

**MICHIGAN AIRPORT DEVELOPMENT
PROGRAM PACKAGE
MDOT Airports Division**

**Ten Year Airport Capital Improvement Plan
2012-2022**

Prepared for:

**White Cloud Airport
White Cloud, Michigan**

**July 2011
Final November 2011**

Contact:

Mr. Bob Sullivan
White Cloud Airport
12 N Charles Street
White Cloud, MI 49349
231-689-5891

Prepared by:

Mead&Hunt

MICHIGAN STATE BLOCK GRANT PROGRAM
TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2012* to FY-2022

*ACIP includes current development year (2011 already programmed - minor changes acceptable)

Airport Name: White Cloud	Airport Identifier: 42C	Date prepared: 7-20-11
Associated City: White Cloud, Michigan		Prepared By: Mead & Hunt,, Inc. (Stephanie Ward, Rodney Nettleton)
Sponsor: City of White Cloud	NPIAS Airport Code: D	Sponsor email address & phone: Bob Sullivan; 231-689-1194;

FINAL ACIP due to MDOT AERO: no later than 8/03/10

Development Year	Project Description	Shown on ALP? ^{**} (Yes or No)	ACIP Code ^{**}	NPIAS Priority Rating ^{**}	Federal Entitlements	Federal Apportionment	Federal Discretionary	State	Local	Total	Remarks/Item Justification - Provide as much detail as possible.
2012	Tree Clearing for Rwy 36 Easements (including design & CA)	Shown on ALP	ST OT OB	44	\$66,500			\$1,750	\$1,750	\$70,000	Tress will need to be removed and pruned on the easement parcels. Exact numbers are unknown at this time pending coordination with property owners. Need Cat Ex.
2012	Consultant costs for purchase of Wolverine Powerline existing easement.	Shown on ALP	ST OT OB	44	\$57,000			\$1,500	\$1,500	\$60,000	Purchase of Wolverine Power property to remove obstruction to existing approach surface.
	Carry forward \$26,500										
2013	Pavement marking and crack sealing	NA	RE RW IM	66	\$2,850			\$75	\$75	\$3,000	Improve safety with fresh paint on airport surfaces. Seal cracks to extend pavement life
2013	Purchase existing utility easement for removal of Runway 18 displaced threshold - Phase I	Shown on ALP	ST OT OB	44	\$176,500	\$318,925		\$13,038	\$13,038	\$521,500	Phase 1, Existing Wolverine Powerline is the controlling object in the Runway 18 approach and needs to be relocated to facilitate the removal of the displaced threshold.
2014	Purchase existing utility easement for removal of Runway 18 displaced threshold - Phase II	Shown on ALP	ST OT OB	44	\$150,000	\$402,425		\$14,538	\$14,538	\$581,500	Phase II of acquisition, relocate powerline and removal of displaced threshold.
2015	Final design for Rwy 18/36 extension	Yes	CA RW EX	51	\$52,250			\$1,375	\$1,375	\$55,000	This will provide the final design for the runway extension prior to the year of construction.
	Carry forward \$97,750										
2016	Pavement marking and crack sealing	NA	RE RW IM	66	\$2,850			\$75	\$75	\$3,000	Improve safety with fresh paint on airport surfaces. Seal cracks to extend pavement life
	Carry forward \$244,900										
2017	Extend Runway 18/36 to 3,500' (583' x 60') including MIRL, PAPI and beacon	Yes	CA RW EX	51	\$394,900	\$545,600		\$24,750	\$24,750	\$990,000	Runway 18/36 will be extended to 3500' x 60' to better service the existing users.
2018	Carry forward \$150,000 for taxi streets, hangar area, entrance road and parking lot										Carry forward \$150,000
2019	Construct taxi streets, hangar area, entrance road and parking lot	Yes	CA TE CO	43	\$237,500			\$6,250	\$6,250	\$250,000	Providing the infrastructure to support the new terminal building, as well as access to the apron areas is desired.
	Carry forward \$62,500										
2020	Carry forward to terminal building construction	NA	NA	NA							no project
	Carry forward \$212,500										
2021	Terminal Building Construction	Yes	CA TE CO	43	\$261,250			\$6,875	\$6,875	\$275,000	A new terminal building is necessary to replace the existing facility which is reaching the end of it's useful life.
	Carry forward \$101,250										
2022	Design for t-hangar construction	Yes	ST BD MS	29	\$61,750			\$1,625	\$1,625	\$65,000	Providing design ahead of the construction will allow for better bidding opportunities
	Carry forward \$189,500										

