Vinton Veterans Memorial Airport (VTI)

Vinton, Iowa

AIP Project Number: 3-19-0092-011-2017

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

FOR

- Removal of Wetland Adjacent to Runway 9-27
- Removal of Other Existing Wetlands on Airport Property
- Parallel Taxiway Along Runway 9-27
- Land Acquisition in the BRL and for Removal of Wetlands
- Deer Fencing with Raised Bottom for Turtle Access
- Tree Removal

and other work as described within the EA.

April 2022

Prepared by: Clapsaddle-Garber Associates

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For: City of Vinton, Iowa

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This environmental assessment becomes a Federal document when evaluated, sign-	ed
and dated by the Responsible Federal Aviation Administration (FAA) Official.	

Responsible FAA Official	Date



Environmental Assessment

Vinton Veterans Memorial Airport

Vinton, Iowa

2022

I hereby certify that this engineering document was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

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Purpose and Need

- 1.1. Introduction This EA was prepared per FAA Order 1050.1F and FAA Order 5050.4B.
- 1.2. Purpose and Need Previous observations, and previous near misses and accidents have identified that wildlife in the immediate vicinity of the airport have been causing a danger to aircraft operations. While the animals and habitats adjacent to the airport have triggered a review of safety concerns, an in-depth analysis of the safety of the airport as a whole has also been looked into in order to establish areas that can significantly increase the safety of air operations at the airport. According to Advisory Circular 150/5200-18C, an Airport Safety Self-Inspection should provide primary attention to pavement areas, safety areas, markings, signs, lighting, aircraft rescue and firefighting, fueling operations, navigational aids, ground vehicles, obstructions, public protection, wildlife hazard management, construction, and snow and ice control. Some safety areas that have been identified as lacking at the Vinton Veteran's Memorial Airport include wildlife hazard management, obstructions, runway safety areas, air operation areas and public protection. The purpose of this Environmental Assessment is to evaluate why these areas are lacking and to implement improvements in order to remedy any existing issues and increase the overall safety of the airport.

Most airports have large areas of open space surrounding the airport to provide margins of safety for aircraft movement. However, these areas can present hazards to aviation if these areas attract wildlife to enter the airport's approach surfaces or air operations areas. In the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives, as well as billions of dollars in aircraft damage. At the Vinton Veterans Memorial Airport, there have been documented wildlife strikes, including deer and birds. One incident was logged in the FAA's wildlife strike database that involved a plane striking three deer crossing the runway causing major damage to the wing and fuselage. Additionally, there have also been many near misses. In 2017, a deer crossed in front of an air tractor on takeoff. The pilot had to pull up dead stick prior to achieving lift off speed to narrowly miss the deer. The deer ran underneath the airplane while it was in flight and caused minor damage to the spray wand under the belly of the plane. This incident went unreported. Animals are attracted to areas that reflect their natural habitat and provide basic living needs such as food and water. According to FAA Advisory Circular 150/5200-33C, Hazardous Wildlife Attractants on or Near Airports, areas such as wetlands can provide ideal locations for feeding, reproduction and escape.

There is a wetland currently adjacent to the primary runway attracting birds and other wildlife that have created a safety hazard to aircraft operations. According to AC 150/5200-33C, wetlands attract many types of wildlife, including many that rank high on the list of hazardous wildlife species. Birds that are known to frequent the wetland area for food, loafing and nesting include geese, ducks, shore birds and sand hill cranes along with deer. Just to the south of the wetland, a grouping of trees is located in the adjacent property. These groupings of trees, including trees around the wetland, have created a known spot for these deer and birds to gather throughout the year. A short field fence runs along the majority of the property line. However, the attraction of the wetlands has not stopped the deer from consistently finding their way onto airport property and wandering across paved and grassed areas necessary for aircraft operations. Local pilots have documented video footage of the numerous large herds of

deer crossing the airfield pavement while planes are taxiing down the runways prior to takeoff. Land-use practices that attract or sustain hazardous wildlife populations on or near airports can significantly increase the potential for wildlife strikes. In October of 2016, a representative from the USDA's Animal and Plant Health Inspection Services visited the airport and concluded in a letter to the FAA that the airport investigates ways to mitigate and remove the wetland area from the airport property.

At public-use airports, the FAA recommends immediately correcting any wildlife hazards arising from existing wetlands located on or near airports. According to FAA AC 150/5200-33C, the FAA recommends minimum separation distances for land uses that attract wildlife such as wetlands. These separation distances are mainly based on three criteria. First, the flight patterns of the aircraft using the airport. Second, the altitude at which most strikes occur. Seventy-eight percent of strikes occur under 1,000 feet, which is commonly during takeoff and landing procedures closest to the airport. Third, the separation distances are also based on National Transportation Safety Board (NTSB) recommendations. For airports serving Turbine powered aircraft, such as the Vinton Airport, AC 150/5200-33C recommends a separation distance of 10,000'. For additional safety to the approach, departure, and circling procedures the recommended separation distance is 5 statute miles, or 26,400 feet. The current separation between the existing wetland and the primary runway is 50 feet.

In order to maintain as much control over the safety of aircraft operations at an airport, it is highly encouraged to own property, where practical, out to the extents of all of the airport safety areas. These safety areas include the Runway Safety Area, Runway Object Free Area, Runway Protection Zones and Building Restriction Line. An easement is recommended in areas where owning land in fee is unfeasible. The airport currently owns all of the Runway Safety and Object Fee areas in fee. The Runway Protection Zones at both ends of Runway 9-27 and 16-34 are either owned in fee or easement. The Building Restriction Line is owned in fee for the majority of the airport except for the west half of Runway 9-27 and a portion to the northwest of Runway 16-34. Additional spaces within the airport property allows the airport to continue to develop its own facilities such as new hangars, if needed, and a parallel taxiway.

Currently, Runway 9-27 has one access taxiway located at Runway End 27 only. Some aircrafts utilize the cross wind visual Runway 16-34 to exit Runway 9-27 quicker. The intersection of these two runways is also very close to Runway End 27 and does not provide much additional value in regards to the amount of time spent taxing on Runway 9-27. Runway End 9 does have a fully constructed Runway End Turnaround that allows aircraft to safely turnaround outside of the runway safety areas. However, after turning around, the aircraft has to taxi the entire length of the runway before it can exit. In general, an airplane is on the runway an extra ¾ of a second for each 100 feet it remains on the runway. This means that aircraft back taxiing from Runway End 9 are on the runway a minimum of 30 additional seconds. The sooner an aircraft exits the runway, the more time the runway is available for takeoffs and landings. Per FAA design standards (AC 5300-13A), parallel taxiways are recommended with increased activity to provide safe and efficient use of the airfield. Additionally, a full parallel taxiway is required in order to decrease visibility minimums.

- 1.3. Proposed Action The following is a list of proposed projects that meet the purpose and need as described above. These projects are anticipated be completed in the near future. The City of Vinton proposes:
 - Removal of wetland adjacent to Runway 9-27.
 - Removal of other existing wetlands on airport property.
 - Removal of trees on existing airport property and acquired property
 - Land acquisition for removal of wetlands (14.9 acres in fee)
 - Installation of deer fencing with raised bottom for turtle access, to mitigate wildlife hazards and wildlife strikes, but reduce the impacts to the Blanding's Turtle.
 - Parallel taxiway along Runway 9-27.
 - Land acquisition in the 35' BRL (12.0 acres in fee)

All proposed projects are included in the Vinton Veterans Memorial Airport's latest Airport Layout Plan (ALP) sheets which were conditionally approved on May 20, 2008.

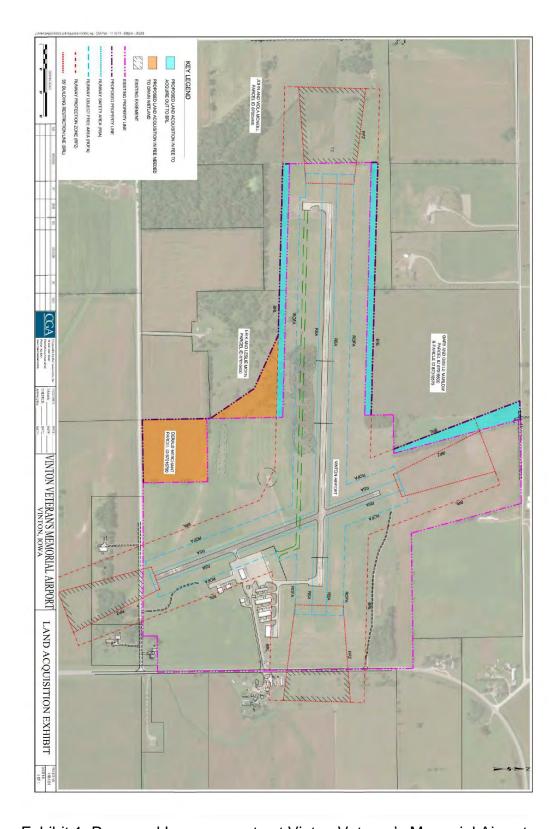


Exhibit 1. Proposed Improvements at Vinton Veteran's Memorial Airport

Alternatives

2.1. Introduction – This section defines the no action, reasonable and plausible alternatives and the proposed action for the various projects identified in this EA. It also briefly explains why each alternative meets or does not meet the Purpose and Need and whether it is considered reasonable or not reasonable.

2.2. No Action Alternatives

<u>2.2.1 - No Action Alternative for Wetland Removal and Land Acquisition for Removal of Wetlands</u>

Under the No Action Alternative, the existing wetlands on the airport would remain unchanged. The existing configuration would not ensure safe airport operations because the potential for wildlife hazards, wildlife attractants and a safety concern with standing water adjacent to the primary runway would still exist. Deer and birds would continue to be attracted to areas immediately adjacent to the air operations areas. The Do Nothing alternative may be considered cost free and environmentally benign. However, the safety consequences are much greater than the total cost to mitigate the hazard. The Vinton Veterans Memorial Airport is a public use airport, and if no action is taken to mitigate the safety concerns caused by the existing wetland there is growing potential that the next significant wildlife strike could be open to legal action.

2.2.2. - No Action Alternative for Tree Removal

Under the No Action Alternative, trees around the airport would be allowed to continue to grow. Trees growing on airport property are not compatible with the land use of the airport. Additionally tree growth within the immediate vicinity of the airport can create airspace obstruction issues or even attract wildlife to the airport. The Do Nothing alternative may be considered cost free and environmentally benign. However, the safety consequences are much greater than the total cost of their removal.

2.2.3 - No Action Alternative for Installation of a Deer Fence along the Airport Perimeter

Under the No Action Alternative, the existing airport perimeter fencing would be left as 4' high field fencing. The existing field fencing is acceptable for separating land uses and restricting most unauthorized access to the airfield, however it is not effective in keeping large bodied wildlife from entering aircraft operations areas. The Do Nothing alternative does not ensure safe airport operations because the potential for wildlife hazards still exists. The Do Nothing alternative may be considered cost free and environmentally benign. However, the safety consequences is much greater than the total cost to mitigate the hazard.

2.2.4 - No Action Alternative for Parallel Taxiway along Runway 9-27

Under the No Action Alternative, no parallel taxiway would be constructed along Runway 9-27. The configuration of Runway 9-27 does not allow planes to exit off the runway in a short amount of time when landing on Runway 27. Operations on Runway 27 require the pilot to land, stop, turnaround and then back taxiing the entire length of Runway 9-27 before they exit the runway. This requires airplanes to remain on the runway up to an additional 30 seconds just for back taxiing alone. Although not required, taxiways are necessary with increased activity to provide safe and efficient

use of the airfield. This benefit would not be realized under the Do Nothing Alternative. Additionally, a full parallel taxiway is required in order to decrease visibility minimums.

2.2.5 - No Action Alternative for Land Acquisition with the 35' BRL

Under the No Action Alternative, no additional land within the 35' Building Restriction Line (BRL) that falls outside of the existing airport boundary would be acquired. The land that falls within the 35' BRL is important for the airport to own in fee to allow the airport the ability to reduce the chances of potential obstructions around the airport vicinity. Additionally, it allows the airport to control the land uses within its immediate vicinity and allows additional space within the airport property limits for the airport to continue to develop its own facilities. Protecting these areas to the maximum extent possible not only serves to protect the aircraft users but also protects the public safety of those around the airport. The do nothing alternative would limits the airports ability to further develop its facilities and control the land use immediately vicinity of the airport.

The No Action Alternatives do not meet the project purpose and need for the various projects within this EA; however, in addition to being a Council on Environmental Quality/National Environmental Policy Act (CEQ/NEPA) requirement, it does serve as a baseline for a comparison of impacts to the preferred alternative and is therefore retained for analysis.

2.3. Reasonable Alternatives

<u>2.3.1 - Alternative for Wetland Removal and Land Acquisition for Removal of Wetlands (Rigorous Wildlife Deterrent Program)</u>

This alternative would implement a rigorous wildlife deterrent program at the airport including installing a deer fence. This alternative would allow the existing wetland to remain, which is undesirable. To implement a wildlife deterrent program at the airport would require extensive personnel training and allocation of such trained personnel to implement the program. The airport currently has a depredation permit from the lowa DNR and the airport has a wildlife air cannon that is used on a regular basis. Past attempts at combined depredation and non-lethal deterrents have failed due to the large deer herd population within the area. The location of the Cedar River and 2,000+ acres of public wildlife areas located near the airport provide the ability for a large deer population to be present at the airport.

The amount of birds that are attracted by the wetlands would also require personnel on a daily basis to harass and eliminate the birds as they come onto the airfield. As a general aviation airport, the Vinton Airport does not have the resources to implement and enforce such a rigorous deterrent program. All resources available have already been used to implement some form of a deterrent program with minimal effect and never fully impacts the level of wildlife coming to the airport.

Implementation of a rigorous wildlife deterrent program would allow the airport to attempt to meet the purpose and need, however it will be extremely ineffective at meeting the purpose and need. Even with implementation of a rigorous wildlife deterrent program the wildlife attractants will still exist and there is still a probability of wildlife strikes on the airfield.

This alternative does not meet the purpose and need and is not carried forward for further evaluation.

2.3.2 - Alternative for Wetland Removal and Land Acquisition for Removal of Wetlands (Relocate Wetland)

Another alternative is to construct a new wetland to accommodate the impact to the state listed threatened plant species and state listed threatened Blanding's Turtle. The Blanding's Turtle is known to frequent the existing wetland and uses the areas near the wetland for nesting during the summer season. If a new wetland was constructed nearby, efforts could be made to try to detour or migrate the turtles towards the new area for use during the non-nesting season. However, it is not a guarantee that attempts to migrate turtle movement to a new wetland would be successful. Although the turtles may lose a small area used for mating and reproduction, the primary nesting area is on the north side of the airport and will not be impacted, and the turtles may forego any new wetland location and continue to migrate along the same routes across the airport for nesting.

An effort could also be made to transplant the threatened plant species as well. The type of threatened plant species in the existing wetland is rare and requires the perfect wetland conditions including precise water table levels, exact wet conditions through the entire calendar year and exact soil types for it to even exist. This type of precise ecosystem is hard to replicate. A new wetland with the same characteristics could be constructed and an attempt could be made to transplant the plant species to the new wetland. However, it is likely that the plants will not survive the relocation.

In Advisory Circular 150/5200-33B, Section 2-4c, The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the recommended separation distances (10,000' from Airport). The Airport does not own any land further than 1,400' away from existing airfield pavement. Moving the wetland any amount will certainly help reduce the risk of it being immediately adjacent to aircraft pavement but moving it to another area inside airport property, well within the separation recommendations, will not solve the safety hazard of being a wildlife attractant, especially for avian species. It is also likely that moving the wetland would have no beneficial impact on the state threatened turtle or plant species. Moving the wetland from one area of the airport to another area does not meet the purpose and need of improving the safety at the airport and it is not viable that the plant species would survive the transplant or that the turtles would migrate to the new wetland area. This alternative was not carried forward for further environmental evaluation.

See Alternate 2.3.2 Exhibit in Appendix J for more information.

2.3.3 - Alternative for Wetland Removal and Land Acquisition for Removal of Wetlands (Rerouting Blanding Turtle Movements)

An alternative for the Wetland Removal, in regards to displacement of the state threatened turtles, would be to provide pipes under the runway so that they don't cross the airport pavement and to add locations at the bottom of the airport fence for access and strategic routing of the turtles. Along with the areas immediately adjacent to the wetland area, there are several areas to the north of the airport that have become ideal nesting location for the turtles during the late spring season. A large portion of them will cross the airport pavement to nest on the north side and then in the fall, the hatchlings

will migrate back across airport pavement. In order to allow the turtles to safely cross to the north side of the airport a tunnel or pipe could be installed underneath the pavement used for aircraft operations. Because these turtles do not like to travel long distances through dark environments, any pipe system would need to be installed with internal lighting to encourage travel through areas where day light is blocked. In order to get the turtles to use a designated piping route, fencing would need to be strategically placed to funnel them into the entrances of the pipes.

FAA safety regulations require the areas within 250' of the Runway centerline and 66' from Taxiway centerline to be clear of non-frangible objects so any fencing installed for strategic routing would need to be installed outside of these areas. Such a pipe would need to be more than 550' long to meet these safety requirements. A pipe that long, with the appropriate lighting installed and associated strategic fencing may be uneconomical for the benefit it provides. Providing such a safe route from one side of the airport to the other would be beneficial for airport safety and the safety of the turtles. However, the fence routing in this option would likely unintentionally block the turtles from using areas on the norths ide of airport property that they were trying to migrate to for nesting.

The sandy soils attract the turtles for nesting, but the wetland can accommodate the turtle during other seasons of the year aside from the winter season. If the wetland disappears, the amount of time the turtles frequent the area for nesting may or may not decrease. However, any form of a wetland will continue to attract other wildlife like birds and deer, and even if the turtles are taught to use new pipes under the airport pavement, it is the other wildlife like deer and avian that cause the greater wildlife hazard. The small increase to airport safety created by blocking the Blanding's Turtle from airport property does not justify the amount of work necessary to provide the appropriate routing and also does not justify the adverse effect it would have on the Blanding's Turtles nesting habits. This alternative meets the purpose and needs of improving the overall safety at the airport but does not improve the safety enough to justify the cost and negative impacts.

See Alternate 2.3.3 Exhibit in Appendix J for more information.

2.3.4 - Alternative for Tree Removal (Trim or Top only what is necessary)

Another alternative is to only trim or top trees that grow on the airport property to below the part 77 airspace (flight obstruction surface) for the airport. This alternative would reduce the possibility of obstructions within the vicinity of the airport due to the growth of the trees. Trimming trees is not a permanent solution as tree trimming will need to be accomplished every few years to ensure the regrowth of the trees does not violate the part 77 airspace. Additionally, trees that are allowed to grow on airport property also attract wildlife, especially birds, to the airport. Non removal of the trees will still create a potential risk for wildlife attractants and wildlife strikes at the airport. Implementation of a tree trimming program would allow the airport to attempt to meet the purpose and need. However, it will not allow the airport to ensure safe aircraft operations. This alternative does not meet the purpose and need and is not carried forward for further evaluation.

2.3.5 - Alternative for Parallel Taxiway along Runway 9/27

This alternative is to construct the parallel taxiway on the north side of the runway. Typically, at airports, especially general aviation airports, the parallel taxiway is installed

on the apron/hangar side of the runway, which at Vinton is the south side. If the parallel taxiway is on the south, a taxing aircraft would just need to cross secondary runway 16-34 to reach the apron/hangar area. If the parallel taxiway is on the north, a taxing aircraft would need to cross the secondary runway, and then also cross back over the primary runway to get to the apron/hangar area. Runway crossings provide areas for potential accidents. A taxiway on the north side of the runway requiring multiple runway crossings is inherently less safe than one on the south side. The only reason to consider installing a taxiway on the north side would be to avoid disturbing the existing wetland. Locating the taxiway on the north would not change the fact that the wetland is a significant safety risk to the airport. Allowing the wetland to stay, does not change the existing safety hazard of attracting birds and deer, and the main safety issue is not mitigated at all. The airport has documented that the state listed threatened Blanding's Turtle may frequent the north side of the airport for nesting and a taxiway on the north side will disturb the nesting habitat of the turtles more than it would on the south side. Due to aircraft movement created from a taxiway on the north side, this alternative does not solve the current safety issue of wildlife attractants at the airport and would actually increase the safety risk of other areas at the airport and does not meet the purpose and need of reducing the safety risks of the airport.

See Alternate 2.3.5 Exhibit in Appendix J for more information.

2.4. Proposed Actions

<u>2.4.1 - Proposed Action for Wetland Removal and Land Acquisition for Removal of</u> Wetlands

The proposed action is to remove the wetlands that are located on airport property. Removal of the wetlands would mean the impact of a state threatened plant species and may impact the state threatened Blanding's Turtles migration habits. However, removal of the wetlands will greatly increase the operational safety at the airport by removing a hazardous wildlife attractant and reducing the chances for wildlife strikes at the airport from deer, birds and other hazardous wildlife. Land acquisition is needed for a drainage ditch or overland flow path to be installed. The drainage ditch will drain the current wetlands and ensure that future storm water runoff can flow off airport property unimpeded once the wetlands have been removed.

2.4.2 - Proposed Action for Tree Removal

The proposed action is to remove all trees on existing property and additional property acquired as part of this proposed action. Removal of the trees will greatly increase the operational safety at the airport by reducing the chances for wildlife strikes at the airport. Removal of the trees will eliminate a wildlife attractant on the airport and eliminate the potential for airspace obstructions due to the trees.

2.4.3 - Proposed Action for Installation of a Deer Fence along the Airport Perimeter

The proposed action is to install a deer fence along the airport perimeter. The proposed fencing would be an approximately 8' tall woven wire fence fabric which will consist of wooden and steel post. Installation of a deer fence will greatly increase the operational safety at the airport by reducing the chances for wildlife strikes at the airport due to large mammals. Installation of deer fencing helps provide safer operations at airports with minimal staffing for a wildlife deterrent program. The fence will be skirted at the bottom around the majority of the property line (i.e. buried below the ground), in order to inhibit burrowing wildlife. Portions of the fence along the north and south side of the airport will be installed with the fabric 8" above the ground in order to allow the existing Blanding's Turtles access to continue their current nesting habits. A couple of 1-way deer gates will be installed along the perimeter in order to allow deer that may get trapped a way to escape airport property without allowing access in. Additionally, existing fences and fence lines not used as part of this project will be cleared, grubbed and the profile will be smoothed out as much as possible.

See Proposed Action 2.4.3 Exhibit in Appendix J for more information.

2.4.4 - Proposed Action for Parallel Taxiway along Runway 9-27

The proposed action is to construct a full parallel taxiway along Runway 9-27. The parallel taxiway will greatly increase the operational safety needs of aircraft operating at the airport by ensuring that all airplanes are able to exit the active runway immediately after landing.

2.4.5 - Proposed Action for Land Acquisition with the 35' BRL

The proposed action is to acquire, in fee, the proposed property within the 35' BRL. The proposed property acquisition will help to ensure the airport is able to reduce the chances of potential obstructions around the airport vicinity. Additionally, it will allow the airport to control the land uses within its immediate vicinity and allows additional space within the airport property limits for the airport to continue to develop its facilities.

3. Affected Environment

3.1. Introduction

This section describes the existing environmental conditions of the potentially affected geographical area.

3.2. Location Map, Vicinity Map, ALP, Photographs

Annotated photographs of the existing areas where the proposed actions will occur can be found in Appendix I.

3.3. Existing/Planned Land Uses and Zoning

3.3.1 Industrial/Commercial Activities

The Vinton Veteran's Memorial Airport is completely surrounded by agricultural land with homesteads related to agricultural production scattered about and is located over 3 miles north of the City of Vinton's corporate limits. Currently there are no known future planned industrial/commercial activities for this area. The no action, proposed action and alternatives will not affect industrial/commercial activities in the surrounding communities.

The existing airport property and immediate vicinity are currently under Benton County Zoning regulations. The existing Airport Height Overlay Zoning Ordinance in effect by the County, sets forth standards for the height of objects in the vicinity of the airport.

3.3.2 Residential Areas, Schools, Churches and Hospitals

Because the Airport is located so far north of the Vinton city limits, no congregation of homes, no Schools, no Churches or Hospitals are located within 3 miles of the airport. The no action, proposed action and alternatives will not affect residential areas, schools, churches or hospitals in the surrounding communities.

It should be noted that a portion of land adjacent to the existing wetland, associated with land zoned as an Agricultural Dwelling, will be purchased in fee in order to install a drainage swale to drain the wetland. The Agricultural Dwelling parcel contains 26.7 acres and is primarily made up of trees and tall grass fields. The grass is only maintained to provide for a handful of paths around the property. Only 6.8 Acres are needed to be purchased by the Airport. The purchase limits include only the trees and grassed areas and does not come within 650 feet of the residence or barn structures.

3.3.3 Publicly-owned Parks, Recreation Areas, Wildlife and Waterfowl Refuges

The Vinton Veteran's Memorial Airport is located approximately 1 mile from the banks of the Cedar River. The presence of the Cedar River provides the opportunity for several wildlife and parks along the banks of the River or it's tributaries. According to the FAA, any wildlife or recreation areas within 5 statute miles of the airport are considered "Hazardous Wildlife Attractants near Airports". There are a handful of recreation areas and wildlife areas within 5 miles of the airport. The largest of the group is the Dudgeon Lake State Wildlife Management Area located just 0.5 mile south of the airport. The Dudgeon Lake area contains 2,047 acres of upland, marsh and timber and provides several opportunities for boating, fishing and hunting. Two other prominent wildlife and

recreation areas in the area include the Red Fox Wildlife Management Area and Rodgers Park. Red Fox is located 0.5 miles north of the airport that contains 198 acres of upland, timber and marsh. Rodgers Park contains 187 acres on a 21 acre lake that feeds the Cedar River and is located just under 3 miles southwest of the airport.

The proposed projects are not expected to have any impacts on any publicly-owned parks, recreation areas, wildlife and water refuges listed above.

3.3.4 National/State Forest, Wilderness Areas, Wild and Scenic Rivers, Nationwide Rivers Inventory

There are no known national/state forest, wilderness areas, wild and scenic rivers and or rivers identified as "outstandingly remarkable" on the Nationwide Rivers Inventory in the vicinity of the airport, therefore, the proposed projects would not impact these resources.

3.3.5 Federally-listed/State-listed Threatened and Endangered Species/Habitat

The Endangered Species Act requires that the project is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species. A list of endangered species was found at the U.S. Fish & Wildlife Services website. See Appendix F. A list was also generated from the Iowa DNRs Natural Areas Inventory for species in the Benton County area. After initial correspondence, the Iowa DNR provided a supplemental list of state species that were threatened, endangered or of special concern.

The Northern Long Eared Bat is one animal that could be in the region. During the winter these bats utilize caves and mines for hibernation in areas of constant temperatures, high humidity and no air currents. However, during the summer these bats can be found in cavities or in crevices of both live trees and dead trees. This type of species may be encountered during tree removal or trimming operations.

The Eastern Prairie Fringed Orchid and Western Prairie Fringed Orchid are species that the iPac identified. These plants are found within wet meadows that is mostly unplowed. Due to the type of wetland and land that is within the project area, this species is not likely to be encountered.

According to the U.S. Fish & Wildlife Service migratory birds may also be encountered in the region. Migratory Birds are protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. These types of birds can be found living or breeding in the trees within the area. The U.S. Fish & Wildlife Services has identified the months of April through Mid-October to be the time frame in which birds labeled as migratory birds have a higher probability of being present. This type of species may be encountered during tree removal or trimming operations.

The lists generated from the Iowa DNR website contained several birds, fish plants and some reptiles. When considering the environment encompassing the proposed action areas it was determined that there would be no effect to the majority of the listed species and habitats. There are a couple of turtles that have the potential to be located within the vicinity of the wetlands area. The Blanding's Turtle most commonly inhabits areas with shallow, slow-moving water and emergent vegetation and is listed

as threatened by wetland loss due to draining or siltation. The Wood Turtle uses grassland, lightly wooded areas, and agricultural field edges within 800 yards of river habitat during the summer months.

The supplemental list provided directly by the Iowa DNR of species that are threatened, endangered or special concern is listed below.

Table 1: Potential Species Occurring in the Vicinity of the Airport

Scientific Name	Common Name	State Status
Xyris torta	Yellow-eyed Grass	Endangered
Lechea intermedia	Narrowleaf Pinweed	Threatened
Phlox bifida	Cleft Phlox	Special Concern
Viola lanceolate	Lance-leaved Violet	Special Concern
Astragalus distortus	Bent Milkvetch	Special Concern
Emydoidea blandingi	Blanding's Turtle	Threatened

An Environmental Resources Report and Rare Plant Survey were conducted by Stantec to address the specific concerns presented by the Iowa DNR. These reports and surveys included visits to the sites, documentation of actual observations and recommendations on potential impacts to encountered species. The full reports can be found in Appendix F.

Blanding's turtles commonly inhabit areas with clean, shallow, slow moving water and abundant aquatic vegetation such as the wetland area. Suitable nesting sites for Blanding's turtles are upland areas with well-drained, sandy loam or sandy soils such as the areas adjacent to the existing wetland. The Stantec report found approximately 5 acres suitable for the turtles to inhabit and approximately 16 acres of for nesting. Field observations indicate that the turtles cross the primary runway to get to their most frequented nesting areas on the north side of the airport. The do nothing alternative has no impact on the Blading's Turtles. The proposed action of removing the wetland will reduce the area on the airport for suitable summer habitation. However, the proposed action of installing perimeter fencing with raised skirting around the airport will allow the turtles to continue to migrate to their preferred nesting areas on the airport without any impact. Because the River is so close to the airport, there a substantial amount of other marshy and wetland areas nearby available to the turtles during non-nesting season and the removal of the wetland will have minimal impact to the state threatened Blanding's turtle. Alternatives were considered to avoid removing the wetland. However, these alternatives required a significant amount of construction and disturbance in the primary nesting areas of the Blanding's turtles and would actually have a larger impact on the Blanding's turtles than the proposed actions would.

The Rare Plant survey observed the presence of all the plants of "Special Concern" and the Endangered Yellow-Eyed Grass. The state threatened Narrowleaf Pinweed were not observed in the area. The State endangered Yellow-Eyed Grass is only known to be located in a handful of areas across the state and the presence of it in the wetland area of the Vinton Airport is significant to the State of Iowa. The Yellow-Eyed Grass requires the perfect wetland conditions including precise water table levels, exact wet conditions through the entire calendar year and exact soil types for it to even exist. This type of precise ecosystem is hard to replicate. The do nothing alternative would not have an

impact to the endangered plant species. The proposed action of the wetland removal does not provide for any accommodation for the Yellow-Eyed Grass and would most likely mean the presence of the plant species would no longer exist at the Airport after the proposed action improvements were completed. Alternatives included creating a new wetland and trying to transplant the endangered Yellow-Eyed Grass. An attempt to construct a new wetland with the exact same characteristics necessary for the Yellow-Eye Grass to survive would be extremely difficult. Removal of the existing wetland is necessary to resolve a public safety hazard and the potential loss of human life due to the existing wildlife attractant needs to take precedence over the negative impact to the Yellow-Eyed Grass.

In order to determine the presence and potential impact on any endangered and threatened species, the U.S. Fish and Wildlife Services, the Iowa Department of Natural Resources, the Benton County Conservation Board, and the Natural Resources Conservation Service were contacted.

3.3.6 Wetlands, Flood Plains, Floodway, Costal Zones and Coastal Barriers For more information about the location of existing wetlands refer to Floodplain and Wetlands Exhibit in Appendix F.

One of the main proposed actions of this Environmental Assessment calls for the removal of two existing wetlands on current airport property. The main wetland on the airport is approximately 7 acres wide and is located just 50 feet south of the main Runway 9-27. The other wetland contains 1.3 acres and is located just southeast of the main wetland. Wetlands are a source for food and water can cause a significant danger to air traffic by attracting birds and other wildlife such as deer. Several near misses and small damage associated with wildlife has been reported by the airport. The FAAs Wildlife Strike database contains one official reported deer strike from the summer of 2013 that caused significant damage to the wing and fuselage of a private aircraft when they struck one of three deer located on the runway. Several accidents or near misses have gone unreported. According to FAA AC 150/5200-33B, the FAA recommends a minimum separation distance of 10,000 feet for airport such as the Vinton Veteran's Memorial Airport. The longer the wetlands remain near the airport the greater the danger for damage or loss of life. The FAA suggests changing the habitat around airports to make it less attractive to birds and other wildlife that might pose a hazard to aircraft. Property acquisition is needed to install a drainage ditch to drain the water from the wetlands.

A wetland delineation was performed as part of this project and can be found with the Stantec reports in Appendix F. After the wetland delineation, coordination with the Department of the Army Corps of Engineers was conducted. The Army Corps of Engineers determined that the wetlands within Airport property are non-jurisdictional. As part of this determination, no wetland mitigation is required as part of the removal of the existing wetlands on the airport property.

Because the Cedar River is so close to the airport, several other classified wetlands are located within the proximity of the airport and along the approach and departure paths. All other existing wetlands shall remain as is, so long as there is no danger to air traffic. Continual monitoring should occur to monitor birds that may use the wetlands. If it is observed that there is a high possibility for the potential for avian collision to occur, then additional wetlands may be considered for removal.

Floodplains are defined as those areas that would be inundated by a 100-year flood. The proposed site and development areas are not on or in the vicinity of any floodplains, floodways, or flood prone areas. In addition, the proposed development will not significantly increase runoff affecting nearby drainage ways and creeks. Any impervious areas that increase runoff will be offset by the seeding and maintenance of grassed areas adjacent to the paved areas. Grassed areas will have a greater tendency to absorb surface runoff than the previously cultivated fields. Therefore, no adverse flood hazards are anticipated as a result of the proposed development.

3.3.7 Historical, Archaeological or Cultural Resources

A cultural resource review was conducted for the Vinton Veteran's Memorial Airport as part of this Environmental Assessment. Research on I-Sites GIS Database, published by the Office of the State Archeologist, found there are no publicly recorded archaeological studies, historical sites or historical buildings located within the immediate vicinity of the Vinton Veteran's Memorial Airport. Historical imagery was also used to determine if the original plat of land was ever used for anything substantial prior to the construction of the airport. The airport was established during the 1970's. According to imagery dating back to the 1930's, no substantial land uses were identified other than agricultural fields.

A phase one Archeological Survey and phase two Architectural Survey were performed by Wapsi Valley. A copy of the Architectural Survey report can be found in Appendix G. During the Archeological Survey auger testing across the 256 acres of the airport produced some items associated with past farmsteads on airport property. However, the survey concluded these items were common across lowa and had no significant historical associations. The Architectural Survey did not recommend listing any buildings or structures as eligible for the National Register of Historic Places and provided an opinion that the proposed projects would have no adverse effects on historic architectural properties.

To ensure that the proposed project will not violate requirements of Historical Preservation Act a review for comments was sent to the Office of the State Archeologist, the State Historical Society of Iowa and the Benton County Historical Society.

The proposed actions are not anticipated to have an impact to historical, archaeological or cultural resources. If any cultural remains are encountered during other portions of construction, work will cease in the immediate area and Federal regulations pertaining to emergency discovery situations will be followed.

3.4. Affected Political Jurisdiction

The proposed improvements at the airport are not expected to affect any political jurisdictions.

3.5. Demographic Information/Bureau of Census Map

The proposed improvements at this airport are not expected to affect any demographic information/bureau of census maps.

3.6. Past, Present, and Reasonably Foreseeable Future Actions

As part of this Environmental Assessment, the construction of a full parallel taxiway along 9-27 is included as a proposed action. The wetlands on airport property have been discussed as a safety hazard to flight operations and is also a proposed action item. Along with being a safety concern, the wetlands are also located in the middle of where the proposed parallel taxiway would go. Without the removal of the wetlands, the construction of the taxiway would not be possible.

An additional parallel taxiway for crosswind runway 16-34 has been planned and depicted on the Airport Layout Plan. This taxiway will not be constructed in the near future and is not included for analysis in this environmental assessment. However, the path of this parallel taxiway goes through the existing hangar. Due to the hangar being recently remodeled, this proposed taxiway has been postponed for the foreseeable future.

The Airport also has portrayed the ambition to extend Runway End 16 to the north and Runway End 9 to the west if it ever meets the FAA requirements for justification and eligibility and the timing works for the allocation of discretionary funding. If these plans came to fruition it would require the acquisition of additional land in the safety areas and building restriction lines including any supplementary easements. Although we are proposing to purchase additional land in this EA, It is not ripe to purchase additional land or assess the acquisition of future property needed when the runway extensions will not be constructed in the near future. These property acquisitions and runway extensions would be discussed in their own Environmental Assessment.

No other no action, proposed action or alternative action proposed in this EA will have a negative impact to past, present or foreseeable actions to the airport or the surrounding community.

4. Environmental Consequences & Mitigation

4.1. Introduction

This section is organized by resource topics, with the impacts of all alternatives combined under resource headings. It provides concise analysis only for resources affected by at least one of the alternatives.

4.2. Resources Not Affected

The no action alternative and proposed actions would not affect the following resources:

- Climate
- Costal Resources
- Department of Transportation Act, Section 4(f)
- Natural resources and energy supply
- Visual effects
- Socioeconomic, Environmental Justice, and Children's Environmental Health and Safety Risks

4.3. Air Quality

There are two components to air quality, the Clean Air Act (CAA) and NEPA. Projects located in nonattainment or maintenance areas may require a conformity determination under the CAA. The Airport is located in an attainment area; therefore, a conformity determination is not required.

NEPA requires the consideration of a proposed project's impact to local air quality. A project's impact on air quality is assessed by evaluating whether it would cause a new violation of a National Ambient Air Quality Standards (NAAQS) or contribute to a new violation in a manner that would increase the frequency or severity of the new violation. As stated in FAA Order 1050.1F, Exhibit 4-1, the FAA's significance threshold for air quality is whether the action would cause pollutant concentrations to exceed one or more of the NAAQS under the CAA, for any of the time periods analyzed, or to increase the frequency or severity of any such existing violations.

No Action and Proposed Action

The FAA Desk Reference for Order 1050.1F, Environmental Impacts: Policies and Procedures references FAA's Aviation Emissions and Air Quality Handbook (January 2015, "Air Quality Handbook") for guidance regarding evaluating environmental consequences in NEPA documents for air quality. Based on Section 4.1.1 of the Air Quality Handbook (Step 1C), an Air Quality Assessment is not required because the Proposed Action is not anticipated to increase the number of aviation or ground surface operations. Therefore, the No Action and the Proposed Action will not have a significant impact on this resource.

4.4. Biotic Resources

The Significance Threshold in FAA Order 1050.1F states that "the U.S. Fish and Wildlife Service or the National Marine Fisheries Service determines that the action would be likely to jeopardize the continued existence of a federally listed threatened or endangered species or would result in the destruction or adverse modification of federally designated critical habitat." There is no significance threshold for non-listed species.

No Action

Since no improvements will occur due to the no action alternative, no impact to biotic resources will occur for this alternative.

Proposed Action

Four different types of endangered or threatened species have been identified in Section 3.3.5 above as having a probability of being encountered within the project areas. These three groups include: Federally Listed; Northern Long Eared Bat (threatened), Eastern Prairie Fringed Orchid (threatened), and Western Prairie Fringed Orchid (threatened); Migratory Birds; and State Listed; Blanding's and Wood Turtles, and the Yellow-Eyed Grass.

Coordination with the U.S. Fish and Wildlife Service did not confirm or exclude the presence of these three groups of species. Coordination with the Iowa DNR confirmed the presence of the Blanding's Turtle and the Yellow-Eyed Grass. The Iowa DNR also requested a plant and animal study be completed.

A survey was completed between June 7-June 15, 2021, to determine if the site was still being used by the Blanding's turtle. The results of the survey were that one female was spotted and captured during this time. This concludes that the site is being used as habitat for the species. A rare plant study was completed on August 23, 2018, to determine if any of the state listed and special concern plants were present at the airport. These species included Yellow-eyed Grass (*Xyris torta*), Narrow-leaf Pinweed (*Lechea intermedia*), Bent Milkvetch (*Astargalus distortus*), Cleft Phlox (Phlox bifida), and Lance-leaved Violet (*Viola lanceolata*). The findings of this study concluded that three of the mentioned species (bent milkvetch, cleft phlox, and lance-leaved violet) were identified at the site. The Yellow-eyed Grass was not observed during the site visit but has previously been confirmed at the site.

The area where the Blanding's turtles would be encountered would be in the wetlands area on the south side of Runway 9-27 during the summer and on the north side of Runway 9-27 during nesting season. In order to mitigate the effects to the turtles a visual field investigation, including a walkthrough, will be performed prior to the construction of the drainage swale. The wetland pond will be pumped out prior to final connection of the drainage swale with precautions installed at the inlet of the pump to prevent a hazard to wildlife. Once the wetland is drained, an additional walkthrough of the drained wetland area will be performed before grading operations commence. If any turtles are encountered during any portion of the process of the wetland mitigation, the Iowa DNR will be contacted to assist in transplanting any turtles to a new habitat in similar areas along the adjacent Cedar River. During normal times of no construction, the Blading's turtles will be able to continue their existing nesting habits on the north side of the airport unimpeded.

The Yellow-Eyed Grass is present in only a handful of locations across the state of lowa. It is specifically tied to the existing wetland as the endangered plant species needs the exact ecological conditions to survive and would most likely be unable to survive transplantation. The existing wetland is a public safety hazard and the potential for loss of life due to the wildlife attractant must take precedence over ecological conditions. No reasonable mitigation can be performed for the Yellow-Eyed Grass. The elimination of the wetland most likely means the elimination of the Yellow-Eyed Grass.

The Northern Long Eared Bat and the Migratory Birds have been identified as probably being present in the trees in the surrounding areas. However, the Northern Long Eared Bat

migrates out of the trees and into caves and mines during the winter months for hibernation and the migratory birds breeding season and probability of being present has been isolated to the months of April through Mid-October. In order to mitigate any negative effects to these two species, tree removal and tree trimming operations will be restricted to the months of November to March. There will be no impact to the Eastern Prairie Fringed Orchid or the Western Prairie Fringed Orchid.

There are no significant impacts associated with federally listed species required the need for an EIS. However, the Iowa DNR has confirmed that there may be potential impacts to the state-listed Blanding's Turtle and Yellow-eyed Grass. An Avoidance, Minimization, and Monitoring Plan will be prepared prior to the start of construction as required by the Iowa DNR. Continued coordination with the Iowa DNR will occur throughout the progress of the project.

4.5. Farmlands

The Significance Threshold for farmlands states "the total combined score on Form AD-1006, 'Farmland Conversion Impact Rating,' ranges between 200-260 points."

No Action

Since no improvements will occur due to the no action alternative, no impact to farmland will occur for this alternative.

Proposed Action

The proposed actions will result in minimal impacts to farmland. As part of the wetland mitigation a drainage swale must be constructed. Land acquisition is needed for the installation of the drainage swale. Approximately 15 Acres are needed for the drainage swale containing only 10 acres of existing farmland that will be separated from the rest of a farm field by the drainage route.

The land purchased out to the building restriction line, in an effort to have control of all airport safety areas, encompasses approximately 12 acres. These 12 acres consist of 2 acres of woods and tall grass, 7 acres of existing farm fields and 3 acres of a horse pasture. As part of the acquisitions to the north, 3 acres of a 7 acre horse pasture will be purchased in fee. This includes two farm sheds (15'x27' and 8'x10') just south of 55th street. These sheds are utilized for feed and equipment for the horse pasture. The 3 acres purchased will cut off access of the remaining 4 acres of the pasture.

Other than the small portion needed for construction of the drainage swale, all property acquired that is currently farmed as agricultural fields will ultimately remain as agricultural fields but will be owned in fee by the airport.

As a result of the full parallel taxiway a small portion of land on airport property currently farmed by the airport will be converted to mowed and maintained areas for aircraft safety. The proposed impact to farmland converted cannot be reduced because the farmland that will be converted is located in areas where the airport needs mowed and maintained areas for aircraft safety, see FAA AC 150/5300-13A section 322 for more information. The direct loss of a few acres of farmland will have minimal impacts on the surrounding community.

A Farmland Conversation Impact Rating Form (AD-1006) was filled out and coordinated with the Natural Resources Conservation Services. Form AD-1006 and a farmland conversion

exhibit can be found in Appendix H. The combined score for farmland resources was 160 well below the 260 threshold for mitigation. It should also be noted that no NRCS Easements were identified within the acquisition limits.

The Proposed Action will not have significant impacts on this resource.

4.6. Hazardous Materials, Solid Waste & Pollution Prevention

Construction, renovation, or demolition of most airside projects produces debris such as dirt, concrete, and asphalt that shall be properly disposed. In addition, new or renovated terminal, cargo, or maintenance facilities may involve construction, renovation, or demolition that produces other types of solid waste. Therefore, airport sponsors shall follow federal, state, or local regulations that address solid waste. Doing so reduces the environmental effects of airport-related construction or operation (FAA 2007). The appropriate disposal of construction or demolition-related solid waste at Vinton Veteran's Memorial Airport is not expected to generate an amount of solid waste that would overwhelm the local waste handling facilities.

Federal, state, and local laws regulate hazardous materials use, storage, transport, or disposal. These laws may extend to past and future landowners of properties containing these materials. In addition, disrupting sites containing hazardous materials or contaminates may cause significant impacts to soil, surface water, groundwater, and air quality. Therefore, airport sponsors purchasing or developing land for airport purposes may encounter hazardous materials contamination (FAA 2007).

The FAA has not established a significance threshold for Hazardous Materials, Solid Waste, and Pollution Prevention.

No Action

Since no construction will occur due to the no action alternative, environmental consequences or mitigation will not occur for this alternative.

Proposed Action

The construction of the proposed actions will result in minor, temporary environmental impacts as a result of dust, heavy equipment emissions, storm water runoff and noise associated with construction equipment and activities. These impacts will be short term and will only last for the duration of the construction at the airport. Each construction project is expected to last only one construction season per project. A construction season is approximately 6 months (May thru October).

Since the Vinton Veteran's Memorial Airport is located outside of the city limits the construction impacts generated by heavy equipment emissions and construction equipment noise will be minimal. The heavy equipment emissions will be minor and will have no impact on the air quality around the airport or in the surrounding communities. Also the noise generated by construction activities will have a minimal impact on the residents and communities surrounding the airport.

As a result of construction or grading operations, dust should be controlled during construction of the proposed projects at the airport. Reasonable precautions to prevent the discharge of fugitive dust beyond the lot line of the property will be taken. During

construction the contractor shall be responsible for providing dust control measures that shall include but are not limited to:

- Application of a dust suppressant (e.g. water)
- Application of a chemical dust suppressant (e.g. calcium chloride, vegetable oils ...
 etc.)
- Installation and use of containment equipment
- Covering transported materials
- Removal of earth or other materials form pavement
- Sweeping and vacuuming of paved haul roads
- Wheel washing

Storm water runoff is also another construction related impact that needs to be controlled during construction. Prior to any land disturbance the airport will get a National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 from the Iowa Department of Natural Resources (IDNR). Also the airport will need to develop a Storm Water Pollution Prevention Plan (SWPPP) and maintain the SWPPP throughout the construction projects.

During construction the contractor(s) will be required to install storm water controls (e.g. silt fence, ditch checks, inlet protection...etc.) and maintain the storm water controls thru the duration of construction until final stabilization has occurred. Storm water controls shall be installed in accordance with FAA standard specifications and local Best Management Practices (BMP). Weekly inspection of storm water controls are required by NPDES General Permit No. 2 and shall be conducted jointly by the City of Vinton's authorized representative and the contractor during construction.

Monitoring of the storm water controls shall continue throughout construction. Storm water runoff and sediment runoff will not impact any wetlands, water quality, or biotic communities downstream of the project.

The Proposed Action will not have any significant impacts on this resource.

4.7. Historical, Architectural, Archeological, and Cultural Resources

The FAA has not established a significance threshold for Historical, Architectural, Archeological, and Cultural Resources.

No Action

Since no improvements will occur due to the no action alternative, impacts to historical or archaeological resources would not occur under the alternative, and therefore, no mitigation is proposed.

Proposed Action

The improvements required by the proposed actions are not anticipated to result in impacts to historical or archaeological resources. It is not anticipated that during construction that the proposed project will uncover any historical, archaeological or cultural resources located within the vicinity of the airport.

Although it is not anticipated that archaeological artifacts would be identified during construction, should any be uncovered, the projects will be stopped. The FAA, Office of the State Archaeologist, and the State of Iowa Historical Preservation Office will be notified and further investigations will be conducted as needed. Construction activities would resume following appropriate agency approvals regarding cultural resources.

The Proposed Action will not have any significant impacts to this resource.

4.8. Land Use

The FAA has not established a significance threshold for Land Use.

No Action

Since no improvements will occur due to the no action alternative, environment consequences or mitigation will not occur for this alternative.

Proposed Action

The existing airport property and immediate vicinity are currently under land use and height zoning regulations and ordinances. There are no known existing incompatible land uses within the vicinity of the airport. Land acquisitions to the building restriction line will help to control the possibility of future non compatible land uses from being constructed.

Tree removals will be conducted in conjunction with the property acquisitions. Any additional obstructions found during the course of the environmental assessment will be mitigated accordingly, by trimming, lighting or removal.

Sponsor Land Use Letter

The sponsor has included a letter stating that the sponsor has taken appropriate action or will take appropriate action to restrict the use of land adjacent to and in the immediate vicinity of the airport. The restrictions of the land use shall be compatible with airport activities and normal operations of aircraft traffic. See Appendix D for more information.

The Proposed Action will not have any significant impacts on this resource.

4.9. Noise

The Significance Threshold in FAA Order 1050.1F states that "The action would increase noise by DNL7 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe. For example, an increase from DNL 65.5 dB to 67 dB is considered a significant impact, as is an increase from DNL 63.5 dB to 65 dB."

No Action

Since no improvements will occur due to the no action alternative, impacts to noise levels around the airport will remain as is under this alternative, and therefore, no mitigation is proposed.

Proposed Action

The improvements required by the proposed action will result in no additional noise

impact to residents located near the airport. The operation forecast at Vinton Veteran's Memorial Airport is not anticipated to exceed 11,500 annual aircraft operations or 575 jet aircraft operations. Therefore the Vinton Airport does not meet the minimum 90,000 annual aircraft operations or minimum 700 annual jet-powered aircraft operations that trigger a Noise analysis. It is not anticipated that noise levels from aircraft operations above 65dB will leave the airport. As defined in 14 CFR 150 and Department of Housing and Urban Development (HUD) any noise levels under 65 dB DNL leaving the airport property limits are acceptable and do not require mitigation.

Due to the location of the projects and the proximity of the projects to the adjacent residences, it is not anticipated at this time that construction related noise from heavy equipment or hauling operations will impact any residents adjacent to the projects. If during construction of the any of the projects it is noticed that construction related noise is an issue, then standard working day hours will be enforced.

The Proposed Action will not have any significant impacts to this resource.

4.10. Water Resources

The Significance Threshold for wetlands is: 1. Adversely affect a wetland's function to protect the quality or quantity of municipal water supplies, including surface waters and sole source and other aquifers; 2. Substantially alter the hydrology needed to sustain the affected wetland system's values and functions or those of a wetland to which it is connected; 3. Substantially reduce the affected wetland's ability to retain floodwaters or storm runoff, thereby threatening public health, safety or welfare; 4. Adversely affect the maintenance of natural systems supporting wildlife and fish habitat or economically important timber, food, or fiber resources of the affected or surrounding wetlands; 5. Promote development of secondary activities or services that would cause the circumstances listed above to occur; or 6. Be inconsistent with applicable state wetland strategies.

