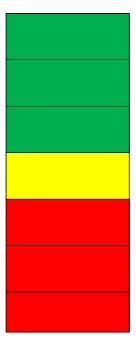


Figure 3.2: Pavement Condition by Branch Use.

Figure 3.3: Pavement Condition by Percent of Area.

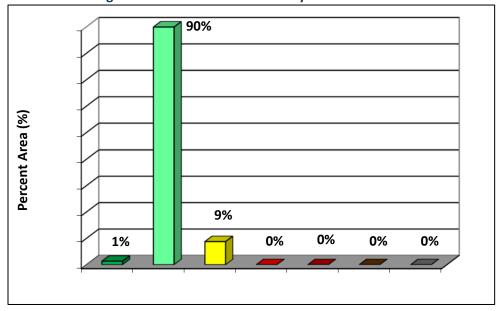


Table 3.2: Section PCI.

#### 3.6. PCC Pavements

# 4 Pavement Capital Improvement Program

4.1. Introduction

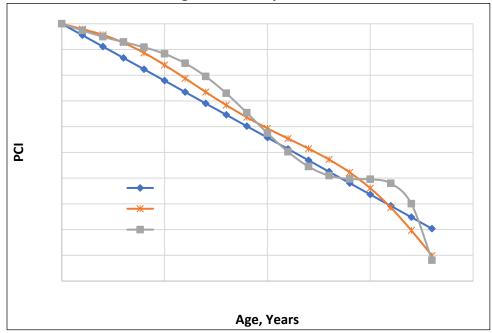
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4.2. Performance Modeling

Present PCI-Age Point Modified Prediction Curve Prediction Curve Age, Years

Figure 4.1: PCI Forecasting.





#### 4.3. Critical PCI Values

#### 4.4. M&R Policies and Unit Costs

Table 4.1: M&R Activities and Unit Costs.

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## 4.5. Pavement CIP Development

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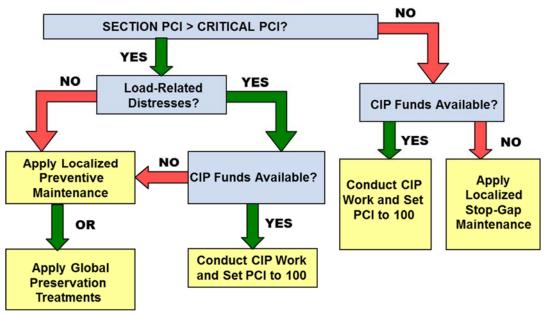


Figure 4.3: Budget Analysis Process.

Figure 4.4: M&R Funding Levels.

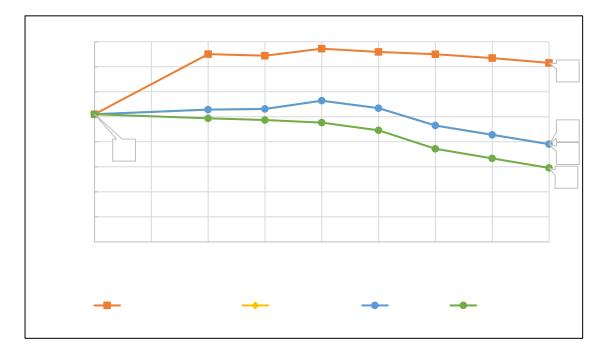


Table 4.2: Summary of M&R Funding Level Analyses.

		, -	0 7	
Total	\$2,850,000	\$830,000	\$830,000	\$0
2027 Backlog	-	\$3,513,000	\$3,513,000	\$4,596,000

# 4.6. Pavement Capital Improvement Program

Table 4.3: Summary of 7-Year PCIP by Project.

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Total	\$3,353,403		

Table 4.4: Summary of 7-Year PCIP by Project and Section.

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1M4_21-01	_Runway 1	8-36 Rehab	ilitation			\$2,142,764
1M4_23-01 <sub>_</sub>	_Apron & T	axiway Reh	nabilitatio	n		\$773,471
1M4_24-01	_Runway 1	8-36 Surfac	e Treatme	ent		\$318,725
1M4_26-01	_Apron & T	axiway Sur	face Treat	tment		\$115,050
						-
					Total	\$3,350,009

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Table 4.5: Summary of Year-1 Maintenance Plan.

Total				\$36,075



# Appendix A Pavement Inventory Report

Posey Field (1M4)

Branch ID	Name	Branch Use	Section ID	Rank <sup>1</sup>	Length (ft)	Width (ft)	Area (sf)	LCD <sup>2</sup>	Surface <sup>3</sup>
A01	Apron 01 Haleyville	APRON	01	S	323	223	82,866	3/8/2007	AC
A01	Apron 01 Haleyville	APRON	02	S	393	140	59,575	7/26/2003	AC
A01	Apron 01 Haleyville	APRON	03	S	100	70	7,000	7/16/2008	APC
R1836	Runway 18-36 Haleyville	RUNWAY	01	Р	5,008	100	500,800	3/20/2007	AC
TA	Taxiway A Haleyville	TAXIWAY	01	S	507	41	20,955	6/27/2007	AC
THANG01	Taxiway Hangar 01 Haleyville	TAXIWAY	01	Т	225	40	9,036	12/10/2012	AC

<sup>&</sup>lt;sup>1</sup> P = Primary pavement, S = Secondary pavement, T = Tertiary pavement

<sup>&</sup>lt;sup>2</sup> LCD = Last construction date. The date of the last major pavement rehabilitation (e.g. AC overlay)

<sup>&</sup>lt;sup>3</sup> AC = Asphalt Cement Concrete, AAC = Aphalt Overlay AC, PCC = Portland cement Concrete, APC = Asphalt Overlay PCC

#### **APPENDIX B**

#### **PMP Maps**

**B1: Inventory Maps** 

B1A: Branch Identification B1B: Section Identification B1C: Sample Unit Layout

B1D: Pavement Type

B1E: Branch Use

B1F: Pavement Age

**B2: Surface Condition Maps** 

B2A: 7-Color PCI B2B: 3-Color PCI

B2C: FOD Rating

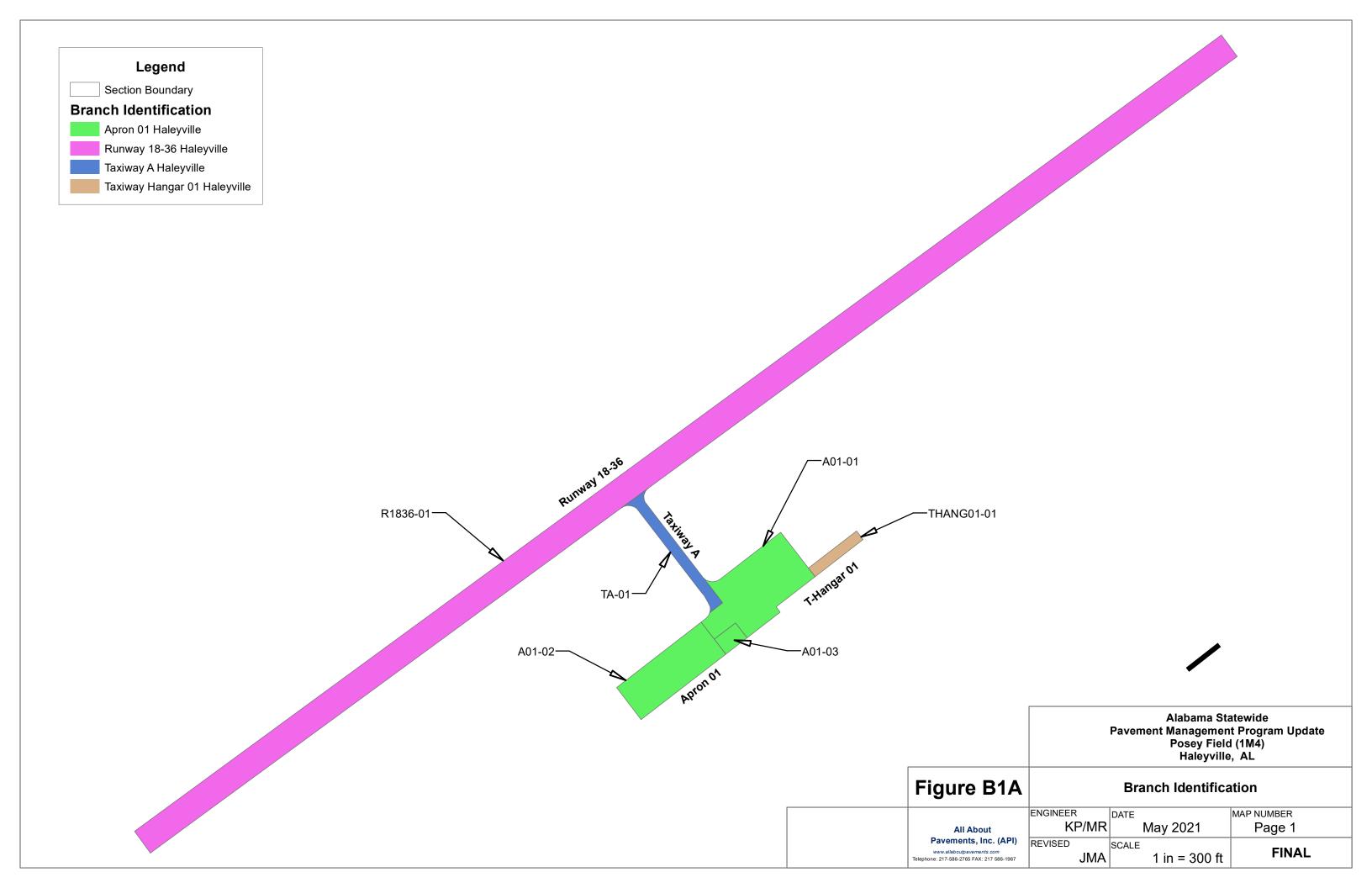
**B2D: Survey Photo Locations** 

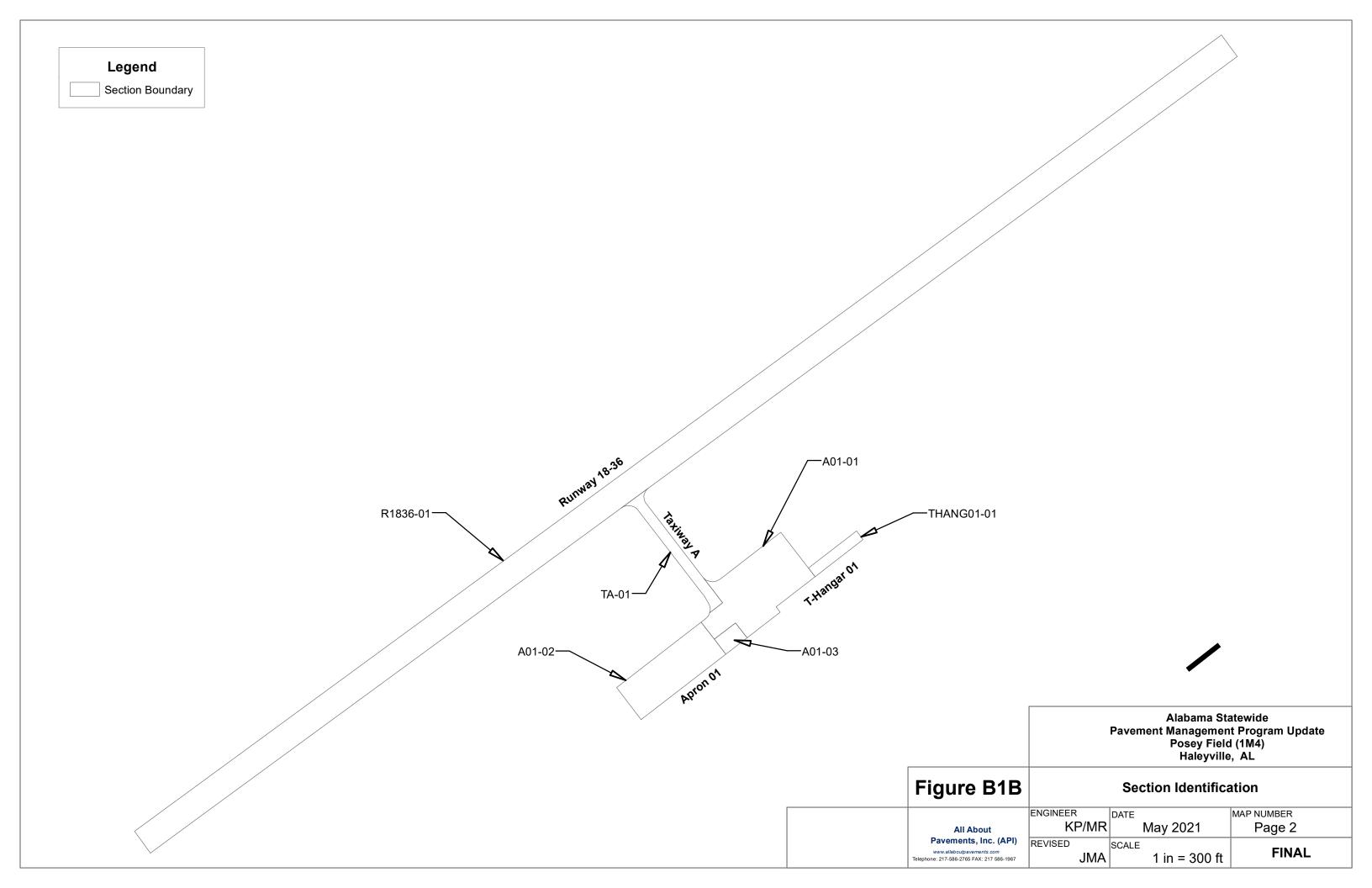
B3: Pavement Capital Improvement Plan (PCIP) Maps

