STAFF SUMMARY SHEET

	TO	ACTION	SIGNATURE (Surname), GRADE AND DATE		TO	ACTION	SIGNATURE (Surname), GRADE AND DATE
1	90 MW/ SEG	Coord	10 Apr 2012	6	90 MW/ CCS	Coord	
2	90 MW/ JA	Coord	GS-13 11 Apr 12	7	90 MW/ CV	Coord	11 Apr
3	90 MSG/ CC	Coord	11 Apr 12	8	90 MW/ CC	Sign	2 APRIL
4	90 MW/ CCEA	Coord	#122 11 Apr 12	9	90 CES/ CC	File	
5	90 MW/ CCE	Coord	11 Apr 12	10			

SURNAME OF ACTION OFFICER AND GRADE	SYMBOL	PHONE	TYPIST'S INITIALS	SUSPENSE DATE
Beckwith, GS-11	90 CES/CEAN	773-3667	rs	

SUBJECT	DATE
Final Environmental Assessment, Gate 5 (Central Avenue) Interchange Improvements	20120406

SUMMARY

1. PURPOSE: 90 MW/CC sign the Final Finding of No Significant Impact (FONSI) allowing the re-alignment of traffic lanes to Gate 5.

2. SUMMARY: F. E. Warren AFB (FEW) is proposing to re-align and expand the traffic lanes that lead to Gate 5 to accommodate the commercial traffic that will be re-routed from Gate 2. The proposed lane re-alignment will occur in May 2012. Per the requirements of the National Environmental Policy Act (NEPA), an Environmental Assessment (EA) has been developed to analyze potential environmental impacts associated with the proposed traffic lane re-alignment and expansion. The NEPA process did not reveal any significant impacts to the human or natural environment; therefore, a FONSI has been prepared by and contracted to Booz Allen Hamilton. The FONSI is the decision document that will finalize the NEPA process for the proposed action. Per the requirements of NEPA, the EA was released for public comment from 26 March through 02 April 2012. A public notice was published in the Warren Sentinel to notify the public of the availability of the EA for review. Copies of the EA were placed at the Base Library and on the FEW Warren website. No comments were received.

3. The Final FONSI is located at Tab 1. The Final EA is located at Tab 2.

4. RECOMMENDATION: 90 MW/CC sign the FONSI at Tab 1.

for Richard W Barbinson
TRAVIS K. LEIGHTON, Lt. Col, USAF
Commander, 90th Civil Engineer Squadron

2 Tabs:
1. Final FONSI, Gate 5 (Central Avenue) Interchange Improveme
2. Final EA, Gate 5 (Central Avenue) Interchange Improvements

Report Documentation Page

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
APR 2012		**00-00-2012 to 00-00-2012**

4. TITLE AND SUBTITLE	5a. CONTRACT NUMBER
Final Environmental Assessment for Gate 5 (Central Avenue) Interchange Improvements on F. E. Warren Air Force Base, Wyoming	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **Booz Allen Hamilton,8283 Greensboro Drive,McLean,VA,22102**	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**	**Same as Report (SAR)**	**20**	

FINAL

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FOR

GATE 5 (CENTRAL AVENUE) INTERCHANGE IMPROVEMENTS

ON

F. E. WARREN AIR FORCE BASE, WYOMING

DECISION

It is my decision to approve the proposed action as described in the Environmental Assessment (EA) for the improvements at Gate 5, which is attached and hereby incorporated by reference.

FINDING OF NO SIGNIFICANT IMPACT

This EA was prepared and evaluated pursuant to the National Environmental Policy Act (Public Law 91-190, 42 U.S.C. 4321 *et seq*) and the Air Force Environmental Impact Process (32 CFR 898). I have concluded that the Proposed Action does not constitute "a major federal action significantly affecting the quality of the human environment" when considered individually or cumulatively in the context of the referenced Act, including both direct and indirect impacts. Therefore, an Environmental Impact Statement is not necessary.

RATIONALE FOR DECISION

My decision to approve the proposed action is based upon the following:

The current design of Gate 5 is deficient and does not adequately handle the projected increase in traffic from the closure of Gate 2. These deficiencies constitute a clear risk to health, safety, and mission execution.

Rehabilitating Gate 1 to accommodate commercial traffic is not a viable option and would result in traffic conditions that would adversely impact traffic flow along the I-25 corridor.

The bridge along Missile Drive that allows access to Gate 2 is unsafe for large commercial vehicles.

Based on the analysis of environmental impacts in the EA, impacts to wildlife and other resources resulting from the proposed project, independently or cumulatively, will not be significant.

APPROVED BY

CHRISTOPHER A. COFFELT, Colonel, USAF
Commander, 90th Missile Wing

21 APR 12
DATE

FINAL

ENVIRONMENTAL ASSESSMENT

FOR

GATE 5 (CENTRAL AVENUE) INTERCHANGE IMPROVEMENTS

ON

F. E. WARREN AIR FORCE BASE, WYOMING

April 2012

Prepared By:
Booz Allen Hamilton
90 CES/CEAN, F. E. Warren AFB, Wyoming
Point of Contact: Travis Beckwith, (307) 773-3667

Table of Contents

1. INTRODUCTION

F. E. Warren Air Force Base (FEW) or Installation is proposing to realign traffic lanes at Gate 5 (Central Avenue) and add a visitor's parking lot.