* Proposed airport development must be shown on current FAA approved ALP prior to funding project

**In accordance with FAA Order 5100.39A, Appendix 6 - Fields should be completed

ENGINEERING COST ESTIMATE

PROJECT: Tree Clearing for Runway 36 Easements
 LOCATION: White Cloud Airport
 CITY: White Cloud, MI
 DATE: 7/20/11
 PREPARED BY: BJH

FINAL DESIGN
 PROJECT PROGRAMMING
 FEASIBILITY STUDY
 STATE PLANNING
 BASED ON FY 2011 DOLLARS

WORK DESCRIPTION: Clear and prune trees in runway 36 easements.

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST
Mobilization and general conditions	LS	1	\$5,000.00	\$5,000.00
Safety and security	LS	1	\$2,000.00	\$2,000.00
Permits	DLR	1,000	\$1.00	\$1,000.00
Tree Clearing or Pruning, 0"-11" Dia.	EA	7	\$500.00	\$3,500.00
Tree Clearing or Pruning, 12"-23" Dia.	EA	7	\$1,000.00	\$7,000.00
Tree Clearing or Pruning, 24"-35" Dia.	EA	14	\$2,000.00	\$28,000.00
Tree Clearing or Pruning, Greater Than 35" Dia.	EA	1	\$3,000.00	\$3,000.00
CONSTRUCTION TOTAL = \$				49,500
CONSTRUCTION CONTINGENCIES (15%) = \$				7,425
CONSTRUCTION TOTAL = \$				56,925
ENGINEERING DESIGN (7%) = \$				3,985
CONSTRUCTION ADMIN (10%) = \$				5,693
\$				66,602
ANTICIPATED CONSTRUCTION YEAR =				2012
RATE OF INFLATION =				2.00%
PROJECT YEAR TOTAL COST = \$				67,934
PROJECT YEAR BUDGET ESTIMATE = \$				70,000



Note: These costs were developed without the benefit of field surveys or soils investigation.
 A final cost estimate will be dependent upon development of these items and further design.

ENGINEERING COST ESTIMATE

PROJECT: Consultant Cost for ROW Purchase
 LOCATION: White Cloud Airport
 CITY: White Cloud, MI
 DATE: 7/20/11
 PREPARED BY: BJH

FINAL DESIGN
 PROJECT PROGRAMMING
 FEASIBILITY STUDY
 STATE PLANNING
 BASED ON FY 2011 DOLLARS

WORK DESCRIPTION: Consultant cost for ROW purchase including preliminary engineering.

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST
Land Consultant Preliminary Coordination	LS	1	\$15,000.00	\$15,000.00
Preliminary Engineering	LS	1	\$45,000.00	\$45,000.00
CONSTRUCTION TOTAL = \$				60,000
CONSTRUCTION CONTINGENCIES (0%) = \$				-
CONSTRUCTION TOTAL = \$				60,000
ENGINEERING DESIGN (0%) = \$				-
CONSTRUCTION ADMIN (0%) = \$				-
				\$ 60,000
PROJECT YEAR BUDGET ESTIMATE = \$				60,000



Note: These costs were developed without the benefit of field surveys or soils investigation.
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ENGINEERING COST ESTIMATE

PROJECT: Purchase ROW
 LOCATION: White Cloud Airport
 CITY: White Cloud, MI
 DATE: 7/20/11
 PREPARED BY: BJH

FINAL DESIGN
 PROJECT PROGRAMMING
 FEASIBILITY STUDY
 STATE PLANNING
 BASED ON FY 2011 DOLLARS

WORK DESCRIPTION: Purchase existing utility easement for removal of Runway 18 displacement.

