Final

ENVIRONMENTAL ASSESSMENT

PROPOSED CONSTRUCTON OF ARMY AND AIR FORCE EXCHANGE SERVICE SHOPPING CENTER

Offutt Air Force Base, Nebraska

May 2005

Army and Air Force Exchange Service
Dallas, Texas

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Acronyms and Abbreviations

$\mu g/m^3$	micrograms per cubic meter
AAFES	Army and Air Force Exchange Service
ACAM	Air Conformity Applicability Model
NDEQ	Nebraska Department of Environmental Quality
ADT	average daily traffic
AFB	Air Force Base
AFI	Air Force Instruction
AFPD	Air Force Policy Directive
AQCR	Air Quality Control Region
bgs	below ground surface
BMPs	Best Management Practices
BX	Base Exchange
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CES	Civil Engineer Squadron
CEV	Environmental Flight
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DoD	Department of Defense
DRMO	Defense Reutilization Marketing Office
EA	environmental assessment
EIAP	Environmental Impact Analysis Process
EIS	environmental impact statement
EO	Executive Order
°F	degrees Fahrenheit
FICON	Federal Interagency Committee on Noise
FONSI	Finding of No Significant Impact
HAP	Hazardous Air Pollutant(s)
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
INRMP	Integrated Natural Resource Management Plan
IRP	Installation Restoration Program
L_{dn}	day-night average sound level
MSA	Metropolitan Statistical Area
N/A	Not Applicable
NAAQS	National Ambient Air Quality Standards
NDEQ	Nebraska Department of Environmental Quality
NEPA	National Environmental Policy Act
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NPDES	National Pollution Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OAFB	Offutt Air Force Base
O&M	operations and maintenance
Pb	lead
PEL	Permissible Exposure Level
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
ROI	region of influence
SEL	sound exposure level
SF	square foot
SIP	State Implementation Plan
SO_2	sulfur dioxide
USACE	U.S. Army Corps of Engineers
USAF	U.S. Air Force
USBC	U.S. Bureau of the Census
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VOC	volatile organic compound

FINDING OF NO SIGNIFICANT IMPACT

CONSTRUCTION OF ARMY AND AIR FORCE EXCHANGE SERVICE SHOPPING CENTER AT OFFUTT AIR FORCE BASE, NEBRASKA

Agency: United States Air Force

Purpose: The 55th Wing at Offutt Air Force Base (OAFB), Nebraska and the Army and Air Force Exchange Service (AAFES) have initiated a planning program at OAFB to construct a new AAFES shopping center to rectify various functional inadequacies within the existing AAFES and OAFB facilities, which include the existing Base Exchange (BX), BX annex, gas station, Class Six, and post office and to expand AAFES services and functions at the shopping center. An expanded facility is needed in the Community Services Zone of OAFB to provide additional and enhanced services to meet the needs of AAFES customers and to be consistent with existing Master Planning documentation for the installation. A siting survey was conducted to locate potential sites for the proposed action. The area of the old SAC Museum was also considered a possible location of the new AAFES shopping center. However, this site was not considered a feasible option because it was not located within the installation Community Center concept and was not consistent with the installation General Plan. Moreover, the SAC Museum alternative is expected to result in more of an impact to the human environment when compared to the proposed action. Specifically, the SAC Museum alternative would result in more construction related impacts and higher construction costs because it would not be able to take advantage of the existing base infrastructure, such as traffic patterns around the community center and truck delivery routes through it. The SAC Museum alternative is also expected to result in more traffic congestion across the base because many of the customers who shop at the commissary would then have to travel across the base to shop at the AAFES shopping center if they were not collocated. There were no other parcels of land identified in the Community Services Zone of OAFB that could accommodate such an expanded facility, therefore, the only reasonable location identified was the site of the existing BX and associated facilities.

Proposed Action: The proposed action is to construct a new 168,788 SF AAFES shopping center at OAFB, Nebraska to replace the existing AAFES and OAFB facilities within the proposed footprint, which are unconsolidated, undersized, outdated, and no longer capable of providing adequate services to personnel and dependents associated with OAFB. The new shopping center would also accommodate retail sales with dressing rooms; customer checkout aisles; customer service area; merchandise processing area; food court consisting of five food concepts plus dining area; military clothing store; administrative and security offices; a branch for the Great Western Bank; restrooms; mechanical room; and concourse. In addition, approximately 792 parking spaces and site access roads encompassing approximately 8 acres of pavement would be constructed. The proposed action would require a total site area of approximately 13 acres.

OAFB is scheduled to take possession of Buildings 106, 162, and 388 during the third quarter of 2006. During the third quarter of 2006, OAFB will initiate the demolition process of these buildings and the post office building. Following demolition, construction of the new shopping center is scheduled to occur in the summer of 2007. After the shopping center is complete, the existing BX (Building 165) will be demolished and the shopping center parking area will be constructed. A new post office would also be constructed by the installation near the project site. It is estimated that the demolition and construction process would occur over approximately two years.

Implementation of the proposed action would result in enhanced efficiency of AAFES operations by providing adequately sized and properly configured facilities, working space, and storage to meet AAFES' needs relative to existing customer demands. In addition, the new shopping center would be located at the site of the existing AAFES Facilities to minimize potential environmental and human resource impacts and has also been located in accordance with established land use plans and policies.

The proposed site is located at the existing AAFES facilities. It is located on South Avenue just east of the Meyer Gate. It is bounded to the north by Grants Pass, to the west by Custer Drive, to the east by SAC Boulevard, and to the south by South Avenue. Access to the site from off-base is through the Kenney Gate or SAC gate, along SAC Boulevard and onto Second Avenue.

Under the proposed action, the shopping center would increase their current levels of employment. The overall employment would increase by 4 employees for a total of 111 employees.

Summary of Findings: The Environmental Assessment (EA) provides an analysis of the potential environmental impacts resulting from implementing the proposed action. Twelve resource areas were evaluated to identify potential environmental consequences: air quality, noise, land use, geological resources, water resources, biological resources, transportation and circulation, cultural resources, socioeconomics, environmental justice and protection of children, hazardous materials and wastes, and utilities. Evaluation of the proposed action indicates that the natural and human environment would not be significantly impacted by proceeding with construction of the new shopping center. Specific resource areas are summarized below.

Air Quality: Implementation of the proposed action would result in minor and temporary increases in criteria pollutant emissions associated with proposed demolition and construction activities. However, no long-term increase in criteria pollutant emissions would occur. Fugitive dust emissions (particulate matter less than 10 or 2.5 microns in diameter [PM_{10} and $PM_{2.5}$]) would be reduced by employing dust minimization practices. Characterization of materials containing or contaminated with asbestos or other toxic and regulated substances will be performed in accordance with applicable regulations, including but not limited to RCRA, TSCA, and State of Nebraska Solid Waste regulations. Implementation of the proposed action would not lead to an exceedance of *de minimis* thresholds and estimated criteria pollutant emissions would not violate the National Ambient Air Quality Standards (NAAQS). Determination of

conformity to the Nebraska State Implementation Plan is not required. Therefore, no significant impacts to air quality would occur as a result of implementation of the proposed action.

Noise: Under the proposed action, minor, temporary impacts to the noise environment in the vicinity of the proposed demolition and construction site would occur. The use of heavy equipment for demolition and site preparation and development (e.g., vegetation removal, grading, and back fill) could potentially generate noise levels above average ambient noise levels. However, noise levels would be typical of standard construction activities; would cease with the completion of proposed construction activities; and would only occur during normal working hours (i.e., between 7:00 A.M. and 5:00 P.M., Monday through Friday). Furthermore, sound levels could be reduced through the use of equipment sound mufflers. The operation and use of the proposed facility would not generate significant noise levels and the noise environment at the installation would continue to be dominated by aircraft and vehicular traffic. Therefore, no significant impacts to the noise environment as a result of implementation of the proposed action would occur.

Land Use: Implementation of the proposed action would result in beneficial impacts to land use at OAFB. Use of the site selected for the proposed action is in accordance with the adopted General Plan for OAFB and all project components will be designed and sited to be compatible with existing base land use. The proposed action would be centrally located within the Community-Commercial land use zone, thereby maintaining the functional relationship among community facilities. Furthermore, the site would be easily accessible to all family housing areas and community support areas. The site is also accessible to military personnel residing in the civilian community. The long-term operation of the proposed new facility would be consistent with noise generated from other land uses within the community center. The long-term operation of the proposed new facility would be consistent with noise generated from other land uses within the community center. Therefore, impacts to land use would not be significant.

Geological Resources: Demolition and construction activities associated with the proposed action would not significantly affect the geologic units underlying the installation as no unique geologic features or geologic hazards are present. Although ground disturbance would occur at the installation during construction, the construction would occur over previously disturbed surfaces. Soils would be disturbed during grading activities associated with proposed construction. However, implementation of Best Management Practices (BMPs) during demolition and construction would reduce impacts to soils associated with grading and clearing activities. In addition, standard erosion control measures (e.g., silt fencing, sediment traps, application of water sprays, and revegetation of disturbed soils) would be implemented to reduce potential impacts related to these characteristics. Therefore, no significant impacts to geological resources would occur as a result of implementation of the proposed action.

Water Resources: Construction would have minor localized (i.e., site-specific) effects on surface water hydrology; however, BMPs would be incorporated during construction to minimize potential erosion, runoff, and sedimentation. OAFB has been issued an Industrial Storm Water

National Pollution Discharge Elimination System (NPDES) General Permit and a Small MS4 permit. AAFES would be covered under the existing NPDES permit for the installation. However, since the proposed action would disturb more than one acre of land at OAFB, the AAFES construction contractor would be required to prepare a Storm Water Pollution Prevention Plan and obtain a Construction Site Storm Water NPDES permit with the Nebraska Department of Environmental Quality (NDEQ) Water Quality Division. In addition, a Construction Best Management Practices Plan would be developed and implemented on-site for the duration of the construction period. Proposed construction activities would not occur within a 100-year floodplain zone. Because the site of the proposed action is already nearly impervious, no appreciable net increase in storm water discharge volumes and intensities are anticipated following completion of the proposed action. Site disturbance and construction associated with the proposed action are not anticipated to affect groundwater resources. Construction operations would not reach depths that could affect groundwater resources. Therefore, no significant impacts to water resources would occur as a result of implementation of the proposed action.

Biological Resources: Construction associated with the proposed action would require vegetation removal (i.e. grass) in landscaped and previously disturbed areas. However, due to the lack of sensitive vegetation at the proposed site, proposed construction would not have significant impacts on vegetation. No Federally-listed endangered, threatened, or proposed species, or their designated critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service, occur at or in the vicinity of the proposed action. There are no delineated wetlands at or in the vicinity of the proposed action at OAFB. Therefore, there would be no impacts to biological resources as a result of implementation of the proposed action.

Transportation and Circulation: Implementation of the proposed action would result in a minor temporary increase in average daily traffic volumes on-base and within the vicinity of the installation during demolition and construction activities. However, construction-related traffic would constitute a small percentage of traffic in the region and most vehicles would remain on site for the duration of construction activities. From an operational standpoint, the proposed action would result in beneficial impacts to vehicle circulation. The proposed action would increase the number of parking spaces around the proposed shopping center which would improve efficiency of cars flowing in and out of the area during peak hours. In addition, the expansion and reconfiguration of the new shopping center access roads would improve traffic congestion that currently queues up in the parking lot during peak traffic periods. The site of the proposed action has ample space for expansion and is located in an ideal location for developing the AAFES shopping center, facilitating efficient vehicular movement within and around the site. An increase in vehicle trips on SAC Boulevard may be realized as a result of the new shopping center. However, the increase in traffic levels would not significantly affect safety and/or the capacity of roads at the installation and within the region. There would be no impacts to existing installation parking as adequate parking would be accommodated on-site. Therefore, there would be no impacts to transportation and circulation as a result of implementation of the proposed action.

Cultural Resources: The proposed construction would take place in an area previously disturbed by urban development. All regulations and policies relevant to the protection of cultural resources would be adhered to by AAFES during the construction process. No archaeological sites or architectural resources are known to exist at the proposed project site. The potential for archeological sites on-base is considered extremely low due to the highly disturbed nature of the base. The Nebraska SHPO concurred with this finding, but cautioned that development at OAFB should take into consideration the potential discovery of buried archeological resources. The nearest cultural resources to the proposed project site is Building 44 (former Blacksmith Shop) which is located approximately 65 feet from the site of the proposed action was listed on the NRHP in 1978. Under the proposed action this building would be avoided and not impacted during demolition and construction activities. Furthermore, the Nebraska SHPO has concurred with the findings of this EA and have no objections to the project proceeding as planned. Therefore, no significant impacts to cultural resources would occur as a result of implementation of the proposed action. Therefore, no significant impacts to cultural resources would occur as a result of implementation of the proposed action.

Socioeconomics: Employment levels and annual sales are projected to increase under the proposed action. Thus, while there would likely be a loss in sales tax revenues to the surrounding areas, as well as a minor loss in revenue to local and regional merchants from AAFES-owned and operated business sales, there would also be an offsetting benefit to the economy through the creation of four new jobs, and procurements for construction of the shopping center. The "multiplier effect" would amplify these benefits, resulting in additional growth through reinvestment in the region. The "multiplier effect" describes the fact that expenditures of money will tend to be re-spent, thus increasing by a larger amount than the initial expenditure. As a result of this offsetting activity, no significant adverse impacts to socioeconomic resources are anticipated. Although the proposed action may have minor impacts on the local economy or nearby competing businesses, the proposed action would not lead to a significant impact to the physical environment.

Environmental Justice and Protection of Children: Under the proposed action, construction activities would be limited to the 13 acre site chosen for the shopping center. There are no minority or low income populations located near the proposed project site. The nearest housing areas to the proposed site are NCO Row and General Row, both of which do not qualify as minority or low income populations. Therefore, implementation of the proposed action would not disproportionately impact minority or low-income populations. Implementation of the proposed action would not result in environmental health risks or safety risks to children, as no housing or facilities for children exist adjacent to, or in the immediate vicinity of, the site of the proposed action. Therefore, no significant impacts to children from health risks or safety risks would occur as a result of implementing the proposed action.

Hazardous Materials and Wastes: The proposed action is not expected to have an impact on the management of hazardous materials at OAFB. The proposed action will not significantly increase or decrease the quantity of hazardous material brought to the installation in the form of

packaged products. It is expected that type and quantity of hazardous packaged products offered for sale by AAFES in the new shopping center will be the same as or very similar to those already offered for sale in the existing AAFES BX at OAFB. The proposed shopping center would likely generate the same types of hazardous waste as the current BX. During the excavation and grading operations in preparation for construction, the potential exists for encounter with contaminated soils from the leak that occurred in an underground storage tank supply line in 1985. The leaded gasoline that leaked may be present in the subsurface soils, and the presence of leaded gasoline has the potential to render the excavated soils hazardous by characteristic (benzene, lead). Based on the results of the Phase II Environmental Site Assessment conducted at the location of the proposed action there were no total petroleum hydrocarbons in the gasoline range (TPH-GRO) detected in any of ten soil samples submitted to a laboratory for testing. In addition, total extractable hydrocarbons in the diesel range (TEH-DRO) were detected in only one sampling location (at two different depths), and the concentrations detected (59 mg/kg and 12.8 mg/kg, respectively) by laboratory analysis were below the Nebraska Risk-based Screening Level of 2390 mg/kg. However, if contaminated soil is encountered during the excavation and grading operations, it would be segregated and appropriately characterized for disposal.

Under the proposed action the BX Service Station would be demolished, and this action would result in a temporary cessation of the generation of waste oil from servicing of customer vehicles. A new service station is proposed to be constructed on OAFB at the new mini-mall location; therefore, the generation of waste oil would be expected to begin at the new location. The demolition of the BX Service Station would include the closure of the four underground storage tanks. The closure procedures would be carried out in accordance with relevant State of Nebraska Department of Environmental Quality (NDEQ) regulations. If contaminated soil or groundwater is identified during the closure procedures, OAFB would follow an appropriate remedial course of action in consultation and cooperation with the NDEQ. In addition, the AAFES contractor would turn over any hazardous waste found at the site to OAFB for proper manifesting and disposal.

The NDEQ and the EPA were notified of OAFB and AAFES intent to build on IRP site SS-04 in the memorandum dated May 20, 2004. OAFB received no comments from the NDEQ or EPA. Therefore, a request for an IRP site waver for construction on IRP site SS-04 was sent to Headquarters Air Combat Command (HQ ACC) on July 6, 2004. HQ ACC approved the request for construction on IRP site SS-04 on August 5, 2004, with implementation of the stipulations for construction contingencies identified in the waiver request letter. Therefore, no significant impacts would occur as a result of implementing the proposed action.

Utilities: No daily limits are placed on OAFB regarding the consumption of electricity, natural gas, and potable water. In addition, regional facilities that would handle wastewater and solid waste from the proposed action have adequate capacity to accommodate anticipated minimal increases. Solid waste, including non-contaminated soils, contaminated soils that are non-hazardous (e.g., state-regulated special waste) construction and demolition debris, and recyclable items (e.g., cardboard, metal, plastic) generated as a result of construction activities would be managed in accordance with the *OAFB Solid Waste Management Plan.* All non-hazardous waste and recyclable items would be collected and disposed off-site by appropriately licensed contractors. Therefore, no significant impacts to utilities would occur as a result of implementation of the proposed action.

Finding of No Significant Impact (FONSI): After review of the EA prepared in accordance with the requirements of the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) Regulations, and Air Force Instruction 32 CFR 989, I have determined that the proposed action would not have significant adverse impacts on the natural and human environment; therefore, an Environmental Impact Statement does not need to be prepared.

John Dennis Daly

JOHN D. DALY
Colonel, USAF
Vice Commander, 55th Wing Offutt AFB

2 May 2005
Date

EXECUTIVE SUMMARY

The 55th Wing at Offutt Air Force Base (OAFB), Nebraska and the Army and Air Force Exchange Service (AAFES) have initiated a planning program at OAFB to construct a new AAFES shopping center to rectify various functional inadequacies within the existing AAFES facilities, which include the existing Base Exchange (BX), BX annex, gas station, Class Six, and post office and to expand AAFES services and functions at the shopping center. An expanded facility is needed in the Community Services Zone of OAFB to provided additional and enhanced services to meet the needs of AAFES customers and to be consistent with existing Master Planning documentation for the installation. A siting survey was conducted to locate potential sites for the proposed action. Based on this survey, there were no other parcels of land identified in the Community Services Zone of OAFB that could accommodate such an expanded facility, therefore, the only reasonable location identified was the site of the existing BX and associated facilities.

This environmental assessment (EA) evaluates the significance of potential environmental and human resource impacts associated with the implementation of the proposed action and No-Action Alternative at OAFB, Nebraska. This EA describes existing conditions and potential impacts on environmental resources at the installation and within the region.

The proposed action is to construct a new 168,788 SF AAFES shopping center at OAFB, Nebraska to replace the existing AAFES facilities within the proposed footprint, which are unconsolidated, undersized, outdated, and no longer capable of providing adequate services to personnel and dependents associated with OAFB. The new shopping center would also accommodate retail sales with dressing rooms; customer checkout aisles; customer service area; merchandise processing area; food court consisting of five food concepts plus dining area; military clothing store; administrative and security offices; a branch office for the Great Western Bank, restrooms; mechanical room; and concourse. In addition, approximately 792 parking spaces and site access roads encompassing approximately 8 acres of pavement would be constructed. The proposed action would require a total site area of approximately 13 acres.

Implementation of the proposed action would result in enhanced efficiency of AAFES operations by providing adequately sized and properly configured facilities, working space, and storage to meet AAFES' needs relative to existing customer demands. In addition, the new shopping center would be located at the site of the existing AAFES facilities to minimize potential environmental and human resource impacts and has also been located in accordance with established land use plans and policies.

The EA evaluated 12 resource areas to identify potential environmental consequences: air quality, noise, land use, geological resources, water resources, biological resources, transportation and circulation, cultural resources, socioeconomics, environmental justice and protection of children, hazardous materials and wastes, and utilities. Impacts resulting from proposed construction activities would be temporary and minor; no long-term impacts would result from implementation of the proposed action at the installation. Direct, indirect, and

cumulative impacts associated with the proposed action and No-Action Alternative at the installation would not be significant for all resource areas. Specific resource areas are summarized below.

Air Quality: Implementation of the proposed action would result in minor and temporary increases in criteria pollutant emissions associated with proposed demolition and construction activities. However, no long-term increase in criteria pollutant emissions would occur. Fugitive dust emissions (particulate matter less than 10 or 2.5 microns in diameter [PM_{10} and $PM_{2.5}$]) would be reduced by employing dust minimization practices. Characterization of materials containing or contaminated with asbestos or other toxic and regulated substances will be performed in accordance with applicable regulations, including but not limited to RCRA, TSCA, and State of Nebraska Solid Waste regulations. Implementation of the proposed action would not lead to an exceedance of *de minimis* thresholds and estimated criteria pollutant emissions would not violate the National Ambient Air Quality Standards (NAAQS). Determination of conformity to the Nebraska State Implementation Plan is not required. Therefore, no significant impacts to air quality would occur as a result of implementation of the proposed action.

Noise: Under the proposed action, minor, temporary impacts to the noise environment in the vicinity of the proposed demolition and construction site would occur. The use of heavy equipment for demolition and site preparation and development (e.g., vegetation removal, grading, and back fill) could potentially generate noise levels above average ambient noise levels. However, noise levels would be typical of standard construction activities; would cease with the completion of proposed construction activities; and would only occur during normal working hours (i.e., between 7:00 A.M. and 5:00 P.M., Monday through Friday). Furthermore, sound levels could be reduced through the use of equipment sound mufflers. The operation and use of the proposed facility would not generate significant noise levels and the noise environment at the installation would continue to be dominated by aircraft and vehicular traffic. Therefore, no significant impacts to the noise environment as a result of implementation of the proposed action would occur.

Land Use: Implementation of the proposed action would result in beneficial impacts to land use at OAFB. Use of the site selected for the proposed action is in accordance with the adopted General Plan for OAFB and all project components will be designed and sited to be compatible with existing base land use. The proposed action would be centrally located within the Community-Commercial land use zone, thereby maintaining the functional relationship among community facilities. Furthermore, the site would be easily accessible to all family housing areas and community support areas. The site is also accessible to military personnel residing in the civilian community. The long-term operation of the proposed new facility would be consistent with noise generated from other land uses within the community center. Therefore, impacts to land use would not be significant.

Geological Resources: Demolition and construction activities associated with the proposed action would not significantly affect the geologic units underlying the installation as no unique geologic features or geologic hazards are present. Although ground disturbance would occur at

the installation during construction, the construction would occur over previously disturbed surfaces. Soils would be disturbed during grading activities associated with proposed construction. However, implementation of Best Management Practices (BMPs) during demolition and construction would reduce impacts to soils associated with grading and clearing activities. In addition, standard erosion control measures (e.g., silt fencing, sediment traps, application of water sprays, and revegetation of disturbed soils) would be implemented to reduce potential impacts related to these characteristics. Therefore, no significant impacts to geological resources would occur as a result of implementation of the proposed action.

Water Resources: Construction would have minor localized (i.e., site-specific) effects on surface water hydrology; however, BMPs would be incorporated during construction to minimize potential erosion, runoff, and sedimentation. OAFB has been issued an Industrial Storm Water National Pollution Discharge Elimination System (NPDES) General Permit and a Small MS4 permit. AAFES would be covered under the existing NPDES permit for the installation. However, since the proposed action would disturb more than one acre of land at OAFB, the AAFES construction contractor would be required to prepare a Storm Water Pollution Prevention Plan and obtain a Construction Site Storm Water NPDES permit with the Nebraska Department of Environmental Quality (NDEQ) Water Quality Division. In addition, a Construction Best Management Practices Plan would be developed and implemented on-site for the duration of the construction period. Proposed construction activities would not occur within a 100-year floodplain zone. Because the site of the proposed action is already nearly impervious, no appreciable net increase in storm water discharge volumes and intensities are anticipated following completion of the proposed action. Site disturbance and construction associated with the proposed action are not anticipated to affect groundwater resources. Construction operations would not reach depths that could affect groundwater resources. Therefore, no significant impacts to water resources would occur as a result of implementation of the proposed action.

Biological Resources: Construction associated with the proposed action would require vegetation removal (i.e. grass) in landscaped and previously disturbed areas. However, due to the lack of sensitive vegetation at the proposed site, proposed construction would not have significant impacts on vegetation. No Federally-listed endangered, threatened, or proposed species, or their designated critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service, occur at or in the vicinity of the proposed action. There are no delineated wetlands at or in the vicinity of the proposed action at OAFB. Therefore, there would be no impacts to biological resources as a result of implementation of the proposed action.

