Public Draft Environmental Assessment
Dog Park Construction
(in proximity to OCWUT Property)
Tinker Air Force Base, Oklahoma

United States Air Force
72 Air Base Wing
Tinker Air Force Base, Oklahoma

April 2016

Cover Sheet

COVER SHEET

Lead Agency: 72nd Air Base Wing, Tinker Air Force Base (AFB), Oklahoma (OK)

Proposed Action: Construct Dog Park, Tinker AFB, Oklahoma City, OK

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Report Designation: Public Draft Environmental Assessment (EA)

Abstract: The 72 Air Base Wing (ABW) at Tinker AFB is proposing to construct a dog park at Tinker AFB. The Proposed Action includes construction of two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. Approximately 1,018 linear feet of fencing would be constructed within the 100- and 500-year floodplains. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City.

Under the No-action Alternative, the Air Force would not construct a dog park on base. On-base residents would lack a convenient location to exercise and socialize their dogs. Residents would continue to use the nearest dog parks in Del City and Midwest City, use their backyards, or walk along the trails and streets at Tinker AFB.

The following resources were identified for consideration in this EA: Air Installation Compatible Use Zone; Air Quality; Land Use; Noise; Geology and Soils; Water Resources; Biological Resources; Cultural Resources; Hazardous Materials and Wastes; Safety and Occupational Health; Utilities and Infrastructure; Socioeconomic Resources; and Environmental Justice.

PRIVACY ADVISORY NOTICE

Letters or other written comments provided may be published in the Final EA. As required by law, comments will be addressed in the Final EA and made available to the public. Any personal information provided will be kept confidential. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and their specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.

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Table of Contents

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

LIST OF FIGURES

LIST OF TABLES

APPENDICES

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Acronyms and Abbreviations

ACRONYMS AND ABBREVIATIONS

ABW	Air Base Wing
AFB	Air Force Base
AICUZ	Air Installation Compatible Use Zone
BASH	Bird/Wildlife Aircraft Strike Hazard
bgs	below ground surface
BMP	best management practice
CATEX	Categorical Exclusion
CCDB	Crutcho Creek Drainage Basin
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
dBA	'A'-weighted decibel
DoD	Department of Defense
EA	Environmental Assessment
EO	Executive Order
FEMA	Federal Emergency Management Association
ft	feet
GI	green infrastructure
INRMP	Integrated Natural Resources Management Plan
kV	kilovolt
LSZ	lower saturated zone
MBTA	Migratory Bird Treaty Act
MHPI	Military Housing Privatization Initiative
MFH	military family housing
NEPA	National Environmental Policy Act
NOI	Notice of Intent
OG&E	Oklahoma Gas and Electric Company
OK	Oklahoma
OSHA	Occupational Safety and Health Administration
PPE	personal protective equipment
PZ	producing zone
ROI	Region of Influence
SAR	species at risk
SCLF	single-conductor linear feet
SWPPP	Stormwater Pollution Prevention Plan
T&E	threatened and endangered
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USZ	upper saturated zone

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Chapter 1

Purpose of and Need for Action

CHAPTER 1
PURPOSE OF AND NEED FOR ACTION

1.1 PURPOSE AND NEED FOR ACTION

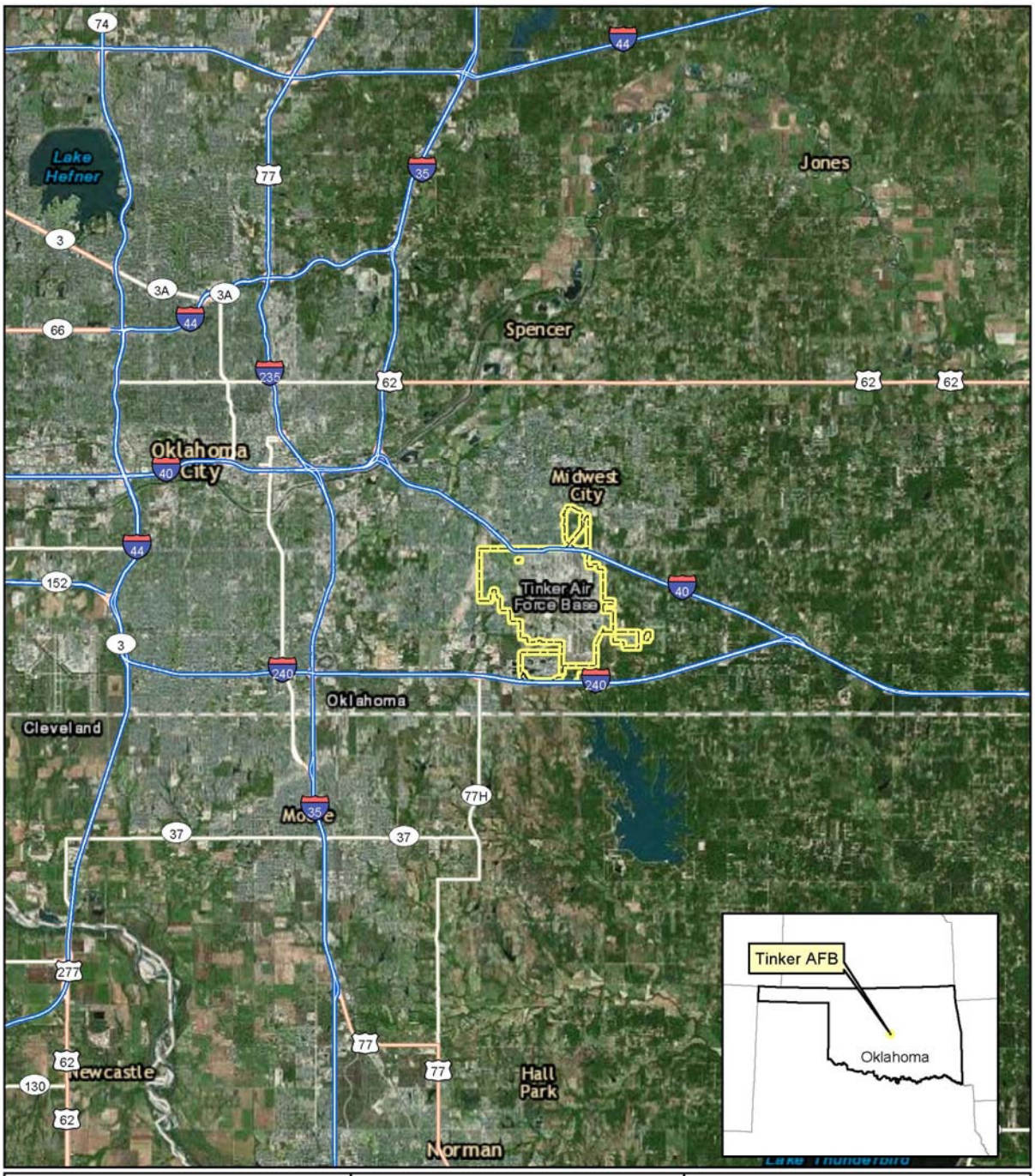
The purpose of this project is to construct a dog park at Tinker Air Force Base (AFB). This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City, Oklahoma. A dog park developed on base would provide military family housing (MFH) residents an easily accessible location to exercise and socialize small and large breed pets. Existing base housing has inefficient yards for pets.

1.2 PROJECT LOCATION

Tinker AFB is located within Oklahoma City, Oklahoma. The Proposed Action is located within the incorporated city limits of Oklahoma City and is on Tinker AFB property. Centered ten miles southeast of downtown, Tinker AFB is bordered to the north by Interstate 40 and Southeast 29th Street, to the east by Douglas Boulevard, to the south by Southeast 74th Street, and to the west by Sooner Road. Incorporated areas immediately surrounding the installation include Midwest City to the north and Del City to the northwest. Figure 1-1 shows the location of Tinker AFB and its geographic setting within Oklahoma County and Oklahoma City. The Proposed Action is proposed for siting north of the youth center (Building 5520), east of McNarney Avenue and the Twining neighborhood, and west of the Vandenberg neighborhood.

1.3 ENVIRONMENTAL ANALYSIS PROCESS

This Environmental Assessment (EA) evaluates the potential environmental consequences of constructing a dog park at Tinker AFB to include fencing; utilities such as electricity, potable water, and municipal solid waste; trash cans; and trees. Based upon this information, Tinker AFB decision-makers, in conjunction with Air Force Materiel Command, will determine whether or not to construct this dog park. The decision options are: 1) to continue with current operations (the No-action Alternative); 2) to select the Proposed Action and prepare a Finding of No Significant Impact; or 3) to prepare an Environmental Impact Statement if the Proposed Action would significantly affect the quality of the human environment. As required by the National Environmental Policy Act (NEPA), potential environmental impacts resulting from all alternatives must be identified and documented prior to selection and implementation of an alternative. Note also that since construction within a floodplain is proposed under the Proposed Action, if this alternative were selected for implementation, a Finding of No Practicable Alternative would be prepared and published with the Final EA.


Lake Hefner
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Midwest City
Tinker Air Force Base
Oklahoma
Cleveland
Moore
Newcastle
Hall Park
Norman
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Imagery: ESRI, GeoEye, Digital Globe Mapping Service
Figure 1-1
Site Map
Tinker AFB, Oklahoma

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1.4 SCOPE OF THE ENVIRONMENTAL REVIEW

NEPA requires federal agencies to consider environmental consequences in their decision-making process. The President's Council on Environmental Quality (CEQ) has issued regulations to implement NEPA that include provisions for both the content and procedural aspects of the required environmental impact analysis. The Air Force NEPA process is accomplished through adherence to the procedures set forth in CEQ regulations (40 Code of Federal Regulations [CFR] Sections 1500-1508), Department of Defense (DoD) Instruction 4715.9 *Environmental Planning and Analysis*, and 32 CFR Part 989 (Environmental Impact Analysis Process), 15 July 1999, as amended (most recently in 2007). These federal regulations establish both the administrative process and substantive scope of the environmental impact evaluation. These regulations are designed to ensure that deciding authorities have a proper understanding of the potential environmental consequences of a contemplated course of action, as well as notify the public of the environmental consequences.

This EA identifies, describes, and evaluates the potential environmental impacts associated with the construction of a dog park at Tinker AFB. Three site locations have been considered; however, only one location meets all of the selection criteria (See Sections 2.2 and 2.3), and this location has been analyzed as the Proposed Action. The potential environmental effects of taking no action are also described. As appropriate, the affected environment and environmental consequences of the action may be described in terms of a regional overview or a site-specific description. Fiscal year 2015 or the most current information available is used as the baseline condition.

If any concurrent actions are identified during the EA process, they will be examined in the context of potential cumulative impacts. A cumulative impact, as defined by the CEQ (40 CFR 1508.7), is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

1.4.1 RESOURCE AREAS ADDRESSED IN DETAIL

Resource areas that could be affected by the Alternatives have been selected to allow for a comprehensive analysis of potential impacts. The intent of this EA is to meet the NEPA requirements established in the Air Force's 32 CFR 989, *Environmental Impact Analysis Process*. The following resource areas are discussed in detail in the EA:

- Noise
- Geology and Soils
- Water Resources
- Hazardous Materials and Waste
- Biological Resources
- Safety and Occupational Health
- Utilities and Infrastructure
  - electricity
  - water consumption, and
  - municipal solid waste

1.4.2 RESOURCE TOPICS ELIMINATED FROM DETAILED ANALYSIS

As part of the analysis process, all resource areas that have the potential to impact or be impacted by the alternatives are considered during the preliminary assessment phase of the analysis. However, since the scope of the alternatives would not impact Tinker AFB's flying mission, aircraft operations, airspace use and management, and aircraft noise have been eliminated from detailed analysis in the EA. Additionally, the project is outside of the runway's Clear Zone and Accident Potential Zone; therefore, Air Installation Compatible Use Zone compliance has been eliminated from analysis.

Heavy equipment used for construction activities under the Proposed Action would be limited to an excavator used for a few hours and a backhoe used for approximately two working days (i.e. 16 hours). Equipment used for this limited time would result in negligible air emissions. Therefore, Air Quality has been eliminated from detailed analysis.

Land Use has been eliminated as a resource topic because the land is currently classified as open space which allows for recreational usage. Installing the dog park would not change the land use classification and would be consistent with the recreational use of the land.

Since there are no archaeological or historic sites located with the project site, Cultural Resources has been eliminated from detailed analysis.

Although Tinker AFB manages hazardous materials and wastes according to federal regulations, there are no hazardous materials or wastes used or stored at the proposed project site. Additionally, the Proposed Action would not introduce new sources of hazardous materials or wastes nor would it provide for storage of hazardous materials or wastes. Therefore, further discussion of hazardous material and waste impacts has been eliminated from this document.

Any discussion of Utilities and Infrastructure within this EA will be limited to electricity, water consumption, and municipal solid waste, as no other utilities would be installed at the dog park.

No increases in base population or school enrollment would be realized as a result of the dog park construction and use, and use of the on-base dog park would not be expected to impact use of off-base dog parks. The local economy would benefit from expenditures incurred from the construction associated with the dog park. Construction materials and goods (e.g., gasoline for equipment and trucks) would be expected to be purchased from the local area. However, it should be noted that employment in the area would not increase since it is expected that the construction

company would utilize their current employees. Due to the limited impacts associated with the Proposed Action, Socioeconomic Resources is not analyzed in further detail in this EA.

Finally, there are no Environmental Justice communities located on-base and the dog park would not be accessible to anyone who does not have base access; therefore, Environmental Justice was not considered further in this EA.

1.5 APPLICABLE REGULATORY REQUIREMENTS

This EA is part of the Environmental Impact Analysis Process for the proposed project and was prepared in compliance with NEPA regulations. The following paragraphs describe the laws and regulations that apply or may apply to the Proposed Action.

1.5.1 Early Public Review

According to *Executive Order (EO) 11988 Floodplain Management*, the Air Force shall "provide opportunity for early pubic review of any plans or proposals for actions in floodplains". Since the Proposed Action includes installation of fencing within the 100- and 500-year floodplains, Tinker AFB published a Notice of Intent (NOI) to prepare an EA in *The Oklahoman* newspaper and the *Tinker Take Off* in November 2015. These NOIs described the purpose and need for the project, described the selection criteria used to establish viable alternatives, identified the Proposed Action and the component of the Proposed Action which would extend into the floodplain, and requested comments from interested state and federal agencies and members of the public. Additionally, scoping letters were mailed on 11 March 2016 to interested state and federal agencies soliciting input on the proposed project. The early public review period ended 11 April 2016 and two agency responses were received; however, those agencies did not have any comments. A copy of the NOI and scoping letters are included in Appendix A.

1.5.2 Interagency Coordination

Federal, state, and local agencies with jurisdiction that could be affected by the alternatives have been notified and consulted. A complete listing of the agencies consulted may be found in Chapter 6 and intergovernmental coordination letters and responses are included in Appendix A (these will be inserted once mailed). This coordination fulfills the Interagency Coordination Act and EO 12372 *Intergovernmental Review of Federal Programs* (14 July 1982), which requires federal agencies to cooperate with and consider state and local views in implementing a federal proposal. Additionally, a public notice announcing the availability of the EA for public review and comment was published on X. The EA was made available online and at the Midwest City Public Library for a period of 30-days. Any comments received during the comment period will be addressed and included in Appendix A of the Final EA.

1.5.3 Environmental Justice

EO 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, was issued by the President on 11 February 1994. In the EO, the President instructed each federal agency to make "achieving environmental justice part of its mission by

identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." "Adverse" is defined by the Federal Interagency Working Group on Environmental Justice as "having a deleterious effect on human health or the environment that is significant, unacceptable, or above generally accepted norms." As described in Section 1.4.2, Resource Topics Eliminated From Detailed Analysis, there are no Environmental Justice communities located on-base and the dog park would not be accessible to anyone who does not have base access; therefore, Environmental Justice was not considered further in this EA.

1.5.4 Permits

Prior to commencement of construction activities, coordination with the City of Oklahoma City Floodplain Administrator must occur. An application for a Floodplain Activity Permit must be submitted to the City of Oklahoma City Floodplain Administrator in accordance with Oklahoma City, Oklahoma Code of Ordinances, Chapter 16 – Drainage and Flood Control. No other applicable permits from local, state, and federal agencies have been identified for this action.

1.6 INTRODUCTION TO THE ORGANIZATION OF THE DOCUMENT

This EA is organized into seven chapters.

Chapter 1 Contains a statement of the purpose of and need for action, the location of the project, a description of the environmental analysis process, a summary of the scope of the environmental review, identification of applicable regulatory requirements, and a description of the organization of the document.