The Significance Threshold for surface waters is: 1. Exceed water quality standards established by Federal, state, local, and tribal regulatory agencies; or 2. Contaminate public drinking water supply such that public health may be adversely affected. The Significance Threshold for groundwater is: 1. Exceed groundwater quality standards established by Federal, state, local, and tribal regulatory agencies; or 2. Contaminate an aquifer used for public water supply such that public health may be adversely affected.

The FAA has not established a significance threshold for Wild and Scenic Rivers.

No Action

No improvements will occur near wetlands as a result of the no action or reasonable alternative; therefore, no impacts to wetlands would occur and no mitigation would be required.

Proposed Action

Wetlands, Floodplains, and Floodways

There are a few U.S. Fish & Wildlife recognized wetlands on airport property including a significantly one located just 50 feet from the main Runway 9-27. The wetlands on airport property have historically attracted wildlife such as birds and deer which have caused several wildlife collisions with aircraft and several near misses. In order to

eliminate the substantial safety hazard to property damage and human life, the wetlands on airport property must be removed. According to the Army Corps of Engineers, the existing wetlands are non-jurisdictional and wetland mitigation or monetary contribution to a wetlands conservation group to re-establish the equivalent volume of wetland removed is not required. Due to the adjacent Cedar River and supplemental wetlands, the removal of the existing wetlands on airport property will have a negligible impact to the surrounding areas. Although no mitigation is required, the City of Vinton is voluntarily in the process of establishing approximately 12 acres of new wetland around the city of Vinton as a progressive approach to mitigation.

The Cedar River is less than 1 mile from the end of Runway 9. Because of the Cedar River, there are several wetlands located in the proximity of the approach and departure paths for both runways. All existing wetlands outside of the airport property shall remain as is, so long as there is no danger to air traffic. Continual monitoring should occur to monitor birds that may use the wetlands. If it is observed that there is a high possibility for potential for avian collision to occur, then the wetland will be considered for removal. For more information about the location of the existing wetlands refer to Floodplain and Wetlands Exhibit in Appendix F.

The Proposed Action will not have any significant impacts on this resource.

Surface Water and Groundwater

Erosion Control and best management practices will be incorporated when working near unnamed tributaries to prevent pollution related to silts, sediments, and non-earth disturbing pollutants from being transported into the waterway as required as part of the NPDES permit discussed in the "Hazardous Materials, Solid Waste & Pollution Prevention" section.

The Proposed Action will not have any significant impacts on this resource.

Wild and Scenic Rivers

Wild and scenic rivers are those rivers having remarkable scenic, recreational, geologic, fish, wildlife, historic, or cultural values. According to the National Wild and Scenic Rivers System, Iowa has approximately 70,247 miles of river but no designated wild and scenic rivers.

No Wild & Scenic Rivers occur in the area of the Proposed Action and therefore, there will be no significant impacts.

Table 4.1 Summary of Impact Category Determinations and Mitigation

Environmental	ry of Impact Category Determinations and Mitigation Proposed Action Alternative		No Action Alternative	
Consequences	•			
Impact Category	Impacts	Mitigation	Impacts	Mitigation
Air Quality	None	None required	None	None
Biological	Altered habitat of State		None	None
Resources	Threatened Turtle	Fencing with access for continued nesting habits		
	Removal of State		None	None
Biological	Endangered Plant and	Prepare Avoidance, Minimization, and		
Resources	habitat of State-	Monitoring Plan		
	Threatened Turtle			
Climate	None	None required	None	None
Coastal Resources	None	None required	None	None
Section 4(f)	None	None required	None	None
Farmlands	Not significant	Abide by FPPA and NRCS guidelines, BMPs	None	None
Hazardous	None	None required	None	None
Materials, Solid				
Waste, & Pollution				
Prevention Historical,	None	Contact SHPO and FAA if resources uncovered	None	None
Architectural,	None	during construction.	None	None
Archeological, and		during construction.		
Cultural Resources				
Land Use	Not significant	City and county commitment to Land Use	None	None
	C	Compatibility Assurance;.		
Natural Resources	None	None required	None	None
and Energy Supply				
Noise and Noise	None	None required	None	None
Compatible Land				
Use				
Socioeconomic,	None	None required	None	None
Environmental				
Justice, & Children's Health				
Visual Effects	None	None required	None	None
Water Resources	Tronc	Trone required	Trone	Trone
	37 ' ' 1' ' 1	N . 1	N T	N T
Wetlands	Non-jurisdictional Wetland Removal	None required	None	None
	wetiand Removal			
Floodplains	None	None required	None	None
riooupiains		rvone required	None	None
Surface Water	Not significant	NPDES, SPCC	None	None
Ground Water	None	None required	None	None
	TNOIC	Trone required		
Wild and Scenic	None	None required	None	None
Rivers Cumulative Impacts	None	None required	None	None

5. Cumulative Impact Analysis

Cumulative impacts are those that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, whether Federal or non-Federal. A review of the Proposed Action's effects on resources when combined with other past, present, and reasonably foreseeable actions as discussed in Section 3.6 has determined that there are no significant cumulative impacts.

6. Preparer Personnel and Qualifications

Engineer/Consultant - Clapsaddle-Garber Associates, Inc. provided the information in the environmental assessment. Michael C. Bearden, P.E. was the engineer and the primary contact for the project. Duties included preparation of environmental assessment report, appendices, and exhibits for the environmental assessment. Mr. Bearden is a licensed professional engineer, in the state of lowa, and has thirty plus years design and planning experience.

Joseph P. Roenfeldt, P.E. assisted the engineer in preparation of the environmental assessment. Duties included preparation of environmental assessment report, appendices, coordination with affected agencies, and exhibits for the environmental assessment. Mr. Roenfeldt has twelve years of planning and design experience.

Justin F. Strom, P.E. assisted the engineer in preparation of the environmental assessment. Duties included preparation of environmental assessment report, appendices, coordination with affected agencies, and exhibits for the environmental assessment. Mr. Strom has six years of planning and design experience.

Architectural and Archeological Sub-Consultant - Wapsi Valley Archeology, Inc. conducted the phase one archaeological survey and phase two architectural assessment services. Nurit G. Finn and Michael R. Finn were the project manager and primary contact for the two surveys/reports. Duties included preparation of the reports and management of field surveys. Nurit G. Finn has over 20 years of experience in archeological and architectural research and excavation and Michael R. Finn has over 20 years of experience in archeological and architectural research and excavation.

Biological Resources Sub-Consultant - Stantec Consulting Services Inc. conducted the Environmental Resources Report and the Rare Plant Survey. Terry VanDeWalle and Stacey Parks were the project manager and primary contact for the two surveys/reports. Duties included preparation of the reports and management of field surveys. Terry VanDeWalle has over 20 years of experience in animal and natural area surveys, threatened and endangered species surveys, wetland mitigation and coordination of environmental impact statements and assessments. Stacey Parks has over 20 years of experience in wetland mitigation, threatened and endangered species surveys, habitat assessments and preparation of NEPA documents

NEPA Coordination Sub-Consultant – Kirkham, Michael & Associates conducted the review and final preparation of the environmental assessment. Duties included review of environmental assessment report and appendices, addressing comments, and public meeting coordination. Kari Sherman and Eric Johnson were the primary contacts. Kari Sherman has 5 years in NEPA experience. Eric Johnson has 30 years in Airport Planning, Land Use, and Development.

7. Agencies and People Consulted

US Army Corps of Engineers

On March 29, 2018 a coordination letter was sent to the Army Corps of Engineers to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the US Army Corps of Engineers and their response to the coordination letter.

Benton County Conservation Board

On March 29, 2018 a coordination letter was sent to the Benton County Conservation Board to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the Benton County Conservation Board.

There has been no correspondence received from the Benton County Conservation Board.

Iowa Department of Natural Resources – Conservation and Recreation Division

On March 29, 2018 a coordination letter was sent to the Iowa Department of Natural Resources to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. Further coordination was instigated on November 11, 2021 with the Blanding Turtle and Yellow-Eyed Grass Study report being sent to them. A response was received on February 3, 2022. See Appendix B for correspondence sent to the Iowa Department of Natural Resources and their response to the coordination letter.

Iowa Department of Transportation

On March 29, 2018 On March 29, 2018 a coordination letter was sent to the Iowa Department of Transportation to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the Iowa Department of Transportation.

National Park Service

On March 29, 2018 a coordination letter was sent to the National Park Service to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the National Park Service.

There has been no correspondence received from the National Park Service.

Natural Resource Conservation Service

On March 29, 2018 a coordination letter was sent to the Natural Resource Conservation Service to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. Current coordination is still happening to determine impacts to Farmlands. As of February

23, 2022, no response has been received. See Appendix B for correspondence sent to the Natural Resource Conservation Service.

United States Fish and Wildlife Service

On March 29, 2018 a coordination letter was sent to the United States Fish and Wildlife Service to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the United States Fish and Wildlife Service.

There has been no correspondence received from the United States Fish and Wildlife Service

State of Iowa Historical Preservation Officer

On March 29, 2018 a coordination letter was sent to the State of Iowa Historical Preservation Officer to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the State of Iowa Historical Preservation Officer and their responses to the coordination letter.

State of Iowa Archaeologist

On March 29, 2018 a coordination letter was sent to the State of Iowa Archaeologist to verify that the proposed project area contains no current records of any historic, cultural or archeological resources protected by the National Historic Preservation Act or will violate the requirements of the Endangered Species Act, or Section 404 of the Clean Water Act. See Appendix B for correspondence sent to the State of Iowa Archaeologist and their response to the coordination letter.

lowa Tribe of Oklahoma

In January 2018 a coordination letter was sent to the lowa Tribe of Oklahoma to verify that the proposed project area contains no current records of any historic, cultural or archeological resources known to their tribe. See Appendix B for correspondence sent to the lowa Tribe of Oklahoma.

There has been no correspondence received from the Iowa Tribe of Oklahoma.

Miami Tribe of Oklahoma

In January 2018 a coordination letter was sent to the Miami Tribe of Oklahoma to verify that the proposed project area contains no current records of any historic, cultural or archeological resources known to their tribe. See Appendix B for correspondence sent to the Miami Tribe of Oklahoma. A response was received on February 5, 2018 that there was no objection to the project.

Omaha Tribe

In January 2018 a coordination letter was sent to the Omaha Tribe to verify that the proposed project area contains no current records of any historic, cultural or archeological resources known to their tribe. See Appendix B for correspondence sent to the Omaha Tribe.

There has been no correspondence received from the Omaha Tribe.

Yankton Sioux Tribe of South Dakota

In January 2018 a coordination letter was sent to the Yankton Sioux Tribe of South Dakota to verify that the proposed project area contains no current records of any historic, cultural or archeological resources known to their tribe. See Appendix B for correspondence sent to the Yankton Sioux Tribe of South Dakota.

There has been no correspondence received from the Yankton Sioux Tribe of South Dakota.

Appendix A - Agencies/Tribes Consulted

US Army Corps of Engineers

US Army Engineer District, Rock Island Clock Tower Building P.O. Box 2004 Rock Island, IL 61204-2004

RE: Environmental Assessment – Early Coordination Vinton Veteran's Memorial Airport Vinton, Iowa AIP No. 3-19-0092-011-2017 CGA PN 4464.10

To Whom it May Concern:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

The proposed development at the Vinton Veteran's Memorial Airport includes the following major projects which are shown on the Proposed Land Disturbance Exhibit and Land Acquisition Exhibit:

- Removal of wetland adjacent to Runway 9-27
- Removal of other existing wetlands on airport property
- Removal of trees on existing airport property and acquired property
- Land acquisition for removal of wetlands (14.9 acres in Fee)
- Installation of 8' high wildlife fencing to mitigate wildlife hazards and wildlife strikes
- Parallel taxiway along Runway 9-27
- Land acquisition in the 35' building restriction line (12.0 acres in fee)
- Hangar removal near the existing terminal building to allow future construction of a parallel taxiway along Runway 16-34

Previous wildlife strikes and near misses with deer and birds have created significant safety hazards to aircraft operations. The U.S. Fish and Wildlife service suggests changing the habitat around airports to make it less attractive to birds and other wildlife. In order to mitigate these safety concerns, the airport intends to remove all wetlands on airport property, including the large wetland located within 50' of Runway 9-27. The airport also intends to remove trees that can attract birds and deer. A 8' tall wildlife fence is being proposed to specifically prevent deer from getting onto the airfield. Land acquisition will be necessary to install a drainage ditch that will drain the wetlands permanently to the south.

Once the wetland near Runway 9-27 has been drained and graded, the airport intends to build a full parallel taxiway in the near future along the south side of Runway 9-27 where the existing wetland currently sits. Per FAA guidelines, parallel taxiways are recommended with increased activity to provide safe and efficient use of the airfield.

While acquiring land for the wetlands mitigation, the airport also plans to buy additional property within the 35' building restriction line of the airport in order to maintain as much control over other safety zones of the airports aircraft operations.

A hangar building at the airport is also being considered for demolition as part of this EA. The building has reached the end of its useful life and continues to be an on-going maintenance issue. It is no longer economically feasible to perform routine maintenance on the building.

To help in our preparation of the EA, we would appreciate your input (via mail or email), including any regulatory, compliance, or permitting requirements within thirty (30) days. If you have questions or require additional information, please contact Joseph Roenfeldt at 641-752-6701 or jroenfeldt@cgaconsultants.com Thank you for your assistance.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Justin Strom

From: Shoemaker, Joseph R CIV USARMY CEMVR (US) < Joey.R.Shoemaker@usace.army.mil>

Sent: Wednesday, May 30, 2018 11:13 AM

To: Joe Roenfeldt

Subject: Vinton Veteran's Memorial Airport

Follow Up Flag: Follow up Flag Status: Flagged

Mr. Roenfeldt,

We offer the following preliminary comments on the proposed project.

- 1) A wetland delineation should be completed to document the size and location of wetlands on the property. The delineation can then be reviewed by our office and a determination can be made on any jurisdictional the Corps would have over filling of those wetlands. If wetlands will be impacted, you should begin coordinating with this office early in your development of project plans.
- 2) If the proposal involves discharge of dredged or fill material into waters of the United States, it may be subject to the Corps of Engineers' jurisdiction under Section 404 of the Clean Water Act (CWA Section 404). The Corps' evaluation of a Section 404 permit application involves multiple analyses, including (1) evaluating the proposal's impacts in accordance with the National Environmental Policy Act (NEPA) (33 CFR part 325), (2) determining whether the proposal is contrary to the public interest (33 CFR § 320.4), and (3) determining whether the proposal complies with the Section 404(b)(1) Guidelines (Guidelines) (40 CFR part 230). These Guidelines specifically require that "no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences" (40 CFR § 230.10(a)).

Thank you.

Joey Shoemaker Project Manager - Iowa Section Corps of Engineers, Regulatory Branch 309-794-5559



Mr. Joseph Shoemaker
US Army Engineer District, Rock Island
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204-2004

RE: Environmental Assessment

Vinton Veteran's Memorial Airport

Vinton, Iowa

AIP No. 3-19-0092-011-2017

CGA PN 4464.10

Mr. Joseph Shoemaker:

This letter is in response to an email received on May 30, 2018 regarding our early coordination of the Environmental Assessment being prepared for the Vinton Veteran's Memorial Airport. Stantec Consulting Services Inc. performed a field investigation on October 25, 2017 and their methods and findings are included in the attached Environmental Resources Report. The scope of the report was to conduct a wetland delineation and a habitat assessment for the state-threatened Blanding's turtle, which is known to occur within the project limits. The report delineates the wetlands located within the project limits. We are providing the report for your review so that you can advise us on any further steps that you may require after reviewing the attached report.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

oseph P. Roenfeldt, P.E.

Project Manager

Copy: Chris Ward, City of Vinton

Stacey Parks, Stantec Terry VanDeWalle, Stantec

Amy Walter, FAA



DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, ROCK ISLAND DISTRICT PO BOX 2004 CLOCK TOWER BUILDING ROCK ISLAND, ILLINOIS 61204-2004

September 14, 2018

Operations Division

SUBJECT: CEMVR-OD-P-2018-402

RECEIVED
SEP 2 0 2018

Clapsaddle-Garber Associates, Inc. Attn: Joseph Roenfeldt, P.E. 16 East Main Street Marshalltown, Iowa 50158

Dear Mr. Roenfeldt:

Our office has reviewed the wetland delineation received August 3, 2018, concerning the proposed work at the Vinton Veteran's Memorial Airport located in Section 32, Township 86 North, Range 10 West, Benton County, Iowa.

We have determined that wetlands W1 and W2 are non-jurisdictional and not Waters of the U.S. Therefore a DA 404 Permit will not be required. This determination also serves to inform you that the Corps will no longer need to be a participant in the preparation of any alternatives to carry forward as we have no jurisdiction over any aquatic resource in the project area.

This letter contains an approved jurisdictional determination for the subject site. If you object to this jurisdictional determination, you may request an administrative appeal under Corps regulations found at 33 CFR Part 331. Enclosed is a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this approved jurisdictional determination, you must submit a completed RFA form to the Mississippi Valley Division Office at the following address:

Administrative Appeals Review Officer US Army Engineer Division, Mississippi Valley ATTN: CEMVD-PD-OD P. O. Box 80 Vicksburg, MS 39181-0080

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by November 13, 2018.

Even though a DA Permit is not required this does not eliminate the requirement that you must still obtain other applicable Federal, state, and local permits.

If you have not already coordinated your project with the IADNR, please contact them by telephone 866/849-0321 to determine if a floodplain development permit is required for your project. You should also contact Mr. Seth Moore, in writing or telephone 515/725-8464 to determine if a sovereign lands construction permit is required or if this project may adversely impact Iowa threatened or endangered species or their habitat.

The Rock Island District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached postcard and return it or go to our Customer Service Survey found on our web site at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?)

Should you have any questions, please contact me by letter or telephone at 309-794-5859.

Sincerely,

and J. Frohlich
Mr. Albert J. Frohlich

Project Manager

Regulatory Branch, Iowa Section

Copies Furnished:

w/o enclosures:

Ms. Christine Schwake (3)
Iowa Department of Natural Resources
Water Resources Section
Wallace State Office Building
502 East 9th Street
Des Moines, Iowa 50319-0034





Regulatory Program

INTERIM APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in the Interim Approved Jurisdictional Determination Form User Manual.

SECTION I: BACKGROUND INFORMATION

A. COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (AJD): 9/14/2018

B. ORM NUMBER IN APPROPRIATE FORMAT (e.g., HQ-2015-00001-SMJ): CEMVR-OD-P-2018-402

C. PROJECT LOCATION AND BACKGROUND INFORMATION: State:Iowa County/parish/borough: Benton City: Vinton Center coordinates of site (lat/long in degree decimal format): Lat. 42.21872, Long92.028168. Map(s)/diagram(s) of review area (including map identifying single point of entry (SPOE) watershed and/or potential jurisdictional areas where applicable) is/are: □attached □ in report/map titled □ Other sites (e.g., offsite mitigation sites, disposal sites, etc.) are associated with this action and are recorded on a different jurisdictional determination (JD) form. List JD form ID numbers (e.g., HQ-2015-00001-SMJ-1):
D. REVIEW PERFORMED FOR SITE EVALUATION: ☐ Office (Desk) Determination Only. Date: 9/14/2018. ☐ Office (Desk) and Field Determination. Office/Desk Dates: Field Date(s):
· ·
SECTION II: DATA SOURCES Chock all that were wood to girl in the data waited to a life the life the data waited to a life the
Check all that were used to aid in the determination and attach data/maps to this AJD form and/or references/citations in the administrative record, as appropriate.
Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant. Title/Date: Environmental
Resources Report, Vinton Veteran's Memorial Airport, January 19, 2018.
Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☑ Data sheets/delineation report are sufficient for purposes of AJD form. Title/Date: Figure 4 Environmental
Resources Report, Vinton Veteran's Memorial Airport, January 19, 2018.
Data sheets/delineation report are not sufficient for purposes of AJD form. Summarize rationale and include
information on revised data sheets/delineation report that this AJD form has relied upon:
Revised Title/Date:
Data sheets prepared by the Corps. Title/Date:
Corps navigable waters study. Title/Date:
☐ CorpsMap ORM map layers. Title/Date: ☐ USGS Hydrologic Atlas. Title/Date:
USGS, NHD, or WBD data/maps. Title/Date:
USGS 8, 10 and/or 12 digit HUC maps. HUC number:
USGS maps. Scale & quad name and date: 24K, IA Vinton, Figure 1 Environmental Resources Report, Vinton
Veteran's Memorial Airport, January 19, 2018.
USDA NRCS Soil Survey. Citation: Figure 2 Environmental Resources Report, Vinton Veteran's Memorial Airport,
January 19, 2018.
USFWS National Wetlands Inventory maps. Citation: Figure 3 Environmental Resources Report, Vinton Veteran's
Memorial Airport, January 19, 2018.
State/Local wetland inventory maps. Citation:
FEMA/FIRM maps. Citation:
Photographs: Aerial. Citation: or Other. Citation:
LiDAR data/maps. Citation:

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Previous JDs. File no. and date of JD letter: Applicable/supporting case law:
Applicable/supporting scientific literature: Other information (please specify):
SECTION III: SUMMARY OF FINDINGS
Complete ORM "Aquatic Resource Upload Sheet" or Export and Print the Aquatic Resource Screen from ORM for Al Waters and Features, Regardless of Jurisdictional Status – Required
A. RIVERS AND HARBORS ACT (RHA) SECTION 10 DETERMINATION OF JURISDICTION: "navigable waters of the U.S." within RHA jurisdiction (as defined by 33 CFR part 329) in the review area. • Complete Table 1 - Required
NOTE: If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Section 10 navigable waters list, DO NOT USE THIS FORM TO MAKE THE DETERMINATION. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Section 10 RHA navigability determination.
B. CLEAN WATER ACT (CWA) SECTION 404 DETERMINATION OF JURISDICTION: "waters of the U.S." within CWA jurisdiction (as defined by 33 CFR part 328.3) in the review area. Check all that apply. (a)(1): All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (Traditional Navigable Waters (TNWs))
 Complete Table 1 - Required This AJD includes a case-specific (a)(1) TNW (Section 404 navigable-in-fact) determination on a water that has not previously been designated as such. Documentation required for this case-specific (a)(1) TNW determination is attached.
 (a)(2): All interstate waters, including interstate wetlands. Complete Table 2 - Required (a)(3): The territorial seas.
(a)(5): All tributaries, as defined in 33 CFR part 328.3, of waters identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
 Complete Table 5 - Required (a)(6): All waters adjacent to a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters. Complete Table 6 - Required □ Bordering/Contiguous.
Neighboring: (c)(2)(i): All waters located within 100 feet of the ordinary high water mark (OHWM) of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3.
 (c)(2)(ii): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 and not more than 1,500 feet of the OHWM of such water. (c)(2)(iii): All waters located within 1,500 feet of the high tide line of a water identified in paragraphs (a)(1) or
(a)(3) of 33 CFR part 328.3, and all waters within 1,500 feet of the OHWM of the Great Lakes. (a)(7): All waters identified in 33 CFR 328.3(a)(7)(i)-(v) where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.
 Complete Table 7 for the significant nexus determination. Attach a map delineating the SPOE watershed boundary with (a)(7) waters identified in the similarly situated analysis Required Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent and require a case-specific significant nexus determination.
(a)(8): All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3 not covered by (c)(2)(ii) above and all waters located within 4,000 feet of the high tide line or OHWM of a water identified in paragraphs (a)(1)-(a)(5) of 33 CFR part 328.3 where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1)-(a)(3) of 33 CFR part 328.3.

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 Complete Table 8 for the significant nexus determination. Attach a map delineating the SPOE
watershed boundary with (a)(8) waters identified in the similarly situated analysis Required
Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established, normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent
and require a case-specific significant nexus determination.
and require a case opening significant nexas dotornination.
C. NON-WATERS OF THE U.S. FINDINGS:
Check all that apply.
The review area is comprised entirely of dry land. Potential-(a)(7) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-
(a)(3) of 33 CFR part 328.3.
Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential
(a)(7) waters identified in the similarly situated analysis Required
Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established.
normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent
and require a case-specific significant nexus determination.
Potential-(a)(8) Waters: Waters that DO NOT have a significant nexus to a water identified in paragraphs (a)(1)-
(a)(3) of 33 CFR part 328.3.
 Complete Table 9 and attach a map delineating the SPOE watershed boundary with potential (a)(8) waters identified in the similarly situated analysis Required
Includes water(s) that are geographically and physically adjacent per (a)(6), but are being used for established,
normal farming, silviculture, and ranching activities (33 USC Section 1344(f)(1)) and therefore are not adjacent
and require a case-specific significant nexus determination.
Excluded Waters (Non-Waters of U.S.), even where they otherwise meet the terms of paragraphs (a)(4)-(a)(8):
• Complete Table 10 - Required
(b)(1): Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.
(b)(2): Prior converted cropland.
(b)(3)(i): Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.
(b)(3)(ii): Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain
wetlands.
(b)(3)(iii): Ditches that do not flow, either directly or through another water, into a water identified in
paragraphs (a)(1)-(a)(3).
(b)(4)(i): Artificially irrigated areas that would revert to dry land should application of water to that area cease. (b)(4)(ii): Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds,
irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds.
(b)(4)(iii): Artificial reflecting pools or swimming pools created in dry land.
(b)(4)(iv): Small ornamental waters created in dry land.1
(b)(4)(v): Water-filled depressions created in dry land incidental to mining or construction activity, including
pits excavated for obtaining fill, sand, or gravel that fill with water.
(b)(4)(vi): Erosional features, including gullies, rills, and other ephemeral features that do not meet the
definition of tributary, non-wetland swales, and lawfully constructed grassed waterways. ¹ (b)(4)(vii): Puddles. ¹
(b)(5): Groundwater, including groundwater drained through subsurface drainage systems.
(b)(6): Stormwater control features constructed to convey, treat, or store stormwater that are created in dry
land.1
(b)(7): Wastewater recycling structures created in dry land; detention and retention basins built for wastewater
recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water
distributary structures built for wastewater recycling. Other non-jurisdictional waters/features within review area that do not meet the definitions in 33 CFR 328.3 of
(a)(1)-(a)(8) waters and are not excluded waters identified in (b)(1)-(b)(7).
• Complete Table 11 - Required.
•

D. ADDITIONAL COMMENTS TO SUPPORT AJD:

¹ In many cases these excluded features will not be specifically identified on the AJD form, unless specifically requested. Corps Districts may, in case-by-case instances, choose to identify some or all of these features within the review area.
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Jurisdictional Waters of the U.S.

Default field entry is "N/A". Delete "N/A" and fill out all fields in the table where applicable for waters/features present in the review area.

Table 1. (a)(1) Traditional Navigable Waters

(a)(1) Waters Name	(a)(1) Criteria	Rationale to Support (a)(1) Designation Include High Tide Line or Ordinary High Water Mark indicators, when applicable.
	Choose an Item.	N/A

Table 2. (a)(2) Interstate Waters

(a)(2) Waters Name	Rationale to Support (a)(2) Designation

Table 3. (a)(3) Territorial Seas

_	
Rationale to	N/A
(a)(3) Waters Name	N/A

Table 4. (a)(4) Impoundments

(a)(4) Waters Name	Rationale to Support (a)(4) Designation
N/A	N/A
A/A	A/A

Table 5. (a)(5)Tributaries

(a)(5) Waters Name	Flow Regime	(a)(1)-(a)(3) Water Name to which this (a)(5) Tributary Flows	Tributary Breaks	Rationale for (a)(5) Designation and Additional Discussion. Identify flowpath to (a)(1)-(a)(3) water or attach map identifying the flowpath; explain any breaks or flow through excluded/non-jurisdictional features, etc.
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A
N/A	Choose an item.	N/A	Choose an item.	N/A

Table 6. (a)(6) Adjacent Waters

	Mater is Adjacent and/or the distance threshold was determined; whether this water extends beyond a threshold; explain if the water is part of a mosaic, etc.
N/A N/A	N/A

Table 7. (a)(7) Waters

SPOE Name	(a)(7) Waters Name	(a)(1)-(a)(3) Water Name to which this Water has a Significant Nexus	(3) Water Significant Nexus Determination which Identify SPOE watershed; discuss whether any similarly situated waters were er has a present and aggregated for SND; discuss data, provide analysis, and summarize how the waters have more than speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water etc.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 8. (a)(8) Waters

SPOE		(3) Water which	Significant Nexus Determination Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be	
w	a)(8) Waters Name	this Water has a Significant Nexus	similarly situated to subject water and aggregated for SND; discuss data, provide analysis, and then summarize how the waters have more than speculative or insubstantial effect the on the physical, chemical, or biological integrity of the (a)(1),(a)(3) water of	
Z	/A	N/A	N/A	1
Ž	N/A	N/A	N/A	Т-

Non-Jurisdictional Waters

Default field entry is "N/A". Delete "N/A" and fill out all fields in the table where applicable for waters/features present in the review area.

Table 9. Non-Waters/No Significant Nexus

SPOE Name	Non-(a)(7)/(a)(8) Waters Name	(a)(1)-(a)(3) Water Name to which this Water DOES NOT have a Significant Nexus	Basis for Determination that the Functions DO NOT Contribute Significantly to the Chemical, Physical, or Biological Integrity of the (a)(1)-(a)(3) Water. Identify SPOE watershed; explain how 100-yr floodplain and/or the distance threshold was determined; discuss whether waters were determined to be similarly situated to the subject water; discuss data, provide analysis, and summarize how the waters did not have more than a speculative or insubstantial effect on the physical, chemical, or biological integrity of the (a)(1)-(a)(3) water.
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Table 10. Non-Waters/Excluded Waters and Features

Paragraph (b) Excluded Feature/Water Name	Rationale for Paragraph (b) Excluded Feature/Water and Additional Discussion.
N/A	N/A
N/A	N/A

Table 11. Non-Waters/Other

Other Non-Waters of U.S. Feature/Water Name	Rationale for Non-Waters of U.S. Feature/Water and Additional Discussion.
W1 and W2	W1 and W2 are outside of all distance threshholds to consider a significant nexus or floodplain proximity. The wetlands are greater than 5500 feet from any A5 tributary and nearly a mile from the 100-year floodplain of the Cedar River. The wetlands have no outlet and they do not flow to any downstream aquatic resource.

	NOTIFICATION OF A	DMINISTRATIVE APPEAL OPTION REQUEST FOR APPEAL	S AND PROCESS	AND	
		File No.: 2018-402	Date: 9/	Date: 9/14/2018	
Attach				See Section below	
	INITIAL PROFFERED PERMIT (S	tandard Permit or Letter of permission)		A	
	PROFFERED PERMIT (Standard P	ermit or Letter of permission)		В	
	PERMIT DENIAL			С	
X	APPROVED JURISDICTIONAL D	ETERMINATION		D	
	PRELIMINARY JURISDICTIONA	L DETERMINATION		E	

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights
 to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT				
REASONS FOR APPEAL OR OBJECTIONS: (Describe your rea	asons for appealing the decision or	your objections to an initial		
proffered permit in clear concise statements. You may attach addi	tional information to this form to c	clarify where your reasons or		
objections are addressed in the administrative record.)				
-				
ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the				
record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to				
clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.				
		immistrative record.		
POINT OF CONTACT FOR QUESTIONS OR INFORMATION:		dia_ th		
If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regard also contact the Division Engine			
process you may contact.	also contact the Division Engine	ci un ougii.		
Albert J. Frohlich	Administrative Appeals Review	ew Officer		
USACE – Rock Island District – Regulatory Branch	US Army Engineer Division,			
P.O. Box 2004	ATTN: CEMVD-PD-OD	• • •		
Rock Island, 1L 61204	P. O. Box 80			
309-794-5859	Vicksburg, MS 39181-0080			
RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government				
consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.				
notice of any site investigation, and will have the opportunity to pa	Date:	Telephone number:		
	Daic.	rerephone number.		
Signature of appellant or agent.				

Benton County Conservation Board

Benton County Conservation Board 5718 20th Ave. Dr. Vinton, IA 52349

RE: Environmental Assessment – Early Coordination
Vinton Veteran's Memorial Airport
Vinton, Iowa
AIP No. 3-19-0092-011-2017
CGA PN 4464.10

To Whom It May Concern:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

The proposed development at the Vinton Veteran's Memorial Airport includes the following major projects which are shown on the Proposed Land Disturbance Exhibit and Land Acquisition Exhibit:

- Removal of wetland adjacent to Runway 9-27
- Removal of other existing wetlands on airport property
- Removal of trees on existing airport property and acquired property
- Land acquisition for removal of wetlands (14.9 acres in Fee)
- Installation of 8' high wildlife fencing to mitigate wildlife hazards and wildlife strikes
- Parallel taxiway along Runway 9-27
- Land acquisition in the 35' building restriction line (12.0 acres in fee)
- Hangar removal near the existing terminal building to allow future construction of a parallel taxiway along Runway 16-34

Previous wildlife strikes and near misses with deer and birds have created significant safety hazards to aircraft operations. The U.S. Fish and Wildlife service suggests changing the habitat around airports to make it less attractive to birds and other wildlife. In order to mitigate these safety concerns, the airport intends to remove all wetlands on airport property, including the large wetland located within 50' of Runway 9-27. The airport also intends to remove trees that can attract birds and deer. A 8' tall wildlife fence is being proposed to specifically prevent deer from getting onto the airfield. Land acquisition will be necessary to install a drainage ditch that will drain the wetlands permanently to the south.

Once the wetland near Runway 9-27 has been drained and graded, the airport intends to build a full parallel taxiway in the near future along the south side of Runway 9-27 where the existing wetland currently sits. Per FAA guidelines, parallel taxiways are recommended with increased activity to provide safe and efficient use of the airfield.

While acquiring land for the wetlands mitigation, the airport also plans to buy additional property within the 35' building restriction line of the airport in order to maintain as much control over other safety zones of the airports aircraft operations.

A hangar building at the airport is also being considered for demolition as part of this EA. The building has reached the end of its useful life and continues to be an on-going maintenance issue. It is no longer economically feasible to perform routine maintenance on the building.

To help in our preparation of the EA, we would appreciate your input (via mail or email), including any regulatory, compliance, or permitting requirements within thirty (30) days. If you have questions or require additional information, please contact Joseph Roenfeldt at 641-752-6701 or jroenfeldt@cgaconsultants.com Thank you for your assistance.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Justin Strom

From: Joe Roenfeldt

Sent: Friday, April 27, 2018 12:15 PM

To: 'kphelps@bentoncountyparks.com'

Cc: 'erikmoen4@gmail.com'; Mike Bearden

Subject: RE: Vinton Memorial Airport

Karen,

Thank you for providing us responses to our request for input regarding any regulatory, compliance, or permitting requirements for the project listed in the proposed Environmental Assessment at the Vinton Veterans Memorial Airport. I will be including a copy of your e-mail below in the Environmental Assessment for documentation.

The Environmental Assessment is in the early stages of development. We are compiling regulatory, compliance, or permitting requirements from various state and federal agencies. The next steps of the environmental assessment process will be to take the information received and determine what impacts there are to the existing environmental resources in the project area and discuss what mitigation measures would be necessary, if the proposed improvements were to be completed. As part of the Environmental Assessment, a Biologist familiar with the area and species within the area will be providing guidance and assistance with various state and federal agencies to determine the impacts to the wildlife within the project area and determine potential mitigation measures, if needed.

Joseph P. Roenfeldt, P.E.

Project Manager

Clapsaddle-Garber Associates, Inc.

Office: 641-752-6701, ext 44 Mobile: 641-750-4256

<u>jroenfeldt@cgaconsultants.com</u> <u>www.cgaconsultants.com</u>

From: Karen Phelps [mailto:kphelps@bentoncountyparks.com]

Sent: Thursday, April 26, 2018 10:49 AM

To: Joe Roenfeldt < jroenfeldt@cgaconsultants.com>

Cc: Erik Moen <erikmoen4@gmail.com> **Subject:** Vinton Memorial Airport

Dear Mr. Roenfeldt,

This email is in reply to your letter of March 29, 2018, concerning the environmental assessment done at the Vinton Veteran's Memorial Airport North of Vinton, IA.

It is my understanding that an Environmental Impact study was done for this area, and plans are moving forward to remove the wetlands on this property.

My concern is that for the past 14 years I have been monitoring the Blanding's turtles that use this area on a consistent basis.

Blanding's turtles are listed as a Threatened Species by the Iowa DNR. As the turtles leave the Dudgeon Wildlife Area every year and travel over a 1/2 mile to this wetland, I am concerned what removal of this wetland will do to their already threatened status.

I have worked with the adjacent landowner, Erik Moen, as he alerted me to the Blanding's wanderings years ago.

With the decline of wetlands and other native habitats occurring all across the state, I need to voice my concern as yet another critical piece of our already fragile landscape will be removed. While the Blanding's turtles are the threatened species utilizing this wetland and surrounding area, I know many other reptiles, amphibians and wildlife also benefit to a high degree because of this unique habitat.

I have copied Mr. Moen on this email, so that he too is aware of what is occurring at the airport. Thank you for allowing me to voice my opinion.

Sincerely, Karen M. Phelps Executive Director

--

Karen Phelps

Executive Director
Benton County Conservation
5718 20th Avenue Dr. Vinton, Iowa 52349

Office: 319-472-4942 Mobile: 319-560-9806

Email: KPhelps@bentoncountyparks.com

"What the caterpillar calls the end of the world, the master calls a butterfly" Richard Bach

For more information please visit: www.bentoncountyparks.com Or on Facebook at www.facebook.com/bentoncountyparks Iowa Department of Natural Resources – Conservation and Recreation Division

Conservation and Recreation Division Iowa Department of Natural Resources Wallace State Office Building 502 East 9th Street Des Moines, IA 50319-0034

RE: Environmental Assessment – Early Coordination
Vinton Veteran's Memorial Airport
Vinton, Iowa
AIP No. 3-19-0092-011-2017
CGA PN 4464.10

To Whom it May Concern:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

The proposed development at the Vinton Veteran's Memorial Airport includes the following major projects which are shown on the Proposed Land Disturbance Exhibit and Land Acquisition Exhibit:

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- Removal of other existing wetlands on airport property
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- Parallel taxiway along Runway 9-27
- Land acquisition in the 35' building restriction line (12.0 acres in fee)
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Previous wildlife strikes and near misses with deer and birds have created significant safety hazards to aircraft operations. The U.S. Fish and Wildlife service suggests changing the habitat around airports to make it less attractive to birds and other wildlife. In order to mitigate these safety concerns, the airport intends to remove all wetlands on airport property, including the large wetland located within 50' of Runway 9-27. The airport also intends to remove trees that can attract birds and deer. A 8' tall wildlife fence is being proposed to specifically prevent deer from getting onto the airfield. Land acquisition will be necessary to install a drainage ditch that will drain the wetlands permanently to the south.

Once the wetland near Runway 9-27 has been drained and graded, the airport intends to build a full parallel taxiway in the near future along the south side of Runway 9-27 where the existing wetland currently sits. Per FAA guidelines, parallel taxiways are recommended with increased activity to provide safe and efficient use of the airfield.

While acquiring land for the wetlands mitigation, the airport also plans to buy additional property within the 35' building restriction line of the airport in order to maintain as much control over other safety zones of the airports aircraft operations.

A hangar building at the airport is also being considered for demolition as part of this EA. The building has reached the end of its useful life and continues to be an on-going maintenance issue. It is no longer economically feasible to perform routine maintenance on the building.

To help in our preparation of the EA, we would appreciate your input (via mail or email), including any regulatory, compliance, or permitting requirements within thirty (30) days. If you have questions or require additional information, please contact Joseph Roenfeldt at 641-752-6701 or jroenfeldt@cgaconsultants.com Thank you for your assistance.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton



DIRECTOR CHUCK GIPP

April 17, 2018

CGA, INC.

ATTN: JOSEPH ROENFELDT 16 EAST MAIN STREET MARSHALLTOWN, IA 50158

RE: Environmental Review for Natural Resources

Environmental Assessment-Early Coordination Proposed Development at Vinton Veteran's

Memorial Airport

AIP No. 3-19-0092-011-2017

CGA PN 4464.10 Benton County

Dear Mr. Roenfeldt:

Thank you for inviting Department comment on the impact of this project. The Department has records of the following state listed species in the immediate vicinity of the project area:

Scientific Name	Common Name	State Status
Xyris torta	Yellow-eyed Grass	Endangered
Lechea intermedia	Narrowleaf Pinweed	Threatened
Phlox bifida	Cleft Phlox	Special Concern
Viola lanceolata	Lance-leaved Violet	Special Concern
Astragalus distortus	Bent Milkvetch	Special Concern
Emydoidea blandingi	Blanding's Turtle	Threatened

The Department requests that the results of a plant and animal survey, conducted by a qualified botanist/biologist, are submitted in advance of any construction activities. Please contact DNR Botanist John Pearson at (515)669-7614 john.pearson@dnr.iowa.gov and Endangered Species Coordinator Kelly Poole at (515)725-8463 kelly.poole@dnr.iowa.gov before surveys begin to have the scope of the surveys approved. The results of these surveys will inform Department recommendations to avoid, minimize, and mitigate impact to these species.

Department records and data are not the result of thorough field surveys. If listed species or rare communities are found during the planning or construction phases, additional studies and/or mitigation may be required.

This letter is a record of review for protected species, rare natural communities, state lands and waters in the project area, including review by personnel representing state parks, preserves, recreation areas, fisheries and wildlife but does not include any comment from the Environmental Services Division of this Department. This letter does not constitute a permit. Other permits may be required from the Department or other state or federal agencies before work begins on this project.

Please reference the following DNR Environmental Review/Sovereign Land Program tracking number assigned to this project in all future correspondence related to this project: 15431.

If you have questions about this letter or require further information, please contact me at (515) 725-8464.

Sincerely,

Seth Moore

Environmental Specialist

Conservation and Recreation Division

Seth Moore

FILE COPY: Seth Moore

Tracking Number: 15431



Ms. Kelly Poole Conservation and Recreation Division Iowa Department of Natural Resources Wallace State Office Building 502 East 9th Street Des Moines, IA 50319-0034

RE: Environmental Assessment

Vinton Veteran's Memorial Airport

Vinton, Iowa

AIP No. 3-19-0092-011-2017

CGA PN 4464.10

IDNR Environmental Review/Sovereign Land Program Tracking Number: 15431

Ms. Kelly Poole:

This letter is in response to a letter received from your office via email on April 17, 2018 regarding our early coordination of the Environmental Assessment being prepared for the Vinton Veteran's Memorial Airport which includes the proposed removal of wetlands. Stantec Consulting Services Inc. performed a field investigation on October 25, 2017 and their methods and findings are included in the attached Environmental Resources Report. The scope of the report was to conduct a wetland delineation and a habitat assessment for the state-threatened Blanding's turtle, which is known to occur within the project limits. We are providing the report for your review so that we can begin coordinating and discussing how to avoid, minimize or mitigate the impacts to the Blanding's turtle. Please advise us on any further steps that you may require after reviewing the attached report.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt Project Manager

Copy: Chris Ward, City of Vinton

Stacey Parks, Stantec Terry VanDeWalle, Stantec



Mr. John Pearson Conservation and Recreation Division Iowa Department of Natural Resources Wallace State Office Building 502 East 9th Street Des Moines, IA 50319-0034

RE: Environmental Assessment

Vinton Veteran's Memorial Airport

Vinton, Iowa

AIP No. 3-19-0092-011-2017

CGA PN 4464.10

IDNR Environmental Review/Sovereign Land Program Tracking Number: 15431

Mr. John Pearson:

This letter is in response to a letter received from your office via email on April 17, 2018 regarding our early coordination of the Environmental Assessment being prepared for the Vinton Veteran's Memorial Airport which includes the proposed removal of wetlands. Stantec Consulting Services Inc. performed a rare plant survey August 23, 2018 and their methods and findings are included in the attached Rare Plant Survey Report. The scope of the report was to conduct an assessment to determine if certain plant species, identified in your April 17, 2018 letter, were located within the project limits.

We are providing the attached report for your review so that we can begin coordinating and discussing how to avoid, minimize or mitigate the impacts to the observed special concern plant species. Please advise us on any further steps that you may require after reviewing the attached report.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt Project Manager

Copy: Chris Ward, City of Vinton

Stacey Parks, Stantec Terry VanDeWalle, Stantec

Amy Walter, FAA

Justin Strom

From: Joe Roenfeldt

Sent: Thursday, October 3, 2019 5:21 PM

To: Moore, Seth

Cc: cward@vintoniowa.net; Mike Bearden; 'Terry.Vandewalle@stantec.com'; Parks, Stacey; Justin Strom

Subject: Vinton Airport EA Discussion

Attachments: Alternatives Summary 10-3-19.pdf; Draft EA with Purpose and Need and Alternative Discussion.pdf;

_Exhibits (Reduced Size).pdf; USACE Letter.pdf

Seth,

Back in January we sat down with you and others at the Iowa DNR to go over the ongoing Environmental Assessment (EA) at the Vinton Veteran's Memorial Airport. During this initial visit the discussion was centered around the known issues at the airport and also briefly about impacts the proposed development at the airport might have to certain biological resources.

During the meeting we discussed the need to provide more defined alternatives and more detailed discussion related to those alternatives. In an effort to provide you more detailed information about the alternatives, I am providing attached to the email the following:

- Brief summary of the alternatives included in more detailed discussion of the EA.
- Purpose and Need section of the EA.
- Detailed discussion of the No Action Alternatives, Reasonable Alternatives, Plausible Alternatives and Proposed Alternatives.
- Supporting exhibits for most alternatives to help visually show impacts or concerns associated with the discussed alternative.

We also attached the U.S. Army Corps of Engineering Letter stating their determination that the wetlands are non-jurisdictional as requested at the January meeting. It was requested that the most recent Airport Master Plan Update be shared as well to see what alternatives were provided during the master plan update. The attached EA provides substantially more alternatives and provides a much more detailed analysis into each alternative than the master plan update provided. Sharing the master plan update would likely not provide much additional benefit at this time.

We feel that it would be good to schedule another sit down meeting, to discuss this as a group, in the coming weeks so that we can better discuss the information presented. As a starting point I was thinking about looking at something the week of October 14 thru October 18. Otherwise we will have to wait until after November 4, 2019.

Joseph P. Roenfeldt, P.E. Project Manager



Clapsaddle-Garber Associates, Inc. (CGA)

PO Box 754 16 East Main Street Marshalltown, Iowa 50158

Office: 641-752-6701, ext 44

Toll Free: 800-542-7981 Fax: 641-752-2849 Mobile: 641-750-4256

jroenfeldt@cgaconsultants.com www.cgaconsultants.com

Ackley | Ames | Cedar Falls | Marshalltown | Webster City

CLICK HERE to sign up for CGA news and updates!







 From:
 Moore, Seth

 To:
 Tener, Scott (FAA)

Cc: Josh Dank; Walter, Amy (FAA); Deitering, Jeff (FAA); City Vinton; Matt Garber; Eric Johnson; Kari Sherman;

Parks, Stacey; VanDeWalle, Terry

Subject: Re: Vinton EA (SL 15431)

Date: Monday, February 7, 2022 2:23:16 PM

Attachments: <u>image001.jpg</u>

image002.jpg image004.png image005.png image005.png image007.png image008.jpg image010.jpg image011.jpg image011.jpg image012.jpg image013.jpg

Scott,

See below in red for answers to your questions. Please let me know if you require anything else.

Thank you,



Seth Moore • Sovereign Lands Permitting/Env. Review

Land and Waters Bureau

Iowa Department of Natural Resources

C 515-330-6432

502 E 9th St, Des Moines, IA 50319



On Fri, Feb 4, 2022 at 8:36 AM Tener, Scott (FAA) < scott.tener@faa.gov> wrote:

Seth,

Thank you for the response. We will be sure to include in our environmental determination the requirement to develop an approved Avoidance, Minimization and Monitoring plan for the turtle and grass.

However, the proposed project involves the removal of the wetland area which is located next to the runway; therefore avoidance is not an option. Removal of the wetland removes incompatible hazardous wildlife habitat next to the runway which could lead to wildlife on the runway and endangering aircraft landing and takeoff. Second, removal of the wetland next to the runway allows for construction of a parallel taxiway separating slow moving taxiing aircraft from landing

aircraft and allowing for a safer runway. We wanted to get a little more clarification of the issue before we make our final determination:

- 1) We assume that since the Blanding's turtle is listed as state-Threatened, that removal of the wetland area next to the runway will not result in extirpation of the species from the state? The concern for Blanding's Turtle is direct take as a result of the construction not extirpation from the state. The request for an Avoidance, Minimization, and Monitoring (AMM) plan minimizes the potential for this. The standard that the Department uses for evaluating impacts to listed species is taking at the local site, not extirpation from the whole state.
- 2) Is this the only known habitat for the state-Endangered Yellow-eyed Grass? Will removal of the wetland result in extirpation of this grass species from the state? There are six known populations of Yellow-eyed Grass in Iowa. The Vinton Airport site has the largest population with over 1000 plants. All of the other populations are smaller with 10-100 plants. (This species is not a true grass, it just gets that common name because of its grass-like leaves. Here is a short description of the species from the Minnesota Wildflowers website: (https://www.minnesotawildflowers.info/flower/twisted-yellow-eyed-grass). Thus the removal of the wetland will not lead to the extirpation of this species from the state.
- 3) Is development of the Avoidance, Minimization and Monitoring plan considered mitigation allowing for the removal of the wetland? Yes, previous discussions have established that avoidance of the wetland is not possible while meeting safety standards for the runway, but this fact needs to be documented in the AAM plan. Mitigation appears to be the only option for the Yellow-eyed Grass (and its wetland habitat), but it will be challenging to create an alternate wetland capable of supporting this specialized species.

Please let me know if you have any questions,

Scott Tener

Environmental Specialist

FAA Central Region Airports Division

Kansas City, Missouri 64106-2325

901 Locust St., Room 364

T816.329.2639 | F816.329.2611

http://www.faa.gov/airports/central/

From: Moore, Seth < seth.moore@dnr.iowa.gov >

Sent: Thursday, February 3, 2022 3:50 PM **To:** Josh Dank < <u>JDank@cgaconsultants.com</u>>

Cc: Walter, Amy (FAA) < <u>Amy.Walter@faa.gov</u>>; Deitering, Jeff (FAA) < <u>jeff.deitering@faa.gov</u>>; Tener, Scott (FAA) < <u>scott.tener@faa.gov</u>>; City Vinton < <u>cward@vintoniowa.net</u>>; Matt Garber < <u>mgarber@cgaconsultants.com</u>>; Eric Johnson < <u>ejohnson@kirkham.com</u>>; Kari Sherman < <u>ksherman@kirkham.com</u>>; Parks, Stacey < <u>Stacey.Parks@stantec.com</u>>; VanDeWalle, Terry < <u>Terry.Vandewalle@stantec.com</u>>

Subject: Re: Vinton EA (SL 15431)

Josh,

Please see the below DNR response for the project. Please let me know if you have any questions or need anything further.

