NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)

NOTICE: 07-GSFC-02

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA): Space Network Expansion East, at the U.S. Army's Adelphi Laboratory Center's (ALC) Blossom Point Research Facility (BPRF), La Plata, Maryland

AGENCY: NASA's Goddard Space Flight Center (GSFC)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: Pursuant to NEPA of 1969, as amended (42 U.S.C. 4321 *et seq.*), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and NASA policy and procedures (14 CFR Part 1216 Subpart 1216.3), NASA has made a Finding of No Significant Impact with respect to the proposed Space Network Expansion (SNE) East Project. The proposed action would be the construction and operation of a satellite ground communications terminal facility at the U.S. Army's Adelphi Laboratory Center's Blossom Point Research Facility, La Plata, Maryland.

ADDRESS: The Environmental Assessment (EA) that supports and serves as a basis for this FONSI may be reviewed at:

Charles County Public Library, La Plata Branch
2 Garrett Avenue
La Plata, Maryland 20646

A limited number of copies of the EA may be obtained by contacting Ms. Lizabeth Montgomery at the address or telephone number indicated below.

FOR FURTHER INFORMATION, CONTACT: Ms. Lizabeth Montgomery, NASA's Goddard Space Flight Center, Safety and Environmental Division, Code 250, Greenbelt, Maryland 20771, Phone: 301-286-0469, Email: Lizabeth.R.Montgomery@nasa.gov

SUPPLEMENTAL INFORMATION:

The Army has prepared an EA to examine the potential effects of the proposed action on natural and cultural resources and areas of environmental concern that could be affected by implementation of the project. NASA has reviewed the EA prepared for the Space Network Expansion East Project and has determined that it represents an accurate and adequate analysis of the scope and level of associated environmental impacts. In accordance with NASA Procedural Requirements 8580.1, NASA, as the adopting agency, has concluded that the EA prepared by the Army adequately describes its proposed action, its potential environmental impacts and in all other respects meets its requirements for an EA. NASA, therefore, has adopted the Army EA (July 2007) and hereby incorporates it by reference in this FONSI. This FONSI is consistent with and is being executed in parallel with, the FONSI prepared by the Army.

The Space Network Expansion East EA describes the ecological, cultural and social issues associated with the proposed clearing and preparation of a six (6) hectare (15 acre) site and the construction and operation of a

satellite ground communications terminal facility (SNE East) at the U.S. Army's Adelphi Laboratory Center's (ALC) Blossom Point Research Facility (BPRF) and clearing of an associated line of sight area. The preferred alternative site is immediately southeast of the Naval Research Laboratory (NRL) Blossom Point Tracking Facility (BPTF). The site of the proposed array is within an area currently leased by the U.S. Army to the U.S. Navy for operation of the BPTF. NASA would operate the proposed mission critical facility in cooperation with the U.S. Naval Research Laboratory. The proposed site clearing, preparation and construction of the new satellite ground communications terminal facility and associated line of sight area and operation of the facility would provide for the critical mission of tracking satellites in space to continue.

The proposed vegetation removal action in both the 6 hectare (15 acre) antenna array site and 20 hectare (50 acre) line of sight area would involve the use of gasoline powered logging equipment, (*i.e.*, chainsaws, trucks, brush chippers, *etc.*). Site preparation and antenna array construction would use equipment normally associated with this type of project (bulldozers, cranes, front end loaders, etc).

Several alternative sites at BPRF for the proposed action were considered for SNE East, they are: 1) Site #1 which is immediately southeast of the BPTF (Preferred Alternative); 2) Site # 6 which is across Blossom Point Road due west of BPTF: 3) Site # 7 southwest of the BPTF and 4) the No Action Alternative. Sites # 6 and 7 were considered for use, but early analysis showed impacts that rendered the alternative not reasonable based on the available alternative site. The No Action Alternative to construction of the proposed facility would result in mission failure of the BPTF and seriously degrade the U.S. Government's satellite tracking ability.

The EA examined potential effects of the proposed action on natural and cultural resources and areas of potential environmental concern that could be affected by implementation of the project. These include land use, soils, surface water, biological resources, cultural resources, environmental justice, and protection of children.

The analysis determined that the implementation of the project on the preferred alternative site would have no significant impacts on the environment. Implementation of the project, with the commitment to use best management practices for commercial tree removal operations and construction, would result in enhanced ability of NASA to complete its mission and increased open and edge habitat to the benefit of the wildlife resources.

On the basis of The Space Network Expansion East Environmental Assessment, NASA has determined that the environmental impacts associated with the Space Network Expansion East Project and locating it at Site #1 (the preferred alternative) will not individually or cumulatively have a significant impact on the quality of the human environment. Therefore, an Environmental Impact Statement is not required. NASA will take no final action prior to 30 days following the publication of this Finding of No Significant Impact.

8-15-07

Edward J. Weiler
Director
NASA's Goddard Space Flight Center

Date

FINDING OF NO SIGNIFICANT IMPACT

IMPLEMENTATION OF CONSTRUCTION OF A SATELLITE GROUND COMMUNICATIONS TERMINAL FACILITY AT THE BLOSSOM POINT RESEARCH FACILITY LA PLATA, MD

US ARMY ADELPHI LABORATORY CENTER
ADELPHI, MD 20783

Pursuant to the Council on Environmental Quality Regulations (40 CFR Parts 1500-1508) for implementing the procedural provisions of the National Environmental Policy Act (42 U.S.C. 4321 et seq.) and Army Regulation 200-2 (Environmental Effects of Army Actions), the US Army Adelphi Laboratory Center (ALC) has written an environmental assessment (EA).

This EA describes the ecological, cultural and social issues associated with the proposed clearing and preparation of a fifteen (15) acre site and the construction and operation of a satellite ground communications terminal facility (SNE East) at the US Army's Adelphi Laboratory Center's (ALC) Blossom Point Research Facility (BPRF) and clearing of an associated line of sight area. The preferred alternative site is immediately southeast of the Naval Research Laboratory (NRL) Blossom Point Tracking Facility (BPTF). The site of the proposed array is within an area currently leased by the US Army to the US Navy for operation of the BPTF. The National Aeronautical and Space Administration (NASA) will operate the proposed mission critical facility in cooperation with the US Naval Research Laboratory. The proposed site clearing, preparation and construction of the new satellite ground communications terminal facility and associated line of sight area and operation of the facility will provide for the critical mission of tracking satellites in space to continue.

The proposed vegetation removal action in both the fifteen acre antenna array site and fifty acre line of sight area involves the use of gasoline powered logging equipment, (i.e. chainsaws, trucks, brush chippers, etc). Site preparation and antenna array construction will use equipment normally associated with this type of project (bulldozers, cranes, front end loaders, etc).

Several alternative sites at BPRF for the proposed action were considered for SNE East, they are: 1) Site #1 which is immediately southeast of the BPTF (Preferred Alternative); 2) Site # 6 which is across Blossom Point Road due west of BPTF: 3) Site # 7 southwest of the BPTF and 4) the No Action Alternative. Sites # 6 and 7 were considered for use, but early analysis showed impacts that rendered the alternative not reasonable based on the available alternative site. The No Action alternative to construction of the proposed facility would result in mission failure of the BPTF and seriously degrade the US Government's satellite tracking ability.

The EA, which is incorporated into this Finding of No Significant Impact, examines potential effects of the proposed action on natural and cultural resources and areas of environmental concern that could be affected by implementation of the project. These include land use, soils. surface water, biological resources, cultural resources, environmental justice, and protection of children.

This analysis determined that the implementation of the project on the preferred alternative site will have no significant impacts on the environment. Implementation of the project, using the best management practices of commercial tree removal operations and construction, shall result in enhanced ability of the

NASA to complete their mission and increased open and edge habitat to the benefit of the wildlife resources.

Based upon the EA, it has been determined that implementation of the proposed action would have no significant impacts on the quality of the natural or human environment. Because there would be no significant impacts resulting from implementation of the proposed action, an Environmental Impact Statement is not required and will not be prepared.

The ALC plans to initiate this proposed action 30 days from the execution of this Finding of No Significant Impact. Copies of the EA may be obtained by contacting: US Army Garrison Adelphi Laboratory Center, ATTN: IMNE-ALC-PA, 2800 Powder Mill Road, Adelphi. MD 20783.

