

LINCOLN AIRPORT

Branch: 12A APRON **A-11**

Length: 387 LF Width: 142 LF Area: 54,954 SF Last Const: 2005 Family: ACAM
 From: APRON To: T-11 Surface: AC

Inspections

Samples Surveyed: 4 Total Samples: 12 Last Inspection Date: 9/12/2012 **PCI: 81**

Sample # 2 Area: 4,850 SF

Distress Description	Severity	Quantity
OIL SPILLAGE	N	8 SF
PATCHING	L	3 SF

Sample # 5 Area: 4,850 SF

Distress Description	Severity	Quantity
OIL SPILLAGE	N	10 SF
PATCHING	L	2 SF
RAVELING	L	100 SF
WEATHERING	L	3,640 SF
WEATHERING	M	1,210 SF

Sample # 8 Area: 4,850 SF

Distress Description	Severity	Quantity
OIL SPILLAGE	N	2 SF
PATCHING	L	6 SF
RAVELING	L	100 SF
WEATHERING	L	3,640 SF
WEATHERING	M	1,210 SF

Sample # 11 Area: 4,850 SF

Distress Description	Severity	Quantity
OIL SPILLAGE	N	15 SF
PATCHING	L	4 SF
RAVELING	L	500 SF
WEATHERING	L	3,700 SF
WEATHERING	M	1,150 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
WEATHERING	M	10,113 SF	100.00%	8.28
RAVELING	L	1,983 SF	25.00%	5.66
WEATHERING	L	31,103 SF	50.00%	5.08
OIL SPILLAGE	N	99 SF	25.00%	2.39
PATCHING	L	42 SF	25.00%	2.00

* 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 90.0 % Climate/Durability 10.0 % Other

LINCOLN AIRPORT

Branch: 12A APRON

A-2

Length: 164 LF **Width:** 110 LF **Area:** 18,040 SF **Last Const:** 2005 **Family:** ACAM
From: T-11 **To:** SOUTHWEST END **Surface:** AC

Inspections

Samples Surveyed: 3 **Total Samples:** 4 **Last Inspection Date:** 9/12/2012 **PCI:** 83

Sample # 1

Distress Description	Severity	Quantity
OIL SPILLAGE	N	1 SF
RAVELING	L	50 SF
WEATHERING	L	4,400 SF
WEATHERING	M	110 SF

Area: 4,510 SF

Sample # 2

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	5 LF
OIL SPILLAGE	N	2 SF
RAVELING	L	100 SF
RAVELING	H	1 SF
WEATHERING	L	4,059 SF
WEATHERING	M	451 SF

Area: 4,510 SF

Sample # 3

Distress Description	Severity	Quantity
RAVELING	L	50 SF
WEATHERING	L	4,059 SF
WEATHERING	M	451 SF

Area: 4,510 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	7 LF	83.33%	2.50
OIL SPILLAGE	N	4 SF	16.67%	2.00
RAVELING	L	267 F	66.67%	3.32
RAVELING	H	1 SF	33.33%	6.00
WEATHERING	L	16,691 SF	5.08%	5.89
WEATHERING	M	1,349 SF	6.29%	4.46

* 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

92.0 % Climate/Durability

8.0 % Other

LINCOLN AIRPORT

Branch: 12R

RUNWAY

R-11

Length: 4,240 LF **Width:** 75 LF **Area:** 318,000 SF **Last Const:** 2005 **Family:** ACRML
From: STA 20+00 RWY 4-22 **To:** STA 64+40 RWY 4-22 **Surface:** AC

Inspections

Samples Surveyed: 7 **Total Samples:** 64 **Last Inspection Date:** 9/12/2012 **PCI:** 79

Sample # 2 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	54 LF
RAVELING	L	950 SF
WEATHERING	L	3,900 SF
WEATHERING	M	975 SF

Sample # 11 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	25 LF
RAVELING	L	750 SF
WEATHERING	L	4,875 SF

Sample # 20 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	38 LF
RAVELING	L	490 SF
WEATHERING	L	4,875 SF

Sample # 29 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	82 LF
RAVELING	L	740 SF
WEATHERING	L	4,875 SF