Thank you for providing the Iowa Department of Natural Resources (DNR) with the results of the plant and animal surveys requested in the letter of Environmental Review dated April 17, 2018. The DNR has reviewed the results of the Rare Plant Survey submitted on August 21, 2020 and the Blanding's Turtle Survey submitted on November 11, 2021 which confirms the presence of the state-Threatened Blanding's Turtle (*Emydoidea blandingii*). While the state-Endangered Yellow-eyed Grass (*Xyris torta*) wasn't observed during the 2018 rare plant survey, the DNR has other credible records indicating its presence.

Due to the potential for impacts to protected species, the DNR requests that the City of Vinton continue to coordinate with the DNR as the project progresses. Should the project move forward, the DNR requests the development of an approved Avoidance, Minimization and Monitoring plan for the state-Threatened Blanding's Turtle (*Emydoidea blandingii*) and for the state-Endangered Yellow-eyed Grass (*Xyris torta*) prior to the start of construction.



Seth Moore • Sovereign Lands Permitting/Env. Review

Land and Waters Bureau

lowa Department of Natural Resources C 515-330-6432

502 E 9th St, Des Moines, IA 50319



C	On Mon, Jan 31, 2022 at 8:01 AM Josh Dank < JDank@cgaconsultants.com >	wrote:
	Seth,	
	Did you have an update on this?	
	Thanks,	
	Joshua Dank	
	Aviation Project Coordinator	
	2	
	Clapsaddle-Garber Associates, Inc. (CGA)	
	16 E Main St, Suite 400	
	Marshalltown, IA 50158	
	Office: 641-752-6701	
	Mobile: 515-868-9592	
	jdank@cgaconsultants.com	
	www.cgaconsultants.com	
	Ackley Ames Cedar Falls Marshalltown Webster City	

CLICK HERE to sign up for CGA news and updates!



From: Moore, Seth < seth.moore@dnr.iowa.gov >

Sent: Tuesday, January 25, 2022 8:00 AM **To:** Josh Dank < <u>JDank@cgaconsultants.com</u>>

Cc: Walter, Amy (FAA) < <u>Amy.Walter@faa.gov</u>>; Deitering, Jeff (FAA)

<<u>ieff.deitering@faa.gov</u>>; Tener, Scott (FAA) <<u>scott.tener@faa.gov</u>>; City Vinton <<u>cward@vintoniowa.net</u>>; Matt Garber <<u>mgarber@cgaconsultants.com</u>>; Eric Johnson <<u>ejohnson@kirkham.com</u>>; Kari Sherman <<u>ksherman@kirkham.com</u>>; Parks, Stacey <<u>Stacey.Parks@stantec.com</u>>; VanDeWalle, Terry <<u>Terry.Vandewalle@stantec.com</u>>

Subject: Re: Vinton EA (SL 15431)

Thank you Josh. I will reach out to Kelly.



Seth Moore • Sovereign Lands Permitting/Env. Review

Land and Waters Bureau

Iowa Department of Natural Resources
C 515-330-6432

502 E 9th St, Des Moines, IA 50319



On Mon, Jan 24, 2022 at 2:47 PM Josh Dank < <u>JDank@cgaconsultants.com</u>> wrote:

Amy,

See attached. Report was emailed to the DNR on 11/11/2021. I've attached the report separately for convenience.

My latest response was from Kelly:

From: Poole, Kelly <u>kelly.poole@dnr.iowa.gov</u> **Sent:** Tuesday, January 18, 2022 11:46 AM To: Josh Dank <u>JDank@cgaconsultants.com</u>

Cc: Parks, Stacey Stacey.Parks@stantec.com; VanDeWalle, Terry

Terry.Vandewalle@stantec.com

Subject: Re: Vinton Airport Blanding's Turtle Survey

I will get back to you early next week.



www.iowadnr.gov

KELLY POOLE | Endangered Species Coordinator

Land and Waters Bureau

Iowa Department of Natural Resources P: 515-782-0358

502 E. 9th Street, Des Moines, IA 50319



Let me know if you have additional questions on the status of the turtle survey review. I've attached the FFY 2022 QPR Quarter 1 report also.

Thanks,

Joshua Dank

Aviation Project Coordinator



Clapsaddle-Garber Associates, Inc. (CGA)

16 E Main St, Suite 400

Marshalltown, IA 50158

Office: 641-752-6701

Mobile: 515-868-9592

idank@cgaconsultants.com

www.cgaconsultants.com

Ackley | Ames | Cedar Falls | Marshalltown | Webster City

CLICK HERE to sign up for CGA news and updates!







From: Walter, Amy (FAA) < <u>Amy.Walter@faa.gov</u>>

Sent: Monday, January 24, 2022 2:09 PM

To: Matt Garber < mgarber@cgaconsultants.com >; Josh Dank

<<u>JDank@cgaconsultants.com</u>>; Eric Johnson <<u>ejohnson@kirkham.com</u>>; Kari

Sherman < ksherman@kirkham.com >

Cc: Deitering, Jeff (FAA) < <u>ieff.deitering@faa.gov</u>>; Tener, Scott (FAA)

<scott.tener@faa.gov>; City Vinton <cward@vintoniowa.net>

Subject: RE: Vinton EA (SL 15431)

Please see the message below from Seth Moore, IA DNR. We have never received the final turtle survey and consider this part of the coordination between the Sponsor/Consultant and State Agency. Please advise as to the status of the report and the date when it was sent to the DNR for final consultation.

Thank you,

Amy J. Walter

Airport Land Specialist

816.329.2603

From:

Sent: Monday, January 24, 2022 1:48 PM

To: Walter, Amy (FAA) < <u>Amy.Walter@faa.gov</u>>

Cc: Deitering, Jeff (FAA) < <u>ieff.deitering@faa.gov</u>>; Tener, Scott (FAA)

<scott.tener@faa.gov>; City Vinton <cward@vintoniowa.net>

Subject: Re: Vinton EA (SL 15431)

Amy,

Hello, I work in the Iowa DNR's Environmental review section. The City of Vinton has contacted us in regard to whether a response was ever given to the FAA concerning the turtle survey that was completed for their airport project. To my knowledge I dont know if we ever received that survey for review. They City did not know if it was sent to us or not either. Could you please send that survey so that we can review it?



Seth Moore • Sovereign Lands Permitting/Env. Review

Land and Waters Bureau

Iowa Department of Natural Resources
C 515-330-6432

502 E 9th St, Des Moines, IA 50319



Iowa Department of Transportation

Iowa DOT Transportation Planner Catherine Cutler 5455 Kirkwood Blvd SW Cedar Rapids, IA 52404

RE: Environmental Assessment – Early Coordination
Vinton Veteran's Memorial Airport
Vinton, Iowa
AIP No. 3-19-0092-011-2017
CGA PN 4464.10

Dear Catherine:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

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- Installation of 8' high wildlife fencing to mitigate wildlife hazards and wildlife strikes
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- Land acquisition in the 35' building restriction line (12.0 acres in fee)
- Hangar removal near the existing terminal building to allow future construction of a parallel taxiway along Runway 16-34

Previous wildlife strikes and near misses with deer and birds have created significant safety hazards to aircraft operations. The U.S. Fish and Wildlife service suggests changing the habitat around airports to make it less attractive to birds and other wildlife. In order to mitigate these safety concerns, the airport intends to remove all wetlands on airport property, including the large wetland located within 50' of Runway 9-27. The airport also intends to remove trees that can attract birds and deer. A 8' tall wildlife fence is being proposed to specifically prevent deer from getting onto the airfield. Land acquisition will be necessary to install a drainage ditch that will drain the wetlands permanently to the south.

Once the wetland near Runway 9-27 has been drained and graded, the airport intends to build a full parallel taxiway in the near future along the south side of Runway 9-27 where the existing wetland currently sits. Per FAA guidelines, parallel taxiways are recommended with increased activity to provide safe and efficient use of the airfield.

While acquiring land for the wetlands mitigation, the airport also plans to buy additional property within the 35' building restriction line of the airport in order to maintain as much control over other safety zones of the airports aircraft operations.

A hangar building at the airport is also being considered for demolition as part of this EA. The building has reached the end of its useful life and continues to be an on-going maintenance issue. It is no longer economically feasible to perform routine maintenance on the building.

To help in our preparation of the EA, we would appreciate your input (via mail or email), including any regulatory, compliance, or permitting requirements within thirty (30) days. If you have questions or require additional information, please contact Joseph Roenfeldt at 641-752-6701 or jroenfeldt@cgaconsultants.com Thank you for your assistance.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Justin Strom

From: Joe Roenfeldt

Sent: Friday, April 27, 2018 10:31 AM

To: 'Cutler, Catherine'
Cc: Mike Bearden

Subject: RE: Vinton Airport EA

Thank you for providing us responses to our request for input regarding any regulatory, compliance, or permitting requirements for the project listed in the proposed environmental assessment at the Vinton Veterans Memorial Airport. I will be including a copy of your e-mail below in the environmental assessment for documentation.

Joseph P. Roenfeldt, P.E.

Project Manager

Clapsaddle-Garber Associates, Inc.

Office: 641-752-6701, ext 44 Mobile: 641-750-4256

<u>iroenfeldt@cgaconsultants.com</u> www.cgaconsultants.com

From: Cutler, Catherine [mailto:Catherine.Cutler@iowadot.us]

Sent: Wednesday, April 11, 2018 2:57 PM

To: Joe Roenfeldt jroenfeldt@cgaconsultants.com>

Subject: Vinton Airport EA

Thank you for including the Iowa Department of Transportation on your early coordination with the proposed improvements to the airport.

Our comments:

- 1. Please be aware of Iowa 150 right of way when planning any runway extensions
- 2. If any of the proposed 8' high wildlife fencing will be in Iowa DOT right of way, you will need to apply for a work on right of way permit.



iowadot.gov f Iowa Department of Transportation

Catherine.Cutler@iowadot.us

National Park Service

Environmental Coordinator National Park Service Midwest Regional Office 601 Riverfront Drive Omaha, NE 68102

RE: Environmental Assessment – Early Coordination Vinton Veteran's Memorial Airport Vinton, Iowa AIP No. 3-19-0092-011-2017 CGA PN 4464.10

To Whom it May Concern:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

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Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Natural Resource Conservation Service

Kurt Simon, State Conservationist Natural Resources Conservation Service 210 Walnut Street, Room 693 Des Moines, Iowa 50309

RE: Environmental Assessment – Early Coordination
Vinton Veteran's Memorial Airport
Vinton, Iowa
AIP No. 3-19-0092-011-2017
CGA PN 4464.10

Dear Kurt:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

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To help in our preparation of the EA, we would appreciate your input (via mail or email), including any regulatory, compliance, or permitting requirements within thirty (30) days. If you have questions or require additional information, please contact Joseph Roenfeldt at 641-752-6701 or jroenfeldt@cgaconsultants.com Thank you for your assistance.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Justin Strom

From: Jensen, Sindra - NRCS, Des Moines, IA <Sindra.Jensen@ia.usda.gov>

Sent: Friday, April 27, 2018 2:35 PM

To: Joe Roenfeldt

Subject: RE: Vinton Veteran's Memorial Airport

Attachments: Location Maps_5561141801Q6C_Mayhew.pdf

Thanks Joe,

No we do not have any existing easements in the area. We do have this application that we are working on as part of the Cedar River watershed project. I don't see it posing a problem with the airport however. We stay outside the restricted area per FAA memorandum of understanding we have with them.

It is quite a few miles away.

Thanks Sindra

SINDRA JENSEN **EASEMENT PROGRAM COORDINATOR USDA-NRCS** 210 WALNUT STREET ROOM 693 DES MOINES, IOWA 50309 SINDRA.JENSEN@IA.USDA.GOV 515-323-2480



📤 Please consider the environment before printing this email

From: Joe Roenfeldt < jroenfeldt@cgaconsultants.com>

Sent: Friday, April 27, 2018 2:27 PM

To: Jensen, Sindra - NRCS, Des Moines, IA <Sindra.Jensen@ia.usda.gov>

Subject: RE: Vinton Veteran's Memorial Airport

Sindra,

The projects would be in T86N R10W Section 32 and 33. Based on the link you provided below it doesn't appear that there are any conservation easements in these section but can you confirm this?

Thank you for your help in this regard.

Joseph P. Roenfeldt, P.E.

Project Manager

Clapsaddle-Garber Associates, Inc.

Office: 641-752-6701, ext 44 Mobile: 641-750-4256

jroenfeldt@cgaconsultants.com www.cgaconsultants.com

From: Jensen, Sindra - NRCS, Des Moines, IA [mailto:Sindra.Jensen@ia.usda.gov]

Sent: Friday, April 27, 2018 1:24 PM

To: Joe Roenfeldt <iroenfeldt@cgaconsultants.com>; Rogers, Richard - NRCS, Des Moines, IA

<Richard.Rogers@ia.usda.gov>

Cc: Bednarek, Richard - NRCS, Des Moines, IA <Rick.Bednarek@ia.usda.gov>; Cronin, James - NRCS, Des Moines, IA <james.cronin@ia.usda.gov>; Kinyon-Anderson, Tara - NRCS, Des Moines, IA <<u>Tara.Kinyon-Anderson@ia.usda.gov</u>>

Subject: RE: Vinton Veteran's Memorial Airport

HI Joe,

I will need to know the location please. Township Range and Section. You can also get our easement shape file off our website. Easement shapefiles website

I can let you know if there are any easements in the area once I get that information.

Thanks. Sindra

SINDRA JENSEN EASEMENT PROGRAM COORDINATOR **USDA-NRCS** 210 WALNUT STREET ROOM 693 DES MOINES, IOWA 50309 SINDRA.JENSEN@IA.USDA.GOV 515-323-2480



📤 Please consider the environment before printing this email

From: Joe Roenfeldt < jroenfeldt@cgaconsultants.com>

Sent: Friday, April 27, 2018 12:04 PM

To: Rogers, Richard - NRCS, Des Moines, IA < Richard. Rogers@ia.usda.gov>

Cc: Bednarek, Richard - NRCS, Des Moines, IA <Rick.Bednarek@ia.usda.gov>; Jensen, Sindra - NRCS, Des Moines, IA <Sindra.Jensen@ia.usda.gov>; Cronin, James - NRCS, Des Moines, IA <james.cronin@ia.usda.gov>; Kinyon-Anderson,

Tara - NRCS, Des Moines, IA < Tara. Kinyon-Anderson@ia.usda.gov>

Subject: RE: Vinton Veteran's Memorial Airport

Thank you for providing us responses to our request for input regarding any regulatory, compliance, or permitting requirements for the project listed in the proposed environmental assessment at the Vinton Veterans Memorial Airport. I will be including a copy of your e-mail below in the environmental assessment for documentation.

The scope of the Environmental Assessment will include completing a Farmland Conversion Impact Rating (Form AD-1006). The exhibits that were sent to you as part of the coordination letter detail the approximate project limits for the project. Are there any know conservation easements located within the vicinity of the airport that might be impacted by the proposed projects?

Joseph P. Roenfeldt, P.E.

Project Manager

Clapsaddle-Garber Associates, Inc.

Office: 641-752-6701, ext 44 Mobile: 641-750-4256

jroenfeldt@cgaconsultants.com www.cgaconsultants.com

From: Rogers, Richard - NRCS, Des Moines, IA [mailto:Richard.Rogers@ia.usda.gov]

Sent: Thursday, April 12, 2018 2:30 PM

To: Joe Roenfeldt < jroenfeldt@cgaconsultants.com>

Cc: Bednarek, Richard - NRCS, Des Moines, IA < <u>Rick.Bednarek@ia.usda.gov</u>>; Jensen, Sindra - NRCS, Des Moines, IA < <u>Sindra.Jensen@ia.usda.gov</u>>; Cronin, James - NRCS, Des Moines, IA < <u>james.cronin@ia.usda.gov</u>>; Kinyon-Anderson,

Tara - NRCS, Des Moines, IA < Tara. Kinyon-Anderson@ia.usda.gov>

Subject: Vinton Veteran's Memorial Airport

Dear Joseph,

Thank you for contacting the Iowa NRCS regarding the Vinton Veteran's Memorial Airport. Of the many resource considerations important to our agency, two specific areas are either under our jurisdiction or control, namely Farmland Protection Policy Act (FPPA) and NRCS conservation easements.

As specific project areas are confirmed and detail provided, you are encouraged to contact Mr. Richard Bednarek, State Soil Scientist, and Ms. Sindra Jensen, Easements Program Coordinator for further assistance on FPPA and NRCS easements, respectively. Both Rick and Sindra are copied above.

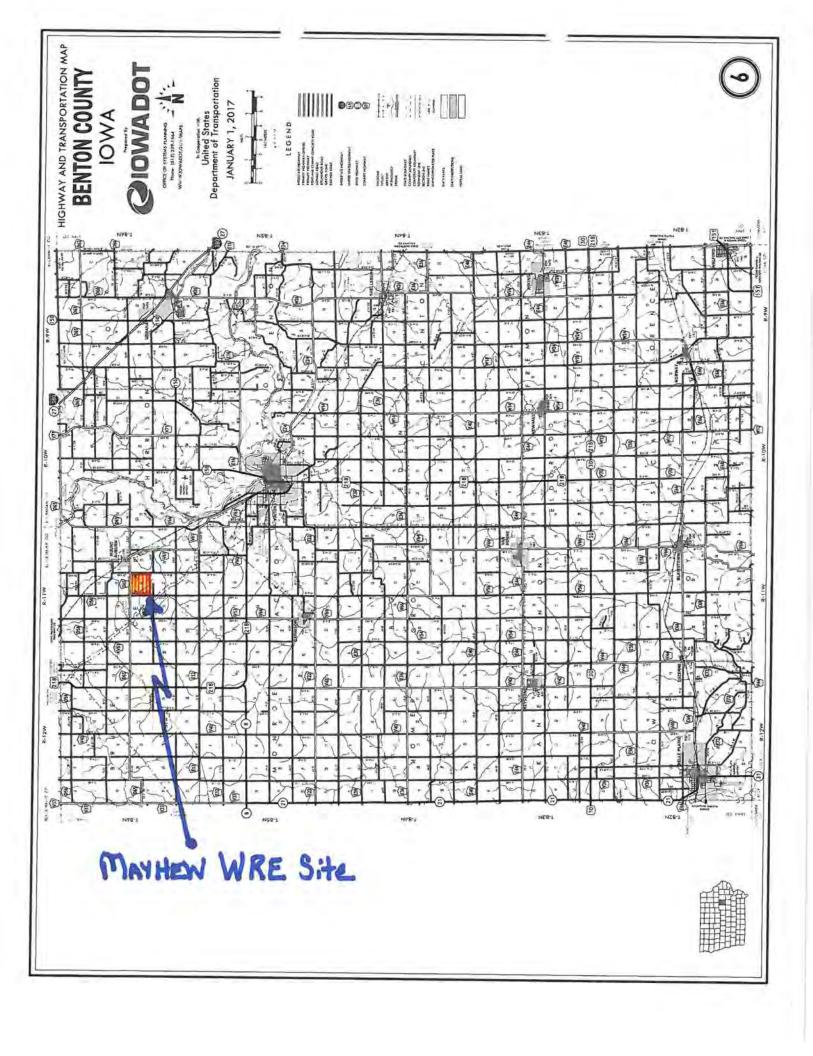
As a guide, I am also attaching an FPPA flowchart we use to for the purpose of determining if the NRCS would need to process a Form AD-1006 submitted by the responsible Federal agency, HUD, or its authorized agent.

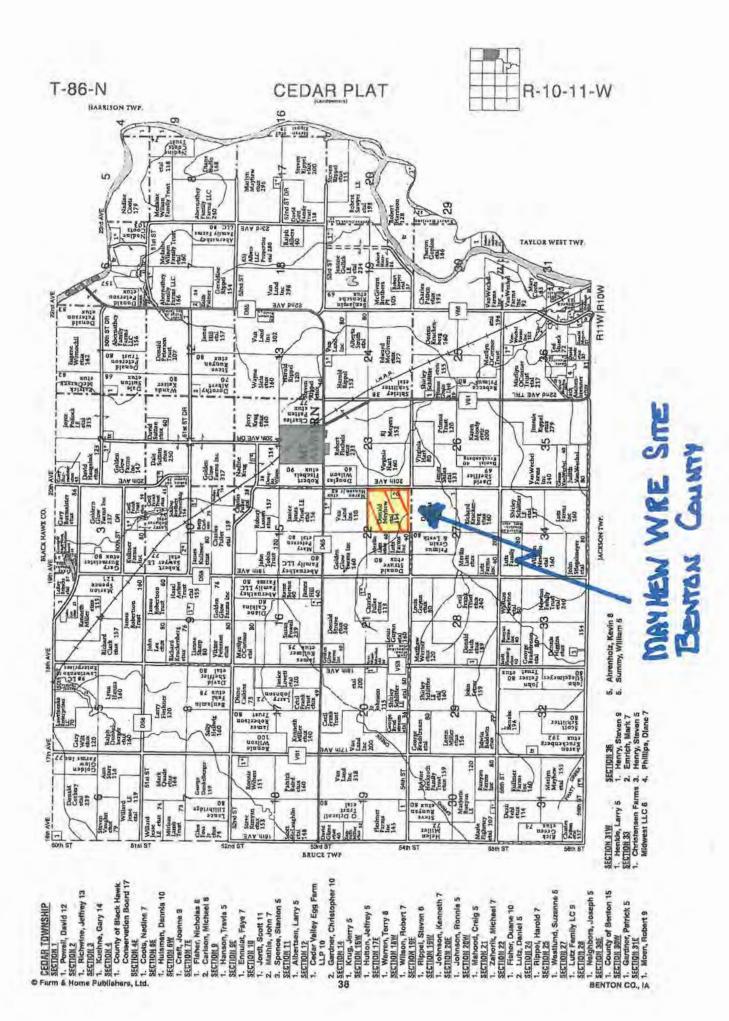
Please contact me if you need further clarification.

Sincerely,

Richard A. Rogers
Cultural Resources Specialist
210 Walnut Street, 693 Federal Building
Des Moines, Iowa 50309-2180
Natural Resources Conservation Service
(515) 323-2253

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ACEP-WRE Application

Date: 9/7/2017

Customer(s): DONALD E MAYHEW JOANNE MAYHEW BROWN LIVING TRUST

Legal Description: Section 22, T86N R11W

Benton County, IA

Farm #5797, Tract #988

Field Office: Vinton Field Office

Agency: USDA NRCS

Assisted By: MICHAEL WEBSTER



Legend

Prepared with assistance from USDA-Natural Resources Conservation Service

2016 Imagery

Access



WRE_Application_w_Field_Boundaries

Iowa - Section Lines

1 inch = 660 feet





USDA

United States Fish and Wildlife Service

Fish and Wildlife Service Rock Island Field Office 1511 47th Avenue Moline, IL 61265

RE: Environmental Assessment – Early Coordination Vinton Veteran's Memorial Airport Vinton, Iowa AIP No. 3-19-0092-011-2017 CGA PN 4464.10

To Whom it May Concern:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

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Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Illinois-Iowa Ecological Services Field Office Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022

Phone: (309) 757-5800 Fax: (309) 757-5807

In Reply Refer To: March 28, 2022

Project code: 2022-0024591

Project Name: Vinton Veteran's Memorial Airport

Subject: Verification letter for the 'Vinton Veteran's Memorial Airport' project under the

January 5, 2016, Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-eared Bat and Activities Excepted from Take Prohibitions.

Dear Kari Sherman:

The U.S. Fish and Wildlife Service (Service) received on March 28, 2022 your effects determination for the 'Vinton Veteran's Memorial Airport' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. This IPaC key assists users in determining whether a Federal action is consistent with the activities analyzed in the Service's January 5, 2016, Programmatic Biological Opinion (PBO). The PBO addresses activities excepted from "take" prohibitions applicable to the northern long-eared bat under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, the Action is consistent with activities analyzed in the PBO. The Action may affect the northern long-eared bat; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the PBO satisfies and concludes your responsibilities for this Action under ESA Section 7(a)(2) with respect to the northern long-eared bat.

Please report to our office any changes to the information about the Action that you submitted in IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation. If the Action is not completed within one year of the date of this letter, you must update and resubmit the information required in the IPaC key.

This IPaC-assisted determination allows you to rely on the PBO for compliance with ESA Section 7(a)(2) <u>only</u> for the northern long-eared bat. It **does not** apply to the following ESA-protected species that also may occur in the Action area:

- Eastern Prairie Fringed Orchid *Platanthera leucophaea* Threatened
- Monarch Butterfly *Danaus plexippus* Candidate
- Western Prairie Fringed Orchid Platanthera praeclara Threatened

If the Action may affect other federally listed species besides the northern long-eared bat, a proposed species, and/or designated critical habitat, additional consultation between you and this Service office is required. If the Action may disturb bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act is recommended.

[1] Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

Vinton Veteran's Memorial Airport

2. Description

The following description was provided for the project 'Vinton Veteran's Memorial Airport':

Removal of wetlands at Vinton Airport, a parallel taxiway along Runway 9-27, land acquistion, tree removal, and deer fencing

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.219348600000004,-92.02943448147592,14z



Determination Key Result

This Federal Action may affect the northern long-eared bat in a manner consistent with the description of activities addressed by the Service's PBO dated January 5, 2016. Any taking that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o). Therefore, the PBO satisfies your responsibilities for this Action under ESA Section 7(a)(2) relative to the northern long-eared bat.

Determination Key Description: Northern Long-eared Bat 4(d) Rule

This key was last updated in IPaC on May 15, 2017. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for Federal actions is to assist determinations as to whether proposed actions are consistent with those analyzed in the Service's PBO dated January 5, 2016.

Federal actions that may cause prohibited take of northern long-eared bats, affect ESA-listed species other than the northern long-eared bat, or affect any designated critical habitat, require ESA Section 7(a)(2) consultation in addition to the use of this key. Federal actions that may

Determination Key Result

This project may affect the threatened Northern long-eared bat; therefore, consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.) is required. However, based on the information you provided, this project may rely on the Service's January 5, 2016, *Programmatic Biological Opinion on Final 4(d) Rule for the Northern Long-Eared Bat and Activities Excepted from Take Prohibitions* to fulfill its Section 7(a)(2) consultation obligation.

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency? *Yes*

2. Have you determined that the proposed action will have "no effect" on the northern long-eared bat? (If you are unsure select "No")

No

3. Will your activity purposefully **Take** northern long-eared bats?

No

4. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

Automatically answered

No

5. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

Yes

6. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

No

7. Will the action involve Tree Removal?

Yes

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

n

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July $31\,$

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

IPaC User Contact Information

Agency: Kirkham Michael Name: Kari Sherman

Address: 12700 West Dodge Road

City: Omaha State: NE Zip: 68154

Email ksherman@kirkham.com

Phone: 4022553286

Lead Agency Contact Information

Lead Agency: Federal Aviation Administration

State of Iowa Historical Preservation Officer

Justin Strom

From: Amy.Walter@faa.gov

Sent: Monday, September 24, 2018 11:57 AM

To: Joe Roenfeldt
Cc: scott.tener@faa.gov

Subject: FW: R&C#180806059_FAA_Vinton_Vinton Veterans Memorial Airport

Attachments: 180806059_FAA_Vinton_VetMemAirport.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Joe,

Attached is the official SHPO comment letter. Please let us know if you have any questions. Thank you,

Amy J. Walter Airport Land Specialist 816.329.2603

From: Andre, Sara <sara.andre@iowa.gov>
Sent: Tuesday, September 18, 2018 1:13 PM
To: Walter, Amy (FAA) <Amy.Walter@faa.gov>

Cc: Higginbottom, Daniel <daniel.higginbottom@iowa.gov>; Unknown Unknown <shpo106@iowa.gov>

Subject: R&C#180806059_FAA_Vinton_Vinton Veterans Memorial Airport

Attached is the official SHPO comment letter for the above-referenced projects, provided in accordance with Section 106 of the National Historic Preservation Act of 1966 and its implementing regulations, 36 CFR Part 800 (revised, effective August 5, 2004).

Please note that you will not receive a hard copy of this letter by mail. There is no need to reply to this email unless you have specific questions or have problems opening the document. Feel free to contact me by email or phone. Be sure to include the Review & Compliance Number (R&C#) in all correspondence.

Sara André

Architectural Historian

State Historic Preservation Office

sara.andre@iowa.gov | 515-242-6157 | iowaculture.gov

Iowa Arts Council | Produce Iowa | State Historical Society of Iowa

Iowa Department of Cultural Affairs

REQUEST FOR SHPO COMMENT ON A PROJECT

1.	GENER	AL INFORMATION	☐ This is a new submitta	ll on relating to SHPO R&C #:		
	a.	Property Name: Vinton Ve		on relating to one o ride #.		
	b.	b. Property Street & Number: 5551 24th Avenue Drive				
	C.	County: Benton	City: Vinton	Zip: <u>52349</u>		
	d.	Federal Agency: FAA	Federal Fundin	g Program/Permit: AIP		
	e.	Agency Project No.:	If HUD, circle one	e: 24 CFR Part 50 or Part 58		
	f.	Contact Person on Project	t: Amy Walter	Phone: 816-329	-2603	
	g.	Contact Address: FAA AC	E-620G, 901 Locust, Kansa	s City, MO Zip: 64106 email: am	y.walter@faa.gov	
II.	IDENTIFICATION OF HISTORIC PLACES Scope of Effort Applied					
	As agreed in programmatic or other agency agreements with SHPO (if applicable)					
	 Includes the attached elements required under 36 CFR 800.4(a) (previously submitted) 1) Area of potential effects, as defined in 800.16(d), is shown on map 2) Existing information has been reviewed on historic properties in the property area at SHPO office and/or other locations of inventory data 3) Information has been sought from parties likely to have knowledge about historic properties in the project area 4) Information gathered from Indian tribes, as appropriate 					
	Identification Results History and Architecture ☑ An attached Iowa Site Inventory form is completed for each building 50 years of age or older					
	Archaeology					
		 Precise project loca Site plan showing ling Number of acres in Legal location: Sect Description of width 	tion map (preferably U.S.G.S. mits of proposed excavation project Township(s ion(s) Township(s and depth of proposed excava	ation and current conditions of project	ot area	
JIL.	APPLICANT CERTIFICATION (Check Either Adverse Effect or No Adverse Effect for Historic Property Affected category)					
	Findings (Check One) No historic properties will be affected (i.e., none are present or there are historic properties present but the project wind have no effect upon them) and adequate documentation under 800.11 is provided, including: 1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary and 2) A description of the steps taken to identify historic properties, including, as appropriate, efforts to seek information pursuant to 800.4(b) and 3) The basis for determining that no historic properties are present or affected. I understand that the SHPO has 30 days from receipt to object to the finding, after which the applicant's responsibilities under Section 106 of the Historic Preservation Act are fulfilled.					
		applying the criteria of adverse A No Adverse Effectimposed to avoid action days from receipt to An Adverse Effect SHPO and other control of the An Adverse Effect SHPO and other control of the An Adverse Effect SHPO and other control of the An Adverse Effect SHPO and other control of the An Adverse Effect SHPO and other control of the Annual Adverse Effect SHPO and other control	se effect under 800.5, propose ct under which, in consultation dverse effects. I understand the the finding shall be considere is found and the applicant, or nsulting parties to resolve the	ation is provided as required in 36 C that the project be considered to ha with the SHPO, the project will be n at failure of the SHPO to provide a cd agreement of the SHPO with the fibther federally authorized represented adverse effect under 800.6	ave (Check One): nodified or conditions lated response within 30 nding ative, will consult with the	
	Тур	Type name below → Amy J Walter				
IV.	STATE	HISTORIC PRESERVATION	OFFICE COMMENT		1	
	X	Agree with the finding in section	on III above (move to reader's	file)	low-up letter	

State of Iowa Archaeologist

John Doershuk Office of the State Archaeologist 700 South Clinton Street Building The University of Iowa Iowa City, Iowa 52242

RE: Environmental Assessment – Early Coordination Vinton Veteran's Memorial Airport Vinton, Iowa AIP No. 3-19-0092-011-2017 CGA PN 4464.10

Dear John:

An Environmental Assessment (EA) is being prepared for the City of Vinton, Iowa for proposed development at the Vinton Veteran's Memorial Airport. We are offering the opportunity to provide input on the project. To assist in the analysis, we are enclosing a Proposed Land Disturbance Exhibit and USGS Quadrangle Map showing the proposed development around the airport.

The proposed development at the Vinton Veteran's Memorial Airport includes the following major projects which are shown on the Proposed Land Disturbance Exhibit and Land Acquisition Exhibit:

- Removal of wetland adjacent to Runway 9-27
- Removal of other existing wetlands on airport property
- Removal of trees on existing airport property and acquired property
- Land acquisition for removal of wetlands (14.9 acres in Fee)
- Installation of 8' high wildlife fencing to mitigate wildlife hazards and wildlife strikes
- Parallel taxiway along Runway 9-27
- Land acquisition in the 35' building restriction line (12.0 acres in fee)
- Hangar removal near the existing terminal building to allow future construction of a parallel taxiway along Runway 16-34

Previous wildlife strikes and near misses with deer and birds have created significant safety hazards to aircraft operations. The U.S. Fish and Wildlife service suggests changing the habitat around airports to make it less attractive to birds and other wildlife. In order to mitigate these safety concerns, the airport intends to remove all wetlands on airport property, including the large wetland located within 50' of Runway 9-27. The airport also intends to remove trees that can attract birds and deer. A 8' tall wildlife fence is being proposed to specifically prevent deer from getting onto the airfield. Land acquisition will be necessary to install a drainage ditch that will drain the wetlands permanently to the south.

Once the wetland near Runway 9-27 has been drained and graded, the airport intends to build a full parallel taxiway in the near future along the south side of Runway 9-27 where the existing wetland currently sits. Per FAA guidelines, parallel taxiways are recommended with increased activity to provide safe and efficient use of the airfield.

While acquiring land for the wetlands mitigation, the airport also plans to buy additional property within the 35' building restriction line of the airport in order to maintain as much control over other safety zones of the airports aircraft operations.

A hangar building at the airport is also being considered for demolition as part of this EA. The building has reached the end of its useful life and continues to be an on-going maintenance issue. It is no longer economically feasible to perform routine maintenance on the building.

To help in our preparation of the EA, we would appreciate your input (via mail or email), including any regulatory, compliance, or permitting requirements within thirty (30) days. If you have questions or require additional information, please contact Joseph Roenfeldt at 641-752-6701 or jroenfeldt@cgaconsultants.com Thank you for your assistance.

Please contact CGA at your convenience if you have any questions on the information provided.

Sincerely,

CLAPSADDLE-GARBER ASSOCIATES, INC.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Justin Strom

From: Joe Roenfeldt

Sent: Friday, April 27, 2018 10:32 AM

To: 'Doershuk, John F'
Cc: Mike Bearden

Subject: RE: CGA PN 4464.10 -- Vinton airport

Thank you for providing us responses to our request for input regarding any regulatory, compliance, or permitting requirements for the project listed in the proposed environmental assessment at the Vinton Veterans Memorial Airport. I will be including a copy of your e-mail below in the environmental assessment for documentation.

The scope of the environmental assessment did include an archeological survey and report that is currently being conducted by Wapsi Valley Archaeology.

Joseph P. Roenfeldt, P.E.

Project Manager

Clapsaddle-Garber Associates, Inc.

Office: 641-752-6701, ext 44 Mobile: 641-750-4256

<u>iroenfeldt@cgaconsultants.com</u> <u>www.cgaconsultants.com</u>

From: Doershuk, John F [mailto:john-doershuk@uiowa.edu]

Sent: Monday, April 09, 2018 2:09 PM

To: Joe Roenfeldt < jroenfeldt@cgaconsultants.com>

Cc: Higginbottom, Daniel [DCA] (Daniel.Higginbottom@iowa.gov) < Daniel.Higginbottom@iowa.gov>

Subject: CGA PN 4464.10 -- Vinton airport

Joseph,

Thanks for letting me know an EA is in progress for planned improvements at the Vinton Memorial Airport and soliciting my comments. There are no recorded archaeological sites in the project area delineated by the documents you shared with me in your letter dated March 29, 2018. A portion of the EA project area was archaeologically investigated by Dave Benn (then of Luther College) in 1978; Benn's focus was primarily on the exposed ground surface but he did excavate a small number of sample test holes searching for archaeological materials. As you might imagine, the methods guiding Benn's field activities and 1978 reporting are significantly out-of-date and do not meet modern standards (http://aiarchaeologist.org/guidelines/). Typically, the lowa State Historic Preservation Office (copied here) considers surveys conducted prior to ca. 1995 as inadequate and the FAA will need to coordinate as to their opinion for this particular instance. In any case, substantial areas not covered by Benn in 1978 are included with the current EA project and thus will require archaeological field investigation prior to ground disturbing activities to verify an absence of significant archaeological deposits (historic properties in NHPA Section 106 terminology).

Sincerely,
John F. Doershuk, Ph.D.
State Archaeologist and Director
Office of the State Archaeologist
Adjunct Associate Professor, Anthropology
University of Iowa

700 Clinton Street lowa City, Iowa 52242-1030 319-384-0751 (office) archaeology.uiowa.edu

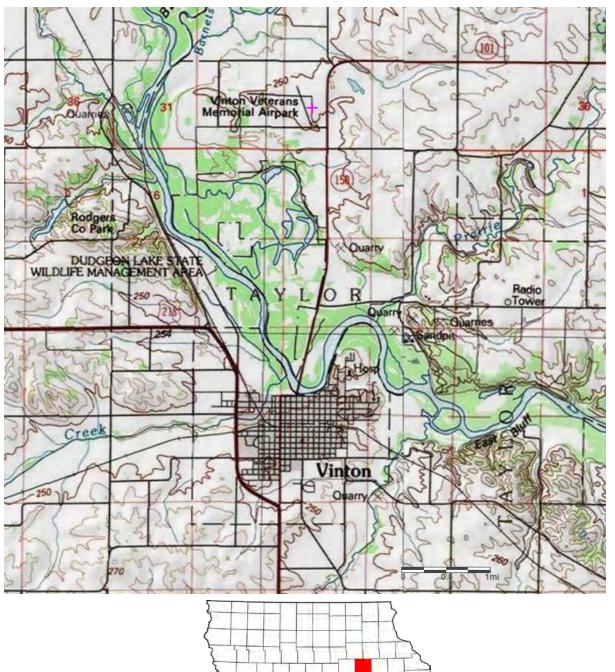
OSA: a UI research center since 1959

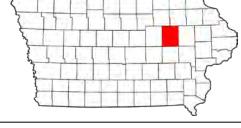


Tribes of Iowa Coordination

Scott Tener, P.E. Environmental Specialist

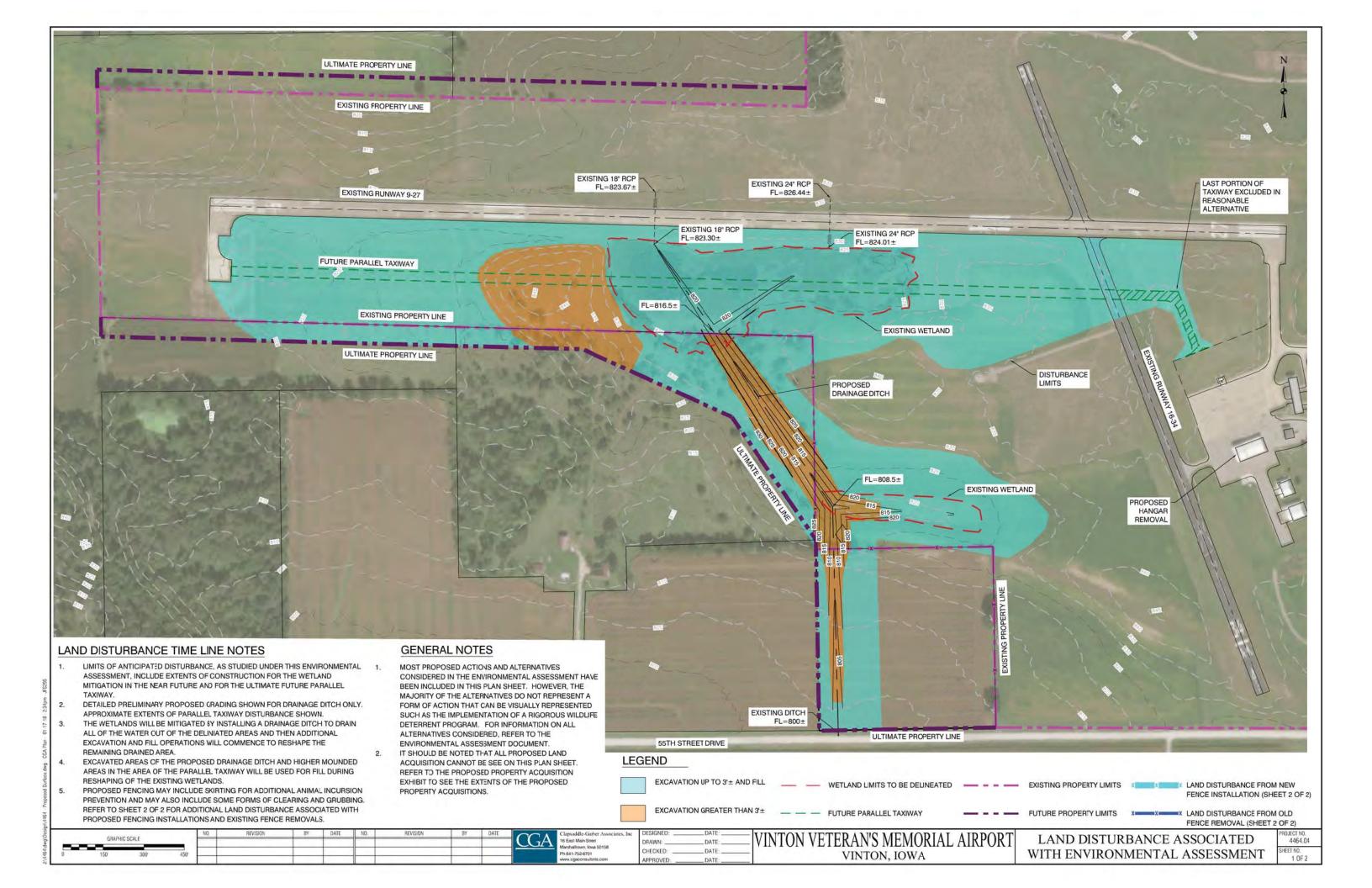
Enclosures

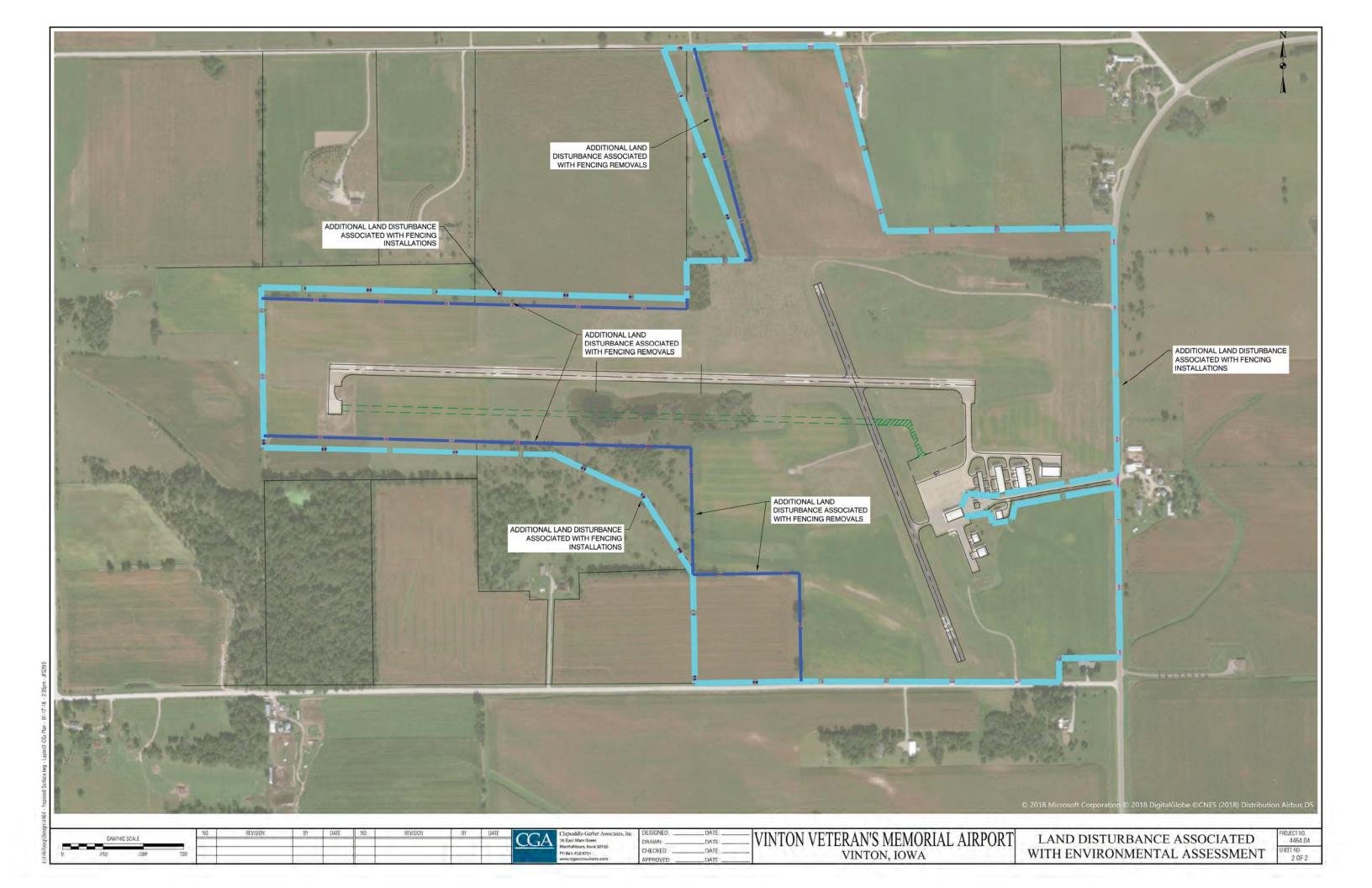




Location and Vicinity Map

Vinton Veterans Memorial Airport Benton County, Iowa





<u>Tribal Coordination – Environmental Assessment</u> <u>Vinton Veteran's Memorial Airport, Vinton; Benton County, IA</u>

Contact	Delivered (Cert Mail)	Response Returned	Action Requested
Ms. Bobi Roush Cultural Preservation Department Iowa Tribe of Oklahoma 335588 E 750 Road Perkins, OK 74059	1/29/18	3/9/18 No Response	Tiellon Trequesicu
Ms. Diane Hunter Tribal Historic Preservation Officer Miami Tribe of Oklahoma P.O. Box 1326 Miami, OK 74355	1/26/18	2/5/18 "no objection"	
Mr. Tony Provost Tribal Historic Preservation Officer Omaha Tribe P.O. Box 368 Macy, NE 68039	1/26/18	3/9/18 No Response	
Mr. Shannon Wright Tribal Historic Preservation Officer Ponca Tribe of Nebraska PO BOX 288 Niobrara NE 68760	1/26/18	3/9/18 No Response	
Mr. Kip Spotted Eagle Tribal Historic Preservation Officer Yankton Sioux Tribe of South Dakota P.O. Box 1153 Wagner, SD 57380-1153	1/26/18	3/9/18 No Response	
Mr. Johnathan L. Buffalo Historic Preservation Director Sac and Fox Tribe of the Mississippi in Iowa/Meskwaki Nation 349 Meskwaki Road Tama, IA 52339	1/26/18	3/9/18 No Response	



Miami Tribe of Oklahoma

3410 P St. NW, Miami, OK 74354 • P.O. Box 1326, Miami, OK 74355
Ph: (918) 541-1300 • Fax: (918) 542-7260
www.miamination.com



February 5, 2018

Scott Tener Environmental Specialist U.S. Department of Transportation Federal Aviation Administration 901 Locust Kansas City, MO 64106

Re: Vinton Veteran's Memorial Airport, Vinton, Iowa – Comments of the Miami Tribe of Oklahoma

Dear Mr. Tener:

Aya, kikwehsitoole – I show you respect. My name is Diane Hunter, and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity, I am the Miami Tribe's point of contact for all Section 106 issues.

