

**MICHIGAN STATE BLOCK GRANT PROGRAM
AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2012 to FY-2021**

Airport Name: Oceana County Airport										Airport Identifier: C04		Date prepared: December 2, 2011
Associated City: Hart/Shelby, Michigan										Prepared By: Oceana County/Prein&Newhof		
Sponsor: County of Oceana										NPIAS Airport Code**: C		Sponsor contact info: oceanairport@yahoo.com
Development Year	Project Description	On ALP*? (Y or N)	ACIP** Code	NPIAS** Priority Rating	Federal Entitlements	Federal Apportionment	Federal Discretionary	State	Local	Total	Remarks/Item Justification	
2011	Carry Over				\$221,134							
2012	Install New Wind Cone and Segmented Circle	yes	ST-OT-IN	40	\$36,100			\$950	\$950	\$38,000	The existing wind cone is several years old and located in the path of the future parallel taxiway. This project will include installing a new wind cone at the ultimate wind cone location shown on the ALP.	
2012	Crack Sealing & Pavement Marking	n.a.	RE-RW-IM	68	\$43,700			\$1,150	\$1,150	\$46,000	Sealing of cracks in bituminous pavement to maintain pavement condition. Remarketing over newly sealed cracks and modifications for Oceana's proposed instrument approach.	
	Total 2012 =				\$79,800			\$2,100	\$2,100	\$84,000		
2013	Install Weather Reporting Equipment	yes	ST-EQ-WX	44	\$24,700			\$650	\$650	\$26,000	The existing DigiWix AWOS does not have a ceilometer. DigiWix is in the process of obtaining FAA certification for their ceilometer. Upgrading the existing AWOS through addition of the ceilometer would provide more weather information to pilots using the airport.	
2013	Construct Tee Hangar (6 Unit)	yes	ST-BD-MS	31	\$237,500			\$6,250	\$6,250	\$250,000	Addition development of revenue generating facilities. Costs are based on a comparison of square foot costs and adjusted for current dollars.	
	Total 2012 =				\$262,200			\$6,900	\$6,900	\$276,000		
2014	Acquire privately owned T-Hangar	yes	ST-BD-MS	31	\$149,958			\$3,946	\$3,946	\$157,850	As small airports struggle to meet budgets it is imperative to do everything to increase our income. One way to increase income is hangar rent. Acquiring this hangar would increase Airport income by approximately \$13,000/year.	
2015	Parallel Taxiway Extension (Design)	yes	CA-TW-CO	57	\$33,250			\$875	\$875	\$35,000	Design engineering for extension of parallel taxiway from existing midfield connector to Runway 9 threshold.	

Development Year	Project Description	On ALP*? (Y or N)	ACIP** Code	NPIAS** Priority Rating	Federal Entitlements	Federal Apportionment	Federal Discretionary	State	Local	Total	Remarks/Item Justification
2016	Parallel Taxiway Extension	yes	CA-TW-CO	57	\$445,927		\$187,724	\$16,675	\$16,675	\$667,000	Complete full length parallel taxiway by extending westward from midfield connector to Runway 9 threshold.
2017	SRE Equipment Acquisition	n.a.	ST-EQ-SN	45	\$128,250			\$3,375	\$3,375	\$135,000	Existing SRE Equipment is aging and beginning to show signs of wear.
2018	ALP Update & User Survey	n.a.	PL-PL-MA	64	\$47,500			\$1,250	\$1,250	\$50,000	Future development of Runway 15/33 will require land acquisition and grading south of Warren Road. Cost to acquire property and relocate utilities may be prohibitive. Alternate alignments of Runway 15/33 will be evaluated.
2018	Crack Sealing & Pavement Marking	n.a.	ST-BD-MS	68	\$43,700			\$1,150	\$1,150	\$46,000	Crack sealing and remarking of existing bituminous pavements.
	Total 2018 =				\$91,200			\$2,400	\$2,400	\$96,000	
2019	Environmental Assessment	yes	CA-RW-EX	53	\$47,500			\$1,250	\$1,250	\$50,000	Environmental assessment for the anticipated extension of Runway 9/27.
2019	Land & Easement Acquisition	yes	CA-RW-EX	53	\$142,500			\$3,750	\$3,750	\$150,000	Land and easement acquisition for the future extensions of Runway 9/27.
	Total 2019 =				\$190,000			\$5,000	\$5,000	\$200,000	
2020	No Project (Carry Over to 2020)	n.a.			\$0			\$0	\$0	\$0	Delaying use of entitlement funds for proposed runway extension in 2020.
2021	Extend Runway 9/27	yes	CA-RW-EX	53	\$340,550		\$63,200	\$10,625	\$10,625	\$425,000	Shift and extend Runway 9/27 300 feet to provide standard approach to Runway 9 threshold.