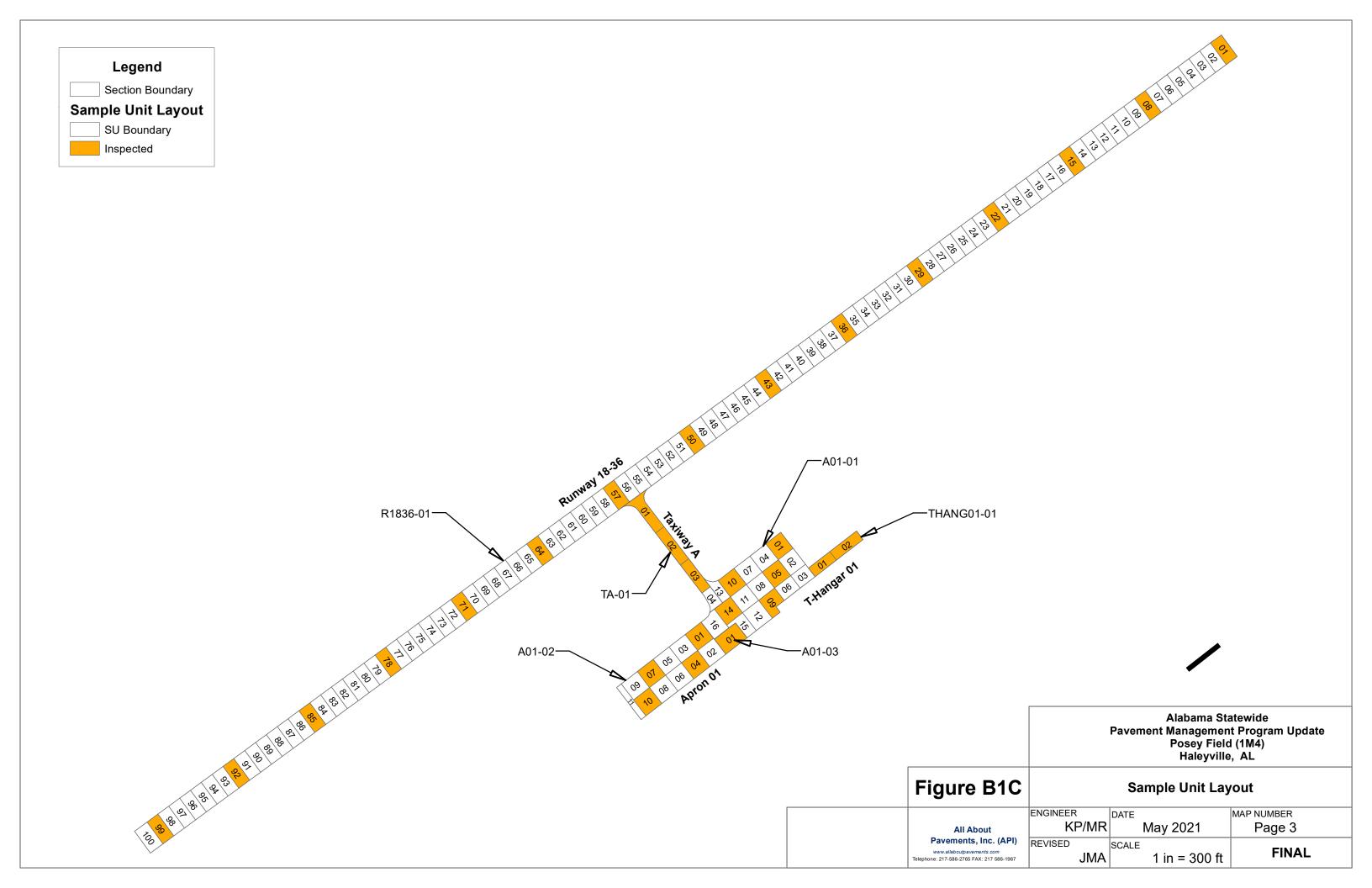
B3A: 2027 Forecasted PCI without PCIP

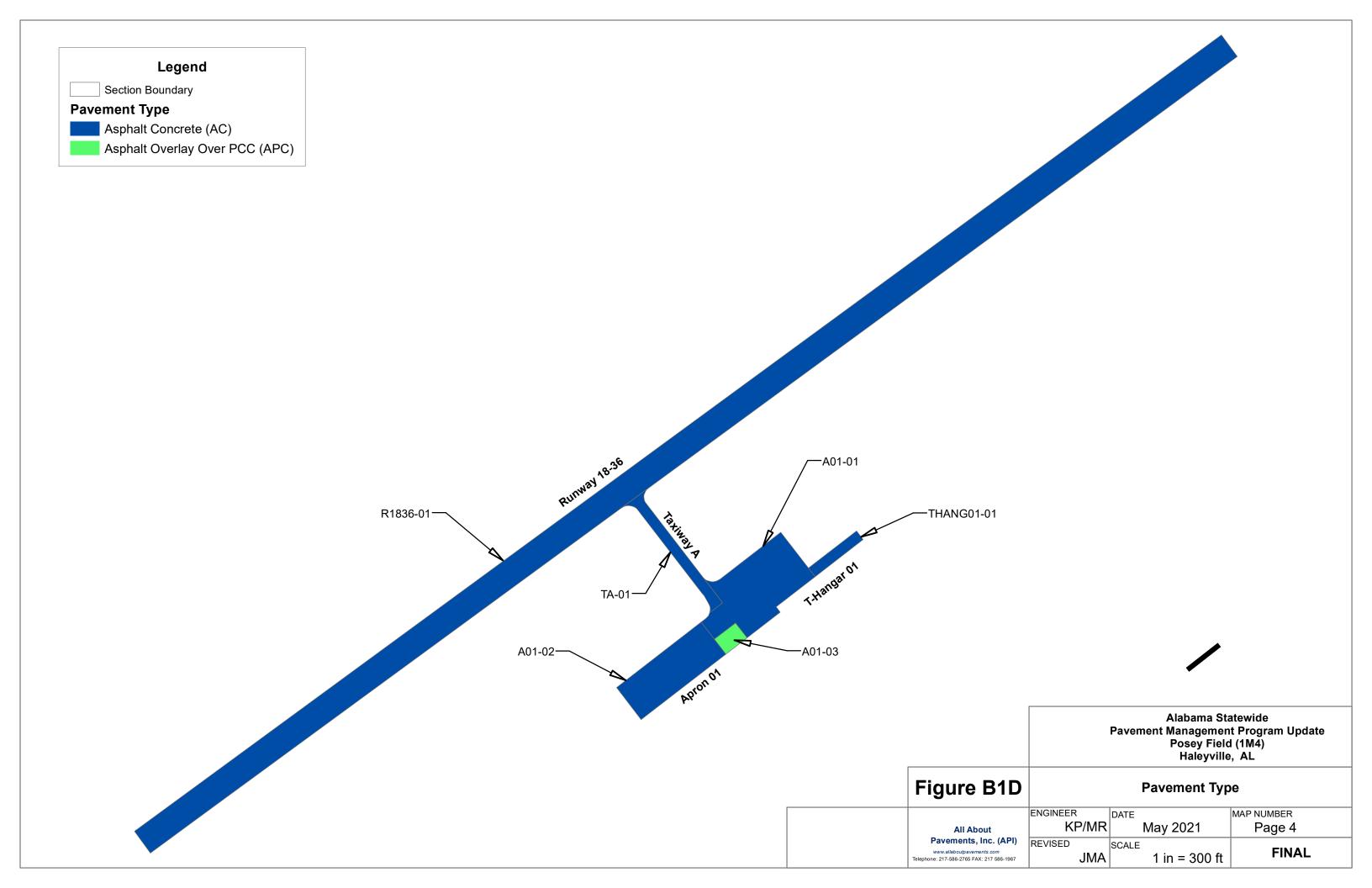
B3B: M&R Needs

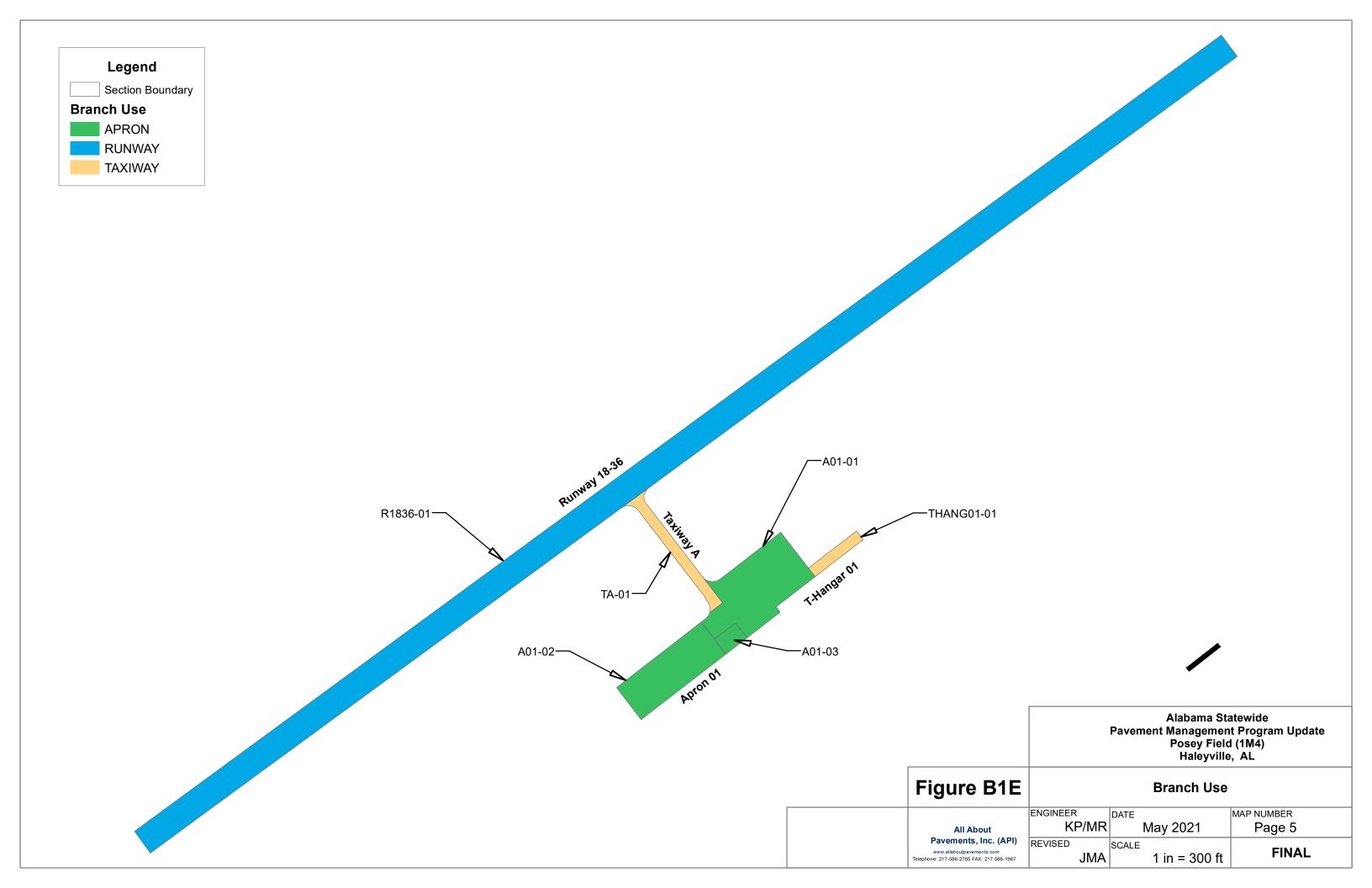
**B3C: PCIP Recommendations** 

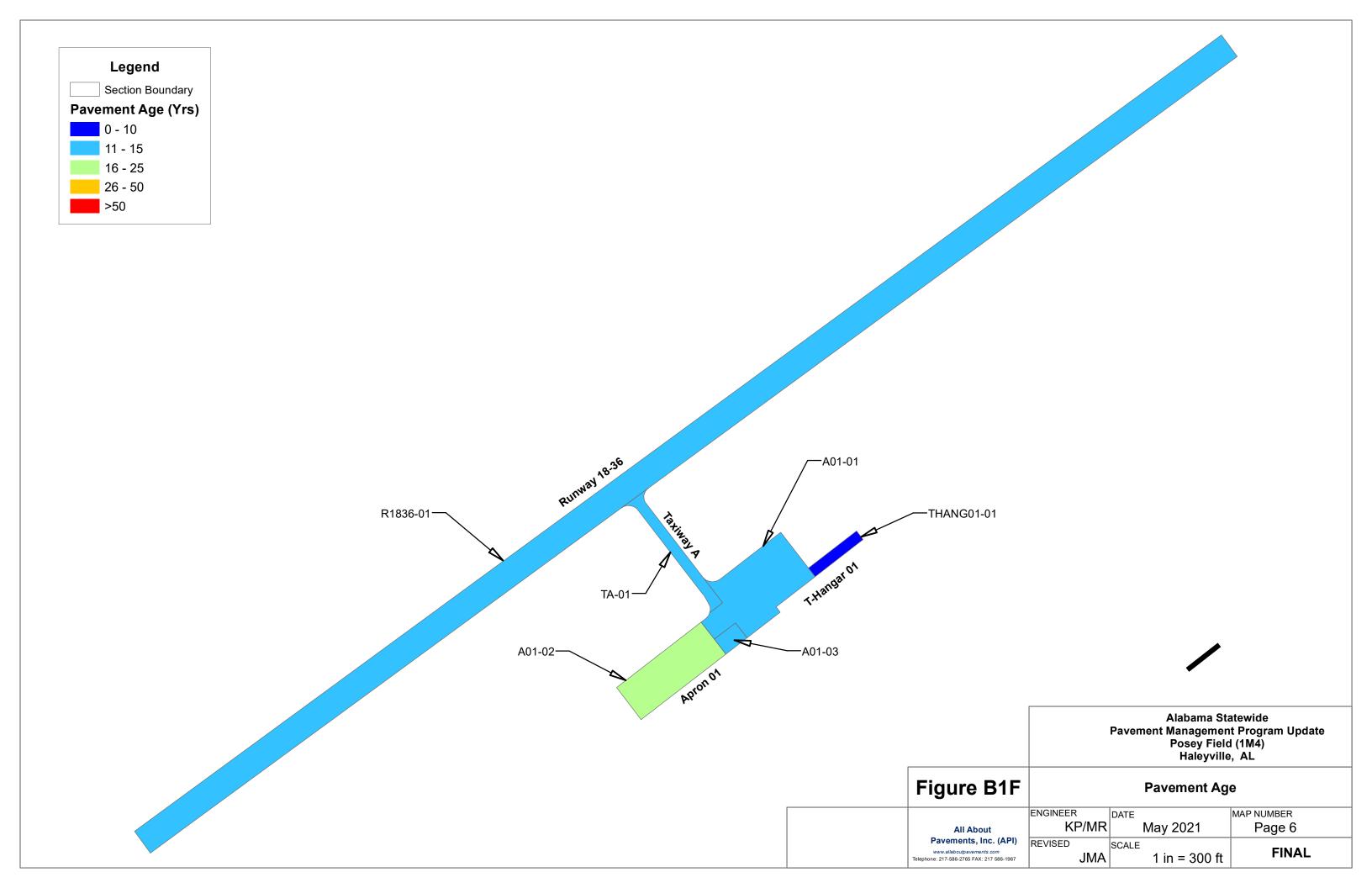


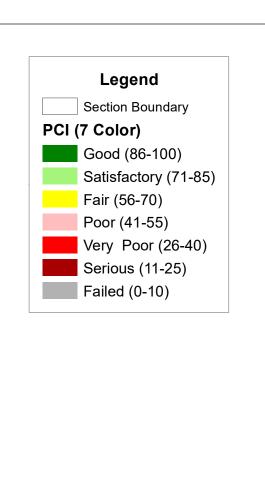


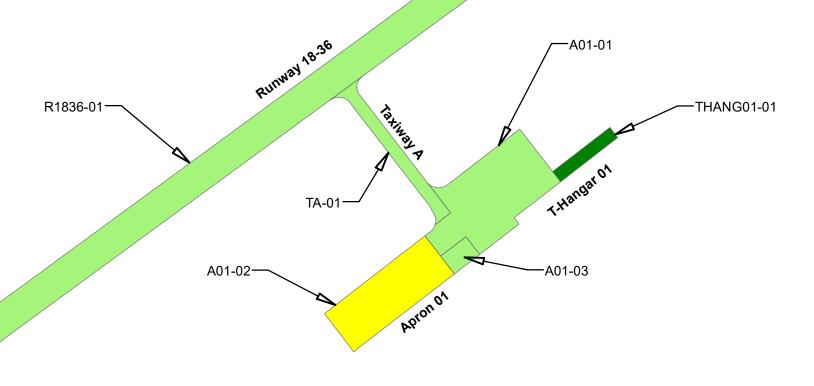








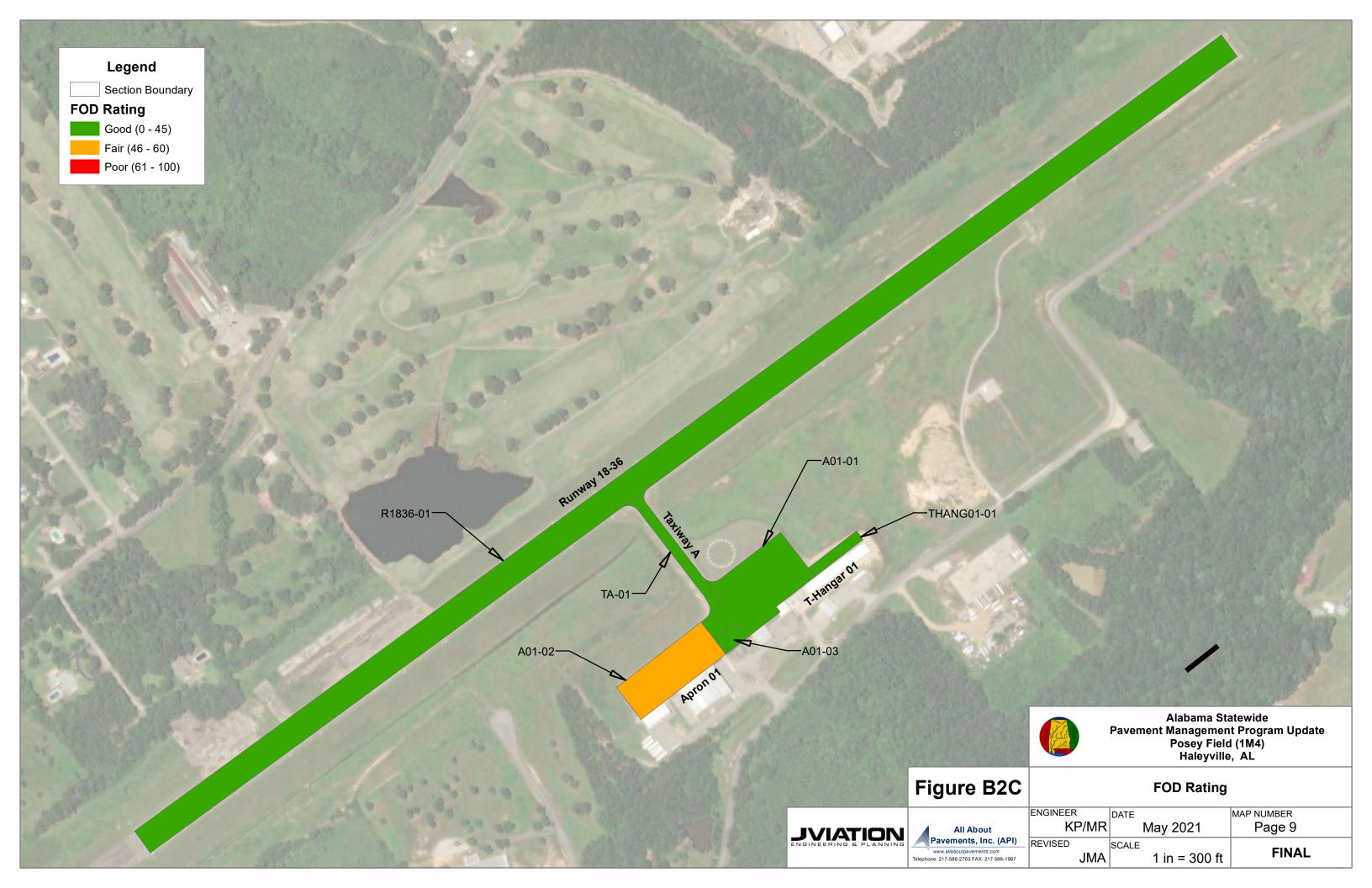


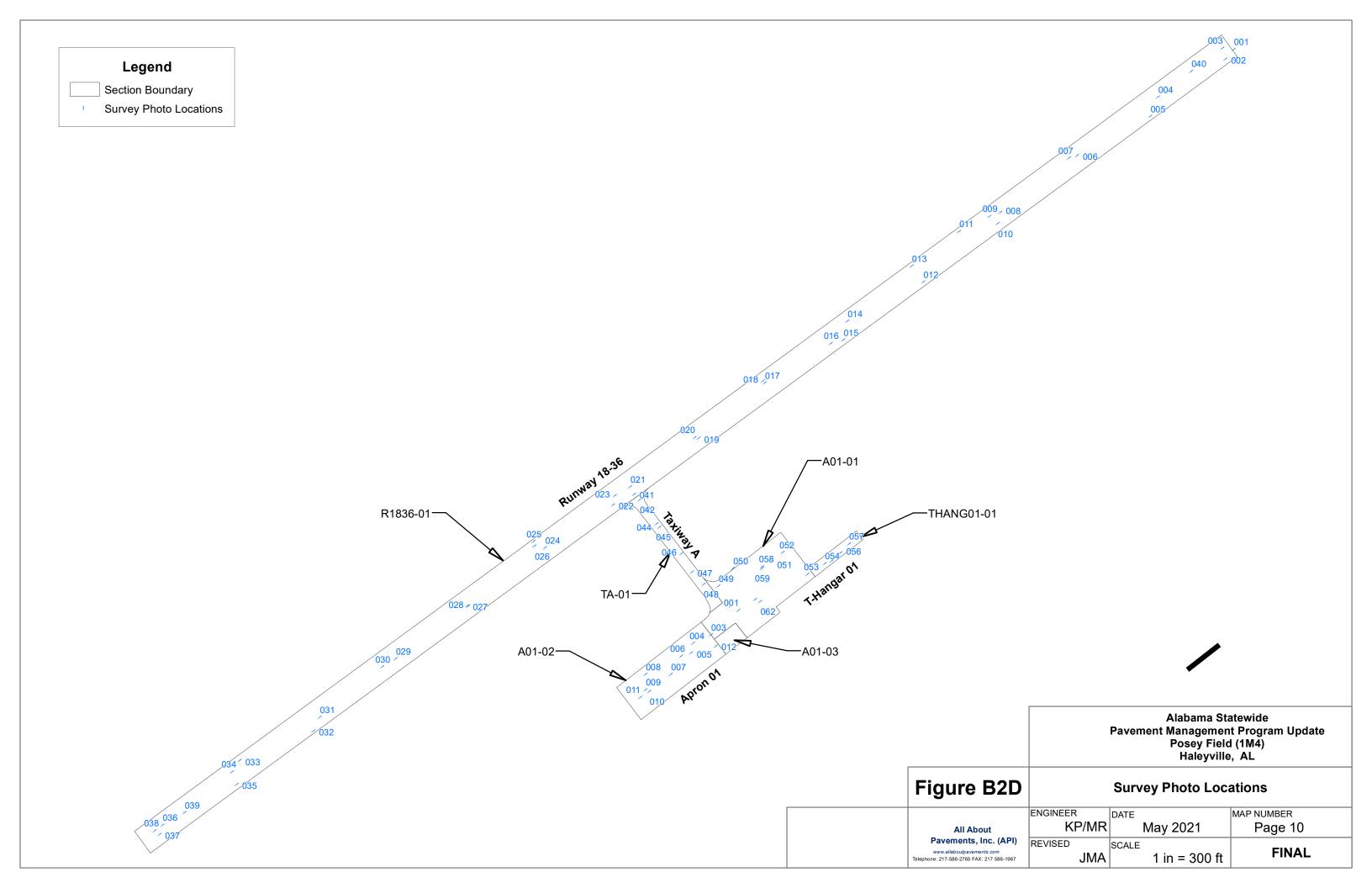


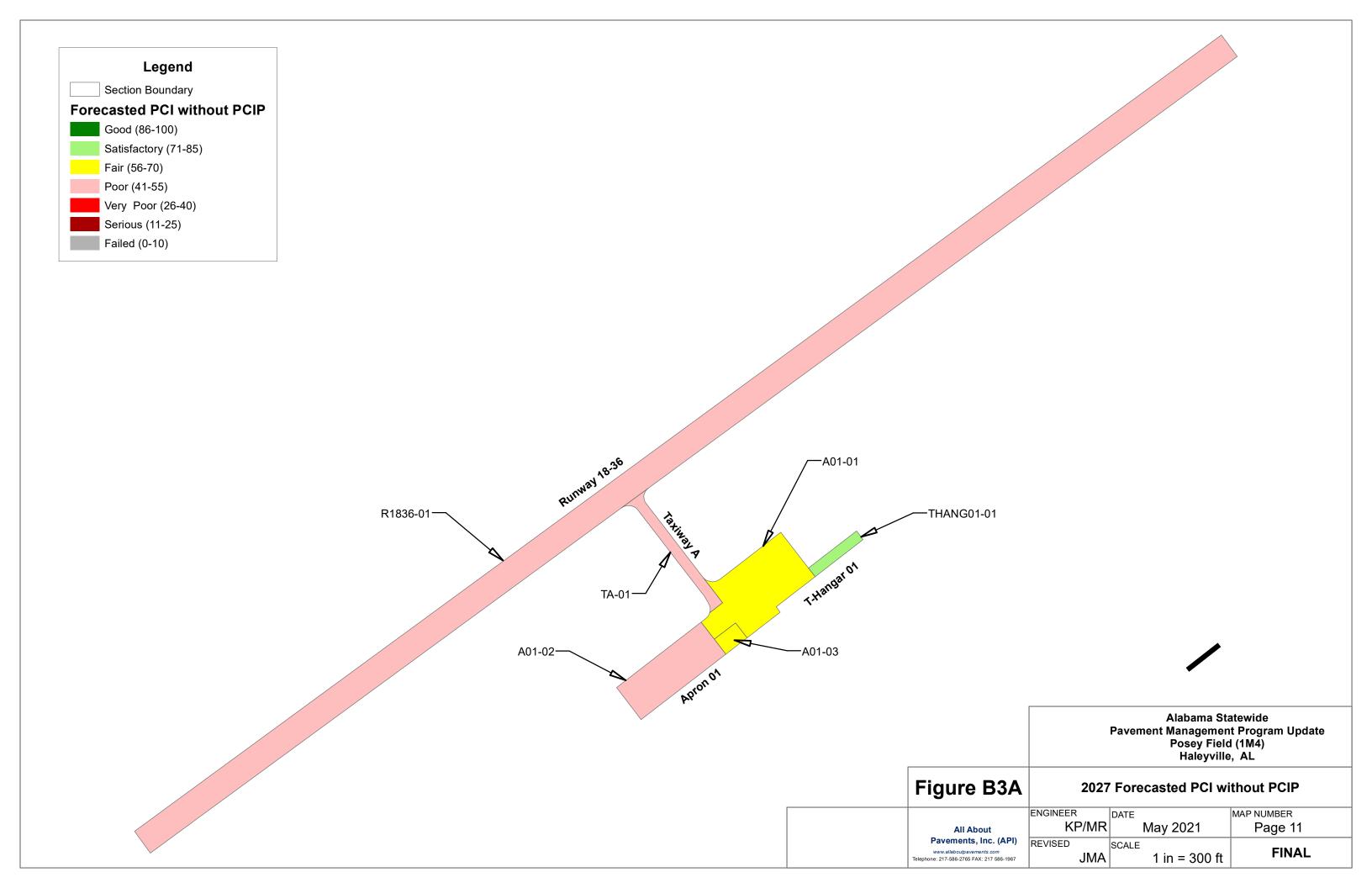
