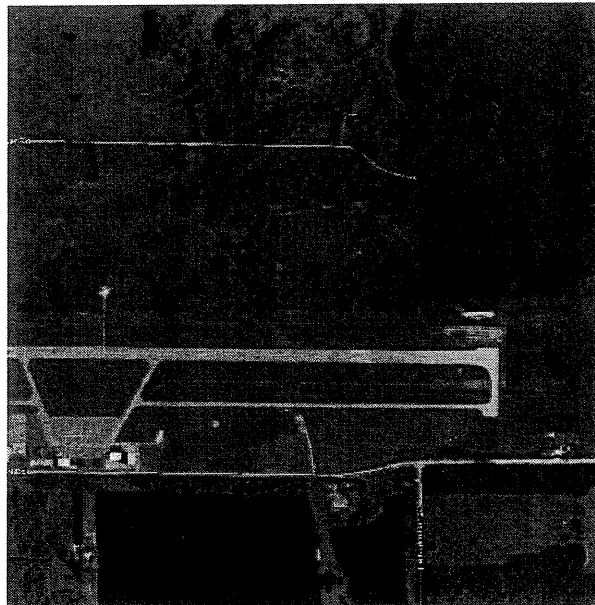


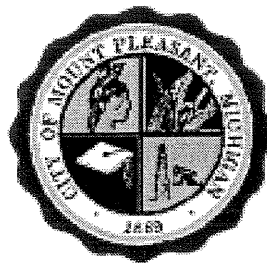
# Phase I, Environmental Due Diligence Audit (EDDA)

## Proposed Parcel Purchase

### Mount Pleasant Municipal Airport



February 2010



## Executive Summary

RW Armstrong has completed this Phase I Environmental Due Diligence Audit (EDDA) for a proposed property acquisition which is adjacent to the Mount Pleasant Municipal Airport in Mount Pleasant, Michigan (the parcel). This Phase I EDDA was completed pursuant to *FAA Order 1050.19B – Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions* and the *ASTM International Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM E 1527-05. The EDDA included a site inspection, interviews of key individuals, and a review of historical and government records conducted by an Environmental Professional as defined by FAA Order 1050.19B and ASTM 1527-05. The attached report provides details of the audit.

The parcel (5665 E River Road) was not located on the federal, state, or local databases which were searched as a part of this investigation. However, facilities within the designated search areas which did appear on these lists. The Mount Pleasant Municipal Airport (5452 E Airport Road) is listed on the Michigan Department of Environmental Quality (Michigan DEQ) Underground Storage Tank (UST), Leaking Underground Storage Tank (LUST), and Aboveground Storage Tank (AST) databases. In addition, there are two sites, TMI Environmental Services (5501 E Airport Road, Site A) and International Waste Management (5580 Airport Road, Site B) listed on the Resource Conservation and Recovery Act (RCRA) generator list as inactive sites and listed on the Facility Index System/Facility Registry System (FINDS) database. The Valley Road site (4942 East Valley Road, Site C) is listed as a Michigan State Hazardous Waste Site. The GTE North (1430 South Isabella Road, Site D) is listed on the Michigan Department of Environmental Quality (Michigan DEQ) Leaking Underground Storage Tank (LUST) and Underground Storage Tank (UST) databases. However, due to the geographic locations and details of the listings, these sites and conditions should not impact the environmental condition of the parcel.

The parcel does contain two geographically depressed “septic disposal lagoons”. These areas do not currently contain standing water or surface-level evidence of septic activity. Underground piping and manhole covers were found during the field visit, but their exact purpose is unknown. Due to the unknown risk of potential contamination, further investigation of these areas is recommended. In addition, should construction activities occur within this area, a proper health and safety plan should be designed, provided to all contractors and subcontractors prior to construction activities, and implemented during construction within the project area. All workers should be equipped with appropriate personal safety equipment.

This executive summary is provided as a convenience and should not be considered as a substitute for technical documentation provided in the report.

## 1.0 Introduction

### 1.1 Purpose

RW Armstrong was tasked to perform a Phase I Environmental Due Diligence Audit (EDDA) of a proposed property acquisition area adjacent to the Mount Pleasant Municipal Airport in Mount Pleasant, Michigan at 5665 East River Road (the parcel). The following report presents the information obtained during the investigation and provides the conclusions, opinions, and recommendations based on the findings.

### 1.2 Detailed Scope of Services

RW Armstrong completed this EDDA pursuant to the scope of work requested by the City of Mount Pleasant. The work was completed in accordance with *FAA Order 1050.19B – Environmental Due Diligence Audits in the conduct of FAA Real Property Transactions* and the ASTM International *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM E 1527-05 with exceptions listed in Section 1.4. In compliance with those guidelines, an Environmental Professional from RW Armstrong conducted historical research, reviewed public records, interviewed key representatives, and performed a site visit.

The historical research conducted in the preparation of this EDDA included the following:

- a search of Sanborn Fire Insurance maps and published city directories;
- a review of federal, state, and local environmental records;
- a review of environmental lien records;
- a review of historic aerial photography and historic topographic maps; and
- documentation of ownership history.