Chapter 2 Describes the history of the formulation of alternatives, identifies selection standards for alternatives, as well as alternatives eliminated from detailed analysis, provides a detailed description of the Proposed Action, describes the No-action Alternative, identified the preferred alternative, provides a comparison matrix of environmental effects for all alternatives, and describes measures to minimize or reduce impacts.

Chapter 3 Contains a general description of the current conditions of the resources that could potentially be affected by the alternatives and an analysis of the environmental consequences of the Proposed Action and No-action Alternative.

Chapter 4 Lists preparers of this document.

Chapter 5 Lists persons and agencies consulted in the preparation of this EA.

Chapter 6 Lists source documents relevant to the preparation of this EA.

Chapter 2

Description of the Alternatives

CHAPTER 2
DESCRIPTION OF THE ALTERNATIVES

2.1 HISTORY OF THE FORMULATION OF ALTERNATIVES

In 2007, an EA was prepared for the Military Housing Privatization Initiative (MHPI) (USAF 2007a). After the EA was completed, this land was leased to the MHPI contracting and the housing located on the site was demolished. The vacant land will be returned to the Air Force for their continued use. The MHPI Environmental Assessment identified that this land could be used for open space; conservation or preservation; or for outdoor recreation.

In 2014, a KC-46A Depot Maintenance Activation EA was prepared for Tinker AFB. As a component of that EA's proposed action, approximately 50 acres of the former military family housing area would be converted to green infrastructure (GI) as part of a mitigation plan for grassland habitat loss associated with depot maintenance activation.

Three areas rendered vacant by the MHPI are being considered as locations to site the dog park (See Figure 2-1). One of the three areas (the Proposed Action) is part of the approximately 50 acres planned for conversion to GI.

Selection criteria serve to assist Tinker AFB in defining the minimum standards that any alternative must meet. They help to identify a reasonable range of alternatives to be analyzed within the EA. Selection criteria in this EA were developed based largely on land use requirements on the installation.

All viable alternatives must:

- Be centrally located to the MFH privatization developments,
- Be located within walking distance to the MFH privatization developments,
- Be available for use all year,
- Be located outside the clear zone, and
- Be sited outside land that could be developed to support mission operations.

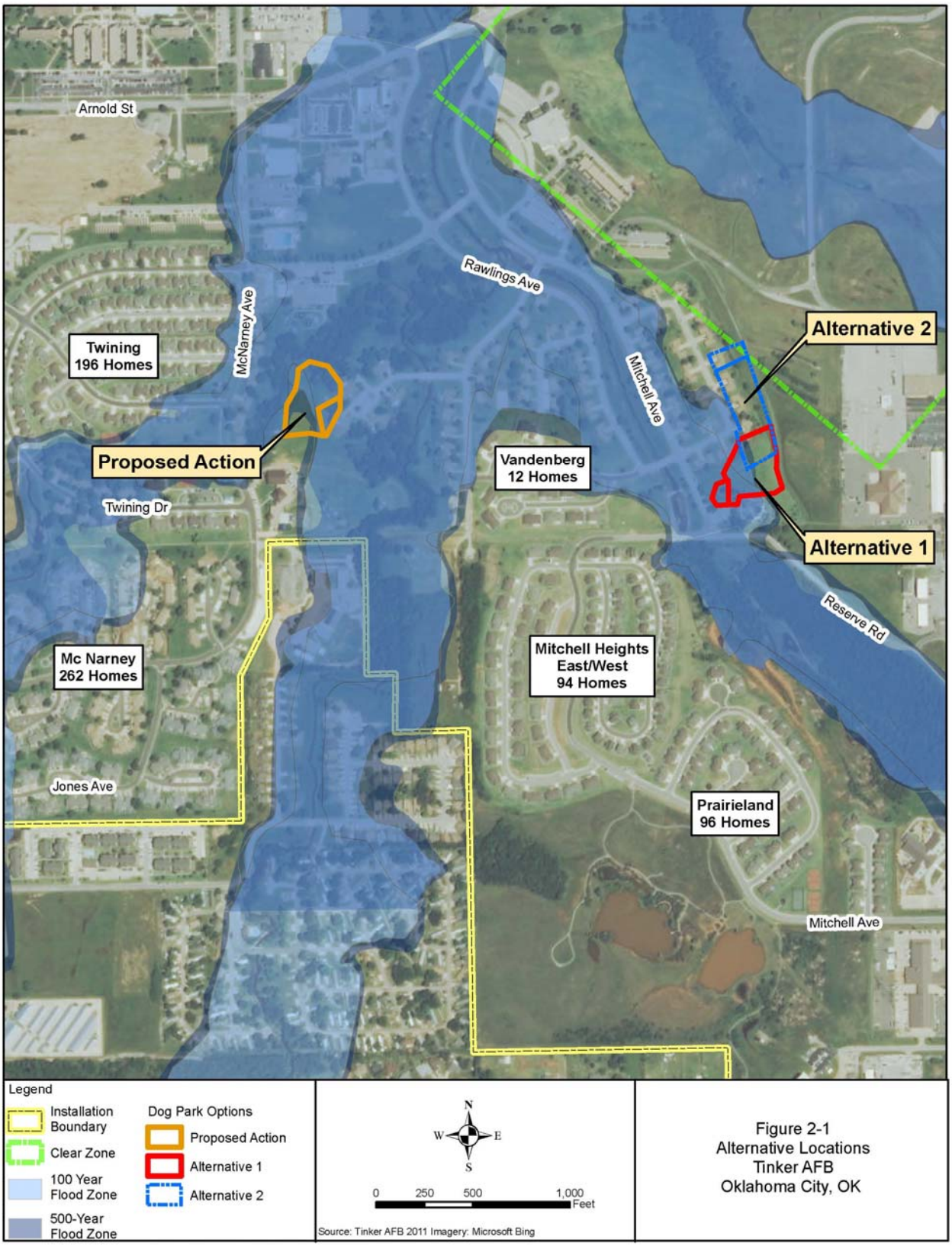
Table 2-1 below compares each alternative considered against the stated selection criteria. Alternatives which meet a given selection criteria are indicated in green; whereas, alternatives which do not meet a given selection criteria are indicated in red. Alternatives which partially meet a selection criterion are indicated in yellow.

Table 2-1 Selection Criteria Comparison Against Alternatives

			Selection Criteria				
			Centrally Located to MFH Privatization	Within Walking Distance to MFH Privatization	Available All Year	Outside the Clear Zone	Outside Land that could be Developed to Support Mission Operations
Alternatives	PA	East of Twining neighborhood/North of Youth Center					
	1	East of Vandenberg neighborhood/North of Playground					
	2	East of Vandenberg neighborhood/East of Wolfe Drive/North of Playground					

Notes:
Green indicates that an alternative meets the given selection criteria.
Yellow indicates that the alternative partially meets the given selection criteria.
Red indicates that the alternative does not meet the given selection criteria.
MFH – Military Family Housing PA – Proposed Action

Two alternatives, Alternatives 1 and 2 were eliminated from further analysis because they did not meet the selection criteria. These alternatives are described in more detail below in Section 2.2. Only one site met the criteria and was selected for consideration and analysis. This alternative is described in detail in Section 2.3 and is considered the Proposed Action.


Arnold St
Rawlings Ave
McNarney Ave
Mitchell Ave
Twining
196 Homes
Alternative 2
Proposed Action
Vandenberg
12 Homes
Twining Dr
Alternative 1
Reserve Rd
Mc Narney
262 Homes
Mitchell Heights
East/West
94 Homes
Jones Ave
Prairieland
96 Homes
Mitchell Ave
Legend
Installation Boundary
Clear Zone
100 Year Flood Zone
500-Year Flood Zone
Dog Park Options
Proposed Action
Alternative 1
Alternative 2
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Feet
Source: Tinker AFB 2011 Imagery: Microsoft Bing
Figure 2-1
Alternative Locations
Tinker AFB
Oklahoma City, OK

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2.2 ALTERNATIVES ELIMINATED FROM DETAILED ANALYSIS

2.2.1 ALTERNATIVE 1

Alternative 1 would be located to the east of Vandenberg neighborhood and north of the super playground near Mitchell Avenue and Reserve Road. This alternative is located near 106 residences in the Vandenberg and Mitchell Heights neighborhoods which represents 16 percent of the residences on base. The site may also be accessed by pedestrians from the Prairieland, McNarney, and Twining neighborhoods (554 residences) but it is just as likely those residents would drive to this location. The entire site experiences storm water run-off during rainy periods effectively limiting its use during this time.

The fence posts and a portion of the fence line would be located within the floodplain; however, the water current speed is slowest in this portion of the flood profile. Therefore, it is not expected that the dog park fence would have any effect on flood water flows. It would not affect the 100- or 500-year flood elevations, floodway elevations or widths.

This alternative is located outside the clear zone; however, the eastern portion of this alternative could be used to support operational mission development. This site was not selected due to the fact that future operational missions could be constructed at this location, the site would be partially unusable during the year due to storm water run-off, and it is within walking distance of only 16 percent of the base residences. Additional concerns were raised about the large breed dog park being located adjacent to the super playground where some small children could be traumatized by the presence of the dogs.

2.2.2 ALTERNATIVE 2

Alternative 2 would be located to the east of Vandenberg neighborhood and east of Wolfe Drive also north of the super playground. This alternative is located near 106 residences in the Vandenberg and Mitchell Heights neighborhoods which represents 16 percent of the residences on base. The site may also be accessed by pedestrians from the Prairieland, McNarney, and Twining neighborhoods (554 residences) but it is just as likely those residents would drive to this location. The southern portion of the site would experience storm water run-off during rainy periods effectively limiting its use during this time. There would be no impacts to the floodplain with this option.

This alternative is located outside the clear zone; however, the site could be used to support operational mission development. The location is sited further north than Alternative 1 to increase the distance from the super playground to the large breed dog park area.

This site was not selected due to the fact that future operational missions could be constructed at this location, the site would be partially unusable during the year due to storm water run-off, and it is within walking distance of only 16 percent of the base residences.

2.3 DETAILED DESCRIPTION OF THE PROPOSED ACTION

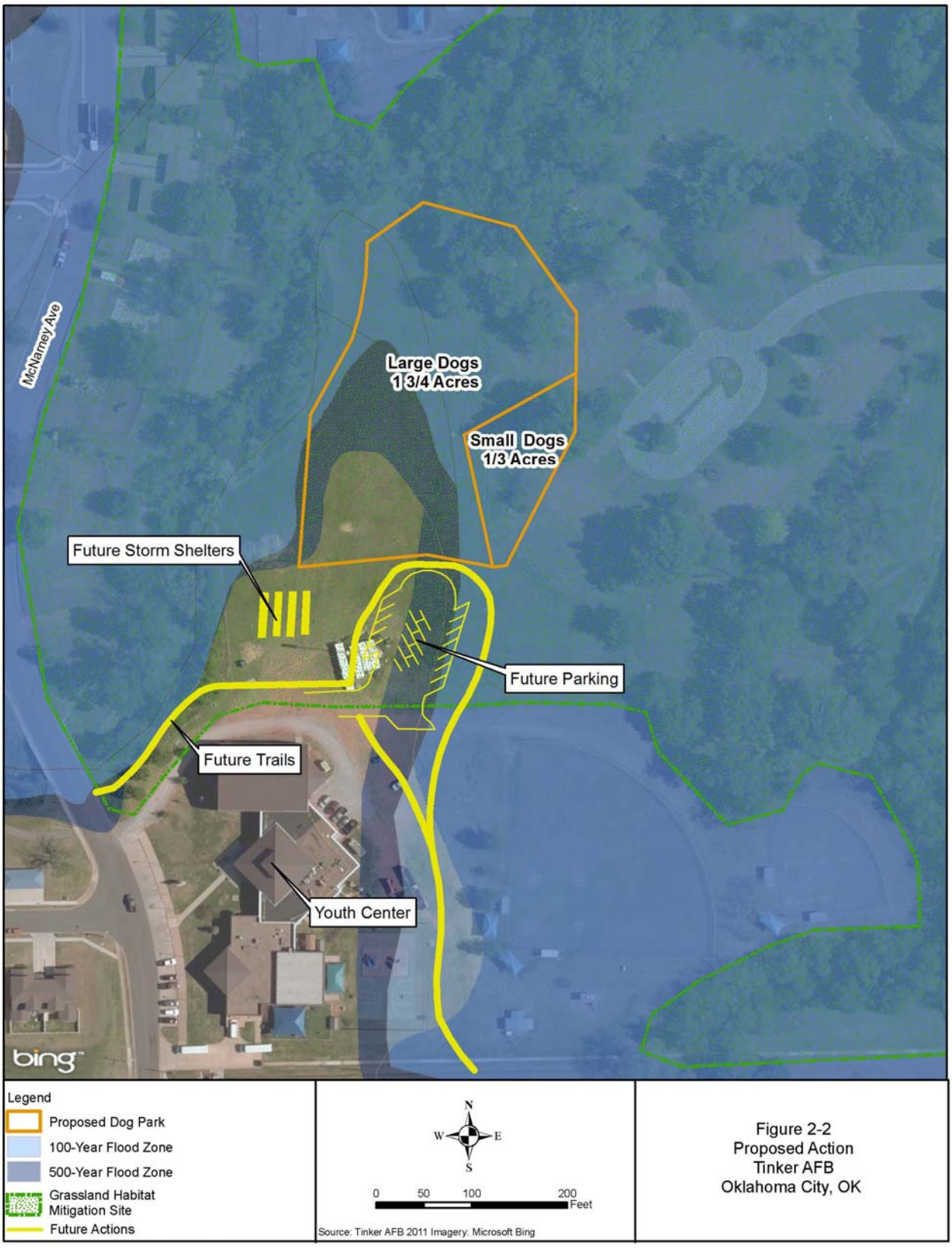
The Proposed Action sites the dog park directly east of the Twining neighborhood and north of the Youth Center, Building 5520. There are plans to install storm shelters north of the Youth Center along with a larger parking area and both are depicted on Figure 2-2. The dog park would be sited so that the south end of the dog park is adjacent to the additional parking area.

The Proposed Action is centrally located near 470 residences in the Twining, McNarney, and Vandenberg neighborhoods which represent 71 percent of the residences on base. The site can be accessed by pedestrians from Mitchell Heights and Prairieland (190 residences) but it is just as likely those residents would drive to the dog park. Parking is available in the existing youth center parking lot and along the paved streets. Parking options would be expanded once the new parking lot is constructed.

The site is outside the clear zone and cannot be developed for future operational mission requirements due to the limited size of the site and its proximity to the floodplain. It was observed that during two suspected 500-year flood events that occurred in May 2015, the Proposed Action site did not experience water flow at a high enough velocity to result in any damage from moving debris. The elevation change across the site is so minor that water flows slowly during flood events. However, just south of the Proposed Action site, a ballfield fence was damaged from the same flood events. The ballfield site is similar to the Proposed Action site along Crutcho Creek. The proposed dog park site does not experience storm water run-off during rainy periods that would effectively limit its use during this time.

This project would consist of chain link type fencing to enclose the dog park. The fence would run parallel to flood flows where it encroaches on the 100 year floodplain. Portions of the fencing and fence posts would be installed in the flood profile. Some utilities would be constructed to provide lighting and water fountains in the area. Trash cans would be installed on the site. Trees may be planted to provide additional shade to what is already available on-site.

All of the small breed area (approximately 0.3 acres) lies within the floodplain and within the planned KC-46A mitigation area. The large breed area (approximately 1.6 acres) is wholly located within the planned KC-46A mitigation area and approximately 1 acre lies within the floodplain.


McNamey Ave
Large Dogs
1 3/4 Acres
Small Dogs
1/3 Acres
Future Storm Shelters
Future Parking
Future Trails
Youth Center
bing
Legend
Proposed Dog Park
100-Year Flood Zone
500-Year Flood Zone
Grassland Habitat
Mitigation Site
Future Actions
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Feet
Source: Tinker AFB 2011 Imagery: Microsoft Bing
Figure 2-2
Proposed Action
Tinker AFB
Oklahoma City, OK

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2.4 DESCRIPTION OF THE NO-ACTION ALTERNATIVE

Under the No-action Alternative, a dog park would not be constructed at Tinker AFB. On-base residents would lack a convenient location to exercise and socialize their dogs. Residents would continue to use the dog park available at Joe B. Barnes Regional Park in Midwest City, use their backyards, or walk along the trails and streets at Tinker AFB. There would be no impact to the KC- 46A mitigation area or to the floodplains. The majority of the open, recreation space central to the MHPI area would likely be converted to prairie tall grass in accordance with the final KC-46A mitigation plan.

2.5 OTHER ACTIONS ANNOUNCED FOR TINKER AFB

This EA also considers the direct and indirect effects of cumulative impacts (40 CFR 1508.7) and concurrent actions (40 CFR 1508.25[1]). A cumulative impact, as defined by the CEQ (40 CFR 1508.7), is the "impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of which agency (federal or non-federal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

Other actions announced for Tinker AFB that could occur during the same time period as the Proposed Action are identified below and are displayed on Figure 2-2.