Alabama Statewide Pavement Management Program Update Posey Field (1M4) Haleyville, AL

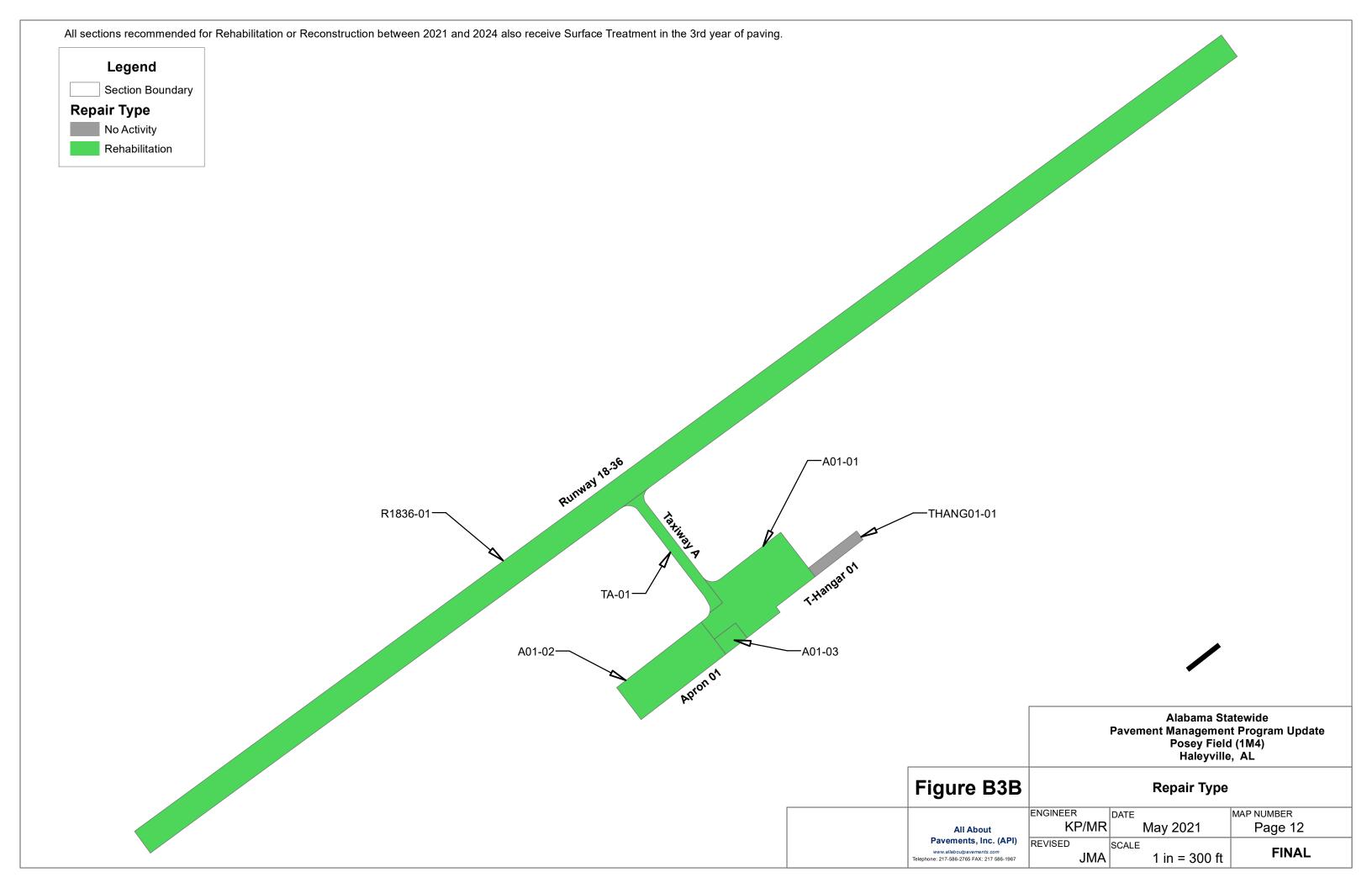
		Figure B2A	7-Color PCI		
		All About	ENGINEER KP/MR	D/ 11 L	мар numвer Page 7
	Pavements, Inc. (API)  www.allaboutpavements.com Telephone: 217-586-2765 FAX: 217 586-1967	REVISED JMA	SCALE 1 in = 300 ft	FINAL	

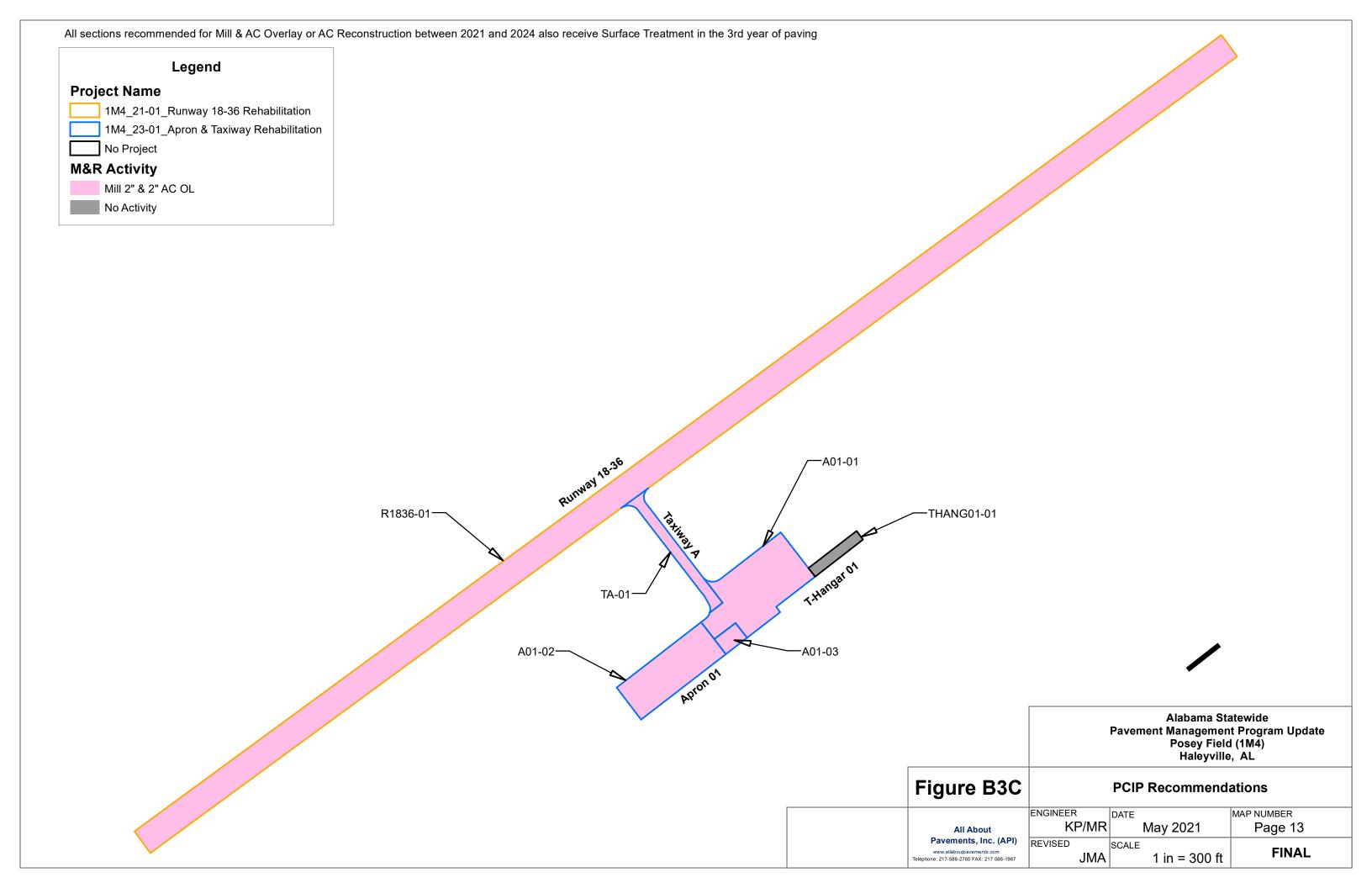














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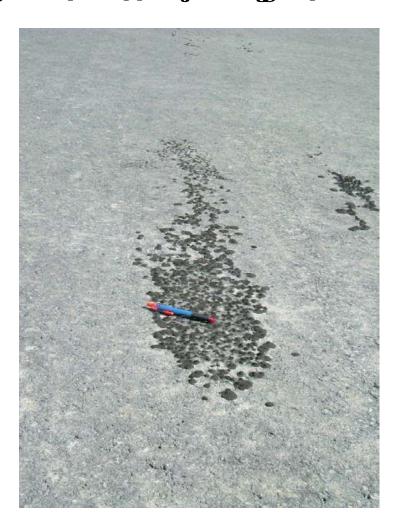


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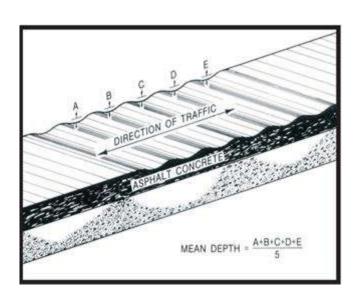
Corrugation is a series of closely spaced ridges and valleys (ripples) occurring at fairly regular intervals, usually less than 5 feet (1.5 meters) along the pavement. The ridges are perpendicular to the traffic direction. Traffic action combined with an unstable pavement surface or base usually causes this type of distress.