The government records search included a review of records maintained by the United States Environmental Protection Agency (USEPA), the United States Coast Guard (USCG), the United States Geologic Survey (USGS), the United States Army Corps of Engineers (USACE), the Michigan Department of Environmental Quality (DEQ), the Isabella County Board of Health, and the Isabella County Drain Commission. A database and environmental lien search was also performed by Environmental Data Resources, Inc. (EDR), Appendix D. Records were reviewed for information regarding potential sites of concern that may be located within the search radii around the project site as defined by ASTM E 1527-05.

The site visit included an inspection of the parcel and surrounding properties as well as interviews of property owners, neighbors, and officials with pertinent knowledge of environmental conditions at and around the parcel.

### 1.3 Significant Assumptions

Assumptions made in the preparation of this report include that the environmental records, obtained from federal, state, and local sources, are complete and current. It has also been assumed that information on gravimetric groundwater flow can, in general, be extrapolated from the local topography and surface drainage in published reports. In addition, RW Armstrong has assumed that all persons interviewed for this report were truthful and forthcoming in their answers.

#### 1.4 Limitations and Exceptions

RW Armstrong based the conclusions of this EDDA upon the information described herein subject to the limitations attached to or described in this report. Due to the limited nature of the inquiry, RW Armstrong makes no warranties; either expressed or implied, that the parcel is free of contamination or other environmental issues. RW Armstrong does warrant, however, that the audit was performed in accordance with the level of attention and skill equal to industry standards under similar conditions.

#### 1.5 Special Terms and Conditions

The areas of investigation were determined in accordance with the parcel boundaries, FAA Order 1050.19B, and ASTM E 1527-05. If the scope of the project should change, additional inquiry may be warranted.

In accordance with FAA Order 1050.19B, if the real property transaction does not occur within 180 days of the date of the site survey and the date of the records review (whichever date is earlier), the report must be reviewed to ensure that the findings of the report are still valid, complete, and accurate, and in accordance with this order before the real property transaction is executed. If the scope of the project or the environmental condition of the property has changed substantially, the report should be updated before proceeding with the real property transaction.

#### 1.6 User Reliance

RW Armstrong has prepared this report for the benefit of the City of Mount Pleasant. The use of this report by any other person or party is limited to specific items that have been included in this report as detailed in Section 1.5. A copy of this report may be provided to and relied upon by a lender, investor, purchaser, or regulatory authority of the property covered by this report. FAA Order 1050-19B specifies that a report is presumed to be valid if completed within 180 days of the review.

### 2.0 Site Description

#### 2.1 Location and Legal Description

The parcel is located at 5665 East River Road, Mount Pleasant, Michigan. This is within the Shepherd and Leaton, Michigan USGS 7.5 Minute Topographic Quadrangles, Township 14 North, Range 4 West, NE ¼ of NE ¼ of Section 12 in Union Township. It is Isabella County parcel number 14-012-20-001-00, as obtained from the Isabella County Map Viewer & Parcel Information Search website. The parcel is currently owned by Turf, Inc.; there are approximately 40 acres included in the parcel. Location maps and aerial photographs are included in Appendix A.

#### 2.2 Site and Vicinity General Characteristics

The parcel is surrounded by properties owned by the City of Mount Pleasant. The Mount Pleasant Municipal Airport is adjacent to the southern boundary of the parcel. The site is wooded with multiple ditches and natural occurring stream beds leading to the Chippewa River. There are two depressed areas in the center of the parcel which are currently covered with grass and low shrubs as verified by aerial photographs and a field visit on January 5 and 6, 2010.

According to the Natural Resources Conservation Service (NRCS), Web Soil Survey, the parcel is generally underlain by loamy sands including the Wasepi Loamy Sand, the Kingsville Loamy Sand, and the Udipsamments. These soils typically have a 0-3% slope

and have a high to very high capacity to transmit water. They originated from sandy and gravelly glaciofluvial or glaciolacustrine deposits. The NRCS Web Soil Survey Report is included in Appendix A.

Isabella County is generally underlain by thick sequences of Pleistocene glacial deposits of sand and gravel which are reported to be approximately 150 to 600 feet thick. The deposits are comprised of till, outwash, and lacustrine deposits which are medium- to coarse-texture materials, but can range from clay to boulder size particles. The bedrock surface is composed of the Jurassic "red beds" and the Saginaw Formations which underlie the glacial deposits. The Jurassic "red beds" are generally 50 to 150 feet thick and consist of red clay, mudstone, siltstone, and sandstone. These are considered to be a confining layer when detailing the hydrogeology of the area. The Saginaw Formation underlies the Jurassic deposits and consists of interbedded sandstone, siltstone, shale, coal, and limestone with hydraulic connected aquifers. These aquifers range from 100 to 370 feet thick and yield both fresh and saline water.

