

# MICHIGAN AIRPORT DEVELOPMENT PROGRAM

AIP CAPITAL IMPROVEMENT PLAN  
2010-2019

FEDERAL/STATE/LOCAL



## Ann Arbor Municipal Airport

### Ann Arbor, MI

Date of Latest ALP - 2008  
ACIP Airport Code - A  
Airport Identifier - ARB



MDOT-AERO  
2700 E AIRPORT SERVICE DRIVE  
LANSING, MICHIGAN 48906

Prepared by: **URS Corporation**

Sponsor: City of Ann Arbor

Submitted by: Matt Kulhanek

Date: August 21, 2009

Revised: \_\_\_\_\_

**MICHIGAN STATE BLOCK GRANT PROGRAM  
TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2010\* to FY-2020**

\*ACIP includes current development year (2010 already programmed - minor changes acceptable)

Airport Name: <b>Ann Arbor Municipal Airport</b>	Date prepared: 08/21/2009
Associated City: <b>Ann Arbor, MI</b>	Prepared By: URS Corporation
Sponsor: <b>City of Ann Arbor</b>	Sponsor email address & phone: 734-994-2841 MJKulhanek@A2
Airport Identifier: <b>ARB</b>	<b>FINAL ACIP due to MDOT AERO: no later than 12/1</b>

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 f
2010(1)	Windcone & Signs LED Lighting Replacement	Rehab Existing	RE-TW-LI	68	\$ 150,000	\$ 1,225,600		\$ 36,200	\$ 36,200	\$ 1,448,000	
2010(2)	800' Runway & Taxiway Extension Construction	Project is shown on the current ALP.	OT-RW-CO	33							
2010(3)											
2010(4)											
2011(1)	Carryover for Future Project	\$ -			\$ -	\$ -		\$ -	\$ -	\$ -	
2011(2)											
2011(3)											
2011(4)											
2012(1)	Terminal Parking Lot Expansion	Project is shown on the current ALP.	CA-GT-CO	54	\$ 279,300	\$ -		\$ 7,350	\$ 7,350	\$ 294,000	
2012(2)	Relocate Airport Drive Phase I	Project is shown on the current ALP.	CA-GT-CO	54							
2012(3)											
2012(4)											
2013(1)	Rehabilitate Existing Airport Access Road	Project is shown on the current ALP.	RE-GT-CO	64	\$ 170,700	\$ 184,600		\$ 9,350	\$ 9,350	\$ 374,000	
2013(2)	Terminal Apron Lighting	Project is shown on the current ALP.	RE-AP-LI	62							
2013(3)											
2013(4)											
2014(1)	Carryover for Future Project	\$ -			\$ -	\$ -		\$ -	\$ -	\$ -	
2014(2)											
2014(3)											
2014(4)											
2015(1)	Terminal Building Expansion and Energy Savings	Project is shown on the current ALP.	CA-TE-CO	49	\$ 1,090,800	\$ 1,090,800		\$ 36,600	\$ 36,600	\$ 1,464,000	
2015(2)	Rehabilitate Terminal Apron	Project is shown on the current ALP.	RE-AP-CO	66							
2016(1)	SRE Equipment	NA	RE-EQ-SN	70	\$ 150,000	\$ 383,900		\$ 14,050	\$ 14,050	\$ 562,000	
2016(2)											
2017(1)	Energy Upgrade MITL (Runway Edge Lights)	Project is shown on the current ALP.	RE-RW-LI	72	\$ 150,000	\$ 1,116,350		\$ 33,325	\$ 33,325	\$ 1,333,000	
2017(2)	Reconstruct SE and NE Taxiways	Project is shown on the current ALP.	RE-TW-CO	72							
2018(1)	Develop New GA, Tiedown Parking Apron	Project is shown on the current ALP.	CA-AP-CO	56	\$ 150,000	\$ 345,900		\$ 13,050	\$ 13,050	\$ 522,000	
2018(2)											
2019(1)	Storm Pipe to New Detention Pond	Project is shown on the current ALP.	CA-OT-CO	59	\$ 150,000	\$ 267,050		\$ 10,975	\$ 10,975	\$ 439,000	
2019(2)	Joint Seal (Rwy and Txy)	Project is shown on the current ALP.	RE-RW-CO	76							
2020(1)	Relocate Airport Drive Phase II	Project is shown on the current ALP.	CA-GT-CO	54	\$ 150,000	\$ 433,300		\$ 15,350	\$ 15,350	\$ 614,000	
2020(2)	Taxiways for New Hangars	Project is shown on the current ALP.	CA-TW-CO	61							