2. PURPOSE AND NEED FOR ACTION

The purpose of this action is to provide safe access to FEW for government, personal and commercial vehicles. FEW intends to close Gate 2 to commercial vehicle traffic, due to the unsafe conditions on the Missile Drive Bridge beyond Gate 2. The Missile Drive Bridge beyond Gate 2 is not deemed safe enough to handle the daily continuous passage of commercial vehicles. It is slated for future repair and replacement. Gate 2 currently processes the majority of the commercial traffic coming onto the Installation. Commercial traffic will be re-directed to Gate 5; Gate 5 has a commercial vehicle inspection bay, and thus has a greater capability to handle the intake of commercial traffic than either Gate 1 or Gate 3.

Although Gate 5 has a large commercial inspection bay, the roads leading to Gate 5 were not designed to handle the increased commercial traffic is re-routed. Since Gate 5 is currently unable to handle the anticipated higher volume of commercial vehicular traffic, Gate 5 will require additional vehicle lanes and realignment of the Central Avenue entrance. Additionally, Gate 5 will have to handle all commercial traffic while the Missile Drive Bridge replacement at Gate 2 is being constructed. Thus, the proposed action will allow safe and expedient access to FEW for all vehicle traffic.

3. SCOPE OF THE ENVIRONMENTAL ASSESSMENT

This Environmental Assessment (EA) is required by the Air Force Environmental Impact Analysis Process (32 CFR 989) and the National Environmental Policy Act (Public Law 91-190), Council on Environmental Quality (CEQ) Regulations (40 CFR Parts 1500-1508). This EA identifies, describes, and evaluates the potential direct, indirect, and cumulative environmental impacts that could result from the construction of the proposed action.

3.1. ALTERNATIVE SELECTION CRITERIA

3.1.1. Security.

Installation Gates handling incoming commercial traffic must have a covered vehicle inspection bay. Any Gate handling commercial traffic that does not have a covered vehicle inspection bay does not meet Department of Defense (DoD) and Air Force (AF) requirements for secure commercial vehicle inspection.

3.1.2. Traffic Circulation.

Inspection facilities for commercial traffic should be sufficiently sized and equipped to handle commercial traffic in a way that does not impede the flow of other traffic onto the Installation and does not cause traffic congestion. The gates should also not direct commercial traffic onto the main roadways of the Installation.

3.1.3. Safety.

Inspection facilities should not empty commercial traffic on the main arterial roadways of the Installation. Commercial traffic is directed to avoid the main roadways on the Installation to improve traffic safety.

4. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

4.1. Alternative 1 – Improvements to Gate 5 (Preferred Alternative)

The preferred action includes constructing two additional inbound lanes of traffic at Gate 5 and filling in the open storm drain. The lanes will be approximately one-half (0.5) mile in length and extend from the current transition of the four lane section owned by the City of Cheyenne to the two lane section owned by FEW. This will accommodate the traffic from the adjacent Joint Forces Readiness Center (JFRC) and the additional commercial vehicle traffic at Gate 5. This action will increase the existing two lane roadway from 5,574 square meters of pavement to four lanes and 11,140 square meters of pavement. Other work will include the addition of signage, storm water improvements, and additional curbs, gutters, and fences.

4.2. Alternative 2 – Move Commercial Traffic to Gate 1

Alternative 2 would move all commercial traffic to Gate 1 on Randall Avenue, which is the main gate for the Installation.

4.3. Alternative 3 – Improve Gate 2 Roadways

Alternative 3 would replace the Missile Drive Bridge west of Gate 2 to allow access of commercial vehicles.

4.4. Alternative 4 – Move Commercial Traffic to Gate 3

Alternative 4 would move commercial traffic to Gate 3.

4.5. Alternative 5 – No Action

Alternative 5 is to take No Action. Under the No Action Alternative, no improvements to Gate 5 will occur. The current traffic configuration would continue and commercial traffic would not be rerouted.

5. ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION.

5.1. Alternative 2 – Move Commercial Traffic to Gate 1

There is not enough distance between Gate 1 and the I-25 interchange to accommodate the high volume of commercial traffic that enters the Installation on a daily basis. Alternative 2 would likely cause traffic backups onto I-25, creating a significant safety hazard. Although additional commercial traffic could be held in field south of Gate 1, this would require additional roadway and parking lot construction that is currently unplanned and unfunded at this time. Re-routing traffic to Gate 1 would also require a significant amount of commercial vehicle traffic to travel through the main area of base (along Randall Avenue) which would add to traffic congestion on the Main Base. Additionally, Gate 1 does not possess enclosed commercial inspection bay. Thus, having commercial traffic routed through Gate 1 does not meet DoD and AF requirements for secure vehicle inspection. For these reasons, Alternative 2 is infeasible and is eliminated from further consideration.

5.2. Alternative 3 – Improve Gate 2 Roadways

The replacement of the Missile Drive Bridge is planned to occur in 2013; funding is not available in 2012 to replace the Missile Drive Bridge. This limits Gate 2's ability safely to handle commercial vehicle traffic for the remaining part of 2012 and makes Alternative 3 infeasible. For this reason, Alternative 2 is eliminated from further consideration.