### **2.3 Current Use of the Property**

The parcel is currently not being used for any residential or industrial purposes; it has not been used since at least 1973 according to Ms. Barbara (Brehm) Grewe, a current partial owner of the parcel. Mr. John Benzinger, Mount Pleasant Municipal Airport Manager, says that the parcel is sometimes used by hunters, but not for any other uses.

### **2.4 Descriptions of Structures**

There are no buildings currently standing on this parcel.

### **2.5 Current Uses of the Adjoining Properties**

The City of Mount Pleasant owns the properties surrounding the parcel. The Mount Pleasant Municipal Airport is to the south of the parcel.

## **3.0 User Provided Information**

### **3.1 Title Records**

The property title is currently held by Turf, Inc. They purchased the parcel from Central Michigan Inns, Inc. on November 12, 2007.

Central Michigan Inns, Inc., William Brehm, president, purchased the parcel from Fred A. Grewe and Beatrice M. Grewe on June 28, 1973. The Grewes had purchased the parcel from Joseph C. Wilmot, Doris Wilmot, Harold J. Wilmot, Patricia Wilmot, James H. Wilmot, Mary L. Wilmot, and Edward M. Wilmot on November 22, 1963. This information was obtained at the Isabella County Register of Deeds on January 7, 2010.

### **3.2 Environmental Liens or Activity and Use Limitations**

A search for environmental liens against the parcel was performed on January 5, 2010 by EDR. According to the search, there are no current or previous environmental liens or activity and use limitations against the parcel. In addition, Ms. Barbara (Brehm) Grewe, a current partial owner of the parcel, indicated during an interview on January 6, 2010 that she did not know of any environmental liens currently in place. A copy of the Environmental Lien Search Report is included in Appendix D.

### 3.3 Specialized Knowledge

Historic use of the parcel was investigated via aerial photography (1938, 1952, 1958, 1965, 1967, 1972, 1982, 1984, 1992, and 2005) and topographic maps (1936 and 1973). The parcel is depicted in these aerial photographs as lightly wooded, but not inhabited or used for industrial purposes from 1938 until 1965. In the 1965, 1967, and 1972 aerial photographs, the parcel appears to be excavated or under construction. In the aerial photographs, dated 1967, 1982, and 1984, there appears to be two well defined, water-filled pits on the property. However, the pits do not contain water in the 1992 or 2005 aerial photographs and vegetation is growing. The surrounding areas, other than the airport to the south of the parcel, appear to be uninhabited in all the historic photographs.

There is no Sanborn Fire Insurance Map coverage of Mount Pleasant, Michigan which includes the parcel. A copy of the EDR Sanborn Fire Map Search showing no coverage of the area is included in Appendix C.

### 3.4 Commonly Known or Reasonably Ascertainable Information

Local agencies and site representatives were contacted and interviewed regarding known environmental conditions of the parcel. Please see Section 6.0 for information obtained during those interviews.

### 3.5 Valuation Reduction for Environmental Issues

The findings of this investigation may affect the valuation of the parcel. The exact reduction is unknown at this time.

### 3.6 Owner, Property Manager, and Occupant Information

The parcel is currently owned and managed by Turf, Inc., 2187 University Park Drive, Okemos, Michigan. It was purchased by Turf, Inc. on November 12, 2007 from Central Michigan Inns, Inc.; Debra (Brehm) Grewe is the daughter of the president of Central Michigan Inns, Inc., William Brehm; and thus has considerable historic knowledge of the property. The interview with Ms. Grewe is detailed in Section 6.1.

### 3.7 Reason for Performing Phase I

The parcel is proposed for purchase by the City of Mount Pleasant for airspace protection, existing FAR Part 77 transitional surface penetrations, existing building restriction line penetrations, and future airport development.

## 4.0 Records Review

This section includes information provided by federal, state and local regulatory agencies. These records were reviewed to identify recognized environmental conditions (RECs) on the site and at surrounding locations which may impact the site. A portion of the information included in this section was compiled by EDR. All records were reviewed during December 2009 and January 2010. The EDR Radius Map Report with Search Report is included in Appendix D.

## 4.1 Standard Environmental Record Sources

### 4.1.1 Federal Records

#### National Priority List (NPL) Database

The NPL identifies uncontrolled hazardous waste sites that warrant further investigation to determine if long-term remedial action is necessary. The NPL is maintained by the USEPA and is comprised of two sections, the Federal Section and the General Section. Both sections were reviewed for this investigation. According to the NPL database, there are no NPL sites within one mile of the parcel.

#### Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database

The CERCLIS is an inventory of all potential uncontrolled hazardous waste sites, based upon state and federal investigation efforts, and notifications received as provided by CERCLA. There are no sites listed on the CERCLIS database within 1/2 mile of the parcel.

