DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
CENTRAL REGION
FINDING OF NO SIGNIFICANT IMPACT/RECORD OF DECISION

IOWA CITY MUNICIPAL AIRPORT
IOWA CITY, IOWA

PURPOSE AND NEED:

The purpose of the Proposed Action is to clear runway approach surfaces as described below under Proposed Action.

The need for the project is to safely provide for the existing and future aviation needs of the City and the surrounding communities per minimum standards for safe and efficient aircraft operations as described in *FAA Advisory Circular 150/5300-13, Airport Design.* The requirements to be satisfied are more specifically described below under Proposed Action.

PROPOSED ACTION:

The Federal Action is providing environmental approval for the following Proposed Action (described in detail in the attached Environmental Assessment) as shown on the Airport Layout Plan (ALP) approved by the Airport Chair October 2016 and conditionally approved by the FAA November 7, 2016:

1. Reclassify Runway 7/25, Relocate Runway 25 Threshold, Relocate Runway 7/25 Precision Approach Path indicator (PAPI) Navigational Aids, and Extend Runway 7
2. Relocate Runway 12 Threshold and Extend Runway 30
3. Revise instrument approach procedures
4. Acquire land and easements to remove and light obstructions
5. Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25
6. Remove Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25
7. Trim/Top Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

ALTERNATIVES CONSIDERED:

The following alternatives were considered:

- **The No Action Alternative:** Not to acquire land and easements, remove obstructions, and build capital projects. The No Action alternative does not meet

the project purpose and need; 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.

- **The Preferred Alternative:** Reclassify runway, relocate runway thresholds, acquire land and easements, remove and light obstructions as described under Proposed Action. This alternative was selected as the Proposed Action because this alternative best meets the purpose and need, is feasible, and results in minimal environmental impacts.

- **Reasonable Alternatives:** The Airport evaluated modifications to the current runway configuration and operating conditions that could reduce the number of mitigations required. In an attempt to reduce the number of obstructions that penetrate the approach/departure surface, alternatives considered reducing the length of Runway 12/30. These runway displacements would eliminate several obstructions incrementally with reductions in length. However, such reductions in length would create several restrictions on the type and size of aircraft that could land and take off at the airport. These restrictions would not be feasible for the operation of the airport. Therefore, these Runway Modification Alternatives did not meet the project's purpose and need and were dismissed from further consideration.

  The Airport also considered the option of closing either Runway 7/25 or Runway 12/30 for all operations. However, closure of either runway would significantly inhibit the airport's ability to operate. Therefore, this alternative does not meet the project's purpose and need and was dismissed from consideration.

PUBLIC OUTREACH:

A notice of availability and notice of a public informational meeting was published in the local newspaper for a 43-day public comment period. In addition to the notice in the newspaper, the Airport sent notification of the availability of the Draft EA and the notice of a public informational meeting to residents and property owners located within the proposed action areas.

The Airport hosted two public informational meetings at the airport. Approximately 20 individuals attended the public informational meetings. Nine (9) comments were received from nine (9) commenters. Comments related to the identification of obstructions on specific properties, the process for city assistance in addressing obstructions, safety, support for the proposed action, and opposition to the proposed action. The comments and responses are provided in the attached EA.

ASSESSMENT AND MITIGATION:

The attached EA addresses the applicable environmental impact areas in accordance with Federal Aviation Administration (FAA) Orders 1050.1 and 5050.4 and analyzes the potential for significant impacts. The attached EA and associated correspondence were reviewed by the FAA to determine whether each of the affected impact categories exceeded an established threshold of significance.

The sponsor's Proposed Action will not significantly affect environmental resources as discussed and analyzed in the attached EA, which contains detailed discussions, analyses, and conceptual mitigation measures of all affected impact categories. Statements of consistency with community planning from state and local governments are highlighted in the attached EA.

The most important environmental issues related to the proposed project are summarized below. If the sponsor undertakes the project, the sponsor must complete the mitigation measures as discussed in the attached EA and as described below.

Resources Not Affected: The No Action and Proposed Action would not affect the following resource categories:

- Air Quality
- Climate
- Coastal Resources
- Department of Transportation Act, Section 4(f)
- Farmland
- Hazardous Materials, Solid Waste and Pollution Prevention
- Land Use and Compatible Land Use
- Natural Resources and Energy Supply
- Water Resources (Surface Waters and Groundwater, Wetlands and Floodplains, Wild and Scenic Rivers)

Biological Resources: Removal of trees would constitute the largest potential impact to biological resources. Removal of the trees would result in impacts to the individual trees as well as result in the elimination of any roosting and nesting habitat that trees may provide for various wildlife species. The affected areas are urban, residential or industrial.

The only federally listed species that may be adversely affected under the proposed action are the Indiana Bat and Northern Long-Eared Bat. These bats could be affected by the clearing of any trees providing suitable bat habitat.

MITIGATION: Before construction, verify that no new species were added to the Threatened and Endangered Species list. If species were added, re-coordinate with USFWS and the appropriate State agency.

Seasonal restriction on tree cutting when Migratory Birds, Indiana Bats, and Northern Long-Eared Bats are roosting or nesting. Cut and remove trees between October 1st and March 31st. If tree removal plans are modified or tree cutting cannot be completed during these dates, conduct a survey per USFWS and contact the USFWS for further consultation.

Historic, Architectural, Archeological or Cultural Resources: A Phase I Cultural Resource Investigation was completed. No impacts to historical, architectural, archaeological, and cultural resources were found. A "No Historic Properties will be Affected" finding was issued by FAA and concurred with by the State Historic Preservation Officer (SHPO) conditioned on the mitigation measures below.

Five (5) Tribes were invited to participate as consulting parties. One (1) tribe responded with "no objection" to the proposed project. Four (4) tribes did not respond.

MITIGATION: To minimize rutting or other ground disturbance, conduct tree clearing and trimming activities while the ground is dry or frozen. Cut and remove trees to the ground. Do not grub or remove the root ball. Grind or chemically treat stumps to prevent regrowth.

If construction work uncovers buried archeological materials, cease work in the area of discovery and immediately notify the State Historic Preservation Office (SHPO) and the FAA. The FAA will contact concerned tribes.

Noise and Compatible Land Use: The Proposed Action will not have a significant impact on this resource. FAA Order 1050.1F, Appendix B, states "No noise analysis is needed for projects involving Design Group I and II airplanes (wingspan less than 79 feet) in Approach Categories A through D (landing speed less than 166 knots) operating at airports whose forecast operations in the period covered by the NEPA document do not exceed 90,000 annual propeller operations (247 average daily operations) or 700 annual jet operations (2 average daily operations). Also, no noise analysis is needed for projects involving existing heliports or airports whose forecast helicopter operations in the period covered by the NEPA document do not exceed 10 annual daily average operations with hover times not exceeding 2 minutes." The numbers of existing and forecasted operations at the airport are below these thresholds, therefore, no noise analysis is required.

Under the Proposed Action, minor increases in noise would occur during obstruction light installation and tree removal activities. Tree removal would likely involve the use of chain saws, chippers, possibly man-lifts, cranes, and other mechanical and diesel equipment. Tree removals and trimming would occur during daylight hours; no nighttime activities would occur. Noise levels in the immediate vicinity of these activities would increase temporarily.

Socioeconomic, Environmental Justice, and Children's Environmental Health and Safety Risks:

Depending on the nature of the residence and the insulation within the residence, tree removal could result in a minor increase in summer cooling costs. On average, only one tree would be removed around most homes. Overall, therefore, no impacts would be anticipated. The community southeast of Runway 30 consists primarily of mobile homes. These mobile homes have thinner walls and less insulation. Therefore, removal of trees in the mobile home park would have a potential to result in increased cooling costs to those residents and/or higher summer temperatures within individual mobile homes. Higher temperatures could potentially result in impacts to children's health. Increased cooling costs and/or higher summer temperatures could constitute a minor impact to these residents, many of whom are likely lower income. Such impacts could be partially mitigated by the planting of tree species that would not grow to heights which would penetrate the approach/departure surface. With mitigation, impacts to socioeconomics would be expected to be minor.

MITIGATION: Employ best management practices (BMPs) to restrict children from the work areas, which may include the posting of signs around the construction site, prohibiting access, fencing, warnings posted around areas of open excavation, and site policing.

Visual Effects: Minor changes to the visual landscape would occur due to removal of trees in the industrial and residential areas surrounding the airport. The removal (or trimming) of large trees will change the viewshed for residents in the immediate vicinity. However, only some trees would be removed and such impacts could be partially mitigated by the planting of tree species that would not grow to heights which would penetrate the approach/departure surface. This would lessen the visual impacts. Overall, the removal of the obstructing trees would constitute a minor impact to visual resources.

The installation of red obstruction lighting on select obstructions (buildings, fences, utility poles) would largely be unnoticeable during the day. At night, the red light would be visible to observers; however, it would be consistent with the existing lighting in the vicinity and would, therefore, not constitute a significant impact.

Construction Impacts: Temporary environmental impacts may occur from construction activities. Use Best Management Practices (BMPs) to minimize impacts. Incorporate in project design specifications recommendations established in FAA Advisory Circular 150/5370-10, Standards for Specifying Construction of Airports, Item P-156, Temporary Air and Water Pollution, Soil Erosion and Siltation Control.

APPROVING FAA OFFICIAL'S STATEMENT OF ENVIRONMENTAL FINDING:

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA). I also find the proposed Federal action with the required mitigation referenced above will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to section 102(2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

DECISION AND ORDER:

This decision constitutes the Federal approval for the actions identified above and any subsequent actions approving a grant of Federal funds for the project. This decision document is an order subject to the exclusive judicial review under 49 USC 46110 by the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision lives or has a principal place of business.

APPROVED: JAMES A JOHNSON Digitally signed by JAMES A JOHNSON Date: 2018.07.13 12:49:28 -05'00'

Manager, FAA Airports Division Date

DISAPPROVED: _____ _____

Manager, FAA Airports Division Date

Iowa City Municipal Airport (IOW)

Iowa City, Iowa

FAA AIP 3-19-0047-024-2017

ENVIRONMENTAL ASSESSMENT (EA)

FOR

Mitigation of obstructions and other work as described within the EA.

Prepared by: AECOM

500 SW 7th Street, Suite 301, Des Moines, IA 5309

For: Iowa City Municipal Airport Commission

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

SCOTT D TENER

Digitally signed by SCOTT D TENER
Date: 2018.07.13 15:22:34 -05'00'

Responsible FAA Official

Date

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List of Acronyms and Abbreviations

ALP	Airport Layout Plan
CEQ	Council on Environmental Quality
EA	Environmental Assessment
FAA	Federal Aviation Administration
ft	Feet
IFR	Instrument Flight Rule
IOW	Iowa City Municipal Airport
msl	Above Mean Sea Level
NEPA	National Environmental Policy Act
PAPI	Precision Approach Path Indicator
SHPO	State Historic Preservation Officer

1. Purpose and Need

1.1 Introduction

This Environmental Assessment (EA) was prepared per Federal Aviation Administration (FAA) Order 1050.1F and FAA Order 5050.4B. It has also been prepared in compliance with the National Environmental Policy Act (NEPA) implementing regulations by the Council of Environmental Quality under 40 CFR Part 1500.

1.2 Purpose and Need

A series of recent airspace obstruction analyses have identified current and potential future obstructions and nonconforming structures within the navigable airspace of the Iowa City Municipal Airport (IOW) runways. IOW is located in Iowa City, Iowa (Figure 1.0). The obstructions and nonconforming structures at IOW are out of compliance with FAA airspace and safety guidelines/standards and present a significant safety hazard to arriving aircraft. These protrusions into the approach zones resulted in the FAA placing a restriction on Night Instrument Flight Rule (IFR) approaches at IOW in the fall of 2014. IOW needs to mitigate the obstructions to resume regular flight operations. The purpose of the proposed mitigation of obstructions at IOW is to bring the airport into compliance with current FAA requirements shown on the approved Airport Layout Plan dated October 2016, thereby continuing normal airport operations.

1.3 Proposed Action

IOW's layout and the proposed project area is shown in Figure 1.1. The proposed action is described in detail in Section 2.4 and includes:

a. Reclassify Runway 7/25, Relocate Runway 25 Threshold, Relocate Runway 7/25 Precision Approach Path indicator (PAPI) Navigational Aids, and Extend Runway 7
b. Relocate Runway 12 Threshold and Extend Runway 30
c. Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25
d. Remove Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25
e. Trim/Top Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

This proposed action is included in IOW's latest Airport Layout Plan (ALP) which was conditionally approved in October 2016. Implementation of the proposed action would bring IOW into compliance with current FAA requirements and would remove the restriction of Night IFR approaches, thus allowing the airport to resume and continue normal airport operations.

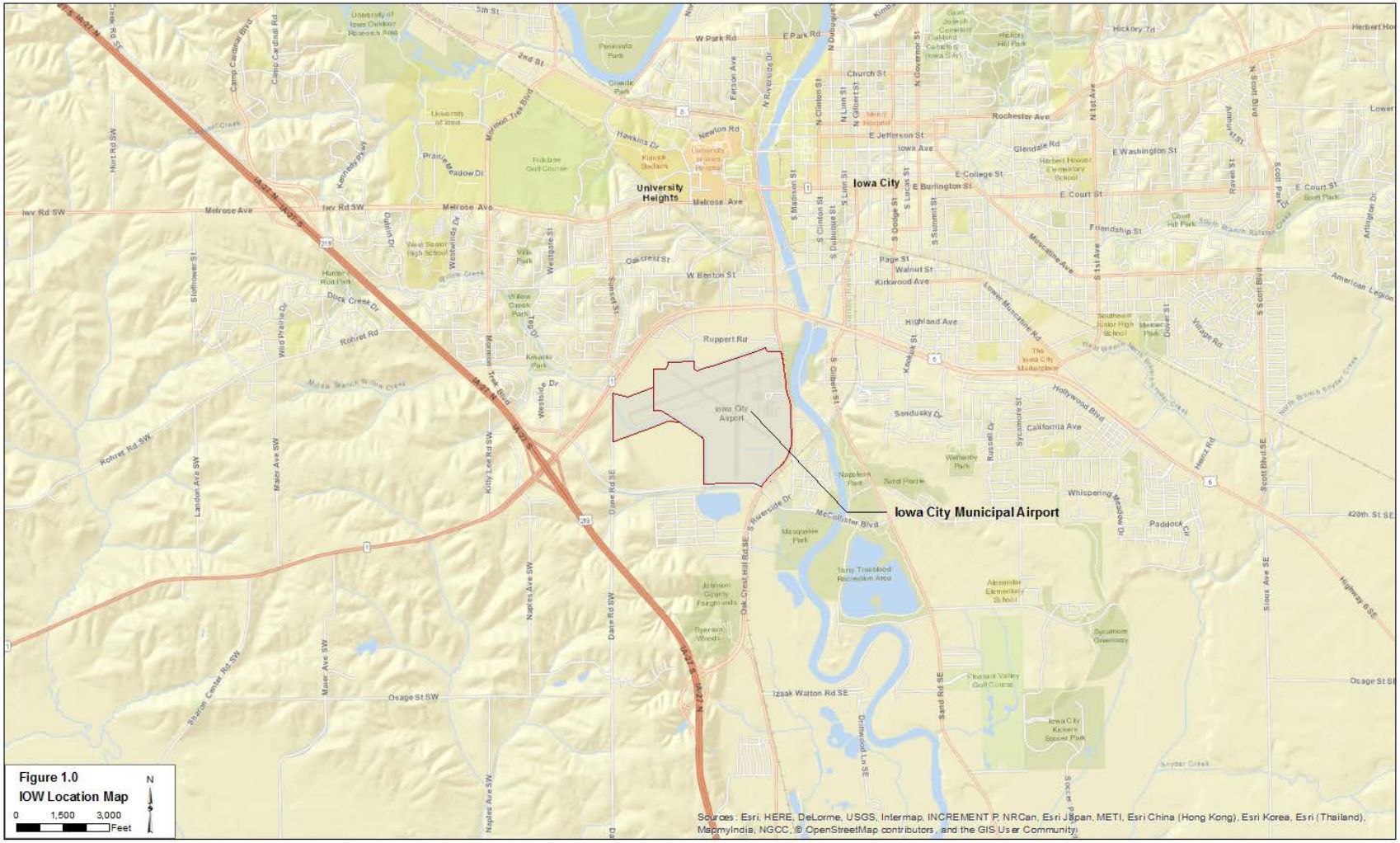

Figure 1.0 IOW Location Map

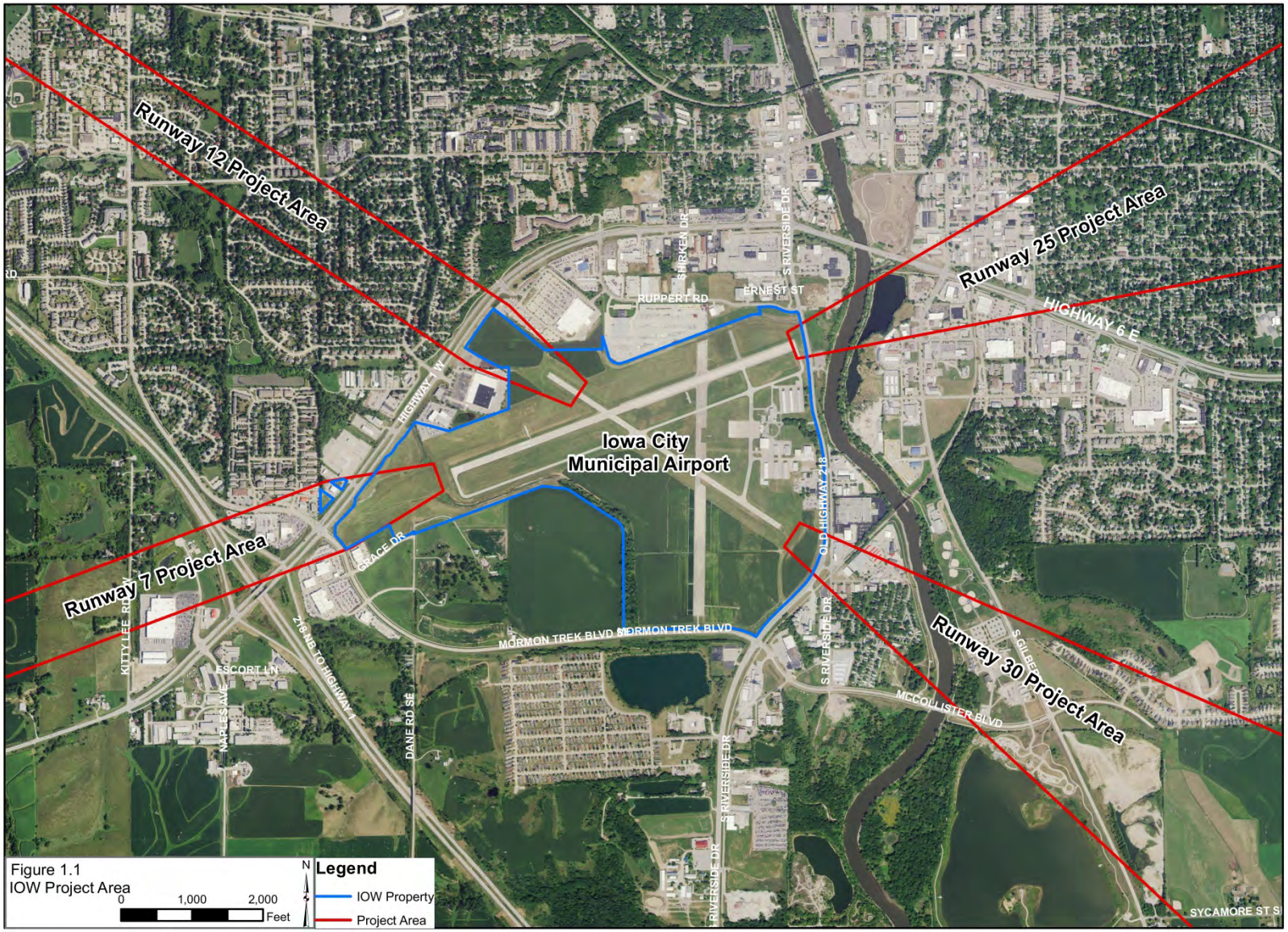

Figure 1.1 IOW Project Area

2. Alternatives

2.1 Introduction

This section defines the No Action Alternative, the Proposed Action, and the Alternatives Evaluated but Eliminated from Further Consideration. 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 Alternative

Under the No Action Alternative, IOW would not address the obstructions and nonconforming structures. As a result, IOW would continue to operate under restriction of Night Instrument Flight Rule (IFR) approaches. This would permanently limit the amount of traffic that could utilize IOW under Night IFR conditions, and thus permanently limit airport operations.

