COLS	STRIP	AIRPO	RT			Bran	ch:	48A	APRON		A-1
Length:	220 LF	Width:	300 LF	Area:	66,000 S	F	Last	Const: 2008		Family:	ACAM
From:	ENTIRE A	APRON		To:						Surface:	AAC
					Inspection	ıs					
Samples S	urveyed:	4	,	Fotal Samples:	12	Last Insp	ection	Date: 9/5/	2012	PCI:	91
Sample #	3								Area	5,500	SF
		Distress De				Severit	ty	Quantity	1		
		OIL SPILL				N		5 SF			
		WEATHER	RING			L		5,500 SF			
Sample #	4								Area:	5,500	SF
•		Distress Do	escription			Severit	tv	Quantity		2,000	01
				RANSVERSE C	RACKING	L		102 LF			
		WEATHER				L		5,500 SF			
Commis #	6							,			~-
Sample #	0	Distress De	carintian			C!4	L.	0	Area:	5,500	SF
				RANSVERSE C	DACKINIC	Severit L	L y	Quantity 5 LF	/		
		WEATHER		CAINS VERSE C.	RACKING	L					
		WEATHER	divo			L		5,500 SF			
Sample #	9								Area:	5,500	SF
		Distress De				Severit	y	Quantity	,		
				RANSVERSE C	RACKING	L		5 LF			
		WEATHER	ING			L		5,500 SF			
		V-L		Extrapo	lated Distress	Ouantities	s*				
		Distress De				Severit		Quantity	Dens	ity	Deduct
		LONGITUI	DINAL/TF	ANSVERSE C	RACKING	L		336 SF	0.00)%	4.08
		OIL SPILLA				N		15 LF	2.49	9%	2.00
		WEATHER	JNG			L	(56,000 SF	50.00)%	5.96
* Multiple de	educt values	are scaled dov	vn from the	ir algebraic sum t	o keep the mod	el consistent	t with	experimental d	ata.		
			Perc	ent of Deduct V	alues Based	on Distress	Mec	hanism			
		,	% Load		%	Climate/D	urabi	lity			% Other

COLS	STRIP	AIRPOI	RT			Bran	ch:	48R	RUNWA	AY		R-1
Length:	5,100 LF	Width:	75 LF	Area:	382,500	SF	Last	Const: 200	8		Family:	ACRM.
From:	R/W 6-24	STA 0+00		To:	R/W 6-24 S	TA 51+00		_			Surface:	AA
					Inspecti	ons						
Samples S	Surveyed:	7	Tot	al Samples:	78	Last Insp	ectio	n Date: 9/	5/2012		PCI:	92
Sample #	1									Area:	4,875 S	F
		Distress Des	scription			Severit	ty	Quanti			.,	
		RAVELING				L		49 SF				
		WEATHERI	ING			L		4,875 SF				
Sample #	12								1	Area:	4,875 S	F
•		Distress Des	scription			Severit	tv	Quanti			1,075 6	1
		RAVELING	-			L	-0	49 SF	,			
		WEATHERI				L		4,875 SF				
Sample #	23								,	Area:	4,875 S	E
oumpre n		Distress Des	cription			Severit	hv	Quanti		u ca.	4,073 3	1
		WEATHERI	-			L	y	4,875 SF	ity			
						L		1,075 51				
Sample #	34	DI								rea:	4,875 S	F
		Distress Des				Severit	y	Quanti	ty			
		RAVELING				L		49 SF				
		WEATHERI	.NG			L		4,875 SF				
Sample#	45								A	rea:	4,875 S	F
		Distress Des	cription			Severit	y	Quanti	ty			
		RAVELING				L		49 SF				
		WEATHERI	NG			L		4,875 SF				
Sample #	56								A	Area:	4,875 S	F
_		Distress Des	cription			Severit	v	Quanti			.,	_
		WEATHERI	NG			L	•	4,875 SF	•			
Sample #	67								A	rea:	4,875 S	F
		Distress Des	cription			Severit	v	Quanti		u ca.	+,013 3	ı
		RAVELING	071pt1011			L	J	49 SF	· y			
		WEATHERI	NG			L		4,875 SF				
				Extran	olated Distre	ss Quantitia	e*					
		Distress Desc	cription	Laudp	Junea Distre	Severit		Quanti	tv	Density	V	Deduct
		RAVELING	-			L	•	2,746 SF		0.15%		2.16
		WEATHERI	NG			L	3	82,500 SF		0.32%		5.96

