

PLAINS AIRPORT

Branch: 63A

APRON

A-1

Length: 378 LF

Width: 375 LF

Area: 141,750 SF

Last Const: 2006

Family: ACAM

From: APRON

To: T-1

Surface: AC

Inspections

Samples Surveyed: 5

Total Samples: 30

Last Inspection Date: 8/28/2012

PCI: 88

Sample # 1

Distress Description

RAVELING
WEATHERING

Severity

L
L

Quantity

250 SF
300 SF

Area: 4,725 SF

Sample # 7

Distress Description

OIL SPILLAGE
RAVELING
WEATHERING

Severity

N
L
L

Quantity

3 SF
100 SF
200 SF

Area: 4,725 SF

Sample # 13

Distress Description

RAVELING
WEATHERING

Severity

L
L

Quantity

50 SF
150 SF

Area: 4,725 SF

Sample # 19

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING
WEATHERING

Severity

L
L
L

Quantity

75 LF
850 SF
700 SF

Area: 4,725 SF

Sample # 26

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING
WEATHERING

Severity

L
L
L

Quantity

203 LF
300 SF
300 SF

Area: 4,725 SF

Extrapolated Distress Quantities*

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
OIL SPILLAGE
RAVELING
WEATHERING

Severity

L
N
L
L

Quantity

1,668 SF
18 SF
9,300 SF
9,900 LF

Density

7.81%
1.25%
50.00%
0.67%

Deduct

5.33
2.00
7.89
1.34

* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

Percent of Deduct Values Based on Distress Mechanism

0.0 % Load

38.0 % Climate/Durability

12.0 % Other

PLAINS AIRPORT

Branch: 63R

RUNWAY

R-1

Length: 4,650 LF

Width: 75 LF

Area: 348,750 SF

Last Const: 2006

Family: ACRML

From: STA 12+00 RWY 13/31

To: STA 58+50 RWY 13/31

Surface: AC

Inspections

Samples Surveyed: 7

Total Samples: 75

Last Inspection Date: 8/28/2012

PCI: 84

Sample # 9

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING

Severity

L
L

Quantity

178 LF
186 SF

Area: 4,650 SF

Sample # 20

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING

Severity

L
L

Quantity

104 LF
500 LF

Area: 4,650 SF

Sample # 31

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING

Severity

L
L

Quantity

114 LF
250 SF

Area: 4,650 SF

Sample # 42

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING

Severity

L
L

Quantity

93 LF
500 SF

Area: 4,650 SF

Sample # 53

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING

Severity

L
L

Quantity

133 LF
465 SF

Area: 4,650 SF

Sample # 64

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING
WEATHERING

Severity

L
L
L

Quantity

114 LF
600 SF
2,325 SF

Area: 4,650 SF

Sample # 75

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING

Severity

L
L

Quantity

166 LF
180 SF

Area: 4,650 SF

Extrapolated Distress Quantities*

Distress Description

LONGITUDINAL/TRANSVERSE CRACKING
RAVELING
WEATHERING

Severity

L
L
L

Quantity

9,664 SF
28,725 LF
24,911 SF

Density

11.11%
4.25%
50.00%

Deduct

9.45
8.90
1.36

* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

Percent of Deduct Values Based on Distress Mechanism

0.0 % Load

100.0 % Climate/Durability

0.0 % Other

PLAINS AIRPORT

Branch: 63T TAXIWAY

T-1

Length: 1,365 LF Width: 35 LF Area: 47,775 SF Last Const: 2006 Family: ACRML
 From: R-1 NORTHWEST END To: R-1 SOUTHEAST END Surface: AC

Inspections

Samples Surveyed: 4 Total Samples: 10 Last Inspection Date: 8/28/2012 **PCI: 88**

Sample # 2	Distress Description RAVELING	Severity L	Quantity 735 SF	Area: 4,900 SF
Sample # 5	Distress Description OIL SPILLAGE RAVELING	Severity N L	Quantity 3 SF 833 SF	Area: 4,900 SF
Sample # 8	Distress Description RAVELING	Severity L	Quantity 50 SF	Area: 4,900 SF
Sample # 9	Distress Description BLEEDING OIL SPILLAGE RAVELING	Severity N N L	Quantity 100 SF 2 SF 500 SF	Area: 4,288 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
BLEEDING	N	252 SF	0.03%	3.25
OIL SPILLAGE	N	13 SF	0.01%	2.00
RAVELING	L	5,329 SF	0.02%	10.38

* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

Percent of Deduct Values Based on Distress Mechanism

0.0 % Load 66.0 % Climate/Durability 34.0 % Other

PLAINS AIRPORT

Branch: 63T

TAXIWAY

T-2

Length: 918 LF Width: 30 LF Area: 27,540 SF Last Const: 2006 Family: ACRML
 From: SOUTHEAST CORNER To: A-1 Surface: AC

