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2  
3 MODIFY 2003-2007 FIVE-YEAR CAPITAL PROJECT PLAN AND THE 2003 CAPITAL  
4 BUDGET TO ACCELERATE THE DESIGN FOR RUNWAY 18/36 RECONSTRUCTION  
5 AND STORM WATER MASTER PLAN AND MODIFY PROJECT SCOPE FOR  
6 PROJECT 200308 RUNWAY 18/36 RECONSTRUCTION TO  
7 INCLUDE A SOUTH PERIMETER ROAD  
8  
9

10 WHEREAS Waukesha County contracted for the completion of an Airport Master Plan under  
11 project 0767-44-18, and  
12

13 WHEREAS runway 18/36 and parallel taxiway C were identified as a priority in need of a  
14 complete reconstruction including lighting, correcting safety area grading deficiencies, relocating  
15 of antiquated storm water system that underlies the length of the runway, a south perimeter road,  
16 and  
17

18 WHEREAS runway 18/36 has been included in the five-year capital plan as project 200308 with  
19 \$135,000 for design in 2004 and \$305,000 for construction in 2006, and  
20

21 WHEREAS a storm water and utility master plan was identified in the Master Plan as necessary  
22 to determine what is currently in place and to develop a means to address the current deficiencies  
23 and remove the storm water system that underlies the runway, and  
24

25 WHEREAS the County Board requested and approved the storm water and utility mapping  
26 master plan be completed during the design phase of the 18/36 reconstruction in 2004 as project  
27 200312, and  
28

29 WHEREAS there is an opportunity for support to assist in the federal place-naming of these  
30 projects, making them eligible for cost sharing of up to 95/5 in federal fiscal year 2004 if  
31 approved by the federal government, and  
32

33 WHEREAS these projects need to be designed and ready for construction prior to the federal  
34 fiscal year in which the federal funds are allocated, and  
35

36 WHEREAS due to the number of priority projects in the Bureau of Aeronautics capital project  
37 plan exceeding funding levels, and hangar area projects not being considered priority, these  
38 projects will not be funded this year, and  
39

40 WHEREAS the Southeast Hangar Area Phase II was approved for construction and included in  
41 the Airport Capital Budget by the County Board in 2003, and  
42

43 WHEREAS the Southeast Hangar Area Phase II has sufficient grading work, which removal was  
44 identified for correcting the runway 18/36 safety area deficiencies, and  
45

46 WHEREAS all of these projects have relation to, and impact on, the reconstruction of runway  
47 18/36, thereby elevating them to priority level projects, and  
48

49 WHEREAS all of these projects can be designed within the funding limits in the current airport

50 capital budget for the Southeast Hangar Area Phase II.

51

52 THE COUNTY BOARD OF SUPERVISORS OF THE COUNTY OF WAUKESHA DOES  
53 ORDAIN that the 2003 capital budget is modified to increase project expenditure appropriations  
54 \$75,000 for Capital Project 200308 18/36 Reconstruction and \$77,500 for Capital Project  
55 200312 Storm Water Master Plan & Utility Mapping and decrease project expenditure  
56 appropriations \$152,500 for Capital Project 200021 Southeast Hangar Area Phase II to delay the  
57 construction of the Southeast Hangar Area Phase II and accelerate the runway 18/36 design,  
58 storm water and utility master plan and south perimeter road design in anticipation of possible  
59 funding levels of 95/5.

60

61 BE IT FURTHER ORDAINED that 2003-2007 Five Year Capital Plan is modified to delete  
62 2004 design funds of \$135,000 for Capital project 200308 18/36 Reconstruction and \$31,000 for  
63 Capital project 200312 Storm Water Master Plan & Utility Mapping.

64

65 BE IT FURTHER ORDAINED that the project scope for Capital project 200308 18/36  
66 Reconstruction is modified to include design work for a perimeter service road.

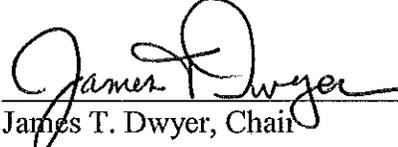
**MODIFY 2003-2007 FIVE-YEAR CAPITAL PROJECT PLAN AND THE 2003 CAPITAL BUDGET TO ACCELERATE THE DESIGN FOR RUNWAY 18/36 RECONSTRUCTION AND STORM WATER MASTER PLAN AND MODIFY PROJECT SCOPE FOR PROJECT 200308 RUNWAY 18/36 RECONSTRUCTION TO INCLUDE A SOUTH PERIMETER ROAD**