*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
(Refer to Airport Code spreadsheet provided on MDOT Aeronautics website under Block Grant Program for specific airport code)

MICHIGAN DEPARTMENT OF TRANSPORTATION
 Bureau of Aeronautics - Airports Division

2012 Cost Estimate

Airport: Oceana County Airport

Development Item: Install New Wind Cone and Segmented Circle

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price*	Amount
Mobilization & General Conditions	1	LSUM	\$3,700.00	\$3,700
Safety and Security	1	LSUM	\$1,100.00	\$1,100
Runway Strip Marker or Circle Segment, Steel Frame	20	EACH	\$550.00	\$11,000
Airport Windcone, 12', Lighted, Type as Specified	1	EACH	\$8,500.00	\$8,500
Remove Existing Windcone and Circle Segment	21	EACH	\$200.00	\$4,200
Unclassified Excavation	500	CYD	\$5.00	\$2,500
Restoration	1	LSUM	\$2,000.00	\$2,000

Construction Total = \$33,000
 Engineering = \$5,000
 Total = \$38,000

*Unit Prices based on F.Y. 2011 dollars

MICHIGAN DEPARTMENT OF TRANSPORTATION
 Bureau of Aeronautics - Airports Division

2013 Cost Estimate

Airport: Oceana County Airport

Development Item: Construction Tee Hangar (6 Unit)

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Pre-Manufactured Tee Hangar	10,000	SFT	\$15	\$150,000
Concrete Floor	10,000	SFT	\$5	\$50,000
Unclassified Excavation	400	CYD	\$5	\$2,000
Aggregate Base	120	CYD	\$25	\$3,000
Bituminous Pavement	120	TON	\$100	\$12,000
Restoration	1	LSUM	\$1,500	\$1,500

Construction Total = \$218,500
 Engineering = \$31,500
 Total = \$250,000

*Unit Prices based on F.Y. 2011 dollars

MICHIGAN DEPARTMENT OF TRANSPORTATION
Bureau of Aeronautics - Airports Division

2016 Cost Estimate

Airport: Oceana County Airport

Development Item: Parallel Taxiway Extension

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Mobilization and General Conditions	1	LSUM	\$75,200	\$75,200
Underground Cable, 1/C, #8, 5000V, L824, Type C, in Trench or Duct	7,500	LFT	\$1.00	\$7,500
Bare Counterpoise Wire, #6, Solid, in Trench or Duct	7,500	LFT	\$1.00	\$7,500
Underground Cable, 1/C, #6, 600V, XHHW, Green Insulated Ground, in Trench or Duct	10,000	LFT	\$1.50	\$15,000
Furnish & Install Specified Electrical Vault Equipment	1	LSUM	\$15,000	\$15,000
Underground Electrical Duct, 2 Bank 3", Direct Burial	200	LFT	\$15	\$3,000
Medium Intensity Edge Light, L861, (MIRL/MITL), 30" High, 6.6A, Stake Mount, Complete	40	EACH	\$550	\$22,000
Guidance Sign, Double-Faced, Type L858R	8	EACH	\$4,000	\$32,000
Unclassified Excavation	11,000	CYD	\$5	\$55,000
Aggregate Base Course, Material as Specified, Compacted InPlace	2,700	CYD	\$30	\$81,000
Bituminous Aggregate Surface Course, 20AAX Composition	1,900	TON	\$70	\$133,000

MICHIGAN DEPARTMENT OF TRANSPORTATION
 Bureau of Aeronautics - Airports Division

2016 Cost Estimate

Airport: Oceana County Airport

Development Item: Parallel Taxiway Extension

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Airport Pavement Marking, Solid, Yellow, With Reflective Beads	9,000	SFT	\$0.25	\$2,250
Concrete Culvert & Sewer Pipe 18", Reinforced, C76, Class IV	2,200	LFT	\$27.50	\$60,500
Inlet 4' Diameter, Type 4, Through 8' Depth	8	EACH	\$2,000	\$16,000
Turfing With Standard Mixture B	7	ACRE	\$600	\$4,200
Topsoiling From Off-Site, Material Furnished By Contractor	3,800	CYD	\$12	\$45,600
Wood Fiber Mulch	7	ACRE	\$750	\$5,250

Construction Total = \$580,000
 Design Engineering = \$35,000
 Construction Engineering = \$52,000
 Total = \$667,000