#### Resource Conservation and Recovery Act Information (RCRAInfo) Database

The RCRAInfo, the USEPA's most comprehensive information system, provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database, which replaced the recoding capabilities of the Resource Conservation and Recovery Information System (RCRIS), includes information on sites which generate, transport, store, treat, and/or dispose of hazardous waste as identified by RCRA. Categories of sites identified by RCRAInfo are listed and defined as follows:

- Large quantity generators (LQGs): generate over 1,000 kg of hazardous waste or over 1 kg of acutely hazardous waste per month.
- Small quantity generators (SQGs): generate between 100 kg and 1,000 kg of hazardous waste per month.
- Conditionally exempt small quantity generators (CESQGs): generate less than 100 kg of hazardous waste or less than 1 kg of acutely hazardous waste per month.
- Treatment, storage, disposal (TSD) facility: treat, store, and/or dispose of hazardous waste.
- Transporters (Trans): entities that move hazardous waste from a generator to a TSD.

In addition, the RCRAInfo database identifies hazardous waste handlers with RCRA corrective action activity based on the Corrective Action Reports (CORRACTS). According to the RCRAInfo database, there are two RCRA sites within one mile of the parcel. They are listed below. Both companies are currently out of business at these locations.

Site ID	Facility	Address	ID #	Category
A	TMI Environmental Services	5501 E Airport Rd	MID985650639	Inactive
B	International Waste Management	5580 Airport Rd	MID980791438	Inactive

**Emergency Response Notification System (ERNS)**

The National Response Center, U.S. Coast Guard (USCG) records and stores information concerning the releases of oil and hazardous substances nationwide. This information is available by query on their web site. The parcel was not listed on this database.

**Toxic Release Inventory (TRI) Facilities**

The USEPA retains a list of industry groups, as well as federal facilities, which report information about toxic chemicals that are being used, manufactured, treated, transported, or released into the environment; and includes information about waste management and pollution prevention activities. There are no sites currently listed on the TRI System within 1/2 mile of the parcel.

**Air Facility System (AFS)**

The AFS contains compliance and enforcement information and permit data for stationary sources of air pollution regulated by the USEPA and Michigan DEQ. This information is used to track the compliance status of point sources covered under the various regulated programs in a central location. There were no sites listed on the AFS within one mile of the parcel.

**Integrated Compliance Information System (ICIS)**

The ICIS is the core information management system supporting the enforcement and compliance operations of the USEPA Office of Enforcement and Compliance Assurance (OECA). The system is used by the USEPA to track federal enforcement and compliance activities performed by the USEPA headquarters and regional offices. There were no sites subject to formal enforcement action through the ICIS system within one mile of the parcel.

**Facility Index System/Facility Registry System (FINDS) Database**

The FINDS database contains both facility information and 'pointers' to other sources that contain more detail. The following sites were included in the FINDS database.

Site	Facility	Address	ID Number
A	TMI Environmental Services	5501 E Airport Rd	110003674444
B	International Waste Management	5580 Airport Rd	110003616971

**Supplemental Data**

Supplemental federal databases were also reviewed. Details of these database searches are included in the EDR Radius Map Report with Search Report in Appendix D. There are no other recorded or listed sites or incidents of environmental concern within one mile of the parcel.

**4.1.2 Michigan State Records****State Hazardous Waste Sites**

This web-based database contains state wide information equivalent to the federal CERCLIS. These sites may not be listed on the federal CERCLIS list.



The Valley Road Facility (Site C), 4942 East Valley Road, was listed on the State Hazardous Waste Site. However, it was deleted from the list on September 12, 1991. There were no other sites within 1/2 mile of the parcel listed on the database.

#### Toxic Chemical Release Inventory

The 2007 Toxic Chemical Release Inventory, State of Michigan Summary Report outlines the releases and waste management activities of Michigan facilities that are subject to the environmental report requirements of Section 313 of the federal Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 (a.k.a. Title III of the Superfund and Reauthorization Act (SARA Title III)) and the Pollution Prevention Act of 1990. There were no sites listed within the 2007 summary report within 1/2 mile of the parcel.

#### Landfill Sites Database and Map

The Michigan DEQ retains an inventory of waste disposal facilities within Michigan. According to the map available on the Michigan DEQ web site, there are no Licensed Type II or Type III Landfills within Isabella County. In addition, according to the Michigan DEQ Hazardous Waste Treatment, Storage, and Disposal Facilities Directory (TSD) there are no TSD Facilities within Isabella County.

#### Leaking Underground Storage Tank (LUST) Database

The Michigan DEQ maintains a database of all reported LUST incidents in Michigan. There are two registered sites, with a total of three incidents recorded. Of those incidents, none are undergoing active remediation at this time. The table below lists the sites and details of facilities in the 1/2 mile search area surrounding the parcel which have a record of a LUST incident.

Site	Facility	Address	ID Number	Date	Status	Released Substance
D	GTE North	1430 S Isabella Rd	C-2452-90	11/26/90	Closed	Unknown
E	Mt Pleasant Municipal Airport	5580 E Airport	C-0624-95	6/1/95	Closed – With Deed Restrictions	Unknown
E			C-0630-95	6/2/95	Closed – With Deed Restrictions	Unknown

#### Registered Underground Storage Tank (UST) Database

USTs are regulated and registered by the Michigan DEQ. There are three sites within the 1/2 mile search area which contain registered USTs, none of which currently contain active USTs. According to this database, the sites listed below have contained a UST.

