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**U.S. Army  
Environmental  
Center**

**VERSION I**

## **Base Realignment and Closure (BRAC) Cleanup Plan**

**Fort Sheridan  
Fort Sheridan, Illinois**

Prepared for:

**U.S. ARMY ENVIRONMENTAL CENTER  
ABERDEEN PROVING GROUND, MARYLAND 21010**

Prepared by:

**THE EARTH TECHNOLOGY CORPORATION  
1420 KING STREET, SUITE 600  
ALEXANDRIA, VIRGINIA 22314**

Unlimited Distribution  
Approved for Public Release

**1 APRIL 1994**

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# TABLE OF CONTENTS

| Section                                                                    | Page No.   |
|----------------------------------------------------------------------------|------------|
| Executive Summary . . . . .                                                | ES-1       |
| <b>Chapter 1: Introduction and Summary . . . . .</b>                       | <b>1-1</b> |
| 1.1 Environmental Response Objectives . . . . .                            | 1-2        |
| 1.2 BCP Purpose, Updates, and Distribution . . . . .                       | 1-3        |
| 1.3 BCT/Project Team . . . . .                                             | 1-6        |
| 1.4 Installation Description and History . . . . .                         | 1-7        |
| 1.5 Environmental Setting . . . . .                                        | 1-13       |
| 1.6 Hazardous Substances and Waste Management Practices . . . . .          | 1-15       |
| 1.7 Off-Post Property/Tenants . . . . .                                    | 1-15       |
| <b>Chapter 2: Property Disposal and Reuse Plan . . . . .</b>               | <b>2-1</b> |
| 2.1 Status of Disposal Planning Process . . . . .                          | 2-1        |
| 2.2 Relationship to Environmental Programs . . . . .                       | 2-1        |
| 2.3 Property Transfer Methods . . . . .                                    | 2-5        |
| 2.3.1 Federal Transfer of Property . . . . .                               | 2-5        |
| 2.3.2 No-Cost Public Benefit Conveyance . . . . .                          | 2-5        |
| 2.3.3 Negotiated Sale . . . . .                                            | 2-5        |
| 2.3.4 Competitive Public Sale . . . . .                                    | 2-5        |
| 2.3.5 Widening of Public Highways . . . . .                                | 2-6        |
| 2.3.6 Donated Property . . . . .                                           | 2-6        |
| 2.3.7 Interim Leases . . . . .                                             | 2-6        |
| 2.3.8 Other Property Transfer Methods . . . . .                            | 2-6        |
| <b>Chapter 3: Installation-wide Environmental Program Status . . . . .</b> | <b>3-1</b> |
| 3.1 Environmental Program Status . . . . .                                 | 3-1        |
| 3.1.1 Restoration Sites . . . . .                                          | 3-1        |
| 3.1.2 Installation-wide Source Discovery and Assessment Status . . . . .   | 3-10       |
| 3.2 Compliance Program Status . . . . .                                    | 3-13       |
| 3.2.1 Storage Tanks . . . . .                                              | 3-15       |
| 3.2.2 Hazardous Materials/Waste Management . . . . .                       | 3-18       |
| 3.2.3 Solid Waste Management . . . . .                                     | 3-18       |
| 3.2.4 Polychlorinated Biphenyls (PCBs) . . . . .                           | 3-18       |
| 3.2.5 Asbestos . . . . .                                                   | 3-18       |
| 3.2.6 Radon . . . . .                                                      | 3-19       |
| 3.2.7 RCRA Facilities (SWMUs) . . . . .                                    | 3-19       |
| 3.2.8 NPDES Permits . . . . .                                              | 3-19       |
| 3.2.9 Oil/Water Separators . . . . .                                       | 3-19       |
| 3.2.10 NRC Licensing . . . . .                                             | 3-20       |
| 3.2.11 Pollution Prevention . . . . .                                      | 3-20       |
| 3.2.12 Mixed Waste . . . . .                                               | 3-20       |

# TABLE OF CONTENTS

Continued

| Section                                                                    | Page No.   |
|----------------------------------------------------------------------------|------------|
| 3.2.13 Radiation                                                           | 3-20       |
| 3.2.14 Lead-based Paint                                                    | 3-20       |
| 3.2.15 Unexploded Ordnance                                                 | 3-20       |
| 3.2.16 Medical Waste                                                       | 3-21       |
| 3.2.17 National Environmental Policy Act                                   | 3-21       |
| 3.2.18 Other Compliance Programs                                           | 3-21       |
| 3.3 Status of Natural and Cultural Resources Programs                      | 3-21       |
| 3.3.1 Vegetation                                                           | 3-21       |
| 3.3.2 Wildlife                                                             | 3-22       |
| 3.3.3 Wetlands                                                             | 3-22       |
| 3.3.4 Designated Preservation Areas                                        | 3-22       |
| 3.3.5 Rare, Threatened and Endangered Species                              | 3-22       |
| 3.3.6 Cultural Resources                                                   | 3-24       |
| 3.3.7 Other Resources                                                      | 3-24       |
| 3.4 Environmental Condition of Property                                    | 3-24       |
| 3.4.1 CERFA Parcels                                                        | 3-25       |
| 3.4.2 CERFA Parcels with Qualifiers                                        | 3-25       |
| 3.4.3 CERFA Disqualified Parcel                                            | 3-25       |
| 3.4.4 CERFA Excluded Parcel                                                | 3-25       |
| 3.4.5 Suitability of Installation Property for Transfer by Deed            | 3-28       |
| 3.5 Status of Community Involvement                                        | 3-28       |
| <b>Chapter 4: Installation-wide Strategy for Environmental Restoration</b> | <b>4-1</b> |
| 4.1 Zone/OU Designation and Strategy                                       | 4-1        |
| 4.1.1 Zone Designations                                                    | 4-1        |
| 4.1.2 OU Designations                                                      | 4-1        |
| 4.1.3 Sequence of OUs                                                      | 4-2        |
| 4.1.4 Environmental Restoration Early Actions Strategy                     | 4-9        |
| 4.1.5 Remedy Selection Approach                                            | 4-9        |
| 4.2 Compliance Strategy                                                    | 4-10       |
| 4.2.1 Storage Tanks                                                        | 4-11       |
| 4.2.2 Hazardous Materials/Waste Management                                 | 4-11       |
| 4.2.3 Solid Waste Management                                               | 4-11       |
| 4.2.4 Polychlorinated Biphenyls (PCBs)                                     | 4-11       |
| 4.2.5 Asbestos                                                             | 4-11       |
| 4.2.6 Radon                                                                | 4-11       |
| 4.2.7 RCRA Facilities (SWMUs)                                              | 4-12       |
| 4.2.8 NPDES Permits                                                        | 4-12       |
| 4.2.9 Oil/Water Separators                                                 | 4-12       |

# TABLE OF CONTENTS

Continued

| Section                                                               | Page No.   |
|-----------------------------------------------------------------------|------------|
| 4.2.10 NRC Licensing . . . . .                                        | 4-12       |
| 4.2.11 Pollution Prevention . . . . .                                 | 4-12       |
| 4.2.12 Mixed Wastes . . . . .                                         | 4-12       |
| 4.2.13 Radiation . . . . .                                            | 4-12       |
| 4.2.14 Lead-Based Paint . . . . .                                     | 4-12       |
| 4.2.15 Unexploded Ordnance (UXO) . . . . .                            | 4-13       |
| 4.2.16 Medical Wastes . . . . .                                       | 4-13       |
| 4.2.17 NEPA . . . . .                                                 | 4-13       |
| 4.2.18 Other Compliance Programs . . . . .                            | 4-13       |
| 4.3 Natural and Cultural Resources Strategy(ies) . . . . .            | 4-13       |
| 4.3.1 Vegetation . . . . .                                            | 4-13       |
| 4.3.2 Wildlife . . . . .                                              | 4-13       |
| 4.3.3 Wetlands . . . . .                                              | 4-13       |
| 4.3.4 Designated Preservation Areas . . . . .                         | 4-14       |
| 4.3.5 Rare, Threatened and Endangered Species . . . . .               | 4-14       |
| 4.3.6 Cultural Resources . . . . .                                    | 4-14       |
| 4.3.7 Other Resources . . . . .                                       | 4-14       |
| 4.4 Community Involvement/Strategy . . . . .                          | 4-14       |
| <b>Chapter 5: Environmental Program Master Schedules . . . . .</b>    | <b>5-1</b> |
| 5.1 Environmental Restoration Program . . . . .                       | 5-1        |
| 5.1.1 Response Schedules . . . . .                                    | 5-1        |
| 5.1.2 Requirements by Fiscal Year . . . . .                           | 5-1        |
| 5.2 Compliance Programs . . . . .                                     | 5-1        |
| 5.2.1 Master Compliance Schedules . . . . .                           | 5-1        |
| 5.2.2 Requirements by Fiscal Year . . . . .                           | 5-10       |
| 5.3 Natural and Cultural Resources . . . . .                          | 5-10       |
| 5.3.1 Natural and Cultural Resources Schedule(s) . . . . .            | 5-10       |
| 5.3.2 Requirements by Fiscal Year . . . . .                           | 5-10       |
| 5.4 Meeting Schedule . . . . .                                        | 5-10       |
| <b>Chapter 6: Technical and Other Issues to be Resolved . . . . .</b> | <b>6-1</b> |
| 6.1 Data Usability . . . . .                                          | 6-1        |
| 6.1.1 BCT Action Items . . . . .                                      | 6-1        |
| 6.1.2 Rationale . . . . .                                             | 6-1        |
| 6.1.3 Status/Strategy . . . . .                                       | 6-1        |
| 6.2 Information Management . . . . .                                  | 6-1        |
| 6.2.1 BCT Action Items . . . . .                                      | 6-2        |
| 6.2.2 Rationale . . . . .                                             | 6-2        |
| 6.2.3 Status/Strategy . . . . .                                       | 6-2        |

# TABLE OF CONTENTS

Continued

| Section                                                           | Page No. |
|-------------------------------------------------------------------|----------|
| 6.3 Data Gaps . . . . .                                           | 6-2      |
| 6.3.1 BCT Action Items . . . . .                                  | 6-3      |
| 6.3.2 Rationale . . . . .                                         | 6-3      |
| 6.3.3 Status/Strategy . . . . .                                   | 6-3      |
| 6.4 Background Levels . . . . .                                   | 6-3      |
| 6.4.1 BRAC Cleanup Team Action Items . . . . .                    | 6-3      |
| 6.4.2 Rationale . . . . .                                         | 6-3      |
| 6.4.3 Status/Strategy . . . . .                                   | 6-3      |
| 6.5 Risk Assessments . . . . .                                    | 6-4      |
| 6.5.1 BCT Action Items . . . . .                                  | 6-4      |
| 6.5.2 Rationale . . . . .                                         | 6-4      |
| 6.5.3 Status/Strategy . . . . .                                   | 6-4      |
| 6.6 Installation-wide Remedial Action Strategy . . . . .          | 6-4      |
| 6.6.1 BCT Action Items . . . . .                                  | 6-4      |
| 6.6.2 Rationale . . . . .                                         | 6-4      |
| 6.6.3 Status/Strategy . . . . .                                   | 6-4      |
| 6.7 Interim Monitoring of Groundwater and Surface Water . . . . . | 6-6      |
| 6.7.1 BCT Action Items . . . . .                                  | 6-6      |
| 6.7.2 Rationale . . . . .                                         | 6-6      |
| 6.7.3 Status/Strategy . . . . .                                   | 6-6      |
| 6.8 Excavation of Contaminated Materials . . . . .                | 6-6      |
| 6.8.1 BCT Action Items . . . . .                                  | 6-6      |
| 6.8.2 Rationale . . . . .                                         | 6-6      |
| 6.8.3 Status/Strategy . . . . .                                   | 6-6      |
| 6.9 Protocols for Remedial Design Reviews . . . . .               | 6-6      |
| 6.9.1 BCT Action Items . . . . .                                  | 6-7      |
| 6.9.2 Rationale . . . . .                                         | 6-7      |
| 6.9.3 Status/Strategy . . . . .                                   | 6-7      |
| 6.10 Conceptual Models . . . . .                                  | 6-7      |
| 6.10.1 BCT Action Items . . . . .                                 | 6-7      |
| 6.10.2 Rationale . . . . .                                        | 6-7      |
| 6.10.3 Status/Strategy . . . . .                                  | 6-7      |
| 6.11 Cleanup Standards . . . . .                                  | 6-7      |
| 6.11.1 BCT Action Items . . . . .                                 | 6-8      |
| 6.11.2 Rationale . . . . .                                        | 6-8      |
| 6.11.3 Status/Strategy . . . . .                                  | 6-8      |
| 6.12 Initiatives for Accelerating Cleanup . . . . .               | 6-8      |
| 6.12.1 BCT Action Items . . . . .                                 | 6-8      |
| 6.12.2 Rationale . . . . .                                        | 6-8      |
| 6.12.3 Status/Strategy . . . . .                                  | 6-8      |

# TABLE OF CONTENTS

Continued

| Section                                                                       | Page No. |
|-------------------------------------------------------------------------------|----------|
| 6.13 Remedial Actions . . . . .                                               | 6-9      |
| 6.13.1 BCT Action Items . . . . .                                             | 6-10     |
| 6.13.2 Rationale . . . . .                                                    | 6-10     |
| 6.13.3 Status/Strategy . . . . .                                              | 6-10     |
| 6.14 Review of Selected Technologies for Application of Expedited Solutions . | 6-10     |
| 6.14.1 BCT Action Items . . . . .                                             | 6-10     |
| 6.14.2 Rationale . . . . .                                                    | 6-10     |
| 6.14.3 Status/Strategy . . . . .                                              | 6-10     |
| 6.15 Hot Spot Removals . . . . .                                              | 6-11     |
| 6.15.1 BCT Action Items . . . . .                                             | 6-11     |
| 6.15.2 Rationale . . . . .                                                    | 6-11     |
| 6.15.3 Status/Strategy . . . . .                                              | 6-11     |
| 6.16 Identification of Clean Properties . . . . .                             | 6-11     |
| 6.16.1 BCT Action Items . . . . .                                             | 6-11     |
| 6.16.2 Rationale . . . . .                                                    | 6-11     |
| 6.16.3 Status/Strategy . . . . .                                              | 6-11     |
| 6.17 Overlapping Phases of the Cleanup Process . . . . .                      | 6-12     |
| 6.17.1 BCT Action Items . . . . .                                             | 6-12     |
| 6.17.2 Rationale . . . . .                                                    | 6-12     |
| 6.17.3 Status/Strategy . . . . .                                              | 6-12     |
| 6.18 Improved Contracting Procedures . . . . .                                | 6-12     |
| 6.18.1 BCT Action Items . . . . .                                             | 6-12     |
| 6.18.2 Rationale . . . . .                                                    | 6-12     |
| 6.18.3 Status/Strategy . . . . .                                              | 6-12     |
| 6.19 Interfacing with the Community Reuse Plan . . . . .                      | 6-13     |
| 6.19.1 BCT Action Items . . . . .                                             | 6-13     |
| 6.19.2 Rationale . . . . .                                                    | 6-13     |
| 6.19.3 Status/Strategy . . . . .                                              | 6-13     |
| 6.20 Bias for Cleanup Instead of Studies . . . . .                            | 6-13     |
| 6.20.1 BCT Action Items . . . . .                                             | 6-13     |
| 6.20.2 Rationale . . . . .                                                    | 6-13     |
| 6.20.3 Status/Strategy . . . . .                                              | 6-13     |
| 6.21 Expert Input on Contamination and Potential Remedial Actions . . . . .   | 6-14     |
| 6.21.1 BCT Action Items . . . . .                                             | 6-14     |
| 6.21.2 Rationale . . . . .                                                    | 6-14     |
| 6.21.3 Status/Strategy . . . . .                                              | 6-14     |
| 6.22 Presumptive Remedies . . . . .                                           | 6-14     |
| 6.22.1 BCT Action Items . . . . .                                             | 6-14     |
| 6.22.2 Rationale . . . . .                                                    | 6-14     |
| 6.22.3 Status/Strategy . . . . .                                              | 6-14     |

# TABLE OF CONTENTS

Continued

| Section                                                                                             | Page No.   |
|-----------------------------------------------------------------------------------------------------|------------|
| 6.23 Partnering (Using Innovative Management, Coordination, and Communication Techniques) . . . . . | 6-15       |
| 6.23.1 BCT Action Items . . . . .                                                                   | 6-15       |
| 6.23.2 Rationale . . . . .                                                                          | 6-15       |
| 6.23.3 Status/Strategy . . . . .                                                                    | 6-15       |
| 6.24 Updating the CERFA Report and Natural/Cultural Resources Documentation . . . . .               | 6-15       |
| 6.24.1 BCT Action Items . . . . .                                                                   | 6-15       |
| 6.24.2 Rationale . . . . .                                                                          | 6-15       |
| 6.24.3 Status/Strategy . . . . .                                                                    | 6-16       |
| 6.25 Implementing the Policy for On-Site Decision Making . . . . .                                  | 6-16       |
| 6.25.1 BCT Action Items . . . . .                                                                   | 6-16       |
| 6.25.2 Rationale . . . . .                                                                          | 6-16       |
| 6.25.3 Status/Strategy . . . . .                                                                    | 6-16       |
| 6.26 Structural and Infrastructure Constraints to Reuse . . . . .                                   | 6-16       |
| 6.26.1 BCT Action Items . . . . .                                                                   | 6-16       |
| 6.26.2 Rationale . . . . .                                                                          | 6-16       |
| 6.26.3 Status/Strategy . . . . .                                                                    | 6-17       |
| 6.27 Other Technical Reuse Issues to be Resolved . . . . .                                          | 6-17       |
| <b>Chapter 7: Primary References . . . . .</b>                                                      | <b>7-1</b> |
| Appendix A: Fiscal Year Funding Requirements/Costs                                                  |            |
| Appendix B: Installation Environmental Restoration Documents Summary Tables                         |            |
| Appendix C: Decision Document/ROD Summaries                                                         |            |
| Appendix D: No Further Response Action Planned (NFRAP) Summaries                                    |            |
| Appendix E: Conceptual Site Model Data Summaries                                                    |            |
| Appendix F: Other Ancillary BCP Materials                                                           |            |

# TABLE OF CONTENTS

Continued

## LIST OF FIGURES

| Figure                                                                                      | Page No. |
|---------------------------------------------------------------------------------------------|----------|
| 1-1 General Location of Fort Sheridan, Illinois . . . . .                                   | 1-8      |
| 1-2 Existing Land Use Adjacent to Fort Sheridan . . . . .                                   | 1-10     |
| 1-3 Location of Past Hazardous Substance Activities . . . . .                               | 1-16     |
| 1-4 Off-Post Parcels . . . . .                                                              | 1-19     |
| 2-1 Disposal and Reuse Parcels . . . . .                                                    | 2-2      |
| 3-1 Sites, Zones, and OUs Currently Under Investigation . . . . .                           | 3-8      |
| 3-2 Environmental Condition of Property . . . . .                                           | 3-26     |
| 3-3 Suitability of Property of Transfer by Deed . . . . .                                   | 3-29     |
| 4-1 Sequence and Primary Document Timeline for Operable Units . . . . .                     | 4-3      |
| 5-1 Projected Master Restoration Schedule . . . . .                                         | 5-2      |
| 5-2 Projected Master Schedule for Mission/Operational-Related Compliance Programs . . . . . | 5-4      |
| 5-3 Projected Master Schedule for Closure-Related Compliance Programs . . . . .             | 5-6      |
| 5-4 Projected Schedule for Natural and Cultural Resources Activities . . . . .              | 5-8      |

# TABLE OF CONTENTS

Continued

## LIST OF TABLES

| Table                                                                                                                     | Page No. |
|---------------------------------------------------------------------------------------------------------------------------|----------|
| 1-1 BCP Distribution List . . . . .                                                                                       | 1-4      |
| 1-1 BCP Plan Distribution List . . . . .                                                                                  | 1-5      |
| 1-2 Current BCT/Project Team Members . . . . .                                                                            | 1-6      |
| 1-2 Current BCT/Project Team Members . . . . .                                                                            | 1-7      |
| 1-3 Property Acquisition Summary . . . . .                                                                                | 1-12     |
| 1-4 History of Installation Operations . . . . .                                                                          | 1-12     |
| 1-5 Hazardous Waste Generating Activities . . . . .                                                                       | 1-18     |
| 1-7 On-Post Tenant Units . . . . .                                                                                        | 1-21     |
| 2-1 Reuse Parcel Data Summary . . . . .                                                                                   | 2-4      |
| 2-2 Existing Legal Agreements/Interim Leases . . . . .                                                                    | 2-5      |
| 3-1 Preliminary Location Summary . . . . .                                                                                | 3-2      |
| 3-1 Preliminary Location Summary . . . . .                                                                                | 3-3      |
| 3-2 Environmental Restoration Site/Study Area Summary . . . . .                                                           | 3-4      |
| 3-2 Environmental Restoration Site/Study Area Summary . . . . .                                                           | 3-5      |
| 3-2 Environmental Restoration Site/Study Area Summary . . . . .                                                           | 3-6      |
| 3-2 Environmental Restoration Site/Study Area Summary . . . . .                                                           | 3-7      |
| 3-3 Environmental Restoration Early Action Status . . . . .                                                               | 3-10     |
| 3-5 Closure-Related Compliance Projects . . . . .                                                                         | 3-14     |
| 3-6 Compliance Early Action Status . . . . .                                                                              | 3-14     |
| 3-6 Compliance Early Action Status . . . . .                                                                              | 3-15     |
| 3-7 Underground Storage Tank Inventory . . . . .                                                                          | 3-16     |
| 3-8 Aboveground Storage Tank Inventory . . . . .                                                                          | 3-17     |
| 3-9 State of Illinois Threatened and Endangered Plant Species Known to Occur on or<br>Adjacent to Fort Sheridan . . . . . | 3-23     |
| 4-1 Relationship Between Restoration<br>Sites, OUs, and Parcels . . . . .                                                 | 4-2      |
| 4-2 Cleanup Sequence . . . . .                                                                                            | 4-7      |
| 4-3 Environmental Restoration Planned Early Actions . . . . .                                                             | 4-9      |
| 4-4 Environmental Compliance Planned Early Actions . . . . .                                                              | 4-10     |
| 5-1 BCT Meeting Schedule . . . . .                                                                                        | 5-11     |
| 6-1 Future Land Use Risk Assessment for Development of Remedy Selections . . . . .                                        | 6-5      |

## LIST OF ACRONYMS

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|        |                                                                       |
|--------|-----------------------------------------------------------------------|
| ACM    | Asbestos-Containing Material                                          |
| AGT    | Aboveground Tank                                                      |
| AOC    | Areas of Concern                                                      |
| AR     | Army Regulation                                                       |
| ARAR   | Applicable or Relevant and Appropriate Requirements                   |
| AREE   | Areas Requiring Environmental Evaluation                              |
| AST    | Aboveground Storage Tank                                              |
| bgs    | Below Ground Surface                                                  |
| BCP    | BRAC Cleanup Plan                                                     |
| BCT    | BRAC Cleanup Team                                                     |
| BEC    | BRAC Environmental Coordinator                                        |
| BRAC   | Base Realignment and Closure                                          |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CERFA  | Comprehensive Environmental Response Facilitation Act                 |
| CFR    | Code of Federal Regulations                                           |
| CRP    | Community Relations Plan                                              |
| COE    | Corps of Engineers                                                    |
| CSA    | Coal Storage Area                                                     |
| DD     | Decision Document                                                     |
| DENIX  | Defense Environmental Network Information Exchange                    |
| DERA   | Defense Environmental Restoration Account                             |
| DLA    | Defense Intelligence Agency                                           |
| DOA    | Department of Army                                                    |
| DoD    | Department of Defense                                                 |
| DOL    | Directorate of Logistics                                              |
| DOT    | Department of Transportation                                          |
| EA     | Environmental Assessment                                              |
| EIS    | Environmental Impact Statement                                        |
| ENPA   | Enhanced Preliminary Assessment                                       |
| EOD    | Explosive Ordnance Disposal                                           |
| FFA    | Federal Facility Agreement                                            |
| FS     | Feasibility Study                                                     |
| IAC    | Illinois Administrative Code                                          |
| IEPA   | Illinois Environmental Protection Agency                              |
| INAI   | Illinois Natural Areas Inventory                                      |
| IRDMIS | Installation Restoration Data Management Information System           |
| IRP    | Installation Restoration Program                                      |
| ISA    | Initial Screening of Alternatives                                     |
| LTM    | Long Term Monitoring                                                  |
| MOA    | Memorandum of Agreement                                               |
| MOU    | Memorandum of Understanding                                           |
| OEA    | Office of Economic Adjustment                                         |

# LIST OF ACROYNMS

Continued

|        |                                                                  |
|--------|------------------------------------------------------------------|
| NCP    | National Oil and Hazardous Substances Pollution Contingency Plan |
| NEPA   | National Environmental Policy Act                                |
| NFA    | No Further Action                                                |
| NFRAP  | No Further Action Planned                                        |
| NPDES  | National Pollutant Discharge Eliminary System                    |
| NPL    | National Priority Listed                                         |
| NRC    | Nuclear Regulatory Commission                                    |
| OSHA   | Occupational Safety and Health Administration                    |
| OU     | Operable Unit                                                    |
| PA     | Preliminary Assessment                                           |
| PCB    | Polychlorinated Biphenyl                                         |
| PIRP   | Public Involvement Reponse Plan                                  |
| PNA    | Polynuclear Aromatic Hydrocarbons                                |
| POL    | Petroleum, Oils, and Lubricants                                  |
| PP     | Proposed Plan                                                    |
| ppm    | Parts Per Million                                                |
| RA     | Remedial Action                                                  |
| RAB    | Restoration Advisory Board                                       |
| RCRA   | Resource Conservation and Recovery Act                           |
| RD     | Remedial Design                                                  |
| RDX    | Research and Development Explosive                               |
| RFA    | RCRA Facility Assessments                                        |
| RFI    | RCRA Facility Investigations                                     |
| RI/FS  | Remedial Investigation/Feasibility Study                         |
| RMIS   | Army Information Management System                               |
| ROD    | Record of Decision                                               |
| RPM    | Remedial Project Manager                                         |
| SARA   | Superfund Amendments and Reauthorization Act                     |
| SI     | Site Investigation                                               |
| SPCC   | spill prevention, control and countermeasure                     |
| STP    | Sewage Treatment Plant                                           |
| SWMU   | Solid Waste Management Unit                                      |
| TAG    | Technical Assistance Grant                                       |
| TERC   | Total Environmental Restoration Contracts                        |
| TRC    | Technical Review Committee                                       |
| TSCA   | Toxic Substances Control Act                                     |
| USAEC  | U.S. Army Environmental Center                                   |
| USACE  | U.S. Army Corps of Engineers                                     |
| USAEHA | U.S. Army Environmental Hygiene Agency                           |
| USEPA  | U.S. Environmental Protection Agency                             |
| UST    | Underground Storage Tank                                         |
| UXO    | Unexploded Ordnance                                              |
| VOC    | Volatile Organic Compound                                        |

# EXECUTIVE SUMMARY

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## **Introduction**

This Base Realignment and Closure (BRAC) Cleanup Plan (BCP) contains the status, management and response strategy, and action items related to Fort Sheridan's ongoing environmental restoration and associated compliance programs. These programs support full restoration of the installation property, which is necessary to meet the requirements for property disposal and reuse activities associated with the closure of the installation. The scope of the BCP considers the following regulatory mechanisms: the BRAC Act; National Environmental Policy Act (NEPA); Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Community Environmental Response Facilitation Act; Resource Conservation and Recovery Act; and other applicable laws.

The BCP is a planning document and was developed by the BRAC Cleanup Team (BCT) consisting of the U.S. Army, U.S. Environmental Protection Agency, and representatives of the State of Illinois. The information and assumptions presented may not necessarily have complete approval from the U.S. Army and/or federal and state regulatory agencies. The BCP is a dynamic document that will be updated regularly to reflect the current status and strategies of remedial actions. This document is the first in a series of updates/modifications and represents conditions and strategies as of March 1994.

## **Status of Disposal, Reuse, and Interim Lease Process**

Fort Sheridan, a BRAC 88 installation, closed on 1 June 1993. The disposal of Fort Sheridan involves three interrelated activities: the NEPA documentation process, development of a disposal plan, and development of a community reuse plan. The first two items are the responsibility of the U.S. Army. The third is the responsibility of the Joint Planning Committee created by the cities of Lake Forest, Highwood, Highland Park, and Lake County for the purpose of developing a plan for reuse and redevelopment of the installation. An environmental impact statement for the closure of the Fort and an environmental assessment (EA) addressing the disposal and reuse of Fort Sheridan property have been completed. The NEPA process will be completed when a finding of no significant impact is finalized. The U.S. Army has outlined alternative disposal and reuse scenarios in the EA and the disposal plan is based on a schedule pointing to an August 1995 disposal date. The Joint Planning Committee has opened the reuse planning process to public review and are reviewing various reuse plans put forward by an earlier authorized planning group, the Fort Sheridan commission, and others. A final community reuse plan has not been developed.

Future property disposal methods at Fort Sheridan may include competitive sale, no cost public benefit conveyance, and legislative property exchange.

## **Status of Environmental Restoration Program**

There are 34 areas requiring environmental evaluation (AREEs) in the BRAC portion of Fort Sheridan disposal and reuse parcels. These AREEs include landfills, vehicle storage areas, coal storage, chemical and other material storage areas, and underground storage tanks (USTs) among others. All USTs have been removed from the disposal and reuse parcels. USTs in operable units (OUs) 1 and 2 are in the closure process. OU 1 is awaiting final approval of the closure report. The closure report for OU 2 is in preparation and will be submitted when remediation activities are complete. No other OUs have been designated to date for the Fort Sheridan disposal and reuse parcels. Asbestos abatement is continuing and leaking polychlorinated biphenyl (PCB) transformers have been removed.

## **Key Restoration and Transferability Strategies and Schedules**

Fort Sheridan has shifted its focus from the activities of an active installation to development of compliance and restoration activities for disposal and reuse of the property. The BCP strategies are currently being implemented to focus restoration activities towards final transfer of installation property. Strategies for determining the most effective responses for contaminant sources and contaminated areas at the installation have been performed on a case-by-case basis by the Project Team. A comprehensive strategy to identify appropriate regulatory programs applicable to the areas of contamination discovered during the restoration program is being developed and will be updated as necessary.

## **Summary of Current BCP Action Items**

Table ES-1 provides a listing of recommendations and issues associated with environmental restoration, compliance, and technical/management action items that require further evaluation and implementation by the BCT/Project Team. Bottom up review program numbers specified in the Department of Defense BCP Guidebook which relate to each action item are identified in the table.

**TABLE ES-1. BCT/PROJECT TEAM ACTION ITEMS**

| Action Item                                                                                            | Status              |             |                 |
|--------------------------------------------------------------------------------------------------------|---------------------|-------------|-----------------|
|                                                                                                        | Program Review Item | In Progress | To Be Performed |
| <b>COMPLIANCE ACTIVITIES</b>                                                                           |                     |             |                 |
| UST Removal/Compliance                                                                                 | 7                   | ×           |                 |
| Unexploded Ordnance Clearance                                                                          | 7                   |             | ×               |
| PCBs                                                                                                   | 7                   |             | ×               |
| Lead-Based Paint Survey                                                                                | 7                   |             | ×               |
| Hazardous Materials/Waste Management                                                                   | 7                   |             | ×               |
| Evaluate need to update natural resource (biological) data                                             | 7, 16, 17           |             | ×               |
| <b>CERCLA 120(H)(3) CONSIDERATIONS</b>                                                                 |                     |             |                 |
| Suitability for Property Transfer<br>- Update environmental conditions map as remediation is completed | 28                  |             | ×               |
| Evaluate alternatives to reduce potential health risk concerns Landfill 3/4                            | 22, 23, 24          |             | ×               |
| <b>COMMUNITY RELATIONS</b>                                                                             |                     |             |                 |
| Update community relations plan                                                                        | 14, 30              |             | ×               |
| Establish Restoration Advisory Board                                                                   | 14                  | ×           |                 |
| <b>MANAGEMENT AND ADMINISTRATIVE SUPPORT ACTIVITIES</b>                                                |                     |             |                 |
| Establish and maintain Defense Environmental Network Information Exchange for information management   | 21                  |             | ×               |
| Prepare conceptual site models                                                                         | 22                  |             | ×               |

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# CHAPTER 1

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## ► INTRODUCTION AND SUMMARY ◀

The purpose of this BRAC Cleanup Plan (BCP) is to summarize the current status of the Fort Sheridan environmental restoration and associated environmental compliance programs and present a comprehensive strategy for implementing response actions necessary to protect human health and the environment. This strategy integrates activities being performed under both the Installation Restoration Program (IRP) and the associated environmental compliance programs to support full restoration of the post. The BCP is a dynamic document that will be updated regularly to incorporate newly obtained information and will reflect the completion or change in status of any remedial actions. This iteration of the BCP was prepared with information available as of March 1994.