Inspections

Samples Surveyed: 3 Total Samples: 6 Last Inspection Date: 8/28/2012 **PCI: 88**

Sample # 2 Area: 5,355 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	137 LF
RAVELING	L	200 SF

Sample # 4 Area: 3,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	25 LF
RAVELING	L	175 SF
WEATHERING	L	700 SF

Sample # 6 Area: 3,875 SF

Distress Description	Severity	Quantity
RAVELING	L	75 SF
WEATHERING	L	700 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	343 LF	0.28%	5.49
RAVELING	L	953 SF	0.01%	5.52
WEATHERING	L	2,965 SF	58.80%	1.81

* Multiple deduct values are scaled down from their algebraic sum to keep the model consistent with experimental data.

Percent of Deduct Values Based on Distress Mechanism

0.0 % Load 100.0 % Climate/Durability 0.0 % Other

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FIRST YEAR LOCAL: 2013

LOCAL REPAIR COST: \$1,399

Section	Distress Description	Severity	Quantity	Work Description	Quantity	Cost	Policv
A-1	OIL SPILLAGE	N	18 SF	Patching - AC Shallow	39 SF	\$782	PREV.
T-1	OIL SPILLAGE	N	13 SF	Patching - AC Shallow	31 SF	\$617	PREV.

FIFTEEN YEAR PROJECTIONS

ESTIMATED AVERAGE ANNUAL COST: \$52,422

Plan Year: 2013		Estimated Cost: \$133,101				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Global MR + Preventive	\$578	\$35,438	\$0	\$0	\$36,016	86	94
R-1	Global MR + Preventive	\$2,709	\$87,188	\$0	\$0	\$89,897	82	89
T-1	Preventive	\$192	\$0	\$0	\$0	\$192	86	86
T-2	Global MR + Preventive	\$111	\$6,885	\$0	\$0	\$6,996	86	94
Plan Year: 2014		Estimated Cost: \$2,038				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$47	\$0	\$0	\$0	\$47	90	90
R-1	Preventive	\$1,635	\$0	\$0	\$0	\$1,635	85	86
T-1	Preventive	\$345	\$0	\$0	\$0	\$345	83	83
T-2	Preventive	\$10	\$0	\$0	\$0	\$10	90	90
Plan Year: 2015		Estimated Cost: \$3,932				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$559	\$0	\$0	\$0	\$559	86	86
R-1	Preventive	\$2,774	\$0	\$0	\$0	\$2,774	83	83
T-1	Preventive	\$491	\$0	\$0	\$0	\$491	80	80
T-2	Preventive	\$108	\$0	\$0	\$0	\$108	86	86
Plan Year: 2016		Estimated Cost: \$6,191				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$1,065	\$0	\$0	\$0	\$1,065	83	83
R-1	Preventive	\$3,976	\$0	\$0	\$0	\$3,976	80	80
T-1	Preventive	\$948	\$0	\$0	\$0	\$948	78	78
T-2	Preventive	\$203	\$0	\$0	\$0	\$203	83	83
Plan Year: 2017		Estimated Cost: \$10,980				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$1,564	\$0	\$0	\$0	\$1,564	80	80
R-1	Preventive	\$7,709	\$0	\$0	\$0	\$7,709	78	78
T-1	Preventive	\$1,415	\$0	\$0	\$0	\$1,415	76	76
T-2	Preventive	\$293	\$0	\$0	\$0	\$293	81	81
Plan Year: 2018		Estimated Cost: \$166,991				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Global MR + Preventive	\$3,319	\$41,082	\$0	\$0	\$44,401	77	84
R-1	Global MR + Preventive	\$11,140	\$101,075	\$0	\$0	\$112,215	76	80
T-1	Preventive	\$1,843	\$0	\$0	\$0	\$1,843	74	74
T-2	Global MR + Preventive	\$550	\$7,982	\$0	\$0	\$8,532	78	84
Plan Year: 2019		Estimated Cost: \$11,971				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$1,609	\$0	\$0	\$0	\$1,609	80	81
R-1	Preventive	\$7,826	\$0	\$0	\$0	\$7,826	78	78
T-1	Preventive	\$2,234	\$0	\$0	\$0	\$2,234	73	73
T-2	Preventive	\$302	\$0	\$0	\$0	\$302	81	81
Plan Year: 2020		Estimated Cost: \$18,001				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$3,325	\$0	\$0	\$0	\$3,325	78	78
R-1	Preventive	\$11,528	\$0	\$0	\$0	\$11,528	76	76
T-1	Preventive	\$2,592	\$0	\$0	\$0	\$2,592	71	72
T-2	Preventive	\$555	\$0	\$0	\$0	\$555	78	79
Plan Year: 2021		Estimated Cost: \$23,962				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$5,265	\$0	\$0	\$0	\$5,265	75	75
R-1	Preventive	\$14,915	\$0	\$0	\$0	\$14,915	74	74
T-1	Preventive	\$2,917	\$0	\$0	\$0	\$2,917	70	71
T-2	Preventive	\$865	\$0	\$0	\$0	\$865	76	76