The No Action Alternative does not meet the project purpose and need; 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 Alternatives Considered and Eliminated

In September 2012, the FAA identified obstructions and nonconforming structures within the navigable airspace of the IOW runways based on current operating conditions and runway configurations. This resulted in the Night IFR restrictions. The approved ALP, dated October 2016, identified additional obstructions and nonconforming structures that penetrate the 20:1 approach/departure surface, thus requiring mitigation. The 20:1 approach/departure surface is the path along which an aircraft would travel when approaching or departing from IOW (Figure 2.0).

Through the surveys and planning analyses, a total of 174 obstructions and nonconforming structures were identified within the navigable airspace of the IOW runways based on current operating conditions and runway configurations. These obstructions and nonconforming structures would require mitigation under IOW's current runway configuration and operating conditions. The 174 obstructions and nonconforming structures constitute the Preliminary Alternative and are shown in Figures 2.1-2.4 and listed in Tables 2-1 through 2.4 in Appendix C.

IOW determined that the number of obstructions and nonconforming structures requiring mitigation under this Preliminary Alternative was excessive in the approach to Runway 12. Therefore, the Preliminary Alternative was dismissed from further consideration.

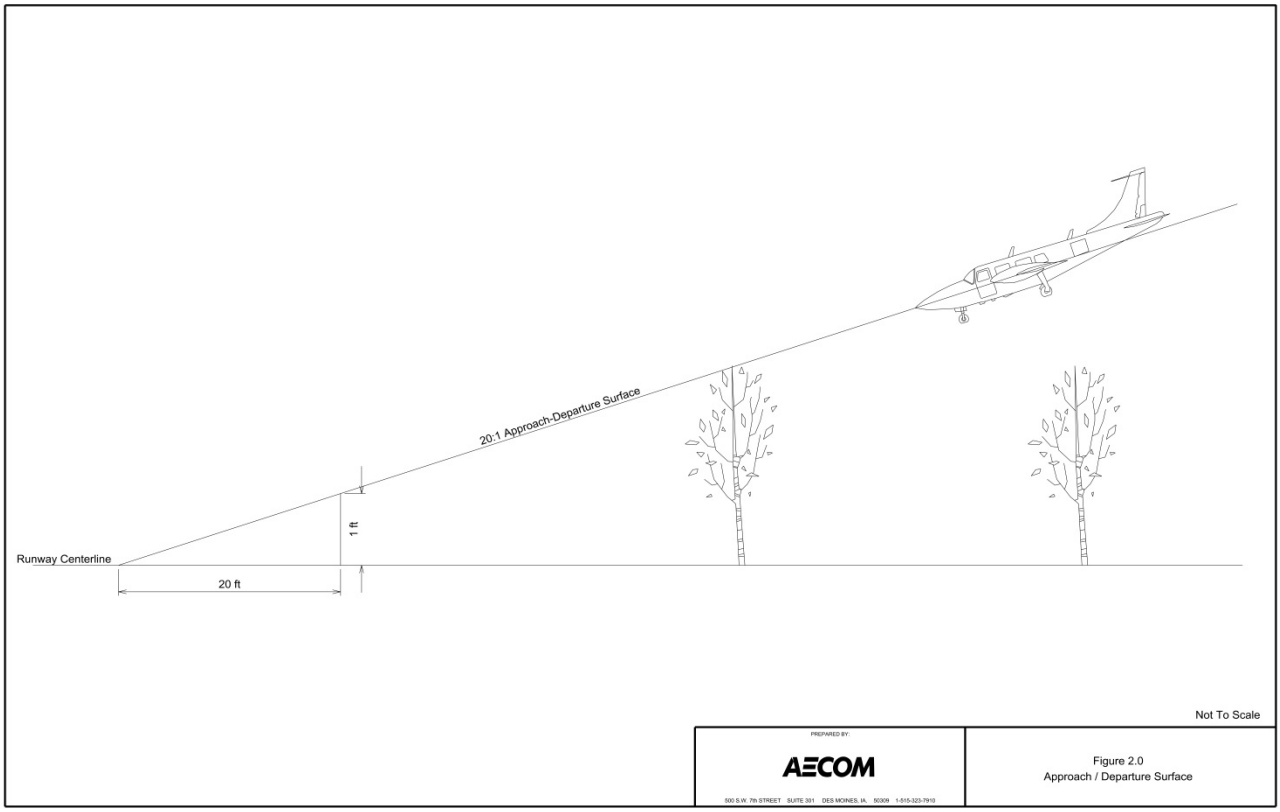

Figure 2.0 20:1 Example Approach/Departure Surface

While preparing the Airport Master Plan, IOW evaluated modifications to the current runway configuration and operating conditions that could reduce the number of mitigations required; these became the Runway Modification Alternatives. In an attempt to reduce the number of obstructions that penetrate the approach/departure surface, alternatives were considered that would reduce the length of Runway 12/30 by 100, 200, 400, 500, 600, or 800 feet. These runway displacements would eliminate several obstructions incrementally with reductions in length. However, such reductions in length would create several restrictions on the type and size of aircraft that could land and take off at the airport. These restrictions would not be feasible for the operation of the airport. Therefore, these Runway Modification Alternatives did not meet the project's purpose and need and were dismissed from further consideration.

IOW also considered the option of closing either Runway 7/25 or Runway 12/30 for all operations. However, closure of either runway would significantly inhibit IOW's ability to operate. Therefore, this alternative does not meet the project's purpose and need and was dismissed from consideration.

In addition to considering modifications to the current airport configurations and operations, IOW also considered alternatives for the methods of mitigation for utility pole obstructions. One method for addressing utility pole obstructions would be to remove the pole and relocate the

utilities underground. This alternative creates greater cost and environmental impacts as compared to the alternative of lighting the pole. Therefore, the option of mitigating utility poles by removal and burial of utilities underground was dismissed from further consideration.

IOW also considered the option of lighting tree obstructions. This alternative is untenable because the trees are growing, which would change the position of the lights and because the tree foliage has the potential to obscure the light. Alternatively, a light pole could be established immediately adjacent to the tree obstruction. This approach is also untenable because the light would not be clearly visible from all sides of the tree. Therefore, the mitigation approach of lighting tree obstructions was dismissed from further consideration.

2.4 Proposed Action

During physical observation, IOW determined that nine of the obstructions and non-conforming structures off Runway 7 had been previously addressed; one was a commercial sign which was previously reviewed by FAA as part of an airspace study and as a result has an obstruction light in place and eight were trees located on airport property which had already been removed. Four obstructions off Runway 30 were found, after further evaluation, to not to be penetrations to the surface. One additional obstruction off Runway 30 was found to be an erroneous record. This reduced the number of obstructions and non-conforming surfaces requiring mitigation from 174 to 160.

After a review of the Preliminary Alternative and Runway Reduction Alternatives, IOW developed a new alternative that would support existing and future aircraft operations at IOW and further reduce the number of mitigations required. This alternative meets the project purpose and need while also minimizing the number of obstructions and nonconforming structures requiring mitigation. Therefore, this alternative became the Proposed Action.

The Proposed Action includes:

a. *Reclassify Runway 7/25, Relocate Runway 25 Threshold, and Extend Runway 7:*

- The classification for the Runway Design Code for Runway 7/25 would be changed from C-II to B-II[1]. This reclassification is driven by a change in the "critical design aircraft"[2]. IOW's new critical design aircraft flies at a slower approach speed. The change in runway design code requires a smaller runway safety area for the existing and forecasted aircraft operations.

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[1] The classification letter designates the approach speed and the Roman numeral designates the wingspan.

[2] Identification of the most demanding aircraft type (based on approach speed, wingspan and tail height) which currently, or in the future, may utilize an airport is essential to airport design. The FAA defines the "critical design aircraft" as the aircraft or aircraft family that is expected to conduct at least 500 annual operations at any particular airport. An operation is defined as either a takeoff or landing. For IOW, the critical design aircraft is a Cessna Citation V.

- The reclassification also allows relocation of the Runway 25 threshold (the point at which an aircraft can take off or land) by 708 feet closer to South Riverside Drive, thus increasing available runway length for takeoffs and landings on Runway 7/25.

- Runway 7 would be extended by 213 feet to maximize the use of airport property and keep the approach/departure surface clear of Highway 1.

  The combination of reclassifying Runway 7/25, relocating the Runway 25 threshold, and extending Runway 7 allows for a landing and takeoff distance available on Runway 7/25 greater than 5,000 feet which would permit 75 percent of the fleet of large aircraft (of 60,000 pounds or less) which are known to use IOW to operate at 60 percent useful fuel load on Runway 7/25.

- The FAA-owned PAPI navigational aids at each end of Runway 7/25 would be relocated to conform to the new threshold locations.

- These changes on Runway 7/25 would not change the number of required mitigations. However, they would improve airport operations and safety.

b. ***Relocate Runway 12 Threshold and Extend Runway 30*** – Moving the Runway 12 threshold 500 feet to the southeast and extending Runway 30 by 300 feet to the southeast results in a total reduction of the landing distance available on Runway 12 by 200 feet. However, this also decreases the number of obstructions requiring mitigation and partially satisfies FAA Night IFR requirements. The new landing distance available for Runway 12 would be 3,700 feet. The landing distance available for Runway 30 would remain 3,900 feet, which would permit 100 percent of small aircraft (with less than 10 passenger seats) to utilize this runway. These changes on Runway 12/30 would reduce the number of required mitigations off these runways from 160 to74.

c. ***Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25*** - IOW would install a light on top of the pole or other nonconforming structure of concern. This light would be maintained by the structure owners as required. The addition of the light would mitigate these obstructions without the need for removal.

d. ***Remove Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25*** - IOW would arrange easements with property owners as needed to access the property and remove designated trees, not suitable for trimming/topping, that are within 10 feet of the approach/departure surface to the ground surface. Trees within 10 feet of the surface have the potential to breach the surface, creating a future penetration and hazard. Trees would be cut and then the stumps ground flat to a few inches below the ground surface. Roots would be left intact in the ground. In some cases, shrubs or trees that would reach a maximum height below the approach surfaces may be replanted per the owner's preference. Removal is the preferred mitigation approach for trees.

e. ***Trim/Top Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25*** - IOW would arrange easements with property owners as needed to access the property and trim or top the trees within 10 feet of the approach/departure surface. Trimming/topping trees can be detrimental to the health of the tree. Trees can become more susceptible to diseases and it can shorten the life of the tree. It can also destabilize the tree. This option would only be suitable for certain tree species. The property owner would be required to maintain the tree below the approach/departure surface in the future. Because this method of mitigation can be damaging to the tree and because it requires long-term maintenance, trimming/topping trees is not the preferred mitigation.

To be conservative, it is assumed, for the purposes of this EA, that most trees would be removed rather than trimmed. Tree trimming of individual trees would be considered during future project development and incorporated when practicable. The preferred method of mitigation of tree obstructions would be to remove the tree at ground level and to grind the stump to at or slightly below ground level. The tree could then be replaced, should the owner request, with a different variety of tree that would not grow into the flight surface in the future. The preferred method of mitigation for utility poles or other structures would be to add a beacon to the pole or structure. Each obstruction will be addressed individually on a case-by-case basis.

For the proposed action, the obstructions and nonconforming structures that present hazards to approaching aircraft are identified in Tables 2.5 through 2.8 and shown on Figures 2.5 through 2.8. The proposed action would reduce the number of obstructions requiring mitigation from the original 160 under the preliminary alternative eliminated from further consideration to 74 without adversely impacting the performance of normal airport operations.

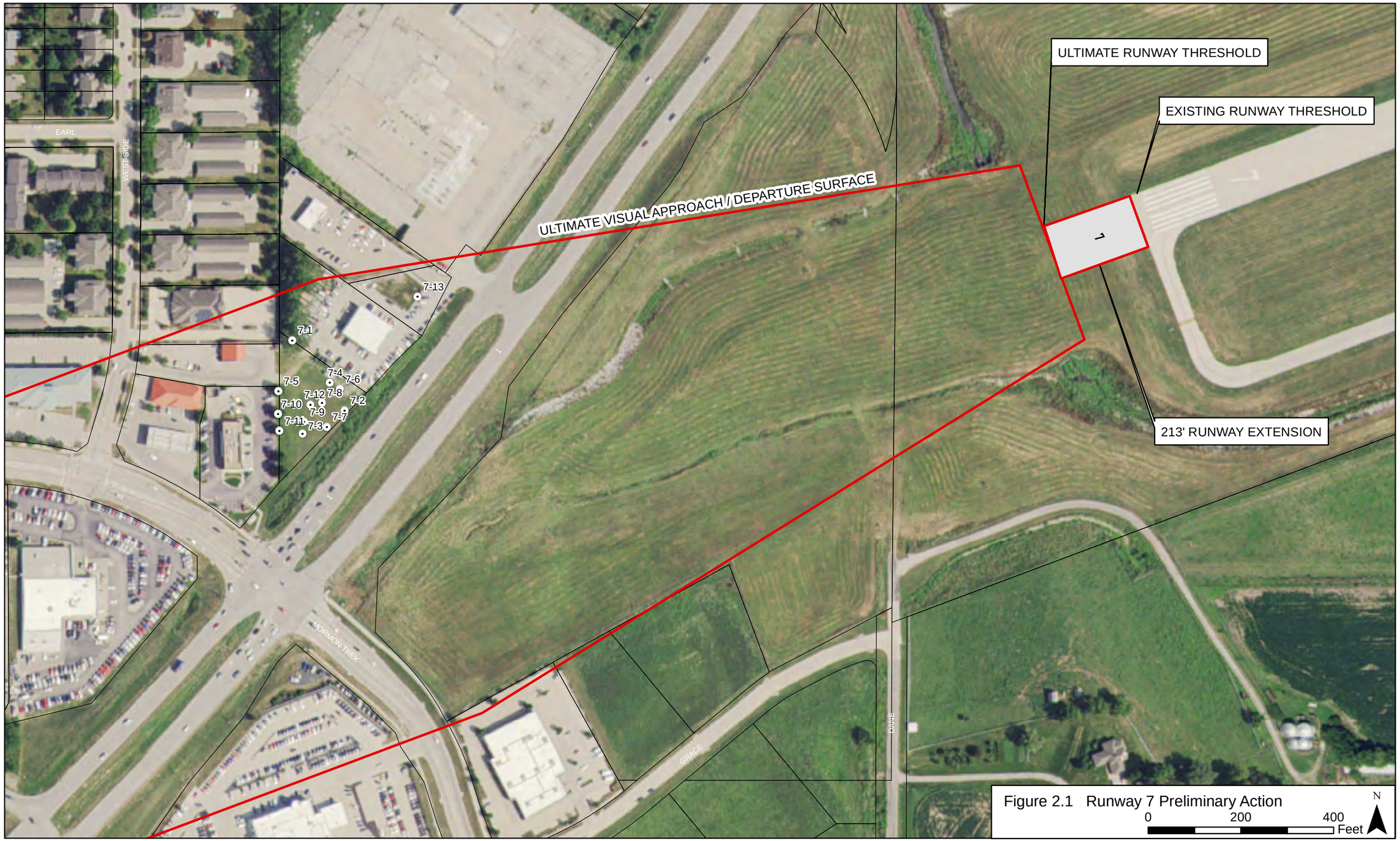

Figure 2.1 Runway 7 Preliminary Action

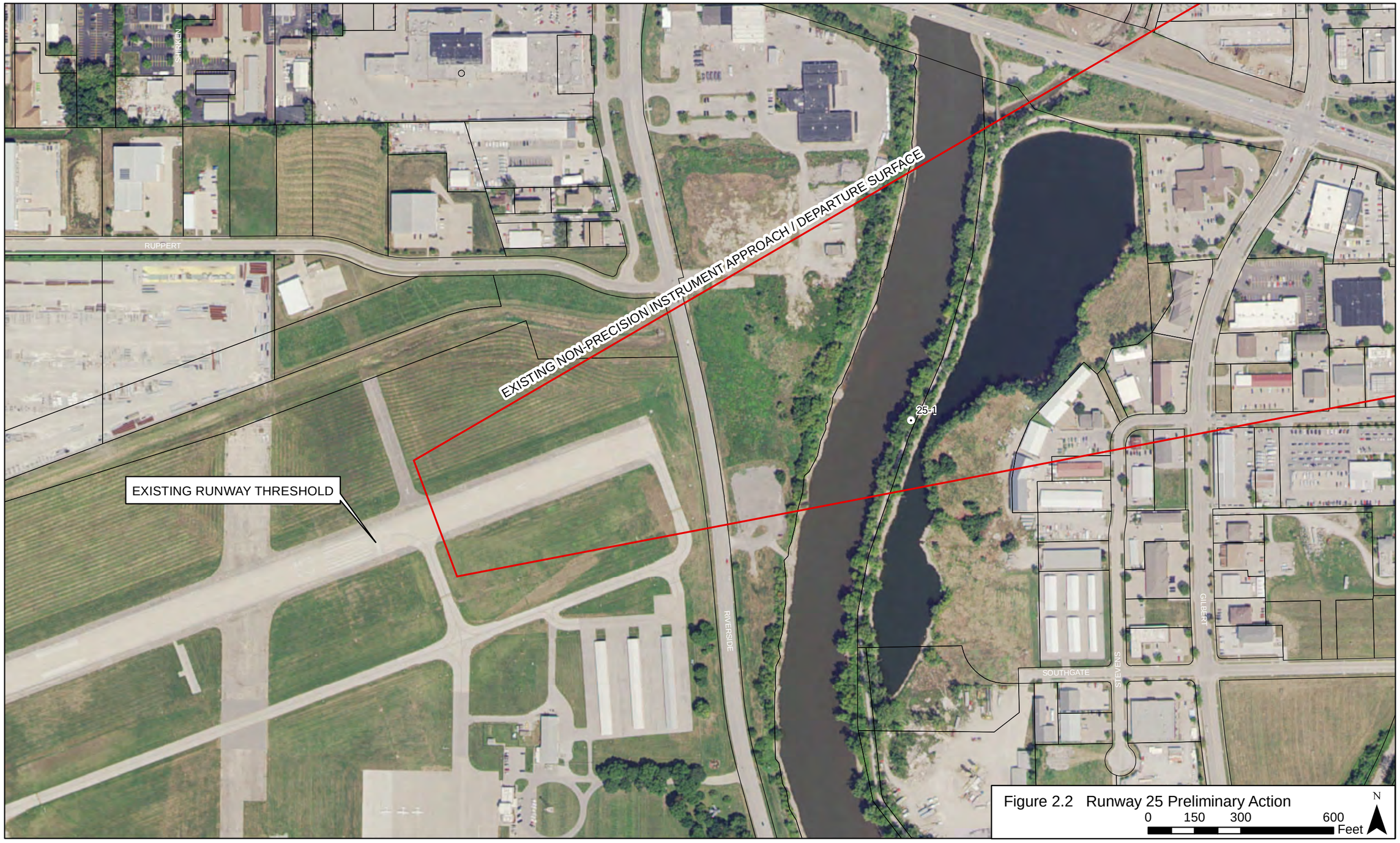

Figure 2.2 Runway 25 Preliminary Action

VISUAL APPROACH/DEPARTURE SURFACE
EXISTING RUNWAY THRESHOLD
HARLOCKE
BENTON
PRAIRIE HILL
WEBBER
HAWK RIDGE
RUPPERT
SUNSET
ASHLEY
WILLOW CREEK
JEFFREY
WESTWOOD
12-150
12-93
12-151
12-66
12-96
12-95
12-85
12-28
12-153
12-90
12-156
12-26
12-92
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12-81
12-94
12-50
12-49
12-15
12-163
12-64
12-155
12-36
12-44
12-8
12-73
12-86
12-77
12-78
12-60
12-160
12-75
12-1
12-51
12-157
12-10
12-162
12-22
12-166
12-152
12-70
12-84
12-13
12-54
12-158
12-71
12-6
12-159
12-91
12-165
12-62
12-5
12-167
12-79
12-25
12-7
12-6
12-72
12-80
12-164
12-24
12-2
12-21
12-53
12-38
12-11
12-43
12-74
12-20
12-18
12-83
12-42
12-45
12-39
12-48
12-55
12-33
12-34
12-161
12-9
12-19
12-61
12-63
12-47
12-35
12-30
12-82
12-51
12-59
Figure 2.3 Runway 12 Preliminary Action
0 200 400 800
Feet
N