Transportation and Circulation: Implementation of the proposed action would result in a minor temporary increase in average daily traffic volumes on-base and within the vicinity of the installation during demolition and construction activities. However, construction-related traffic would constitute a small percentage of traffic in the region and most vehicles would remain on site for the duration of construction activities. From an operational standpoint, the proposed action would result in beneficial impacts to vehicle circulation. The proposed action would increase the number of parking spaces around the proposed shopping center which would improve efficiency of cars flowing in and out of the area during peak hours. In addition, the

expansion and reconfiguration of the new shopping center access roads would improve traffic congestion that currently queue up in the parking lot during peak traffic periods. The site of the proposed action has ample space for expansion and is located in an ideal location for developing the AAFES shopping center, facilitating efficient vehicular movement within and around the site. An increase in vehicle trips on SAC Boulevard may be realized as a result of the new shopping center. However, the increase in traffic levels would not significantly affect safety and/or the capacity of roads at the installation and within the region. There would be no impacts to existing installation parking as adequate parking would be accommodated on-site. Therefore, there would be no impacts to transportation and circulation as a result of implementation of the proposed action.

Cultural Resources: The proposed construction would take place in an area previously disturbed by urban development. All regulations and policies relevant to the protection of cultural resources would be adhered to by AAFES during the construction process. No archaeological sites or architectural resources are known to exist at the proposed project site. The potential for archeological sites on-base is considered extremely low due to the highly disturbed nature of the base. The Nebraska SHPO concurred with this finding, but cautioned that development at OAFB should take into consideration the potential discovery of buried archeological resources. The nearest cultural resources to the proposed project site is Building 44 (former Blacksmith Shop) which is located approximately 65 feet from the site of the proposed action was listed on the NRHP in 1978. Under the proposed action this building would be avoided and not impacted during demolition and construction activities. Furthermore, the Nebraska SHPO has concurred with the findings of this EA and have no objections to the project proceeding as planned. Therefore, no significant impacts to cultural resources would occur as a result of implementation of the proposed action. Therefore, no significant impacts to cultural resources would occur as a result of implementation of the proposed action.

Socioeconomics: Employment levels and annual sales are projected to increase under the proposed action. Thus, while there would likely be a loss in sales tax revenues to the surrounding areas, as well as a minor loss in revenue to local and regional merchants from AAFES-owned and operated business sales, there would also be an offsetting benefit to the economy through the creation of 4 new jobs, and procurements for construction of the shopping center. The "multiplier effect" would amplify these benefits, resulting in additional growth through reinvestment in the region. The "multiplier effect" describes the fact that expenditures of money will tend to be re-spent, thus increasing by a larger amount than the initial expenditure. As a result of this offsetting activity, no significant adverse impacts to socioeconomic resources are anticipated. Although the proposed action may have minor impacts on the local economy or nearby competing businesses, the proposed action would not lead to a significant impacts to the physical environment.

Environmental Justice and Protection of Children: Under the proposed action, construction activities would be limited to the 13 acre site chosen for the shopping center. There are no minority or low income populations located near the proposed project site. The nearest housing areas to the proposed site are NCO Row and General Row, both of which do not qualify as

minority or low income populations. Therefore, implementation of the proposed action would not disproportionately impact minority or low-income populations. Implementation of the proposed action would not result in environmental health risks or safety risks to children, as no housing or facilities for children exist adjacent to, or in the immediate vicinity of, the site of the proposed action. Therefore, no significant impacts to children from health risks or safety risks would occur as a result of implementing the proposed action.

Hazardous Materials and Wastes: The proposed action is not expected to have an impact on the management of hazardous materials at OAFB. The proposed action will not significantly increase or decrease the quantity of hazardous material brought to the installation in the form of packaged products. It is expected that type and quantity of hazardous packaged products offered for sale by AAFES in the new shopping center will be the same as or very similar to those already offered for sale in the existing AAFES BX at OAFB. The proposed shopping center would likely generate the same types of hazardous waste as the current BX. During the excavation and grading operations in preparation for construction, the potential exists for encounter with contaminated soils from the leak that occurred in an underground storage tank supply line in 1985. The leaded gasoline that leaked may be present in the subsurface soils, and the presence of leaded gasoline has the potential to render the excavated soils hazardous by characteristic (benzene, lead). Based on the results of the Phase II Environmental Site Assessment conducted at the location of the proposed action there were no total petroleum hydrocarbons in the gasoline range (TPH-GRO) detected in any of ten soil samples submitted to a laboratory for testing. In addition, total extractable hydrocarbons in the diesel range (TEH-DRO) were detected in only one sampling location (at two different depths), and the concentrations detected (59 mg/kg and 12.8 mg/kg, respectively) by laboratory analysis were below the Nebraska Risk-based Screening Level of 2390 mg/kg. However, if contaminated soil is encountered during the excavation and grading operations, it would be segregated and appropriately characterized for disposal.

Under the proposed action the BX Service Station would be demolished, and this action would result in a temporary cessation of the generation of waste oil from servicing of customer vehicles. A new service station is proposed to be constructed on OAFB at the new mini-mall location, therefore, the generation of waste oil would be expected to begin at the new location. The demolition of the BX Service Station would include the closure of the four underground storage tanks. The closure procedures would be carried out in accordance with relevant State of Nebraska Department of Environmental Quality (NDEQ) regulations. If contaminated soil or groundwater is identified during the closure procedures, OAFB would follow an appropriate remedial course of action in consultation and cooperation with the NDEQ. In addition, the AAFES contractor would turn over any hazardous waste found at the site to OAFB for proper manifesting and disposal.

The NDEQ and the EPA were notified of OAFB and AAFES intent to build on IRP site SS-04 in the memorandum dated May 20, 2004. OAFB received no comments from the NDEQ or EPA. Therefore, a request for an IRP site waver for construction on IRP site SS-04 was sent to Headquarters Air Combat Command (HQ ACC) on July 6, 2004. HQ ACC approved the request

for construction on IRP site SS-04 on August 5, 2004, with implementation of the stipulations for construction contingencies identified in the waiver request letter. Therefore, no significant impacts would occur as a result of implementing the proposed action.

Utilities: No daily limits are placed on OAFB regarding the consumption of electricity, natural gas, and potable water. In addition, regional facilities that would handle wastewater and solid waste from the proposed action have adequate capacity to accommodate anticipated minimal increases. Solid waste, including non-contaminated soils, contaminated soils that are non-hazardous (e.g., state-regulated special waste) construction and demolition debris, and recyclable items (e.g., cardboard, metal, plastic) generated as a result of construction activities would be managed in accordance with the *OAFB Solid Waste Management Plan*. All non-hazardous waste and recyclable items would be collected and disposed off-site by appropriately licensed contractors. Therefore, no significant impacts to utilities would occur as a result of implementation of the proposed action.

FINAL
ENVIRONMENTAL ASSESSMENT

PROPOSED CONSTRUCTION OF ARMY AND AIR FORCE EXCHANGE SERVICE SHOPPING CENTER AT OFFUTT AIR FORCE BASE, NEBRASKA

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1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

Offutt Air Force Base (OAFB) is a United States Air Force Base (AFB) under Air Combat Command (ACC). OAFB currently occupies approximately 4,041 acres of land (including remote sites) in eastern Sarpy County in the Greater Omaha-Council Bluffs Metropolitan Statistical Area (Figure 1-1). The 55th Wing is the largest wing within ACC and is the host wing at OAFB. The 55th Wing's primary mission is to provide logistical and administrative support to all units of the base and its operational mission is to provide worldwide reconnaissance, real-time intelligence, and command and control, information warfare, and combat support to national leadership and war fighting commanders.

The Army and Air Force Exchange Service (AAFES) operates several facilities at OAFB in support of a regional population of approximately 41,294 people (includes military, military dependents, and civilian employees). The existing Base Exchange (BX), BX annex, gas station, Class Six, and post office (an OAFB facility) are located in Buildings 165, 162, 388, 106, and 137, respectively (Figure 1-2). Table 1-1 lists the year of construction and square footage for each existing AAFES facility present at the site of the proposed action.

Table 1-1. AAFES Existing Building Description

Building No.	Building Description	Square Feet (SF)	Year of Construction
106	Class 6	5,700	1983
137	Post Office	1,980	1973
162	BX Annex	14,259	1970
165	Base Exchange (BX)	68,422	1969
388	Gas Station	9,123	1963

The existing BX (Building 165) currently has 29,472 square feet (SF) of retail space. Despite repeated expansion and renovations, the building is undersized and unsuitable to adequately support current sales levels. The existing floor space limits stock assortment and selection while competition intensifies around OAFB. An expanded facility is needed in the Community Services Zone of OAFB to provided additional and enhanced services to meet the needs of AAFES customers and to be consistent with existing Master Planning documentation for the installation. A siting survey was conducted to locate potential sites for the proposed action. Based on this survey, there were no other parcels of land identified in the Community Services Zone of OAFB that could accommodate such an expanded facility, therefore, the only reasonable location identified was the site of the existing BX and associated facilities. The above listed buildings are programmed to be demolished in order to provide space for the construction of a proposed new shopping center design, with food service, various service facilities, and a military clothing store.

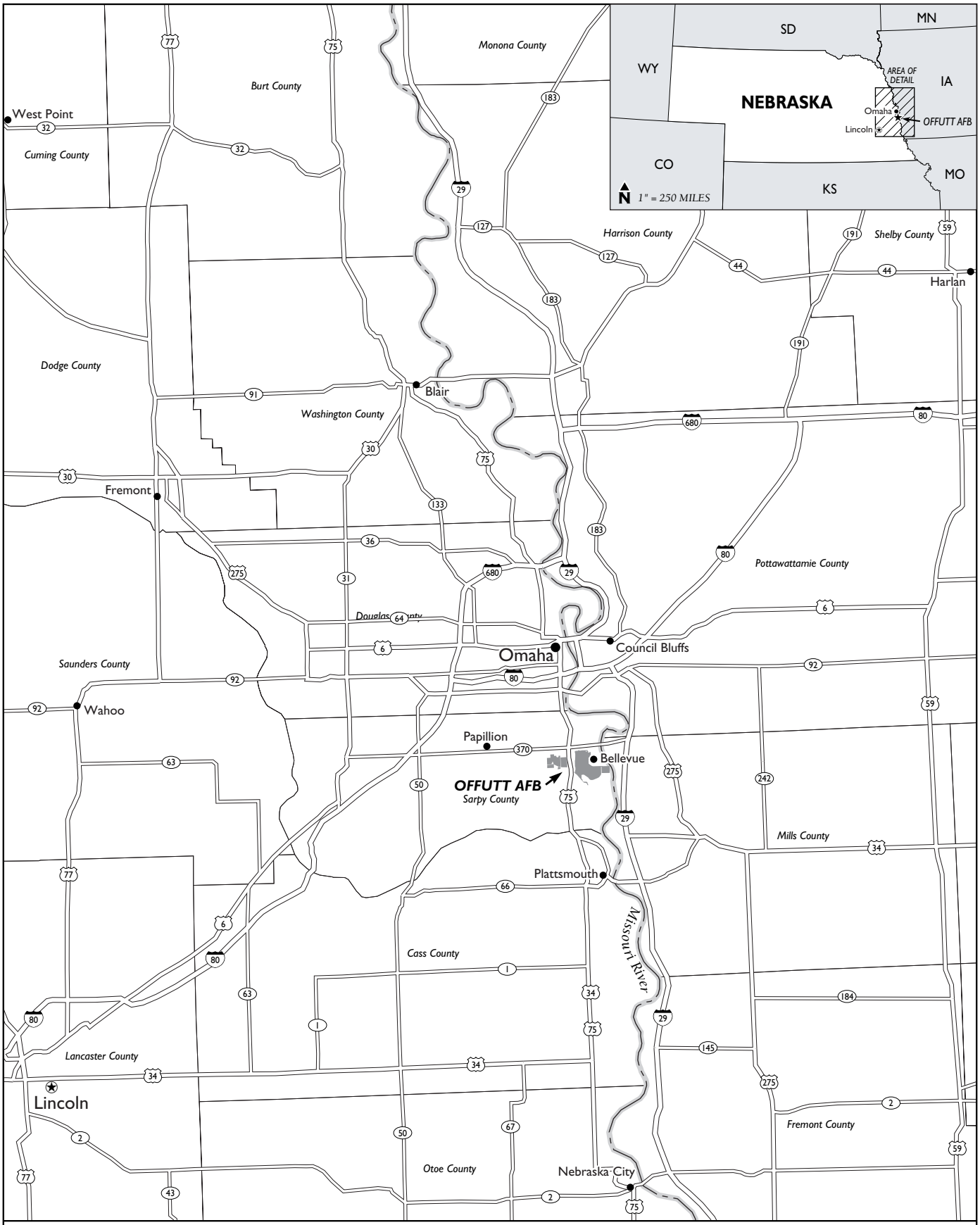

Figure 1-1
Offutt Air Force Base, Nebraska

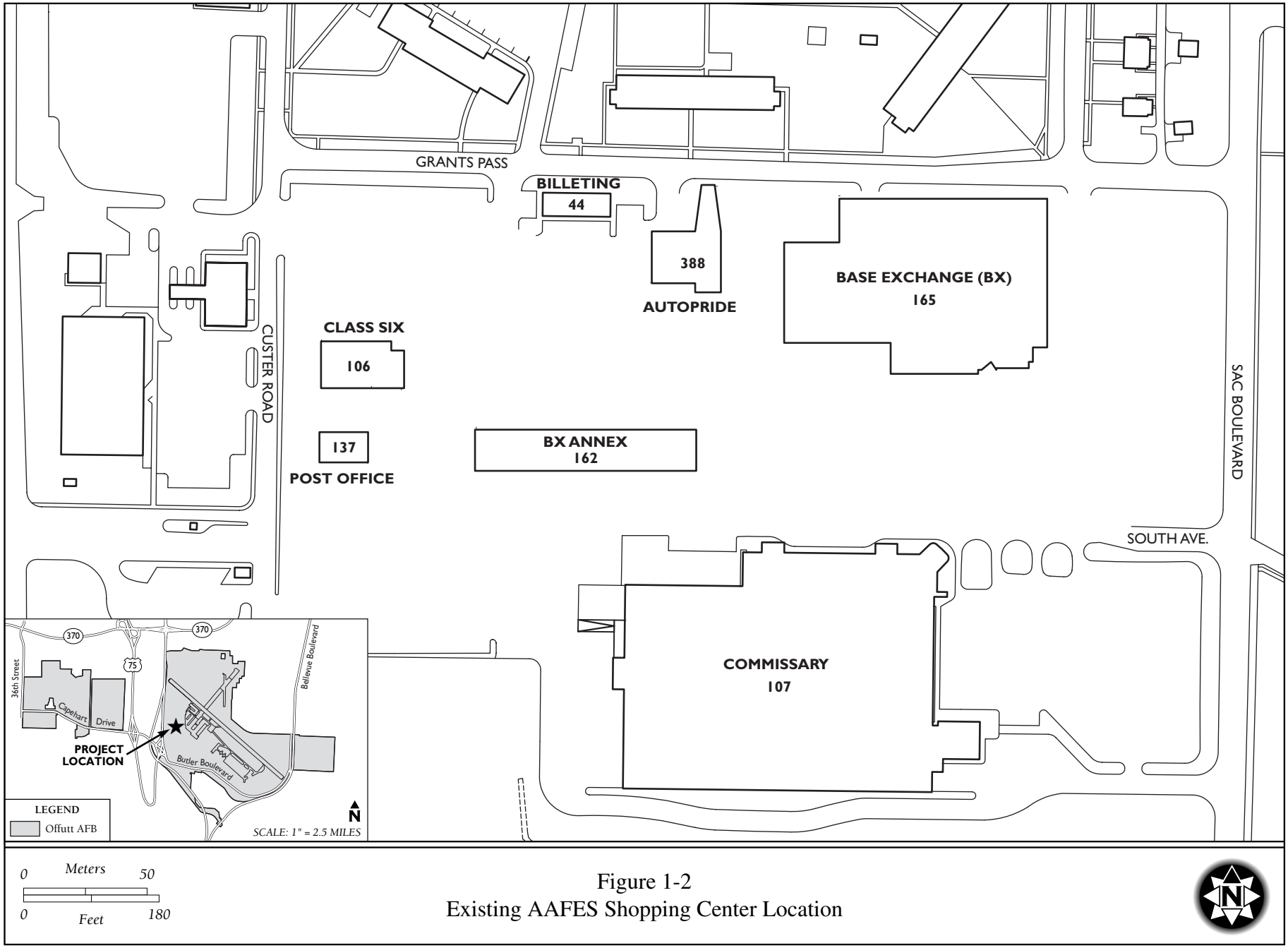

Figure 1-2
Existing AAFES Shopping Center Location

1.2 LOCATION OF THE PROPOSED ACTION

The proposed action would take place at OAFB in Sarpy County, Nebraska. The site for the proposed construction is located within the Community-Commercial Land Use within the cantonment area of the installation. The proposed site is located on South Avenue just east of the Meyer Gate. It is bounded to the north by Grants Pass, to the west by Custer Drive, to the east by SAC Boulevard, and to the south by South Avenue. Access to the site from off-base is through the Kenney Gate or SAC gate, along SAC Boulevard and onto Second Avenue. Meyer Gate is only open during special events or during periods of elevated threat potential.

1.3 DECISION TO BE MADE AND THE DECISION MAKER

The decision to be made with respect to the proposed action is whether a new AAFES shopping center will be constructed at OAFB. The purpose of this environmental assessment (EA) is to evaluate the potential impacts upon the natural and man-made environment, should the proposed action be implemented. The decision to approve the proposed action begins at OAFB with the Vice Wing Commander.

1.4 SCOPE OF THE ENVIRONMENTAL REVIEW

The intent of this EA is to identify potential impacts associated with the proposed action and alternatives to the proposed action, including the No-Action Alternative. In doing so, this EA will evaluate the following resource categories:

- Air Quality
- Noise
- Land Use
- Geologic Resources
- Water Resources
- Biological Resources
- Transportation and Circulation
- Cultural Resources
- Socioeconomics
- Environmental Justice and Protection of Children
- Hazardous Materials and Waste
- Utilities

This EA will also address cumulative impacts, and the compatibility of the proposed action and alternatives with the objectives of federal, regional, state, and local land use plans, policies, and controls. The relationship between the short-term use of the environment and its long-term productivity, as well as an assessment of any irreversible and irretrievable commitments of resources associated with the alternative, will also be evaluated.

1.5 APPLICABLE REGULATORY REQUIREMENTS

The Environmental Impact Analysis Process (EIAP) is the process by which the U.S. Air Force facilitates compliance with environmental regulations. The primary legislation affecting these agencies' decision-making process is the National Environmental Policy Act (NEPA) of 1969. This act and other facets of the EIAP are described below.

1.5.1 National Environmental Policy Act

This act requires that Federal agencies consider potential environmental consequences of proposed actions in their decision-making process. The intent of NEPA is to protect, restore, or enhance the environment through well-informed Federal decisions. The Council on Environmental Quality (CEQ) was established under NEPA for the purpose of implementing and overseeing Federal policies as they relate to this process. In 1978, the CEQ issued *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 Code of Federal Regulations [CFR] §1500-1508). These regulations specify that an EA be prepared to:

- briefly provide sufficient analysis and evidence for determining whether to prepare an environmental impact statement (EIS) or a Finding of No Significant Impact (FONSI);
- aid in an agency's compliance with NEPA when an EIS is deemed unnecessary; and
- facilitate EIS preparation when one is necessary.

Further, to comply with other relevant environmental requirements and to assess potential environmental impacts, the EIAP and the decision-making process involve a thorough examination of all environmental issues pertinent to the proposed action.

1.5.2 Interagency and Intergovernmental Coordination for Environmental Planning

NEPA and CEQ regulations require intergovernmental notifications prior to making any statement of potential environmental impacts. Through the process of Interagency and Intergovernmental Coordination for Environmental Planning (IICEP), the USAF, in coordination with AAFES, notifies relevant federal, state, and local agencies and allows them to make known their environmental concerns specific to the proposed action. Comments from these entities are addressed and incorporated into the environmental impact analysis process.

1.6 ORGANIZATION OF THE DOCUMENT

The purpose of this EA is to evaluate any potential impacts associated with the proposed action and the alternatives to the proposed action, including the No-Action Alternative. Section 2 of this document provides a description of the proposed action and alternatives. Section 3 provides a baseline assessment of specific resource areas within the affected environment. These resource areas include specific elements of both the natural and man-made environment. Finally, Section 4 evaluates the potential impacts of both the proposed action and the alternatives on the resource areas described in Section 3.

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2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

2.1 INTRODUCTION

Section 2 describes the proposed action and alternatives to the proposed action, including the No-Action Alternative. This section discusses the history of the formulation of alternatives, including those eliminated from further consideration. The proposed action and all other alternatives are described in detail, and a comparison matrix is provided that summarizes the effects of all alternatives. Finally, the preferred alternative is identified.

In general, the proposed action involves demolition of the AAFES owned Class Six store, BX annex, and the OAFB owned Post Office by OAFB. The Class Six store and new service station would be moved to the new mini-mall which was analyzed under separate NEPA analysis and a Finding of No Significant Impact was signed. OAFB would construct a new Post Office and AAFES would construct a new 168,788 SF BX shopping center to replace the current BX located at the site. The new shopping center would contain retail facilities, food court service, military clothing store, security office, a branch office for the Great Western Bank, and 792 parking spaces for customers and employees.

2.2 HISTORY OF THE FORMULATION OF ALTERNATIVES

AAFES began evaluating options for expansion of the existing BX. Investigation revealed demolition of existing facilities and construction of a new shopping center as the preferred option since no other parcels of land in the Community Services Zone of the installation were identified during the siting survey that could accommodate an expanded and enhanced AAFES shopping center. The need to rectify the functional inadequacies within the existing BX (Building 165) and the associated facilities led decision makers to evaluate opportunities to expand the operational footprint of the shopping center functions at OAFB. The programming of the existing AAFES facilities for demolition by the U.S. Department of the Air Force (USAF) followed AAFES decision to construct a new shopping center.

2.3 IDENTIFICATION OF ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

Decision makers from AAFES and OAFB evaluated the feasibility of expanding and renovating the existing BX at OAFB. However, this alternative was eliminated from further consideration in this EA due to cost concerns. Moreover, the current BX design could not accommodate the proposed expansion or could not be easily developed to adequately support such an establishment. As a result, this alternative is not considered feasible and has been eliminated from further analysis.

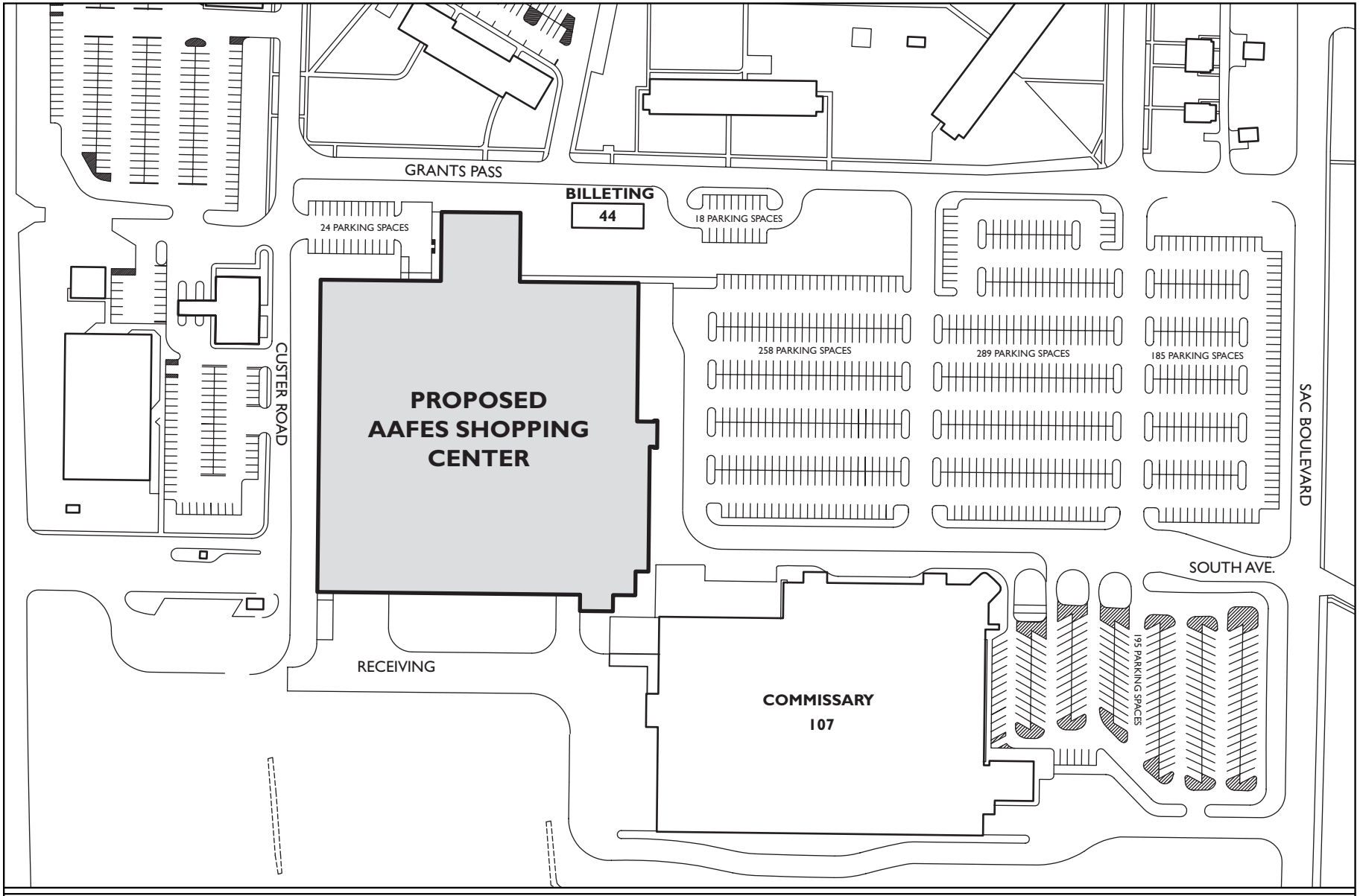

Figure 2-1
Detailed Site Plan of the Proposed Action

In addition, the area of the old SAC Museum was also considered a possible location of the new AAFES shopping center. However, this site was not considered a feasible option because it was not located within the installation Community Center concept and was not consistent with the installation General Plan. Moreover, the SAC Museum alternative is expected to result in more of an impact to the human environment when compared to the proposed action. Specifically, the SAC Museum alternative would result in more construction related impacts and higher construction costs because it would not be able to take advantage of the existing base infrastructure, such as traffic patterns around the community center and truck delivery routes through it. The SAC Museum alternative is also expected to result in more traffic congestion across the base because many of the customers who shop at the commissary would then have to travel across the base to shop at the AAFES shopping center if they were not collocated. No other parcels of land were identified in the Community Services Zone that would accommodate the size of the proposed expanded facility. Therefore, only the proposed action and the No-Action Alternative are carried forward for detailed analysis in this EA.