This BCP is a planning document. Information, schedules, and response and remedial actions presented in this BCP do not necessarily represent those that have been or will be approved by the U.S. Army or federal and state regulatory agencies. It was necessary to make certain assumptions and interpretations to develop the schedule and cost estimates. As additional data become available, implementation programs and cost estimates could be altered. Such changes would then be reflected in future updates to the BCP.

Chapter 1 describes the objectives of the environmental restoration program, explains the purpose of the BCP, introduces the Project Team formed to review the program, and provides a brief history of the Fort.

Chapter 2 summarizes the current status of the Fort Sheridan property disposal planning process and describes the relationship of the disposal process with other environmental programs.

Chapter 3 summarizes the current status and past history of the Fort Sheridan IRP and associated environmental compliance programs, community relations activities that have occurred to date, and the environmental condition of base property.

Chapter 4 describes the basewide strategy for environmental restoration, including the strategies for dealing with each operable unit (OU) or area of concern (AOC) on base. This chapter also includes summaries of plans for managing underground storage tanks (UST), polychlorinated biphenyl (PCB) transformers, asbestos abatement, and responses under other compliance programs if they are applicable.

Chapter 5 provides master schedules of planned and anticipated activities to be performed throughout the duration of the environmental restoration program, including associated compliance activities.

Chapter 6 describes specific technical and/or administrative issues to be resolved and presents a strategy for resolving these issues.

Chapter 7 presents the primary references used in compiling the BCP.

In addition to the main text, the following appendices are included in this document:

- ▶ Appendix A - tables presenting funding requirements, as well as a summary table of projected and historical costs for the environmental restoration program
- ▶ Appendix B - technical documents and data loading summary, listings of previous environmental restoration program deliverables by program and by site
- ▶ Appendix C - summaries of Decision Documents (DDs) for which a response action or remedial action was selected
- ▶ Appendix D - summaries of each DD for each site or OU for which a no further response action planned (NFRAP) decision has been made
- ▶ Appendix E - working conceptual models for sites, zones, or OUs.
- ▶ Appendix F - other ancillary materials relevant to the BCP.

## **1.1 Environmental Response Objectives**

The objectives of the base closure environmental restoration program at Fort Sheridan are as follows:

- ▶ Protect human health and the environment
- ▶ Strive to meet reuse goals established by the U.S. Army and community consistent with legislation relevant to the closure of Fort Sheridan
- ▶ Comply with existing statutes and regulations
- ▶ Conduct all environmental restoration activities in a manner consistent with Section 120 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA)
- ▶ Conduct Community Environmental Response Facilitation Act (CERFA) investigations
- ▶ Continue efforts to identify all potentially contaminated areas
- ▶ Establish priorities for environmental restoration and restoration-related compliance activities so that property disposal and reuse goals can be met

- ▶ Initiate selected removal actions to control, eliminate, or reduce risks to manageable levels
- ▶ Identify and map the environmental condition of installation property, with the intent of identifying areas suitable for transfer by deed
- ▶ Complete the environmental restoration process as soon as practicable for each source area, zone, or OU, in an order of priority which takes into account both environmental concerns and redevelopment plans; consider future land use when characterizing risks associated with releases of hazardous substances, pollutants, contaminants, or hazardous wastes.
- ▶ Develop, screen, and select response actions or remedial actions that reduce risks in a manner consistent with statutory requirements
- ▶ Commence response actions for (1) environmental and (2) property disposal and reuse priority areas as soon as practicable
- ▶ Advise the real estate arm of the U.S. Army BRAC Organization of property that is deemed suitable for transfer and properties that are not suitable for transfer because they are either not properly evaluated or pose an unacceptable human health or environmental risk
- ▶ Conduct long-term remedial action for groundwater and any necessary 5-year reviews for wastes left on site
- ▶ Establish interim and Long-Term Monitoring (LTM) plans for remedial actions as appropriate.

## **1.2 BCP Purpose, Updates, and Distribution**

This BCP presents, in summary fashion, the status of Fort Sheridan's environmental restoration and compliance programs and the comprehensive strategy for environmental restoration and restoration-related compliance activities. It lays out the response action approach at the installation in support of installation closure. In addition, it defines the status of efforts to resolve technical issues so that continued progress and implementation of scheduled activities can occur. The Fort Sheridan BCP Strategy and Schedule herein is designed to streamline and expedite the necessary response actions associated with the historic district and the northern part of the post to facilitate the earliest possible disposal and reuse activities.

This BCP will be reviewed quarterly and updated annually. Updates to the BCP will be distributed to each member of the Fort Sheridan Project Team as well as to additional individuals and organizations as identified by the BCT. Table 1-1 provides an initial list of individuals to receive the updates of the BCP. The list may be expanded at a later time.

**TABLE 1-1. BCP DISTRIBUTION LIST**

| Name                        | Title                                                                              | Address                                                                                                                   |
|-----------------------------|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Allan Balliett              | Chief Environmental Management, Fort McCoy                                         | Department of Army<br>Headquarters, Fort McCoy<br>Attn: AFZR-DE-E<br>Sparta, WI 54656-5000                                |
| Gary Schafer                | Remedial Project Manager, U.S. Environmental Protection Agency (USEPA)             | USEPA, Region V<br>77 W. Jackson Blvd.<br>HSRL-6J<br>Chicago, IL 60604                                                    |
| Steve Nussbaum              | Environmental Protection Engineer, Illinois Environmental Protection Agency (IEPA) | IEPA<br>Office of Community Relations<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276               |
| <b>PROJECT TEAM MEMBERS</b> |                                                                                    |                                                                                                                           |
| Russell Fendick             | U.S. Army Environmental Center (USAEC) Project Officer                             | USAEC<br>Attn: SFIM-AEC-BCA<br>Bldg. E-4480<br>Aberdeen Proving Ground, MD 21010-5401                                     |
| Victor Bonilla              | FORSCOM Headquarters                                                               | Not Available                                                                                                             |
| Steve Stokke                | Project Manager, Fort McCoy                                                        | Environmental Management Division<br>Attn: AFRC-FM-DEE<br>2160 South J Street<br>Fort McCoy, WI 54656-5162                |
| Ron Gierthy                 | Fort Sheridan                                                                      | Building 202<br>Philip Sheridan Reserve Center<br>Fort Sheridan, IL 60087-5000                                            |
| Chuck Grigalawski           | Field Representative, IEPA                                                         | IEPA<br>Field Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276                              |
| Chris Kallis                | Environmental Protection Specialist, IEPA                                          | IEPA<br>Environmental Protection<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276                    |
| Susan Toutant               | Project Manager, Louisville District                                               | Department of Army<br>U.S. Army Engineer District, Louisville<br>600 Martin Luther King Jr. Place<br>Louisville, KY 40202 |
| Mike Lambert                | Real Estate Specialist, U.S. Army Corps of Engineers (USACE) Louisville District   | Department of Army<br>U.S. Army Engineer District, Louisville<br>600 Martin Luther King Jr. Place<br>Louisville, KY 40202 |
| Nadina Smith                | Real Estate Specialist, USACE Louisville District                                  | Department of Army<br>U.S. Army Engineer District, Louisville<br>600 Martin Luther King Jr. Place<br>Louisville, KY 40202 |
| Shannon Townsend            | U.S. Navy, Great Lakes Training Center                                             | Engineering Field Activity-Midwest<br>Building 1-A, Code 920<br>Great Lakes, IL 60088-5600                                |

**TABLE 1-1. BCP PLAN DISTRIBUTION LIST****Continued**

| <b>Name</b>      | <b>Title</b>                    | <b>Address</b>                                                                                              |
|------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------|
| Jim Show         | Chemist, IEPA                   | IEPA<br>Analytical Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276           |
| Connie Sullinger | Risk Assessor, IEPA             | IEPA<br>Risk Assessment<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276               |
| Ron Daughy       | RCRA Issues, IEPA               | IEPA<br>RCRA Compliance<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276               |
| Mike Heaton      | RCRA Closures, IEPA             | IEPA<br>RCRA Closures<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276                 |
| Sharon Otto      | Geologist, IEPA                 | IEPA<br>Geology Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276              |
| Don Sutton       | Air Pollution, IEPA             | IEPA<br>Air Quality Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276          |
| Jerry Sweitzer   | Air Pollution, IEPA             | IEPA<br>Air Quality Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276          |
| Jackie Neuber    | Air Pollution, IEPA             | IEPA<br>Air Quality Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276          |
| Ron Steward      | Landfill Specialist, IEPA       | IEPA<br>Solid Waste Division<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276          |
| Don Harrison     | Community Relations Coordinator | IEPA<br>Office of Community Relations<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276 |
| Carol Barry      | Legal Counsel                   | Legal Service<br>2200 Churchill Road, P. O. Box 19276<br>Springfield, IL 62794-9276                         |

### 1.3 BCT/Project Team

The BCT is composed of three members, including Remedial Project Managers from both the USEPA, Region V and the IEPA. The BCT is led by the BRAC Environmental Coordinator (BEC).

The Project Team consists of the BCT and additional individuals whom the BCT selects to assist in the environmental restoration process at Fort Sheridan. The Project Team is led by the BEC. Project Team meetings are the means of conducting periodic program reviews and reaching consensus on decisions with the USEPA and IEPA. Table 1-2 lists the current Project Team members, and specifies individual roles and responsibilities.

**TABLE 1-2. CURRENT BCT/PROJECT TEAM MEMBERS**

| Name                        | Title                                             | Phone          | Role/Responsibility                        |
|-----------------------------|---------------------------------------------------|----------------|--------------------------------------------|
| Allan Balliett              | Chief Environmental Management, Fort McCoy        | (608) 388-2160 | BEC/BCT Member                             |
| Gary Schafer                | Remedial Project Manager, USEPA                   | (312) 886-4071 | USEPA Representative/BCT Member            |
| Steve Nussbaum              | Environmental Protection Engineer, IEPA           | (217) 524-4193 | IEPA Representative/BCT Member             |
| <b>PROJECT TEAM MEMBERS</b> |                                                   |                |                                            |
| Russell Fendick             | USAEC Project Officer                             | (410) 671-1630 | USAEC                                      |
| Victor Bonilla              |                                                   | (406) 752-4701 | FORSCOM HQ                                 |
| Steve Stokke                | Project Manager, Fort McCoy                       | (608) 388-2160 | Project Manager                            |
| Ron Gierthy                 | Fort Sheridan                                     | (708) 926-3842 | BRAC Transition Coordinator, Fort Sheridan |
| Chuck Grigalawski           | Field Representative, IEPA                        | (708) 388-7930 | IEPA                                       |
| Chris Kallis                | Environmental Protection Specialist, IEPA         | (708) 388-7930 | Water Specialist, USEPA                    |
| Susan Toutant               | Project Manager, Louisville District              | (502) 625-2014 | Project Manager                            |
| Mike Lambert                | Real Estate Specialist, USACE Louisville District | (502) 625-7373 | Real Estate                                |
| Nadina Smith                | Real Estate Specialist, USACE Louisville District | (502) 625-7374 | Real Estate                                |
| Shannon Townsend            | U.S. Navy, Great Lakes Training Center            | (708) 688-4197 | U.S. Navy Representative                   |
| Jim Show                    | Chemist, IEPA                                     | (217) 285-5166 | Chemist/Quality Assurance                  |

**TABLE 1-2. CURRENT BCT/PROJECT TEAM MEMBERS****Continued**

| <b>Name</b>      | <b>Title</b>                       | <b>Phone</b>   | <b>Role/Responsibility</b> |
|------------------|------------------------------------|----------------|----------------------------|
| Connie Sullinger | Risk Assessor, IEPA                | (217) 782-6760 | Health and Safety          |
| Ron Daughy       | RCRA Issues, IEPA                  | (217) 782-6760 | RCRA Issues                |
| Mike Heaton      | RCRA Closures, IEPA                | (217) 524-3300 | RCRA Closures              |
| Sharon Otto      | Geologist, IEPA                    | (217) 782-6760 | Geologist                  |
| Don Sutton       | Air Pollution, IEPA                | (271) 282-2113 | Air pollution quality      |
| Jerry Sweitzer   | Air Pollution, IEPA                | (271) 282-2113 | Air pollution quality      |
| Jackie Neuber    | Air Pollution, IEPA                | (271) 282-2113 | Air pollution quality      |
| Ron Steward      | Landfill Specialist, IEPA          | (217) 524-3300 | Landfill Issues            |
| Don Harrison     | Community Relations<br>Coordinator | (217) 782-5562 | Community Relations        |
| Carol Barry      | Legal Counsel                      | (217) 524-2364 | Legal Service              |

#### **1.4 Installation Description and History**

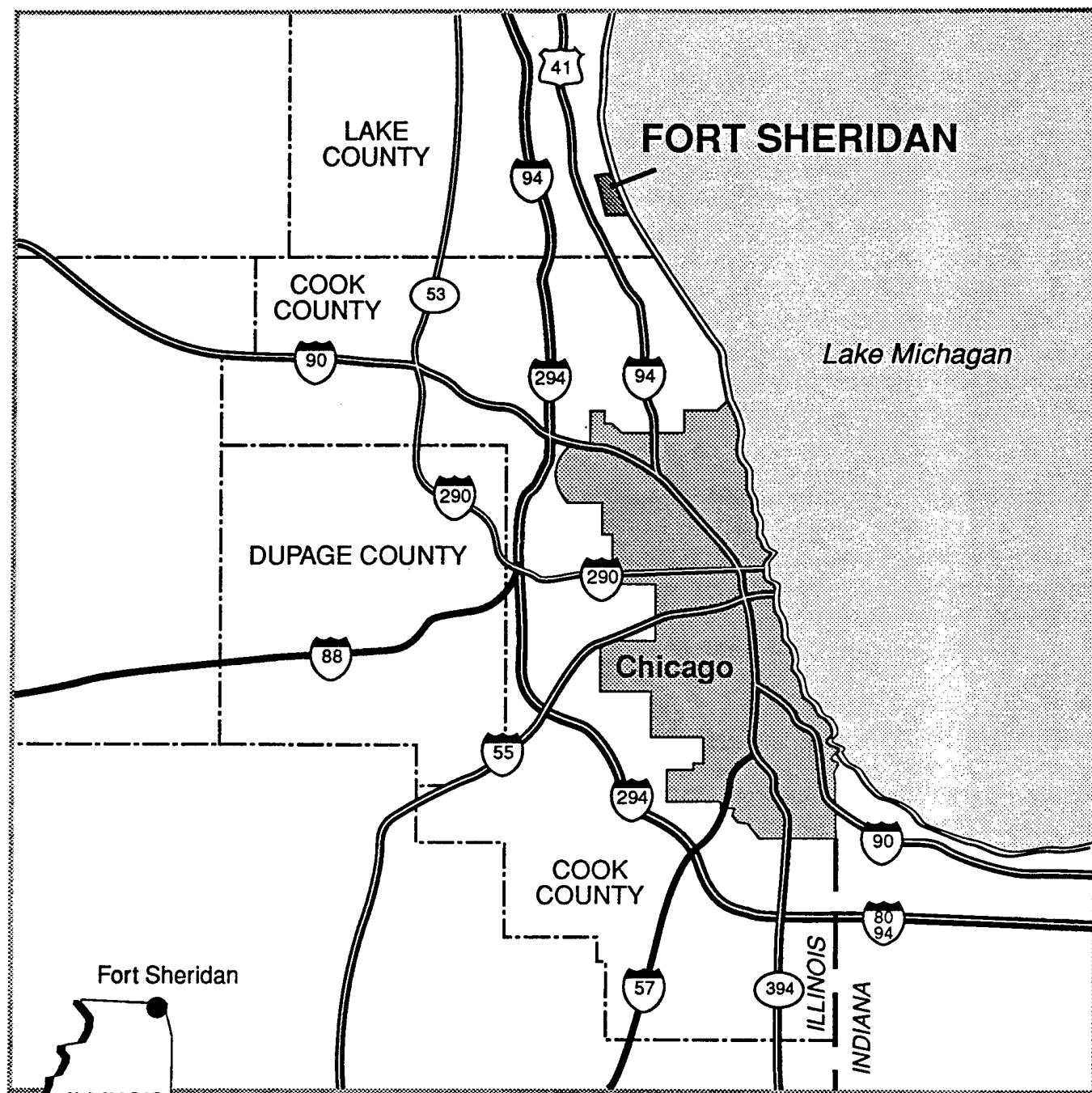
Fort Sheridan is located on approximately 695 acres in Lake County, Illinois. Fort Sheridan is surrounded on three sides by the urban-residential communities of Lake Forest (north), Highland Park (south), and Highwood (west). On the northwest, within the City of Lake Forest, the McCormick Nature Reserve is adjacent to the post boundaries. Lake Michigan is on the west of the post. The three communities have a combined population of approximately 55,000. Figure 1-1 shows the general location of the installation and Figure 1-2 shows the surrounding land use.

Fort Sheridan was acquired in October 1887 and initially staffed on 13 November 1887. The fort was formally named in 1888 with cavalry training its major mission. Construction of permanent facilities was also authorized in 1888 when 632.5 acres were acquired. In the early 1900s land transactions resulted in an additional 96.5 acres added to the installation. A total of 18.5 acres for which acquisition date is not known were also added to the installation. A history of acquisitions is provided in Table 1-3.

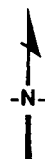
Historical activities and missions for Fort Sheridan are summarized in Table 1-4. The early military missions emphasized training of cavalry and infantry including the Spanish American War (1898), Mexican War (1913), and World War I. During World War I, Fort Sheridan added a major military hospital to treat the wounded. The hospital played a major role during World War II and was active at a reduced level until it was demolished in the early 1960s.

The post also played a major role in anti-aircraft and coastal (anti-naval) artillery training. It was also the administrative headquarters for 46 prisoner of war camps in Michigan, Illinois, and Wisconsin during World War II.

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General Location of  
Fort Sheridan, Illinois



Scale in Miles

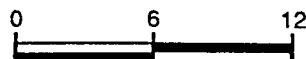
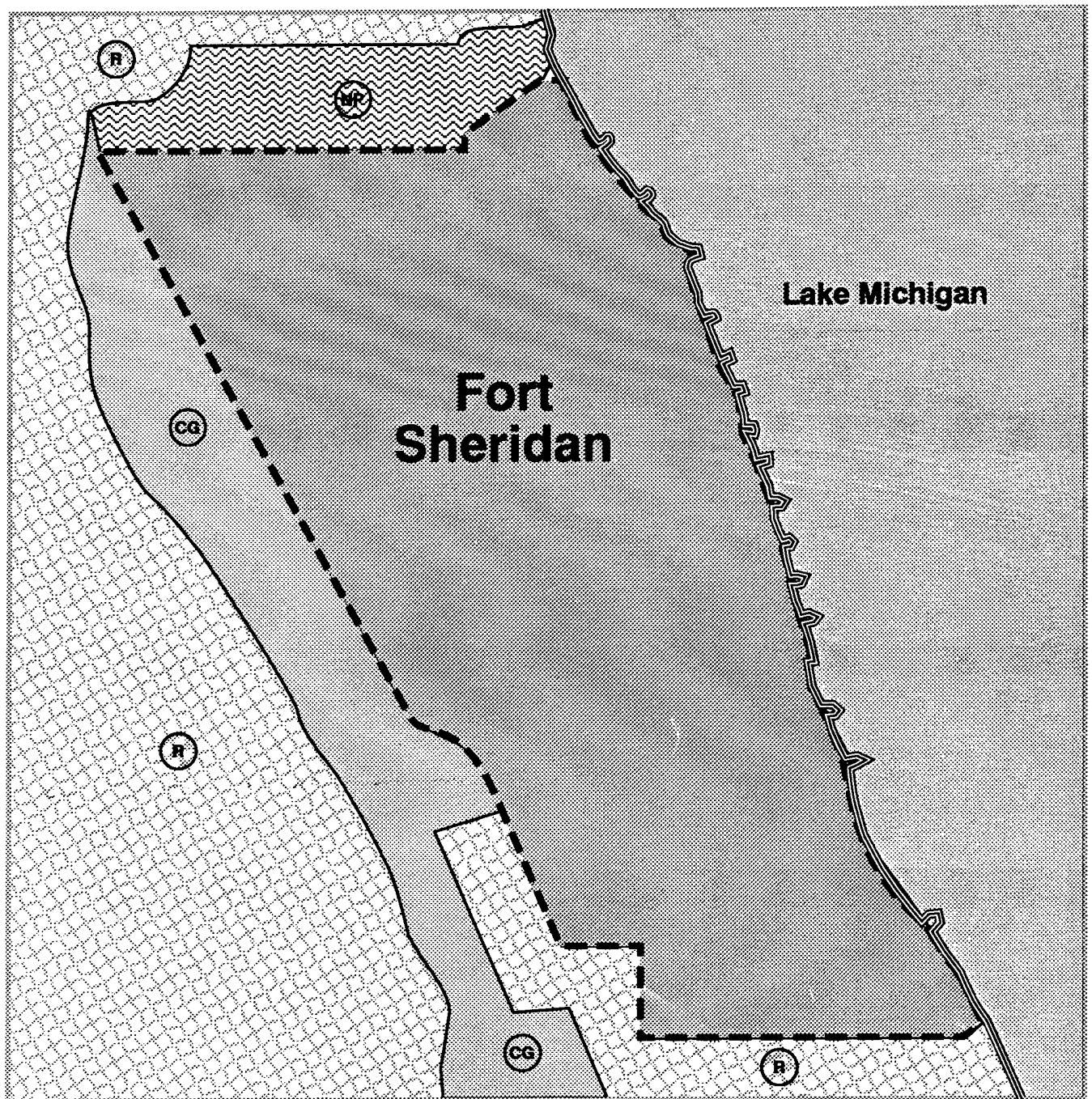


Figure 1-1

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# EXPLANATION

-  Residential
-  Commercial General
-  Natural Preserve
-  Installation Boundary

Existing Land  
Use Adjacent  
to Fort Sheridan

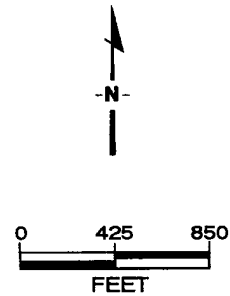


Figure 1-2

**TABLE 1-3. PROPERTY ACQUISITION SUMMARY**

| Tract Number | Previous Land Owner                                                                                 | Acreage     |               |                  |
|--------------|-----------------------------------------------------------------------------------------------------|-------------|---------------|------------------|
|              |                                                                                                     | Fee Land    | Easement Land | Acquisition Date |
| 102, 103     | Adolphus C. & Mary P. Bartlett<br>Charles L. and Francis K. Hutchison<br>John J. and Sarah J. Janes | 632.5 acres |               | 6 October 1887   |
| 101          | Rebecca P. and William A. McNeil                                                                    | 12.14 acres |               | 26 February 1909 |
| Unknown      | Unknown                                                                                             | 84 acres    |               | 1906, 1907, 1908 |
| 104          | Otto R. Hansen                                                                                      | 5.80 acres  |               | Unknown          |
| 171          | Michael Sweeney                                                                                     | 12.74 acres |               | Unknown          |

**TABLE 1-4. HISTORY OF INSTALLATION OPERATIONS**

| Period    | Type of Operation                               | Weapon System         | Hazardous Substance Activities                                                                                         | Map Reference (see Figure 1-3) |
|-----------|-------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| 1887-1950 | Cavalry, Infantry, Artillery Training, Hospital | Small Arms, Artillery | Landfills, POL, paints/thinners, solvents/degreasers, medical wastes, fuel/oil storage                                 | 1, 2, 3, 4, 5, 6               |
| 1950-1979 | Nike Missile Defense System                     | Nike Missile          | Landfills, POL, paints/thinners, solvents/degreasers, medical wastes, fuel/oil storage, pesticides, explosive ordnance | 1, 2, 3, 4, 5, 6, 7, 8         |
| 1979-1993 | Administrative Support for Army Reserve         | None                  | POL, paints/thinners, solvents/degreasers, medical wastes, pesticides, fuel/oil storage, explosive ordnance            | 2, 3, 4, 5, 6, 7, 8            |

Key: POL = Petroleum, Oil, and Lubricants

More recently, Fort Sheridan served as headquarters of the Nike missile anti-aircraft defense systems in the midwest. All Nike systems were supplied and underwent service maintenance at Fort Sheridan from the 1950s to 1974. Since 1973, Fort Sheridan has been headquarters of the Fourth Army, U.S. Army Recruiting Command for Region V, and the activities of the 74 Army Reserve Centers in the seven state midwest region (Illinois, Iowa, Indiana, Michigan, Minnesota, Missouri, and Wisconsin). From 1973 until the fort was closed, the fort's primary mission has been administration and logistical support for the midwest region.

Approximately 190 acres of the installation has been transferred to the U.S. Navy. About 14 acres in the northwest corner of the fort and about 90 acres in the southwest have been transferred to the U.S. Army Reserve. The existing post cemetery, about 15 acres, will be retained by the U.S. Army Forces Command for operation and maintenance until such time as disposal is accomplished.

### **1.5 Environmental Setting**

This section provides a brief description of the environmental setting for Fort Sheridan.

**Physiography.** Fort Sheridan is located north of Chicago, Illinois along the Lake Michigan shoreline on the Highland Park Moraine, the eastern most moraine in Southern Lake County, Illinois. It is situated within the Lake Border Morainic System of the Central Lowlands Physiographic Province of the United States. This system consists of five long, narrow, closely spaced moraines that run generally parallel to the Lake Michigan shoreline. These moraines consist of unconsolidated glacial till of Pleistocene age, deposited during the Wisconsin glacialation.

The topography at Fort Sheridan is relatively flat, with a gentle slope of 2 to 4 degrees to the east of terminating at a bluff line that runs along the lakeshore. The top of the bluff ranges from 39 to 69 feet (12 to 21 meters) above the Lake Michigan level. Elevations at Fort Sheridan range from approximately 650 feet (198 meters) above sea level at the bluff line to up to 695 feet (212 meters) above sea level at the western boundary of the installation.

Three major and two minor surface soil services have been identified on Fort Sheridan. The major series are the Morley Silt Loam, which covers the majority of the land; the Hennepin Loam, which is located in parts of the northwest, northeast, and southeast areas; and beach sand, which is located along the lakeshore. The minor soil series, which occupy small areas along the western boundary of the installation, are the Markham and Beecher Silty Clay Loams.

The Pleistocene glacial deposits at Fort Sheridan are approximately 90 feet thick. These deposits are associated with the silty, pebbly clay, olive yellow to olive brown to gray in color. Isolated pockets and lenses of sand, gravel, or silt may also be found within these deposits.

The sediments underlying Fort Sheridan consist predominantly of clay to silty clay with occurrences of thin (generally less than 3 feet in thickness) and laterally discontinuous silt, sand, or gravel lenses. The report indicates that these units were deposited by streams flowing to (or from) the general direction of Lake Michigan. Since these channel sands are stratigraphically

and topographically higher to the west, groundwater within the sands theoretically would flow from west to east, toward Lake Michigan. Channel sands occur at many different elevations indicating numerous channels may be present in the Fort area.

Due to slow recovery rates on monitoring wells, accurate static groundwater water levels could not be obtained from the Draft Final Remedial Investigation/Remedial Action/Feasibility Study. Groundwater levels have been obtained from previously installed piezometers. These data show the groundwater elevation between 610 and 670 feet with respect to mean sea level. Fort Sheridan is situated on a bluff overlooking Lake Michigan, approximately 650 feet above sea level. The local groundwater flow appears to be into the ravines and a regional groundwater flow is to Lake Michigan.

Fort Sheridan and all neighboring cities and towns obtain drinking water from Lake Michigan. The nearest town that utilizes groundwater as a municipal water supply is Lincolnshire, approximately 5 miles southwest of Fort Sheridan. Only one well at Fort Sheridan was used for purposes other than groundwater monitoring. This well, installed in the late 1960s, was used to supplement a pond at the northern end of the installation. The pump in this well is inoperable and has not been operational for many years. The exact depth of this well is unknown.

The water table in the Pleistocene glacial till may vary from 2 to 3 feet below ground surface (bgs) to 15 feet bgs. The groundwater in the glacial till does not appear to flow readily because of low permeability caused by the high clay content. If the sand lenses in the glacial till are channel sands, then ground water flow in this formation could reach the surface waters in the ravines or Lake Michigan. Based on available data, the characteristics of the groundwater hydrology of, and the sand lenses present in, the glacial till below Fort Sheridan remains unclear.

Unconsolidated deposits are about 200 feet thick on the Fort Sheridan site. It is primarily glacial till with several thin zones of sand and gravel (occasionally silty), below 100 feet in some areas (Larsen, 1973). Pebbles and boulders found are principally dolomite and shale. The Silurian dolomite is about 300 feet in thickness and forms a shallow bedrock aquifer. This aquifer is separated from the deep Cambrian-Ordovician bedrock by 100-200 feet thick layers of non-water bearing shales of the Maquoketa formation. Some downward leakage from the shallow bedrock aquifer through the Maquoketa shales has been reported.

There are no perennial streams on the facility. A small pond is located near the bluff at the northern end of the facility. This pond has a surface area of approximately one acre and is 15 feet deep at maximum pool evaluation. Constructed in 1967, the pond is fed by a groundwater well and has no watershed. The facility's storm sewer system discharges into Lake Michigan, either by direct pipeline to culverts or via the ravines. Six deep ravines traverse the surface of the property from west to east, running generally perpendicular to the shoreline. In the past, these ravines have been used as waste disposal sites identified later as landfills. Surface runoff within Fort Sheridan flows either into the nearest ravine or an inlet to the base storm sewer system. The ravines provide natural drainage pathways leading to Lake Michigan.