Sample # 38 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	76 LF
RAVELING	L	950 SF
WEATHERING	L	4,875 SF

Sample # 47 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	66 LF
RAVELING	L	75 SF
WEATHERING	L	4,875 SF

Sample # 56 **Area:** 4,875 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	91 LF
RAVELING	L	50 SF
WEATHERING	L	4,875 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
LONGITUDINAL/TRANSVERSE CRACKING	L	4,026 SF	1.43%	5.54
RAVELING	L	37,321 SF	17.60%	10.64
WEATHERING	L	308,914 SF	98.57%	5.94
WEATHERING	M	9,086 SF	5.01%	2.60

* 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

LINCOLN AIRPORT

Branch: 12T

TAXIWAY

T-11

Length: 2,503 LF

Width: 25 LF

Area: 62,575 SF

Last Const: 2005

Family: ACRML

From: R-1 STA 43+70

To: R-1 STA 64+40

Surface: AC

Inspections

Samples Surveyed: 6

Total Samples: 13

Last Inspection Date: 9/12/2012

PCI: 75

Sample # 2

Area: 3,375 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	47 LF
RAVELING	L	200 SF
WEATHERING	L	2,700 SF
WEATHERING	M	675 SF

Sample # 5

Area: 5,000 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	24 LF
RAVELING	L	1,250 SF
WEATHERING	L	4,250 SF
WEATHERING	M	750 SF

Sample # 8

Area: 5,000 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	90 LF
RAVELING	L	200 SF
WEATHERING	L	5,000 SF

Sample # 11

Area: 5,000 SF

Distress Description	Severity	Quantity
RAVELING	L	750 SF
WEATHERING	L	5,000 SF

Sample # 14

Area: 3,375 SF

Distress Description	Severity	Quantity
LONGITUDINAL/TRANSVERSE CRACKING	L	12 LF
PATCHING	L	102 SF
RAVELING	L	1,180 SF
RAVELING	M	120 SF
WEATHERING	L	3,375 SF

Sample # 17

Area: 3,600 SF

Distress Description	Severity	Quantity
ALLIGATOR CRACKING	L	5 SF
LONGITUDINAL/TRANSVERSE CRACKING	L	65 LF
RAVELING	L	200 SF
WEATHERING	L	2,700 SF
WEATHERING	M	900 SF

Extrapolated Distress Quantities*

Distress Description	Severity	Quantity	Density	Deduct
ALLIGATOR CRACKING	L	12 LF	0.25%	7.00
LONGITUDINAL/TRANSVERSE CRACKING	L	587 SF	40.00%	4.82
PATCHING	L	252 SF	20.00%	2.28
RAVELING	L	9,331 SF	58.00%	11.95
RAVELING	M	296 SF	2.00%	6.03
WEATHERING	L	56,836 SF	10.31%	5.87
WEATHERING	M	5,739 SF	56.04%	5.11

* 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

16.0 % Load

84.0 % Climate/Durability

0.0 % Other

LINCOLN AIRPORT

FIRST YEAR LOCAL: 2013

LOCAL REPAIR COST: \$3,185

Section	Distress Description	Severity	Quantity	Work Description	Quantity	Cost	Policy
A-11	OIL SPILLAGE	N	99 SF	Patching - AC Shallow	143 SF	\$2,864	PREV.
A-2	OIL SPILLAGE	N	4 SF	Patching - AC Shallow	16 SF	\$321	PREV.

FIFTEEN YEAR PROJECTIONS

ESTIMATED AVERAGE ANNUAL COST: \$51,923

Plan Year: 2013		Estimated Cost: \$122,464					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Global MR + Preventive	\$692	\$13,739	\$0	\$0	\$14,431	79	86	
A-2	Global MR + Preventive	\$157	\$4,510	\$0	\$0	\$4,667	81	88	
R-11	Global MR + Preventive	\$6,104	\$79,501	\$0	\$0	\$85,604	78	83	
T-11	Global MR + Preventive	\$2,118	\$15,644	\$0	\$0	\$17,762	74	78	