2.4 DETAILED DESCRIPTION OF THE PROPOSED ACTION

The proposed action is to construct a new 168,788 SF AAFES shopping center at OAFB, Nebraska to replace the existing AAFES and OAFB facilities within the proposed footprint (see Section 1-1), which are unconsolidated, undersized, outdated, and no longer capable of providing adequate services to personnel and dependents associated with OAFB (Figure 2-1). The new shopping center would also accommodate retail sales with dressing rooms; customer checkout aisles; customer service area; merchandise processing area; food court consisting of five food concepts plus dining area; military clothing store; administrative and security offices; a branch for the Great Western Bank; restrooms; mechanical room; and concourse. In addition, approximately 792 parking spaces and site access roads encompassing approximately 8 acres of pavement would be constructed. The proposed action would require a total site area of approximately 13 acres.

OAFB is scheduled to take possession of Buildings 106, 162, and 388 during the third quarter of 2006. In the third quarter of 2006, OAFB will initiate the demolition process of these buildings and the post office building. Following demolition, construction of the new shopping center is scheduled to occur during the first quarter of 2007. After the shopping center is complete, the existing BX (Building 165) will be demolished and the shopping center parking area will be constructed. A new post office would also be constructed by the installation near the project site. Its estimated that the demolition and construction process would occur over approximately two years.

The proposed site is located on South Avenue just east of the Meyer Gate and is bounded to the north by Grants Pass, to the west by Custer Drive, to the east by SAC Boulevard, and to the south by South Avenue (Figure 2-2). Access to the site from off-base is through the Kenney Gate or SAC gate, along SAC Boulevard and onto Second Avenue. Meyer Gate is only open

during special events. On-base access to the new shopping center would also be from SAC Boulevard (see Figure 2-1).

Figure 2-2 Photograph of Proposed Site for New AAFES Shopping Center

Under the proposed action, the shopping center would increase their current levels of employment from the existing AAFES facilities. The overall employment would increase by 4 employees for a total of 111 employees under the proposed action. Current total annual salary and benefits associated with the existing BX, clothing store, car care center, and Class Six total $2.7 million. Under the proposed action, the estimated total annual salary and benefits associated with the shopping center and associated facilities would increase by approximately 2.5 percent. Annual sales are also expected to increase once the new shopping center is opened. Annual sales for the existing BX, clothing store, car care center, and Class Six average $35 million. Annual projected sales after implementation of the proposed action, are estimated to be $42 million (AAFES 2004).

2.5 DESCRIPTION OF THE NO-ACTION ALTERNATIVE

The No-Action Alternative would maintain the status quo at OAFB. The existing shopping center would continue to operate as it does currently. The existing site identified on Figure 1-2 would remain unchanged. Personnel and dependents associated with the installation would continue to use the existing BX, BX annex, gas station, Class Six, and post office, which are unconsolidated, undersized, outdated, and poorly configured. Over the long-term, use of these existing facilities would result in overall customer dissatisfaction and low morale, ultimately

degrading the ability of AAFES to provide high quality facilities and services to military members and their dependents.

2.6 COMPARISON MATRIX OF ENVIRONMENTAL EFFECTS OF PROPOSED ACTION AND NO-ACTION ALTERNATIVE

Table 2-1 presents a comparison of the potential environmental effects, including cumulative effects, resulting from implementation of the proposed action or the No-Action Alternative. The environmental effects are described in Section 4. As shown in Table 2-1, the proposed action and the No-Action Alternative would have no appreciable effects on these resources.

Table 2-1 Comparison of Potential Environmental Consequences

Resource Area	*Proposed Action*	*No-Action*
Air Quality	○	○
Noise	○	○
Land Use	+	○
Geologic Resources	○	○
Water Resources	○	○
Biological Resources	○	○
Transportation/Circulation	+	○
Cultural Resources	○	○
Socioeconomics	○	○
Environmental Justice	○	○
Hazardous Materials and Wastes	○	○
Utilities	○	○

Notes: ○ = Negligible or no impacts
◑ = Adverse but not significant impacts
● = Potential for significant impacts
+ = Beneficial impacts

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3 AFFECTED ENVIRONMENT

This section describes relevant existing environmental conditions for resources potentially affected by the proposed action and No-Action Alternative described in Section 2. This description of the environment that may be affected provides a framework for understanding the potential direct, indirect, and cumulative effects of the proposed action and the No-Action alternative.

As directed by guidelines contained in NEPA, CEQ regulations, and 32 CFR 989, *The Environmental Impact Analysis Process*, the description of the affected environment focuses only on those resource areas potentially subject to impacts and should be commensurate with the anticipated level of environmental impact.

This EA analyzes potential environmental effects for the following resource areas: air quality, noise, land use, geological resources, water resources, biological resources, transportation and circulation, cultural resources, socioeconomics, environmental justice and protection of children, hazardous materials and wastes, and utilities. The following subsections contain definitions of each resource, a description of the associated region of influence (ROI) for each resource, and existing conditions for each resource within the associated ROI.

3.1 AIR QUALITY

3.1.1 Definition of Resource

Air quality is defined as the ambient air concentrations of specific criteria pollutants determined by the USEPA to be of concern to the health and welfare of the general public. These 7 criteria pollutants include ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead (Pb). To establish limits on pollutant concentrations, the USEPA has created National Ambient Air Quality Standards (NAAQS) to identify the maximum allowable concentrations of criteria pollutants that are considered safe, with an additional adequate margin of safety, to protect human health and welfare (Table 3-1). Depending on the type of pollutant, these maximum concentrations may not be exceeded at any time, or may not be exceeded more than once per year (USEPA 2004a). The Nebraska Department of Environmental Quality has adopted the NAAQS for all criteria pollutants.

Indoor air quality is addressed in this EA as it relates to buildings constructed over areas that may be contaminated with petroleum hydrocarbons. Currently no numeric standards or limits exist in the indoor air quality regulations established by USEPA or the State of Nebraska for contaminants of this nature. With regard to occupational (i.e., workplace) exposure, OSHA has established (29 CFR 1910.1028) a Permissible Exposure Limit (PEL) of 1 ppm (TWA) for benzene, a typical component of gasoline.

POLLUTANT	AVERAGING TIME	NAAQS	
		Primary	Secondary
Ozone (O_3)	8 Hour	0.08 ppm (157 µg/m^3)	Same as Primary Standards
	1 Hour	0.12 ppm (235 µg/m^3)	
Carbon Monoxide (CO)	8 Hour	9 ppm (10 mg/m^3)	Same as Primary Standards
	1 Hour	35 ppm (40 mg/m^3)	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.053 ppm (100 µg/m^3)	Same as Primary Standards
Sulfur Dioxide (SO_2)	Annual Average	0.03 ppm (80 µg/m^3)	—
	24 Hour	0.14 ppm (365 µg/m^3)	—
	3 Hour	—	0.50 ppm (1,300 µg/m^3)
Suspended Particulate Matter Less than 10 Microns in Diameter (PM_{10})	Annual Arithmetic Mean	50 µg/m^3	Same as Primary Standards
	24 Hour	150 µg/m^3	
Suspended Particulate Matter Less than 2.5 Microns in Diameter ($PM_{2.5}$)	Annual Arithmetic Mean	15 µg/m^3	Same as Primary Standards
	24 Hour	65 µg/m^3	
Lead (Pb)	Calendar Quarter	1.5 µg/m^3	Same as Primary Standards

ppm – parts per million µg/m^3 – micrograms per cubic meter mg/m^3 – milligrams per cubic meter Source: USEPA 2003a.

Table 3-1 National Ambient Air Quality Standards

3.1.1.1 Criteria Pollutants

Criteria pollutants affecting air quality in a given region can be characterized as being either stationary or mobile sources. Stationary sources of emissions, also known as point sources, are typified by emissions from smokestacks. Mobile sources of emissions, also termed non-point sources, would include emissions from cars and airplanes. Air quality within a region is a function of the type and amount of pollutants emitted, size and topography of the air basin, and prevailing meteorological conditions.

Ozone

The majority of ground-level O_3 (smog) is formed as a result of complex photochemical reactions in the atmosphere between volatile organic compounds (VOCs), nitrogen oxides (NO_x), and oxygen. VOCs and NO_x are considered precursors to the formation of O_3, a highly reactive

gas that can damage lung tissue and affect respiratory function. While O_3 in the lower atmosphere is considered a damaging air pollutant, O_3 in the upper atmosphere is beneficial, as it protects the earth from harmful ultraviolet radiation. However, atmospheric processes preclude ground-level O_3 from reaching the upper atmosphere (USEPA 2004b).

Carbon Monoxide

CO is a colorless, odorless, poisonous gas produced by the incomplete combustion of fossil fuels. Elevated levels of CO can result in harmful health effects, especially for the young and elderly, and can also contribute to global warming (USEPA 2004b).

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas produced primarily as a result of the burning of fossil fuels. NO_2 can also lead to the formation of O_3 in the lower atmosphere. NO_2 can cause respiratory ailments, especially in the young and elderly, and can lead to degradations in the health of aquatic and terrestrial ecosystems (USEPA 2004b).

Sulfur Dioxide

SO_2 is emitted primarily from the combustion of coal and oil by steel mills, pulp and paper mills, and from non-ferrous smelters. High concentrations of SO_2 can aggravate existing respiratory and cardiovascular diseases in asthmatics and others who suffer from emphysema or bronchitis. SO_2 also contributes to acid rain, which can in turn lead to the acidification of lakes and streams (USEPA 2004b).

Particulate Matter

$PM_{2.5}$ includes fine particles that are believed to pose significant health risks by lodging deeply into the lungs. Studies have linked increased exposure to $PM_{2.5}$ to respiratory and cardiovascular disease as well as premature death. Sources of $PM_{2.5}$ and PM_{10} include crushing or grinding operations, and dust from paved or unpaved roads (USEPA 2004c).

PM_{10} is typically comprised of dust, ash, soot, smoke, or liquid droplets emitted into the air. Fires, unpaved roads, construction activities, and natural sources (wind and volcanic eruptions) can contribute to increased PM_{10} concentrations. PM_{10} particles can be inhaled into the respiratory system, leading to the possible aggravation of lung diseases (USEPA 2004b).

Lead

Typically, lead emissions are associated with large stationary industrial sources (e.g., smoke stacks). Other sources of lead may include pipes, fuel, and paint, although the use of lead in these materials has declined dramatically in recent decades. Lead can be inhaled directly or ingested indirectly by consuming lead-contaminated food, water, or dust. Fetuses and children are most susceptible to lead poisoning, which can result in heart disease and nervous system damage (USEPA 2004b).

3.1.1.2 Clean Air Act Amendments

Through the Clean Air Act (CAA) Amendments of 1990, the USEPA has required each state to prepare a State Implementation Plan (SIP), which describes how each state will achieve compliance with the NAAQS. The SIP is a compilation of goals, strategies, schedules, and enforcement actions that will help lead a state into compliance with the NAAQS. Nebraska has adopted the NAAQS. Areas not in compliance with the NAAQS can be declared nonattainment areas by the USEPA, or the appropriate state or local agency. Areas in compliance with the NAAQS are defined as being in attainment. Where insufficient air quality monitoring data exist to determine attainment status for an area, the region is designated as unclassified.

The criteria for nonattainment status varies by pollutant: 1) an area is in nonattainment for O_3 if the NAAQS have been exceeded more than three discontinuous times in 3 years; and 2) an area is in nonattainment for any other pollutant if the NAAQS have been exceeded more than once per year.

The CAA established certain statutory requirements for federal agencies with proposed federal activities to demonstrate conformity of the proposed activities with the SIP for attainment of the NAAQS. Under these rules, certain actions are exempt from conformity determinations, while others are presumed to be in conformity if total project emissions are below *de minimis* levels established under 40 CFR 93.153. *De minimis* levels (in tons per year) vary from pollutant to pollutant and are also subject to the severity of the nonattainment status.

3.1.2 Existing Conditions

3.1.2.1 Climate

Climate in the OAFB area is characterized by warm and humid summers and cold and dry winters. The mean temperature is approximately 77 degrees Fahrenheit (°F) during the summer and the mean temperature is approximately 23 °F in the winter. The OAFB area (Sarpy County) averages approximately 30 inches of rain a year, with the majority of rain falling from April through September. Winds average approximately 11 miles per hour, typically from the northwest or southeast, depending upon the time of year.

3.1.2.2 Regional Setting

OAFB is located in Sarpy County, Nebraska, within Air Quality Control Region (AQCR) 50 (The Metropolitan Omaha Council Bluffs Interstate AQCR). All of Sarpy County is in attainment or unclassified for all of the NAAQS (USEPA 2004d). No Prevention of Significant Deterioration (PSD) Class I areas are located within the vicinity of OAFB (USEPA 2004e).

3.1.2.3 Air Emissions Inventory

The 2003 Air Emissions Inventory categorizes emissions from all stationary sources at OAFB (Table 3-2). Primary stationary sources include combustion emissions from boilers, furnaces, generators, incinerators, and aircraft maintenance. OAFB is considered a major source of NO_x, CO, and VOC emissions and are therefore required to obtain a CAA Title V major source operating permit to the Nebraska Department of Environmental Quality (OAFB 2001).

Table 3-2 2001 Actual Stationary Emissions at OAFB (tons/year)

CO	VOCs	NO_x	SO_2	PM_{10}	$PM_{2.5}$	Total HAPs
27.55	14.31	42.83	0.54	2.51	2.26	1.59

Source: OAFB 2003.
Note: HAPs = Hazardous Air Pollutants

Based on USEPA memorandum August 2, 1996, certain facilities are exempt from permitting requirements primarily since such activities are not essential to the primary military activity. Based on USEPA guidance for Major Source Determinations at Military Installations under the Air Toxics, New Sources Review, and Title V Operating Permit Program of the CAA, the existing AAFES gas station at the proposed project site is not part of Offutt AFB's Title V major source operating permit and emissions from the gas station are not included in yearly Air Emissions Inventories.

3.1.3 Indoor Air Quality

There currently are no known indoor air quality problems in the buildings located in or near the area of proposed construction. However, a portion of the site associated with the proposed action is situated on soil that may be contaminated based on information contained in reports from past subsurface investigations that identified petroleum hydrocarbons in the soil and groundwater (see Section 3.11.2.1). One specific contaminant identified during various site investigations included benzene, a typical component of gasoline. It is possible that weathered petroleum products existing in the soil, soil gases, or groundwater could seep into the subsurface portions of these buildings and affect indoor air quality. Currently no numeric standards or limits exist in the indoor air quality regulations established by USEPA or the State of Nebraska for contaminants of this nature. With regard to occupational (i.e., workplace) exposure, OSHA has established (29 CFR 1910.1028) a PEL of 1 ppm (TWA) for benzene.

3.2 NOISE

3.2.1 Definition of Resource

Noise can be defined as any sound that interferes with communication, is intense enough to damage hearing, or is otherwise annoying (Federal Interagency Committee on Noise [FICON] 1992). Human response to noise varies according to the type and characteristics of the noise source, distance between the source and the receptor, sensitivity of the receptor, and time of day.

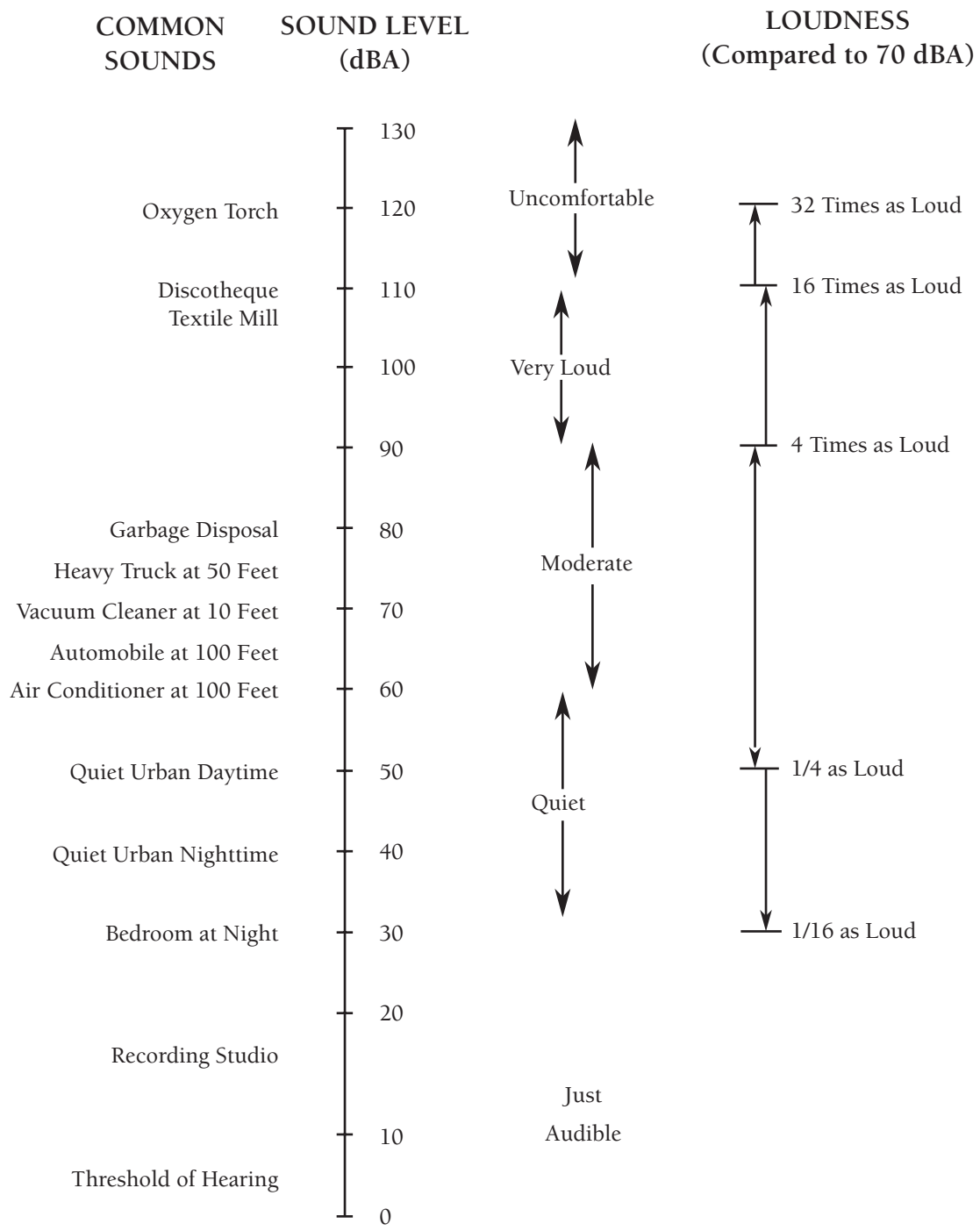
The physical characteristics of sound include its level, frequency, and duration. Sound is commonly measured with instruments that record instantaneous sound levels in decibels (dB), which are based on a logarithmic scale (e.g., a 10 dB increase corresponds to a 100 percent increase in perceived sound). Under most conditions, a change of 5 dB is required for humans to perceive a change in the noise environment (USEPA 1973).

Sound measurements are often weighted to emphasize those frequencies heard especially well by the human ear. While the range of frequencies across which humans hear extends from 20 to 20,000 Hertz, the human ear is most sensitive to sounds in range of 1,000 and 8,000 Hertz, with sensitivity diminishing at lower and higher frequencies. As a result, A-weighted sound level measurements (dBA), which de-emphasize the high and low frequencies and emphasize the middle frequencies, are used to characterize sound levels that are heard especially well by the human ear. As seen in Figure 3-1, human hearing ranges from approximately 20 dBA (the threshold of hearing) to 120 dBA (the threshold of pain).

The sound exposure level (SEL) is a measure of the physical energy associated with a noise event that incorporates both the intensity and duration of the event. For example, the SEL associated with an aircraft overflight would be comprised of noise levels for the period of time when the aircraft is approaching (noise levels are increasing), the instant when the aircraft is directly overhead (noise levels are at a maximum), and the period of time when the aircraft is departing (noise levels are decreasing). As the SEL also considers the duration of a noise event, SEL values are typically higher than the maximum noise level measured for most noise events.

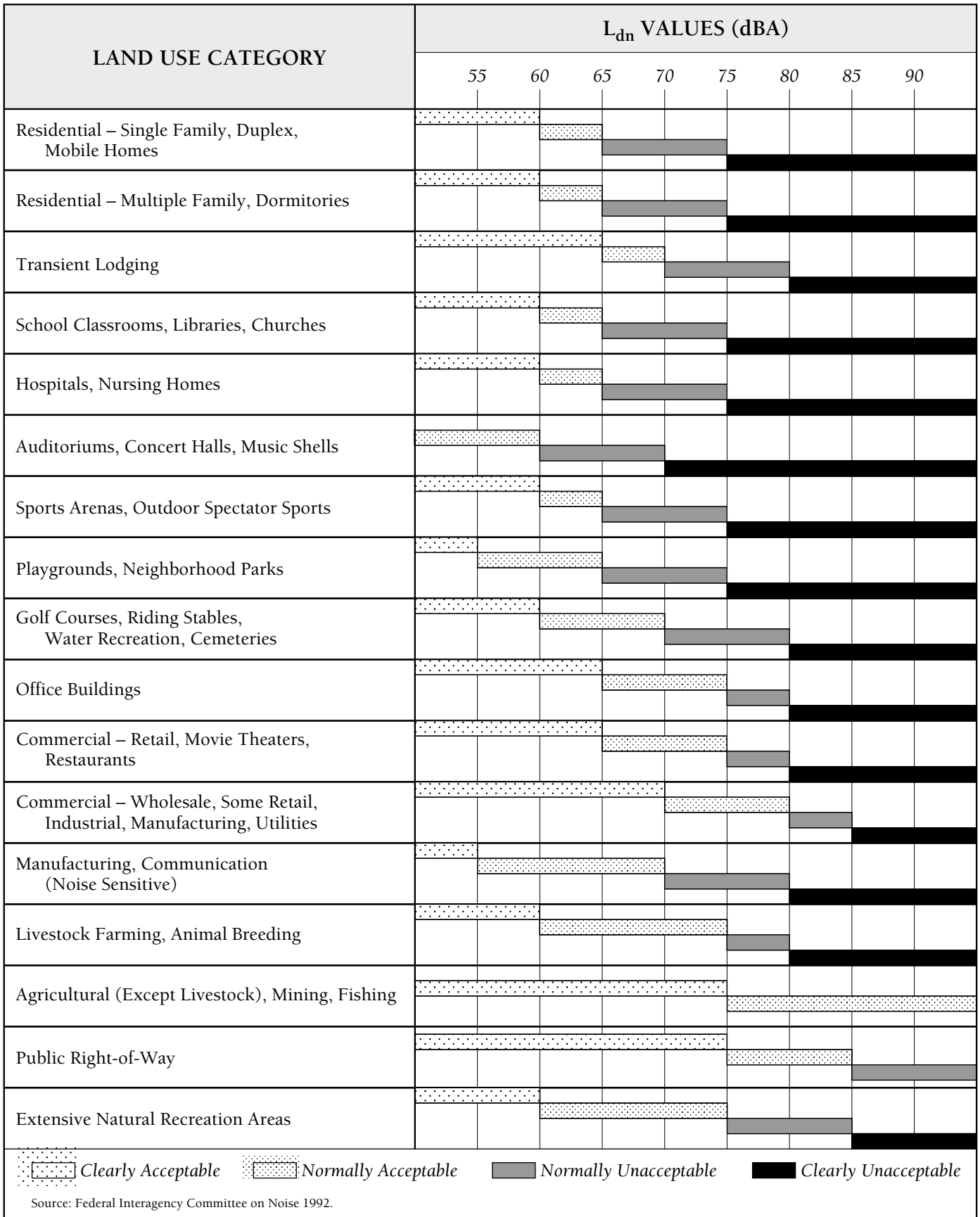
The day-night average sound level (L_{dn}) is the energy-averaged sound level of all SEL values within a 24-hour period, with a 10 dBA penalty assigned to noise events occurring between 10:00 P.M. and 7:00 A.M. to compensate for the annoyance associated with the occurrence of nighttime noise events. The L_{dn} is the preferred noise metric of the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, Federal Aviation Administration, USEPA, and the Department of Defense (DoD).