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST
Phase 1	LS	1	\$521,500.00	\$521,500.00
Phase 2	LS	1	\$581,500.00	\$581,500.00
CONSTRUCTION TOTAL = \$				1,103,000
CONSTRUCTION CONTINGENCIES (0%) = \$				-
CONSTRUCTION TOTAL = \$				1,103,000
ENGINEERING DESIGN (0%) = \$				-
CONSTRUCTION ADMIN (0%) = \$				-
				\$ 1,103,000
PROJECT YEAR BUDGET ESTIMATE = \$				1,103,000




Note: These costs were developed without the benefit of field surveys or soils investigation.
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ENGINEERING COST ESTIMATE

PROJECT: Extend Runway 18/36
 LOCATION: White Cloud Airport
 CITY: White Cloud, MI
 DATE: 7/20/11
 PREPARED BY: BJH

FINAL DESIGN
 PROJECT PROGRAMMING
 FEASIBILITY STUDY
 STATE PLANNING
 BASED ON FY 2011 DOLLARS

WORK DESCRIPTION: Extend runway 18/36 to 3,500' (583' x 60') including MIRL, PAPI, and beacon.

ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	ITEM COST																				
Mobilization and General Conditions	LS	1	\$40,000.00	\$40,000.00																				
Safety and Security	LS	1	\$20,000.00	\$20,000.00																				
Runway Approach Surface Marker	EA	4	\$150.00	\$600.00																				
Runway Centerline Monument	EA	1	\$200.00	\$200.00																				
Underground Cable, 1/C, #8, 5KV	LF	10,000	\$2.00	\$20,000.00																				
Bare Copper Counterpoise	LF	10,000	\$1.50	\$15,000.00																				
Furnish and Install Specified Vault Equipment	LS	1	\$10,000.00	\$10,000.00																				
Relocate Threshold lights	EA	6	\$150.00	\$900.00																				
Runway Lights for extension	EA	6	\$650.00	\$3,900.00																				
Beacon	EA	1	\$8,000.00	\$8,000.00																				
Beacon Tower	EA	1	\$12,000.00	\$12,000.00																				
PAPI	SET	2	\$15,000.00	\$30,000.00																				
Clearing & Grubbing	ACRE	20	\$2,500.00	\$50,000.00																				
Unclassified Excavation	CY	1,500	\$2.00	\$3,000.00																				
Borrow Excavation	CY	80,000	\$3.50	\$280,000.00																				
Aggregate Base, 6"	CY	800	\$35.00	\$28,000.00																				
Bituminous Surface, 3"	TON	800	\$80.00	\$64,000.00																				
Pavement Marking	LS	1	\$8,000.00	\$8,000.00																				
Turfing & Mulching	ACRE	8	\$2,000.00	\$16,000.00																				
Topsoil	CY	2,500	\$15.00	\$37,500.00																				
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;">  </div> <div style="width: 65%;"> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: right;">CONSTRUCTION TOTAL = \$</td> <td style="text-align: right;">647,100</td> </tr> <tr> <td style="text-align: right;">CONSTRUCTION CONTINGENCIES (15%) = \$</td> <td style="text-align: right;">97,065</td> </tr> <tr> <td style="text-align: right;">CONSTRUCTION TOTAL = \$</td> <td style="text-align: right;">744,165</td> </tr> <tr> <td style="text-align: right;">ENGINEERING DESIGN (7%) = \$</td> <td style="text-align: right;">52,092</td> </tr> <tr> <td style="text-align: right;">CONSTRUCTION ADMIN (10%) = \$</td> <td style="text-align: right;">74,417</td> </tr> <tr> <td style="text-align: right;"></td> <td style="text-align: right;">\$ 870,673</td> </tr> <tr> <td style="text-align: right;">ANTICIPATED CONSTRUCTION YEAR =</td> <td style="text-align: right;">2017</td> </tr> <tr> <td style="text-align: right;">RATE OF INFLATION =</td> <td style="text-align: right;">2.00%</td> </tr> <tr> <td style="text-align: right;">PROJECT YEAR TOTAL COST = \$</td> <td style="text-align: right;">980,519</td> </tr> <tr> <td style="text-align: right;">PROJECT YEAR BUDGET ESTIMATE = \$</td> <td style="text-align: right;">990,000</td> </tr> </table> </div> </div>					CONSTRUCTION TOTAL = \$	647,100	CONSTRUCTION CONTINGENCIES (15%) = \$	97,065	CONSTRUCTION TOTAL = \$	744,165	ENGINEERING DESIGN (7%) = \$	52,092	CONSTRUCTION ADMIN (10%) = \$	74,417		\$ 870,673	ANTICIPATED CONSTRUCTION YEAR =	2017	RATE OF INFLATION =	2.00%	PROJECT YEAR TOTAL COST = \$	980,519	PROJECT YEAR BUDGET ESTIMATE = \$	990,000
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WHITE CLOUD AIRPORT

