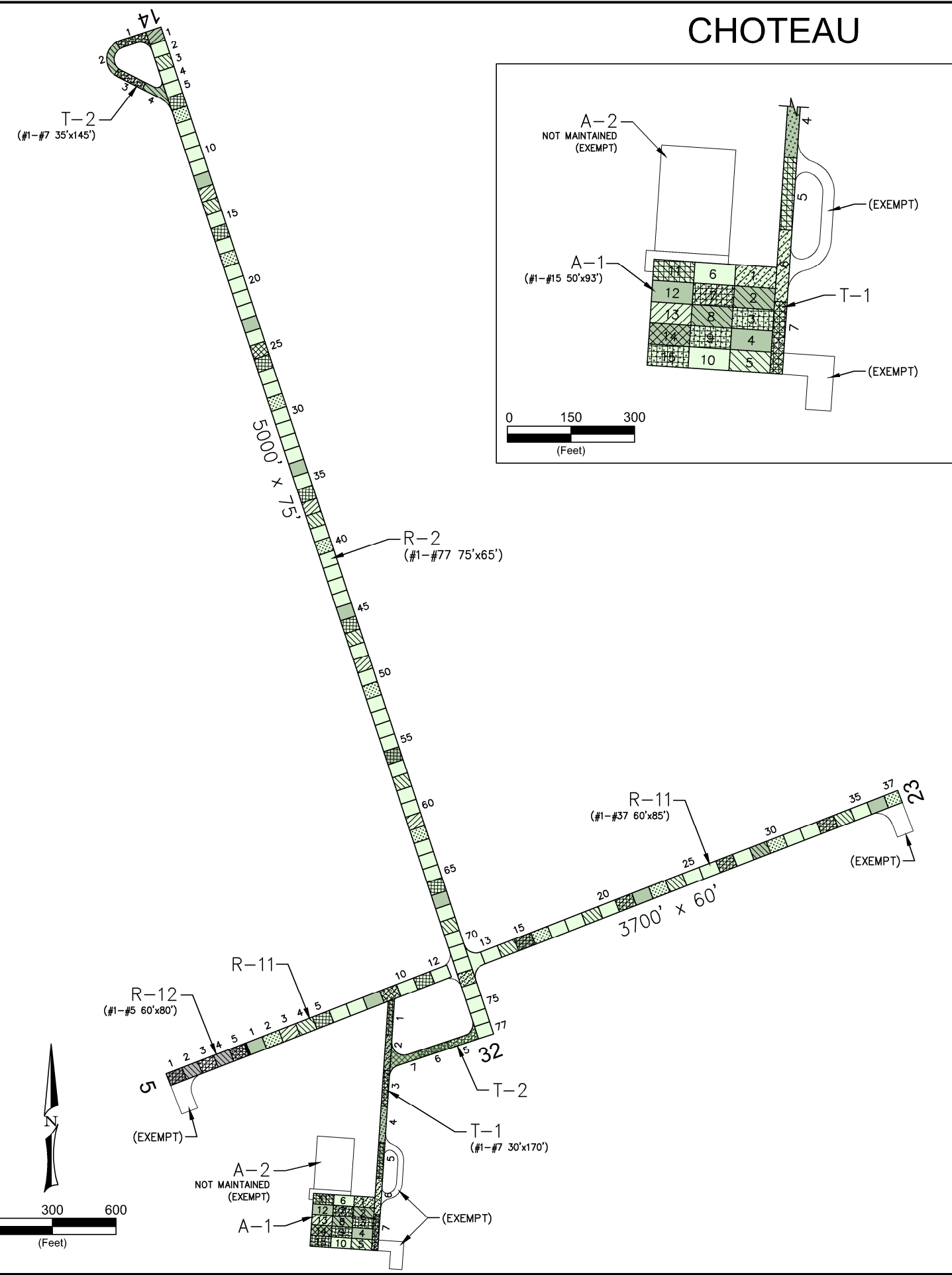


CHOTEAU

PAVEMENT STRENGTH SURVEY/PAVEMENT CONDITION SURVEY

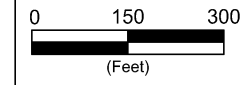
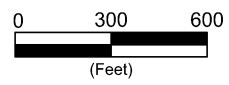