Plan Year: 2014		Estimated Cost: \$5,406					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$421	\$0	\$0	\$0	\$421	83	83	
A-2	Preventive	\$100	\$0	\$0	\$0	\$100	85	85	
R-11	Preventive	\$3,192	\$0	\$0	\$0	\$3,192	80	80	
T-11	Preventive	\$1,693	\$0	\$0	\$0	\$1,693	76	76	

Plan Year: 2015		Estimated Cost: \$9,223					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$662	\$0	\$0	\$0	\$662	80	80	
A-2	Preventive	\$161	\$0	\$0	\$0	\$161	82	82	
R-11	Preventive	\$6,193	\$0	\$0	\$0	\$6,193	78	78	
T-11	Preventive	\$2,207	\$0	\$0	\$0	\$2,207	74	74	

Plan Year: 2016		Estimated Cost: \$13,504					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$1,331	\$0	\$0	\$0	\$1,331	77	77	
A-2	Preventive	\$295	\$0	\$0	\$0	\$295	79	79	
R-11	Preventive	\$9,201	\$0	\$0	\$0	\$9,201	76	76	
T-11	Preventive	\$2,678	\$0	\$0	\$0	\$2,678	73	73	

Plan Year: 2017		Estimated Cost: \$17,587					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$1,994	\$0	\$0	\$0	\$1,994	74	75	
A-2	Preventive	\$518	\$0	\$0	\$0	\$518	76	76	
R-11	Preventive	\$11,970	\$0	\$0	\$0	\$11,970	74	74	
T-11	Preventive	\$3,105	\$0	\$0	\$0	\$3,105	71	72	

Plan Year: 2018		Estimated Cost: \$152,834					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Global MR + Preventive	\$2,653	\$15,927	\$0	\$0	\$18,580	72	77	
A-2	Global MR + Preventive	\$739	\$5,228	\$0	\$0	\$5,968	74	79	
R-11	Global MR + Preventive	\$14,494	\$92,163	\$0	\$0	\$106,657	73	76	
T-11	Global MR + Preventive	\$3,494	\$18,136	\$0	\$0	\$21,629	70	73	

Plan Year: 2019		Estimated Cost: \$18,292					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$2,047	\$0	\$0	\$0	\$2,047	75	75	
A-2	Preventive	\$526	\$0	\$0	\$0	\$526	76	77	
R-11	Preventive	\$12,456	\$0	\$0	\$0	\$12,456	74	74	
T-11	Preventive	\$3,264	\$0	\$0	\$0	\$3,264	72	72	

Plan Year: 2020		Estimated Cost: \$22,369					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$2,752	\$0	\$0	\$0	\$2,752	72	72	
A-2	Preventive	\$762	\$0	\$0	\$0	\$762	74	74	
R-11	Preventive	\$15,173	\$0	\$0	\$0	\$15,173	73	73	
T-11	Preventive	\$3,681	\$0	\$0	\$0	\$3,681	71	71	

Plan Year: 2021		Estimated Cost: \$26,309					PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After	
A-11	Preventive	\$3,453	\$0	\$0	\$0	\$3,453	70	70	
A-2	Preventive	\$997	\$0	\$0	\$0	\$997	72	72	
R-11	Preventive	\$17,642	\$0	\$0	\$0	\$17,642	72	72	
T-11	Preventive	\$4,217	\$0	\$0	\$0	\$4,217	70	70	

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Plan Year: 2022		Estimated Cost: \$31,166				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-11	Preventive	\$5,019	\$0	\$0	\$0	\$5,019	68	68
A-2	Preventive	\$1,316	\$0	\$0	\$0	\$1,316	69	70
R-11	Preventive	\$19,883	\$0	\$0	\$0	\$19,883	71	71
T-11	Preventive	\$4,948	\$0	\$0	\$0	\$4,948	69	69

Plan Year: 2023		Estimated Cost: \$189,358				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-11	Global MR + Preventive	\$6,640	\$18,464	\$0	\$0	\$25,103	66	70
A-2	Global MR + Preventive	\$1,855	\$6,061	\$0	\$0	\$7,916	67	72
R-11	Global MR + Preventive	\$22,822	\$106,842	\$0	\$0	\$129,664	70	72
T-11	Global MR + Preventive	\$5,651	\$21,024	\$0	\$0	\$26,675	68	70