- Construct tornado shelters/safe rooms at the Youth Center – After it was determined that existing interior rooms are no longer sufficient as safe storm shelters, Tinker AFB proposed to construct new storm shelters at the east and west Child Development Centers, as well as at the Youth Center. This project would construct four new storm shelters north of the existing Youth Center which would serve to shelter the Youth Center's 300 children and 60 staff during Oklahoma's tornado season. A Categorical Exclusion (CATEX) was completed and signed for this project in March 2015.

- Construction of Parking – This project would install an approximately 0.281 acre paved parking lot outside of the entrance to the proposed dog park. This parking lot would primarily serve Mitchell Heights and Prairieland neighborhood residents who prefer to drive to the dog park, rather than walk. This project is not yet programmed and no NEPA documentation has been prepared.

- Construction of Trails – This project would install approximately 0.23 miles of paved trails to provide walking access to the dog park. It is estimated that the trail would be approximately five feet (ft) wide, for a total of 0.139 acres of trail. The trails would be located around the back side of the Youth Center and would encircle the future parking lot described above. This project is not yet programmed and no NEPA documentation has been prepared.

- Construct Natural Gas Distribution System Loop Legs – This project will install additional 4 inch High Density Polyethylene pipe via direct bore operations. This will create a looped

natural gas distribution system with redundant feeds to the Theater, Shoppette, Izzard Pool, Child Development Center, and Youth Center. A creek must be crossed in two places and if the pipe cannot be bored underground, contractors will either use the existing bridge structure or use the existing pipe trapeze in order to cross the creek. The two points it will cross the creek is Mitchell Avenue and Twining Drive and east of Mc Narney Avenue and Doolittle Avenue. The floodplain will not be affected by this project. A CATEX was completed and signed for this project in September 2015.

2.6 COMPARISON OF ENVIRONMENTAL EFFECTS OF ALL ALTERNATIVES

Table 2-2 summarizes the impacts of the Proposed Action and the No-action Alternative. This table provides a comparison of the effects of the alternatives to assist in the decision-making process.

2.7 MEASURES TO REDUCE IMPACTS

Analysis of environmental impacts has determined that no mitigation measures would be necessary to prevent significant adverse effects. However, best management practices (BMPs) are proposed to help minimize impacts. Table 2-3 presents a summary of these mitigation measures and BMPs proposed under the Proposed Action and the No-action Alternative.

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Table 2-2 Summary of Environmental Impacts

Resource	Proposed Action – Dog Park Construction	No-Action Alternative
Noise	Short-term, minor increase in construction noise. Construction noise would contribute approximately 45-51 'A'-weighted decibels (dBA) to the baseline noise levels at the closest noise sensitive receptors; however, since decibels are a logarithmic unit, additional noise would not add substantially to existing levels. Potential short-term noise increase in immediate vicinity of park if park users' dogs begin barking.	No change to existing noise levels.
Geology and Soils	No impact to geology. No anticipated changes to the topography of the site or soil unit composition. Minor, short-term increases in fugitive dust during excavation activities. No loss of prime farmland. Potential for minor erosion with West Crutcho Creek as closest receiving water located immediately adjacent to the proposed dog park. Sedimentation of creek would be limited due to barrier provided by on-site grasses and creek bank vegetation. Implementation of a Stormwater Pollution Prevention Plan and its associated best management practices would also reduce sedimentation impacts.	No soil disturbance, erosion, or changes to underlying geology of the site.
Water Resources	Potential to encounter shallow groundwater during soil excavation. If groundwater were encountered during excavation, all excavation activities would cease and the engineering design of the fencing would be re-examined to determine if a new design is necessary. No impacts to drinking water production zone utilized by Tinker Air Force Base (AFB). Negligible to minor impacts to West Crutcho Creek related to erosion and sedimentation. No anticipated changes to topography; therefore, no impacts to the 100- or 500-year flood elevations, floodway elevations, or widths. No change to impervious surfaces and no waterflow impediment. No impacts to flood levels, runoff quantity, or flood water velocity. Potential for damage to new fencing; however, impacts would be short-term, as repairs would be completed after damage occurs. Increased potential for soil erosion immediately following construction activities; however, impact would be temporary and would be eliminated once vegetation was re-established.	No impacts to groundwater, surface water, topography, impervious cover, or floodplains.
Biological Resources	Negligible to minor, long-term impacts to aquatic habitat in Crutcho Creek due to a potential increase in dog waste reaching the creek. Minor, long-term impacts to vegetation due to site use. Minor, long-term impact to birds, including migratory birds, as presence of humans and dogs may reduce the desirability of the habitat to some bird species. Minor, long-term fragmentation of 0.5 acres of mammalian, reptile, and amphibian habitat as well a long-term reduction in habitat quality due to presence of humans and dogs. Minor, long-term impacts to invertebrate species due to soil compaction and presence of dogs. No impacts to protected species or state species of special concern. Minimal impact to green infrastructure included as part of a mitigation plan for the KC-46A Depot Maintenance Activation project. One and a half acres of native habitat would be established in a different area to modify the mitigation plan.	No impacts to vegetation, birds, fish, mammals, reptiles, amphibians, invertebrates, protected species, state species of special concern, or migratory birds. Beneficial impacts to green infrastructure, as the mitigated green infrastructure area would remain intact, instead of segregated as it would be under the Proposed Action.
Safety and Occupational Health	No impact to Bird/Wildlife Aircraft Strike Hazard (BASH) program or incidents. Short-term increase in potential for safety incidents during construction activities. Long-term increase in potential mishaps during use of the park, including slips, trips, and falls; insect bites/stings, climatic incidents, and dog bites.	No impact to BASH program or incidents. Potential for safety incidents at site would be higher than for Proposed Action due to limited pest control services scheduled for area classified as open space. Potential for pedestrian tripping hazards would remain.
Utilities and Infrastructure	Approximate long-term increase in annual electrical consumption by one percent. No adverse impacts to the existing electrical distribution system or supply. Negligible increase in potable water consumption for the base resulting from water fountain installation at the park. No adverse impacts to potable water consumption at Tinker AFB. Long-term, minor increase in municipal solid waste generated at Tinker AFB resulting from municipal and dog waste. The increase would be so limited that it would not be expected to result in adverse impacts to the municipal solid waste collection and disposal system at Tinker AFB. Negligible to minor short-term increase in construction and demolition waste generated during construction activities. Adverse impacts to capacity of nearby landfills are not expected.	No change to electrical and potable water consumption or solid waste generation rates.

Notes: AFB – Air Force Base BASH – Bird/Wildlife Aircraft Strike Hazard dBA – 'A"-weighted decibel

2

Table 2-3 Summary of Measures to Reduce Impacts

Resource	Measures to Minimize or Reduce Impacts and Best Management Practices (BMPs)
Noise	No mitigation measures would be necessary. All construction activities would occur during daytime hours (0700 – 1900 hours). BMPs would include equipping noise-generating heavy equipment at the project site with the manufacturer's standard noise control devices (i.e., mufflers, baffling, and/or engine enclosures). All equipment should be properly maintained to ensure that no additional noise from worn or improperly maintained equipment parts is generated. Construction activities would be conducted according to the Occupational Safety and Health Administration regulations 29 CFR 1910.95 and 29 CFR 1926.52. Occupational exposure to the noise from heavy equipment could be reduced by requiring workers to wear appropriate hearing protection. Hearing protective devices such as ear plugs or ear muffs should be worn at all locations where workers may be exposed to high noise levels.
Geology and Soils	No mitigation measures would be necessary. BMPs would include spraying water over soil during construction activities to reduce fugitive dust. Erosion control measures, such as silt fences or other barricades may be necessary to prevent soil runoff and would be included as BMPs within the Stormwater Pollution Prevention Plan (SWPPP).
Water Resources	No mitigation measures would be necessary. BMPs would include erosion control measures such as silt fences or other barricades established within the SWPPP. Additionally, erosion immediately following conclusion of construction activities could be minimized by planting vegetative cover or installing inert material such that soils are stabilized at the end of construction activities.
Biological Resources	No mitigation measures would be necessary. Erosion control measures such as installation of barricades would be established in the SWPPP and implemented during construction. Educational signage would be posted on effects of dog waste in aquatic systems as well as signs requiring dog park users to clean up their dog's waste. The park would also include a dispenser for dog waste bags and a receptacle for the placement of used bags.
Safety and Occupational Health	No mitigation measures would be necessary. BMPs for construction activities include posting signs in potentially dangerous work areas and communication with base residents and employees well in advance of construction commencement to help minimize hazards for pedestrians during the construction time period. Use of signage and personal protective equipment such as hard hats, steel toed boots, hearing protection, work gloves, reflective vests, safety harnesses, signaling flags at the construction site would protect workers and bystanders from sharp and/or heavy tools, construction materials, loose construction debris, large and noisy moving equipment, as well as biological hazards. BMPs for park safety include posting signs at the dog park entrance which identify the park rules (including vaccination requirements). Additionally, park users would be responsible for determining climatic conditions prior to use of the park and dressing to fit the weather conditions. All park users should make use of the water fountain on site to stay hydrated.
Utilities and Infrastructure	No mitigation measures are necessary and no BMPs are recommended.

Notes: BMP – Best Management Practice SWPPP – Stormwater Pollution Prevention Plan

Chapter 3

Affected Environment and Environmental Consequences

CHAPTER 3
AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 NOISE

The Region of Influence (ROI) for this noise analysis includes Tinker AFB with focus on the housing areas surrounding the proposed dog park site.

3.1.1 Affected Environment

The primary source of noise at Tinker AFB is associated with aircraft flight and maintenance operations. The noise contours generated at Tinker AFB are primarily driven by flight operations from aircraft stationed at Tinker and from aircraft functional check flights required after depot maintenance is performed. The proposed dog park site is located outside of the noise contours, as presented in the 2006 Air Installation Compatible Use Zone (AICUZ) Study for Tinker AFB (USAF 2006). It is also located outside the clear zone. The closest noise sensitive receptor to the proposed site is the Youth Center located approximately 210 ft away. The closest housing is located approximately 500 ft from the proposed dog park. The proposed site is currently classified as open space.

3.1.2 Environmental Consequences

Under the Proposed Action, installation of fencing and utilities would result in temporary, minor increases in noise levels. It is expected that a small excavator would be used to install the fenceposts and a shovel would be used to fill in the holes. A small backhoe or trencher would be used to install the limited utilities. Backhoes typically produce peak sound pressure levels of 78 'A'-weighted decibels (dBA) at a distance of 50 ft, while excavators produce sound pressure levels of 81 dBA at the same distance. If both the backhoe and excavator were operated at the same time, the combined sound pressure level would be approximately 83 dBA at a distance of 50 ft. Since sound pressure levels decrease by six dBA with every doubling of the distance from the source, it is expected that noise levels at the Youth Center would be approximately 71 dBA and would be approximately 65 dBA at the closest residence. This does not account for the ability of sound to be reflected/absorbed by nearby objects, which could further reduce noise levels. Sound levels within the Youth Center and residences would be even lower due to the sound transmission loss through building walls and windows. Noise levels within buildings are generally reduced by 20 decibels, depending on the type of walls and windows (US Navy 2005). Even at the upper end of the noise range, noise generated from the source would contribute approximately 45 dBA to the baseline noise levels at the closest residences and approximately 51 dBA to the baseline noise levels at the Youth Center. However, since decibels are a logarithmic unit, the additional noise would not add substantially to the existing levels. All construction activities would occur during daytime hours (0700 – 1900 hours). The noise associated with the operation of machinery on the construction sites would be short-term, intermittent, and highly localized; therefore, would not accumulate over time and would last only as long as the duration of construction activities. Construction noise impacts would be short-term and minor.

Use of the dog park could generate additional noise resulting from barking dogs; however, the noise would only last as long as the barking event. It is not anticipated that noise generated from barking dogs at the park would be frequent or persistent enough to result in increased average noise levels at the closest noise sensitive receptors.

Under the No-action Alternative, there would be no noise generated from utility installation or use of the dog park. Therefore, there would be no impact to baseline noise levels.

3.1.3 Cumulative Effects

Construction projects described in Section 2.5 Other Action Announced for Tinker AFB would generate noise as a result of use of construction equipment. Construction noise associated with these projects would be short-term and located in approximately the same area as the proposed dog park. Because of the short-term nature of the dog park construction activities it is unlikely that construction of all projects (including those described in Section 2.5) would occur at the same time. However, if they did, the combined noise level would be approximately 93 dBA. This would contribute approximately 81 dBA to the outside baseline noise levels at the Youth Center and 61 dBA to the interior baseline noise levels. The combined noise would also contribute approximately 75 dBA and 55 dBA to the exterior and interior baseline noise levels, respectively, at the nearest residence. Cumulative construction noise impacts would be short-term and minor.

3.1.4 Measures to Reduce Impacts

Noise-generating heavy equipment at the project site should be equipped with the manufacturer's standard noise control devices (i.e., mufflers, baffling, and/or engine enclosures). All equipment should be properly maintained to ensure that no additional noise from worn or improperly maintained equipment parts is generated. Construction activities would occur between 0700 and 1900 hours and would be conducted according to the Occupational Safety and Health Administration (OSHA) regulations 29 CFR 1910.95 and 29 CFR 1926.52. Occupational exposure to the noise from heavy equipment could be reduced by requiring workers to wear appropriate hearing protection. Hearing protective devices such as ear plugs or ear muffs should be worn at all locations where workers may be exposed to high noise levels. No mitigation measures would be required.

3.2 GEOLOGY AND SOILS

The ROI for this resource topic is limited to the proposed project site.

An area's geological resources typically consist of surface and subsurface materials and their inherent properties. Principal factors influencing the ability of geological resources to support structural development are topography and soil stability.

Topography is defined as the relative positions and elevations of the natural or human-made features of an area that describe the configuration of its surface. An area's topography is influenced by many factors, including human activity, seismic activity of the underlying geological material, climatic conditions, and erosion. Information about an area's topography typically

encompasses surface elevations, slope, and physiographic features (i.e., mountains, ravines, or depressions). Since the Proposed Action would not result in any changes to the site's topography, this resource topic is not discussed further.

The term "soil" generally refers to unconsolidated materials lying over bedrock or other parent material. Soils play a critical role in both the natural and human environment. Soil depth, structure, elasticity, strength, shrink-swell potential, and erodibility determine a soil's ability to support man-made structures and facilities. Soils are typically described in terms of their series or association, slope, physical characteristics, and relative compatibility or constraints with respect to particular construction activities and types of land use. Prime farmland is designated by the United States Department of Agriculture (USDA) as land that has the appropriate characteristics for producing particular crops and is available for this use. Some of the characteristics considered for prime farmland include soil quality, growing season, and availability of water, such that high yields of crops are produced from these farmlands.

3.2.1 Affected Environment

Geology – According to the 2008 *Geologic Map Compilation of the Oklahoma City Metro Area, Central Oklahoma* the uppermost geologic bedrock formation at the Proposed Action site is the Garber Formation, comprised predominantly of a friable to moderately indurated sandstone, fine-grained to less commonly very fine-grained, with varying proportions of claystone, siltstone, and sandstone – and siltstone-pebble conglomerates and breccias (USGS 2008). Individual sandstone intervals average about 20 ft thick with a range from 3-75 ft thick. Claystone and siltstone intervals are usually three feet thick or less and are more common at the base and top of the formation. Conglomerates and breccias are usually found in the lower parts of the formation and range from 0.5-3 ft thick, with an average of 1.5 ft thick (USGS 2008).

Topography – The elevation of the subject property is approximately 1,200 ft above sea level. Overall, surface topography at the proposed project site is generally flat with an approximate five percent increase in elevation from east to west (USGS 2012).

Soils and Prime Farmland – The Oklahoma County Soil Survey maps show several separate soil units mapped across the Proposed Action site. Some map units are made up of two or more major soils or miscellaneous areas. A complex consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they can't be shown separately on the map (USDA 2015). The total area and percent coverage of these soils is presented in Table 3-1.

Table 3-1 Proposed Action Soil Unit Coverage

Soil Unit	Total Area (acres)	Percent of Soil Unit in Total Area
Lawrie loam	1.16	60.1
Lawrie-Urban land complex	0.44	22.8
Zaneis-Urban land complex	0.19	9.8
Ashport silt loam	0.14	7.3
Total	**1.93**	**100.00**

Source: USDA 2015

The main soil type within the proposed site is classified by the USDA as Lawrie loam. Lawrie loam is primarily composed of Lawrie and similar soils (80 percent) and Ashport and similar soils (10 percent), with 10 percent being minor soil components. Lawrie soils are typically loam and silt loam over silty clay loam. They are well drained with a moderately high to high capacity to transmit water and are rarely flooded. Ashport soils are almost exclusively silty clay loam, with stratified loam to silt loam to silty clay loam at its deepest depths. They are well drained with a moderately high to high capacity to transmit water and are rarely flooded. The minor soil components in this series include Canadian and Easpur. The Lawrie loam soil type is classified as prime farmland (USDA 2015).