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Plan Year: 2022		Estimated Cost: \$29,731				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$7,198	\$0	\$0	\$0	\$7,198	73	73
R-1	Preventive	\$18,017	\$0	\$0	\$0	\$18,017	73	73
T-1	Preventive	\$3,366	\$0	\$0	\$0	\$3,366	70	70
T-2	Preventive	\$1,150	\$0	\$0	\$0	\$1,150	75	75

Plan Year: 2023		Estimated Cost: \$209,353				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Global MR + Preventive	\$9,136	\$47,625	\$0	\$0	\$56,761	71	76
R-1	Global MR + Preventive	\$20,827	\$117,174	\$0	\$0	\$138,000	71	74
T-1	Preventive	\$3,929	\$0	\$0	\$0	\$3,929	69	69
T-2	Global MR + Preventive	\$1,409	\$9,253	\$0	\$0	\$10,662	73	77

Plan Year: 2024		Estimated Cost: \$31,984				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$7,439	\$0	\$0	\$0	\$7,439	73	73
R-1	Preventive	\$18,864	\$0	\$0	\$0	\$18,864	73	73
T-1	Preventive	\$4,484	\$0	\$0	\$0	\$4,484	68	68
T-2	Preventive	\$1,197	\$0	\$0	\$0	\$1,197	75	75

Plan Year: 2025		Estimated Cost: \$37,926				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$9,499	\$0	\$0	\$0	\$9,499	71	71
R-1	Preventive	\$21,896	\$0	\$0	\$0	\$21,896	71	72
T-1	Preventive	\$5,054	\$0	\$0	\$0	\$5,054	68	68
T-2	Preventive	\$1,476	\$0	\$0	\$0	\$1,476	73	73

Plan Year: 2026		Estimated Cost: \$45,335				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$13,280	\$0	\$0	\$0	\$13,280	69	69
R-1	Preventive	\$24,642	\$0	\$0	\$0	\$24,642	70	71
T-1	Preventive	\$5,683	\$0	\$0	\$0	\$5,683	67	67
T-2	Preventive	\$1,729	\$0	\$0	\$0	\$1,729	72	72

Plan Year: 2027		Estimated Cost: \$54,838				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-1	Preventive	\$18,011	\$0	\$0	\$0	\$18,011	67	67
R-1	Preventive	\$28,434	\$0	\$0	\$0	\$28,434	70	70
T-1	Preventive	\$6,432	\$0	\$0	\$0	\$6,432	66	66
T-2	Preventive	\$1,961	\$0	\$0	\$0	\$1,961	71	71