Most people are exposed to sound levels of 50-55 dBA (L_{dn}) or higher on a daily basis. Studies conducted to determine noise impacts on various human activities have revealed that sound levels below 65 dBA (L_{dn}) do not significantly bother approximately 87 percent of the population (FICON 1992). Figure 3-2 provides the guidelines established by FICON that are commonly used to determine acceptable levels of noise exposure for various types of land use.



Source: Harris 1979.

Figure 3-1
Examples of Typical Sound Levels
in the Environment



Source: Federal Interagency Committee on Noise 1992.

Figure 3-2
Recommended Land Use for
L_{dn}-Based Noise Values

3.2.2 Existing Conditions

Noise sources at OAFB are primarily generated by aircraft operations, on- and off-base vehicle operations, and construction projects. Construction projects are considered short-term in their effects, and noise impacts are generally isolated to the site of the project and the immediate vicinity. OAFB has a 11,700-foot by 300-foot primary runway (12/30) with aircraft operations divided almost evenly in both directions.

The nearest noise-sensitive receptor to the site of the proposed action is the on-base historic military housing area approximately 500 feet east of the proposed project site.

3.3 LAND USE

3.3.1 Definition of Resource

Land use comprises the natural conditions and/or human-modified activities occurring at a particular location. Human-modified land use categories include residential, commercial, industrial, transportation, communications and utilities, agricultural, institutional, recreational, and other developed use areas. Management plans and zoning regulations determine the type and extent of land use allowable in specific areas and are often intended to protect specially designated or environmentally sensitive areas.

3.3.2 Existing Conditions

3.3.2.1 Regional and Local Land Use

OAFB is located in eastern Sarpy County, Nebraska, nine miles south of downtown Omaha. It is bounded by the City of Bellevue to the north, east, and west. To the south, Sarpy County has granted zoning jurisdiction to the City of Bellevue, however, the area is not within city limits. The Papillion Creek forms the southwestern border, and to the south and southeast lies agricultural land. The Missouri River flows one mile to the east and the Platte River lies approximately one and a half miles to the south. The urban development of the City of Bellevue includes a mix of residential, industrial, and strip commercial uses.

3.3.2.2 Installation Land Use

OAFB and its remote sites consists of approximately 4,041 acres of land, all of which are improved or developed in some manner. Occupied building, structures, pavements, and landscaped residences make up a majority of the acreage, and the runways, taxiways, and adjacent infield areas account for over 1,059 acres (OAFB 2004). Two golf courses, the Base Lake Recreation Area, playgrounds, picnic areas and other recreational developments, are the primary focus of outdoor recreation activities at Offutt AFB. Figure 3-3 shows the existing land use at OAFB.

The installation includes three housing areas, commonly referred to as: Historic, Coffman Heights, and Capehart. The Historic military family housing area contains 32 units which are located adjacent to the base community center and industrial facilities south of the active runway. Coffman Heights currently consists of 154 units and an additional 186 units are planned for construction. The Capehart housing area is located approximately 1 mile west of the SAC gate, and consists of 2,059 units.

Figure 3-3
Land Use at Offutt AFB, NE

Land Use and the Noise Environment

Land use activities most sensitive to ambient noise are residential, public services, commercial, cultural, and recreational. Noise generated from aircraft and roadway traffic represents the greatest contribution to the overall noise environment at OAFB. Construction activities can also result in disruption to noise-sensitive receptors and land use areas (e.g., outdoor recreation participants or administrative personnel); however, construction activities tend to be temporary and associated noise can be reduced with special equipment and scheduling restrictions. The land immediately surrounding OAFB is not in conflict with the noise levels generated by installation activities.

3.4 GEOLOGICAL RESOURCES

3.4.1 Definition of Resource

Geological resources are defined as the geology, soils, and topography of a given area. The geology of an area includes bedrock materials, mineral deposits, and fossil remains. The principal geologic factors influencing stability of structures are soil stability and seismic properties. Soil, in general, refers to unconsolidated earthen materials overlying bedrock or other parent material. Soil structure, elasticity, strength, shrink-swell potential, and erodibility all determine the ability for the ground to support structures and facilities. Relative to development, soils typically are described in terms of their type, slope, physical characteristics, and relative compatibility or limitations with regard to particular construction activities and types of land use. Long-term geological, erosional, and depositional processes typically influence the topographic relief of an area. Topography incorporates the physiographic, or surface, features of an area and is usually described with respect to elevation, slope, aspect, and landforms.

3.4.2 Existing Conditions

3.4.2.1 Geological Resources

OAFB is located within the Dissected Till Plains section of the Central Lowland province. A majority of the base consists of gently sloping to flat topography consistent with the Dissected Till Plains that comprise the eastern one-fifth of Nebraska. The northern portion of OAFB is rolling uplands. The local bedrock consists of Cretaceous Dakota Sandstone which lies between 40 and 100 feet below ground surface. OAFB is underlain by limestone and shales of the Lansing and Kansas City Groups.

OAFB generally lies within elevations ranging from 1,150 feet above mean sea level at the highest elevation to 960 feet above mean sea level in the southeastern corner of the base near the Missouri River.

3.4.2.2 Soils

A variety of silty clay loams and clayey and sandy alluvium exist on OAFB. Within the southeastern portion of the base near the Missouri river the soils consist of silty clay and wet alluvial soils. The soil associations found on base include: Judson, Marshall, Albaton, Monona, Ida, Onawa, Colo, Hayine, and Wet Alluvial. Generally, soils throughout the base provide sufficient nutrients to support vegetation cover without the use of chemicals.

3.5 WATER RESOURCES

3.5.1 Definition of Resource

Water resources include both surface and subsurface water. Surface water includes all lakes, ponds, rivers, and streams within a defined area or watershed. Subsurface water, commonly referred to as groundwater, is typically found in certain areas known as aquifers. Aquifers are areas of mostly high porosity soil where water can be stored between soil particles and within soil pore spaces. Groundwater is typically recharged during precipitation events and is withdrawn for domestic, agricultural, and industrial purposes.

Due to dangers and damages associated with major flooding, legislation has been developed to limit construction within identified flood-prone zones. Specifically, development of areas within the identified 100-year floodplain zone (areas generally subject to major flooding once every 100 years) is typically limited to recreation and preservation activities. Flood hazards associated with the 100-year floodplain are also addressed in this section.

The Clean Water Act (CWA) of 1972 is the primary Federal law that protects the nation's waters, including lakes, rivers, aquifers, and coastal areas. The primary objective of the CWA is to restore and maintain the integrity of the nation's waters.

Water resources analyzed in this section include the surface and subsurface water resources at and surrounding OAFB. Wetlands are addressed in Section 3.6, Biological Resources.

3.5.2 Existing Conditions

3.5.2.1 Surface Water

OAFB is located in the Missouri River Drainage Basin and is adjacent to Papillion Creek which is the major stream in the area. The Missouri River is located approximately one mile east of the installation and Papillion Creek flows northwest to southeast between the Capehart Housing Area and the Main Base (Figure 3-4). Base Lake is located in the southeastern portion of the base. Base Lake coves approximately 113 acres of land and averages 23 feet deep. The lake is a flooded remnant of the borrow pit created for runway construction. The surface drainage patterns on OAFB generally flow east towards Papillion Creek and the Missouri River.

Although OAFB is protected by levees and not in the 100-year flooplain, there remains a drainage problem near the East Gate in the event that the Missouri River floods (OAFB 2004).

3.5.2.2 Groundwater

The water table at OAFB ranges from depths of 7 to 70 feet below ground surface (bgs) (OAFB 2001). OAFB has no production wells used for human consumption and receives its water supplies from the Metropolitan Utilities District of Omaha, Nebraska (OAFB 2004).

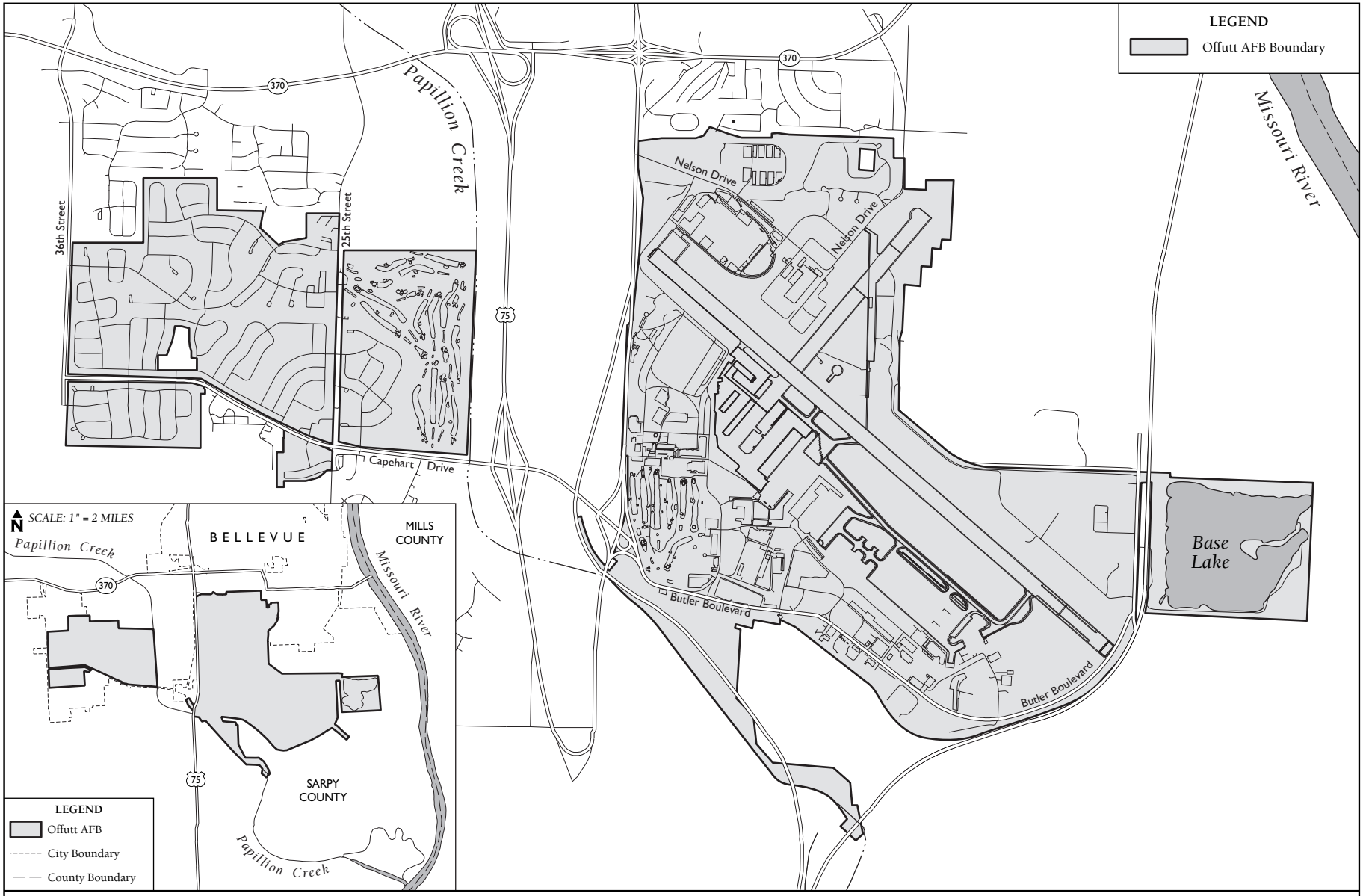


Figure 3-4
Surface Water Features at and in the Vicinity of Offutt AFB, NE

3.6 BIOLOGICAL RESOURCES

3.6.1 Definition of Resource

Biological resources include living, native, or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to as vegetation and animal species are referred to as wildlife. Habitat can be defined as the resources and conditions present in an area that produces occupancy of a plant or animal (Hall et al. 1997). Although the existence and preservation of biological resources are intrinsically valuable, these resources also provide aesthetic, recreational, and socioeconomic values to society. This analysis focuses on species or vegetation types that are important to the function of the ecosystem, of special societal importance, or are protected under Federal or state law or statute. For purposes of this EA, these resources are divided into three major categories: vegetation; wetlands and sensitive habitats; and rare, threatened, and endangered species.

Vegetation includes all existing terrestrial plant communities with the exception of wetlands or threatened, endangered, or sensitive plant species. The affected environment for vegetation includes only those areas potentially subject to ground disturbance.

Wetlands are considered sensitive habitats and are subject to Federal regulatory authority under Section 404 of the CWA and Executive Order (EO) 11990, *Protection of Wetlands*. Jurisdictional wetlands are defined by the U.S. Army Corps of Engineers (USACE) as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (USACE 1987). Areas meeting the Federal wetland definition are under the jurisdiction of the USACE. Wetlands generally include swamps, marshes, bogs, and similar areas. (33 CFR Part 328). Like vegetation, the affected environment for wetlands includes only those areas potentially subject to ground disturbance.

Rare, threatened, and endangered species are defined as those plant and animal species listed as rare, threatened, endangered, or proposed as such, by the USFWS. The Federal Endangered Species Act protects Federally listed threatened and endangered plant and animal species. Federal species of concern, formerly Category 2 candidate species, are not protected by law; however, these species could become listed and, therefore, protected at any time. Their consideration early in the planning process may avoid future conflicts that could otherwise occur.

3.6.2 Existing Conditions

3.6.2.1 Vegetation and Forestry

OAFB is situated within the Central Lowland Province. Vegetation in this area is bordered by the Oak-Pine Forest to the north. Due to previous urban development that has occurred at OAFB, only a small portion of the unimproved lands on OAFB contain original native vegetation cover. There are no natural wooded areas in existence at OAFB (OAFB 2001). Maintained grassy areas and improved land dominate the installation's groundcover. The Plant community on OAFB consist of an estimated 13,121 trees and 7,300 shrubs (OAFB 2001).

3.6.2.2 Rare, Threatened, and Endangered Species

According to the U.S. Fish and Wildlife, no Federally-listed endangered, threatened, or proposed species, or their designated Critical Habitats occur on OAFB (OAFB 2004). However, table 3-3 lists the special status species *potentially* occurring at OAFB.

Table 3-3 Special-Status Species Potentially Occurring at OAFB

Common Name	*Scientific Name*	*Status*[1] *Federal*	*State*
Plants			
Harper's Filmbristylis	*Filmbristylis perpusilla*	SC	NL
Pondspice	*Litsea aestivalis*	SC	NL
Eastern Bloodleaf	*Iresines rhizomatosa*	TBD	TBD
Virgina Least Trillium	*Trillium pusillum var. virginianum*	TBD	TBD
Birds			
Piping Plover	*Charadrius melodius*	T	T
Least Tern	*Sterna antillarum*	NL	C
Great Egret	*Asmerodius albus*	NL	C
Peregrine Falcon	*Falco peregrinus*	E	E
Bald Eagle	*Haliaeetus leucocephalus*	T	E
Vertebrates			
Mabee's Salamander	*Ambystoma mabeei*	NL	T
Invertebrates			
Northern Beach Tiger Beetle	*Cincidela dorsalis dorsalis*	T	SC

Notes: [1] C = Candidate, E = endangered, NL = not listed, SC = species of concern, T = threatened, TBD = To Be Determined.
Source: OAFB 2004.

3.6.2.3 Wetlands

In accordance with Air Force policy, installations are required to develop and maintain a current inventory of natural habitats as part of the Integrated Natural Resources Management Plan (INRMP). Wetlands are a significant natural habitat which should be included in this inventory. Alteration of wetlands is limited at military installations by EO 11990 and by the CWA.

According to the base wide jurisdictional wetland delineation study conducted in 1996, there are no jurisdictional wetlands within OAFB (OAFB 2004). Three wetland areas were delineated outside of the perimeter fence on Offutt AFB (OAFB 2004). There are no wetlands on or adjacent to the site of the proposed action.

3.7 TRANSPORTATION AND CIRCULATION

3.7.1 Definition of Resource

Transportation refers to the movement of vehicles on roadway networks. Primary roads, such as major interstates, are designed to move traffic and do not necessarily provide access to all adjacent areas. Secondary roads, commonly referred to as surface streets, are used to gain access to residential and commercial areas, hospitals, and schools. Roadway operating conditions are typically described in terms of average daily traffic (ADT) volumes.

3.7.2 Existing Conditions

3.7.2.1 Installation Circulation

Access to the OAFB is from the following major highways: Nebraska Highway 370 running east-west from the bridge in Bellevue across Sarpy County to I-80; U.S. Highway 75/Kennedy Freeway running north-south located west of the Main Base and is also the main access route to Omaha; Fort Crook Road directly west of the Main Base, parallel to Highway 75; and Capehart Road, connecting the Capehart Housing Area and the SAC Gate on base. The ADT on these roads range from 14,000 to 35,000 vehicles per day (OAFB 2004). Traffic congestion usually occurs during standard morning and evening peak traffic periods, generally in the vicinity of the three operational entrance gates: Bellevue, Kenney, and SAC gates.

There are five entrance gates on OAFB, two of which are closed (Figure 3-5). The three active gates (Bellevue, Kenney, and SAC gates) funnel traffic into and out of all areas of the base via arterial roads. The Meyer and East Gates are only open during special events occurring on the installation.

Parking is generally adequate throughout the base however, parking has been an issue at the USSTRATCOM, the Community Center, and the existing BX. The parking lot closest to the BX has an occupancy rate of 93 percent during peak periods. According to the BX manager, parking is the greatest constraint limiting sales growth (OAFB 2004).

The proposed project site is accessed via the Kenney Gate or SAC gate, along SAC Boulevard and onto Second Avenue. The site is located on South Avenue just east of the Meyer Gate and is bounded to the north by Grants Pass, to the west by Custer Drive, to the east by SAC Boulevard, and to the south by South Avenue.

Several changes to the existing transportation system have been proposed in the OAFB General Plan. The most significant change proposed is the potential reuse of Meyer and East Gates and the upgrading of SAC Gate to alleviate existing inadequacies of the base transportation system.

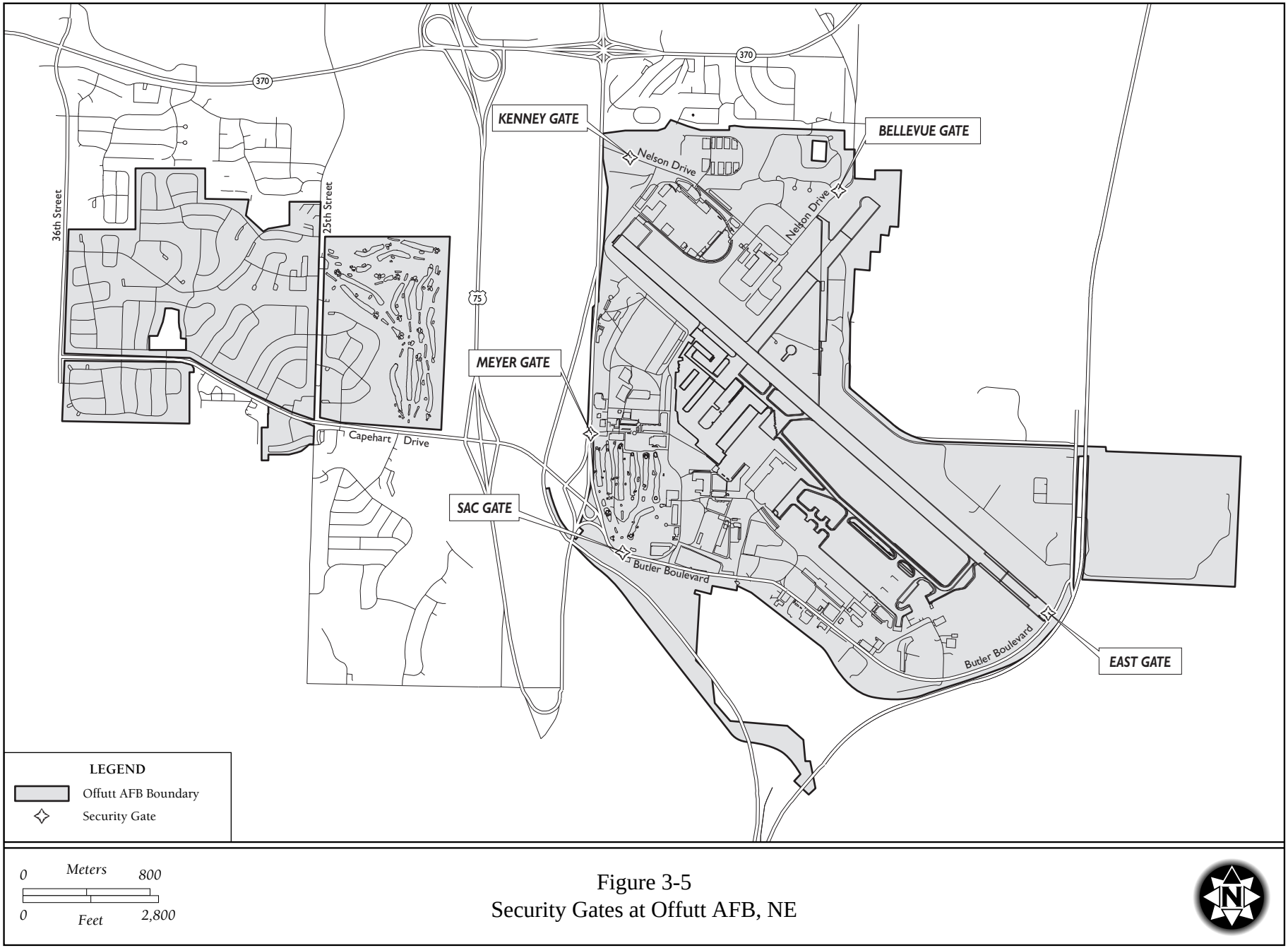


Figure 3-5
Security Gates at Offutt AFB, NE

3.8 CULTURAL RESOURCES

3.8.1 Definition of Resource

Cultural resources consist of prehistoric and historic districts, sites, structures, artifacts, or any other physical evidence of human activity considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. Cultural resources can be divided into three major categories: archaeological resources (prehistoric and historic), architectural resources, and traditional cultural resources.

Archaeological resources are locations where human activity measurably altered the earth or left deposits of physical remains (e.g., tools, arrowheads, or bottles). "Prehistoric" refers to resources that predate the advent of written records in a region. These resources can range from a scatter composed of a few artifacts to village sites and rock art. "Historic" refers to resources that postdate the advent of written records in a region. Archaeological resources can include campsites, roads, fences, trails, dumps, battlegrounds, mines, and a variety of other features.

Architectural resources include standing buildings, dams, canals, bridges, and other structures of historic or aesthetic significance. Architectural resources generally must be more than 50 years old to be considered for protection under existing cultural resource laws. However, more recent structures, such as Cold War era military buildings, may warrant protection if they have exceptional characteristics and the potential to be historically significant structures. Architectural resources must also possess integrity (i.e., its important historic features must be present and recognizable).

Traditional cultural resources can include archaeological resources, buildings, neighborhoods, prominent topographic features, habitats, plants, animals, and minerals that Native Americans or other groups consider essential for the continuance of traditional cultures.