The Lawrie-Urban land complex is comprised of 60 percent Lawrie and similar soils and 40 percent Urban land. Lawrie soils are described above, while the Urban land is fine-silty mine spoil or earthy fill. Urban land has a very low to high capacity to transmit water and is rarely flooded. This soil type is not classified as prime farmland (USDA 2015).

The Zaneis-Urban land complex is comprised of 57 percent Zaneis and similar soils and 43 percent Urban land. Zaneis soils are loamy nearest the surface then transition into clay loam, then sandy clay loam, and finally bedrock at depths of 42-52 inches. These soils are well drained with a very low to moderately high capacity to transmit water; they do not flood. Urban land is described above. The Zaneis-Urban land complex is not classified as prime farmland (USDA 2015).

The least present soil type at the proposed project site is Ashport silt loam. It is comprised of 85 percent Ashport, frequently flooded, and similar soils. Fifteen percent is comprised of minor components. Ashport, frequently flooded soils are primarily silt loam, with silty clay loam at its deepest depths. They are well drained with a moderately high to high capacity to transmit water and are frequently flooded. The minor components which comprise this soil type are Pulaski, frequently flooded; Yahola, frequently flooded; and Tribbey, frequently flooded. The Ashport silt loam soil type is not classified as prime farmland (USDA 2015).

3.2.2 Environmental Consequences

Under the Proposed Action, an excavator would dig approximately two feet below ground surface (bgs) to prepare for fence post installation. Therefore, the underlying geological Garber formation

would not be disturbed. There would be no impact to geology of the site under the Proposed Action.

Soils at the proposed site would be disturbed during excavation; however, as the fence posts are installed, the majority of the soil would be placed back into the trench. Any soils permanently displaced due to fence post installation would be spread over the immediate vicinity. The amount of soil relocated would be so minor, there would be no anticipated changes to the topography of the site or soil unit composition. Minor erosion may occur and the closest receiving water is West Crutcho Creek located immediately adjacent to the proposed dog park to the north of the site. Although the topography gradually slopes towards the creek, the majority of the site is covered with grasses and there is a row of dense vegetation along the creek which would act as a barrier to limit sedimentation. Implementation of a Stormwater Pollution Prevention Plan (SWPPP) and incorporation of best management practices within the SWPPP would assist in sediment control during excavation and construction activities.

Fugitive dust may be generated during soil excavation; however, this disturbance would be minor and short-term, would fall off rapidly with distance from the construction site, and would last only as long as the duration of construction.

Since construction activities under the Proposed Action would be limited to installation of a fence and utilities, there would be no addition of impervious surface. Therefore, there would be no loss of prime farmland as a result of the Proposed Action.

Under the No-action Alternative, there would be no soil disturbance, erosion, or changes to underlying geology of the site. Therefore, geology and soils would not change from baseline conditions.

3.2.3 Cumulative Effects

Impacts to geology and soils as a result of the Proposed Action would be minor and, with the exception of erosion, would be limited to the project site. Cumulative projects listed in Section 2.5 could also result in erosion which could impact West Crutcho Creek. Any other impacts to soils and geology from the cumulative projects would be expected to be limited to their respective project sites. Erosion at each of the cumulative project sites would be managed through use of a SWPPP and BMPs and would not be expected to result in a cumulative increase in erosion.

3.2.4 Measures to Reduce Impacts

Contractors may need to spray water over the soil during construction activities in order to reduce fugitive dust. Additionally, erosion control measures, such as silt fences or other barricades may be necessary to prevent soil runoff and would be included as BMPs within the SWPPP. No mitigation measures are necessary.

3.3 WATER RESOURCES

Water resources include groundwater features such as aquifers; surface water features including watersheds, rivers, lakes, wetlands, and streams; and floodplains. The ROI for this resource topic includes Tinker AFB, with a focus on the proposed project site and its immediate surrounding areas.

3.3.1 Affected Environment

Tinker AFB is positioned above the Central Oklahoma Aquifer recharge zone. The Central Oklahoma Aquifer, also known as the Garber-Wellington Aquifer, underlies all or portions of eight counties, including Oklahoma County, and spans approximately 2,900 square miles. The aquifer serves as a public and domestic source of water for major communities in the central Oklahoma area. The productive formations associated with this aquifer are the Garber Sandstone and the Wellington Formation. These formations are often collectively referred to as the "Garber-Wellington" Aquifer, which has a maximum thickness of approximately 1,000 ft.

Four groundwater-bearing units are located in the area: the Hennessey water bearing zone, upper saturated zone (USZ), lower saturated zone (LSZ), and producing zone (PZ). The USZ, LSZ, and PZ are associated with the Garber Aquifer. The Hennessey Group is the shallowest bedrock formation underlying Tinker AFB. Depth to shallow groundwater at Tinker AFB has been reported ranging from a few feet to about 70 ft (USACE 2012). Groundwater in the upper 200 ft of this aquifer is typically unconfined while groundwater at greater depths is partly confined or confined (USGS 2015). The depth to groundwater at the proposed dog park site is unknown.

The PZ is the zone that is utilized for drinking water by Tinker AFB and Oklahoma City. The Tinker AFB water supply distribution system is comprised of 26 water wells ranging from a depth of 700 to 900 ft (USAF 2007b). Based on a review of Tinker AFB cross-section maps, the groundwater "Production Zone" of the Garber-Wellington begins at a depth of approximately 200 ft bgs.

The main surface water features in the vicinity of the project area is Crutcho Creek, of which the West tributary (West Crutcho Creek) is located immediately adjacent to the proposed dog park to the north of the site. Crutcho Creek generally flows to the northwest and discharges into the North Canadian River, approximately six miles north of Tinker AFB.

There are no rivers or lakes within the proposed project site or its immediate vicinity. Additionally, according to the United States Fish and Wildlife Service (USFWS) National Wetlands Inventory Mapper, there are no wetlands within the proposed project site or in the immediate vicinity (USFWS 2015a).

Approximately 1.3 acres of the dog park is located within the 100-year floodplain and approximately 0.04 acres is located within the 500-year floodplain. These areas are shown in Figure 2-2.

3.3.2 Environmental Consequences

Implementation of the Proposed Action would impact soils to a depth of a few feet and excavation activities could potentially encounter groundwater at shallow depths. If groundwater were encountered during excavation, all excavation activities would cease and the engineering design of the fencing would be re-examined to determine if a new design is necessary. Due to the shallow depth of soil excavation, the PZ utilized for drinking water by Tinker AFB would not be impacted.

Impacts to West Crutcho Creek due to erosion and sedimentation would be negligible to minor and would be as described above in Section 3.2.2 Geology and Soils Environmental Consequences.

Although soils removed from post holes would be distributed over the surrounding area, the amount of soil distributed is expected to be so minor that there would not be any topography changes. Since there would be no change to topography in the area, the Proposed Action would not affect the 100- or 500-year flood elevations, floodway elevations or widths. Additionally, there would be no change in impervious surfaces under the Proposed Action and the installed fence posts would not substantially impede water flow. Therefore, flood levels, runoff quantity, and flood water velocity would also not be affected. It is possible that during a major flood event, debris may collect at the base of the new site fencing and the fence line may be damaged either by debris or by water flow. In the event of fence damage, the park would be temporarily closed until repairs could be completed.

In the event of a flood immediately following construction activities there would be an increased potential for erosion due to disturbed soils on the proposed site. This would be a temporary impact which would be eliminated once vegetation over the disturbed soil was re-established. A full engineering analysis is not required per Federal Emergency Management Association (FEMA) guidance to regulatory agencies. FEMA terms this type of project as a "minor project" under the National Flood Insurance Program floodplain management requirements.

Under the No-action Alternative, there would be no soil disturbance; therefore, there would be no impacts to groundwater or surface water. No changes to site topography would occur and there would be no change in impervious cover at the site. As a result, there would be no impacts to floodplains.

3.3.3 Cumulative Effects

The future parking and trails projects described in Section 2.5 would both partially occur within the 100- and 500-year floodplains (see Figure 2-2). These two projects would increase impervious cover within the floodplains, potentially impacting the floodplains. NEPA and floodplain impacts analyses have not been conducted for these two projects. Since the Proposed Action is not expected to impact floodplains, it would not contribute to cumulative effects to floodplains.

3.3.4 Measures to Reduce Impacts

Impacts to West Crutcho Creek due to erosion and sedimentation would be minimized through use of erosion control measures such as silt fences or other barricades and would be included as BMPs within the SWPPP. Additionally, erosion impacts resulting from flooding immediately after construction (prior to natural re-establishment of vegetation) could be minimized by planting vegetative cover or installing inert material such that soils are stabilized at the end of construction activities. This requires effective scheduling of BMPs to most efficiently reduce or eliminate erosion and sedimentation. No mitigation measures would be necessary.

3.4 BIOLOGICAL RESOURCES

The ROI for this resource topic includes Tinker AFB, with a focus on the proposed project site and its immediate surrounding areas.

Biological resources include plant and animal species and the habitats in which they occur. For this analysis, biological resources are divided into the following categories: vegetation, wildlife, and protected species. Vegetation and wildlife refer to the plant and animal species, both native and introduced, which characterize the region. Protected species are plant and animal species in need of protection to ensure that the species do not decline to extinction.

To promote and support many of their missions, Tinker AFB has created a GI network, defined by the Natural Resources Program as "an interconnected network of waterways, wetlands, woodlands, grasslands, and other natural areas of base-wide significance" (USAF 2012). The purpose of the GI is to create a system of natural areas both on and off Tinker AFB property connected by undisturbed habitat corridors. Benefits of a GI system to Tinker AFB include pollution control, increased military readiness by providing natural environments for training, reduction of potential property damage in the event of a 100- or 500-year flood event, enhancing the natural aesthetics of the base, increasing the wellness of base personnel by providing green areas for relaxation and recreation, and providing undisturbed habitat to wildlife on base. As a component of the KC-46A Depot Maintenance Activation, approximately 50 acres of the former military family housing area would be converted to GI, to mitigate for grassland habitat loss associated with depot maintenance activation. The preferred areas selected for the dog park is part of the 50 acres that would have been converted to GI.

3.4.1 Affected Environment

Vegetation - Tinker AFB is located in a suburban area outside of Oklahoma City and is heavily urbanized with little unimproved green space. As classified within the preliminary Tinker AFB Integrated Natural Resources Management Plan (INRMP), the proposed dog park site is composed mostly of improved turf (1.42 acres) but has areas of floodplain mixed forest (0.31 acres), and urban woodlands (0.19 acres) (USAF 2012).

Birds

There are over 400 species of birds known to occur in the state of Oklahoma, 209 of which have been observed on Tinker AFB (USAF 2012). Seasonal species richness of the Tinker area is greatest in the spring, followed by the summer, autumn, and winter (USAF 2012). Much of this diversity can be attributed to Tinker AFB's location along the Central Flyway, a migratory route extending from Canada, through central United States, and into Mexico (USFWS 2012). Bird species found in the Tinker area fluctuate throughout the year as they move in and out of the area along their migratory route (USAF 2012). The majority of birds observed in the Tinker area are considered migratory and are therefore protected under the Migratory Bird Treaty Act (MBTA) (16 USC §703-712). The most abundant birds observed on Tinker AFB property are the eastern meadowlark (*Sturnella magna*), Franklin gull (*Leucophaeus pipixcan*), European starling (*Sturnus vulgaris*), mourning dove (*Zenaida macroura*), northern cardinal (*Cardinalis cardinalis*), and the barn swallow (*Hirundo rustica*) (USAF 2012). With the exception of the Franklin gull, all of the commonly occurring bird species would be expected to be present either as transients, or for foraging or nesting, within the proposed dog park site.

Fish

Surface water habitat in the Tinker AFB area is located within the Crutcho Creek Drainage Basin (CCDB), as discussed in Section 3.3.1. Studies of surface waters within the CCDB (outside of Tinker AFB boundaries) identify up to 22 native species of fish (USAF 2012). The overall species richness on base is typical for headwater areas and the species of fish identified outside of Tinker AFB are similar to those identified on-base. Of nine on-base sites surveyed in 2013, ten species were found in Crutcho Creek at the sample site nearest the proposed dog park. These species (from most to least prevalent) include red shiner (*Cyprinella lutrensis*), longear sunfish (*Lepomis megalotis*), western mosquitofish (*Gambusia affinis*), sand shiner (*Notropis stramineus*), bullhead minnow (*Pimephales vigilax*), bluegill (*Lepomis macrochirus*), green sunfish (*Lepomis cyanellus*), fathead minnow (*Pimephales promelas*), largemouth bass (*Micropterus salmoides*), and gizzard shad (*Dorosoma cepedianum*) (Marsh-Matthews 2013). At Tinker AFB this is likely the most natural creek segment, having a riparian canopy and the least stream channel alternations. The diversity of fish in this segment is similar to those found in other Great Plains prairie streams (USAF 2012). A complete list of the 30 species of fish identified on Tinker AFB (not including hybridized species and non-native fish stocked in four ponds throughout Tinker AFB) can be found in Appendix D of the preliminary draft of the Tinker AFB INRMP (not included in this EA). Overall these fish populations are stable and species richness has been increasing, while fish kills have been decreasing. None of the stocked ponds or Crutcho Creek fall within the proposed dog park site. Crutcho Creek is immediately to the north of the proposed site.

Mammals

There are 34 mammal species known to occur on Tinker AFB, most of which are common throughout the general Tinker AFB area (USAF 2012). Common species include fox squirrels (*Sciurus niger*), eastern cottontail rabbits (*Sylvilagus floridanus*), Virginia opossum (*Didelphis virginiana*), raccoon (*Procyon lotor*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), beaver (*Castor canadensis*), muskrat (*Ondatra zibethicus*), and various rodent species (*Neotoma* spp., *Peromyscus* spp., *Sigmodon* spp., etc.) (USAF 2012). While white-tailed deer (*Odocoileus virginianus*)

populations on-base are limited, the population around Tinker AFB is thought to be increasing (USAF 2012).

Recent studies concluded that species diversity of mammals was higher within green spaces than in more developed areas throughout Tinker AFB, including within riparian corridors and upland habitats. Conversely, species diversity of mammals was found to be lower near airfields and industrial areas on the installation. The Shannon-Wiener Diversity index for mammals and herpetofauna for the Crutcho Creek Area was 2.51, while adjacent areas showed lower species diversity (Hellgren and Bogosian 2009). The proposed dog park area may provide habitat for some of the common mammals present within Tinker AFB.

Reptiles and Amphibians

Forty-eight species of reptiles and amphibians, collectively known as herpetofauna, are known to occur on Tinker AFB, including gray tree frog (*Hyla versicolor*), 3-toed box turtle (*Terrapene carolina*), red-eared slider (*Trachemys* [*Pseudemys*] *scripta*), and plain bellied water snake (*Nerodia erythrogaster*) (USAF 2012). Of these 48 species, only 12 are amphibians. This is likely due to the restrictive habitat requirements of amphibians as well as the secretive nature of most amphibian species. Only one venomous snake, the copperhead (*Agkistrodon contortrix*), has been confirmed on Tinker AFB in their favorable oak woodland habitat on the extreme east side of the base (west of Douglas Blvd) (USAF 2012). A state species of concern, the Texas horned lizard (*Phrynosoma cornutum*), is known to occur on Tinker AFB, primarily in the southern and southwestern areas of the base. The Texas horned lizard is discussed in more detail below under Protected Species. As with mammalian species, herpetofauna were most abundant in green spaces, appearing to avoid airfields and industrial areas on base (USAF 2012). The Shannon-Wiener Diversity index for mammals and herpetofauna for the Crutcho Creek Area was 2.51, while adjacent areas showed lower species diversity (Hellgren and Bogosian 2009). The proposed dog park area is expected to provide habitat for common reptiles present within Tinker AFB.

Invertebrates

Invertebrate species on Tinker AFB include both insects and mollusks. There are 128 invertebrate species that have been documented on base, with hundreds of others that could likely be present. Although none of these species are federally- or state-listed as threatened or endangered, there are several species considered vulnerable by the Tinker AFB Natural Resources Program, including two butterflies, the Arogos skipper (*Atrytone arogos*) and the Ottoe skipper (*Hesperia ottoe*). An introduced invertebrate, the Asiatic basket clam (Family *Corbiculidae*), is known to occur in streams and ponds in the Tinker AFB area. This species has negative effects on aquatic ecosystems throughout the state of Oklahoma (USAF 2012).

