

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

Airport Name:	Ann Arbor Muni	Date Prepared:	09/08/2016
Associated City:	Ann Arbor	Sponsor Name:	City of Ann Arbor
Airport Identifier:	ARB	Sponsor Email:	mjkulhanek@a2gov.org

Dev. Year	Project Description	Concept#	Shown On ALP	ACIP Code	NPIAS Priority Rating	Entitlement	Discretionary	Apportionment	State	Local	Total	Project Description (Long)
2017	Extend Runway Runway 6/24 & Txy A Design	131791	Yes	CARWEX	56	\$252,000			\$14,000	\$14,000	\$280,000	Final design & approach survey. Original Approach survey 2009. Sponsor to pursue ownership transfer for Rwy 6 REIL which is FAA-owned currently.
2017	Install Runway Lighting 6/24 Extension&TW A	125483	Yes	STRWLI	50			\$64,800	\$3,600	\$3,600	\$72,000	
2018	Extend Runway 800' Rwy 6/24 & Txy A Construction	125145	Yes	CARWEX	56			\$1,962,900	\$109,050	\$109,050	\$2,181,000	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	125484	Yes	STRWLI	50			\$803,700	\$44,650	\$44,650	\$893,000	
2019	Const/Imp/Rehab Access Road Airport Blvd Design	125471	Yes	OTGTAC	23	\$37,800			\$2,100	\$2,100	\$42,000	
2019	Const/Imp/Rehab Access Road Airport Blvd. Construction	125134	Yes	OTGTAC	23	\$174,600			\$9,700	\$9,700	\$194,000	Phase I Drainage
2019	Const/Imp/Rehab Access Road Airport Blvd. Construction	131793	Yes	OTGTAC	23	\$295,200			\$16,400	\$16,400	\$328,000	Phase II - Asphalt paving and sidewalk
2020	Const/Rehab Non-Rev Park Lot (NH, MAP, NP) Design	125474	Yes	OTOTPA	19	\$34,200			\$1,900	\$1,900	\$38,000	

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2021	Const/Rehab Non-Rev Park Lot (NH, MAP, NP) Construction	125146	Yes	OTOTPA	19	\$354,600		\$19,700	\$19,700	\$394,000	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

08/04/16

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	\$180,000.00	\$180,000.00
<hr/> TOTAL PROJECT COST						\$280,000.00



PROBABLE PROJECT COST

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

N75.MKT.CRM

08/04/16

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$25,000.00	\$25,000.00
2	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	RUNWAY APPROACH SURFACE MARKER	8	Ea	\$1,000.00	\$8,000.00
4	RUNWAY CENTERLINE MONUMENT	2	Ea	\$1,000.00	\$2,000.00
5	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
6	BARE COUNTERPOISE WIRE, #8 STRANDED, IN TRENCH OR DUCT	17,600	Lft	\$2.50	\$44,000.00
7	UNDERGROUND CABLE, 1/C, #8, 5000V, L824, TYPE C, IN TRENCH OR DUCT	30,600	Lft	\$2.00	\$61,200.00
8	ELECTRICAL VAULT MODIFICATIONS, AS SPECIFIED	1	LS	\$60,000.00	\$60,000.00
9	MISC. JUNCTION CAN	30	Ea	\$900.00	\$27,000.00
10	PLASTIC CONDUIT, 2", DIRECT BURIAL	7,000	Lft	\$8.00	\$56,000.00
11	UNDERGROUND ELECTRICAL DUCT, 4 BANK 4", DIRECT BURIAL	100	Lft	\$75.00	\$7,500.00
12	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	MIRL/MITL (LED) ON EXISTING BASE CAN	258	Ea	\$500.00	\$129,000.00
14	MISC. GUIDANCE SIGNS	5	Ea	\$5,000.00	\$25,000.00
15	RUNWAY END IDENTIFIER LIGHT SYSTEM (REIL), AS SPECIFIED	1	Set	\$30,000.00	\$30,000.00
16	PRECISION APPROACH PATH INDICATOR (PAPI), 4 BOX, INSTALLED	2	Set	\$50,000.00	\$100,000.00
17	MISC. FAA REIMBURSEABLE AGREEMENT COST FOR RELOCATION OF REILS	1	LS	\$100,000.00	\$100,000.00
18	MISC. PAPI FLIGHT CHECK	1	LS	\$8,000.00	\$8,000.00
TOTAL CONSTRUCTION COST					\$770,000.00
COST ESCALATION (2%+/- PER YEAR)					\$31,000.00
DESIGN ENGINEERING & ADMINISTRATION					\$72,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION					\$92,000.00
TOTAL PROJECT COST					\$965,000.00