## **1.6 Hazardous Substances and Waste Management Practices**

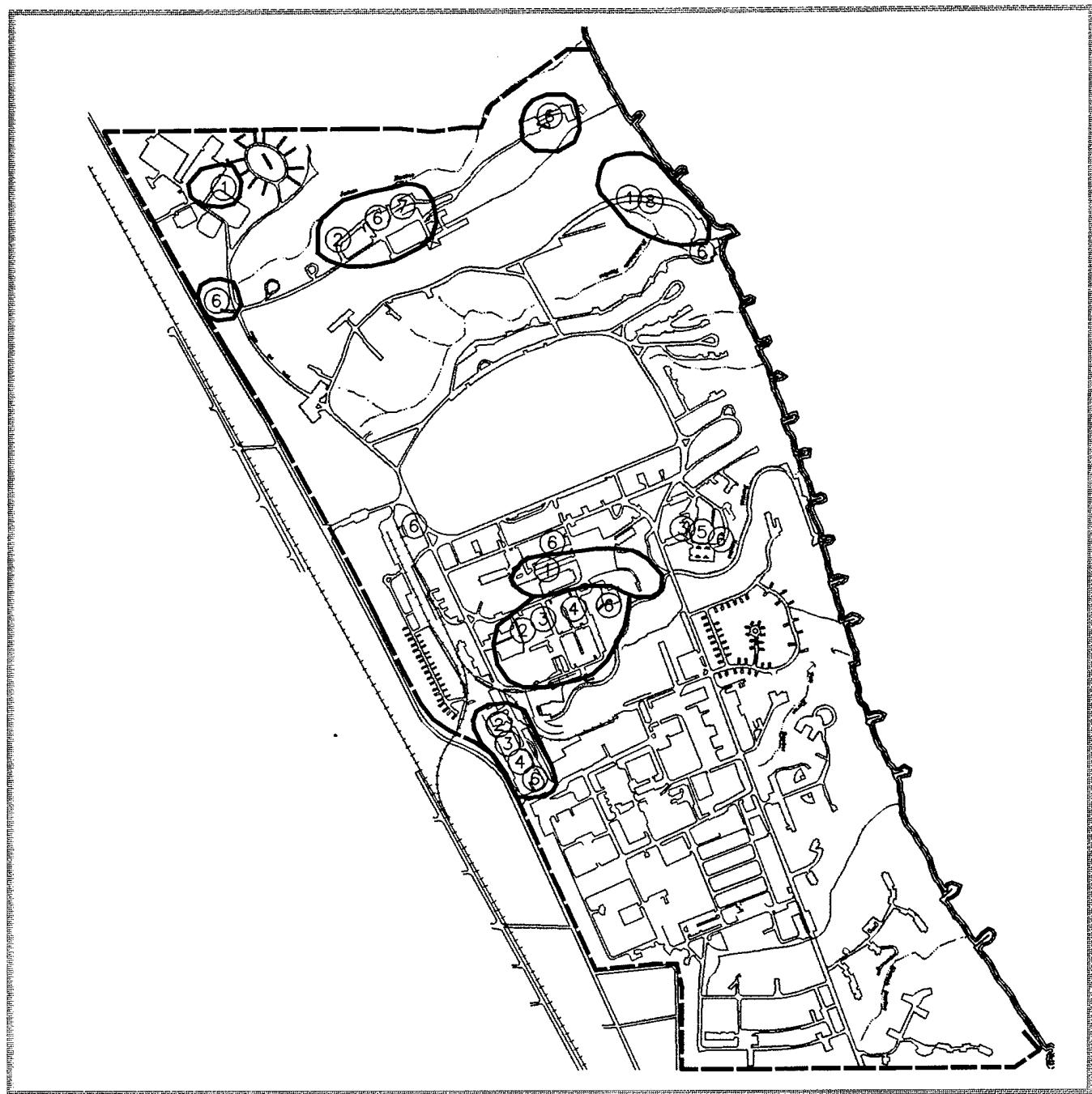
In support of those missions assigned to Fort Sheridan, past activities have involved the handling of a variety of hazardous substances and the generation of listed hazardous waste such as xylene, toluene, methylene chloride, chloroform, bis(2-ethylhexyl)phthalate, waste oil, other solvents, lubricants, paints, flammable materials, acids, medical wastes, and pesticides. Insufficient data are available to determine the total quantities of these materials used at the installation and generated as hazardous waste. Table 1-4 identifies the historical hazardous substance activities associated with the various installation missions. Figure 1-3 indicates the various locations where these activities occurred. Table 1-5 indicates current or past waste generating activities in the BRAC portion of Fort Sheridan.

Past industrial waste disposal practices at Fort Sheridan have involved landfilling and open and pit burning. These practices no longer occur. There are three inactive landfills in the BRAC portion of the installation which were used to dispose of various waste.

## **1.7 Off-Post Property/Tenants**

**Off-Post Property.** Fort Sheridan has no off-post properties. In the past, the Fort Sheridan Commander had responsibility for the Joliet Training Area, however, that responsibility was transferred to Fort McCoy in June 1993. Table 1-6 and Figure 1-4 will reflect any off-post property that may be acquired by Fort Sheridan.

**Tenants.** Non-U.S. Army tenant organizations have included the Office of the Surgeon General, AMMED Activity (HSC). Table 1-7 indicates the non-U.S. Army tenants recently on-post.



#### EXPLANATION

- ① Designation of Activity Location
- Boundary of Activity Location
- - - Installation Boundary

**Location of Past  
Hazardous  
Substance  
Activities**



0 650 1300  
FEET

**Figure 1-3**

**TABLE 1-5. HAZARDOUS WASTE GENERATING ACTIVITIES**

| Facility                  | Unit                         | Activity                                   | Name of Waste Material                                            | Generation Rate          | Disposition                                                                                                                                          |
|---------------------------|------------------------------|--------------------------------------------|-------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Building 43               | General Support Shop         | Cleaning, stripping, painting, repair      | Methylene chloride, xylene, soap/degreaser, other cleaners, paint | $\pm$ 100 gal/mo         | Pumped, treated, and hauled away by private contractor                                                                                               |
| Building 51               | Motor Pool                   | Vehicle maintenance                        | POL, solvents                                                     | Unknown                  | Collected in 55 gallon drums for disposal. Location not determined.                                                                                  |
| Building 135              | Supply Storage               | Storage, distribution, hazardous materials | Waste generated not determined                                    | No information available | No information available                                                                                                                             |
| Building 172              | Golf Course Storage Building | Pesticide storage                          | Various fertilizers and pesticides                                | No information available | Used on golf course                                                                                                                                  |
| Building 216              | Maintenance Shop             | Vehicle body work, painting                | POL, solvents, paints, thinners, degreasers                       | Unknown                  | Unknown                                                                                                                                              |
| Building 707              | Health Clinic                | Medical care                               | Infectious waste, other medical waste                             | 5 kilograms per day      | Currently, autoclaved and disposal of at sanitary landfill. Historically, wastes were shipped to Naval Training Center Great Lakes for incineration. |
| Heliport/<br>Building 117 | Heliport                     | Helipad, fixed wing hangar, POL storage    | POL                                                               | Unknown                  | Unknown                                                                                                                                              |
| Building 86               | Supply Storage               | Hazardous material storage                 | Waste generated undetermined                                      | No information available | No information available                                                                                                                             |
| Building 126              | Maintenance Storage          | Pesticide storage                          | Various pesticides                                                | No information available | Used on golf course on-post                                                                                                                          |

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**There are currently no Off-Post Parcels  
associated with Fort Sheridan. Future  
changes will be reflected here.**

EXPLANATION

Off-Post Properties



**Figure 1-4**

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**TABLE 1-7. ON-POST TENANT UNITS**

| <b>Tenant</b>                                       | <b>Building</b>          |
|-----------------------------------------------------|--------------------------|
| Office of the Surgeon General, AMMED Activity (HSC) | Buildings not determined |

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# CHAPTER 2

## ► PROPERTY DISPOSAL AND REUSE PLAN ◀

This chapter discusses the current status of the disposal and reuse planning process for Fort Sheridan and the relationship between the disposal process and environmental programs at the installation. It also identifies property transfer methods being utilized or considered in the disposal plans.

### 2.1 Status of Disposal Planning Process

The disposal of Fort Sheridan involves three interrelated activities: the NEPA EIS process, development of a disposal plan, and development of a community reuse plan. An EIS for the closure of Fort Sheridan has been completed (USACE, 1990) with a Record of Decision (ROD) dated 19 February 1991. The EIS addressed alternative site areas for the U.S. Army Reserve Component and conceptual alternative reuses of the installation. An Environmental Assessment for the disposal and reuse of Fort Sheridan, Illinois was prepared in September 1993. A Draft FNSI is under review by the U.S. Army and a decision on the FNSI will be made by June 1994.

The Fort Sheridan Commission was formed in about 1989 with assistance from the Office of Economic Adjustment (OEA). By early 1990, the Fort Sheridan Commission had formed ten advisory panels to assist in the reuse planning process. In March 1991, the Fort Sheridan Commission approved a community reuse plan, however, additional planning concepts are still being considered and discussed. The Fort Sheridan Commission has been superseded by the Fort Sheridan Joint Planning Committee as the designated Reuse Committee. The public review process on the community reuse plan was initiated in August 1993. A final reuse plan has not yet been approved by the Reuse Committee or the three cities and the county involved. The Joint Planning Committee may apply for and receive additional OEA funds to complete the reuse planning process.

Specific disposal parcel designations are not complete. However, for planning purposes in this BCP, two tentative reuse parcels have been identified based on the historic district and the rest of the disposal parcel. These parcels are shown in Figure 2-1. Final disposal parcel designations will be determined when a final reuse plan is selected and has been coordinated and integrated with the cleanup activities. Fort Sheridan is scheduled to complete the Disposal Plan in January 1995 and close all real estate transactions in August 1995. These milestones are listed in Table F-2 in Appendix F.

### 2.2 Relationship to Environmental Programs

Disposal and reuse activities at Fort Sheridan are intimately linked to environmental investigations, restoration, and compliance activities for two reasons:

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# EXPLANATION

- ① Historical District  
Residential/Commercial
- ② Golf Course & Residential
- ③ Cemetary
- ④ U.S. Navy (Excluded)
- ⑤ U.S. Army Reserve (Excluded)

--- Installation Boundary

**Disposal  
and  
Reuse  
Parcels**



0 650 1300  
FEET

**Figure 2-1**

*Fort Sheridan, Illinois*

- ▶ Federal property transfers to nonfederal parties are governed by CERCLA Section 120(h)(3)(B)(i).
- ▶ Residual contamination may remain on certain properties after remedial actions have been completed or put into place, thereby restricting the future use of those properties.

CERCLA Section 120(h)(3)(B)(i) requires deeds for federal transfer of previously contaminated property to contain a covenant that all remedial actions necessary to protect human health and the environment have been taken. The 1992 Community Environmental Response Facilitation Act (CERFA) amendment to CERCLA provided clarification to the phrase "has been taken." This clarification states that all remedial action has been taken if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the Administrator to be operating properly and successfully. It further states that the carrying out of longterm pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the Administrator to be operating properly and successfully does not preclude the transfer of the property. This deed requirement applies only to property on which a hazardous substance was stored for 1 year or more, or is known to have been disposed of or released. Thus, any required remedial and/or removal response actions must be selected and implemented for such contaminated properties before transfers to private parties can occur.

The requirement for complying with CERCLA 120(h) and the possibility of residual contamination are factored into the property disposal and reuse process at Fort Sheridan. Table 2-1 takes these two factors into consideration, presents summary information on BRAC disposal and Reuse Parcels 1 and 2, and provides an approximate timetable for transfer by deed of each parcel at Fort Sheridan.

**TABLE 2-1. REUSE PARCEL DATA SUMMARY**

| Parcel | Acres | Priority | Description and Proposed Reuse                                                                       | Known Sites               | Projected Transfer Date | Transfer Mechanism                                           | Recipient |
|--------|-------|----------|------------------------------------------------------------------------------------------------------|---------------------------|-------------------------|--------------------------------------------------------------|-----------|
| 1      | 230   | 1        | Historic District; Residential/Commercial                                                            | Portions of OU 1 and OU 2 | 8/95                    | Competitive Sale; Negotiated Sale; Legislated Exchange       | TBD       |
| 2      | 139   | 1        | Golf Course/Northern Post Area (not in historic district); residential/active recreation; commercial | Portions of OU 1 and OU 2 | 8/95                    | Competitive Sale; Negotiated Sale; No Cost Public Conveyance | TBD       |

Key: TBD = To Be Determined

The Fort Sheridan strategy and schedule herein is designed to streamline and expedite the necessary response actions associated with Parcels 1 and 2 to facilitate the earliest possible disposal and reuse activities. Because of the need to delineate between areas suitable for transfer and those which are not, the Fort Sheridan BCT continues to develop an environmental-condition-of-property map for the Fort Sheridan (see text and figures in Chapter

3.4) using, in part, data from the CERFA investigation of the installation. This environmental-condition-of-property map allows the visualization of both contaminated areas and areas of no suspected contamination, and the relationship of these areas to disposal and reuse parcels. This map will be updated as contaminated areas are remediated and restored.

## **2.3 Property Transfer Methods**

This section presents the various property transfer methods that may be implemented to dispose of the Fort Sheridan property.

### **2.3.1 Federal Transfer of Property**

Based on a Memorandum of Understanding (MOU) dated 8 August 1991, approximately 200 acres of the southeastern portion of Fort Sheridan was transferred from the Department of the Army (DOA) to the Department of the Navy effective 1 October 1993. The final property transfer is contingent on all reimbursement funds being transferred to DOA by 30 September 1995. As of March 1994, no further federal transfers are planned. This parcel is considered an excluded property unavailable for transfer for the purposes of this BCP. This legal agreement is identified in Table 2-2.

**TABLE 2-2. EXISTING LEGAL AGREEMENTS/INTERIM LEASES**

| <b>Title Interim Lease/Legal Agreement</b>                                                            | <b>Building No./Areas</b> | <b>Date of Agreement</b> | <b>Reuse Parcel</b> |
|-------------------------------------------------------------------------------------------------------|---------------------------|--------------------------|---------------------|
| MOU between DOA and Department of the Navy: transferred certain properties at Fort Sheridan, Illinois | ± 200 acres               | 8 August 1991            | 4                   |

### **2.3.2 No-Cost Public Benefit Conveyance**

Historically about 35 acres of Fort Sheridan property have been conveyed to various jurisdictions for roadways, pipeline right of ways, water treatment facilities, and open space. The no cost public benefit conveyance may be used to transfer selected portions of disposal Parcel 2 as part of an open space recreational use area.

### **2.3.3 Negotiated Sale**

A negotiated sale of the disposal parcels is not anticipated at this time.

### **2.3.4 Competitive Public Sale**

This is an actively considered option for the transfer of the disposal parcels.

### ***2.3.5 Widening of Public Highways [Easements]***

No easements or widening of public highways are currently being considered as part of the disposal process.

### ***2.3.6 Donated Property***

The donation of property is not being considered as a transfer option at this time.

### ***2.3.7 Interim Leases***

No interim leases are being considered at this time.

### ***2.3.8 Other Property Transfer Methods***

Development of and passage of legislation to provide for an exchange of property is being considered as an option for the transfer of all or parts of disposal and reuse Parcels 1 and 2.

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# CHAPTER 3

## ► INSTALLATION-WIDE ENVIRONMENTAL PROGRAM STATUS ◄

This chapter provides a summary of the current status of environmental restoration projects, installation-wide source discovery and assessment activities, and ongoing compliance activities at Fort Sheridan. It also summarizes the status of the cultural and natural resource programs at the installation, the status of the community involvement to date, and the environmental condition and suitability for transfer of the installation property.

### 3.1 Environmental Program Status

An Installation Assessment was conducted in 1981 and updated in 1987. An Enhanced Preliminary Assessment (ENPA) was prepared in 1989. A Draft Final Remedial Investigation (RI)/Risk Assessment was prepared in 1992 and a Draft CERFA Report was prepared in 1993. The Draft RI/Risk Assessment report indicates which areas requiring environmental evaluation (AREEs) pose no risk to human health or the environment.

Table 3-1 lists a total of 34 AREEs that were identified in the ENPA (1989), CERFA (1993), and Draft RI/Risk Assessment (1992) reports. Eighteen of the AREEs presented in Section 3.1 have been investigated as part of the RI/Risk Assessment process and are included in Table 3-2. Table 3-2 lists the study area and may be cross-referenced to the reuse map presented in Figure 2-1.

Currently no Installation Restoration Program (IRP) sites have been designated within the BRAC disposal and reuse parcels. However, the ENPA, CERFA, and RI/Risk Assessment reports all identify sites where additional studies and evaluations may need to be considered.

#### 3.1.1 Restoration Sites

As of March 1994 no IRP sites have been designated for the Fort Sheridan disposal and reuse parcels. The only area currently under investigation in the disposal reuse parcels is the 50-acre area being surveyed for unexploded ordnance (UXO).

The Department of Defense (DoD) Restoration Management Information System (RMIS) database tracks the status of IRP activities initially funded under the Defense Restoration Account from the identification stage to completion of remedial actions and development of no further response action planned (NFRAP) documentation. The RMIS database lists 26 sites on Fort Sheridan potentially requiring remediation/restoration. Eleven of these sites are located in the disposal and reuse parcels (Figure 3-1 and Table 3-2). No DD or Record of Decision (ROD), under CERCLA, for which a remedial action was selected have been prepared.

**TABLE 3-1. PRELIMINARY LOCATION SUMMARY**

| Restoration Site No. | Description             | Environmental Investigation Report Results/Findings |       |                                |                                                                         | Final Determination       |
|----------------------|-------------------------|-----------------------------------------------------|-------|--------------------------------|-------------------------------------------------------------------------|---------------------------|
|                      |                         | ENPA                                                | CERFA | Draft Final RI/Risk Assessment | Findings                                                                |                           |
|                      | Landfill 2              | x                                                   | x     | x                              | Fill material is general refuse, cinders, coal, and UXO                 | UXO needs clearance       |
|                      | Landfills 3/4           | x                                                   | x     | x                              | Fill material is debris, rubble, cinders, elevated levels of thallium   | TBD                       |
|                      | Building 40             | x                                                   | x     |                                | USTs removed                                                            | TBD                       |
|                      | Building 43             | x                                                   | x     | x                              | Combined with Bartlett Ravine for RI/Risk Assessment                    | TBD                       |
|                      | Building 51             | x                                                   | x     |                                | UST removed, toluene/xylene in vehicle storage area                     | TBD                       |
|                      | Building 86             |                                                     | x     |                                | Apparent hazardous material spill                                       | TBD                       |
|                      | Building 117            | x                                                   | x     |                                | Used for aircraft maintenance and storage USTs removed                  | TBD                       |
|                      | Building 126            | x                                                   | x     | x                              | Pesticide/fertilizer storage                                            | TBD                       |
|                      | Building 135            | x                                                   | x     |                                | Storage area no signs of leakage                                        | TBD                       |
|                      | Building 172            |                                                     | x     |                                | Pesticide storage                                                       | TBD                       |
|                      | Building 216            | x                                                   | x     | x                              | Paints and solvents stored                                              | TBD                       |
|                      | Building 707            | x                                                   | x     |                                | Waste disposal of sanitary landfill offsite                             | TBD                       |
|                      | Lovell Army Hospital    | x                                                   | x     |                                | No information available                                                | No further action planned |
|                      | Coal Storage Area #2    |                                                     | x     | x                              | No polynuclear aromatic hydrocarbons (PNA) or metal contamination found | TBD                       |
|                      | Coal Storage Area #3    |                                                     | x     | x                              | PNAs, thallium, and zinc present                                        | TBD                       |
|                      | Vehicle Storage Area #1 |                                                     | x     | x                              | Toluene/xylene compounds present                                        | TBD                       |
|                      | Vehicle Storage Area #2 |                                                     | x     | x                              | Toluene/xylene found in soils                                           | TBD                       |
|                      | Janes Ravine            |                                                     | x     | x                              | Toxic materials present - thallium                                      | TBD                       |
|                      | Hutchinson Ravine       |                                                     | x     | x                              | Low levels of PNAs and solvents.                                        | TBD                       |
|                      | Bartlett Ravine         |                                                     | x     | x                              | Presence of bis(2-ethylhexyl)phthalate and methylene chloride.          | TBD                       |

**TABLE 3-1. PRELIMINARY LOCATION SUMMARY**

**Continued**

| Restoration Site No.       | Description                                   | Environmental Investigation Report Results/Findings |       |                                |                                                                                            | Final Determination                                                                                   |
|----------------------------|-----------------------------------------------|-----------------------------------------------------|-------|--------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|                            |                                               | ENPA                                                | CERFA | Draft Final RI/Risk Assessment | Findings                                                                                   |                                                                                                       |
|                            | Airport Drain                                 |                                                     | ×     | ×                              | Low lead levels.                                                                           | TBD                                                                                                   |
|                            | Scott Loop Drain                              |                                                     | ×     | ×                              | Low level toxics benzo(a)pyrene.                                                           | TBD                                                                                                   |
|                            | Drinking Water Treatment Facility Building 29 | ×                                                   |       |                                | Water facility went offline in February 1994. Cleanup status needs review.                 | TBD                                                                                                   |
| OU 1                       | UST OU1 Building 2, 1 UST                     |                                                     | ×     |                                | Removed                                                                                    | Waiting for final closure approval; no further action planned                                         |
|                            | UST OU1 Building 117, 2 USTs                  |                                                     | ×     |                                | Removed                                                                                    | Waiting for final closure approval; no further action planned                                         |
|                            | UST OU1 Building 205, 1 UST                   |                                                     | ×     |                                | Removed                                                                                    | Waiting for final closure approval; no further action planned                                         |
| OU2-1                      | UST OU2 Building 40, 4 USTs                   |                                                     | ×     |                                | Removed                                                                                    | TBD                                                                                                   |
|                            | UST OU2 Building 51, 1 UST                    |                                                     | ×     |                                | Removed                                                                                    | TBD                                                                                                   |
|                            | UST OU2 Building 60, 1 UST                    |                                                     | ×     |                                | Removed                                                                                    | TBD                                                                                                   |
|                            | UST OU2 Building 115, 1 UST                   |                                                     | ×     | ×                              |                                                                                            | TBD                                                                                                   |
| Radon post-wide            | Radon Survey                                  | ×                                                   | ×     |                                | One unoccupied building with elevated levels of radon                                      | TBD                                                                                                   |
| Asbestos post-wide         | Asbestos Surveys                              | ×                                                   | ×     | ×                              | Damaged asbestos in some buildings                                                         | Damaged asbestos will be removed. Presence of asbestos will be noted in ownership transfer documents. |
| PCB Transformers post-wide | PCB Transformers                              | ×                                                   | ×     | ×                              | Nine PCB containing transformers, one was found to be leaking and was immediately removed. | All PCB transformers may have been removed, but this needs to be determined                           |

Key: TBD = To Be Determined  
PCB = Polychlorinated Biphenyls

**TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY**

| Study Area/Parcel       | Site No. | RMIS Site No. | Site Class | Description                    | Material Disposed Of                           | Date of Operation        | Status                   | Risk to Human Health and the Environment | Regulatory Mechanism | NFRAP |
|-------------------------|----------|---------------|------------|--------------------------------|------------------------------------------------|--------------------------|--------------------------|------------------------------------------|----------------------|-------|
| Landfill 2, Parcel 2    |          | FTSH-02       | TBD        | Landfill                       | Domestic/industrial waste, UXO                 | 1950s-early to mid 1970s | RI/Risk Assessment       | HI: 8.0E-03<br>CRL: 12E-05               | CERCLA<br>CWA        |       |
| Landfills 3/4, Parcel 1 |          | FTSH-03/04    | TBD        | Landfill                       | Domestic/industrial waste                      | Mid 1940s-late 1960s     | RI/Risk Assessment       | HI: 3.8E+01<br>CRL: 1.0E-05              | CERCLA<br>CWA        |       |
| Building 40, Parcel 1   |          |               | TBD        | Heating Plant                  | None identified                                | Early 1960s-present      | ENPA                     | TBD                                      | CAA<br>RCRA-I        |       |
| Building 43, Parcel 1   |          | FTSH-13       | TBD        | Support Shop                   | Methylene chloride, solvents, degreaser, paint | TBD                      | ENPA, RI/Risk Assessment | Combined with Bartlett Ravine            | CERCLA<br>RCRA       |       |
| Building 51, Parcel 1   |          | TBD           | TBD        | Motor Pool                     | POL, solvents                                  | TBD                      | ENPA                     | TBD                                      | CERCLA               |       |
| Building 86, Parcel 1   |          | TBD           | TBD        | Warehouse                      | TBD                                            | TBD                      | CERFA                    | TBD                                      | CERCLA               |       |
| Building 117, Parcel 2  |          | FTSH-16       | TBD        | Maintenance Hangar and Storage | POL, undetermined                              |                          | ENPA                     | TBD                                      | RCRA-I               |       |
| Building 126, Parcel 2  |          | TBD           | TBD        | Golf Course Office/Maintenance | Pesticides/fertilizer                          | Unknown                  | ENPA, RI/Risk Assessment | HI: 3.9E-01<br>CRL: 2.1E-06              | CERCLA<br>TSCA       |       |
| Building 135, Parcel 1  |          | TBD           | TBD        | Supply Storage                 | No waste generated                             | TBD                      | ENPA                     | TBD                                      | CERCLA               |       |
| Building 172, Parcel 2  |          | FTSH-19       | TBD        | Golf Course Storage            | Pesticides, fertilizers                        | TBD                      | ENPA                     | TBD                                      | CERCLA               |       |
| Building 216, Parcel 1  |          | TBD           | TBD        | Maintenance Shop               | POL, solvents, degreasers, paint thinners,     | TBD                      | ENPA, RI/Risk Assessment | HI: 1.5E+01<br>CRL: 6.6E-05              | CERCLA<br>RCRA       |       |

**TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY**

Continued

| Study Area/Parcel                            | Site No. | RMIS Site No. | Site Class | Description              | Material Disposed Of        | Date of Operation | Status             | Risk to Human Health and the Environment | Regulatory Mechanism | NFRAP |
|----------------------------------------------|----------|---------------|------------|--------------------------|-----------------------------|-------------------|--------------------|------------------------------------------|----------------------|-------|
| Building 707, Parcel 1                       |          | TBD           | TBD        | Health Clinic            | Medical waste               | TBD               | ENPA               | TBD                                      |                      |       |
| Army Hospital, Parcel 1                      |          | FTSH-26       | TBD        | Medical Facilities       | Medical waste               | 1917-mid 1960s    | Demolished         | --                                       | --                   |       |
| Coal Storage Area #2, Parcel 1               |          | TBD           | TBD        | Surface Coal Storage     | Coal leachate and residuals | Unknown           | RI/Risk Assessment | HI: 5.8E+00<br>CRL: 1.0E-05              | CERCLA               |       |
| Coal Storage Area #3, Parcel 1               |          | TBD           | TBD        | Surface Coal Storage     | Coal leachate and residuals | Unknown           | RI/Risk Assessment | HI: 3.8E+01<br>CRL: 3.0E-04              | CERCLA               |       |
| Vehicle Storage Area #1, Parcel 1            |          | TBD           | TBD        | Vehicle Storage          | Waste oil fuels             | Unknown-present   | RI/Risk Assessment | HI: 5.8E+00<br>CRL: 1.0E-05              | CERCLA               |       |
| Vehicle Storage Area #2, Parcel 1            |          | TBD           | TBD        | Vehicle Storage          | Waste oil fuels             | Unknown-present   | RI/Risk Assessment | HI: 5.9+00<br>CRL: 1.0E-05               | CERCLA               |       |
| Janes Ravine, Parcel 2                       |          | TBD           | TBD        | Ravine                   | TBD                         | --                | RI/Risk Assessment | HI: 3.5E+00<br>CRL: 2.1E-05              | CWA                  |       |
| Hutchinson Ravine, Parcel 1                  |          | TBD           | TBD        | Ravine                   | TBD                         | --                | RI/Risk Assessment | HI: 2.5E-01<br>CRL: 3.6E-07              | CWA                  |       |
| Bartlett Ravine, Parcel 1                    |          | TBD           | TBD        | Ravine                   | TBD                         | --                | RI/Risk Assessment | HI: 1.7E-01<br>CRL: 7.8E-04              | CWA                  |       |
| Airport Drain, Parcel 2                      |          | TBD           | TBD        | Drain                    | Non-specific                | --                | RI/Risk Assessment | HI: 1.8E-02<br>CRL: No Est.              | CWA                  |       |
| Scott Loop Drain, Parcel 1                   |          | TBD           | TBD        | Drain                    | Non-specific                | --                | RI/Risk Assessment | HI: 1.2 E-01<br>CRL: 2.1E-05             | CWA                  |       |
| Water Treatment Facility, Bldg. 29, Parcel 1 |          | FTSH-25       | TBD        | Water Treatment Facility | TBD                         | 1890-1994         | TBD                | TBD                                      | CERCLA, CWA          |       |

**TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY**

| Continued                        |          |              |            |                                 |                                                 |                   |                                                                    |                                          |                              |       |
|----------------------------------|----------|--------------|------------|---------------------------------|-------------------------------------------------|-------------------|--------------------------------------------------------------------|------------------------------------------|------------------------------|-------|
| Study Area/Parcel                | Site No. | RMS Site No. | Site Class | Description                     | Material Disposed Of                            | Date of Operation | Status                                                             | Risk to Human Health and the Environment | Regulatory Mechanism         | NFRAP |
| UST OU1, Parcels 1 and 2         | OU1-1    | TBD          | OU         | Building 2, 1 UST               | Tank #B7-A1                                     | Unknown           | Removed/closed                                                     | --                                       | RCRA-I                       | x     |
|                                  | OU1-2    | TBD          | OU         | Building 117, 2 USTs            | 2 Tanks #D3-A1, C3-A1                           | Unknown           | Removed/closed                                                     | --                                       | RCRA-I                       | x     |
|                                  | OU1-3    | TBD          | OU         | Building 205, 1 UST             | Tank #E6-A1 + 330 cubic yards contaminated soil | Unknown           | Removed/closed                                                     | --                                       | RCRA-I                       | x     |
| UST OU2, Parcels 1 and 2         | OU2-1    | TBD          | OU         | Building 40, 4 USTs             | Tank #D8-B1, D8-C1, D8-C2, D8-B2                | Unknown           | Removed                                                            | --                                       |                              |       |
|                                  | OU2-2    | TBD          | OU         | Building 51, 1 UST              | Tank #E7-81                                     | Unknown           | Removed                                                            | --                                       |                              |       |
|                                  | OU2-3    | TBD          | OU         | Building 60, 1 UST              | Tank #D7-A1                                     | Unknown           | Removed                                                            | --                                       |                              |       |
|                                  | OU2-4    | TBD          | OU         | Building 115, 1 UST             | Tank #E9-B1                                     | Unknown           | Removed RI/Risk Assessment                                         | HI: 8.9E-01<br>CRL: 4.4E-06              | RCRA-I                       |       |
| Post-wide Radon, Parcels 1 and 2 | --       | TBD          | TBD        | Building radon survey post-wide | --                                              | Unknown           | Survey complete, one building with elevated radon level, PA, CERFA | TBD                                      | Army radon reduction program |       |

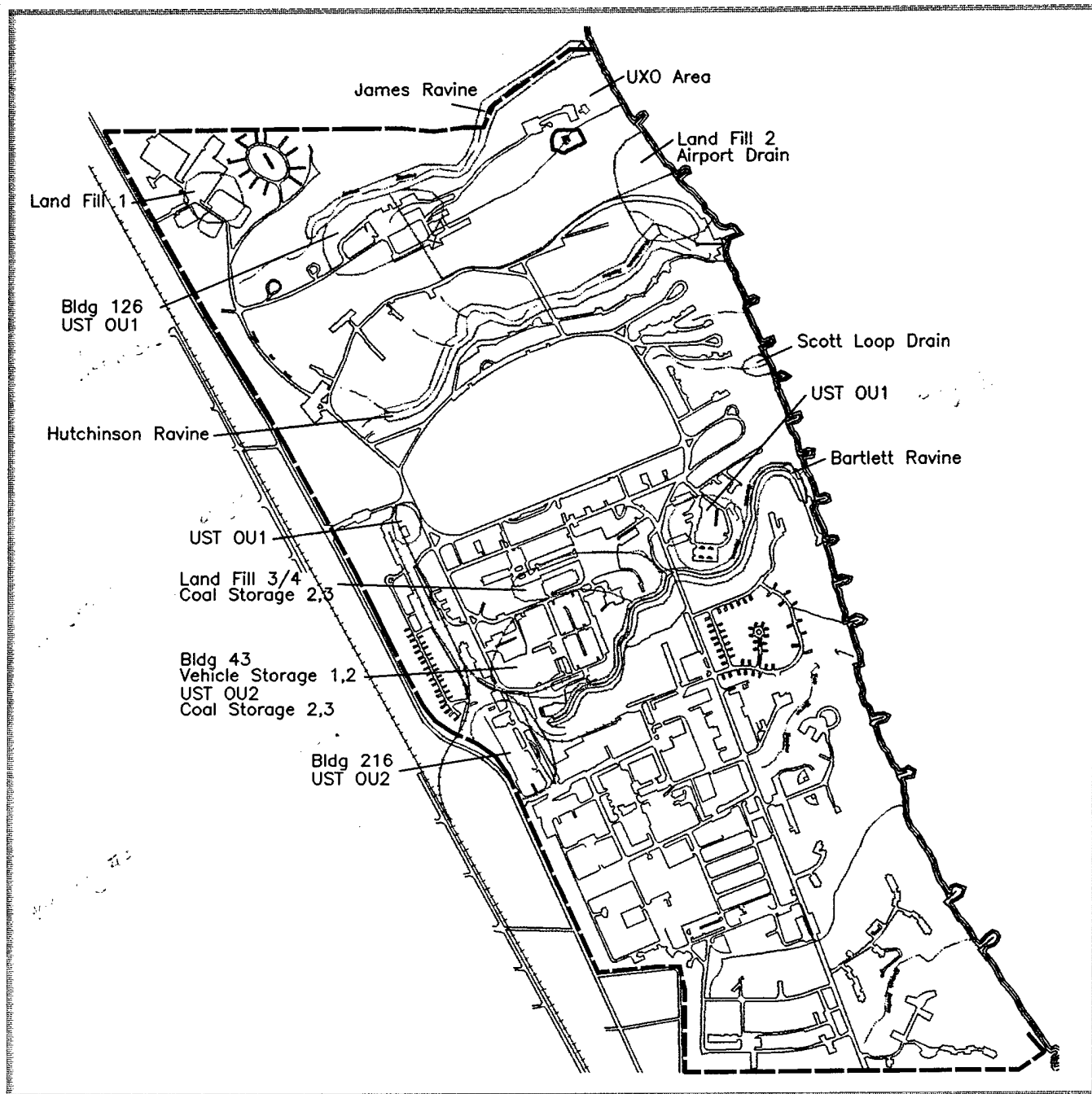
**TABLE 3-2. ENVIRONMENTAL RESTORATION SITE/STUDY AREA SUMMARY**

Continued

| Study Area/Parcel                          | Site No. | RMIS Site No. | Site Class | Description        | Material Disposed Of | Date of Operation | Status                                                                          | Risk to Human Health and the Environment | Regulatory Mechanism | NFRAP |
|--------------------------------------------|----------|---------------|------------|--------------------|----------------------|-------------------|---------------------------------------------------------------------------------|------------------------------------------|----------------------|-------|
| Post-wide Asbestos, Parcels 1 and 2        | --       | FTSH-21       | TBD        | Building surveys   | Asbestos             | Unknown           | Survey complete damaged asbestos to be removed. ENPA, RI/Risk Assessment, CERFA | TBD                                      | CERCLA, TSCA, CAA    |       |
| Post-wide PCB Transformer, Parcels 1 and 2 | --       | FTSH-20       | TBD        | Transformer Survey | PCB                  | Unknown           | Survey complete, ENPA, RI/Risk Assessment                                       | TBD                                      | CERCLA TSCA          |       |

**Key:** TBD = To Be Determined  
 HI = Hazard Index  
 CRL = Cancer Risk Level  
 UXO = Unexploded Ordnance  
 CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act  
 RCRA = Resource Conservation and Recovery Act  
 ENPA = Enhanced PA  
 CWA = Clean Water Act  
 RI = Remedial Investigation  
 OU = Operable Unit

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#### EXPLANATION

-  Multiple Site or Area OUs
-  Installation Boundary

**Sites, Zones,  
and OUs  
Currently Under  
Investigation**



0 650 1300  
FEET

**Figure 3-1**

As part of the BCP process, the other sites in the RMIS database will be more clearly identified to determine the status of the risk assessment and feasibility studies, and the remediation status of the USTs on the list. The BCT will integrate the information from the RI/Risk Assessment and the CERFA Report and the results of the UST removal process into the RMIS database. This will allow the BCT to monitor the success of BCP implementation. No early action remediation activities have been implemented by the BCT as of March 1994. Table 3-3 is included in the BCP for use if restoration early actions are identified by the BCT.