Date: 2/28/07

Joseph Watson
Garrison Manager (Acting)

ENVIRONMENTAL ASSESSMENT

CONSTRUCTION OF A SATELLITE GROUND
COMMUNICATIONS TERMINAL FACILITY
AT THE BLOSSOM POINT RESEARCH FACILITY
LA PLATA, MD

US ARMY GARRISON ADELPHI LABORATORY CENTER
ADELPHI, MD 20783

Prepared by: Date:

Robert S. Wardwell — July 19, 2007

Robert S. Wardwell
Natural Resources Manager
IMNE-ALC-PWE

Reviewed by:

July 20, 2007

Kevin Mason
Environmental Coordinator
IMNE-ALC-PWE

Concurred by:

August 15, 2007

Edward J. Weiler
Director, NASA's Goddard Space Flight Center

Approved by:

August 28, 2007

Joseph Watson
Garrison Manager (Acting)

EXECUTIVE SUMMARY

This Environmental Assessment describes the ecological, cultural and social issues associated with the proposed clearing and preparation of a fifteen (15) acre site and the construction and operation of a satellite ground communications terminal facility (SNE East) at the US Army's Adelphi Laboratory Center's (ALC) Blossom Point Research Facility (BPRF) and clearing of an associated line of sight area. The preferred alternative site is immediately southeast of the Naval Research Laboratory (NRL) Blossom Point Tracking Facility (BPTF). The site of the proposed array is within an area currently leased by the US Army to the US Navy for operation of the BPTF. The National Aeronautical and Space Administration (NASA) will operate the proposed mission critical facility in cooperation with the US Naval Research Laboratory. The proposed site clearing, preparation and construction of the new satellite ground communications terminal facility and associated line of sight area and operation of the facility will provide for the critical mission of tracking satellites in space to continue.

Proposed Action

In order to accomplish the mission of the NRL BPTF and NASA, the Adelphi Laboratory Center (ALC) has proposed to clear a fifteen (15) acre area of existing vegetation, perform site preparation activities, construct a satellite ground communications terminal facility in an area immediately southeast of the NRL BPTF and establish a line of sight area for the satellite tracking devices. The proposed vegetation removal action in both the fifteen acre antenna array site and fifty acre line of sight area involves the use of gasoline powered logging equipment, (i.e. chainsaws, trucks, brush chippers, etc). Site preparation and antenna array construction will use equipment normally associated with this type of project (bulldozers, cranes, front end loaders, etc).

Alternatives Considered

Several alternative sites at BPRF for the proposed action were considered for SNE East, they are: 1) Site #1 which is immediately southeast of the BPTF (Preferred Alternative); 2) Site # 6 which is across Blossom Point Road due west of BPTF: 3) Site # 7 southwest of the BPTF and 4) the No Action Alternative. Sites # 6 and 7 were considered for use, but early analysis showed impacts that rendered the alternative not reasonable based on the available alternative site. The No Action alternative to construction of the proposed facility would result in mission failure of the BPTF and seriously degrade the US Government's satellite tracking ability.

Environmental Issues and Concerns

Using the No Action alternative as a baseline upon which to determine impacts of the proposed construction and related activities, initial assessment indicated that potential issues and concerns center on: the dangers associated with construction, vegetation removal and site preparation; damage to adjacent natural resources and the ecosystem; and loss of forested habitat. Adverse impacts shall be minimized, mitigated, and controlled to an insignificant magnitude through: utilizing only fully licensed and bonded construction and site preparation contractors; specifically delineating the work area and minimizing entrance into the adjacent habitat by utilizing existing rights of way for vehicle and personnel movement; and managing a portion of the cleared area as open edge habitat, an important ecological resource significantly lacking in the area of the project.

Findings and Conclusions

Consideration of the environmental impact minimization, mitigative, monitoring, and control measures planned indicates that the proposed action shall have no significant impacts on the quality of the human environment or upon local natural resources at BPRF or in the neighboring community. With respect to BPRF's on-going mission operations and Integrated Natural Resources Management Plan, neither direct nor indirect cumulative impacts of the proposed action are expected to be significant. Therefore, a finding of no significant impact (FNSI) is recommended to be published for the proposed site preparation and building construction project. Consequently, an environmental impact statement (EIS) is not required for the proposed action.

TABLE OF CONTENTS

Section/Title Page

EXECUTIVE SUMMARY 1
Table of Contents 2
List of Appendices
List of Figures 3
List of Acronyms 4

1.0 PURPOSE, NEED, AND SCOPE 5
1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION 5
1.2 SCOPE 5
1.3 PUBLIC INVOLVEMENT 5
1.4 IMPACT ANALYSIS 5

2.0 DESCRIPTION OF THE PROPOSED ACTION 6
2.1 CONSTRUCTION OF A NEW SATELLITE GROUND COMMUNICATIONS TERMINAL FACILITY (SNE East) 6
2.2 SITE PREPARATION ACTIVITIES 6
2.3 BPRF SUPPORT ACTIVITIES 6

3.0 ALTERNATIVES CONSIDERED 8
3.1 SITE SIX (6) – DIRECTLY ACROSS BLOSSOM POINT ROAD FROM THE BPTF SERVICE ENTRANCE
SITE ONE (1) - IMMEDIATELY SOUTH AND EAST OF THE BPTF. (PREFERRED ALTERNATIVE)
SITE SEVEN (7) – SOUTH AND WEST OF THE BPTF ALONG THE BOUNDARY WITH THE US ARMY BLOSSOM POINT RESEARCH FACILITY
3.2 NO ACTION ALTERNATIVE 12

4.0 AFFECTED ENVIRONMENT 12
4.1 SETTING 12
4.2 LAND USE 12
4.2.1 BPRF Master Planning 12
4.2.2 Neighboring Land Uses 12
4.3 WATER AND AIR RESOURCES 12
4.3.1 Surface Water 12
4.3.2 Ground Water 13
4.3.3 Air Quality 13
4.4 GEOLOGY, SOILS, AND TOPOGRAPHY 13
4.4.1 Geology 13
4.4.2 Soils 13
4.4.3 Topography 13
4.5 ECOLOGICAL RESOURCES 13
4.5.1 Vegetation (Wetlands and Uplands) 13
4.5.2 Fisheries and Aquatic Organisms 14
4.5.3 Wildlife Ecology 14
4.5.4 Wildlife Management 14
4.5.5 Threatened and Endangered Species 14
4.6 CULTURAL RESOURCES 14
4.6.1 Historical Sites 14

4.7 INFRASTRUCTURE 14
4.7.1 Water Supply and Wastewater 14
4.7.2 Solid Waste Disposal 14
4.7.3 Utility Service 14
4.8 PERMITS, AGREEMENTS, AND REGULATORY AUTHORIZATIONS 15
4.9 COMMUNITY SERVICES 15

5.0 ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES 15
5.1 ENVIRONMENTAL CONSEQUENCES 15
5.1.1 Land Use Impacts 15
5.1.2 Water Resources 16
5.1.3 Air Quality and Clean Air Act Conformity 16
5.1.4 Noise 17
5.1.5 Geology, Soils, and Topography 17
5.1.6 Ecological Resources 17
5.1.7 Cultural and Historical Resources 17
5.1.8 Infrastructure 17
5.1.9 Permits, Agreements, and Regulatory Authorizations 18
5.2 SOCIOECONOMIC CONSEQUENCES 18
5.2.1 Aesthetics 18
5.2.2 Environmental Justice 19
5.2.3 Community Services 19
5.3 CUMULATIVE IMPACTS 19
5.3.1 Current and Planned Operations 19
5.3.2 BPRF Future Utilization Program 19
5.3.3 Summary 19
5.4 ACTION SUMMARY 19

6.0 FINDINGS AND CONCLUSIONS 20

7.0 LIST OF AGENCIES AND PERSONS CONSULTED 20
7.1 FEDERAL/STATE AGENCIES 20
7.2 GARRISON ADELPHI LABORATORY CENTER/ARMY RESEARCH LABORATORY 21

8.0 LIST OF PREPARERS 21

LIST OF APPENDICES

Appendix/Title

A References 21

B Microwave Radiation Survey at Blossom Point Tracking Facility 23

LIST OF FIGURES

Figure/Title

2-1 SNE East Site Plan (Nominal)

3-1 Site One (1)

3.2 Site Six (6)

3.3 Site Seven (7)

LIST OF ACRONYMS

ALC	Adelphi Laboratory Center
AR	United States Army Regulation
ARL	Army Research Laboratory
BPRF	Blossom Point Research Facility
BPTF	Blossom Point Tracking Facility
CEQ	Council on Environmental Quality
CESF	Central Engineering Support Facility
CFR	Code of Federal Regulations
COMAR	Code of Maryland Regulations
dBA	decibels, A-weighted
DoD	Department of Defense
DPW	Directorate of Public Works
EA	Environmental assessment
EIS	Environmental impact statement
FNSI	Finding of no significant impact
ft	foot or feet
ISC	Installation Spill Contingency
GALC	US Army Garrison Adelphi Laboratory Center
LOD	Limit of Disturbance
NASA	National Aeronautical and Space Administration
NEPA	National Environmental Policy Act
NOI	Notice of Intent
NRL	Naval Research Laboratory
SHPO	State Historic Preservation Office
SNE	Space Network Expansion
SPCC	Spill Prevention Control and Countermeasure plan

1.0 PURPOSE, NEED, AND SCOPE

1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION

For the past several years, the U.S. Navy Research Laboratory (NRL) has been in the midst of a multi-year program to provide and upgrade mission, staff, and support services at the Blossom Point Tracking Facility (BPTF) in southern Charles County, Maryland. The site is operated under a lease from the US Army Adelphi Laboratory Center (ALC). This program has resulted in the acquisition of new missions and enhancements to tracking technology.