*Unit Prices based on F.Y. 2011 dollars

MICHIGAN DEPARTMENT OF TRANSPORTATION
 Bureau of Aeronautics - Airports Division

2017 Cost Estimate

Airport: Oceana County Airport

Development Item: Snow Removal Equipment

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Tractor (100 Hp)	1	LSUM	\$110,000	\$110,000
Snow Blower Attachment	1	EACH	\$15,000	\$15,000

Construction Total = \$125,000
 Engineering = \$5,000
 Total = \$130,000

*Unit Prices based on F.Y. 2011 dollars

MICHIGAN DEPARTMENT OF TRANSPORTATION
 Bureau of Aeronautics - Airports Division

2018 Cost Estimate

Airport: Oceana County Airport

Development Item: Crack Sealing and Pavement Marking

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price*	Amount
Mobilization & General Conditions	1	LSUM	\$3,800.00	\$3,800
Joint and Crack Sealing, as Specified	20,000	LFT	\$1.50	\$30,000
Remarking Airport Pavement, Solid, White, With Reflective Beads	34,000	SFT	\$0.25	\$8,500
Remarking Airport Pavement, Solid, Yellow, With Reflective Beads	6,000	SFT	\$0.25	\$1,500

Construction Total = \$43,800
 Engineering = \$2,200
 Total = \$46,000

*Unit Prices based on F.Y. 2011 dollars

MICHIGAN DEPARTMENT OF TRANSPORTATION
 Bureau of Aeronautics - Airports Division

2019 Cost Estimate

Airport: Oceana County Airport

Development Item: Land Acquisition

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Parcel 012-004-200-05	1	LSUM	\$19,500	\$19,500
Parcel 012-004-200-08	1	LSUM	\$19,500	\$19,500
Parcel 012-002-100-02	1	LSUM	\$19,000	\$19,000
Parcel 012-002-100-02	1	LSUM	\$75,000	\$75,000

Construction Total = \$133,000
 Land Consultant = \$67,000
 Total = \$200,000

*Unit Prices based on F.Y. 2011 dollars

MICHIGAN DEPARTMENT OF TRANSPORTATION
Bureau of Aeronautics - Airports Division

2021 Cost Estimate

Airport: Oceana County Airport

Development Item: Runway Extension

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Mobilization and General Conditions	1	LSUM	\$40,500	\$40,500
Runway End Identifier Light System (REIL), L849	2	SET	\$15,000	\$30,000
Precision Approach Path Indicator (PAPI), 4 Box, Installed	2	SET	\$20,000	\$40,000
Underground Cable, 1/C, #8, 5000V, L824, Type C, in Trench or Duct	9,000	LFT	\$1.00	\$9,000
Bare Counterpoise Wire, #6, Solid, in Trench or Duct	9,000	LFT	\$1.00	\$9,000
Underground Cable, 1/C, #6, 600V, XHHW, Green Insulated Ground, in Trench or Duct	9,000	LFT	\$1.50	\$13,500
Underground Electrical Duct, 2 Bank 3", Direct Burial	100	LFT	\$15	\$1,500
Medium Intensity Edge Light, L861, (MIRL/MITL), 30" High, 6.6A, Stake Mount, Complete	70	EACH	\$550	\$38,500
Guidance Sign, Double-Faced, Type L858R	6	EACH	\$4,000	\$24,000
Pavement Removal	4,500	SYD	\$2	\$9,000
Unclassified Excavation	4,800	CYD	\$5	\$24,000