5.3. Alternative 4 – Move Commercial Traffic to Gate 3

Gate 3 does not have an enclosed commercial inspection facility and is not equipped to handle commercial traffic. The lack of a covered commercial inspection bay does not meet the requirements and standards for secure DoD and AF vehicle inspection. Additionally, commercial traffic coming through Gate 3 would pass near the Carlin Heights housing area, which would increase amounts of noise and traffic congestion for installation residents living at Carlin Heights. For these reasons, Alternative 4 is infeasible and is eliminated from further consideration.

6. AFFECTED ENVIRONMENT

The following Affected Environment Resource Areas are not expected to be impacted by the Proposed Action or the various Alternatives to the Proposed Action: Land Use, Water Resources, Natural Resources, Hazardous Waste, and Utilities. A detailed

description of the Affected Environment for these Resource Areas is available in the *Final Programmatic Environmental Assessment for F. E. Warren AFB*, (2005). These descriptions are hereby incorporated by reference into this Environmental Assessment. See Table 1.

6.1. Geology & Soils

FEW is located within the High Plains section of the Great Plains Physiographic Province. Rocks within the region range in age from Pre-Cambrian to recent, and are composed primarily of shale with small amounts of sandstone, siltstone, and limestone. The base is in Seismic Zone 1, which means there is a minor seismic event probability. Base topography is characterized by broad plateaus that are nearly flat in the historic core, and increase in slope along the ridgelines and along Crow Creek. Elevation ranges from 6,080 feet in the southeastern portion of the base, to 6,365 feet in the northern portion. Most areas with slopes of 10 percent or greater, which are generally considered unsuitable for construction, are located in the undeveloped northern third of the base. The predominant soil series on the base is classified texturally as loamy, with an average topsoil depth ranging from four to six inches. The subsoil is primarily alluvial clay that extends from a depth of approximately 6 to 36 inches.

6.2. Air Quality

Under provisions of the Clean Air Act (CAA), the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) for air pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. One set of limits (the primary standard) protects health; another set of limits (the secondary standard) is intended to prevent environmental and property damage. A geographic area that meets or does better than the primary standard is called an attainment area; areas that don't meet the primary standard are called non-attainment areas. Laramie County is designated as an attainment area for all criteria air pollutants.

6.3. Cultural and Archaeological Resources

FEW has over 200 properties that are contributing elements to the Fort D. A. Russell National Historic Landmark District (NHLD). Most of these facilities are located within the central core of the base, designated as a Historic District in 1969 under the provisions of the National Historic Preservation Act [16 U.S.C. 470 *et seq.*], and designated the Fort D. A. Russell National Historic Landmark in 1972. The base also contains 131 archaeological sites; of which, 71 are eligible or potentially eligible for inclusion in the National Register of Historic Places (30 C.F.R. 60).

6.4. Safety and Occupational Health

Traffic congestion on base normally peaks in the early morning, during lunchtime, and at the end of the workday. Congestion occurs at Gate 1, Gate 2, and Gate 5 as people enter and leave the base. Traffic congestion also occurs at the intersection of Rogers Drive, Randall Avenue, and Vesle Drive. The rail crossing at the intersection of Randall Avenue and Missile Drive/Central Avenue is signed but not signalized. The presence of pronghorn antelope also presents a traffic circulation concern, as collisions are a possibility.

6.5. Noise

Existing sources of noise on the installation include fixed-wing aircraft from the Cheyenne Airport, rotary-wing aircraft from the installation's helicopter operations, the Burlington Northern Santa Fe railroad, vehicle traffic on surface streets, and dispersed construction areas.

6.6. Solid Waste

The installation does not have an active solid waste landfill. Solid waste (trash) is collected, weighed, and transported to the City of Cheyenne landfill for disposal. A civilian contractor removes approximately 160 tons of solid waste per month from the installation's industrial areas, and an additional 100 tons of solid waste from the Military Family Housing.

6.7. Transportation

The arterial roads on the installation, those roads that carry the most traffic, are Artillery Road, Central Avenue, Randall Avenue, Missile Drive, and the Northern Portion of Old Glory Road. Six collector roads, Frontier Road, Old Glory Road, Rogers Drive, Commissary Road, 10th Cavalry Avenue, and 15th Cavalry Avenue, distribute traffic from the arterial roads to local roads and to adjacent land uses.

Table 1. Comparison of Anticipated Environmental Impacts

	Alternative 1	Alt. 5-No Action
Land Use	No Change	No Change
Geology & Soils	Potential for minor soil erosion during construction	No Impacts
Air Quality	Increased emissions during road construction in area	No Impacts
Water Resources	None	None
Natural Resources	None	None
Cultural Resources	None	None
Safety/Occ. Health	Positive impacts to traffic safety at Gate 2	Unsafe conditions at Gate 2 would continue as traffic is routed over Missile Drive Bridge
Noise	Minor increase in noise during construction	None
Solid Waste	Solid waste generated during construction	None
Hazardous Waste	None	None
Utilities	None	None
Transportation	Positive impact on traffic flow	Adverse impact on traffic flow at Gate 5 as current roadways configurations are inadequate to handle incoming commercial traffic

7. ENVIRONMENTAL CONSEQUENCES

7.1. ALTERNATIVE 1 – Improvements to Gate 5 (Proposed Action)

7.1.1. Geology and Soils

7.1.1.1. Direct and Indirect Impacts – Ground disturbance during construction will create a short-term increase in the potential for soil erosion. The use of best management practices during construction will mitigate the potential for soil erosion.