In 2006, NRL entered into a discussion with technical staff from the National Aeronautical and Space Administration (NASA) regarding the possibility of establishing a satellite ground communications terminal facility (SNE East) on an area leased from the US Army's Adelphi Laboratory Center's (ALC) Blossom Point Research Facility's (BPRF) (Figure 2.1). The proposed action provides for the removal of vegetation and site preparation in a fifteen (15) acre site, construction of this facility in an area immediately south and east of the main compound of the BPTF and the establishment of a fifty (acre) line of sight area. This area will extend in a southeast and southwest direction from the satellite ground communications terminal facility.

1.2 SCOPE

This environmental assessment (EA) focuses on the impacts of activities related to the removal of vegetation, site preparation and construction of a satellite ground communications terminal facility (SNE East) on an area leased from the US Army's Adelphi Laboratory Center's (ALC) Blossom Point Research Facility's (BPRF). The proposed action provides for the removal of vegetation and site preparation in a fifteen (15) acre site, construction of this facility in an area immediately south and east of the main compound of the BPTF and the establishment of a fifty (acre) line of sight area. This area will extend in a southeast and southwest direction from the satellite ground communications terminal facility. The focus includes consideration of other actions being taken at BPRF and BPTF to ensure that cumulative impacts, direct as well as indirect, are assessed.

1.3 PUBLIC INVOLVEMENT

The Garrison Manager of the US Army Garrison Adelphi Laboratory Center (GALC) has management responsibility for the environmental stewardship and natural resources protection of BPRF and for the conditions and constraints under which activities are allowed to be conducted by users of the facility. The Garrison Manager of GALC is responsible for ensuring protection of the BPRF environment and that proposed activities and use of the BPRF are conducted in accordance with Local, State, Federal, and Army regulations.

Public notification of the findings and conclusions of an EA is provided by ALC through publishing either a finding of no significant impact (FNSI) thereby making the EA available for review for 30 days prior to allowing initiation of a proposed action or a notice of intent (NOI) to prepare an environmental impact statement (EIS).

1.4 IMPACT ANALYSIS

This EA identifies, documents, and evaluates the relevant incremental and cumulative effects of the proposed action, described in Section 2.0, on the existing resources at BPRF. Alternatives to the proposed action are described in Section 3.0. The No-Action Alternative discussed in Section 3.0 is the baseline established to analyze the environmental and socioeconomic effects of the proposed action. The

Army analyzed the proposed action against the existing baseline conditions described in Section 4.0, Affected Environment, of this EA and identified the relevant beneficial and adverse impacts. These impacts and the planned mitigation are presented in Section 5.0, Environmental and Socioeconomic Consequences. Findings and conclusions resulting from the impact analysis are presented in Section 6.0.

This EA was prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations, and Army Regulation (AR) 200-2, Environmental Effects of Army Actions, and 32 CFR part 651. The analysis also addresses applicable State of Maryland and Federal environmental laws and regulations and Executive Orders concerning the Protection of Wetlands and Environmental Justice.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Construction of a new satellite ground communications terminal facility (SNE East)

The removal of existing vegetation, site preparation and construction of the facility on the fifteen (15) acre site will be accomplished using a variety of gasoline and diesel powered equipment. These include, but are not limited to, chainsaws, brush chippers, log skidders, bulldozers, cranes, front end loaders, boom trucks and pickup trucks. Construction related material (soil, vegetation, lumber, etc) will be removed offsite by way of the existing state and county road system and deposited in an appropriately licensed facility. Figure 2-1 shows the equipment and facilities associated with the proposed operation of the SNE east. These include antennae, a power building, security fencing and road access.

The establishment of a fifty (acre) line of sight area will be accomplished using chain saws. This area will extend in a southeast and southwest direction from the satellite ground communications terminal facility. The trees cut down in order to establish this critically important component of the project will be placed in piles on the perimeter of the facility. This will significantly increase the availability of cover and shelter for game and nongame animals alike in an area currently devoid of such habitat.

2.2 SITE PREPARATION ACTIVITIES

The fifteen (15) acre proposed action site and associated fifty (acre) line of sight area will be specifically delineated using a combination of methods including tree paint to mark the perimeter of the site, flagging to mark existing rights of way for vehicle and pedestrian access and establishment of a vehicle parking area. The contractor shall determine through visual terrestrial survey whether there are obstructions in the project area and through electronic means the location of any underground utilities. If an obstruction is present, the contractor shall notify the Government and a joint decision as to whether the obstruction is sufficient to interfere with the project shall be made.

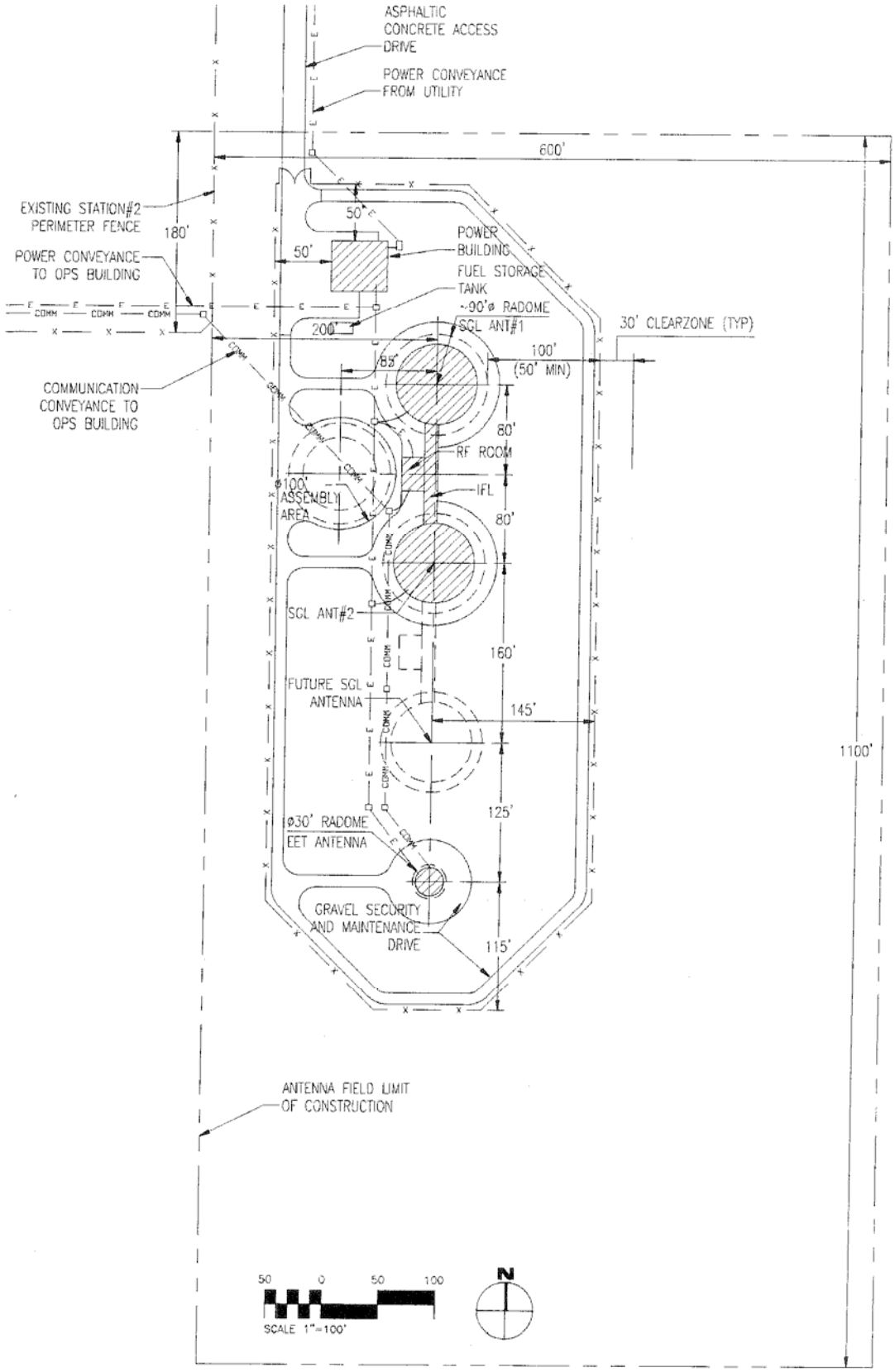
2.3 BPRF SUPPORT ACTIVITIES

No support to the contractor, other than fire prevention and protection, will be provided by the ALC BPRF workforce. All other support will be provided by the staff at the NRL BPTF.