Only significant cultural resources, known or unknown, warrant consideration with regard to adverse impacts resulting from a proposed action. To be considered significant, archaeological or architectural resources must meet one or more criteria as defined in 36 CFR 60.4 for inclusion in the National Register of Historic Places (NRHP).

Several Federal laws and regulations have been established to manage cultural resources, including the National Historic Preservation Act (1966), the Archaeological and Historic Preservation Act (1974), the American Indian Religious Freedom Act (1978), the Archaeological Resource Protection Act (1979), and the Native American Graves Protection and Repatriation Act (1990). In addition, coordination with Federally recognized Native American tribes must occur in accordance with EO 13084, *Consultation and Coordination with Indian Tribal Governments*.

On November 27, 1999, the DoD promulgated its Annotated American Indian and Alaska Native Policy, which emphasizes the importance of respecting and consulting with tribal governments

on a government-to-government basis. This Policy requires an assessment, through consultation, of the effect of proposed DoD actions that may have the potential to significantly affect protected tribal resource, tribal rights, and Indian lands before decisions are made by the respective services.

3.8.2 Existing Conditions

The Fort Crook Historic District represents the first of these historic resources which contains architecturally unique and significant buildings representative of the Quartermaster Style of architecture. The district is also significant as it serves to define the historic parade ground. The district includes old brick officer and enlisted quarters, a guard house, blacksmith shop, fire station, and parade ground. The Fort Crook Historic District was listed on the NRHP in 1976 and has expansion potential.

Building 44 (former Blacksmith Shop) which is located approximately 65 feet from the site of the proposed action was listed on the NRHP in 1978. The Blacksmith Shop was constructed in 1893 and consists of a single story structure designed as a regimental blacksmith, tinsmith, plumber, paint, carpenter, and wheelwright shop. The building is significant for its architecture, excellent craftsmanship, and its role in support of military operations. The building is currently used as the installation Billeting office.

The Martin Bomber Building/Area (Building 301) is also a significant historic resources due to its role in airplane production during World War II, its unique manufacturing capabilities, and its massive size.

Other facilities have been identified for nomination on the NRHP due to their historic or cold war significance, however, none are located at or in the immediate vicinity of the proposed action. In addition, there are no archeological sites on OAFB (OAFB 2004).

3.9 SOCIOECONOMICS

3.9.1 Definition of Resource

Socioeconomics comprise the basic attributes of population and economic activity within a particular area or ROI and typically encompass population, employment and income, and industrial/commercial growth. Impacts on these fundamental socioeconomic resources can also influence other components such as housing availability and public services provision.

Socioeconomic data are presented for the City of Bellevue, Sarpy County, the State of Nebraska, and the U.S. to analyze baseline socioeconomic conditions in the context of regional, state, and national trends.

3.9.2 Existing Conditions

3.9.2.1 Population

Regional

The Omaha-Council Bluffs, NE-IA Metropolitan Statistical Area (MSA) is composed of five counties: Douglas, Sarpy, Cass and Washington counties in Nebraska and Pottawattamie County in Iowa (Omaha Chamber of Commerce 2004). The Omaha MSA population is 734,270 and is the 61st largest statistical area in the U.S. (Omaha Chamber of Commerce 2004). Sarpy County population increased over 20,000 from 1990 to 2000, representing a 19.5 percent increase and is the third highest population in the state (Table 3-4). The population of Nebraska gained 8.4 percent and the City of Bellevue experienced a population growth of 43 percent. Both the city and county surged ahead of the State of Nebraska and the United States for percent population growth over the last decade. The steady growth of the five-county Omaha MSA is expected to continue, with the largest percentage increase expected in Sarpy County. The Omaha MSA population is expected to increase over 25 percent between 1990 and 2010 (Omaha Chamber of Commerce 2004).

Table 3-4 Population for the United States, State of Nebraska, Sarpy County, and City of Bellevue, 1990-2000

Year	United States Population	Nebraska Population	Sarpy County Population	City of Bellevue Population
1990	248,709,873	1,578,305	102,583	30,982
2000	281,421,906	1,711,263	122,595	44,382
% Change '90-'00	**13.2**	**8.4**	**19.5**	**43.0**

Source: U.S. Bureau of the Census (USBC) 2004a, 2004b.

OAFB

The current employee personnel levels associated with OAFB total 12,053. This total is composed of 8,481 military members, 2,019 appropriated fund civilians, and 1,553 other civilians employed on base (OAFB 2003b).

3.9.2.2 Regional Job Growth and Unemployment

The service-producing sectors accounted for more than 34 percent of jobs in the Omaha-Council Bluffs MSA. Combined, services and trade comprises 54 percent of metro area employment. Average employment in the Omaha-Council Bluffs MSA in 2002 was 430,667 compared with 330,520 in 1990, a gain of over 100,000 jobs (Omaha Chamber of Commerce 2004).

The unemployment rate for the Omaha-Council Bluffs MSA was 4.1 percent in 2003 compared with an unemployment rate of 5.8 percent for the U.S during the same year. The total number of unemployed persons in the MSA in 2003 was 17,400 (Omaha Chamber of Commerce 2004). According to the 2000 Census, Sarpy County had 1,817 unemployed persons, representing a 2.0 percent unemployment rate of the civilian labor force (USBS 2000). The City of Bellevue had 850 unemployed persons, representing a 2.5 unemployment rate (USBC 2000). The State of Nebraska had 32,287 unemployed persons, representing a 2.5 percent unemployment rate during the same year (USBC 2000). The unemployment rate was below the national rate of 3.7 during the same year (USBC 2000).

Job Composition

The labor force level for Nebraska was 959,217 in 2002, a 0.7 percent increase from 2001. The labor force for Sarpy County during the same year was 62,467 (U.S. Department of Labor, Bureau of Labor Statistics 2004).

In the state of Nebraska trade, transportation, warehousing, and utilities was the leading non-farm job sector with 196,000 jobs or 21.6 percent of the 2002 total. Education and health services ranked second in average number of jobs at 111,000 jobs, representing a 1.8 percent increase from the pervious year. The number of manufacturing jobs which represents 11.7 percent of non-farm employment, reached 4.2 percent in 2002.

The manufacturing sector averaged 106,000 jobs. Leisure and hospitality employment averaged 76,000 jobs, a slight increase from 2001. The financial service sector averaged 61,000 jobs, a notable 2.2 percent increase over 2001. The number of government sector jobs averaged 159,000 in 2002, up 1.5 percent from the pervious year. The number of federal government jobs totaled 16,000, or 10.1 percent of government sector jobs; state government jobs totaled 40,000, or 25.6 percent, and local government jobs totaled 102,000, or 64.2 percent. Government jobs represented 17.5 percent of total non-farm payroll jobs in 2002 (Bureau of Economic Analysis 2004).

According to the Omaha Chamber of Commerce, there are approximately 19,390 businesses located in the Omaha-Council Bluffs MSA. Table 3-5 lists the region's ten largest employers (Omaha Chamber of Commerce 2004).

Table 3-5 Top Ten Major Employers in the Omaha-Council Bluffs MSA

Employer (Overall Rank)
1. Offutt AFB, 55th Wing
2. Alegent Health
3. Omaha Public Schools
4. First Data Corp.
5. Methodist Health System
6. Mutual of Omaha Companies
7. Nebraska Medical Center
8. Odyssey Staffing, Inc.
9. Staff Mid-America
10. West Corporation

Source: Omaha Chamber of Commerce 2004.

Earnings

Average annual wages vary in Nebraska due to factors such as the type of jobs available, the different industrial composition of the counties, the mix between seasonal and year-round work, and the extent of union activity. Many of the jobs in Sarpy County provide relatively high wages, resulting in a per capita personal income of $27,638 in 2002—ranked tenth highest in the state (Bureau of Economic Analysis 2004).

Total personal income is a broader measure of financial strength for the residents of a county, including resources such as dividends, rents, and government transfer payments, as well as wages. Sarpy County was ranked third in the state of Nebraska with a total personal income level of $3,573,985 (Bureau of Economic Analysis 2004).

3.9.2.3 AAFES Employment and Expenditures

The AAFES BX, military clothing store, Class 6, and car care center at OAFB employs 107 personnel with combined annual salary and benefits totaling $2.7 million. Annual sales for the existing BX (including military clothing store, Class 6, and car care center) currently average $35 million (AAFES 2004).

3.10 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN

3.10.1 Definition of Resource

In 1994, EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was issued to focus attention of Federal agencies on human health and environmental conditions in minority and low-income communities. In addition, EO 12898 aims to ensure that disproportionately high and adverse human health or environmental effects on these communities are identified and addressed.

In order to provide a thorough environmental justice evaluation, this section gives particular attention to the distribution of race and poverty status in areas potentially affected by implementation of the proposed action. For purposes of this analysis, minority and low-income populations are defined as follows:

- *Minority Populations*: Persons of White origin, Blacks, American Indians and Alaska Natives, Asians, Native Hawaiian and Other Pacific Islanders, as well as those individuals who categorized themselves as "two or more races" or "some other race" on the Census 2000 questionnaire.

- *Low-Income Populations*: Persons living below the poverty level, based on U.S. Census Bureau intercensal data reported in the 2000 Profile of Selected Economic Characteristics.

Because children may suffer disproportionately from environmental health risks and safety risks, EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, was issued in 1997. EO 13045 helps to ensure that Federal agencies' policies, programs, activities, and standards address environmental risks and safety risks to children. This section identifies the locations where numbers of children may be disproportionately high (e.g., schools, childcare center, family housing) in areas potentially affected by implementation of the proposed action.

3.10.2 Existing Conditions

3.10.2.1 Race and Poverty Status

Population distribution data for Sarpy County, the City of Bellevue, and the State of Nebraska are summarized in Table 3-6. The City of Bellevue has the highest percent minority population (14.2 percent), followed closely by Sarpy County at 10.8 percent and Nebraska at 10.4 percent.

Table 3-6 Population Distribution: Sarpy County, City of Bellevue, and State of Nebraska, 2000

Race Category	Sarpy County	% Total Pop	City of Bellevue	% Total Pop	Nebraska	% Total Pop
White	109,335	89.2	38,092	85.8	1,533,261	89.6
Black/African American	5,340	4.4	2,719	6.1	68,541	4.0
American Indian and Alaska Native	515	0.4	223	0.5	14,896	0.9
Asian	2,331	1.9	938	2.1	21,931	1.3
Native Hawaiian and Other Pacific Islander	108	0.1	49	0.1	836	0.0
Other[1]	4,966	4.1	2,361	5.3	71,798	4.2
TOTAL	**122,595**	**100**	**201,568**	**100**	**1,711,263**	**100**

Source: USBC 2000.
[1]Census 2000 allowed respondents to define their race as either White, Black, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander. In addition, respondents were allowed to report "Some other race" and were given the option of selecting two or more races (57 possible combinations). The "Other" category combines numbers for "Some other race" and all combinations of two or more races.

Table 3-7 compares populations of Sarpy County, the State of Nebraska, and the United States that were below the poverty level in 1999, based on U.S. Census Bureau estimates. Data reveals that the percent of the population below the poverty level in Sarpy County was much lower than the population below the poverty level state and nation wide.

Table 3-7 Poverty Status: Sarpy County, State of Nebraska, and United States, 1999

Sarpy County	% Total Pop	Nebraska	% Total Pop	United States	% Total Pop
5,092	4.2	161,269	9.7	33,899,812	12.4

Source: USBC 2000.

There are no minority of low income populations living near the proposed project site or immediately off-base. The nearest housing areas to the proposed project site are NCO Row and General Row both of which are not considered minority or low income populations.

3.10.2.2 Protection of Children

As required by EO 13045, this analysis includes an assessment of the potential for children to be disproportionately exposed to environmental health risks and safety risks. According to the OAFB General Plan, as well as a field survey, there are no facilities adjacent to, or in the immediate area of, the proposed action that would contain disproportionate populations of children. The closest housing areas are NCO Row and General Row housing which generally consists of senior military officers and do not typically include large populations of children. The majority of military children live off-base in Capehart Housing. Furthermore, there are no childcare facilities or schools located near the proposed project site, since schools are located off-base. The nearest children population center is the Child Enrichment Center which is located approximately 750 – 1,000 feet from the proposed project site.

3.11 HAZARDOUS MATERIALS AND WASTES

3.11.1 Definition of Resource

Hazardous materials and hazardous wastes are defined and categorized by numerous environmental statutes as substances exhibiting the physical properties of ignitability, corrosivity, reactivity, or toxicity that may pose a substantial threat to human health or the environment.

The U.S. Air Force, through Air Force Policy Directive (AFPD) 32-70, *Environmental Quality*, establishes its commitment to environmentally sound management practices including: cleaning up environmental damage from past activities; meeting all environmental standards applicable to present operations; planning future activities to minimize environmental impacts; managing responsibly any natural and cultural resources it holds in public trust; and eliminating pollution from its activities wherever possible. AFPD 32-70 and the Air Force Instructions (AFI) series 32-7000 incorporate the requirements of all Federal regulations, DoD Directives, and other AFIs for the management of hazardous materials and hazardous wastes.

3.11.2 Existing Conditions

The Environmental Flight at OAFB oversees the management of hazardous materials and wastes for the entire installation.

Disposal of hazardous waste generated at OAFB is arranged through a Defense Reutilization Marketing Office (DRMO) service contract through which appropriately licensed hazardous waste contractors remove and dispose of the waste, and DRMO maintains all hazardous waste documentation in accordance with pertinent regulations.

Hazardous Materials. The BX Service Station (Bldg. 388) stores bulk quantities of fuel (unleaded gasoline) and waste oil in four underground storage tanks. The tanks are described in reference documents as 388-1A (550-gal waste oil), 388-2A (10,000-gal gasoline), 388-3A (10,000-gal gasoline), and 388-4A (10,000-gal gasoline).

Hazardous Waste. The Environmental Flight, pursuant to AFI 32-7042, developed a *Hazardous Waste Management Plan*. This plan provides guidance to OAFB personnel on the proper handling, storage, and disposal of hazardous waste and implements the USEPA "cradle-to-grave" management controls for hazardous waste.

Asbestos. AFI 32-1052 mandates that installations develop an asbestos management plan to reduce the potential of personal exposure to potentially hazardous levels of airborne asbestos fibers and to maintain compliance with pertinent asbestos regulations. The Environmental Flight developed an *Asbestos Management and Operations Plan* to meet these requirements. No known asbestos hazards exist in the buildings (Bldgs. 106, 137, 162, 165, and 388) scheduled for demolition as part of the proposed action. However, based on the dates of construction (1963-1983), it is possible that asbestos-containing materials were used in these buildings.

Based on interviews with knowledgeable personnel in the Civil Engineer Squadron, it is expected that soil excavation for footers or utility installations may encounter an out-of-use wastewater conveyance pipe buried below ground surface running west-east along the centerline of South Avenue (southern extent of the proposed construction area). CES personnel described the pipe as a cement-asbestos sanitary sewer force main that has been out of use for approximately 20 years.

Additional information provided by CES personnel indicates that in the early 1980s a wood frame building was demolished in place (wood and debris pushed into the basement) north of the proposed construction area (i.e., parallel to Grant's Pass, in line with Building 44). The building reportedly had asbestos siding and asbestos-containing wrap on the piping and fittings associated with the heating system.

Lead-Based Paint. No known lead-based paint hazards exist in the buildings scheduled for demolition as part of the proposed action. However, based on the dates of construction (1963-1983) of the buildings, it is possible that lead-based paint was used in the finishing and/or subsequent upgrade and renovation of these buildings.

3.11.2.1 Installation Restoration Program

This section describes activities in the vicinity of the proposed action that are part of the OAFB Installation Restoration Program (IRP). [Note: The Air Force now uses the term Environmental Restoration Program (ERP); however, since the term IRP was used in the documents reviewed and referenced for this EA, the former program name is included for consistency.] The IRP Phase I – Records Search conducted by Engineering-Science for the U.S. Air Force Strategic Air Command in August 1985 identified 15 sites at OAFB as having the potential for environmental contamination. The Phase I study evaluated the 15 sites using the Hazard Assessment Rating Methodology (HARM) and assigned a HARM Score for each site. The study recommended that each of the sites be further investigated and monitored. Of the 15 sites described in the Phase I study, only Spill Site No. 4 appears to be of interest in assessing the potential impacts of the proposed action due to its proximity to the proposed construction site.

The IRP Site described as Spill Site No. 4 encompasses a large area near the BX (AAFES) Gas Station and Auto Pride Service Garage (Building 388). In February of 1985, a discrepancy was noted in the MOGAS inventory at the gas/service station, and, subsequently, a leak was discovered in the supply line between the storage tanks and dispensers. At the time it was estimated that 900 gallons of leaded gasoline were lost. In 1991, Woodward-Clyde Consultants conducted a Site Assessment of the BX Service Station (OAFB 1992).

Soil samples were collected, screened for volatile organic vapors, and submitted to a laboratory for analysis. Petroleum hydrocarbons were detected in 8 of the 13 soil samples analyzed (depths ranging from 4.0 to 16.5 feet bgs), and BTEX components were detected in 2 boring locations (depths ranging from 4 to 16 feet bgs). The assessment also included installation of a network of groundwater monitoring wells, primarily located down-gradient of the existing BX fuel storage

tanks. Petroleum hydrocarbons, volatile organic compounds (e.g., benzene, toluene, ethylbenzene, xylenes) and metals (e.g., arsenic, barium, copper, lead, nickel, zinc) were detected in the groundwater samples collected. It was noted that although the source of the original contamination (the underground storage tank [UST] containing leaded gasoline) had been eliminated, the contaminated soil surrounding the existing tanks remained as a secondary source of contamination. In a July 1993 letter to Mr. Philip Cork at OAFB, the State of Nebraska Department of Environmental Quality (DEQ) stated that it would not require additional remedial action at that time and indicated that remedial actions would be limited to a vapor survey (i.e., monitoring for combustible vapors in the sanitary sewer).

Since 1993, additional sampling of subsurface soils and groundwater has been conducted in the vicinity of the BX Service Station; however, no remedial activities (e.g., excavation of soils, treatment of groundwater) have been conducted at the site.

In 1994, ten underground storage tanks were removed from the BX Service Station site. The tanks were described in the closure documents as follows: 388-1 (10,000-gal unleaded gasoline), 388-2 (10,000-gal unleaded gasoline)), 388-3 (10,000-gal unleaded gasoline), 388-4 (4,000-gal unleaded gasoline), 388-5 (10,000-gal unleaded gasoline), 388-7 (560-gal waste oil), 388-8 (4,000-gal unleaded gasoline), 388-9 (4,000-gal unleaded gasoline), 388-10 (6,000-gal unleaded gasoline), 388-11 (1,000-gal leaded gasoline). At the time of the removals, some contaminated soils were observed, excavated, and transported off-site for disposal in the Douglas County Landfill.

In December 2001, URS Corporation conducted a Site Investigation of the Building 388 BX Service Station. The investigation included collection of subsurface soil samples as well as groundwater samples. Laboratory analysis detected some or all of the following contaminants in the soil samples (depths ranging from 3 to 15 feet bgs): benzene, toluene, ethylbenzene, xylenes, MTBE, n-Hexane, and petroleum hydrocarbons. In addition, benzene, toluene, ethylbenzene, xylenes, and MTBE were detected in all of the groundwater samples.

Based on the predicted movement, and on fate and transport modeling of the contaminant plume described in the 1992 Woodward-Clyde Site Assessment and the detection of petroleum-related contaminants in the 2001 URS Corporation Site Investigation, it is expected that contaminated soils would be encountered during excavation and grading/filling operations at the proposed construction site. Figure 3-6 shows the existing hazardous waste constraints at the proposed action site.

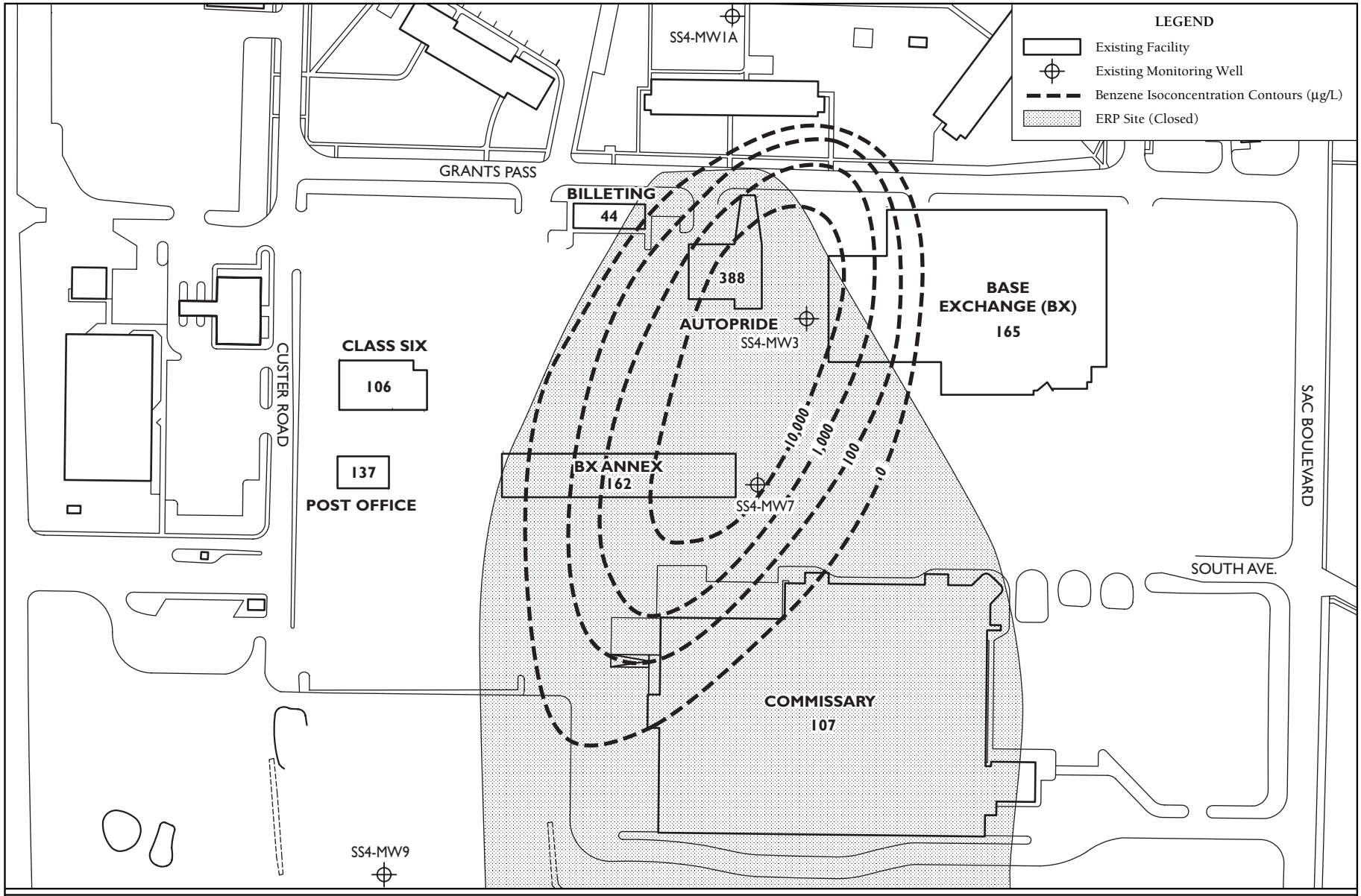


Figure 3-6
Existing Hazardous Waste Constraints at the Proposed Action Site

Subsequent to the issuance of the Draft EA, AAFES conducted a Phase II Environmental Site Assessment at the location of the proposed action through its contractor, ENRISCO, of Wake Forest, North Carolina. The purpose of the evaluation was to determine if previously identified soil or groundwater contamination from nearby gasoline USTs had impacted soil and/or groundwater in the vicinity of the proposed shopping mall. In the Phase II report, ENRISCO stated that total petroleum hydrocarbons in the gasoline range (TPH-GRO) were not detected in any of ten soil samples (depths ranging from 6 to15 feet bgs) submitted to a laboratory for testing. In addition, ENRISCO reported that total extractable hydrocarbons in the diesel range (TEH-DRO) were detected in only one sampling location (at two different depths), and the concentrations detected (59 mg/kg at 9-10 feet and 12.8 mg/kg at 14-15 feet, respectively) by laboratory analysis were below the Nebraska Risk-based Screening Level of 2390 mg/kg. Finally, ENRISCO reported that groundwater was not encountered within 15 feet of the ground surface during drilling activities.

3.12 UTILITIES

3.12.1 Definition of Resource

Utilities consist of land, facilities, structures, energy, and services necessary to perform required operations. This assessment presents baseline conditions, including current consumption levels, for electricity and natural gas, potable water, wastewater, and solid waste management associated with relevant AAFES functions at OAFB.