Protected Species and State Species of Special Concern

Tinker AFB has a comprehensive species at risk (SAR) monitoring and management program. SAR determinations are made by Tinker AFB natural resource personnel based on information from a variety of sources, including state and federal wildlife agencies as well as non-governmental

organizations. These determinations are used to make informed habitat and wildlife management decisions on Tinker AFB.

A total of 48 SAR have been documented on Tinker AFB with observations of five state species of special concern and one federally listed threatened species. The state species of concern were Bell's vireo (*Vireo bellii*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicanus*), Swainson's hawk (*Buteo swainsoni*), and the Texas horned lizard (*Phrynosoma cornutum*). The federally-listed threatened species was the piping plover (*Charadrius melodus)*. Of these species, only the loggerhead shrike has been documented within West Crutcho Creek (USAF 2012).

While the majority of the 48 documented SAR species at Tinker AFB are birds, SAR species known to occur on-base also include five mammals, one amphibian, one fish, and two reptile species. Observations of SAR have not been made within the footprint of the proposed dog park. Three bird species and one mammal designated as SAR have been observed within West Crutcho Creek. The observed species were Hermit thrush [*Catharus guttatu*]), loggerhead shrike [*Lanius ludovicanus*], yellow warbler [*Setophaga petechia*]), and Red fox [*Vulpes vulpes*]. Within the proposed dog park area, SAR habitat is present. There is 0.19 acre of urban woodland habitat, 0.34 acre of riparian area, and 0.31 acre of floodplain mixed forest which may support SAR (USAF 2012).

Federally-listed threatened and endangered (T&E) species are protected under Section 7 of the Endangered Species Act of 1973 (16 USC § 1531 et seq.). A list of T&E species for Oklahoma County was obtained from the USFWS Information for Planning and Conservation website. The list includes two threatened species (piping plover [*Charadrius melodus*] and red knot [*Calidris canutus rufa*]) and two endangered species (whooping crane [*Grus Americana*], and least tern [Sterna antillarum] (USFWS 2015b). Of these, the piping plover is the only species to have been documented at Tinker AFB. It was reported once as a bird aircraft strike and no other piping plovers have been observed on base (USAF 2012). No critical habitat for any listed species is on Tinker AFB.

There are currently four state-listed endangered species identified by the Oklahoma Department of Wildlife Conservation as occurring in Oklahoma. These include the longnose darter (*Percina nasuta*), blackside darter (*Percina maculata*), Oklahoma cave crayfish (*Cambarus tartarus*), and neosho mucket (*Lampsilis rafinesqueana*). However, none of these species are located within Oklahoma County.

The following is a brief discussion of the threatened and endangered fauna species known historically from Oklahoma County that has the potential to be found on Tinker AFB. No rare, threatened, or endangered flora species have been identified for Oklahoma County. The preliminary Tinker AFB INRMP includes a detailed discussion of T&E species and species of concern observed on-base. Table 3-2 below shows all federally-listed T&E species known to occur in Oklahoma County (USFWS 2015b).

Table 3-2 Threatened and Endangered Species within Oklahoma County

Common Name	Scientific Name	Federal Status	State Status	Suitable Habitat Occurrence in the Proposed Project Areas	Potential Species Presence
BIRDS					
Least Tern	*Sterna antillarum*	E		**No -** there are no sandbars along rivers within the project area.	Highly improbable
Piping Plover	*Charadrius melodus*	T	--	**No—**there are no mudflats, sandy beaches, large wetlands, rivers, lakes, or reservoirs on the project site.	Highly improbable
Red Knot	*Calidris canutus rufa*	T	--	**No-** there is no tundra habitat or intertidal marine habitat on the project site.	Highly improbable
Whooping Crane	*Grus americana*	E	--	**No—**there are no large shallow wetlands, rivers, reservoirs, lakes, or wet prairies on the project sites.	Highly improbable

Source: USFWS 2015b; ODWC 2016
Notes:
-- = not likely to be present
T = Threatened
E = Endangered
C = Candidate Species, proposed for listing
X = likely to be present

Least Tern - The least tern (*Sterna antillarum*) is a possible summer resident within Oklahoma, breeding from mid-May to late August (ODWC 2011a). They are typically occurring along large rivers, lakes, and reservoirs. The species requires bare sand or gravel for nesting and can form breeding colonies ranging from two to twenty pairs.

Tinker AFB does not have least tern habitat (i.e., large rivers, lakes, or reservoirs) on the base. The largest waterbody on Tinker is 3.5 acres. However, least terns have been documented at the 2,900-acre Stanley Draper Lake approximately one mile to the southeast of Tinker AFB. While it is possible that the least tern could also utilize large graveled roof tops on base, no least terns have been observed on-base. Therefore, it is possible this species could migrate across the base, but without suitable habitat, stopovers would be highly improbable.

Piping Plover - The piping plover (*Charadrius melodus*) is a spring and fall migrant through Oklahoma with recorded sightings in April through May and July through late September (ODWC 2011b). The species is typically observed on mudflats, sandy beaches, along shallow wetlands with sparse vegetation, and along the margins of lakes and large rivers where there is exposed sand or mud.

The piping plover has been documented on the base by a single recorded, and USFWS-validated, occurrence. On 11 May 2009, USDA biologists found the partial remains of a piping plover on Runway 18/36. It was presumed to have been struck by an aircraft. Its occurrence was considered

an aberration since 1) USDA biologists had been conducting spring bird hazing/surveys on the airfield on a daily basis for several years, and this was the first time this species had been observed on the base and 2) because the base does not provide suitable habitat for this species. Furthermore, that same year, Virginia Tech, under contract to conduct base-wide seasonal bird inventories, had completed their spring survey in early May, and six sample sites on the airfield movement area yielded no piping plover or other T&E species sightings. Although it is not uncommon to see shorebirds on wet runways and grassy areas of Tinker's airfield in spring months, this piping plover was considered a rare transient. To date, there have been no other sightings of this species on Tinker AFB.

Suitable habitat for this species exists at Stanley Draper Lake approximately one mile to the southeast of Tinker AFB. Though it is possible this species might stopover on Tinker AFB property during migration, it is more likely that it would utilize Stanley Draper Lake for stopover habitat.

Red Knot – The red knot (*Calidris canutus*) is a migratory bird that winters primarily along the Chilean Coast and migrates to its Canadian breeding ground. They are found during breeding season in drier tundra areas, and outside of breeding season are primarily found in intertidal, marine habitats. A population of red knots that winter on the gulf coast of Texas migrates through the Great Plains, including Oklahoma, to their breeding grounds. The birds typically fly over Oklahoma and do not make landfall. Only 40 red knots have been reported in Oklahoma (ODWC 2011c).

Tinker AFB does not have red knot habitat (i.e., tundra, or marine habitat). Red knots are seldom found in Oklahoma. This species may migrate over the base, but are not expected to make landfall and stopovers are highly improbable.

Whooping Crane - The whooping crane (*Grus americana*) is a spring and fall migrant most commonly observed in the western half of Oklahoma on the western side of Interstate 35 and east of Guymon in the panhandle (ODWC 2011d). They are typically observed in shallow wetlands; marshes; along the margins of ponds and lakes; sandbars and shorelines of shallow rivers; wet prairies; and crop fields near wetlands.

Prairie Pond in Tinker's Urban Greenway does provide suitable stopover habitat for the whooping crane; however, none have ever been observed on the base. Due to lack of habitat on Tinker AFB, it is highly improbable this species would stopover on the base. However, suitable habitat for this species does exist at Stanley Draper Lake approximately one mile to the southeast of Tinker AFB. This lake is more likely to be used as stopover habitat.

Migratory Birds –

Migratory birds are protected by the MBTA (16 USC §703) as well as EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds). Illegal actions against migratory bird species are defined by the MBTA as any "attempt at hunting, pursuing, wounding, killing, possessing, or transporting any migratory bird, nest, egg, or part thereof". Approximately one mile southeast of

Tinker AFB is Stanley Draper Lake which provides attractive nesting, roosting, hunting and stopover habitat to migratory birds. As discussed in the Tinker AFB INRMP, the base may be in route to Stanley Draper Lake for migratory birds, and 209 bird species have been documented on Tinker AFB (USAF 2012). The six most abundant bird species at Tinker AFB identified in a 2010 study were the eastern meadowlark, Franklin gull, European starling, mourning dove, northern cardinal, and the barn swallow. Tinker AFB maintains a migratory bird depredation permit issued through USFWS to conduct intentional takes of migratory birds for the purposes of wildlife control under the Bird/Wildlife Aircraft Strike Hazard (BASH) program. The BASH program is further described in Section 3.5 Safety and Occupational Health.

Many migratory species stopover on Tinker AFB property during migration. As nesting sites for some species of migratory birds can change from year to year, nests for migratory birds could be constructed within the proposed project site during future breeding seasons. However, the majority of the site is improved turf and provides little habitat for migratory birds. Trees are present and may provide nesting habiat and it is not expected that any trees would be removed during construction activities. However, human activity around nest trees could potentially dissuade birds from nesting there in the future.

Green Infrastructure

Currently Tinker's GI areas cover 1,033 acres of Tinker AFB, or 21 percent of the total base land area (USAF 2012). The proposed dog park site includes 1.92 acres of land designated as GI.

3.4.2 Environmental Consequences

Implementation of the Proposed Action would affect 1.92 acres, including impact to maintained and unmaintained areas. The impacts to biological resources would be minor.

Vegetation

Impacts from the Proposed Action would result in the segmentation of 1.92 acres of vegetation through the installation of a fence. The site is primarily maintained turf. The proposed dog park would not include the removal or alteration of the existing vegetation through construction activity. It is expected that the regular and intended use of the park may result in the alteration and reduction of the herbaceous vegetation through dog and human foot traffic. Regular compaction of the soil through heavy use of the park may result in stress to some trees, but the effects would be minor. The 0.31 acres of mixed floodplain forest and the 0.19 acres of woodlands would not be impacted during construction or use.

Under the No-action Alternative, vegetation at the site would not be disturbed and no impacts to vegetation would be anticipated.

Birds

The existing habitat within the proposed site is primarily low quality maintained turf, with less than a quarter of the 1.92 acres site containing higher quality woodlands. The impacts to birds

from the Proposed Action are expected to be minor. The dog park would not include the intentional removal of the existing habitats, therefore any bird species using the project site for nesting or foraging would be able to continue to use the site. The presence of humans and dogs would reduce the desirability of the habitat to some bird species, but the impact would be minor.

Under the No-action Alternative, use of the open space would remain as is, resulting in no change to the desirability of bird habitat. Therefore, impacts to birds would not be expected.

Fish

Impacts to fish species from the Proposed Action are expected to be negligible. Fish habitat is not present within the project area. Crutcho Creek is directly north of the project site. Implementation of the proposed action is not expected to result in a change in soil erosion during construction. Soil erosion during construction would be minimal due to implementation of BMPs. Regular use of the dog park could result in a change in water quality to the neighboring creek due to runoff that would include an increase in dog waste. Implementation of specific measures such as barricades would reduce these impacts. Measures would include erosion control at the time of project construction, and educational signs and literature available to dog park users on the importance of managing dog waste in the dog park. The change in water quality is expected to be minor, and the correlating effects on fish are expected to be negligible.

Under the No-action Alternative, no impacts to Crutcho Creek water quality would be anticipated. Therefore, there would be no impacts to fish as a result of the No-action Alternative.

Mammals

The existing habitat within the proposed site is primarily low quality maintained turf, with less than a quarter of the 1.92 acres site containing higher quality woodlands The impacts to mammals as a result of the Proposed Action is expected to be minor. The dog park would not include the intentional removal of the existing habitat, therefore any mammal species using the project site would be able to continue using the site. The addition of a fence would fragment the woodland habitat from adjacent woodlands, and would result in some mammals not being able to access the approximately 0.5 acres of project site woodlands. Some mammals would also have reduced access to the project site while dogs and humans are present. The habitat quality would be reduced by the presence of humans and mammals. These impacts overall would be minor.

Under the No-action Alternative, use of the open space would remain as is, resulting in no fragmentation of, change in the desirability of, or change in access to mammal habitat. Therefore, impacts to mammals would not be expected.

Reptiles and Amphibians

The existing habitat within the proposed site is primarily low quality maintained turf, with less than a quarter of the 1.92 acres site containing higher quality woodlands. The impact to reptiles and amphibians is expected to be minor. The implementation of the Proposed Action would not include the removal of existing habitats. As with mammals, the fragmentation of the habitat by

the project fence would result in lack of access to some reptiles and amphibians, and the regular use of the project site by humans and dogs would result in a reduction of habitat quality. Amphibians using the nearby Crutcho Creek would have negligible impacts due to changes in water quality resulting from a possible increase in dog waste in runoff to the creek.

Under the No-action Alternative, use of the open space would remain as is, resulting in no fragmentation of, change in the quality of, or change in access to reptile and amphibian habitat. No impacts to Crutcho Creek water quality would be anticipated. Therefore, no impacts to reptiles and amphibians would be expected as a result of the No-action Alternative.

Invertebrates

The existing habitat within the proposed site is primarily low quality maintained turf, with less than a quarter of the 1.92 acres site containing higher quality woodlands. The impact to invertebrates is expected to be minor. The implementation of the Proposed Action would not include the removal of existing habitat. The regular use of the project site by humans and dogs would result in a reduction of habitat quality and likely a change in invertebrate community composition. The compaction of soil by humans and dogs, along with the introduction of dog waste would result in a minor change in invertebrate community composition on the site. Invertebrates using the nearby Crutcho Creek would have negligible impacts due to changes in water quality resulting from a possible increase in dog waste in runoff to the creek. The project would have negligible impacts on the introduced invertebrate, the Asiatic basket clam.

Under the No-action Alternative, use of the open space would remain as is, resulting in no change in the quality of, or change in access to invertebrate habitat. No impacts to Crutcho Creek water quality would be anticipated. Therefore, no impacts to invertebrates would be expected as a result of the No-action Alternative.

Protected Species and State Species of Special Concern

The Proposed Action and No-action Alternative would have no impact on protected species or state species of special concern. The project area does not support any listed species or their preferred habitats and it would be highly improbable for listed species of species of concern to be present on or near the site. Therefore, neither alternative would have a direct impact to protected species.

Migratory Birds

The existing habitat within the proposed site is primarily low quality maintained turf, with less than a quarter of the 1.92 acres site containing higher quality woodlands. The impacts to migratory bird species from the Proposed Action is expected to be negligible. The low quality habitat at the proposed site is of limited value for migratory birds. The dog park would not include the intentional removal of the existing habitats, therefore any migratory bird species using the project site for a stop-over, nesting, or foraging would be able to continue to use the site. The presence of

humans and dogs would reduce the desirability of the habitat to specific migratory bird species, but the impact would be minor.

Under the No-action Alternative, use of the open space would remain as is, resulting in no change to the desirability of migratory bird habitat. Therefore, impacts to birds would not be expected.

Green Infrastructure

The Proposed Action would have minor impacts to GI. The proposed dog park is within an area selected for GI as part of a mitigation plan for the KC-46A Depot Maintenance Activation project. The creation of the dog park would encompass approximately 1.5 acres (three percent) of the planned mitigation area, thereby preventing its use for mitigation. The project would necessitate a modification to the KC-46A Depot Maintenance Activation mitigation plan wherein the 1.5 acres of green infrastructure would be established in a different area. The overall impact would be minimal.

Under the No-action Alternative, the site would continue to be included as part of the mitigation plan for the KC-46A Depot Maintenance Activation project. Therefore, there would be beneficial impacts to GI, as it would not be segregated from the rest of the mitigated GI area, as it would be under the Proposed Action.

3.4.3 Cumulative Effects

The future parking and trails projects described in Section 2.5 would both partially occur within undeveloped habitats (see Figure 2-2) and would result in long-term habitat loss of approximately 0.42 acres. The minor loss associated with these two projects in conjunction with the habitat fragmentation and loss of habitat quality associated with the proposed project would result in a combined impact on wildlife habitat; however, this impact is expected to be minor due to the limited area of habitat affected. Construction in multiple base locations may result in greater erosion and potential changes in water quality within Crutcho Creek. Erosion at the cumulative project sites would be managed through use of a SWPPP and BMPs and would not be expected to result in a cumulative increase in erosion.

3.4.4 Measures to Reduce Impacts

Impacts to biological resources as a result of the Proposed Action would be minor. The reduction of impacts through BMPs would be greatest for the potential impacts to Crutcho Creek. BMPs discussed in the water resources section, such as installation of barricades would reduce impacts to the biological resources that use Crutcho Creek habitat. Erosion from site use and construction along with changes in water quality due to an increase in dog waste would have the greatest impacts to biological resources in the creek.