**TABLE 3-3. ENVIRONMENTAL RESTORATION EARLY ACTION STATUS**

| IRP Site No. | Action                                            | Purpose | Status |
|--------------|---------------------------------------------------|---------|--------|
|              |                                                   |         |        |
|              | No early action activities have been implemented. |         |        |
|              |                                                   |         |        |
|              |                                                   |         |        |
|              |                                                   |         |        |

### **3.1.2 Installation-wide Source Discovery and Assessment Status**

The ENPA (1989) identified 16 AREEs. The RI/Risk Assessment conducted in 1992 identified 18 AREEs within the Fort Sheridan disposal and reuse parcels. Eight of these AREEs overlapped in both the ENPA and the RI/Risk Assessment. In 1993 the CERFA Report summarized these evaluations and identified eight additional AREEs for a total of 34 AREEs. The sites located within the disposal and reuse parcels are identified in Table 3-1.

In addition to the specific areas requiring evaluation, the ENPA indicated that asbestos, PCBs, pesticides, radioactive materials, radon, and USTs were concerns that should be addressed. The following is a discussion of the AREEs within the disposal and reuse parcels.

**Landfill 2.** Landfill 2 is located immediately adjacent to Lake Michigan. The landfill was reportedly used prior to World War I. Materials discovered during excavations include general refuse, coal, and cinders. The area was also used as a small-arms firing range from World War I until the 1950s for disposal of ammunition by open detonation. An UXO survey identified 517 metallic contacts at Landfill 2 and nearly all were excavated. Small artillery shell casings were found along the beach and collected. No live ordnance was encountered.

Beryllium was found to exceed corrective action levels in soils. Semi-volatile and volatile organic compounds were present in soils above regulated levels. Research and Development Explosive (RDX) and methylene chloride were detected in the groundwater.

**Landfills 3/4.** Landfill 3 is part of the former north branch of Bartlett Ravine. The landfill was used in the mid-1960s. The fill material is reportedly building debris and rubble, and cinders from the heating plant. Some open burning reportedly took place at the site. Thallium was found in soils at elevated levels. Landfill 4, located immediately west of Landfill 3, constitutes the remainder of the former north branch of Bartlett Ravine. The landfill was used in the mid-1960s. The fill material is reportedly building debris and rubble. The area is now covered with asphalt and used for vehicle parking.

**Building 40.** The heating plant, located north of Bartlett Ravine, utilizes three natural gas-fired boilers to provide heat to buildings located at the Fort. Fuel oil was used as a backup fuel supply.

**Building 43.** Building 43 was a general support shop. Activities that were conducted at this location include furniture cleaning and stripping, typewriter repair, carpentry, and small painting operations. Numerous releases had reportedly occurred at this building. High concentrations of semi-volatile and volatile organic compounds were detected in the water and sediment samples collected during the RI.

**Building 51.** Building 51 has been the post motor pool since the 1950s and was used for maintenance of post vehicles. Waste oil, solvents, and related fluids were collected in 55-gallon drums. No significant spills were reported.

**Building 86.** Building 86 is a warehouse used to store a variety of industrial chemicals. Installation spill reports reviewed during the CERFA report preparation indicated that releases of hazardous substances have occurred at Building 86.

**Building 117.** This building was formerly a hangar where low level aircraft maintenance was conducted. At the time of the ENPA, the building was used for storage by the Directorate of Logistics (DOL). The drains in the building were suspected to be connected to the Janes Ravine.

**Building 126.** Pesticides and fertilizers were stored and mixed in Building 126. Pesticides and volatile organic compounds were found at concentrations below regulated levels.

**Building 135.** Building 135 was used for supply storage of materials for DOL Maintenance Division. Hazardous materials stored at this location included solvents, paints, trichloroethylene, and adhesives. No signs of leakage were observed.

**Building 172.** Pesticides and fertilizers were stored in drums in Building 172.

**Building 216.** Building 216 housed a body shop where vehicle body work and painting were performed. A paint spray booth where Chemical Agent Resistant Coating paint is used is located in the building. Materials such as paints and solvents were stored at this location. Soil samples were collected and analyzed during the RI. Low levels of metals were detected and did not exceed regulatory levels.

**Building 707.** The health clinic was constructed in 1967. Prior to the 1970s, infectious waste was hauled off-site to be incinerated. At the time of the ENPA in 1989, the waste was autoclaved and disposed of in a regional sanitary landfill.

**Lovell Army Hospital.** The hospital, located on the site of the current golf course, operated until 1920. It was demolished in the 1960s and the rubble was disposed of in Landfills 3 and 4. It is not known if any hazardous materials were used at the hospital.

**Coal Storage Area 2 (CSA2).** CSA2 is located east of Building 39, extends past Building 40, and occupies ½ acre of land. The area was used for open-air storage of coal. Soil samples were collected and analyzed for semi-volatile organic compounds and metals. No PNAs or metals were detected in the samples. The land currently contains an asphalt parking lot, a grass area, and a heating plant (Building 40).

**Coal Storage Area 3 (CSA3).** CSA3 is located west of the Bartlett Ravine and occupies a long narrow strip. The area was used for open-air storage of coal. Soil samples were collected and analyzed for semi-volatile organic compounds and metals. PNAs were detected at levels exceeding leaking UST cleanup objectives. Thallium and zinc were also present. The land currently contains the Fort's swimming pool and covers a grass area.

**Vehicle Storage Area 1.** VS1 is located in an area bounded by Buildings 51, 55, 58, and 112 and consists of a paved area. The area was used in conjunction with Building 51 as the Fort's Motor Pool. Soil samples were collected and analyzed for semi-volatile and volatile organic compounds. Toluene and xylene were detected in soils. Their source was attributed to motor and/or heating fuel leaks and spills.

**Vehicle Storage Area 2.** VS2 is located between Buildings 42 and 62. Soil samples were collected and analyzed for semivolatile and volatile organic compounds. Toluene and benzene compounds were present in the soils.

**Janes Ravine.** The northern most ravine at Fort Sheridan is referred to as Janes Ravine. This ravine is primarily fed by surface water runoff throughout its extent. However, stormwater is discharged into the ravine from neighboring Highwood, Illinois and the reserve portion of the Fort. The stormwater system servicing the reserve area also drains areas associated with Landfill 1 and the yard area at Building 902. The reserve drainage system was examined separately and then with respect to the entire ravine system. A second potential source of drainage to Janes Ravine was determined to be a small ditch near Building 126.

**Hutchinson Ravine.** Hutchinson Ravine passes through the Fort in an area used for housing and a golf course. The drainage system consists primarily of an intermittent stream fed by surface runoff. The only stormwater drainage originates at the western edge of the ravine from Highwood and includes small systems associated with each housing unit.

**Bartlett Ravine.** Bartlett Ravine is a large drainage system influenced by various activities at the Fort. A road has been constructed through the ravine leading to a beach. Along both sides of the road are channelized ditches underlain by concrete. A storm sewer lies under the road

surface. Numerous storm water systems ultimately feed into this ravine from areas engaged in various activities. Three of these systems and the main ravine channel were evaluated during the RI/Risk Assessment program.

**Airport Drain.** The airport drain is a small drainage system over Landfill 2 that originates near the small airport and flows eastward toward Lake Michigan.

**Scott Loop Drain.** This drain is a small ravine that leads into Lake Michigan and passes through the Scott Loop area of the historic district. It drains a large section of the golf course, the former hospital site, and a residential area.

**Building 29.** This building was used as the drinking water treatment facility for the post. It ceased operation in February 1994. Some storage of water treatment chemicals occurred at this facility.

**UST OU 1.** USTs in OU 1 were removed during June-July 1993. The final closure report is currently being reviewed by the IEPA. Buildings involved are Building 2, Building 117, and Building 205.

**UST OU 2.** USTs in OU 2 were removed in the fall of 1993 and the closure report is in progress. Buildings involved are Building 40, Building 51, Building 60 and Building 115.

**Radon.** Installation-wide radon surveys have been conducted and some buildings with apparent high readings have been retested. One building was found to have levels in excess of 4 pCi/L.

**Asbestos.** Installation-wide surveys have been conducted. Some buildings do not have asbestos documentation. Damaged asbestos has been removed. The current asbestos abatement program is continuing with a recent (March 1994) contract for asbestos lining abatement.

**Polychlorinated Biphenyls (PCBs).** An installation-wide survey was conducted and a leaking PCB transformer was removed immediately. Eight other PCB transformers which were in good condition were left in place for later removal.

### **3.2 Compliance Program Status**

Compliance activities at Fort Sheridan are being conducted in coordination with environmental restoration activities under the IRP. Compliance activities address USTs, aboveground tanks (ASTs), oil water separators, hazardous materials management, asbestos, radon, PCBs, water discharges, Nuclear Regulatory Commission (NRC) licensing, radiological materials handling, mixed waste management, and pollution prevention.

Compliance actions at Fort Sheridan can be divided into two separate categories: current mission- and operational-related compliance projects and closure-related compliance projects. Mission- and operational-related projects are those which have been or would be conducted for the normal operation of the installation and are unrelated to activities necessitated by installation closure under BRAC. Conversely, closure-related compliance projects are those conducted

specifically as a result of environmental compliance and restoration activities related to BRAC closure and property disposal. There are currently no mission/operational compliance projects active at Fort Sheridan. Table 3-4 is included for reference only. The post is closed and there are no mission/operational-related compliance projects. The status of closure-related compliance projects at Fort Sheridan is shown in Table 3-5. The status of compliance-related early remedial actions is shown in Table 3-6.

**TABLE 3-4. MISSION/OPERATIONAL-RELATED COMPLIANCE PROJECTS**

| Project | Status                                                                                                       | Regulatory Program |
|---------|--------------------------------------------------------------------------------------------------------------|--------------------|
|         | The post has been closed. There are no mission/ operational compliance projects currently active or ongoing. |                    |

**TABLE 3-5. CLOSURE-RELATED COMPLIANCE PROJECTS**

| Project                    | Status                                                      | Regulatory Program                                                                   |
|----------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------|
| UST Removal                | Complete                                                    | RCRA I, CWA                                                                          |
| UST Soil Remediation       | Ongoing                                                     | RCRA I, CWA                                                                          |
| Damaged Asbestos Removal   | Ongoing                                                     | DOA Policy "Lead-Based Paint and Asbestos in U.S. Army properties affected by BRAC". |
| Asbestos Survey Completion | Future                                                      | OSHA, CAA                                                                            |
| PCB Removal/Cleanup        | Survey completed/contaminated transformer removed           | TSCA                                                                                 |
| UXO Survey                 | Survey complete. Recommendation for 100% search and removal | NA                                                                                   |

Key: NA = Not Applicable

**TABLE 3-6. COMPLIANCE EARLY ACTION STATUS**

| Site   | UST No. | Action                                        | Purpose                   | Status                                  |
|--------|---------|-----------------------------------------------|---------------------------|-----------------------------------------|
| OU 1-1 | B7-A1   | Remove tank                                   | Prevent leakage           | Awaiting acceptance of closure report   |
| OU 1-2 | D3-A1   | Remove tank                                   | Prevent leakage           | Awaiting acceptance of closure report   |
| OU 1-2 | C3-A1   | Remove tank                                   | Prevent leakage           | Awaiting acceptance of closure report   |
| OU 1-3 | E6-A-1  | Remove tank and 30 yards of contaminated soil | Stop leakage cleanup soil | Awaiting acceptance of closure report   |
| OU 2-1 | D8-B1   | Remove tank                                   | Prevent leakage           | Tank removed waiting for closure report |
| OU 2-1 | D8-B2   | Remove tank                                   | Prevent leakage           | Tank removed waiting for closure report |
| OU 2-1 | D8-C1   | Remove tank                                   | Prevent leakage           | Tank removed waiting for closure report |

**TABLE 3-6. COMPLIANCE EARLY ACTION STATUS****Continued**

| Site       | UST No. | Action      | Purpose                  | Status                                  |
|------------|---------|-------------|--------------------------|-----------------------------------------|
| OU 2-1     | D8-C2   | Remove tank | Prevent leakage          | Tank removed waiting for closure report |
| OU 2-2     | E7-A1   | Remove tank | Prevent leakage          | Tank removed waiting for closure report |
| OU 2-3     | D7-A1   | Remove tank | Prevent leakage          | Tank removed waiting for closure report |
| OU 2-4     | E9-D1   | Remove tank | Prevent leakage          | Tank removed waiting for closure report |
| Landfill 2 | --      | UXO Survey  | Determine if UXO present | Report recommends clearances            |

### 3.2.1 Storage Tanks

The USEPA has delegated the management of the UST program to the state of Illinois. The state has primary enforcement responsibility and USEPA's approval effectively suspends the applicability of certain federal regulations in favor of the state program, thereby eliminating duplicative requirements. Therefore, UST closure and investigation activities at Fort Sheridan are being conducted under the Illinois UST program.

All USTs have been removed that were located in the BRAC property. USTs and ASTs have historically been used for the storage of petroleum products and/or wastes at Fort Sheridan.

A total of 16 USTs were identified on the disposal and reuse parcels at Fort Sheridan. Four of the USTs on the disposal and reuse parcels were removed as part of the OU1 response action. Because the Fort Sheridan UST closure and investigation activities are being conducted under IEPA jurisdiction, closure for OU1 will be final following the approval of the closure reports by IEPA. Seven USTs have been removed as part of the OU2 activities and final closure is underway. Two additional USTs associated with Buildings 29 and 31 were apparently removed in the past.

The OU1 and OU2 UST sites in the disposal and reuse parcels are included as fuel and oil storage locations in Figure 3-1. Table 3-7 provides an inventory of USTs in the disposal and reuse parcels. As part of the UST removal activities on Fort Sheridan, contaminated soils are being disposed in permitted landfills or remediated in place using thermal adsorption. As of March 1994, no groundwater contamination has been observed in relation to any leaking UST.

AST compliance programs at Fort Sheridan are conducted under Army Regulation (AR) 200-1 and the federal requirements including 40 CFR Parts 110, 112, and 116 and 415 Illinois Administrative Code (IAC) Sections 25/3.

Twenty-eight ASTs are currently located in the Fort Sheridan disposal and reuse parcels. The tanks store diesel and fuel oil. Ongoing environmental restoration activities at Fort Sheridan include installation of secondary containment at all AST locations. An AST inventory for the disposal and reuse parcels is provided in Table 3-8.

**TABLE 3-7. UNDERGROUND STORAGE TANK INVENTORY**

| Tank No. | Reuse Parcel | Location  | Year Installed | Capacity (Gallons) | Substance Stored | Status  | Comments | Future Actions |
|----------|--------------|-----------|----------------|--------------------|------------------|---------|----------|----------------|
| D8-B1    | 1            | Bldg. 40  | Unknown        | 30,000             | #2 Fuel Oil      | Removed |          | Final Closure  |
| D8-B2    | 1            | Bldg. 40  | Unknown        | 30,000             | #2 Fuel Oil      | Removed |          | Final Closure  |
| D8-C1    | 1            | Bldg. 40  | Unknown        | 30,000             | #2 Fuel Oil      | Removed |          | Final Closure  |
| D8-C2    | 1            | Bldg. 40  | Unknown        | 30,000             | #2 Fuel Oil      | Removed |          | Final Closure  |
| E7-A1    | 1            | Bldg. 51  | Unknown        | 5,000              | #2 Fuel Oil      | Removed |          | Final Closure  |
| D7-A1    | 1            | Bldg. 60  | Unknown        | 10,000             | Diesel           | Removed |          | Final Closure  |
| E9-B1    | 1            | Bldg. 115 | Unknown        | 10,000             | Diesel           | Removed |          | Final Closure  |
| D3-A1    | 2            | Bldg. 117 | Unknown        | 10,000             | #2 Fuel Oil      | Removed |          | Final Closure  |
| C3-A1    | 2            | Bldg. 117 | Unknown        | 1,000              | JP4              | Removed |          | Final Closure  |
| C3-A2    | 2            | Bldg. 117 | Unknown        | 1,000              | JP4              | Removed |          | Final Closure  |
| C3-A3    | 2            | Bldg. 117 | Unknown        | 1,000              | JP4              | Removed |          | Final Closure  |
| C3-A4    | 2            | Bldg. 117 | Unknown        | 1,000              | JP4              | Removed |          | Final Closure  |
| E6-A1    | 2            | Bldg. 205 | Unknown        | 2,000              | JP4              | Removed |          | Final Closure  |
| B7-A1    | 1            | Bldg. 2   | Unknown        | 10,000             | Diesel           | Removed |          | Final Closure  |
| B7-A1    | 1            | Bldg. 29  | Unknown        | 275                | #1 Fuel Oil      | Removed |          | --             |
| B7-A1    | 1            | Bldg. 31  | Unknown        | 225                | #2 Fuel Oil      | Removed |          | --             |

**TABLE 3-8. ABOVEGROUND STORAGE TANK INVENTORY**

| Location       | Size (gallons)/Contents | Status                             |
|----------------|-------------------------|------------------------------------|
| Parcel 1 78-1  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 78-2  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 29-1  | 275/Diesel              | Secondary Containment Construction |
| Parcel 1 29-2  | 1,000/#2 Fuel Oil       | Secondary Containment Construction |
| Parcel 1 121-1 | 550/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 40-1  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 40-2  | 30,000/#2 Fuel Oil      | Secondary Containment Construction |
| Parcel 1 40-3  | 30,000/#2 Fuel Oil      | Secondary Containment Construction |
| Parcel 1 44-1  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 44-2  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 69-1  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 112-1 | 550/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 126-1 | 250/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 126-2 | 250/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 126-3 | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 55-1  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 60-1  | 150/Diesel              | Secondary Containment Construction |
| Parcel 1 61-1  | 550/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 718-1 | 550/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 72-1  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 72-2  | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 1 726-1 | 550/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 152-1 | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 152-2 | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 153-1 | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 901-1 | 275/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 2 912-1 | 550/#2 Fuel Oil         | Secondary Containment Construction |
| Parcel 173-1   | 275/Gasoline            | Secondary Containment Construction |

### **3.2.2 Hazardous Materials/Waste Management**

Hazardous waste compliance programs at Fort Sheridan are conducted under AR 200-1, and the federal requirements found in 40 CFR 260 through 269, 40 CFR 117. 49 CFR 171 et seq., Department of Transportation (DOT) regulations, and 35 IAC Sections 700-738 et. seq.

No stand-alone hazardous waste management plan is in place at Fort Sheridan. The directions for managing hazardous waste and non-hazardous waste are contained in separate standard operating procedures and guidance documents. Elements of hazardous waste management are also included in documents such as the spill prevention, control and countermeasure (SPCC) plan and the Storm Water Pollution Prevention Plan. Management of hazardous waste under these various guidance programs provides the framework for compliance with federal, state, and U.S. Army regulations. While some locations are known to have accumulated waste oils and solvents in drums for later disposal, no specific designated satellite accumulation points or RCRA permitted treatment, storage, and disposal facilities are known to have been present on Fort Sheridan including the disposal and reuse parcels.

### **3.2.3 Solid Waste Management**

Solid waste management compliance programs at Fort Sheridan are conducted under AR 200-1 and 420-47, and the federal requirements found in 40 CFR 240-246 and 40 CFR 257-258, DOT regulations and the Illinois Solid Waste Management Act.

Since the 1980s, solid waste generated at Fort Sheridan was hauled to regional sanitary landfills by private haulers. Prior to the inactivation of on-post landfills, most solid wastes were disposed of on-post. All on-post landfills are inactive (see Section 1.0). An area of about 50 acres including Landfill 2 and adjacent areas have been surveyed and found to contain significant quantities of UXO.

### **3.2.4 Polychlorinated Biphenyls (PCBs)**

PCB management compliance programs at Fort Sheridan are conducted under AR 200-1 and the federal requirements found in 40 CFR 761, DOT regulations, and Illinois PCB regulations.

No PCB materials are stored at Fort Sheridan. A post-wide survey of transformers in 1992 identified 9 transformers containing PCBs in the disposal and reuse parcels. One leaking PCB transformer was removed. The other eight PCB transformers were in good condition and may also have been removed but the status of those transformers has not been verified. The status of these transformers will be determined by the BCT and appropriate action implemented to comply with regulatory requirements.

### **3.2.5 Asbestos**

Asbestos-containing material (ACM) is regulated by USEPA, the Occupational Safety and Health Administration (OSHA), and the State of Illinois. Asbestos at Fort Sheridan is being managed

in compliance with the DOA guidance "Lead-Based Paint and Asbestos in U.S. Army Properties Affected by Base Realignment and Closure."

Fort Sheridan has conducted a series of post-wide asbestos surveys. However, some buildings were not well documented and will require supplemental surveys. A detailed review of the documentation will be done as part of the BRAC cleanup process to identify those buildings within the disposal and reuse parcels requiring additional documentation.

During the asbestos survey effort, 24 buildings on the BRAC property were identified as having damaged asbestos materials requiring remediation. ACM has been removed from all 24 buildings. Asbestos abatement activities are continuing within the disposal and reuse parcels.

### **3.2.6 Radon**

The radon reduction program at Fort Sheridan is conducted under AR 200-1, Chapter 11, U.S. Army Radon Reduction Program.

Fort Sheridan conducted a post-wide radon survey and assessment in the 1990s. Radon levels in four buildings located in the disposal and reuse parcels exceeded 4 pCi/L during the initial 90-day testing. These buildings were retested. Only one building (Building 28) was found to have high levels (8.0 pCi/L) during the retest. Because this building is currently unoccupied, no remedial actions have occurred as of March 1994.

### **3.2.7 RCRA Facilities (SWMUs)**

There are no RCRA facilities in the disposal and reuse parcels at Fort Sheridan. Therefore, no solid waste management units (SWMUs) have been designated within the disposal and reuse parcels.

### **3.2.8 NPDES Permits**

Point source wastewater discharges generated at Fort Sheridan are regulated under the Federal Water Pollution Control Act, Clean Water Act, and the NPDES Permit Program (40 CFR Parts 122, 125, and 136), National Pretreatment Standards (40 CFR Part 403), Illinois Compiled Statutes Chapter 415, Illinois Water Pollution Discharge Act, 35 IAC Subtitle/Illinois Water Pollution Control Rules, and AR 200-1, Chapters 3 and 8.

A NPDES permit was granted to Fort Sheridan for the discharge of effluent from a sewage treatment plant (STP) into Lake Michigan. The STP ceased operations in 1974 and the NPDES permit was not renewed. Fort Sheridan's sanitary sewer system is currently connected to the North Shore Sanitary Sewer District system.

### **3.2.9 Oil/Water Separators**

Oil/water separators at Fort Sheridan are managed under the installation's SPCC plan, in accordance with applicable federal regulations including Section 313(a) of the Clean Water Act

and regulations 40 CFR Parts 110, 112, and 122, 35 IAC Subtitle C, ISC Chapter 415, North Shore Sanitary Sewer District requirements, DoD directives, and AR 200-1.

No oil/water separators are presently in use in the disposal and reuse parcels. An oil/water separator installed in Building 51 during the 1980-1982 timeframe has not been used since 1989.

### ***3.2.10 NRC Licensing***

Fort Sheridan has never been issued an installation-specific NRC license. The use of depleted uranium in dummy munitions was addressed by an U.S. Army-wide NRC permit for munitions training. A survey of facilities following termination of the training mission indicated no residual effects of the use of the training devices.

### ***3.2.11 Pollution Prevention***

Pollution prevention at Fort Sheridan is managed through the installation hazardous waste management program described in Section 3.2.2 in accordance with AR 200-1, Chapter 6, and applicable federal and state regulatory requirements. The Fort Sheridan pollution prevention program includes elements of the Stormwater Pollution Prevention Plan, the SPCC plan, and the standard operating procedures and guidance memoranda.

### ***3.2.12 Mixed Waste***

There is no mixed waste generated at Fort Sheridan.

### ***3.2.13 Radiation***

The use of munitions containing depleted uranium was addressed by an U.S. Army-wide NRC permit. Radioactive testing instruments, watches and compasses were used and stored on-post. However, there is currently no known radioactive material in the disposal and reuse parcels.

### ***3.2.14 Lead-based Paint***

Lead-based paint at Fort Sheridan is managed in accordance with DOA policy guidance "Lead-Based Paint and Asbestos in U.S. Army Properties Affected by Base Realignment and Closure." A lead-based paint survey has not been conducted at the installation. In lieu of quantitative data, lead-based paint is assumed to be present in all installation buildings constructed prior to 1978.

### ***3.2.15 Unexploded Ordnance***

A survey conducted in 1993 indicated that 50 acres including and adjacent to Landfill 2 contain UXO. The UXO detected during the survey was removed when feasible or was turned over to military Explosive Ordnance Disposal (EOD) specialists who detonated the UXO in place. The final report (February 1994) identifies the need for 100 percent clearance surveys from the surface to a subsurface depth of least 4 feet.

### ***3.2.16 Medical Waste***

There is currently no medical waste generated at Fort Sheridan. The 1989 ENPA indicates the health clinic generated about 5 kilograms per day of infectious wastes. These wastes were autoclaved and disposed of with the general refuse in a regional sanitary landfill. Prior to the 1970s, medical and veterinary wastes were disposed of in the landfills on post. In the early 1970s, medical wastes were hauled daily to the Great Lake Training Center for incineration in a pathological waste incinerator.

### ***3.2.17 National Environmental Policy Act***

The Fort Sheridan Base Closure Final EIS has been completed and a ROD has been signed. A Final EA for the disposal and reuse of Fort Sheridan, Illinois has also been prepared (September 1993). The FNSI is currently being reviewed by the U.S. Army.

### ***3.2.18 Other Compliance Programs***

Fort Sheridan has a Stormwater Pollution Prevention Plan in place (January 1994) and an updated SPCC plan (November 1992) to minimize the potential for contamination of surface and groundwater. The Stormwater Pollution Prevention Plan will need to be considered and potentially integrated into any reuse planning for the disposal and reuse parcels.

## **3.3 Status of Natural and Cultural Resources Programs**

Although Fort Sheridan does not have formalized management plans for natural and cultural resources, these resources are managed in accordance with AR 420-74 and 420-40, DoD Directive 4700.4 and 4710.1, and applicable federal and state regulations and statutes.

More detailed natural resource identification and description may be required prior to economic redevelopment and property reuse. Natural and cultural resources will also be considered during the environmental remedy selection process so that accidental impacts to these resources can be prevented.

This section describes the current status of the natural and cultural resources at Fort Sheridan including a brief description of the vegetation, wildlife, wetlands and preservation areas; rare, threatened and endangered species; and cultural resources. The information available on biological resources present or potentially present on Fort Sheridan is based on studies conducted in 1977.

### ***3.3.1 Vegetation***

About 600 acres of Fort Sheridan are developed and consist primarily of buildings, pavement, horticultural plantings and lawns. Most of the natural vegetation on-post is associated with the ravines and the bluff areas. Janes Ravine is the least disturbed ravine system along the Illinois Shore of Lake Michigan. Janes Ravine has been included in the Illinois Natural Areas Inventory (INAI). Other ravines on-post are significantly disturbed by landfills or roadways, but in some

locations still support elements of natural ravine vegetation. An area of bluff above Lake Michigan, just south of the disposal and reuse parcels, supports approximately 6 acres of natural open prairie-like vegetation that is also of state-wide significance. It is also the largest remaining area of prairie-like vegetation that once occurred along the Lake Michigan shoreline in Illinois. The location of this vegetation type in Fort Sheridan has also been included in the INAI. The locations of these unique vegetation types are delineated in Figure F-1 of Appendix F.

In relatively undisturbed areas, the ravines support a deciduous woodland dominated by basswood (*Tilia americana*), sugar maple (*Acer saccharinum*), ash (*Fraxinus spp.*), and elm (*Ulmus americana*). The most characteristic shrub is witch hazel (*Hamamelis virginiana*). The diverse herbaceous cover is described briefly in the Base Closure EIS and the Disposal and Reuse EA. No detailed mapping of the vegetation types on Fort Sheridan is available.