3.12.2 Existing Conditions

3.12.2.1 Energy

OAFB receives electricity from the Western Area Power Administration which is delivered through the Omaha Public Power District lines. The base currently operated at approximately 56 percent of the system capacity. There are no daily limits imposed on OAFB for electrical consumption and sufficient electrical capacity exists to support significant development (OAFB 2004).

Natural gas is provided to OAFB by the Peoples Natural Gas via commercial lines located south of Kenney Gate at Meyer Gates, and at the intersection of Capehart Road and 25th Street. The base currently operates at approximately 72 percent of natural gas capacity, leaving a reserve of 28 percent. There is sufficient reserve capacity to accommodate significant growth.

3.12.2.2 Potable Water

OAFB obtains potable water from the Metropolitan Utilities District. The Metropolitan Utilities District obtains its water from a well source located at 36th Street and the Platte River (OAFB 2004). Water lines supply potable water to the installation at five base locations: Two in the Capehart Housing Area and three on the Main Base. The base has a contract for purchase of up to 4.22 million gallons of water per day (OAFB 2004). Water consumption varies upon the season and usually increases during June through September. A typical dry year will produce a summertime average daily consumption of 2.6 million gallons (OAFB 2004). There is adequate water available from the Metropolitan Utilities District to support significant growth on the installation (OAFB 2004).

3.12.2.3 Wastewater

The City of Omaha provides wastewater treatment to OAFB. OAFB has a contractual limit of 3.6 million gallons of effluent per day (OAFB 2004). The installation is connected to a 120-inch city outfall line that runs along the east side of Papillion Creek. The city tertiary treatment plant is located southeast of the base near the mouth of the Platte River. There is adequate wastewater treatment service available from the City of Omaha to support moderate growth on the base (OAFB 2004).

3.12.2.4 Solid Waste Management

Solid waste generated at OAFB is either recycled on-site or disposed of at the Sarpy County off-base landfill. A Recycling Center was constructed in 1997 and is operated by the base's refuse contractor (OAFB 2004).

Approximately 75 percent of the solid waste generated by the existing AAFES BX and associated facilities consists of recyclable materials such as corrugated cardboard and other packing materials and plastic bottles, aluminum, and glass. AAFES has significantly reduced the quantity of material sent to the landfill by implementing a comprehensive recycling program in conjunction with OAFB.

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4 ENVIRONMENTAL CONSEQUENCES

Resource analysis presented in this section is based on an examination of the potential effects of the proposed action and the No-Action Alternative (described in Section 2) on existing environmental conditions (described in Section 3). The discussion of potential environmental consequences follows the sequence of existing environmental conditions, as presented in Section 3.

4.1 AIR QUALITY

4.1.1 Approach to Analysis

Criteria pollutant emissions resulting from proposed construction activities at OAFB have been evaluated for the proposed action and No-Action Alternative. Air quality impacts would be significant if emissions associated with the proposed action or No-Action Alternative would: 1) increase ambient air pollution concentrations above the NAAQS; 2) contribute to an existing violation of the NAAQS; 3) interfere with, or delay timely attainment of the NAAQS; or 4) impair visibility within Federally mandated PSD Class I areas. Additionally, a conformity analysis would be required before initiating any action that might lead to nonconformance of a SIP or an exceedance of *de minimis* criteria pollutant thresholds, or that might contribute to a violation of the NAAQS. Offutt AFB is in attainment of the NAAQS for all criteria pollutants.

4.1.2 Impacts

4.1.2.1 Proposed Action

Demolition and Construction Emissions

Demolition and construction activities associated with the proposed action at OAFB would result in minor, temporary increases in criteria pollutant emissions. Specifically, emissions from construction and construction-related vehicles used during facility demolition and construction activities would increase. In addition, fugitive dust (i.e., PM_{10} and $PM_{2.5}$) would increase as a result of surface disturbances (e.g., grading and vegetation removal) associated with construction activities. Given the increased size of the proposed shopping center mobile or stationary source emissions may increase slightly at the installation due to the proposed action. However, this potential increase in emissions would be minor and no significant impacts to air quality would occur.

Total emissions resulting from proposed construction activities have been estimated, using the Air Force's Air Conformity Applicability Model (ACAM) (USAF 2002) and accounting for fugitive dust and vehicle exhaust emissions from construction vehicles and equipment (Table 4-1). Emissions were estimated based upon the total square footage associated with the proposed action, over an assumed demolition and construction period of two years. Demolition and construction vehicles used during implementation of the proposed action would consist of a

mixture of loaders, trucks, backhoes, excavators, water trucks, and other vehicles and equipment typically associated with demolition and construction activities.

Table 4-1 Estimated Demolition and Construction Emissions as a Result Implementation of the Proposed Action (tons/year)

	CO	VOCs	NO_X	SO_2	PM_{10}
Demolition and Construction Emissions	23	2	10	1	9
Representative *de minimis* levels[1]	100	100	100	100	100
Exceeds *de minimis* Threshold	N/A	N/A	N/A	N/A	N/A

Notes: [1] *de minimis* levels are presented for comparison purposes only; the region is in attainment of the NAAQS.
CO - Carbon Monoxide; VOCs - Volatile Organic Compounds; NO_x - Nitrogen Oxides; SO_2 - Sulfur Dioxide; PM_{10} - particulate matter less than 10 microns in diameter; N/A = not applicable.

Data presented in Table 4-1 shows that estimated air emissions resulting from proposed demolition and construction activities, although not occurring within a nonattainment or maintenance area, would be below *de minimis* levels. In addition, estimated emissions as a result of implementation of the proposed action would not violate the NAAQS.

Demolition and construction-related emissions as a result of implementation of the proposed action would temporarily impact local air quality. However, vehicle emissions generated by proposed demolition and construction activities would be temporary and short-term; no long-term increases in vehicle emissions would occur. Emissions associated with construction-related vehicles and equipment would be negligible, as most vehicles would be driven to and kept at the affected site until construction was complete.

Fugitive dust generated from proposed construction activities would temporarily impact local air quality. However, fugitive dust generated by proposed construction activities would be temporary and short-term; no long-term increases in fugitive dust would occur. Additionally, increases in PM_{10} and $PM_{2.5}$ would be moderated through Best Management Practices (BMPs), including watering of exposed soils, soil stockpiling, and soil stabilization, thereby limiting the total quantity of fugitive dust emitted during the construction period.

Building materials and demolition debris generated during the course of demolition or encountered during the course of excavation and grading will be segregated and characterized for reuse, recycling, or disposal as appropriate. Characterization of materials containing or contaminated with asbestos or other toxic and regulated substances will be performed in accordance with applicable regulations, including but not limited to RCRA, TSCA, and State of Nebraska Solid Waste regulations.

Implementation of the proposed action would not lead to an exceedance of *de minimis* thresholds and estimated criteria pollutant emissions would not violate the NAAQS; determination of conformity to the Nebraska SIP is not required. In addition, implementation of the proposed action would not impair visibility within a PSD Class I area as no PSD Class I areas are located

within the vicinity of the proposed action. Therefore, no significant impacts to air quality would occur as a result of implementation of the proposed action.

Indoor Air Quality

There currently are no known indoor air quality problems in the buildings located in or near the area of proposed construction. However, a portion of the site associated with the proposed action is situated on soil that may be contaminated based on information contained in reports from past subsurface investigations that identified petroleum hydrocarbons in the soil and groundwater (see Section 3.11.2.1). One specific contaminant identified during various site investigations included benzene, a typical component of gasoline.

Where there is contamination of the nature described in Section 3.11.2.1, there is the potential for weathered petroleum products existing in the soil, soil gases, or groundwater to seep into the subsurface portions of a building and affect indoor air quality. The quality of the air inside any of the buildings to be constructed as part of the proposed action can not be evaluated prior to construction. However, the Air Force recognizes that one or more of the following actions could be implemented in consideration of the potential impact of soil/soil or gas/groundwater contamination on the quality of air in a building.

- Conduct a risk-based assessment to evaluate potential impacts to the future indoor air quality of a building. The USEPA Soil Screening Guidance could be used as the basis for such an assessment (Original Guidance published in 1996; Supplemental Guidance published in 2002 includes new methods to develop Soil Screening Levels for the migration of volatiles from subsurface sources into indoor air).

- In the design and construction of a building, incorporate features and systems in accordance with construction industry standards (e.g., ASHRAE Standard 62-2001 - Ventilation for Acceptable Indoor Air Quality), to establish and maintain a high standard of quality in the indoor air.

- In the design, construction, and future maintenance of a building, adhere to guidelines established by USEPA and State of Nebraska Human Health Standards recommendations for maintaining good indoor air quality. Ensure that ventilation systems are designed and operated to provide adequate amounts of outdoor air.

4.1.2.2 No-Action Alternative

Under the No-Action Alternative, proposed short-term construction activities at the proposed project site would not occur. Baseline air quality, as described in Section 3.1, would remain unchanged. Therefore, no significant impacts to air quality would occur as a result of implementation of the No-Action Alternative.

4.2 NOISE

4.2.1 Approach to Analysis

Noise impacts as a result of implementation of the proposed action at OAFB have been evaluated to the degree to which they would affect the baseline noise environment, as described in Section 3.2. Potential changes in the noise environment can be beneficial (i.e., if the number of sensitive noise receptors exposed to unacceptable noise levels is reduced); negligible (i.e., if the total area exposed to unacceptable noise levels is essentially unchanged); or adverse, (i.e., if they result in increased exposure to unacceptable noise levels).

4.2.2 Impacts

4.2.2.1 Proposed Action

Under the proposed action, minor, temporary impacts to the noise environment in the vicinity of the proposed construction site would occur. The use of heavy equipment for site preparation and development (e.g., vegetation removal, grading, and back fill) could potentially generate noise levels above average ambient noise levels. However, noise levels would be typical of standard construction activities; would cease with the completion of proposed construction activities; and would only occur during normal working hours (i.e., between 7:00 A.M. and 5:00 P.M., Monday through Friday). Furthermore, sound levels could be reduced through the use of equipment sound mufflers.

Generally, the average sound level produced by construction activities would be approximately 85 A-weighted decibels (dBA) at a distance of 50 feet (USEPA 1971). However, as the nearest noise-sensitive receptor (an on-base residential area) is located over 500 feet northeast of the site of the proposed action, no appreciable noise impacts to residential areas would occur. In addition, the operation and use of the proposed facility would not generate significant noise levels above existing levels and the noise environment in the vicinity of the proposed action would continue to be dominated by aircraft and vehicular traffic. Therefore, no significant impacts to the noise environment as a result of implementation of the proposed action would occur.

4.2.2.2 No-Action Alternative

Under the No-Action Alternative, proposed construction of the new shopping center at OAFB would not occur. The baseline noise environment, as described in Section 3.2, would remain unchanged. Therefore, no significant impacts to noise would occur as a result of implementation of the No-Action Alternative.

4.3 LAND USE

4.3.1 Approach to Analysis

Significance of potential land use impacts is based on the level of land use sensitivity in areas affected by a proposed action. In general, land use impacts would be significant if they would: 1) be inconsistent or in non-compliance with applicable land use plans or policies; 2) preclude the viability of an existing land use activity; 3) preclude continued use or occupation of an area; or 4) be incompatible with adjacent or vicinity land use to the extent that public health or safety is threatened.

4.3.2 Impacts

4.3.2.1 Proposed Action

Implementation of the proposed action would result in beneficial impacts to land use at OAFB. Use of the site selected for the proposed action is in accordance with the General Plan for OAFB and all project components will be designed and sited to be compatible with existing base land use. The proposed action would be centrally located within the Community-Commercial land use zone, thereby maintaining the functional relationship among community facilities. Furthermore, the site would be easily accessible to all family housing areas and community support areas. The site is also accessible to military personnel residing in the civilian community. As described in Section 4.2.2.1, Noise, construction noise levels would be similar to typical construction noise, would last only the duration of demolition and construction activities (approximately 3 years), and could be reduced through the use of equipment sound mufflers and restricted hours of construction. Moreover, the long-term operation of the proposed new facility would be consistent with noise generated from other land uses within the community center. Therefore, impacts to land use would not be significant.

4.3.2.2 No-Action Alternative

Under the No-Action Alternative, proposed construction of a new shopping center would not occur. Baseline land use, as described in Section 3.3, would remain unchanged. Therefore, no significant impacts to land use would occur as a result of implementation of the No-Action Alternative.

4.4 GEOLOGICAL RESOURCES

4.4.1 Approach to Analysis

The protection of unique geologic features, minimization of soil erosion, and the location of facilities in relation to potential geologic hazards are considered when evaluating impacts of a proposed action. Generally, impacts on geological resources are not significant if proper construction techniques and erosion control measures are implemented to minimize or mitigate short and long-term disturbance to soils and to overcome limitations imposed by earth resources.

4.4.2 Impacts

4.4.2.1 Proposed Action

Geological Resources

Demolition and construction activities associated with the proposed action would not significantly affect the geologic units underlying the installation as no unique geologic features or geologic hazards are present. Although ground disturbance would occur at the installation during construction, the construction would occur over previously disturbed surfaces. Therefore, no significant impacts to geological resources would occur as a result of implementation of the proposed action.

Soils

Soils would be disturbed during grading activities associated with proposed demolition and construction. However, implementation of BMPs during construction would reduce impacts to soils associated with grading and clearing activities. In addition, standard erosion control measures (e.g., silt fencing, sediment traps, application of water sprays, and revegetation of disturbed soils) would be implemented to reduce potential impacts related to these characteristics. Therefore, no significant impacts to soils would occur as a result of implementation of the proposed action.

4.4.2.2 No-Action Alternative

Under the No-Action Alternative, proposed short-term demolition and construction activities at the proposed project site would not occur. There would be no construction or ground-disturbing activities. As a result, baseline conditions for geological resources and soils would remain unchanged. Therefore, no significant impacts to geological resources or soils would occur as a result of implementation of the No-Action Alternative.

4.5 WATER RESOURCES

4.5.1 Approach to Analysis

The analysis of water resources includes all surface and groundwater resources at the installation as well as watershed areas affected by existing and potential runoff. Significant impacts to water resources could potentially occur if the proposed action resulted in changes to water quality or supply; threatened or damaged unique hydrologic characteristics; endangered public health by creating or worsening health hazards; or violated established laws or regulations. Impacts of flood hazards on proposed actions would be significant if such actions are proposed in areas with high probabilities of flooding. Potential impacts to wetlands are discussed in Section 4.6, Biological Resources.

4.5.2 Impacts

4.5.2.1 Proposed Action

Surface Water

Under the proposed action, proposed construction activities would result in a temporary increase in total suspended particulate matter (i.e. sedimentation) to nearby surface water. To minimize potential impacts, BMPs (see Section 4.4.2.1, Soils, above) would be implemented during the construction period.

OAFB has been issued an Industrial Storm Water National Pollution Discharge Elimination System (NPDES) General Permit and a Small MS4 permit. AAFES would be covered under the existing NPDES permit for the installation. However, since the proposed action would disturb more than one acre of land at OAFB, the AAFES construction contractor would be required to prepare a Storm Water Pollution Prevention Plan and obtain a Construction Site Storm Water NPDES permit with the Nebraska Department of Environmental Quality (NDEQ) Water Quality Division. In addition, a Construction Best Management Practices Plan would be developed and implemented on-site for the duration of the construction period. Construction would have minor localized (i.e., site-specific) effects on surface water hydrology; however, BMPs would be incorporated during construction to minimize potential erosion, runoff, and sedimentation. Proposed construction activities would not occur within a 100-year floodplain zone.

Because the site of the proposed action is already nearly impervious, no appreciable net increase in storm water discharge volumes and intensities are anticipated following completion of the proposed action. However, the relocation of the existing post office will likely be placed on an area that is currently vegetated. Any increase in storm water volume associated with the additional impervious pavement at the new post office location would be minor and would be accommodated by the existing storm water discharge infrastructure (OAFB 2004). Therefore, no significant impacts would occur to surface water resources as a result of implementation of the proposed action.

Groundwater

Site disturbance and construction associated with the proposed action are not anticipated to affect groundwater resources. Construction operations would not reach depths that could affect groundwater resources. Therefore, no significant impacts would occur to groundwater resources as a result of implementation of the proposed action.

4.5.2.2 No-Action Alternative

Under the No-Action Alternative, proposed short-term construction activities at the proposed project site would not occur. Baseline surface water and groundwater conditions would remain unchanged. Therefore, no significant impacts to surface water or groundwater would occur as a result of implementation of the No-Action Alternative.

4.6 BIOLOGICAL RESOURCES

4.6.1 Approach to Analysis

Determination of the significance of potential impacts to biological resources is based on: 1) the importance (i.e., legal, commercial, recreational, ecological, or scientific) of the resource; 2) the proportion of the resource that would be affected relative to its occurrence in the region; 3) the sensitivity of the resource to proposed activities; and 4) the duration of ecological ramifications. Impacts to biological resources are significant if species or habitats of concern are adversely affected over relatively large areas or disturbances cause reductions in population size or distribution of a species of concern.

This section analyzes the potential for impacts to biological resources, such as habitat loss, from implementation of the proposed action or alternative. Analysis of on-base impacts focuses on whether and how ground-disturbing activities may affect biological resources.

4.6.2 Impacts

4.6.2.1 Proposed Action

Vegetation and Forestry

Construction associated with the proposed action would require vegetation removal (i.e. grass) in landscaped and previously disturbed areas. However, due to the lack of sensitive vegetation at the proposed site, proposed demolition and construction would not have significant impacts on vegetation.

Rare, Threatened, and Endangered Species

No Federally-listed endangered, threatened, or proposed species, or their designated critical habitat under the jurisdiction of the USFWS, occur at or in the vicinity of the proposed action (OAFB 2004). Therefore, there would be no impacts to threatened or endangered species with implementation of the proposed action.

Wetlands

There are no jurisdictional wetlands located within the boundaries of OAFB (OAFB 2004). No wetlands occur at or in the vicinity of the proposed action, therefore, no significant impacts would occur to wetlands as a result of implementation of the proposed action.

4.6.2.2 No-Action Alternative

Under the No-Action Alternative, demolition and construction activities associated with the proposed action would not occur. Baseline vegetation and forestry resources would remain unchanged. In addition, no wetlands or Federally-listed endangered, threatened, or proposed species, or their designated critical habitat under the jurisdiction of the USFWS, or state-

designated sensitive species, occur at or in the vicinity of the proposed action. Therefore, no significant impacts to biological resources would occur as a result of implementation of the No-Action Alternative.

4.7 TRANSPORTATION AND CIRCULATION

4.7.1 Approach to Analysis

Impacts on transportation and circulation would be considered significant if the proposed action affected the safety and/or the capacity of roads at the installation and within the region. In addition, impacts would be considered significant if the proposed action increased the potential for traffic disruption or congestion along regional and local transportation corridors.

4.7.2 Impacts

4.7.2.1 Proposed Action

Demolition and Construction Impacts

Proposed demolition and construction activities would require the removal of demolition-related debris and the delivery of construction equipment and materials to the installation. However, construction traffic would constitute a small portion of the total existing traffic volume in the region and at the installation. The majority of vehicles used for construction activities would be driven to the construction site and kept onsite for the duration of construction, resulting in only a small increase in vehicle trips. In addition, increases in traffic volumes associated with demolition and construction activities would be temporary. Upon completion of construction, no long-term impacts to off-base transportation systems would occur.

Implementation of proposed construction at the installation would result in minor, temporary impacts to on-base traffic circulation as a result of increased traffic associated with construction vehicles. However, these impacts would be short-term and would not have a significant impact on the installation's transportation network.

Operational Impacts

From an operational standpoint, the proposed action would result in beneficial impacts to vehicle circulation. The proposed action would increase the number of parking spaces around the proposed shopping center which would improve efficiency of cars flowing in and out of the area during peak hours. In addition, the expansion and reconfiguration of the new shopping center access roads would improve traffic congestion that currently queue up in the parking lot during peak traffic periods. The site of the proposed action has ample space for expansion and is located in an ideal location for developing the AAFES shopping center, facilitating efficient vehicular movement within and around the site. An increase in vehicle trips on SAC Boulevard may be realized as a result of the new shopping center. However, the increase in traffic levels would not significantly affect safety and/or the capacity of roads at the installation and within the region. There would be no impacts to existing installation parking as adequate parking would be accommodated on-site. Therefore, no significant impacts to transportation and circulation would occur as a result of implementation of the proposed action.

4.7.2.2 No-Action Alternative

Under the No-Action Alternative, proposed construction activities at the proposed project site would not occur. Baseline transportation and circulation conditions, as described in Section 3.7, would remain unchanged. Therefore, no significant impacts to transportation and circulation would occur as a result of implementation of the No-Action Alternative.

4.8 CULTURAL RESOURCES

4.8.1 Approach to Analysis

Cultural resources are subject to review under both Federal and state laws and regulations. Section 106 of the National Historic Preservation Act of 1966 empowers the Advisory Council on Historic Preservation to comment on Federally initiated, licensed, or permitted projects affecting cultural sites listed or eligible for inclusion on the NRHP. Once cultural resources have been identified, significance evaluation is the process by which resources are assessed relative to significance criteria for scientific or historic research, for the general public, and for traditional cultural groups. Only cultural resources determined to be significant (i.e., eligible for the NRHP) are protected under the National Historic Preservation Act.

Analysis of potential impacts to cultural resources considers both direct and indirect impacts. Direct impacts may occur by: 1) physically altering, damaging, or destroying all or part of a resource; 2) altering characteristics of the surrounding environment that contribute to resource significance; 3) introducing visual, audible, or atmospheric elements that are out of character with the property or alter its setting; or 4) neglecting the resource to the extent that it deteriorates or is destroyed. Direct impacts can be assessed by identifying the type and location of the proposed action and by determining the exact locations of cultural resources that could be affected. Indirect impacts primarily result from the effects of project-induced population increases and the resultant need to develop new housing areas, utilities services, and other support functions necessary to accommodate population growth. These activities and facilities' subsequent use can disturb or destroy cultural resources.

4.8.2 Impacts

4.8.2.1 Proposed Action

The proposed construction would take place in an area previously disturbed by urban development. No archaeological sites or architectural resources are known to exist at the proposed project site. The potential for archeological sites on-base is considered extremely low due to the highly disturbed nature of the base (OAFB 2001). The Nebraska SHPO concurred with this finding, but cautioned that development at OAFB should take into consideration the potential discovery of buried archeological resources (OAFB 2001).

The nearest cultural resources to the proposed project site is Building 44 (former Blacksmith Shop) which is located approximately 65 feet from the site of the proposed action was listed on the NRHP in 1978. Under the proposed action this building would be avoided and not impacted during demolition and construction activities. In addition, the Fort Crook Historic District is located in the vicinity of the proposed action. However, the none of the buildings within the Fort Crook Historic District would be directly or indirectly disturbed by the proposed action. Furthermore, the Nebraska SHPO has concurred with the findings of this EA and have no

objections to the project proceeding as planned (see Appendix A). Therefore, no significant impacts to cultural resources would occur as a result of implementation of the proposed action.

Due to the nature of historic properties and the current methodological limitations of cultural resources surveys, all archaeological sites at OAFB and its associated lands may not have been discovered during prior surveys. Some properties may be discovered during the construction or implementation of an activity that has been approved. If archaeological sites are discovered during the construction or implementation of an activity, all work in the area of the suspected site must cease and the OAFB Cultural Resources Manager must be notified immediately by telephone for consultation and appropriate action. All regulations and policies relevant to the protection of cultural resources would be adhered to by AAFES during the demolition and construction process.

4.8.2.2 No-Action Alternative

Under the No-Action Alternative, proposed construction activities at the proposed project location would not occur. Baseline cultural resource conditions would remain unchanged. Therefore, no significant impacts on cultural resources would occur as a result of implementation of the No-Action Alternative.

4.9 SOCIOECONOMICS

4.9.1 Approach to Analysis

Significance of population and expenditure impacts are assessed in terms of their direct effects on the local economy and related effects on other socioeconomic resources within the region. Socioeconomic impacts would be considered significant if the proposed action resulted in a substantial shift in population trends, or notably affected regional employment, spending and earning patterns, or community resources.

4.9.2 Impacts

4.9.2.1 Proposed Action

Under the proposed action employment levels would increase by 4 employees for a total of 111 employees at the shopping center. Current total annual salary and benefits associated with the existing BX, clothing store, car care center, and Class Six total $2.7 million. Under the proposed action, the estimated total annual salary and benefits associated with the shopping center and associated facilities would increase by approximately 2.5 percent. Annual sales are also expected to increase once the new shopping center is opened. Annual sales for the existing BX, clothing store, car care center, and Class Six average $35 million. Annual projected sales after implementation of the proposed action, are estimated to be $42 million (AAFES 2004).

The anticipated sales increase attributable to the facilities owned and operated by AAFES would result in a loss in sales tax revenues to the surrounding area, as well as a minor loss in revenue to local and regional merchants that might receive that business if the new shopping center were not constructed. However, the increase in employment opportunities associated with the new shopping center would be beneficial to the local and regional economy. In addition, construction services procured through the local economy to construct the new shopping center would be considered a positive impact.