Fire Prevention and Protection: These services shall be used, if necessary, to minimize the risk of fire and to protect buildings and structures at BPTF and BPRF. The project activity represents a minor short-term increase in the level of effort presently expended by BPRF for fire prevention and protection. Neither new equipment nor procedures shall be necessary to meet these requirements.

Visitor Access and Control: Management of visitors and construction project crews will be the responsibility of the NRL BPTF.

Figure 2-1 SNE East Site Plan (Nominal)



Roadways and Parking Areas: The contractor shall be allowed to use existing BPTF roadways and parking areas, if necessary. The proposed project shall require new construction and/or changes to existing BPRF roadways or parking areas.

3.0 ALTERNATIVES CONSIDERED

As required by the CEQ's regulations, Title 40 Code of Federal Regulations Parts 1500 - 1508 (40 CFR 1500-1508), for implementing the procedural provisions of NEPA and AR 200-2, this EA must consider all reasonable and viable alternatives, including a No Action alternative. Several alternative sites on the BPTF were considered in preparing this EA, the alternatives considered to be reasonable are:

- Site 1 (Preferred Alternative) is located south and east of BPTF.

  Site 6 is located west of BPTF directly across Blossom Point Road from the Service Entrance.

  Site 7 is located south and west of BPTF along the boundary with the US Army Blossom Point Research Facility.
- No Action Alternative.

The No Action alternative is frequently presumed to describe a relatively undisturbed natural setting. In this EA, however, the local environmental baseline is more appropriately described as a disturbed forested area.

3.1 Construction of a new satellite ground communications terminal facility (SNE East)

Preliminary review and analysis of the proposed action involved the conduct of a visual survey on three (3) separate and distinct sites on the BPTF for construction of the facility. These sites are shown in Figure (s) 3.1, 3.2 and 3.3. The findings of the survey and the implications for construction on each of the sites are discussed below:

Site Six (6) – Directly across Blossom Point Road from the BPTF Main Entrance Figure 3.2. This fifteen (15) acre site contains deciduous and evergreen vegetation common to BPRF. It also contains a wetland area approximately 10,000 square feet in size and a cultural resources site, both of which would be adversely affected by the construction. The selection of this site would impact a portion of Blossom Point Road in order to connect the required electrical, water and wastewater for the building into the existing BPTF infrastructure on the east side of Blossom Point Road. Due to the impacts identified above, this site is not considered reasonable and is eliminated from any further consideration.

Site One (1) - Immediately south and east of the BPTF. (Preferred Alternative) Figure 3.1. This fifteen (15) acre site contains deciduous and evergreen vegetation common to BPRF. It is in close proximity to the existing infrastructure at BPTF and is readily accessible by existing roadways. No wetlands or significant cultural or historical sites exist within 100 feet of the area.

Site Seven (7) – South and West of the BPTF along the boundary with the US Army Blossom Point Research Facility Figure 3.3. This fifteen (15) acre site contains deciduous and evergreen vegetation common to BPRF. It is in close proximity to the existing infrastructure at BPTF and would require the construction of an access road in an area adjacent to a culturally significant site. Wetlands exist within the area and would be impacted during construction on this site. The selection of this site would adversely impact the mission of the US Army Blossom Point Research Facility as part of the operational range at BPRF would be lost during construction and operation of the SNE East. Due to

the impacts identified above, this site is not considered reasonable and is eliminated from any further consideration.

Figure 3.1 Site One (1) - Immediately south and east of the BPTF. (Preferred Alternative).

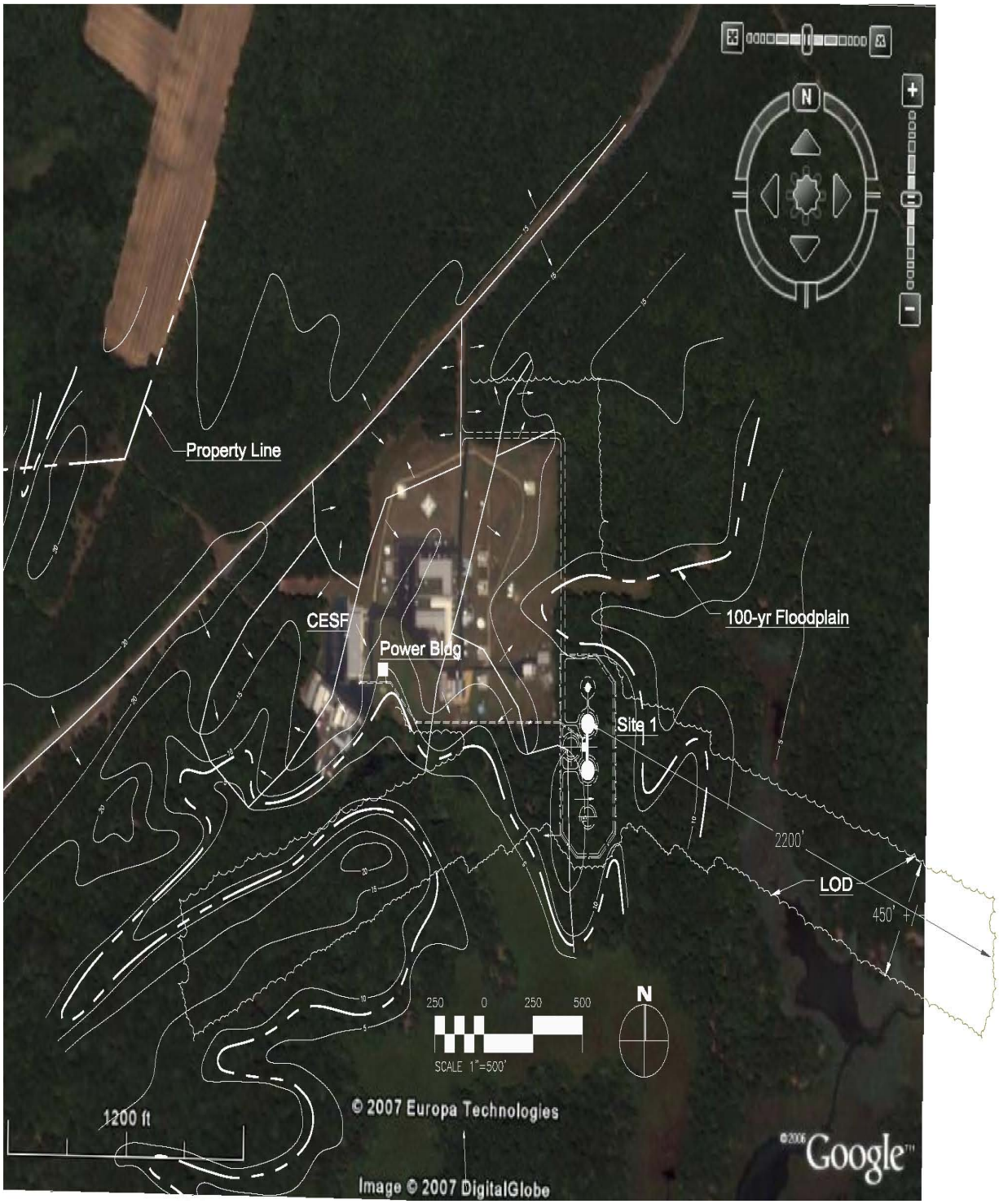


Figure 3.2 Site Six (6) – Directly across Blossom Point Road from the BPTF Main Entrance