PROBABLE PROJECT COST

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

N75.MKT.CRM

08/04/16

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$70,000.00	\$70,000.00
2	SAFETY AND SECURITY	1	LS	\$100,000.00	\$100,000.00
3	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
4	UNCLASSIFIED EXCAVATION	33,000	Cyd	\$10.00	\$330,000.00
5	EROSION CONTROL, SILT FENCE	2,500	Lft	\$3.00	\$7,500.00
6	MISC. EROSION CONTROL	1	LS	\$15,000.00	\$15,000.00
7	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	2,300	Cyd	\$40.00	\$92,000.00
8	MISC. 12" SAND SUBBASE	4,800	Cyd	\$25.00	\$120,000.00
9	PORTLAND CEMENT CONCRETE PAVEMENT, 6" NON-REINFORCED	13,700	Syd	\$55.00	\$753,500.00
10	JOINT AND CRACK SEALING, AS SPECIFIED	130	Lft	\$10.00	\$1,300.00
11	MISC. PAVEMENT REPAIRS	1	LS	\$40,000.00	\$40,000.00
12	MISC. RUNWAY GROOVING	8,000	Syd	\$3.00	\$24,000.00
13	AIRPORT PAVEMENT MARKING, SOLID, BLACK	24,500	Sft	\$1.50	\$36,750.00
14	AIRPORT PAVEMENT MARKING, SOLID, WHITE, WITH REFLECTIVE BEADS	31,500	Sft	\$1.50	\$47,250.00
15	AIRPORT PAVEMENT MARKING, SOLID, YELLOW, WITH REFLECTIVE BEADS	14,500	Sft	\$1.50	\$21,750.00
16	MISC. DRAINAGE	1	LS	\$100,000.00	\$100,000.00
17	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	4,500	Lft	\$15.00	\$67,500.00
18	UNDERDRAIN CLEANOUT, AS SPECIFIED	12	Ea	\$1,500.00	\$18,000.00
19	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	5	Acre	\$6,000.00	\$30,000.00
TOTAL CONSTRUCTION COST					\$1,880,000.00
COST ESCALATION (2%+/- PER YEAR)					\$75,000.00
DESIGN ENGINEERING & ADMINISTRATION					\$176,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION					\$226,000.00
TOTAL PROJECT COST					\$2,357,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
ANN ARBOR, MI
REHABILITATE EXISTING AIRPORT ACCESS ROAD - PHASE I

N75.MKT.CRM

08/03/16

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$15,000.00	\$15,000.00
2	SAFETY AND SECURITY	1	LS	\$5,000.00	\$5,000.00
3	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
4	BORROW EXCAVATION, FURNISHED BY CONTRACTOR AT OFF-SITE LOCATION	1,600	Cyd	\$15.00	\$24,000.00
5	EROSION CONTROL, SILT FENCE	1,800	Lft	\$3.00	\$5,400.00
6	CONCRETE CULVERT & SEWER PIPE 12", REINFORCED, C76, CLASS II	1,800	Lft	\$50.00	\$90,000.00
7	PRECAST CONCRETE END SECTION FOR 12" PIPE	2	Ea	\$500.00	\$1,000.00
8	MISC. DRAINAGE STRUCTURE	5	Ea	\$3,000.00	\$15,000.00
9	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	1150	Syd	\$5.00	\$5,750.00
TOTAL CONSTRUCTION COST					\$166,000.00
COST ESCALATION (2%+/- PER YEAR)					\$3,000.00
DESIGN ENGINEERING & ADMINISTRATION (PHASE I AND II)					\$42,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION					\$25,000.00
TOTAL PROJECT COST					\$236,000.00