^{*} 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**

0.0 % Load

0.0 **% Other**

COLST	TRIP A	IRPO	RT				Bra	nch:	48T	TAXI	WAY		T-1
Length: From: R	780 LF JW6-24 ST	Width: A 50+88	35 LF		Area: To:	27,300 SF R/W 6-24 ST <i>A</i>		Last	Const: 2	2008		Family: Surface:	ACRML AAC
						Inspections							
Samples Sur	veyed:	3	,	Fotal Sa	mples:	6	Last Insp	oectio	n Date:	9/5/2012		PCI:	94
Sample # 1		Distress De WEATHER	-				Sever	ity	Qua 4,760 S		Area:	4,760	SF
Sample # 3	1	Distress De: WEATHER	•				Severi L	ity	Qua 4,760 S		Area:	4,760	SF
Sample # 5		Distress Des	_				Severi L	ity	Qua i 4,760 S		Area:	4,760	SF
				E	xtrapol	ated Distress (Quantitie	S*					
		Distress Des WEATHERI					Severi L		Qua 27,300 S		Density 72.00%	•	Deduct 5.96
* Multiple ded	uct values a	e scaled dow	n from the	eir algebra	aic sum t	o keep the mode	l consister	nt with	experime	ntal data.			
			Perc	ent of D	educt V	alues Based or	n Distres	s Mec	hanism				

100.0 % Climate/Durability

COLST	RIP A	AIRPOI	RT			Branch:	48T	TAXI	WAY		T-2
	560 LF W 6-24 V	Width: WEST TURN	35 LF AROUND	Area: To:	19,600 SF	Las	st Const:	2008		family: urface:	ACRML AAC
					Inspections						
Samples Surv	veyed:	3	Tot	al Samples: 4		Last Inspecti	on Date:	9/5/2012	1	PCI:	94
Sample # 1		Distress Des				Severity L	Qua 4,900	ntity SF	Area:	4,900 5	F
Sample# 2		Distress Des				Severity L	Qua 4,900	ntity SF	Area:	4,900 S	F
Sample # 3		Distress Des	1000			Severity L	Qua 4,900	ntity SF	Area:	4,900 S	F
				Extrapolate	d Distress (Quantities*					
		Distress Des WEATHERI	7.00			Severity L	Qua 19,600	ntity LF	Density 1.03%		Deduct 5,96
* Multiple dedu	et values a	re scaled down	from their a	lgebraic sum to k	eep the mode	consistent with	experimen	ntal data.			
			Percent	of Deduct Valu	ies Based or	n Distress Me	chanism				
		0.0 %	6 Load		100.0 %	Climate/Dura	bility			0.0 %	6 Other