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A-1, Overview with crack



R-1, Overview



R-1, Surface detail with crack



T-1, Overview

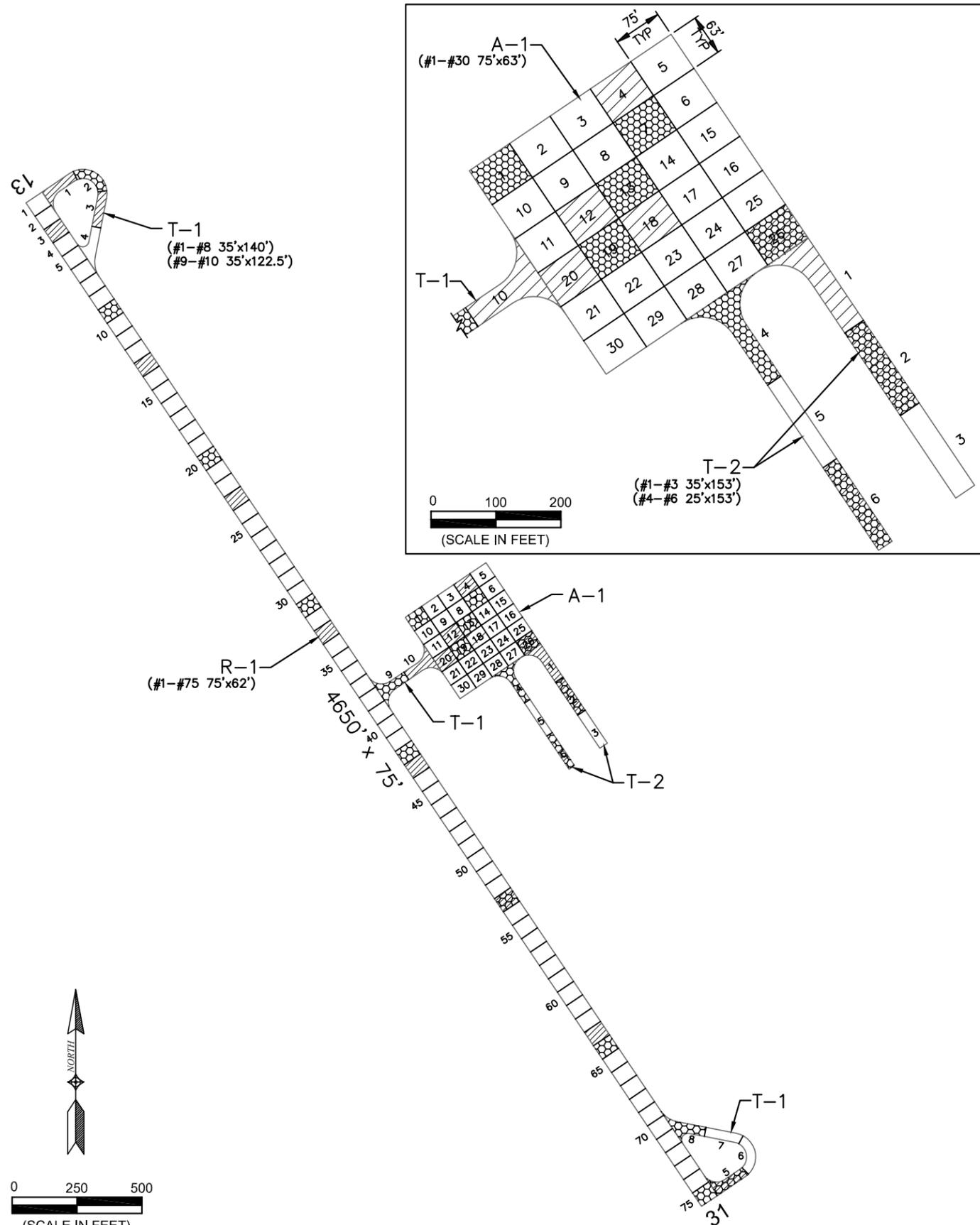
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T-1, Surface detail with crack

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PAVEMENT STRENGTH SURVEY/PAVEMENT CONDITION SURVEY

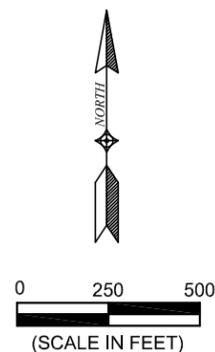
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PAVE. IDENT.	SOIL CLASS	SUB GRADE CLASS	SUBBASE COURSE	BASE COURSE	SURFACE COURSE	OVERLAY	PAVEMENT STRENGTH			REMARKS
							MAX. GROSS LOAD (LBS)			
							SINGLE	DUAL	DUAL TAN.	
RUNWAYS										
R-1	CBR=7.2	6" COMP. P-152 & FILTER FABRIC	8" P-154	3" P-208	3" P-401		12,500			1 2
TAXIWAYS										
T-1	CBR=7.2	6" COMP. P-152 & FILTER FABRIC	8" P-154	3" P-208	3" P-401		12,500			1 2
T-2	CBR=7.2	6" COMP. P-152 & FILTER FABRIC	8" P-154	3" P-208	3" P-401		12,500			1 2
APRONS										
A-1	CBR=7.2	6" COMP. P-152 & FILTER FABRIC	8" P-154	3" P-208	3" P-401		12,500			1 2

REMARKS:

1 AIP-005, 2006, ALL NEW CONSTRUCTION

2 AIP-008, 2011, CRACK SEAL, FOG SEAL AND REMARK ALL PAVEMENTS



LEGEND 1997 SURVEY AREA (NOT SURVEYED) 2000 SURVEY AREA (NOT SURVEYED) 2003 SURVEY AREA (NOT SURVEYED) 2006 SURVEY AREA (NOT SURVEYED) 2009 SURVEY AREA 2012 SURVEY AREA	DATE OF PAVEMENT STRENGTH SURVEY:		MONTANA AVIATION SYSTEM PLAN 2012 UPDATE - PAVEMENT CONDITION INDEXES
	EVALUATED BY:		
	DATE OF MOST RECENT PAVEMENT CONDITION SURVEY:	AUG. 29, 2012	PREPARED FOR:
	EVALUATED BY:	J. WALLA	
			PLAINS MONTANA DATE: DEC. 2012