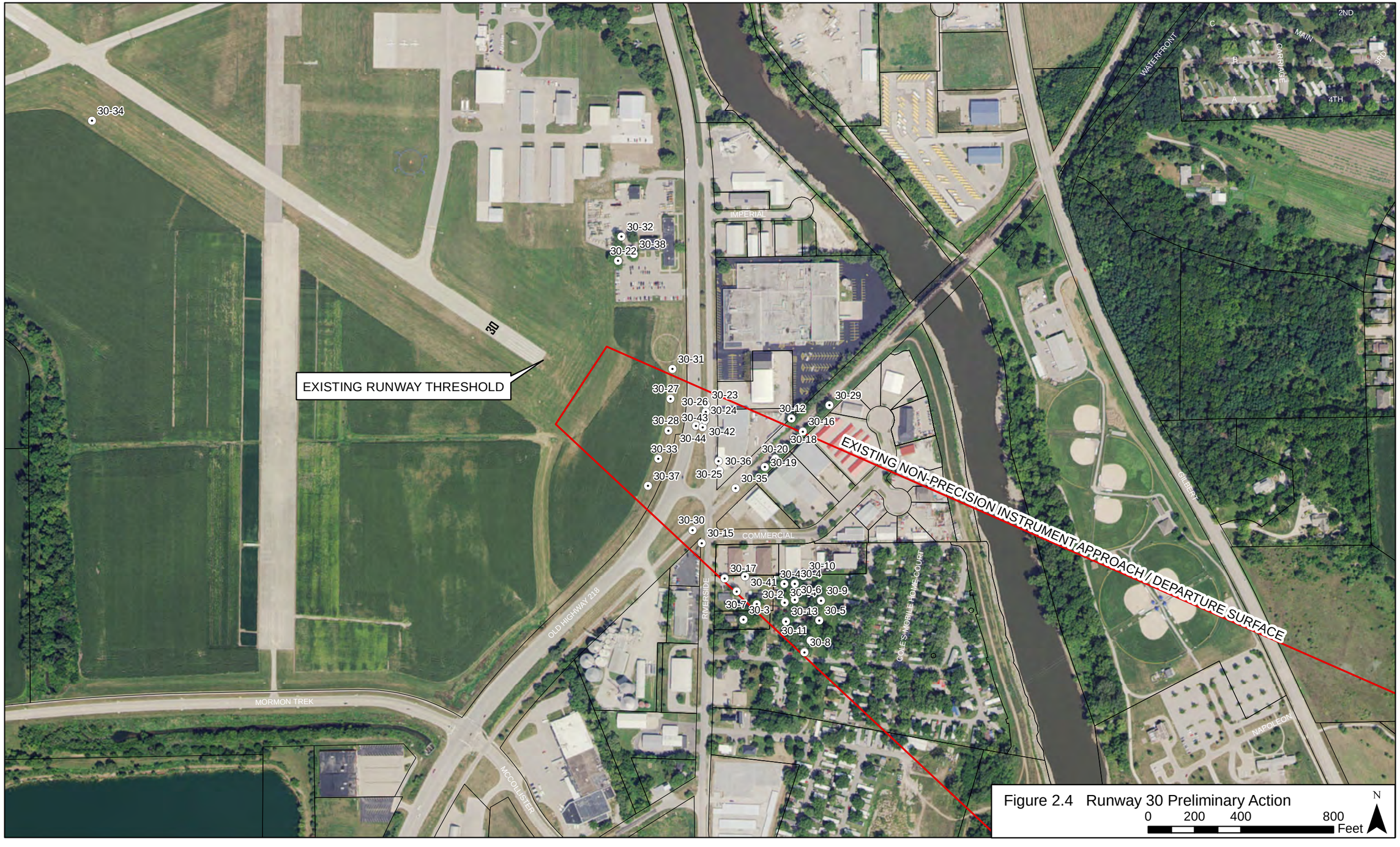

Figure 2.4 Runway 30 Preliminary Action

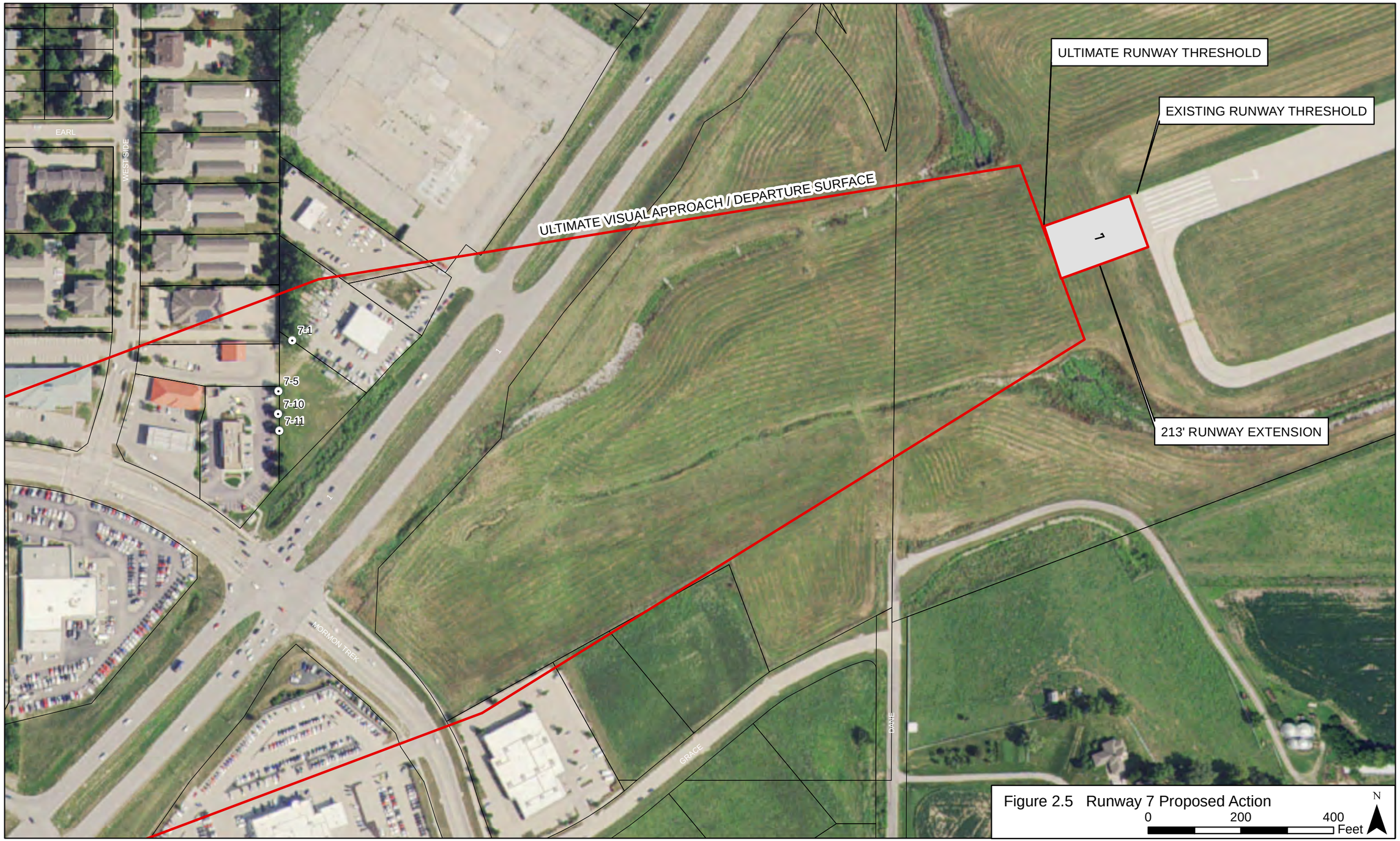

Figure 2.5 Runway 7 Proposed Action

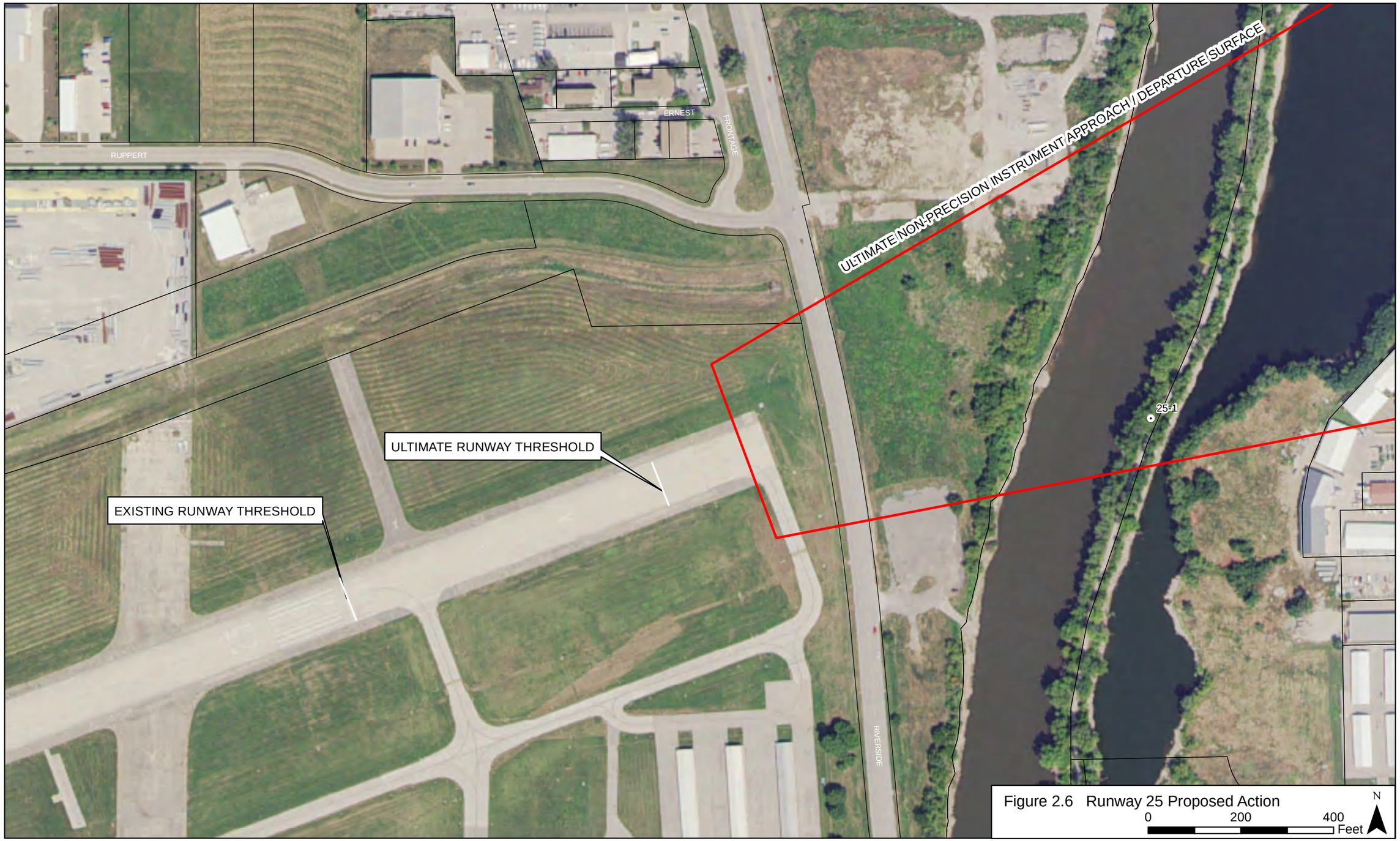

Figure 2.6 Runway 25 Proposed Action

Figure 2.7 Runway 12 Proposed Action

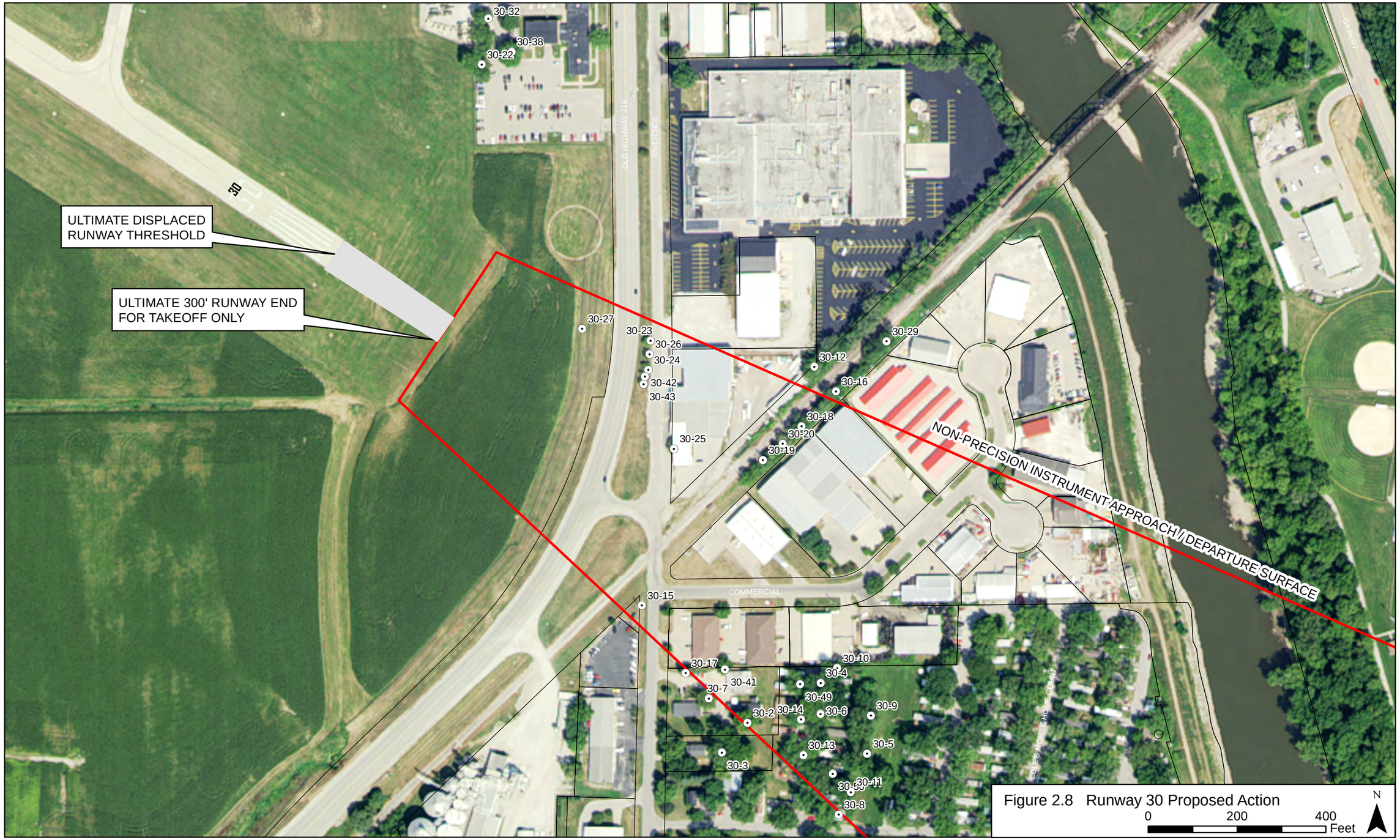

Figure 2.8 Runway 30 Proposed Action

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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, Airport Diagram, Photographs

IOW is located in Iowa City, Iowa. Figure 1.0 shows the general location of the airport and the existing structures and runways at IOW. Figures 2.5 through 2.8 show the locations of the obstructions that need to be removed as part of the Proposed Action. The representative photographs in Appendix C show examples of some of the trees that would be removed under the Proposed Action.

3.3 Existing/Planned Land Uses and Zoning

The Proposed Action is at IOW located in the city of Iowa City, Iowa. The land on which the airport is located is zoned as Neighborhood Public. The area off the end of Runway 12 is zoned Intensive Commercial south of Highway 1 and Low Density Single-Family Residential north of Highway 1. The area off the end of Runway 30 is zoned as General Industrial, Intensive Commercial, and Neighborhood Stabilization and Planned Development. The area off the end of Runway 25 is zoned Intensive Commercial near the river and Community Commercial closer to Highway 6. The area off the end of Runway 7 is zoned Intensive Commercial on either side of Highway 1, and Low Density Multi-Family Residential and Commercial Office and Community Commercial farther from IOW (Iowa City 2016).

The following features, found within the project area, are described below: Industrial/Commercial Activities; Residential Areas, Publicly-Owned Parks, Floodplains.

3.3.1 Industrial/Commercial Activities

Commercial retail and Industrial businesses are located on the north, east and west sides of IOW. These businesses are primarily located along South Riverside Drive and Iowa Highway 1. Industrial businesses are generally light industrial and specialty supply stores, such as automotive and plumbing supply.

3.3.2 Residential Areas, Schools, Churches and Hospitals

Residences are located on the northwest and south sides of IOW. On the northwest side of the airport, the houses are single-family residences with large mature trees. South of the airport is a mobile home park. There are three churches, one school and two hospitals located within 0.75 miles of the ends of the runways.

3.3.3 Publicly-Owned Parks, Recreational Areas, Wildlife and Waterfowl Refuges

There are four public parks within 0.75 mile of IOW: Sturgis Ferry Park is located just east of South Riverside Drive, adjacent to the Iowa River. Sturgis Ferry Park is nearly 38 acres and includes picnic tables and a boat ramp with access to the Iowa River. Napoleon Park, located on the east side of the Iowa River, is nearly 29 acres with several recreational trails, playground equipment, ballfields, and other amenities. Benton Hill Park is located approximately 0.6 mile north-northeast of the end of Runway 12. It is 3.5 acres and includes multi-use trail routes, natural areas, a preschool playground, a small shelter, and an open play area (Iowa City 2017a). Kiwanis Park is located approximately 0.6 mile northwest of the end of Runway 7. Amenities at the 14-acre park include playground equipment, a picnic shelter, multi-use paths and trails, and trailhead parking (Iowa City 2017b). There are no wildlife or waterfowl refuges in the immediate vicinity of IOW.

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

There are no known national or state forests, wilderness areas, wild and scenic rivers, or rivers that are part of the Nationwide Rivers Inventory in the vicinity of IOW.

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

There are seven federally endangered species in Johnson County, Iowa. The seven species include two mammals, one mollusk, one insect, and three flowering plants (United States Fish and Wildlife Service 2017). In addition, the State of Iowa lists four birds, two fish, nine mussels, four insects, two mammals, 29 flowering plants (dicots), 23 grasses (monocots), six ferns and six reptiles as either threatened, endangered, or of special concern with a possibility of occurring in Johnson County (Iowa Department of Natural Resources 2017). Consultation was initiated with the United States Fish and Wildlife Service and the Iowa Department of Natural Resources in August 2015. A response was received from the Iowa Department of Natural Resources that same month (Appendix B).

3.3.6 Wetlands, Floodplains, Floodways, Coastal Zones and Coastal Barriers

IOW and some surrounding areas are within the 100-year floodplain, the area with a 1 percent annual chance flood hazard. The mobile home park on the southeast side of the airport is also located within the 100-year floodplain. Sturgis Ferry Park is within the 100-year and 500-year floodplain (0.2 percent annual chance flood hazard). Most of the businesses and residences are outside of the floodplain. The Iowa River floodway is located east of the airport, and east and immediately adjacent to South Riverside Drive in the vicinity of the airport entrance. There are no coastal zones or coastal barriers in the vicinity of the airport.

3.3.7 Historic, Archeological or Cultural Resources

IOW conducted a cultural resources survey and an architectural survey of the proposed project area in September 2017. No archaeological resources were identified. There are no entries on the National Register of Historic Places list located within 0.5 mile of the Iowa City Airport.

3.4 Affected Political Jurisdiction

The Iowa City Airport is located in Iowa City, Johnson County, Iowa. The City has adopted ordinances regulating property and land uses. Iowa City has also adopted an airport overlay zone (AO) within which no structures or trees may penetrate the airport overlay zone (Title 14, Chapter 6 of the City Code of Ordinances).

3.5 Demographic Information/Bureau of Census Map

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Under EO 12898 (Environmental Justice), federal agencies identified in that EO are to address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. The analysis of the impacts of the proposed activities on environmental justice issues follows guidance issued under NEPA by the Council on Environmental Quality (CEQ) (CEQ 1997).