### 3.3.2 Wildlife

Information on wildlife at Fort Sheridan is based primarily on studies conducted in 1977. A variety of common small mammals, amphibians and reptiles are present at Fort Sheridan. These species occur primarily in the natural areas in the ravines and undeveloped areas of the post. The bird species known to occur on the post include woodland species, waterfowl, and hawks and gulls. In addition, Fort Sheridan is located in the migration corridor for the peregrine falcon (*Falco peregrinus*) and they have been observed along the lake shore.

### 3.3.3 Wetlands

A detailed survey and delineation of wetlands was performed in 1977. During the UXO survey in 1993, the UXO team identified two previously unrecorded wetlands. Several wetland areas are present on Fort Sheridan. Two small wetlands occur near the fish pond (Figure F-1) in the northeast area of the post. A lacustrine-littoral-unconsolidated shoreline wetland is present below the officer housing area in the disposal and reuse parcels. The wetland locations are delineated in Figure F-1 of Appendix F.

### 3.3.4 Designated Preservation Areas

Designated preservation areas will include both INAI vegetation areas, wetlands, relatively undisturbed ravine slopes supporting native vegetation, and the designated historic district. In addition, other historic and prehistoric resources outlined in the 1993 report "Literature Review, Architectural Evaluation and Phase I Archaeological Reconnaissance of Selected Portions of Fort Sheridan, Illinois" will be subject to the protection required by the Memorandum of Agreement (MOA) on cultural resources. These areas are included in Figure F-1 of Appendix F.

### 3.3.5 Rare, Threatened and Endangered Species

A threatened and endangered species survey was conducted in 1977. Additional reconnaissances by the INAI staff were conducted in 1988.

Eleven species of plants listed by the State of Illinois as threatened or endangered occur on the Fort Sheridan property or in the McCormick Nature Preserve adjacent to the Janes Ravine portion of Fort Sheridan. These species are listed in Table 3-9. No federally listed plant species are currently known to occur on the post.

**TABLE 3-9. STATE OF ILLINOIS THREATENED AND ENDANGERED PLANT SPECIES KNOWN TO OCCUR ON OR ADJACENT TO FORT SHERIDAN**

| Common Name                  | Scientific Name                                              | Last Status | Seen |
|------------------------------|--------------------------------------------------------------|-------------|------|
| Ground Juniper               | <i>Juniperus communis</i> (*) <i>L. var. depressa pursh.</i> | Threatened  | 1978 |
| Pale Vechling                | <i>Lathyrus ochroleucus</i> (R)                              | Threatened  | 1977 |
| Rice Grass**                 | <i>Oryzopsis racemosa</i>                                    | Threatened  | 1976 |
| Small Solomon's Seal         | <i>Polygonatum pubescens</i> (R)                             | Endangered  | 1977 |
| Arbor Vitae                  | <i>Thuja occidentalis</i> (*)                                | Threatened  | 1978 |
| Star Flower                  | <i>Trientalis borealis</i> (R)                               | Threatened  | 1977 |
| Dog Violet                   | <i>Viola conspersa</i> (R)                                   | Threatened  | 1978 |
| Canadian Buffalo-berry       | <i>Sherpherdia canadensis</i> (B)                            | Endangered  | 1978 |
| Weak Bluegrass**             | <i>Poa languida</i> (R)                                      | Endangered  | 1988 |
| Grove Bluegrass**            | <i>Poa alsodes</i>                                           | Endangered  | 1988 |
| Purple Flowering Raspberry** | <i>Rubus odoratus</i>                                        | Endangered  | 1976 |

\*\*These four species were found in McCormick Ravine - U.S. Army Corps of Engineers, 189a.

Key: (B) = Plants found on Bluff Ravine  
 (R) = Plants found in Janes Ravine  
 (\*) = Found at Bluff and Janes Ravine

Source: Illinois Department of Conservation, 1978 and 1988.

Five state-listed and two federally-listed bird species are known to have been present on the post, although none has been observed to nest on the post. These species include the Forster's tern (*Sterna forsteri*, state-endangered), common tern (*Sterna hirundo*, state-endangered), brown creeper (*Certhia familiaris*, state-endangered), veery (*Catharus fuscescens*, state-threatened), piping plover (*Charadrius melodus*, federal-endangered) and the peregrine falcon (*falco peregrinus*, federal-endangered).

### **3.3.6 Cultural Resources**

There are historically significant structures located at Fort Sheridan (Figure F-1). A major portion of the disposal and reuse parcel includes the Fort Sheridan Historic District which is on the National Register of Historic Places and is designated as a National Landmark. A report entitled "Literature Review, Architectural Evaluation, and Phase I Archaeological Reconnaissance of Selected Portions of Fort Sheridan, Illinois" was prepared in September 1993. A MOA between the DOA, the Advisory Council on Historic Preservation and the Illinois State Historic Preservation Officer concerning disposal of Fort Sheridan, Illinois has been prepared.

These requirements in the MOA include a standard preservation covenant to be incorporated into the transfer documents and recorded in the real estate records of Lake County, Illinois. The MOA also includes a requirement for the recipient to agree to prepare and implement an approved development and management plan. It is designed to ensure protection and preservation of the historical district and other cultural resource values. A copy of the MOA is provided in Appendix F.

### **3.3.7 Other Resources**

No other resources have been identified that would be affected by the disposal and reuse actions at Fort Sheridan.

## **3.4 Environmental Condition of Property**

In October 1992, Public Law 102-426, CERFA amended Section 120(h) of CERCLA and established new requirements with respect to contamination assessment, cleanup, and regulatory agency notification/concurrence for federal facility closures. CERFA requires the federal government, before termination of federal activities on real property owned, to identify property where no hazardous substances were stored, released, or disposed of. These requirements retroactively affect the U.S. Army BRAC 88 and BRAC 91 environmental restoration activities, and are being implemented at BRAC 93 sites concurrently with their ENPAs. The primary CERFA objective is for federal agencies to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment. Although CERFA does not mandate the U.S. Army transfer real property so identified, the first step in satisfying the objective is the requirement to identify real property where no CERCLA-regulated hazardous substances or petroleum products were stored, released, or disposed.

An investigation to identify the environmental condition of property in compliance with CERFA has been conducted at Fort Sheridan. CERFA investigations included the following assessment procedures:

- ▶ A review of historical records,
- ▶ Interviews with current and past installation employees, and
- ▶ A visual site inspection.

During the CERFA investigation process, installation property was assigned to four categories, or parcel types. These categories are CERFA parcel, CERFA parcel with qualifiers, CERFA disqualified parcels, and CERFA excluded parcels as defined below.

An environmental condition of property map provided as Figure 3-2 identifies property at the installation based on these four parcel categories. The parcels are delineated using a 1-acre square grid for boundary definition. Where CERFA disqualified parcels and CERFA parcels with qualifiers have coincided, the overlapped area has been designated CERFA disqualified.

### ***3.4.1 CERFA Parcels***

CERFA parcels are those portions of the installation real property for which investigation reveals no evidence of storage for one year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of being threatened by migration of such substances. CERFA Parcels also include any portion of the installation which once contained non-CERCLA hazards, including asbestos, UXO, lead-based paint, and radionuclides, but has since been fully remediated.

### ***3.4.2 CERFA Parcels with Qualifiers***

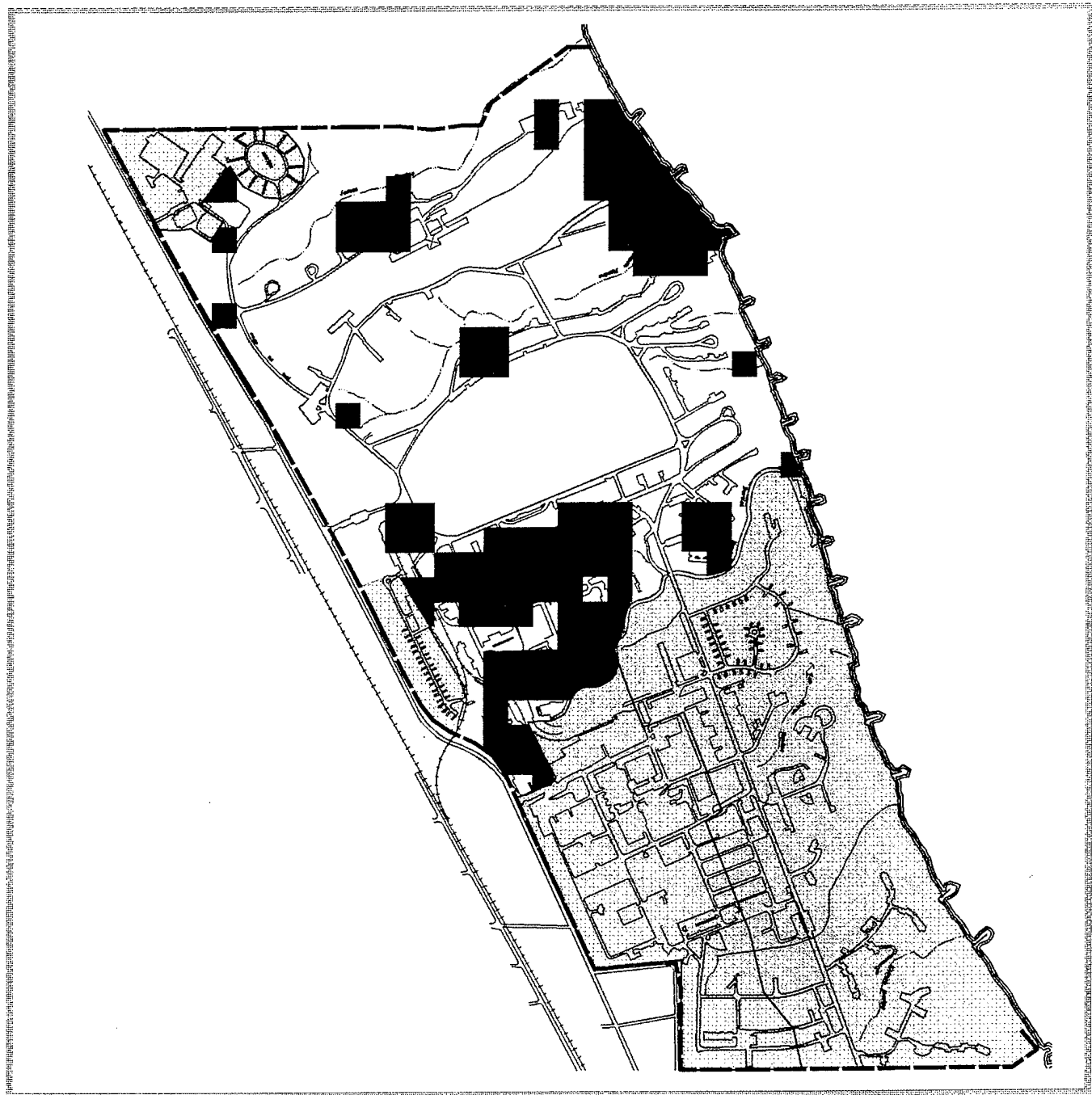
CERFA parcels with qualifiers are those portions of the installation real property for which investigation reveals no evidence of storage for one year or more, release, or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of being threatened by migration of such substances. Parcels do however, contain non-CERCLA related hazards including the presence of asbestos, UXO, lead-based paint, radionuclides, radon, or stored (not in use) PCB containing equipment.

### ***3.4.3 CERFA Disqualified Parcel***

CERFA disqualified parcels are those portions of the installation real property for which there is evidence of CERCLA hazardous substance, petroleum, or petroleum derivative storage for one year, release or disposal, or threatened by such release or disposal. CERFA disqualified parcels also include any portion of the installation containing a PCB release or disposal, any EOD locations, any storage sites of chemical ordnance, and any areas in which CERCLA hazardous substances or petroleum products have been released or disposed and subsequently fully remediated.

### ***3.4.4 CERFA Excluded Parcel***

CERFA excluded parcels are those portions of the installation real property retained by the DoD, and therefore not explicitly investigated for CERFA. CERFA excluded parcels also include any portion of the installation which have already been transferred by deed to a party outside the federal government, or by transfer assembly to another federal agency.



# EXPLANATION

- Installation Boundary
- CERFA Parcel
- CERFA Parcel with Qualifier(s)
- CERFA Disqualified Parcel
- ▨ CERFA Excluded Parcel

Environmental  
Condition  
of Property



0 650 1300  
FEET

Figure 3-2

Fort Sheridan, Illinois

### **3.4.5 Suitability of Installation Property for Transfer by Deed**

SARA Title I, Section 120 to CERCLA requires that any deed for federal property being transferred on which any hazardous substance was stored for one year or more, known to have been released, or disposed of contains, to the extent such information is available, the following information:

- ▶ A notice of the type and quantity of such hazardous substances,
- ▶ Notice of the time at which such storage, release, or disposal took place,
- ▶ A description of the remedial action taken, if any, and
- ▶ A covenant warranting that all remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of such transfer, and any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States.

The U.S. Army has begun the identification of property suitable for transfer under CERCLA through the CERFA identification process. The CERFA process is an effective screening mechanism to expeditiously identify those properties immediately transferable. These properties, designated CERFA parcels and CERFA parcels with qualifiers, have had no activities which could potentially preclude them from transfer under CERCLA.

CERFA disqualified properties consist of those which have experienced CERCLA hazardous substance storage, POL storage, hazardous substance releases or POL releases. Under SARA Title I, Section 120 to CERCLA only those properties which have experienced a hazardous substance release which has not been remediated and for which there is no "remedy in place" are currently unsuitable for transfer to a non-federal entity. These properties typically represent a small portion of the CERFA disqualified property.

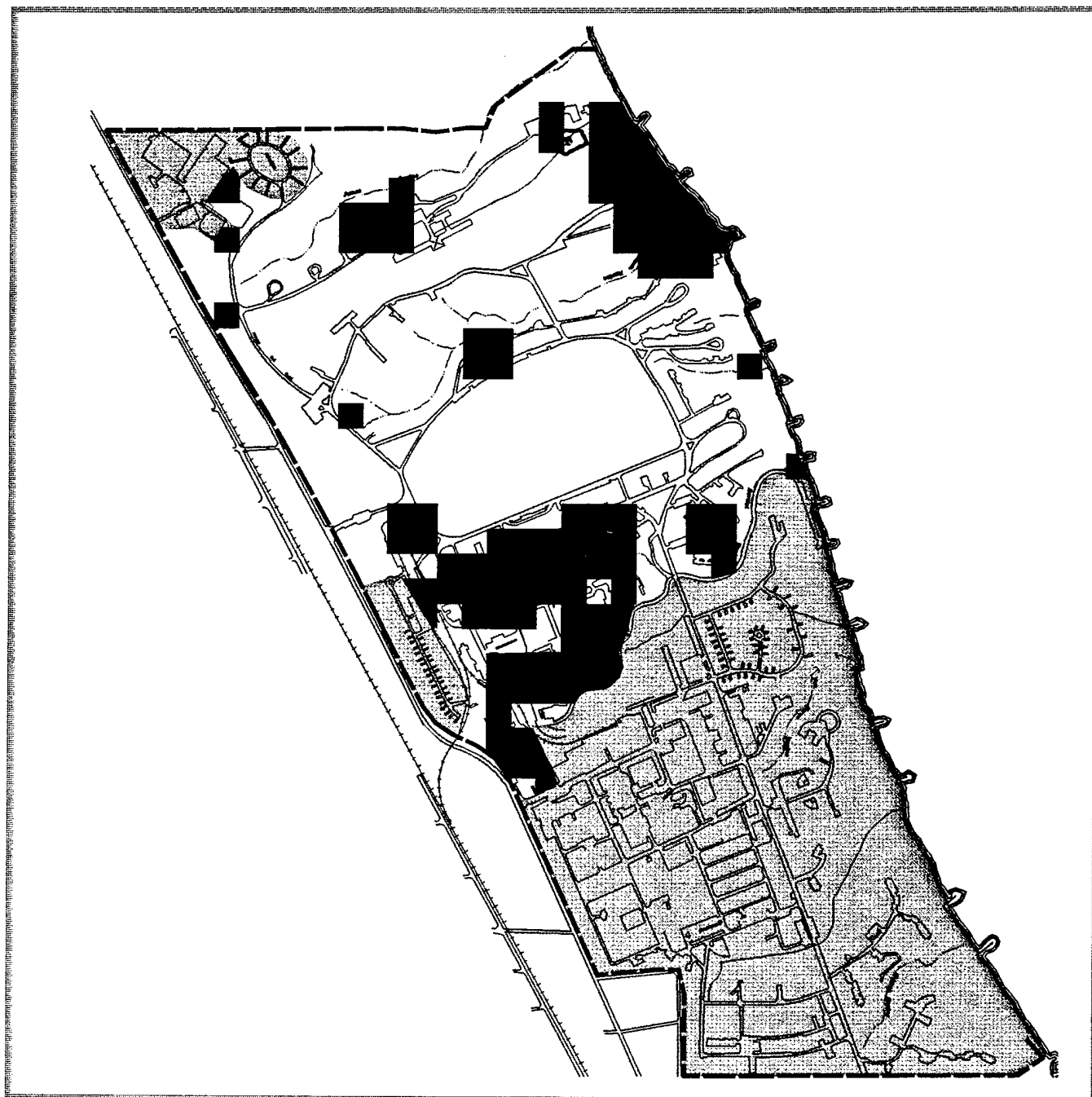
Figure 3-3 identifies CERFA parcels and CERFA parcels with qualifiers which are immediately transferable under CERCLA as well as CERFA disqualified parcels. The U.S. Army is continuing the identification process for property suitable for transfer including the refinement of CERFA disqualified parcels into those suitable and unsuitable for transfer under CERCLA.

### **3.5 Status of Community Involvement**

Community relations activities that have taken place at Fort Sheridan to date include the following:

- ▶ **EIS Process.** During the development of the closure EIS and the disposal and reuse EA, numerous public scoping meetings were held. Public comments were received by the U.S. Army on draft EIS documents and were addressed in final versions of these documents.

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# EXPLANATION

- Installation Boundary
- CERFA Parcel and CERFA Parcel with Qualifier(s) \*
- CERFA Disqualified Parcel \*\*
- ▨ CERFA Excluded Parcel

\* CERFA Parcels and CERFA Parcels with Qualifier(s) are areas suitable for current transfer under SARA Title I, Section 120 of CERCLA.

\*\* CERFA Disqualified Parcels are areas with current or historic POL/Hazardous Substance Storage and/or releases. Only unremediated hazardous substance release sites or those without a remedy in place are unsuitable for transfer to a non-federal entity under SARA Title I, Section 120.



0 650 1300  
FEET

Suitability of  
Property for  
Transfer

Figure 3-3

- ▶ **Information Repositories.** A public repository for information will be established on post or in a nearby public library. It contains information relative to environmental activities at Fort Sheridan.
- ▶ **Administrative Record.** An Administrative Record File will be established at Fort Sheridan in accordance with CERCLA requirements. A copy of the Administrative Record File index will be on file at USEPA Region V headquarters.
- ▶ **Community Relations Plan.** A Draft Community Relations Plan (CRP) has been prepared for Fort Sheridan and is currently being reviewed by the U.S. Army.
- ▶ **Restoration Advisory Board (RAB).** The RAB is in the process of being formed. Draft letters requesting nominations for the RAB are in final review. Distribution is to be made in late March or April 1994.
- ▶ **Technical Assistance Grant (TAG).** The USEPA has awarded a TAG to the Fort Sheridan Commission for reuse planning and in 1991. A community reuse plan was completed. In 1993 the Fort Sheridan Joint Planning Committee was formed to reevaluate the planning effort and develop a refined reuse plan. The Joint Planning Committee is considering submitting an application for a TAG.
- ▶ **Mailing List.** A mailing list of all interested parties in the community is being developed and will be maintained by the BCT and updated regularly.
- ▶ **News Releases.** One news release describing the status of the environmental restoration and evaluation activities at Fort Sheridan has been distributed to the mailing list to date.
- ▶ **Workshops.** A workshop with homeless assistance organizations and advocates was held in February 1994 to present options and capability of Fort Sheridan to meet the needs of the homeless under the McKinney Act requirements.

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# CHAPTER 4

## ► INSTALLATION-WIDE STRATEGY FOR ENVIRONMENTAL RESTORATION ◀

This chapter describes and summarizes the installation-wide environmental restoration and compliance strategy for Fort Sheridan. Prior to 9 January 1989, IRP projects were underway to identify, characterize, and remediate environmental contamination at Fort Sheridan. With the closure announcement, the installation's strategy shifted from supporting an active U.S. Army mission to responding to disposal and reuse considerations.

The strategy for determining the most effective response mechanism for contaminant sources and contaminated areas during the early stages of the restoration process at the installation has been performed on a case-by-case basis by the BCT. The BCT has developed a comprehensive strategy to identify the appropriate regulatory programs applicable to the areas of contamination discovered during the restoration program.

### 4.1 Zone/OU Designation and Strategy

Zones define an installation's investigative strategy. Zones are geographically contiguous areas amenable to management as a single investigative unit. Zones can be used to group multiple sites and environmental data collected during one or more investigations into related geographic areas for detailed mapping, and facilitate the development of conceptual models of sources, migration pathways, and receptors. Zones are distinct from OU response actions.

OUs define an installation's remedial strategy. They are derived from an evaluation of hydrogeologic and chemical analytical data within an investigative zone, or by comparing data between zones. OU types may be based on geographic area, common media (soil, groundwater, surface water, other), common treatment technology, priorities, or schedules. OUs establish a logical sequence of discussions that address contamination releases in a comprehensive fashion.

#### 4.1.1 Zone Designations

The Fort Sheridan BCT has not designated zones on Fort Sheridan or in the disposal and reuse parcels. The Fort Sheridan BCT will coordinate with the RI/Risk Assessment/FS contractor, the USACE, and the remediation contractor to integrate AREEs, AOCs, and/or sites into zones and OUs as appropriate.

#### 4.1.2 OU Designations

As of March 1994, the Fort Sheridan BCT has designated three OUs within Fort Sheridan. Two of the OUs include areas within the disposal and reuse parcels. OU 1 includes USTs within the disposal and reuse parcels as well as the Department of the Navy property and the U.S. Army

Reserve lands. OU 2 also includes USTs in both disposal and reuse parcels and the excluded areas remaining in Department of the Navy and DOA ownership. OU 3 is the Landfill 6 and 7 area of the remaining DOA/Department of the Navy areas. The UST OUs are based on the timeframe during which they were removed. The UST OUs cannot be depicted in a figure (Figure 3-1) because they are not based on their geographical proximity or other relationships. The relationship between restoration sites, zones, OUs, and disposal and reuse parcels as they are currently designated is presented in Table 4-1. The Fort Sheridan BCT will identify and designate OUs as they are appropriate to the areas requiring remedial response actions. If necessary, additional elements will be added to Table 4-1.

**TABLE 4-1. RELATIONSHIP BETWEEN RESTORATION SITES, OUS, AND PARCELS**

| Parcel | Zone | OU            | Site |
|--------|------|---------------|------|
| 1      | NA   | OU 1 and OU 2 |      |
| 2      | NA   | OU 1 and OU 2 |      |

**Key:** NA = Not Applicable

#### **4.1.3 Sequence of OUs**

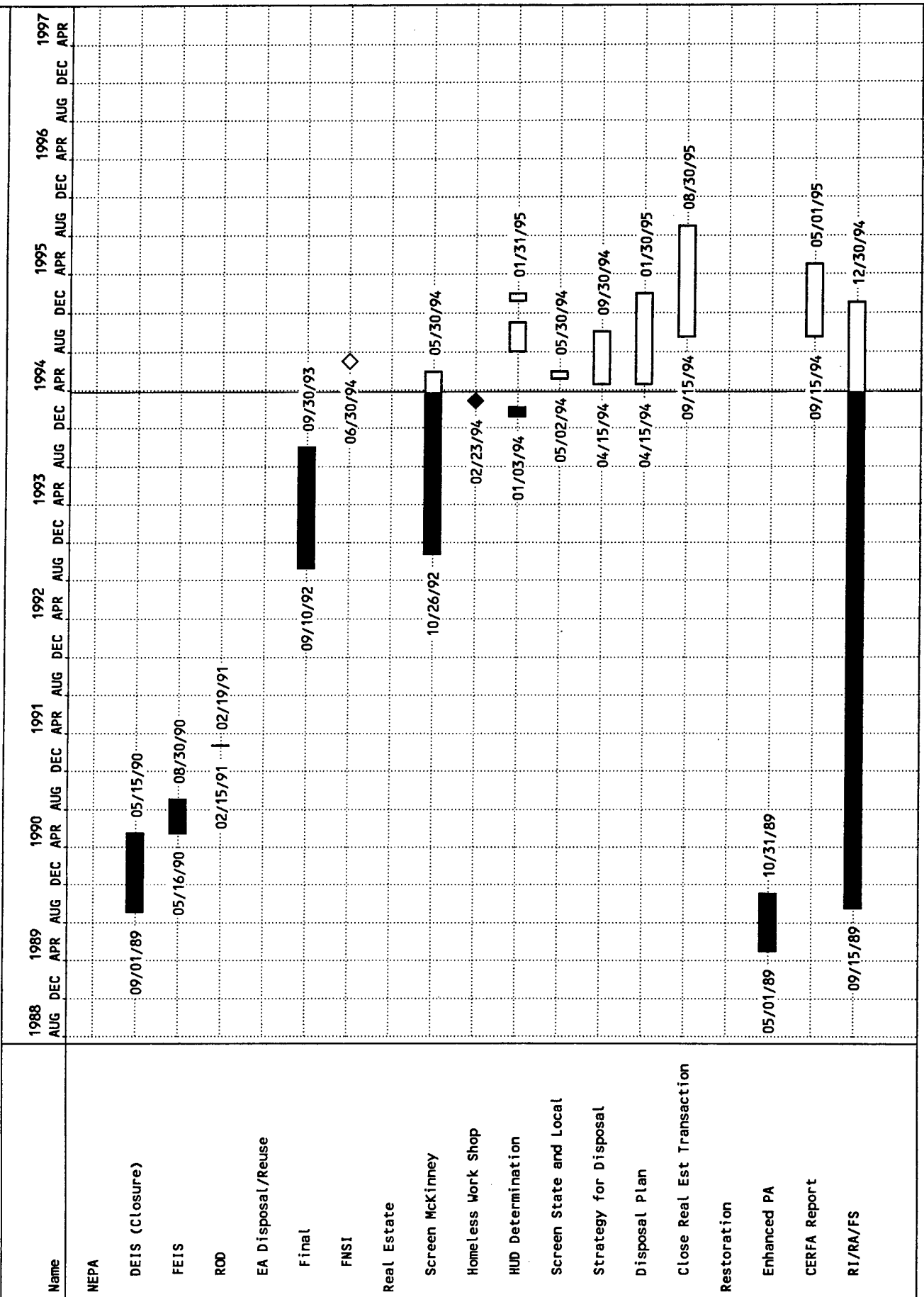
The sequencing of OUs will be determined by the BCT based on potential levels of hazard to human health, the need to expedite remediation and cleanup leading to the transfer and reuse of the disposal parcels. The sequence of OU 1 and OU 2 outlined in Table 4-2 was based on the need to remove USTs in a timely manner from the disposal and reuse parcels in order to eliminate potential contamination sources.

A comprehensive OU strategy will be developed by the Fort Sheridan BCT. This strategy will consolidate IRP sites into zones for investigation based on the results of the RI/Risk Assessment/FS, and then define a logical sequence of OUs addressing all past releases and/or other conditions associated with these sites. In addition to defining OUs, the environmental response strategy:

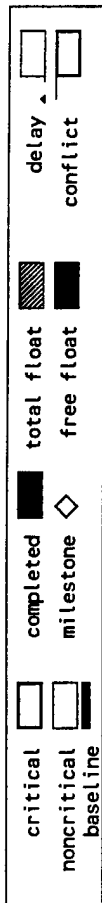
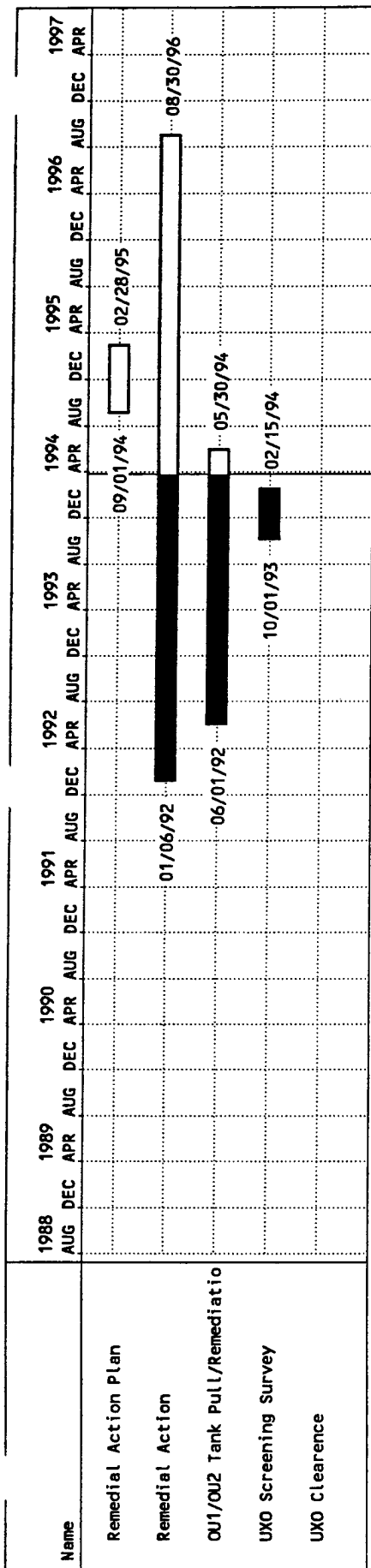
- ▶ Evaluates the need to target the UXO area for early response action.
- ▶ Streamlines the document review process by defining an 8- to 9-month review cycle between submittal of a draft FS and the submittal of a draft ROD
- ▶ Initiates remedial design (RD) during the proposed plan (PP) and ROD review process so that final designs can be in place as soon as possible after the ROD is signed. This initiative is only applicable for sites where the proposed response or remedial action has general approval from regulators.

PROJECT: Fort Sheridan  
 MANAGER: Allan Balliet  
 CURRENT DATE: 03/25/94  
 AS OF DATE: 03/25/94

Figure 4-1



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**TABLE 4-2. CLEANUP SEQUENCE**

| Reuse Parcel | Zone | OU        | Environmental Risk | Reuse Priority | Cleanup Sequence | Reconcile Comments                          |
|--------------|------|-----------|--------------------|----------------|------------------|---------------------------------------------|
| 1            | NA   | OU 1/OU 2 | None               | 1              | 1                | Closure report submitted in final approval. |
| 2            | NA   | OU 1/OU 2 | None               | 1              | 2                | Closure in process. Tanks removed.          |

Key: NA = Not Applicable

The current OU cleanup sequence for the Fort Sheridan disposal and reuse parcels is summarized in Table 4-2. The OU sequence also be depicted in the schedule provided as Figure 4-1 as OUs are designated and this BCP is updated. The schedule also identifies the timeline for the generation of primary documents necessary for completion of the OU cleanup actions.

The schedule was developed using the critical path analysis method with the following components:

- ▶ **Critical.** Critical jobs are those in which any extension in their duration will cause an equivalent delay in the project. Often referred to as the critical path. Normally the cumulative time span from the start of the first critical job to the end of the last critical job is the duration of the project.
- ▶ **Noncritical.** Noncritical jobs are usually subtasks required to accomplish the critical job. The start and end dates may be varied within the project parameters. However, variations in the timeframe may result in an impact to the critical job of the project.
- ▶ **Baseline.** A set of "original" schedule dates that can be compared with the current schedule to determine if the project has slipped.
- ▶ **Completed Duration.** A measure in time periods of the portion of a job that is completed. A corresponding value will be displayed in the percent complete field and remaining duration field after the completed duration value has been entered.
- ▶ **Milestone.** A project event that represents a checkpoint, a major accomplishment, or a deliverable result. There is no time duration associated with a milestone.
- ▶ **Total Float.** The total length of time that a noncritical job can be delayed before it causes the project or a critical job to slip or causes a job to not meet its target date.
- ▶ **Free Float.** The length of time a noncritical job can be delayed without affecting another job.