Amounts are total of all projects for each year.  
\*\*In accordance with FAA Order 5100.39A, Appendix 6 - Fields need to be completed

**Year 0 To Year 5  
Capital Improvement Plan  
2010-2019**

Prepared By: **URS Corporation**

Location: **Ann Arbor Municipal Airport  
Ann Arbor, MI**

Projects			Funding	
	Estimated Cost	Description	Funds	Description
2010  Year 1	\$ 24,000	Windcone & Signs LED Lighting Replacement	\$ (1,448,000)	2010 Project Total Cost from Left
	\$ 1,424,000	800' Runway & Taxiway Extension Construction	\$ -	Non-Primary Entitlement Carryover
			\$ 150,000	2010 Non-Primary Entitlement
			\$ 1,225,600	Discetionary / State Aportionment
			\$ 36,200	State Match (2.5%)
			\$ 36,200	Local Match (2.5%)
	\$ 1,448,000	<b>Total</b>	\$ -	Unused Non-Primary Entitlement
			\$ -	Balance
2011  Year 2	\$ -	Carryover for Future Project	\$ -	2011 Project Total Cost from Left
			\$ -	Non-Primary Entitlement Carryover
			\$ 150,000	2011 Non-Primary Entitlement
			\$ -	Discetionary / State Aportionment
			\$ -	State Match (2.5%)
			\$ -	Local Match (2.5%)
	\$ -	<b>Total</b>	\$ (150,000)	Unused Non-Primary Entitlement
			\$ -	Balance
2012  Year 3	\$ 176,000	Terminal Parking Lot Expansion	\$ (294,000)	2012 Project Total Cost from Left
	\$ 118,000	Relocate Airport Drive Phase I	\$ 150,000	Non-Primary Entitlement Carryover
			\$ 150,000	2012 Non-Primary Entitlement
			\$ -	Discetionary / State Aportionment
			\$ 7,350	State Match (2.5%)
			\$ 7,350	Local Match (2.5%)
	\$ 294,000	<b>Total</b>	\$ (20,700)	Unused Non-Primary Entitlement
			\$ -	Balance
2013  Year 4	\$ 256,000	Rehabilitate Existing Airport Access Road	\$ (374,000)	2013 Project Total Cost from Left
	\$ 118,000	Terminal Apron Lighting	\$ 20,700	Non-Primary Entitlement Carryover
			\$ 150,000	2013 Non-Primary Entitlement
			\$ 184,600	Discetionary / State Aportionment
			\$ 9,350	State Match (2.5%)
			\$ 9,350	Local Match (2.5%)
	\$ 374,000	<b>Total</b>	\$ -	Unused Non-Primary Entitlement
			\$ -	Balance
2014  Year 5	\$ -	Carryover for Future Project	\$ -	2014 Project Total Cost from Left
			\$ -	Non-Primary Entitlement Carryover
			\$ 150,000	2014 Non-Primary Entitlement
			\$ -	Discetionary / State Aportionment
			\$ -	State Match (2.5%)
			\$ -	Local Match (2.5%)
	\$ -	<b>Total</b>	\$ (150,000)	Unused Non-Primary Entitlement
			\$ -	Balance

**YEAR 6 TO YEAR 10  
CAPITAL IMPROVEMENT PLAN  
2010-2019**

Prepared By: **URS Corporation**  
**LOCATION: Ann Arbor Municipal Airport**  
**Ann Arbor, MI**

PROJECTS		
	Estimated Cost	DESCRIPTION
2015	\$ 688,000	Terminal Building Expansion and Energy Savings
	\$ 776,000	Rehabilitate Terminal Apron
Year 6		
	<b>\$ 1,464,000</b>	<b>TOTAL</b>