Identification of minority populations requires analysis of individual race and ethnicity classifications as defined by the USCB, as well as comparisons of all minority populations in the region. Low-income populations are those with incomes that are less than the poverty level (CEQ 1997). Minority or low-income populations exist if either of the following conditions is met:

- The minority or low-income population of the surrounding community exceeds 50 percent of the total population.
- The ratio of minority or low-income population within the surrounding community is meaningfully greater (i.e., greater than or equal to 20 percent) than the corresponding minority or low-income population percentage in the general population or other appropriate unit of geographic analysis (CEQ 1997).

Demographic data from census block groups in the potentially affected community (i.e., those block groups within the proposed project area), were compared to data for Johnson County and the State of Iowa to determine the presence of any environmental justice communities.

Table 3.1 presents the demographic population of the proposed project area, Johnson County, and the State of Iowa. No minority populations were identified within the proposed project area. Table 3.2 presents the low-income population of the proposed project area, Johnson County, and the State of Iowa. A low-income population is present in one block group within the proposed project area, Block Group 1 in Census Tract 6 (Figure 3.0).

Table 3.1. Race and Ethnic Population within the Proposed Action Area

Race / Ethnicity	Block Groups in the Project Area					Johnson County, Iowa	State of Iowa
	BG 3, CT 5	BG 4, CT 5	BG 3, CT 17	BG 1, CT 18.02	BG 4, CT 104		
Total Population	**1,863**	**2,749**	**1,204**	**2,232**	**2,122**	**130,882**	**3,046,355**
White	1,379	2,238	1,020	1,369	1,506	108,767	2,701,123
Percent of Total	74.0	81.4	84.7	61.3	71.0	83.1	88.7
Black or African American	129	120	46	206	87	6,163	86,906
Percent of Total	6.9	4.4	3.8	9.2	4.1	4.7	2.9
American Indian or Alaska Native	3	2	1	5	8	226	8,581
Percent of Total	0.2	0.1	0.1	0.2	0.4	0.2	0.3
Asian	197	231	21	156	39	6,774	52,597
Percent of Total	10.6	8.4	1.7	7.0	1.8	5.2	1.7
Native Hawaiian and Other Pacific Islander	0	0	0	4	0	47	1,797
Percent of Total	0.0	0.0	0.0	0.2	0.0	0.0	0.1
Some Other Race	7	5	1	3	4	230	2,132
Percent of Total	0.4	0.2	0.1	0.1	0.2	0.2	0.1
Two or More Races	53	53	39	49	57	2,475	2,475
Percent of Total	2.8	1.9	3.2	2.2	2.7	1.9	0.1
Hispanic or Latino	95	100	76	440	421	6,200	151,544
Percent of Total	5.1	3.6	6.3	19.7	19.8	4.7	5.0
Total Aggregate Minority	**505**	**526**	**193**	**882**	**625**	**22,127**	**306,037**
Percent of Total	**27.1**	**19.1**	**16.0**	**39.5**	**29.5**	**16.9**	**10.0**
Block Groups with Significant Minority Population	**N**	**N**	**N**	**Y**	**N**	**Not Applicable**	**N**

BG = Census Block Group
CT= Census Tract
Source: U.S. Census Bureau 2010

Table 3.2 Low-Income Population within the Proposed Action Area

Block Groups within the Project Area	Total Population	Number of Low-Income Individuals	Percent of Total	Block Groups with Significant Low-Income Population
Block Group 3, Census Tract 5	2,353	146	6.2	N
Block Group 4, Census Tract 5	2,577	637	24.7	N
Block Group 3, Census Tract 17	1,360	422	31.0	N
Block Group 1, Census Tract 18.02	1,855	377	20.3	N
Block Group 4, Census Tract 104	1,922	229	11.9	N
Johnson County	**133,721**	**23,911**	**17.9**	**Not Applicable**
State of Iowa	**3,005,808**	**369,828**	**12.3**	**N**

Source: U.S. Census Bureau 2016

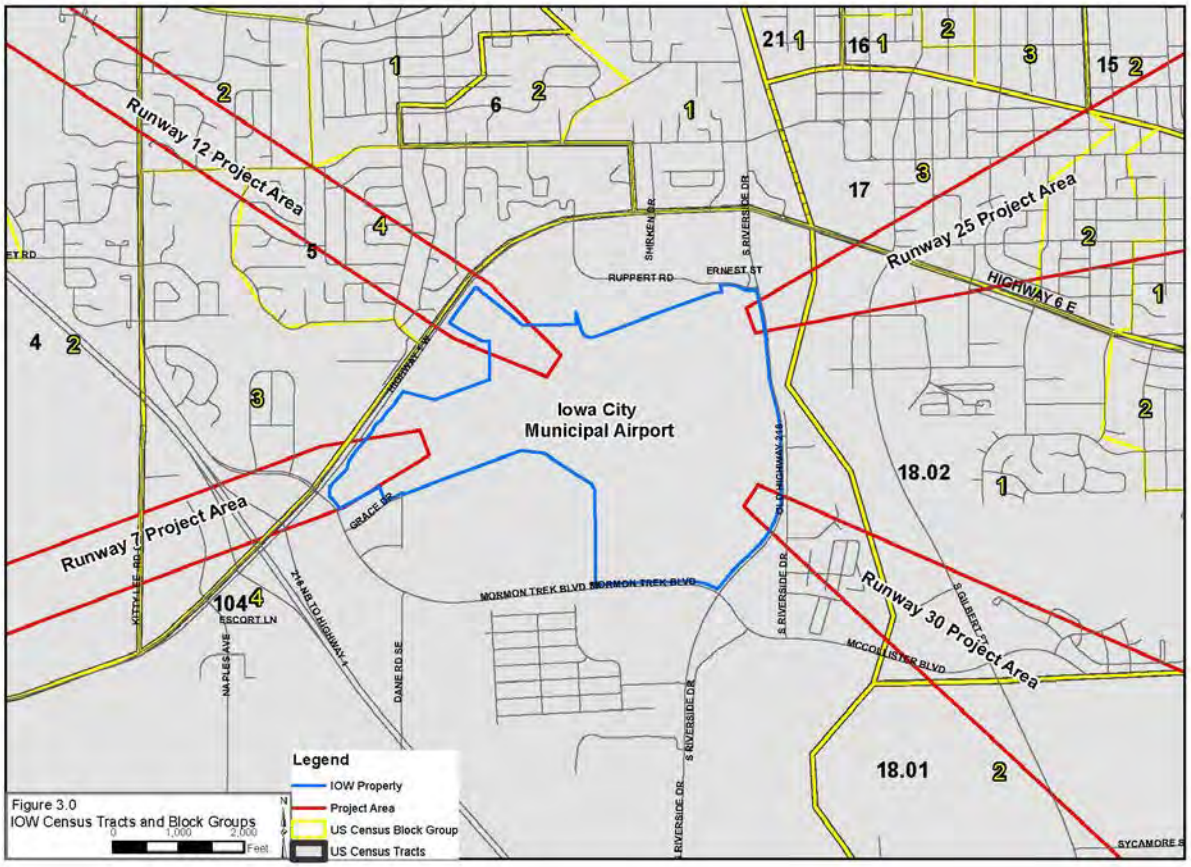

Figure 3.0 U.S. Census Tracts and Block Groups in the Vicinity of IOW

3.6 Past, Present and Reasonably Foreseeable Future Actions

There are no known state transportation projects in the immediate vicinity of IOW.

Iowa City has plans to develop a vacant area on both sides of Highway 6, immediately across the Iowa River from the Airport. This area will become a riverfront park, with walking and biking trails and access to the Iowa River for boating and fishing. This park is part of a larger development plan called Riverfront Crossing, located immediately south of downtown (Iowa City 2017c). The Riverfront Crossing district is 76 acres in size and designed to accommodate up to 900 residential units and up to 220,000 square feet of ground floor retail/office space. Community goals leading to the development of the Sub-Area Plan included the following:

- Develop a new mixed-use, pedestrian-oriented district.
- Create a resilient riverfront park system.
- Enhance Ralston Creek to become a community asset.
- Develop a multi-modal transportation system.
- Create a network of green streets throughout the district.
- Promote sustainable design practices within the district (Iowa City 2013).

According to information on the City's website, construction of the first phase of the park was slated for summer of 2017. This phase is located immediately north of Highway 6 on the right bank of the Iowa River (Iowa City 2017c).

4. Environmental Consequences and 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, environmental impacts, and conceptual measures needed to mitigate those impacts only for resources affected by at least one of the alternatives.

4.2 Environmental Impact Categories Not Affected

The No Action Alternative and Proposed Action would not affect the following resource areas:

- ***Air Quality:*** IOW is not located in a non-attainment or maintenance area for the National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act. IOW, in Iowa City, Iowa, is in an attainment area and is not subject to General Conformity requirements. No air quality analysis is required.

- ***Climate:*** The use of select construction equipment and the removal of individual trees in the vicinity if IOW would not result in significant impacts to climate as a result of the action alternatives. There would be no impacts to climate under the no action alternative.

- ***Coastal Resources:*** There are no coastal resources in the vicinity of IOW, and thus, there would be no impacts to coastal resources under any of the project alternatives.

- ***Department of Transportation Act, Section 4(f):*** There are no known Section 4(f) resources that would be affected by the proposed project alternatives and actions.

- ***Farmlands:*** There are no farmlands protected by the Farmland Protection Policy Act (FPPA) in the project area; therefore, no impacts to farmlands would occur under any of the alternatives.

- ***Hazardous Materials, Solid Waste and Pollution Prevention:*** No hazardous materials are located in the vicinity of the obstructions considered under the proposed project alternatives. Construction equipment utilized for the proposed actions would be maintained, and any spills of oils or fuels from such equipment would be addressed through best management practices. Felled trees and/or tree trimmings would be chipped on-site by the contractor or removed from the site to be used for other purposes (fire wood, lumber, etc.). Trees would not be burned or buried within the project area. No additional permitting requirements are anticipated. Therefore, mitigation of the obstructions would not cause potential impacts associated with hazardous materials, solid waste, or pollution.

- ***Land Use and Compatible Land Use:*** There would be no changes to land use under any of the project alternatives. Therefore, there would be no impacts to land use associated with the project. IOW's land use letter is provided in Appendix F.

- ***Natural Resources and Energy Supply:*** None of the proposed project alternatives would affect natural resources or energy sources. Thus, there would be no impacts to energy supply associated with the project.

- ***Surface Waters and Groundwater:*** None of the project alternatives would result in impacts to surface waters and groundwater. One obstruction is located near the Iowa River. Removal of this obstruction may generate a small amount of sediment/debris that could fall into the river. The amount of material that could be introduced to the river would be less than the debris accumulation after wind and rain storms. Therefore, the additional sediment/debris would be consistent with natural accumulations, and no additional impacts would be anticipated.

- ***Wetlands and Floodplains:*** No wetlands have been identified within the area affected by individual obstruction mitigations. Should ground-disturbing mitigations be required adjacent to the creek west of Runway 7 or the Iowa River, those areas would be evaluated for jurisdictional wetlands. While some of the obstructions are located within the floodplain, mitigation of these obstructions would not result in changes to the floodplain. Therefore, the project alternatives would result in no impacts to wetlands or floodplains. IOW initiated consultation with the Iowa Emergency Management Division to confirm the evaluation of floodplain impacts; no comments were received.

- ***Wild and Scenic Rivers:*** There are no wild and scenic rivers located within the proposed action area. Therefore, none of the project alternatives would cause impacts to wild and scenic rivers.

The following sections discuss potential impacts and mitigation for the remaining resource areas affected by the proposed project. Table 4.1 presents a summary of the anticipated impacts for all resource areas in association with the proposed project alternatives.

4.3 Biological Resources (Including Fish, Wildlife and Plants)

Biological resources that may be affected by the Proposed Action include trees, shrubs and herbs that may be eliminated or damaged by the obstruction removal process. Because there would be no in-water work or anticipated surface water disturbances, no fish would be anticipated to be affected by the proposed action.

4.3.1 No Action Alternative

Under the No Action Alternative, no trees or other obstructions would be removed; therefore, no disturbances or impacts to biological resources would occur.

4.3.2 Proposed Action

Under the Proposed Action, 56 trees and other obstructions would be removed or modified. Removal of all trees would constitute the largest potential impact to biological resources. Trimming of some trees would minimize some impacts. Removal of the trees would result in impacts to the individual trees as well as result in the elimination of any habitat that specific tree

provided for various wildlife species. The affected areas are urban, residential or industrial. In these areas, there are many similar trees which could provide habitat for any affected wildlife species. Additionally, small or immobile wildlife which may be unable to leave the tree removal area may be impacted, such as eggs and juveniles in birds and other animal nests.

The Migratory Bird Treaty Act (MBTA) applies to Federal agency actions. The MBTA prohibits the taking, killing, possession, and transportation (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. Removal of obstructions during nesting season could result in impacts to migratory birds, eggs, and nests. IOW would avoid clearing or grubbing of migratory bird nesting habitat during the nesting season from April 1 to July 15. Additionally, IOW would work closely with US Fish and Wildlife Service biologists to identify available protective measures prior to/during obstruction mitigation activities. The only federally listed species that may be adversely affected under the proposed action are the Indiana Bat and Northern Long-Eared Bat. These bats could be affected by the clearing of any trees providing suitable bat habitat. Potential direct and indirect impacts on these species would be avoided by scheduling the clearing of trees so that all trees would be removed between October 15 and March 31, the period when these bats would not be roosting in trees.

4.4 Historical, Architectural, Archeological, and Cultural Resources

Consultation with the Iowa State Historic Preservation Officer (SHPO) confirmed that no historic properties would be impacted by the proposed action.

4.5 Noise

Noise is unwanted or unwelcome sound usually caused by human activity and added to the natural acoustic setting of a locale. Community response to noise is dependent on the intensity of the sound source, its duration, the proximity of noise-sensitive land uses, and the time of day the noise occurs (i.e., higher sensitivities would be expected during the quieter overnight periods).

4.5.1 No Action Alternative

Under the No Action Alternative, no changes to existing noise levels would occur. Therefore, there would be no impact to noise in the vicinity of IOW.

4.5.2 Proposed Action

FAA Order 1050.1F, Appendix B, states “No noise analysis is needed for projects involving Design Group I and II airplanes (wingspan less than 79 feet) in Approach Categories A through D (landing speed less than 166 knots) operating at airports whose forecast operations in the period covered by the NEPA document do not exceed 90,000 annual propeller operations (247 average daily operations) or 700 annual jet operations.” The Iowa City Municipal Airport Master Plan forecasts approximately 52,650 annual aircraft operations at IOW in the year 2034 (Bolton & Menk 2016). This is well under the 90,000 operations limit. Therefore, a noise analysis was not conducted for this EA.

Under the Proposed Action, minor increases in noise would occur during obstruction removal activities. Tree removal would likely involve the use of chain saws, chippers, possibly man-lifts, cranes, and other mechanical and diesel equipment. Noise levels in the immediate vicinity of these activities would increase temporarily. Tree removal activities would be temporary, likely lasting several hours to as long as one day for each tree. All trees on any individual side of the runways would likely be scheduled for removal/trimming during a single period. Therefore, noise impacts in any specific area would likely last for several days to a few weeks. The noise would be dispersed around the area as the trimmers moved from obstruction to obstruction. Tree removals and trimming would occur during daylight hours; no nighttime activities would occur.

Installation of obstruction lights would also involve the use of mechanical and diesel equipment. These installations would also likely require several hours to a day per obstruction. The installations would also occur only during daylight hours.

Overall, although noise levels would increase above the ambient, existing levels for mitigation of the various obstructions, these increases would be temporary and minor.

4.6 Socioeconomics, Environmental Justice, and Children's Environmental Health and Safety Risks

The socioeconomic analysis considers human elements of the environment, such as population, employment, housing, and public services. The environmental justice analysis evaluates impacts to minority and low-income populations within the project vicinity to ensure no group of people is disproportionately impacted by a project action. Project actions are also evaluated to ensure children's health is not disproportionately impacted by a proposed action.

4.6.1 No Action Alternative

Under the No Action Alternative, no obstructions would be mitigated. Therefore, no changes or other impacts to socioeconomics, environmental justice or children's environmental health in the IOW vicinity would occur.

4.6.2 Proposed Action

Impacts to the local community associated with the removal of trees may result in a reduction in shading for certain residences. Depending on the nature of the residence and the insulation within the residence, this could result in a minor increase in summer cooling costs. The community on the northwest side of Runway 12 consists of permanent single-family homes. This neighborhood is also heavily vegetated with trees of varying heights. On average, only one tree would be removed around most homes. Overall, therefore, no impacts would be anticipated.

As described in Section 3.5, the community southeast of Runway 30 consists primarily of semi-permanent mobile homes. These mobile homes have thinner walls and less insulation than the permanent homes on the northwest of Runway 12. Therefore, removal of trees in the mobile home park would have a potential to result in increased cooling costs to those residents and/or higher summer temperatures within individual mobile homes. Higher temperatures could potentially result in impacts to children's health. Increased cooling costs and/or higher summer

temperatures could constitute a minor impact to these residents, many of whom are likely lower income than the residents northwest of Runway 12. Such impacts could be partially mitigated by the planting of tree species that would not grow to heights which would penetrate the approach/departure surface. With mitigation, impacts to socioeconomics would be expected to be minor.

4.7 Visual Effects (Including Light Emissions)

Visual resources are the visual characteristics of a place and include both natural and man-made attributes. Visual resources are important as they can determine how an observer experiences a particular location. A viewshed is defined as the environment that can be seen from a certain vantage point; a viewpoint is the vantage point from where the visual character is seen.

Current visual conditions in the IOW vicinity range from heavy industrial aspects to small scale residential aspects. Heavy industrial areas are dominated by large buildings, parking lots and heavy equipment. Lighter industrial and office areas are dominated by slightly smaller buildings, parking lots, and businesses, such as restaurants and commercial supply stores. The residential areas consist of small homes with front yards, narrow streets and a generally more natural landscape appearance. Appendix C includes photographs of the individual obstructions (identified in Figures 2.5 through 2.8) that would be affected by the proposed project activities.

4.7.1 No Action Alternative

Under the No Action Alternative, no obstructions would be mitigated. Therefore, no changes or other impacts to the visual aspects of the IOW vicinity would occur.

4.7.2 Proposed Alternative

Under the Proposed Action, minor changes to the visual landscape would occur due to mitigation of the obstructions. A few trees would be removed in the industrial areas surrounding IOW. Most of these are located along major roads, or are along the Iowa River. The removal of these trees would change the visual aspects along these roads. Minor changes to the viewscape may occur and be experienced by people travelling along the roads. However, many trees would remain, thereby retaining the overall visual character of these areas.

In the smaller scale residential areas to the northeast and southwest of the IOW, mitigation of obstructions would have greater impacts. The sample renderings in Appendix G show how the visual landscape could change in the future as a result of removal of certain obstructions. Rendering 1.1 in Appendix E shows an example of a replacement of a tree with a smaller species that would not grow to heights that would make it an obstruction in the future.

The removal (or trimming) of large trees will change the viewshed for residents in the immediate vicinity. Tree removal will also increase the amount of empty space in the viewshed as areas formerly occupied by greenery and three-dimensional objects would now be empty, creating more open space in the neighborhoods. Only some trees would be removed, however; and smaller trees and shrubbery would remain. This would lessen the visual impacts.

Installation of lighting on select obstructions (buildings, fences, utility poles) would create an insignificant impact on visual resources. The addition of the red light would largely be unnoticeable during the day. At night, the red light would be visible to observers; however, it would be consistent with the existing lighting in the vicinity and would, therefore, not constitute a significant impact.

Overall, the removal of the obstructing trees would constitute a minor impact to visual resources in the areas surrounding the IOW.