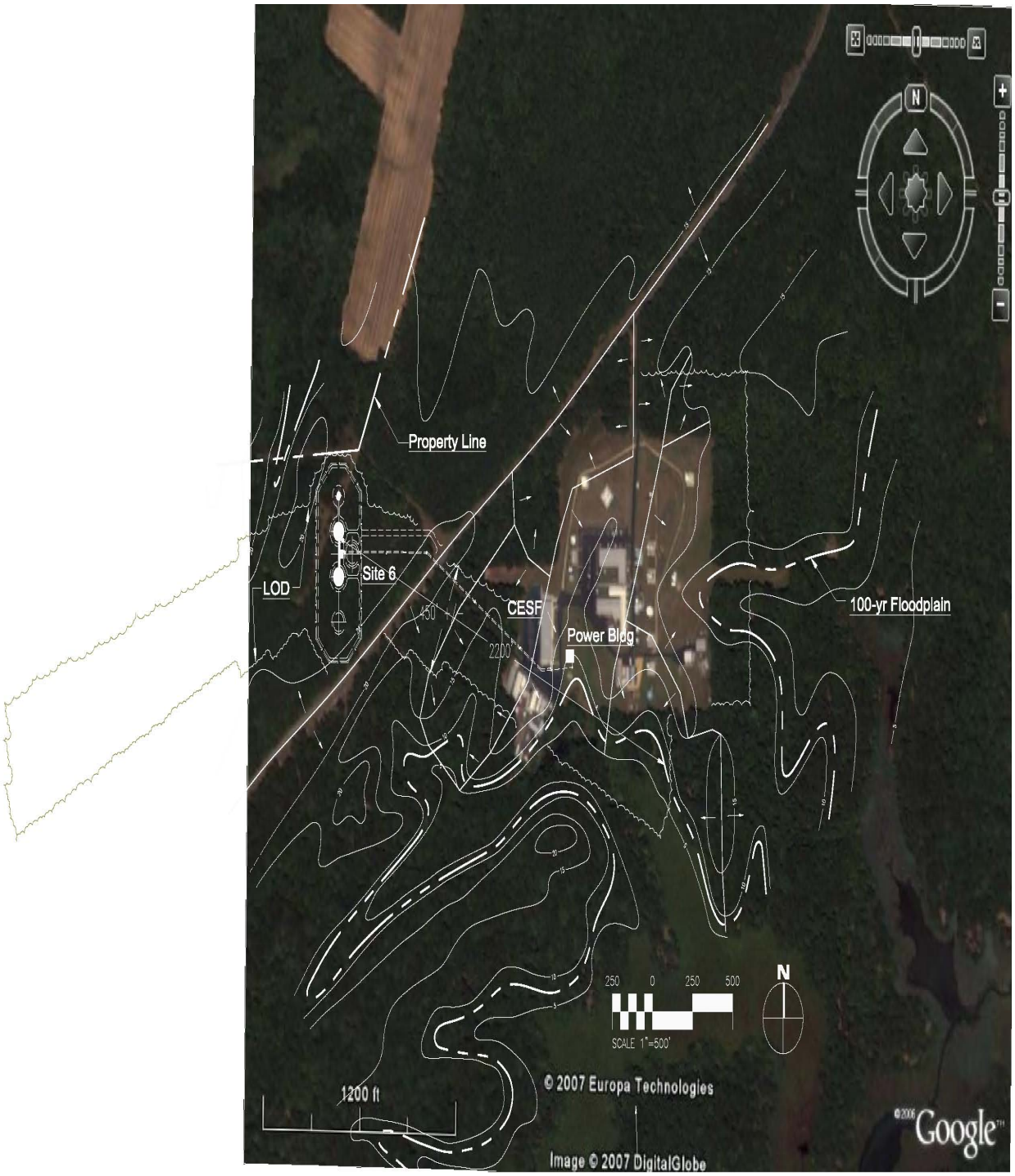
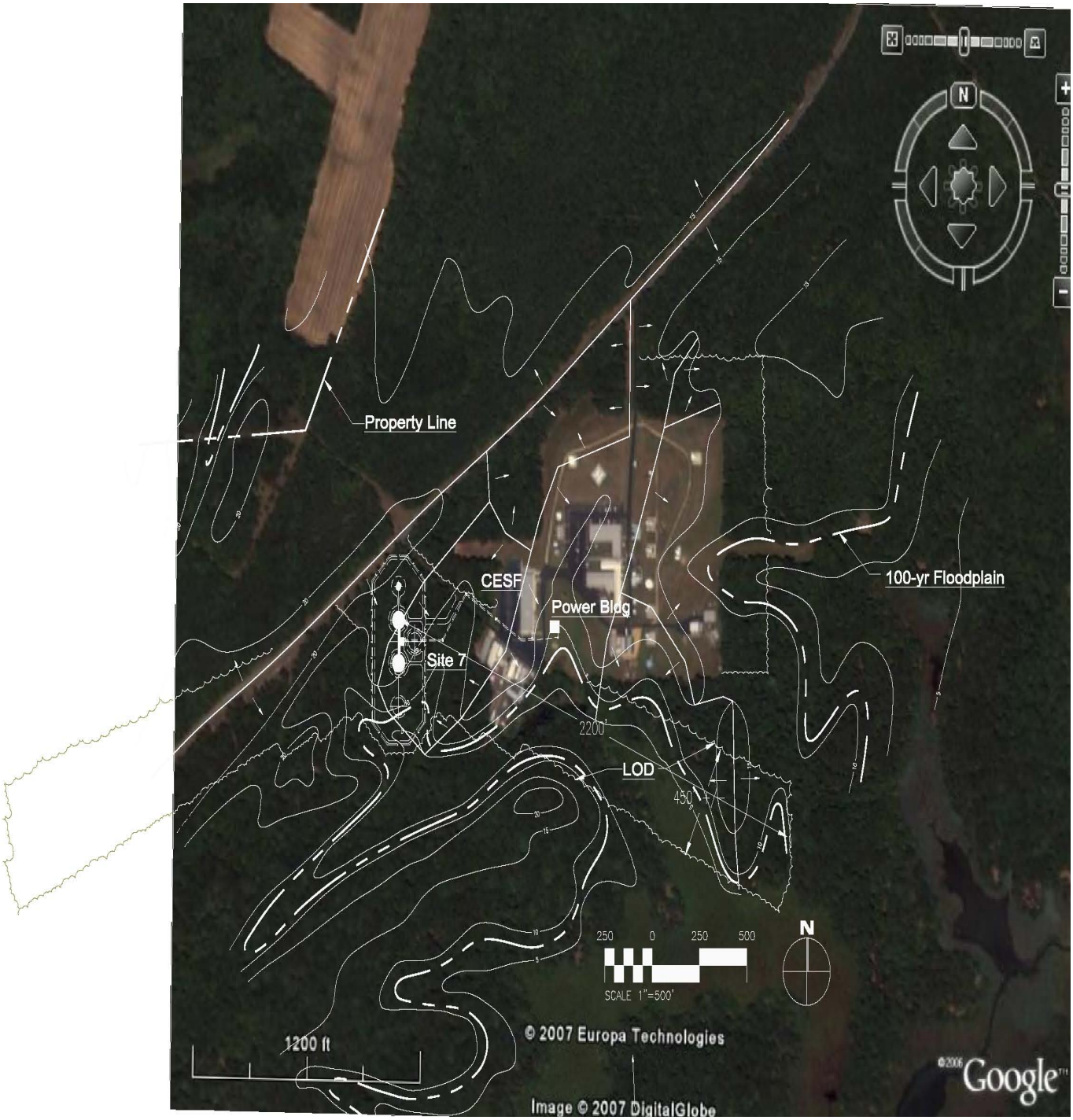


Figure 3.3 Site Seven (7) – South and West of the BPTF along the boundary with the US Army Blossom Point Research Facility



3.2 NO ACTION ALTERNATIVE

Inclusion of the No-Action alternative is prescribed by the CEQ regulations as the benchmark against which federal actions are to be evaluated. For the proposed action evaluated in this EA, the No Action alternative shall preclude the construction of a new satellite ground communications terminal facility at the BPTF. Under this alternative, the BPTF shall continue to occupy obsolete buildings that have been determined to have insufficient capacity to support the mission of the BPTF. There shall be no change in the BPRF affected environment described in Section 4.0.

The selection of this alternative will create a situation where the mission of the BPTF will fail and will result in a serious degradation in the US Governments ability to successfully track satellites. Because the No-Action alternative does not support BPTF mission requirements, it was not considered a viable alternative.

4.0 AFFECTED ENVIRONMENT

This section describes the existing environmental setting of the portion of BPRF that shall be affected by the proposed action on the preferred alternative site. Existing BPRF constraints, natural and cultural resources, permits, agreements, operations, and facilities are discussed only to the extent that they apply in describing/characterizing the existing environment, analyzing impacts, and making decisions regarding the proposed action.

4.1 SETTING

The BPRF, a subinstallation of ALC, occupies approximately 1,600 acres (3.0 square miles) of Army-owned land in a rural setting on Cedar Point Neck in southern Charles County, Maryland, approximately 9 miles southwest of La Plata, the county seat, and 25 miles south of Washington, D.C.