The Miami Tribe offers no objection to the above-mentioned project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, as this site is within the aboriginal homelands of the Miami Tribe, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

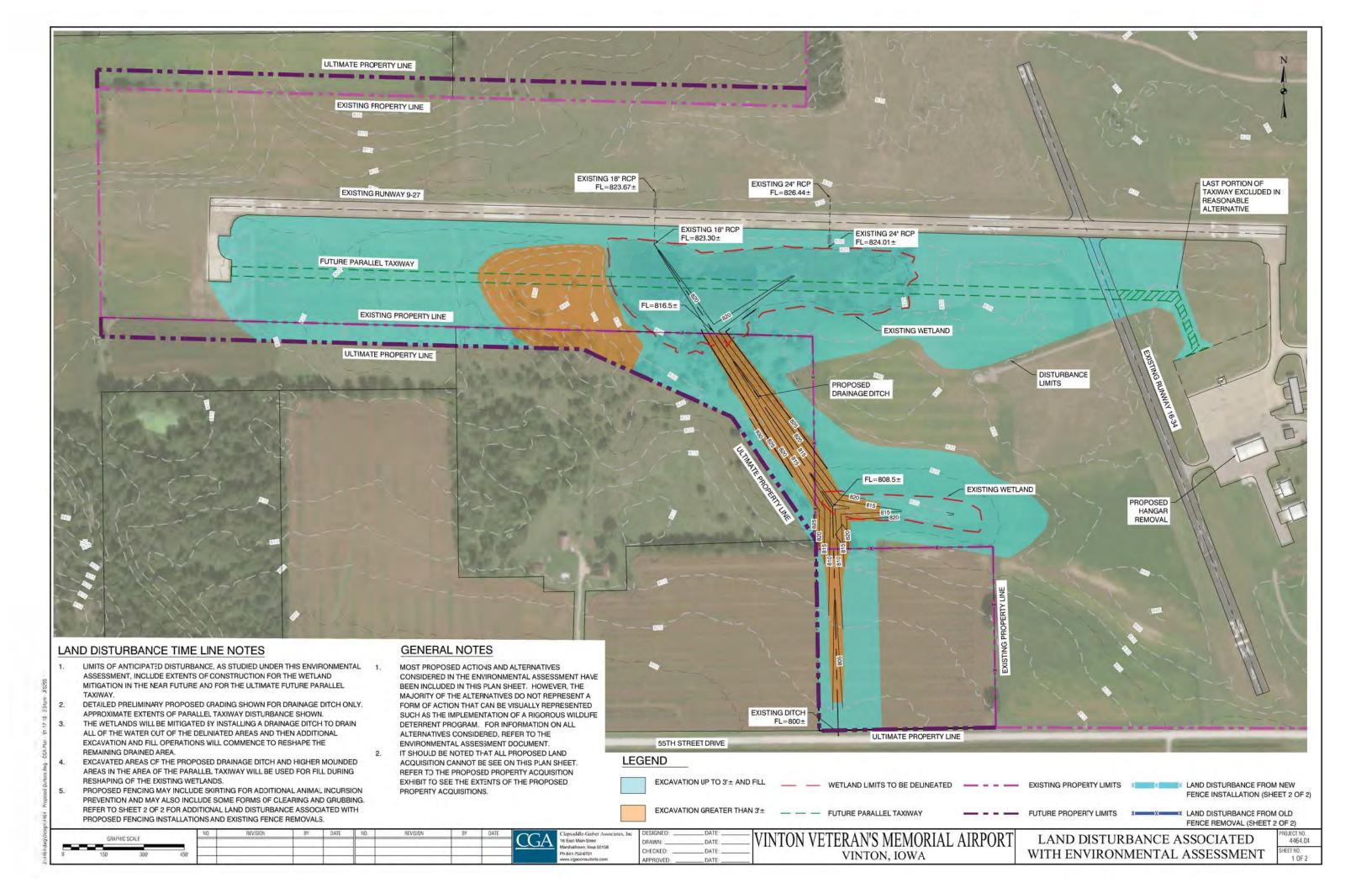
Respectfully,

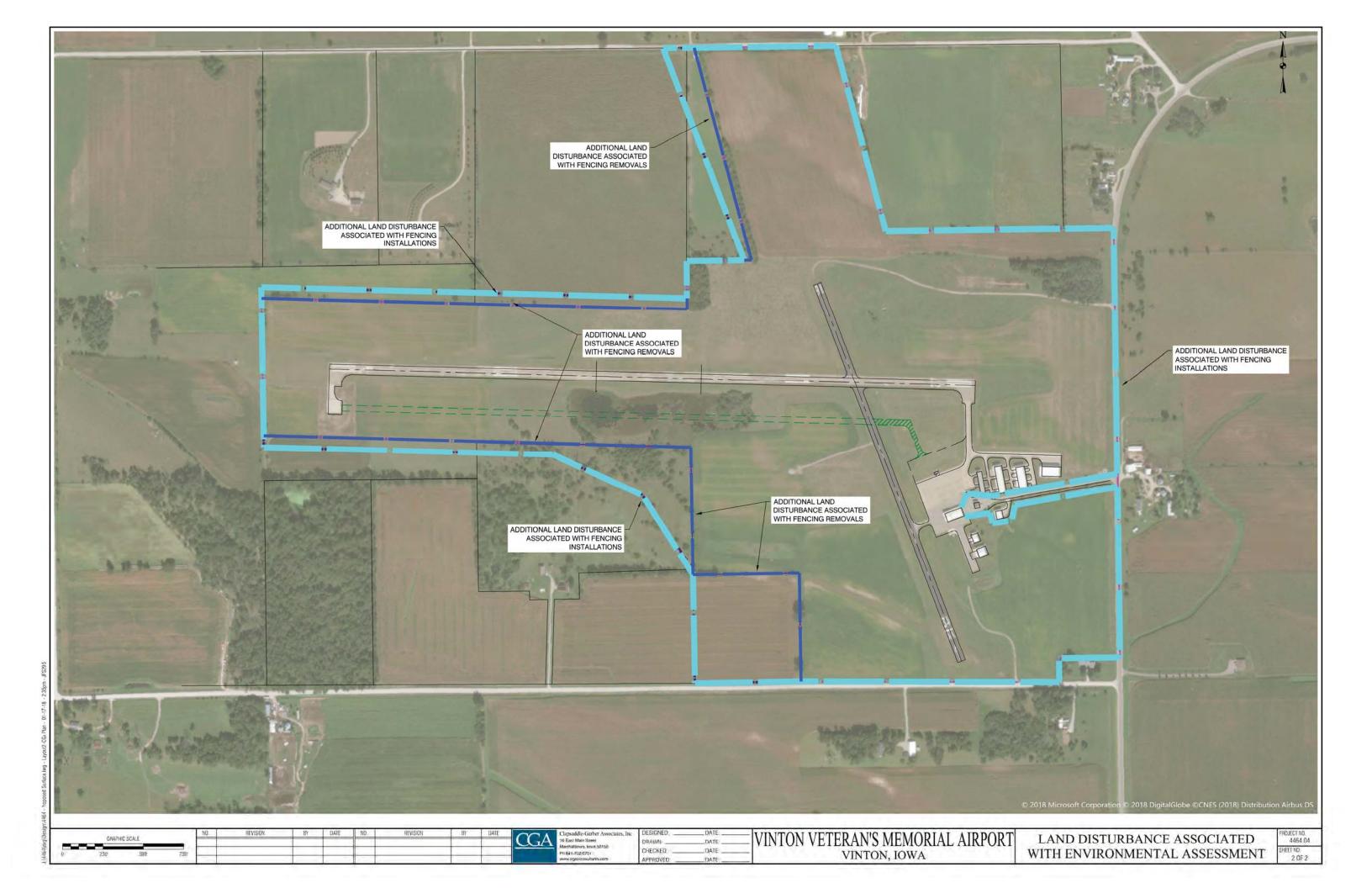
Diane Hunter

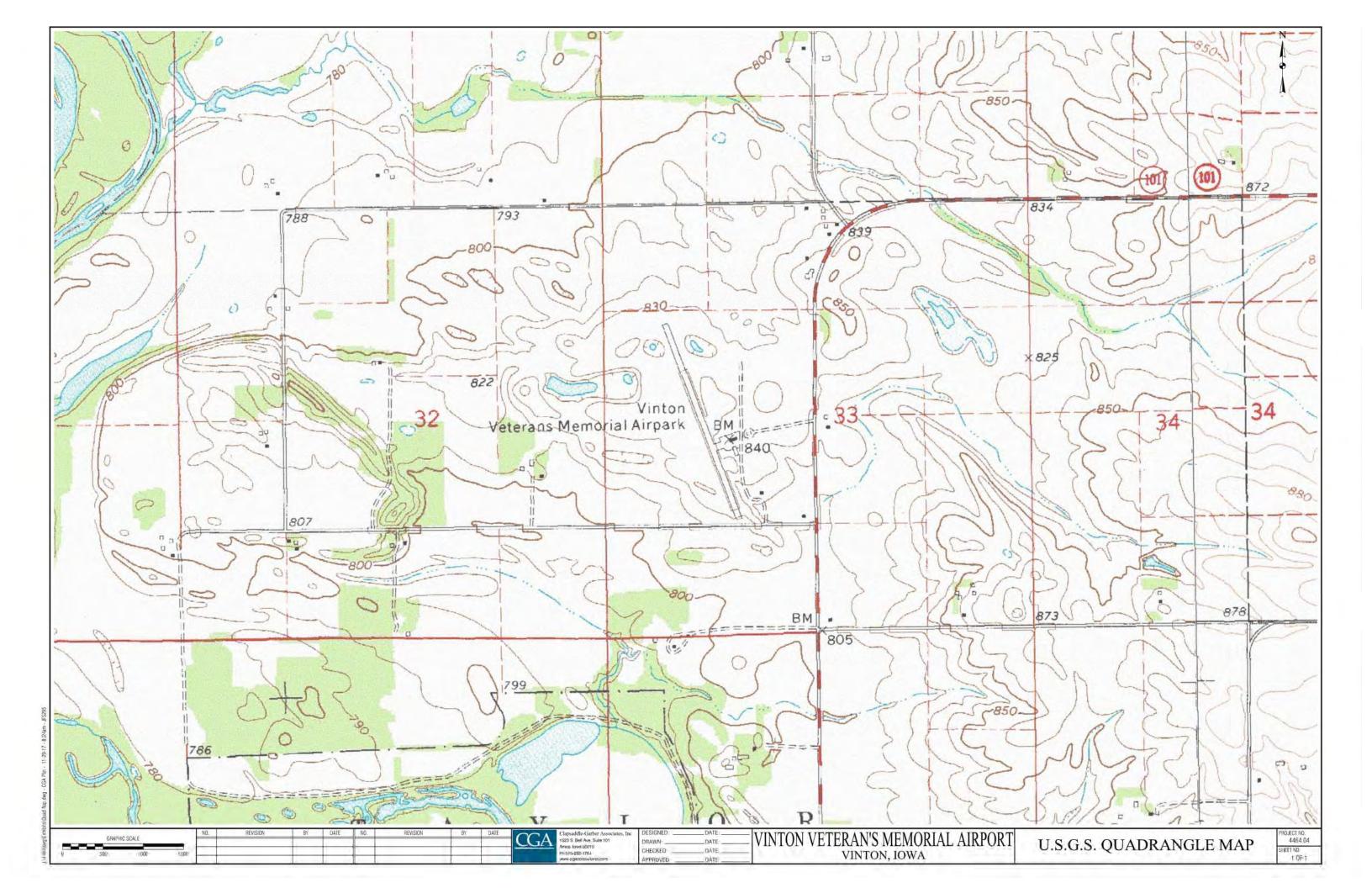
Diane Hunter

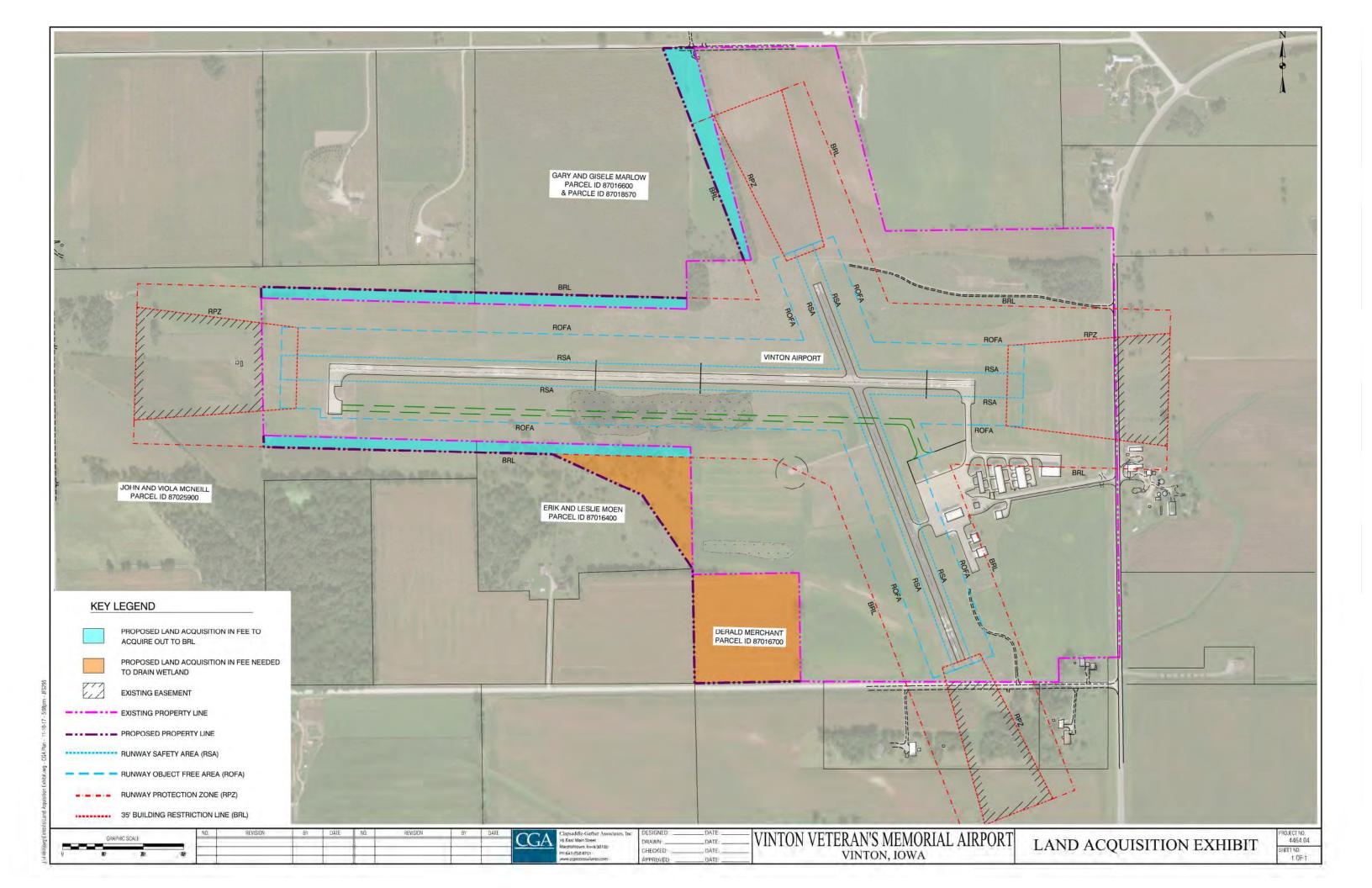
Tribal Historic Preservation Officer

Coordination Exhibits











Land Owners

Mr. Erik Moen and Ms. Leslie Moen 2375 55th Street Drive Vinton, IA 52349

RE: Conduct Environmental Study Vinton Veteran's Memorial Airport Vinton, Iowa AIP 3-19-0092-011-2017 PN 4464.10

Dear Mr. Erik Moen and Ms. Leslie Moen:

The Vinton Veteran's Memorial Airport, in Vinton, is in the early planning stages of potential future projects at the airport. These projects may or may not require acquisition of some property adjacent to the airport. As part of this planning process, the Vinton Airport is planning to conduct an archaeology survey on your property and other adjacent properties. The archaeological survey is required to locate or identify possible areas of archaeological importance. The archaeological survey consists of a pedestrian surface reconnaissance as well as possible minor sub surface testing to approximately 18" below the ground. The tests will be dug with a 20-inch diameter auger and will be backfilled upon completion. If any artifacts are recovered from your property, they will be returned to you upon completion of the project. The archaeological survey will be conducted by the Wapsi Valley Archaeology of Anamosa, Iowa. Wapsi Valley Archaeology is anticipating that the survey will take approximately one week to complete and will be conducted sometime during the middle of April. It is anticipated that the work would likely take place around the week of April 15, 2018 thru April 21, 2018 and the exact schedule will be weather dependent. The information obtained from the archeological survey will be part of a report submitted to the Federal Aviation Authority (FAA) for early coordination purposes.

To show the portions of property where the archeological survey will be conducted, I have enclosed an exhibit showing the approximate limits of the archaeological survey.

If we do not receive any reply from you, Wapsi Valley will proceed with accessing your property during the approximate timeline listed above.

Should you have any questions, or require more additional information, please contact Joe Roenfeldt at 641-752-6701 extension 44.

Sincerely,

Clapsaddle-Garber Associates, Inc.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Mr. Gary Marlow and Ms. Gisele-Jill Marlow 2397 55th Street Vinton, IA 52349

RE: Conduct Environmental Study Vinton Veteran's Memorial Airport Vinton, Iowa AIP 3-19-0092-011-2017 PN 4464.10

Dear Mr. Gary Marlow and Ms. Gisele Marlow:

The Vinton Veteran's Memorial Airport, in Vinton, is in the early planning stages of potential future projects at the airport. These projects may or may not require acquisition of some property adjacent to the airport. As part of this planning process, the Vinton Airport is planning to conduct an archaeology survey on your property and other adjacent properties. The archaeological survey is required to locate or identify possible areas of archaeological importance. The archaeological survey consists of a pedestrian surface reconnaissance as well as possible minor sub surface testing to approximately 18" below the ground. The tests will be dug with a 20-inch diameter auger and will be backfilled upon completion. If any artifacts are recovered from your property, they will be returned to you upon completion of the project. The archaeological survey will be conducted by the Wapsi Valley Archaeology of Anamosa, Iowa. Wapsi Valley Archaeology is anticipating that the survey will take approximately one week to complete and will be conducted sometime during the middle of April. It is anticipated that the work would likely take place around the week of April 15, 2018 thru April 21, 2018 and the exact schedule will be weather dependent. The information obtained from the archeological survey will be part of a report submitted to the Federal Aviation Authority (FAA) for early coordination purposes.

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Sincerely,

Clapsaddle-Garber Associates, Inc.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Mr. John Mcneill and Ms. Viola Mcneill 2354 55th Street Drive Vinton, IA 52349

RE: Conduct Environmental Study Vinton Veteran's Memorial Airport Vinton, Iowa AIP 3-19-0092-011-2017 PN 4464.10

Dear Mr. John Mcneill and Ms. Viola Mcneill:

The Vinton Veteran's Memorial Airport, in Vinton, is in the early planning stages of potential future projects at the airport. These projects may or may not require acquisition of some property adjacent to the airport. As part of this planning process, the Vinton Airport is planning to conduct an archaeology survey on your property and other adjacent properties. The archaeological survey is required to locate or identify possible areas of archaeological importance. The archaeological survey consists of a pedestrian surface reconnaissance as well as possible minor sub surface testing to approximately 18" below the ground. The tests will be dug with a 20-inch diameter auger and will be backfilled upon completion. If any artifacts are recovered from your property, they will be returned to you upon completion of the project. The archaeological survey will be conducted by the Wapsi Valley Archaeology of Anamosa, Iowa. Wapsi Valley Archaeology is anticipating that the survey will take approximately one week to complete and will be conducted sometime during the middle of April. It is anticipated that the work would likely take place around the week of April 15, 2018 thru April 21, 2018 and the exact schedule will be weather dependent. The information obtained from the archeological survey will be part of a report submitted to the Federal Aviation Authority (FAA) for early coordination purposes.

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Should you have any questions, or require more additional information, please contact Joe Roenfeldt at 641-752-6701 extension 44.

Sincerely,

Clapsaddle-Garber Associates, Inc.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Mr. Derald Merchant 5859 22nd Ave Vinton, IA 52349

RE: Conduct Environmental Study Vinton Veteran's Memorial Airport Vinton, Iowa AIP 3-19-0092-011-2017 PN 4464.10

Dear Mr. Derald Merchant:

The Vinton Veteran's Memorial Airport, in Vinton, is in the early planning stages of potential future projects at the airport. These projects may or may not require acquisition of some property adjacent to the airport. As part of this planning process, the Vinton Airport is planning to conduct an archaeology survey on your property and other adjacent properties. The archaeological survey is required to locate or identify possible areas of archaeological importance. The archaeological survey consists of a pedestrian surface reconnaissance as well as possible minor sub surface testing to approximately 18" below the ground. The tests will be dug with a 20-inch diameter auger and will be backfilled upon completion. If any artifacts are recovered from your property, they will be returned to you upon completion of the project. The archaeological survey will be conducted by the Wapsi Valley Archaeology of Anamosa, Iowa. Wapsi Valley Archaeology is anticipating that the survey will take approximately one week to complete and will be conducted sometime during the middle of April. It is anticipated that the work would likely take place around the week of April 15, 2018 thru April 21, 2018 and the exact schedule will be weather dependent. The information obtained from the archeological survey will be part of a report submitted to the Federal Aviation Authority (FAA) for early coordination purposes.

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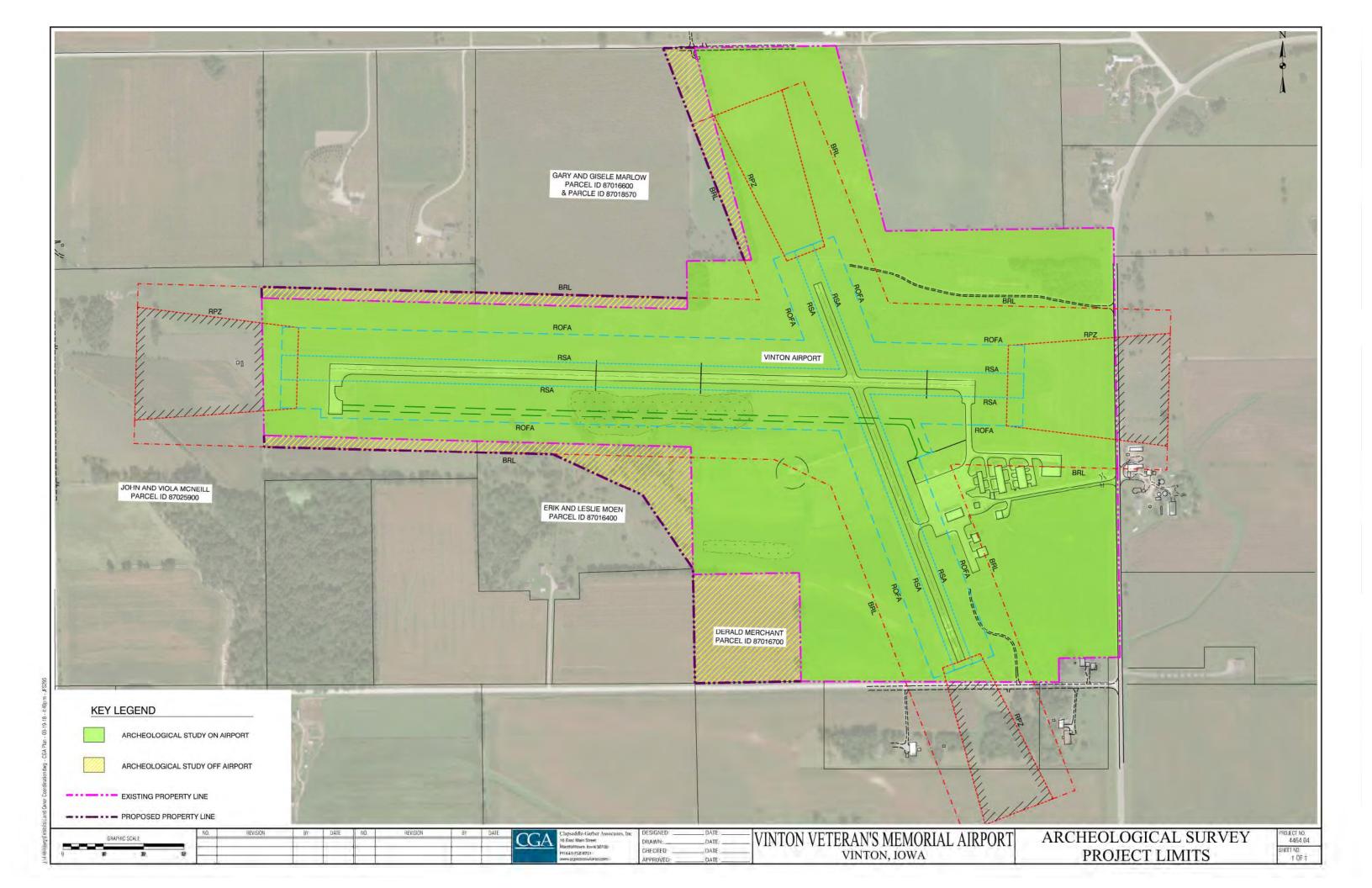
Sincerely,

Clapsaddle-Garber Associates, Inc.

Joseph P. Roenfeldt, P.E. Project Manager

Copy: Chris Ward, City of Vinton

Coordination Exhibits



Appendix C - Public Involvement

Will be included at a later date.

Summary of Public Information Meeting

Transcribed Minutes of Public Information Meeting

Public Information Meeting Affidavit of Publication

Public Information Meeting Sign in Sheets

Public Information Meeting Power Point

Public Information Meeting Exhibits





City of Vinton PO Box 529 110 West 3rd Street Vinton, IA 52349

Phone: (319) 472-4707

Fax: (319) 472-4456

Email: cityhall@vintoniowa.net Website: www.vintoniowa.net

Vinton Veterans Memorial Airport 110 West 3rd St Vinton, IA 52349 (319) 472-4707

February 23, 2022

Ms. Amy Walter Federal Aviation Administration, Central Region Airports Division 901 Locust Street, Room 364 Kansas City, MO 64106-2325

Re: Vinton Veterans Memorial Airport Land Use Assurance

Dear Ms. Walter:

The City of Vinton assures that per 49 USC 47107(a)(10), appropriate action, including the adoption of zoning laws, has been or will be taken, to the extent reasonable, to restrict the use of land adjacent to or in the immediate vicinity of the Vinton Veterans Memorial Airport to activities and purposes compatible with normal airport operations, including the landing and takeoff of aircraft. This applies to both existing and planned land uses.

If the Federal Aviation Administration has any further questions regarding this matter, please contact me.

Chris Ward

Vinton City Administrator

In A. West

Cc: Joshua Dank, Aviation Project Coordinator Kari Sherman, Kirkham Michael

Appendix E - *USFWS iPac Report*



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Illinois-Iowa Ecological Services Field Office Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 Phone: (309) 757-5800 Fax: (309) 757-5807

In Reply Refer To: March 28, 2022

Project Code: 2022-0024591

Project Name: Vinton Veteran's Memorial Airport

Subject: List of threatened and endangered species that may occur in your proposed project

location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)

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(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see https://www.fws.gov/birds/policies-and-regulations.php.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

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Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Illinois-Iowa Ecological Services Field Office Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

Project Summary

Project Code: 2022-0024591

Event Code: None

Project Name: Vinton Veteran's Memorial Airport
Project Type: Federal Grant / Loan Related

Project Description: Removal of wetlands at Vinton Airport, a parallel taxiway along Runway

9-27, land acquistion, tree removal, and deer fencing

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@42.219348600000004,-92.02943448147592,14z



Counties: Benton County, Iowa

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis	Threatened
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/9045	

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus	Candidate
No critical habitat has been designated for this species.	
Species profile: https://ecos.fws.gov/ecp/species/9743	

Flowering Plants

NAME	STATUS
Eastern Prairie Fringed Orchid <i>Platanthera leucophaea</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601	Threatened
Western Prairie Fringed Orchid Platanthera praeclara	Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1669

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

WETLAND INFORMATION WAS NOT AVAILABLE WHEN THIS SPECIES LIST WAS GENERATED. PLEASE VISIT https://www.fws.gov/wetlands/data/mapper.html OR CONTACT THE FIELD OFFICE FOR FURTHER INFORMATION.

IPaC User Contact Information

Agency: Kirkham Michael Name: Kari Sherman

Address: 12700 West Dodge Road

City: Omaha State: NE Zip: 68154

Email ksherman@kirkham.com

Phone: 4022553286

Lead Agency Contact Information

Lead Agency: Federal Aviation Administration

Appendix F - Biological Studies

Environmental Resources Report



Environmental Resources Report

Vinton Veteran's Memorial Airport Vinton, Iowa

January 19, 2018

Prepared for:

Clapsaddle-Garber Associates, Inc. 16 East Main Street Marshalltown, IA 50158

Prepared by:

Stantec Consulting Services Inc. 2300 Swan Lake Blvd., Suite 202 Independence, IA 50644 Phone: (319) 334-3755

Fax: (319) 334-3780

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1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

Stantec Consulting Services Inc. (Stantec) performed a delineation of wetland boundaries and a habitat assessment for the state-threatened Blanding's turtle (*Emydoidea blandingii*) at the Vinton Veteran's Memorial Airport in Vinton, Iowa (Project). The Project is located in Section 32 and 33, Township 86N, Range 10W (Figures 1 through 4). The study limits include the existing airport property as shown on Figures 1 through 4.

This report presents the purpose, methods, results, and conclusions of the field investigation.

1.2 PURPOSE OF THE PROJECT

The purpose of this investigation was to:

- Determine the presence of wetlands and waterways and to delineate the boundaries of these features within the study limits.
- Conduct a habitat assessment for the state-threatened Blanding's turtle within the study limits.

Discharges of dredged or fill material, excavation, and mechanized land clearing in Waters of the U.S. will require authorization from the U.S. Army Corps of Engineers (USACE). Final determination and delineation of the limit of Waters of the U.S. for permitting purposes rests with the USACE. The determinations and delineations presented here may be used for planning and informational purposes. For final authorization for activities in U.S. waters, the USACE must approve this determination.

2.0 METHODS

2.1 WETLANDS

The initial steps in the wetland determination process included a review of the following documents:

- Benton County Soil Survey [Digital Data] (USDA 2017a) (Figure 2);
- NRCS list of hydric soils for Benton County [Digital Data] (USDA 2017b) (Figure 2);
- USFWS National Wetlands Inventory (NWI) Data (Figure 3)

These documents provide information on where wetlands have been previously identified or areas that possess a high likelihood of wetlands occurring.

Wetland determinations were conducted using the Routine On-Site Determination Method defined in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (USACE 2010). According to procedures described in this manual, areas that under normal circumstances reflect a predominance of hydrophytes (water-loving vegetation), hydric soils, and wetland hydrology (e.g., inundated or saturated soils) are considered wetlands.

At each sampling point:

- 1. The presence or absence of normal circumstances was determined.
- 2. The plant community was characterized by identifying dominant plant species using the "50/20" rule and, in some cases, the FAC-neutral test. The 50/20 rule includes first placing plant species present in each stratum onto a list and then estimating the absolute percent cover of each species in each stratum. All species in a stratum are then ranked by absolute abundance from most to least abundant. Plant species are selected from the ranked list, in decreasing order of coverage, until the cumulative coverage of selected species exceeds 50 percent of the total coverage for the stratum. If two or more species are equal in coverage (i.e., they are tied in rank), they are selected as a group. The selected plant species are all considered to be dominants. In addition, any other species that alone comprises at least 20 percent of the total percent cover in the stratum is also considered to be a dominant. A wetland indicator status is determined and recorded for each dominant species.
- 3. Soil pits were dug to a depth of at least 18 inches where possible and the soil was evaluated for hydric soil characteristics.
- Hydrology was assessed by observing for primary (e.g., inundation, saturation within the root zone, water marks, etc.) and secondary (e.g., oxidized pore linings, water stained leaves, etc.) indicators of wetland hydrology.

A wetland delineation was conducted by a qualified Stantec biologist on October 25, 2017 within the study limits. Weather at the time of the fieldwork consisted of sunny skies with temperatures approximately 45 degrees Fahrenheit. No frozen ground was encountered, and no snow cover was present. A minimum of one wetland and one non-wetland point were sampled at each wetland where applicable. Wetlands were classified using the Cowardin et al. (1979) system. Data forms are included in Appendix A. Site photographs are included in Appendix B.

2.2 WATERS OF THE U.S.

All "blue line" streams identified by U.S. Geological Survey (USGS) National Hydrography Data (Figures 3 and 4) were investigated in the field. A stream was considered to meet Waters of the U.S. criteria if it had a defined bed and bank, an ordinary high water mark, and appeared to actively sort sediment under normal conditions.

2.3 BLANDING'S TURTLE HABITAT ASSESSMENT

Habitat suitability for the Blanding's turtle was determined using the following criteria:

<u>Suitable</u> – The presence of suitable summer, winter, and nesting habitat within close proximity of a site.

- Summer Habitat Shallow emergent marsh, lake bay, or slow moving stream with a soft bottom and abundant aquatic vegetation. A complex of wetlands with varying depths is preferable.
- Winter Habitat Marsh, stream, or lake bay with a water depth sufficient to prevent freezing completely to the bottom and soft substrate to allow for burying up to 3 feet (ft).
- Nesting Habitat Sand or sandy loam soils with <75 percent vegetation cover within 0.25 mile (mi) of suitable summer habitat including agricultural fields.

<u>Moderately Suitable</u> – Less than suitable summer habitat with suitable winter and nesting habitat within close proximity of a site.

<u>Low Potential</u> – Suitable or less than suitable summer habitat and an absence of winter and/or nesting habitat within close proximity of a site.

Unsuitable – The absence of suitable summer habitat at a site.

3.0 RESULTS

3.1 WETLANDS

Two emergent wetland communities were identified within the study limits: Wetland W-1 and Wetland W-2 (Figure 4).

3.1.1 Wetland W-1

Wetland W-1, approximately 4.8 acres in size, is a palustrine emergent wetland located immediately south of the existing runway (Figure 4). This wetland is identified by NWI data as a palustrine emergent wetland (PEMF); however, NWI data also indicate a pond (PUBF) on the west end of the wetland (Figure 3). A defined pond was not observed at the time of the fieldwork; however, primary hydrology indicators, including inundation and saturation, were observed throughout the wetland.

Soils within the wetland are mapped as Shandep clay loam, 0-2% slopes, ponded, occasionally flooded (2153) (USDA 2017a; Figure 2), a predominantly hydric soil unit identified on the hydric soils list for Benton County (USDA 2017b; Figure 2). Soils within the wetland consist of black (10YR 2/1) clay loam with redoximorphic concentrations present close to the surface (Appendix A). Hydric soil field indicators present include Redox Dark Surface (F6) (USACE 2010).

Vegetation within the wetland is dominated by river bulrush (*Schoenoplectus fluviatilis*), lake sedge (*Carex lacustris*), burr reed (*Sparganium americanum*), smartweed (*Persicaria latifolia*), cattail (*Typha spp.*), and woolgrass (*Scirpus cyperinus*). Other species present within the wetland include dark green bulrush (*Scirpus atrovirens*), softstem bulrush (*Schoenoplectus tabernaemontani*), beggars' tick (*Bidens cernua*), fox sedge (*Carex vulpinoidea*), and spike rush (*Eleocharis* spp.).

3.1.2 Wetland W-2

Wetland W-2, approximately 1.0 acre in size, is a palustrine emergent wetland located within a grassed drainageway within an active agricultural field west of the existing airport hangar (Figure 4). This wetland is identified by NWI data as a palustrine emergent wetland (PEMC) (Figure 3). Primary hydrology indicators observed in the field include inundation and saturation at the surface.

Soils within the wetland are mapped as Sparta loamy fine sand, 2-5% slopes (41B) (USDA 2017a; Figure 2), a non-hydric soil unit (USDA 2017b; Figure 2). Soils within the wetland consist of very dark brown (10YR 2/2) loamy sand with redoximorphic concentrations present close to the surface (see Sampling Point A; Appendix A). Hydric soil field indicators present include Sandy Redox (S5) (USACE 2010).

Vegetation within the wetland is dominated by woolgrass, prairie cordgrass (*Spartina pectinata*), and reed canary grass (*Phalaris arundinacea*). Other species observed include fox sedge, river bulrush, beggars' tick (*Bidens* spp. and *B. cernua*), tussock sedge (*Carex stricta*), blue vervain (*Verbena hastata*), and river bulrush.

3.2 WATERS OF THE U.S.

No "blue line" streams are identified by national hydrography data within the study limits and none were identified during the field investigation (Figure 4). National hydrography data indicate three waterbodies (ponds) within the study limits (Figures 3 and 4); however, these ponds were not observed to be present in the field.

3.3 BLANDING'S TURTLE HABITAT ASSESSMENT

Blanding's turtles are large aquatic turtles with an elongated, smooth, high-domed carapace that is black and commonly marked with light colored spots or irregular lines. The plastron varies from yellow with dark black blotches to almost black. A movable hinge is present on the plastron. The top and sides of the head are gray to black and the chin, throat and neck are bright yellow. The legs are generally black and may contain some yellow scales. Males have dark upper jaws and a slightly concave plastron, and females have yellow upper jaws and a flat plastron.

Blanding's turtles commonly inhabit areas with clean, shallow, slow-moving water and abundant aquatic vegetation (Ernst and Lovich 2009). Areas with a water depth of less than four feet and a soft bottom substrate are preferred. Blanding's turtles frequently bask on logs, matted vegetation, stumps, and live trees to absorb heat from the sun. Blanding's turtles often utilize terrestrial areas close to water bodies, specifically sandy hillsides used for nesting in the spring. Hibernation during the winter months is spent buried in mud at the bottom of ponds and lakes.

Suitable nest sites for Blanding's turtles are upland areas with well-drained, sandy loam or sandy soils (Ross and Anderson 1990; Oldfield and Moriarty 1994; Ernst and Lovich 2009). Most nests in Wisconsin and Minnesota are located in grasslands (Ross and Anderson 1990; Linck and Moriarty 1998). Nesting has also been observed in agricultural fields (Linck et al. 1989; Casper 1998). Female Blanding's turtles may move a considerable distance in search of suitable nest sites (Congdon et al. 1983; Oldfield and Moriarty 1994). However, most nests are located within a few hundred feet of water (Congdon et al. 1983; Linck et al. 1989; Ross and Anderson 1990).

Habitat Assessment

The results of the habitat assessment indicate approximately 4.8 acres of suitable summer habitat and 16.2 acres of nesting habitat for the Blanding's turtle are present within the study limits (Figure 4).

Wetland W-1 contains suitable summer habitat (Figure 4) and appears to remain inundated for most of the year, although not at a depth suitable as winter habitat (i.e., 3 feet). Abundant emergent and submergent vegetation is present, providing good cover and foraging habitat for the turtles.

Suitable nesting habitat is present in the uplands immediately adjacent to Wetland W-1 (Figure 4). Ground cover immediately adjacent to the wetland consists primarily of upland grasses and sandy soils; grasses appear to be mowed and maintained by airport staff. A grassland community immediately north of the airport property also provides suitable nesting habitat for this species. In addition, the airport is located approximately 0.7 mile north of the Dudgeon Lake State Wildlife Management Area, a site known to have a strong Blanding's turtle population. This area provides a complex of wetlands and open water with varying depths, some of which is deep enough to serve as suitable Blanding's turtle winter habitat.

Conversations with the airport manager on the day of the fieldwork indicate Blanding's turtles are commonly observed on airport property. Turtles are observed on both sides of the existing runway with a large number of individuals crossing the runway during spring to nest north of the runway, and in the fall as hatchlings move south across the runway as they move to their hibernation location. The airport manager finds several Blanding's turtle shells each year on the airport property. He provided an adult Blanding's turtle shell (carapace only) to Stantec on the day of the fieldwork that was found during summer 2017.

Photos of Blanding's turtles observed by airport staff and of habitat types documented by Stantec within the study limits are included in Appendix B.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 WETLANDS AND OTHER WATERS OF THE U.S.

Based on the results of the field wetland determination, we conclude the following:

- Two emergent wetlands (approximately 5.8 acres) are present within the study limits:
 - Wetland W-1, an emergent wetland approximately 4.8 acres in size, located immediately south of the existing runway; and,
 - Wetland W-2, an emergent wetland approximately 1.0 acre in size, located within an agricultural field west of the existing airport hangar.
- No streams meeting Waters of the U.S. criteria are present within the study limits.

The USACE has regulatory authority over waters of the U.S. including adjacent wetlands. Prior to beginning work at this site or disturbing or altering wetlands, waterways, or adjacent lands in any way, Stantec recommends that the owner obtain the necessary permits or other agency regulatory review and concurrence with regard to the proposed work to comply with applicable regulations.

The information provided by Stantec regarding wetland boundaries is a scientific-based analysis of the wetland and upland conditions present on the site at the time of the fieldwork. The determination was performed by an experienced and qualified professional using standard practices and sound professional judgment. The ultimate decision on wetland determinations and boundaries rests with the USACE.

4.2 BLANDING'S TURTLE HABITAT ASSESSMENT

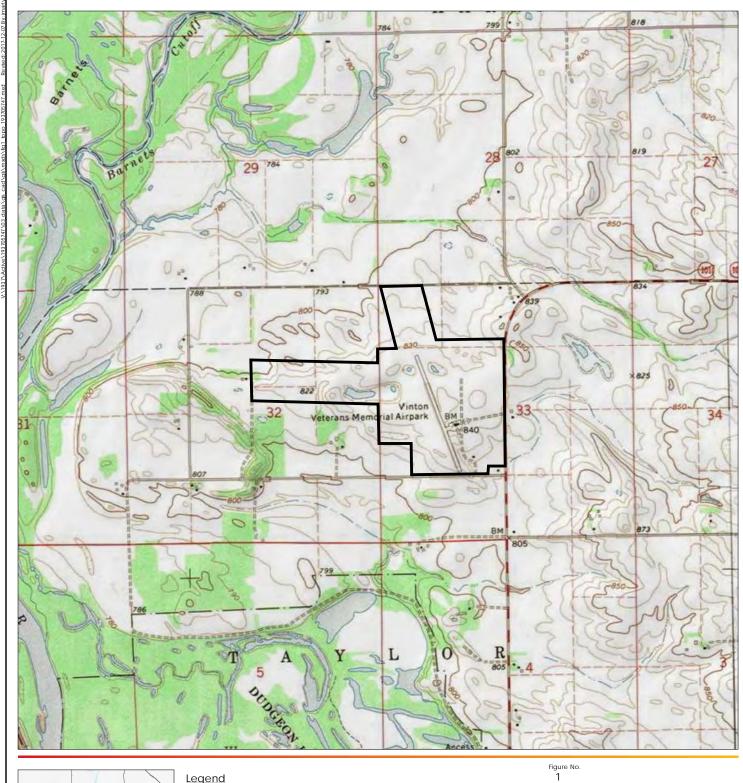
Based on the results of the Blanding's turtle habitat assessment, we conclude the following:

- Approximately 4.8 acres of suitable summer Blanding's turtle habitat are present within Wetland
 W-1 immediately south of the existing runway.
- Approximately 16.2 acres of suitable Blanding's turtle nesting habitat are found within the study limits.
- Conservations with airport staff indicate Blanding's turtles are commonly observed on airport property. Airport staff has photodocumented Blanding's turtles on the airport property.

The lowa DNR has regulatory authority over state-listed threatened and endangered species. Prior to beginning work at this site or disturbing or altering suitable Blanding's turtle habitat, Stantec recommends that the owner consult with the lowa DNR regarding potential impacts to Blanding's turtles.

5.0 REFERENCES

- Casper, G. S. Movement patterns, habitat use, and conservation strategies in a small population of Blanding's turtle (*Emydoidea blandingii*) in southern Wisconsin [abstract]. In: Turtle Workshop; 7-8 May 1998; J.F. Bell Museum of Natural History, Minneapolis, MN.
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- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service. 2017a. Soil Survey Data from Benton County, Iowa (Digital Format).
- USDA, Soil Conservation Service. 2017b. Hydric Soil List for Benton County, Iowa (Digital Format).





Approximate Project Boundary

Notes

1. Coordinate System: NAD 1983 StatePlane lowa North
FPS 1401 Feet

2. Data Sources Include: Stantec, NADS, USGS

3. Background: USGS 7.5" Topographic Quadrangles

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

Title

Project Location and Topography

Client/Project
Clapsaddle-Garber Associates, Inc. Vinton Veterans Memorial Airpark

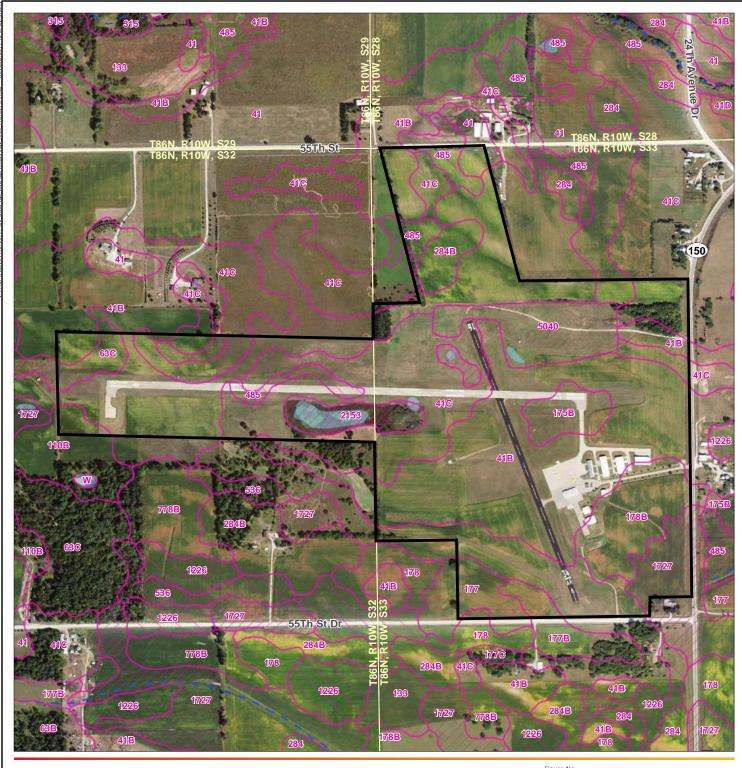
Project Location T86N, R10W, S32, 33, C. of Vinton, Benton Co., IA

193705747 Prepared by JM on 2017-12-06 Technical Review by DG on 2017-12-06 Independent Review by SP on 2017-12-06

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- Coordinate System: NAD 1983 StatePlane lowa North FIPS 1401 Feet
- Data Sources Include: Stantec, NADS, USGS, NRCS
 Orthophotography: 2017 NAIP

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Approximate Project Boundary NRCS Soil Survey Data

Hydric Ratings

Predominantly Hydric Soil

Partially Hydric Soil Non-Hydric Soil

National Hydrography Data

Perennial Stream

Intermittent Stream

Waterbody

Figure No.

Title

NRCS Soil Survey Data Hydric Ratings

Client/Project
Clapsaddle-Garber Associates, Inc. Vinton Veterans Memorial Airpark

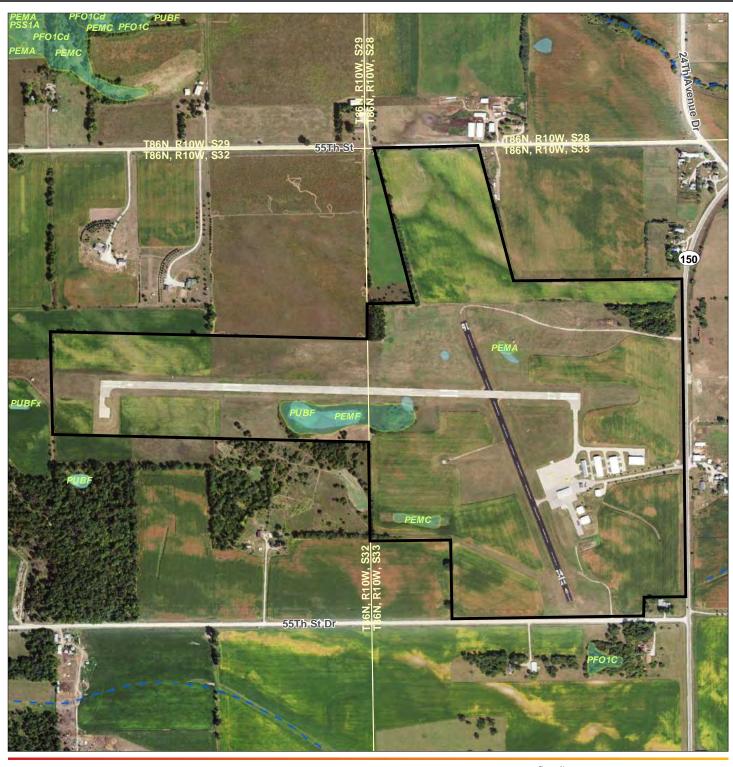
Project Location T86N, R10W, S32, 33, C. of Vinton, Benton Co., IA

193705747 Prepared by JM on 2017-12-06 Technical Review by DG on 2017-12-06 Independent Review by SP on 2017-12-06

0 400 800 Feet 1:9,600 (at original document size of 8.5x11)









Legend

Approximate Project Boundary

National Wetlands Inventory Feature

National Hydrography Data

✓ Perennial Stream

Intermittent Stream

Waterbody

Figure No.

Title

National Wetlands Inventory

Client/Project
Clapsaddle-Garber Associates, Inc. Vinton Veterans Memorial Airpark

Project Location T86N, R10W, S32, 33, C. of Vinton, Benton Co., IA

193705747 Prepared by JM on 2017-12-06 Technical Review by DG on 2017-12-06 Independent Review by SP on 2017-12-06

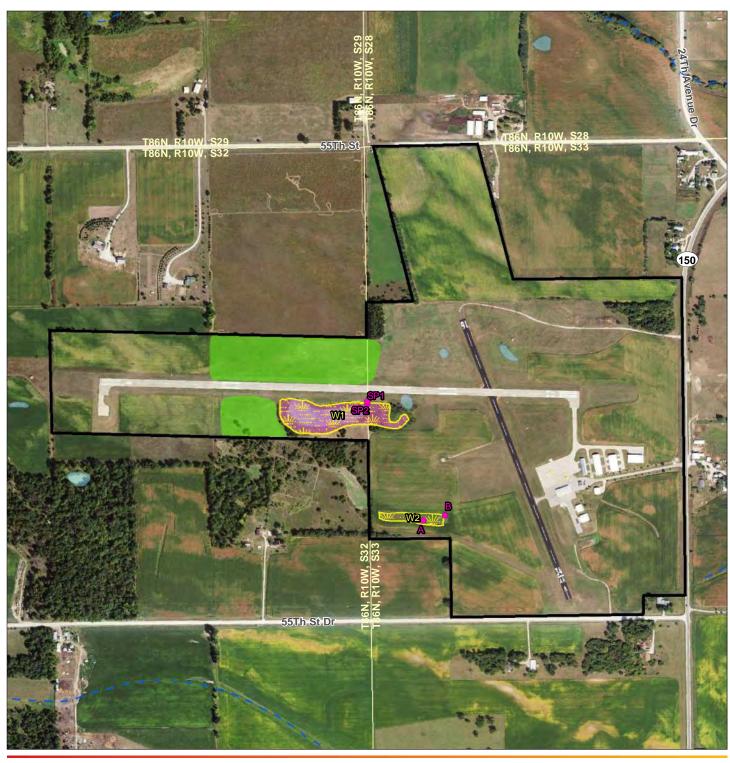
0 400 800 Feet 1:9,600 (at original document size of 8.5x11)





- 1. Coordinate System: NAD 1983 StatePlane lowa North FIPS 1401 Feet
- Data Sources Include: Stantec, NADS, USGS, USFWS
 Orthophotography: 2017 NAIP

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Approximate Project Boundary

Sample Point

Field Delineated Wetland Blanding's Turtle Habitat

Nesting Habitat Summer Habitat National Hydrography Data

Perennial Stream

Intermittent Stream

Waterbody

Figure No.