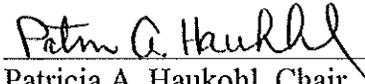
Presented by:  
Public Works Committee

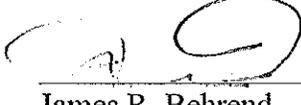
Approved by:  
Executive Committee

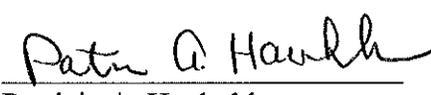
Approved by:  
Finance Committee

  
Richard L. Manke, Chair

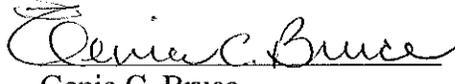
  
James T. Dwyer, Chair

  
Patricia A. Haukohl, Chair

  
James R. Behrend

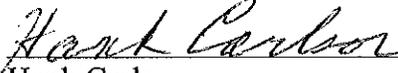
  
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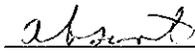
  
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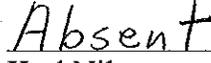
  
Kenneth C. Herro

  
Donald M. Broesch

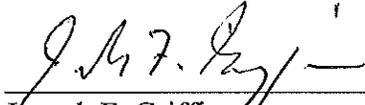
  
Hank Carlson

  
Walter L. Kolb

  
Genia C. Bruce

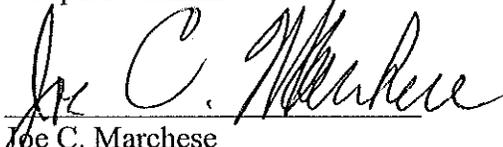
  
Karl Nilson

  
Richard L. Manke

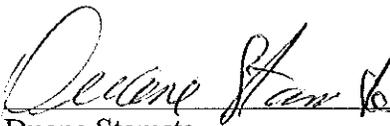
  
Joseph F. Griffin

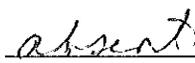
  
Rodell L. Singert

  
Duane E. Paulson

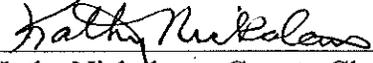
  
Joe C. Marchese

  
David W. Swan

  
Duane Stamsta

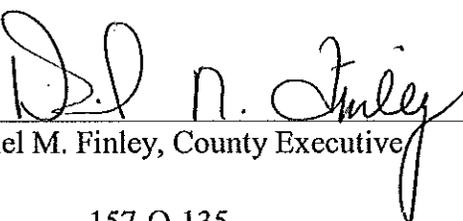
  
Michael Sommentag

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, was presented to the County Executive on:

Date: 3-28-03,   
Kathy Nickolaus, County Clerk

The foregoing legislation adopted by the County Board of Supervisors of Waukesha County, Wisconsin, is hereby:

Approved:    
Vetoed:

Date: 3-31-03,   
Daniel M. Finley, County Executive

NOTE: This sheet replaces the one yellow-copied to you. The addition to the five-year plan adopted project sheet is underlined.

Project #	A-200308-A	Project Title:	Runway 18/36 Reconstruction
Department:	Airport	Manager:	Keith Markano
Phase:	Formation		
Budget Action:	New	Date:	March 14, 2003, 11:28 AM

REVISED

CAPITAL BUDGET SUMMARY				
Year	2003	2004	2006	Total
Project Phase	Design	Design	Construction	Project
Expenditure Budget	\$75,000	\$0	\$305,000	\$380,000
Revenue Budget	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Net County Cost	\$75,000	\$0	\$305,000	\$380,000
<b>COST DOCUMENTATION</b>			<b>REVENUE</b>	
Construction		\$1,758,121	State of Wisconsin 20% FAA 60%	\$439,530 \$1,318,591
Design/Construction Admin. Administration		\$263,718 <u>\$175,812</u>	Project dependent on available Federal and/or State funding	
Total Project Cost		\$2,197,651	Total Revenue	\$1,758,121
<b>EXPENDITURE BUDGET</b>		<b>\$380,000</b>	<b>REVENUE BUDGET</b>	<b>\$0</b>

**Project Scope & Description**

Reconstruct the existing runway and east parallel taxiway in their current configuration, grade runway safety area for regulatory compliance and include a south perimeter road following FAA suggested guidelines for alleviating the need for vehicles, particularly fuel trucks from operating on the runway and taxiways, replace the runway edge light system, relocate the old storm sewer from underneath the runway and install edge lighting on taxiway C (the east parallel taxiway).

**Location**

East of the terminal building and west of the control tower.