- ▶ **Delay.** A waiting period that prevents the job from starting at its earliest possible start time. Delay times can either be input by the user or assigned by the program to resolve resource conflicts.
- ▶ **Conflict.** The amount of time a job overruns its target date. This is also called "negative float".

The RI/Risk Assessment/FS document for Fort Sheridan is in the process of being finalized. No IRP sites, zones, or OUs have been designated for the disposal and reuse parcels based on the RI/Risk Assessment/FS documentation. The need to address concerns about the USTs was raised in the draft RI/Risk Assessment report of June 1992. The first set of USTs (OU 1) was removed by the end of July 1992. The second set (OU 2) was removed in February 1994. The activities related to the RI/FS process and the OUs associated with the Fort Sheridan disposal and reuse parcels is summarized below:

- ▶ **OU 1**

|                 |                        |
|-----------------|------------------------|
| RI Report       | June 1992              |
| UST Remediation | July 1992              |
| Closure Report  | April 1994 (estimated) |
- ▶ **OU 2**

|                 |                          |
|-----------------|--------------------------|
| RI Report       | June 1992                |
| UST Remediation | May 1994 (estimated)     |
| Closure Report  | October 1994 (estimated) |
- ▶ **Landfill 2**

|                        |                  |
|------------------------|------------------|
| ENPA                   | October 1989     |
| Draft RI Report        | June 1992        |
| CERFA Report           | October 1993     |
| Ordnance Survey        |                  |
| Draft Technical Report | February 1994    |
| UXO Clearance Survey   | To Be Determined |
- ▶ **Landfill 1**

|                          |                  |
|--------------------------|------------------|
| ENPA                     | October 1989     |
| Draft RI Report          | June 1992        |
| CERFA Report             | October 1993     |
| Further Actions (if any) | To Be Determined |
- ▶ **Landfills 3/4**

|                          |                  |
|--------------------------|------------------|
| ENPA                     | October 1989     |
| Draft RI Report          | June 1992        |
| CERFA                    | October 1993     |
| Further Actions (if any) | To Be Determined |

#### 4.1.4 Environmental Restoration Early Actions Strategy

No environmental restoration early IRP actions are anticipated at Fort Sheridan. However, Table 4-3 is provided should any early actions need to be initiated.

**TABLE 4-3. ENVIRONMENTAL RESTORATION PLANNED EARLY ACTIONS**

| Site | UST No. (or other unit identifier)                                                                                                                           | Action | Objective | Time Frame |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------|------------|
|      |                                                                                                                                                              |        |           |            |
|      | Currently, no early environmental restoration actions are planned in the disposal and reuse parcels on Fort Sheridan. Future changes will be reflected here. |        |           |            |
|      |                                                                                                                                                              |        |           |            |
|      |                                                                                                                                                              |        |           |            |
|      |                                                                                                                                                              |        |           |            |

Other AREEs or AOCs identified in the RI report and the CERFA report will be evaluated and considered by the BCT for early actions. Examples of such AOCs are the UXO in and adjacent to Landfill 2 and the noncarcinogenic health risks at Landfill 3/4.

#### 4.1.5 Remedy Selection Approach

Remedies will be selected in accordance with statutory and National Oil and Hazardous Substances Pollution Contingency Plan (NCP) criteria. The Fort Sheridan Project Team will involve all parties who have an impact on the remedies selected at the installation in the remedy selection process. Particular attention will be given to the following during the evaluation of alternatives:

- ▶ **Applicable or Relevant and Appropriate Requirements (ARARs).** Applicable requirements for anticipated remedial actions will be identified through Project Team communication and coordination. The effectiveness of alternatives in reducing concentrations of contaminants to chemical-specific ARARs will be evaluated. Waivers will be considered where treatment to standards is technically impractical
- ▶ **Land Use/Risk Assessment.** Risk assessment protocols will incorporate consideration of future land use in exposure scenarios
- ▶ **Applicable Remedies.** The presumptive remedy selection approach advocated in USEPA's 30-day study will be applied in selected cases. Focused FSs will be developed where appropriate

- ▶ **POL Remedies.** Source-specific actions for POLs will be addressed under the state UST program or under the RCRA closure process since POL releases at Fort Sheridan have occurred as a result of USTs and due to spills
- ▶ **Future Land Use.** Cleanup goals need to be factored into future land use and/or deed restrictions. This will require coordination and integration of information from the EIS/EA analysis, the RI/Risk Assessment/FS process, the ENPA, the CERFA report, the community reuse plan, and any proposed development and management plans.

The BEC will hold Project Team meetings to discuss conceptual remedies early in the FS process (initial screening of alternatives [ISA] stage) to ensure the FS focuses on the appropriate types of remedies for each site or OU.

## 4.2 Compliance Strategy

This section describes the strategies for addressing compliance related environmental issues at Fort Sheridan prior to installation closure and/or property transfer. These environmental compliance strategies have been developed to ensure that installations are compliant with federal and state regulatory programs, DoD and U.S. Army directives and regulations throughout the BRAC process.

If required, early actions could be implemented as part of the Fort Sheridan compliance program to remove contaminant sources and reduce risk posed by releases or potential releases. These early actions are described below and are identified in Table 4-4.

**TABLE 4-4. ENVIRONMENTAL COMPLIANCE PLANNED EARLY ACTIONS**

| Site | UST No. | Action                                              | Objective                               | Time Frame                 |
|------|---------|-----------------------------------------------------|-----------------------------------------|----------------------------|
| OU 1 | B7-A1   | Tank removed 1993                                   | Eliminate spill potential/health hazard | Pending State approval     |
| OU 1 | DE-A    | Tank removed 1993                                   | Eliminate spill potential/health hazard | Pending State approval     |
| OU 1 | C3-A1   | Tank removed 1993                                   | Eliminate spill potential/health hazard | Pending State approval     |
| OU 1 | E6-A1   | Tank removed; removed 330 yd <sup>3</sup> soil 1993 | Eliminate spill potential/health hazard | Pending State approval     |
| OU 2 | D8-B1   | Tank removed 1993                                   | Eliminate spill potential/health hazard | Closure report in progress |
| OU 2 | D8-C1   | Tank removed 1993                                   | Eliminate spill potential/health hazard | Closure report in progress |
| OU 2 | D8-C2   | Tank removed 1993                                   | Eliminate spill potential/health hazard | Closure report in progress |
| OU 2 | D8-B2   | Tank removed 1993                                   | Eliminate spill potential/health hazard | Closure report in progress |

**TABLE 4-4. ENVIRONMENTAL COMPLIANCE PLANNED EARLY ACTIONS**

| Site | UST No. | Action               | Objective                               | Time Frame                    |
|------|---------|----------------------|-----------------------------------------|-------------------------------|
| OU 2 | E7-A1   | Tank removed<br>1993 | Eliminate spill potential/health hazard | Closure report in<br>progress |
| OU 2 | D7-A1   | Tank removed<br>1993 | Eliminate spill potential/health hazard | Closure report in<br>progress |
| OU 2 | E9-B1   | Tank removed<br>1993 | Eliminate spill potential/health hazard | Closure report in<br>progress |

#### **4.2.1 Storage Tanks**

The compliance strategy for storage tanks has been implemented. All USTs in the disposal and reuse parcels have been removed. OU 1 closure is complete pending final approval of the closure report. The USTs in OU 2 have been removed and the closure process is underway. Following removal of the USTs, some were replaced with ASTs with secondary containment. All existing ASTs have been provided with secondary containment.

#### **4.2.2 Hazardous Materials/Waste Management**

If any hazardous materials and hazardous wastes are handled at Fort Sheridan, they will continue to be managed in accordance with federal, state, and U.S. Army regulations.

#### **4.2.3 Solid Waste Management**

Solid waste is currently disposed of in a regional sanitary landfill off-post. No changes in the solid waste management program are currently planned as part of the BCP process.

#### **4.2.4 Polychlorinated Biphenyls (PCBs)**

The BCT will evaluate the need for additional transformer removals. As of March 1994 no PCB compliance activities are planned at Fort Sheridan.

#### **4.2.5 Asbestos**

Damaged asbestos has been removed from buildings in the disposal and reuse parcels and asbestos abatement is continuing installation-wide. The presence of asbestos in the buildings that are transferred will be included in the deed transfer documentation.

#### **4.2.6 Radon**

Radon surveys of the buildings in the disposal and reuse parcels indicate one building had elevated levels of radon. Because the building is currently unoccupied, no radon compliance activities are planned as of March 1994.

#### **4.2.7 RCRA Facilities (SWMUs)**

No RCRA facilities or RCRA waste generating activities are present within the disposal and reuse parcels and no compliance strategy is necessary.

#### **4.2.8 NPDES Permits**

Fort Sheridan does not currently require a NPDES permit. There are no plans to obtain a NPDES permit for any activities within the disposal and reuse parcels.

#### **4.2.9 Oil/Water Separators**

No oil/water separators are in use in the disposal and reuse parcels. The oil/water separator installed in Building 51 during the 1980-1982 timeframe has not been used since 1989.

#### **4.2.10 NRC Licensing**

An U.S. Army-wide NRC license was in place for the use of depleted uranium in dummy munitions. No installation-specific NRC licenses were ever required at Fort Sheridan; therefore, no compliance strategy is necessary.

#### **4.2.11 Pollution Prevention**

The appropriate elements of the SPCC plan and the stormwater pollution prevention plan will continue to be implemented until the disposal and reuse parcels are transferred.

#### **4.2.12 Mixed Wastes**

There is no mixed waste generated at Fort Sheridan; therefore, there are no compliance requirements or strategies under this program for the installation.

#### **4.2.13 Radiation**

There are no radioactive wastes generated at Fort Sheridan; therefore, there are no compliance requirements or strategies under this program for the installation.

#### **4.2.14 Lead-Based Paint**

No surveys have been conducted for lead-based paint in the disposal and reuse parcels. The BCT will consider the need to conduct a lead-based paint survey in the disposal and reuse parcels.

#### **4.2.15 Unexploded Ordnance (UXO)**

Results of the ordnance survey (February 1994) indicate that a 100 percent clearance survey should be conducted at Fort Sheridan.

#### **4.2.16 Medical Wastes**

There is no medical waste generated at Fort Sheridan; therefore, there are no compliance requirements or strategies under this program for the installation.

#### **4.2.17 NEPA**

Following the U.S. Army's review of the FNSI, action will be taken as needed.

#### **4.2.18 Other Compliance Programs**

The Stormwater Pollution Prevention Plan will need to be considered and potentially integrated into any reuse planning for the disposal and reuse parcels.

### **4.3 Natural and Cultural Resources Strategy(ies)**

This section discusses the strategies for natural and cultural resource programs at Fort Sheridan developed to manage these resources throughout the BRAC cleanup and installation closure process.

#### **4.3.1 Vegetation**

Fort Sheridan will continue to maintain the existing vegetation until the disposal and reuse parcels are transferred. The BCT will evaluate the need to update the existing data on the vegetation present in the disposal and reuse parcels to assist in the reuse planning process.

#### **4.3.2 Wildlife**

Fort Sheridan will continue to maintain the existing wildlife habitat and populations until the disposal and reuse parcels are transferred. The BCT will evaluate the need to update the existing data on wildlife species present in the disposal and reuse parcels to assist in the reuse planning process.

#### **4.3.3 Wetlands**

Fort Sheridan will preserve existing wetlands within the disposal and reuse parcels until the property is transferred. The BCT will evaluate the need to conduct validation studies to confirm

the numbers and types of wetlands present in the disposal and reuse parcels to assist in the planning process leading to the transfer of the property.

#### ***4.3.4 Designated Preservation Areas***

Fort Sheridan will continue to protect the Janes Ravine and Lake Shore Bluff habitats listed in the INAI as being of state-wide importance and value. These sites will be considered in any reuse planning and remedial action activities.

#### ***4.3.5 Rare, Threatened and Endangered Species***

Any rare, threatened and endangered or otherwise sensitive species will continue to be protected if observed to be present on Fort Sheridan. The BCT will evaluate the need to update available information on the presence and distributions of sensitive plant and animal species occurring in the disposal and reuse parcels. This will assist the BCT during the reuse planning process and could expedite the transfer of sensitive habitats to the appropriate organizations.

#### ***4.3.6 Cultural Resources***

Fort Sheridan will continue to preserve and protect the cultural resource values within the Historic District and elsewhere in the disposal and reuse parcels. The planning process will follow the requirement of the MOA and the suggestions in the September 1993 report entitled "Literature Review, Archaeological Evaluation and Phase I Archaeological Reconnaissance". The BCT will evaluate the need to conduct detailed archaeological studies as recommended in the September 1988 report.

#### ***4.3.7 Other Resources***

No other significant resources are known to be present within the disposal and reuse parcels.

### **4.4 Community Involvement/Strategy**

The draft CRP will be finalized and implemented in a timely fashion to facilitate communication among the U.S. Army, other federal, state, or local agencies, the Fort Sheridan Joint Planning Committee, the RAB, and interested groups and other community residents concerning restoration activities and reuse planning at Fort Sheridan. This communication ensures that all parties involved, or interested, are provided accurate, consistent information in a timely manner concerning related cleanup activities, contaminants, and possible effects of any contamination. It provides mechanisms for all parties to provide input into the decision-making process of the IRP and the reuse planning process.

The Fort Sheridan BCT will consider using the following strategy to support a proactive community relations program in accordance with the CERCLA requirements:

- ▶ Review and update the CRP as needed.
- ▶ Establish a RAB to increase community involvement.
- ▶ Maintain an information repository at the installation or at a nearby community library.
- ▶ Publish fact sheets on the progress of environmental restoration and disposal programs.
- ▶ Continue coordination with the Joint Planning Committee and concerned local agencies.
- ▶ Develop PPs and issue PP fact sheets. Issue public notices two weeks in advance of public comment periods on these plans in two local newspapers.
- ▶ Hold 30-day public comment periods on PPs, and respond to all comments in a responsiveness summary.
- ▶ Hold informal and formal public meetings as required during the response process.
- ▶ Provide an opportunity for public comment on removal actions.

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# CHAPTER 5

## ► ENVIRONMENTAL PROGRAM MASTER SCHEDULES ◀

This chapter presents the Fort Sheridan Master Schedules of anticipated activities in the installation's environmental programs. These schedules are simplified from detailed network and operational schedules developed to support OU-specific work plans and compliance agreements. Environmental restoration activities are graphically summarized in Figure 5-1. Compliance activities are summarized in Figure 5-2 and Figure 5-3. Natural and cultural resource activities are summarized in Figure 5-4. Each of these schedules displays the critical path analysis for the respective installation program. Components in each analysis include critical and noncritical path, baseline, completed duration, milestones, float, delay and conflict. These components are defined in Section 4.1.3.

### **5.1 Environmental Restoration Program**

This section presents response schedules and outlines fiscal year requirements for Fort Sheridan's environmental restoration program.

#### ***5.1.1 Response Schedules***

The installation's ability to meet the milestones shown on the schedule in Figure 5-1 hinges on the signing of the appropriate DD. The RDs and RAs must be completed according to the schedule. The closure report for OU 1 USTs is currently being reviewed by the IEPA. Closure activities for OU 2 are underway.

#### ***5.1.2 Requirements by Fiscal Year***

The detailed requirements information by fiscal year is contained in the Fort Sheridan Work Plan and is incorporated into this document by reference. The tables in Appendix A to this document are taken directly from the Work Plan and provide summary information on funding requirements.

### **5.2 Compliance Programs**

This section presents master compliance schedules and outlines fiscal year requirements for Fort Sheridan's environmental compliance programs.

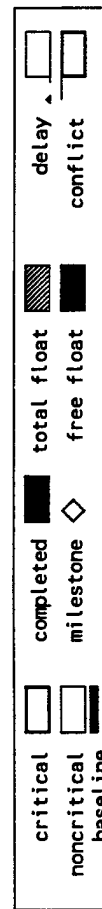
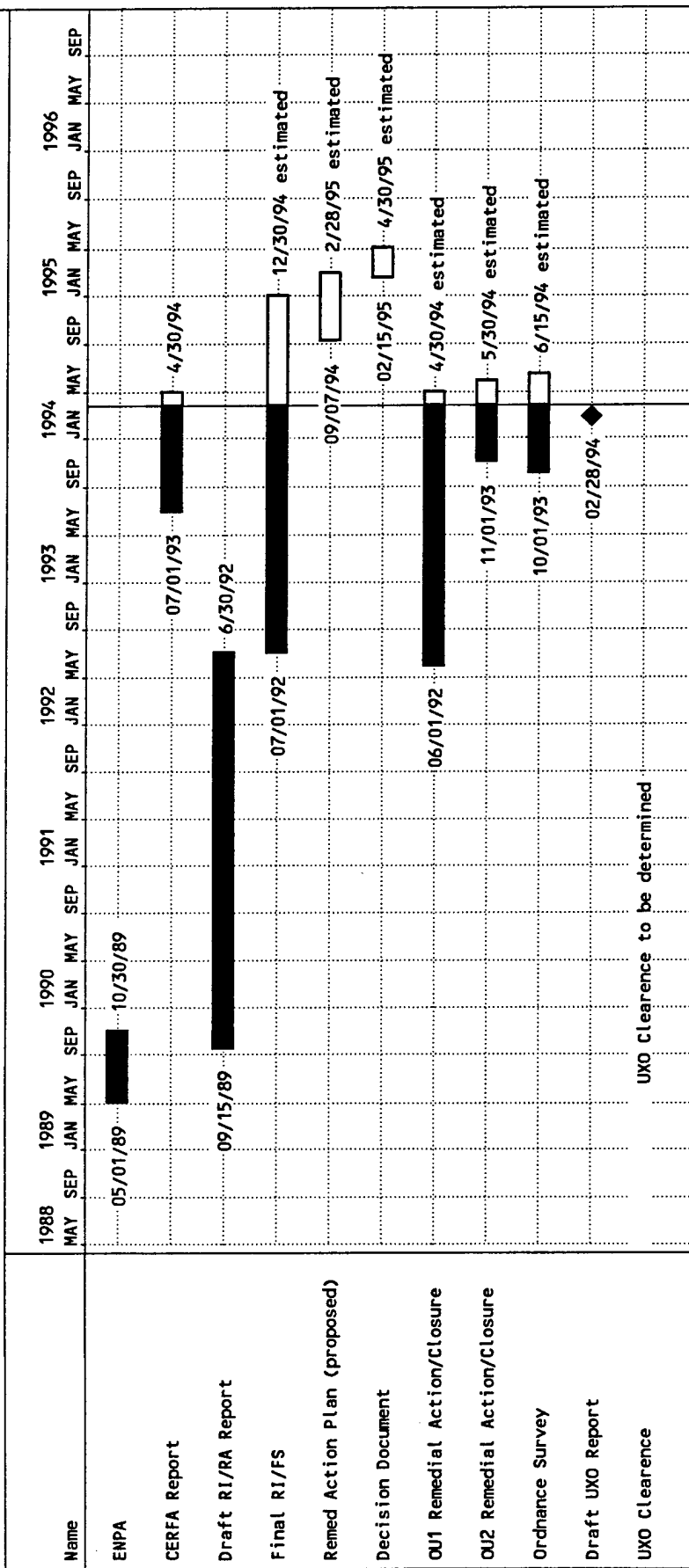
#### ***5.2.1 Master Compliance Schedules***

There are no mission/operation-related compliance programs at Fort Sheridan (Figure 5-2). The compliance schedule for closure-related compliance programs is provided as Figure 5-3.

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PROJECT: Fort Sheridan  
 MANAGER: Allan Balliet  
 CURRENT DATE: 03/25/94  
 AS OF DATE: 03/25/94

Figure 5-1



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PROJECT: Fort Sheridan  
 MANAGER: Allan Balliet  
 CURRENT DATE: 03/25/94  
 AS OF DATE: 03/25/94

Figure 5-2

| Name                                                              | 1986 |     | 1987 |     | 1988 |     | 1989 |     | 1990 |     | 1991 |     | 1992 |     | 1993 |     | 1994 |     | 1995 |     | 1996 |     |  |
|-------------------------------------------------------------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|--|
|                                                                   | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR | DEC  | APR |  |
|                                                                   |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |  |
| There are no mission related compliance programs at Fort Sheridan |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |     |  |

critical

completed

noncritical

baseline

total float

free float

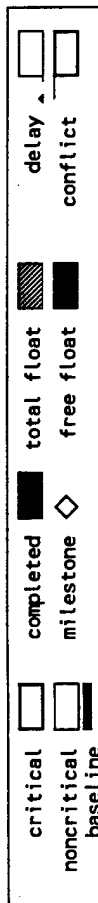
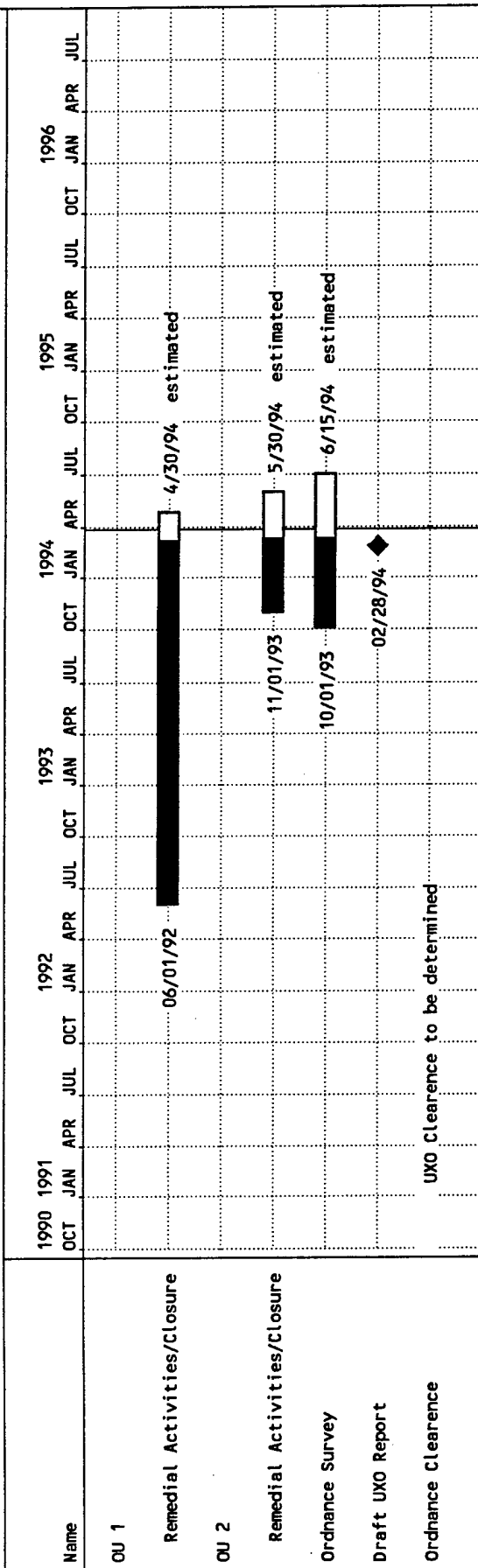
delay

conflict

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PROJECT: Fort Sheridan  
 MANAGER: Allan Balliet  
 CURRENT DATE: 03/25/94  
 AS OF DATE: 03/25/94

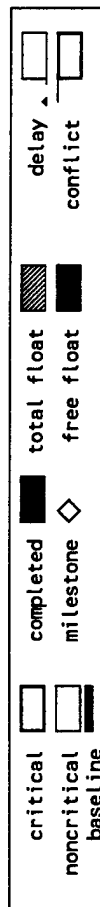
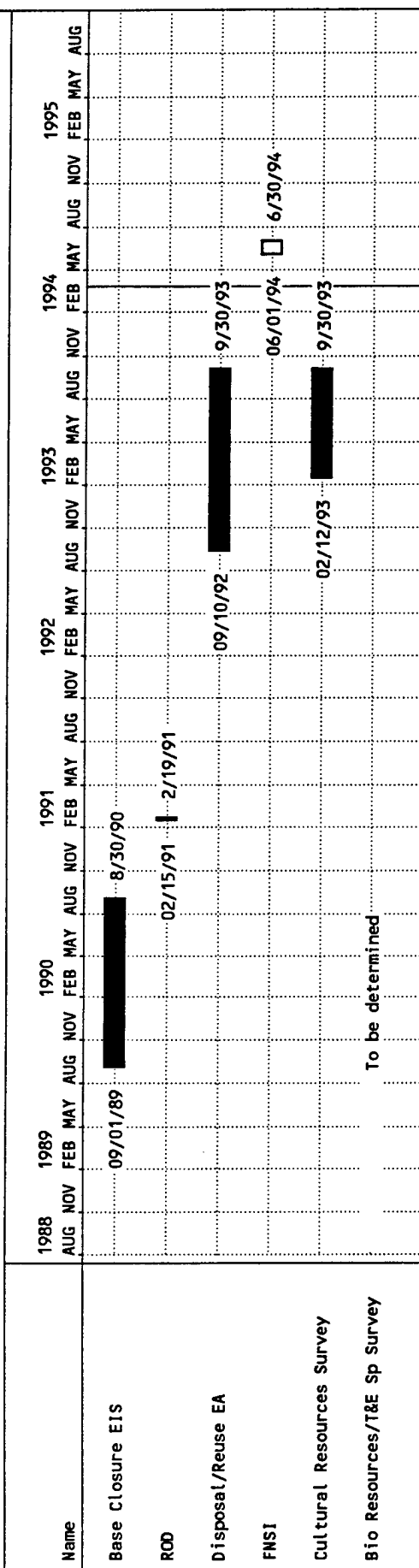
Figure 5-3



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PROJECT: Fort Sheridan  
 MANAGER: Allan Balliet  
 CURRENT DATE: 03/25/94  
 AS OF DATE: 03/25/94

Figure 5-4



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Compliance activities to be completed include closure of the OU 1 and OU 2 UST removal programs. The BCT will evaluate the need to implement a UXO related remedial program.

### ***5.2.2 Requirements by Fiscal Year***

The detailed requirements information by fiscal year is contained in the Fort Sheridan Work Plan and is incorporated into this document by reference. The tables in Appendix A to this document are taken directly from the Work Plan and provide summary information on funding requirements.

## **5.3 Natural and Cultural Resources**

This section presents master natural and cultural resources activity schedules and outlines fiscal year requirements for Fort Sheridan natural and cultural resource programs.

### ***5.3.1 Natural and Cultural Resources Schedule(s)***

The natural and cultural resources schedule for past projects at Fort Sheridan is provided in Figure 5-4. There are currently no cultural resources projects planned at Fort Sheridan. The BCT will evaluate the need for studies to update the biological information available for the Fort Sheridan disposal and reuse parcels.

### ***5.3.2 Requirements by Fiscal Year***

The detailed requirements information by fiscal year is contained in the Fort Sheridan Work Plan and is incorporated into this document by reference. The tables in Appendix A to this document are taken directly from the Work Plan and provide summary information on funding requirements.

## **5.4 Meeting Schedule**

Meetings are scheduled to promote an expedited restoration schedule for Fort Sheridan. Meetings are typically held as follows:

- ▶ BCT Meetings - Monthly
- ▶ Technical/Issue Resolution Meetings - As necessary to facilitate continued progress on restoration/compliance and planning related activities
- ▶ BRAC In-Progress Review Meetings - Monthly as part of the BCT meetings
- ▶ RAB - monthly.

A listing of the currently scheduled BCT meetings is provided in Table 5-1.

**TABLE 5-1. BCT MEETING SCHEDULE**

| Date                | Topic                                        |
|---------------------|----------------------------------------------|
| 8-9 February 1994   | Briefing by USAEC and USACE                  |
| 17-17 February 1994 | Environmental Strategy Planning              |
| 22-23 March 1994    | Real Estate and Cleanup Progress Integration |
| April 1994          | TBD                                          |
| 22-23 May 1994      | TBD                                          |
| June 1994           | TBD                                          |

Key:    TBD            =        To Be Determined  
         USAEC        =        U.S. Army Environmental Center  
         USACE        =        U.S. Army Corps of Engineers

# CHAPTER 6

## ► TECHNICAL AND OTHER ISSUES TO BE RESOLVED ◀

This chapter summarizes technical and other issues that are yet to be resolved. These issues include information management; usability of historical data; data gaps; natural (background) levels of elements and compounds in soil, groundwater, surface water, and sediments; risk assessment; state cleanup standards; and program initiatives to complete cleanup requirements as required to meet property transfer schedules.

### 6.1 Data Usability

This section summarizes unresolved issues pertaining to the validity of using historical data sets in the installation environmental restoration program.

#### 6.1.1 BCT Action Items

The BCT at Fort Sheridan will continue to ensure the acceptability of data generated in order to provide improved information management during the BRAC environmental restoration process. The BCT should evaluate and select the appropriate data/information management system.

#### 6.1.2 Rationale

Historical analytical data can contribute to the completion of site characterizations and risk assessments by filling data gaps. Current and future data from each data collection system (e.g., field laboratories, field screening techniques) are critical to the completion of all site characterization efforts, comprehensive conceptual model development, risk assessments, and ultimately the selection of remedial actions to protect human health and the environment.

#### 6.1.3 Status/Strategy

The BCT is currently reviewing existing environmental documents, but no additional specific action items on data usability have been identified.

### 6.2 Information Management

This section identifies issues that need to be resolved with regard to managing information gathered and used in the installation environmental restoration and compliance programs. Issues include:

- ▶ Improve coordination of, access to, and management of environmental restoration and real estate-type data generated at Fort Sheridan
- ▶ Require all contractors to submit data in electronic format that can be readily used by the U.S. Army
- ▶ Establish method/procedure to be able to distribute data to parties (USEPA, IEPA, Real Property Contractors, Fort Sheridan RAB, etc.) with need for an installation-wide perspective on activities at Fort Sheridan
- ▶ Develop provisions for real time data inputs of field decisions to expedite progress on response actions or remedial actions.

### **6.2.1 BCT Action Items**

In order to manage data usability during the environmental restoration BRAC process, the information transfer system, Defense Environmental Network Information Exchange (DENIX), should be made available to each Fort Sheridan BCT member.

### **6.2.2 Rationale**

As the number of agencies and contractors associated with the Fort Sheridan disposal and environmental restoration program increases, it is important that all parties involved are able to share data for decision making. The establishment and maintenance of an electronic data base of sampling and analysis data and spatial (e.g., real estate maps) data is the most efficient method of sharing data among parties.

### **6.2.3 Status/Strategy**

A summary of the current status of data usability relative to BRAC cleanup activities at Fort Sheridan and strategies which have been developed to address data usability requirements is provided below:

- ▶ All historical data generated at Fort Sheridan should be made available at the BEC office at Fort McCoy and at Fort Sheridan
- ▶ Data generated in the future will be loaded into DENIX on a quarterly basis, subject to inclusion of this requirement being added to or included into contracts
- ▶ Necessary contract modifications will be made by the U.S. Army to ensure that data from ongoing efforts are submitted electronically into DENIX.

## **6.3 Data Gaps**

This section summarizes unresolved issues pertaining to the identification and collection of data needed to complete the Fort Sheridan environmental restoration program.

### **6.3.1 BCT Action Items**

No data gaps have been identified at Fort Sheridan; however, as restoration activities progress additional data gaps and appropriate action items may be identified in the area of biological resources.

### **6.3.2 Rationale**

Currently all biological analyses and assessments are based on a 1977 biological survey. There is some indication that some species have expanded their distributions and other changes could have taken place.