Nanjemoy Creek bounds the installation on the west, while the Potomac River bounds it on the south and east. Access to BPRF is from Maryland Route 6 via Cedar Point Neck Road and Blossom Point Road.

4.2 LAND USE

4.2.1 BPRF Master Planning: Land-use designations within BPRF, including the project area, are consolidated into the broad general category of Industrial Land Use in the BPRF Master Plan (Draft), 15 July 1993. No change in the land use designation will result from the proposed action.

4.2.2 Neighboring Land Uses: Charles County is being transformed from rural-agricultural to suburban in form and character. The land areas surrounding BPRF are presently developed in agricultural and rural residential uses, with limited waterfront residential development along the adjacent and adjoining shores. The County's Comprehensive Plan indicates that the shorelines and the land areas north of the BPRF on Cedar Point Neck in the project area are planned to remain under protection and/or conservation status, to limit the amount and type of development.

4.3 WATER AND AIR RESOURCES

4.3.1 Surface Water: The BPRF is bounded by the Potomac River to the east and south and the Nanjemoy Creek, a tributary to the Potomac, to the west. Port Tobacco River, another Potomac tributary, lies to the northeast and King's Creek, a westerly meandering river draining into the Nanjemoy Creek, lies to the northwest.

4.3.2 **Ground Water**: At BPRF, the relatively impermeable Nanjemoy Formation functions mainly as a confining layer that inhibits the vertical movement of groundwater. Below the Nanjemoy, the Aquia Formation is composed of light to dark olive glauconite with interbedded very fine sand, silt, and clay at a depth of 80 to 120 ft below MSL. The Aquia Formation is the predominant water bearing formation in southeastern Charles County.

The Raritan and Patapsco Formations of the Upper Cretaceous series are found at a depth of 250 to 325 ft below MSL. These deposits are brown and sandy clays with interbedded yellow and white, medium to fine grained sands. The sand layers are generally used in the BPRF area to develop wells for potable water use.

4.3.3 **Air Quality**: BPRF is in the mid-latitude, humid, temperate climate belt. Temperature and precipitation data are obtained from the National Weather Service Station in La Plata, Maryland. The average temperature in July is 89°F and in January is 21°F. Average annual rainfall is 47 inches with less than 10 inches of snowfall.

The BPRF is in the State of Maryland's Air Quality Control Area V. This area is designated as in attainment for all criteria pollutants. Very few of the criteria pollutants are monitored near the BPRF site.

4.4 GEOLOGY, SOILS, AND TOPOGRAPHY

4.4.1 **Geology**: The BPRF is located within the Atlantic Coastal Plain physiographic province. This coastal plain is largely characterized by unconsolidated sediment deposits that have been eroded over time from the mountains within the Blue Ridge and Piedmont provinces to the north and west, respectively. .

The Atlantic Coastal Plain sediments that underlie the surface soils rest on crystalline (bedrock) from the Piedmont physiographic province. The thickness of the sediment above bedrock is approximately 1,300 ft. The geologic units encountered from the surface to the bedrock are the Nanjemoy, Aquia, and Raritan and Patapsco to a depth of 325 ft below MSL.

4.4.2 **Soils**: Surface soils at BPRF are classified as part of the Elkton, Othello-Keyport association. Soils (lowland deposits) in this association occur on nearly level terrain. These deposits belong to the Recent and Pleistocene Series and are part of the Columbia Group and are characterized as yellow to orange sand, silt, gravel, and clay mixtures with irregular bedding. The soil is poorly to moderately well drained and ranges in texture from fine sand to silt loams and silt clays to coarse sands and gravels.

4.4.3 **Topography**: Located on a neck of land consisting of approximately 1,600 acres of mostly unimproved land, the topography gently slopes 2 to 5 percent towards the Potomac River and Nanjemoy Creek. Approximately 148 acres are classified as tidal marshland or swamp. Included in these 148 acres of swamp are 19 acres of ponds averaging two feet or less in water depth.

4.5 ECOLOGICAL RESOURCES

Much of the land area encompassed by BPRF is categorized as developed; disturbed; or used for research activities. The remaining undeveloped areas consist of forested moderate to steep slopes and wetlands that are associated with either Nanjemoy Creek or the Potomac River. Except for the land to the northeast, BPRF is surrounded by water.

4.5.1 **Vegetation (Wetlands and Uplands):** Two hundred thirty six (236) acres of the BPRF are classified by the United States Fish and Wildlife Service's (USFWS) May 1994 report: Mapping Report for United States Army — Blossom Point ARL as wetlands and the rest (1,364 acres) are classified as

upland acreage. The BPRF is situated in an area originally classified as oak-hickory-pine forest prior to its being cleared for development and agriculture.

4.5.2 Fisheries and Aquatic Organisms: No fish resources exist in the vicinity of the proposed action preferred alternative site**.**

4.5.3 Wildlife Ecology: The habitat types at BPRF are suitable for many species of wildlife. Since the facility is not bounded by a fence or other containing device, wildlife shall freely pass through the area. The grounds consist of marshes, swamps, forested areas, and various clearings providing a variety of cover types for different species. There are a variety of species which frequent BPRF. The most common game species is the white-tailed deer (Odocoileus virginianus). Other game animals include gray squirrel (Sciurus carolinensus), eastern cottontail (Sylvilagus floridanus), woodchuck (Marmota monax), bobwhite (Colinus virginianus), mourning dove (Zenaidura macroura), black duck (Anas rubripes), and wood duck (Aix sponsa). Fur bearing species consist of opossum (Didelphis marsupialis), mink (Mustela vison), muskrat (Ondatra zibethica), striped skunk (Mephitis mephitis), beaver (Castor shalladensis), raccoon (Procyon lotor), and gray fox (Urocyon cinereoargenteus).

4.5.4 Wildlife Management: As noted in the Cooperative Fish and Wildlife Management Plan of the BPRF's Integrated Natural Resources Management Plan — approved by the ALC installation Commander, the Chief of Wildlife, State of Maryland Department of Natural Resources, and the Regional Director, U.S. Fish and Wildlife Service in May 2002, the primary goal of fish and wildlife management at BPRF is to conserve the fish and wildlife resources and habitats existing on the property for the benefit of the public. Protection, preservation, conservation, and enhancement of the diversity of habitats at BPRF are emphasized. The objectives of multiple use and stewardship are combined with support for the military mission in all aspects of this Plan.

4.5.6 Threatened and Endangered Species: No Federally endangered or threatened species exist within the proposed action preferred alternative site.

4.6 CULTURAL RESOURCES

4.6.1 Historical Sites: Based on previous cultural resource investigations undertaken for the Army, there are 38 known archaeological sites at BPRF. Of these, 27 are considered prehistoric and 11 are considered historic. None of these are within the proposed action preferred alternative site.

4.7 INFRASTRUCTURE

4.7.1 Water Supply and Wastewater: BPRF and the BPTF rely solely on groundwater for its potable water supply. The BPRF has one on-site well to meet its limited demand for potable water and a small pond used for fire fighting purposes. Bottled drinking water is provided for BPRF personnel. The BPTF has its own well water supply. The area is not served nor planned to be served with a municipal sewer system. The BPRF and the BPTF are served by on-site septic systems.

4.7.2 Solid Waste Disposal: A private solid waste disposal service provides biweekly collection of non-hazardous solid waste at the BPRF and BPTF.

4.7.3 Utility Service: The Southern Maryland Electric Cooperative, Inc. provides electric power to BPRF and BPTF. Verizon provides telephone service.

4.8 PERMITS, AGREEMENTS, AND REGULATORY AUTHORIZATIONS

No permits, agreements, and regulatory authorizations that are relevant to and applicable in analyzing impacts and making decisions regarding the proposed action on the preferred alternative site were found during the analysis for the EA.

4.9 COMMUNITY SERVICES

The BPRF and BPTF are provided with several Charles County community services.

Public Safety: Charles County is served by two major law enforcement agencies: the Maryland State Police and the County Sheriff's Department. The nearest police station to BPRF is located in La Plata, approximately 9 miles northeast of the BPRF. The nearest fire station and rescue squad to BPRF is located in La Plata, with arrival time on the order of fifteen minutes. A firefighting vehicle has been acquired for BPRF and the BPTF also maintains a fire truck. Emergency medical treatment is available at La Plata Hospital. The Charles County Rescue Squad shall provide ambulance service to the proposed action project area.

Emergency Planning: In 2002, Charles County developed an Emergency Operations Plan. While it does not specifically mention either BPRF or BPTF, there are references to other nearby military installations (i.e., Indian Head Naval Surface Warfare Center and Patuxent Naval Air Station). The information regarding the potential from emergencies at these locations is germane to both BPRF and BPTF.