Title

Field Collected Data

Client/Project
Clapsaddle-Garber Associates, Inc. Vinton Veterans Memorial Airpark

Project Location T86N, R10W, S32, 33, C. of Vinton, Benton Co., IA

193705747 Prepared by JM on 2017-12-06 Technical Review by DG on 2017-12-06 Independent Review by SP on 2017-12-06

0 400 800 Feet 1:9,600 (at original document size of 8.5x11)









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Project/Site:		eran's Memorial Airp	oort				Stantec Project #:	193705747		Date:	10/25/1	
Applicant: Investigator #1:	Vinton Airp			Investi	igotor #2:					County: State:	Benton IA	
Soil Unit:		amy fine sand, 5-9% slopes		investi	igator #2:		IWI/WWI Classification	· NI/A			W1	
Landform:	Side slope	arny fine sand, 5-9% slopes		Loc	al Relief:		IVVI/VV VVI Glassification	. IN/A		Sample Point:		
Slope (%):	0	Latitude:			onaitude:			Datum:		Community ID:		
		ditions on the site ty					ain in remarks)		No	Section:	32	
Are Vegetation	□ . Soil □ .	or Hydrology □ sig	nificantly	/ disturb	ed?	,.,	Are normal circumsta	ances present?)	Township:	86N	
		or Hydrology □ nat					✓ Yes	N₽		Range:	10	Dir: W
SUMMARY OF		, 0,	,									
Hydrophytic Ve	getation Pre	sent?		□ Yes	. ⊌ No			Hydric Soils	Present?			□ Yes ☑ No
Wetland Hydrol	ogy Present	?		□ Yes	. ☑ No			Is This Samp	oling Point	Within A Wetla	and?	Yes 🛮 No
Remarks:	Sampling p	oint taken immedia	tely nortl	h of wetl	and boun	dary in a	n area mowed and mai	ntained by airp	ort staff. T	This point is at	least 12	2 inches higher
	in elevation	when compared to	the wet	land bou	ındary.							
HYDROLOGY												
Wetland Hydr	oloav Indic	ators (Check here i	f indicate	ors are r	not preser	nt⊠):						
Primary:		(. ,-			Secondary:			
	A1 - Surface				B9 - Wate					B6 - Surface So		
	A2 - High Wa A3 - Saturation				B13 - Aqu					B10 - Drainage C2 - Dry-Seaso		Toblo
	B1 - Water M				B14 - True C1 - Hydr					C8 - Crayfish Bu		iable
	B2 - Sedimer						spheres on Living Roots			C9 - Saturation		n Aerial Imagery
	B3 - Drift Dep						educed Iron			D1 - Stunted or		
	B4 - Algal Ma B5 - Iron Der				C6 - Rece		duction in Tilled Soils			D2 - Geomorph D5 - FAC-Neutr		n
		องเร on Visible on Aerial Ima	agery		D9 - Gaug					D3 - FAC-Neuti	ai i esi	
		Vegetated Concave S			Other (Ex							
Field Observat	ions:											
Surface Water	Present?	□ Yes ☑ No	Depth:	0	(in.)			Wetland Hy	drology Dr		Yes ₪	. No
Water Table Pr	esent?	□ Yes ☑ No	Depth:	>18	(in.)			welland ny	urology Fi	esent:	162 1	3 INO
Saturation Pres	ent?	□ Yes ☑ No	Depth:	>18	(in.)							
Describe Record	ed Data (str	eam gauge, monitorii	ng well, a	erial pho	otos, previ	ous inspe	ctions), if available:		N/A			
	•											
Remarks:				-	-							
Remarks:												
SOILS					-	·						
SOILS Map Unit Name		41C - Sparta loamy fine	sand, 5-9%	% slopes	-	·	Series Drainage Class	: Excessively	Drained			
SOILS Map Unit Name Taxonomy (Sub	group):	Entic Hapludolls			•	·						
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to	Entic Hapludolls			of indicators.) (Typ	pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS:	=Covered/Coated Sand Gra		Pore Lining, M=Matrix)		
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to Bottom	Entic Hapludolls the depth needed to document the inc	licator or confire	m the absence o		pe: C=Concentra	tion, D=Depletion, RM=Reduced Matrix, CS-	=Covered/Coated Sand Gra	ains; Location: PL=P	T .		Texture
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): otion (Describe to Bottom Depth	Entic Hapludolls the depth needed to document the inc Horizon	dicator or confirm	m the absence of Matrix (Moist)	%		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gra OX Features %	Type	Location	(e.g. cla	ay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): otion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist)	% 100		tion, D=Depletion, RM=Reduced Metrix, CS Red Color (Moist)	=Covered/Coated Sand Gra OX Features %	Type	Location	(e.g. cla	ay, sand, loam) amy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100 		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gra OX Features %	Type	Location 	(e.g. cla	ay, sand, loam) namy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100 		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Grid OX Features %	Type	Location 	(e.g. cla	ay, sand, loam) pamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100 		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gri	Type	Location 	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100 		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Grid OX Features %	Type	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100 		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Grr	Type	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100 		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gro	Type		(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gro	Type		(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 18 Soil Field In	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100	 esent @	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	-Covered/Coated Sand Gro OX Features % Indicators	Type for Problem	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ition (Describe to Bottom Depth 18 Soil Field Ir A1- Histosol	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100 stre not pre S4 - Sand		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	-Covered/Coated Sand Gro OX Features % Indicators	Type for Problen A16 - Coast	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18 Soil Field Ir A1- Histosol A2 - Histic E	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	-Covered/Coated Sand Gra OX Features % Indicators	Type for Problem A16 - Coast S7 - Dark Sr	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ition (Describe to Bottom Depth 18 Soil Field Ir A1- Histosol	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100 stre not pre S4 - Sand		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	=Covered/Coated Sand Gro OX Features % Indicators	Type for Problen A16 - Coast S7 - Dark S1 F12 - Irlon-M	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix	-Covered/Coated Sand Gro OX Features % Indicators	Type for Problen A16 - Coast S7 - Dark Si F12 - Iron-N TF12 - Very	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix	-Covered/Coated Sand Gro OX Features % Indicators	Type for Problen A16 - Coast S7 - Dark Si F12 - Iron-N TF12 - Very	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2	% 100		tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)	-Covered/Coated Sand Gro OX Features % Indicators	Type for Problen A16 - Coast S7 - Dark Si F12 - Iron-N TF12 - Very	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Bottom Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features % Indicators	Type for Problen A16 - Coast S7 - Dark Si F12 - Iron-N TF12 - Very	Location	(e.g. cla	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features 96 Indicators	Type for Problen A16 - Coast S7 - Dark SF F12 - Iron-N TF12 - Very Other (Expla	Location	es clo	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features 96 Indicators Indicators of hydrophy	Type for Problen A16 - Coast S7 - Dark S7 F12 - Iron-N TF12 - Very Other (Expla	Location	es clo	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	m the absence of Matrix (Moist) 3/2	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features 96 Indicators	Type for Problen A16 - Coast S7 - Dark S7 F12 - Iron-N TF12 - Very Other (Expla	Location	es clo	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features 96 Indicators Indicators of hydrophy	Type for Problen A16 - Coast S7 - Dark S7 F12 - Iron-N TF12 - Very Other (Expla	Location	es clo	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features 96 Indicators Indicators of hydrophy	Type for Problen A16 - Coast S7 - Dark S7 F12 - Iron-N TF12 - Very Other (Expla	Location	es clo	ay, sand, loam) amy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Depth 18	Entic Hapludolls the depth needed to document the inc Horizon	Color 10YR	Matrix (Moist) 3/2 icators a	% 100	esent dy Gleyed by Redox ped Matrix by Muck ly Ny Gleyed Matrix by Muck ly Ny Gleyed teted Matrix Dark St. eted Dark	tion, D=Depletion, RM=Reduced Matrix, CS Red Color (Moist)): Matrix ineral Matrix (rface Surface	-Covered/Coated Sand Gro OX Features 96 Indicators Indicators of hydrophy	Type for Problen A16 - Coast S7 - Dark S7 F12 - Iron-N TF12 - Very Other (Expla	Location	es clo	ay, sand, loam) amy sand



Project/Site:	Vinton Veteran's Memorial Airport				Wetland ID: W1 Sample Point 1
	·				·
VEGETATION		-native spec	cies.)		
Tree Stratum (P	ot size: 30 ft radius)				
	Species Name		Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50.0%</u> (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 x 1 = 0$
	Total Cover	= 0			FACW spp. 0 x 2 = 0
					FAC spp. $30 X 3 = 90$
	ratum (Plot size: 15 ft radius)				FACU spp x $4 = 280$
1.					UPL spp. $0 x 5 = 0$
2.					
3.					Total 100 (A) 370 (B)
4.					
5.					Prevalence Index = B/A = 3.700
6.					
7.					
8.				-	Hydrophytic Vegetation Indicators:
9.				-	☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover	= 0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (PI	ot size: 5 ft radius)				☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *
1.	Bromus inermis	50	Υ	FACU	
2.	Poa pratensis	20	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be
3.	Erigeron canadensis	10	N	FACU	present, unless disturbed or problematic.
4.	Plantago major	10	N	FAC	Definitions of Vegetation Strata:
5.	Trifolium pratense	10	N	FACU	•
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
10.	Total Cover				1100dy 111103
	Total Cover	= 100			
Maraka Maraka	(Dist size 20 ft as ")				
	tum (Plot size: 30 ft radius)				
1.					
2.					Hadron bod's Varietation Brown to D.V
3.					Hydrophytic Vegetation Present □ Yes ☑ No
4.					
5.	 				
<u> </u>	Total Cover				
Remarks:	No trees, shrubs, or vines at this sampling poir	nt.			
<u> </u>					
Additional Re	marks:				



Are Vegetation	Vinton Airp S. Parks, S 2153 - Shandep clay Depression O O O O O O O O O O O O O O O O O O O	Stantec y loam, 0-2% slopes, ponded, occa Latitude: ditions on the site ty or Hydrology □ sig or Hydrology □ na sent?	asionally flooded : /pical for	Loc Line this time y disturb roblemat	ed? tic?	Concav		Datum: Pes □ Inces present? N□ Hydric Soils	No Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	2 Wetland 33 86N 10 Dir: W
Wetland Hydr Primary	A1 - Surface A2 - High Wa A3 - Saturation B1 - Water N B2 - Sedimer B3 - Drift Der B4 - Algal Ma B5 - Iron Dep B7 - Inundation B8 - Sparsely	ater Table on Marks nt Deposits posits at or Crust	agery	0	B9 - Wate B13 - Aqu B14 - Truc C1 - Hydr C3 - Oxidi C4 - Pres C6 - Rece C7 - Thin D9 - Gaug	er-Stained uatic Fauna e Aquatic ogen Sulfi ized Rhizo ence of Ro ent Iron Re Muck Suri ge or Well	a Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils 'ace Data				Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants ic Position
Surface Water Water Table Pr Saturation Pres	Present? resent? sent?	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No eam gauge, monitori	Depth: Depth: Depth:	0	(in.) (in.) (in.)	ous inspe	ections). if available:	Wetland Hyd	drology Pr	resent? 🗵	Yes □ No
Remarks:	ieu Data (c	eam gaage, mense	ilg won, c	zenai pina	J100, p10	Ous more	olionoj, ii avaliabio.		14// 1		
-00U-0											
SOILS Map Unit Name	7.	2153 - Shanden clay loa	am 0-2% s	lones, por	nded occasi	ionally floor	Series Drainage Class:	Verv Poorly [Orained		
Taxonomy (Sub		Cumulic Endoaque	olls				•				
				m the absence (of indicators.) (Ty	pe: C=Concentra	ation, D=Depletion, RM=Reduced Matrix, CS=	=Covered/Coated Sand Gra	ains; Location: PL=P	ore Lining, M=Matrix)	
Profile Descrip	otion (Describe to		ndicator or confir.			1	Dad	F 5			Tauturo
Profile Descrip	Bottom	the depth needed to document the in		Matrix				ox Features	Tyne	Location	Texture
Profile Descrip Top Depth	Bottom Depth		Color	Matrix (Moist)	%	10YR	Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
Profile Descrip	Bottom	the depth needed to document the in		Matrix		10YR 10YR			Type C C	Location M M	(e.g. clay, sand, loam)
Top Depth 0	Bottom Depth 10	the depth needed to document the in Horizon	Color 10YR	Matrix (Moist) 2/1	% 95	10YR 10YR 7.5YR	Color (Moist) 3/4	% 5	Ċ	M	(e.g. clay, sand, loam)
Top Depth 0 10	Bottom Depth 10	the depth needed to document the in Horizon	Color 10YR 10YR	Matrix (Moist) 2/1 2/1	% 95 90	10YR	Color (Moist) 3/4 3/4	% 5 5	CO	M M	(e.g. clay, sand, loam) clay loam clay loam
Top Depth 0 10	Dotion (Describe to Bottom Depth 10 18	the depth needed to document the in Horizon	Color 10YR 10YR	Matrix (Moist) 2/1 2/1 	% 95 90 	10YR 7.5YR	Color (Moist) 3/4 3/4 4/6	% 5 5 5	C	M M M	(e.g. clay, sand, loam) clay loam clay loam
Profile Descrip Top Depth 0 10	Bottom Depth 10 18	the depth needed to document the in Horizon	Color 10YR 10YR 	Matrix (Moist) 2/1 2/1 	% 95 90 	10YR 7.5YR 	Color (Moist) 3/4 3/4 4/6	% 5 5 5	C C C	M M M	(e.g. clay, sand, loam) clay loam clay loam
Profile Descrip Top Depth 0 10	btion (Describe to Bottom Depth 10 18	Horizon	Color 10YR 10YR 	Matrix (Moist) 2/1 2/1	95 90 	10YR 7.5YR 	Color (Moist) 3/4 3/4 4/6	% 5 5 5 	C C C	M M M	(e.g. clay, sand, loam) clay loam clay loam
Profile Descrip Top Depth 0 10	btion (Describe to Bottom Depth 10 18	Horizon	Color 10YR 10YR	Matrix (Moist) 2/1 2/1	95 90 	10YR 7.5YR 	Color (Moist) 3/4 3/4 4/6	% 5 5 5 	C C C	M M M 	(e.g. clay, sand, loam) clay loam clay loam
Profile Descrip Top Depth 0 10 NRCS Hydric	btion (Describe to Depth 10 18 10 18 10 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 2/1	95 90 	10YR 7.5YR	Color (Moist) 3/4 3/4 4/6): Matrix iineral Matrix c rface Surface	% 5 5 5 Indicators	C C C C C C C C C C C C C C C C C C C	M M M	(e.g. clay, sand, loam) clay loam clay loam
Profile Descrip Top Depth 0 10 NRCS Hydric	btion (Describe to Depth 10 18 10 18 10 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 2/1	% 95 90	10YR 7.5YR	Color (Moist) 3/4 3/4 4/6): Matrix iineral Matrix c rface Surface	% 5 5 5 Indicators	C C C C C C C C C C C C C C C C C C C	M M M	(e.g. clay, sand, loam) clay loam clay loam es
Profile Descrip Top Depth 0 10 NRCS Hydric	btion (Describe to Depth 10 18 10 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon	Color 10YR 10YR ere if ind	Matrix (Moist) 2/1 2/1	% 95 90	10YR 7.5YR	Color (Moist) 3/4 3/4 4/6): Matrix iineral Matrix c rface Surface	% 5 5 5 Indicators Indicators of hydrophyd	C C C C C C C C C C C C C C C C C C C	M M M	(e.g. clay, sand, loam) clay loam clay loam es urface



Project/Site:	Vinton Veteran's Memorial Airport				Wetland ID: W1 Sample Point 2
VEGETATION	(Species identified in all uppercase are non-na	ative spec	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				
	<u>Species Name</u>		Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:3(A)
3.					
4.					Total Number of Dominant Species Across All Strata:3(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 100 X 1 = 100
	Total Cover =	0			FACW spp. 0
					FAC spp. $0 X 3 = 0$
	atum (Plot size: 15 ft radius)				FACU spp. $0 X 4 = 0$
1.					UPL spp. $0 X 5 = 0$
2.					
3.					Total 100 (A) 100 (B)
4.					
5.					Prevalence Index = B/A = 1.000
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
10.					
	Total Cover =	0			
					☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 5 ft radius)				☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *
1.	Schoenoplectus fluviatilis	50	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Sparganium americanum	25	Υ	OBL	present, unless disturbed or problematic.
3.	Scirpus cyperinus	25	Υ	OBL	
4.					Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28
10.					ft. tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size,
13.					and woody plants less than 3.28 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	100			
Woody Vine Strat	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:	No trees, shrubs, or vines at this sampling point.				
L					
Additional Re	marks:				
. taaniona ite					



Project/Site:	Vinton Vete	eran's Memorial Air	port				Stantec Project #:	193705747		Date:	10/25/17
Applicant:	Vinton Airp	ort/CGA								County:	Benton
Investigator #1:				Invest	igator #2:					State:	IA
Soil Unit:		amy fine sand, 2-5% slopes	s				IWI/WWI Classification:	N/A		Wetland ID:	
Landform:	Depression				cal Relief:		Э	- .		Sample Point:	
Slope (%):	0	Latitude			ongitude:			Datum:		Community ID:	
		ditions on the site ty				(If no, expl			No	Section:	33
		or Hydrology 🗆 sig					Are normal circumsta	•	?	Township:	86N
		or Hydrology 🛚 na	iturally pr	oblema	ic?		✓ Yes	N₽		Range:	10 Dir: W
SUMMARY OF		10						11 1: 0 :1	D 10		\/ = N
Hydrophytic Ve					S □ No			Hydric Soils		\\/:4h::n \\ \\/.a4	☑ Yes □ No
Wetland Hydrol	ogy Present	?		Yes	s □ No			is This Samp	oling Point	Within A Wetl	and? ☑ Yes ■ No
Remarks:											
LIVERALARY											
HYDROLOGY											
		ators (Check here	if indicat	ors are r	not preser	nt□):					
<u>Primary:</u>									Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Sc	
	A2 - High Wa A3 - Saturation				B13 - Aqu B14 - Tru					B10 - Drainage C2 - Dry-Seaso	
	B1 - Water M				C1 - Hydr					C8 - Crayfish B	
	B2 - Sedimer						spheres on Living Roots				Visible on Aerial Imagery
	B3 - Drift Dep	oosits		ш	C4 - Pres	ence of Re	educed Iron				Stressed Plants
	B4 - Algal Ma						duction in Tilled Soils			D2 - Geomorph	
0 1	B5 - Iron Dep				C7 - Thin				⊌.	D5 - FAC-Neutr	ral Test
		on Visible on Aerial Im Vegetated Concave :			D9 - Gaug Other (Ex						
	bo - Sparsely	vegetated Concave	Surrace		Other (Ex	piairi iri Ne	illaiks)				
Field Observat	ione:										
		E Van E Na	Danth	0	(in)						
Surface Water		□ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	ent?	☑ Yes □ No	Depth:	0	(in.)						
Describe Record		eam gauge, monitor							N/A		
Remarks:	Inundation not p	resent at the sampling poi	nt; however,	inundation	of less than o	and inch of u					
						one monor w	ater was observed at various loca	ations within the we	tland on the day	y of the fieldwork.	
						one inciror w	ater was observed at various loca	ations within the we	tland on the da	y of the fieldwork.	
SOILS						one inciror w	ater was observed at various loca	ations within the we	etland on the day	y of the fieldwork.	
Map Unit Name		41B - Sparta loamy fine				one men or w	ater was observed at various local Series Drainage Class:			y of the fieldwork.	
Map Unit Name Taxonomy (Sub	group):	Entic Hapludolls	sand, 2-59	% slopes			Series Drainage Class:	Excessively	Drained		
Map Unit Name Taxonomy (Sub Profile Descrip	group):	Entic Hapludolls	sand, 2-59	% slopes				Excessively	Drained		
Map Unit Name Taxonomy (Sub	group):	Entic Hapludolls	sand, 2-59	% slopes	of indicators.) (Ty		Series Drainage Class:	Excessively	Drained		Texture
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to	Entic Hapludolls	e sand, 2-59	% slopes	of indicators.) (Ty		Series Drainage Class:	Excessively	Drained		Texture (e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to Bottom	Entic Hapludolls the depth needed to document the in	e sand, 2-59	% slopes m the absence Matrix	of indicators.) (Ty		Series Drainage Class:	Excessively Covered/Coated Sand Grace Excessively	Drained ains; Location: PL=P	ore Lining, M=Matrix)	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Entic Hapludolls the depth needed to document the in Horizon	e sand, 2-59	% slopes m the absence Matrix (Moist)	of indicators.) (Ty	pe: C=Concentra	Series Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CS= Reduced Color (Moist)	Excessively Covered/Coated Sand Grac Excessively Excessively Excessively	Drained ains; Location: PL=P	ore Lining, M=Matrix)	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): Dition (Describe to Depth 10	Entic Hapludolls the depth needed to document the in Horizon	e sand, 2-59 midicator or confir Color 10YR	% slopes m the absence Matrix (Moist) 3/1	of indicators.) (Ty	pe: C=Concentra	Series Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 3/4	Excessively Covered/Coated Sand Grac Excessively Covered/Coated Sand Grac X Features % 5	Drained ains; Location: PL=P Type C	core Lining, M=Matrix) Location M	(e.g. clay, sand, loam) loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	e sand, 2-59 micror or confirm Color 10YR 10YR	% slopes m the absence Matrix (Moist) 3/1 3/1	of indicators.) (Ty	pe: C=Concentra 10YR 10YR	Series Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 3/4 3/4	Excessively Covered/Coated Sand Grac Excessively Covered/Coated Sand Grac Excessively Sox Features % 5 5	Drained ins; Location: PL=P Type C C	core Lining, M=Matrix) Location M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color 10YR 10YR	% slopes m the absence Matrix (Moist) 3/1 3/1	of indicators.) (Ty	pe: C=Concentra 10YR 10YR 7.5YR	Series Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CS= Redo Color (Moist) 3/4 3/4 4/6	Excessively Covered/Coated Sand Graz Excessively Covered/Coated Sand Graz Excessively Sox Features % 5 5 5	Drained Drained Type C C C	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): ption (Describe to Bottom Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	c sand, 2-5° ndicator or confirmation of the c	% slopes m the absence Matrix (Moist) 3/1 3/1	of indicators.) (Ty	10YR 10YR 10YR 7.5YR	Series Drainage Class: tion, D=Depietion, RM=Reduced Matrix, CS= Redo Color (Moist) 3/4 3/4 4/6	Excessively Covered/Coated Sand Grace Excessively Covered/Coated Sand Grace X S S S S S	Drained Type C C C	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of the color confirmation of the color confirmation of the color confirmation of the color colo	% slopes m the absence Matrix (Moist) 3/1 3/1	% 95 90	10YR 10YR 10YR 7.5YR	Series Drainage Class: Reduced Matrix, CS= Reduced Matrix, CS= Color (Moist) 3/4 3/4 4/6	Excessively Covered/Coated Sand Grap Excessively Covered/Coated Sand Grap Excessively Sox Features Sox Features 5 5 5	Drained Type C C C	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color Color 10YR 10YR	% slopes m the absence Matrix (Moist) 3/1 3/1	of indicators.) (Ty	10YR 10YR 10YR 7.5YR	Series Drainage Class: Redo Color (Moist) 3/4 3/4 4/6	Excessively Covered/Coated Sand Grac Excessively Covered/Coated Sand Grac X S S S S	Drained Type C C C	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	Color 10YR 10YR	% slopes m the absence Matrix (Moist) 3/1 3/1	% 95 90	10YR 10YR 10YR 7.5YR	Series Drainage Class: tion, D=Depletion, RM=Reduced Matrix, CS= Reduced Color (Moist) 3/4 3/4 4/6	Excessively Covered/Coated Sand Gra DX Features % 5 5	Drained Type C C C	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): otion (Describe to Depth 10 18 Soil Field In	Entic Hapludolls the depth needed to document the in Horizon	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 icators a	% 95 90 are not pre	10YR 10YR 10YR 7.5YR 	Series Drainage Class: Reduced Matrix, CS= Reduce	Covered/Coated Sand Grace Covered/Coated Sand Covered/Coated Sand Coated Sand	Drained Type C C C for Problem	Location M M M matic Soils ¹	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): otion (Describe to Depth 10 18 Soil Field Ir A1- Histosol	Entic Hapludolls the depth needed to document the in Horizon	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 icators a	% 95 90 S4 - Sance	10YR 10YR 7.5YR gy Gleyed	Series Drainage Class: Reduced Matrix, CS= Reduce	Covered/Coated Sand Groot Features 5 5 5 Indicators	Drained Type C C C	Location M M M Prairie Redox	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): otion (Describe to Depth 10 18 Soil Field In	Entic Hapludolls the depth needed to document the in Horizon	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 icators a	% 95 90	10YR 10YR 7.5YR gy Gleyed	Series Drainage Class: Reduced Matrix, CS= Reduced Matrix, CS= 3/4 3/4 4/6	Excessively Covered/Coated Sand Grac Excessively Covered/Coated Sand Grac Sox Features % 5 5 Indicators	Drained Type C C C for Problem S7 - Dark Si	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	ogroup): ption (Describe to Depth 10 18 Soil Field Ir A1- Histosol A2 - Histic Ep	Entic Hapludolls the depth needed to document the in Horizon	Color 10YR 10YR	m the absence Matrix (Moist) 3/1 icators a	% 95 90	10YR 10YR 10YR 7.5YR	Series Drainage Class: Redc Color (Moist) 3/4 4/6	Excessively Accovered/Coated Sand Grac DX Features % 5 5 Indicators	Type C C C for Problen A16 - Coasts F12 - Iron-N	Location M M M Prairie Redox	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 18 Soil Field Ir A1- Histosol A2 - Histic Ef A3 - Black Hi A4 - Hydroge A5 - Stratifiec	Entic Hapludolls the depth needed to document the in Horizon	Color 10YR 10YR	Matrix (Moist) 3/1 3/1 icators a	of indicators.) (Ty % 95 90 S4 - Sanc S5 - Sanc S6 - Strip F1 - Loan F2 - Loan	10YR 10YR 10YR 7.5YR ty Gleyed dy Redox ped Muchx My Gleyed	Series Drainage Class: Reduced Matrix, CS= Reduce	Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Social Sand Grace	Type C C C for Problen A16 - Coast S7 - Dark Si T12 - Very	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	m the absence Matrix (Moist) 3/1 icators a	95 90 are not prr S4 - Sanc S5 - Sanc S6 - Strip F1 - Loan F3 - Depl	10YR 10YR 10YR 7.5YR dy Gleyed dy Redox ped Matrix y Muck M ny Gleyed eted Matrix	Series Drainage Class: Reduced Matrix, CS= Reduced Matrix, CS= 3/4 3/4 4/6): Matrix ineral Matrix	Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Social Sand Grace	Type C C C for Problen A16 - Coast S7 - Dark Si T12 - Very	Location M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	% 95 90	10YR 10YR 7.5YR 19 Gleyed dy Redox yy Redox yy Gleyed deted Matrix yn Muck M yn Gleyed deted Matrix xx Dark Su	Series Drainage Class: Redc Color (Moist) 3/4 4/6	Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Social Sand Grace	Type C C C for Problen A16 - Coast S7 - Dark Si T12 - Very	Location M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Detion (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90 are not pre \$4 - Sanc \$5 - Sanc \$6 - Strip F1 - Loan F2 - Loan F3 - Deply F6 - Redc F7 - Deply	10YR 10YR 10YR 7.5YR esent □ dy Gleyed dy Redox py Muck M ny Gleyed deted Matrix by Dark St ceted Dark	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Covered/Coated Sand Grace Social Sand Grace	Type C C C for Problen A16 - Coast S7 - Dark Si T12 - Very	Location M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Definition (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90 are not pre \$4 - Sanc \$5 - Sanc \$6 - Strip F1 - Loan F2 - Loan F3 - Deply F6 - Redc F7 - Deply	10YR 10YR 7.5YR 19 Gleyed dy Redox yy Redox yy Gleyed deted Matrix yn Muck M yn Gleyed deted Matrix xx Dark Su	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Excessively Covered/Coated Sand Grap Excessively Covered/Coated Sand Grap Sox Features Sox Features Sox Features Indicators	Drained Type C C C for Problem A16 - Coast S7 - Dark S F12 - Iron-M TF12 - Veryl Other (Expla	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Detion (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90	10YR 10YR 10YR 7.5YR esent □ dy Gleyed dy Redox py Muck M ny Gleyed deted Matrix by Dark St ceted Dark	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Covered/Coated Sand Grace Covered/Coated Sand Covered/Coated Sand Coated Sand	Type C C C for Problen A16 - Coast S7 - Dark S1 F12 - Iron-M TF12 - Very Other (Expla	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Definition (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90 are not pre \$4 - Sanc \$5 - Sanc \$6 - Strip F1 - Loan F2 - Loan F3 - Deply F6 - Redc F7 - Deply	10YR 10YR 10YR 7.5YR esent □ dy Gleyed dy Redox py Muck M ny Gleyed deted Matrix by Dark St ceted Dark	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Excessively Covered/Coated Sand Grap Excessively Covered/Coated Sand Grap Sox Features Sox Features Sox Features Indicators	Type C C C for Problen A16 - Coast S7 - Dark S1 F12 - Iron-M TF12 - Very Other (Expla	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric Restrictive Layer (If Observed)	Degroup): Detion (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90	10YR 10YR 10YR 7.5YR esent □ dy Gleyed dy Redox py Muck M ny Gleyed deted Matrix by Dark St ceted Dark	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Covered/Coated Sand Grace Covered/Coated Sand Covered/Coated Sand Coated Sand	Type C C C for Problen A16 - Coast S7 - Dark S1 F12 - Iron-M TF12 - Very Other (Expla	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	Degroup): Detion (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90	10YR 10YR 10YR 7.5YR esent □ dy Gleyed dy Redox py Muck M ny Gleyed deted Matrix by Dark St ceted Dark	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Covered/Coated Sand Grace Covered/Coated Sand Covered/Coated Sand Coated Sand	Type C C C for Problen A16 - Coast S7 - Dark S1 F12 - Iron-M TF12 - Very Other (Expla	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric Restrictive Layer (If Observed)	Degroup): Detion (Describe to Depth 10 18	Entic Hapludolls the depth needed to document the in Horizon	color confirmation of confirma	Matrix (Moist) 3/1 3/1 icators a	96 95 90	10YR 10YR 10YR 7.5YR esent □ dy Gleyed dy Redox py Muck M ny Gleyed deted Matrix by Dark St ceted Dark	Series Drainage Class: ### Reduced Matrix, CS= Reduced Color (Moist)	Covered/Coated Sand Grace Covered/Coated Sand Covered/Coated Sand Covered/Coated Sand Coated Sand Coat	Type C C C for Problen A16 - Coast S7 - Dark S1 F12 - Iron-M TF12 - Very Other (Expla	Location M M M	(e.g. clay, sand, loam) loamy sand loamy sand



Wetland ID:

Project/Site: Vinton Veteran's Memorial Airport W2 Sample Point **VEGETATION** (Species identified in all uppercase are non-native species.) Tree Stratum (Plot size: 30 ft radius) % Cover Dominant Ind.Status Dominance Test Worksheet Species Name Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) 2. 3 4. Total Number of Dominant Species Across All Strata: 3 (B) 5. 6. Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) 7. 8. **Prevalence Index Worksheet** 9. Total % Cover of: Multiply by: 10. OBL spp. x 1 = Total Cover = 0 FACW spp. x 2 = 60 120 FAC spp. 0 x 3 =0 Sapling/Shrub Stratum (Plot size: 15 ft radius) FACU spp. x 4 = x 5 = 1. UPL spp. 2 3 Total 100 (A) 160 (B) 4. 5 Prevalence Index = B/A = 1.600 6. 7 8. **Hydrophytic Vegetation Indicators:** 9 □ No Rapid Test for Hydrophytic Vegetation Yes 10. ✓ Yes □ No Dominance Test is > 50% Total Cover = ✓ Yes □ No Prevalence Index is ≤ 3.0 * □ Yes □ No Morphological Adaptations (Explain) * □ No Herb Stratum (Plot size: 5 ft radius) □ Yes Problem Hydrophytic Vegetation (Explain) * 40 OBL Scirpus cyperinus * Indicators of hydric soil and wetland hydrology must be Spartina pectinata 30 **FACW** present, unless disturbed or problematic. 25 **FACW** 3. Phalaris arundinacea 4. Carex vulpinoidea N **FACW Definitions of Vegetation Strata:** 5. 2 **FACW** Verbena hastata Ν 6 Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. 7. 8. Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 9. -ft. tall. 10. 11. Herb - All herbaceous (non-woody) plants, regardless of size, 12 and woody plants less than 3.28 ft. tall. 13. 14. 15. Woody Vines - All woody vines greater than 3.28 ft. in height. Total Cover = 100 Woody Vine Stratum (Plot size: 30 ft radius) 2. 3. Hydrophytic Vegetation Present ☑ Yes □ No 4. 5. 0 Total Cover = No trees, shrubs, or vines at this sampling point Remarks: Additional Remarks:



Applicant: Vinto Investigator #1: S. Pa Soil Unit: 418-S Landform: Rise Slope (%): 0 Are climatic/hydrologi Are Vegetation□, Sc Are Vegetation□, Sc SUMMARY OF FINDI Hydrophytic Vegetatic Wetland Hydrology P Remarks:	Exparts loamy fine sand, 2-5% slopes Latitude: ic conditions on the site ty oil , or Hydrology sig oil , or Hydrology nat INGS on Present?	: /pical for t	Loc Lo this time	ed? tic?	Concave	ain in remarks) Are normal circumstar Yes	Datum: ☐ Yes ☐ nces present? N□ Hydric Soils	No Present?	Date: County: State: Wetland ID: Sample Point: Community ID: Section: Township: Range:	Upland 33 86N 10 Dir: W
Primary:	Indicators (Check here in Surface Water High Water Table Saturation Water Marks Sediment Deposits Drift Deposits Algal Mat or Crust ron Deposits nundation Visible on Aerial Imas Sparsely Vegetated Concave S	agery		B9 - Wate B13 - Aqu B14 - True C1 - Hydro C3 - Oxidi C4 - Prese C6 - Rece C7 - Thin I D9 - Gaug	er-Stained latic Fauna e Aquatic I ogen Sulfii ized Rhizo ence of Re ent Iron Re Muck Surf ge or Well	a Plants de Odor spheres on Living Roots educed Iron duction in Tilled Soils ace Data		0	B6 - Surface So B10 - Drainage C2 - Dry-Seasoi C8 - Crayfish Bt C9 - Saturation D1 - Stunted or D2 - Geomorphi D5 - FAC-Neutr	Patterns n Water Table urrows Visible on Aerial Imagery Stressed Plants ic Position
Surface Water Preser Water Table Present? Saturation Present?	nt? ☐ Yes ☑ No	Depth: Depth: Depth: ing well, as	0 >18 >18 erial pho	(in.) (in.) (in.) otos, previo	ous inspe		Wetland Hyd	drology Pr	resent?	Yes 🛭 No
Remarks:										
SOILS Map Unit Name:	41B - Sparta loamy fine	sand, 2-5%	slopes			Series Drainage Class:	Excessively	Drained		
Taxonomy (Subgroup				('adams) (Tur	C Concentry				· · · · · · · · · · · · · · · · · · ·	
-	ttom	licator or cummin	Matrix		38: C=Concentra		x Features	ins; Location. FL-i	ore Lining, M=Matrix)	Texture
	epth Horizon	Color (%		Color (Moist)	%	Type	Location	(e.g. clay, sand, loam)
0 1		10YR	3/1	100						loamy sand
						-				-
						-				
										-
□ A1- H □ A2 - F □ A3 - S □ A4 - F □ A5 - S □ A10 - □ A11 - □ A12 - □ S1 - S	Field Indicators (check he listosol Histic Epipedon Black Histic Hydrogen Sulfide Stratified Layers 2 cm Muck Depleted Below Dark Surface Thick Dark Surface Sandy Muck Mineral 5 cm Mucky Peat or Peat		0	Are not pre S4 - Sand S5 - Sand S6 - Stripp F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple F8 - Redo	ly Gleyed I ly Redox ped Matrix ny Muck M ny Gleyed eted Matrix ox Dark Su eted Dark	ineral Matrix (rface Surface cions		S7 - Dark Si F12 - Iron-M TF12 - Very Other (Expla	Prairie Redox urface langanese Mass Shallow Dark St ain in Remarks)	



Project/Site:	Vinton Veteran's Memorial Airport				Wetland ID: W2 Sample Point B
	·				·
VEGETATION	(Species identified in all uppercase are non-	-native spec	cies.)		
Tree Stratum (Pl	ot size: 30 ft radius)				D. T. (W. I. I.)
,	Species Name		Dominant	Ind.Status	Dominance Test Worksheet
1.					
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:(B)
5.					
6.					Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. $0 X 1 = 0$
	Total Cover	= 0			FACW spp. $0 \times 2 = 0$
					FAC spp. $0 X 3 = 0$
	atum (Plot size: 15 ft radius)				FACU spp. 60 $\times 4 = 240$
1.					UPL spp. 40 $x = 5$ 200
2.					
3.					Total 100 (A) 440 (B)
4.					
5.					Prevalence Index = B/A = 4.400
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					☐ Yes ☑ No Dominance Test is > 50%
	Total Cover	= 0			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☐ No Morphological Adaptations (Explain) *
	ot size: 5 ft radius)				☐ Yes ☐ No Problem Hydrophytic Vegetation (Explain) *
1.	Daucus carota	40	Y	UPL	* Indicators of hydric soil and wetland hydrology must be
2.	Bromus inermis	30	Υ	FACU	present, unless disturbed or problematic.
3.	Erigeron canadensis	25	N	FACU	•
4.	Cirsium arvense	5	N	FACU	Definitions of Vegetation Strata:
5.					
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at
7.					breast height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					To sum.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					and #300y planto 1655 than 5.20 ft. tail.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 100			
	um (Plot size: 30 ft radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☐ No
4.					
5.					
	Total Cover				
Remarks:	No trees, shrubs, or vines at this sampling poin	nt.			
Additional Re	marks:				

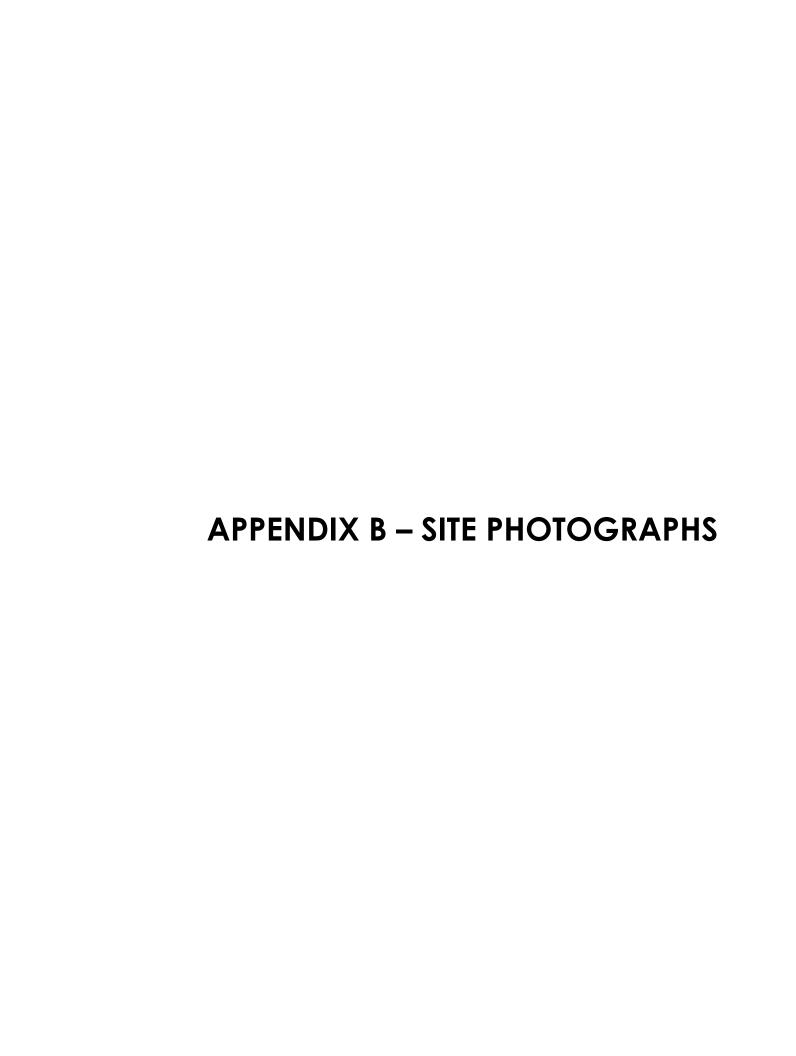




Photo 1. View of Wetland W-1 at Vinton Veteran's Memorial Airport facing west from center of wetland. 10/25/17.

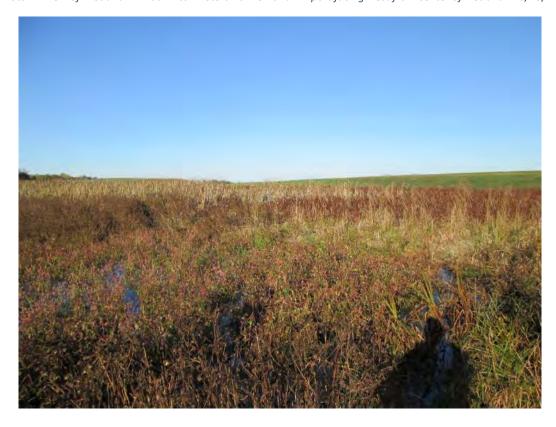


Figure 2. View of Wetland W-1 at Vinton Veteran's Memorial Airport facing roughly northwest from center of wetland. 10/25/17.



Photo 3. View facing east toward Wetland W-1 at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 4. View facing west along north edge of Wetland W-1 at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 5. View facing west toward Wetland W-1 at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 6. View of upland vegetation immediately east of existing taxiway at Vinton Veteran's Memorial Airport. This area identified wetland by NWI data; however, upland conditions were observed in the field. 10/25/17.



Photo 7. View of upland vegetation immediately east of existing taxiway at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 8. View of Wetland W-2 facing west from eastern end of wetland boundary at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 9. View of adult state-threatened Blanding's turtle at Vinton Veteran's Memorial Airport as provided by Clapsaddle-Garber Associates. Date Unknown.



Photo 10. View of adult state-threatened Blanding's turtle at Vinton Veteran's Memorial Airport as provided by Clapsaddle-Garber Associates. Date Unknown.



Photo 11. View facing west of suitable summer Blanding's turtle habitat at Vinton Veteran's Memorial Airport; suitable nesting habitat for this species is visible in the background of the photo. 10/25/17.



Photo 12. View of suitable Blanding's turtle nesting habitat south of the existing runway at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 13. View (facing northeast toward existing runway) of suitable Blanding's turtle nesting habitat (foreground) and suitable summer habitat (red vegetation in background) at Vinton Veteran's Memorial Airport. 10/25/17.



Photo 14. View facing west of agricultural field with sandy soil located south of the existing runway at the Vinton Veteran's Memorial Airport. 10/25/17.



Photo 15. View facing east of suitable Blanding's turtle nesting habitat north of the existing runway at the Vinton Veteran's Memorial Airport. 10/25/17.



Photo 16. View of suitable Blanding's turtle nesting habitat located immediately north of the Vinton Veteran's Memorial Airport. 10/25/17.

Rare Plant Survey



Vinton Veteran's Memorial Airport

Rare Plant Survey

October 3, 2018

Prepared for:

Clapsaddle-Garber Associates, Inc. 16 East Main Street Marshalltown, IA 50158

Prepared by:

Stantec Consulting Services Inc. 2300 Swan Lake Blvd., Suite 202 Independence, IA 50644 Phone: (319) 334-3755 Fax: (319) 334-3780

Project # 193705747

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1.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) was retained by Clapsaddle-Garber Associates, Inc. (CGA) to conduct a rare plant survey at the Vinton Veterans Memorial Airport in Vinton, Iowa.

2.0 METHODS

2.1 GATHER BACKGROUND INFORMATION

Background information was gathered from a variety of sources in preparation for the field survey. Available information was provided by John Pearson of the Iowa Department of Natural Resources (IA DNR), including data from the Natural Areas Inventory (NAI) database maintained by IA DNR. Additional background information gathered included recent and historic aerial photographs (1930s to 1960s), historic (presettlement) vegetation maps, topographical information, and information from the Iowa State University Ada Hayden Herbarium.

In a letter dated April 17, 2018, the IA DNR indicated the following state-listed and special concern plant species have been documented in the vicinity of the airport:

- Yellow-eyed Grass (Xyris torta) Endangered
- Narrow-leaf Pinweed (Lechea intermedia) Threatened
- Bent Milkvetch (Astargalus distortus) Special Concern
- Cleft Phlox (Phlox bifida) Special Concern
- Lance-leaved Violet (Viola lanceolata) Special Concern

A preliminary screening of historic aerial photographs was conducted to identify areas that are currently or were historically disturbed including areas plowed for row crop production or had other forms of significant disturbance such as construction, development, creation of landfill, etc. Based on this disturbance, these areas were determined to have a low potential to host high quality native plant communities and rare plants; therefore, the field survey did not focus on these areas.

The preliminary screening also identified areas that have not been significantly disturbed in the past (i.e., pastures/grasslands/wetlands). These areas have only experienced limited disturbance, and/or have geologic/soil features that make them more likely to host rare plants (e.g. the airport grounds appear to include part of a dormant parabolic dune feature based on signatures in the 1950-1960 era air photos). These areas are shown Figure 1 and were investigated during the field survey (see below).

2.2 FIELD SURVEY

The field survey was conducted on August 23, 2018. The survey included walking transects in areas of the airport grounds with high potential for hosting high quality native plant communities and rare plants. An effort was made to accomplish complete visual coverage of all areas with potential to support rare plant populations. This resulted in transects often being less than 10 feet apart in areas with tall/thick vegetation and up to approximately 30 to 50 feet apart in more open settings with shorter vegetation. Field survey efforts on the airport grounds were focused on areas illustrated on Figure 1.

Where rare plants were encountered, their location (either as individuals or patches) was recorded using a Trimble GeoXH, dual-frequency GPS unit.



3.0 RESULTS & DISCUSSION

The airport site supports moderate to high-quality remnant sand prairie, wet/sedge meadow, and emergent marsh native plant communities. While these native plant communities do also include invasive, non-native plants, the overall plant species composition of these areas is of notable quality and rarity for this region of lowa and within the broader geomorphic region known at the "lowan Surface".

Three special concern plant species (bent milkvetch, cleft phlox, and lance-leaved violet) were positively identified at this site during the field visit. The state-endangered yellow-eyed grass was not observed but was previously confirmed at the site (lowa DNR data). The presence of narrow-leaf pinweed was not confirmed during the field survey. No other federal or state-listed plant species were observed at the site. The locations of identified rare plant populations are shown in Figure 1.

A significant amount of the sandy soil upland areas had been recently hayed prior to the field survey (Figure 1). Although this likely made detection of bent milkvetch easier, it could have made detection of other rare plants more difficult. For instance, it is unlikely that cleft phlox (if present) would have regrown following haying in time to be observed during the field survey. Therefore, there is potential for cleft phlox and/or narrow-leaf pinweed to be present in these hayed areas.

It is important to note the field survey was conducted outside of the optimal flowering period for the rare plant species identified by the IA DNR which made detection of these species more difficult. Based on Stantec's professional judgement, the results for each plant species is provided below.

Yellow-eyed Grass

A large, emergent wetland community suitable to support yellow-eyed grass is located immediately south of the existing runway. This wetland was confirmed present during a wetland delineation conducted by Stantec in 2017 (Figure 1). Herbarium specimens from the Ada Hayden Herbarium confirm that yellow-eyed grass has been collected from this wetland in the recent past.

Because the field survey was conducted outside of the optimal flowering period for this species (June 20 to July 15), dense patches of reed canary grass (*Phalaris arundinacea*) in a few portions of the wetland, as well as taller, more desirable wetland species, could have easily obscured individuals of yellow-eyed grass that may have been present. Given the quality of this emergent marsh/wet meadow community, there is a high probability that this wetland could support an extant population of this species. Therefore, a subsequent survey to confirm presence of this species, conducted during the known flowering period (June 20 to July 15), is recommended.

Narrow-leaf Pinweed

One *Lechea* sp. individual was observed during the field survey (Figure 1); however, based on the morphological characteristics observed in the field, this individual was likely not the state-threatened *L. intermedia*.

Bent Milkvetch

This species was confirmed on site. Four vegetative individuals were observed in a quality prairie remnant on the east side of the large wetland just south of the runway (Figure 1).



2

Cleft Phlox

Approximately 50 vegetative individuals of *Phlox* sp. were observed on the southeast margin of site (Figure 1). This location coincides with the location of a dormant parabolic dune identified on historic aerial photographs. Based on the soils, associated plants, and morphological characteristics of the individuals observed, it is likely these individuals are *Phlox bifida*. However, because the plants were observed outside of the normal flowering period and because morphological features of plants can be altered due to weathering late in the growing season, a spring 2019 site visit is recommended during the known flowering period (roughly May) for this species to confirm presence.

Lance-leaved Violet (Viola lanceolata)

Lance-leaved violet was confirmed at the site. Approximately 30 individual plants were observed in several locations around the wetland community south of the existing runway (Figure 1). This included one area where brush/trees were piled on part of the lance-leaved violet population at the east end of the large, emergent marsh wetland. Because lance-leaved violet is such a small, diminutive plant, it is easily obscured by taller vegetation and becomes very difficult to detect after approximately mid-April in most years. It is highly likely that this plant is present in other locations at the site but obscured by the dense, tall vegetation around the fringe of the main wetland, as well as potentially the smaller wetland to the south.

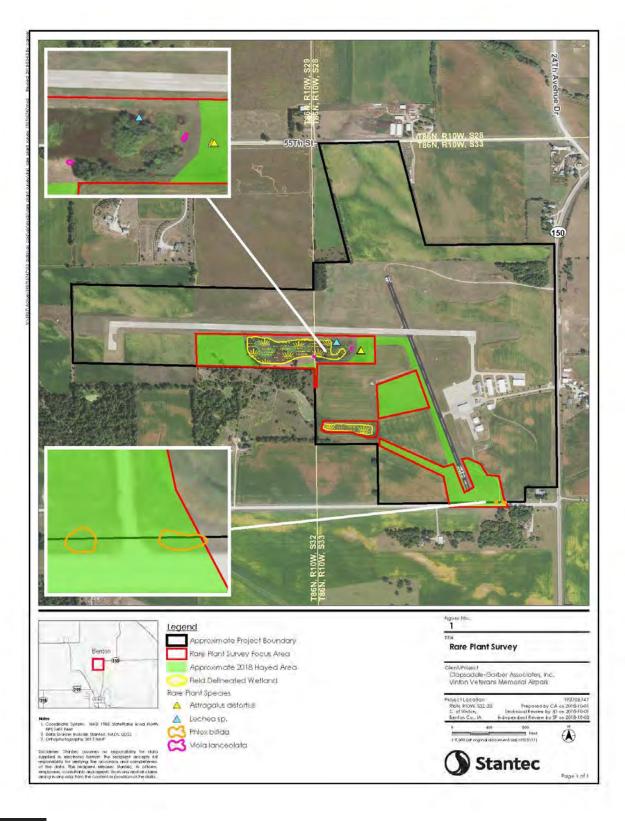
4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the field survey, Stantec has concluded the following:

- 1) Three special concern plant species (bent milkvetch, cleft phlox, and lance-leaved violet) were positively identified at this site during the field visit.
- 2) The state-endangered yellow-eyed grass was not observed but was previously confirmed within a large wetland at the site. A subsequent survey to confirm presence of this species is recommended during the known flowering period (June 20 to July 15).
- 3) One *Lechea* sp. individual was observed during the field survey; however, based on the morphological characteristics observed in the field, this individual was likely not the state-threatened *L. intermedia* (narrow-leaf pinweed).
- 4) Approximately 50 vegetative individuals of *Phlox* sp. were observed on the southeast margin of site (Figure 1). Based on the soils, associated plants, and morphological characteristics of the individuals observed, it is likely these individuals are *Phlox bifida*. However, because the plants were observed outside of the normal flowering period and because morphological features of plants can be altered due to weathering late in the growing season, a spring 2019 site visit is recommended during the known flowering period (roughly May) for this species to confirm presence.
- 5) Lance-leaved violet was confirmed at the site. Because lance-leaved violet is such a small, diminutive plant, it is easily obscured by taller vegetation and becomes very difficult to detect after approximately mid-April in most years. Therefore, it is highly likely that this plant is present in other locations at the site, but obscured by the dense, tall vegetation observed around the fringe of the large wetland, as well as potentially the smaller wetland to the south.
- 6) No other federal or state-listed plant species were observed at the site.

The Iowa DNR has regulatory authority over state-listed threatened and endangered species. Prior to initiating any development/construction activities at the site, Stantec recommends consultation with the Iowa DNR regarding potential impacts to rare plant species documented at the site.







Appendix A - SITE PHOTOS



Photo 1 – Cleft phlox individual observed on southeast side of site.





Photo 2 – Cleft phlox.



Photo 3 - area where Phlox bifida was documented, occurring on either side of boundary between airport property to the left and road right-of-way.





Photo 4 – Bent milkvetch.