PAVE. IDENT.	SOIL CLASS	SUB GRADE CLASS	SUBBASE COURSE	BASE COURSE	SURFACE COURSE	OVERLAY	PAVEMENT STRENGTH			REMARKS
							MAX. GROSS LOAD (LBS)			
							SINGLE	DUAL	DUAL TAN.	
RUNWAYS										
R-11	E-7	F7	6" P-154	6" P-208, 6" P-207, 1" P-208	2" P-401	P-609	24,000			2,3,4
R-12			5.5" P-154 WITH FABRIC	6.5" P-208	2" P-401	P-609	24,000			2,3,4
R-2			7.5" P-154 WITH FABRIC	6.5" P-208	3" P-401	P-609	24,000			2,3,4
TAXIWAYS										
T-1	E-7	F7		5" P-208, 6" P-207, 1" P-208	3" P-401	P-609	24,000			1,2,3,4
T-2			7.5" P-154 WITH FABRIC	6.5" P-208	3" P-401	P-609	24,000			2,3,4
APRONS										
A-1	E-7	F7	6" P-154	5" P-208, 6" P-207, 1" P-208	3" P-401	P-609	24,000			2,3,4
A-2	E-7	F7			UNKNOWN		4,000			

REMARKS:

- ADAP-01, P-216 = COLD MIX ASPHALT
- AIP-03, 2001, RECONSTRUCT (R-11), EXTEND (R-12) RUNWAY 5/23; CONSTRUCT RUNWAY 14/32 (R-2), TURNAROUND (T-2); RECONSTRUCT PORTION OF TAXIWAY A (T-1); CONSTRUCT TAXIWAY B (T-2); RECONSTRUCT APRON (A-1).
- AIP-006-2007, CRACK SEAL, FOG SEAL, AND REMARK PAVEMENTS.
- AIP-007-2013, CRACK SEAL, FOG SEAL, AND REMARK PAVEMENTS.

LEGEND ■ 2003 SURVEY AREA ■ 2006 SURVEY AREA ■ 2009 SURVEY AREA ■ 2012 SURVEY AREA ■ 2015 SURVEY AREA ■ MAINTAIN: PCI > 60 ■ TRANSITION: PCI 45 TO 60 ■ RECONSTRUCT: PCI < 45	DATE OF PAVEMENT STRENGTH SURVEY:	SEPT. 22, 1987	MONTANA AVIATION SYSTEM PLAN 2015 UPDATE - PAVEMENT CONDITION INDEXES JOHN NORDHAGEN FIELD (CII)	
	EVALUATED BY:	C. NEW		
	DATE OF MOST RECENT PAVEMENT CONDITION SURVEY:	SEPT. 28, 2015	Date: DECEMBER 2015	Prepared For: MONTANA MDT DEPARTMENT OF TRANSPORTATION
	EVALUATED BY:	D. SCHANDEL	Prepared By: RPA Robert Peccia & Associates, Inc.	
LOCATION:	CHOTEAU MONTANA			