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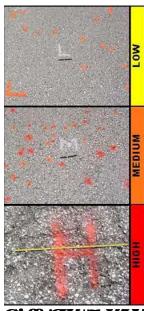
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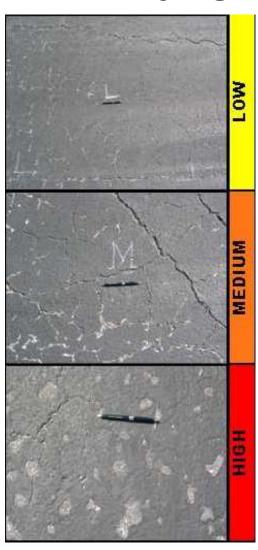
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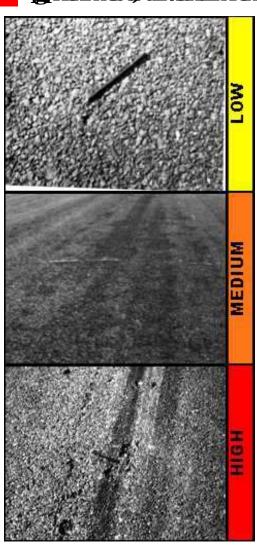
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- =bU%gei (fYZcdfff#%gei (fYa YhfffYffyghfUfj YgladYzhYhia VfcZa @ U[fY[UYd]YWga]gg]b[ ]gVNkYb) UXX&UX5cfhYhia VfcZa]gg]b[ ` U[fY[UYW]gYgYcYghdNIVXX%
- =bU%gi UYZcdff#\$gi UYa YYHTYJTYYHYHUJ YgadYZhYbi a WfcZ A U[fYUYdfWgalgg]b[fgWkYb&&UX(\$UX#cfhYbi a WfcZalgg]b[` U[fYUYWgYg]g] fYUYThUb%ti lXcYgbdYUVXX&cMWHizZhYUYU
- -bU%gei UYZcdff#%gei UYa YhfifYfh@HiUj YgladYzhYhiaWfcZ U [fY|UYd]Wga]gg|d [gcjYf(\$UN#cfhYhiaWfcZa]gg|d U [fY|UYWgYfg [g] fYINfhUs&cMWHcZhYUYU"



#### %" Fi Hb 137Ł

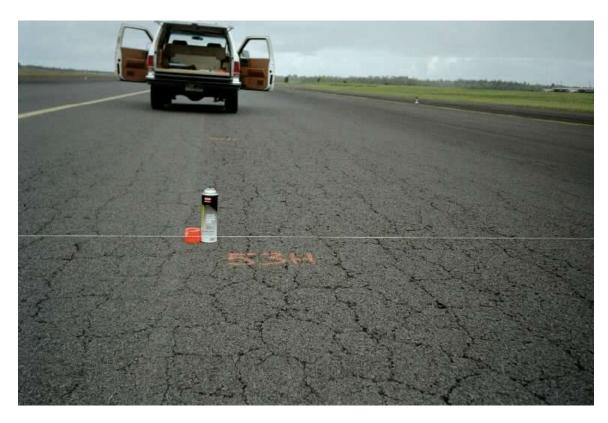
5 filigUgifAWXXfYgglcb]bhYk\YY'dIh/\cky YZ]baUm]bgUbWgfilgUf bc]jWUYcbmIZHfUfUjbADZk\YbhYk\YY'dIhgUfYJ`YXk]h kUMf''IJj YaYih id]ZiaUmcWifUcb[hYgXXgcZhYfilifFillip]gYiagZicaUdhfaUbHrXXffaUjcb' |bUmcZhYdj YaYihUMgcfg'V.[fUXZig'UmWigXVmWigc]XUJcbcf`UMU' acj YaYihzZhYaUMJUgXiYlc111ZjWcUXg''Q[bjZWJifillip] Wb`YXXlc'aUcf gli WifUZ]ifYcZhYdj YaYih

# G YINGALDX COST INVAL

- @ck! YeehU | bW|bXYth/
- A YAJia ? Wilk YYb UXX/JbW/bXXch/
- < |[\!\Y\Y\Y\Y\Y\]bX\\]bX\\\]bX\\\]bX\\\]bX\\\]bX\\\]bX\\\]</pre>

#### **FYUfcdidg**

- @dk!BcWdb/
- AWia!diwuwifgYun
- < [\'!duwbwefgYun
  </pre>



: **[[ifY7**<sup>!</sup>."57**Fill**b["

# %'''G]ddL[Y7fUM]b| 157L

Globil YMUNGIFY NOW THE CONTROL OF THE STATE OF THE STATE

Gy YING No degrees of severity are defined. It is sufficient to indicate that a slippage

# FYLIFD: ME

- 8cbch]b[/
- ♦ Danuca XXX day



: **][ifY7% G]dt[[Y7fU<u>N</u>]**b["

#### %"CkY by 1571

#### 8YAJdJdb

5 gkY lgWlfUMifriXVnibi dklfXVi [YJbhYdlj Ya Yhligig fAUW 5 gkY a Um cWlfg Udniej Y Uga U Uf Ucf UgU ch Yz [fUX U k Uj Y 9]h Y hinh czgk Y Wb VY UWła dlb YXVnig fAUW MCU b ["5 gkY [gi gi U m W gX Vnic gł U Mcz b bh Y gi V fUX cf Vnigk Y ]h [ gc] ž Vi h Uga U gk Y Wb Uga cWlf cb h Ygi fAUW cz Ub Ugh Uh cj Y Unilij Y DV 7 z Ligu Ygi Yi z Z UV ck! i d ]b h Y DV 7 g UV"

#### 



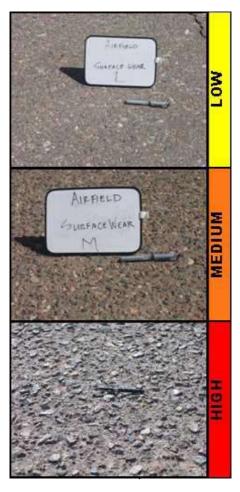
#### 

#### 8YgAldid

HYKYLIJI UKUnicZhYUghUhMbYYFUXZbYU[fY[UYaUh] Zica hYdijYaYbh gifXVY

#### Gj Y hier y Yg

- 5gkUigifZWW| JbbJb| leigickig| bgcZU Jb| k\ ]WaUiWYUWYUXXiii WaUjwwbyIjbdgi@cggjghYzJbYU [fYUYaUij] lgbdjWWYUXaUiW WwadbjYX\iizZjb| cZhYUgkUhWcf' 9X| YgcZhYWUgYU [fYUigUY W| JbbJb| le WYI dcgXfTigghUiSS) JbWYgcf%aaE' DjYaYbiaUiW fYUij YnibikifUgbikiUg\* adbhgcXE'
- @cggicZaphYU[fY|UYaUnii 1gbcijkNkVYUbXXX;YgicZkNkfgYU[fY|UY\UjYVYbi A Yldcgixidhe%fkjXhYddjYgigixNicZhYvNkfgYU[fY|UYXiYhehYcggi cZaphYU[fY|UYaUnii"
- 9XYgcZNAUgYU[fYUY\YYYbYIdcgX[fYUYfYUb% k]XhYdzhYd[Ygh | gXYCZhYVAUgYU[fYUY'HYY]gWbgXYUYYcggcZJbYU[fYUYaUA] "YXJH 1cddYHJU'cfgaYcggcZNAUgYU[fYUY"



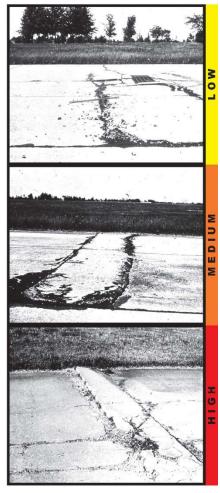
#### %"6'ck!I dfD77Ł

# 8YJAJdJcb

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#### GjY hie jyg

- 6i Wjb[cfgUMfb[\UgbdiYbWYXhYdIjYaYhijbcdfUjjYzUXdbnUg][\h LacibicZici[\b\ugy]|dg'
- A 6i Wjb of guingb \ Lighdi Yanyah Ydij Ya Yhijbodh Uji Yzvi h Lig b jawah Ladhi zidi [\big Ya] jag "
- 6i Whi cfg undh \ Ugfbaraan Ydi Ya Yhibodhuji Y



%" 7dbY6fYU\_gAD77Ł

#### CHYPY:

- @ck! 7fUM\GYNYbe'gU'bl 'cfa befgU'bl 'fbcZfy| bcVNYAUY
  flC8fcHYJUE-Zbcbfilled, it has a mean width less than approximately 1#
  inch (3 millimeters); a filled crack can be of any width, but the filler material
  aighybglgukfinksyljcb'H yunukkybnyutby unu
  cbc'gbchtuwx
- A Y ia ? One of the following conditions exists: (1) filled or non filled cfuylg acxilly right years: CS driffu/fit bed filled crack has a mean width between 1/8 inch (3 millimeters) and 1 inch (25 millimeters); (3) a filled crack is not spalled or only lightly spalled, but the filler is in unsatisfactory while filthy (1) why years a condition of the condition
- In the following conditions exists: (1) filled or non filled crack is severely spalled, causing definite FOD potential; (2) a non filled crack hague a block in the following conditions exists: (1) filled or non filled crack is severely spalled, causing definite FOD potential; (2) a non filled crack hague a block in the following conditions exists: (1) filled or non filled crack is severely spalled, causing definite FOD potential; (2) a non filled crack hague a block in the following conditions exists: (1) filled or non filled crack is severely spalled, causing definite FOD potential; (2) a non filled crack hague a block in the following conditions exists: (1) filled or non filled crack is severely spalled, causing definite FOD potential; (2) a non filled crack hague a block in the following conditions exists: (1) filled or non filled crack hague.

## **FYUfcdicbg**

- @dk! BcUlldbcfglUVIVV
- A YMia ! AUVIVV
- < [[\!] glU\lfU\gruthnU\lambda\```</p>
  cffYdUWhYgU'



XYA dIW

: || ifY7'%: D77 7cfb¥f6f¥U"

%" 7fWg "@dj ]h XbUZHUg YgYUX8]U dbU fD77Ł

## CY YHY

- A YAji a ! %i bi2j "YXVIIV\@VIIkYb\%Sic %|bWk|XYk|In bc Zi Y|b| cf gU |b| cf & Zj "YXVIIV\@cZUbnik|Xh Zi Y|b| "Y@hUb\# "|bWcf a YAji a ' g\j Y|lnigU |b| /

#### **FYLlfedichg**

- @dk!BcUJdbdfgUVIVyg
- AWia!guvwg



: **||ifY7%&:DV7HUgiYgY7fU<u>V</u>g** 

#### **88'8i fW]]Im7fU<u>V</u>gfD77**Ł

#### 8YAJdJdb

# **GjYJhi@j**Yg

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#### **GYTHY**

- @ck! ]b[YbYU'ni[ccX\vbY]i|cbhfci[\ci lfhYg\v]i|cb" C\UUbigd\f&fa]b[`kY`k]h cb'nUa]bcfUaci bicZUbicZhYU\cj Yhni\cicZX\aU Yd\vartet\f\u00e4bia
- A Wija ! ]b[ YbMU nixLjf WibMJ]dbhfci [\ci lih YgNJjcbžk]h cbYcfacfYcZ UnivZh YU\cj YhndigcZNià U YcfYgNJicWiMJ]b[ le UacMUYXI[fY]" CNUUHbYY@jaa WJUYfYtUWa YHk]h]b&nNfg

#### **FYLlfcdldg**

- @ck!BcWydb/
- A Whita ! ghu'chig



#### & ChUTINVADIZE.

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a UMU': of Whylich y Ui Ulched I Whyligh By

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ZNHUX Uf YHJY) gei UYZNH! @Uf Yd I WYG

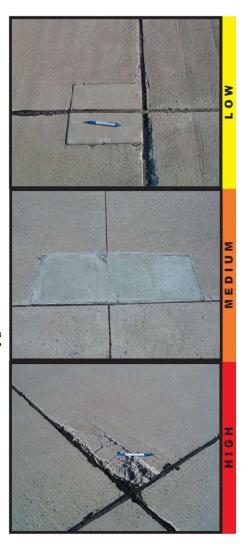
UYXEN VX | bh Ybi ligh Ub'

## CYTHY

- @ck!DIN/gablich| kyžk|h' ThiyefbeXMeftich/
- A Wiji a ! DIW\ Ligwinjcfthwibwif
   acwiffygl/jbj WbWgyblici bwhy
   wygliwa Unju WbWygcxi wz
   kjh WbgwiWYwwiiih jbcf; C8'
   dewill
- < [[\!] DUW\\\ Lightforum \ Lightforum \

#### **FYLlfcdldg**

- @ck **Ë8cBch]b**[/
- A Wajia! FY/TUW/dIW/cffY/TUW/hY gU/



: **||ifY7%. D/7GaUDIW**|

#### &" @UT YDDWAD77L

Patching is the same as defined ZfUga U'dIW'
\cky Yzh YUYUcZh YdIW | ga cfYh Ub) 'ga' UfY
ZNI 5 i | j | lm W | gudIWh Uh UgfYi UWXh Y
cf| | j | Lu'dj Ya Y | hww gy cZd UYa Y | hz
i b Xf | fci b Xi | j | j | j | j | j | j | j | j | m
W | IfYh Ygja YUgh cg/Zf Y | 'U dIW | j | !"