7.1.1.2. Cumulative Impacts – Construction at Gate 5, when combined with other projects on or proximate to the base, will not significantly impact the soils on the installation. Development on the installation will disturb soils in the future. This is not expected to adversely impact soils on the installation.

7.1.2. Air Quality

7.1.2.1. Direct and Indirect Impacts – A short-term increase in fugitive dust will be generated by ground disturbing activities during construction activities. There will also be a short-term increase in vehicle emissions generated by construction equipment. Increase in localized vehicle emissions associated with operation and use of the gates is not expected, as these gates are already in use. FEW is in an attainment area, therefore, an air conformity analysis is not needed.

7.1.2.2. Cumulative Impacts – The proposed actions may have a positive impact on local air quality. Better traffic patterns should facilitate more efficient entry onto FEW and reduce the amount of time vehicles spend idling. Improvements to Gate 5, when combined with the impacts of other projects on or proximate to the base, does not significantly impact installation air quality. Planned future land use patterns will not change significantly from existing land use configurations. Planned future development is not expected to change the air quality status on the base or in the surrounding area.

7.1.3. Water Resources

7.1.3.1. Direct and Indirect Impacts – A Wyoming Pollutant Discharge Elimination System (WYPDES) storm water construction permit will be required. A storm water construction permit will be needed because construction activities will disturb more than one acre. The proposed action will add 5,566 square meters of impervious surface at Gate 5. During previous construction at Gate 5, a riparian area was created to the immediate south of the project area, which serves as a detention pond for storm water. Any storm water runoff generated by the increased impervious surface is expected flow into the riparian area south of Gate 5. All sheet runoff will remain on site and possibly increase the size of the volume of the riparian area. Planning and management of stormwater at Gate 5 follows Section 438 of the Energy Independence and Security Act (EISA) which dictates "pre-development hydrology" is preserved at Federal facilities to the maximum extent practicable.

7.1.3.2. Cumulative Impacts – Construction at Gate 5, when combined with the impacts of other projects on or proximate to the base, does not significantly affect the water resources on the installation. Planned future development on the installation will result in additional impervious surface. Currently, 72% of the installation is classified as Open Space, and projections indicate that future foreseeable development will utilize an additional 300 acres, leaving 67% of the installation classified as Open Space (USAF 2004). The amount of impervious surface added to

the installation is expected to be negligible in relation to the amount of Open Space remaining.

7.1.4. Cultural Resources

7.1.4.1. Direct and Indirect Impacts – Improvements to Gate 5 will not occur within the boundary of the Historic District, nor will it be visible from it. There are no archaeological sites documented in the vicinity of Gate 5. Design drawings shall be coordinated with the Wyoming State Historic Preservation Office to ensure the proposed action will have no impacts to cultural resources. If any archaeological resources are discovered during construction, FEW shall adhere to the "Cultural Resources Standard Operating Procedure: Unanticipated Discovery of Archaeological Resources".

7.1.4.2. Cumulative Impacts – Improvements at Gate 5, when combined with the impacts of other projects on or proximate to the base, does not significantly impact installation cultural resources.

7.1.5. Safety and Occupational Health

7.1.5.1. Direct and Indirect Impacts - There would be no impacts related to human health and safety from the proposed action area during demolition and anticipated site use thereafter. The proposed action will change the traffic patterns at Gate 5 and have a positive impact on traffic safety. Other impacts would be negligible and insignificant. All personnel shall follow Occupational Safety & Health Administration (OSHA) and AF regulations to ensure safety on the work site.

7.1.5.2. Cumulative Impacts - A long-term positive impact on health and safety is anticipated at Gate 5, as the proposed project will alleviate the problem of traffic backing up onto Interstate 25. Construction at Gate 5, when combined with the impacts of other projects on or proximate to the base, will not cause a significant health and safety impact.

7.1.6. Noise

7.1.6.1. Direct and Indirect Impacts – There will be a short-term increase in noise associated with construction activities. However, noise generated by construction activities should not constitute a nuisance. Since noise associated with traffic is already present in each of the proposed locations, long-term impacts are expected to be insignificant.

7.1.6.2. Cumulative Impacts – Improvements at Gate 5, when combined with other projects on or proximate to the base, will not cause significant noise impacts. Planned future land use patterns will not change

significantly from existing land use configurations. The increase in noise, other than during construction activities, resulting from future development is expected to be insignificant.

7.1.7. Solid Waste

7.1.7.1. Direct and Indirect Impacts – There will be non-hazardous construction debris generated by this project, such as cleared vegetation, excess lumber, and other non-hazardous building materials. These materials will either be recycled or disposed of at the Cheyenne City Landfill located at 1461 Happy Jack Road (ten miles west of the base).