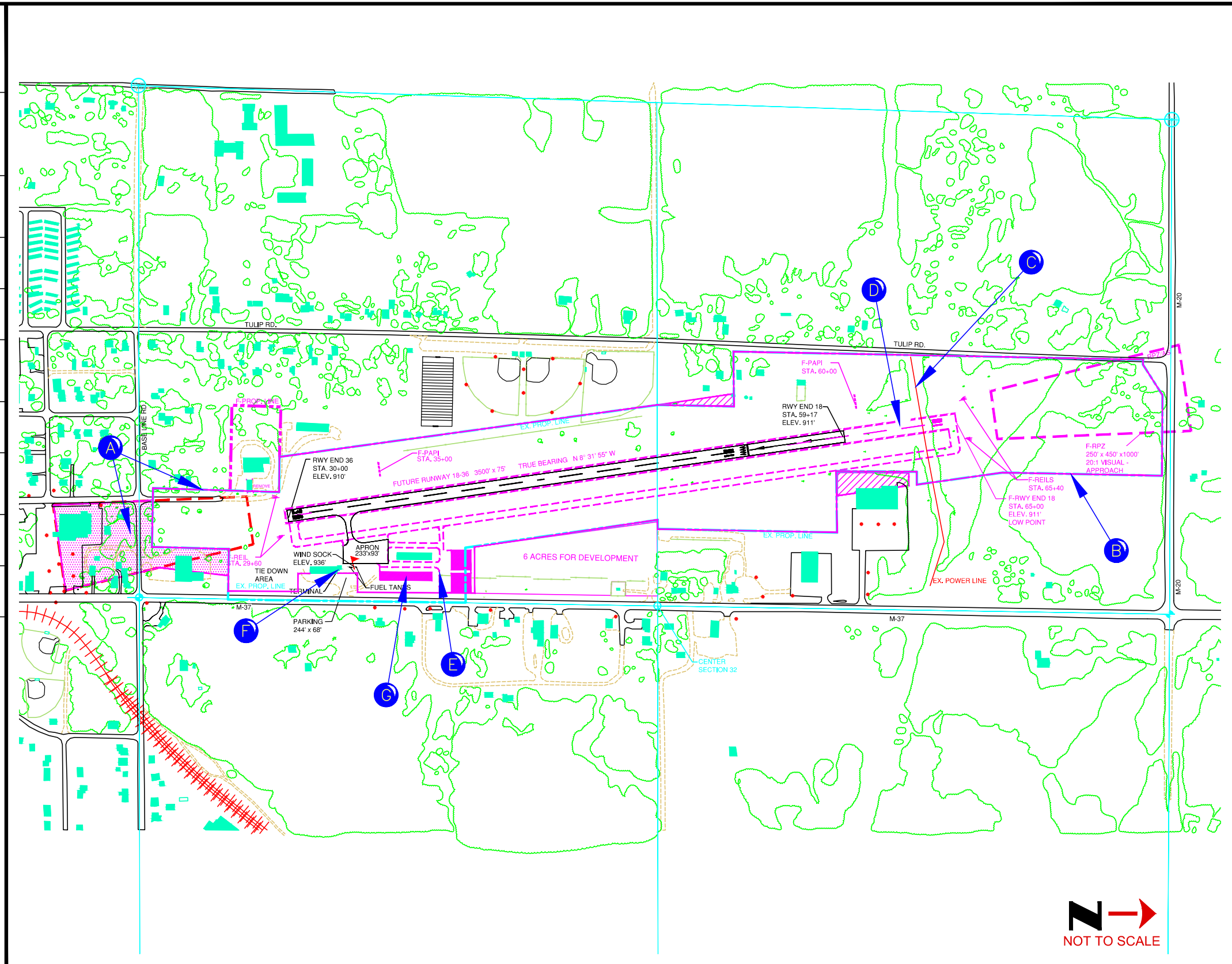
WHITE CLOUD, MICHIGAN

TEN-YEAR DEVELOPMENT PLAN - YEARS 2012 TO 2022



FAA IDENTIFIER: 42C
STATE ID: 62-01

YEAR - 2012	<ul style="list-style-type: none"> A TREE CLEARING FOR RUNWAY 36 EASEMENTS (INCLUDING DESIGN & CONSTRUCTION ADMINISTRATION) B CONSULTANT COSTS FOR PURCHASE OF WOLVERINE POWERLINE ROW
YEAR - 2013	<ul style="list-style-type: none"> C PAVEMENT MARKING AND CRACK SEALING C PURCHASE EXISTING UTILITY EASEMENT FOR REMOVAL OF RUNWAY 18 DISPLACED THRESHOLD - PHASE I
YEAR - 2014	<ul style="list-style-type: none"> C PURCHASE EXISTING UTILITY EASEMENT FOR REMOVAL OF RUNWAY 18 DISPLACED THRESHOLD - PHASE II
YEAR - 2015	<ul style="list-style-type: none"> D FINAL DESIGN FOR RUNWAY 18/36 EXTENSION
YEAR - 2016	<ul style="list-style-type: none"> PAVEMENT MARKING AND CRACK SEALING
YEAR - 2017	<ul style="list-style-type: none"> D EXTEND RUNWAY 18/36 TO 3,500' (583' X 60') INCLUDING MIRL, PAPI, AND BEACON
YEAR - 2018	<ul style="list-style-type: none"> CARRY FORWARD FUNDING
YEAR - 2019	<ul style="list-style-type: none"> E CONSTRUCT TAXISTREETS, HANGAR AREA, ENTRANCE ROAD, AND PARKING LOT
YEAR - 2020	<ul style="list-style-type: none"> CARRY FORWARD FUNDING
YEAR - 2021	<ul style="list-style-type: none"> F TERMINAL BUILDING CONSTRUCTION
YEAR - 2022	<ul style="list-style-type: none"> G DESIGN T-HANGAR



MICHIGAN AIRPORT PROGRAM (MAP) MEETINGS

Attendance Sheet

Airport: White Cloud

Date: September 20, 2011

PLEASE PRINT

<u>Name</u>	<u>Representing</u>	<u>Phone</u>	<u>E-mail</u>
Betsy Steudle	MDOT-AERO (Programming)	517-335-8359	steudleb@michigan.gov
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