#### CHYPE

- @dk!DIW[gZ|bl/jcb]b[kYžk]h"]liiYef bcXNY[efU]cb/
- A Wia ! DUW\ Lgwinfcftrwebwef
   acwiffgil']b| Wb Wgwib tici bwh Y
   wigwib unifu Wb Wwigcx[ wek]h
   Wigwit Wywwii in ]bcf: C8 definiful/
- < [[\!] DUW\ LightfictUnicity for your of the control of t

#### **FYUfcdldg**

- @ck **Ë8cBch]b**[/
- A YMia ? FYIUWdIWcfYIUM YgU/
- < ||\ EFYIUWdIWcffYIUWhYgU/</pre>



: || ifY7%. 'D77@f| YDIW'

## &" Dodi leftD77Ł

## **CHYPY**

No degrees of severity are defined for popouts. < cky Yzdychi leja i glwy lybej y wzryh yntrywi lywydyg lyzy y ly ydddi liwyglnia i glil wyx uhld la uynhfydddi leidf gei uyntryc y fhyyhlfygwuru



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### &"Diadb fD77L

### 8 yaldd

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## GjYfhi@jYg

Bc XI fYgcZgj YlmtfyXZbXT-liggi ZlyNtlie byWYhUri adb[Y]glg



### &" GW]b[ 11077Ł

A LINEWH CONTINUE TO THE PARTY OF THE PARTY

#### CHYPE

- @ck? 7ftijb[ cfatilvitvy]b[ Yl jajej Yfg[ bj/whigtvtfyth Ygfatw]gb [ccxwhyijcbk]h bcgw]b[ "H Ywitvydumbai gliyykY xz/bxxtbx Ytgrifw] bjrxx
- A Wiji a ? GU/lejdWWcj Y Uddid Ja UYm)ı 'cf 'YgjcZh YgjfZWk]h 'ga Y : C8'ddWHU/



### &": U 116 11077L

## Calina Ydicf Zi 'Hol 'lgUx|ZAFYXWcZYYj UlcbUdU'c|Hicf WUWWigXXviiid Ylj U'cf Wing: |XU|cb'

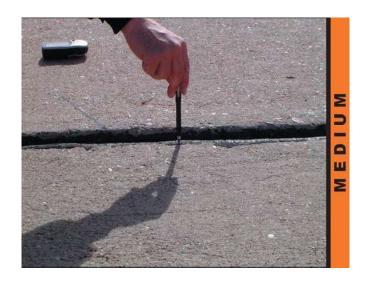
## CH YING

Severity levels are defined by the difference in elevation across the fault and the

	Fi bktigH1]ktig	5dfdg
@	0% <del>(</del> ]bW	% Ë% <b>SJ3</b> V
A	% Ë% <b>\$J\$W</b>	%82 %JbW
<	2% <b>8]</b> bW	2%ы

## **FYILIFCdldbg**

- @ck!BcWicb/
- AYAjia Ë; fjbAjb [Ucb hY'c]bla



#### &"GUHYXGWHD77Ł

HYDNIN WWELFYWWENUMY I HEZI FOR CYC WEWW EXCE YOUN I WEF IN SELECTION I WE WIND AND THE WEIF OF THE SELECTION OF THE SELECTIO

#### CHYPY:

- @ck? Slab is broken into four or five pieces with the vast majority of the cracks for Y,) chryffic ck!@iY|hh
- ◆ A Mia ! (1) Slab is broken into four or five pieces with over 15 percent of the WWgZa Mia gj Mhitc\][\!gj MhitWgZcffffgWgVc\_Voffffg] cfacffd Wgkh cj Y,) chfwlizh YwweZck!/

### FYLlfcdldg

- @ck ËCJU 7fUV
- ◆ AYAjia!:i "XXch dlwcffYdlwhyglv



## &"Gfb\_UY7fUWfD77Ł

GAFID U YMICUGUYA UF IDYMICUGH UTIFYI GʻUmidomUzik ZMRICH UXXX bch M PHXILMI ggAYMHIY gʻUMH YMIFYZ FA YXXI FILI TAYQINIH UXMIFILI ICZAY WHANIYU XI GʻUMIX bchil PHXA bici [\ "AYXXIA" iCZAY gʻU"

## **GJYFFY**

No degrees of severity are defined. It is sufficient to indicate that shrinkage cracks exist.

## **FYUfcdidg**

### • 8cBch]b[



#### 'S'>c]bhiGdUgfiD77L

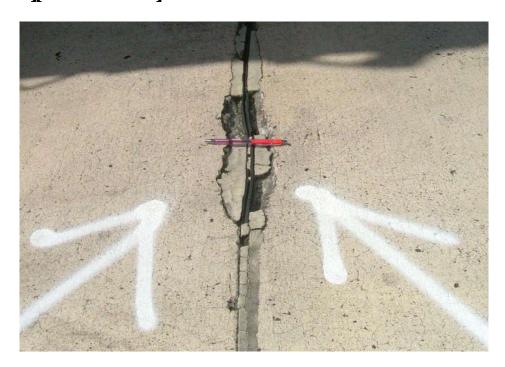
zeldigU ld lghYAghN fUlcbcZhYgWX Ygklh b&ZNicZhYgXvCZhY'cldi'i
5 "cldigU i g U mxcYgbchN NbXj YflW mhfci [\ hYgWzVi lildYgNghY'cldi'h
UbUl 'Y' 'GU ld i fYg YgAca 'N Wgg YgNgygUhY'cld WWW gXVinliX Mulcb cZbWacfYgJVYaUNJUgcfMZJWcUg K YU WbWYUHY'cldi'Nu gXVin cj Ykcf\_ld EWaVbXklh MZJWcUg gUbchYWi gYcZqU ld "

#### CH AHA

- @ck! cj Y & ZYVich | UX lg Vic\_Yb | ble be a cf Yh Ubhf Yy d | YY y ZY b | X\ cf a YX i a 'gy Y | bn X Y y g k | h " | bi Y cf be: C8 ch Y y | UZ cf | g & Y y g h Ub & ZYVich | UX lg Vic\_Yb | ble a cf Yh Ubhf Yy d | YY y g k | h " | bi Y: C8 cf | f Y X i A U Y ch Y y h | UX | g Vic\_Yb | ble a cf Yh Ubhf Yy d | YY g X k | h " | bi Y: C8 cf | f Y X i A U Y ch Y y h | UX | g Vic\_Yb | ble a cf Yh Ubhf Yy d | YY g X k | h " | bi Y: C8 cf | f Y X k U Y ch Y y h | ble a cf Yh Ubhf Yy d | YY g X k | h " | bi Y: C8 cf | f Y Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k | Y k |
- A Wija ! cj Y & Wind | Uwig Vic\_Yo] ble acfYhU 'cj Wig Wij bx Vin] \h
  cfa Wija Vic Wijcfga Y: C8 ch Yh JU Y Jejh zcf Je E Yegh Ub & Wind |
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#### **FYLIFCdldg**

- @dk! Bc Widb/
- A Yajia ! da Yajia Udaffu Xajia da W
- < || \! d\f2fa Udlf||UXY|\ d\f\W'</p>



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7cfbffgU]b[ ]ghYftjY]b[ cfVNU\_XkbcZhYgWk]h]bUffid ]aUYni&XYicZ hYVdfbf'' 5 VdfbffgIU XJZfgZica UVdfbfVfYU\_JbhUfhYgIU Uf YgXkbkUX le]bYgWhY'c]bfk\]YhYVfYU\_YlPbYgjYfJWnfhfci [\hYgW'

#### CHAHA

- A Wiji a Ë% ThYgiU lg Vic\_Yb lite like cfacfYd Wig Wijb XVinin Wiji a '
  gj Yflm Vil Wig Ub XUZIK 'ga U ZiU a Ybliga Un W Ug Biricf 'ccgy' & ThYgiU 'lg'
  XXI b XVInich Ygj Yr ZiU a Yb XVII Whitia Un W Waad b J XX Yn UZIK '
  \Uf | b Y VII Wig Cf' Eh YgiU \Ug XII Y | cfu Y Xie h Ydc | b i k \YY ccg Ya U Y | U | g
  Wigh | C8 de Y H I U/

#### **FYLIfCdldbg**

- @dk!BcUJdb/
- AWia!dffUWhdlW
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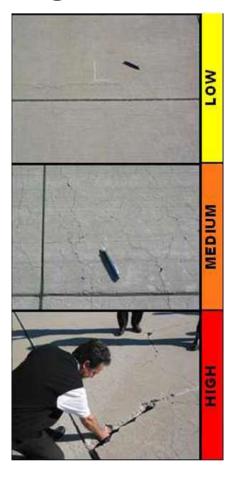
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## **APPENDIX F**

## **INVENTORY**

F1: Section Forecasted Pavement Condition Rating

F2: Branch PCI Rating F3: Branch FOD Rating

## Appendix F1 Forecasted Section PCI

Branch ID	Section ID			For	ecasted	PCI		
DIGITALI	Section in	2021	2022	2023	2024	2025	2026	2027
A01	01	69	67	65	63	61	58	56
A01	02	61	59	57	55	53	50	48
A01	03	72	70	68	66	64	61	59
R1836	01	70	70	69	66	57	53	49
TA	01	72	70	66	62	57	52	48
THANG01	01	84	82	80	78	76	73	71

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A01	01	3/8/2007	AC	APRON	S	0	82,866.00	11/4/2019	12	72
A01	02	7/26/2003	AC	APRON	S	0	59,575.00	11/4/2019	16	64
A01	03	7/16/2008	APC	APRON	S	0	7,000.00	11/4/2019	11	75
R1836	01	3/20/2007	AC	RUNWAY	Р	0	500,800.00	11/4/2019	12	71
TA	01	6/27/2007	AC	TAXIWAY	S	0	20,955.00	11/4/2019	12	75
THANG01	01	12/10/2012	AC	TAXIWAY	Т	0	9,036.00	11/4/2019	7	87

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16-20	16	59,575.00	1	64.00	0.00	64.00
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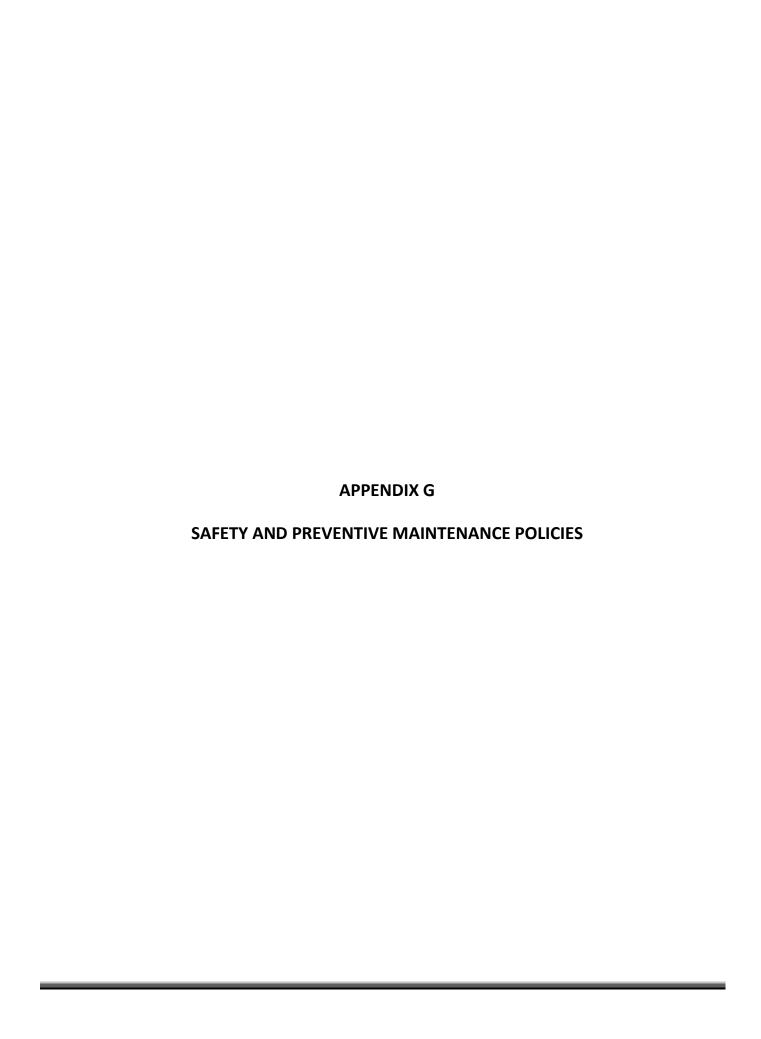
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## Appendix G1 Localized Safety (Stopgap) Repair Policy