7.1.7.2. Cumulative Impacts – Improvements at Gate 5, when combined with other projects on or proximate to the base, will not significantly impact solid waste management. Solid waste generated on the installation is either recycled or taken to the city landfill. The new construction will not create a long-term increase in the amount of solid waste generated by the installation.

7.1.8. Transportation

7.1.8.1. Direct and Indirect Impacts – Short-term increases in traffic at alternating gates is expected during construction. The preferred alternative will have a positive impact on traffic safety by realigning traffic patterns and making clear routes of ingress.

7.1.8.2. Cumulative Impacts – Long-term increases in traffic volume are not expected, as these gates are already in use. Cumulative impacts to transportation are not expected.

7.2. ALTERNATIVE 5 – No Action

Under the No Action Alternative, no changes to any of the ECP's would occur. The ECP's would continue to operate as they do now. The no action alternative would not address traffic or safety concerns at either Gate 2 or Gate 5.

8. LIST OF PREPARERS/PERSONS CONSULTED

The following agencies/individuals were contacted and/or provided a copy of the EA during its original preparation in order to afford an opportunity for comment on the content of the document.

U. S. Fish and Wildlife Service 5353 Yellowstone Road Cheyenne WY 82009	Kurt Warmbier Environmental Attorney F. E. Warren AFB WY 82005
Todd Eldridge Community Planner F. E. Warren AFB WY 82005	Jennifer Howenstine Natural Resources/NEPA Support F. E. Warren AFB WY 82005
Travis Beckwith NEPA/Cultural Resources Manager F. E. Warren AFB WY 82005	
Andy McKinley Chief, Environmental Flight F. E. Warren AFB WY 82005	
Kirk Schaumman Air Quality Manager F. E. Warren AFB WY 82005	

9. MAPS & FIGURES

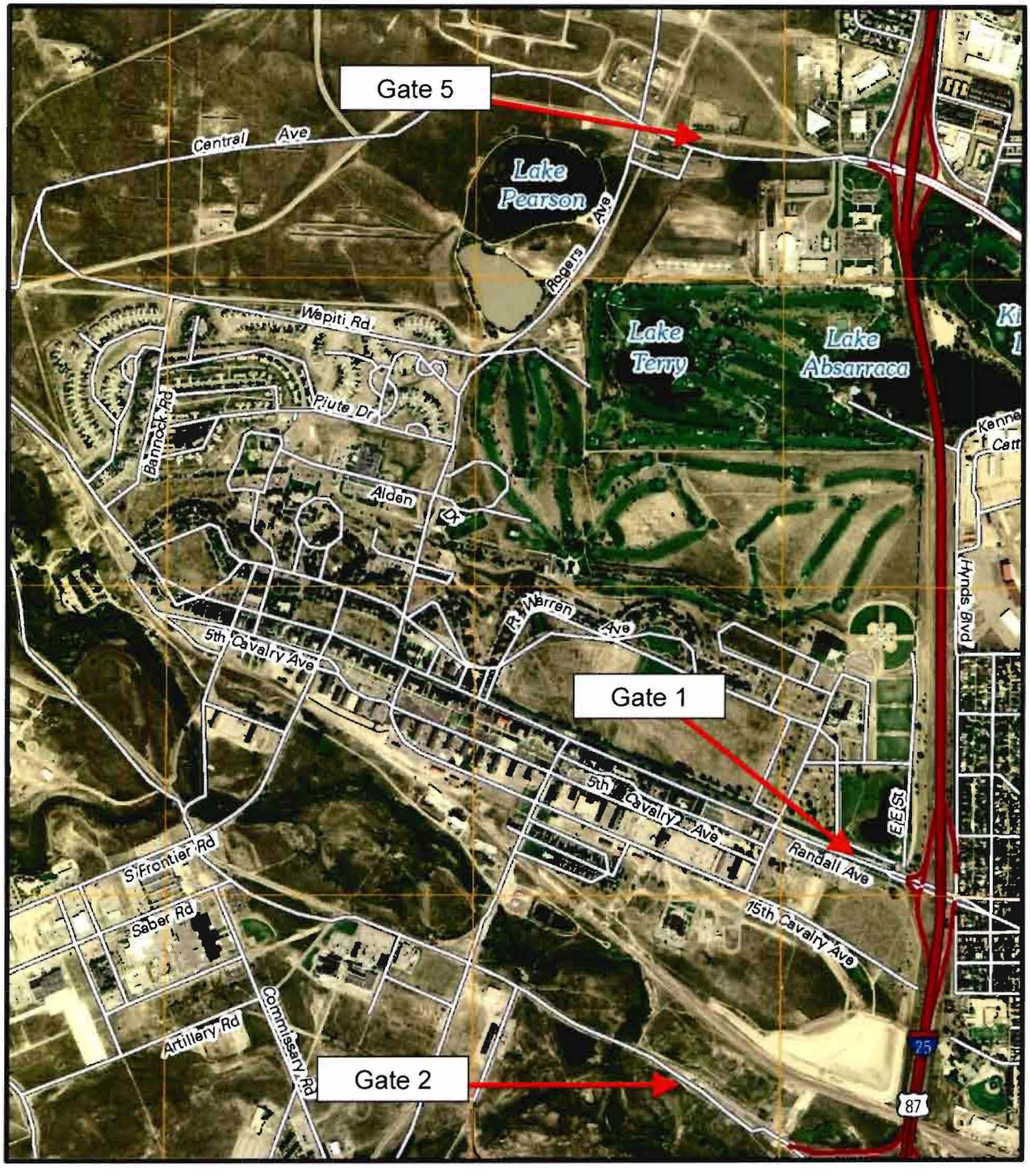


Figure 1: (U. S. Geological Survey. *Cheyenne North Quadrangle, Wyoming.* 1:24,000. 7.5 minute series. Reston, Virginia: USGS 2009).