Site use would result in greater presence of dog waste in the area and therefore greater impacts to water quality due to stormwater runoff carrying the waste to the creek. Impacts to water quality would be reduced through signage at the dog park and through base publications educating the dog park users on the importance of cleaning up dog waste. The dog park would include a dispenser

for dog waste bags and a receptacle for the placement of used bags. No mitigation measures would be required.

3.5 SAFETY AND OCCUPATIONAL HEALTH

The ROI for this resource topic includes Tinker AFB.

A safe environment is one that is free of dangers that could cause harm to people or damage to property. Numerous approaches are available to improve safety and reduce the magnitude of a hazard, including the use of engineering controls, administrative controls, and the use of personal protective equipment (PPE). Naturally-occurring potential health and safety hazards include biological risks (poisonous plants, insects, and animal bites), uneven terrain, inclement weather conditions (heat and/or cold exposure, tornado, flash floods, or other weather related conditions). Potential man-made safety and occupational health hazards include noise exposure (see Section 3.1), ground traffic (i.e. driving or walking), glare from reflective surfaces (as it relates to air traffic), and injuries due to motorized vehicle accidents. The use of BMPs and adherence to federal, state, and local regulations, OSHA regulations, and implementation of a site specific health and safety plan greatly reduce the potential for injuries and accidents.

The proposed project site is currently classified as open space and does not contain any asbestos, lead-based paint, or polychlorinated biphenyls. Therefore, the discussion of safety is limited to bird/aircraft strike hazards, construction safety, and safety of park users.

3.5.1 Affected Environment

Bird and wildlife strikes by aircraft constitute a safety concern because of the potential for damage to aircraft, injury to aircrews, or local populations if an aircraft strike and subsequent aircraft accident should occur in a populated area. Also, if the frequency of bird strikes were high, certain bird species populations might be reduced. Along with the Natural Resources Program, Tinker AFB manages its avian species under a BASH Program through the base's safety office. Control of wildlife species on Tinker AFB for the purposes of BASH is generally limited to habitat management and harassment techniques, though sometimes the use of lethal control measures is required.

Construction activities at Tinker AFB are performed by trained and qualified personnel in accordance with applicable regulations and standards. Construction site safety is managed by adherence to regulatory requirements and by implementation of operational practices that reduce risk of illness, injury, death, and property damage. The health and safety of construction contractors are safeguarded by the OSHA regulations 29 CFR 1910 and, 29 CFR 1926. These standards specify the amount and type of training required for industrial workers, the use of PPE, engineering controls, and maximum exposure limits for workplace stressors. Typical hazards related to construction activities include biological hazards, slips trips and falls, use of hand and power tools, repetitive motion injuries, proper lifting and material handling, heavy equipment, heat or/and cold stress, noise exposure, proper PPE, and using the proper tool for the job. Additionally, contractors must maintain cleanliness at the construction site. Construction debris which can be

blown around a construction site can also pose a hazard to those working and driving in the area of the construction. Contractors responsible for construction activities would be responsible for compliance with the applicable OSHA regulations and identifying appropriate protective measure for employees.

Naturally-occurring potential health and safety hazards include insects, rough terrain, and climactic conditions. Insects such as mosquitoes can carry disease. The topography of the site is relatively flat; however, even occasional minor ground depressions can result in tripping hazards. Temperatures in Oklahoma County vary from an average low of 49 degrees to an average high of 72 degrees. Average annual precipitation is 36.21 inches and average annual snowfall is 7 inches, with the first freeze occurring typically in early November and the last freeze occurring near early April (Oklahoma Climatological Survey 2015).

3.5.2 Environmental Consequences

BASH - Construction of the dog park under the Proposed Action would have no impact on base aircraft operations (i.e., takeoffs, landings, and closed patterns). Additionally, there would be no change to vegetation that serves as potential habitat for birds. There could be fewer birds within the dog park area due to the presence of humans and dogs resulting in a reduced potential for bird-aircraft strikes. Therefore, the Proposed Action would not result in adverse impacts to BASH incidents or the BASH program at Tinker AFB.

Under the No-Action Alternative, the potential for bird/wildlife-aircraft strikes would remain at the baseline conditions; therefore, there would be no impact to BASH incidents.

Construction Safety - During construction of the Proposed Action, the majority of ground safety issues would be slips, trips and falls, unfamiliar work environment, and task specific hazards such as working with hand tools or power tools and heavy equipment. It is possible to expect a short-term increase in the number of incidents due to the increase in activity occurring on the base. Construction is an inherently dangerous activity due to the use of large, powerful, and noisy pieces of equipment; however, hazards would be mitigated with BMPs at each phase of the project to help ensure the safety of all involved. Clear demarcation of the work area as well as fencing would be needed to keep construction activities and debris in the construction area and bystanders out of the potentially dangerous work areas. Construction employees would be given the proper training to identify hazards as well as all necessary PPE to do their jobs safely. The PPE would include hard hats, steel toed boots, hearing protection, work gloves, reflective vests, safety harnesses, signaling flags, communication devices and any other equipment deemed necessary in the safety plan. Use of PPE and signage at the construction site would protect workers and bystanders from sharp or heavy tools and construction materials, loose construction debris, large and noisy moving equipment, as well as biological hazards such that an increase in the number or severity of construction accidents would not be expected under the Proposed Action. Therefore, it is expected that the Proposed Action would have no impact on the rate or severity of construction-related accidents.

Under the No-action Alternative, no construction activities would occur on the site; therefore, there would be no increased potential for safety mishaps.

Park Safety – Under the Proposed Action, hazards associated with utilization of the completed dog park include pests, (e.g. ticks, wasps, hornets, and mosquitoes), rough terrain, and climatic conditions. To control pests within the park the Base's Pest Management Shop would conduct pest control activities according to the base's Integrated Pest Management. Recreational facilities, such as this dog park, are considered high priority areas and receive continuous monitoring and treatments regardless of funding limitations (USAF 2013). Uneven terrain would be addressed during park construction. To the extent reasonable, construction workers would fill in holes found across the park with soil removed during excavation. Park users would be responsible for determining climatic conditions prior to use of the park. Cold conditions would suggest use of a coat or multiple clothing layers, while warmer weather may necessitate moisture wicking clothing. All park users should make use of the water fountain on site to stay hydrated.

Another potential hazard would be dog bites from un-controlled dogs. At Tinker AFB, all dogs are required to be current on vaccinations and each dog must wear a collar or harness with current rabies tag attached. A sign posting park rules (including vaccination requirements) would be posted at the gate. If park rules and BMPs for weather conditions are followed, no impacts to safety would be expected to result from the Proposed Action.

Under the No-Action alternative, the project site would remain classified as open space and would likely be considered a medium priority area for pest control services. In this case, the area would receive routing pest control services subject to fund availability (USAF 2013). Compared to the Proposed Action, this could result in increased instances of insects on the site. Since the site would not be fenced, persons walking through the area could have an increased chance of being bitten or stung. Additionally, the terrain would remain as it is now. Any uneven terrain would remain a tripping hazard for pedestrians. Although safety incidents would not be expected to increase if no action were taken at the site, the potential for safety incidents would be higher than if the Proposed Action were implemented.

3.5.3 Cumulative Effects

Neither the Proposed Action, nor any of the projects listed in Section 2.5 are expected to result in an increase in BASH incidents. Therefore, there would be no cumulative effects.

Construction safety hazards would be present at the four project sites described in Section 2.5, in addition to the Proposed Action. Multiple construction projects occurring simultaneously increase the number of non-military personnel on the base adding to traffic congestion, construction, and ground safety incidents. Each project manager would be required to develop and implement a health and safety program that would address all safety concerns, train personnel adequately, and mitigate the chances of any incidents. If multiple construction activities were occurring simultaneously and required an increase in construction vehicle traffic, a traffic plan would be developed and implemented.

Construction of the parking lot outside the proposed dog park would help improve traffic flow, resulting in a beneficial impact to ground/traffic safety. Additionally, the construction of paved trails would improve ground terrain such that there would be a decreased potential for slips, trips, and falls resulting from uneven terrain while pedestrians traverse from their vehicle to the park. As a result, there would be a beneficial cumulative impact resulting from the Proposed Action, construction of the parking lot, and construction of the walking trails.

3.5.4 Measures to Reduce Impacts

No mitigation measures would be required. BMPs for construction activities include posting signs in potentially dangerous work areas and communication with base residents and employees well in advance of construction commencement to help minimize hazards for pedestrians during the construction time period. This would help to reduce the risk of potential bodily injury, death or property damage. Additionally, use of signage and PPE such as hard hats, steel toed boots, hearing protection, work gloves, reflective vests, safety harnesses, signaling flags at the construction site would protect workers and bystanders from sharp and/or heavy tools, construction materials, loose construction debris, large and noisy moving equipment, as well as biological hazards.

BMPs for park safety include posting signs at the dog park entrance which identify the park rules (including vaccination requirements). Additionally, park users would be responsible for determining climatic conditions prior to use of the park and dressing to fit the weather conditions. All park users should make use of the water fountain on site to stay hydrated.

3.6 UTILITIES AND INFRASTRUCTURE

Since only electrical lines, a water fountain, and trash cans would be installed under the Proposed Action, the utilities and infrastructure discussion in this EA will be limited to electricity, water consumption, and municipal solid waste. The ROI for this resource topic includes Tinker AFB.

3.6.1 Affected Environment

Electricity - Electricity services are supplied to Tinker AFB by Oklahoma Gas and Electric Company (OG&E) through a looped 138-kilovolt (kV) transmission line and four substations. The distribution system includes 36 12.47-kV feeder circuits utilizing approximately 286,000 single-conductor linear feet (SCLF) of overhead lines with 143 pole-mounted transformers and 900,000 SCLF of underground lines utilizing 139 pad-mounted transformers. Approximately 72 generators provide backup power to select buildings. OG&E provides additional backup power via a turbine-powered 80 megawatt peaking plant and standby generator (USAF 2007b). In 2014, Tinker AFB consumed 428,413 megawatt-hours of electricity, while in 2012 and 2013 they consumed 456,711 and 432,142 megawatt-hours, respectively (USAF 2016a).

Existing electrical lines are located within the footprint of the proposed dog park, including near the proposed entrance.

Potable Water - Tinker AFB utilizes a system of 22 groundwater wells that range in depth from 380 ft to 706 ft in depth to obtain water that is chlorinated prior to distribution to consumers (USAF

2007b). Tinker AFB operates Water System ID Number OK2005508. Based on the 2015 Water Quality Report, drinking water meets all federal and state requirements. Additionally, a secondary source of potable water for Tinker AFB may be received from the Oklahoma City Stanley Draper water system (USAF 2015). The current average annual water consumption for Tinker AFB is approximately 744 million gallons per year. The Tinker AFB water supply and distribution system is reportedly operating at approximately 75 percent capacity and supplies approximately 1.9 million gallons per day (USAF 2016b). The system consists of approximately 562,000 linear ft of asbestos cement cast iron, mostly installed in 1943, and polyvinyl chloride pipe, installed as recently as 2001 (USAF 2007b).

Existing potable water lines are located at the northern end of the proposed dog park site.

Municipal Solid Waste – Solid waste generated at Tinker AFB is picked up for off-site disposal in a licensed landfill facility. All solid waste disposal is handled by a private contractor. Construction and demolition debris are not included in the contract for solid waste disposal. Several best management practices for waste management are applied at Tinker AFB and are outlined in an Integrated Solid Waste Management Plan. Based on information collected for the Tinker AFB General Plan, solid waste generated at the Installation poses no significant constraints to operation and development at the Installation (USAF 2007b).

3.6.2 Environmental Consequences

Under the Proposed Action, approximately four light posts would be installed, along with a single water fountain and several trash cans. At this point, there are no design specifications for the site and associated utilities; therefore, an exact electrical load cannot be calculated. For purposes of estimation, it is assumed that the installed lights would be light emitting diode luminaires, which are more energy efficient than mercury vapor and incandescent lights, and have a longer lifetime. Additionally, assuming an average wattage of 240 per luminaires, the additional annual electrical load resulting from the installation of four lamps would be 4,204 kilowatt hours. This would equate to a one percent increase in annual electrical consumption and would not result in any adverse impacts to the existing electrical distribution system or supply. Additionally, it is assumed that the installed water fountain would not be refrigerated; therefore, would not impact electrical consumption.

Installation of a water fountain at the proposed dog park site would result in a negligible increase in potable water consumption for the base. The fountain would only be used occasionally when base residents utilize the dog park. Considering the water distribution system's remaining operating capacity, installation of a water fountain at the dog park would not result in any adverse impacts to potable water consumption at Tinker AFB.

Trash cans installed at the proposed dog park would be utilized for municipal waste as well as for dog waste (i.e. fecal matter). Disposal of solid waste generated at the park would be managed by the same private contractor that handles solid waste disposal for Tinker AFB. As a result of the Proposed Action, there would be a long-term, minor increase in municipal solid waste generated at Tinker AFB; however, the increase would be so limited that it would not be expected to result

in adverse impacts to the municipal solid waste collection and disposal system at Tinker AFB. Construction and demolition waste generated during construction of the park and installation of utilities would be managed by the contractor and amounts of waste generated are expected to be minimal due to the limited nature of construction activities. Construction and demolition wastes generated are not expected to impact the capacity of nearby landfills.

Under the No-action Alternative, no utilities would be installed at the proposed site. Therefore, there would be no change to the baseline electrical and potable water consumption, and solid waste generation rates described in Section 3.6.1.

3.6.3 Cumulative Effects

With the exception of the tornado shelters, the construction projects described in Section 2.5 would not be expected to consume electricity. The tornado shelter would utilize electricity only during emergencies when the shelter is in use. Therefore, in conjunction with the electricity generated as a result of lamps at the proposed dog park, there would be a long-term, minor cumulative increase in electrical consumption at Tinker AFB as a result of these two projects. Since there are no constraints on the amount of power available to Tinker AFB, this impact would not be considered adverse.

None of the projects listed in Section 2.5 would be expected to result in potable water consumption and would not contribute to cumulative effects.

The construction projects described in Section 2.5 would generate construction and demolition waste that would be managed by the construction contractor. It is expected that the amount of construction and demolition waste generated would be minor due to the small size of the projects. Combined with the construction and demolition waste expected to be generated as a result of the dog park, there would be a short-term minor increase in construction and demolition waste disposed at local landfills. This increase is not expected to adversely impact the current landfill's life expectancy. None of the projects described in Section 2.5 are expected to generate municipal solid waste; therefore, they would not contribute to cumulative impacts to municipal solid waste.

3.6.4 Measures to Reduce Impacts

Since utilities and infrastructure impacts would be negligible to minor, no best management practices are recommended and no mitigation would be required.