PROBABLE PROJECT COST

ANN ARBOR MUNICIPAL AIRPORT
 ANN ARBOR, MI
 REHABILITATE EXISTING AIRPORT ACCESS ROAD - PHASE II

N75.MKT.CRM

08/03/16

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$20,000.00	\$20,000.00
2	SAFETY AND SECURITY	1	LS	\$7,500.00	\$7,500.00
3	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
4	UNCLASSIFIED EXCAVATION	1,500	Cyd	\$10.00	\$15,000.00
5	EROSION CONTROL, SILT FENCE	2,900	Lft	\$3.00	\$8,700.00
6	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	3,800	SY	\$5.00	\$19,000.00
7	MISC. PREPARATION OF EXISTING PAVEMENT	1	LS	\$20,000.00	\$20,000.00
8	BITUMINOUS AGGREGATE SURFACE COURSE	800	Ton	\$100.00	\$80,000.00
9	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	200	Gal	\$5.00	\$1,000.00
10	MISC. ASPHALT SIDEWALK	320	Ton	\$120.00	\$38,400.00
11	MISC. PAVEMENT MARKINGS	1	LS	\$5,000.00	\$5,000.00
12	CONCRETE CURB, SIZE AS SPECIFIED	1200	Lft	\$25.00	\$30,000.00
13	MISC. TRAFFIC SIGNS	2	Ea	\$700.00	\$1,400.00
14	TURFING WITH MIXTURE AND RATE, AS SPECIFIED	3200	Syd	\$5.00	\$16,000.00
TOTAL CONSTRUCTION COST					\$267,000.00
COST ESCALATION (2%+/- PER YEAR)					\$21,000.00
DESIGN ENGINEERING & ADMINISTRATION (DESIGN IN PHASE I)					\$0.00
CONSTRUCTION INSPECTION & ADMINISTRATION					\$40,000.00
TOTAL PROJECT COST					\$328,000.00



PROBABLE PROJECT COST

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

N75.MKT.CRM

08/04/16

ITEM NO	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$25,000.00	\$25,000.00
2	SAFETY AND SECURITY	1	LS	\$10,000.00	\$10,000.00
3	PERMITS	5,000	Dlr	\$1.00	\$5,000.00
4	MISC. LIGHTPOLES FOR PARKING LOT EXPANSION	1	LS	\$50,000.00	\$50,000.00
5	UNCLASSIFIED EXCAVATION	2,000	Cyd	\$15.00	\$30,000.00
6	EROSION CONTROL, SILT FENCE	900	Lft	\$3.00	\$2,700.00
7	MISC. 6" SAND SUBBASE, CLASS II	190	Cyd	\$25.00	\$4,750.00
8	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	245	Cyd	\$40.00	\$9,800.00
9	COLD MILL BITUMINOUS PAVEMENT, SPECIFIED THICKNESS	3,400	SY	\$5.00	\$17,000.00
10	MISC. PREPARATION OF EXISTING PAVEMENT	1	LS	\$25,000.00	\$25,000.00
11	BITUMINOUS AGGREGATE SURFACE COURSE	900	Ton	\$100.00	\$90,000.00
12	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	500	Gal	\$5.00	\$2,500.00
13	CONCRETE SIDEWALK, 6"	145	Sft	\$7.00	\$1,015.00
14	MISC. PARKING LOT PAINT	1	LS	\$5,000.00	\$5,000.00
15	CONCRETE CULVERT & SEWER PIPE 12", REINFORCED, C76, CLASS II	120	Lft	\$50.00	\$6,000.00
16	PRECAST CONCRETE END SECTION FOR 12" PIPE	5	Ea	\$400.00	\$2,000.00
17	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	450	Lft	\$12.00	\$5,400.00
18	CATCH BASIN 5' DIAMETER, TYPE 2, THROUGH 8' DEPTH	1	Ea	\$2,500.00	\$2,500.00
19	CONCRETE CURB, SIZE AS SPECIFIED	580	Lft	\$25.00	\$14,500.00
20	MISC. TRAFFIC SIGNS	3	Ea	\$700.00	\$2,100.00
21	SEEDING WITH MIXTURE AND RATE AS SPECIFIED	1.0	Acre	\$5,000.00	\$5,000.00
TOTAL CONSTRUCTION COST					\$315,000.00
COST ESCALATION (2%+/- PER YEAR)					\$32,000.00
DESIGN ENGINEERING & ADMINISTRATION					\$38,000.00
CONSTRUCTION INSPECTION & ADMINISTRATION					\$47,000.00
TOTAL PROJECT COST					\$432,000.00