### **6.3.3 Status/Strategy**

A detailed seasonal biological inventory using remote imagery and field studies will be considered by the BCT to assist in IRP and property transfer planning.

## **6.4 Background Levels**

This section summarizes unresolved issues pertaining to documenting background levels for Fort Sheridan's environmental restoration program.

### **6.4.1 BRAC Cleanup Team Action Items**

The following BRAC cleanup team action items should be addressed at Fort Sheridan relative to documenting background cleanup levels:

Background concentrations of elements in the environment will be established at Fort Sheridan for use in baseline risk assessment computations.

### **6.4.2 Rationale**

Background concentration values of elements in the soil, groundwater, surface water, and sediments need to be determined before risk assessments can be conducted. The values must be representative of what is naturally occurring and what is occurring due to anthropogenic sources. These values must be concurred with by USEPA and state regulators.

### **6.4.3 Status/Strategy**

A summary of the current status of background level documentation at Fort Sheridan and strategies to further identify background cleanup levels is still being developed.

## **6.5 Risk Assessments**

This section summarizes unresolved issues pertaining to risk assessments required to complete the Fort Sheridan environmental restoration and compliance programs. Risk assessments have been conducted as part of the RI/RA/FS process.

### **6.5.1 BCT Action Items**

The BCT will continue to evaluate anticipated land use during development of exposure assessments.

### **6.5.2 Rationale**

Anticipated or known land uses at Fort Sheridan need to be considered in exposure assessment assumptions.

### **6.5.3 Status/Strategy**

Anticipated or known land uses at Fort Sheridan have been considered and will continue to be considered in exposure assessment assumptions (see Table 6-1).

## **6.6 Installation-wide Remedial Action Strategy**

A formal remedial action strategy which addresses the ongoing environmental restoration within the disposal and reuse parcels has not yet been developed for Fort Sheridan.

### **6.6.1 BCT Action Items**

The BCT plans to review the BCP quarterly and update it annually including revisions to the remediation schedule. A budget addressing current and projected funding needs is being developed and will be modified as necessary to reflect changes in the BCP.

### **6.6.2 Rationale**

The installation-wide remedial action strategy is structured to expedited remedial actions while controlling costs.

### **6.6.3 Status/Strategy**

Environmental investigations are proceeding for the disposal and reuse parcels at Fort Sheridan as the RI/RA/FS report is finalized. The results of these investigations will be used by the BCT to develop the remedial action strategy.

**TABLE 6-1. FUTURE LAND USE RISK ASSESSMENT FOR DEVELOPMENT OF REMEDY SELECTIONS**

| Site ID         | Risks                                             | Contaminants |       |                                                | Current Use         | Adjacent Uses                             | Anticipated Uses                      |
|-----------------|---------------------------------------------------|--------------|-------|------------------------------------------------|---------------------|-------------------------------------------|---------------------------------------|
|                 |                                                   | Groundwater  | Soil  | Surface/<br>Sediment                           |                     |                                           |                                       |
| OU 1            | Not a risk to human health                        | None         | Fuels |                                                | -                   | Residential, commercial, recreational     | Residential, recreational             |
| OU 2            | Not a risk to human health                        | None         | Fuels | -                                              | -                   | Residential, recreational, commercial     | Residential, recreational             |
| Janes Ravine    | Risk to human health<br>(HI 3.5E+00, CRL 2.1E-05) | -            | -     | Thallium                                       | Open space          | Residential, recreational                 | Recreational                          |
| Bartlett Ravine | Risk to human health<br>(HI 1.7E-01, CRL 2.8E-04) | -            | -     | Methylene chloride, bis(2-ethylhexyl)phthalate | Road way/recreation | Residential, recreational, post buildings | Commercial, residential, recreational |

Key: HI = Hazard Index  
 CRL = Carcinogen Risk Level

## **6.7 Interim Monitoring of Groundwater and Surface Water**

Interim groundwater monitoring is not being conducted within the disposal and reuse parcels on Fort Sheridan.

### **6.7.1 BCT Action Items**

There are no action items related to groundwater monitoring within the disposal and reuse parcels on Fort Sheridan.

### **6.7.2 Rationale**

The draft remedial investigation (June 1992) does not indicate a need for groundwater monitoring within the disposal and reuse parcels on Fort Sheridan.

### **6.7.3 Status/Strategy**

If the final RI/RA/FS report indicates a need for groundwater monitoring, a strategy will be developed.

## **6.8 Excavation of Contaminated Materials**

No additional excavation of contaminated materials has been identified for Fort Sheridan at this time. This activity will be addressed in future versions of this BCP as appropriate.

### **6.8.1 BCT Action Items**

If ongoing environmental investigations at Fort Sheridan identify contaminated source areas that can be removed by excavation, the BCT will address this requirement through the installation-wide remedial strategy.

### **6.8.2 Rationale**

An installation-wide remedial strategy should identify when excavation is necessary.

### **6.8.3 Status/Strategy**

Currently, no new contaminated materials requiring excavation have been identified at Fort Sheridan. The BCT will develop a strategy for excavation activities on an as required basis.

## **6.9 Protocols for Remedial Design Reviews**

The Fort Sheridan BCT will coordinate with other IRP contractors to develop protocols for remedial design reviews associated with zones, OUs, or sites requiring remedial action.

### **6.9.1 BCT Action Items**

The BCT will adopt remedial design protocols as part of the remedial strategy. The BCT will also provide any decision documents and design information to the RAB, once established, and other interested parties.

### **6.9.2 Rationale**

Review of remedial designs is critical to ensure they will achieve cleanup goals and that they are technically and administratively feasible.

### **6.9.3 Status/Strategy**

Copies of remedial design documents will be provided to members of the BCT and other interested parties for review in a manner consistent with the protocols specified under CERCLA Section 120, and in accordance with all ARARs specified in Chapter 4 and Section 6.11 of this document.

## **6.10 Conceptual Models**

Conceptual site models have not yet been prepared for OUs at Fort Sheridan. When prepared, conceptual site model summaries will be provided in Appendix E.

### **6.10.1 BCT Action Items**

The BCT is in the process of developing conceptual site models.

### **6.10.2 Rationale**

Conceptual site models will be developed based on the results of past investigations and ongoing remedial actions as they progress. The conceptual models can be used to identify data gaps and evaluate potential remedial action alternatives.

### **6.10.3 Status/Strategy**

Past investigation results will be reviewed, evaluated, and integrated with existing data to develop conceptual models. The models will focus on source areas, potential extent of contamination, potential contaminant migration pathways, and identification of potential receptors.

## **6.11 Cleanup Standards**

Cleanup standards are used to identify remedial alternatives capable of achieving cleanup goals, and the time at which remediation is complete. No cleanup standards have been identified for Fort Sheridan.

### **6.11.1 BCT Action Items**

The Fort Sheridan BCT will develop a list of acceptable cleanup standards.

### **6.11.2 Rationale**

In the absence of federal- or state-mandated cleanup standards for hazardous wastes or constituents in soils, the approach for providing remediation criteria for contaminated soils is either through the conduct of risk assessment specific to a site or the use of more generic guidance levels. The Interim Final RCRA Facility Investigation (RFI Guidance, Volume I of IV, Development of an RFI Work Plan and General Considerations for RCRA Facility Investigations (USEPA 30/SW-89-031, Waste Management Division, Office of Solid Waste, May 1989) provides health-based guidance criteria concentrations for a number of hazardous compounds and elements based on oral and inhalation exposure routes. These health-based criteria are provided for known carcinogens (Table 8-6 of the RFI guidance) and systematic toxicants (Table 8-7 of the RFI guidance). The criteria are subject to change and will be confirmed by the appropriate regulatory agency prior to use. For many compounds listed in Table 6-2 of the RFI guidance, no guidance levels have been developed. The Project Team should investigate the applicability of Illinois UST cleanup standards for sites identified in the FFA, but found to be contaminated only with petroleum products.

### **6.11.3 Status/Strategy**

The cleanup standards will be selected after review and evaluation of ARARs, risk estimates, and review of potential future land use. For many compounds, no guidance levels have been developed. For these compounds, other ARAR criteria may apply. ARARs must be evaluated on a case-by-case basis as the need arises.

## **6.12 Initiatives for Accelerating Cleanup**

Initiatives for expediting remedial actions have been developed for Fort Sheridan.

### **6.12.1 BCT Action Items**

The BCT will continue to implement the initiatives for accelerating cleanup as listed in Section 6.12.3.

### **6.12.2 Rationale**

It is desirable to initiate accelerated cleanups at Fort Sheridan to facilitate the property transfer process.

### **6.12.3 Status/Strategy**

The following initiatives have been implemented by the Project Team for expediting response actions at the installation:

- ▶ Identify ARARs - Develop a list of ARARs by obtaining lists of ARARs from the state and other agencies and examine the Records of Decision (RODs) for similar sites in the same state to identify which ARARs are likely to apply.
- ▶ Risk-based Cleanup - Pursue negotiations with the regulators to agree on risk-based cleanup standards based on future land usage.
- ▶ Define Document Review Process - Negotiate terms with the regulatory reviewers to streamline the review process by agreeing to a definitive time cycle (such as 12 months) from the submittal of a draft FS/PP to the signing of a ROD.
- ▶ Concurrent Reviews - Develop a complete list of reviewers early and pursue parallel review tracks to eliminate delays.
- ▶ Team Approach - Build a strong team consisting of the installation Remedial Project Manager (RPM), U.S. Army representatives, contractors, and federal and state regulatory personnel that have the authority, responsibility, and accountability for implementing innovative solutions to remediate and close sites in a timely, cost-effective manner.
- ▶ Joint Preparation - Expedite the document preparation and review/approval by forming a working team with USEPA and IEPA when preparing required documents such as DDs and RODs.
- ▶ Community Involvement - Involve the community during the remedial process to encourage support at the time of site closure. By informing the community during the process, the likelihood of opposing comments during the public comment period is lessened.
- ▶ Innovative Technologies - Pursue collaborative projects using innovative technologies being researched at the U.S. Army, USEPA, state or those suggested by the contractor.
- ▶ Innovative Contracting - Maximize flexibility of contracting procedures and investigate use of level-of-effort, direct/cost reimbursement, award incentives, and other flexible contracting methods.

### **6.13 Remedial Actions**

The Fort Sheridan BCT will evaluate the results of the RI/RA report and the CERFA report to determine additional actions that may be necessary. Potential sites requiring remediation are Landfill 2 and Landfill 3/4.

#### **6.13.1 BCT Action Items**

The BCT will review available data to select appropriate remedial alternatives and address the technical issues that affect remedial actions in a timely manner.

#### **6.13.2 Rationale**

Technical issues must be addressed in a timely manner in order to ensure that the remedial action schedules are not drastically affected. It is desirable that remedial actions required at Fort Sheridan be done prior to transfer of the disposal and reuse parcels.

#### **6.13.3 Status/Strategy**

Remedial actions will be incorporated into the post-wide remedial action strategy. Selection of remedial alternatives will be based on data from ongoing environmental investigations, evaluation of cleanup standards, and the technical and administrative feasibility of potential alternatives.

### **6.14 Review of Selected Technologies for Application of Expedited Solutions**

Expedited implementation of remedial technologies may be desirable at Fort Sheridan to facilitate property transfer efforts.

#### **6.14.1 BCT Action Items**

The BCT will make every effort to expedite implementation of any necessary remedial technologies to facilitate transfer for the Fort Sheridan. Potential methods for expediting implementation include concurrent document preparation; fast-track design, review, and construction of remedial systems; excavation or removal of hot spots or continuing sources; and use of presumptive remedies.

#### **6.14.2 Rationale**

It is desirable to expedite evaluation of remedial technologies at Fort Sheridan in order to facilitate the property transfer process.

#### **6.14.3 Status/Strategy**

At the present time, environmental investigations are ongoing at Fort Sheridan. If these investigations indicate the need for remediation, cleanup initiatives which are capable of meeting cleanup standards, and are technically and administratively feasible will be identified. The time required to achieve cleanup standards will be considered during selection of cleanup approaches. Cleanup initiatives will be expedited as much as possible and will be incorporated into the basewide remedial action strategy.

## **6.15 Hot Spot Removals**

There are currently no hot spot removals planned at Fort Sheridan.

### **6.15.1 BCT Action Items**

If any hot spots are identified within the Fort Sheridan disposal and reuse parcels, the BCT will review the situation to determine if removal of the hot spots will expedite cleanup and property transfer efforts. If these efforts will be expedited by a hot spot removal, the BCT may elect to incorporate this approach into the remedial action strategy for the installation.

### **6.15.2 Rationale**

Hot spot removals may expedite any required cleanup efforts and facilitate property transfer. If appropriate, hot spot removals may be used to achieve these goals.

### **6.15.3 Status/Strategy**

Should information arise which would suggest the need for immediate action in order to protect human health and the environment, the BCT in conjunction with USAEC; USACE Louisville District; and the Safety, Occupational Health, and Environmental Division at Fort McCoy will evaluate the situation and make decisions regarding the best strategy for removal.

## **6.16 Identification of Clean Properties**

The CERFA report has identified clean properties at Fort Sheridan.

### **6.16.1 BCT Action Items**

As areas at Fort Sheridan are remediated, the BCP will be updated to reflect the changes.

### **6.16.2 Rationale**

It is necessary to identify clean properties as part of the property transfer effort.

### **6.16.3 Status/Strategy**

Section 3.4.5 of this BCP describes the suitability of property for transfer. The CERFA process is being used as a screening mechanism to identify properties that are immediately transferable. The properties have been designated CERFA parcels and CERFA parcels with qualifiers. Figure 3-3 illustrates these parcels which are immediately transferable. The CERFA report is currently being reviewed by the appropriate regulatory agencies. As areas at Fort Sheridan are remediated, the BCP will be updated to reflect the changes.

## **6.17 Overlapping Phases of the Cleanup Process**

Remedial alternatives will continue to be evaluated to determine opportunities for combining remedial action efforts at Fort Sheridan.

### **6.17.1 BCT Action Items**

The BCT will review remedial alternatives to evaluate where opportunities exist for combining remedial actions in order to eliminate duplication of effort.

### **6.17.2 Rationale**

Overlapping remedial actions can eliminate redundant efforts and facilitate property transfer.

### **6.17.3 Status/Strategy**

If additional investigations or remedial activities are necessary, it may be desirable to conduct them concurrently as part of the post-wide remedial action strategy to expedite property transfer efforts.

## **6.18 Improved Contracting Procedures**

Efficient and cost-effective contracting procedures are necessary to expedite the restoration process.

### **6.18.1 BCT Action Items**

No BCT action items regarding contracting have been identified.

### **6.18.2 Rationale**

Any unresolved technical issues relative to improved contracting procedures will be addressed in future revisions to this BCP, as needed.

### **6.18.3 Status/Strategy**

The U.S. Army is currently considering implementation of Total Environmental Restoration Contracts (TERC) to allow the environmental studies, remedial designs and remedial actions to be completed by one contractor under one contract in order to expedite the restoration process. Because the restoration process at Fort Sheridan is in a fairly advanced stage, implementation of TERCs may not apply. However, the U.S. Army is giving special emphasis to accelerating contracts on BRAC installations.

## **6.19 Interfacing with the Community Reuse Plan**

Interface with a community reuse plan is desirable to expedite implementation of remedial actions, and identification and transfer of parcels to the community.

### **6.19.1 BCT Action Items**

A draft final CRP has been prepared for Fort Sheridan (February 1994). The BCT will update the CRP as necessary. Implementation of the CRP will assist in interfacing with the community during the development of a reuse plan.

### **6.19.2 Rationale**

Coordination with the Joint Planning Committee and their planning process will contribute to the selection of appropriate cleanup standards and facilitates implementation of remedial alternatives, ultimately resulting in successful transfer of property.

### **6.19.3 Status/Strategy**

The BCT is considering various reuse scenarios put forward since 1991 and continuing to work with the Joint Planning Committee to evaluate restoration actions with respect to future land use. The Base Transition Coordinator attends all meetings of the Task Force and relays information to the BCT. In addition, the RAB will allow the community and the BCT to study the progress and decisions regarding Fort Sheridan.

## **6.20 Bias for Cleanup Instead of Studies**

Whenever possible, the BCT will select early cleanup rather than additional studies of potentially contaminated sites. This approach will expedite early achievement of cleanup goals and transfer of property.

### **6.20.1 BCT Action Items**

The BCT will make every effort to implement any necessary remedial technologies as soon as possible to facilitate transfer of the Fort Sheridan disposal and reuse parcels.

### **6.20.2 Rationale**

Early implementation of remedial alternatives will reduce the need for additional studies of contaminated sites and will accelerate completion of cleanup activities. This in turn will facilitate property transfer efforts.

### **6.20.3 Status/Strategy**

Where applicable, the BCT will promote cleanup instead of studies.

## **6.21 Expert Input on Contamination and Potential Remedial Actions**

It is necessary that proper resources are used to evaluate contamination and associated remedial actions.

### **6.21.1 BCT Action Items**

The BCT is currently utilizing the state, USEPA, USAEC, U.S. Army Environmental Hygiene Agency (USAEHA) and contractors to ensure that the proper resources are used to evaluate contamination and potential remedial actions.

### **6.21.2 Rationale**

The use of several entities involved in the restoration at Fort Sheridan will promote an expedited property transfer process.

### **6.21.3 Status/Strategy**

The state, USEPA, USAEC, USAEHA, and contractors will continue to ensure that the proper resources are used to evaluate contamination and potential remedial actions.

## **6.22 Presumptive Remedies**

The USEPA has issued guidance on presumptive remedies for a few specific contamination scenarios, e.g., one of the presumptive remedies for vadose zone volatile organic compound contamination is soil vapor extraction. Some of these presumptive remedies may be applicable to Fort Sheridan if contamination scenarios are similar to those in the presumptive remedy guidance.

### **6.22.1 BCT Action Items**

The BCT will consider presumptive remedies to expedite implementation of the installation's remedial action strategy.

### **6.22.2 Rationale**

The use of presumptive remedies may potentially expedite the cleanup process by allowing for expedited implementation of cleanup technologies.

### **6.22.3 Status/Strategy**

Presumptive remedies will be used where applicable. These remedies may be applicable when addressing Landfill 3/4.

## **6.23 Partnering (Using Innovative Management, Coordination, and Communication Techniques)**

Partnering is the process of fostering cooperation and communication between key players in the BRAC process.

### **6.23.1 BCT Action Items**

At the present time, the BCT is actively fostering partnerships with USAEC, the community, and regulatory agencies through scheduled meetings and the document review process.

### **6.23.2 Rationale**

Close cooperation/coordination between Fort Sheridan, USAEC, the community, and regulators helps foster good working relationships, and can accelerate implementation of the installation's remedial action strategy by keeping "key players" informed of the status of environmental efforts, soliciting their input, and addressing potential concerns in the remediation process.

### **6.23.3 Status/Strategy**

The BCT plans to continue its activities and to encourage information transfer between Fort Sheridan, USAEC, the community, and regulators.

## **6.24 Updating the CERFA Report and Natural/Cultural Resources Documentation**

At the present time, Fort Sheridan cultural resources are well documented, although additional archaeological surveys have been recommended. The information on natural resources of Fort Sheridan, primarily biological resources, is over 17 years old and no natural resources management plan is available. The CERFA report, including parcel classifications, will be updated as necessary based on the results of ongoing restorations at Fort Sheridan.

### **6.24.1 BCT Action Items**

The BCT will update the CERFA report, including parcel classifications, as necessary when remedial actions at Fort Sheridan are complete. The BCT will evaluate the need to update biological resource data.

### **6.24.2 Rationale**

Updates of the CERFA report are necessary to reflect changes in parcel classification based on completion of remedial actions. It is anticipated that parcel reclassification will ultimately result in most, if not all, of the Fort Sheridan disposal and reuse parcels becoming eligible for property transfer. The update of the biological resources data will allow for more effective planning and thus expedite the transfer of the property.

### ***6.24.3 Status/Strategy***

The BCT will periodically review the CERFA report in conjunction with new data from remedial actions to determine if parcels can be reclassified to allow property transfer.

## **6.25 Implementing the Policy for On-Site Decision Making**

If decisions leading to investigation, remediation, and transfer of Fort Sheridan can be made onsite, implementation of the installation-wide remedial action strategy will be expedited.

### ***6.25.1 BCT Action Items***

At the present time, the BCT is actively fostering partnerships with USAEC, the community, and regulatory agencies through scheduled meetings and the document review process. This will enhance the BCT's ability to make effective onsite decisions and will speed the BRAC process.

### ***6.25.2 Rationale***

Close cooperation/coordination between Fort Sheridan, USAEC, the community, and regulators helps to foster good working relationships, and can accelerate implementation of the installation-wide remedial action strategy by keeping "key players" informed of the status of environmental efforts, soliciting their input, allowing effective onsite decision making, and addressing potential concerns in the remediation process.

### ***6.25.3 Status/Strategy***

The BCT plans to continue its activities and to encourage information transfer between Fort Sheridan, the community, and regulators.

## **6.26 Structural and Infrastructure Constraints to Reuse**

At the present time, no structural or infrastructure constraints to reuse of Fort Sheridan have been identified.

### ***6.26.1 BCT Action Items***

If structural and infrastructure constraints to reuse of Fort Sheridan are identified, the BCT will evaluate approaches for overcoming these constraints, or for alternative reuses, so the property can be transferred.

### ***6.26.2 Rationale***

Potential structural and infrastructure constraints must be overcome, or alternative reuses must be identified, to allow transfer of Fort Sheridan disposal and reuse parcels.

### ***6.26.3 Status/Strategy***

At the present time, no structural or infrastructure constraints to reuse of Fort Sheridan disposal and reuse parcels have been identified.

### **6.27 Other Technical Reuse Issues to be Resolved**

At the present time, no other technical reuse issues have been identified.

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# CHAPTER 7

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Chemical Systems Laboratory, Aberdeen Proving Ground. 1982. Installation Assessment of Fort Sheridan and Joilet Training Area, Illinois.

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U.S. Army. 1988. Fourth U.S. Army Memorandum 340-1, Fort Sheridan Historical Data.

# **APPENDIX A**

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## **► FISCAL YEAR FUNDING REQUIREMENTS/COSTS ◀**

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**TABLE A-1. TOTAL ENVIRONMENTAL PROGRAM SUMMARY**

| FUND REQUIREMENTS (\$000) |         |         |         |         |         |         |         |       |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Program                   | FY 1993 | FY 1994 | FY 1995 | FY 1996 | FY 1997 | FY 1998 | FY 1999 | Total |
| IRP DERA                  | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0     |
| IRP BRAC                  | 2485    | 6723    | 6775    | 0       | 0       | 0       | 0       | 15982 |
| EC-CR                     | 0       | -       | 0       | 0       | 0       | 0       | 0       | 0     |
| EC-MR                     | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0     |
| NAT/CULT                  | 117     | 40      | 0       | 0       | 0       | 0       | 0       | 157   |
| Total                     | 2602    | 6763    | 6774    | 0       | 0       | 0       | 0       | 16139 |

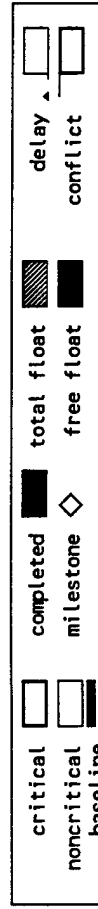
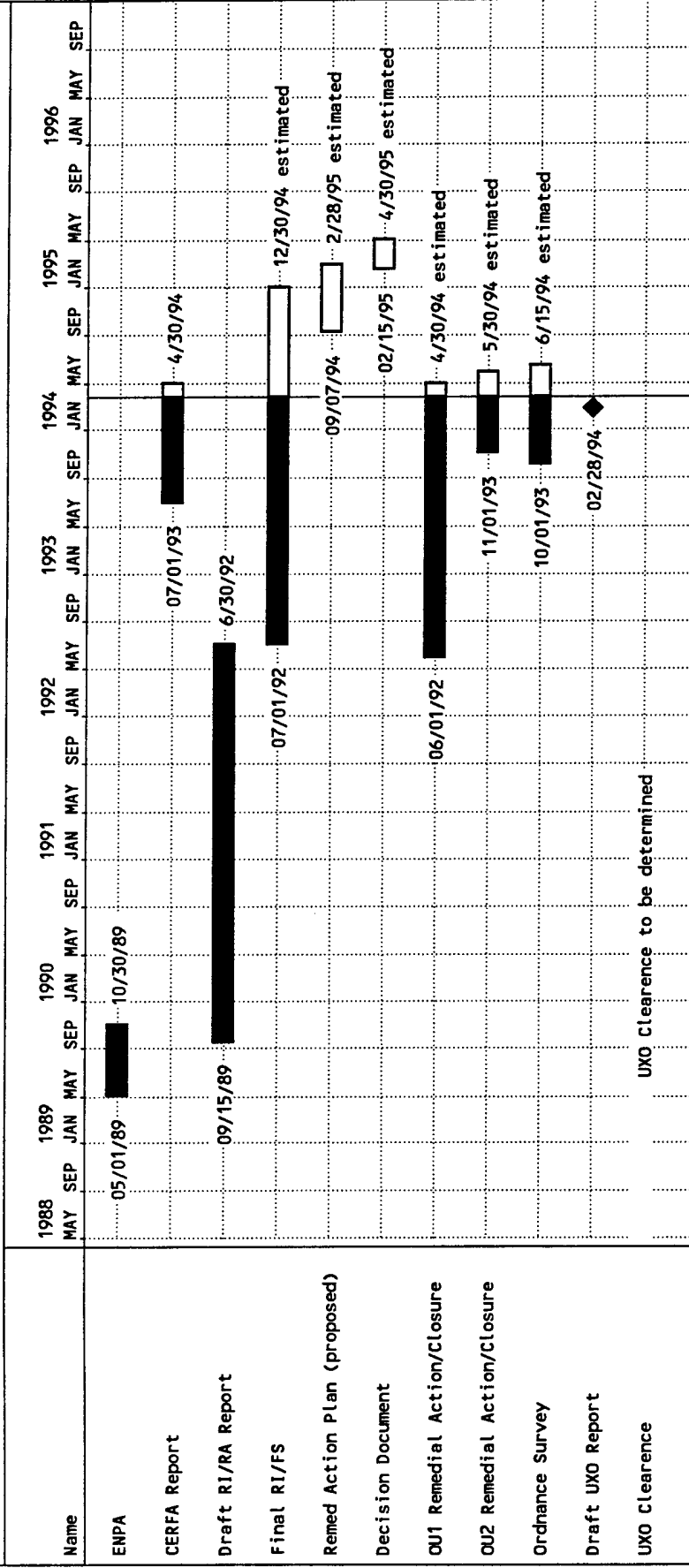
**TABLE A-2. HISTORICAL ENVIRONMENTAL PROGRAM EXPENDITURES SUMMARY**

| FUND REQUIREMENTS (\$000) |         |         |         |         |         |         |         |       |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|-------|
| Program                   | FY 1986 | FY 1987 | FY 1988 | FY 1989 | FY 1990 | FY 1991 | FY 1992 | Total |
| IRP DERA                  | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0     |
| IRP BRAC                  | 0       | 0       | 0       | 0       | 2999    | 512     | 513     | 4024  |
| EC-CR                     | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0     |
| EC-MR                     | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0     |
| NAT/CULT                  | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0     |
| Total                     | 0       | 0       | 0       | 0       | 2999    | 512     | 513     | 4024  |

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PROJECT: Fort Sheridan  
 MANAGER: Allan Balliet  
 CURRENT DATE: 03/25/94  
 AS OF DATE: 03/25/94

Figure A-1



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## **APPENDIX B**

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### **► INSTALLATION ENVIRONMENTAL RESTORATION DOCUMENTS SUMMARY TABLES ◄**

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**TABLE B-1. PROJECT DELIVERABLES**

| Year | Phase | Project Title                                                                                                                   | Report No. | Sites Examined    | Delivery date/<br>By Whom                                                       |
|------|-------|---------------------------------------------------------------------------------------------------------------------------------|------------|-------------------|---------------------------------------------------------------------------------|
| 1982 | IA    | Installation Assessment of Fort Sheridan and Joliet Training Area                                                               | 1          | Sites not defined | Chemical Systems Laboratory, 1982                                               |
| 1984 | PA    | Enhanced Preliminary Assessment Report: Fort Sheridan                                                                           | 2          | Sites not defined | Argonne National Laboratory, 1989                                               |
| 1990 | NEPA  | Fort Sheridan, IL Base Closure Final Environmental Impact Statement                                                             | 3          | Sites not defined | U.S. Army, 1990                                                                 |
| 1992 | RI/RA | Draft Final Remedial Investigation (RI)/Risk Assessment (RA) Report Remedial Investigation/Feasibility Study, Fort Sheridan, IL | 4          | Sites not defined | Environmental Science and Engineering, Inc./ U.S. Army Corps of Engineers, 1992 |
| 1992 | RI/RA | Report of Findings for PCB Transformer Sampling Conducted at Fort Sheridan                                                      | 5          | Sites not defined | Environmental Science and Engineering, Inc. 1992                                |
| 1992 | IRP   | Closure Report/Remove Underground Storage Tanks, Fort Sheridan, IL                                                              | 6          | Sites not defined | Allstates Environmental Services, Inc. 1992                                     |
| 1993 | NEPA  | Final Environmental Assessment for Disposal and Reuse of Fort Sheridan, IL                                                      | 7          | Sites not defined |                                                                                 |
| 1993 | NEPA  | Literature View, Architectural Evaluation and Phase I Archaeological Reconnaissance of Selected Portions of Fort Sheridan, IL   | 8          | Sites not defined | USACERL, 1993                                                                   |
| 1993 | CERFA | Draft CERFA Report                                                                                                              | 9          | Sites not defined | The Earth Technology Corporation, 1993                                          |
| 1994 | RI/RA | Fort Sheridan Ordnance Survey (50-acre parcel)                                                                                  | 10         | Sites not defined | International Technology Corporation, 1994                                      |

**TABLE B-2. SITE DELIVERABLES**

|  |                                                            |  |  |  |  |
|--|------------------------------------------------------------|--|--|--|--|
|  |                                                            |  |  |  |  |
|  | <b>No specific site deliverables have been identified.</b> |  |  |  |  |
|  |                                                            |  |  |  |  |

**TABLE B-3. TECHNICAL DOCUMENTS/DATA  
LOADING STATUS SUMMARY**

|  |                                                                                    |  |  |  |  |
|--|------------------------------------------------------------------------------------|--|--|--|--|
|  |                                                                                    |  |  |  |  |
|  | <b>The status of technical documents data loading has not<br/>been determined.</b> |  |  |  |  |
|  |                                                                                    |  |  |  |  |

# **APPENDIX C**

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## **► DECISION DOCUMENT/ROD SUMMARIES ◀**

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# APPENDIX C

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## ► DECISION DOCUMENT/ROD SUMMARIES ◀

No Decision Documents or IRP RODs have been prepared for Fort Sheridan activities.

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# APPENDIX D

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## ► NO FURTHER RESPONSE ACTION PLANNED (NFRAP) SUMMARIES ◀

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# **APPENDIX D**

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## **► NO FURTHER RESPONSE ACTION PLANNED (NFRAP) SUMMARIES ◄**

No formal NFRAP Decision Documents have been prepared.

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# **APPENDIX E**

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## **► CONCEPTUAL SITE MODEL DATA SUMMARIES ◀**

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# APPENDIX E

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## ► CONCEPTUAL SITE MODEL DATA SUMMARIES ◀

No conceptual site models have been selected for Fort Sheridan activities.