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Chapter 4

List of Preparers

CHAPTER 4
LIST OF PREPARERS

Name/Organization	Degree	Resource Area	Years of Experience
Brent Ferry, P.G./WESTON	BA, Geology; MS, Hydrogeology	Project Manager	13
Loretta Turner, P.E./WESTON	BS, Chemical Engineering	Team Lead, Document Review	18
Tamara Carroll/WESTON	BS, Bioenvironmental Science	Document Preparation Lead; Resource Specialist, Noise, Geology and Soils, Water Resources, Safety and Occupational Health, and Utilities and Infrastructure	13
Kathleen Mittmann/WESTON	BS, Biology; MS Biology – Aquatic Ecology Emphasis	Resource Specialist, Biological Resources	18
Corey Ricks/WESTON	AAS, Electronics Technology; BS Geography	GIS Analyst	9
Barry Peterson/WESTON	BS, Meteorology; MS, Atmospheric Sciences	Resource Specialist, Air Quality	15
Rusty Jones/WESTON	BS, Geology and Geophysics; BS Psychology	Resource Specialist, Geology and Soils	7
Owena Yang-Totorica	BA, International Studies, China Regional Studies	Quality Control	20

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Chapter 5

List of Persons and Agencies Consulted

CHAPTER 5
LIST OF PERSONS AND AGENCIES CONSULTED

Federal Agencies/Representatives

Natural Resources Conservation Service, US Department of Agriculture
Gary O'Neill

Tinker AFB
Debra Edwards, Realty Specialist
Tim Taylor, Environmental Health Specialist
John Truong, Stormwater Program Manager

US Fish and Wildlife Services
Dixie Porter

Federal Emergency Management Association
Robert Ramierz

US Army Corps of Engineers, Tulsa District
Carolyn Schultz

US Environmental Protection Agency, Region 6
Rhonda Smith

State Agencies

Oklahoma Water Resource Board
Julie Cunningham

Oklahoma Corporation Commission
Patrice Douglas

Oklahoma Department of Agriculture, Food, and Forestry
George Geissler

Oklahoma Wildlife Service, US Department of Agriculture
Kevin Grant

Oklahoma Department of Wildlife Conservation
Richard Hatcher

Oklahoma Geological Survey
Randy Keller

Oklahoma Department of Transportation

Dawn Sullivan

Oklahoma Department of Environmental Quality
Jennifer Wright

State Historic Preservation Office
Melvena Heisch

Local Agencies

Association of Central Oklahoma Governments
Yvonne Anderson

City of Oklahoma City
Mick Cornett, Mayor
Marsha Slaughter, Oklahoma City Water Utilities Trust
Pete White, Councilman

Greater Oklahoma City Chamber of Commerce
Mark VanLandingham

County Representatives

Brian Maughan, County Commissioner, District Two

Tribal Representatives

Caddo Nation of Oklahoma
Tamara Francis-Fourkiller, THPO

Muscogee (Creek) Nation
Emman Spain, THPO

Osage Nation
Dr. Andrea A. Hunter, THPO

Seminole Nation
Natalie Harjo, HPO

Wichita & Affiliated Tribes
Gary McAdams, THPO

Public Interest Groups/Individuals

Restoration Advisory Board
IST AFCEC/CZO, Tinker Environmental Library

John Harrington, Federal Emergency Management Association
Earl Hatley, Oklahoma Toxics Campaign
William Janacek, City of Midwest City
Tom Leatherbee, City of Del City
Kathy Lippert, Greystone Environmental Services, Inc.
Mark Purcell, USEPA Region 6
Betty Reaties, Oklahoma DEQ
Scott Thompson, DEQ Site Assessment Unit

Sierra Club, Oklahoma Chapter
David Okam

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Chapter 6

References

CHAPTER 6
REFERENCES

Hellgren, E.C. and V. Bogosian III. 2009. Baseline Survey of Presence or Absence of Mammalian, Reptilian, and Amphibian Populations on Tinker Air Force Base, with Estimation of Population Demographics and Size. Cooperative Wildlife Research Laboratory, Southern Illinois University. Carbondale, IL.

Oklahoma Climatological Survey. 2015. Oklahoma County Climate Survey. Available at: http://climate.ok.gov/county_climate/Products/QuickFacts/oklahoma.pdf. Last accessed 30 December 2015.

ODWC. 2016. Oklahoma Department of Wildlife Conservation. County by County List of Endangered and Threatened Species. Available at: http://www.wildlifedepartment.com/wildlifemgmt/endangered/State_Listed_by_County.pdf. Last accessed: 6 January 2016.

ODWC. 2011a. Oklahoma Department of Wildlife Conservation. Fact Sheet – Interior Least Tern. Available at: http://www.wildlifedepartment.com/wildlifemgmt/endangered/least_tern.htm. Last accessed: 26 January 2016. Copyright 2011.

ODWC. 2011b. Oklahoma Department of Wildlife Conservation. Fact Sheet – Piping Plover. Available at: http://www.wildlifedepartment.com/wildlifemgmt/endangered/plover.htm. Last accessed: 26 January 2016. Copyright 2011.

ODWC. 2011c. Oklahoma Department of Wildlife Conservation. Fact Sheet – Rufa Red Knot. Available at: http://www.wildlifedepartment.com/wildlifemgmt/endangered/rufaredknot.pdf. Last accessed: 26 January 2016. Copyright 2011.

ODWC. 2011d. Oklahoma Department of Wildlife Conservation. Fact Sheet – Whooping Crane. Available at: http://www.wildlifedepartment.com/wildlifemgmt/endangered/crane.htm. Last accessed: 26 January 2016. Copyright 2011.

Marsh-Matthews, E. 2013. *Comparison of Fish Assemblages of the Crutcho Creek Drainage Basin, Oklahoma*. University of Oklahoma. 18 January 2013.

USACE. 2012. KC-46A Master Planning Study, Final Study, Tinker AFB, OK. Prepared by Burns & McDonnel. April 2012.

USAF. 2016a. United States Air Force. Email correspondence between Gary Krivokapich, Utility Engineer, Tinker Air Force Base, and Tamara Carroll, Weston Solutions. 12 January 2016.

USAF. 2016b. United States Air Force. Email correspondence between John Truong, Tinker Air Force Base, and Tamara Carroll, Weston Solutions. 15 January 2016.

USAF. 2015. United States Air Force. 2015 Water Quality Report. 29 May 2015.

USAF. 2013. United States Air Force. Tinker Air Force Base Integrated Pest Management Plan. August 2013.

USAF. 2012. Preliminary Draft of the Integrated Natural Resource Management Plan for Tinker Air Force Base. Civil Engineering Directorate, 72 ABW/CEANO, Inter Air Force Base, Oklahoma.

USAF. 2007a. United States Air Force. Final Environmental Assessment for the Military Housing Privatization Initiative (MHPI), Tinker Air Force Base, Oklahoma. September.

USAF. 2007b. United States Air Force. *General Plan and Installation Summary for Tinker Air Force Base.* 17 July.

USAF. 2006. United States Air Force. Air Installation Compatible Use Zone Study. Tinker Air Force Base. December 2006.

USDA. 2015. United States Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey. Available online at http://websoilsurvey.nrcs.usda.gov/. Accessed 21 December 2015.

USFWS. 2015a. United States Fish and Wildlife Service. National Wetlands Inventory Mapper. Available at: http://www.fws.gov/wetlands/Data/Mapper.html. Last accessed 31 December 2015.

USFWS. 2015b. United States Fish and Wildlife Service. Information for Planning and Conservation (IPaC) Website. Available at: http://ecos.fws.gov/ipac/. Last accessed 4 January 2015.

USFWS. 2012. The Central Flyways. [Online] Reveiwed: http://central.flyways.us/. Accessed: 21 June, 2012.

USGS. 2015. Ground water Atlas of the United States, Oklahoma and Texas, HA 730-E. Accessed 31 December 2015. Available at: http://pubs.usgs.gov/ha/ha730/ch_e/E-text9.html

USGS. 2012. United States Geological Survey. Topographic Map: Midwest City Quadrangle, Oklahoma, 7.5-Minute Series.

USGS. 2008. Stanley, Thomas M., Standridge, G. Russell. 2008. *Geologic Map Compilation of the Oklahoma City Metro Area, Central Oklahoma*, Oklahoma Geological Survey.

US Navy. 2005. *Guidelines for Sound Insulation of Residences Exposed to Aircraft Operations*. Available from http://www.fican.org/pdf/Wyle_Sound_Insulation.pdf. Last accessed 14 March 2012.

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Appendix A

Early Public Review and Interagency Coordination

Published Notices of Intent

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F-35A continued from page 10

modification at Edwards, to a full production representative internal gun configuration. AF-2 is instrumented differently than other F-35s for data collection.

Clearing the gun for airborne use is a key milestone toward the Air Force's initial operating capability of the F-35A. The program's development and demonstration phase is scheduled to end in 2017, at which point the F-35 will have an operational gun.

The F-35 Joint Strike Fighter Integrated Test Force started testing the gun last June when the first shots were fired from the ground at the Edwards Gun Harmonization Range.

"We want to clear it so when the guy is supporting troops on the ground or fighting someone, they don't have to think about whether the gun's going to work or not. They just have to worry about getting the (predicted impact point marker) on the right spot," Major Trickey said. "There's a lot of trust that people have put into us to make sure that we got the test right, and I feel like at the end of the day, we did."

ALFOODACT Recall

Date Issued: 29 Oct 2015

ConAgra Foods Company, a Omaha, Nebraska establishment, is voluntarily recalling DAVID Trail Mix Sweet & Salty flavor products due to the presence of an ingredient in the trail mix that contains milk protein, which is not declared on the packaging. These items were shipped nationwide.

The products subject to recall are identified as follows:

The DAVID Trail Mix Sweet & Salty UPC is: 26200 23885, 5oz. bags/149g.

Consumers who have purchased the product should discard the product.

Product was available at Tinker AFB Commissary but was immediately removed from shelves, marked and placed on Medical Hold.

PUBLIC NOTICE
NOTICE OF INTENT
TO PREPARE AN ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION OF A DOG PARK AT TINKER AIR FORCE BASE (AFB), OKLAHOMA

The Air Force is issuing this notice to advise the public of its intent to prepare an Environmental Assessment (EA) to evaluate potential environmental impacts associated with construction of a dog park for small and large breed dogs at Tinker Air Force Base. The dog park is needed in order to support a quality of life concern for on-base residents, as existing base housing has inefficient yards for pets. Currently the closest dog park is off-base in Del City.

The dog park would consist of two contiguous areas surrounded by fencing to separate small and large dog breeds. Three site locations for the dog park were identified as alternatives for analysis and were compared against selection standards developed for the project. Selection standards required that the site location be centrally located to, and within walking distance of the military family housing privatization developments, located outside the airfield clear zone, and sited outside land that could be developed to support mission operations. Only one alternative location met all of the selection standards and is being carried forward as the Proposed Action. This Proposed Action is located on Tinker AFB east of the Twining neighborhood, north of the youth center, and west of the Vandenberg neighborhood. Some chain-link fencing for the Proposed Action would extend into the existing 100-year floodplain and as a result, the Proposed Action is subject to the requirements and objectives of Executive Order 11988 – Floodplain Management.

In order to effectively define the full range of issues to be evaluated in the EA, the Air Force is soliciting scoping comments from interested state and federal agencies and interested members of the public. The comments should consist of the range of actions, alternatives, and impacts to be considered in the EA. Ultimately, the comments will determine the scope of the issues to be addressed and for identifying the significant issues related to the Proposed Action to be analyzed in depth in the EA. Presently, the United States Army Corps of Engineers and the Federal Emergency Management Agency have been contacted for input regarding construction within a floodplain. The public scoping period will extend for 30 days following publication of this notice of intent and no scoping meeting will be held. Comments may be submitted through 14 December 2015 to Mr. Tim Taylor (NEPA Program Manager), 72 ABW/CEIEC, 7535 5th Street, Tinker AFB, OK 73145, by telephone at 405-734-4579, or by email to Timothy.taylor.5@us.af.mil.

Join One Of Our

Notice of Intent Publication on 6 November 2015 in the Tinker Take Off

6D TUESDAY, NOVEMBER 10, 2015 COMMUNITY | LIFE THE OKLAHOMAN | NEWSOK.COM

Archbishop visits students, honors teacher at St. Philip Neri school

The Most Reverend Paul S. Coakley, archbishop of Oklahoma City, visits fifth- and sixth-graders at St. Philip Neri Catholic School in Midwest City. (PHOTO PROVIDED)

FROM STAFF REPORTS

MIDWEST CITY – The Most Rev. Paul S. Coakley, archbishop of Oklahoma City, recently visited St. Philip Neri Catholic School.

Coakley began his tour by presiding over Mass, celebrated with students, teachers and parishioners.

Coakley focused on St. Paul's letters in his homily, citing the Scripture, "If God is for us, who can be against us?" He challenged those in attendance, "Place trust in the Lord, just as Jesus did with His Father."

After Mass, the Rev. Timothy Fuller, St. Philip Neri parish priest, and Principal Brenda Teter led Coakley on a school tour.

Coakley visited every classroom and answered questions from students, according to a news release.

Second-grader Remy Broussard asked, "What was Jesus' mission?" Coakley answered, "To announce the kingdom of God and receive the reign of God into our lives."

The archbishop discussed religious topics along with the advanced curriculum St. Philip Neri offers.

Eighth-grade teacher Monica Schmidlkofer had earlier been announced as the winner of the 2015 Archbishop Paul S. Coakley Educator of the Year Award.

The archbishop personally congratulated her and said, "I enjoy coming to this school. I am not only inspired but impressed."

Caring Vans offer immunizations

FROM STAFF REPORTS

The Oklahoma Caring Vans are helping to fight the spread of the flu virus this season.

In addition to flu shots, the vans provide to youths all immunizations that are required by Oklahoma law for enrollment in schools or child care facilities. Services are provided at no charge to children ages 6 weeks through 18 years who qualify, including the uninsured, Medicaid-eligible or American Indians.

Each child's parent or guardian must be present to provide current shot records and to complete paperwork before immunizations can be given.

Also, body mass index screenings are available for children 2 to 18 years old.

All children are required to be current on their immunizations before enrolling at child care facilities or schools. Immunization records also are needed before a child can be enrolled in pre-K or kindergarten.

November schedule

- 10 a.m. to 2 p.m. Friday, Oklahoma City Indian Women, Infants and Children (WIC) Clinic, 210 Quadrum Drive.
- 10 a.m. to 3:30 p.m. Nov. 17, Wichita, Caddo and Delaware tribes WIC, 1623 E State Highway 66, El Reno.
- 11 a.m. to 3 p.m. Nov. 18, WCD WIC, 7001 S Western Ave.
- 9 a.m. to 3 p.m. Nov. 18, Neighborhood Services Organization WIC, 3330 N MacArthur Blvd.
- 8:30 a.m to noon Nov. 19, Latino Community Development Agency, 420 SW 10.
- 10 a.m. to 2 p.m. Nov. 20, Educare, 500 SE Grand Blvd.

Poet to read works in Norman

FROM STAFF REPORTS

NORMAN – Megan Kaminski, an assistant professor of poetry writing at the University of Kansas, will read from her work at 7 p.m. Wednesday at Mainsite Contemporary Art gallery, 122 E Main St.

Kaminski's appearance is part of the ongoing Mark Allen Everett Poetry Reading event sponsored by the University of Oklahoma.

Kaminski specializes in ecopoetics, 20th- and 21st-century anglophone poetry and poetics, and contemporary nonfiction.

Her first book of poetry is "Desiring Map." Her second book, "Deep City," explores the body and the city as architecture in crisis.

Her poems and essays have appeared, or are forthcoming, in The Atlantic, Barrelhouse, The New Orleans Review and Sink Review.

The free reading is open to the public.

Volunteers needed for dental clinic event

FROM STAFF REPORTS

The Oklahoma Dental Association needs volunteers of all backgrounds, training and experience for the Oklahoma Mission of Mercy event Feb. 5-6 at the Cox Convention Center.

Organizers will need more than 1,500 volunteers, including dentists, hygienists, assistants, front office staff, dental technicians, physicians and language translators.

There also are numerous volunteer opportunities during the event for those who have no dental profession training or experience.

"The need for this type of event is great, as more than half of Oklahomans do not have dental insurance," said Dr. Shannon Griffin, an Edmond dentist who volunteers for the event.

"We're seeking people with a servant heart, ready to assist and help those who otherwise might not have access to care. With or without professional dental experience, we need you."

How to help

To sign up to volunteer or for more information about the event, go to www.okmom.org.

ADOPT A PET

Molly enjoys pets, hugs and daily walks. She's a 1-year-old, 49-pound German shepherd mix. Molly is a good playmate with other dogs and is housebroken. Her number at the Oklahoma City Animal Shelter is 215629, and her adoption fee is $60. All pets are spayed or neutered and have age appropriate shots and a health check. The shelter is at 2811 SE 29 and is open for adoptions seven days a week from noon until 5:45 p.m. For more information, go online to www.okc.petfinder.com or www.okc.gov. (PHOTO PROVIDED)

PUBLIC NOTICE

NOTICE OF INTENT TO PREPARE AN ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION OF A DOG PARK AT TINKER AIR FORCE BASE (AFB), OKLAHOMA

The Air Force is issuing this notice to advise the public of its intent to prepare an Environmental Assessment (EA) to evaluate potential environmental impacts associated with construction of a dog park for small and large breed dogs at Tinker Air Force Base (AFB), Oklahoma. The dog park is needed in order to support a quality of life concern for on-base residents, as existing base housing has inefficient yards for pets. Currently the closest dog park is off-base in Del City, Oklahoma.

The dog park would consist of two contiguous areas surrounded by fencing to separate small and large dog breeds. Three site locations for the dog park were identified as alternatives for analysis and were compared against selection standards developed for the project. Selection standards required that the site location be centrally located to, and within walking distance of the military family housing privatization developments, located outside the airfield clear zone, and sited outside land that could be developed to support mission operations. Only one alternative location met all of the selection standards and is being carried forward as the Proposed Action. This Proposed Action is located on Tinker AFB east of the Twining neighborhood, north of the youth center, and west of the Vandenberg neighborhood. Some chain-link fencing for the Proposed Action would extend into the existing 100-year floodplain and as a result, the Proposed Action is subject to the requirements and objectives of *Executive Order 11988 – Floodplain Management*.