5.0 ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES

In this section, the environmental and socioeconomic consequences of the proposed action are described, characterized, and analyzed for potential significance. The significance of the anticipated environmental conditions attributable to the proposed action on the preferred alternative site was determined relative to established regulatory limits, standards, and present environmental conditions as described in Section 4.0, Affected Environment. Additionally, the impacts of the proposed action on the preferred alternative site are described and analyzed in the context of cumulative environmental impacts, where necessary.

5.1 ENVIRONMENTAL CONSEQUENCES

The operation, maintenance, and construction of the alternatives considered are discussed in the following subsections. The No Action alternative, i.e., the existing environment described in Section 4.0, provides the primary baseline for determining the extent and duration of potential and cumulative impacts. The potential impacts are quantified where possible or described qualitatively within a range from no impact to substantially beneficial or substantially adverse. The significance of each impact is also described based on the magnitude of change resulting and the significance of the environmental effect. Cumulative effects are evaluated and summarized in Section 5.3. A finding concerning the significance of the environmental effects is included in the discussion and analysis.

5.1.1 Land Use Impacts: Implementation of the proposed action on the preferred alternative site shall affect present land use at BPRF through conversion of land from its present use (forest) to a new use (developed site) since vegetation in a fifteen (15) acre area will be removed and construction of a satellite ground terminal will result.

The proposed project shall have potential short- and long-term land use impacts related to construction and site preparation activities.

Site Preparation: These activities shall include vegetation removal and grading of the site prior to construction. Support activities and procedures that shall be used for site preparation are noted in Section 2.3. The nature of the site preparation — visual surveys for obstructions, site disturbance delineation and electronic location and marking of buried utility lines — is not expected to be the cause of significant environmental impacts. Removal of the vegetation shall cause a permanent conversion of forested habitat to a developed or semi-cleared environment. Establishment of "edge" habitat, an important component of the ecosystem which is currently lacking in the area, will be accomplished in an area currently devoid of such a resource.

Summary: The above land use assessment indicates impacts shall be expected to occur through: the short-term presence of construction and site preparation crews and associated equipment; and the long-term conversion of forested habitat to a developed site. Neighboring community perceptions of significant changes of the proposed action on the preferred alternative site shall not be expected to occur because of the remote location.

The significance of these impacts was addressed through consideration of both regulatory and cultural factors. As a result of this analysis, the proposed project is expected:

- To be compatible with the existing land use designation for the project area,
- To have no significant effect on neighboring land uses,
- To not have an significant environmental impact on present BPRF land use,
- To have no effect regarding induced development of nearby BPRF land,
- To have no significant impact upon land-based recreational uses,
- To have long-term beneficial impacts relative to increased "edge" habitat,

Thus, the proposed action on the preferred alternative site is neither a significant change with regards to other BPRF land uses nor a significant land use impact from a master planning viewpoint.

Water Resources: Environmental impacts to the water resources resulting from the proposed action on the preferred alternative site are minimal due to the lack of water resources in the project area. Ground water recharge potential is not expected to be significantly affected by the project although there will be a minimal increase in impervious surface in the project area.

Summary: The above water resources assessment indicates that no significant impacts shall be expected to occur due to the proposed action on the preferred alternative site

5.1.3 Air Quality and Clean Air Act Conformity: According to the 1990 Environmental Assessment for the Blossom Point Research Facility, the current emissions of all air pollutants from the BPRF and BPTF are below the emission levels described in COMAR 26.11.01 (L), that is below 100 lb/hr, 1,000 lbs/day or 50 tons/year for a nonattainment site. The primary sources of these emissions at BPRF and BPTF are: diesel generators that provide emergency power when the normal electrical service is disrupted; mobile sources (government and privately owned vehicles, lawnmowers, chain saws, etc.) No open burning or open detonation occurs at either BPRF or BPTF.

Construction and operation of the proposed project on the preferred alternative site will not significantly change this as there are no new major sources of air pollution within the project area. There will be a minor and short-term impact during actual construction as this will involve the use of heavy construction equipment over a short period of time.

Due to the fact that no significant increase in emissions will occur from the project, the proposed action will not affect the climate of the region nor contribute to the global warming potential due to carbon monoxide emissions. Therefore, no mitigation measures for air quality impacts are warranted.

5.1.4 Noise: The proposed action on the preferred alternative site involves the use of established building construction and site preparation techniques using commercially available construction equipment routinely used within the area.

The proposed action on the preferred alternative project area shall be a source of equipment noise during site preparation and building construction. By State of Maryland regulation, the maximum allowable construction noise level on a receiving property is 90 dBA during the day and 55 dBA at night. For this proposed action, the nearest receiving property, other than BPTF, is about 0.7 miles to the north of the project area. Since the project shall involve, primarily, equipment normally used in building construction and site preparation operations, such as bulldozers and chain saws, and the equipment noise shall occur periodically during the project construction period, the contractor shall be expected to comply with the construction noise limits for neighboring communities with minimal difficulty and with no significant impact.

There will be no noise producing activities that will be audible to any off-site receptors during operation of the SNE East on preferred alternative site. Overall, the operation of the SNE East is compatible with the adjacent rural residential land uses from a noise standpoint and therefore no mitigation impacts for noise are warranted.

5.1.5 Geology, Soils, and Topography: Site preparation, construction and operation of the facility on the preferred alternative site will result in minimal changes to the existing topography (elevation) of the 15 acre site, as some leveling of the area will ultimately result. However, this change is not considered to be significant, due to the small size of the project (0.94%) of the total area of BPRF. No significant change in the geology or soils within the BPRF will result from this project .

5.1.6 Ecological Resources: Even though BPRF and neighboring communities have been partially developed, there is a wide variety of plants, animals, and aquatic resources present on BPRF. No endangered or threatened species, wetlands or significant natural resources exist within the preferred alternative site.

Wildlife Ecology: Wildlife species within the preferred alternative site shall be expected to vacate the immediate area during site preparation and construction activities and the presence of contractor employees.

Wildlife Management: The preferred alternative site is not included in the wildlife management program at BPRF due to the restrictions of the lease agreement.

5.1.7 Cultural and Historical Resources: Due to the fact that there are no culturally or historically significant resources in the preferred alternative site, no impact will result from the proposed action.

5.1.8 Infrastructure: The proposed project shall require the construction of a satellite ground communications terminal facility (SNE East) at the BPTF. This building will utilize the existing infrastructure support and will not need additional resources.

Traffic: Movement of construction materials and equipment to and from the preferred alternative site is required to conduct building construction and site preparation operations. Vehicle traffic will be limited to that necessary to transport crews and equipment to the site. The existing road network shall be utilized.

Fire Risk: Operations related to building construction and site preparation activities are not inherent ignition sources, i.e., do not use open flames or highly combustible materials, and shall not materially increase the risk of range fires on BPRF. The actual risk shall be determined by the degree of control exercised over ignition sources and the ability to fight a fire if it should occur. Adequate maintenance of vehicles and vehicle parking restrictions (to preclude vehicle catalytic converters from initiating grass fires) shall minimize the potential for fires to background levels of risk. If a fire were to be started or noticed during construction and site preparation activities, strict adherence to established protocols shall be necessary to protect the safety of staff and to minimize property damage. Besides implementing in-place BPRF procedures and protocols, maintenance of on-site fire fighting equipment shall be required. With present intentions for adequate contractor vehicle parking and the presence of staff trained in the use of fire extinguishers, there is no apparent reason to expect that the fire risk shall not be controlled or shall result in significant environmental impacts.

Sewage Disposal: Existing BPTF sewage treatment facilities are adequate to accommodate the new facility. Because of the location, the contractor may decide to provide and use portable latrines for construction workers.

Solid Waste Disposal: Contractor generated solid waste shall be removed from the project site and disposed of by the contractor. Disposal of project related hazardous waste shall be conducted in accordance with applicable Federal and State hazardous waste regulations and is the responsibility of the project contractor. Solid waste generated following occupancy of the building shall be in accordance with existing procedures and utilize existing contracts.

Spills: For vehicles and equipment on BPRF and BPTF roadways, the contractor shall be required to be familiar with and utilize the BPRF Spill Prevention Control and Countermeasure (SPCC) and Installation Spill Contingency (ISC) Plans when storing, handling, and/or using fuels and hazardous materials.