Site	Facility	Address	ID Number	Tanks	Status
F	General Telephone Co	1430 S Isabella Rd	11224	2 – gas 1 – diesel	Removed Removed
E	Mt Pleasant Municipal Airport	5580 E Airport	5580	3 – av. gas 1 – jet fuel	Removed Removed
G	Pro Comm Inc	5788 E Airport Rd	38430	1 – gas 1 – diesel	Removed Removed

#### Registered Aboveground Storage Tank (AST) Database

The Michigan DEQ retains a database which records ASTs within the state. The following sites are listed on that database according to the EDR search; this

information could not be verified on the Michigan DEQ website or through interviews with Michigan DEQ personnel and was found to be inaccurate upon field verification at the Mount Pleasant Municipal Airport.

Site	Facility	Address	Facility ID	# of Tanks	Material
E				1	Flammable Liquid
	MOP – Mt Pleasant	5453 E Airport		1	Removed
	Municipal Airport	Road	91037214	1	Jet Fuel A

### Brownfield Inventory

The Michigan DEQ maintains a database of all Brownfield project locations. According to this database there are no Brownfield water system replacement sites or Brownfield/UST Field Sites within 1/2 mile of the parcel.

### Michigan Department of Environmental Quality Site Registry

The Michigan DEQ maintains a geographically-based interactive web site that presents information detailing locations of environmental interest. For example, the map contains information on completed cleanups and past operations as well as data on current operations and activities. The Site Registry Inquiry System currently includes site identification information for the following systems:

- Air Quality
  - Air Inventory
- Environmental Science & Services Division
  - Toxic Release Inventory
- Land & Water Management Division
  - Land & Water Management
- Office of Geological Survey
  - Mineral Wells
  - Oil & Gas
- Waste and Hazardous Materials
  - Conditional Exempt Generator of Hazardous Waste
  - Hazardous Waste Transporter
  - Large Quantity Generator of Hazardous Waste
  - Liquid Industrial Waste
  - Scrap Tires
  - Small Quantity Generator of Hazardous Waste
  - Solid Waste Refuse
  - Treatment, Storage, or Disposal Facility
  - Used Oil Program
- Water Bureau
  - Groundwater
  - NPDES
  - Water Program

According to the interactive map on the website, there are no locations of interest within 1/2 mile of the parcel.

### Supplemental Data

Supplemental state databases were also reviewed. Details of these databases are included in the EDR Radius Map Report with Search Report in Appendix D. There were no sites found on the supplemental databases within 1/2 mile of the parcel.

#### 4.1.3 Indian Reservation Records

The Isabella Indian Reservation is the land base of the Saginaw Chippewa Tribal Council which is located within 1/8 mile of the parcel. The reservation's total land area is 2.17 square miles and a population of 25,838 residents (as of the 2000 census).

According to the UST records maintained by the Indian Reservation, the following locations contain USTs. The USTs at all sites listed have been removed.

Site	Facility	Address	# of Tanks	Status	Date	Evidence of Leaks
F	General Telephone Co	1430 S Isabella Rd	2	Removed	6/15/90	Yes
E	Mt Pleasant Municipal Airport	5580 E Airport	4	Removed	6/1/95	Yes
G	Pro Comm Inc	5788 E Airport Rd	5	Removed	4/17/95	

#### 4.1.4 Isabella County Records

Isabella County Health Department was visited on January 6, 2010 to obtain information associated with the environmental condition of the parcel. The Health Department maintains files documenting water wells and septic systems. They did not have any information associated with the address of the parcel and the surrounding area. In addition, there was no information found for the associated Golf Course or Holiday Inn.

The Isabella County Drain Commissioner, Mr. Rick Jakubiec, was contacted regarding his knowledge of potential drains through the parcel. Mr. Jakubiec reviewed the Drain Commission files and found no information associated with the parcel address. In addition, he reported that he has lived in the community for 35 years and wasn't aware of any other issues which may have affected the parcel.

Mr. Duane Ellis, the Isabella County Engineer, supplied a map which outlines the miscellaneous easements surrounding the Mount Pleasant Municipal Airport. This map shows an easement owned by Central Michigan Inns, Inc. along the abandoned Summerton Road. This easement was obtained in August 1990 and the purpose was listed as "Golf Course". The location of this easement correlates to the locations of the underground piping and ground-level manhole covers which were identified in the field visit. The easement map is included in Appendix D. Photographs of the piping and manhole covers are included in Appendix B.

#### 4.2 Additional Environmental Record Sources

Additional information was obtained from the Michigan Highways website. The website outlines the history and organization of the highway system in Michigan. According to this website, US 127 through the Mount Pleasant area was completed in 1962. This would coincide with the timing of the excavation pits at the parcel.