Figure 2: Aerial photograph of Gate 5 (90 CES Geobase).

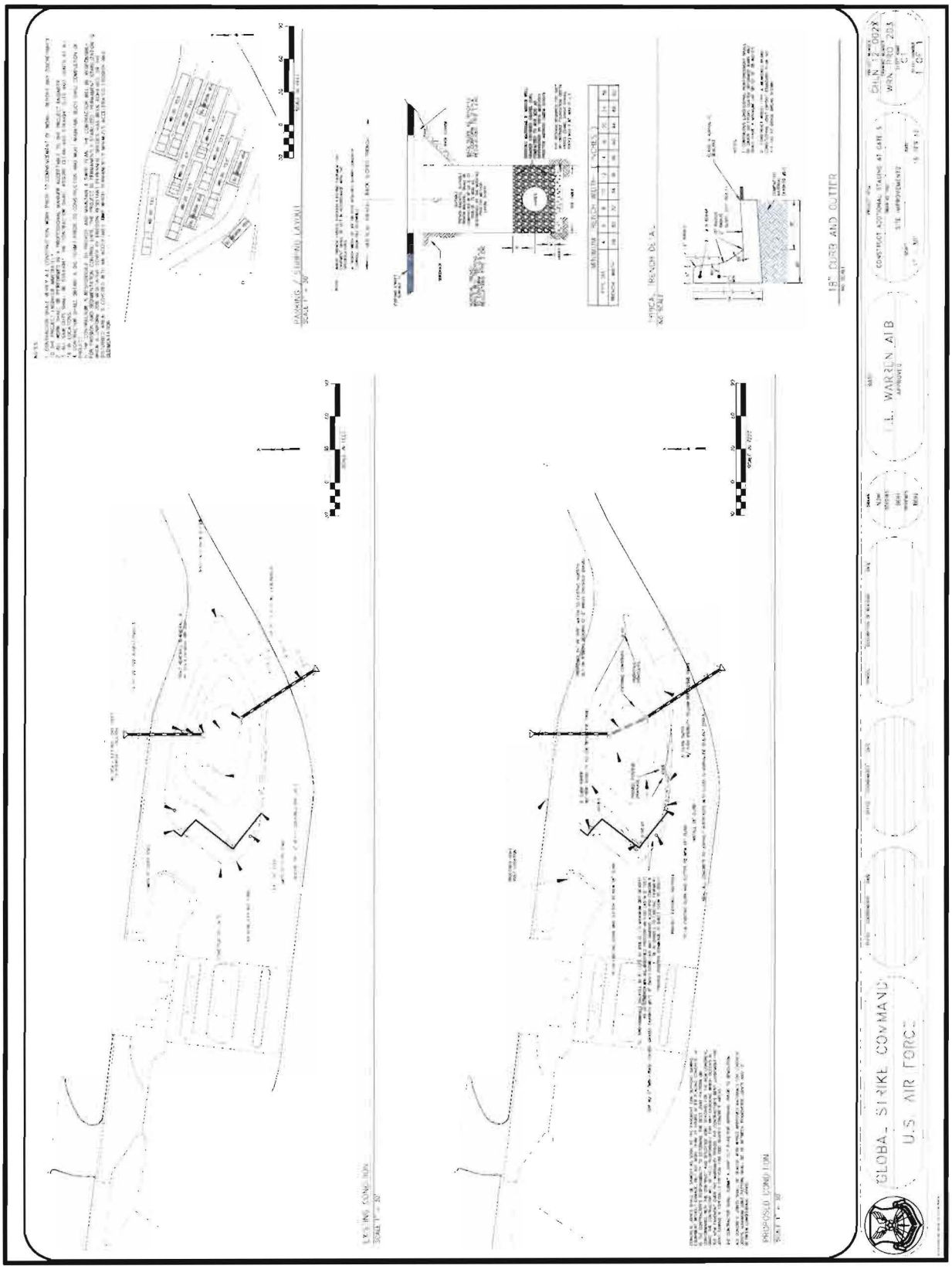


Figure 3: Construct Additional