CHOTEAU AIRPORT

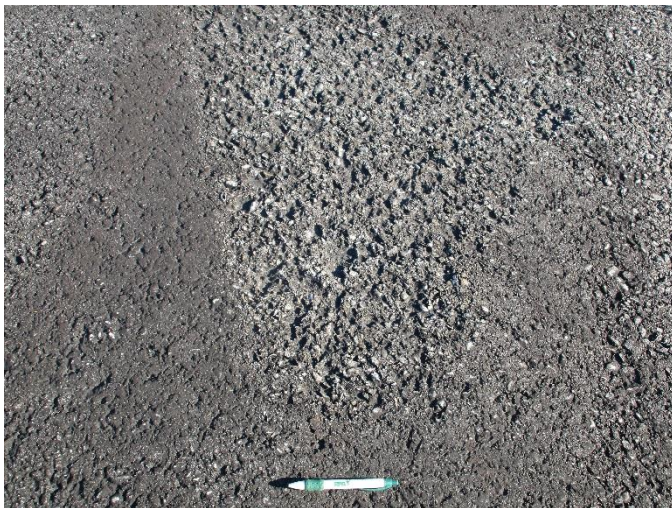
9/28/2015



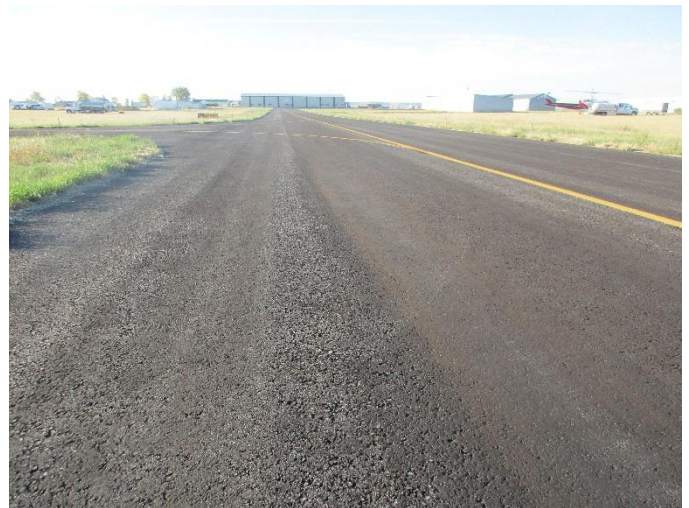
A-1, Overview with tie downs



A-1, Surface detail with bleeding



T-1, Surface detail with raveling



T-1, Overview

CHOTEAU AIRPORT

9/28/2015



T-2, Surface detail with gouge



T-2, Overview



R-2, Surface detail with raveling



R-2, Overview

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9/28/2015



R-11, Surface detail



R-11, Overview

CHOTEAU AIRPORT

Branch: 19A

APRON

A-1

Length: 181 LF **Width:** 256 LF **Area:** 46,336 SF **Last Const. :** 2001 **Family:** ACAM15
From: SOUTHERLY END OF APRON **To:** NORTH 256' **Surface:** AC

Inspections

Samples Surveyed: 5 **Total Samples:** 5 **Last Inspection Date (RPA)** 9/28/2015 **PCI:** 70

Sample # 1 **Area:** 4650 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	111 LF
RAVELING	L	93 SF
WEATHERING	L	93 SF
PATCHING	L	35 SF
BLEEDING	N	30 SF
DEPRESSION	H	7 SF
RAVELING	H	7 SF

Sample # 3 **Area:** 4650 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	116 LF
RAVELING	L	93 SF
WEATHERING	L	93 SF
PATCHING	L	25 SF
DEPRESSION	H	5 SF
RAVELING	H	5 SF
OIL SPILLAGE	N	3 SF

Sample # 7 **Area:** 4650 SF

Distress Description	Severity	Quantity
WEATHERING	L	93 SF
RAVELING	L	93 SF
LONGITUDINAL/TRANSVERSE CRACKING	L	9 LF
OIL SPILLAGE	N	10 SF
RAVELING	H	5 SF

Sample # 9 **Area:** 4650 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	31 LF
WEATHERING	L	93 SF
RAVELING	L	93 SF
PATCHING	L	1 SF

Sample # 15 **Area:** 4650 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	237 LF
BLEEDING	N	400 SF
WEATHERING	L	93 SF
RAVELING	L	93 SF
LONGITUDINAL/TRANSVERSE CRACKING	M	8 LF
RAVELING	H	10 SF
OIL SPILLAGE	N	4 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
DEPRESSION	H	24 SF	0.05 %	12.00
BLEEDING	N	857 SF	1.85 %	9.96
LONGITUDINAL/TRANSVERSE CRACKING	L	1004 LF	2.17 %	7.86
RAVELING	H	54 SF	0.12 %	6.67
LONGITUDINAL/TRANSVERSE CRACKING	M	16 LF	0.03 %	4.00
RAVELING	L	927 SF	2.00 %	3.99
PATCHING	L	122 SF	0.26 %	2.07
OIL SPILLAGE	N	34 SF	0.07 %	2.00
WEATHERING	L	927 SF	2.00 %	0.68

* 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 51.0 % Climate/Durability 49.0 % Other

CHOTEAU AIRPORT

Branch: 19R1

RUNWAY

R-11

Length: 3,300 LF **Width:** 60 LF **Area:** 198,000 SF **Last Const. :** 2001 **Family:** ACRML15
From: STA 17+00 **To:** STA 50+00 **Surface:** AC

Inspections

Samples Surveyed: 6 **Total Samples:** 7 **Last Inspection Date (RPA)** 9/28/2015 **PCI:** 75

Sample # 2 **Area:** 5100 SF

Distress Description	Severity	Quantity
WEATHERING	L	510 SF
LONGITUDINAL/TRANSVERSE CRACKING	L	130 LF
RAVELING	L	102 SF
BLEEDING	N	6 SF