Plan Year: 2024		Estimated Cost: \$32,638				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-11	Preventive	\$5,150	\$0	\$0	\$0	\$5,150	68	68
A-2	Preventive	\$1,341	\$0	\$0	\$0	\$1,341	70	70
R-11	Preventive	\$20,950	\$0	\$0	\$0	\$20,950	71	71
T-11	Preventive	\$5,197	\$0	\$0	\$0	\$5,197	69	69

Plan Year: 2025		Estimated Cost: \$38,623				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-11	Preventive	\$6,871	\$0	\$0	\$0	\$6,871	66	66
A-2	Preventive	\$1,914	\$0	\$0	\$0	\$1,914	68	68
R-11	Preventive	\$23,896	\$0	\$0	\$0	\$23,896	70	70
T-11	Preventive	\$5,942	\$0	\$0	\$0	\$5,942	68	68

Plan Year: 2026		Estimated Cost: \$45,925				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-11	Preventive	\$8,619	\$0	\$0	\$0	\$8,619	64	64
A-2	Preventive	\$2,493	\$0	\$0	\$0	\$2,493	66	66
R-11	Preventive	\$28,114	\$0	\$0	\$0	\$28,114	69	69
T-11	Preventive	\$6,699	\$0	\$0	\$0	\$6,699	68	68

Plan Year: 2027		Estimated Cost: \$53,143				PCI		
Section	Maintenance	Local	Global	Major<Crit	Major>Crit	Total	Before	After
A-11	Preventive	\$10,399	\$0	\$0	\$0	\$10,399	62	63
A-2	Preventive	\$3,081	\$0	\$0	\$0	\$3,081	64	64
R-11	Preventive	\$32,130	\$0	\$0	\$0	\$32,130	68	68
T-11	Preventive	\$7,534	\$0	\$0	\$0	\$7,534	67	67

LINCOLN AIRPORT

9/12/2012



A-2, Surface detail with depression



A-11, Surface detail with depression



R-11, Overview



R-11, Surface detail with crack

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R-11, Surface detail with crack 2