#### 4.3 Physical Setting Sources

The physical setting was researched using the USGS Topographic maps (1936 and 1973), aerial photographs (1938, 1952, 1958, 1965, 1967, 1972, 1982, 1984, 1992, and 2005), field visits on January 6 and 7, 2010, and the NRCS, Web Soil Survey. These maps are included in Appendix A.

#### 4.4 Historical Use Information on the Property

The historic aerial photographs (1938, 1952, and 1958) show the parcel as a lightly wooded area. During that time the parcel was held by the Wilmot family.

From 1963 until the 1973, the parcel was owned by Fred A. Grewe and Beatrice M. Grewe. Mr. Fred Grewe owned an excavation company in the Mount Pleasant community. The parcel shows evidence of excavation in the 1965, 1967, and 1972 aerial photographs with multiple dirt roadways and pits. Ms. Barbra (Brehm) Grewe, the current parcel owner and daughter-in-law of Mr. Fred Grewe, suspected that the parcel may have been used to obtain borrow material. This material could have been used in the construction of the new interstate (US 127) which was being built in the area at that time.

In 1973, Mr. Fred Grewe sold the parcel to Central Michigan Inns, Inc., Mr. William Brehm, president. The 1982 and 1984 aerial photographs show well defined septic lagoons filled with water. The exact date of construction and purpose of the lagoons is not known. There were no written records found (NPDES permit or county septic permit) to determine those details.

An easement was obtained by Central Michigan Inns, Inc. from the City of Mount Pleasant in 1990. This easement extended along the west side of the abandoned Summerton Road, from the Golf Course to the southeast corner of the parcel. The city records indicate the purpose of the easement, as "Golf Course". The aerial photographs from 1992 shows the depressed areas of the septic lagoons; however no evidence of water is shown in the photograph.

The 2005 aerial photograph of the parcel shows the outline of the septic pits; however the area is overgrown with trees and grass and doesn't show standing water. Central Michigan Inns, Inc. owned the parcel until November 12, 2007 at which time the parcel was sold to Turf, Inc., which is owned by Ms. Barbara (Brehm) Grewe and her brother, William Brehm, Jr. Since that time, there has been no activity on the parcel.

The applicable and available City Directories were reviewed by EDR on January 20, 2010 for the parcel and surrounding areas. No suspect facilities were found during the review of the Polk's City Directory, Jill-Donnelly Criss-Cross Directory, Johnson's City Directory, Robinson's County Directory, or Enterprise City Directory. The EDR City Directory Abstract is included in Appendix C.

#### 4.5 Historical Use Information on Adjoining Properties

The City of Mount Pleasant owns the properties which surround the parcel. The Mount Pleasant Municipal Airport is located on the southern side of the parcel. This airstrip was constructed by the Roosevelt Oil Company for their business use in the 1930s and then donated to the City of Mount Pleasant in 1940. The airport is currently categorized as a General Utility Airport with a 5,000 by 100 foot main runway and a 2,500 by 160 foot turf cross-wind runway averaging 11,000 landings and take-offs per year.

#### 5.0 Site Reconnaissance

An inspection of the parcel and surrounding properties was conducted on January 6 and 7, 2010. There were no additional concerns found as a result of the site inspection. Photographs taken during the site inspection are included in Appendix B.

In addition, photographs were taken during the wetland delineation of the parcel. Those photographs and also included in Appendix B.

### **5.1 Methodology and Limiting Conditions**

The work was completed in accordance with *FAA Order 1050.19B – Environmental Due Diligence Audits in the conduct of FAA Real Property Transactions* and the *ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, ASTM E 1527-05 with exceptions listed in Section 1.4.

During the field investigation on January 6 and 7, 2010, there was approximately 4 inches of snow cover which restricted the direct ground observations.

RW Armstrong based the conclusions of this EDDA upon the information described herein. Due to the limited nature of the inquiry, RW Armstrong makes no warranties; either expressed or implied that the site is free of contamination or other environmental issues. RW Armstrong warrants that the assessment was performed in accordance with the level of attention and skill equal to industry standards under similar conditions.

### **5.2 General Site Setting**

The parcel is currently lightly-wooded and is not currently being used for residential or industrial purposes. It is generally flat with well draining soils and two central depressed areas, covered with grass, shrubs, and small trees.

### **5.3 Exterior Observations**

The easement associated with a high-pressure gas line intersects the southwest corner of the parcel. This gas line runs southeast to northwest across the vicinity. In addition, an easement extends from the southeast corner of the parcel, southward across the airport to the golf course. This easement is owned by Central Michigan Inns, Inc, its use is labeled as "Golf Course".

Also found during the field investigation was underground pipes and surface-level manhole covers. There was no evidence of the specific use of these pipes or the year they were installed. Photographs of the pipes and manhole covers were taken during the wetland field investigation in October 2009 and are included in Appendix B.

### **5.4 Interior Observations**

There are no interior spaces associated with this project.