FUNDING	
FUNDS	DESCRIPTION
\$ (1,464,000)	2015 Project Total Cost from Left
\$ 150,000	Non-Primary Entitlement Carryover
\$ 150,000	2015 Non-Primary Entitlement
\$ 1,090,800	Discretionary / State Apportionment
\$ 36,600	State Match (2.5%)
\$ 36,600	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2016	\$ 562,000	SRE Equipment
Year 7		
	<b>\$ 562,000</b>	<b>TOTAL</b>

\$ (562,000)	2016 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2016 Non-Primary Entitlement
\$ 383,900	Discretionary / State Apportionment
\$ 14,050	State Match (2.5%)
\$ 14,050	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2017	\$ 147,000	Energy Upgrade MITL (Runway Edge Lights)
	\$ 1,186,000	Reconstruct SE and NE Taxilanes
Year 8		
	<b>\$ 1,333,000</b>	<b>TOTAL</b>

\$ (1,333,000)	2017 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2017 Non-Primary Entitlement
\$ 1,116,350	Discretionary / State Apportionment
\$ 33,325	State Match (2.5%)
\$ 33,325	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2018	\$ 522,000	Develop New GA. Tiedown Parking Apron
Year 9		
	<b>\$ 522,000</b>	<b>TOTAL</b>

\$ (522,000)	2018 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2018 Non-Primary Entitlement
\$ 345,900	Discretionary / State Apportionment
\$ 13,050	State Match (2.5%)
\$ 13,050	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2019	\$ 412,000	Storm Pipe to New Detention Pond
	\$ 27,000	Joint Seal (Rwy and Txy)
Year 10		
	<b>\$ 439,000</b>	<b>TOTAL</b>

\$ (439,000)	2019 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2019 Non-Primary Entitlement
\$ 267,050	Discretionary / State Apportionment
\$ 10,975	State Match (2.5%)
\$ 10,975	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance

2020	\$ 378,000	Relocate Airport Drive Phase II
	\$ 236,000	Taxilanes for New Hangars
Year 10		
	<b>\$ 614,000</b>	<b>TOTAL</b>

\$ (614,000)	2020 Project Total Cost from Left
\$ -	Non-Primary Entitlement Carryover
\$ 150,000	2020 Non-Primary Entitlement
\$ 433,300	Discretionary / State Apportionment
\$ 15,350	State Match (2.5%)
\$ 15,350	Local Match (2.5%)
\$ -	Unused Non-Primary Entitlement
\$ -	Balance



**Ann Arbor Municipal Airport**

YEAR (PROJECT NUMBER): 2010(2)

**DESCRIPTION: 800' Runway & Taxiway Extension Construction**

Work Item Description	Quantity	Unit	Price	Amount
Mobilization and Safety Security	1	Lump Sum	\$ 100,000.00	\$ 100,000
Pavement Removal	3,500	SYD	\$ 20.00	\$ 70,000
Runway Lighting	12	Each	\$ 950.00	\$ 11,400
Taxiway Lighting	20	Each	\$ 950.00	\$ 19,000
Relocate Existing Taxiway & Threshold Lights	11	Each	\$ 300.00	\$ 3,300
#8 Cable in Conduit	3,800	LFT	\$ 3.00	\$ 11,400
#6 Solid Counterpoise Wire	3,800	LFT	\$ 2.00	\$ 7,600
Replace Existing Txy Lights with LED Lamps	218	Each	\$ 450.00	\$ 98,100
Signs	4	Each	\$ 3,500.00	\$ 14,000
Relocate Existing VASI	1	Each	\$ 10,000.00	\$ 10,000
Relocate REIL	2	Set	\$ 5,000.00	\$ 10,000
Relocate PAPI	1	set	\$ 10,000.00	\$ 10,000
Relocate ODAL'S	1	Lump Sum	\$ 15,000.00	\$ 15,000
Unclassified Excavation	40,000	CYD	\$ 4.00	\$ 160,000
Drainage	1	Lump Sum	\$ 40,000.00	\$ 40,000
6 Inch Aggregate Base Course	2,700	CYD	\$ 30.00	\$ 81,000
6 Inch Concrete Pavement	15,000	SYD	\$ 22.00	\$ 330,000
Runway Grooving	12,000	SYD	\$ 2.00	\$ 24,000
Turfing & Mulching	5	Acres	\$ 2,000.00	\$ 10,000
Marking	1	Lump Sum	\$ 50,000.00	\$ 50,000
Approach Markers and Centerline monument	1	Lump Sum	\$ 2,000.00	\$ 2,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -

TOTAL CONSTRUCTION		\$ 1,076,800.00
ENGINEERING FINAL DESIGN		\$ 65,000.00
CONSTRUCTION ADMIN.		\$ 120,000.00
CONTINGENCY	15%	\$ 161,520.00
<b>TOTAL*</b>		<b>\$ 1,424,000.00</b>
TOTAL FEDERAL DOLLARS	95%	\$ 1,352,800
TOTAL STATE DOLLARS	2.5%	\$ 35,600
TOTAL LOCAL DOLLARS	2.5%	\$ 35,600

\* Amount rounded up to the nearest thousand dollars.

**DESCRIPTION AND JUSTIFICATION:**

Existing runway will be lengthened to 4300'. Runway will also be shifted 150' to the west to provide clearance over State Road on the East side of the airport. Parallel taxiway will be extended to match the new runway. Connector taxiway on the southeast side will be relocated to the new runway end. All taxiway lights will be replaced with LED fixtures.

ALP STATUS	ENV.	PURPOSE:	
Project is shown on the current ALP.	EA in previous year	Other	4
		Runway	10
		Construction	10
		<b>PRIORITY NUMBER</b>	<b>33</b>

























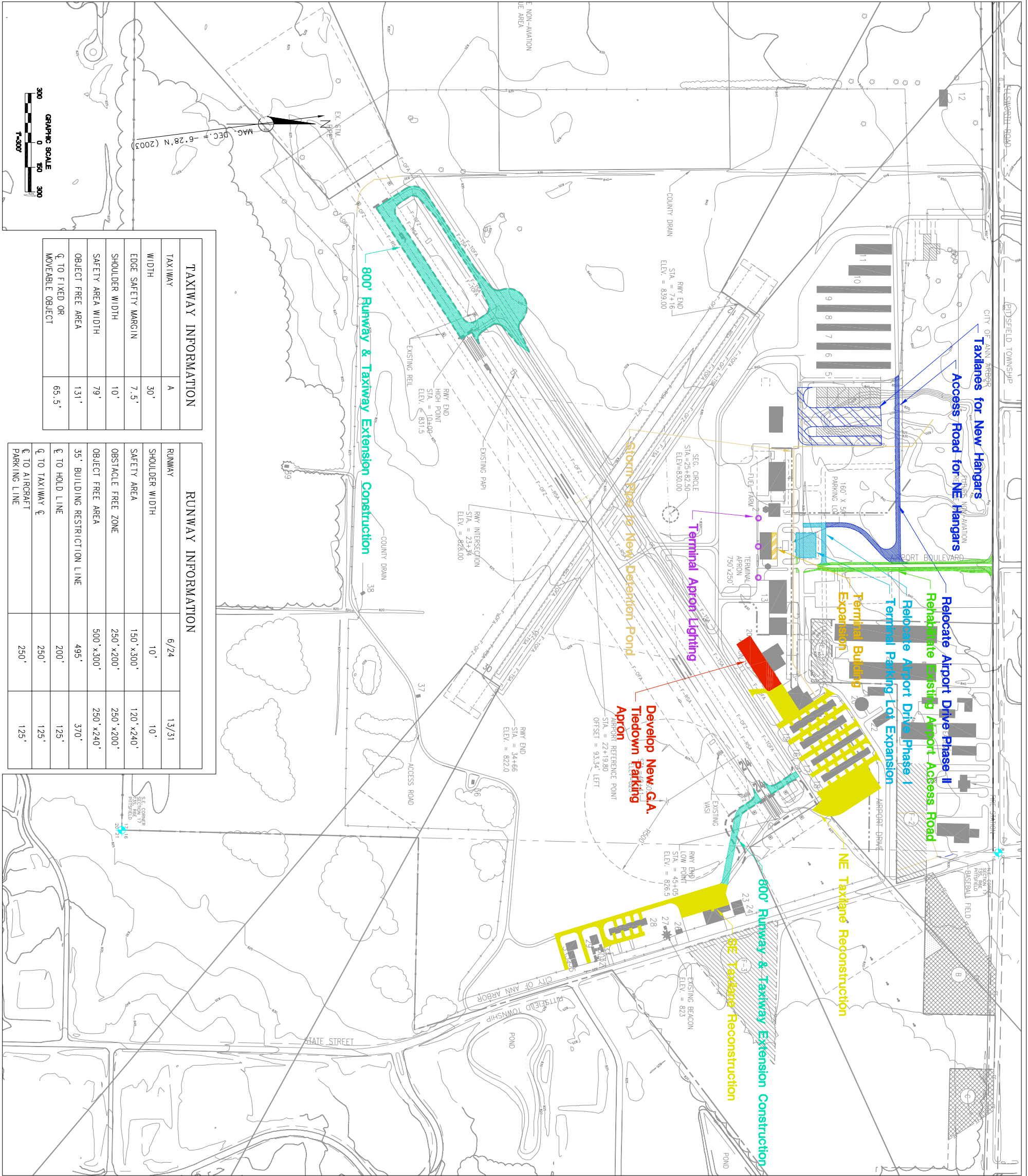








NO.	DESCRIPTION	ELEVATION
1	ADMINISTRATION/TERMINAL BUILDING	849.56
2	AIR TRAFFIC CONTROL TOWER (ATCT)	893.29
3	AIR TRAFFIC ADMINISTRATION BUILDING	864.52
4	CORPORATE HANGAR (AV. GAS CO.)	866.72
5	T-HANGAR	858.03
6	T-HANGAR	857.98
7	T-HANGAR	857.12
8	T-HANGAR	857.95
9	T-HANGAR	856.01
10	T-HANGAR (NESTED)	863.58
11	T-HANGAR (NESTED)	863.56
12	BARN	894.80
13	CORPORATE HANGAR (MICHIGAN UNIVERSITY)	861.57
14	FIXED BASE OPERATION HANGAR	862.57