Table 4.1 Summary of Impact Category Determinations and Mitigation

Environmental Consequences	Proposed Action Alternative		No Action Alternative	
Impact Category	**Impacts**	**Mitigation**	**Impacts**	**Mitigation**
Air Quality	None	None Required	None	None
Biological Resources	Not Significant	Trees would only be trimmed or removed between October 15 and March 31, when bats would not be potentially roosting. This would also avoid the migratory bird nesting season from April 1 to July 15.	None	None
Climate	None	None Required	None	None
Coastal Resources	None	None Required	None	None
Section 4(f)	None	None Required	None	None
Farmlands	None	None Required	None	None
Hazardous Materials, Solid Waste and Pollution Prevention	Not Significant	Lawfully dispose of tree debris.	None	None
Historical, Architectural, Archeological and Cultural Resources	None	Immediately stop all activity and contact SHPO and FAA if resources are uncovered during construction.	None	None
Land Use and Compatible Land Use	None	City commitment to Land Use Compatibility Assurance; establish and maintain appropriate airport zoning/ordinances.	None	None
Natural Resources and Energy Supply	None	None Required	None	None
Noise	Not Significant	None Required	None	None
Socioeconomic, Environmental Justice and Children's Health	Not Significant	Replacement of removed trees with smaller species that would not grow to heights that would create an obstruction in the future would mitigate cooling costs and/or heating impacts to mobile homes.	None	None
Visual Effects	Not Significant	If desired by the landowner, the City of Iowa City would replace removed trees with smaller species that would not grow to heights that would create an obstruction in the future.	None	None
Water Resources	None	None Required	None	None
Wetlands	None	None Required	None	None

Floodplains	None	None Required	None	None
Surface Water	None	None Required	None	None
Groundwater	None	None Required	None	None
Wild and Scenic Rivers	None	None Required	None	None
Cumulative Impacts	None	None Required	None	None

5. Cumulative Impact Analysis

A review of the Proposed Action's effects on resources when combined with other past, present and reasonably foreseeable actions (discussed in Section 3.6) has determined that there are no significant cumulative impacts.

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Appendix A

LIST OF PREPARERS

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Appendix A - LIST OF PREPARERS

Name:	**David Hughes, PE (AECOM)**
Education:	B.S., Mining Engineering
Project Role:	Project Manager
Experience:	35 Years in Airport Planning and Development

Name:	**Carol Butler Freeman, PG (AECOM)**
Education:	M.S., Geological Sciences; BS, Geology
Project Role:	NEPA Compliance Specialist
Experience:	9 Years of Experience in NEPA Document Preparation and Environmental Project Management

Name:	**Zoe Knesl (AECOM)**
Education:	M.S. Marine Science
Project Role:	Affected Environment and Environmental Consequences
Experience:	9 Years of Experience in NEPA Document Preparation

Name:	**Holly McDonald (AECOM)**
Education:	A.A.S., Civil Engineering Technology
Project Role:	GIS
Experience:	3 Years in Civil Engineering

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Appendix B
AGENCY CONSULTATION

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Appendix B – AGENCY CONSULTATION

Federal Agencies

Mark Cornish
Environmental Planning Branch
U.S. Army Corps of Engineers
Rock Island District
Clock Tower Building
Rock Island, Illinois 61201

Mr. Kraig McPeek
U.S. Fish and Wildlife Service
1511 – 47th Avenue
Moline, Illinois 61265

Federally Recognized Tribes

Ms. Bobi Roush
Cultural Preservation Department
Iowa Tribe of Oklahoma
335588 E 750 Road
Perkins, Oklahoma 74059

Ms. Diane Hunter
Tribal Historic Preservation Officer
Miami Tribe of Oklahoma
P.O. Box 1326
Miami, Oklahoma 74355

Mr. Tony Provost
Tribal Historic Preservation Officer
Omaha Tribe
P.O. Box 368
Macy, Nebraska 68039

Mr. Shannon Wright
Tribal Historic Preservation Officer
Ponca Tribe of Nebraska
PO BOX 288
Niobrara, Nebraska 68760

Mr. Johnathan L. Buffalo
Historic Preservation Director
Sac and Fox Tribe of the Mississippi in
Iowa/Meskwaki Nation
349 Meskwaki Road
Tama, Iowa 52339

State Agencies

Ms. Christine Schwake
Environmental Services Division
Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319-0034

Iowa State Historic Preservation Officer
State Historical Society of Iowa
600 E. Locust Street
Des Moines, Iowa 50319-0290

Mr. Dennis Harper
Iowa State Hazard Mitigation Team
7900 Hickman Road, Suite 500
Windsor Heights, Iowa 50324

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Appendix C
OBSTRUCTION TABLES

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Appendix C – OBSTRUCTION TABLES

C.1 PRELIMINARY ALTERNATIVE OBSTRUCTIONS

Table 2.1. Runway 7 Preliminary Alternative

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
7-1	777.1	763.7	13.4	Tree
7-2	759.4	761.0	-1.6	Tree
7-3	763.9	766.2	-2.3	Tree
7-4	758.8	761.5	-2.7	Tree
7-5	763.9	767.0	-3.1	Tree
7-6	757.0	760.7	-3.7	Tree
7-7	759.3	763.5	-4.2	Tree
7-8	766.0	763.0	3.0	Tree
7-9	767.9	765.5	2.4	Tree
7-10	758.9	767.9	-9.0	Tree
7-11	758.7	768.4	-9.7	Tree
7-12	766.1	763.1	3.0	Tree
7-13	742.3	749.4	-7.1	Lighted Sign

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

Table 2.2 Runway 25 Preliminary Alternative

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
25-1	698.3	692.9	5.4	Tree

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

Table 2.3. Runway 12 Preliminary Alternative

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
12-1	745.8	798.3	52.5	Tree
12-2	745	777.9	32.9	Tree
12-3	742.8	770.3	27.5	Tree
12-4	743.9	770.8	26.9	Tree
12-5	744.4	771.2	26.8	Tree
12-6	741.3	764.8	23.5	Tree
12-7	747.5	771	23.5	Tree
12-8	750.9	774	23.1	Tree
12-9	753	775.8	22.8	Tree
12-10	756.1	778.5	22.4	Tree
12-11	739.9	760.8	20.9	Tree
12-12	757.8	787.3	29.6	Tree
12-13	795.5	815.6	20.1	Tree
12-14	808.8	828.9	20.1	Tree
12-15	765.5	785.4	19.9	Tree
12-16	750.7	770	19.3	Tree
12-17	806.1	825.1	19.1	Tree
12-18	733.8	752	18.2	Tree
12-19	746.6	764.5	17.9	Tree
12-20	756.8	774.3	17.5	Tree
12-21	734.3	751.6	17.3	Tree
12-22	752	769.3	17.3	Tree
12-23	800.1	816.8	16.7	Tree
12-24	749.3	764.2	14.9	Tree
12-25	759.8	773.9	14.1	Tree
12-26	810	823.5	13.5	Tree
12-27	768.7	780.6	11.9	Tree
12-28	818.6	829.9	11.3	Tree
12-29	768.5	783.3	14.8	Tree
12-30	740.7	750	9.3	Tree
12-31	790.5	799.3	8.8	Tree
12-32	790.1	798.9	8.8	Tree
12-33	739.4	748	8.6	Tree
12-34	736.1	744.6	8.5	Tree
12-35	743.5	751.8	8.3	Tree
12-36	765.4	773.4	8	Tree
12-37	799.8	808	8.2	Tree
12-38	747.5	755.5	8	Tree
12-39	741.2	748.6	7.4	Tree
12-41	807.1	814.4	7.3	Tree
12-42	758.3	765.4	7.1	Tree

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
12-43	735.6	742.6	7	Tree
12-44	757.6	764.1	6.5	Tree
12-45	745.1	751.5	6.4	Tree
12-46	774.5	780.2	5.7	Tree
12-47	734.2	739.7	5.5	Tree
12-48	732.8	738.2	5.4	Tree
12-49	768.7	773.8	5.1	Tree
12-50	797.1	802	4.9	Tree
12-51	736.4	740.9	4.5	Tree
12-52	802.7	807.2	4.5	Tree
12-53	756.9	761.2	4.3	Tree
12-54	792.1	796.2	4.1	Tree
12-55	754	757.9	3.9	Tree
12-56	801	804.7	3.7	Tree
12-57	789	792.6	3.6	Tree
12-58	797.6	801.2	3.6	Tree
12-59	688.3	691.5	3.2	Tree
12-60	782	785.1	3.1	Tree
12-61	743.2	746.3	3.1	Tree
12-62	742.4	745	2.6	Tree
12-63	732.8	735.3	2.5	Tree
12-64	756.6	759.1	2.5	Tree
12-65	772.2	773.8	1.6	Tree
12-66	823.1	825	1.9	Tree
12-67	772.2	789.2	17	Tree
12-68	798.7	799.5	0.8	Tree
12-69	794.2	794.8	0.6	Tree
12-70	807.4	814.1	6.7	Tree
12-71	775.9	776.1	0.2	Tree
12-72	765.9	766.1	0.2	Tree
12-73	806.8	806.5	-0.3	Tree
12-74	759.7	759	-0.7	Tree
12-75	759.4	758.8	-0.6	Tree
12-76	796.4	795.3	-1.1	Tree
12-77	795.1	793.9	-1.2	Tree
12-78	790.7	789.5	-1.2	Tree
12-79	788.9	787.7	-1.2	Tree
12-80	762.1	760.8	-1.3	Tree
12-81	779.2	777.6	-1.6	Tree
12-82	732.5	730.8	-1.7	Tree
12-83	734.7	732.9	-1.8	Pole
12-84	799.5	797.6	-1.9	Tree

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
12-85	823.7	821.6	-2.1	Tree
12-86	797.9	795.9	-2	Tree
12-87	790.4	788.2	-2.2	Tree
12-88	783.9	781.4	-2.5	Tree
12-89	785.8	782.8	-3	Tree
12-90	806.8	803.7	-3.1	Tree
12-91	754.6	751.3	-3.3	Tree
12-92	807.1	803.8	-3.3	Tree
12-93	829.2	829.2	0	Tree
12-94	816.6	812.6	-4	Tree
12-95	799.9	800.9	1	Tree
12-96	808.1	804	-4.1	Tree
12-97	778.5	772.5	-6	Tree
12-98	730.6	736.7	6.1	Tree
12-99	737.2	738.7	1.5	Tree
12-150	823.2	828.3	5.1	Tree
12-151	812.3	817.5	5.2	Tree
12-152	805.2	811.7	6.5	Tree
12-153	802.4	806.4	4	Tree
12-154	804.9	806.2	1.3	Tree
12-155	794.1	795.4	1.3	Tree
12-156	780.2	790	9.8	Tree
12-157	779.6	784.6	5	Tree
12-158	775.9	780.2	4.3	Tree
12-159	759	763	4	Tree
12-160	755.7	760	4.3	Tree
12-161	755.8	758.6	2.8	Tree
12-162	753.7	756	2.3	Tree
12-163	752.8	755.8	3	Tree
12-164	743.8	746.9	3.1	Tree
12-165	738.7	743	4.3	Tree
12-166	731.6	732.8	1.2	Building
12-167	729.5	729.7	0.2	Building

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

Table 2.4. Runway 30 Preliminary Alternative

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
30-2	717.3	706	11.3	Tree
30-3	721.4	Part 77	Part 77	Tree
30-4	718.8	710.8	8	Tree
30-5	723.6	719.2	4.4	Tree
30-6	717.1	712.3	4.8	Tree
30-7	708.6	700.9	7.8	Tree
30-8	719.6	720.3	-0.7	Tree
30-9	714.9	717.2	-2.3	Tree
30-10	709.7	711	-1.3	Tree
30-11	714.5	720	-5.5	Tree
30-12	697.1	Part 77	Part 77	Tree
30-13	708.9	713.3	-4.4	Tree
30-14	706.2	710.8	-4.6	Tree
30-15	692.9	688.8	4.1	Pole
30-16	695.8	693.8	2	Tree
30-17	697.2	697.1	0.1	Tree
30-18	692.7	692.8	-0.1	Tree
30-19	689.9	691.2	-1.3	Tree
30-20	688.6	692.1	-3.5	Tree
30-22	706.2	Part 77	Part 77	Tree
30-23	672.7	673.2	-0.5	Tree
30-24	673.2	674.8	-1.6	Tree
30-25	676.8	682.5	-5.7	Tree
30-26	671	674	-3	Tree
30-27	656.5	Part 77	Part 77	Fence
30-28	658.3	Part 77	Part 77	Fence
30-29	699.2	Part 77	Part 77	Tree
30-30	697.8	Part 77	Part 77	Railroad
30-31	656.3	Part 77	Part 77	Fence
30-32	707	Part 77	Part 77	Tree
30-33	656.4	Part 77	Part 77	Fence
30-34	657.3	Part 77	Part 77	Bush
30-35	697.6	Part 77	Part 77	Railroad
30-37	655.1	Part 77	Part 77	Fence
30-38	699.6	Part 77	Part 77	Tree
30-39	674.4	Part 77	Part 77	Railroad
30-41	692	701	-9	Tree
30-42	667.7	675.3	-7.6	Tree
30-43	668.3	675.6	-7.3	Tree
30-44	667.6	674.2	-6.6	Tree
30-45	667.7	671.4	-3.7	Tree

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
30-48	674.6	Part 77	Part 77	Railroad
30-49	700.8	708.9	-8.1	Tree
30-50	711.6	717.6	-6	Tree

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

C.2 PROPOSED ACTION ALTERNATIVE OBSTRUCTIONS

Table 2.5. Runway 7 Proposed Action

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
7-1	777.1	763.7	13.4	Tree
7-5	763.9	767.0	-3.1	Tree
7-10	758.9	767.9	-9.0	Tree
7-11	758.7	768.4	-9.7	Tree

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

Table 2.6. Runway 25 Proposed Action

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
25-1	698.3	692.9	5.4	Tree

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

Table 2.7. Runway 12 Proposed Action

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
12-1	770.8	798.3	27.5	Tree
12-2	770.0	777.9	7.9	Tree
12-3	767.8	770.3	2.5	Tree
12-4	768.9	770.8	1.9	Tree
12-5	769.4	771.2	1.8	Tree
12-6	766.3	764.8	-1.5	Tree
12-7	772.5	771.0	-1.5	Tree
12-8	775.9	774.0	-1.9	Tree
12-9	778.0	775.8	-2.2	Tree
12-10	781.1	778.5	-2.6	Tree
12-11	764.9	760.8	-4.1	Tree
12-12	782.8	787.3	4.5	Tree
12-13	820.5	815.6	-4.9	Tree
12-14	833.8	828.9	-4.9	Tree
12-15	790.5	785.4	-5.1	Tree
12-16	775.7	770.0	-5.7	Tree
12-17	831.1	825.1	-5.9	Tree
12-18	758.8	752.0	-6.8	Tree
12-19	771.6	764.5	-7.1	Tree
12-20	781.8	774.3	-7.5	Tree
12-21	759.3	751.6	-7.7	Tree
12-22	777.0	769.3	-7.7	Tree
12-23	825.1	816.8	-8.3	Tree
12-24	774.3	764.2	-10.1	Tree
12-27	791.1	792.8	1.7	Tree
12-29	793.5	783.3	-10.2	Tree
12-32	809.1	815.5	6.4	Tree
12-58	816.5	823.0	6.5	Tree
12-67	797.7	813.3	15.6	Tree
12-168	822.3	828.0	5.7	Tree
12-169	792.2	814.3	22.1	Tree
12-170	798.5	820.5	22.0	Tree
12-171	805.9	822.1	16.1	Tree
12-172	784.2	791.8	7.6	Tree

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

Table 2.8. Runway 30 Proposed Action

Obstruction ID	Obstruction Elevation (ft)	20:1 Approach Departure Surface Elevation (msl)	Penetration of 20:1 Approach Departure Surface (ft)*	Type of Obstruction
30-2	717.3	706.0	11.3	Tree
30-3	721.4	Part 77	Part 77	Tree
30-4	718.8	710.8	8.0	Tree
30-5	723.6	719.2	4.4	Tree
30-6	717.1	712.3	4.8	Tree
30-7	708.6	700.9	7.8	Tree
30-8	719.6	720.3	-0.7	Tree
30-9	714.9	717.2	-2.3	Tree
30-10	709.7	711.0	-1.3	Tree
30-11	714.5	720.0	-5.5	Tree
30-12	697.1	Part 77	Part 77	Tree
30-13	708.9	713.3	-4.4	Tree
30-14	706.2	710.8	-4.6	Tree
30-15	692.9	688.8	4.1	Pole
30-16	695.8	693.8	2.0	Tree
30-17	697.2	697.1	0.1	Tree
30-18	692.7	692.8	-0.1	Tree
30-19	689.9	691.2	-1.3	Tree
30-20	688.6	692.1	-3.5	Tree
30-22	706.2	Part 77	Part 77	Tree
30-23	672.7	673.2	-0.5	Tree
30-24	673.2	674.8	-1.6	Tree
30-25	676.8	682.5	-5.7	Tree
30-26	671.0	674.0	-3.0	Tree
30-27	656.5	Part 77	Part 77	Fence
30-29	699.2	Part 77	Part 77	Tree
30-32	707.0	Part 77	Part 77	Tree
30-34	657.3	Part 77	Part 77	Bush
30-38	699.6	Part 77	Part 77	Tree
30-41	692.0	701.0	-9.0	Tree
30-42	667.7	675.3	-7.6	Tree
30-43	668.3	675.6	-7.3	Tree
30-45	667.7	671.4	-3.7	Tree
30-49	700.8	708.9	-8.1	Tree
30-50	711.6	717.6	-6.0	Tree

* Positive values indicate the amount the obstruction penetrates the approach/departure surface; negative numbers indicate the distance the obstruction is beneath the approach/departure surface.

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Appendix D
REPRESENTATIVE OBSTRUCTION PHOTOGRAPHS

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Appendix D – REPRESENTATIVE OBSTRUCTION PHOTOGRAPHS

Photograph 1.1 – Obstructions 7-1 and 7-5

Photograph 1.2 – Obstruction 30-25

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Appendix E
EXAMPLE FUTURE CONDITIONS RENDERINGS

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Appendix E – EXAMPLE FUTURE CONDITION RENDERINGS

Rendering 1.1 – Obstruction 12.10 Existing Conditions

Rendering 1.2 – Obstruction 12.10 Projected Future Conditions

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Appendix F
SPONSOR’S LAND USE LETTER

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CITY OF IOWA CITY
410 East Washington Street
Iowa City, Iowa 52240-1826
(319) 356-5000
(319) 356-5009 FAX
www.icgov.org

January 9, 2018

Federal Aviation Administration
Airports Division, Central Region
901 Locust St.
Kansas City, MO 64106

Re: Iowa City Municipal Airport

To Whom It May Concern:

The City of Iowa City, Iowa makes the following statement of compatible land use assurances as required by US Code, Title 49, 47107(a)(10), formerly Section 511(2)(5) of the Airport and Airway Improvement Act of 1982.

The City of Iowa City, Iowa provides assurances that appropriate action, including the adoption of zoning laws, has been or will be taken to the extent reasonable to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations, including landing and takeoff of aircraft. This assurance includes the consideration of existing and future land uses.

Sincerely,

James A. Throgmorton
Mayor, City of Iowa City of Iowa City

Cc: Michael Tharp, Airport Operations Specialist
Eric Goers, Asst. City Attorney

Appendix G
PUBLIC COMMENTS AND RESPONSES

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APPENDIX G – PUBLIC COMMENTS AND RESPONSES

The Draft EA was published on February 28, 2018. A notice of availability and notice of a public informational meeting was published in the Iowa Press Citizen initiating a 43-day public scoping period which concluded on April 12, 2018. In addition to the notice in newspaper, IOW sent notification of the availability of the Draft EA and the notice of a public informational meeting to residents and property owners located within the proposed action areas. Additionally, IOW prepared a website where the Draft EA and supporting documents could be downloaded, and with an interactive map of the proposed action area and identified obstructions. The public notice and screenshots of the website are included in Appendix H.

IOW hosted two public informational meetings on April 2, 2018, at the airport. IOW staff, board members, and contractors, and city employees were available to address public questions and collect public comments. A total of approximately 20 individuals attended the public informational meetings. The posters and handouts available at the public informational meetings are included in Appendix H.

Comments were accepted through mail, email, and at the public meeting. A total of 9 comments were received from 9 commenters. Comments were received in relation to the identification of obstructions on specific properties, the process for city assistance in addressing obstructions, safety, support for the proposed action, and opposition to the proposed action.

The substantive comments received were summarized and responded to below. The original comment submissions are included in this appendix following the responses to comments.

1.1 Identification of Obstructions on Specific Properties

Comment 1: IOW received several inquiries in person, by phone, and by email asking whether obstructions had been identified on a specific property. The inquires received by email have been counted and are included in this Appendix. (*Commenters: Various*)

> ***Response 1:*** IOW thanked the commenters for their comment and identified whether there was an obstruction on the specific property in question, or on an adjacent property. Additionally, IOW provided the commenters with the following information:
>
> For more information about the study, we have developed the following website (https://iowacityea.aecomonline.net/) to allow the community to determine property impacts. From this website you can access the following:
>
> - The Draft Environmental Assessment in a downloadable pdf which describes the proposed action and analyzes potential impacts (https://iowacityea.aecomonline.net/documents/IOW_DraftEA_2018-02-26.pdf).
> - A downloadable photo log pdf which also displays the identified obstructions (https://iowacityea.aecomonline.net/documents/Draft_IOW_Obstruction_PhotoLog.pdf).

