

**MICHIGAN STATE BLOCK GRANT PROGRAM
AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)**

Airport Name:	Ann Arbor Muni	Date Prepared:	09/11/2015
Associated City:	Ann Arbor	Sponsor	City of Ann Arbor
Airport Identifier:	ARB	Sponsor	mjkulhanek@a2gov.org
DRAFT ACIP Due:	10/01/2015		

Dev. Year	Project Description	Shown On ALP	ACIP Code	NPIAS Priority Rating	Entitlement	Discretionary	Apportionment	State	Local	Total	Project Description (Long)
2016	Rehab Runway Runway 6/24 & Taxiways - Paint Marking	Yes	RERWIM	72	\$22,500			\$1,250	\$1,250	\$25,000	
2017	Extend Runway Runway 6/24 & Txy A Design	Yes	CARWEX	56	\$250,200			\$13,900	\$13,900	\$278,000	Final design & approach survey for rwy 6/24 & txy A extension project. Original Approach survey from 2009. New survey is needed.
2017	Install Runway Lighting 6/24 Extension&TW A	Yes	STRWLI	50			\$59,400	\$3,300	\$3,300	\$66,000	
2018	Extend Runway 800' Rwy 6/24 & Txy A Construction	Yes	CARWEX	56			\$1,983,600	\$110,200	\$110,200	\$2,204,000	Lengthen Rwy 6/24 & Txy A to 4300'. Project includes a 150' shift of the Rwy to the west. Relocate Txy D to new end of Rwy. New LED lighting.
2018	Install Runway Lighting 6/24 Extension&TW A	Yes	STRWLI	50			\$730,800	\$40,600	\$40,600	\$812,000	
2019	Const/Imp/Rehab Access Road Airport Blvd Design	Yes	OTGTAC	23	\$31,500			\$1,750	\$1,750	\$35,000	
2019	Const/Imp/Rehab Access Road Airport Blvd. Construction	Yes	OTGTAC	23	\$414,900			\$23,050	\$23,050	\$461,000	Rehab would extend from Ellsworth Road south to Airport Drive. Work incl milling existing asphalt, construct a boulevard entrance at Ellsworth. etc.

2020	Const/Rehab Non-Rev Park Lot (NH, MAP,NP) Design	Yes	OTOTPA	19	\$33,300	\$1,850	\$1,850	\$37,000	
2020	Const/Rehab Non-Rev Park Lot (NH, MAP,NP) Construction	Yes	OTOTPA	19	\$346,500	\$19,250	\$19,250	\$385,000	Construct a new 20-25 car parking lot for the terminal building at the NW corner of Airport Drive and Airport Blvd. Rehab pavement of existing lot.



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
RUNWAY 6/24 EXTENSION FINAL DESIGN AND APPROACH SURVEY (PHASE II)

N75.MKT.CRM

08/10/15

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1007051	MISC. APPROACH SURVEY	1	LS	\$100,000.00	\$100,000.00
2	1007051	MISC. FINAL DESIGN	1	LS	\$178,000.00	\$178,000.00
TOTAL PROJECT COST						\$278,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
800' RUNWAY AND TAXIWAY EXTENSION - LIGHTING