Photo 5 – Bent milkvetch rosette.





Photo 6 – Bent milkvetch habitat, hayed in mid-summer.

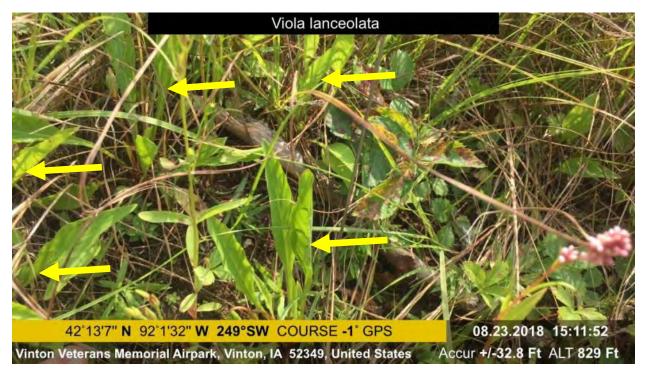


Photo 7 – Lance-leaved violet individuals are readily evident in a recently hayed area on the edge of the large wetland.



VINTON VETERAN'S MEMORIAL AIRPORT RARE PLANT SURVEY

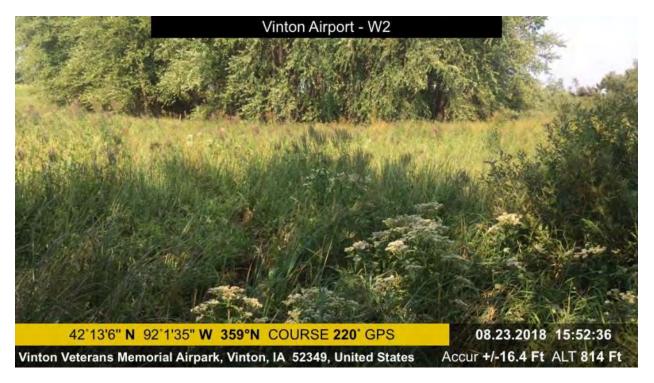


Photo 8 – view from east end of large wetland and the high quality wet/sedge meadow. Photo taken near location of lance-leaved violet.





Photo 9 - Pinweed species Lechea sp.





Photo 10 – Pinweed species *Lechea sp.*



Blanding's Turtle Survey



Stantec Consulting Services Inc.

2300 Swan Lake Boulevard, Suite 202, Independence, IA 50644

October 20, 2021

Mr. Justin Strom, P.E. Clapsaddle-Garber Associates, Inc. 16 East Main Street P.O. Box 754 Marshalltown, IA 50158

Reference: Blanding's Turtle Survey

Vinton Veteran's Memorial Airport

Benton County, Iowa

Dear Mr. Strom,

Stantec Consulting Services Inc. (Stantec) completed a trapping survey for the state-threatened Blanding's turtle (*Emydoidea blandingii*) at the Vinton Veteran's Memorial Airport located approximately 4 miles north of the town of Vinton in Benton County, Iowa (Figure 1). The presence of the species had been previously documented at the airport. The purpose of the present survey was to capture adult Blanding's turtles, preferably females, and attach radio-transmitters in an attempt to determine which areas of the airport property are used by the turtles. This letter presents the methods, results, and conclusions of the survey.

METHODS

Based on coordination with the Iowa Department of Natural Resources (DNR), the survey methods included the following:

- Visual encounter searches
- Installation and monitoring of drift fences on airport property
- Aquatic trapping of Wetland 1 (Figure 1), if suitable conditions are present (i.e., water levels are deep enough for trapping)

The landowner located south of Wetland 1 had previously installed chicken wire on their side of the fence, effectively preventing movement of turtles between the two properties except for areas where the chicken wire had been breached. The length of the fence was searched by Stantec biologists looking for gaps in the chicken wire where turtles might be able to pass through. Two locations were found where passages had been excavated beneath the boundary fence that were large enough for movement of adult Blanding's turtles. Both locations were immediately south of Wetland 1 (Figure 1). Semi-circular sections of drift fence were installed at each passage that encompassed the passage with both ends of the drift fence tied into the boundary fence, ensuring that any turtles moving under the boundary fence from the private property onto the airport property at these locations would encounter the drift fence. The drift fence consisted of 18-inch wide window screen buried 6 inches in the ground leaving 12 inches above ground. The screen was staked in an upright position and 5-gallon pitfall traps were placed every 20 feet along both sections of drift fence.

Aquatic trapping was not possible as Wetland 1 contained only approximately 6 inches of water during the survey period; the water was too shallow for placement of aquatic traps.



October 20, 2021 Page 2 of 2

RESULTS

Visual encounter searches and installation and monitoring of drift fences began on June 7, 2021. Drift fences were monitored twice per day until June 15, 2021 when they were removed. Weather during the survey period consisted of daytime temperatures in the upper 90s° F and no rain. The decision to end trapping was based on the extreme temperatures and lack of a significant number of captures. No Blanding's turtles were captured in the drift fences and overall captures were few, consisting of:

- Two juvenile painted turtles (*Chrysemys picta*)
- One red-sided garter snake (Thamnophis sirtalis parietalis)
- Two meadow voles (Microtus pennsylvanicus)

One adult (>20 years old) female Blanding's turtle was captured by hand the evening of June 7, 2021, as she crossed the runway from south to north in the vicinity of Wetland 1 (Figure 1). The project biologist had intended to attach a radio transmitter; however, upon palpation she was confirmed to be gravid and carrying eggs. Because transmitter attachment would have required the female to be kept overnight and because she was headed in the direction of the known nesting area north of the runway, the decision was made to release the female without attaching the transmitter so as to avoid having her lay eggs while in captivity and thereby endangering the entire clutch. The female was observed for approximately 45 minutes after release, during which time she only moved a few feet.

CONCLUSIONS

Although only one Blanding's turtle was encountered during the survey, this one encounter confirms continued use of the airport property, and Stantec's reiterates its earlier conclusion that suitable Blanding's turtle nesting habitat is present on the airport property, which is supported by the gravid female found during this survey during the nesting season. Even though the decision was made to not track the female, given her reproductive condition, time of year, and time of day found (evening), it is highly likely she was in search of a nesting site.

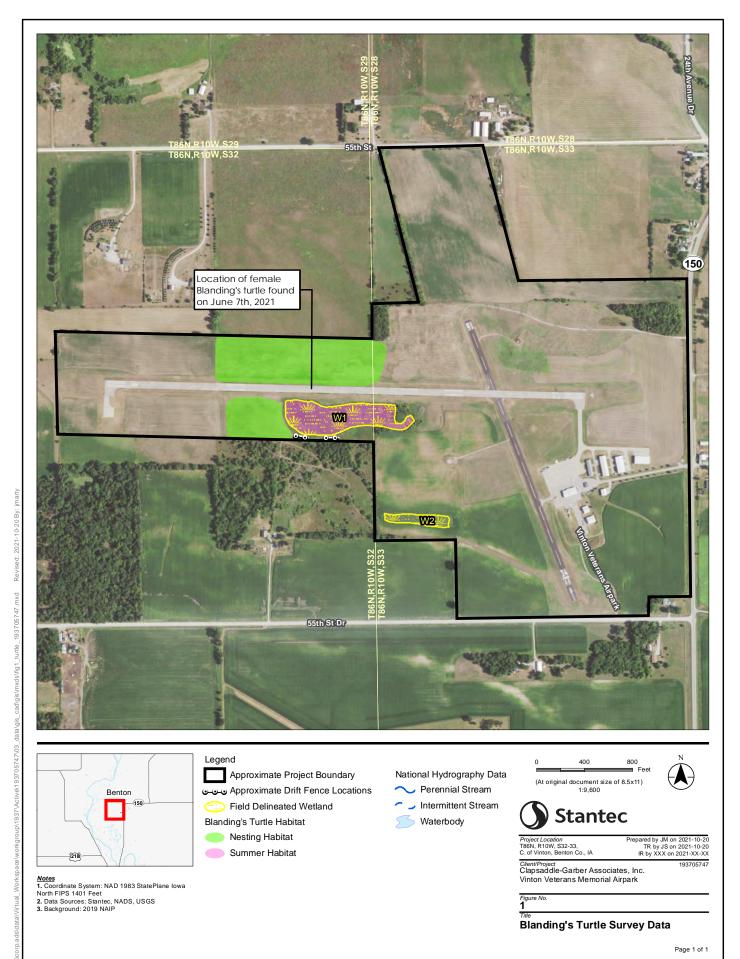
Even though Wetland 1 did not contain adequate water for aquatic trapping during the survey period, it still likely serves as summer habitat in years when sufficient water is present and may serve as a staging area for nesting females and at least an initial stopover site for newly emerge hatching turtles. Unfortunately, the question still remains as to where the turtles spend most of year.

If you have any questions, or require any additional information, please feel free to contact Terry (319) 334-3755 or Stacey at (319) 327-0457.

Regards,

STANTEC CONSULTING SERVICES INC.

Terry VanDeWalle Senior Biologist/Principal terry.vandewalle@stantec.com Stacey Parks Senior Scientist/Associate stacey.parks@stantec.com



Iowa DNR Natural Areas Inventory



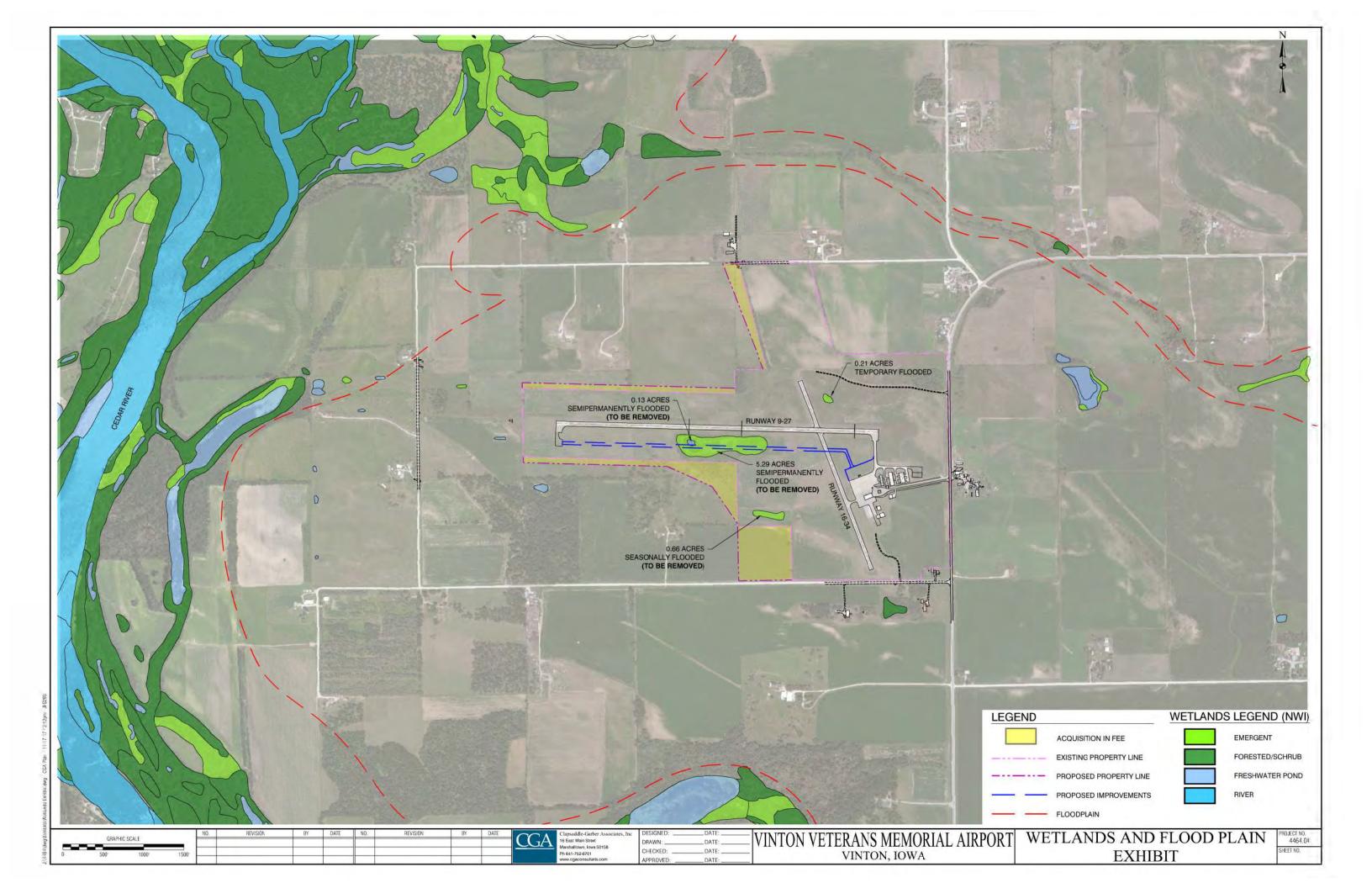
Listed Species In a County

<< Back To Query Page

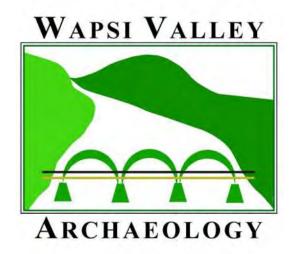
BENTON County, IA

County	Common Name	Scientific Name	Class	State Status	Federal Status	Link To Species Profile
BENTON	Bald Eagle	Haliaeetus leucocephalus	BIRDS	S		PDF
BENTON	Red-shouldered Hawk	Buteo lineatus	BIRDS	E		PDF
BENTON	American Brook Lamprey	Lampetra appendix	FISH	Т		PDF
BENTON	Black Redhorse	Moxostoma duquesnei	FISH	Т		PDF
BENTON	Blacknose Shiner	Notropis heterolepis	FISH	Т		PDF
BENTON	Weed Shiner	Notropis texanus	FISH	E		PDF
BENTON	Western Sand Darter	Ammocrypta clara	FISH	Т		PDF
BENTON	Cylindrical Papershell	Anodontoides ferussacianus	FRESHWATER MUSSELS	Т		
BENTON	Ellipse	Venustaconcha ellipsiformis	FRESHWATER MUSSELS	Т		
BENTON	Plains Pocket Mouse	Perognathus flavescens	MAMMALS	E		PDF
BENTON	Bent Milk-vetch	Astragalus distortus	PLANTS (DICOTS)	S		PDF
BENTON	Bog Willow	Salix pedicellaris	PLANTS (DICOTS)	Т		PDF
BENTON	Cleft Phlox	Phlox bifida	PLANTS (DICOTS)	S		
BENTON	Kitten Tails	Besseya bullii	PLANTS (DICOTS)	Т		PDF
BENTON	Lance-leaved Violet	Viola lanceolata	PLANTS (DICOTS)	S		
BENTON	Muskroot	Adoxa moschatellina	PLANTS (DICOTS)	S		
BENTON	Narrowleaf Pinweed	Lechea intermedia	PLANTS (DICOTS)	Т		
BENTON	Sage Willow	Salix candida	PLANTS (DICOTS)	S		
BENTON	Slender Copperleaf	Acalypha gracilens	PLANTS (DICOTS)	S		
BENTON	Swamp Thistle	Cirsium muticum	PLANTS (DICOTS)	S		
BENTON	Sweet Indian Plantain	Cacalia suaveolens	PLANTS (DICOTS)	Т		
BENTON	Green's Rush	Juncus greenei	PLANTS (MONOCOTS)	S		
BENTON	Oval Ladies'-tresses	Spiranthes ovalis	PLANTS (MONOCOTS)	Т		
BENTON	Slender Sedge	Carex leptalea	PLANTS (MONOCOTS)	S		
BENTON	Small White Lady's Slipper	Cypripedium candidum	PLANTS (MONOCOTS)	S		
BENTON	Tall Cotton Grass	Eriophorum angustifolium	PLANTS (MONOCOTS)	S		
BENTON	Western Prairie Fringed Orchid	Platanthera praeclara	PLANTS (MONOCOTS)	Т	Т	<u>PDF</u>
BENTON	Yellow-eyed Grass	Xyris torta	PLANTS (MONOCOTS)	E		
BENTON	Ledge Spikemoss	Selaginella rupestris	PLANTS (PTERIODOPHYTES)	S		
BENTON	Northern Adder's- tongue	Ophioglossum pusillum	PLANTS (PTERIODOPHYTES)	S		
BENTON	Blanding's Turtle	Emydoidea	REPTILES	Т		PDF

Floodplain and Wetland Exhibit



Appendix G - Architectural History Survey



Architectural History Survey and Evaluation for Proposed Improvements to Vinton Veterans Memorial Airport, Benton County, Iowa

Wapsi Valley Archaeology Report No. 992

Prepared for: Clapsaddle-Garber Associates, Inc.

By Maggie Jones, Principal Investigator

Nurit G. Finn, Project Manager

Wapsi Valley Archaeology, Inc. 126 East Main Street Anamosa, Iowa 52205 (319) 462-4760

May 2018

Architectural History Survey and Evaluation for Proposed Improvements to Vinton Veterans Memorial Airport, Benton County, Iowa

Maggie Jones

Wapsi Valley Archaeology Report No. 992

Nurit G. Finn, Project Manager

Wapsi Valley Archaeology, Inc. 126 East Main Street Anamosa, Iowa 52205 (319) 462-4760

May 2018

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Abstract

Wapsi Valley Archaeology, Inc. completed an intensive-level architectural history survey of the Vinton Veterans Memorial Airport in Vinton, Benton County, Iowa, for a proposed airport improvement project. The goal of this survey was to determine whether the proposed undertaking would adversely affect any historic architectural resources on the airport property and in the immediate vicinity. Fieldwork for the project was completed for Clapsaddle-Garber Associates, Inc. in September 2017. The study area encompasses 272 acres. The investigation found that no properties in the project area are eligible for the National Register of Historic Places. Wapsi Valley Archaeology, Inc. recommends that no additional architectural history investigations are necessary for the proposed project.

Introduction

This report presents the results of an intensive-level architectural history survey and evaluation completed for proposed improvements to the Vinton Veterans Memorial Airport in Benton County, Iowa. Wapsi Valley Archaeology, Inc. completed this investigation for Clapsaddle-Garber Associates, Inc. on behalf of the airport in September 2017. This study was completed to assist with project planning and with compliance with Section 106 of the National Historic Preservation Act. The purpose of this survey was to determine whether any properties in the project area are eligible for listing on the National Register of Historic Places.

The purpose of this investigation was to complete an intensive-level architectural history survey evaluation of the Vinton Veterans Memorial Airport and L.C. Preston Farmstead to determine whether the properties are eligible for listing on the National Register of Historic Places.

At the request of Clapsaddle-Garber Associates and the Federal Aviation Administration, the current investigation examined the airport property and documented a single building in the airport boundaries that is more than 50 years old, an airplane hangar. In addition, a farmstead at 2375 55th Street Drive immediately southwest of the airport was also examined. The hangar and farmstead were identified and recommended for investigation due to an extension of airport property lines, the potential future construction of a taxiway running parallel to the existing taxiway, construction of a fence, and grading for drainage of wetland areas.

Buildings in the project area have construction dates ranging from 1897 to 2013. Buildings examined by this investigation include resources constructed between 1897 and 1963 and consist of a residence, agricultural buildings, and an airplane hangar. Modern buildings include a variety of sheds and airplane hangars.

Maggie Jones and Michael Giller completed the intensive-level architectural history field investigation on September 15, 2017. Maggie Jones of Wapsi Valley Archaeology, Inc. served as the Principal Investigator for this project and authored this report. Nurit G. Finn served as Project Manager. Michael Giller prepared the figures and maps. Cooper Jacks edited this report. Eleisha Barnett assisted with report formatting and production.

Project Area Description

PROJECT LOCATION AND DESCRIPTION

This study examined the Vinton Veterans Memorial Airport and the L.C. Preston Farmstead in northeast Benton County, three miles north of the city of Vinton. The airport is at 5551 24th Avenue Drive and the L.C. Preston Farmstead is at 2375 55th Street Drive (Figures 1 and 2). The legal location of the approximately 272-acre project area is the E 1/2 of Section 32 and the W 1/2 of Section 33 of Township 86N, Range 10W. The legal location of the L.C. Preston Farmstead is the NE 1/4 of the SE 1/4 of Section 32 (Figure 3).

The proposed project will involve future airport runway improvements, grading for drainage of wetland areas, and an extension of the airport property lines. The airport plans to construct a parallel taxiway south of the current 4,000-foot-long 09/27 runway. The proposed extended property line cuts into the northeast corner of parcel (87016400) or 2375 55th Street Drive. With the expansion of the property, the airport proposes to surround the property with a deer fence in accordance with updated Federal Aviation Administration (FAA) requirements.

ENVIRONMENTAL CONTEXT

The Vinton Veterans Memorial Airport is on the uplands adjacent to the Cedar River. The airport is three miles north of the city of Vinton in a rural location. The Cedar River flows west of the airport and separates it from Vinton. Southeast of the airport lies Dudgeon Lake State Wildlife Management Area, managed by the lowa Department of Natural Resources (Iowa DNR). Red Fox Wildlife Area lies to the north of the airport adjacent to the Cedar River.

The architectural history survey area included the expanded airport property and the L.C. Preston Farmstead. Historic plat maps and aerial photographs of the area are presented in Figures 4 through 7.

The Vinton Veterans Memorial Airport, which opened in 1964, appears on 1968–69 lowa Airport Directory aerial photographs. These show one runway and one hangar that are still extant (see Figure 7). Aerial photography over the past fifty

¹ Iowa Aeronautics Commission, *Iowa Airport Directory 1968-69* (State House, Des Moines, IA:

years reveals a gradual expansion of airport hangars and buildings to the current iteration, which includes nine buildings and two runways (Figures 8 and 9).²

The farmstead contains a house constructed in 1897 that is visible on a 1901 plat map (see Figure 4).³ The L.C. Preston Farmstead includes one house, four outbuildings, and a windmill (Figure 10).

⁻

² ISU GIS Facility, "Iowa Statue University Geographic Information Systems Support and Research Facility" (Iowa State University, Ames, Iowa. Electronic document, http://ortho.gis.iastate.edu, accessed ______ 2017, 2017), http://ortho.gis.iastate.edu.

³ "Benton County, IA Assessor," *Beacon*, August 22, 2017, https://beacon.schneidercorp.com/Application.aspx?AppID=83&LayerID=782&PageTypeID=2&PageID=545; George A. Ogle, "Standard Atlas of Benton County, IA" (George A. Ogle & Co., 1901).

Approach to Architectural History

RESEARCH DESIGN

The purpose of the intensive-level architectural history survey was to photograph and evaluate through research and observations the Vinton Veterans Memorial Airport and the L.C. Preston Farmstead within their historic contexts. The goal of the investigation was to determine whether any resources are eligible for listing on the National Register of Historic Places and, if so, whether the proposed undertaking will have an adverse effect on these resources.

Resource evaluations were completed following the Secretary of the Interior's Standards and Guidelines for identifying and evaluating historic places.⁴ The practices used in this investigation also meet recommendations for cultural resource management and historic preservation in the state of Iowa.

BACKGROUND AND FIELD RESEARCH METHODS

Maggie Jones and Michael Giller of Wapsi Valley Archaeology, Inc. conducted the field investigations for this project on September 15, 2017. Jones conducted online research using sources available from the Iowa State University Library, Statelibraryofiowa.org, and the I-Sites website maintained by the Office of the State Archaeologist (OSA). In addition, other sources examined included local histories, historic maps, and newspapers available online.

The field investigation involved an examination of the airport and farmstead within the project area, including digital photographs and field notes taken onsite. All examined properties were mapped using a Trimble GPS unit with sub-meter accuracy. HADB form 06-013 and Site inventory forms 06-01033 through 06-01036 were prepared during this study and are presented in Appendixes 1 and 2 at the end of this report.

⁴ National Park Service, Secretary of the Interior's Standards for Architectural and Engineering Documentation (Washington, D.C.: Department of the Interior, 1983).

DISPOSITION OF RECORDS

After fieldwork, all pertinent data collected during the survey were returned to Wapsi Valley Archaeology, Inc. facilities in Anamosa, Iowa, where all records associated with the project are on file.

Results of Investigations

INTRODUCTION

The on-site visit for this project was conducted September 15, 2017. Buildings and structures on the parcel were photographed, sketch maps were drawn, and each property was mapped using a Trimble GeoXT GPS unit with sub-meter accuracy. Appendix 2 presents site inventory forms completed for the airport, hangar, farmstead, and house.

The intensive-level architectural history survey is intended to identify architectural resources that are eligible for the National Register of Historic Places. Such resources would be considered "historic properties" under federal law and, if adversely affected by the proposed project, may require formal actions to lessen those effects prior to construction.

Evaluating the historic significance of architectural properties involves considering specific criteria defined by the National Park Service for determining resource eligibility for listing on the National Register of Historic Places. All determinations of eligibility use the following criteria:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of significant persons in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in history or prehistory.⁵

The evaluation process considers each of these criteria as well as whether a property retains key aspects of integrity, which include location, design, setting, materials, workmanship, feeling, and association.

Significant resources may not always be the most lavish, oldest, or the most flamboyant to the casual observer. An apparently humble resource may be National Register eligible because it is associated with a significant trend in

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⁵ How to Apply the National Register Criteria for Evaluation, National Register Bulletin, 1997.

history, is a good example of a particular type or style of architecture or engineering, or for other reasons that become evident through research. Buildings or structures may be representative of types of architecture or engineering that speak to a particular time and place, helping to tell the overall historical narrative of an area despite being of an unassuming character.

Previous Historic Architectural Surveys

The area examined by this intensive-level survey includes the Vinton Veterans Memorial Airport with seven hangars, one office, a maintenance shed, and two runways and the L.C. Preston Farmstead containing a house, four outbuildings, and a windmill. None of the buildings or structures on the properties were previously identified as eligible for the National Register of Historic Places. No prior intensive-level architectural history surveys had been completed for any portion of the project area. A search of I-Sites showed that no architectural properties have been previously inventoried in the project area and that no inventoried or evaluated resources are present in a two-mile radius of the project area.⁶

Benton County is home to 16 extant National Register–listed properties. Table 1 enumerates those 16 properties in Benton County. Seven of the 16 National Register–listed properties are in Vinton. None of the listed properties are in or near the vicinity of the current project area.

Table 1. National Register-Listed Properties in Benton County, Iowa.⁷

NRHP-Listed Property	Location	
Belle Plaine Main Street Historic District	Belle Plaine	
Benton County Courthouse	Vinton	
Burlington, Cedar Rapids & Northern	Vinton	
Passenger Station-Vinton		
Central Vinton Residential Historic District	Vinton	
Herring Hotel	Belle Plaine	
Iowa Canning Company Seed House	Vinton	

⁶ OSA-UI, "I-Sites: An Online GIS and Database for Iowa Archaeology. Office of the State Archaeologist, University of Iowa, Iowa City, Iowa. Electronic Document, Http://Ags.gis.iastate.edu/IsitesPublicAccess/, Accessed September 2017," 2017, http://ags.gis.iastate.edu/IsitesPublicAccess/.

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⁷ National Park Service, "National Register of Historic Places Digitial Archive," *National Register of Historic Places*, 2017.

NRHP-Listed Property	Location		
Building			
James Greer McQuilkin Round Barn	Eagle Center		
Frank G. Ray House & Carriage House	Vinton		
Round Barn, Bruce Township Section 3	Bruce Township		
Round Barn, Bruce Township Section 6	Bruce Township		
Sankot Motor Company	Belle Plaine		
Shellsburg Bridge	Shellsburg		
Upper Stone Schoolhouse	Vinton		
Vinton Public Library	Vinton		
Youngville Café	Watkins		
Frank E and Katie (Cherveny) Zalesky	Belle Plaine		
House			

OTHER ARCHITECTURAL HISTORY STUDIES OF AVIATION PROPERTIES

National Register Bulletins are particularly useful when evaluating properties for the National Register of Historic Places. They provide both technical guidance and assistance to evaluate a particular property type or historical theme. The 1998 National Register Bulletin 43, "Guidelines for Evaluating and Documenting Historic Aviation Properties" provides a historic context on American aviation, historic aviation properties types, and guidance on evaluating the integrity of the property types. Although the bulletin tends to focus on military aviation properties, the historical context and integrity information can provide a useful basis for evaluation. In the document, hangars fall under the air terminal or air stations property type.

In order for hangars to be listed on the National Register, the bulletin indicates a hangar may be significant for its association with specific innovations of flight. One example of a hangar nominated under Criterion A is Hangar One at Los Angeles International Airport, which was a stop of the courses during the National Air Races in 1933 and 1936. Another example is Felts Field in Spokane, Washington, which is locally significant for its association with the development of early aviation in eastern, inland Washington. Under Criterion C, a hangar may represent an important style of architecture with distinctive characteristics. Additionally, an airport may be eligible as a district where components may lack individual distinction but, when taken together, represent a significant and distinguishable entity.

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⁸ Anne Milbrooke, "Guidelines for Evaluating and Documenting Historic Aviation Properties" (National Park Service, 1998), https://www.nps.gov/nr/publications/bulletins/aviation/NRB43.pdf.

The Vinton Veterans Memorial Airport is not associated with any particular historic events, individuals, or architectural style. Additionally, the Vinton Veterans Memorial Airport contains only one building greater than 50 years old and does not warrant the creation of a district as a distinguishable entity.

HISTORICAL THEMES

Vinton, Iowa

On December 21, 1837, Benton County was formally created and named after United States Senator Thomas Hart Benton of Missouri. Early in 1839, George Wright and John Smith became the first Euro-American settlers in Benton County.⁹

Founded in 1849, Vinton became the county seat of Benton County. The city originally was named Northport before it was renamed for Iowa State Legislator Plynn Vinton.¹⁰

The Cedar Rapids & St. Paul Company railroad constructed a line through Vinton and, in 1869, the first train arrived in town. 11 Aside from the railroad, the Cedar River and agriculture defined much of the history and development of the city of Vinton. The town developed around the river, a natural transportation and shipping resource. The city took advantage of the region's many farmers, emerging as an outpost for trading and a location for farmers to sell goods and purchase items. Pioneer businesses matured to become processing factories, retail stores, and technical assistance for agricultural interests including the lowa Canning Company. Vinton's population expanded through the turn of the century and continued to grow steadily through the twentieth century (Table 2).

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⁹ Western Historical Company, *A History of Benton County* (Chicago: Western Historical Company, 1878).

¹⁰ A History of the Origin of the Place Names Connected with the Chicago & North Western and Chicago, St. Paul, Minneapolis & Omaha Railways, 2nd ed. (Chicago: 1908, n.d.).

¹¹ Ibid. 429.

Table 2. Population of Vinton, Iowa. 12

Year	Population		
1870	2,460		
1880	2,906		
1890	2,865		
1900	3,499		
1910	3,336		
1920	3,381		
1930	3,372		
1940	4,163		
1950	4,307		
1960	4,781		
1970	4,845		
1980	5,040		
1990	5,103		
2000	5,102		
2010	5,257		

By the 1970s, businesses and industries that were active during the first half of the twentieth century underwent a difficult transition as small, rural farms struggled. In the 1980s, the local economy followed in the footsteps of nationwide farm communities that collapsed during the farm crisis. To make matters worse, Interstate 380 was completed in 1985, twelve miles east of Vinton. Highway 218 was no longer the primary thoroughfare between Cedar Rapids and Waterloo and this led to more struggles for local businesses. Local businesses fell to larger corporations and more and more Vinton citizens worked in the larger surrounding cities of Waterloo and Cedar Rapids. In the 1990s, downtown reconstruction projects revitalized the downtown district providing a necessary facelift. 13

¹² Iowa Data Center and U.S. Census Bureau, "Total Population for Iowa's Incorporated Places: 1850–2000," n.d., accessed June 6, 2017.

¹³ City of Vinton, "History," City of Vinton, accessed August 23, 2017, cityofvinton.org/history.

Airport Development and the History of Aviation in Iowa and Benton County

The Wright brothers conducted the world's first successful airplane flight on December 17th, 1903. The first military airplane was constructed in 1908 for the United States Army Signal Corp. Since World War I, aviation has held a significant position in the United States for civil history, commercial history, and military history.¹⁴

World War II created major advancements in aviation technology and the aviation industry. Not only did the military aircraft industry prosper, but the general aviation industry grew as veterans sought to use their flying skills. Also, the GI Bill provided inexpensive flying lessons. After World War II, the availability of airplanes and related technology created the demand for municipal airports in small communities not served by metropolitan areas.¹⁵

In 1958, Congress reorganized the Federal Aviation Organization by abolishing the Civil Aeronautics Administration for the creation of the independent Federal Aviation Agency (FAA). The agency regulated all commercial and military aviation in the United States. By 1967, the independent Federal Aviation Agency became the Federal Aviation Administration under the Department of Transportation.¹⁶

In the 1960s and 1970s, large sections of the American rail networks closed, necessitating cities and states to invest in other forms of public infrastructure, often in the form of airports. In 1969, at the height of municipal aviation, the United States had over 6,700 public-use airports. By 2011 public-use airport totals dropped to around 5,000. Currently, lowa is home to 117 airports, most of which are municipal airports. The Vinton Veterans Memorial Airport was constructed at a time where many Midwestern communities were adding municipal airports to serve community aviation needs. Many lowa airports housed and continue to house businesses that service agriculture with aerial application of pesticides and fertilizers.

Airports and the American aviation system were built "partly for travel but also to ensure ubiquitous landing sites in the event of national security events or natural

¹⁴ Milbrooke, "Guidelines for Evaluating and Documenting Historic Aviation Properties."

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ Thomas P. Thatcher, "A Guidebook for the Preservation of Public-Use Airports" (Washington, D.C.: Transportation Research Board, 2011), https://www.nap.edu/read/14547/chapter/1, 2.

disasters."¹⁸ Airports are "where the nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports."¹⁹

Agriculture in Benton County, Iowa

Throughout Iowa's history, agriculture has dominated the economy, identity, and landscape of the state's 99 counties. Although agriculture has been the primary use of the land since the Euro-American settlement of Iowa, agricultural methods underwent immense changes since that time. Technological advances including railroads, barbed wire, and new types of farm machinery all facilitated the expansion of agriculture in Iowa.

The State of Iowa fostered technological advancements and agricultural production through its state agricultural college (Iowa State University) and a combination of county and state fairs. These institutions encouraged the development of new agricultural methods and technologies such as hybrid crops and field tiling. By the end of the nineteenth century, Iowa farmers diversified their crop production to increase their yields and their profits.²⁰

During the Great Depression and Dust Bowl of the 1930s, farmers transformed their methods to conserve the land and decrease erosion and water pollution. Buffer strips and windbreaks were planted along property lines. Fields were shallowly plowed to prevent widespread erosion. Throughout the twentieth and twenty-first centuries, agricultural technology also led to shifts in rural community culture and the landscape of lowa farms. With modern tractor innovations, farmers can farm more and more land in less time. This pattern has led to fewer farmers and farms while using the same amount of farmland.²¹

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¹⁸ Steve Friess, "Factories or Runways? Municipal Airports Face Economic Pressure," *The New York Times*, July 18, 2017, https://www.nytimes.com/2017/07/18/business/municipal-airports-development.html?mcubz=0.

¹⁹ Thatcher, "A Guidebook for the Preservation of Public-Use Airports."

²⁰ Iowa Public Television, "The Science and Technology of Agriculture," *Iowa Public Television*, accessed June 29, 2017, http://site.iptv.org/iowapathways/mypath/science-and-technology-agriculture.

William Edwards, "New Census of Agriculture Reveals Much about Iowa Farms" (Ames: Iowa State University: Extension and Outreach, 2014).

T. E. Savage in the 1905 *Geology of Benton County* writes, "Benton is preeminently an agricultural county." Today, the majority of Benton County farms are mid-sized farms with near-equal numbers of farms in three size groups: 10 to 49 acres, 50 to 179 acres, and 500 to 999 acres. Far fewer farms are on the margins of this spectrum at less than 10 acres or over 1,000 acres. The majority of Taylor Township is agricultural land. The history of agriculture in Benton County fits into a larger national trend toward consolidation in this sector.

At 2375 55th Street Drive, a focus of the current investigation, ownership shifted while the property remained associated with agriculture. The 1872 plat map indicates the farmstead was owned by J.S. Singleton.²⁴ By 1885, farmer L.C. Preston owned the land and the plat map depicts the first known house built on the property.²⁵ Assessor records show the house was constructed in 1897.²⁶ Preston owned the property through at least 1901; however, by 1917 farmer Frank Bednar owned the property.²⁷ The 1930 plat map shows Bednar as the property owner.²⁸ It is not known who owned the property in 1940 when the chicken coop and a shed were constructed. Erik C. and Leslie J. Moen are the property's current landowners.²⁹

FIELDWORK RESULTS

The architectural history survey examined and evaluated the Vinton Veterans Memorial Airport and the nearby L.C. Preston Farmstead. The Vinton Veterans Memorial Airport encompasses one historic hangar built in 1963, six modern hangars, a modern office, and a modern maintenance shed. The L.C. Preston Farmstead includes a historic farmhouse built in 1897, two historic outbuildings

²² TE Savage, Geology of Benton County, 1905, 129.

²³ US Department of Agriculture, "2012 Census of Agriculture: Benton County, Iowa" (USDA, 2012).

^{2012). &}lt;sup>24</sup> Harrison & Warner, *Atlas of Benton County, Iowa* (Marshalltown, Iowa: Harrison & Warner, 1872).

²⁵ Geo. E. Warner and C. M. Foote, "Plat Book of Marshall County, Iowa" (Minneapolis, Minnesota: Warner & Foote, 1885).

²⁶ "Benton County, IA Assessor."

²⁷ Anderson Publishing Co., "Atlas of Benton County, Iowa" (Mason City, Iowa: Anderson Publishing Co., 1917); Ogle, "Standard Atlas of Benton County, IA."

²⁸ W. W. Hixson & Co., "Plat Book of Benton County, Iowa" (W. W. Hixson & Co., Rockford, Illinois, 1930).

²⁹ "Benton County, IA Assessor."

constructed in 1940, and two modern outbuildings. Table 3 summarizes the historic resources examined by this study.

Table 3. Summary of Historic Resources Examined by this Study.

		Site						
		Inventory	Historic Function	NRHP				
Address	Name	Number	(Date)	Eligibility	Figures			
Non-NRHP-Eligible Buildings								
5551 24th Avenue	Vinton Veterans	06-01033	Airport	Not Eligible	11–27			
Drive	Memorial Airport							
5551 24th Avenue	Hangar	06-01034	Airplane Hangar	Not Eligible	13–14			
Drive								
2375 55th Street	L.C. Preston	06-01035	Farmstead	Not Eligible	28–38			
Drive	Farmstead							
2375 55th Street	L.C. Preston	06-01036	House	Not Eligible	28–30			
Drive	House							

Wapsi Valley Archaeology, Inc. concludes that the architectural resources examined by this study, while older than fifty years of age, do not individually rise to a level of significance for listing on the National Register of Historic Places. They are not associated with particular historic events, significant individuals, or distinctive architectural styles, and do not yield information important to history to warrant listing on the National Register of Historic Places. The resources examined would also not contribute as elements of any historic district.

PROPERTIES DETERMINED NOT ELIGIBLE

Vinton Veterans Memorial Airport, Site Inventory Number 06-01033

Address: 5551 24th Avenue Drive, Vinton, IA, 52349

Figures: 11–27

Description

The Vinton Veterans Memorial Airport contains one hangar constructed in 1963, an office constructed in the 1980s, six hangars constructed from the 1990s to 2013, a maintenance shed constructed in 2006, and two runways that have been sporadically replaced with newer materials. The first runway, 16/34 orientation,

was constructed in the mid-1960s. The second runway, 09/27, was added in the 1980s.

The Vinton Veterans Memorial Airport hangar, constructed in 1963, lies west of all the other buildings and structures. The low-pitched, gabled hangar is clad entirely with vertical, white-colored, metal siding and is visually divided into two sections by height. The west section stands approximately three feet taller than the east section. The west elevation contains a gray-painted paneled door and a picture window. On the south half of the west elevation is a large modern bi-fold hangar door that replaced a sliding door. The south elevation contains two doors, a four-lite window, and a large hangar door that slides on a runner located on top. The hangar door was replaced in 2011 after a windstorm ripped the previous door off the hangar. The east elevation contains a green-painted metal door and is surrounded by sun-bleached red-painted metal trim. The north elevation contains two square cuts into the metal siding that are secured to the building by metal locks. The west side of the north elevation contains an added air conditioning unit and a picture window with blue trim.

The eastern-oriented, side-gabled office was constructed in the mid-1990s. White vertical, vinyl siding clads the building, while black asphalt, shingles top the building. The moving south to north on the east elevation, the elevation contains a single-hung sash window, a paneled door with a single lite window covering the top half of the door. Large picture windows cover the north and west elevations. The south elevation contains a door and a single-hung sash window.

Entering the airport from 24th Avenue Drive, the first hangar to the north was constructed in 2013–2014 and is a rectangular building with a shed roof. White-colored vertical metal siding clads the bulk of the exterior, while the building's edges pop with red trim. The north elevation contains two hangar doors and two entry doors. The west elevation contains one door on its south end. All other elevations are unadorned. A white plastic fence separates the northern hangars from the driveway.

The second hangar to the north of the entrance was constructed in 2009, is gabled, and is clad in white-colored vertical metal siding with red trim. The east elevation contains a hangar door and a large garage door. The north elevation features on entry door. The west elevation contains a hangar door, two entry doors, and a large garage door on the south half of the elevation. The south elevation contains one door and a small adjoining window.

Between the second and third hangars sits a small rectangular storm shelter with vents and a single door on the south elevation. The third hangar is an Astro brand hangar constructed in the 1990s. The Astro hangar is clad in white vertical metal siding and features red trim on its edges. Both the east and west elevations contain two sliding hangar doors and two entry doors. The south elevation contains a single door situated under the gable.

South of the entrance driveway sit two identical Morton sheds acting as hangars. Both front-gabled buildings are clad in white-colored vertical metal siding and accented with red trim. The west elevations contain bi-fold hangar doors. The farsouth hangar, built in 1997, contains two shuttered windows on the east elevation while the other hangar was constructed in 1992 and is unadorned on all other elevations.

The airport also contains gabled maintenance shed constructed in 2006. The shed is clad in vertical tan-colored metal siding, while dark green trim lines the bottom of the building and all edges. The shed's east elevation contains two white garage doors each with two, small windows. A white door separates the garage doors. The south elevation contains two sliding windows and a door. All other elevations are plain. The gabled building is topped with two cupolas with louvered vents.

The Vinton Veterans Memorial Airport contains two runways. The 16/34 asphalt runway measures 2,500 feet by 50 feet. This runway location has been used since the 1960s; it has been entirely replaced with newer materials over the past fifty years. The 09/27 concrete runway is 4,000 feet by 60 feet and has been in use since the late 1980s or early 1990s.

Significance

The Vinton Veterans Memorial Airport does not meet any of the National Register Criteria of Significance. The resource is not significant under Criterion A as it is not associated with any particular significant events of the past. In the 1960s and 1970s, large sections of the American rail networks closed, meaning cities and states needed to invest in other forms of public infrastructure, often in the form of airports. In 1969, at the height of municipal aviation, the United States had over 6,700 public-use airports, which by 2011 dropped to around 5,000. Currently, lowa is home to 117 airports, most of which are municipal airports. The Vinton Veterans Memorial Airport was constructed at a time when many Midwestern communities were adding municipal airports to serve the community aviation

³⁰ Thomas P. Thatcher, "A Guidebook for the Preservation of Public-Use Airports" (Washington, D.C.: Transportation Research Board, 2011), https://www.nap.edu/read/14547/chapter/1, 2.

needs. Many lowa airports housed and continue to house businesses that serve agriculture needs with aerial application of pesticides and fertilizers.

The resource is also not eligible under Criterion B as there are no demonstrable connections between the resource and the lives of people significant to either the area or the nation. The Vinton Veterans Memorial Airport continues to be home to agricultural aviation businesses, but it is not an exceptional example of an lowa municipal airport. The hangars, office, and runways are not the work of a master or components to a larger architectural whole. The recent construction of hangars and replacements of runway materials have altered the makeup of the larger architectural whole. Thus, the resource is not significant under Criterion C. Finally, the architectural and historic resources are not likely to yield information important to understanding history and are not significant under Criterion D.

While the Vinton Veterans Memorial Airport fits into the trend of Iowa airports and is over fifty years old, it has drastically changed over time, as is evident from aerial photography. Throughout its first fifty years, the Vinton Veterans Memorial Airport has expanded exponentially while upgrading runways and hangars to meet changing needs. The only building or structure original to the airport is the west hangar that underwent large-scale replacement of hangar doors. All other buildings and structures were added after 1980. In addition, though one runway is over 50 years old, it has been entirely repaved and modified over the years. The airport does not exhibit any distinctive architectural characteristics, is not associated with any person or event of historic significance, and contains a majority of modern buildings less than fifty years old not reaching a level of collective significance to warrant a historic district. It is not eligible for listing on the National Register of Historic Places.

Hangar, Site Inventory Number 06-01034

Address: 5551 24th Avenue Drive, Vinton, IA, 52349

Figures: 13-14

Description

The Vinton Veterans Memorial Airport hangar, constructed in 1963, is west of all of the other buildings and structures. The low-pitched, gabled hangar is clad entirely with vertical white-colored metal siding and is visually divided into two sections by height. The west section stands approximately three feet taller than

the east section. The west elevation contains a gray-painted paneled door and a picture window. On the south half of the west elevation is a large modern bi-fold hangar door that replaced a sliding door. The south elevation contains to doors, a four-lite window and a large hangar door that slides on a runner located on top. The hangar door was replaced in 2011 after a windstorm ripped the previous door off the hangar. The east elevation contains a green-painted metal door and is surrounded by sun-bleached red-painted metal trim. The north elevation contains two squares cut into the metal siding that are secured to the building by metal locks. The west side of the north elevation contains an added air conditioning unit and a picture window with blue trim.

Significance

The Vinton Veterans Memorial Airport hangar does not meet any of the National Register Criteria. The resource is not significant under Criterion A as it is not associated with significant events of the past. The Vinton airport is a general service airport that is municipally owned and operated. The hangar is part of an airport was constructed at a time when many Midwestern communities were adding municipal airports to serve the aviation needs of communities. The resource is not significant under Criterion B as there is no demonstrable connection between the resource and the lives of people significant to either the area or the nation. The historic hangar continues to be home to agricultural aviation businesses, however, it is not an exceptional example of a hangar. The hangar is not the work of a master, as the recent replacement of metal walls and doors have altered the makeup of the larger architectural whole. Thus, the resource is not significant under Criterion C. Finally, it is not likely to yield information important to understanding history and is not significant under Criterion D.

The hangar exemplifies no notable characteristics and has been modified with modern-style hangar doors that diminish the integrity of the building. The hangar exhibits no distinctive architectural characteristics, and it is not associated with any person or event of historic significance. It is not eligible for listing on the National Register of Historic Places.

L.C. Preston Farmstead, Site Inventory Number 06-01035

Address: 2375 55th Street Drive, Vinton, IA, 52349

Figures: 28-38

Description

The L.C. Preston Farmstead consists of six buildings and structures that remain on the farmstead. The resources include a house, garage, two sheds, and a chicken coop. The house, one shed, chicken coop, and windmill are historic, while the garage and other shed are less than fifty years old.

The two-story, irregularly-shaped L.C. Preston farmhouse was once a rectangular folk-style house before two additions to the west and north elevations altered the shape of the building. According to Benton County Assessor records, the farmhouse was constructed in 1897. The south-oriented farmhouse sits on a brown-painted concrete foundation and is clad in light-yellow modern vinyl siding. The irregular, brown metal modern roof shows multiple periods of construction as the original rectangular house features a hipped roof on its eastern elevation, while all other rooflines are gabled. Most windows are narrow single-hung sash windows.

The south elevation features the primary entrance under a shed-roofed elevated wooden porch. On the original building are thin single-hung sash windows. To the west of the porch and original house lies a two-story addition with a double-car garage on the house's west elevation. The second story of the addition includes living quarters with a Palladian-style window arrangement on the west elevation. The north elevation features an elevated second-story gabled addition. Under the north addition sits a sliding door and concrete deck. The east elevation features a bay window topped with the same brown metal roofing material that clads the rest of the house.

The rectangular garage west of the house is clad in horizontal tan-colored vinyl siding and topped with a brown metal roof. The 1999 garage features two white, paneled garage doors on the east and south elevations. The east elevation also includes a gray, metal storm door with a nine-lite window. Three sliding windows dot the garage's north and west elevations.

The saltbox-styled gabled shed directly south of the garage was constructed in 1940 and is clad in horizontal yellow-colored vinyl siding and topped with a white metal roof. The shed features a gray-painted door on the east elevation. On the

south elevation, under exposed rafters, is a sliding window. The south elevation also connects to a fenced-in concrete slab used as a dog kennel.

West of the gabled shed sits a coop clad in various vertical metals and a brown metal covered, half-monitor roof. The east elevation of the 1940 chicken coop features a large opening. The south elevation contains several openings and windows in the half-monitor roof. The west and north elevations contains louvered vents as the coop is used for goats and various animals.

West of the chicken coop sits a modern, six-bay, metal loafing shed constructed in 2008. The shed-roofed shed sits on a concrete slab and is clad in vertical tancolored metal siding with brown trim and a brown metal roof.

A metal windmill in a deteriorated state sits to the north of the house. Beneath the structure is a concrete-covered well.

A crushed-gravel drive connects the main house to the 55th Street Drive. A poured-concrete half-basketball court sits north of the house. Fields surround the farmstead's south, east, and west sides, while evergreen trees line the property's north boundary.

Significance

As discussed previously, the farmstead property has been owned by a number of different individuals and families since 1872. The current house was constructed in 1897by L.C. Preston,³¹ who owned the property through at least 1901. By 1917 the farm changed ownership and farmer Frank Bednar owned the property. 32 The 1930 plat map also shows Bednar as the property owner. 33 It is not known who owned the property in 1940 when the chicken coop and a shed were constructed. Erik C. and Leslie J. Moen currently own the property.³⁴

The house has undergone several significant changes that sever its history as a farmhouse. The large additions to the west and north elevations as well as metal roof and vinyl siding all are departures from the folk style the simple farmhouse once exhibited. The 1940s shed has been extensively altered with vinyl siding

^{31 &}quot;Benton County, IA Assessor."

³² Anderson Publishing Co., "Atlas of Benton County, Iowa" (Mason City, Iowa: Anderson Publishing Co., 1917); Ogle, "Standard Atlas of Benton County, IA."

³³ W. W. Hixson & Co., "Plat Book of Benton County, Iowa" (W. W. Hixson & Co., Rockford, Illinois, 1930).

^{34 &}quot;Benton County, IA Assessor."

and a metal roof. Other associated outbuildings and structures are not distinctive.

The farmstead does not exhibit any distinctive architectural characteristics, is not associated with any person or event of historic significance, and does not reach a level of collective significance or distinction to warrant a historic district. It is not eligible for listing on the National Register of Historic Places.