Sample # 9 **Area:** 5100 SF

Distress Description	Severity	Quantity
WEATHERING	L	510 SF
LONGITUDINAL/TRANSVERSE CRACKING	L	80 LF
RAVELING	L	102 SF
RAVELING	M	25 SF

Sample # 16 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	247 LF
WEATHERING	L	510 SF
RAVELING	L	102 SF
WEATHERING	M	100 SF
RAVELING	H	4 SF
PATCHING	L	1 SF

Sample # 23 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	262 LF
WEATHERING	L	510 SF
RAVELING	L	102 SF
WEATHERING	M	100 SF
LONGITUDINAL/TRANSVERSE CRACKING	M	2 LF
RAVELING	H	4 SF
PATCHING	L	2 SF

Sample # 30 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	287 LF
WEATHERING	L	510 SF
RAVELING	L	102 SF
WEATHERING	M	100 SF
OIL SPILLAGE	N	10 SF

Sample # 37 **Area:** 5100 SF

Distress Description	Severity	Quantity
WEATHERING	L	510 SF
LONGITUDINAL/TRANSVERSE CRACKING	L	50 LF
RAVELING	L	102 SF
WEATHERING	M	100 SF
RAVELING	H	25 SF
PATCHING	L	1 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	6833 LF	3.45 %	11.19
RAVELING	H	214 SF	0.11 %	6.37
RAVELING	M	162 SF	0.08 %	4.00
LONGITUDINAL/TRANSVERSE CRACKING	M	13 LF	0.01 %	4.00
RAVELING	L	3960 SF	2.00 %	3.99
OIL SPILLAGE	N	65 SF	0.03 %	2.00
PATCHING	L	26 SF	0.01 %	2.00
WEATHERING	M	2588 SF	1.31 %	1.94
WEATHERING	L	19800 SF	10.00 %	1.72
BLEEDING	N	39 SF	0.02 %	0.00

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

CHOTEAU AIRPORT

Branch: 19R1

RUNWAY

R-11

Percent of Deduct Values Based on Distress Mechanism

0.0 % Load

95.0 % Climate/Durability

5.0 % Other

CHOTEAU AIRPORT

Branch: 19R2

RUNWAY

R-2

Length: 5,000 LF **Width:** 75 LF **Area:** 375,000 SF **Last Const. :** 2001 **Family:** ACRML15
From: Connecting TW (T-2) **To:** Jughandle (T-2) **Surface:** AC

Inspections

Samples Surveyed: 7 **Total Samples:** 77 **Last Inspection Date (RPA)** 9/28/2015 **PCI:** 75

Sample # 7 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	251 LF
RAVELING	L	96 SF
WEATHERING	L	96 SF
RAVELING	H	8 SF
DEPRESSION	L	3 SF
OIL SPILLAGE	N	1 SF

Sample # 18 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	226 LF
RAVELING	L	96 SF
WEATHERING	L	96 SF
OIL SPILLAGE	N	2 SF

Sample # 29 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	263 LF
WEATHERING	L	96 SF
RAVELING	L	96 SF
DEPRESSION	L	6 SF

Sample # 40 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	223 LF
RAVELING	L	96 SF
WEATHERING	L	96 SF
RAVELING	H	6 SF
RAVELING	M	5 SF

Sample # 51 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	217 LF
WEATHERING	L	96 SF
RAVELING	L	96 SF
SWELLING	L	12 SF

Sample # 62 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	196 LF
RAVELING	L	96 SF
WEATHERING	L	96 SF
DEPRESSION	L	32 SF

Sample # 73 **Distress Description** **Severity** **Quantity** **Area:** 4875 SF

LONGITUDINAL/TRANSVERSE CRACKING	L	260 LF
BLEEDING	N	180 SF
WEATHERING	L	96 SF
RAVELING	L	96 SF
RAVELING	H	60 SF
RAVELING	M	20 SF
PATCHING	L	2 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	17978 LF	4.79 %	14.32
RAVELING	H	813 SF	0.22 %	8.07
RAVELING	M	275 SF	0.07 %	4.00
RAVELING	L	7385 SF	1.97 %	3.95
BLEEDING	N	1978 SF	0.53 %	3.25
OIL SPILLAGE	N	33 SF	0.01 %	2.00
PATCHING	L	22 SF	0.01 %	2.00
SWELLING	L	132 SF	0.04 %	1.00
WEATHERING	L	7385 SF	1.97 %	0.68