- An Interactive Map which displays the identified obstructions (https://iowacityea.aecomonline.net/map_view.html). The Interactive Map has a search bar where you can enter your street address. Obstructions are identified on the map with a dot and number. If you see a dot and number on your parcel or an adjacent parcel you can click on the dot and a photograph will pop-up which shows the identified obstruction(s) at that location. You can click on the small photograph for a larger image. Below are a couple of screen shots from this website for your address.

Comment 2: Does Obstruction 12-23 penetrate the approach/departure surface by about 16 feet? (*Commenter: Julia Cascio*)

> ***Response 2:*** You are correct that Obstruction 12-23 penetrates the approach/departure surface by approximately 16 feet. Your question helped draw our attention to an error in the labeling and identification of the obstructions. Obstruction 12-23 is marked on the map at 123 Penfro Drive. However, the obstruction identified in the associated image on the interactive map and in the photo log is on the adjacent property, 115 Penfro Drive. To clarify this issue, two of our environmental staff visited Penfro Drive and surveyed the two trees in question. Their measurements were able to determine that both trees should have been labeled as obstructions. The figures in the Final EA identifying the obstructions have been updated to reflect this change. The neighboring property owner at 115 Penfro Drive was contacted by mail to inform them of the change as well. Figure 2.7 in Chapter 2 and Table 2.7 in Appendix C have been updated to include the added Obstruction 12-168.

Comment 3: Please relook at trees on east side (toward the rear) of 123 Penfro Drive. Check for height and potential encroachment. Include the tree in front (total three trees). (*Commenter: Nancy Goldsmith*)

> ***Response 3:*** The trees at 123 Penfro Drive were surveyed for height and potential encroachment. All three trees have been identified as obstructions (12-58, 12-170, and 12-171. These three obstructions have been added to Figure 2.7 in Chapter 2 and Table 2.7 in Appendix C.

Comment 4: Please review tree in front yard of 24 Denbigh Drive when evaluating Obstruction 12-67. The tree is at the southwest corner of the house. (*Commenter: Nick Lanbenthal*)

> ***Response 4:*** A survey was conducted on multiple trees at 24 Denbigh Drive due to the similarity of apparent height from visual examination. Obstruction 12-67 was confirmed as an obstruction and its height was adjusted in Table 2.7 in Appendix C. Two additional trees were identified as obstructions, 12-32 and 12-169. Obstructions 12-32 and 12-169 were added to Figure 2.7 in Chapter 2 and Table 2.7 in Appendix C.

Comment 5: There is a tree on my property at 1111 Wylde Green Road that appears to be as tall or taller than the one identified for removal at 1107 Wylde Green Road (Obstruction 12-29). My fear is that the tree on my property at 1111 Wylde Green Road will be a problem in the near future, if it is not already, and I will be required to remove it after the program/grant is over.

Could you please take a look at 111 Wylde Green Road and let me know if this should be added as an obstruction? I am willing to meet at the property if needed. (*Commenter: Ron Logsden*)

> ***Response 5:*** Trees at 1111 Wylde Green Road were surveyed and two were identified as obstructions, 12-27 and 12-172. These obstructions were added to Figure 2.7 in Chapter 2 and Table 2.7 in Appendix C.

1.2 Process for City Assistance for Addressing Obstructions

Comment 6: The letter we received stated that "although law makes property owners responsible for preventing and removing these obstructions, the City is willing to offer assistance in the mitigation of trees that constitute obstructions. That assistance may include performing the work, at City cost, and replacing the tree(s) with shrubs or trees unlikely to grow to an illegal height." How do we go about getting information on the specifics of assistance for our property? (*Commenter: Julia Cascio*)

> ***Response 6:*** The City of Iowa City will be reaching out to the impacted property owners once the environmental review process has been completed and the Final EA published. The City will discuss the options and process with each property owner individually.

1.3 Safety

Comment 7: I want to know how high above my house a plane is supposed to be. Concerned about number of planes that seem to be too low. (*Commenter: Nancy Goldsmith*)

> ***Response 7:*** The exact height above the house is unknown and dependent upon the aircraft type and crew. The Airspace Zoning for the Iowa City Municipal Airport protects the surface above the end of the runway based on FAA requirements.

1.4 Support for the Proposed Action

Comment 8: As a local resident (just outside the affected area) as well as a pilot/flight instructor, I am glad to see this process moving forward. Removing these obstructions will enhance the safety and accessibility of our community. (*Commenter: Matt Wolford*)

> ***Response 8***: Thank you for your comment.

1.5 Opposition to the Proposed Action

Comment 9: I wish to submit a statement of strong opposition to the Iowa City airport's planned Obstruction Mitigation activities and proposal.

In my opinion, the proposal for "mitigation" is in fact a proposal for an expansion of airport operations and increased flight activity.

Calling this proposal "obstruction mitigation" is a disingenuous attempt to distract the public from the real issue at hand: the Airport Commission's purpose is to increase the size and type of aircraft that will be able to land and take off from the Iowa City airport. It appears that the airport simply wishes to allow bigger planes to use the facility, but because they are landlocked, they

cannot do so safely, without reclassifying and making available more vertical airspace at the edges of the facility, thus the need for "obstruction mitigation".

The project summary states that as part of the mitigation request, the airport wishes reclassify Runway 7/25; relocate the runway 25 and 12 thresholds, and extend runways 7 and 30. The only reason to do this is to increase the accessibility of the airport to larger, faster, louder planes that will arrive and depart with more frequency, often at night or in inclement weather when additional instrumentation is required.

Neither the City nor the airport is willing to acknowledge or openly discuss what they are really doing, nor will they acknowledge the risk that such an expansion poses to the surrounding neighborhoods and community at large.

Most citizens don't understand the details of the airport operations, thus a request for “obstruction mitigation", while seemingly benign on first glance, is in fact deliberately obfuscating.

This proposal will have very real and deleterious impacts to our community. Ours is the oldest airport of its kind in the United States that is still in its original location. It has long since outgrown the footprint of its siting. This "mitigation", if approved, represents an expansion of flight activity on a site that is simply too small, and too close to homes and structures. Flight expansion of the sort proposed poses an imminent safety hazard to surrounding homes and businesses.

There are very real social, economic and environmental impacts of this proposed action: our neighborhoods will continue to lose peace and quiet to increasing airport activities; property values in the expanded flight paths will fall, and noise conditions will increasingly disturb citizens and wildlife alike. The environmental impact assessment gives virtually no attention to concerns regarding noise or flight impacts on adjunct homes. That alone should make it suspect as a decision making tool.

I ask that FAA to reject the airport's request for so-called obstruction mitigation.

Please make them call it what it is: an expansion of flight activities. At the very least, the airport should be required to separate their request, and allow open and transparent public discourse about the reclassification and extension of runways. The current proposal is unacceptable and should be rejected.

Thank you for your consideration. (*Commenter: Laura Routh*)

> ***Response 9:*** In 2016, as part of the Airport Master Plan update, the Airport Commission completed an airspace analysis to identify obstructions and nonconforming structures that were out of compliance with Federal Aviation Administration (FAA) safety guidelines and standards. 174 objects were identified as obstructions to the airport’s airspace.
>
> A planning committee consisting of members from the aviation community, neighborhood representatives, and City administration made a number of recommendations to the Airport Commission related to the mitigation of obstructions.

These recommendations were adopted as part of the Airport Master plan. The Airport Master Plan update process was completed in 2016 and a copy of the plan is maintained online and is accessible at the Airport's web page (https://icgov.org/airport)

The Airport Commission is obligated by FAA grant assurances to operate the airport "*at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state and local agencies for maintenance and operation." *FAA Sponsor Assurances #19, March 2014*

This requirement includes maintaining clear runway approaches to a minimum of 20:1 ratio extending off each runway end. This is also known as the visual approach/departure surface. By moving the runway threshold, the Airport Commission has worked to alleviate the necessity of obstruction mitigation, vastly reducing the number of trees that penetrate the Approach Overlay Zone, and requiring mitigation. The Airport has proposed a mitigation plan that works with affected property owners to replace trees which are to be removed with species that do not grow to similar heights creating future obstructions. While the Iowa City Zoning Code requires that property owners not allow trees to grow up into the Approach Overlay Zone, the Commission is offering to remove and replace the trees at Commission expense.

The change in runway design category is a result of the actual use of the airport. Airport runways are designed based on an aircraft type that uses the runway 500 times per year. Under the 1996 Runway 7/25 was designated as a C-II category runway. Aircraft in the "C" category have approach speeds between 121 and 140 knots. Since the 1996 Master Plan had been completed, the airport did not register sufficient numbers of operations to maintain a category C designation and instead have reduced the designation to B-II. This "B" category includes aircraft with approach speeds between 91 and 120 knots.

The EA for the project is being completed under applicable FAA orders, as well as the National Environmental Policy Act (NEPA). This includes hosting public meetings and obtaining public comments regarding the plan. There have been several comments made, all of which will become part of the record and will be reviewed and addressed as the plan is finalized.

The safety of those who use the Airport, as well as those living and working nearby, is paramount in the consideration of the Airport Commission. The FAA's requirement to remove the obstructions in the flight path furthers that interest in safety. It is for that reason the Airport Commission is moving forward with this obstruction mitigation plan.

Appendix H

NOTICE OF AVAILABILITY AND PUBLIC INFORMATIONAL MEETING, WEBSITE INFORMATION, AND PUBLIC INFORMATIONAL MEETING MATERIALS

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Pg. 1 of 2

PCmedia

PRESS-CITIZEN MEDIA
PART OF THE USA TODAY NETWORK

CITY OF IOWA CITY
ICPD
410 E WASHINGTON ST
IOWA CITY IA 522401825

AFFIDAVIT OF PUBLICATION

State of Wisconsin

County of Brown, ss.:

The undersigned, being first duly sworn on oath, states that the Iowa City Press Citizen, a corporation duly organized and existing under the laws of the State of Iowa, with its principal place of business in Iowa City, Iowa, the publisher of

Iowa City Press Citizen

newspaper of general circulation printed and published in the City of Iowa City, Johnson County, Iowa, and that an advertisement, a printed copy of which is attached as Exhibit "A" and made part of this affidavit, was printed and published in Iowa City Press Citizen on the following dates:

Ad No.	Start Date:	Run Dates:	Cost:
0002752101	2/28/18	02/28/18	$53.65

Copy of Advertisement
Exhibit "A"

Kaypra

Subscribed and sworn to before me by said affiant this

28th day of February, 2018

Vicky Felty
Notary Public

9-19-21
Commission expires

VICKY FELTY
NOTARY
PUBLIC
STATE OF WISCONSIN

Notice of Public Informational Meeting for Proposed Improvements at Iowa City Municipal Airport, Iowa City, Iowa

The City of Iowa City intends to undertake the following proposed actions at the Iowa City Municipal Airport (IOW):

- Reclassify Runway 7/25, Relocate Runway 25 Threshold, and Extend Runway 7
- Relocate Runway 12 Threshold and Extend Runway 30
- Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25
- Remove any Trees Penetrating the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25
- Trim/Top any Trees Penetrating the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

We are providing notice of a public informational meeting where we will address the proposed actions' potential economic, social, and environmental impacts. In addition, we will address the project's consistency with the goals and objectives of the affected area's land use or planning strategy.

The public informational meeting will be held at the following time and place:

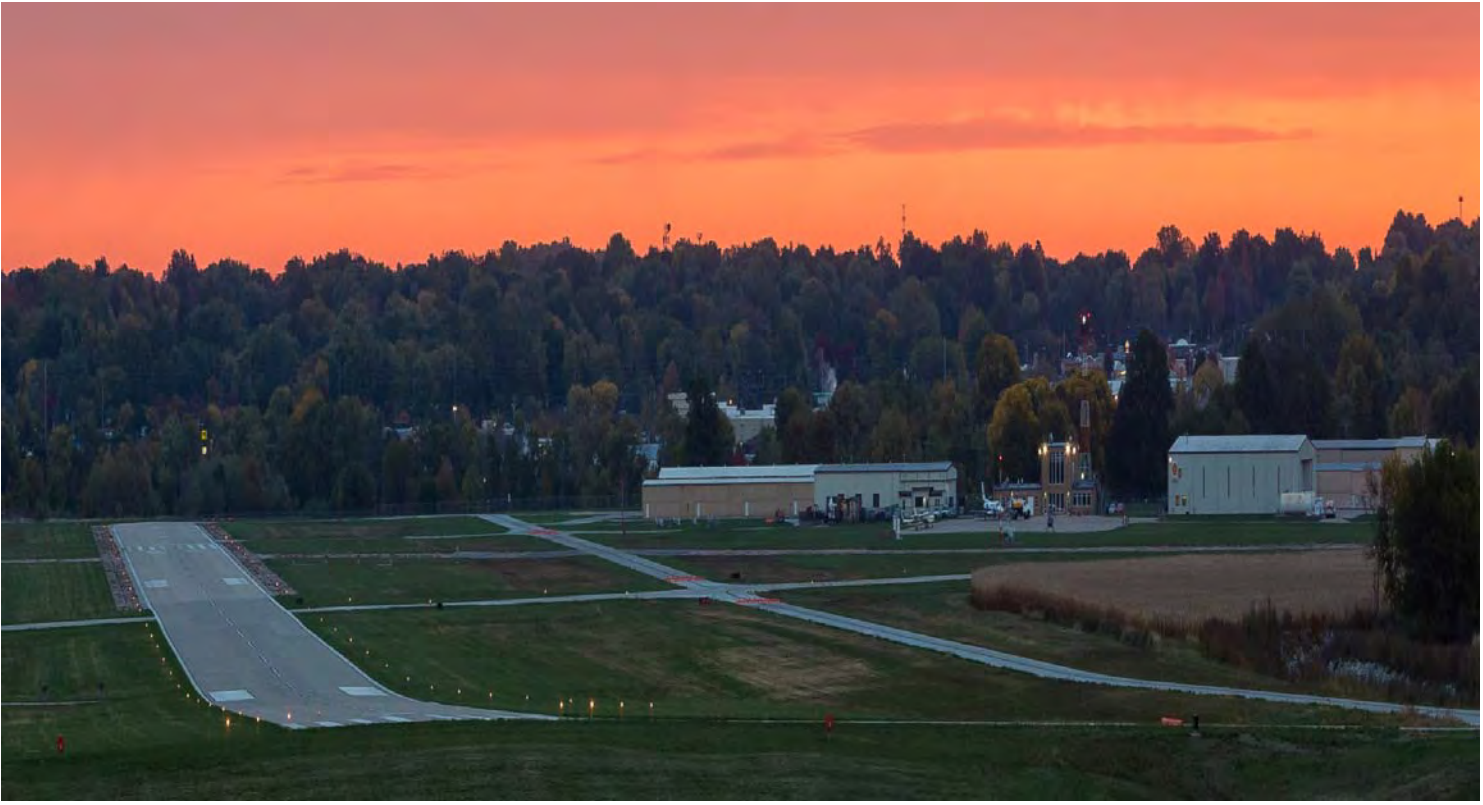
Monday, April 2, 2018
11:30 am to 1:30 pm and 4:30 to 6:30 pm
Iowa City Municipal Airport
1801 S. Riverside Drive 52246

Potentially affected environmental resources include: biological resources; hazardous materials, solid waste, and pollution prevention; noise; socioeconomic, environmental, and children's health; and visual effects.

The draft environmental assessment (EA) describing the proposed actions impacts will be available for public review until Thursday, April 12, 2018. The draft EA may be viewed at Iowa City Municipal Airport (1801 Riverside Drive, Iowa City, IA) and the City of Iowa City City Clerk's Office (410 E. Washington Street, Iowa City, IA). Additionally the Draft EA is available online at https://iowacityea.aecomonline.net. Those wishing to provide written comments must do so to the below address with the letter postmarked no later than Thursday, April 12, 2018 to:

Iowa City Municipal Airport
Attention: Iowa City Airport EA
1801 S. Riverside Drive
Iowa City, IA 52246
Email: IowaCityAirportEA@aecom.com

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment –including your personal identifying information–maybe made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.



Iowa City Municipal Airport (IOW), Iowa City, Iowa Environmental Assessment (EA) for Mitigation of Obstructions FAA AIP 3-19-0047-024-2017

A series of recent airspace obstruction analyses have identified current and potential future obstructions and nonconforming structures within the navigable airspace of the Iowa City Municipal Airport (IOW) runways in Iowa City, Iowa. The obstructions and nonconforming structures at IOW are out of compliance with Federal Aviation Administration (FAA) airspace and safety guidelines/standards and present a significant safety hazard to arriving aircraft. These protrusions into the approach zones resulted in the FAA placing a restriction on Night Instrument Flight Rule (IFR) approaches at IOW in the fall of 2014. IOW needs to mitigate the obstructions to bring the airport into compliance with current FAA requirements shown on the approved Airport Layout Plan (ALP) dated October 2016 and to resume regular flight operations.

ENVIRONMENTAL ASSESSMENT

IOW, in cooperation with the FAA, has prepared an Environmental Assessment (EA) per Federal Aviation Administration (FAA) Order 1050.1F and FAA Order 5050.4B. The EA has also been prepared in compliance with the National Environmental Policy Act (NEPA)

implementing regulations by the Council of Environmental Quality under 40 CFR Part 1500. The EA evaluates the No Action Alternative and the Proposed Action. The Proposed Action includes:

a. Reclassify Runway 7/25, Relocate Runway 25 Threshold, and Extend Runway 7

b. Relocate Runway 12 Threshold and Extend Runway 30

c. Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25

d. Remove Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

e. Trim/Top Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

The obstructions identified for mitigation under the Proposed Action can be viewed on the IOW EA Interactive Map (map_view.html) or in the Draft IOW Obstruction EA (documents/IOW_DraftEA_2018-02-26.pdf).

PUBLIC INFORMATIONAL MEETING

IOW will host a public informational meeting where we will address the proposed actions potential economic, social, and environmental impacts. In addition, we will address the project's consistency with the goals and objectives of the affected area's land use or planning strategy.

The public informational meeting will be held at the following time and place:

Monday April 2, 2018
11:30 am to 1:30 pm and 4:30 to 6:30 pm
Iowa City Municipal Airport
1801 S. Riverside Drive 52246

Potentially affected environmental resources include: biological resources; hazardous materials, solid waste, and pollution prevention; noise; socioeconomic, environmental, and children's health; and visual effects.

PUBLIC COMMENTS

The Draft EA describing the proposed actions' impacts will be available for public review until April 12, 2018. The draft EA may be viewed at the Iowa City Municipal Airport (1801 Riverside Drive, Iowa City, IA) and the City of Iowa City, City Clerk's Office (410 E. Washington Street, Iowa City, IA).