Thus, while there would likely be a loss in sales tax revenues to the surrounding areas, as well as a minor loss in revenue to local and regional merchants from AAFES-owned and operated business sales, there would also be an offsetting benefit to the economy through increased state and local tax revenue from the creation of 4 new jobs, and procurements for construction of the new shopping center. The "multiplier effect" would amplify these benefits, resulting in additional growth through reinvestment in the region. The "multiplier effect" describes the fact that expenditures of money will tend to be re-spent, thus increasing by a larger amount than the initial expenditure. As a result of this offsetting activity, no significant adverse impacts to socioeconomic resources are anticipated. Although the proposed action may have minor impacts on the local economy or nearby competing businesses, the proposed action would not lead to a significant impacts to the physical environment.

4.9.2.2 No-Action Alternative

Under the No-Action Alternative, proposed construction activities at the proposed project location would not occur. Baseline socioeconomic conditions would remain unchanged. Therefore, no significant impacts to socioeconomic conditions would occur as a result of implementation of the No-Action Alternative.

4.10 ENVIRONMENTAL JUSTICE AND PROTECTION OF CHILDREN

4.10.1 Approach to Analysis

In order to comply with EO 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, ethnicity and poverty status in the vicinity of the proposed actions have been examined and compared to city, county, and state data to determine if any minority or low-income communities could potentially be disproportionately affected by implementation of the proposed action or alternatives. Similarly, to comply with EO 13045, *Protection of Children From Environmental Health Risks and Safety Risks*, the locations where numbers of children may be proportionally high on and in the vicinity of the proposed actions was determined to ensure that environmental risks and safety risks to children are addressed.

Three criteria must be met for impacts to minority and low income communities or children to be considered significant. 1) There must be one or more populations within the ROI. 2) There must be adverse (or significant) impacts from the proposed action. 3) The environmental justice populations within the ROI must bear a disproportionate burden of those adverse impacts. If any of these criteria are not met, then impacts with respect to environmental justice or protection of children would not be significant.

4.10.2 Impacts

4.10.2.1 Proposed Action

Under the proposed action, demolition and construction activities would be limited to the 13 acre site as shown in Figure 2-1. There are no minority or low income populations located near the proposed project site. The nearest housing areas to the proposed site are NCO Row and General Row, both of which do not qualify as minority or low income populations. Therefore, implementation of the proposed action would not disproportionately impact minority or low-income populations.

Implementation of the proposed action would not result in environmental health risks or safety risks to children, as no housing or facilities for children exist adjacent to or in the immediate vicinity of the proposed action. During proposed construction of the new shopping center, standard construction site safety precautions (e.g., fencing and patrolling) would be implemented. In addition, the existing high-security environment at the installation prohibits access by unauthorized personnel. For these reasons, potential health or safety impacts to children living or playing in the vicinity would be minimized. Therefore, no significant impacts to children from health risks or safety risks would occur as a result of implementation of the proposed action.

4.10.2.2 No-Action Alternative

Under the No-Action Alternative, proposed activities at the proposed project site would not occur. Baseline conditions would remain unchanged. Therefore, no significant impacts to environmental justice conditions would occur, nor would children be disproportionately exposed to increased health or safety risks as a result of implementation of the No-Action Alternative.

4.11 HAZARDOUS MATERIALS AND WASTES

4.11.1 Approach to Analysis

Federal, state, and local laws regulate the storage, transportation, and disposal of hazardous materials and wastes. These laws have been established to protect human health and the environment from potential impacts. The significance of impacts associated with hazardous wastes and materials is based on the toxicity of the substance, transportation and storage risk, and the method of waste disposal. Impacts are considered significant if the storage, use, transportation, or disposal of these substances increases human health risks or environmental exposure.

4.11.2 Impacts

4.11.2.1 Proposed Action

During the construction period, the construction contractor would be responsible for notifying the installation in advance of bringing any hazardous materials on the installation. Furthermore, the construction contractor would be responsible for disposing of any hazardous materials used and hazardous waste generated on the site, including those used or generated by subcontractors, during construction activities.

Hazardous Materials. The proposed action is not expected to have an impact on the management of hazardous materials at OAFB. The proposed action will not significantly increase or decrease the quantity of hazardous material brought to the installation in the form of packaged products. It is expected that type and quantity of hazardous packaged products offered for sale by AAFES in the new shopping center will be the same as or very similar to those already offered for sale in the existing AAFES BX at OAFB.

Hazardous Waste. The proposed shopping center would likely generate the same types of hazardous waste as the current BX (i.e., expired or damaged paint and paint-related materials, fire-retardant chemicals, and pesticide/herbicide products). During the excavation and grading operations in preparation for construction, the potential exists for encounter with contaminated soils from the leak that occurred in an underground storage tank supply line in 1985. The leaded gasoline that leaked may be present in the subsurface soils, and the presence of leaded gasoline has the potential to render the excavated soils hazardous by characteristic (benzene, lead). Based on the results of the Phase II Environmental Site Assessment conducted at the location of the proposed action there were no total petroleum hydrocarbons in the gasoline range (TPH-GRO) detected in any of ten soil samples submitted to a laboratory for testing. In addition, total extractable hydrocarbons in the diesel range (TEH-DRO) were detected in only one sampling location (at two different depths), and the concentrations detected (59 mg/kg and 12.8 mg/kg, respectively) by laboratory analysis were below the Nebraska Risk-based Screening Level of 2390 mg/kg. However, if contaminated soil is encountered during the excavation and grading operations, it would be segregated and appropriately characterized for disposal.

Under the proposed action the BX Service Station would be demolished, and this action would result in a temporary cessation of the generation of waste oil from servicing of customer vehicles. A new service station is proposed to be constructed on OAFB at the new mini-mall location, therefore, the generation of waste oil would be expected to begin at the new location. The demolition of the BX Service Station would include the closure of the four underground storage tanks. The closure procedures would be carried out in accordance with relevant State of Nebraska Department of Environmental Quality (NDEQ) regulations. If contaminated soil or groundwater is identified during the closure procedures, OAFB would follow an appropriate remedial course of action in consultation and cooperation with the NDEQ. In addition, the AAFES contractor would turn over any hazardous waste found at the site to OAFB for proper manifesting and disposal.

Asbestos. In order to minimize the potential for construction workers to be exposed to buried asbestos-containing materials (e.g., asbestos-containing pipe, demolition debris), extreme caution would be used when excavating in the vicinity of the buried building foundation (i.e., the northwest portion of the proposed construction area) and in the vicinity of the buried wastewater conveyance pipe (southern extent of the proposed construction area). Care would be taken not to disturb the underground pipe or the buried building foundation; however, if the pipe, foundation or associated demolition debris are encountered during soil excavation, the contractor would contact the Environmental Flight immediately, and appropriate protective measures would be implemented.

Building materials and demolition debris generated during the course of demolition or encountered during the course of excavation and grading will be segregated and characterized for reuse, recycling, or disposal as appropriate. Characterization of materials containing or contaminated with asbestos or other toxic and regulated substances will be performed in accordance with applicable regulations, including but not limited to RCRA, TSCA, and State of Nebraska Solid Waste regulations.

Lead-Based Paint. Building materials and demolition debris generated during the course of demolition or encountered during the course of excavation and grading will be segregated and characterized for reuse, recycling, or disposal as appropriate. Characterization of materials containing or contaminated with lead-based paint or other toxic and regulated substances will be performed in accordance with applicable regulations, including but not limited to RCRA, TSCA, and State of Nebraska Solid Waste regulations.

Installation Restoration Program. The NDEQ and the EPA were notified of OAFB and AAFES intent to build on IRP site SS-04 in the memorandum dated May 20, 2004. OAFB received no comments from the NDEQ or EPA. Therefore, a request for an IRP site waver for construction on IRP site SS-04 was sent to Headquarters Air Combat Command (HQ ACC) on July 6, 2004. HQ ACC approved the request for construction on IRP site SS-04 on August 5, 2004, with implementation of the stipulations for construction contingencies identified in the waiver request letter. The waiver request letter and the waiver approval letter are included in Appendix B.

In order to minimize the potential for exposure of construction workers to potentially contaminated soils at the site (e.g., as described in Section 3.11.2.1), any soils excavated as part of the proposed action would be properly segregated and sampled by the construction contractor hired by AAFES. Sample results would determine whether soils can be reused on the site or require proper disposal off-site at a facility permitted to receive the soils pursuant to appropriate Federal and State of Nebraska regulations. Furthermore, procedures to minimize dust during excavation and construction activities will be implemented on-site. Therefore, no significant impacts would occur as a result of implementing the proposed action.

4.11.2.2 No-Action Alternative

Under the No-Action Alternative, no construction would occur at the site. The standards described above for management of potentially hazardous packaged consumer products would continue to apply during ongoing operation of the existing AAFES facilities. Baseline hazardous material and waste conditions would remain unchanged and IRP sites in the vicinity of the project site would continue to be studied and remediated as appropriate under the IRP. Therefore, there would be no impacts from hazardous materials and wastes with implementation of the No-Action Alternative.

4.12 UTILITIES

4.12.1 Approach to Analysis

The assessment of impacts to utilities is based on comparing existing use and condition to proposed changes in these resources. The analysis compares current utility usage for applicable functions with anticipated future demands to determine potential impacts. Potential impacts to utilities may occur if a change in demand resulting from the proposed action significantly affects the ability of a utility provider to service existing customers. Facilities, such as landfills, may be impacted if they are unable to effectively accommodate additional demands resulting from a proposed activity.

4.12.2 Impacts

4.12.2.1 Proposed Action

Energy

There are no daily limits imposed on OAFB for electrical or natural gas consumption and sufficient electrical capacity exists to support significant development (OAFB 2004). Under the proposed action electricity and natural gas consumption is expected to increase, however, because there are no daily limits imposed on OAFB, the minor increase in electricity and natural gas demand under the proposed action would have no adverse impact on the ability of the Western Area Power Administration and the Peoples Natural Gas company to effectively serve customers.

Potable Water

There is adequate water available from the Metropolitan Utilities District to support significant growth on the installation (OAFB 2004). Under the proposed action water consumption is expected to increase, however, because there are no daily limits imposed on OAFB for water, the minor increase in water demand under the proposed action would have no significant adverse impact on potable water resources.

Wastewater

The City of Omaha provides wastewater treatment to OAFB. OAFB has a contractual limit of 3.6 million gallons of effluent per day (OAFB 2004). There is adequate wastewater treatment service available from the City of Omaha to support moderate growth on the base (OAFB 2004). Therefore, the minor increase in wastewater produced under the proposed action would not likely adversely impact the City of Omaha Wastewater Treatment Plant.

Solid Waste Management

Solid waste, including non-contaminated soils, contaminated soils that are non-hazardous (e.g., state-regulated special waste) construction and demolition debris, and recyclable items (e.g.,

cardboard, metal, plastic) generated as a result of construction activities would be managed in accordance with the *OAFB Solid Waste Management Plan*. All non-hazardous waste and recyclable items would be collected and disposed off-site by appropriately licensed contractors.

Solid waste generated at OAFB is either recycled on-site or disposed of at the Sarpy County off-base landfill. A Recycling Center was constructed in 1997 and is operated by the base's refuse contractor (OAFB 2004). The proposed action would result in a short-term increase in solid waste generated in the form of demolition debris. The landfill has ample capacity to support the minor increase in overall solid waste levels generated by the proposed action. In addition, AAFES has significantly reduced the quantity of material sent to the landfill by implementing a comprehensive recycling program in conjunction with OAFB. Over the long term, the routine operations of the proposed shopping center would be expected to generate quantities of solid waste only slightly greater than those generated by the existing operations (i.e., in the buildings proposed for demolition). Therefore, the proposed action would have no significant impacts on solid waste management.

4.12.2.2 No-Action Alternative

Under the No-Action Alternative, proposed construction activities at the proposed project location would not occur. Baseline conditions for utility resources would remain unchanged. Therefore, no significant impacts to utilities would occur as a result of implementation of the No-Action Alternative.

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5 CUMULATIVE EFFECTS

This section provides: 1) a definition of cumulative effects; 2) a description of past, present, and reasonably foreseeable actions relevant to cumulative effects; and 3) a summary of cumulative effects potentially resulting from interaction of the proposed action with other actions.

5.1 DEFINITION OF CUMULATIVE EFFECTS

Council on Environmental Quality regulations stipulate that potential environmental impacts resulting from cumulative impacts should be considered in an EA. Cumulative impacts are defined as "the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions" (40 CFR 1508.7). Recent CEQ guidance in *Considering Cumulative Effects* (CEQ 1997) affirms this requirement, stating that the first steps in assessing cumulative effects involve defining the scope of the other actions and their interrelationship with the proposed action. The scope must consider geographic and temporal overlaps among the proposed action and other actions. It must also evaluate the nature of interactions among these actions. In accordance with NEPA, a discussion of cumulative impacts resulting from projects that are proposed, currently under construction, recently completed, or anticipated to be implemented in the near future is necessary.

To identify cumulative effects the analysis needs to address three fundamental questions:

1. Does a relationship exist such that affected resource areas of the proposed action might interact with the affected resource areas of past, present, or reasonably foreseeable actions?
2. If one or more of the affected resource areas of the proposed action and another action could be expected to interact, would the proposed action affect or be affected by impacts of the other action?
3. If such a relationship exists, then does an assessment reveal any potentially significant impacts not identified when the proposed action is considered alone?

5.2 CUMULATIVE PROJECTS

5.2.1 AAFES Mini-Mall

A project is currently underway to construction a Mini-Mall to include a Shoppette, Popeye's/Burger King, Class Six, 6-bay Car Care Center, eight multi-product automobile fuel dispensers, and 140 parking spaces for customers and employees. The environmental assessment on this project resulted in a FONSI.

5.2.2 New Control Tower

A project is planned in FY 2005 to construct a 10-story steel tower with a cab to replace the existing undersized control tower. The environmental assessment on this project resulted in a FONSI.

5.2.3 Runway Repair

The runway repairs project consist of replacing a degraded portion of the center and outer edge of the runway pavements with reinforced concrete; resurface degraded portions of the shoulders on the southeastern end of the runway overrun; repair depressed terminating light bar on the northwest end of the runway; install approach lighting on both ends of the runway; widen the shoulders of three taxiways with asphalt; seal all joints; and provide necessary pavement markings. The first phase of runway repairs occurred in 1994 and the second phase of repairs is planned to occur between 2007-2008. The environmental assessment on this project resulted in a FONSI.

5.2.4 Air Force Weather Agency Headquarters Facility

A new headquarters facility is planned for construction in FY 2006. This project consists of constructing a three-story facility with an access road, communications support, site improvements, and landscaping to support a 1100-person work force. This project is in accordance with the Offutt AFB General Plan for removal of administrative functions from the Martin Bomber Building (Building 301). The environmental assessment for this proposed action has not been completed.

5.2.5 Fire/Crash Rescue Station

The new Fire/Crash Rescue Station is planned to be completed in FY 2005. The new station would consolidate all base and flight line firefighting vehicles, apparatus, equipment, and personnel. This includes space for 24-hour crew quarters, command and control center, and maintenance areas for fire protection equipment.

5.2.6 Housing Privatization

A project is currently in progress to privatize military family housing. The project includes upgrading 1,890 Capehart Housing units and replacement of 391 Wherry units to meet current life safety codes and provide a comfortable and appealing living environment comparable to the off-base civilian community. The environmental assessment on this project resulted in a FONSI.

5.2.7 SAC Federal Credit Union

A project is planned to construct a new Credit Union facility to replace the existing branch. This includes demolition of the existing branch facility. The Credit Union would demolish the existing facility and replace it with a new modular facility at the same location. This new facility will be a full service branch with drive-up lanes and a drive-up ATM. The facility will be

approximately 3,000 square feet. The environmental assessment on this project resulted in a FONSI.

5.3 CUMULATIVE IMPACT ANALYSIS

This section addresses, for each resource area, the additive effects of the proposed action in conjunction with the projects identified above. Since the No-Action Alternative represents no change from existing conditions, no cumulative impacts would occur.

5.3.1 Air Quality

Although the majority of cumulative projects at Offutt AFB would result in an increase in construction-related pollutants, cumulative impacts to air quality are not expected as proposed projects would occur, over multiple years, over a large area, and would be short-term in nature. Pollutant emissions associated with the proposed action have been estimated to be significantly below *de minimus* levels and, in conjunction with identified cumulative projects, would not result in significant cumulative impacts to air quality within the region. In addition, *de minimis* levels are presented for comparison purposes only; the region is in attainment of the NAAQS, and therefore not subject to general conformity analysis. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to Air Quality at Offutt AFB.

5.3.2 Noise

Implementation of the proposed action would result in short-term increases to the noise environment; however, no new noise sources would be created. The noise environment at the installation would continue to be dominated by aircraft and vehicular traffic. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to the noise environment at Offutt AFB.

5.3.3 Land Use

Implementation of the proposed action would be consistent with existing and planned land use designations. In addition, identified cumulative projects at Offutt AFB would be consistent with existing or planned land use designations. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to land use at Offutt AFB.

5.3.4 Geological Resources

Implementation of the proposed action would not impact geological resources as appropriate design measures and standard construction practices would be implemented. Project-specific Erosion Control Plans would be prepared to control erosion during proposed construction activities and best management practices would be implemented where applicable. Therefore,

implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to geological resources at Offutt AFB.

5.3.5 Water Resources

Implementation of the proposed action would not impact water resources as appropriate design measures, erosion control plans, and standard construction practices would be implemented for all projects involving new construction to minimize the potential for increased sedimentation and degraded surface hydrology or water quality. Due to the substantial depth to groundwater at Offutt AFB, none of the projects would be likely to affect groundwater resources. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to water resources at Offutt AFB.

5.3.6 Biological Resources

Implementation of the proposed action in conjunction with identified cumulative projects would not result in significant cumulative impacts to biological resources. All of the cumulative projects are site-specific projects that would have only temporary, localized impacts to biological resources. Such projects would be developed according to guidelines and special conservation measures described in the Integrated Natural Resources Management in order to minimize impacts to biological resources. Therefore, in conjunction with other past, present, or reasonably foreseeable projects, the proposed action would not result in significant cumulative impacts to biological resources at Offutt AFB.

5.3.7 Transportation and Circulation

Implementation of the proposed action in conjunction with identified cumulative projects would not result in significant impacts to transportation and circulation. Identified construction projects would be spread out over several years and would be dispersed throughout the installation. In addition, the majority of vehicles used for construction activities would be driven to the project locations and would be kept on site for the duration, resulting in a smaller increase in daily vehicle trips. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in significant cumulative impacts to traffic and circulation at Offutt AFB.

5.3.8 Cultural Resources

Implementation of the proposed action in conjunction with identified cumulative projects would not result in significant cumulative impacts to cultural resources. All of the cumulative projects are site-specific projects for which any impacts to cultural resources would be very localized. Such projects would be developed according to guidelines and special conservation measures described in the Integrated Cultural Resources Management Plan in order to minimize impacts to cultural resources. Therefore, in conjunction with other past, present, or reasonably foreseeable

projects, the proposed action would not result in significant cumulative impacts to cultural resources at Offutt AFB.

5.3.9 Socioeconomics

Implementation of the proposed action would positively impact socioeconomic resources. Identified cumulative projects within at Offutt AFB would also positively impact socioeconomic resources. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would result in beneficial cumulative impacts to socioeconomic resources at Offutt AFB.

5.3.10 Environmental Justice and Protection of Children

Implementation of the proposed action is not projected to result in adverse impacts to any other resource areas that would, in turn, be expected to disproportionately affect minority and low-income communities or children populations. Therefore, in conjunction with other past, present, or reasonably foreseeable projects, the proposed action would not result in significant cumulative impacts to environmental justice and protect of children at Offutt AFB.

5.3.11 Hazardous Materials and Wastes

All hazardous materials and hazardous wastes would be handled, used, and disposed of properly in accordance with applicable regulations. Cumulative construction projects do not pose health or safety risks to children or other non-participants at Offutt AFB or off base. All hazardous materials and wastes would be used and disposed of in accordance with applicable regulations and base policies. Therefore, in conjunction with other past, present, or reasonably foreseeable projects, the proposed action would not result in significant cumulative impacts to hazardous materials and wastes at Offutt AFB.

5.3.12 Utilities

Implementation of the proposed action in conjunction with other identified cumulative projects on base would result in only a slight overall increase in the amount of utilities required. There is sufficient utility infrastructure to accommodate the increase demand. Therefore, implementation of the proposed action in conjunction with other past, present, or reasonably foreseeable projects would not result in cumulative impacts to utilities at Offutt AFB.

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6 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Analysis of the resource areas contained in this EA concludes that no unavoidable adverse environmental impacts would result from the proposed action or No-Action Alternative.

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7 COMPATIBILITY OF THE PROPOSED ACTION AND ALTERNATIVE WITH THE OBJECTIVES OF FEDERAL, REGIONAL, STATE, AND LOCAL LAND USE PLANS, POLICIES, AND CONTROLS

The proposed action would be appropriately located within the Community-Commercial land use zone of OAFB and would not adversely impact the current or long-range planning goals influencing the local and regional communities. Furthermore, the proposed action would fully comply with applicable Federal, state, and local plans, policies, and controls with respect to land use. In particular, the proposed action would be required to adhere to the requirements of the State of Nebraska's erosion and sedimentation control regulations throughout the construction process. In addition, land disturbing activities greater than one acre are required to obtain a Construction Site Storm Water NPDES Permit from NDEQ. AAFES would coordinate with NDEQ to provide any necessary technical oversight for erosion and sedimentation control prior to any ground disturbing or construction activities and adhere to an approved erosion and sedimentation control plan throughout the construction process.

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8 RELATIONSHIP BETWEEN THE SHORT-TERM USE OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

NEPA requires that environmental documentation include a statement on the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity. Overall, the long-term productivity of the environment would be maintained with the implementation of the proposed action or the No-Action Alternative.

The proposed action would involve some minor short-term impacts associated with demolition, building site development, and construction of the new shopping center. All other impacts to the built and natural environment are deemed minimal. Therefore, the long-term productivity of the environment would not be appreciably affected by the implementation of the proposed action.

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9 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

NEPA also requires that an environmental analysis include identification of "any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects thereof on consumption or destruction of a resource that could not be replaced in a reasonable period of time. The proposed demolition of existing AAFES facilities and construction of a new AAFES shopping center would result in few direct and indirect commitments of resources; these would be related mainly to the consumption of utilities (i.e. electricity, natural gas, and water).

Expenditures of electrical energy and other resources can be considered irreversible and, therefore, irretrievably committed to the proposed project. The new shopping center, to the extent feasible, would include in the building design and overall operation, energy and water saving features that would minimize the use of these resources. With or without these features, however, the natural resources this action demands would be relatively insignificant and not substantially different from the commitment of resources under the No-Action Alternative.

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10 SPECIAL PROCEDURES AND ENVIRONMENTAL PERMITS REQUIRED

Impact evaluations presented in this EA have determined that no significant environmental impacts are expected to occur as a result of implementation of the proposed action or No-Action Alternative at OAFB. This determination is based upon a thorough review and analysis of existing environmental and human resource information, the application of accepted modeling methodologies, and coordination with knowledgeable personnel from the 55th Wing, AAFES, and local, state, and Federal agencies.

There would be no significant environmental and human resource impacts for all resource areas as a result of implementation of the proposed action. Special procedures relevant to storm water discharge (described in Section 4.5, Water Resources), and potential contamination (described in Section 4.11, Hazardous Materials and Wastes) are summarized below.

OAFB has been issued an Industrial Storm Water NPDES General Permit and a Small MS4 permit. AAFES would be covered under the existing NPDES permit for the installation. However, since the proposed action would disturb more than one acre of land at OAFB, the AAFES construction contractor would be required to prepare a Storm Water Pollution Prevention Plan and obtain a Construction Site Storm Water NPDES permit with the NDEQ Water Quality Division. In addition, a Construction Best Management Practices Plan would be developed and implemented on-site for the duration of the construction period.

The NDEQ and the EPA were notified of OAFB and AAFES intent to build on IRP site SS-04 in the memorandum dated May 20, 2004. OAFB received no comments from the NDEQ or EPA. Therefore, a request for an IRP site waver for construction on IRP site SS-04 was sent to HQ ACC on July 6, 2004. HQ ACC approved the request for construction on IRP site SS-04 on August 5, 2004, with implementation of the stipulations for construction contingencies identified in the waiver request letter. The waiver request letter and the waiver approval letter are included in Appendix B.

No other special procedures or environmental permits have been identified for the proposed action. However, additional permits may be required once the final building design is completed for the project.