Distress	Distress Severity	Description	Code	Work Type	Work Unit
41	High	ALLIGATOR CR	PA-FD	Patching - AC Full-Depth	SqFt
43	High	BLOCK CR	CS-AC	Crack Sealing - AC	Ft
45	High	DEPRESSION	PA-FD	Patching - AC Full-Depth	SqFt
47	High	JT REF. CR	CS-AC	Crack Sealing - AC	Ft
48	High	L & T CR	CS-AC	Crack Sealing - AC	Ft
50	High	PATCHING	PA-FD	Patching - AC Full-Depth	SqFt
53	High	RUTTING	PA-FD	Patching - AC Full-Depth	SqFt
54	High	SHOVING	PA-PD	Patching - AC Partial-Depth	SqFt
55	NA	SLIPPAGE CR	PA-PD	Patching - AC Partial-Depth	SqFt
56	High	SWELLING	PA-FD	Patching - AC Full-Depth	SqFt
61	High	BLOW-UP	SL-PC	Slab Replacement - PCC	SqFt
61	Medium	BLOW-UP	PA-PF	Patching - PCC Full Depth	SqFt
62	High	CORNER BREAK	PA-PF	Patching - PCC Full Depth	SqFt
63	High	LINEAR CR	PA-PF	Patching - PCC Full Depth	SqFt
63	Medium	LINEAR CR	CS-PC	Crack Sealing - PCC	Ft
64	High	DURABIL. CR	SL-PC	Slab Replacement - PCC	SqFt
64	Medium	DURABIL. CR	PA-PF	Patching - PCC Full Depth	SqFt
66	High	SMALL PATCH	PA-PP	Patching - PCC Partial Depth	SqFt
67	High	LARGE PATCH	PA-PF	Patching - PCC Full Depth	SqFt
70	High	SCALING	SL-PC	Slab Replacement - PCC	SqFt
71	High	FAULTING	GR-PP	Grinding (Localized)	Ft
72	High	SHAT. SLAB	SL-PC	Slab Replacement - PCC	SqFt
74	High	JOINT SPALL	PA-PP	Patching - PCC Partial Depth	SqFt
75	High	CORNER SPALL	PA-PP	Patching - PCC Partial Depth	SqFt
76	High	ASR	SL-PC	Slab Replacement - PCC	SqFt

Appendix G2
Localized Preventive Repair Policy

	Distress				Work
Distress	Severity	Description	Code	WorkType	Unit
41	Mediun	ALLICATORG	PAAC	Patching: ACRill Depth	SqR
41	High	ALLICATORO	PAAC	Patching- ACRill Depth	SqR
42	N/A	HHING	PAAS	Patching- ACPartial Depth	SqR
49	High	HOKOR	PAAC	Patching- ACRill Depth	SqR
49	Medium	HOKOR	CSAC	GackSealing- AC	R
44	Low	CORUCATION	PAAS	Patching- ACPartial Depth	SqR
44	High	CORLICATION	PAAS	Patching- ACPartial Depth	SqR
44	Medium	CORUCATION	PAAS	Patching- ACPartial Depth	SqR
45	Medium	DERESSION	PAAC	Patching- ACRull Depth	SqR
45	Low	DERESSION	PAAC	Patching- ACTull Depth	SqR
45	High:	DERESSION	PAAC	Patching- ACTull Depth	SqR
45	Hgh	JRE CR	CSAC	GackSealing- AC	R
45	Mediun	JIRE CR	CSAC	GackSealing- AC	R
4	Hgh	L&TCR	CSAC	GackSealing- AC	R
4	Medium	L&TCR	CSAC	GadsSealing- AC	R
4€	N/A	CLSPIIAG	PAAC	Patching- ACTull Depth	SqR
<b>5</b> C	High	PAICHNG	PAAC	Patching- ACTull Depth	SqR
<b>5</b> C	Mediun	PAICHNG	PAAC	Patching- ACTull Depth	SqR
52	High	RAVHING	PAAS	Patching- ACPartial Depth	SqR
<b>5</b> E	High	RUTING	PAAC	Patching- ACTull Depth	SqR
<b>5</b> E	Low	RUTING	PAAC	Patching- ACTull Depth	SqR
<b>5</b> E	Medium	RUTING	PAAC	Patching- ACT-III-Depth	SqR
<b>5</b> 5	N/A	SIPPACECR	PAAC	Patching- ACTull Depth	SqR
<b>5</b> 6	Low	SWHING	PAAC	Patching- ACTull Depth	SqR
<b>5</b> 6	Medium	SWHING	PAAC	Patching- ACTull Depth	SqR
61	Low	HOWUP	PAH	Patching- PCCFull Depth	SqR
61	Medium	HOWUP	PAH	Patching- PCCFull Depth	SqR
61	Hgh	HOWLP	PAPI	Patching: PCCFull Depth	SqR
<b>6</b> 2	Mediun	CORNER	PAPI	Patching: PCCFull Depth	SqR
<b>6</b> 2	Hgh	CORNER	PAPI	Patching: PCCFull Depth	SqR
<b>6</b> 2	Iov	CONTRIBEA	CSR	GackSealing- PCC	R
<b>6</b> 2	Mediun	INEARCR	CSRC	GackSealing- PCC	R
<b>6</b> E	Hgh	INEARCR	PAPI	Patching- PCCPartial Depth	SqR
64	Mediun	DURABIL CR	PAPI	Patching: PCCFull Depth	SqR
64	Hgh	DURABIL.CR	SLR	Stab Replacement - PCC	SqR
<b>6</b> 5	Hgh	JISEALDMG	PK	Jint Seal (Localized)	R
<b>6</b> 5	Mediun	JISEALDMG	PK	Jirt Seal (Localized)	R
Œ	Hgh	SVAILPAICH	PAH	Patching- PCCPartial Depth	SqR
<b>6</b> £	Mediun	SMAILPAICH	PAPI	Patching- PCCPartial Depth	SqR
65	Medium	LARGEPAICH	PAPI	Patching- PCCFull Depth	SqFl

Appendix G2
Localized Preventive Repair Policy

Distress	Distress Severity	Description	Code	WorkType	Work Unit
67	High	LARGEPAICH	PAPI	Patching- RCFull Depth	SqR
Œ	N/A	PLMPING	PIC	Jint Seal (Localized)	R
7	Medium	SCALING	PAPI	Patching- RCPartial Depth	SqR
70	High	SCALING	SLR	ScbReplacement - PCC	SqR
71	High	FALTING	CRH	Girting(Localized)	R
71	Mediun	FALTING	CRH	Girding(Localized)	R
72	Medium	SHAT SLAB	SLR	ScbReplacement - PCC	SqR
72	High	SHAT SLAB	SLR	SkbReplacement - PCC	SciR
74	High	JONISPAIL	PAPE	Patching- RCPartial Depth	SqR
74	Mediun	JONISPAIL	PAH	Patching- RCCPartial Depth	SqR
75	Medium	CORNESPALI	PAPE	Patching- PCCPartial Depth	SqR
75	Hel	CORNESPALI	PAPE	Patching- PCCPartial Depth	SciR
7€	Medium	ASR	SLR	SkbRpkænert-RC	SciR
76	Heh	ASR	SLR	SkbReplacement - PCC	ScR

## **APPENDIX H**

## **M&R UNIT COSTS**

H1: M&R Unit Costs

H2: Component Costs for Repair

H3: Airport Category

#### Maintenance and Repair (M&R) Unit Costs

The M&R costs developed for the ALDOT PMP include costs for maintenance, preservation, and repair activities and are described below.

#### **Unit Costs Source Data**

The source for the M&R costs data is RSMeans, which has data for 14 locations throughout Alabama, as identified by the yellow highlighted boxes in Figure 1. The cost data is presented in terms of individual line items like asphalt wearing course, aggregate base etc., which were consolidated to develop the activity costs described below.

The cost data show a distinct difference in costs between locations north and south of Birmingham, especially for the higher value items like the asphalt layers. Therefore, the unit costs were developed accordingly for the airports north and south of Birmingham, as identified in Figure 1. Appendix H2 presents the component costs used in developing the M&R costs.

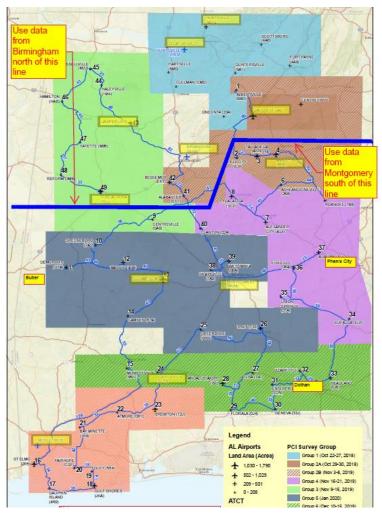


Figure 1: RSMeans Unit Costs Locations.

#### Maintenance & Repair (M&R) Activities

Maintenance activities are localized activities which are typically assigned in the first year of the M&R plan based on the observed distresses.

Repair activities are further subdivided into preservation, rehabilitation, and reconstruction. Repair activities are conducted for larger areas, typically at the section level and are assigned based on the Critical Pavement Condition Index, denoted as CP in Table 1. The CP is based on the section's rank or importance within the overall network and typically ranges from 55 to 70. The CP was set at 70 for the ALDOT runway pavements and 65 for the other pavements.

Activity Type	PCI	Activity
Preservation	> CP	Runway Surface Treatment
Preservation	7 CP	Taxiway and Apron Surface Treatment
	> CP	2" AC OL <sup>1</sup>
Rehabilitation	55 - CP	Mill 2" & 2" AC OL
	45 - 55	Mill 2" & 3" AC OL
Reconstruction	0 - 45	Reconstruct with AC

Table 1: Repair Activities.

The depths for the milling and overlay (AC OL) in Table 1 were established by creating a balance between removal of surficial distress and providing additional pavement structural capacity. All overlay options include full-depth patching to repair localized distresses.

From the FAA 5010 records, the Alabama airport network includes a wide range of allowable aircraft loads. The airports were divided into three categories of allowable aircraft loads based on requirements for minimum pavement thickness and the use of a P-401 surface layer. The categories are based on the aircraft maximum gross takeoff weight (MGTOW) and include: less than 12,500 lbs, 12,500 to 30,000 lbs, and 30,000 to 100,000 lbs. Appendix H3 presents the category for each airport.

For any sections requiring reconstruction, the pavement sections were established primarily in accordance with the requirements in Table 3 of the FAA's Advisory Circular 150/5320-6F. The pavement sections used for developing the cost estimates are:

```
    ≥ 12,500 lbs
    4" P-403 (State HMA Mix) + 6" P-209 Base
    ≥ 12,500 - 30,000 lbs
    4" P-403 (State HMA Mix) + 8" P-209 Base
    ≥ 30,000 - 100,000 lbs
    5" P-401 + 10" P-209 Base
```

It is important to note that while the FAA requires a stabilized base for those pavements that support aircraft operations with MGTOWs that are greater than 100,000 lbs, the number of such operations is minimal for those airports shown in Appendix H3. As a result, the cost of a stabilized base is excluded in the development of the unit costs for ALDOT's PMP update. However, based on the Engineer's future design and aircraft fleet mix development, project-level construction work could include the use of a stabilized base at that time.

<sup>&</sup>lt;sup>1</sup>For Sections with Structural Distress and PCI greater than Critical PCI

#### **M&R** Unit Costs

Paving projects typically include additional project costs like mobilization, design, construction administration and inspections, and drainage improvements. A summary of non-direct pavement construction line items has been included in the unit costs in Tables 5 and 6 as described below. These non-direct items are expressed as a percentage of the total component costs for each activity.

These non-direct pavement construction items were developed from API's extensive experience with APMP project cost estimation. These percentages may vary for Alabama airport construction projects; however, since the direct pavement scope of work is estimated in a network-level evaluation, these conservative estimates serve as a good starting point for the development of realistic total project costs and annual APMP budgets for ALDOT. For repair activities such as Mill & Overlay, which typically do not include significant drainage work, the corresponding multiplier was reduced by 50 percent. The nondirect cost factors are presented in Table 2.

Fastar	Function of	Estimate			
Factor	Function of	Preservation	Rehabilitation	Reconstruction	
Mobilization	All costs, less design	10%	10%	10%	
Drainage	Paving costs	_	4%	8%	
Improvements	raving costs	_	470	670	
Contingency	All costs, less mobilization and design	10%	20%	20%	
Design & CM	All costs, less mobilization and design	15%	20%	20%	

Table 2: Cost Factors.

The M&R unit costs for maintenance, preservation, and repair activities were developed from the RSMeans cost data and are presented in the following section.

#### Maintenance

The maintenance activities include crack seal, and full and partial-depth patching. The unit costs are presented in Table 3.

Table 3: Unit Costs for Maintenance.

Activity	Unit Cost	Unit
Seal Cracks - AC	\$3.95	lf
AC Full-Depth Patching	\$25.05	sf
AC Partial-Dept Patching	\$16.28	sf
Seal Cracks – PCC	\$6.00	lf
PCC Full-Depth Patching	\$35.00	sf
PCC Partial-Depth Patching	\$175.00	sf
Jt. Seal	\$8.00	If
Slab Replacement	\$20.00	sf

#### **Preservation**

The unit costs for the surface treatments are presented in Table 4. They include sealing of cracks and application of pavement markings.

Table 4: Unit Costs for Preservation Activities.

Activity	Unit Cost	Unit
Runway Surface Treatment	\$0.57	sf
Taxiway and Apron Surface Treatment	\$0.88	sf

#### **Rehabilitation and Reconstruction**

As discussed previously, repair activities are also divided into rehabilitation and reconstruction. The unit costs for airport repair for the Northern Region (Birmingham Area) and Southern Region (Montgomery Area) are shown in Tables 5 and 6, respectively.

Table 5: Unit Costs for Repair Activities, Northern Region.