N75.MKT.CRM

08/10/15

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$25,000.00	\$25,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	1000525	RUNWAY APPROACH SURFACE MARKER	8	Ea	\$750.00	\$6,000.00
4	1000530	RUNWAY CENTERLINE MONUMENT	2	Ea	\$1,200.00	\$2,400.00
5	1000535	PERMITS	5,000	Dir	\$1.00	\$5,000.00
6	1080530	BARE COUNTERPOISE WIRE, #8 STRANDED, IN TRENCH OR DUCT	17,600	Lft	\$2.50	\$44,000.00
7	1080588	UNDERGROUND CABLE, 1/C, #8, 5000V, L824, TYPE C, IN TRENCH OR DUCT	30,600	Lft	\$2.00	\$61,200.00
8	1090515	ELECTRICAL VAULT MODIFICATIONS, AS SPECIFIED	1	LS	\$50,000.00	\$50,000.00
9	1097050	MISC. JUNCTION CAN	30	Ea	\$900.00	\$27,000.00
10	1100614	PLASTIC CONDUIT, 2", DIRECT BURIAL	7,000	Lft	\$8.00	\$56,000.00
11	1100638	UNDERGROUND ELECTRICAL DUCT, 4 BANK 4", DIRECT BURIAL	100	Lft	\$75.00	\$7,500.00
12	1257050	MEDIUM INTENSITY EDGE LIGHT, L861, (MIRL/MITL), 30" HIGH, 6.6A, BASE MOUNT, LED, WITH LENS/LAMP	48	Ea	\$1,500.00	\$72,000.00
13	1257050	MIRL/MITL (LED) ON EXISTING BASE CAN	258	Ea	\$500.00	\$129,000.00
14	1257050	MISC. GUIDANCE SIGNS	5	Ea	\$3,000.00	\$15,000.00
15	1250820	RUNWAY END IDENTIFIER LIGHT SYSTEM (REIL), AS SPECIFIED	1	Set	\$20,000.00	\$20,000.00
16	1250837	PRECISION APPROACH PATH INDICATOR (PAPI), 4 BOX, INSTALLED	2	Set	\$25,000.00	\$50,000.00
17	1257051	MISC. FAA REIMBURSEABLE AGREEMENT COST FOR RELOCATION OF REILS	1	LS	\$100,000.00	\$100,000.00
18	1257051	MISC. PAPI FLIGHT CHECK	1	LS	\$8,000.00	\$8,000.00
TOTAL CONSTRUCTION COST						\$688,000.00
COST ESCALATION FOR 2018 (2%+/- PER YEAR)						\$41,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$66,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$83,000.00
TOTAL PROJECT COST						\$878,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
800' RUNWAY AND TAXIWAY EXTENSION

N75.MKT.CRM

08/10/15

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$70,000.00	\$70,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$100,000.00	\$100,000.00
3	1000535	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
4	1520410	UNCLASSIFIED EXCAVATION	32,900	Cyd	\$10.00	\$329,000.00
5	2080625	EROSION CONTROL, SILT FENCE	4,240	Lft	\$3.00	\$12,720.00
	2087051	MISC. EROSION CONTROL	1	LS	\$15,000.00	\$15,000.00
6	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	2,270	Cyd	\$40.00	\$90,800.00
7	2097021	MISC. 12" SAND SUBBASE	4,760	Cyd	\$25.00	\$119,000.00
8	5010510	PORTLAND CEMENT CONCRETE PAVEMENT, 6" NON-REINFORCED	13,630	Syd	\$55.00	\$749,650.00
10	6050520	JOINT AND CRACK SEALING, AS SPECIFIED	130	Lft	\$5.00	\$650.00
	6057051	MISC. PAVEMENT REPAIRS	1	LS	\$33,000.00	\$33,000.00
11	6107001	MISC. RUNWAY GROOVING	12,000	Syd	\$2.00	\$24,000.00
12	6200517	AIRPORT PAVEMENT MARKING, SOLID, BLACK	24,500	Sft	\$1.50	\$36,750.00
13	6200534	AIRPORT PAVEMENT MARKING, SOLID, WHITE, WITH REFLECTIVE BEADS	31,500	Sft	\$1.50	\$47,250.00
14	6200535	AIRPORT PAVEMENT MARKING, SOLID, YELLOW, WITH REFLECTIVE BEADS	14,500	Sft	\$1.50	\$21,750.00
15	7017051	MISC. DRAINAGE	1	LS	\$100,000.00	\$100,000.00
16	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	4,470	Lft	\$15.00	\$67,050.00
17	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	11	Ea	\$1,500.00	\$16,500.00
18	9010517	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	5	Acre	\$6,000.00	\$30,000.00
TOTAL CONSTRUCTION COST						\$1,868,000.00
COST ESCALATION FOR 2018 (2%+/- PER YEAR)						\$112,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$178,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$224,000.00
TOTAL PROJECT COST						\$2,382,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
REHABILITATE EXISTING AIRPORT ACCESS ROAD