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11 REFERENCES

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12 LIST OF PREPARERS

This report was prepared for, and under the direction of, the Army and Air Force Exchange Service (AAFES) by The Environmental Company, Inc. (TEC). Members of the professional staff are listed below:

Project Management

Kevin Martin, AICP, Project Director
M.P., Urban and Environmental Planning

Christine Davis, Project Manager
M.S., Environmental Management

Quality Assurance

Kevin Martin, AICP, Project Director
M.P., Urban and Environmental Planning

Technical Analysts

Christine Davis
M.S., Environmental Management

Ellen Graap Loth, CHMM
B.S., Natural Resources

GIS and Graphic Design

Deirdre Stites
A.A., Geology

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Appendix A

IICEP Correspondence

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IICEP RESPONSE SUMMARY

Environmental Assessment for Proposed Construction of Army and Air Force Exchange Service New Shopping Center at Offutt Air Force Base, NE

Date	*IICEP Agency*	*Issues/Concerns*
8 July 2004	Nebraska State Historical Society	The preliminary review of this project suggests that it will not directly affect historic properties. When potential impacts to historic properties under the proposed action have been assessed, those assessments should be provided to our office for comment.
22 July 2004	Metropolitan Area Planning Agency	Requests additional information on the EA to be discussed at a review meeting held August 18, 2004.
4 October 2004	Nebraska State Historical Society	The project as proposed will have no adverse affect on the Fort Crook Historic District, a property listed on the National Register of Historic Places, and we have no objections to the project proceeding as planned.
3 March 2005	Nebraska State Historical Society	E-mail concurring with previous determination of no adverse effect per October 4, 2004 correspondence.
4 April 2005	State of Nebraska, Department of Environmental Quality	Recommend adding language to the Air Quality section of the FONSI to reflect that asbestos testing will occur, and abatement measures will follow if required.
5 April 2005	Department of the Army, Corps of Engineers, Omaha District	No additional comments.

IICEP DISTRIBUTION LIST

Environmental Assessment for
Proposed Construction of
Army and Air Force Exchange Service New Shopping Center
at
Offutt Air Force Base, Nebraska

Nebraska Department of Environmental Quality Attn: Joe Francis 1200 N Street P.O. Box 98922 Lincoln, NE 68508-8922	Metropolitan Area Planning Agency Attn: Alene Ramsey 2222 Cuming Street Omaha, NE 68102-4328
Nebraska State Historical Society State Historic Preservation Office Attn: Mr. Bill Callahan 1500 R Street P.O. Box 82554 Lincoln, NE 68501-2554	City of Omaha Planning Department Attn: Robert Peters Omaha/Douglas Civic Center 1819 Farnam Street, Suite 1111 Omaha, NE 68183-0110
U.S. Environmental Protection Agency (Region 7) Attn: Air and Toxics Division (ARTD) 901 N. 5th Street Kansas City, KS 66101	City of Bellevue Planning Department Attn: Dan Stroh 210 W. Mission Avenue Bellevue, NE 68123
Army Corps of Engineers Omaha District, Planning Division Attn: Candace Gorton, Chief Environmental, Economics, & Cultural Resources Section 215 North 17th Street Omaha, NE 68102-4978	Offutt AFB 55 WG/PA Attn: Lt. Corinna Jones 906 SAC Blvd., Suite 1 Offutt AFB, NE 68113-3206

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 55TH WING (ACC)
OFFUTT AIR FORCE BASE NEBRASKA

JUN 2 1 2004

Nebraska State Historical Society
State Historic Preservation Office
Mr. Bill Callahan
1500 R Street
P.O. Box 82554
Lincoln, NE 68501-2554

Mr. Karl A. Morris
55 CES/CEVN
106 Peacekeeper Dr, Ste 2N3
Offutt AFB, NE 68113-4019

Dear Mr. Callahan

Offutt Air Force Base (AFB) is preparing an Environmental Assessment (EA) for the proposed construction of an Army and Air Force Exchange Service (AAFES) shopping center at Offutt AFB, Nebraska. The proposed action includes supporting construction a new 168,788 SF shopping center to replace the current AAFES facilities located at the site. These facilities include the existing BX, mini-mall, gas station, Class Six, and post office. The new shopping center would contain retail facilities, food court service, military clothing store, pharmacy, security office, and 792 parking spaces for customers and employees. The Draft Description of Proposed Action and Alternatives (DOPAA) is included with this correspondence as an attachment.

The environmental impact analysis process for this project is being conducted by the Air Force in accordance with the Council on Environmental Quality guidelines pursuant to the requirements of the National Environmental Policy Act of 1969. In accordance with Executive Order 12372, *Intergovernmental Review of Federal Programs*, we request your participation by reviewing the attached Draft DOPAA and solicit your comments concerning the proposed action and any potential environmental consequences. Please provide written comments or information regarding the action at your earliest convenience but no later than 30 calendar days from receipt of this letter.

Responses should be directed to our consultant, The Environmental Company, Inc. The point of contact is Ms. Christine Davis; she can be reached at (805) 564-4940 or by email at cedavis@tecinc.com. Please forward written comments to Ms. Davis at 1525 State Street, Suite 103, Santa Barbara, CA 93101. To expedite delivery of information, you may fax it to Ms. Davis at (805) 564-4988. Thank you for your assistance.

Sincerely,

KARL A. MORRIS
Chief, Cultural and Natural Resources

Attachment: Draft DOPAA

Global Power for America

NEBRASKA STATE HISTORICAL SOCIETY
1500 R STREET, P.O.BOX 82554, LINCOLN, NE 68501-2554
(402) 471-3270 Fax: (402) 471-3100 1-800-833-6747 www.nebraskahistory.org

July 8, 2004

Ms. Christine Davis
The Environmental Company
1525 State St., Ste. 103
Santa Barbara, CA 93101

RE: Construction of an Army and Air Force Exchange Service (AAFES) at Offutt Air Force Base, NE-Draft Description of Proposed Action and Alternatives dated June, 2004.

Received by NESHPO 6/25/04, HP#0406-081-01

Dear Ms. Davis:

Per the request of Karl Morris, Chief, Cultural and Natural Resources at Offutt Air Force Base, we are directing our comments on the referenced document to you. Our comments on this project are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and implementing regulations 36CFR Part 800.

Our preliminary review of this project suggests that it will not directly affect historic properties. Given the information provided, none of the properties scheduled for demolition approach the minimum age requirement for consideration of eligibility for the National Register of Historic Places.

However, we note that the project area is adjacent to the southeastern-most corner of the Fort Crook Historic District, a property listed in the National Register of Historic Places. Your environmental analysis of this project should take this information into account and, further, examine whether the project will have indirect effects on the Fort Crook district, as described at 36 CFR 800.5(a)(1) and (2). Additionally you should address and, as appropriate, plan for the potential for discovery of previously unknown historic properties (i.e., historic archeological properties) as described at 800.13. When you have assessed the potential for the project to affect historic properties as enumerated above, you should provide those assessments to our office for comment.

If you have any questions, please do not hesitate to call Bill Callahan at 402/471-4788. Thank you for this opportunity to comment.

Sincerely,

L. Robert Puschendorf
Deputy State Historic Preservation Officer
Nebraska State Historic Preservation Office

Cc: Karl Morris- 55 CES/CEVN

METROPOLITAN AREA PLANNING AGENCY
2222 Cuming Street, Omaha, Nebraska 68102-4328
Phone: (402) 444-6866 Fax: (402) 342-0949
Email: mapa@mapacog.org www.mapacog.org
In the MAPA Region: 1-800-827-6866

MAPA
A Council of Governments

July 22, 2004

Mr. Karl A. Morris
55 CES/CEVN
106 Peacekeeper Dr, Ste 2N3
Offutt AFB, NE 68113-4019

Re: Proposed Construction of Army and Air Force Exchange Service Shopping Center-Environmental Assessment

Dear Mr. Morris:

We have received the draft description of proposed action and alternative for the Proposed Construction of an Army and Air Force Exchange Service Shopping Center. The review committee will meet on Wednesday, August 18, 2004 at 2:00 p.m. in the Papio Missouri River NRD offices, 8901 South 154th Street, Omaha, NE 68138. We would appreciate if you or someone from your staff would make a short presentation on your application and be prepared to answer questions from the committee.

In addition, please provide the MAPA Project Review Committee with the information requested on the enclosed E.O. 12372 Review Process Form for the proposed project. Completing and returning the form before August 18, 2004 will assist the committee in their review. You may fax the form to (402) 342-0949. Thank you in advance for your cooperation.

Sincerely,

Alene A. Ramsey

Alene A, Ramsey
Administrative Services Director

MAPA E.O. 12372 Review Process Form

Title of Grant Application_____

Please provide the following information in addition to a copy of your grant application and budget. *

Attach a short (one page) narrative description or summary of this grant application. Please include goals and objectives.

If this is a continuation application, provide a copy of the annual report or annual progress report including accomplishments, the impact of the program today, attach a case study, provide the number served, and list measurable outcomes.

* Please spell out and define all acronyms.

NEBRASKA STATE HISTORICAL SOCIETY
1500 R STREET, P.O.BOX 82554, LINCOLN, NE 68501-2554
(402) 471-3270 Fax: (402) 471-3100 1-800-833-6747 www.nebraskahistory.org

October 4, 2004

Ms. Christine Davis
The Environmental Company
1525 State St., Ste. 103
Santa Barbara, CA 93101

RE: Construction of an Army and Air Force Exchange Service (AAFES) at Offutt Air Force Base, NE
Preliminary Final Environmental Assessment
HP#0406-081-01

Dear Ms. Davis:

We have received the referenced document. Our comments on this project are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and implementing regulations 36CFR Part 800.

In our opinion, the project as proposed will have no adverse affect on the Fort Crook Historic District, a property listed in the National Register of Historic Places, and we have no objection to the project proceeding as planned. To evidence compliance with Section 106, if the Air Force concurs with our opinion they should retain their documented finding as part of the project files, along with this letter and our letter of July 8, 2004.

If you have any questions, please do not hesitate to call Bill Callahan at 402/471-4788. Thank you for this opportunity to comment.

Sincerely,

L. Robert Puschendorf
Deputy State Historic Preservation Officer
Nebraska State Historic Preservation Office

Cc: Karl Morris- 55 CES/CEVN

Davis, Christine

From: Bill Callahan [callahan@nebraskahistory.org]
Sent: Tuesday, March 22, 2005 12:17 PM
To: Davis, Christine
Subject: AAFES, Offutt AFB

Hi, Christine:

We just received a request for comment by Offutt for the construction of the AAFES facility. In order to avoid confusion, we will not reiterate our determination of no adverse effect per our October 4, 2004 correspondence (see attached). Although we cc'd Offutt with the original correspondence, please provide them with a copy of our comment.

If you have any questions, please do not hesitate to either email or call me at 402/471-4788.

Thank you,

Bill Callahan
Public Programs and Resource
Planning Program Associate
Nebraska State Historic Preservation Office

STATE OF NEBRASKA

Mike Johanns
Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY
Michael J. Linder
Director
Suite 400, The Atrium
1200 'N' Street
P.O. Box 98922
Lincoln, Nebraska 68509-8922
Phone (402) 471-2186
FAX (402) 471-2909

April 4, 2005

Christine Davis
The Environmental Company, Inc.
1525 State St., Suite 103
Santa Barbara, CA 93101

RE: Environmental Assessment (EA) for the Proposed Construction of an Army and Air Force Exchange Service (AAFES) Shopping Center at Offutt AFB, Nebr.

Dear Ms. Davis:

The Nebraska Department of Environmental Quality (NDEQ) has reviewed the above referenced project. We recommend that you include some language in the Air Quality section of the FONSI to reflect that asbestos testing will occur, and abatement measures will follow if required.

If you have questions, feel free to contact me at (402) 471-8697.

Sincerely,

Hugh Stirts, PhD
NEPA Coordinator

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
106 SOUTH 15TH STREET
OMAHA NE 68102-1618

REPLY TO
ATTENTION OF

April 5, 2005

Planning, Programs, and Project Management Division

Ms. Christine Davis
The Environmental Company, Inc.
1525 State Street, Suite 103
Santa Barbara, California 93101

Dear Ms. Davis:

The U.S. Army Corps of Engineers, Omaha District (Corps) reviewed the proposed action and offered comments in a letter dated March 26, 2004.

The Corps has reviewed the FONSI submitted March 7, 2005 regarding the construction of a mini mall at Offutt Air Force Base in Sarpy County, Nebraska and has no additional comments.

If you have questions, please contact Ms. Katie Reed at (402) 221-4604. Thank you for the opportunity to review this proposal.

Sincerely,

Candace Gorton

Candace Gorton, Chief
Environmental, Economics and
Cultural Resources Section
Planning Branch

Appendix B

IRP Site Waiver

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS, 55TH WING (ACC)
OFFUTT AIR FORCE BASE, NEBRASKA

6 July 2004

MEMORANDUM FOR HQ ACC/CEV
129 Andrews St Ste 102
Langley AFB VA 23665-2769

FROM: 55 CES/CC
106 Peacekeeper Dr Ste 2N3
Offutt AFB NE 68113-4019

SUBJECT: Construction Waiver to Construct a Main Exchange (BX) at Offutt's Environmental Restoration Program (ERP) BX Service Station Site (SS-004)

1. Request a waiver to construct a new Main Base Exchange (BX) at Offutt AFB. Construction of the new BX will be on or near an Environmental Restoration Program (ERP) site (the existing BX Service Station). A drawing showing the proposed construction site is at Attachment 1.

2. This project will include a 15,681 square meter shopping center, containing a main exchange retail store, military clothing sales store, 6-concept food court, Great Western Bank to include a drive-through and a 17-activity concessions mall. The facility will also include administration offices, merchandise processing area, 792-vehicle parking, cargo delivery area, and landscape to incorporate site drainage, retention walls, curbs and gutters for a complete and useable facility. The new facility will incorporate accessibility for the physically handicapped, fire detection, alarm and suppression systems, communications; duress alarms systems, and a 700-ton heating, ventilation and air conditioning system.

3. The fuel contamination from the BX Service Station site should have no adverse impact on construction of the new BX, as the primary source of contamination has been eliminated. However, contaminated soil encountered during construction, which cannot be placed back in the excavation, will be hauled to an approved landfill for disposal and/or treatment. No additional remedial action is required at this site by the Nebraska Department of Environmental Quality.

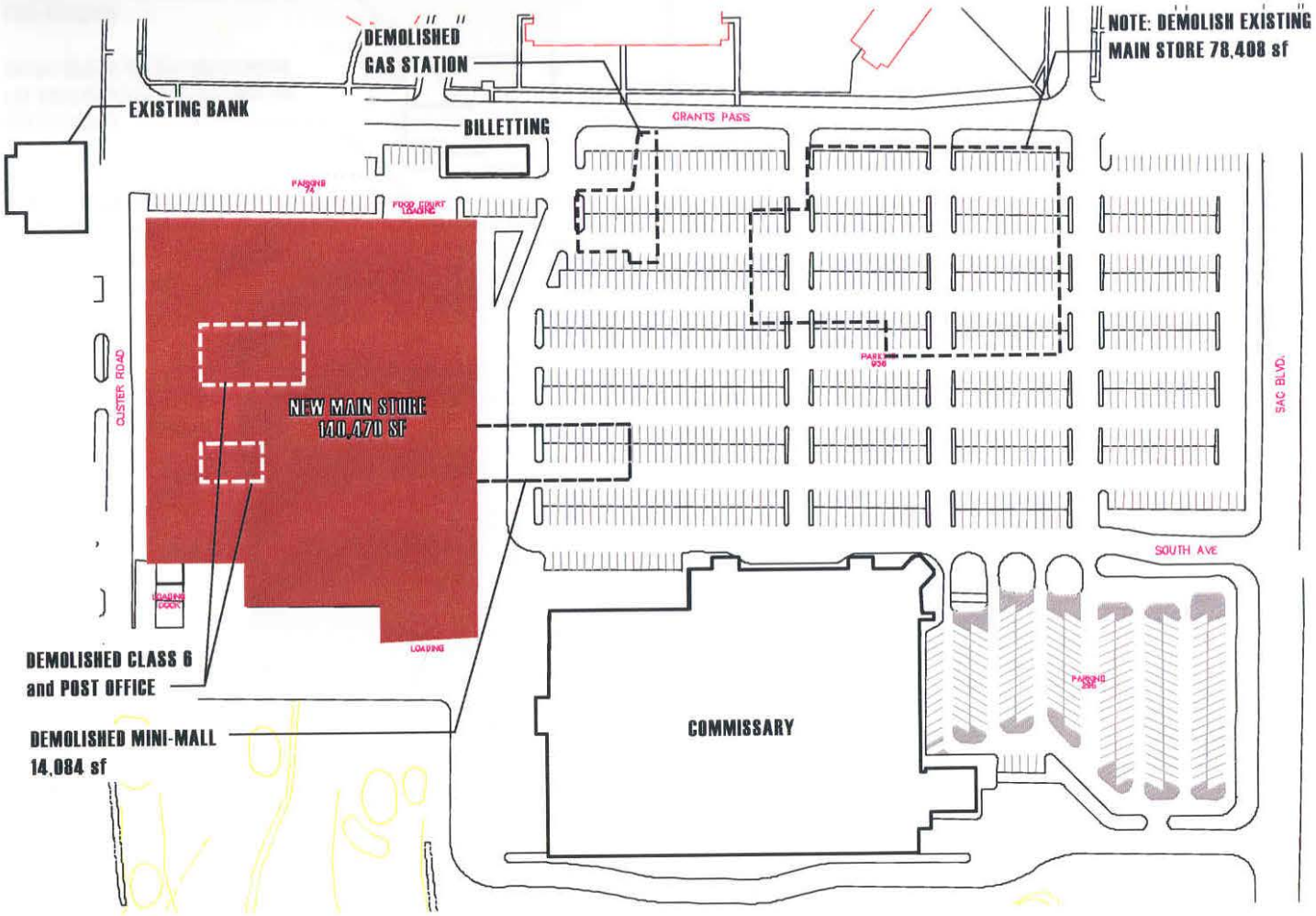
4. We have notified the Nebraska Department of Environmental Quality and the Environmental Protection Agency Region VII of our intent to build a new BX. Neither opposed this construction as long as we follow appropriate regulations if contamination is encountered.

5. Our point of contact for the site is Mr. Philip Cork at (402) 294-7621.

GARY J. SINGLER, Lt Col, USAF
Commander, 55th Civil Engineer Squadron

Attachments:
1. Proposed Construction Site Map
2. Map Indicating Extent of Contamination

cc: HQ ACC/CEP
HQ ACC/CEVR



LEGEND

- Existing AAFES Facilities
- Proposed AAFES Facilities
- Demolished Buildings

NOTE: Build new store and demolish existing main store.

Note: Base for graphic provided by Terry Lee and Associates.

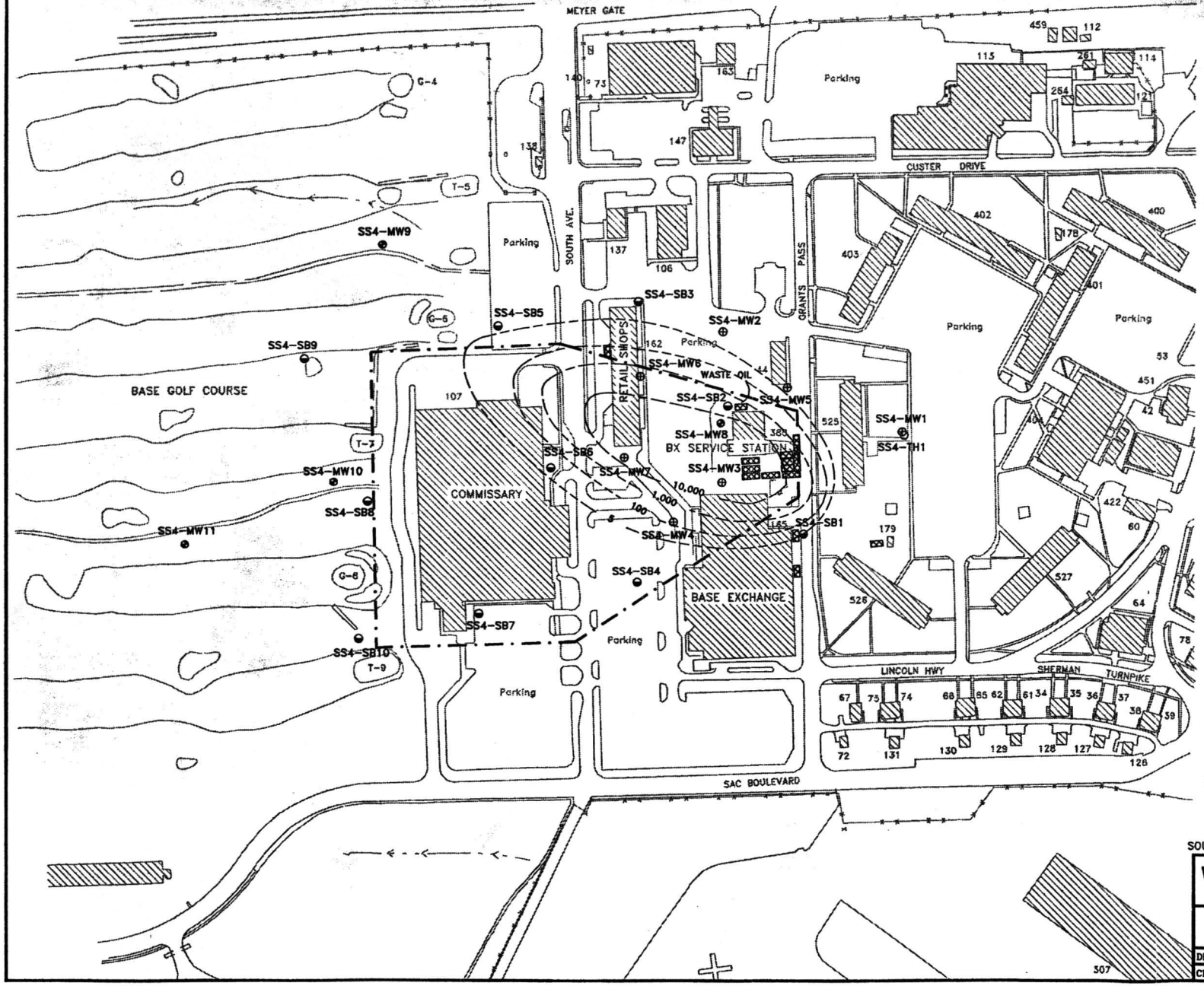
Offutt Air Force Base
Proposed Master Plan

NEW MAIN STORE

ERNST & YOUNG

No Scale

AUGUST 2001



LEGEND

- EXISTING MONITORING WELL LOCATION
- EXISTING SOIL BORING LOCATION
- MONITORING WELL LOCATION
- SOIL BORING LCOATION
- TEST HOLE LOCATION
- 1,000 BENZENE ISOCONCENTRATION CONTOURS (ug/L)
- SURFACE DRAINAGE
- USTS
- STRUCTURE
- SUSPECTED SPILL SITE LOCATION

200 0 200 400

APPROXIMATE SCALE IN FEET

SOURCE: Offutt AFB CAD generated sites & aerial photos

Woodward-Clyde Consultants
ENGINEERING & SCIENCES APPLIED TO THE EARTH & ITS ENVIRONMENT

ESTIMATED PRESENT-DAY BENZENE ISOCONCENTRATION CONTOURS AT SS4 OFFUTT AIR FORCE BASE NEBRASKA

DRN BY	JWB	DATE	FEB. 1992	PROJECT NO.	FIG. NO.
CHK'D BY	DLJ	DATE	FEB. 1992	89MC206E	8

Phil
file

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR COMBAT COMMAND
LANGLEY AIR FORCE BASE VIRGINIA

AUG 05 2004

MEMORANDUM FOR 55 CES/CC
106 Peacekeeper Drive, Suite 2N3
Offutt AFB NE 68113-4019

FROM: HQ ACC/CEV
129 Andrews Street, Suite 102
Langley AFB VA 23665-2769

SUBJECT: Waiver Approval for Environmental Restoration Program (ERP) (Ref: Your Ltr, 6 July 04, Construction Waiver to Construct a Main Exchange (BX) at Offutt's Environmental Restoration Program (ERP) BX Service Station Site (SS-04)

1. Your request for construction waivers for Project SGBP040021 on ERP site SS-04 is approved. You may proceed with the construction of the Main Base Exchange and all associated work.

2. Referenced letter and its attachments identify environmental concerns and provide stipulations for construction contingencies on ERP site. Please ensure strict compliance with these stipulations. Any contaminated material identified during construction will be removed using project funds.

3. HQ ACC/CEV ERP Program Manager for Offutt is Mrs. Carol Stark. If you have any questions regarding this issue, please contact her at DSN 574-9415 or (757) 764-9415.

Patricia M. Ogorzaly

PATRICIA M. OGORZALY
Acting Chief, Environmental Division