T-11, Overview



T-11, Surface detail with crack



T-11, Surface detail with grinding

LINCOLN AIRPORT

9/12/2012

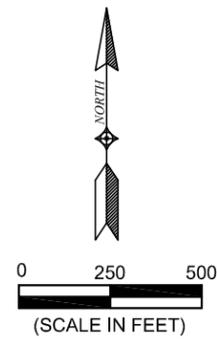
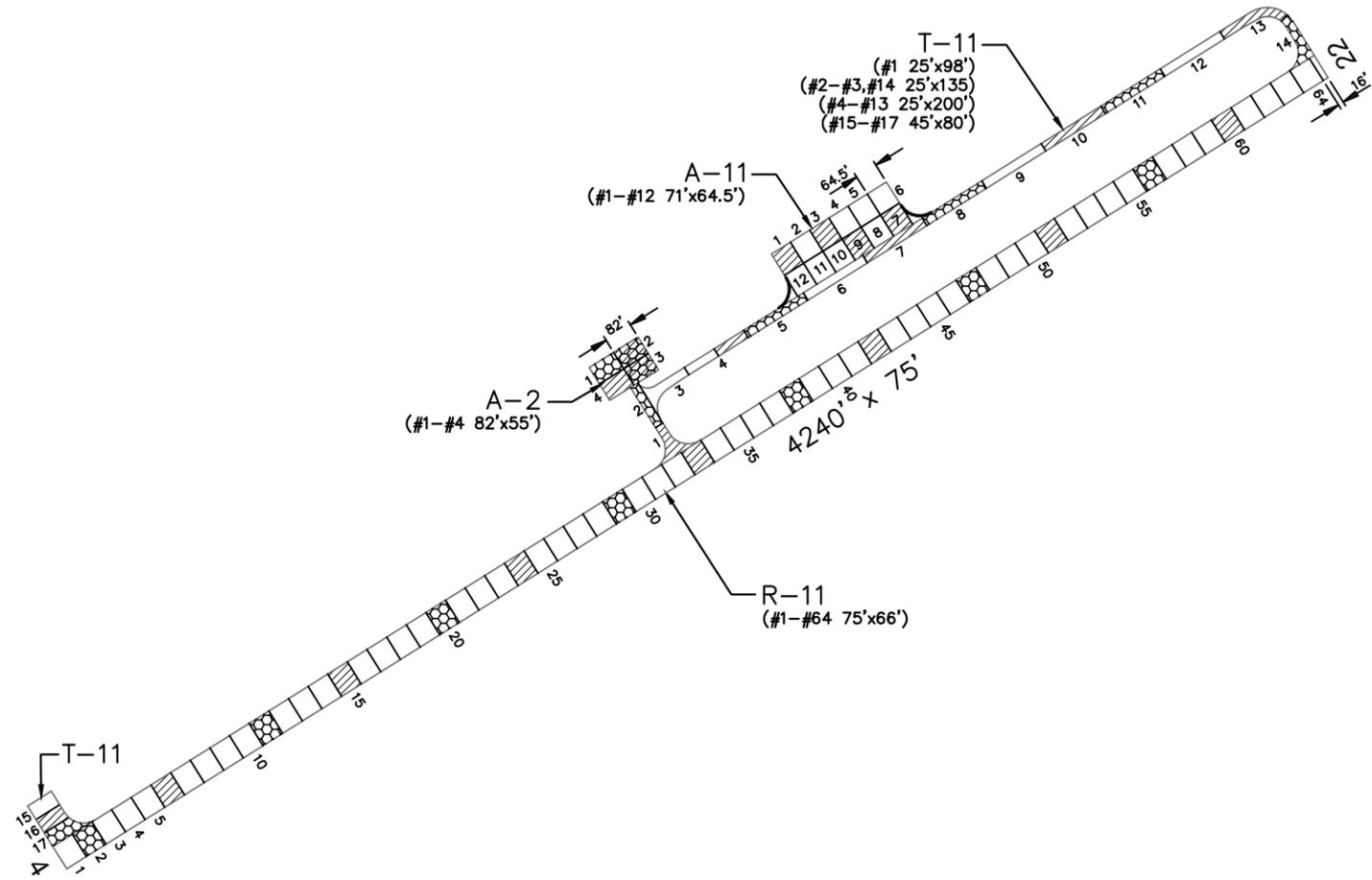


T-11, Surface detail patch

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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-6	F6	29" P-154	6.75" P-208	3" P-401		12,500			1 2
TAXIWAYS										
T-11	E-6	F6	29" P-154	6.75" P-208	3" P-401		12,500			1 2
APRONS										
A-11	E-6	F6	29" P-154	6.75" P-208	3" P-401		12,500			1 2
A-2			29" P-154	6.75" P-208	3" P-401		12,500			2

REMARKS:

1 AIP-001, 1984, RECONSTRUCT PORTIONS OF RUNWAY AND SURFACE RUNWAY; REHABILITATE TAXIWAY AND APRON.

2 AIP-004, 2005, ALL NEW CONSTRUCTION: RECONSTRUCT RUNWAY 4-22 (R-11), TAXIWAY (T-11), AND APRONS (A-11,A-2).

LEGEND 1997 SURVEY AREA 2000 SURVEY AREA 2003 SURVEY AREA (NOT SURVEYED) 2006 SURVEY AREA (NOT SURVEYED) 2009 SURVEY AREA 2009 SURVEY AREA	DATE OF PAVEMENT STRENGTH SURVEY:	OCT. 15, 1990	MONTANA AVIATION SYSTEM PLAN 2012 UPDATE - PAVEMENT CONDITION INDEXES
	EVALUATED BY:	J. STYBA	
	DATE OF MOST RECENT PAVEMENT CONDITION SURVEY:	SEPT. 12, 2012	LINCOLN LINCOLN MONTANA
	EVALUATED BY:	J. WALLA	
			PREPARED FOR:
			PREPARED BY:
			DATE: DEC. 2012