CHOTEAU AIRPORT

Branch: 19R2

RUNWAY

R-2

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
DEPRESSION	L	451 SF	0.12 %	0.31

* 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	83.0 % Climate/Durability	17.0 % Other
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CHOTEAU AIRPORT

Branch: 19T

TAXIWAY

T-1

Length: 1,292 LF **Width:** 30 LF **Area:** 38,760 SF **Last Const. :** 2001 **Family:** ACRML15
From: RWY STA 13+50 **To:** APRON **Surface:** AC

Inspections

Samples Surveyed: 4 **Total Samples:** 4 **Last Inspection Date (RPA)** 9/28/2015 **PCI:** 75

Sample # 2 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	141 LF
WEATHERING	L	119 SF
RAVELING	L	119 SF
RAVELING	M	80 SF
BLEEDING	N	29 SF
RAVELING	H	3 SF
OIL SPILLAGE	N	1 SF

Sample # 4 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	147 LF
RAVELING	L	119 SF
WEATHERING	L	119 SF
RAVELING	M	90 SF
RAVELING	H	5 SF

Sample # 6 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	61 LF
RAVELING	L	119 SF
WEATHERING	L	119 SF
BLEEDING	N	40 SF
RAVELING	H	3 SF
PATCHING	L	1 SF

Sample # 7 **Area:** 5100 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	57 LF
WEATHERING	L	119 SF
RAVELING	L	119 SF
RAVELING	H	12 SF
OIL SPILLAGE	N	4 SF
PATCHING	L	2 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	771 LF	1.99 %	7.38
RAVELING	M	323 SF	0.83 %	7.36
RAVELING	H	44 SF	0.11 %	6.56
RAVELING	L	904 SF	2.33 %	4.37
BLEEDING	N	131 SF	0.34 %	2.35
OIL SPILLAGE	N	10 SF	0.02 %	2.00
PATCHING	L	6 SF	0.01 %	2.00
WEATHERING	L	904 SF	2.33 %	0.73

* 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 87.0 % Climate/Durability 13.0 % Other

CHOTEAU AIRPORT**FIFTEEN YEAR PROJECTIONS: ESTIMATED AVERAGE ANNUAL COST: \$302,598**

PLAN YEAR: 2016			ESTIMATED COST:			\$751,741	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-2	Prev. & Thin AC	\$1,354	\$69,342			\$70,696	73	81
R-2	Prev. & Seal Coat	\$12,796	\$105,000			\$117,796	74	77
R-11	Prev. & Thin AC	\$6,756	\$386,100			\$392,856	74	83
A-1	Prev. & Thin AC	\$3,133	\$90,355			\$93,488	68	82
T-1	Prev. & Thin AC	\$1,323	\$75,582			\$76,905	74	83
PLAN YEAR: 2017			ESTIMATED COST:			\$14,569	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-2	Basic Prev.	\$522				\$522	79	79
T-1	Basic Prev.	\$385				\$385	80	80
R-11	Basic Prev.	\$1,965				\$1,965	80	80
R-2	Basic Prev.	\$10,937				\$10,937	75	76
A-1	Basic Prev.	\$760				\$760	79	79
PLAN YEAR: 2018			ESTIMATED COST:			\$19,289	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Basic Prev.	\$643				\$643	79	79
T-2	Basic Prev.	\$776				\$776	77	77
A-1	Basic Prev.	\$1,299				\$1,299	76	76
R-11	Basic Prev.	\$3,284				\$3,284	79	79
R-2	Basic Prev.	\$13,287				\$13,287	74	74
PLAN YEAR: 2019			ESTIMATED COST:			\$24,243	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
R-2	Basic Prev.	\$15,749				\$15,749	73	73
T-1	Basic Prev.	\$923				\$923	77	77
A-1	Basic Prev.	\$1,837				\$1,837	73	74
R-11	Basic Prev.	\$4,716				\$4,716	77	77
T-2	Basic Prev.	\$1,018				\$1,018	76	76
PLAN YEAR: 2020			ESTIMATED COST:			\$29,365	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1	Basic Prev.	\$2,376				\$2,376	71	71
T-1	Basic Prev.	\$1,192				\$1,192	76	76
T-2	Basic Prev.	\$1,257				\$1,257	75	75
R-2	Basic Prev.	\$18,453				\$18,453	72	72
R-11	Basic Prev.	\$6,087				\$6,087	76	76
PLAN YEAR: 2021			ESTIMATED COST:			\$156,927	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1	Basic Prev.	\$3,277				\$3,277	69	69
T-1	Basic Prev.	\$1,459				\$1,459	74	74
R-2	Prev. & Seal Coat	\$21,510	\$121,724			\$143,234	70	73
T-2	Basic Prev.	\$1,502				\$1,502	73	73
R-11	Basic Prev.	\$7,455				\$7,455	74	74
PLAN YEAR: 2022			ESTIMATED COST:			\$36,131	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1	Basic Prev.	\$4,559				\$4,559	67	67
T-1	Basic Prev.	\$1,736				\$1,736	73	73
T-2	Basic Prev.	\$1,765				\$1,765	72	72
R-2	Basic Prev.	\$19,202				\$19,202	72	72
R-11	Basic Prev.	\$8,869				\$8,869	73	73
PLAN YEAR: 2023			ESTIMATED COST:			\$42,764	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-1	Basic Prev.	\$2,035				\$2,035	72	72
A-1	Basic Prev.	\$5,898				\$5,898	65	65
R-2	Basic Prev.	\$22,379				\$22,379	70	70
R-11	Basic Prev.	\$10,393				\$10,393	72	72
T-2	Basic Prev.	\$2,059				\$2,059	71	71