FIRST YE	EAR LOCAL: 2013					LOCAL REP	AIR COST:	\$6	592
Section A-1	Distress Description OIL SPILLAGE	Severity N	Quantity 15 SF	Work Description Patching - AC Shall		Quantity 35 SF	Cost \$692	Po PREV.	liev
FIFTEEN	YEAR PROJECTIONS			ESTIMA	TED AVE	RAGE ANNU	AL COST:	\$37	,977
Plan Year:				Estir	nated Cost:	\$112,258		P	CI
Section	Maintenance	Local	Global		Major>Crit		Total	Before	Afte
A-1 R-1	Global MR + Preventive Global MR + Preventive	\$75 \$57	\$16,500 \$95,626	\$0 \$0	\$0 \$0		\$16,575 \$95,683	89 ⁻ 90	97 98
Plan Year:					nated Cost:	\$94			CI
Section T-1	Maintenance Preventive	Local	Global		Major>Crit		Total	Before	Afte
T-2	Preventive	\$55 \$39	\$0 \$0	\$0 \$0	\$0 \$0		\$55 \$39	88 88	88 88
Plan Year:	2015			Estir	nated Cost:	\$350		P	CI
Section	Maintenance	Local	Global	Major <crit n<="" td=""><td>Aajor>Crit</td><td></td><td>Total</td><td>Before</td><td>After</td></crit>	Aajor>Crit		Total	Before	After
A-1	Preventive	\$67	\$0	\$0	\$0		\$67	89	89
R-1 T-1	Preventive Preventive	\$30 \$147	\$0 \$0	\$0	\$0		\$30	90	90
Т-2	Preventive	\$147 \$106	\$0 \$0	\$0	\$0		\$147	85	85
1-2	Tieventive	3100	30	\$0	\$0		\$106	85	85
Plan Year:					nated Cost:	\$2,150			CI
Section A-1	Maintenance	Local	Global		lajor>Crit		Total	Before	After
A-1 R-1	Preventive Preventive	\$310 \$1,437	\$0 \$0	\$0	\$0		\$310	86	86
Γ-1	Preventive	\$1,437	\$0 \$0	\$0 \$0	\$0 \$0		\$1,437	87 82	87
Γ-2	Preventive	\$169	\$0	\$0 \$0	\$0		\$235 \$169	82 82	82 82
Plan Year:	2017			Estin	antad Contr	£2 000		D.	CI
Section	Maintenance	Local	Global		nated Cost:	\$3,899	Total	Before	After
\-I	Preventive	\$551	\$0	S0	SO SO	-	\$551	83	83
R-1	Preventive	\$2,760	\$0	\$0	\$0		\$2,760	84	84
Γ-1	Preventive	\$343	\$0	\$0	\$0		\$343	80	80
Γ-2	Preventive	\$246	\$0	\$0	\$0		\$246	80	80
Plan Year:	2018			Estin	nated Cost:	\$135,909		PC	CI
Section	Maintenance	Local	Global		lajor>Crit		Total	Before	After
1-1	Global MR + Preventive	\$863	\$19,128	\$0	\$0		\$19,991	80	86
₹-1	Global MR + Preventive	\$3,996	\$110,857	\$0	\$0		\$114,852	81	87
Γ-1 Γ-2	Preventive Preventive	\$620 \$445	\$0 \$0	\$0 \$0	\$0 \$0		\$620 \$445	78 78	78 78
Plan Year:	2019				nated Cost:	£4 024		PC	
Section	Maintenance	Local	Global		lajor>Crit	34,724	Total	Before	After
N-1	Preventive	\$559	\$0	\$0	\$0		\$559	83	83
₹-1	Preventive	\$2,864	\$0	\$0	\$0		\$2,864	84	84
-1	Preventive	\$873	\$0	\$0	\$0		\$873	76	76
7-2	Preventive	\$627	\$0	\$0	\$0		\$627	76	76
Plan Year:				Estim	nated Cost:	\$6,907	7.4D 7	PC	CI
Section	Maintenance	Local	Global		lajor>Crit		Total	Before	After
	Preventive	\$821	\$0	\$0	\$0		\$821	80	80
	Preventive Preventive	\$4,182	\$0 \$0	\$0	\$0		\$4,182	81	81
	Preventive	\$1,108 \$795	\$0	\$0 \$0	\$0 \$0		\$1,108 \$795	74 74	74 74
Plan Year:	2021			Estim	ated Cost:	\$11.172		PC	71
	Maintenance	Local	Global		[ajor>Crit	Ψ11,1/2	Total	Before	After
	Preventive	\$1,752	\$0	\$0	\$0		\$1,752	77	77
R-1	Preventive	\$7,153	\$0	\$0	\$0		\$7,153	79	79
	Preventive Preventive	\$1,320 \$947	\$0 \$0	\$0 \$0	\$0 \$0		\$1,320 \$947	73 73	73
		J77/	30	φU	30		394/	13	73
Plan Year: Section	2022 Maintenance	Local	Global		ated Cost: ajor>Crit	\$16,595	Total	PC Before	
	Preventive	\$2,680	\$0	so	\$0		\$2,680	75	After 75
	Preventive	\$11.518	\$0	SO.	\$ ∩		\$11 31×	77	
R-1	Preventive	\$11,318 \$1,512	\$0 \$0	\$0 \$0	\$0 \$0		\$11,318 \$1,512	77 72	77 72