N75.MKT.CRM

08/10/15

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$25,000.00	\$25,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	1000535	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
4	1520453	BORROW EXCAVATION, FURNISHED BY AIRPORT OWNER AT OFF-SITE LOCATION	1,520	Cyd	\$15.00	\$22,800.00
5	2080625	EROSION CONTROL, SILT FENCE	2,900	Lft	\$3.00	\$8,700.00
6	4000531	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	3,420	SY	\$5.00	\$17,100.00
7	4007051	MISC. PREPARATION OF EXISTING PAVEMENT	1	LS	\$20,000.00	\$20,000.00
8	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	730	Ton	\$100.00	\$73,000.00
9	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	180	Gal	\$5.00	\$900.00
10	6107010	MISC. ASPHALT SIDEWALK	13,770	Sft	\$5.00	\$68,850.00
11	6207010	MISC. PAVEMENT MARKINGS	1	LS	\$5,000.00	\$5,000.00
12	7010510	CONCRETE CULVERT & SEWER PIPE 12", REINFORCED, C76, CLASS II	1,570	Lft	\$50.00	\$78,500.00
13	7010920	PRECAST CONCRETE END SECTION FOR 12" PIPE	2	Ea	\$400.00	\$800.00
14	7517050	MISC. DRAINAGE STRUCTURE	5	Ea	\$3,000.00	\$15,000.00
15	7540550	CONCRETE CURB, SIZE AS SPECIFIED	1120	Lft	\$25.00	\$28,000.00
16	8007050	MISC. TRAFFIC SIGNS	2	Ea	\$700.00	\$1,400.00
17	9010517	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	0.7	Acre	\$5,000.00	\$3,500.00
TOTAL CONSTRUCTION COST						\$384,000.00
COST ESCALATION FOR 2019 (2%+/- PER YEAR)						\$31,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$35,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$46,000.00
TOTAL PROJECT COST						\$496,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
 ANN ARBOR, MI
 CONSTRUCT/REHAB NON-REVENUE PARKING LOT

N75.MKT.CRM

08/10/15

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$25,000.00	\$25,000.00
2	1000410	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	1000535	PERMITS	5,000	Dir	\$1.00	\$5,000.00
4	1097051	MISC. LIGHTPOLES FOR PARKING LOT EXPANSION	1	LS	\$50,000.00	\$50,000.00
5	1520410	UNCLASSIFIED EXCAVATION	2,000	Cyd	\$15.00	\$30,000.00
6	2080625	EROSION CONTROL, SILT FENCE	830	Lft	\$3.00	\$2,490.00
7	2087021	MISC. 6" SAND SUBBASE, CLASS II	190	Cyd	\$25.00	\$4,750.00
8	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	245	Cyd	\$40.00	\$9,800.00
9	4000531	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	3,400	SY	\$5.00	\$17,000.00
10	4007051	MISC. PREPARATION OF EXISTING PAVEMENT	1	LS	\$20,000.00	\$20,000.00
11	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	885	Ton	\$100.00	\$88,500.00
12	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	455	Gal	\$5.00	\$2,275.00
13	6100532	CONCRETE SIDEWALK, 6"	145	Sft	\$7.00	\$1,015.00
14	6207010	MISC. PARKING LOT PAINT	1	LS	\$5,000.00	\$5,000.00
15	7010510	CONCRETE CULVERT & SEWER PIPE 12", REINFORCED, C76, CLASS II	120	Lft	\$50.00	\$6,000.00
16	7010920	PRECAST CONCRETE END SECTION FOR 12" PIPE	5	Ea	\$400.00	\$2,000.00
17	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	450	Lft	\$12.00	\$5,400.00
18	7510511	CATCH BASIN 5' DIAMETER, TYPE 2, THROUGH 8' DEPTH	1	Ea	\$2,500.00	\$2,500.00
19	7540550	CONCRETE CURB, SIZE AS SPECIFIED	580	Lft	\$25.00	\$14,500.00
20	8007050	MISC. TRAFFIC SIGNS	3	Ea	\$700.00	\$2,100.00
21	9010540	SEEDING WITH MIXTURE AND RATE AS SPECIFIED	1.0	Acre	\$5,000.00	\$5,000.00
TOTAL CONSTRUCTION COST						\$308,000.00
COST ESCALATION FOR 2020 (2%+/- PER YEAR)						\$31,000.00
DESIGN ENGINEERING & ADMINISTRATION						\$37,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION						\$46,000.00
TOTAL PROJECT COST						\$422,000.00