## **6.0 Interviews**

### **6.1 Interview with Owner/Site Manager**

Ms. Barbara (Brehm) Grewe is a partial owner of the parcel. She was interviewed on January 6, 2010 concerning the history of the parcel and the potential hazardous materials which may impact the parcel. Her father-in-law is Mr. Fred Grewe, the owner of the parcel from 1963 until 1973. In addition, her father, Mr. William Brehm, was the president of Central Michigan Inns, Inc., the owner of the parcel from 1973 until 2007. Therefore, Ms. Grewe has extensive historical knowledge of the parcel.

She indicated that her father, Mr. William Brehm, opened the Holiday Inn (5665 East Pickard Road, Mount Pleasant) in September 1964. There was a septic lagoon to the east of the hotel property, along Pickard Road, which Ms. Grewe said was used for the septic

needs of the Holiday Inn. She was unaware of any pipes connecting the Holiday Inn to the parcel. Ms. Grewe noted illegal dumping which occurred on the parcel; however she remembered her brother, Mr. William Brehm, Jr., undertaking the clean-up of that dumped material in the mid-1980s.

## 6.2 Interviews with Occupants

There are no secondary occupants of this parcel.

## 6.3 Interviews with Local Government Officials

The Acting Supervisor, Saginaw Bay District Office, Remediation and Redevelopment Division, Michigan DEQ, Ms. Rhonda Klann was contacted on January 4, 2010 regarding their files concerning the parcel. She reviewed their files and didn't find information concerning the parcel; however she had information about the Mount Pleasant Municipal Airport. In 1988, an inspection of the airport was conducted in response to an anonymous complaint of leaking drums producing a strong odor within a hanger on airport property. Ms. Klann found 31 drums in Hanger 5 but no odor was evident. Mr. Roy Crain, the airport manager at the time, reported that the used oil had been obtained from a manufacturing firm for use in a waste oil heater. The used oil was later found to be contaminated with an unknown substance and could not be burnt. Mr. Crain was to contact Ms. Klann regarding sampling and disposal of the drums. In a letter from Mr. Crain to Ms. Klann, dated November 28, 1988, he reported that the airport was pursuing the company from which they purchased the waste oil. Mr. Crain wrote that the airport would proceed with characterization and removal of the material in the drums. Ms. Klann indicated in the interview that there was no additional information concerning these drums, or other incidents at the airport.

The Isabella County Health Department was visited on January 6, 2010. They maintain records of private water wells and septic systems within Isabella County, organized by street address. Ms. Linda Stanwick, Secretary, reviewed the records and did not find any information connected with the parcel address. In addition, she did not find records associated with the address of the Holiday Inn or the Golf Course.

Mr. Rick Jakubiec is the Isabella County Drain Commissioner. He was interviewed on January 6, 2010. Mr. Jakubiec reviewed the records of the county and contacted the Isabella County Engineer. The Drain Commission did not have records of legal drains within the parcel; however the County Engineer, Mr. Duane Ellis, had a map of the easements in the vicinity of the parcel. That map is included in Appendix D. The map shows an easement from the parcel, south across the airport, to the Holiday Inn Golf Course. This easement was filed with the City of Mount Pleasant Engineering Department on August 2, 1990. Its purpose is listed as "Golf Course".

## 6.4 Interviews with Others

The Mount Pleasant Municipal Airport was visited on January 6 and 7, 2010. Mr. John Belzinger is the current airport manager and has lived in Mount Pleasant for an extended amount of time. Mr. Belzinger provided information to update the Michigan DEQ AST database; there are three ASTs owned and operated by the airport on the airport property, one flammable liquid, one jet fuel A, and one diesel fuel. He was unaware of any spills or incidents attributed to these ASTs. The Mount Pleasant Municipal Airport does not use any type of de-icing fluids. They have a heated hanger available for de-icing airplanes; therefore, the airport has no spills or incidents attributed to de-icing fluids or areas of potential ammonia contamination.

The USTs at the airport were removed and soil was over-excavated to remove petroleum contamination in June 1995. Mr. Belzinger was the manager of the airport at that time. The LUST incident was attributed to the impacted soil and the removal of a UST which was discovered during the removal activities. The Michigan DEQ has listed the incidents as "Closed".

Mr. Belzinger was aware of the barrels which were described by the Michigan DEQ Remediation and Redevelopment Division file review. These barrels were described as containing used oil and housed in Hanger 5 in 1988 by Ms. Rhonda Klann, Michigan DEQ Remediation and Redevelopment. Mr. Roy Crane was the outgoing airport manager at the time of her inspection. In 1989, when Mr. Benzinger took over as airport manager, he properly disposed of the used oil and the barrels. However the DEQ was not notified of these actions. Mr. Belzinger indicated during the interview that he would contact Ms. Klann and coordinate a re-inspect the airport to update the Michigan DEQ files.

When asked about the companies which surround the airport, Mr. Belzinger indicated that TMI Environmental Services, Site A (RCRA Inactive) and International Waste Management, Site B (RCRA Inactive) had been out of business for some time. He was unaware of any concerns stemming from those companies which may impact the parcel.