L.C. Preston House, Site Inventory Number 06-01036

Address: 2375 55th Street Drive, Vinton, IA, 52349

Figures: 28–30

Description

The two-story, irregularly shaped L.C. Preston house was once a rectangular folk-style house before two additions to the west and north elevations altered the shape of the building. According to Benton County Assessor records, the farmhouse was constructed in 1897. The south-oriented farmhouse sits on a brown-painted concrete foundation and is clad in light-yellow vinyl siding. The irregular, brown metal roof shows multiple periods of construction as the original rectangular house features a hipped roof on its eastern elevation, while all other rooflines are gabled. Most windows are narrow single-hung sash windows.

The south elevation features the primary entrance under a shed-roofed elevated wooden porch. On the original building are thin single-hung sash windows. West of the porch and original house lies a two-story addition with a double-car garage on the house's west elevation. The second story of the addition includes living quarters with a Palladian-style window arrangement on the west elevation. The north elevation features an elevated second-story gabled addition. Under the north addition sits a sliding door and concrete deck. The east elevation features a bay window topped with the same brown metal roofing material the rest of the house is clad in.

Significance

The L.C. Preston house has undergone several significant changes that sever its history as a farmhouse. The large additions to the west and north elevations as well as metal roof and vinyl siding all are departures from the folk-style the simple farmhouse once exhibited. The house does not exhibit any distinctive

architectural characteristics and is not associated with any person or event of historic significance. It is not eligible for listing on the National Register of Historic Places.

Conclusions

The goal of this study was to evaluate architectural resources that could be adversely affected by the proposed undertaking. The Vinton Veterans Memorial Airport at 5551 24th Avenue Drive and L.C. Preston Farmstead at 2375 55th Street Drive were evaluated for National Register eligibility.

Field examination and historic research indicated that Vinton Veterans Memorial Airport is not eligible for listing on the National Register of Historic Places. Only one building on the airport property, a hangar, is more than 50 years old. Wapsi Valley Archaeology, Inc. concludes that the hangar, while more than 50 years old, is not individually eligible for the National Register of Historic Places. The hangar is an example of a resource type ubiquitous across lowa and generally lacks distinction.

In addition, the L.C. Preston Farmstead has undergone significant changes that have compromised its historic significance. The L.C. Preston Farmstead is not associated with historically significant people or events and does not exhibit distinctive architectural characteristics or retain research potential for understanding history. Although the farmstead and current residence have been present since 1897, they are not individually significant nor do they maintain a level of integrity necessary to warrant eligibility as part of a historic district designation.

Recommendations

This architectural history survey and evaluation of the Vinton Veterans Memorial Airport hangar and L.C. Preston Farmstead determined that neither property rises to a level of significance sufficient for eligibility for listing on the National Register of Historic Places. Therefore, in our opinion, the proposed project will have no adverse effects on historic architectural properties. Wapsi Valley Archaeology recommends that no additional architectural history investigations are necessary for the proposed project.

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Figures

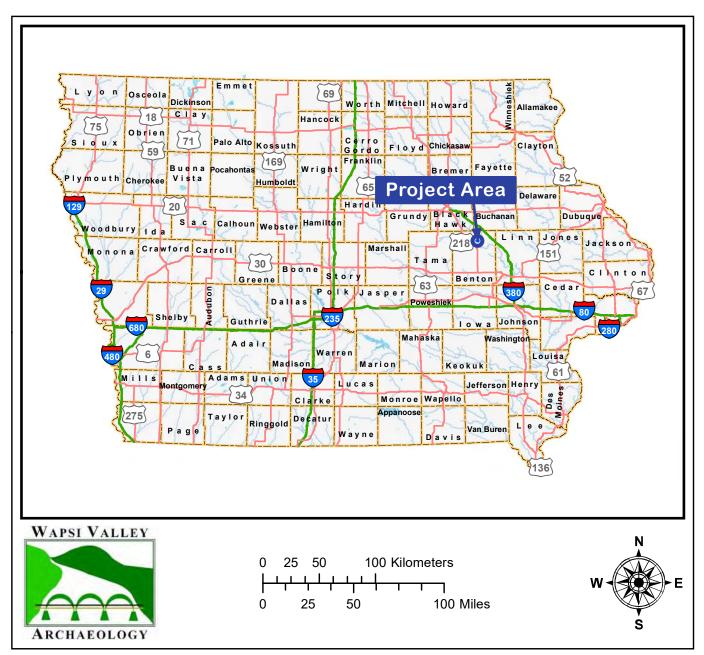


Figure 1. Map of Iowa and the general location of the survey area. Source: Iowa DNR (2016).

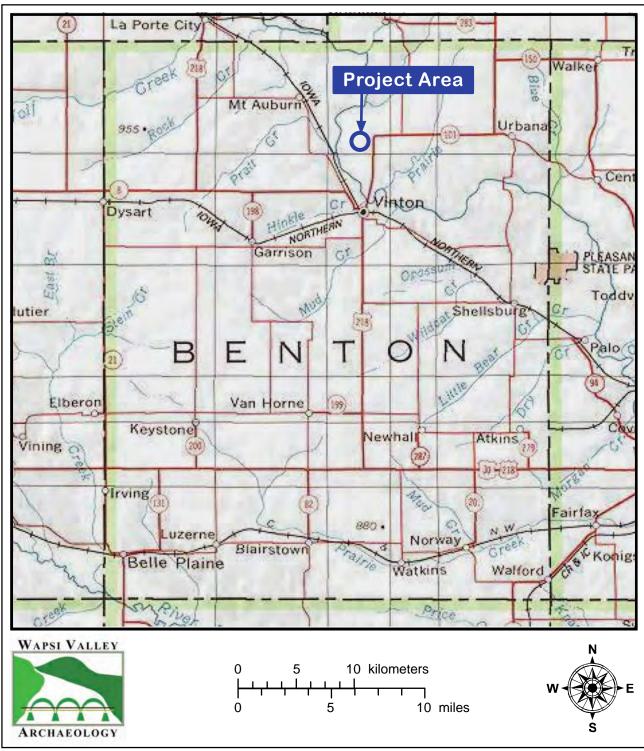


Figure 2. Map showing Benton County, Iowa, and the general location of the project area. Source: National Geographic (2009).

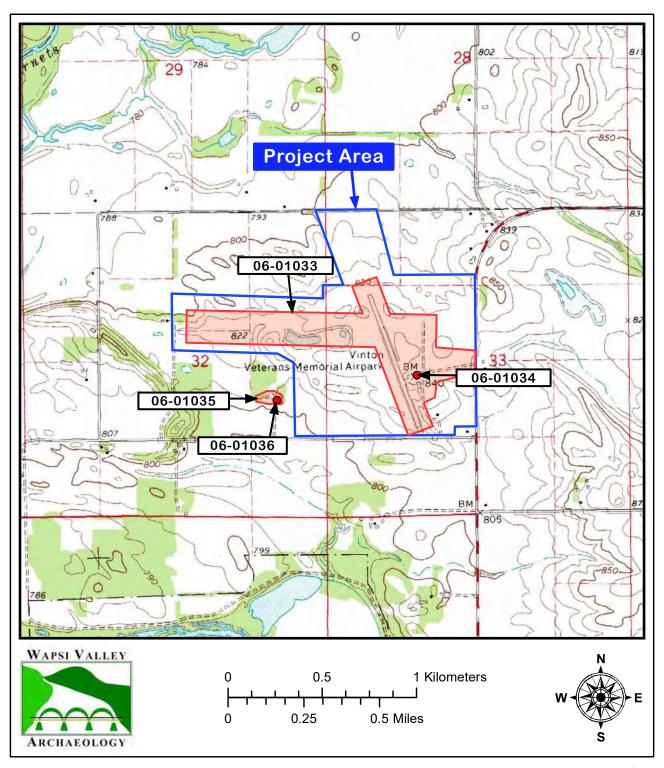


Figure 3. Map showing topography and elevations within the study area and locations of inventoried resources. Source: USGS La Moille, Iowa (1975), 7.5' Series Quadrangle Map.

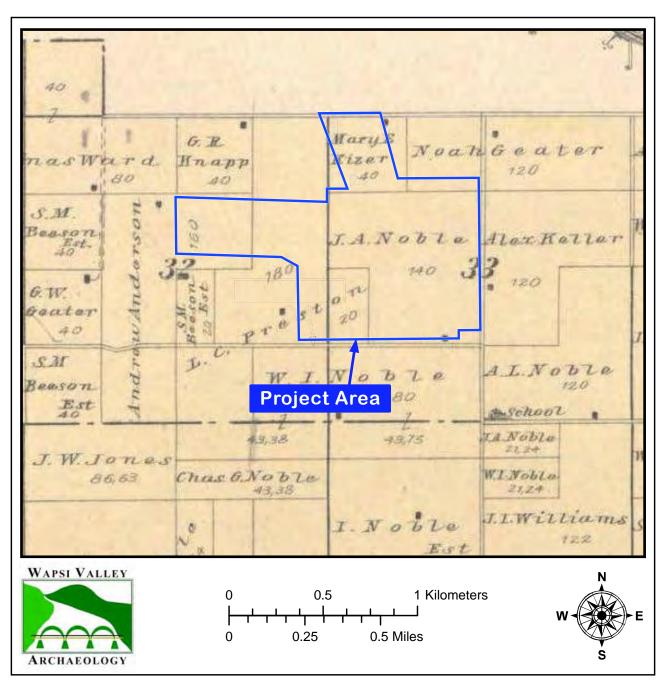


Figure 4. 1901 General Land Office survey plat map of the project area. Source: George A. Ogle (1901).

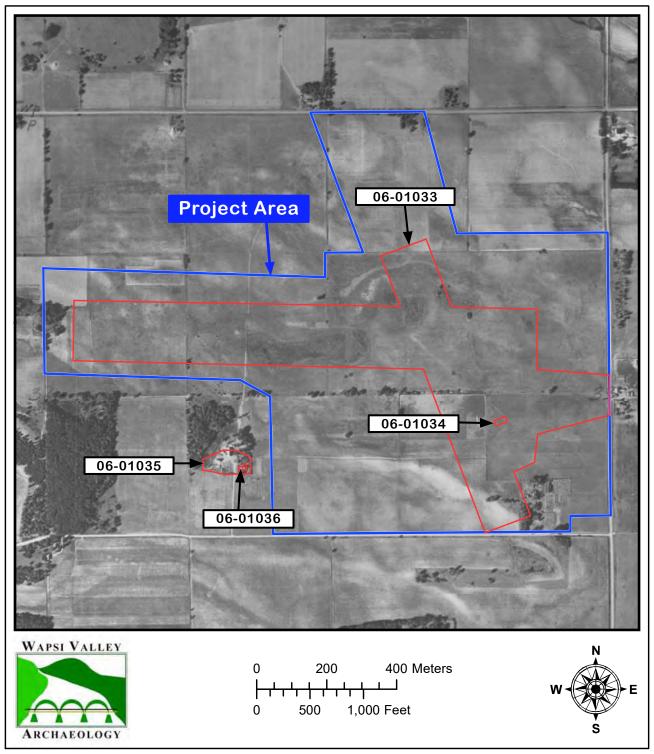


Figure 5. Late 1930s aerial photograph of the project area. Source: ISU GIS Facility (2017).

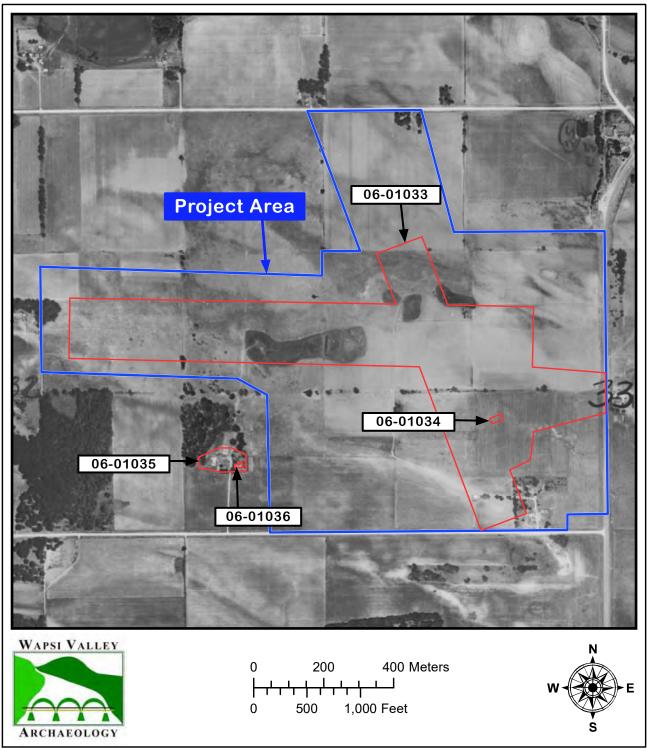


Figure 6. 1950s aerial photograph of the project area. Source: ISU GIS Facility (2017).



Figure 7. 1968–69 aerial photograph of the Vinton Veterans Memorial Airport. Source: Iowa DOT (1969).

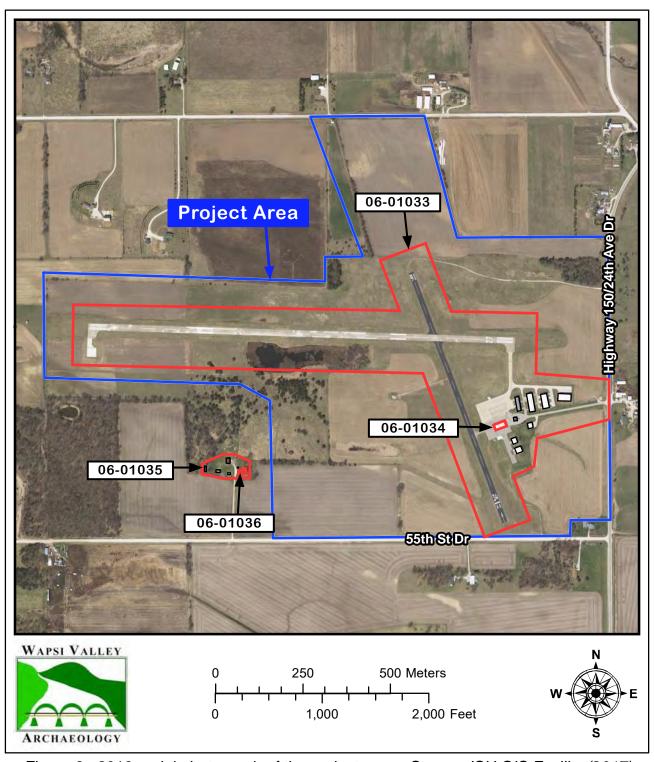


Figure 8. 2016 aerial photograph of the project area. Source: ISU GIS Facility (2017).

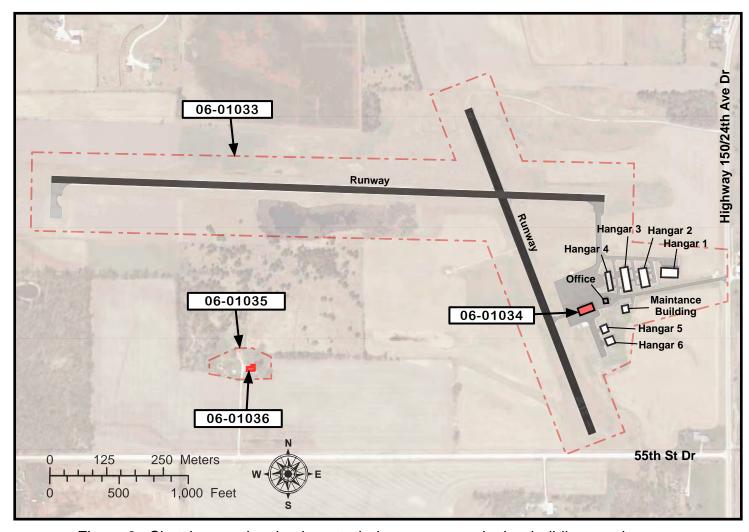


Figure 9. Sketch map showing inventoried resources and other buildings and structures at Vinton Veterans Memorial Airport.

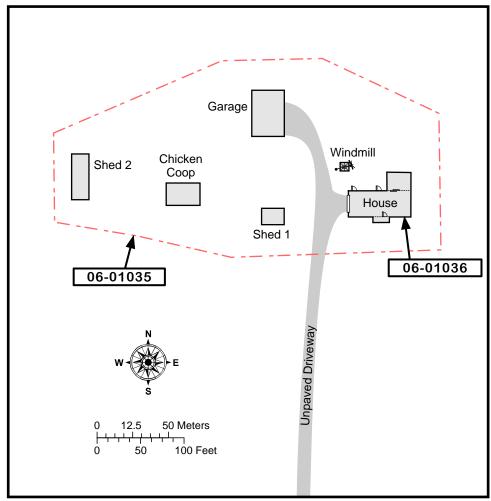


Figure 10. Sketch map of buildings and structures at 2375 55th Street Drive.



Figure 11. Office, view to the southwest.



Figure 12. Office, view to the northeast.



Figure 13. Hangar, view to the southeast.



Figure 14. Hangar, view to the northwest.



Figure 15. Hangar 1, view to the east.



Figure 16. Hangar 2, view to the southwest.



Figure 17. Hangar 2, view to the northeast.



Figure 18. Hangar 3, view to the southwest.



Figure 19. Hangar 3, view to the northeast.



Figure 20. Hangar 4, view to the southwest.



Figure 21. Hangar 4, view to the northeast.



Figure 22. Maintenance shed, view to the southwest.



Figure 23. Maintenance shed, view to the northeast.



Figure 24. Hangar 5, view to the southeast.



Figure 25. Hangar 5, view to the northwest.



Figure 26. Hangar 6, view to the southeast.



Figure 27. Hangar 6, view to the northwest.



Figure 28. House, view to the northeast.



Figure 29. House, view to the northwest.



Figure 30. House, view to the southeast.



Figure 31. Garage, view to the northwest.



Figure 32. Garage, view to the southeast.



Figure 33. Modern shed, view to the northwest.



Figure 34. Chicken coop, view to the northwest.



Figure 35. Chicken coop, view to the southeast.



Figure 36. Shed, view to the northwest



Figure 37. Shed, view to the southeast.



Figure 38. Windmill, view to the north.

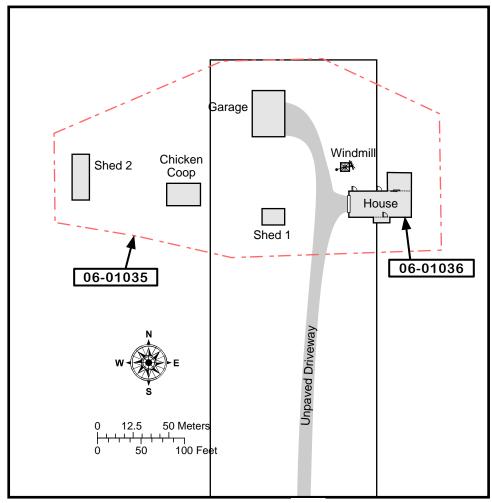


Figure 39. Sketch map of buildings and structures at 2375 55th Street Drive.

Appendix 1: HADB Form

Historical Architectural Data Base

Data Entry Form for Studies and Reports

Doc. No.: <u>06-013</u>

Source of Study:	dy: ☐ Certified Local Government Project ☐ Section 106 Review & Compliance Project ☐ Historical Resource Development Program Project ☐ Other			
	Project Reference #:			
	Compiler/Originator: rchaeology, Inc.			
Author Role:	☐ Consultant ☐ Private Researcher/Writer ☐ Teacher ☐ Student ☐ Project employee/volunteer ☐ Site Administrator ☐ Other: ☐ Other:			
	listory Survey and Evaluation of the Vinton Veterans Memorial Airport,			
Benton County,	. Iowa			
Year Issued:	<u>2018</u>			
Type of Work Pe (check one only)	rformed:			
Survey:	Windshield survey minimum level documentation Reconnaissance survey to make recommendations for intensive survey(s). Intensive survey Mixed intensive and reconnaissance survey			
Plan:	Planning for Preservation/Survey Community Preservation Plan			
Property Sti	Iowa Historic Property Documentation Study Historic American Building Survey (HABS) Historic American Engineering Record (HAER) Management or Master Plan Historic Structure Report Feasibility/Re-use Study Architectural/Engineering Plans and Specs.			
National Re	gister: Multiple Property Documentation Form			
Other (e.g., r	private research, school project, video):			

Error! Reference source not found.

Kind of Work Produced:

fill in one sectio Report:	n only: Report or Monograph or Chapter, etc.) Published/produced by: Wapsi Valley Archaeology, Inc.
	Place issued: Anamosa
	Client: Clapsaddle-Garber Inc.
	If applicable, include:
	Series Title:
	Volume #: Report #: 992
Monograph	a: Publisher Name:
	Place:
Chapter:	In: First pg. #: Last pg. #:
Journal:	Name: Vol No Pages: to
Thesis:	Degree (check one): Ph.D. LL.D. M.A. M.S. B.A. B.S.
	Name of College/University:
Paper:	Meeting:
	Place:
Other:	
Geographic Sco _l ⊠ City/tov	pe of Study: vn
State:	<u></u>
County:	Benton
Town:	<u>Vinton</u>
Township:	<u>86N</u>
Range:	<u>10W</u>
before 1830	leck any decades that receive particular attention) ☐ 1830s ☐ 1840s ☐ 1850s ☐ 1860s ☐ 1870s ☐ 1880s ☒ 1890s 10s ☐ 1920s ☐ 1930s ☐ 1940s ☐ 1950s ☒ 1960s ☒ 1970s ☒ 1980/later
19008 19	108 19208 19308 19408 19308 19008 19708 1980/later
Keyword: (Vinton	Index of any subjects, topics, or people given prominent attention in the report)
<u>Airport</u>	
<u>Aviation</u>	
Farmstead	
Agriculture	<u> </u>
<u>Hangar</u>	
	·

Appendix 2: Site Inventory Forms

STATE HISTORIC PRESERVATION OFFICE OF IOWA

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

State Inventory Number:06-0103							
9-Digit SHPO Review and Compliance (R&	C) Number:		Non-E	xtant Year:			-
IOWA SITE INVENTORY FO	RM						
Read the Iowa Site Inventory Form http://www.iowahistory.org/historic-pres					oleting this form. I	he instrui	ctions are available at
Basic Information							
Historic Building Name: Vinton	Veterans Memorial A	irpoi	<u>t</u>				
Other Names:							
Street Address: 5551 24th Ave							
City: Vinton	X Vicinity (County:	Benton	State:	IA	ZIP: _	52349
LEGAL DESCRIPTION							
Rural			Urban				
		-	Subdivision:				
			Block(s):				
Range No.: 10W		_	Lot(s):				
Section: 32 & 33	(F 1/2 and W 1/2	-					
Quarter: c		_					
Classification							
A DDODEDTY CATECORY.	D MUMBER OF RECOU	IDCEC /	WITHIN DDODEDT	v).			
A. PROPERTY CATEGORY: Building(s)	B. NUMBER OF RESOU If eligible property, ent			1).	If non-elig	ihle nro	perty, enter number of:
☐ District	Contributing		Noncontributing		ii iioii ciig	ibic pio	perty, enter number of
☐ Site	•	dings			9		Buildings
☐ Structure	Site						Sites
□ Object	 Stru	ctures					Structures
	Obje				2		Objects
	Tota				<u></u>		Total
C. STATUS OF PROPERTIES LISTED	ON THE NATIONAL REGIST	TER OF	HISTORIC PLACES	☐ Liste	d □ De-listed □] NHL [□ NPS DOE
D. FOR PROPERTIES WITHIN A H	ISTORIC DISTRICT						
 □ Property contributes to a National Re □ Property contributes to a potential □ Property does not contribute to the h 	gister or local certified historic dist historic district, based on professic	nal histo	oric/architectural surve	y and evalua	ation.		
Historic District Name:			Historic District Site Nu	umber:			
E. NAME OF RELATED PROJECT R	EPORT OR MULTIPLE PROPE	RTY S	FUDY (if applicable)				
MPD Title:			Historical Architectural	Database N	Vo		

Address: 5551 24th Avenue Drive		
City: Vinton	County: Benton	
Site Number:06-01033	District Number:	
Function or Use		
Enter categories (codes and terms) from the lowa Site Inventory Form Instructio	ns	
A. HISTORIC FUNCTIONS	B. CURRENT FUNCTIONS	
14B: Air-Related	14B: Air-Related	
Description		
A. ARCHITECTURAL CLASSIFICATION	B. MATERIALS	
_01: No Style	Foundation (visible exterior): N/A	
	Walls (visible exterior): N/A	
	Other: N/A	
C. NARRATIVE DESCRIPTION	must be completed.	
Statement of Significance		
A APPLICABLE NATIONAL REGISTER OF HISTORIC PLACES CRITE	ERIA (mark your opinion of eligibility after applying relevant National Register criteria)	
Criterion A: Property is associated with significant events.	☐ Yes X No ☐ More research recommended	
Criterion B: Property is associated with the lives of significant persons.		
Criterion C: Property has distinctive architectural characteristics.	☐ Yes 🔀 No ☐ More research recommended	
Criterion D: Property yields significant information in archaeology/history.		
B. SPECIAL CRITERIA CONSIDERATIONS (mark any special consideration)		
☐ A. Owned by a religious institution or used for religious purposes.	☐ E. A reconstructed building, object, or structure.	
☐ B. Removed from its original location.	☐ F. A commemorative property.	
☐ C. A birthplace or grave.	☐ G. Property less than 50 years of page or achieved significance within the past 50 years.	
☐ D. A cemetery		
C. AREAS OF SIGNIFICANCE (enter categories from instructions)	D. PERIOD(S) OF SIGNIFICANCE	
	N/A	
E. SIGNIFICANT DATES	F. SIGNIFICANT PERSON (complete if Criterion B is marked above)	
Construction Date: 1963		
Other Dates (including renovations): 1964		
G. CULTURAL AFFILIATION (complete if Criterion D is marked above)	H. ARCHITECT/BUILDER	
N/A	Architect: N/A	
	Builder/Contractor: N/A	

Address: <u>5551 24th Av</u>	enue Drive		
City: Vinton		County: Be	enton
Site Number: <u>06-01035</u>		District Number:	
Bibliography			
☑ See continuation sheets for	or the list research sources used in prepari	ing this form.	
Geographic Data			
	c		
OPTIONAL UTM REFERENCE See continuation sheet for a			
Zone	Easting	Northing	NAD
1		•	
2			_
3. 4.			
Form Preparation			
Name and Title: Maggie	Jones, Architectural Historia	ın	Date:11/13/2017
•	/alley Archaeology, Inc.		
Street Address: 126 East I			
mjones@wapsi	valleyarch.com	rerepnone: _ (31	9)402-4700
Additional Documentat	ion		
A EOD ALL DRODEDTIES AT	TACH THE FOLLOWING, AS SPECIFIED I	NI THE IOWA CITE INVENTORY FORM	INSTRUCTIONS
_		N THE TOWA SITE INVENTORY FORM	INSTRUCTIONS
 Map of property's location within Glossy color 4x6 photos labeled 	r the community. on back with property/building name, address, d	ate taken, view shown, and unique nhoto num	her
	umber on a map and/or floor plan, using arrows	, ,	
4. Site plan of buildings/structures	on site, identifying boundaries, public roads, and	building/structure footprints.	, ,
B. FOR ALL STATE HISTORIC	TAX CREDIT PART 1 APPLICATIONS, HIS	STORIC DISTRICTS AND FARMSTEADS	, AND BARNS
See lists of special requirements ar	nd attachments in the Iowa Site Inventory Form In:	structions.	
State Historic Preservation O	office (SHPO) Use Only		
	•	National Degister eligibility	
The SHPO has reviewed the Site ii ☐ Yes ☐ No	nventory and concurs with above survey opinion on More research recommended	on National Register eligibility:	
☐ This is a locally o	lesignated property or part of a locally designated	l district.	
Comments:			

_Date:

SHPO Authorized Signature:



600 East Locust Street | Des Moines, IA 50319 (515) 281-8742 | Fax: (515) 282-0502 www.iowahistory.org/historicpreservation July 2014

IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property: Vinton Veterans Memorial Airport	Site Number: 06-01033			
Address: 5551 24th Avenue Drive	Related District Number:			
City: Vinton County: Benton				

Description

The Vinton Veterans Memorial Airport contains one hangar constructed in 1963, an office constructed in the 1980s, six hangars constructed from the 1990s to 2013, a maintenance shed constructed in 2006, and two runways that have been sporadically replaced with newer materials. The first runway 16/34 orientation was first constructed in the mid-1960s. The second runway 09/27 was added in the 1980s.

The Vinton Veterans Memorial Airport hangar constructed in 1963 is west of all the other buildings and structures. The low-pitched, gabled hangar is clad entirely with vertical, white-colored, metal siding and is visually divided into two sections by height. The west section stands approximately three feet taller than the east section. The west elevation contains a gray-painted paneled door and a picture window. On the south half of the west elevation is a large modern bi-fold hangar door that replaced a sliding door. The south elevation contains two doors, a four-lite window, and a large hangar door that slides on a runner located on top. The hangar door was replaced in 2011 after a windstorm ripped the previous door off the hangar. The east elevation contains a green-painted metal door and is surrounded by sunbleached red-painted metal trim. The north elevation contains two square cuts into the metal siding that are secured to the building by metal locks. The west side of the north elevation contains an added air conditioning unit and a picture window with blue trim.

The eastern-oriented, side-gabled office was constructed in the mid-1990s. White vertical, vinyl siding clads the building, while black asphalt, shingles top the building. The moving south to north on the east elevation, the elevation contains a single-hung sash window, a paneled door with a single lite window covering the top half of the door. Large picture windows cover the north and west elevations. The south elevation contains a door and a single-hung sash window.

Entering the airport from 24th Avenue Drive, the first hangar to the north was constructed in 2013–2014 and is a rectangular building with a shed roof. White-colored vertical metal siding clads the bulk of the exterior, while the building's edges pop with red trim. The north elevation contains to hangar doors and two entry doors. The west elevation contains one door on its south end. All other elevations are unadorned. A white plastic fence separates the northern hangars from the driveway.

The second hangar to the north of the entrance was constructed in 2009, is gabled and clad in white-colored vertical metal siding with red trim. The east elevation contains a hangar door and a large garage door. The north elevation features on entry door. The west elevation contains a hangar door, two entry doors, and a large garage door on the south half of the elevation. The south elevation contains one door and a small adjoining window.

Between the second and third hangars sits a small rectangular storm shelter with vents and a single door on the south elevation. The third hangar is an Astro brand hangar constructed in the 1990s. The Astro hangar is clad in white vertical metal siding and features red trim on its edges. Both the east and west elevations contain two sliding hangar doors and two entry doors. The south elevation contains a single door situated under the gable.



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property: Vinton Veterans Memorial Airport	Site Number: <u>06-01033</u>			
Address: 5551 24th Avenue Drive	Related District Number:			
City: Vinton County: Benton				

South of the entrance driveway sit two identical Morton sheds acting as hangars. Both front-gabled buildings are clad in white-colored vertical metal siding and accented with red trim. The west elevations contain bi-fold hangar doors. The far-south hangar, built in 1997, contains two shuttered windows on the east elevation while the other hangar was constructed in 1992 and is unadorned on all other elevations.

The airport also contains gabled maintenance shed constructed in 2006. The shed is clad in vertical tan-colored metal siding, while dark green trim lines the bottom of the building and all edges. The shed's east elevation contains two white garage doors each with two, small windows. A white door separates the garage doors. The south elevation contains two sliding windows and a door. All other elevations are plain. The gabled building is topped with two cupola vents.

The Vinton Veterans Memorial Airport contains two runways. The 16/34 asphalt runway measures 2,500 feet by 50 feet. This runway location has been used since the 1960s; it has been replaced with newer materials over the past fifty years. The 09/27 concrete runway is 4,000 feet by 60 feet. and has been in use since the late 1980s, early 1990s.

Significance

The Vinton Veterans Memorial Airport does not meet any of the National Register Criteria of Significance. The resource is not significant under Criterion A as it is not associated with any particular significant events of the past. Although in the 1960s and 1970s, large sections of the American rail networks closed, meaning cities and states needed to invest in other forms of public infrastructure, often in the form of airports. In 1969, at the height of municipal aviation, the United States had over 6,700 public-use airports, which by 2011 dropped to around 5,000. Currently, lowa is home to 117 airports, most of which are municipal airports. The Vinton Veterans Memorial Airport was constructed at a time where many Midwestern communities were adding municipal airports to service the community aviation needs. Many lowa airports housed and continue to house businesses that service agriculture needs with aerial application of pesticides and fertilizers.

The Vinton Veterans Memorial Airport continues to be home to agricultural aviation businesses, but it is not a particularly exceptional example of an Iowa municipal airport. Similarly, the resource is not significant under Criterion B as there is no demonstrable connection between the resource and the lives of people significant to either the area or the nation. The hangars, office, and runways are not the work of a master or components to a larger architectural whole, as the recent construction of hangars and replacements of runway materials have altered the makeup of the larger architectural whole. Thus, the resource is not significant under Criterion C. Finally, the architectural and historic resources are not significant under Criterion D.



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property:Vinton Veterans Memor	ial Airport	Site Number: 06-01033		
Address: 5551 24th Avenue Drive		Related District Number:		
City: Vinton	County: Benton			

While the Vinton Veterans Memorial Airport fits into the trend of Iowa airports and is over fifty years old, it has drastically changed over time, as is evident from aerial photography. Throughout its first fifty years, the Vinton Veterans Memorial Airport has expanded exponentially while upgrading runways and hangars to meet changing needs. The only building or structure original to the airport is the west hangar that underwent large-scale replacement of hangar doors. All other buildings and structures were added after 1980. In addition, though one runway is over 50 years old, it has been entirely repaved and modified over the years. The airport does not exhibit any distinctive architectural characteristics, is not associated with any person or event of historic significance, and contains a majority of modern buildings less than fifty years old not reaching a level of collective significance to warrant a historic district. It is not eligible for listing on the National Register of Historic Places.

References

Benton County, IA Assessor." Beacon, August 22, 2017. https://beacon.schneidercorp.com/ Application.aspx?AppID=83&LayerID=782&PageTypeID=2&PageID=545.

ISU GIS Facility. "Iowa State University Geographic Information Systems Support and Research Facility." Iowa State University, Ames, Iowa. Electronic document, http://ortho.gis.iastate.edu, accessed September 2017, 2017. http://ortho.gis.iastate.edu.



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET

Name of Property: Vinton Veterans Memorial	Airport	Site Number: 06-01033
Address: 5551 24th Avenue Drive	•	Related District Number:
City: Vinton	County Ponton	

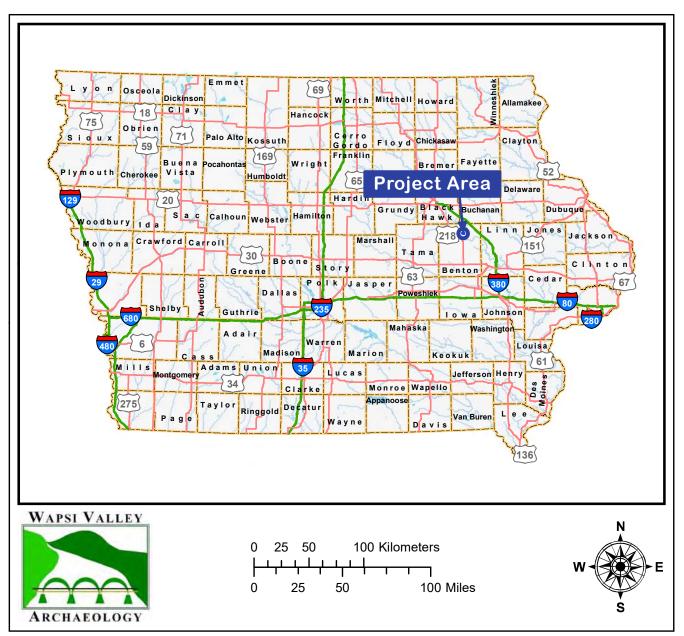


Figure 1. Map of Iowa and the general location of the survey area. Source: Iowa DNR (2016).



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET

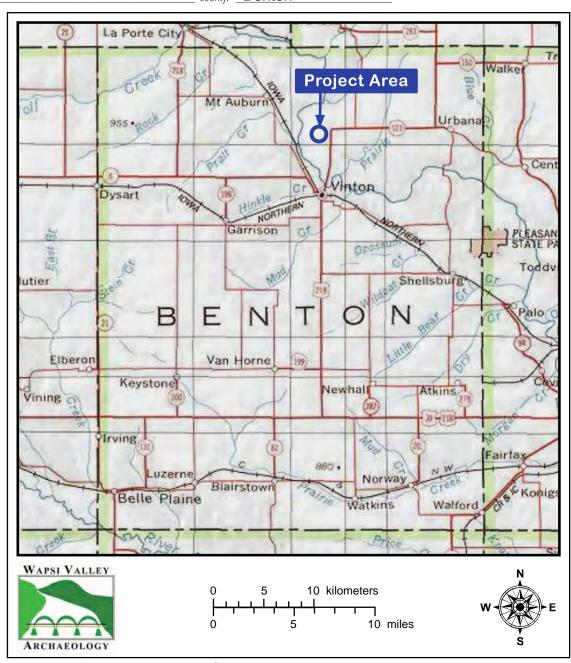


Figure 2. Map showing Benton County, Iowa, and the general location of the project area. *Source: National Geographic (2009).*



City: Vinton

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

600 East Locust Street | Des Moines, IA 50319 (515) 281-8742 | Fax: (515) 282-0502 www.iowahistory.org/historicpreservation July 2014

IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property: Vinton Veterans Memorial Airport	Site Number: 06-01033			
address: 5551 24th Avenue Drive	Related District Number:			

___ County: _Benton

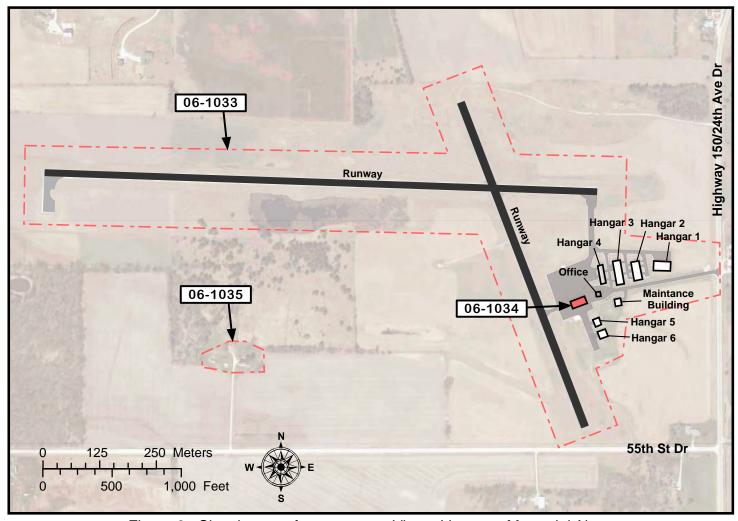


Figure 3. Sketch map of structures at Vinton Veterans Memorial Airport.



IOWA SITE INVENTORY	FORM -	CONTINUATION	SHEET
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Name of F	roperty:	Vinton Veterans Memorial Airport	Site Number: <u>06-01033</u>
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County:Benton	



Figure 4. Office, view to the southwest.



Figure 5. Office, view to the northeast.



INWA	CITE	INVENTORY FORM	- CONTINUIATION	CHFFT
IUVVA	JIIL	HINNEINI OKI FOKIM	- CONTINUATION	JIILLI

Name of P	roperty:	Vinton Veterans Memorial Airport	Site Number: _ 06-01033
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County: Benton	



Figure 6. Hangar, view to the southeast.



Figure 7. Hangar, view to the northwest.



IOWA SIT	E INVENTORY	FORM -	CONTINUATION	SHEET
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Name of F	roperty:	Vinton Veterans Memorial Airport	Site Number: 06-01033
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County: Benton	



Figure 8. Hangar 1, view to the east.



Figure 9. Hangar 2, view to the southwest.



IOWA SITE INVENTORY FO	ORM – CON1	INUATION	SHEET
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Name of F	roperty:	Vinton Veterans Memorial Airport	Site Number: _06-01033
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County: Benton	



Figure 10. Hangar 2, view to the northeast.



Figure 11. Hangar 3, view to the southwest.



IOWA SITE INVENTORY FORM – CONTINUATION SHEE	IOWA SITE	INVENTORY	FORM -	CONTINUATION	SHEET
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Name of F	Property: Vinton Veter	ans Memorial Airport	Site Number: <u>06-01033</u>
Address:	5551 24th Avenue [Drive	Related District Number:
City:	Vinton	County: Benton	



Figure 12. Hangar 3, view to the northeast.



Figure 13. Hangar 4, view to the southwest.



IOWA SITE	INVENTORY	' FORM -	CONTINUATION	SHEET
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Name of F	Property:	Vinton Veterans Memorial Airport	Site Number: 06-01033
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County: Benton	



Figure 14. Hangar 4, view to the northeast.



Figure 15. Maintenance shed, view to the southwest.



IOWA SITE	INVENTORY	FORM -	CONTINUATION	SHEET
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Name of F	roperty:	Vinton Veterans Memorial Airport	Site Number: 06-01033
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County:Benton	



Figure 16. Maintenance shed, view to the northeast.



Figure 17. Hangar 5, view to the southeast.



ΙΛΙΛΙΔ	CITE	INVENTORY	FORM _	CONTINUATION	CHEET
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Name of F	roperty:	Vinton Veterans Memorial Airport	Site Number: _06-01033
Address:	5551	24th Avenue Drive	Related District Number:
City:	Vinton	County: Benton	



Figure 18. Hangar 5, view to the northwest.



Figure 19. Hangar 6, view to the southeast.



IOWA SITE INVENTORY FORM – CONTINUATION SHEET					
Name of Property:	Vinton Veterans Memorial Airport	Site Number: _ 06-01033			
	24th Avenue Drive	Related District Number:			
City: Vinton	County: Benton				

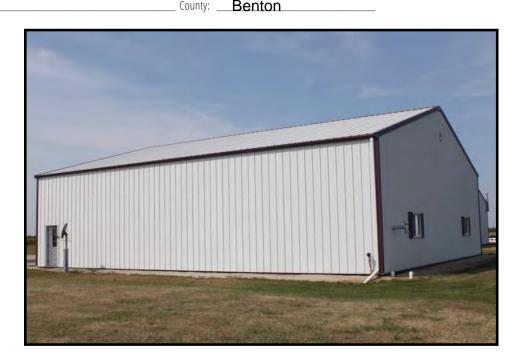


Figure 20. Hangar 6, view to the northwest.

STATE HISTORIC PRESERVATION OFFICE OF IOWA

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

State Inventory Number:06-0103			Supplemental				
9-Digit SHPO Review and Compliance (R8	C) Number:		Non-l	Extant Year:			-
IOWA SITE INVENTORY FO	PRM						
Read the Iowa Site Inventory Form http://www.iowahistory.org/historic-pres						n. The instru	ctions are available at
Basic Information							
Historic Building Name: Vinton V		•	•				
Street Address: <u>5551 24th Ave</u> City: Vinton		County:	Benton	State:	IA	ZIP:	52349
LEGAL DESCRIPTION		,					
Rural			Urban				
Township Name: <u>Taylor</u>		_	Subdivision:				
Township No.: 86N		_	Block(s):				
Range No.: 10W		-	Lot(s):				
Quarter: NE 1/4	of <u>SW 1/4</u>	-					
Classification							
A. PROPERTY CATEGORY:	B. NUMBER OF RESOU			ГҮ):	lf non a	مادة ما مادة	wanter autor windshar of
⊠ Building(s)	If eligible property, ent				IT non-e	eligible pro	perty, enter number of:
District	Contributing		Noncontributing				Duildings
Site	Sites	dings -				1	Buildings - Sites
☐ Structure		ctures		-			Structures
☐ Object	Obje			-			- Objects
	Obje			-		1	Total
				-		·	
C. STATUS OF PROPERTIES LISTER	O ON THE NATIONAL REGIST	TER OF	HISTORIC PLACES	Liste	d 🔲 De-listed	∃ NHL	□ NPS DOE
D. FOR PROPERTIES WITHIN A H	ISTORIC DISTRICT						
 □ Property contributes to a National Re □ Property contributes to a potential □ Property does not contribute to the h 	historic district, based on profession	nal hist	oric/architectural surve	ey and evalu	ation.		
Historic District Name:			Historic District Site N	lumber:			
E. NAME OF RELATED PROJECT R	EPORT OR MULTIPLE PROPE	RTY S	TUDY (if applicable)				
MPD Title:			Historical Architectura	al Database N	No.		

Address: 5551 24th Avenue Drive					
City: Vinton	County: Benton				
Site Number:06-01034	District Number:				
Function or Use					
Enter categories (codes and terms) from the Iowa Site Inventory Form Instruction	ons				
A. HISTORIC FUNCTIONS	B. CURRENT FUNCTIONS				
14B02: Airplane hangar	14B02: Airplane hangar				
Description					
A. ARCHITECTURAL CLASSIFICATION	B. MATERIALS				
09C20: Welded frame	Foundation (visible exterior): 10B: Poured Concrete				
	OFF. Ctool				
	o C. Matal				
	N1/A				
_					
C. NARRATIVE DESCRIPTION	must be completed.				
Statement of Significance					
A. APPLICABLE NATIONAL REGISTER OF HISTORIC PLACES CRITI	ERIA (mark your opinion of eligibility after applying relevant National Register criteria)				
Criterion A: Property is associated with significant events.	☐ Yes 🔀 No ☐ More research recommended				
Criterion B: Property is associated with the lives of significant persons.					
Criterion C: Property has distinctive architectural characteristics.	☐ Yes X No ☐ More research recommended				
Criterion D: Property yields significant information in archaeology/history.					
enterior b. Property fields significant mornation in architectory,	in a part of more research recommended				
$\textbf{B. SPECIAL CRITERIA CONSIDERATIONS} \ (\text{mark any special considerations}) \\$	ons; leave blank if none)				
$\hfill \square$ A. Owned by a religious institution or used for religious purposes.	☐ E. A reconstructed building, object, or structure.				
☐ B. Removed from its original location.	☐ F. A commemorative property.				
☐ C. A birthplace or grave.	☐ G. Property less than 50 years of page or achieved significance within the past 50 years.				
☐ D. A cemetery					
C. AREAS OF SIGNIFICANCE (enter categories from instructions)	D. PERIOD(S) OF SIGNIFICANCE				
	N/A				
E. SIGNIFICANT DATES	F. SIGNIFICANT PERSON (complete if Criterion B is marked above)				
Construction Date: 1963	·				
Other Dates (including renovations):					
G. CULTURAL AFFILIATION (complete if Criterion D is marked above)	H. ARCHITECT/BUILDER				
N/A					
_1V// \	Builder/Contractor: Unknown				

Address: 2375 55th Street Drive	e		
City: Vinton			nton
Site Number: <u>06-01035</u>		District Number:	
Bibliography			
✓ See continuation sheets for the list res			
Coornaulio Data			
Geographic Data			
OPTIONAL UTM REFERENCES			
See continuation sheet for additional UTM	or comments		
Zone	Easting	Northing	NAD
_			
3.			
4.			
Form Preparation			
Name and Title: Maggie Jones, A	rchitectural Historian		Date: 11/13/2017
Organization/Firm: Wapsi Valley Ar			
Street Address: 126 East Main Stre			
			ZIP: <u>52205</u>
Email: mjones@wapsivalleyare	cn.com	Telephone: _ (31 9	9)462-4760
Additional Documentation			
A. FOR ALL PROPERTIES, ATTACH THE F	OLLOWING, AS SPECIFIED IN THE	IOWA SITE INVENTORY FORM	INSTRUCTIONS
1. Map of property's location within the communi			
2. Glossy color 4x6 photos labeled on back with p			
3. Photo key showing each photo number on a m 4. Site plan of buildings/structures on site, identi		'	ation and directional view of each photograph.
		,	AND DADNE
B. FOR ALL STATE HISTORIC TAX CREDI See lists of special requirements and attachments			AND BARNS
see ists of special requirements and attachments	in the lowa site inventory rothin instruction	13.	
State Historic Preservation Office (SHPO)	Use Only		
The SHPO has reviewed the Site Inventory and c	oncurs with above survey opinion on Natio	nal Register eligibility:	
	research recommended		
☐ This is a locally designated pro	perty or part of a locally designated district		
Comments:			

_Date:

SHPO Authorized Signature:



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property: _	Vinton Veterans Memorial Airport Hangar	Site Number: 06-01034		
, , -	24th Avenue Drive	Related District Number:		
City: Vinton	County: Benton			

Description

The Vinton Veterans Memorial Airport hangar, constructed in 1963, is west of all the other buildings and structures. The low-pitched, gabled hangar is clad entirely with vertical white-colored metal siding and is visually divided into two sections by height. The west section stands approximately three feet taller than the east section. The west elevation contains a gray-painted paneled door and a picture window. On the south half of the west elevation is a large modern bi-fold hangar door that replaced a sliding door. The south elevation contains to doors, a four-lite window and a large hangar door that slides on a runner located on top. The hangar door was replaced in 2011 after a windstorm ripped the previous door off the hangar. The east elevation contains a green-painted metal door and is surrounded by sun-bleached red-painted metal trim. The north elevation contains two squares cut into the metal siding that are secured to the building by metal locks. The west side of the north elevation contains an added air conditioning unit and a picture window with blue trim

Significance

The Vinton Veterans Memorial Airport hangar does not meet any of the National Register Criteria. The resource is not significant under Criterion A as it is not associated with any particular significant events of the past. In the 1960s and 1970s, large sections of the American rail networks closed, meaning cities and states needed to invest in other forms of public infrastructure, often in the form of airports. In 1969, at the height of municipal aviation, the United States had over 6,700 public-use airports, which by 2011 dropped to around 5,000. Currently, low is home to 117 airports, most of which are municipal airports. The Vinton airport is a general service airport that is municipally owned and operated. The Vinton Veterans Memorial Airport was constructed at a time where many Midwestern communities were adding municipal airports to service the community aviation needs. Many lowa airports housed and continue to house businesses that service agriculture needs with aerial application of pesticides and fertilizers. The historic hangar continues to be home to agricultural aviation businesses, but it is not a particularly exceptional example of a hangar. Similarly, the resource is not significant under Criterion B as there is no demonstrable connection between the resource and the lives of people significant to either the area or the nation. The hangar is not the work of a master, as the recent replacement of metal walls and doors have altered the makeup of the larger architectural whole. Thus, the resource is not significant under Criterion C. Finally, the architectural and historic resources are not significant under Criterion D.

The historic hangar does not exemplify any notable characteristics and has been modified with modern-style hangar does that diminish the integrity of the building. The hangar does not exhibit any distinctive architectural characteristics, nor is it associated with any person or event of historic significance. It is currently not eligible for listing on the National Register of Historic Places, and therefore, no further research is recommended at this time.

References

"Benton County, IA Assessor." Beacon, August 22, 2017. https://beacon.schneidercorp.com/Application.aspx? ApplD=83&LayerID=782&PageTypeID=2&PageID=545.

ISU GIS Facility. "Iowa State University Geographic Information Systems Support and Research Facility." Iowa State University, Ames, Iowa. Electronic document, http://ortho.gis.iastate.edu, accessed September 2017, 2017. http://ortho.gis.iastate.edu.