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

2017	Available Federal Entitlements (NPE) \$150,000 (\$572,961 Carryover from 2016)	
	Final Design and Approach Survey (Phase II) Runway 6/24 Extension	\$280,000
	Install Runway 6/24 & Taxiway Lighting - Design	\$72,000
	Carryover \$-----	(Local \$17,600) Total \$352,000
2018	Available Federal Entitlements (NPE) \$150,000 (\$370,961 carryover from 2017)	
	800' Runway 6/24 & Taxiway A Extension Construction	\$2,181,000
	Install Runway 6/24 & Taxiway Lighting - Construction	\$893,000
	Carryover \$-----	(Local \$153,700) Total \$3,074,000
2019	Available Federal Entitlements (NPE) \$150,000 (\$0 Carryover from 2018)	
	Rehab Existing Airport Access Road (Airport Blvd.) - Design (both phases)	\$42,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Phase 1 (site prep & drainage)	\$194,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Phase 2 (pavement & sidewalks)	\$328,000
	Carryover \$-----	(Local \$28,200) Total \$564,000
2020	Available Federal Entitlements (NPE) \$150,000 (\$0 Carryover from 2019)	
	Terminal Building Parking Lot Expansion - Design	\$38,000
	Carryover \$-----	(Local \$1,900) Total \$38,000
2021	Available Federal Entitlements (NPE) \$150,000 (\$112,000 Carryover from 2020)	
	Terminal Building Parking Lot Expansion - Construction	\$394,000
	Carryover \$-----	(Local \$19,700) Total \$394,000

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

2017	Available Federal Entitlements (NPE) \$150,000 (\$572,961 Carryover from 2016)	
	Rehab Existing Airport Access Road (Airport Blvd.) - Design (both phases)	\$42,000
	Rehab Existing Airport Access Road (Airport Blvd.) - Phase 1 (site prep & drainage)	\$194,000
	Carryover \$-----	(Local \$11,800) Total \$236,000
2018	Available Federal Entitlements (NPE) \$150,000 (\$486,961 Carryover from 2017)	
	Rehab Existing Airport Access Road (Airport Blvd.) - Phase 2 (pavement & sidewalks)	\$328,000
	Carryover \$-----	(Local \$16,400) Total \$328,000
2019	Available Federal Entitlements (NPE) \$150,000 (\$308,961 Carryover from 2018)	
	Terminal Building Parking Lot Expansion - Design	\$38,000
	Terminal Building Parking Lot Expansion - Construction	\$394,000
	Carryover \$-----	(Local \$21,600) Total \$432,000
2020	Available Federal Entitlements (NPE) \$150,000 (\$26,961 Carryover from 2019)	
	Rehab Runway 6/24 and Taxiways (all) - Joint Repair - Design	\$16,000
	Rehab Runway 6/24 and Taxiways (all) - Joint Repair - Construction	\$154,000
	Carryover \$-----	(Local \$8,500) Total \$170,000
2021	Available Federal Entitlements (NPE) \$150,000 (\$6,961 Carryover from 2020)	
	Terminal Building Expansion and Renovation Study	\$15,000
	Carryover \$-----	(Local \$750) Total \$15,000