Mr. Belzinger was able to field locate the high pressure gas lines traversing the airport property and was unaware of any concerns attributed to those lines.

## 7.0 Findings

There were sites within the search area of this parcel found on the federal, state, and local database searches.

- 2 RCRA Sites
- 2 FINDS Sites
- 1 Michigan State Hazardous Waste Site
- 2 sites listed as Michigan DEQ LUST Incidents (Closed)
- 3 registered Michigan DEQ UST Facilities (Removed)
- 1 registered Michigan DEQ AST Site
- 3 registered Indian Reservation UST facilities (Removed)
- 2 registered Isabella County Easement
- 1 Michigan DEQ Remediation and Redevelopment field investigation file

During the field visit, there was no distressed vegetation or stained soil seen; however there was snow cover on the ground which limited viewing of the ground surface. Due to the incomplete information concerning the history of the septic pits within the parcel, there is an unknown potential for contamination within the septic pit area of the parcel.

No one interviewed knew of outstanding environmental issues not previously outlined during the research.

## 8.0 Opinion

Considering the level of investigation and interviews, in addition to current and historical information available concerning the parcel, this report maintains a high level of confidence in its ability to detect potential contamination. It is the opinion of RW Armstrong that the research information should be tempered with the topographic and



physical conditions of the project site and the amount of time past since any activity has occurred on the parcel.

## 9.0 Conclusions

RW Armstrong has completed this Phase I EDDA of the proposed parcel acquisition site adjacent to the Mount Pleasant Municipal Airport in Mount Pleasant, Michigan. This Phase I EDDA was completed pursuant to *FAA Order 1050.19B – Environmental Due Diligence Audits in the conduct of FAA Real Property Transactions* and the ASTM International Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM E 1527-05.

The areas of investigation were determined in accordance with the parcel limits and the guidelines of FAA Order 1050.19B and ASTM E 1527-05. If the scope of this project changes, additional investigations may be warranted.

In accordance with ASTM E 1527-05, a recognized environmental condition (REC) is defined as “the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into a structure on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not RECs.”

As a result of the research outlined in this report, the parcel was found to be a REC. The following facts contributed to this designation:

- The historic aerial photographs show excavation, which has an unknown purpose
- The historic aerial photographs show man-made rectangular pits filled with azure-blue water, possibly indicative of biological activity
- The 1973 USGS Topographic map labels the pits as “Sewage Disposal Pits”
- The Isabella County Engineer supplied a map which shows an easement from the golf course to the property, with an unknown purpose

The investigation found the potential of the presence or likely presence of a hazardous substance or petroleum products within the historic septic pits within the parcel under conditions that suggest an existing/past/threat of release into ground, ground water, or subsurface water. Sampling and testing is suggested to verify the presence of contaminants in the vicinity of these septic pits.

Soil borings are recommended within the septic pit area and should include sampling of the soil and groundwater. Testing recommended includes Total Petroleum Hydrocarbons (TPH) Gasoline Range, Diesel Range, and Extended Range, benzene, toluene, ethylbenzene, and xylene (BTEX), naphthalene, methyl tertiary butyl ether (MtBE), heavy metals, and fecal coliform. RW Armstrong recommends boring placements at 150 foot intervals, totally 15 to 20 borings distributed through the septic pit locations.



Due to the limited nature of this inquiry, RW Armstrong makes no warranties; either expressed or implied that the site is free of contamination or other environmental issues. In addition, should construction occur at this location, a proper health and safety plan should be designed, provided to all contractors and subcontractors prior to construction activities, and implemented during construction within the project area. All workers should be equipped with appropriate personal safety equipment.

## 10.0 Deviation

There were no deviations from FAA Order 1050.19B or ASTM E1527-05 in completion of this investigation.

## 11.0 Additional Services

There were no additional services completed.

## 12.0 References

US Environmental Protection Agency, Facility Registry System (FRS) through the Envirofacts web-site, accessed 1/14/10

National Response Center, On-Line Query, accessed 1/14/10

USEPA, Facility Index System (FINDS), last updated 10/19/09

USGS in cooperation with the State of Michigan, Department of Environmental Quality, Summary of Hydrogeologic Conditions by County for the State of Michigan, 2007

Michigan Department of Environmental Quality, 2007 Toxic Chemical Release Inventory, Summary Report

Michigan Department of Environmental Quality, Combined Solid Waste Landfill Waste Receipt Report, 2008

Michigan Department of Environmental Quality, Active Part 115 Solid Waste Landfills, June 2008

Michigan Department of Environmental Quality, Michigan Hazardous Waste Treatment, Storage, and Disposal Facilities Directory (TSD), accessed December 30, 2009

Michigan Department of Environmental Quality, Brownfields – UST Database, accessed December 30, 2009

Michigan Department of Environmental Quality, Site Registry, accessed December 30, 2009

Michigan Department of Environmental Quality, Underground Storage Tank Facility Search and Leaking Underground Storage Tanks Site Search and Michigan Environmental Mapper, accessed December 30, 2009 (updated daily)