Staging Area at Gate 5 Site Improvements

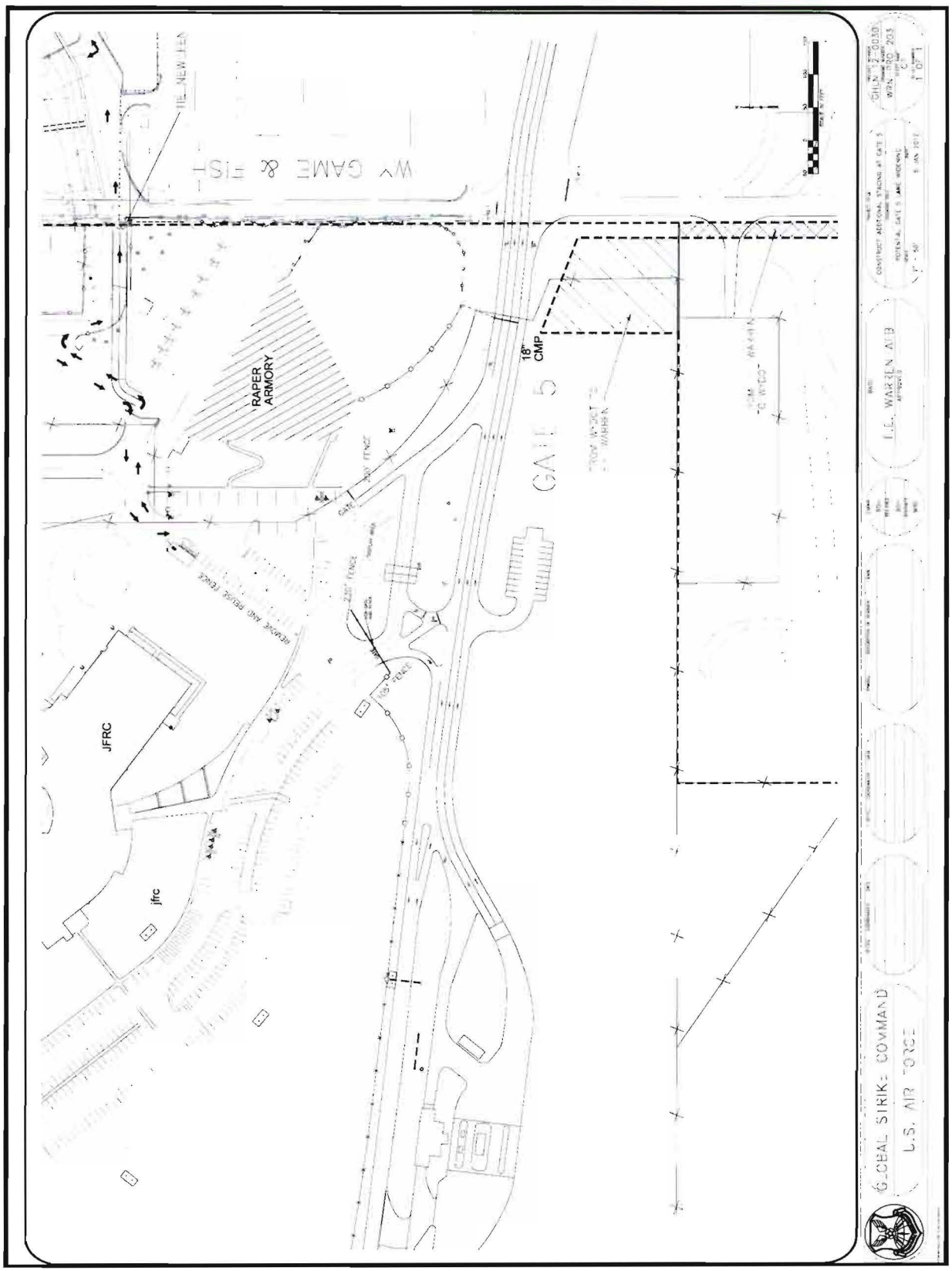
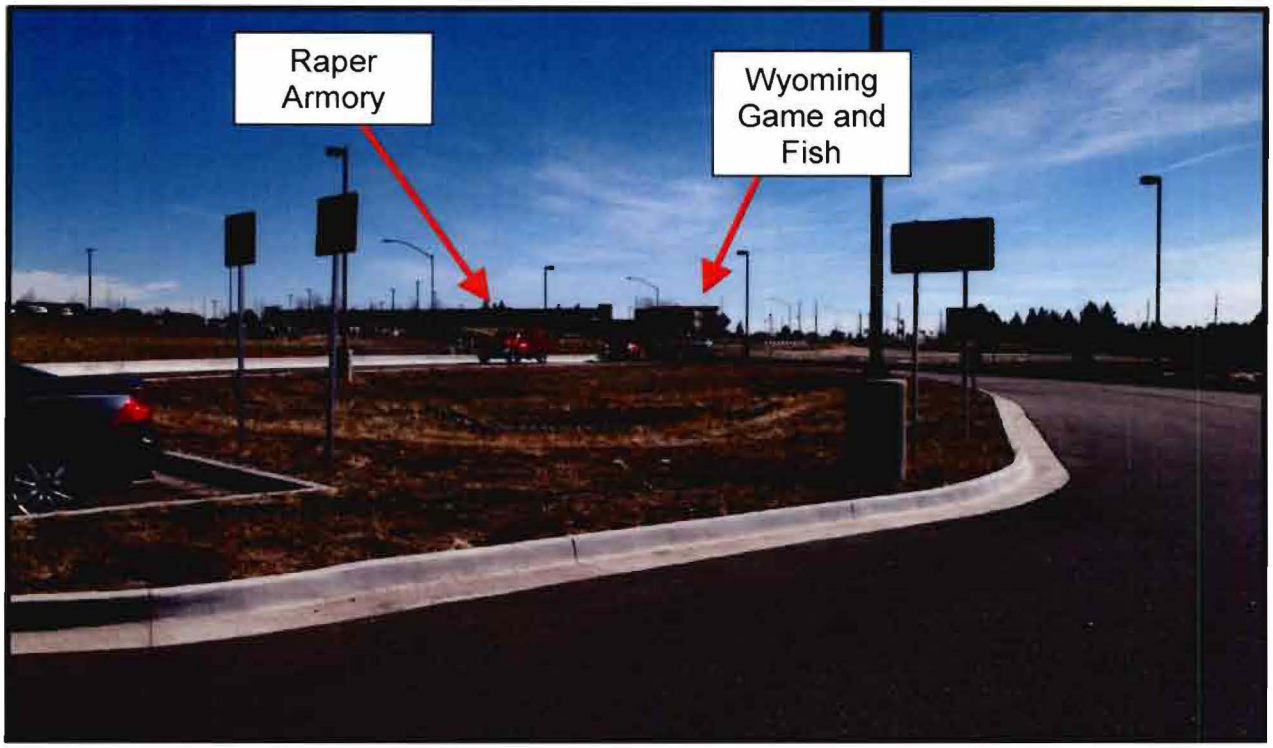