Those wishing to provide written comments must do so to the below address with the letter postmarked no later than **Thursday April 12, 2018 to:**

Comments may also be mailed to:

Iowa City Municipal Airport
Attention: Iowa City Airport EA
1801 Riverside Drive
Iowa City, IA 52246
emailed: IowaCityAirportEA@aecom.com (mailto:IowaCityAirportEA@aecom.com?Subject=Comment)

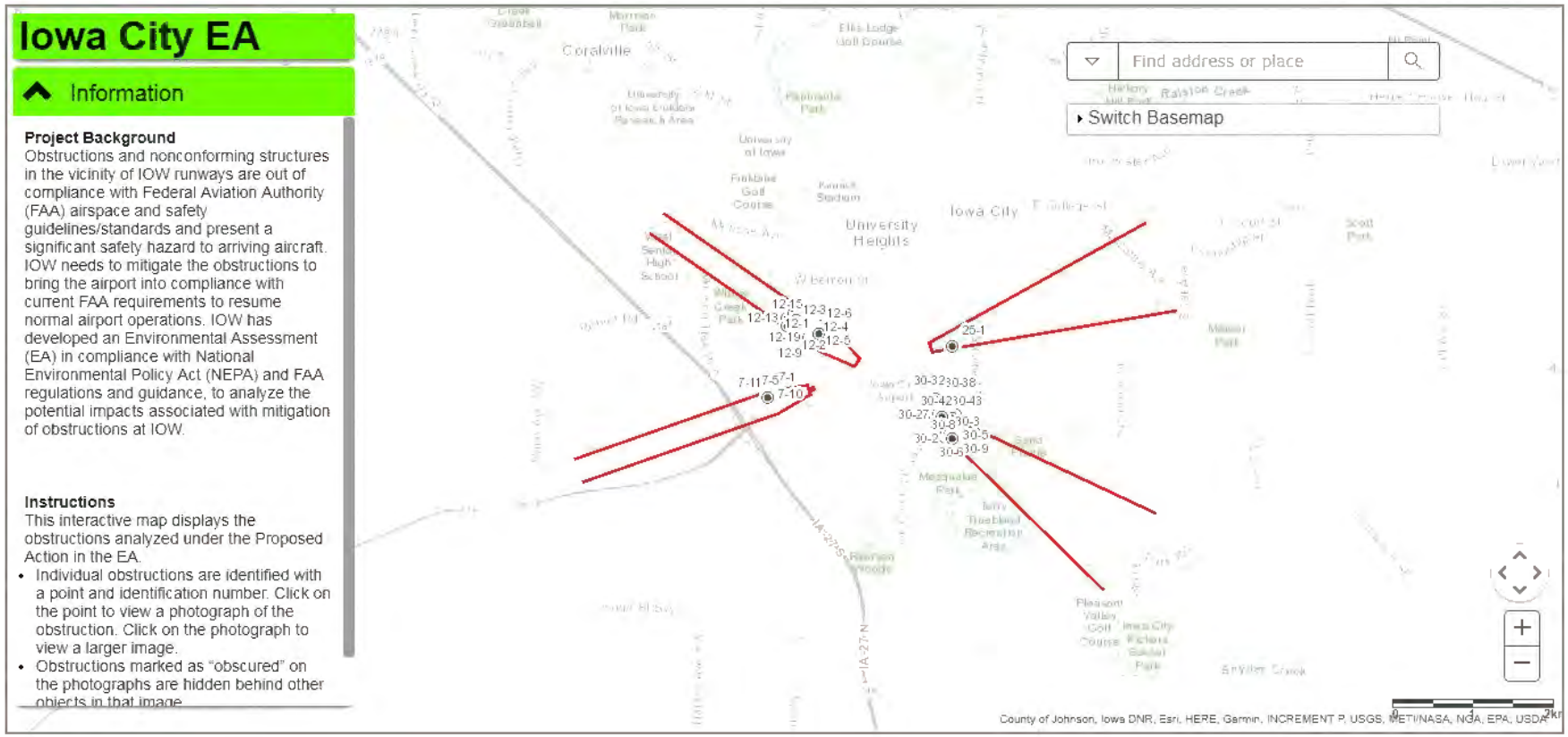
Before including your address, phone number, e-mail address, or other personal identifying information on any comments submitted, be advised that your entire comment – including your personal identifying information – may be made publicly available upon receipt of an open records request. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be legally able to do so.

DOCUMENTS

Draft IOW Obstruction EA (documents/IOW_DraftEA_2018-02-26.pdf)
IOW Obstruction Interactive Map (map_view.html)
Draft IOW Obstruction Photo Log (documents/Draft_IOW_Obstruction_PhotoLog.pdf)
2016 IOW Airport Master Plan (documents/Final_IOW_Master Plan_100616.pdf)

IOW Obstruction Mitigation EA Interactive Map Website: https://iowacityea.aecomonline.net/map_view.html

IOW Obstruction Mitigation EA Interactive Map Website: https://iowacityea.aecomonline.net/map_view.html



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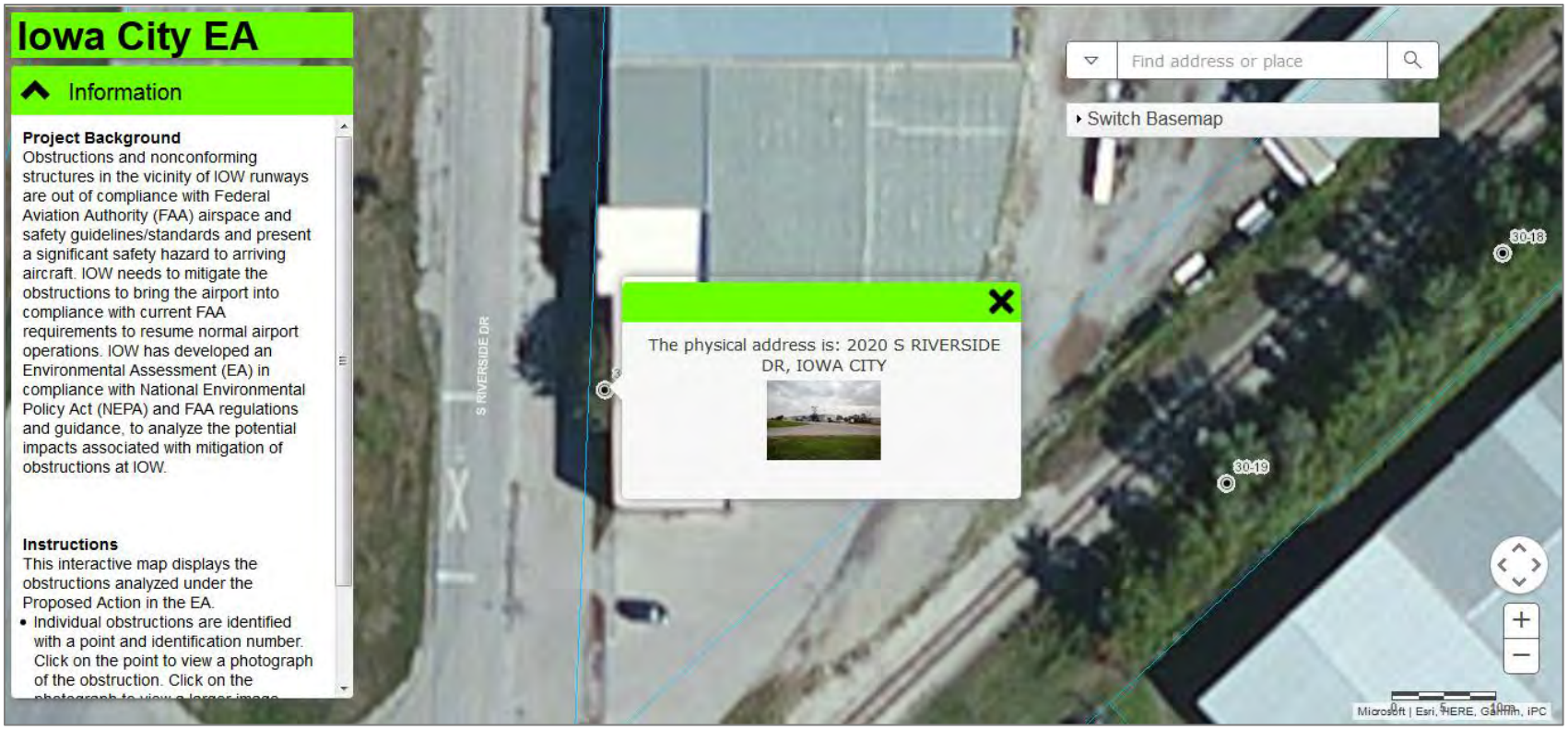

IOW Obstruction Mitigation EA Interactive Map Website: https://iowacityea.aecomonline.net/map_view.html

Iowa City Municipal Airport (IOW) Obstruction Mitigation Environmental Assessment

FACT SHEET

- In coordination with the Federal Aviation Administration (FAA), the airport has identified several trees, utility poles, and other structures that are tall enough to protrude into the approach area of the runways.
- These obstructions and nonconforming structures are potential hazards to arriving and departing airplanes, and in turn to the surrounding neighborhoods.
- The FAA has placed temporary restrictions on airport operations that will be lifted only after these obstruction hazards are removed.
- Although the law makes property owners responsible for preventing and removing these obstructions, the City is willing to offer assistance in the mitigation of trees that constitute obstructions. That assistance may include performing the work, at City cost, and replacing the tree(s) with shrubs or trees unlikely to grow to an illegal height, if that is the wish of the property owner. For structures, not trees, it may be possible to install a light atop the nonconforming structure in lieu of removal.
- A total of 174 obstructions and nonconforming structures were identified within the navigable airspace of the IOW runways based on current operating conditions and runway configurations.
- IOW determined the number of obstructions and nonconforming structures requiring mitigation under this Preliminary Alternative was excessive
- IOW developed a new alternative that would support existing and future aircraft operations at IOW and reduce the number of mitigations required.
- The City of Iowa City intends to undertake the following proposed actions at the Iowa City Municipal Airport (IOW):
    - Reclassify Runway 7/25, Relocate Runway 25 Threshold, and Extend Runway 7
    - Relocate Runway 12 Threshold and Extend Runway 30
    - Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25
    - Remove Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25
    - Trim/Top Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25
- This proposed action is included in IOW's latest Airport Layout Plan (ALP) which was conditionally approved in October 2016.
- Implementation of the proposed action would bring IOW into compliance with current FAA requirements and would remove the restriction of Night IFR approaches, thus allowing the airport to resume and continue normal airport operations.
- The analysis for the Draft EA identified no impacts to the following resources in association with the proposed actions: Air Quality; Climate; Coastal Resources; Farmlands; Historical, Architectural, and Cultural Resources; Land Use and Compatible Land Use; Natural Resources and Energy Supply; and Water Resources.
- Trees would be removed only between October 15 and March 31 to avoid the bat roosting season and thus avoid potential impacts to threatened and endangered species.
- Tree debris would be disposed of in accordance with all local, state, and federal regulations.
- Noise impacts would be temporary and minor during tree removal.
- Residents would have an option to have trees replaced with smaller species. Therefore, visual resources, socioeconomic. and environmental justice impacts would be minimized.
- The analysis for the Draft EA identified no cumulative impacts in association with the proposed actions.

Public Meeting Comment Form

Iowa City Municipal Airport (IOW) Obstruction Mitigation Environmental Assessment

If you have any issues, concerns, or questions related to the Iowa City Municipal Airport Obstruction Mitigation Environmental Assessment, please complete and submit this comment sheet at the public meeting to ensure your input is considered. You can also drop the comment sheet in the mail to the address on the reverse side of this sheet. Fold the comment sheet on the lines with the return address showing, tape it closed, affix a stamp, and mail. You may attach additional pages. Please submit your comments by ***April 12, 2018***. You may also submit comments by e-mail to IowaCityAirportEA@aecom.com.

Before including your address, phone number, e-mail address or any other personally identifying information in your comment, you should be aware that your entire comment – including personal identifying information - may be made publicly available at any time. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Name:_____ Title:_____

Organization: _____

Mailing address:_____

City, State, Zipcode:_____

E-mail:_____ Phone: _____

Thank you for your interest and participation!

Fold 2

_____
_____
_____

Affix Stamp Here

Iowa City Municipal Airport
Attention: Iowa City Airport EA
1801 S. Riverside Drive
Iowa City, IA 52246

Fold 1

Proposed Actions

Reclassify Runway 7/25, Relocate Runway 25 Threshold, and Extend Runway 7

- The classification for the Runway Design Code for Runway 7/25 would change from C-II to B-II.
- The reclassification also allows relocation of the Runway 25 threshold (the point at which an aircraft can take off or land) by 708 feet closer to South Riverside Drive, thus increasing available runway length for takeoffs and landings on Runway 7/25.
- Runway 7 would be extended by 213 feet to maximize the use of airport property and keep the approach/departure surface clear of Highway 1.
- These changes allow for a landing and takeoff distance available on Runway 7/25 greater than 5,000 feet which would permit 75 percent of the fleet of large aircraft (of 60,000 pounds or less) which are known to use IOW to operate at 60 percent useful fuel load on Runway 7/25.
- These changes on Runway 7/25 would not change the number of required mitigations. However, they would improve airport operations and safety.

Relocate Runway 12 Threshold and Extend Runway 30

- Moving the Runway 12 threshold 500 feet to the southeast and extending Runway 30 by 300 feet to the southeast results in a total reduction of the landing distance available on Runway 12 by 200 feet.
- This also decreases the number of obstructions requiring mitigation and partially satisfies FAA Night IFR requirements.
- The new landing distance available for Runway 12 would be 3,700 feet.
- The landing distance available for Runway 30 would remain 3,900 feet, which would permit 100 percent of small aircraft (with less than 10 passenger seats) to utilize this runway.
- These changes on Runway 12/30 would reduce the number of required mitigations off these runways from 160 to 61.

Install Obstruction Lights on Utility Poles and/or Nonconforming Structures in the Approach Zones to Runway 12/30 and Runway 7/25

- IOW would install a light on top of the pole or other nonconforming structure of concern.
- This light would be maintained by the structure owners as required.
- The addition of the light would mitigate these obstructions without the need for removal.

Remove Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

- IOW would arrange easements with property owners as needed to access the property and remove designated trees, not suitable for trimming/topping, that are within 10 feet of the approach/departure surface to the ground surface.
- Trees within 10 feet of the surface have the potential to breach the surface, creating a future penetration and hazard.
- Trees would be cut and then the stumps ground flat to a few inches below the ground surface. Roots would be left intact in the ground.
- In some cases, shrubs or trees that would reach a maximum height below the approach surfaces may be replanted per the owner's preference.
- Removal is the preferred mitigation approach for trees.

Trim/Top Trees in the Approach Zones Off Both Ends of Runway 12/30 and Runway 7/25

- IOW would arrange easements with property owners as needed to access the property and trim or top the trees within 10 feet of the approach/departure surface.
- Trimming/topping trees can be detrimental to the health of the tree. Trees can become more susceptible to diseases and it can shorten the life of the tree. It can also destabilize the tree.
- This option would only be suitable for certain tree species.
- The property owner would be required to maintain the tree below the approach/departure surface in the future.
- Because this method of mitigation can be damaging to the tree and because it requires long-term maintenance, trimming/topping trees is not the preferred mitigation.