**Runway & Taxiway Extension Track
Ann Arbor Municipal Airport - ARB**

2016	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2015)	
	Remarking of Runway/Taxiways	\$25,000
	<i>Carryover \$-----</i>	(Local \$1,250) Total \$25,000
2017	Available Federal Entitlements (NPE) \$----- (\$----- carryover from 2016)	
	Final Design and Approach Survey (Phase II) Runway 6/24 Extension	\$278,000
	Install Runway 6/24 & Taxiway Lighting - Design	\$66,000
<i>Carryover \$-----</i>	(Local \$17,200) Total \$344,000	
2018	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2017)	
	800' Runway 6/24 & Taxiway A Extension Construction	\$2,204,000
	Install Runway 6/24 & Taxiway Lighting - Construction	\$812,000
<i>Carryover \$-----</i>	(Local \$150,800) Total \$3,016,000	
2019	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2018)	
	Rehab Existing Airport Access Road (Airport Blvd.)	\$461,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Design	\$35,000
<i>Carryover \$-----</i>	(Local \$24,800) Total \$496,000	
2020	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2019)	
	Terminal Building Parking Lot Expansion - Design	\$37,000
	Terminal Building Parking Lot Expansion - Construction	\$385,000
<i>Carryover \$-----</i>	(Local \$21,100) Total \$422,000	

**No Runway and Taxiway Extension Track
Ann Arbor Municipal Airport - ARB**

2016	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2015)	
	Remarking of Runway/Taxiways	\$25,000
	<i>Carryover \$-----</i>	(Local \$1,250) Total \$25,000
2017	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2016)	
	Rehab Existing Airport Access Road (Airport Blvd.)	\$461,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Design	\$35,000
<i>Carryover \$5,500</i>	(Local \$24,800) Total \$496,000	
2018	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2017)	
	Terminal Building Parking Lot Expansion - Design	\$37,000
	Terminal Building Parking Lot Expansion - Construction	\$385,000
<i>Carryover \$-----</i>	(Local \$21,100) Total \$422,000	
2019	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2018)	
	Rehab Runway 6/24 and Taxiways (all) - Joints and Remarking - Design	\$16,000
	Rehab Runway 6/24 and Taxiways (all) - Joints and Remarking - Construction	\$154,000
<i>Carryover \$-----</i>	(Local \$8,500) Total \$170,000	
2020	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2019)	
	Terminal Building Expansion and Renovation Study	\$15,000
	<i>Carryover \$-----</i>	(Local \$750) Total \$15,000

TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2016 to FY-2026

Ann Arbor Municipal Airport - ARB

2016	Available Federal Entitlements (NPE) \$----- (\$----- Carryover from 2015)	
	Remarking of Runway/Taxiways	\$25,000
		(Local \$1,250) Total \$25,000
2017	Final Design and Approach Survey (Phase II) Runway 6/24 Extension	\$278,000
	Install Runway 6/24 & Taxiway Lighting - Design	\$66,000
	Rehab Existing Airport Access Road (Airport Blvd.)	\$461,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Design	\$35,000
		(Local \$42,000) Total \$840,000
2018	800' Runway 6/24 & Taxiway A Extension - Construction	\$2,204,000
	Install Runway 6/24 & Taxiway Lighting - Construction	\$812,000
	Terminal Building Parking Lot Expansion - Design	\$37,000
	Terminal Building Parking Lot Expansion - Construction	\$385,000
		(Local \$171,900) Total \$3,438,000
2019	Rehab Runway 6/24 and Taxiways (all) - Pavement Joints and Remarking - Design	\$16,000
	Rehab Runway 6/24 and Taxiways (all) - Pavement Joints and Remarking - Construction	\$154,000
		(Local \$8,500) Total \$170,000
2020	Terminal Building Expansion and Renovation Study	\$15,000
		(Local \$750) Total \$15,000
2021	Terminal Building Expansion - Design	\$57,000
	Terminal Building Expansion - Construction	\$704,000
		(Local \$38,050) Total \$761,000
2022	Rehab Existing Airport Access Road (Airport Drive - Phase I)	\$219,000
		(Local \$10,950) Total \$219,000
2023	Rehab Existing Airport Access Road (Airport Drive - Phase II)	\$166,000
		(Local \$8,300) Total \$166,000
2024	Reconstruct SE and NE Taxiways	\$1,138,000
		(Local \$56,900) Total \$1,138,000
2025	Box Hangar Taxilanes	\$193,000
	SRE Equipment	\$321,000
		(Local \$25,700) Total \$514,000
2026	Rehab and Expand Terminal Ramp & New Lighting	\$1,557,000
	Storm Drainage Improvements/Hangar Site Work	\$128,000
		(Local \$84,250) Total \$1,685,000