Microwave Radiation (MR) Hazards: The potential for MR hazards exists during the operation of the SNE East on the preferred alternative site. The MR emitted by these antennae is very similar to that currently emitted by the antennae presently operated at the BPTF. A microwave radiation survey conducted in March 1990 (Appendix B) by the Naval Research Laboratory Radiation Branch, which was documented in the 1990 Environmental Assessment for the BPFTF, indicated that operation of the existing equipment at the BPTF in the present configuration does not present a microwave radiation (a source of non-ionizing radiation) hazard to personnel. This was based on the following: the transmitting time of the units lasts less than two minutes and cumulates less than one hour of transmission per day and the units are normally aimed well above the horizon when transmitting. Prior to the SNE East becoming fully operational, NASA will conduct a site specific radiation safety action in order to ascertain the specific potential hazards and any appropriate mitigation actions will be instituted.

5.1.9 Permits, Agreements, and Regulatory Authorizations: No permits, agreements or regulatory authorizations are required to complete the proposed action on the preferred alternative site.

5.2 SOCIOECONOMIC CONSEQUENCES

Consideration of the limited nature of the project, there is minimal potential for economic impacts upon the neighboring community, and there are no issues or impacts that shall be expected to have either significantly beneficial or adverse socioeconomic consequences.

5.2.1 Aesthetics: No impacts on offsite aesthetics will occur from the project.

5.2.2 Environmental Justice: Under Executive Order 12898, issued 11 February 1994, Federal Agencies are required to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations in the United States. Because of the nature of the area's demographics and the type of activities being proposed, the construction of a building and related site preparation in the preferred alternative site, this project is not expected to disproportionately affect minority or low-income populations.

5.2.4 Community Services: Because of the limited number of contractor employees involved and the fact that the proposed action will not result in an increase in the numbers of employees at BPTF, it is not expected to have any significant impact upon the limited community services provided to BPRF.

5.3 CUMULATIVE IMPACTS

5.3.1 Current and Planned Operations: Review of the above analysis for impacts associated with the proposed action on the preferred alternative site indicates that there are neither direct nor indirect cumulative impacts that shall be significant.

5.3.2 BPRF Future Utilization Program: The presently approved ALC facility construction program for BPRF does not include new structures in the near-term (3-5 years) in close proximity to the BPTF and the proposed action does not affect present BPRF structures or their intended future uses.

5.3.3 Summary: The above analyses, considered with environmental documentation for present and planned operations within BPRF, indicate that neither direct nor indirect cumulative impacts shall be significant.

5.4 ACTION SUMMARY

The following is a summary of measures, which shall be employed to minimize impacts of the proposed action and associated activities.

Site Preparation and Noise: To minimize potential adverse aesthetic impacts of noise, site preparation and building construction activities shall be conducted between 0700 and 1700 hours during weekdays.

Soil and Vegetation Disturbance: Prior to site preparation, the boundaries of the project will be clearly delineated and existing rights of ways will be adequately marked.

Cultural and Archeological Resources: In the event that unexpected cultural resources are found during site preparation, work shall be stopped by the contractor and the findings shall be coordinated with the SHPO before proceeding further.

Spills: Contractors shall be required to be familiar with and implement BPRF SPCC and ISC plans in the event of a spill of hazardous material.

Parking: To minimize the potential for grass fires, contractors and visitors to the preferred alternative project area shall be instructed to drive/park catalytic converter equipped vehicles only on designated roadways/hardstands and to avoid grass covered areas.

6.0 FINDINGS AND CONCLUSIONS

The proposed action on the preferred alternative site shall be implemented in two separate phases: site preparation and facility construction.

Site Preparation: The preferred alternative site shall be specifically delineated using permanent marks, such as paint. Existing rights of ways shall be specifically marked and vehicle operators shall be informed to utilize them at all times. Electronically assisted location of underground utilities and their marking shall be accomplished prior to commencement of site preparation activities.

Facility Construction: The proposed action shall require bringing vehicles, equipment and material to the area and operating powered equipment and engines during construction. Construction shall not require the use of hazardous materials other than construction engine/vehicle fuels. The BPRF SPCC and ISC plans shall be adequate to control potentially adverse impacts from these materials on land. Normal attention to standard building construction and site preparation practices, such as the use of safety equipment, shall be employed. Consequently, no significant impacts to local air quality, water resources, natural or cultural resources, or quality of life in the neighboring community should be experienced during construction.

Facility Operation: The operation of the SNE East on the preferred alternative site will not result in any noise producing activities that will be audible to any off-site receptors. The operation of the SNE East is compatible with the adjacent rural residential land uses from a noise standpoint. In regards to potential human health hazards related to operation of the facility, prior to the SNE East becoming fully operational, NASA will conduct a site specific radiation safety action in order to ascertain the specific potential hazards and any appropriate mitigation actions will be instituted.

Implementation of this proposed action on the preferred alternative site will have no significant impacts on the quality of the human environment or upon local natural resources at BPRF or in the neighboring community. With respect to BPRF's on-going mission operations and Integrated Natural Resources Management Plan, neither direct nor indirect cumulative impacts of the proposed action are expected to be significant. Therefore, a finding of no significant impact (FNSI) is recommended to be published for the proposed building construction, operation and site preparation project. Consequently, an environmental impact statement (EIS) is not recommended for the proposed action.

7.0 LIST OF AGENCIES AND PERSONS CONSULTED

7.1 FEDERAL/STATE AGENCIES

NAME	ORGANIZATION	AREA OF INTEREST
Tom Moorehead	US Naval Research Laboratory	Tracking Operation
Glenn Therres	Maryland Department of Natural Resources	Endangered and Threatened Species
Ted Sobchak	National Aeronautical and Space Agency (NASA)	Satellite Technology
Elizabeth Montgomery	NASA	Environmental Protection

7.2 GARRISON ADELPHI LABORATORY CENTER/ARMY RESEARCH LABORATORY

NAME	OFFICE SYMBOL	AREA(S) OF INTEREST
Kevin Mason	IMNE-ALC-PWE	Environmental regulatory compliance
Timothy Connolly	AMSRD-ARL-O-CC-AL	Environmental law
John Kaiser, Jr.	IMNE-ALC-PWB	BPRF Site Manager

8.0 List of Preparers:

Robert S. Wardwell	IMNE-ALC-PWE	Natural Resources

APPENDIX A

REFERENCES

ENVIRONMENTAL

Environmental Assessment of The U.S. Army Laboratory Command Harry Diamond Laboratories, Adelphi, Maryland, October 1990. Blossom Point Field Test Facility, Blossom Point, Maryland.

Master Plan Report Tab, December 1990. USAALC, Blossom Point Field Test Facility, Maryland.

CULTURAL

Phase I Archeological Survey Of Twelve Areas At The Blossom Point Field Test Facility (BPFTF) Charles County, Maryland, April 1996.

Kise, Franks and Straw Historic Preservation Group. 1993. *Cultural Resources Management Plan* (Draft). (Prepared for Adelphi Laboratory Center. Philadelphia, PA.)

OTHER

Adelphi Laboratory Center. 2002. *Integrated Natural Resources Plan*.

Department of the Interior, United States Fish and Wildlife Service, *National Wetlands Inventory: Mapping Report for United States Army — Blossom Point ARL*, dated May 16, 1994.

U.S. Army Research Laboratory, Adelphi Laboratory Center. 2001 *Endangered Species Management Plan for Chesapeake Region Bald Eagle, Haliaeetus leucocephalus* .

U.S. Department of Agriculture, Soil Conservation Service. 1974. *Soil Survey of Charles County, Maryland.*

U.S. Department of the Army. 1990. AR 200-1, *Environmental Protection and Enhancement*, Headquarters, Department of the Army, Washington, D.C.

U.S. Department of the Army. 1988. AR 200-2, *Environmental Effects of Army Actions.* Headquarters, Department of the Army, Washington, D.C.

Charles County Government, *Emergency Operations Plan*, June 2002.

APPENDIX B

Microwave Radiation Survey at Blossom Point Tracking Facility

Unit	Reading on Monitor (mW/square cm)	Permissible Exposure Limit (mW/square cm)
Four Identical 20-Foot Transmitters	Maximum of 0.01 (E-Field)	4.56 (E-Field)
48-Foot Transmitter	Maximum of 0.2 (E-Field) Maximum of 0.2 (H-Field)	1.0 (E-Field) 1.0 (E-Field)
Yagi Antenna (LACE)	Maximum of 0.01 (E-Field) Maximum of 0.2 (H-Field)	1.0 (E-Field) 1.0 (E-Field)

Note: E-Field means Electric-Field Strength
H-Field means Magnetic-Field Strength

Source: Environmental Assessment of The U.S. Army Laboratory Command Harry Diamond Laboratories, Adelphi, Maryland, October 1990. Blossom Point Field Test Facility, Blossom Point, Maryland.