**Analysis of Need**

Based on past records it appears the last time the runway was reconstructed was some time during the 1960's. An overlay of the pavement was completed in 1986 and is nearing the end of its 20 year design life. Based on pavement maintenance plans done in 1994 and 1997 the pavement was determined to reach its design life in 2001 (a new plan is currently being done). The annual maintenance, which was outlined in the plan has been completed following the proposed schedule. The pavement is currently in poor to fair condition. Some transverse cracks have appeared and they were patched in the fall of 2000. The patching done to date has begun to fail due to water infiltration below grade. From past borings done on the airport, it is possible that much of the runway was originally constructed on unsuitable material. Additionally, in October of 1999, The FAA issued Order 5200.8, *Runway Safety Area Program*. The RSA is intended to provide a measure of safety in the event of an aircraft excursion from the runway by significantly reducing the extent of personal injury (to both people on the ground and in the aircraft) and aircraft damage during overruns, undershoots and veer-offs. It is the objective of the Runway Safety Area Program that all RSA's at federally obligated airports conform to the standards set forth in FAA Advisory Circular (AC) 150/5300-13, *Airport Design*. As part of the Master Plan process there was a review of the RSA. The RSA for runway 18/36 does not meet the FAA requirements with respect to grading. The north end of the runway is several feet higher than the surrounding terrain and has a steep drop off at the end of the pavement. There are also trees and utility poles on the County land just across Bluemound Road, which need to be removed. Also, the existing storm sewer, which serves the County Expo Grounds flows under the runway. This system is very old and may include clay pipes in many areas under the runway. This system has collapsed in the past and it is recommended that it be replaced. Reconstruction of the runway would allow replacement of this system and also allow us to redirect the flow along the runway rather than underneath it, making future maintenance easier and less costly. Finally,

<b>Project #</b>	A-200308-A	<b>Project Title:</b>	Runway 18/36 Reconstruction
<b>Department:</b>	Airport	<b>Manager:</b>	Keith Markano
<b>Phase:</b>	Formation		
<b>Budget Action:</b>	New	<b>Date:</b>	March 14, 2003, 11:28 AM

the lighting system for the runway is very old (assumed last done in the 1960's) and is becoming an increasing maintenance problem. Several of the isolation transformers have failed to date and the jacketing on the cable has failed in many spots. There are several electrical ducts which pass underneath the runway, these ducts and the cable would be accessible during the reconstruction. Finally, taxiway C does not have any edge lighting, currently there are edge reflectors which do not afford the greatest visibility under adverse conditions. Many of these reflectors are damaged and/or faded and will require replacement. Some of the intersections along the taxiway do not have guidance signs, which is a safety issue. Where there are guidance signs, the signs are old and are becoming a maintenance problem and most of the legends are faded and need to be replaced.

**Alternatives**

Do nothing – we could continue to patch the runway on annual basis. If the rate of water infiltration into the sub-base continues or accelerates it would require closure of the runway to do a full depth repair on only those portions of the runway affected. These repairs would be very costly and would not guarantee the problem would not re-occur if the issue of water infiltration is not fully addressed. In essence, we could continue to operate as we are now for the short term but we could possibly see increased maintenance costs for the pavement and the lighting.

**Ongoing Operating Costs**

The operating costs would essentially be the same as they are now for snow removal. We would see a reduction in the maintenance costs but this is difficult to quantify, as there is no way to judge the current rate of deterioration statistically. Additionally, we would see some reduction in electrical related repairs as new lights and transformers would be installed.

**Previous Action**

None

V

DATE-03/25/03

(ORD) NUMBER-1570135

1 K. HERRO.....AYE  
 3 D. STAMSTA.....AYE  
 5 J. MARCHESE.....AYE  
 7 J. JESKEWITZ.....AYE  
 9 P. HAUKOHL.....AYE  
 11 K. HARENDA.....AYE  
 13 J. MORRIS.....  
 15 D. SWAN.....AYE  
 17 J. BEHREND.....AYE  
 19 M. SONNENTAG.....  
 21 W. KOLB.....AYE  
 23 P. PRONOLD.....AYE  
 25 K. CUMMINGS.....AYE  
 27 D. PAULSON.....AYE  
 29 M. THOMAS.....AYE  
 31 V. STROUD.....AYE  
 33 D. PAVELKO.....AYE  
 35 C. SEITZ.....AYE

2 R. THELEN.....AYE  
 4 H. CARLSON.....AYE  
 6 D. BROESCH.....AYE  
 8 J. DWYER.....AYE  
 10 S. WOLFF.....AYE  
 12 J. GRIFFIN.....AYE  
 14 J. LA PORTE.....AYE  
 16 R. MANKE.....AYE  
 18 D. FANFELLE.....AYE  
 20 M. KIPP.....AYE  
 22 G. BRUCE.....AYE  
 24 A. SILVA.....AYE  
 26 S. KLEIN.....AYE  
 28 P. JASKE.....AYE  
 30 K. NILSON.....AYE  
 32 P. GUNDRUM.....AYE  
 34 R. SINGERT.....AYE

TOTAL AYES-33

TOTAL NAYS-00

CARRIED   X  

DEFEATED \_\_\_\_\_

UNANIMOUS   X  

TOTAL VOTES-33