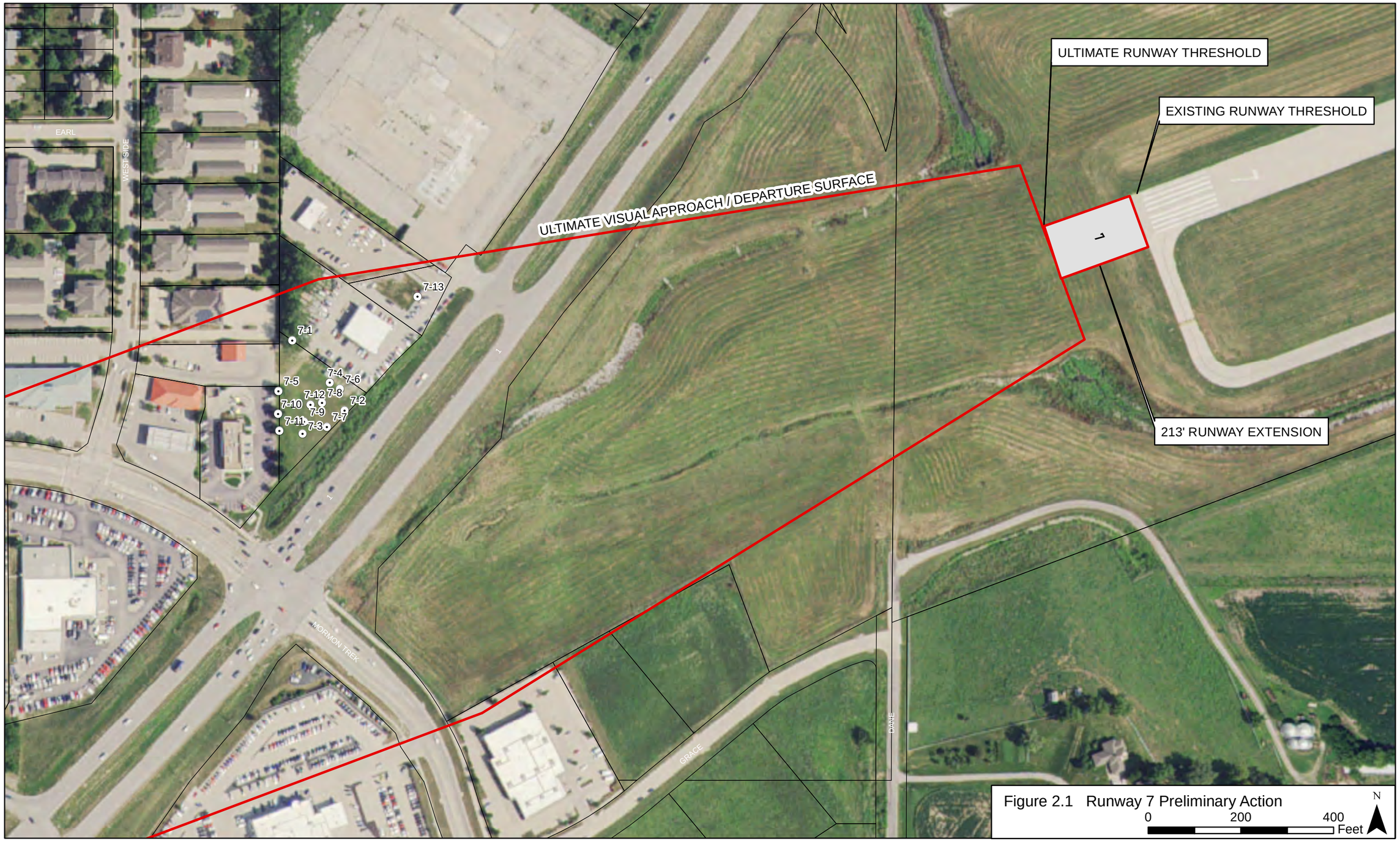

Figure 2.1 Runway 7 Preliminary Action

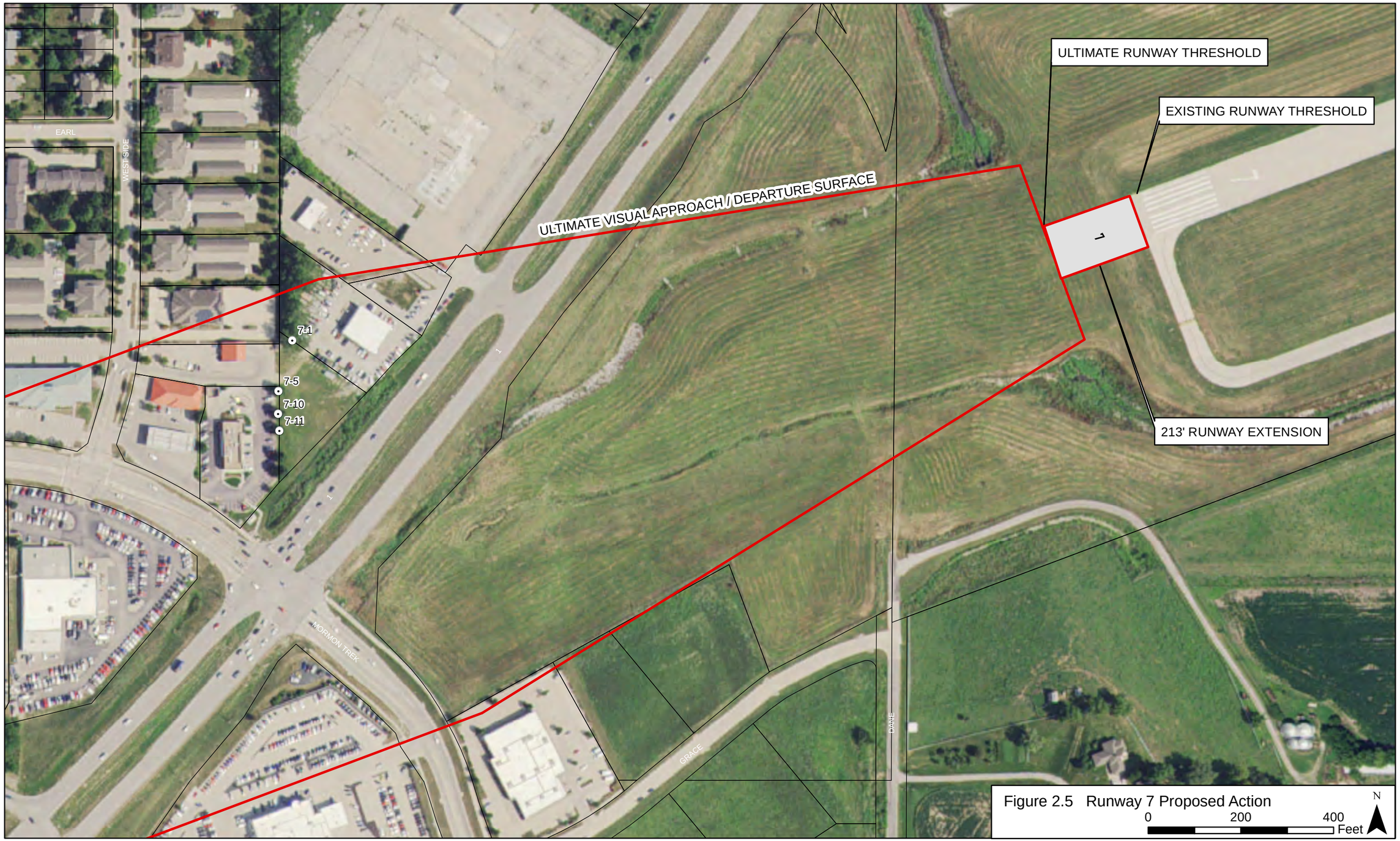

Figure 2.5 Runway 7 Proposed Action

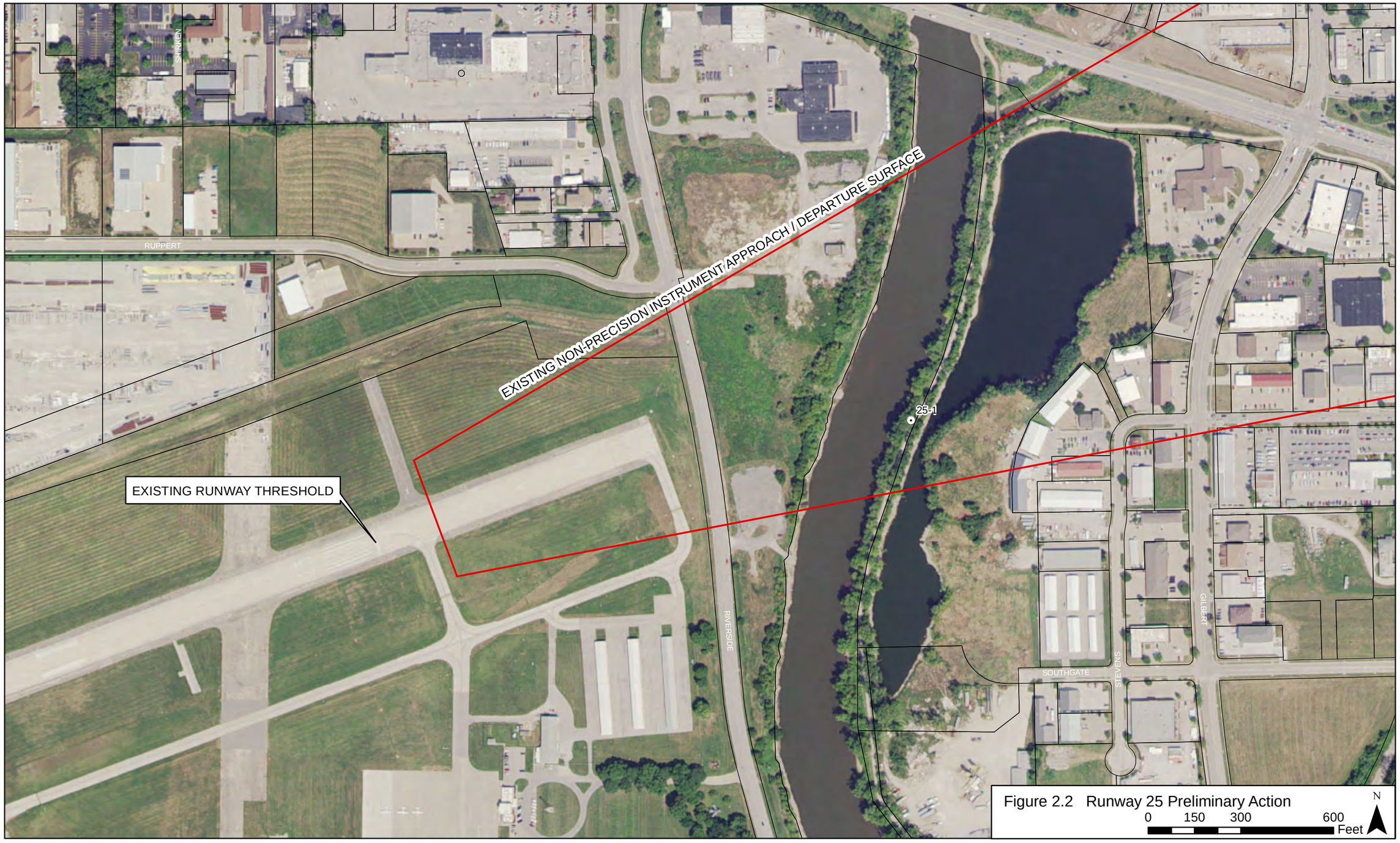

Figure 2.2 Runway 25 Preliminary Action

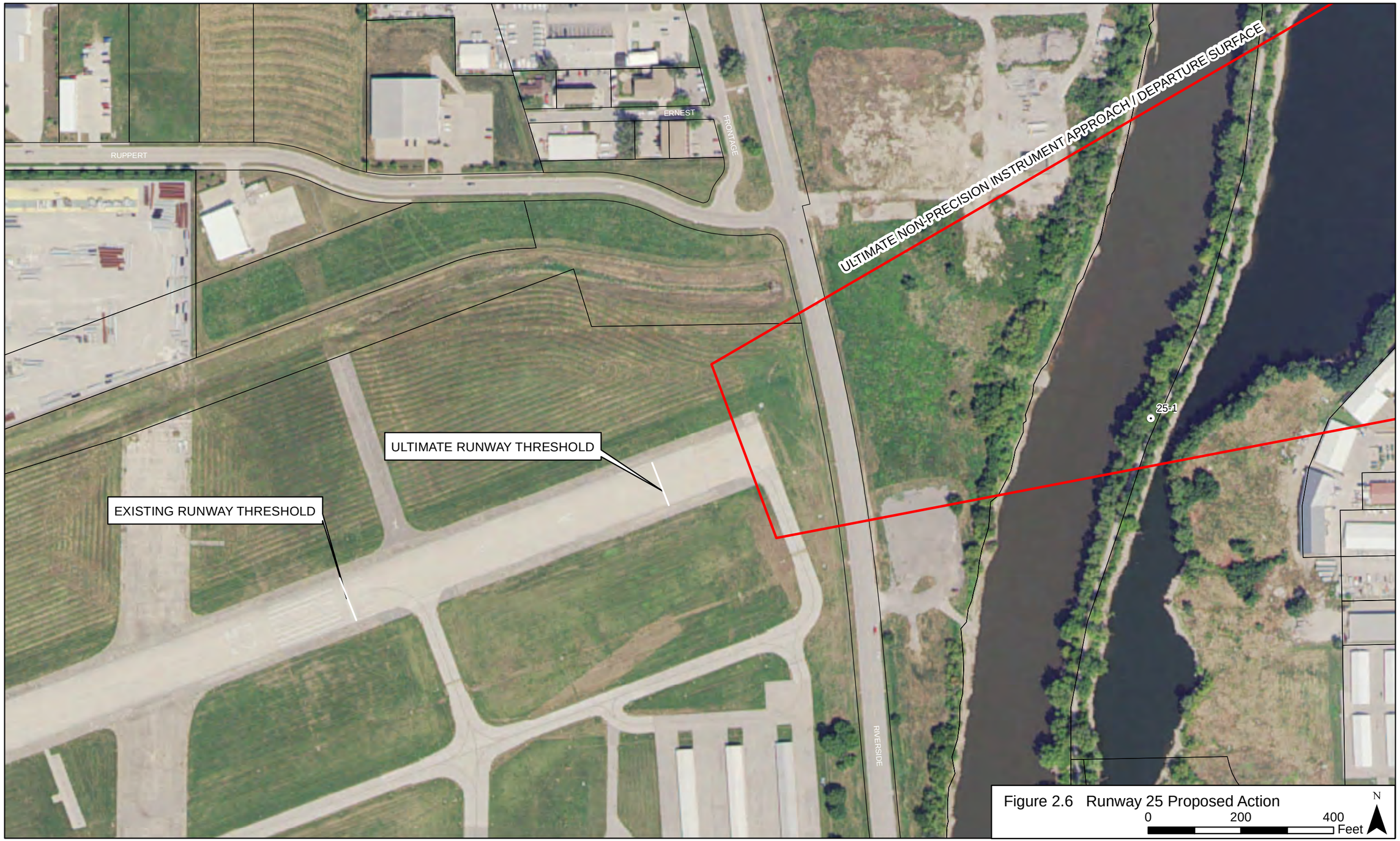

Figure 2.6 Runway 25 Proposed Action

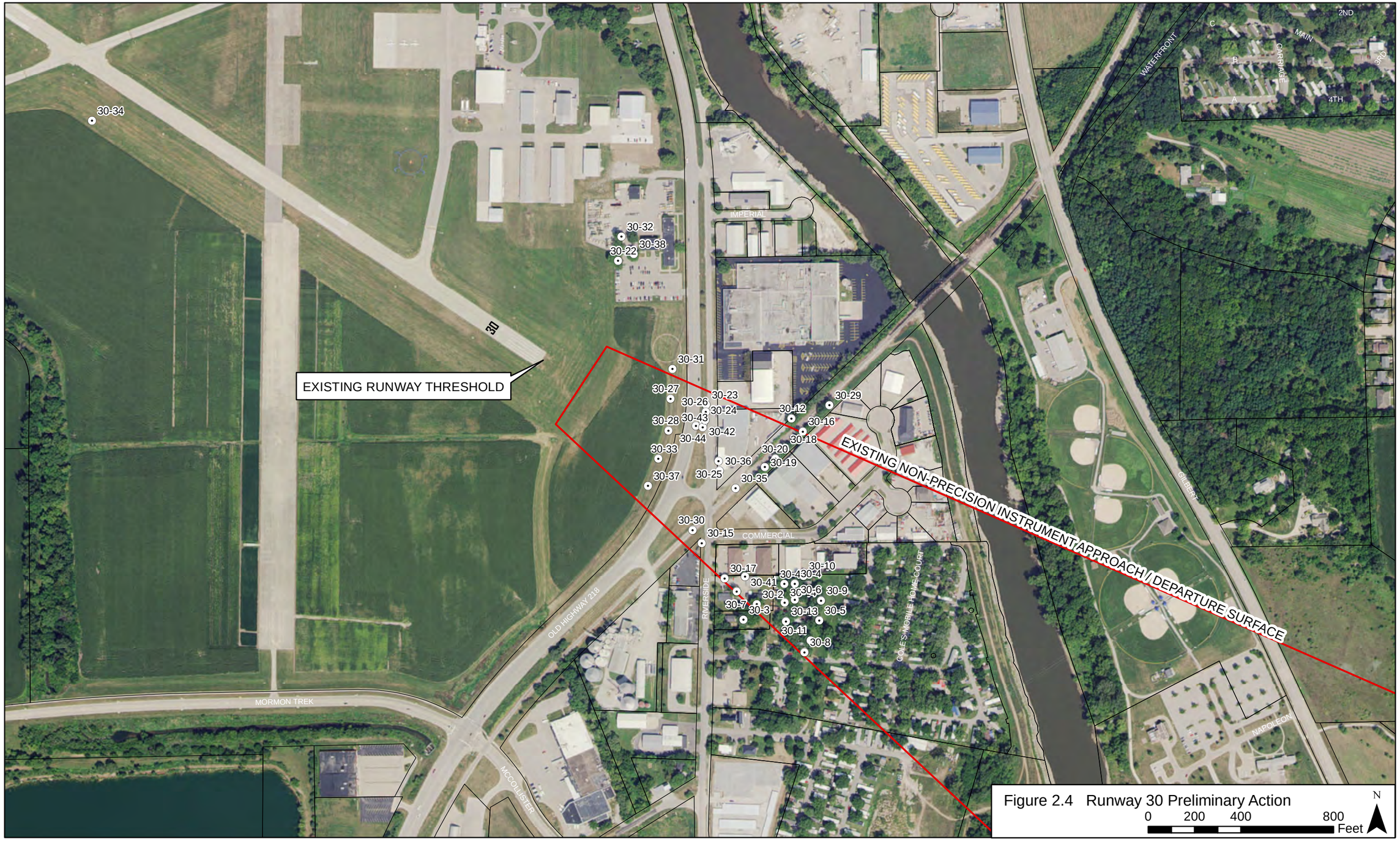

Figure 2.4 Runway 30 Preliminary Action

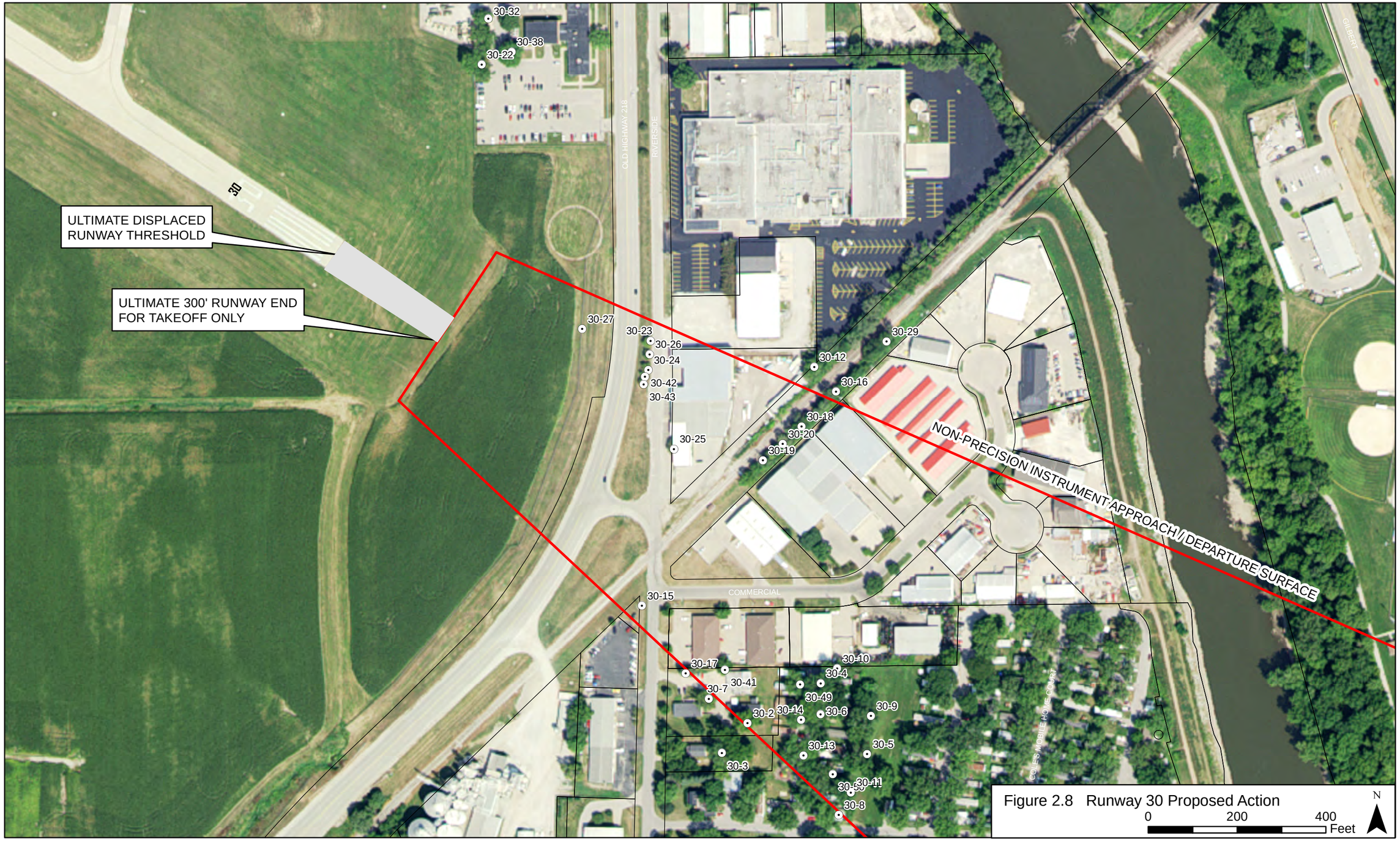

Figure 2.8 Runway 30 Proposed Action

0 200 400 Feet

N

VISUAL APPROACH/DEPARTURE SURFACE
EXISTING RUNWAY THRESHOLD
HARLOCKE
BENTON
PRAIRIE HILL
WEBBER
HAWK RIDGE
RUPPERT
SUNSET
ASHLEY
WILLOW CREEK
JEFFREY
WESTWOOD
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12-93
12-151
12-66
12-96
12-95
12-85
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12-167
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Figure 2.3 Runway 12 Preliminary Action
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Feet
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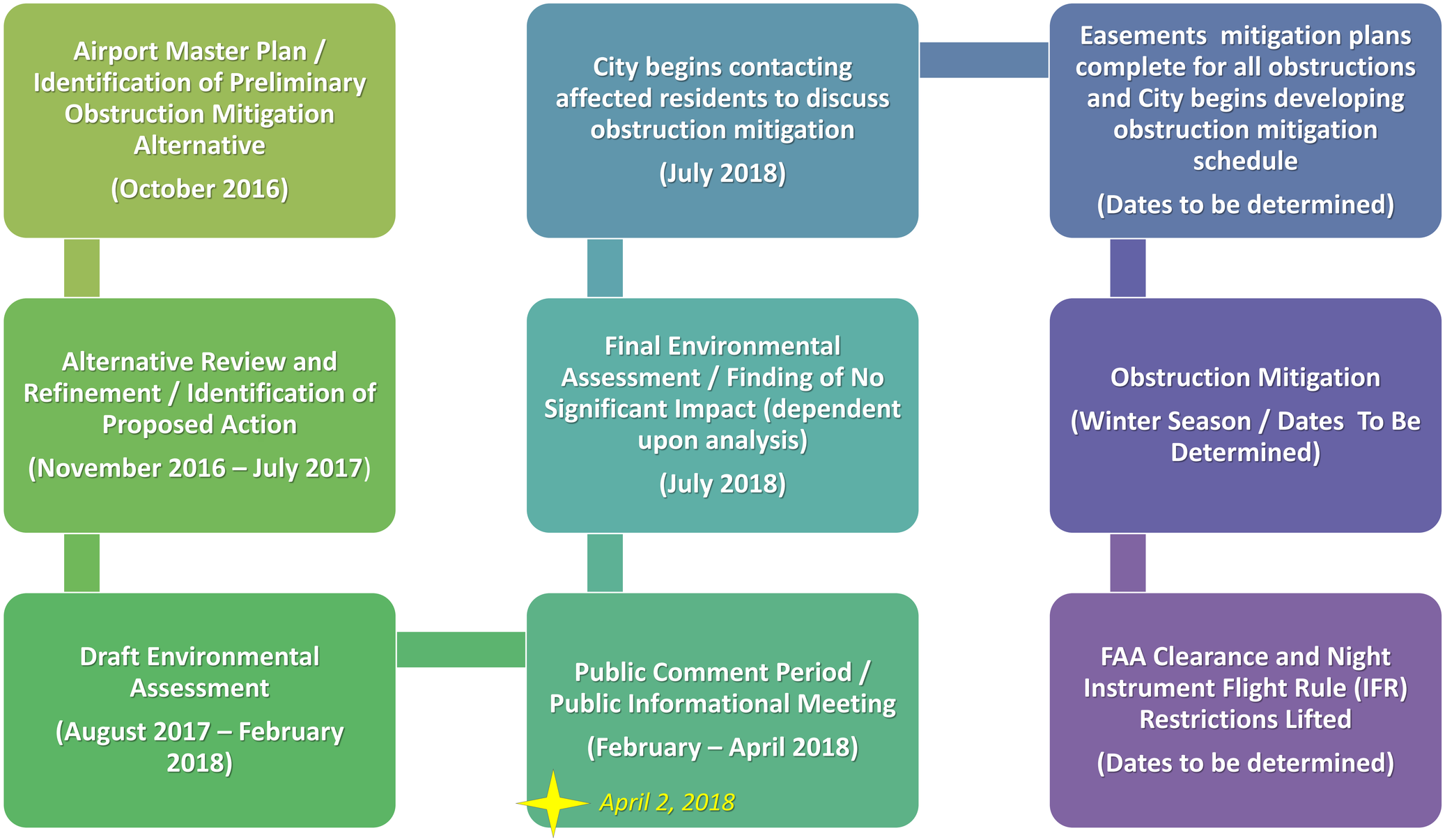
Figure 2.7 Runway 12 Proposed Action

IOW Obstruction Mitigation Process