Plan Year:	2023			Es	stimated Cost:	\$172.336		P	CI	
Section	Maintenance	Local	Global	Major <crit< th=""><th>Major>Crit</th><th>+1.=,000</th><th>Total</th><th>Before</th><th>After</th></crit<>	Major>Crit	+1.=,000	Total	Before	After	
A-1	Global MR + Preventive	\$3,601	\$22,175	SO	SO		\$25,776	72	78	
R-1	Global MR + Preventive	\$15,153	\$128,513	\$0	\$0		\$143,666	75	79	
T-1	Preventive	\$1,684	\$0	\$0	\$0		\$1,684	71	71	
T-2	Preventive	\$1,209	\$0	\$0	\$0		\$1,209	71	71	
Plan Year:	2024			Es	Estimated Cost: \$17,749			PCI		
Section	Maintenance	Local	Global	Major <crit< td=""><td colspan="2"></td><td>Total</td><td>Before</td><td>After</td></crit<>			Total	Before	After	
A-I	Preventive	\$2,748	\$0	\$0	\$0		\$2,748	75	75	
R-1	Preventive	\$11,840	\$0	\$0	\$0		\$11,840	77	77	
T-1	Preventive	\$1,840	\$0	\$0	\$0		\$1,840	70	70	
T-2	Preventive	\$1,321	\$0	\$0	\$0		\$1,321	70	70	
Plan Year: 2025				Es	stimated Cost:	\$23,138		P	CI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td></td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit		Total	Before	After	
A-1	Preventive	\$3,730	\$0	\$0	\$0		\$3,730	73	73	
R-1	Preventive	\$15,924	\$0	\$0	\$0		\$15,924	75	75	
T-1	Preventive	\$2,028	\$0	\$0	\$0		\$2,028	70	70	
T-2	Preventive	\$1,456	\$0	\$0	\$0		\$1,456	70	70	
Plan Year:				Es	stimated Cost:	\$28,211		Pe	CI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td>•</td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit	•	Total	Before	After	
A-1	Preventive	\$4,710	\$0	\$0	\$0		\$4,710	70	70	
R-1	Preventive	\$19,637	\$0	\$0	\$0		\$19,637	74	74	
T-1	Preventive	\$2,249	\$0	\$0	\$0		\$2,249	69	69	
T-2	Preventive	\$1,615	\$0	\$0	\$0		\$1,615	69	69	
	Plan Year: 2027			Es	timated Cost:	\$33,961		Po	CI	
Section	Maintenance	Local	Global	Major <crit< td=""><td>Major>Crit</td><td></td><td>Total</td><td>Before</td><td>After</td></crit<>	Major>Crit		Total	Before	After	
A-1	Preventive	\$6,749	\$0	\$0	\$0		\$6,749	68	68	
R-1	Preventive	\$23,027	\$0	\$0	\$0		\$23,027	73	73	
T-1	Preventive	\$2,436	\$0	\$0	\$0		\$2,436	69	69	
T-2	Preventive	\$1,749	\$0	\$0	\$0		\$1,749	69	69	

9/5/2012



A-1, Oil spillage



A-1, Overview



A-1, Surface detail with crack



R-1, Overview

9/5/2012



R-1, Surface detail



T-1, Overview

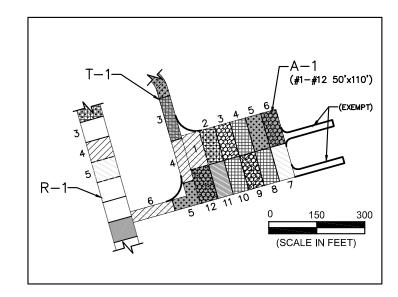


T-2, Overview

Engineering Planning Consulting

DEC. 2012

COLSTRIP



T-2 (#1-#4 35'x140')

T—1-(#1-#6 35'x136')

> R-1-(#1-#78 75'x65')

PAVEMENT STRENGTH SURVEY/PAVEMENT CONDITION SURVEY

D41/E	2011	SUB	01100405	5405	SURFACE		PAVE			
PAVE. IDENT.	SOIL CLASS	GRADE	SUBBASE COURSE	BASE COURSE	COURSE	OVERLAY	MAX. G	ROSS LO	AD (LBS)	REMARKS
		CLASS					SINGLE	DUAL	DUAL TAN.	
					RUNWAYS					
R-1		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			
					TAXIWAYS					
T-1		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			
T-2		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			
					APRONS					
A-1		CBR=2.8	6" P-152	9" P-208	3" P-401	2.5" P-403	12,500			444

- AIP-008, 2001, CRACK SEAL, FOG SEAL, AND REMARK ALL PAVEMENTS.
- \Rightarrow AIP-011, 2008, REHABILITATE (OVERLAY) RUNWAY 6-24 (R-1), TAXIWAY (T-1), TURNAROUND (T-2), AND APRON (A-1).

LEGEND		DATE OF PAVEMENT		MONTANA	AVIATION SYS	TEM DIAL
333	1997 SURVEY AREA	STRENGTH SURVEY:			- PAVEMENT CONDI	
	2000 SURVEY AREA	EVALUATED BY:		СО	LSTRIP AIRPO	DRT
	2003 SURVEY AREA	DATE OF MOST		PREPARED FOR:		PREPARED BY:
	2006 SURVEY AREA	RECENT PAVEMENT CONDITION SURVEY:	SEPT. 5, 2012	N. F. C.	COLSTRIP	
	2009 SURVEY AREA		·	A VIET BILLIANS	MONTANA	9
B	2012 SURVEY AREA	EVALUATED BY:	M. BECKHOFF			