In order to effectively define the full range of issues to be evaluated in the EA, the Air Force is soliciting scoping comments from interested state and federal agencies and interested members of the public. The comments should consist of the range of actions, alternatives, and impacts to be considered in the EA. Ultimately, the comments will determine the scope of the issues to be addressed and for identifying the significant issues related to the Proposed Action to be analyzed in depth in the EA. Presently, the United States Army Corps of Engineers and the Federal Emergency Management Agency have been contacted for input regarding construction within a floodplain. The public scoping period will extend for 30 days following publication of this notice of intent and no scoping meeting will be held. Comments may be submitted through 14 December 2015 to Mr. Tim Taylor (NEPA Program Manager), 72 ABW/CEIEC, 7535 5th Street, Tinker AFB, OK 73145, by telephone at 405-734-4579, or by email to Timothy.taylor.26@us.af.mil.

Notice of Intent Publication on 10 November 2015 in The Oklahoman

Sample of General Scoping Letter

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street, Suite 234
Tinker AFB OK 73145

MAR 0 4 2016

Ms. Barbara Brantner
Tinker Environmental Library
Restoration Advisory Board
6120 Arnold Street, Bldg 5702
Tinker AFB OK 73145

Dear Ms. Brantner

The 72d Air Base Wing is preparing an Environmental Assessment (EA) under the National Environmental Policy Act to evaluate the environmental impacts associated with the construction of a Dog Park at Tinker Air Force Base (AFB). This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located off-base three miles away in Del City, Oklahoma. A dog park developed on base would provide military family housing residents an easily accessible location to exercise and socialize small and large breed pets.

The EA will consider three alternate locations for the dog park; however, only one location is considered viable due to selection standards associated with the project. These selection standards require that the site location be centrally located to, and within walking distance of the military family housing privatization developments, located outside the airfield clear zone, and sited outside land that could be developed to support mission operations. Therefore, one alternative, the Proposed Action, has been carried forward for detailed analysis. This Proposed Action is located on Tinker AFB east of the Twining neighborhood, north of the youth center, and west of the Vandenberg neighborhood. It is shown on Figure 1, attached.

The Proposed Action is centrally located near 470 residents in the Twining, McNarney, and Vandenberg neighborhoods, which represent 71 percent of the on-base residents. The site could also be accessed by pedestrians from Mitchell Heights and Prairieland (190 residents) but it is likely that those residents would drive to the dog park, as residents would have to walk 0.5 mile and 0.8 mile, respectively, along existing roads. Currently, parking is available in the youth center parking lot and along paved streets; however, a separate project to construct additional youth center parking would be located adjacent to the south end of the dog park and would be available for park users.

As part of the Proposed Action, some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted

on the site to provide shade. Approximately 1,018 linear feet of fencing would be constructed within the 100-year floodplain; therefore, the Proposed Action is subject to the requirements and objectives of *Executive Order 11988 – Floodplain Management*.

This letter is intended to inform you of the intent to prepare an EA for this action. A copy of the Draft EA will be made available to you for your review and comment at a later date.

Thank you for your assistance in this matter. If there are any questions or comments regarding this proposed project, please contact Mr. Tim Taylor (NEPA Program Manager), 72 ABW/CEIEC, 7535 5th Street, Tinker AFB, OK 73145, by telephone at 405-734-4579, or by email to Timothy.taylor.5@us.af.mil.

Sincerely

STEPHANIE P. WILSON, Colonel, USAF

2 Attachments:
1. List of Agencies Contacted
2. Figure

Enclosures for General Scoping Letter

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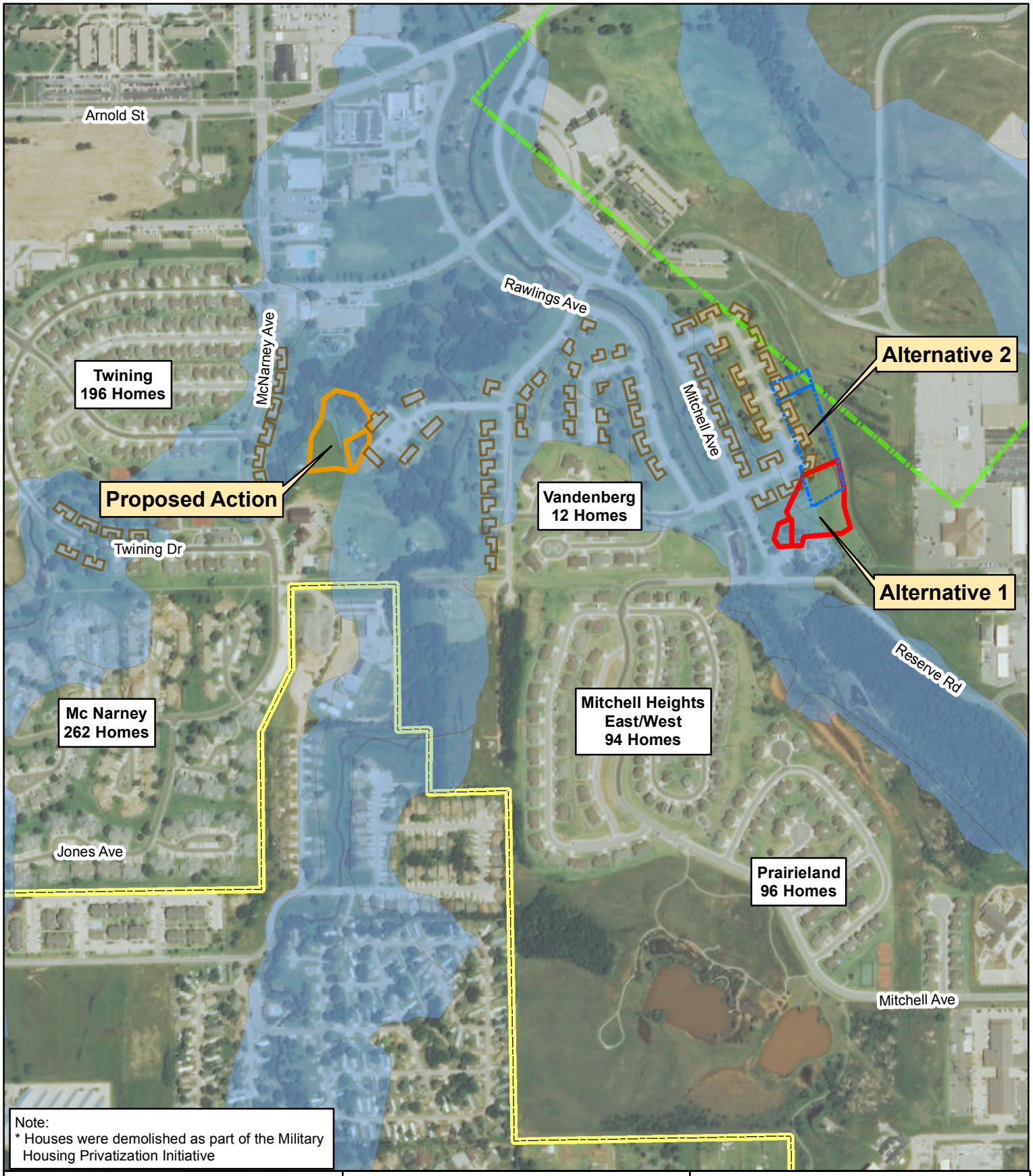
AGENCY	DEPARTMENT	TITLE	TITLE-1	FIRST NAME	LAST NAME	ADDRESS	ADDRESS-2	CITY	STATE	ZIP
Association of Central Oklahoma Governments	Central Oklahoma Clean Cities	Program Manager	Ms.	Yvonne	Anderson	21 East Main	Suite 100	Oklahoma City	OK	73104-2405
Tinker Environmental Library	Restoration Advisory Board		Ms.	Barbara	Brantner	6120 Arnold Street	Bldg 5702	Tinker AFB	OK	73145
City of Oklahoma City		Mayor	Mr.	Mick	Cornett	200 N Walker	3rd Floor	Oklahoma City	OK	73102
Audubon Society of Central Oklahoma		President	Ms.	Jane	Cunningham	4228 NW 59th St.		Oklahoma City	OK	73112
Oklahoma Water Resource Board	Planning & Management Division	Chief	Ms.	Julie	Cunningham	3800 N. Classen		Oklahoma City	OK	73118
Oklahoma Corporation Commission		Chairman	Ms.	Patrice	Douglas	P.O. Box 52000		Oklahoma City	OK	73152-2000
Oklahoma Department of Agriculture, Food and Forestry	Forestry Services	State Forester	Mr.	George	Geissler	2800 N Lincoln Boulevard		Oklahoma City	OK	73105
US Department of Agriculture, Animal and Plant Health Inspection Service	Oklahoma Wildlife Service	State Director	Mr.	Kevin	Grant	PO Box 528804		Oklahoma City	OK	73152
Federal Emergency Management Association (FEMA)	Restoration Advisory Board		Mr.	John	Harrington	21 E Main	Suite 100	Oklahoma City	OK	73104-2405
Oklahoma Department of Wildlife Conservation		Director	Mr.	Richard	Hatcher	P.O. Box 53465		Oklahoma City	OK	73152
OK Toxics Campaign	Restoration Advisory Board		Mr.	Earl	Hatley	3000 United Founders Blvd	#125	Oklahoma City	OK	73112
City of Midwest City	Restoration Advisory Board	Environmental Services Director	Mr.	William	Janacek	8730 SE 15th Street		Midwest City	OK	73110
Oklahoma Geological Survey		Director	Dr.	Randy	Keller	100 East Boyd St.	Suite N131	Norman	OK	73019
City of Del City	Restoration Advisory Board		Mr.	Tom	Leatherbee	3701 SE 15th Street		Del City	OK	73115
Greystone Environmental Services, Inc	Restoration Advisory Board		Ms.	Kathy	Lippert	1000 W Wilshire	Suite 340	Oklahoma City	OK	73116
Oklahoma County	District Two	County Commissioner	Mr.	Brian	Maughan	320 Robert S. Kerr	Room 101	Oklahoma City	OK	73102-3441
Sierra Club, Oklahoma Chapter		Chapter Director	Mr.	David	Okam	P.O. Box 60644		Oklahoma City	OK	73146-0644
US Department of Agriculture	Natural Resources Conservation Service	State Conservationist	Mr.	Gary	O'Neill	100 USDA	Suite 206	Stillwater	OK	74074-2655
US Fish and Wildlife Services	Division of Ecological Services		Ms.	Dixie	Porter	9014 E. 21st Street		Tulsa	OK	74129
USEPA-REGION 6 (6SF-LP) #1200	Restoration Advisory Board		Mr.	Mark	Purcell	1445 Ross Avenue	Suite 1200	Dallas	TX	75202-2733
	Restoration Advisory Board		Ms.	Betty	Reaties	425 Blue Spruce Drive		Midwest City	OK	73130
Marketing Data Analyst	Restoration Advisory Board		Mr.	Richard	Reginald	1821 Oaks Way		Oklahoma City	OK	73131
Federal Emergency Management Association (FEMA)	Regulatory Division		Mr.	Robert	Ramirez	800 North Loop 288		Denton	TX	76209
US Army Corps of Engineers, Tulsa District	Planning & Environmental Division		Ms.	Carolyn	Schultz	1645 S. 101 East Avenue		Tulsa	OK	74128-4609
City of Oklahoma City	Oklahoma City Water Utilities Trust	Director	Ms.	Marsha	Slaughter	420 West Main		Oklahoma City	OK	73102
EPA Region VI	Compliance Assurance and Enforcement Division (6EN-XP)	Chief	Ms.	Rhonda	Smith	1445 Ross Avenue	Suite 1200	Dallas	TX	75202
Oklahoma Department of Transportation	Planning & Research Division	Environmental Director	Ms.	Dawn	Sullivan	200 NE 21st Street	Room 3D2a	Oklahoma City	OK	73105
DEQ Site Assessment Unit	Restoration Advisory Board		Mr.	Scott	Thompson	P.O Box 1677		Oklahoma City	OK	73101
Greater Oklahoma City Chamber of Commerce	Government Relations	Vice President	Mr.	Mark	VanLandingham	123 Park Avenue		Oklahoma City	OK	73102
City of Oklahoma City	Ward Four	Councilman	Mr.	Pete	White	200 N Walker	3rd Floor	Oklahoma City	OK	73102
Oklahoma Department of Environmental Quality	Customer Services Division		Ms.	Jennifer	Wright	P.O. Box 1677		Oklahoma City	OK	73101-1677



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Tribal/SHPO Scoping IICEP Letters

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

APR 0 1 2016

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street
Tinker AFB, OK 73145

Natalie Harjo, Historic Preservation Officer (HPO)
Seminole Nation
36645 Highway 270
Wewoka, OK 74884

Dear Ms. Harjo,

Enclosed for your review and comment is the Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) for the Dog Park Construction at Tinker Air Force Base (AFB). The overall purpose of the project is to construct a dog park at Tinker AFB with two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City. Based on the EA, the Air Force has prepared a proposed FONSI/FONPA.

In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we request your participation in the process, and solicit any comments or concerns you may have on the attached Draft EA and proposed FONSI/FONPA. Comments may be submitted no later than 15 days from receipt of this letter and should be provided to Mr. Tim Taylor, 72 ABW/CEIE, by telephone at (405) 734-4579, or by email to timothy.taylor.5@us.af.mil .

Sincerely

STEPHANIE P. WILSON, Colonel, USAF

Attachments:
Draft EA and FONSI

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

APR 0 1 2016

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street
Tinker AFB, OK 73145

Melvena Heisch, Deputy State Historic Preservation Officer
Oklahoma State Historic Preservation Office
800 Nazih Zuhdi Drive
Oklahoma City, OK 73105-7917

Dear Ms. Heisch,

Enclosed for your review and comment is the Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) for the Dog Park Construction at Tinker Air Force Base (AFB). The overall purpose of the project is to construct a dog park at Tinker AFB with two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City. Based on the EA, the Air Force has prepared a proposed FONSI/FONPA.

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STEPHANIE P. WILSON, Colonel, USAF

Attachments:
Draft EA and FONSI/FONPA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

APR 07 2016

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street
Tinker AFB, OK 73145

Gary McAdams, Tribal Historic Preservation Officer (THPO)
Wichita and Affiliated Tribes
P.O. Box 729
1 ¼ Miles North on Highway 281
Anadarko, OK 73005

Dear Mr. Adams,

Enclosed for your review and comment is the Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) for the Dog Park Construction at Tinker Air Force Base (AFB). The overall purpose of the project is to construct a dog park at Tinker AFB with two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City. Based on the EA, the Air Force has prepared a proposed FONSI/FONPA.

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STEPHANIE P. WILSON, Colonel, USAF

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Draft EA and FONSI/FONPA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

APR 0 7 2016

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street
Tinker AFB, OK 73145

Tamara Francis-Fourkiller, Tribal Historic Preservation Officer (THPO)
Caddo Nation of Oklahoma
117 Memorial Drive
Binger, OK 73009

Dear Ms. Francis-Fourkiller,

Enclosed for your review and comment is the Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) for the Dog Park Construction at Tinker Air Force Base (AFB). The overall purpose of the project is to construct a dog park at Tinker AFB with two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City. Based on the EA, the Air Force has prepared a proposed FONSI/FONPA.

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STEPHANIE P. WILSON, Colonel, USAF

Attachments:
Draft EA and FONSI/FONPA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

APR 0 7 2016

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street
Tinker AFB, OK 73145

Emman Spain, Tribal Historic Preservation Officer (THPO)
Muscogee (Creek) Nation
P.O. Box 580
Okmulgee, OK 74447

Dear Mr. Spain,

Enclosed for your review and comment is the Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) for the Dog Park Construction at Tinker Air Force Base (AFB). The overall purpose of the project is to construct a dog park at Tinker AFB with two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City. Based on the EA, the Air Force has prepared a proposed FONSI/FONPA.

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Sincerely

STEPHANIE P. WILSON, Colonel, USAF

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Draft EA and FONSI/FONPA

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 72D AIR BASE WING (AFMC)
TINKER AIR FORCE BASE OKLAHOMA

APR 0 7 2016

Colonel Stephanie P. Wilson
Commander
7460 Arnold Street
Tinker AFB, OK 73145

Dr. Andrea A. Hunter, Tribal Historic Preservation Officer (THPO)
Osage Nation
627 Grandview
Pawhuska, OK 74056

Dear Dr. Hunter,

Enclosed for your review and comment is the Draft Environmental Assessment (EA) and proposed Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) for the Dog Park Construction at Tinker Air Force Base (AFB). The overall purpose of the project is to construct a dog park at Tinker AFB with two contiguous areas surrounded by fencing to separate small and large breed dogs. Some utilities would be constructed to provide lighting and water fountains to the area. Trash cans would be installed on the site and trees may be planted on the site to provide shade. This project is needed to support a quality of life concern for on-base residents, as the closest dog park to Tinker AFB is located approximately 2.5 miles away in Del City. Based on the EA, the Air Force has prepared a proposed FONSI/FONPA.

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