IOWA SITE INVENTORY I	FORM –	CONTINUATION	SHEET
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Name of Pr	operty: Vinton Veterans Memorial Airport Hangar	Site Number: _06-01034
Address: _	5551 24th Avenue Drive	Related District Number:
City:V	Tinton County: Benton	

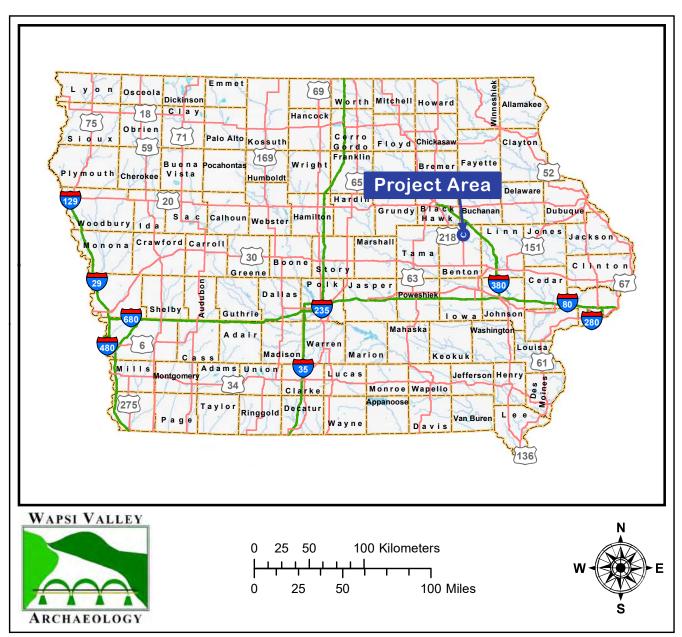


Figure 1. Map of Iowa and the general location of the survey area. Source: Iowa DNR (2016).



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Name of Property:	Vinton Veterans Memorial Airport Hangar	Site Number: 06-01034
. , ,	24th Avenue Drive	Related District Number:
City: Vinton	County: _Benton	_

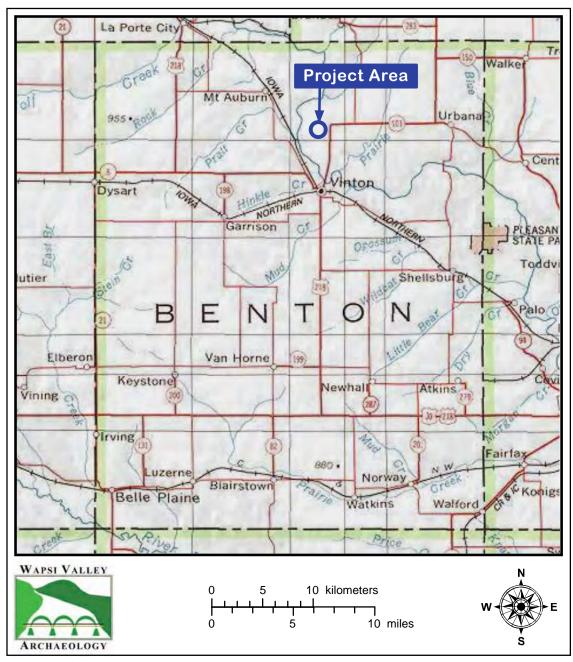


Figure 2. Map showing Benton County, Iowa, and the general location of the project area. *Source: National Geographic (2009).*



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Name of Property: _	Vinton Veterans Memorial Airport Hangar	Site Number: 06-01034
, , -	24th Avenue Drive	Related District Number:
City:Vinton	County: Benton	

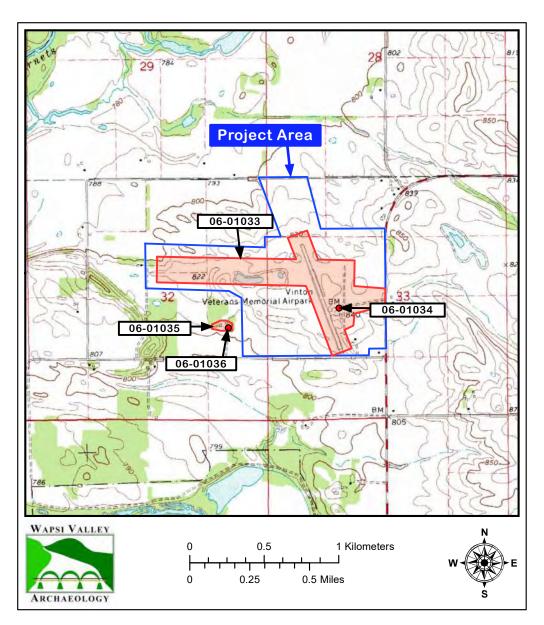


Figure 3. Map showing topography and elevations within the study area. Source: USGS La Moille, Iowa (1975), 7.5' Series Quadrangle Map.



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Name of Property:Vinton Veterans M	lemorial Airport Hangar	Site Number: 06-01034
Address: 5551 24th Avenue Drive	, ,	Related District Number:
City: Vinton	County: Benton	

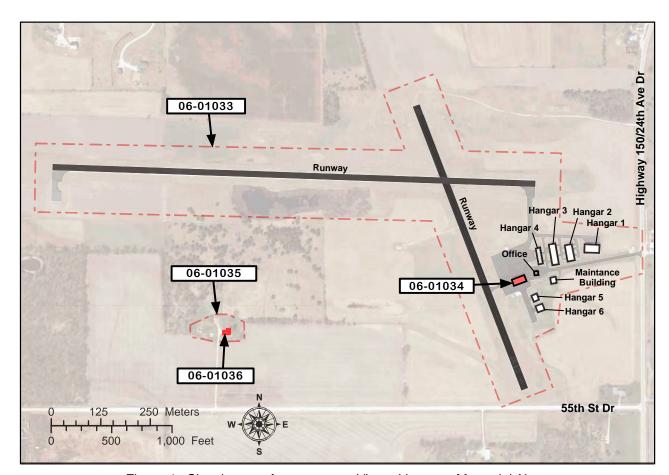


Figure 4. Sketch map of structures at Vinton Veterans Memorial Airport.



IOWA SITE	INVENTORY	FORM -	CONTINUATION	SHEET
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Name of Property:	Vinton Veterans Memorial Airport Hangar	Site Number: 06-01034
	24th Avenue Drive	Related District Number:
City:Vinton	County: Benton	



Figure 5. Hangar, view to the southeast.



Figure 6. Hangar, view to the northwest.

STATE HISTORIC PRESERVATION OFFICE OF IOWA

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

State Inventory Number: <u>06-010</u>							
9-Digit SHPO Review and Compliance (R8	&C) Number:			extant Year:			-
IOWA SITE INVENTORY FO	DRM						
Read the Iowa Site Inventory Forn http://www.iowahistory.org/historic-pre					oleting this form. T	The instru	ctions are available at
Basic Information							
Historic Building Name: L.C. Pro Other Names: Street Address: 2375 55th Str							
City: Vinton	X Vicinity	County:	Benton	State:	IA	ZIP: _	52349
LEGAL DESCRIPTION							
Rural			Urban				
			Subdivision:				
			Block(s):				
Range No.: 10W			Lot(s):				
Section: 32							
Quarter: NE 1/4	of SE 1/4						
Classification							
A. PROPERTY CATEGORY:	B. NUMBER OF RESC	OLIDCES (WITHIN DDODEDT	rv\•			
Building(s)	If eligible property, e			1).	If non-elis	zible pro	perty, enter number of:
☐ District	Contributing		Noncontributing			, p. v	parsy, and manual an
☐ Site	•	uildings			5		Buildings
☐ Structure		ites					. Sites
☐ Object		tructures					Structures
<u></u> објест		bjects			1		. Objects
		otal		•	6		Total
C. STATUS OF PROPERTIES LISTE	D ON THE NATIONAL REGI	STER OF	HISTORIC PLACES	National		⊐ инг г	¬ NPS DOF
		JIER OI	THIS TO KITC I ENCES	Liste	a E De listed [
 D. FOR PROPERTIES WITHIN A H Property contributes to a National R Property contributes to a potential Property does not contribute to the l 	egister or local certified historic d historic district, based on profes	sional histo	oric/architectural surve	ey and evalua	ation.		
Historic District Name:			Historic District Site N	umber:			
E. NAME OF RELATED PROJECT R	EPORT OR MULTIPLE PRO	PERTY ST	FUDY (if applicable)				
MPD Title:			Historical Architectura	ıl Database N	lo		

Address: 2375 55th Street Drive	
City: Vinton	County: Benton
Site Number:06-01035	District Number:
Function or Use	
Enter categories (codes and terms) from the lowa Site Inventory Form Instruction	ons
A. HISTORIC FUNCTIONS	B. CURRENT FUNCTIONS
09B01: Farmstead	09B01: Farmstead
D 1.0	
Description	
A. ARCHITECTURAL CLASSIFICATION	B. MATERIALS
01: No Style	
	A 1 / A
	other. IN/A
C. NARRATIVE DESCRIPTION $\ \ \ \ \ \ \ \ $	must be completed.
Statement of Significance	
A. APPLICABLE NATIONAL REGISTER OF HISTORIC PLACES CRITI	ERIA (mark your opinion of eligibility after applying relevant National Register criteria)
Criterion A: Property is associated with significant events.	☐ Yes 🔀 No ☐ More research recommended
Criterion B: Property is associated with the lives of significant persons.	
Criterion C: Property has distinctive architectural characteristics.	☐ Yes 🔀 No ☐ More research recommended
Criterion D: Property yields significant information in archaeology/history.	
B. SPECIAL CRITERIA CONSIDERATIONS (mark any special considerati	ions: leave hlank if none)
☐ A. Owned by a religious institution or used for religious purposes.	☐ E. A reconstructed building, object, or structure.
☐ B. Removed from its original location.	☐ F. A commemorative property.
C. A birthplace or grave.	☐ G. Property less than 50 years of page or achieved significance within the past 50 years.
D. A cemetery	G. Property less than 50 years of page of definered significance within the past 50 years.
C. AREAS OF SIGNIFICANCE (enter categories from instructions)	D. PERIOD(S) OF SIGNIFICANCE
C. ARLAS OF SIGNIFICANCE (enter categories from histractions)	N/A
E. SIGNIFICANT DATES	F. SIGNIFICANT PERSON (complete if Criterion B is marked above)
Construction Date: <u>1897</u>	N/A
Other Dates (including renovations):	
G. CULTURAL AFFILIATION (complete if Criterion D is marked above)	H. ARCHITECT/BUILDER
N/A	
	Builder/Contractor: Unknown

Address: 2375 55th S	Street Drive				
		County: Ber	County: Benton		
Site Number:06-01035					
Bibliography					
✓ See continuation sheets	s for the list research sources used in preparir	ng this form.			
Geographic Data					
OPTIONAL UTM REFEREN	ICFS				
	or additional UTM or comments				
Zone	Easting	Northing	NAD		
1.	•	-			
•					
			_		
4			_		
Form Preparation					
Name and Title: Maggi	ie Jones, Architectural Historiar	n	Date: <u>11/13/2017</u>		
•	i Valley Archaeology, Inc.				
Street Address: 126 Eas					
•	vojvollovorob com				
Email: Injoines@wap	osivalleyarch.com		1]402-4700		
Additional Document	ation				
A. FOR ALL PROPERTIES,	ATTACH THE FOLLOWING, AS SPECIFIED IN	I THE IOWA SITE INVENTORY FORM I	NSTRUCTIONS		
1. Map of property's location wi	thin the community.				
,	ed on back with property/building name, address, da				
, , ,	o number on a map and/or floor plan, using arrows n	, ,	ition and directional view of each photograph.		
	res on site, identifying boundaries, public roads, and	,			
	RIC TAX CREDIT PART 1 APPLICATIONS, HIS	•	AND BARNS		
See lists of special requirements	s and attachments in the lowa Site Inventory Form Inst	tructions.			
State Historic Preservation	 n Office (SHPO) Use Only				
	te Inventory and concurs with above survey opinion or	n National Pagistar aligibility			
Yes N		i Mational Register Engionity.			
☐ This is a local	ly designated property or part of a locally designated	district.			
Comments:					

_Date:

SHPO Authorized Signature:



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property:L.C.		ad	Site Number: 06-01035	
Address: 2375 55th Street Drive			Related District Number:	
City: Vinton		County: Benton		
L.C. Preston Fari	<u>mstead</u>			
House	1897			
Garage	1999			
Saltbox Shed	c. 1940			
Chicken Coon	c 1940			

Description

Windmill

Loafing Shed

2008

c. 1940

The L.C. Preston farmstead consists of six buildings and structures that remain on the farmstead. The resources include a house, garage, two sheds, and a chicken coop. The house, one shed, chicken coop, and windmill are historic, while the garage and other shed are less than fifty years old.

The two-story, irregularly shaped L.C. Preston farmhouse was once a rectangular folk-style house before two additions to the west and north elevations altered the shape of the building. According to Benton County Assessor records, the farmhouse was constructed in 1897. The south-oriented farmhouse sits on a brown-painted concrete foundation and is clad in light-yellow modern vinyl siding. The irregular, brown metal modern roof shows multiple periods of construction as the original rectangular house features a hipped roof on its eastern elevation, while all other rooflines are gabled. Most windows are narrow single-hung sash windows.

The south elevation features the primary entrance under a shed-roofed elevated wooden porch. On the original building are thin single-hung sash windows. To the west of the porch and original house lies a two-story addition with a double-car garage on the house's west elevation. The second story of the addition includes living quarters with a Palladian-style window arrangement on the west elevation. The north elevation features an elevated second-story gabled addition. Under the north addition sits a sliding door and concrete deck. The east elevation features a bay window topped with the same brown metal roofing material the rest of the house is clad in.

The rectangular garage west of the house is clad in horizontal tan-colored vinyl siding and topped with a brown metal roof. The 1999 garage features two white, paneled garage doors on the east and south elevations. The east elevation also includes a gray, metal storm door with a nine-lite window. Three sliding windows dot the garage's north and west elevations.

The saltbox-styled gabled shed directly south of the garage was constructed in 1940 and is clad in horizontal yellow-colored vinyl siding and topped with a white metal roof. The shed features a gray-painted door on the east elevation. On the south elevation, under exposed rafter is a sliding window. The south elevation also connects to a fenced-in concrete slab used as a dog kennel.



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET			
Name of Property: L.C. Preston Farmstead	Site Number: 06-01035		
Address: 2375 55th Street Drive	Related District Number:		
City: Vinton County: Benton			

West of the gabled shed sits a coop clad in various vertical metals and a brown metal covered, half-monitor roof. The east elevation of the 1940 chicken coop features a large opening. The south elevation contains several openings and windows in the half-monitor roof. The west and north elevations contains louvered vents as the coop is used for goats and various animals.

West of the chicken coop sits a modern, six-bay, metal loafing shed constructed in 2008. The shed-roofed shed sits on a concrete slab and is clad in vertical tan-colored metal siding with brown trim and a brown metal roof.

A metal windmill in a deteriorated state sits to the north of the house. Beneath the structure is a concrete-covered well.

A crushed-gravel drive connects the main house to the 55th Street Drive. A poured-concrete half—basketball court sits north of the house. Fields surround the farmstead's south, east, and west sides, while evergreen trees line the properties north boundary.

Significance

T. E. Savage in the 1905 Geology of Benton County writes, "Benton is pre-eminently an agricultural county." Today, the majority of Benton County farms are mid-sized farms with near-equal numbers of farms between 10 and 49, as 50 to 179, as 500 to 999 acres. Far fewer farms are on the wide-ends of the size spectrum between 1 and 9 acres and over 1,000 acres. The majority of Taylor Township is agricultural land. The history of agriculture in Benton County fits into a larger national trend toward consolidation in this sector. Throughout the twentieth and twenty-first centuries, agricultural technology also led to shifts in rural community culture and the landscape of lowa farms. With modern tractor innovations, farmers can farm more and more land in less time. This pattern has led to fewer farmers and farms while using the same amount of farmland.

The 1872 plat map shows the farmstead land owned by J.S. Singleton. By 1885, farmer L.C. Preston owned the land and the plat map shows the first known house built on the property. Assessor records show the current house was constructed in 1897. Preston owned the property through at least 1901, but by 1917 farmer Frank Bednar owned the property. The 1930 plat map shows Bednar as the property owner. It is unknown who owned the property in 1940 when the chicken coop and a shed were constructed. Erik C. and Leslie J. Moen are the current owners of the property. The house has undergone several significant changes that sever its history as a farmhouse. The large additions to the west and north elevations as well as metal roof and vinyl siding all are departures from the folk style the simple farmhouse once exhibited.



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property: L.C. Prest	on Farmstead	Site Number: _ 06-01035		
Address: 2375 55th Street	Drive	Related District Number:		
City: Vinton	County: Benton			

The farmstead does not exhibit any distinctive architectural characteristics, is not associated with any person or event of historic significance, and does not reach a level of collective significance or distinction to warrant a historic district. It is currently not eligible for listing on the National Register of Historic Places, and therefore, no further research is recommended at this time.

References

"Benton County, IA Assessor." Beacon, August 22, 2017. https://beacon.schneidercorp.com/Application.aspx?AppID=83&LayerID=782&PageTypeID=2&PageID=545.

ISU GIS Facility. "Iowa State University Geographic Information Systems Support and Research Facility." Iowa State University, Ames, Iowa. Electronic document, http://ortho.gis.iastate.edu, accessed September 2017, 2017. http://ortho.gis.iastate.edu



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET

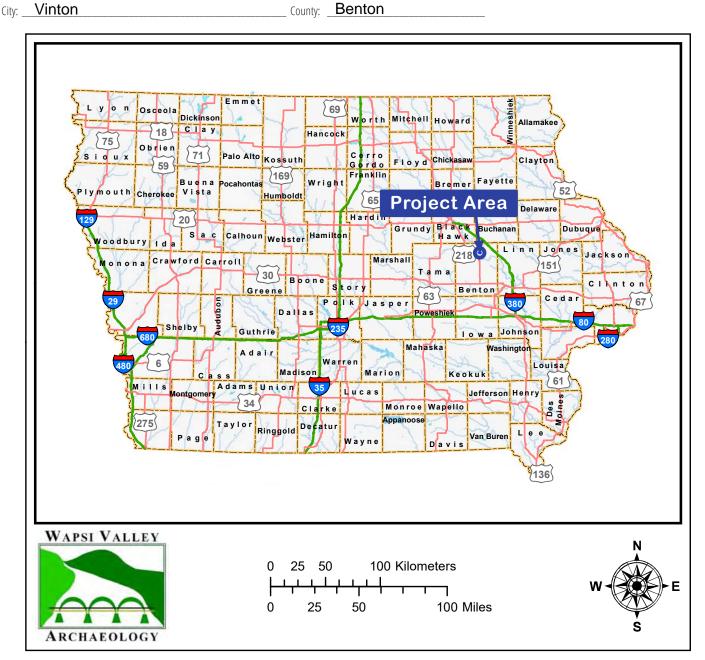


Figure 1. Map of Iowa and the general location of the survey area. Source: Iowa DNR (2016).



IOWA SITE INVENTORY FORM -	CONTINUATION	SHEET
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Name of Property:L.C. Preston Farmstead		Site Number: 06-01035
Address: 2375 55th Street Drive		Related District Number:
City: Vinton	County: Benton	

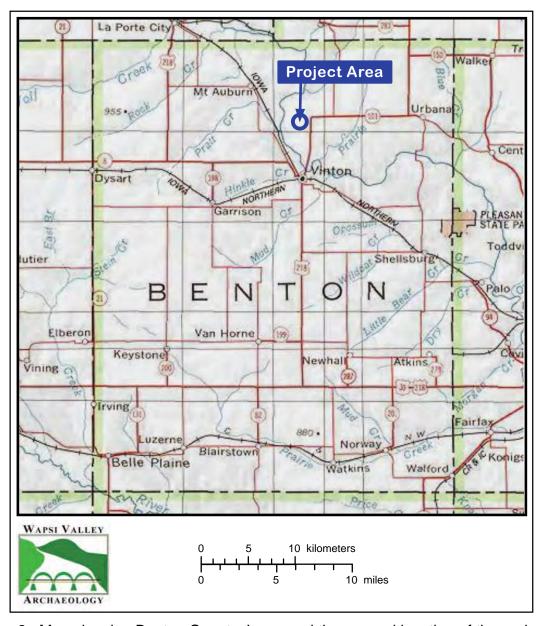


Figure 2. Map showing Benton County, Iowa, and the general location of the project area. *Source: National Geographic (2009).*



City: Vinton

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

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IOWA SITE INVENTORY FORM – CONTINUATION SHEET

 Name of Property:
 L.C. Preston Farmstead
 Site Number:
 06-01035

 Address:
 2375 55th Street Drive
 Related District Number:

County: Benton

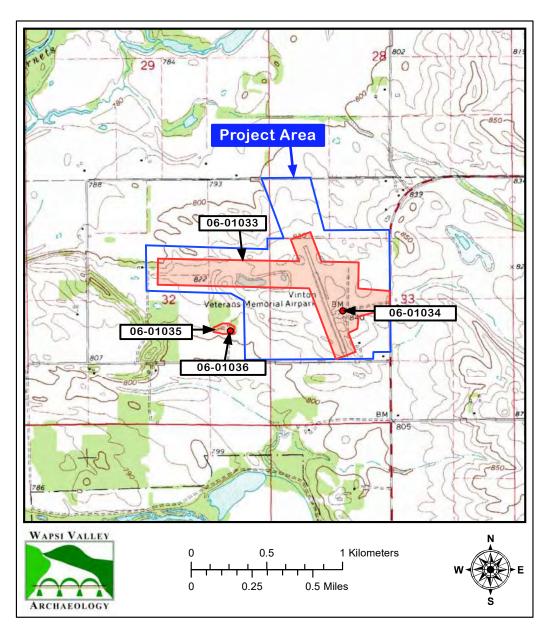


Figure 3. Map showing topography and elevations within the study area. Source: USGS La Moille, Iowa (1975), 7.5' Series Quadrangle Map.



IOWA SITE INVENTORY FORM – CONTINUATION SHEET			
Name of Property: L.C. Preston Farmstead		Site Number: 06-01035	
Address: 2375 55th Street Drive		Related District Number:	
City: Vinton	_ County: _Benton		

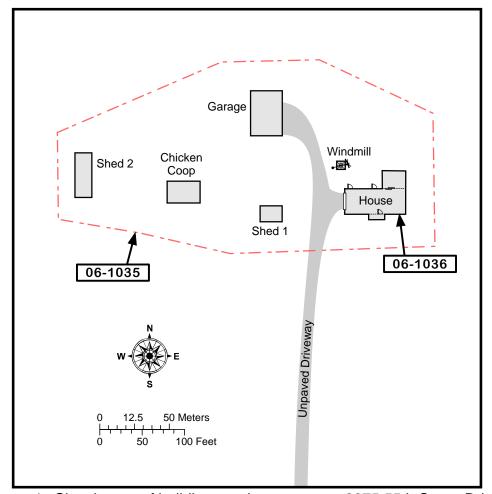


Figure 4. Sketch map of buildings and structures at 2375 55th Street Drive.



IOWA SITE INVENTOR	FORM –	CONTINUATION	SHEET
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Name of Property: L.C. Preston Farmstead		Site Number: <u>06-01035</u>
Address: 2375 55th Street Drive		Related District Number:
City: Vinton	County: Benton	



Figure 5. House, view to the northeast.



Figure 6. House, view to the northwest.



Name of Property:L.C. Presto	on Farmstead	Site Number: 06-01035
Address: 2375 55th Street		Related District Number:
City: Vinton	County: Benton	



Figure 7. House, view to the southeast.



Figure 8. Garage, view to the northwest.



IOWA SITE	INVENTORY	FORM -	CONTINUATION	SHEET
IOWA SIIL	IINVLINIONI	FURIVI -	CONTINUATION	JIILL

Name of Property: L.C. Preston Farmstead		Site Number: <u>06-01035</u>
Address: 2375 55th Street Drive		Related District Number:
City: Vinton	County: Benton	



Figure 9. Garage, view to the southeast.



Figure 10. Modern shed, view to the northwest.



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Name of	Property: L.C. Preston Farmstead			Site Number: <u>06-01035</u>
Address:	2375 55th Street Drive			Related District Number:
City:	Vinton	County: _	Benton	



Figure 11. Chicken coop, view to the northwest.



Figure 12. Chicken coop, view to the southeast.



Name of	Property:	L.C. Preston Farmstead			 Site Number: <u>06-01035</u>
Address:	2375 5	55th Street Drive			 Related District Number:
City:	Vinton		_ County:	Benton	



Figure 13. Shed, view to the northwest



Figure 14. Shed, view to the southeast.



IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property:L.C. Preston Farm	nstead	Site Number: _06-01035		
Address: 2375 55th Street Drive		Related District Number:		
City: Vinton	County: Benton			



Figure 15. Windmill, view to the north.

STATE HISTORIC PRESERVATION OFFICE OF IOWA

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

State Inventory Number: 06-010					
9-Digit SHPO Review and Compliance (R8	&C) Number:		Extant Year:		
IOWA SITE INVENTORY FO	DRM				
Read the Iowa Site Inventory Forn http://www.iowahistory.org/historic-pre				is form. The ins	tructions are available at
Basic Information					
Historic Building Name: L.C. Pro Other Names: Street Address: 2375 55th Sti					
City: Vinton	🔀 Vicinity County	Benton	State: IA	ZIF	: _ 52349
LEGAL DESCRIPTION					
Rural		Urban			
		Subdivision:			
		Block(s):			
Range No.: 10W		Lot(s):			
Section: 32					
Quarter: NE 1/4	of <u>SE 1/4</u>				
Classification					
A. PROPERTY CATEGORY:	D MIIMDED OF DECOLIDES	C (WITHIN DDODED	ΓV\•		
X Building(s)	B. NUMBER OF RESOURCES If eligible property, enter nu			non-eligible r	property, enter number of:
District	Contributing	Noncontributing		non engine i	roperty, enter number on
☐ Site	Buildings	g		1	Buildings
☐ Structure	Sites			'	Sites
☐ Object	Structures				Structures
<u> Порјест</u>	Objects				— Objects
	Total			1	Total
					_
C. STATUS OF PROPERTIES LISTE	D ON THE NATIONAL REGISTER (OF HISTORIC PLACES	Listed De	-listed NH	L NPS DOE
D. FOR PROPERTIES WITHIN A H	IISTORIC DISTRICT				
 Property contributes to a National Re Property contributes to a potential Property does not contribute to the land 	historic district, based on professional h	istoric/architectural surv	ey and evaluation.		
Historic District Name:		Historic District Site N	lumber:		
E. NAME OF RELATED PROJECT R	EPORT OR MULTIPLE PROPERTY	STUDY (if applicable)			
MPD Title		Historical Architectura	al Database No		

Address: 2375 55th Street Drive		
	County:Benton	
Site Number:06-01036	District Number:	
Function or Use		
Enter categories (codes and terms) from the lowa Site Inventory Form Instruction	ins	
A. HISTORIC FUNCTIONS	B. CURRENT FUNCTIONS	
01A01: Single Dwelling Residence		
Description		
A. ARCHITECTURAL CLASSIFICATION	B. MATERIALS	
09A: Other	Foundation (visible exterior): 10B: Poured Concrete	
	Walls (visible exterior): 15B: Vinyl	
	Roof: 05F: Steel	
	Other:	
C. NARRATIVE DESCRIPTION	must be completed.	
Statement of Significance		
A APPLICABLE NATIONAL REGISTER OF HISTORIC PLACES CRITE	ERIA (mark your opinion of eligibility after applying relevant National Register criteria)	
Criterion A: Property is associated with significant events.	☐ Yes 🔀 No ☐ More research recommended	
Criterion B: Property is associated with the lives of significant persons.	☐ Yes 🔀 No ☐ More research recommended	
	☐ Yes 🔀 No ☐ More research recommended	
Criterion C: Property has distinctive architectural characteristics.		
Criterion D: Property yields significant information in archaeology/history.	☐ Yes 🔀 No 🗌 More research recommended	
B. SPECIAL CRITERIA CONSIDERATIONS (mark any special considerations)	ons; leave blank if none)	
☐ A. Owned by a religious institution or used for religious purposes.	☐ E. A reconstructed building, object, or structure.	
☐ B. Removed from its original location.	☐ F. A commemorative property.	
☐ C. A birthplace or grave.	☐ G. Property less than 50 years of page or achieved significance within the past 50 years.	
☐ D. A cemetery		
C. AREAS OF SIGNIFICANCE (enter categories from instructions)	D. PERIOD(S) OF SIGNIFICANCE	
	N/A	
	_	
E. SIGNIFICANT DATES	F. SIGNIFICANT PERSON (complete if Criterion B is marked above)	
Construction Date: <u>1897</u>		
Other Dates (including renovations):		
G. CULTURAL AFFILIATION (complete if Criterion D is marked above)	H. ARCHITECT/BUILDER	
N/A	Architect: Unknown	
	Builder/Contractor: Unknown	

Address: 2375 55th Str	eet Drive		
City: Vinton County: Be			nton
Site Number: <u>06-01036</u>		District Number:	
Bibliography			
✓ See continuation sheets for	or the list research sources used in preparing	this form.	
Coornantia Data			
Geographic Data			
OPTIONAL UTM REFERENCE	S		
See continuation sheet for a	dditional UTM or comments		
Zone	Easting	Northing	NAD
1. 2.			
4.			
Form Preparation			
Name and Title: Maggie	Jones, Architectural Historian		Date:11/13/2017
•	Valley Archaeology, Inc.		
Street Address: 126 East I		Chata. IA	
•	valleyarch.com		
indii. <u>injerioo e mapo</u> i	rano jaromicom	reteptione. <u>Con</u>	0) 102 1100
Additional Documentat	ion		
A. FOR ALL PROPERTIES, AT	TACH THE FOLLOWING, AS SPECIFIED IN	THE IOWA SITE INVENTORY FORM	INSTRUCTIONS
1. Map of property's location within	•		
	on back with property/building name, address, date	taken, view shown, and unique photo numl	ber.
3. Photo key showing each photo n	umber on a map and/or floor plan, using arrows ne	xt top each photo number to indicate the loc	ation and directional view of each photograph.
4. Site plan of buildings/structures	on site, identifying boundaries, public roads, and b	uilding/structure footprints.	
B. FOR ALL STATE HISTORIC	TAX CREDIT PART 1 APPLICATIONS, HIST	ORIC DISTRICTS AND FARMSTEADS,	, AND BARNS
See lists of special requirements ar	nd attachments in the Iowa Site Inventory Form Instr	uctions.	
State Historic Preservation C	Office (SHPO) Use Only		
	nventory and concurs with above survey opinion on	National Dogistor oligibility	
Yes No	More research recommended	National Register eligibility.	
☐ This is a locally o	designated property or part of a locally designated di	strict.	
Comments:			

_Date:

SHPO Authorized Signature:



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property: L.C. Preston House		Site Number: 06-01036		
Address: 2375 55th Street Drive		Related District Number:		
City: Vinton	County: Benton			

Description

The two-story, irregularly shaped L.C. Preston house was once a rectangular folk-style house before two additions to the west and north elevations altered the shape of the building. According to Benton County Assessor records, the farmhouse was constructed in 1897. The south-oriented farmhouse sits on a brown-painted concrete foundation and is clad in light-yellow vinyl siding. The irregular, brown metal roof shows multiple periods of construction as the original rectangular house features a hipped roof on its eastern elevation, while all other rooflines are gabled. Most windows are narrow single-hung sash windows.

The south elevation features the primary entrance under a shed-roofed elevated wooden porch. On the original building are thin single-hung sash windows. West of the porch and original house lies a two-story addition with a double-car garage on the house's west elevation. The second story of the addition includes living quarters with a Palladian-style window arrangement on the west elevation. The north elevation features an elevated second-story gabled addition. Under the north addition sits a sliding door and concrete deck. The east elevation features a bay window topped with the same brown metal roofing material the rest of the house is clad in.

Significance

The L.C. Preston house has undergone several significant changes that sever its history as a farmhouse. The large additions to the west and north elevations as well as metal roof and vinyl siding all are departures from the folk-style the simple farmhouse once exhibited. The house does not exhibit any distinctive architectural characteristics and is not associated with any person or event of historic significance. It is currently not eligible for listing on the National Register of Historic Places, and therefore, no further research is recommended at this time.

References

"Benton County, IA Assessor." Beacon, August 22, 2017. https://beacon.schneidercorp.com/ Application.aspx?AppID=83&LayerID=782&PageTypeID=2&PageID=545.

ISU GIS Facility. "Iowa State University Geographic Information Systems Support and Research Facility." Iowa State University, Ames, Iowa. Electronic document, http://ortho.gis.iastate.edu, accessed September 2017, 2017. http://ortho.gis.iastate.edu.

OSA-UI. "I-Sites: An Online GIS and Database for Iowa Archaeology. Office of the State Archaeologist, University of Iowa, Iowa City, Iowa. Electronic Document, Http://Ags.gis.iastate.edu/IsitesPublicAccess/, Accessed November 2017," 2017. http://ags.gis.iastate.edu/IsitesPublicAccess/.



Address: 2375 55th Street Drive

STATE HISTORIC PRESERVATION OFFICE IOWA SITE INVENTORY

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Related District Number: _

IOWA SITE IN	NVENTORY FORM – CONTINUATION SHEET	
Name of Property:	L.C. Preston House	Site Number: <u>06-01036</u>

City: Vinton County: Benton

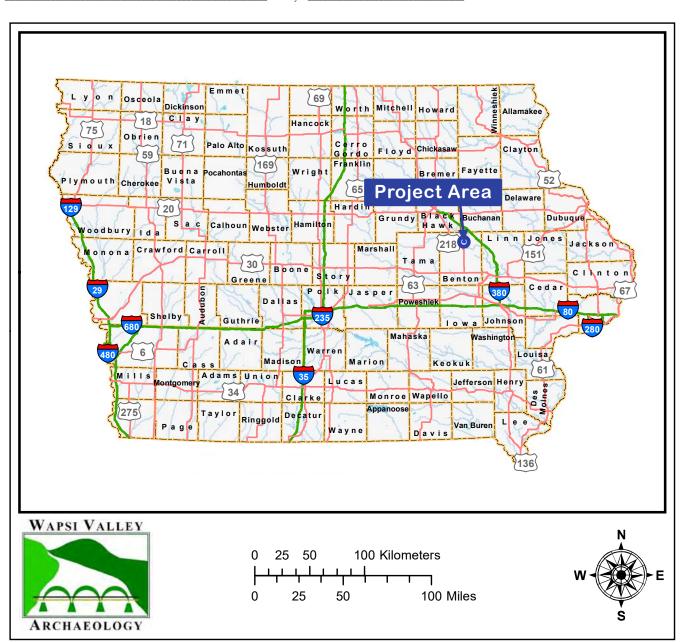


Figure 1. Map of Iowa and the general location of the survey area. Source: Iowa DNR (2016).



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Name of	Property:L.C. Preston House		Site Number: _ 06-01036
Address:	2375 55th Street Drive		Related District Number:
City:	Vinton	County: Benton	

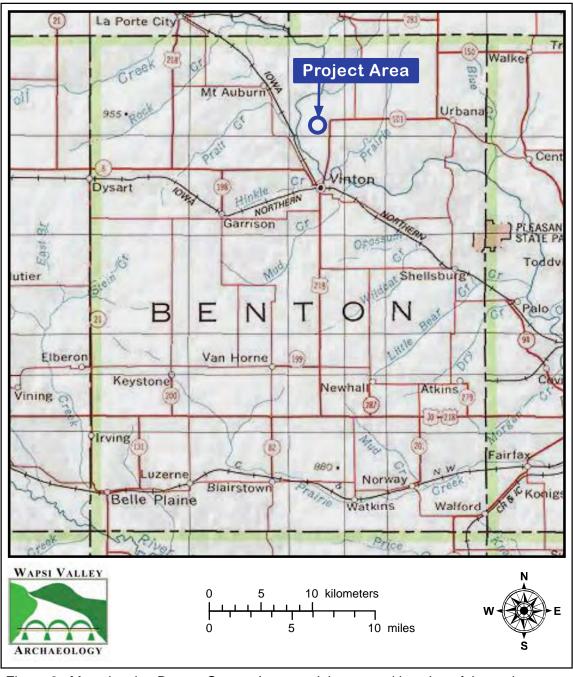


Figure 2. Map showing Benton County, Iowa, and the general location of the project area. *Source: National Geographic (2009)*.



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IOWA SITE INVENTORY FORM – CONTINUATION SHEET

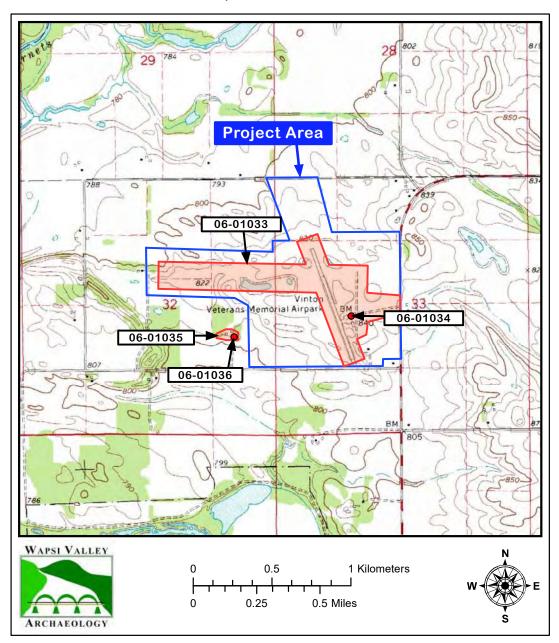


Figure 3. Map showing topography and elevations within the study area. Source: USGS La Moille, Iowa (1975), 7.5' Series Quadrangle Map.



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8

Name of Property: L.C. Preston House		Site Number: 06-01036
Address: 2375 55th Street Drive		Related District Number:
City: Vinton	County: Benton	



Figure 4. House, view to the northeast.



Figure 5. House, view to the northwest.



IOWA SITE INVENTORY FORM – CONTINUATION SHEET				
Name of Property:L.C. Preston Hous	S e	Site Number: 06-01036		
address: 2375 55th Street Drive		Related District Number:		
ity. Vinton	County: Benton			



Figure 6. House, view to the southeast.



IOWA SITE INVENTORY FORM – CONTINUATION SHEET								
Name of Property: L.C. Preston House		Site Number: 06-01036						
Address: 2375 55th Street Drive		Related District Number:						
City: Vinton	County: Benton	_						

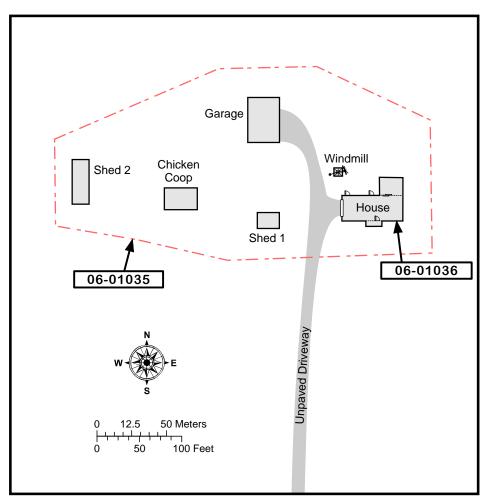


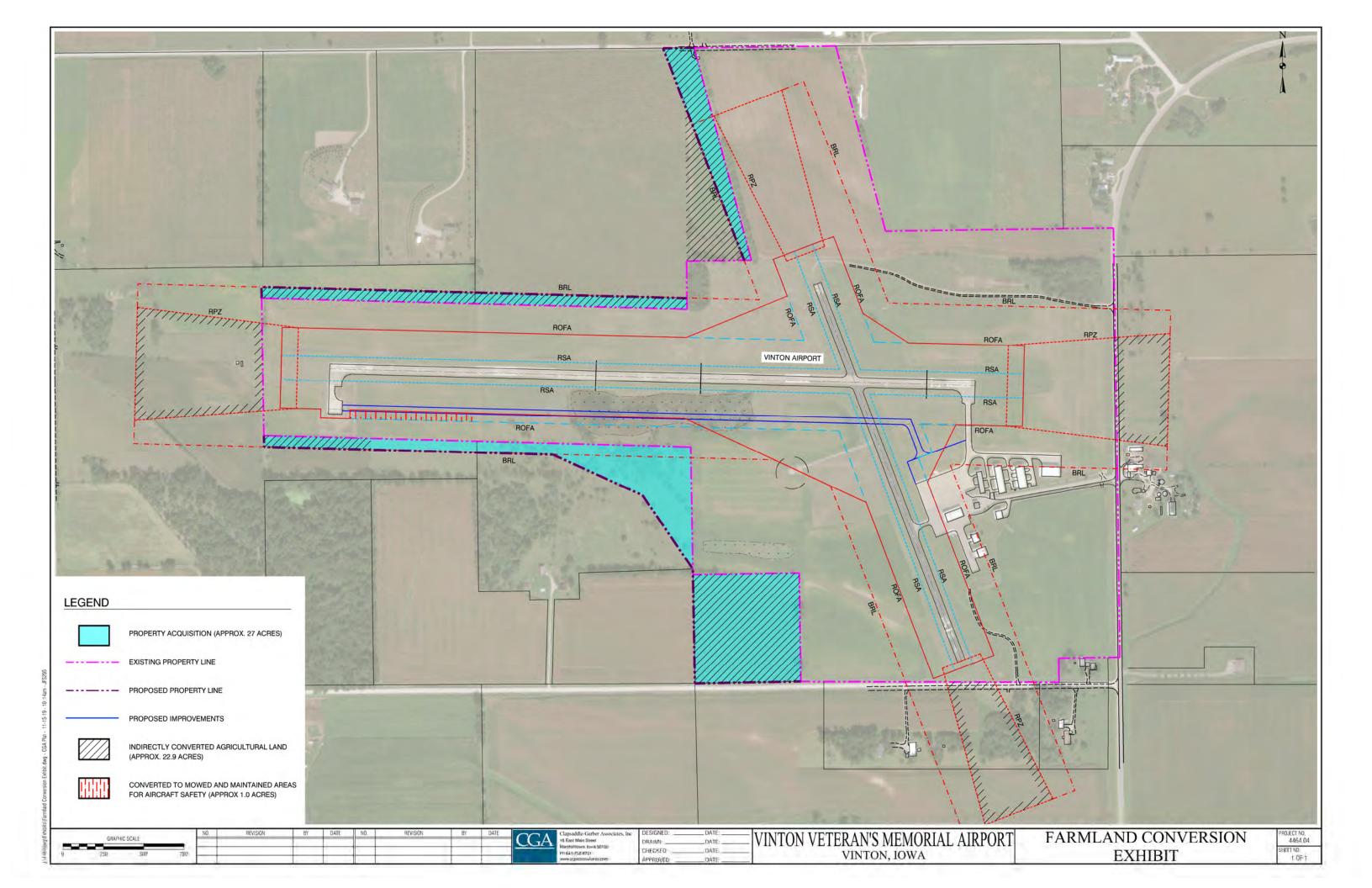
Figure 7. Sketch map of structures at 2375 55th Street Drive.

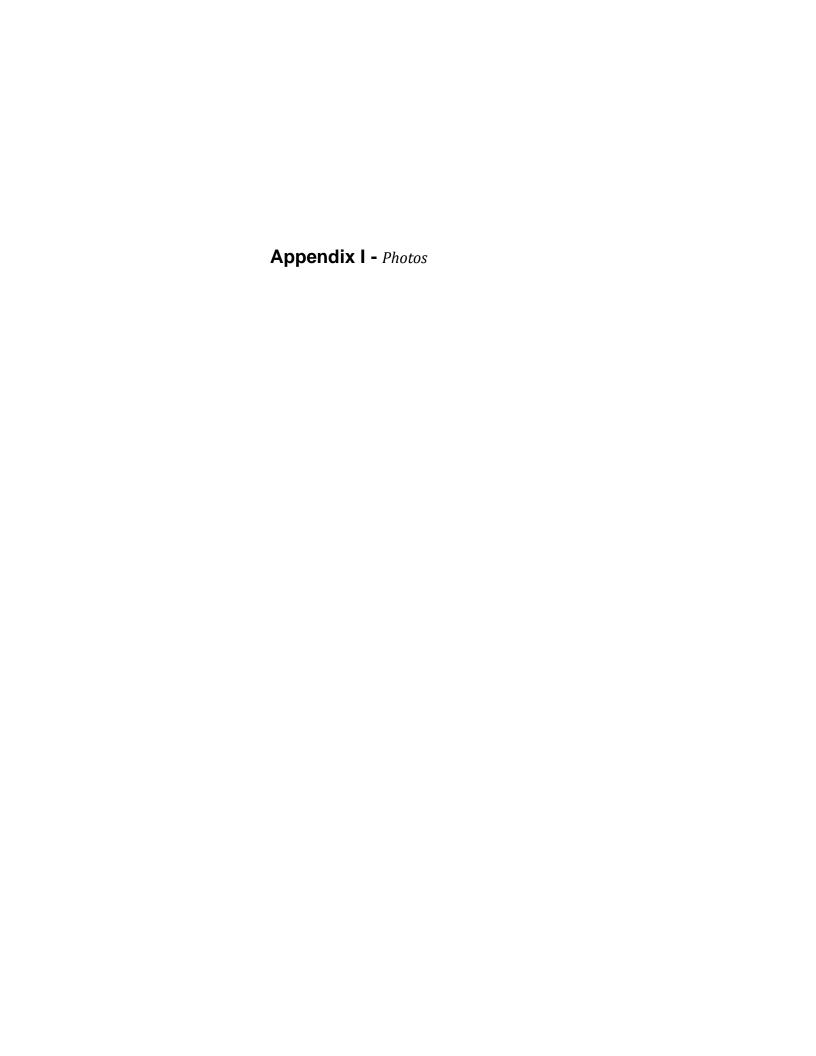
Appendix H - Farmlands

Farmland Conversion Impact Rating

F	U.S. Department	_		ATING				
PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request						
Name of Project		Federal Agency Involved						
Proposed Land Use		County and State						
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:				
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		? YES NO		Acres Irrigated Average		Farm Size		
Major Crop(s) Farmable Land In Govt. Juris Acres: %		,		Amount of Farmland As Defined in FPPA				
		unsulotion		Acres: %				
Name of Land Evaluation System Used	Name of State or Local Site Assessment System			Date Land Evaluation Returned by NRCS				
PART III (To be completed by Federal Agency)				Alternative Site Rating				
				Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly								
B. Total Acres To Be Converted Indirectly								
C. Total Acres In Site								
PART IV (To be completed by NRCS) Land Evaluation Information								
A. Total Acres Prime And Unique Farmland								
B. Total Acres Statewide Important or Local Important Farmland								
C. Percentage Of Farmland in County Or Le	ocal Govt. Unit To Be Converted							
D. Percentage Of Farmland in Govt. Jurisdi	ction With Same Or Higher Relati	ve Value						
PART V (To be completed by NRCS) Land Relative Value of Farmland To Be C		s)						
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)			Maximum Points	Site A	Site B	Site C	Site D	
Area In Non-urban Use			(15)					
Perimeter In Non-urban Use			(10)					
Percent Of Site Being Farmed			(20)					
Protection Provided By State and Local Government			(20)					
5. Distance From Urban Built-up Area			(15)					
6. Distance To Urban Support Services			(15)					
7. Size Of Present Farm Unit Compared To Average			(10)					
8. Creation Of Non-farmable Farmland			(10)					
Availability Of Farm Support Services			(5)					
10. On-Farm Investments			(20)					
11. Effects Of Conversion On Farm Support Services			(10)					
12. Compatibility With Existing Agricultural Use			(10)					
TOTAL SITE ASSESSMENT POINTS			160					
PART VII (To be completed by Federal Agency)								
Relative Value Of Farmland (From Part V)			100					
Total Site Assessment (From Part VI above or local site assessment)			160					
TOTAL POINTS (Total of above 2 lines)			260					
Site Selected:	Date Of Selection			Was A Local Site Assessment Used? YES NO				
Reason For Selection:				1				
Name of Federal agency representative completing this form:					Da	Date:		

Farmland Conversion Exhibits





Photos



Existing Wetland adjacent to Runway 9-27



Existing Wetland adjacent to Runway 9-27



Existing secondary Wetland on south side of airport



Existing secondary Wetland on south side of airport



Proposed parallel taxiway location from wetland looking west



Proposed parallel taxiway location from wetland looking east



Existing field fence to be replaced with 8' chain link fence with raised bottom for turtle access



Existing trees near Runway 9-27 to be removed



Existing Hangar to be demolished in the background



Alternatives Summary

Alternatives Summary

2.2 - No Action Alternatives

- 2.2.1 Don't touch wetland
- 2.2.2 Don't remove trees
- 2.2.3 Don't add deer fence
- 2.2.4 Don't build taxiway
- 2.2.5 Don't buy more land
- 2.2.6 Don't demolish hangar (See Alt 2.2.6 Exhibit)

The No Action Alternatives do not meet the project purpose and need to improve the overall safety of the airport for the various projects within the EA.

2.3 - Reasonable and Plausible Alternatives

- 2.3.1 Implement Rigorous Wildlife Deterrent Program instead of removing wetland
- 2.3.2 Relocate wetland (See Alt 2.3.2 Exhibit)
- 2.3.3 Strategically route Blanding's Turtle Movement under pavement (See Alt 2.3.3 Exhibit)
- 2.3.4 Only trim trees and don't fully remove them
- 2.3.5 Implement Rigorous Wildlife Deterrent Program instead of installing deer fence
- 2.3.6 Construct a partial parallel taxiway instead of a full parallel taxiway (See Alt 2.3.6 Exhibit)
- 2.3.7 Construct a taxiway on the north side of the runway (See Alt 2.3.7 Exhibit)
- 2.3.8 Construct a new runway on the north side of the airport and convert the existing runway into a taxiway (See Alt 2.3.8 Exhibit)
- 2.3.9 Rehabilitate the existing hangar instead of demolish
- 2.3.10 Relocate existing hangar instead of demolish

Resources available for a Rigorous Wildlife Deterrent Program would not be effective enough. Any option not to remove the wildlife allows the most critical safety hazard to the airport to remain. Blanding's Turtle is less of a hazard to the airport than deer and avian. Blocking turtle access to airport would have adverse effect on turtles. Relocating the wetland on airport property only moves the safety hazard to a different location. The safest and most cost effective place to build a parallel taxiway is on the south side of the runway. Any construction on the north side of the existing runway will impact the turtles nesting habits. From a planning and financial standpoint, rehabilitation or relocating of the existing hangar is uneconomical to the airport. These alternatives do not meet the project purpose and need for providing overall safety improvements to the airport.

2.4 - Proposed Actions

- 2.4.1 Remove existing wetlands on airport property
- 2.4.2 Remove all trees on existing property
- 2.4.3 Install 8' tall deer fence along airport perimeter with portions of fencing raised 8" to allow turtle access. (See Proposed Action 2.4.3 Exhibit)
- 2.4.4 Construct full parallel taxiway on south side of the runway
- 2.4.5 Acquire property out to the building restriction line

Wetland removed. Associated plant species affected. Trees removed and 8' deer fence installed. Wetland altered, but Blanding's turtles nesting habits unchanged. The risk of a wildlife strike at the airport significantly reduced. Parallel taxiway construction and land acquisitions significantly enhance the safety of aircraft movement around the airfield. These actions meet the project purpose and need of improving the overall safety at the airport.

Alternative Exhibits