15	T-HANGAR	846.73
16	T-HANGAR	846.47
17	T-HANGAR	843.65
18	T-HANGAR	846.30
19	T-HANGAR (NESTED)	849.13
20	ROTATING FLOOR HANGAR	850.89
21	CONVENTIONAL HANGAR	851.15
22	CONVENTIONAL HANGAR	847.51
23	CONVENTIONAL HANGAR	836.92
24	CONVENTIONAL HANGAR	836.87
25	FIXED BASE OPERATION HANGAR	846.03
26	OFFICE BUILDING	837.91
27	CITY WATER FACILITY	823.35
28	T-HANGAR	836.39
29	CONVENTIONAL HANGAR	842.77
30	T-HANGAR	834.98
31	T-HANGAR	835.85
32	T-HANGAR	836.80
33	CONVENTIONAL HANGAR	843.80
34	CONVENTIONAL HANGAR	842.34
35	CONVENTIONAL HANGAR	841.81
36	CITY WATER FACILITY	837.20
37	CITY WATER FACILITY	837.60
38	CITY WATER FACILITY	834.09
39	CITY WATER FACILITY	836.12



TAXIWAY INFORMATION	
TAXIWAY	A
WIDTH	30'
EDGE SAFETY MARGIN	7.5'
SHOULDER WIDTH	10'
SAFETY AREA WIDTH	79'
OBJECT FREE AREA	131'
Q TO FIXED OR MOVEABLE OBJECT	65.5'

RUNWAY INFORMATION		
RUNWAY	6/24	13/31
SHOULDER WIDTH	10'	10'
SAFETY AREA	150' x 300'	120' x 240'
OBSTACLE FREE ZONE	250' x 200'	250' x 200'
OBJECT FREE AREA	500' x 300'	250' x 240'
35' BUILDING RESTRICTION LINE	495'	370'
Q TO HOLD LINE	200'	125'
Q TO TAXIWAY	250'	125'
Q TO AIRCRAFT PARKING LINE	250'	125'

# ANN ARBOR MUNICIPAL AIRPORT

ANN ARBOR, MICHIGAN

5 YEAR PLAN

12940723

1

SITE NO. 81-1

3950 SPARKS DR. S.E.  
616 574-8500

JW	X
RJC	X
DR	X
WMM	X

06/27/08 ALP PUBLICATION  
 03/21/08 FAA AIRSPACE REVIEW  
 12/17/07 MDOT DRAFT REVIEW

W. MALINOWSKI