MICHIGAN DEPARTMENT OF TRANSPORTATION
Bureau of Aeronautics - Airports Division

2021 Cost Estimate

Airport: Oceana County Airport

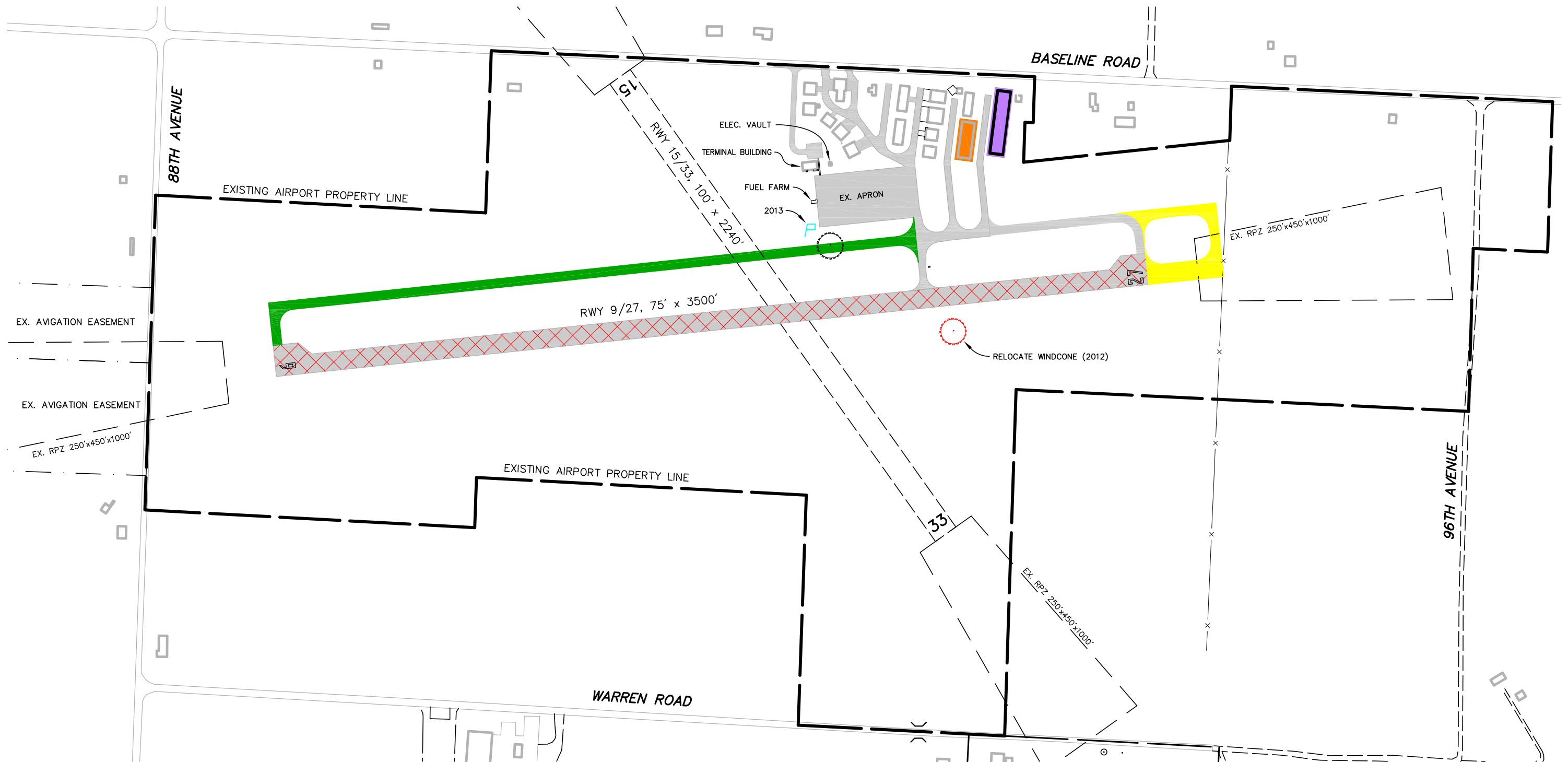
Development Item: Runway Extension

Prepared By: Prein&Newhof

Work Item Description	Estimated Quantity	Unit	Estimated Unit Price	Amount
Aggregate Base Course, Material as Specified, Compacted InPlace	1,200	CYD	\$30	\$36,000
Bituminous Aggregate Surface Course, 20AAX Composition	800	TON	\$70	\$56,000
Airport Pavement Marking, Solid, White, With Reflective Beads	15,000	SFT	\$0.25	\$3,750
Airport Pavement Marking, Solid, Yellow, With Reflective Beads	3,000	SFT	\$0.25	\$750
Concrete Culvert & Sewer Pipe 18", Reinforced, C76, Class IV	300	LFT	\$27.50	\$8,250
Precast Concrete End Section For 18" Pipe	4	EACH	\$750	\$3,000
Turfing With Standard Mixture B	3	ACRE	\$600	\$1,800
Topsoiling From Off-Site, Material Furnished By Contractor	1,600	CYD	\$12	\$19,200
Wood Fiber Mulch	3	ACRE	\$750	\$2,250

Construction Total = \$370,000
 Design Engineering = \$22,000
 Construction Engineering = \$33,000
 Total = \$425,000

*Unit Prices based on F.Y. 2011 dollars



FY PLANNING KEY

	2012 JOINT SEALING/RWY MARKING		2014 TEE HANGAR ACQUISITION
	2012 RELOCATE WINDCONE		2016 PARALLEL TAXIWAY EXTENSION
	2013 TEE HANGAR CONSTRUCTION		2020 RUNWAY EXTENSION
	2013 WEATHER EQUIPMENT		

North



SCALE: 1" = 400'

OCEANA COUNTY AIRPORT
HART/SHELBY, MICHIGAN
2012-2021 ACIP PROGRAM

Prein&Newhof
2100586
DECEMBER 2011