Activity Type	Antivity	MGTOW, thousand lbs			
Activity Type	Activity	≤ 12.5	12.5-30	30-100	
	2" AC OL	\$3.78		\$4.19	
Rehabilitation	Mill 2" & 2" AC OL	\$4.15		\$4.56	
	Mill 2" & 3" AC OL	\$5.18		\$5.79	
Reconstruction	AC Reconstruction	\$8.40	\$9.10	\$10.91	

Table 6: Unit Costs for Repair Activities, Southern Region.

Activity Type	Activity	MGTOW, thousand lbs			
Activity Type	Activity	≤ 12.5	12.5-30	30-100	
	2" AC OL	\$3.54		\$3.91	
Rehabilitation	Mill 2" & 2" AC OL	\$3.90		\$4.27	
	Mill 2" & 3" AC OL	\$4.82		\$5.37	
Reconstruction	AC Reconstruction	\$7.63	\$8.25	\$9.87	

## Appendix H2 Component Costs for Repair

Activity Type	Unit	Birmingham (Northern)	Montgomery (Southern)	Comments
Milling 1" to 3"	SY	\$2.08	\$2.01	
Pavement Demolition	SY	\$6.34	\$6.12	
Haulage - For Demolition & AC	CY	\$6.08	\$5.87	
Haulage for 12" Thick Demolition	SY	\$2.03	\$1.96	
Haulage for 2" Thick AC Paving	SY	\$0.34	\$0.33	
Haulage for 3" Thick AC Paving	SY	\$0.51	\$0.49	
Haulage for 4" Thick AC Paving	SY	\$0.68	\$0.65	
AC Wearing Course	Ton	\$97.42	\$86.90	
AC Binder Course	Ton	\$87.80	\$78.17	
P401 - For airports with >60 kip aircraft	Ton	\$116.90	\$104.28	Assumed P401 cost to be 20% greater than AC Wearing Course
6" Aggregate Base (P208)	SY	\$10.17	\$9.12	
8" Aggregate Base (P208)	SY	\$13.29	\$11.89	
6" P209 Aggregate Base	SY	\$12.20	\$10.94	Assumed P209 cost to be 20% greater than P208
8" P209 Aggregate Base	SY	\$15.95	\$14.27	Assumed P209 cost to be 20% greater than P208
10" P209 Aggregate Base	SY	\$19.94	\$17.84	Direct multiplier for 10" from 8"
4" P154 Aggregate Base	SY	\$5.42	\$4.86	Assumed P154 cost to be 20% lower than P208
6" P154 Aggregate Base	SY	\$8.14	\$7.30	Assumed P154 cost to be 20% lower than P208
Pavement Markings	sf	\$1.48	\$1.39	

Appendix H3
Airport Category

Danier	City	FAAID	Max Gross Weight (Thousand Ibs)			NATUR CVA	Catagoni	
Region	City	FAA ID	S	D	2D	Max GW	Category	
	Reform	3M8	12.5	-	-	12.5	<= 12,500	
	Fayette	M95	15.0	ı	ı	15.0	12,500-30,000	
	Hamilton	HAB	15.0	ı	-	15.0	12,500-30,000	
	Scottsboro	4A6	15.0	-	-	15.0	12,500-30,000	
	Alabaster	EET	16.0	ı	ı	16.0	12,500-30,000	
	Centre-Piedmont	PYP	16.0	ı	ı	16.0	12,500-30,000	
	Fort Payne	4A9	16.0	-	-	16.0	12,500-30,000	
	Haleyville	1M4	20.0	-	-	20.0	12,500-30,000	
	Hartselle	5M0	20.0	ı	ı	20.0	12,500-30,000	
Birmingham	Guntersville	8A1	24.0	1	1	24.0	12,500-30,000	
Birriningnam	Cullman	CMD	30.0	ı	ı	30.0	12,500-30,000	
	Russellville	M22	30.0	1	-	30.0	12,500-30,000	
	Jasper	JFX	50.0	1	1	50.0	> 30,000	
	Oneonta	20A	20.0	35.0	55.0	55.0	> 30,000	
	Bessemer	EKY	60.0	60.0	-	60.0	> 30,000	
	Albertville	8A0	60.0	90.0	130.0	130.0	> 30,000	
	Madison	MDQ	60.0	75.0	140.0	140.0	> 30,000	
	Decatur	DCU	75.0	125.0	150.0	150.0	> 30,000	
	Tuscaloosa	TCL	61.0	87.0	168.0	168.0	> 30,000	
	Gadsen	GAD	90.0	115.0	195.0	195.0	> 30,000	
	Florala	0J4	-	-	-	-	<= 12,500	
	Elba	14J	4.0	1	-	4.0	<= 12,500	
	Headland	0J6	12.0	-	-	12.0	<= 12,500	
	Roanoke	7A5	12.0	-	-	12.0	<= 12,500	
	Greenville	PRN	15.0	-	-	15.0	12,500-30,000	
	Union Springs	07A	15.0	-	-	15.0	12,500-30,000	
	Wetumpka	08A	15.0	-	-	15.0	12,500-30,000	
	Atmore	OR1	16.0	-	-	16.0	12,500-30,000	
	Clanton	02A	16.0	-	-	16.0	12,500-30,000	
	Eufaula	EUF	16.0	-	-	16.0	12,500-30,000	
Montgomery	Geneva	33J	16.0	-	-	16.0	12,500-30,000	
	Greensboro	7A0	16.0	-	-	16.0	12,500-30,000	
	Centreville	0A8	18.0	-	-	18.0	12,500-30,000	
	Ashland-Lineville	26A	20.0	-	-	20.0	12,500-30,000	
	Sylacauga	SCD	20.0	-	-	20.0	12,500-30,000	
	St. Elmo	2R5	23.0	-	-	23.0	12,500-30,000	
	Ozark	71J	-	25.0	-	25.0	12,500-30,000	
	Camden	61A	27.0	-	-	27.0	12,500-30,000	
	Bay Minette	1R8	28.0	-	-	28.0	12,500-30,000	
	Foley	5R4	28.0	-	-	28.0	12,500-30,000	
	Tuskegee	06A	28.5	-	-	28.5	12,500-30,000	

Appendix H3
Airport Category

Dogion	City	FAA ID	Max Gross	Weight (Tho	ousand lbs)	NAOV CVA	Catagory	
Region	City	FAA ID	S	D	2D	Max GW	Category	
	Alexander City	ALX	30.0	-	-	30.0	12,500-30,000	
	Dauphin Island	4R9	30.0	1	1	30.0	12,500-30,000	
	Pell City	PLR	30.0	-	1	30.0	12,500-30,000	
	Prattville	1A9	30.0	-	-	30.0	12,500-30,000	
	Enterprise	EDN	-	-	-	-	> 30,000	
	Evergreen	GZH	30.0	50.0	-	50.0	> 30,000	
	Marion	A08	30.0	50.0	-	50.0	> 30,000	
	Selma	SEM	33.0	54.0	-	54.0	> 30,000	
Montgomory	Fairhope	CQF	36.0	58.0	-	58.0	> 30,000	
Montgomery	Brewton	12J	40.0	60.0	-	60.0	> 30,000	
	Demopolis	DYA	30.0	38.0	60.0	60.0	> 30,000	
	Monroeville	MVC	70.0	-	-	70.0	> 30,000	
	Auburn-Opelika	AUO	45.0	75.0	-	75.0	> 30,000	
	Talladega	ASN	30.0	65.0	95.0	95.0	> 30,000	
	Gulf Shores	JKA	80.0	100.0	-	100.0	> 30,000	
	Troy	TOI	24.0	80.0	140.0	140.0	> 30,000	
	Anniston	ANB	28.0	43.5	260.0	260.0	> 30,000	
	Andalusia-OPP	79J	98.0	160.0	275.0	275.0	> 30,000	

## **APPENDIX I**

## **PAVEMENT CAPITAL IMPROVEMENT PROGRAM**

I1: PCIP Summary

I2: Year 1 Maintenance Plan

# Appendix I1 PCIP Summary

Branch & Section	2021	2022	2023	2024	2025	2026	2027
A01-01	Preventive \$2729.89 Before:69.36 After:69.36	Preventive \$3757.77 Before:67.15 After:67.15	Required Project Major Below Critical \$376211.64 Before:64.94 After:100	Preventive \$204.42 Before:97.79 After:97.79	Preventive \$421.97 Before:95.57 After:95.57	Global MR  \$57000.38	Preventive \$446.75 Before:95.58 After:95.58
A01-02	StopGap \$1134.61 Before:61.36 After:61.36	StopGap \$1302.62 Before:59.15 After:59.15	Required Project Major Below Critical \$270470.5 Before:56.94 After:100	Preventive \$146.96 Before:97.79 After:97.79	Preventive \$303.37 Before:95.57 After:95.57	Global MR  \$40979 38	Preventive \$321.18 Before:95.58 After:95.58
A01-03	Preventive \$192.76 Before:72.36 After:72.36	Preventive \$213.34 Before:70.15 After:70.15	Required Project Major Above Critical \$31780 Before:67.94 After:100	Preventive \$17.27 Before:97.79 After:97.79	Preventive \$35.65 Before:95.57 After:95.57	Global MR \$4815.03	Preventive \$37.74 Before:95.58 After:95.58
R1836-01	l'	Preventive \$685.28 Before:98.7 After:98.7	Preventive \$1367.25 Before:97.48 After:97.48	Preventive + Required Project Global MR \$322494.76 Before:96.45 After:98.7	Preventive \$1450.52 Before:97.48 After:97.48	\$2103.51 Before:96.45	Preventive \$2777.71 Before:95.45 After:95.45

# Appendix I1 PCIP Summary

Branch & Section	2021	2022	2023	2024	2025	2026	2027
TA-01	Before:72.29	StopGap \$231.4 Before:69.51 After:69.51	l <i>'</i>	Before:98.98	Preventive \$51.93 Before:97.85 After:97.85	Global MR  \$14340.58	Preventive \$55.09 Before:97.85 After:97.85
THANG01-01	Apron Surface Treatment	Before:89.14	Before:86.5	Before:83.96		Before:79.49	Preventive \$245.48 Before:77.51 After:77.51

## Appendix I2 Localized Maintenance Plan

Branch ID	Section	Policy	Distress	Description	Severity	Distress			Work Description	Work	Work	Unit	Work Cost
	ID		Code	2 000	3373,	Qty	Unit	Distress	The state of the s	Qty	Unit	Cost	
A01	01	Preventive	48	L & T CR	Low	2,418	Ft	2.92	No Localized M & R	0		\$0.00	\$0
A01	01	Preventive	57	WEATHERING	Low	82,866	SqFt	100	No Localized M & R	0		\$0.00	\$0
A01	01	Preventive	48	L & T CR	Medium	2,523	Ft	3.05	Crack Sealing - AC	2,523	Ft	\$3.95	\$9,967
A01	02	Safety	48	L & T CR	Low	2,754	Ft	4.62	No Localized M & R	0		\$0.00	\$0
A01	02	Safety	48	L & T CR	Medium	1,867	Ft	3.13	No Localized M & R	0		\$0.00	\$0
A01	02	Safety	57	WEATHERING	Medium	7,446	SqFt	12.5	No Localized M & R	0		\$0.00	\$0
A01	02	Safety	57	WEATHERING	Low	40,951	SqFt	68.74	No Localized M & R	0		\$0.00	\$0
A01	02	Safety	52	RAVELING	Low	11,168	SqFt	18.75	No Localized M & R	0		\$0.00	\$0
A01	03	Preventive	47	JT REF. CR	Medium	200	Ft	2.86	Crack Sealing - AC	200	Ft	\$3.95	\$790
A01	03	Preventive	47	JT REF. CR	Low	350	Ft	5	No Localized M & R	0		\$0.00	\$0
R1836	01	Preventive	52	RAVELING	Low	334	SqFt	0.07	No Localized M & R	0		\$0.00	\$0
R1836	01	Preventive	48	L & T CR	Low	37,093	Ft	7.41	No Localized M & R	0		\$0.00	\$0
R1836	01	Preventive	48	L & T CR	Medium	5,743	Ft	1.15	Crack Sealing - AC	5,742	Ft	\$3.95	\$22,683
R1836	01	Preventive	57	WEATHERING	Low	500,466	SqFt	99.93	No Localized M & R	0		\$0.00	\$0
TA	01	Preventive	57	WEATHERING	Medium	231	SqFt	1.1	No Localized M & R	0		\$0.00	\$0
TA	01	Preventive	48	L & T CR	Medium	35	Ft	0.17	Crack Sealing - AC	35	Ft	\$3.95	\$137
TA	01	Preventive	45	DEPRESSION	Low	64	SqFt	0.3	Patching - AC Full-Depth	100	SqFt	\$25.05	\$2,498
TA	01	Preventive	48	L & T CR	Low	1,140	Ft		No Localized M & R	0		\$0.00	\$0
TA	01	Preventive	57	WEATHERING	Low	20,724	SqFt	98.9	No Localized M & R	0		\$0.00	\$0
THANG01	01	Preventive	48	L & T CR	Low	190	Ft	2.1	No Localized M & R	0		\$0.00	\$0
THANG01	01	Preventive	57	WEATHERING	Low	9,036	SqFt	100	No Localized M & R	0		\$0.00	\$0