Figure 4: Construct Additional Staging at Gate 5 (Potential Gate 5 Widening)

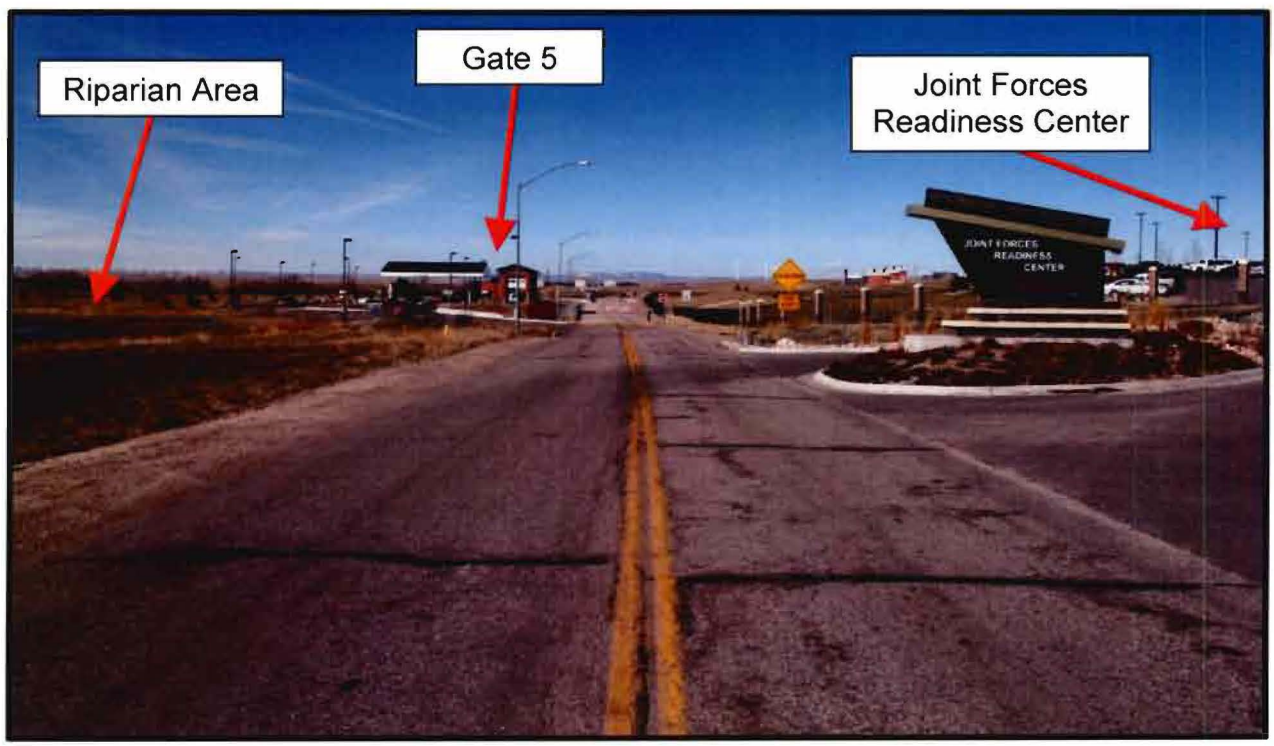
10. PHOTOGRAPHS

Photograph 1: View looking west at Gate 5. (Photograph by T. Beckwith, March 2012)

Photograph 2: View looking west at Gate 5. (Photograph by T. Beckwith, March 2012)



Photograph 3: View looking northeast from Gate 5. (Photograph by T. Beckwith, March 2012)



Photograph 4: View looking west along Central Avenue towards Gate 5. (Photograph by T. Beckwith, March 2012)