PLAN YEAR: 2024			ESTIMATED COST:			\$54,033	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1	Basic Prev.	\$7,314				\$7,314	63	63
T-2	Basic Prev.	\$2,621				\$2,621	69	69
R-2	Basic Prev.	\$29,595				\$29,595	69	69
T-1	Basic Prev.	\$2,374				\$2,374	70	71
R-11	Basic Prev.	\$12,129				\$12,129	70	71

PLAN YEAR: 2025			ESTIMATED COST:			\$70,983	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-2	Basic Prev.	\$3,526				\$3,526	67	68
R-11	Basic Prev.	\$15,965				\$15,965	69	69
A-1	Basic Prev.	\$8,833				\$8,833	60	61
R-2	Basic Prev.	\$39,534				\$39,534	67	67
T-1	Basic Prev.	\$3,125				\$3,125	69	69

PLAN YEAR: 2026			ESTIMATED COST:			\$1,068,984	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-2	Prev. & Thin AC	\$4,626	\$93,190			\$97,816	65	74
R-11	Prev. & Thin AC	\$21,342	\$518,885			\$540,227	67	75
R-2	Prev. & Seal Coat	\$51,605	\$141,111			\$192,717	65	69
T-1	Prev. & Thin AC	\$4,178	\$101,576			\$105,754	67	75
A-1	Prev. & Thin AC	\$11,041	\$121,430			\$132,470	58	70

PLAN YEAR: 2027			ESTIMATED COST:			\$58,659	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1	Basic Prev.	\$4,849				\$4,849	67	68
R-11	Basic Prev.	\$9,734				\$9,734	74	74
T-1	Basic Prev.	\$1,906				\$1,906	74	74
R-2	Basic Prev.	\$40,229				\$40,229	67	67
T-2	Basic Prev.	\$1,941				\$1,941	73	73

PLAN YEAR: 2028			ESTIMATED COST:			\$75,100	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
R-11	Basic Prev.	\$11,472				\$11,472	72	72
R-2	Basic Prev.	\$52,716				\$52,716	65	65
T-1	Basic Prev.	\$2,246				\$2,246	72	72
T-2	Basic Prev.	\$2,271				\$2,271	71	71
A-1	Basic Prev.	\$6,395				\$6,395	65	65

PLAN YEAR: 2029			ESTIMATED COST:			\$94,696	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
T-2	Basic Prev.	\$2,700				\$2,700	70	70
R-11	Basic Prev.	\$13,399				\$13,399	71	71
T-1	Basic Prev.	\$2,623				\$2,623	71	71
A-1	Basic Prev.	\$8,016				\$8,016	63	63
R-2	Basic Prev.	\$67,958				\$67,958	63	63

PLAN YEAR: 2030			ESTIMATED COST:			\$2,041,481	PCI	
SectionID	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	before	after
A-1	Basic Prev.	\$9,749				\$9,749	61	61
T-2	Basic Prev.	\$3,684				\$3,684	68	68
T-1	Basic Prev.	\$3,242				\$3,242	69	70
R-11	Basic Prev.	\$16,561				\$16,561	69	70
R-2	Reconstruct			\$2,008,245		\$2,008,245	60	100