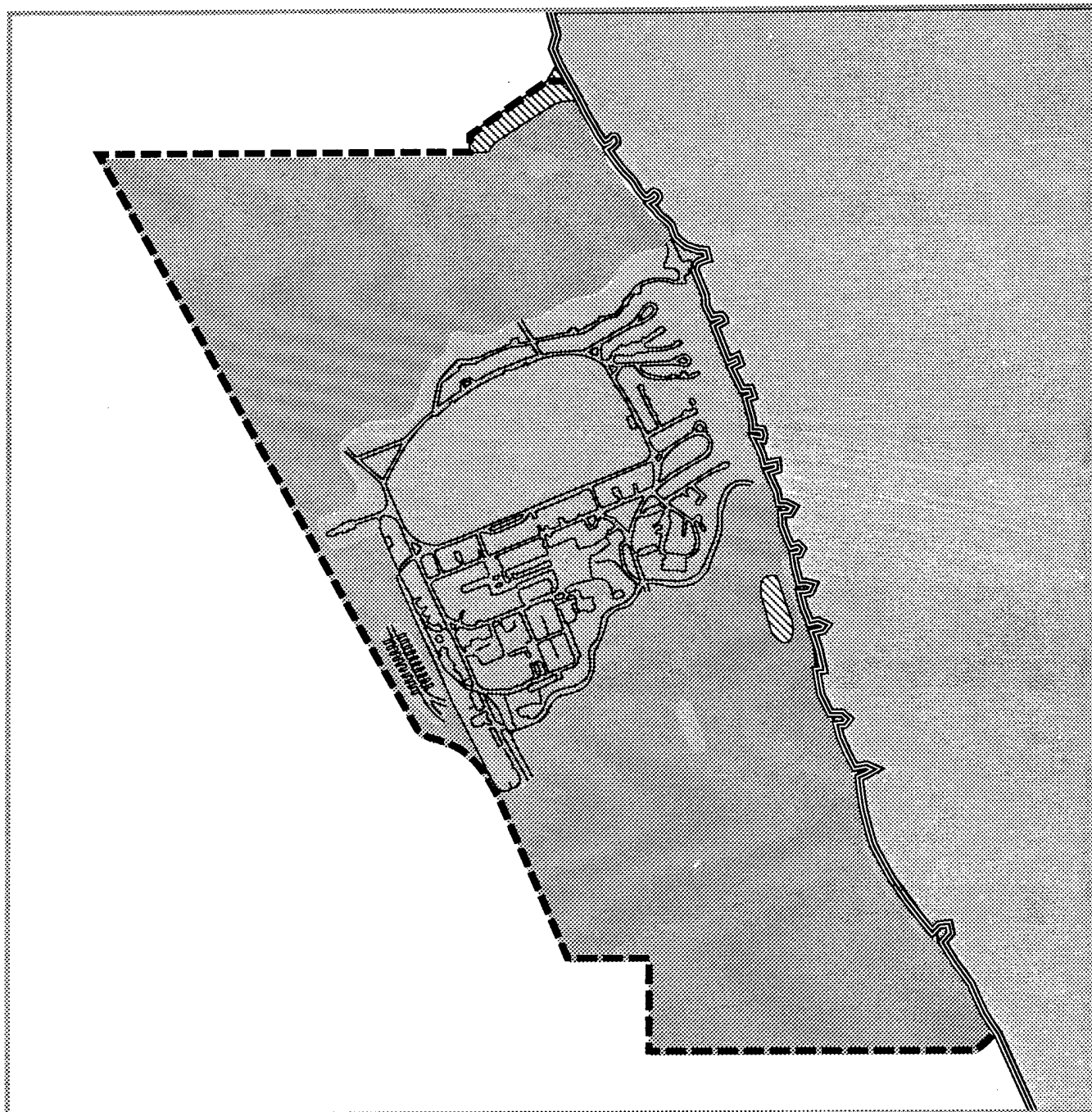
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# **APPENDIX F**

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## **► OTHER ANCILLARY BCP MATERIALS ◀**

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#### EXPLANATION

-  Wetlands
-  INAI Natural Areas
-  Historic District and National Registrar Eligible Buildings
-  Installation Boundary

Distribution of  
Known Sensitive  
Natural Areas,  
Wetlands and  
Cultural Resources  
on Fort Sheridan



Figure F-1

## ► DISPOSAL MILESTONES ◀

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**TABLE F-1. DISPOSAL MILESTONES**

| Action                                                                                                                   | Completion Date     |
|--------------------------------------------------------------------------------------------------------------------------|---------------------|
| Army awards contract for Fort Sheridan Historic Preservation Survey                                                      | May 1993            |
| Contractor completes Survey and submits report to Corps                                                                  | September 1993      |
| Environmental Assessment for disposal/reuse                                                                              | September 1993      |
| Army seeks approval of Historic Preservation Survey by Illinois Historic Preservation Agency (IHPA) and Advisory Council | December 1993       |
| Complete Housing Transfer to Navy                                                                                        | January 1994        |
| HUD Determination of Suitability for Homeless                                                                            | January 1994        |
| Memorandum of Agreement (MOA) to IHPA and Advisory Council for review                                                    | February 1994       |
| Draft lease prepared for interim operation of golf course by Lake County Forest Preserve (LCFP)                          | February 1994       |
| Completion of review process by IHPA and Advisory Council of Survey and MOA                                              | February 1994       |
| Workshop for Homeless Agencies                                                                                           | February 1994       |
| Notice of Surplus Determination                                                                                          | February 1994       |
| Published in Federal Register (begins 60-day "freeze" period)                                                            | March 1994          |
| Lease golf course to LCFP                                                                                                | April/June 1994*    |
| Approval by IHPA and Advisory Council of Survey and MOA                                                                  | April 1994          |
| Make available to the Redevelopment Authority                                                                            | May 1994**          |
| State and Local Screening                                                                                                | May 1994**          |
| State and Local interest determined                                                                                      | June 1994**         |
| Finding of No Significant Impact (FONSI) for disposal/reuse                                                              | June 1994           |
| HUD Determination of Suitability for Homeless                                                                            | August/October 1994 |
| Determine strategy for disposal to private sector                                                                        | September 1994      |
| Scope of Work for contractor's marketing plan                                                                            | November 1994       |
| Negotiate conveyance of a golf course to LCFP                                                                            | November 1994       |
| Begin appraisal of Fort Sheridan Historic District                                                                       | January 1995        |
| Disposal Plan                                                                                                            | January 1995        |
| HUD Determination of Suitability for Homeless                                                                            | February/April 1995 |
| Advertise property for sale by competitive bid process                                                                   | May 1995            |
| Statement of Condition (SOC)                                                                                             | June 1995           |
| Schedule bid opening/open bids                                                                                           | July 1995           |
| Award bids (pending receipt of SOC)                                                                                      | August 1995         |
| Close real estate transactions                                                                                           | August 1995         |

\*Based on McKinney Act screening in February 1994 or approval from CERE-C to lease subject to McKinney.

\*\*Based on McKinney Act screening in February 18 - April 19 timeframe.

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**► CULTURAL RESOURCES  
MEMORANDUM OF AGREEMENT ◄**

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MEMORANDUM OF AGREEMENT  
BETWEEN THE DEPARTMENT OF THE ARMY,  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,  
AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER  
CONCERNING DISPOSAL OF FORT SHERIDAN, ILLINOIS

Whereas the Department of the Army (Army) has conducted appropriate inventory measures to identify National Register eligible archaeological and architectural properties at Fort Sheridan, Illinois, and determined that the closure of that installation may have adverse effects on properties that are listed in or determined to be eligible for the National Register of Historic Places as Part of the Fort Sheridan National Historic Landmark (NHL) or as separate properties, and has consulted with the Illinois State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation (Council) in accordance with Section 106 of the National Historic Preservation Act, 16 U.S.C. 470 (the Act), its implementing regulations (36 CFR Part 800), and the Programmatic Agreement among the Army, the Council, and the National Conference of State Historic Preservation Officers as amended 17 July 1992 (PA); and

Whereas the Fort Sheridan Joint Planning Committee and other interested parties have participated in the consultation, and have been invited to concur in this Memorandum of Agreement (MOA);

Now, therefore, it is mutually agreed that the following stipulations will be adhered to in order to take into account the effect of the closure and disposal of Fort Sheridan on historic properties, in accordance with the Act.

Stipulations

The Army will ensure that the following stipulations are implemented:

I. Applicability

A. The terms of this agreement apply to the program to dispose of Fort Sheridan lands and properties as mandated by the Base Realignment and Closure Act of 1988 (P.L. 100-526). Only those resources that are significant -- that meet the criteria for listing in the National Register of Historic Places (National Register) -- are historic properties. Historic properties are those places listed on or eligible for listing on the National Register that hold scientific, historic, artistic, or technological importance.

B. At Attachment A is a general location map of Fort Sheridan, showing currently identified properties now on or recommended as eligible for the National Register. For the purposes of this Agreement, the Fort Sheridan Historic District (District) is the National Historic Landmark (NHL) as listed in the National Register in 1980.

## II. Areas of Potential Effects

A. For the purposes of this agreement, the area of potential effects (36 CFR 800.2[c]) is the area within the installation boundaries scheduled for disposal as part of the Base Realignment and Closure action. It is possible that this action could have an adverse effect on Fort Sheridan properties that are now on or considered to be eligible for the National Register.

B. Based upon current information, the decision to dispose of Fort Sheridan lands and properties should have no adverse effect on historic properties beyond current installation boundaries.

## III. Identification and Evaluation

A. The Army, in concert with an architectural historian meeting the minimum qualifications set forth in the Secretary of the Interior's Professional Qualifications Standards for Architectural History (36 CFR Part 66), has completed an inventory and evaluation of all buildings, structures, and designated landscapes at Fort Sheridan both within and outside of the District and a report of this examination has been filed with the Council and the SHPO. This study has also evaluated the significance of the shorelines, ravines, bluffs, open spaces, and parade ground.

B. The Army has also conducted a survey to locate any National Register eligible archeological sites that may be present within the boundaries of Fort Sheridan. A report documenting this survey has been filed with the Council and SHPO. This survey was conducted by an archeologist that met the minimum qualifications set forth in the Secretary of the Interior's Professional Qualifications Standards for Archeologist (36 CFR Part 66).

C. Based upon the investigations conducted pursuant to stipulations I.A. and I.B., the Army, in consultation with the Illinois SHPO, will apply the National Register Criteria (36 CFR 60.4) to all buildings, structures, landscape elements, and archeological sites to determine whether: (a) they should be included within an expanded Fort Sheridan District, and/or whether (b) they should be recognized as eligible for inclusion in the National Register either individually or as parts of a separate historic district.

D. If the Army and the Illinois SHPO agree that a building, structure or landscape element should be included in the Fort Sheridan District, they shall redraw the boundaries of the District accordingly and take into account the effects of property disposal upon the District.

E. If the Army and SHPO agree that a building, structure, designed landscape, archeological site, or any group or combination of buildings, structures, landscapes, or archeological sites lying outside the Fort Sheridan District is individually or collectively eligible for inclusion in the National Register but should not be included in the District, the Army, in consultation with the SHPO, will take into account the affects of disposal upon these properties.

F. If the Army and the SHPO disagree about the boundaries of District or the eligibility of properties within or outside of the District, the Army will refer the disagreement to the Keeper of the National Register, whose decision in the matter shall be final.

#### IV. Disposal of Fort Sheridan Properties

A. The Army will consult with the SHPO and the Council to make a good faith effort to dispose of the Fort Sheridan District and all other Fort Sheridan National Register eligible properties in a manner that is compatible with their historic and architectural contexts. The Army encourages input from the SHPO and other interested parties in identifying developers that would be interested in acquiring the property and preserving its historic aspects.

B. The Army will make every good faith effort to transfer the District in toto and unsubdivided. Should it prove necessary to subdivide the property in order to obtain an appropriate price, or for other reasons, the Army will consult with the parties to this Agreement to determine whether additional measures should be employed to protect historic properties, and will implement any measures agreed upon.

C. The Army will prepare a marketing plan, in consultation with the SHPO, for the District and any other National Register eligible properties located on Fort Sheridan. The marketing plan shall include the following elements:

1. An information package about the property, including but not limited to:

- \* photographs of the property;
- \* a parcel map;

- \* information on the property's historic and architectural significance identifying elements or characteristics of the property that should be given special consideration in planning;
  - \* information on Federal tax benefits for rehabilitation of historic structures;
  - \* notification that the purchaser will be required to rehabilitate and maintain the property in accordance with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (U.S. Department of the Interior, National Park Service, 1983) unless renegotiated with the Illinois SHPO;
  - \* notification that a restrictive covenant (Attachment B) will be included in the transfer document; and
  - \* a requirement that all those offering to purchase the District or any portion thereof to include in their offerings a proposed development and management plan for the District, which shall meet the standards set forth in Attachment C. The Army will encourage offerers to prepare their development and management plans in consultation with the SHPO.
2. A distribution list of potential purchasers or transferees;
  3. An advertising plan and schedule; and
  4. A schedule for receiving and reviewing offers.

D. The Army will afford the SHPO thirty (30) days to review and concur in the marketing plan. Should the SHPO not respond within thirty (30) days, the Army will assume the SHPO concurs in the plan.

E. Upon the SHPO's concurrence in the marketing plan, the Army shall implement the plan. If concurrence can not be reached, the plan will be submitted to the Advisory Council on Historic Preservation for review and comment.

F. The Army will review all offers in consultation with the SHPO prior to acceptance.

The Army, in consultation with the SHPO may negotiate with an offerer to obtain needed changes in the offerer's development and management plan, and will approve the successful offerer's development and management plan prior to transferring the real property to which it pertains.

The Army will ensure that all real property within the District is transferred subject to the recipient's formal agreement to

implement the approved development and management plan, and that the recipient's agreement is made a part of the instrument transferring the real property and is recorded in the real estate records of Lake County, Illinois.

G. The Army will ensure that the purchaser will be notified that all rehabilitation and maintenance for historic buildings must be carried out in accordance with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation Historic Buildings (U.S. Department of the Interior, National Park Service, 1983, hereinafter "Standards"); that the instrument transferring the property incorporate the covenant attached hereto as Attachment B; and that the covenant is recorded in the real estate records of Lake County, State of Illinois.

H. If, within a period of six (6) months, there is no acceptable offer that will conform to the rehabilitation and maintenance requirements of the Standards for the entire property or individual parcels that contain historic properties, the Army will consult with the SHPO about 1) modifying the covenant to reduce the requirements, or 2) transferring the property without a preservation covenant. In that event, the Army will consult with the Illinois SHPO and the Advisory Council about conducting appropriate Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) recordation measures for affected properties which are listed in or considered eligible for inclusion in the National Register of Historic Places.

*may possible*  
I. To reduce possible conflicts with the over all development/marketing of the property, McKinney Act interests and state and local requirements will be addressed in the marketing plan.

## V. Dispute Resolution

A. Should any party to this agreement object within thirty (30) days to any plans or other documents provided by the Army or others for review pursuant to this agreement, or to any actions proposed or initiated by the Army that may pertain to the terms of this agreement, the Army shall consult with the objecting party to resolve the objection. If the Army determines that the objection cannot be resolved, the Army shall forward all documentation relevant to the dispute to the Council. Within thirty (30) days after receipt of all pertinent documentation, the Council will either:

1. provide the Army with recommendations, which the Army will take into account in reaching a final decision regarding the dispute; or

2. notify the Army that it will comment pursuant to 36 CFR 800.6(b), and proceed to comment. Any Council comment provided

in response to such a request will be taken into account by the Army in accordance with 36 CFR 800.6(c)(2) with reference to the subject of the dispute.

B. Any recommendation or comment provided by the Council pursuant to stipulation VIII will be understood to pertain only to the subject of the dispute; the Army's responsibility to carry out all actions under this agreement that are not the subjects of the dispute will remain unchanged.

C. At any time during implementation of the measures stipulated in this agreement, should an objection to any such measure or its manner of implementation be raised by a member of the public, the Army shall take the objection into account and consult as needed with the objecting party, the SHPO, and the Council to resolve the objection.

#### VI. Amendments

A. Any party to this MOA may request that it be revised, whereupon the parties will consult in accordance with 36 CFR 80.13 to consider such revision.

B. Following appropriate consultations between the Army, the Council, and the Illinois SHPO, the terms of this agreement or any attachment hereto, may be amended by signing the form provided as Attachment D.

C. The Army will invite the Fort Sheridan Commission to concur in the amendment.

D. Upon execution of the amendment, each party will attach a copy of the fully executed form to their copy of this agreement, and will enter the amendment number and date on the upper right-hand corner of the first page of this agreement.

#### VII. Scheduled Consultation

Twelve (12) months after this agreement is executed and annually thereafter until Fort Sheridan properties have been transferred, from Army control, in accordance with the terms of this agreement, the Army, Council, and Illinois SHPO will consult to review implementation of its terms and determine whether amendments are needed. If amendments are needed, the parties to this agreement will consult in accordance with stipulation VI of this agreement to make such revisions.

#### VIII. Availability of Funds

The Army commitments as stipulated in this MOA will be executed subject to the availability of funds. The Army will notify the Council and SHPO if sufficient funds cannot be made available to implement all or part of the MOA requirements. Nonavailability of funds will result in a need for consultation as specified in stipulation V. Dispute Resolution/MOA Revision.

#### IX. Termination of Agreement

A. Any party to this MOA may terminate it by providing thirty (30) days notice to the other parties, providing that the parties will consult during the period prior to termination to seek agreement on amendments or other actions that would avoid termination. In the event of termination, the Army will comply with 36 CFR 800.4 through 800.6 with regard to individual undertakings covered by this MOA.

B. Execution and implementation of this MOA evidences that the Army has afforded the Council a reasonable opportunity to comment on the transfer of Fort Sheridan, and that the Army has taken into account the effects of the undertaking on historic properties.

DEPARTMENT OF THE ARMY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Major General, USA      Chief of Staff      Forces Command

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Commander, Fort McCoy

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Susan Mogerman, State Historic Preservation Officer

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Executive Director

Concur:

FORT SHERIDAN JOINT PLANNING COMMITTEE

By: \_\_\_\_\_ Date: \_\_\_\_\_

LANDMARKS PRESERVATION COUNCIL OF ILLINOIS

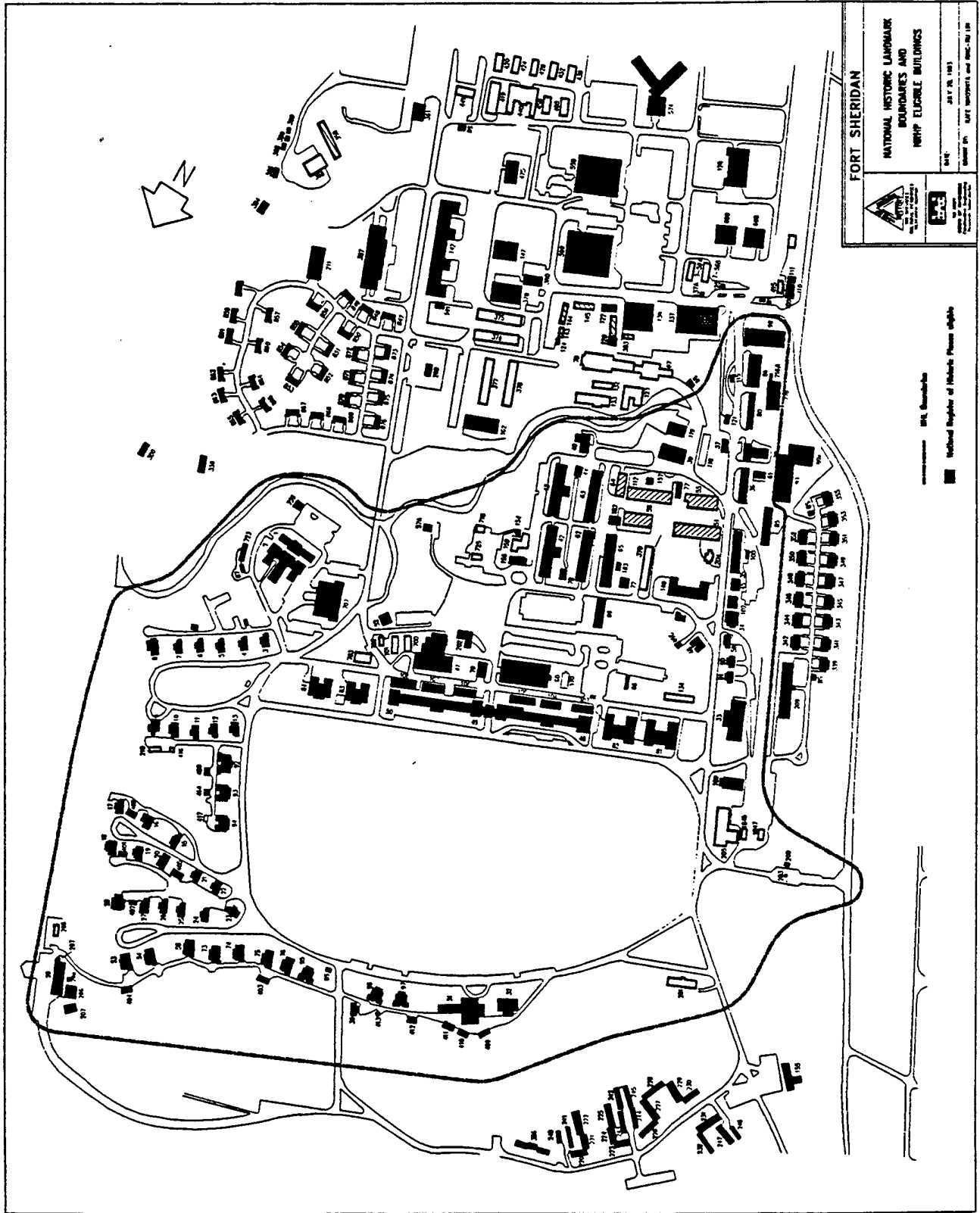
By: \_\_\_\_\_ Date: \_\_\_\_\_

NATIONAL TRUST FOR HISTORIC PRESERVATION

By: \_\_\_\_\_ Date: \_\_\_\_\_

ATTACHMENT A:

MAP OF FORT SHERIDAN,  
LOCATION OF NATIONAL HISTORIC LANDMARK,  
AND NATIONAL REGISTER-ELIGIBLE  
STRUCTURES



**FORT SHERIDAN**

**NATIONAL HISTORIC LANDMARK  
BOUNDARIES AND  
WWNP ELIGIBLE BUILDINGS**

DATE: JULY 28, 1983  
PREPARED BY: NPS, HISTORIC AND BIC-201-10

— WWNP Boundary  
■ National Register of Historic Place eligible

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ATTACHMENT B: STANDARD PRESERVATION COVENANT

1. In consideration of the conveyance of certain real property, hereinafter referred to as (name of property), located in the County of Lake, State of Illinois, which is more fully described as: (Insert legal description.), (Name of property recipient) hereby covenants on behalf of (himself/herself/itself/), (his,her,its) heirs, successors, and assigns at all times to the United States Army and the Illinois State Historic Preservation Officer to preserve and maintain (name of property) in accordance with the recommended approaches in the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (National Park Service, 1983) in order to preserve and enhance those qualities that make (name of property) eligible for inclusion in the National Register of Historic Places.

2. No exterior construction, alteration, remodeling or other modification shall be undertaken or permitted to be undertaken on (name of property) without the express prior written permission of the Illinois State Historic Preservation Officer if not already approved in the management plan.

3. The Illinois State Historic Preservation Officer shall be permitted at all reasonable times to inspect (name of property) in order to ascertain if the above conditions are being observed.

4. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, the Illinois State Historic Preservation Officer may, following reasonable notice to (name of recipient), institute suit to enjoin said violation or to require the restoration of (name of property). The successful party shall be entitled to recover all costs or expenses incurred in connection with such a suit, including all court costs and attorney's fees.

5. (Name of recipient) agrees that the Illinois State Historic Preservation Officer may at its discretion, without prior notice to (name of recipient), convey and assign all or part of its rights and responsibilities contained herein to a third party.

6. This covenant is binding on (name of recipient), (his/her/its) heirs, successors, and assigns in perpetuity, unless waived by the Illinois SHPO. Restrictions, stipulations, and covenants contained herein shall be inserted by (name of recipient) verbatim or by express reference in any deed or other legal instrument by which (he/she/it) divests (himself/herself/itself) of either the fee simple title or any other lesser estate in (name of property) or any part thereof.

7. The failure of the Illinois State Historic Preservation Officer to exercise any right or remedy granted under this instrument shall not have the effect of waiving or limiting the exercise of any other right or remedy or the use of such right or remedy at any other time.

The covenant shall be a binding servitude upon (name of property) and shall be deemed to run with the land. Execution of this covenant shall constitute conclusive evidence that (name of recipient) agrees to be bound by the foregoing conditions and restrictions and to perform to obligations herein set forth.

## ATTACHMENT C: STANDARDS FOR DEVELOPMENT AND MANAGEMENT PLAN

The development and management plan for the Fort Sheridan Historic District or any part thereof, and any other National Register listed or eligible properties including subsequently defined districts must meet the following standards:

I. It must promote the preservation of the significant characteristics of the District (s) as a whole; accordingly;

A. it must address development and management of the entirety of the District(s), or if it is a plan for a portion of a District, it must relate development and management of that portion to that of the entire District, regardless of ownership; and

B. it must reflect an understanding of the historical, architectural, and landscape characteristics that make the District(s) eligible for inclusion in the National Register of Historic Places and that contribute to its character.

II. It must provide for all rehabilitation and maintenance of buildings, structures, and designed landscape elements to be performed in accordance with the recommended approaches in the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (National Park Service, 1983).

III. It must fully justify the demolition of any building or structure whose demolition is proposed.

IV. It must provide for all new construction to be performed in accordance with the recommended approaches in the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitation Historic Buildings (National Park Service, 1983).

V. It must minimize, and fully justify, any new construction or alteration of landscapes that will alter the view from any existing building or structure.

VI. If it involves use of the Parade Ground, it must provide for the Parade Ground to be maintained as landscaped open space that retains its historical character.

VII. It must provide for the Illinois State Historic Preservation Officer to review and approve:

- a. plans and specifications for rehabilitation;
- b. plans and specifications for new construction;
- c. plans and specifications for landscaping; and
- d. maintenance plans.

After acquiring any District or portion thereof, developers can enter into a separate MOA with the Illinois SHPO and the Council concerning their use and treatment of the National Register or NHL properties located on said lands.

VIII. It must provide for any instruments transferring the property from the Army to the recipient to include the following covenant:

1. In consideration of the conveyance of certain real property, hereinafter referred to as (name of property), located in the County of Lake, State of Illinois, which is more fully described as: (Insert legal description.), (Name of property recipient) hereby covenants on behalf of (himself/herself/itself), (his/her/its) heirs, successors, and assigns at all times to the United States Army and the Illinois State Historic Preservation Officer to preserve and maintain (name of property) in accordance with the (title and full citation of the development and management plan) in order to preserve and enhance those qualities that make (name of property) eligible for inclusion in the National Register of Historic Places.

2. No exterior construction, alteration, remodeling or any other thing shall be undertaken or permitted to be undertaken on (name or property) which would affect the integrity or the appearance of (name of property), except for those things that are consistent with the (title of the development and management plan) without the express prior written permission of the Illinois State Historic Preservation Officer, signed by a fully authorized representative thereof.

3. The Illinois State Historic Preservation Officer shall be permitted at all reasonable times to inspect (name of property) in order to ascertain if the above conditions are being observed.

4. In the event of a violation of this covenant, and in addition to any remedy now or hereafter provided by law, the Illinois State Historic Preservation Officer may, following reasonable notice to (name of recipient), institute suit to enjoin said violation or to require the restoration of (name of connection) with such a suit, including all court costs and attorney's fees.

5. (Name of recipient) agrees that the Illinois State Historic Preservation Officer may at its discretion, without prior notice to (name of recipient), convey and assign all or part of its rights and responsibilities contained herein to a third party.

6. This covenant is binding on (name of recipient), (his/her/its) heirs, successors, and assigns in perpetuity. Restrictions, stipulations, and covenants contained herein shall be inserted by (name of recipient) verbatim or by express reference in any deed or other legal instrument by which (he/she/it) divests (himself/herself/itself) of either the fee simple title or any other lesser estate in (name of property) or any part thereof.

7. The failure of the Illinois State Historic Preservation Officer to exercise any right or remedy granted under this instrument shall not have the effect of waiving or limiting the exercise of any other right or remedy or the use of such right or remedy at any other time.

The covenant shall be a binding servitude upon (name of property) and shall be deemed to run with the land. Execution of this covenant shall constitute conclusive evidence that (name of recipient) agrees to be bound by the foregoing conditions and restrictions and to perform to obligations herein set forth.

ATTACHMENT D: AMENDMENT FORM

AMENDMENT # \_\_\_\_\_

DATE: \_\_\_\_\_

MEMORANDUM OF AGREEMENT  
BETWEEN THE DEPARTMENT OF THE ARMY,  
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION,  
AND THE ILLINOIS STATE HISTORIC PRESERVATION OFFICER  
CONCERNING DISPOSAL OF FORT SHERIDAN, ILLINOIS

1. Need for Amendment: (Describe briefly)

2. Amendment: (Specify)

DEPARTMENT OF THE ARMY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Major General, USA Chief of Staff Forces Command

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Commander, Fort McCoy

ILLINOIS STATE HISTORIC PRESERVATION OFFICER

By: \_\_\_\_\_ Date: \_\_\_\_\_

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Executive Director

**► KNOWN CULTURAL/HISTORIC  
RESOURCES ON FORT SHERIDAN ◀**

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**TABLE F-2. KNOWN CULTURAL/HISTORIC RESOURCES  
ON FORT SHERIDAN**

| Building                                                                     | Year | Function          |
|------------------------------------------------------------------------------|------|-------------------|
| <b>Contributing Buildings Within the National Historic Landmark District</b> |      |                   |
| 01                                                                           | 1893 | Library           |
| 02                                                                           | 1893 | Education Center  |
| 03                                                                           | 1890 | Officers Quarters |
| 04                                                                           | 1890 | Officers Quarters |
| 05                                                                           | 1890 | Officers Quarters |
| 06                                                                           | 1890 | Officers Quarters |
| 07                                                                           | 1890 | Officers Quarters |
| 08                                                                           | 1890 | Officers Quarters |
| 09                                                                           | 1890 | Officers Quarters |
| 10                                                                           | 1890 | Officers Quarters |
| 11                                                                           | 1890 | Officers Quarters |
| 12                                                                           | 1890 | Officers Quarters |
| 13                                                                           | 1890 | Officers Quarters |
| 15                                                                           | 1890 | Officers Quarters |
| 16                                                                           | 1890 | Officers Quarters |
| 17                                                                           | 1891 | Officers Quarters |
| 18                                                                           | 1890 | Officers Quarters |
| 19                                                                           | 1890 | Officers Quarters |
| 20                                                                           | 1890 | Officers Quarters |
| 21                                                                           | 1890 | Officers Quarters |
| 22                                                                           | 1890 | Officers Quarters |
| 23                                                                           | 1890 | Officers Quarters |
| 24                                                                           | 1890 | Officers Quarters |
| 25                                                                           | 1890 | Officers Quarters |
| 26                                                                           | 1890 | Officers Quarters |
| 27                                                                           | 1890 | Officers Quarters |
| 28                                                                           | 1905 | Officers Quarters |

**TABLE F-2. KNOWN CULTURAL/HISTORIC RESOURCES  
ON FORT SHERIDAN**

**Continued**

| <b>Building</b> | <b>Year</b> | <b>Function</b>                    |
|-----------------|-------------|------------------------------------|
| 29              | 1890        | Pump Station                       |
| 30              | 1890        | Officers Quarters                  |
| 31              | 1892        | Community Club                     |
| 32              | 1907        | Guest Housing                      |
| 33              | 1890        | Museum                             |
| 34              | 1890        | Child Care                         |
| 35              | 1890        | Civilian Office                    |
| 36              | 1890        | Warehouse                          |
| 37              | 1892        | Non-commissioned Officers Quarters |
| 38              | 1890        | Post Office                        |
| 39              | 1891        | Warehouse                          |
| 42              | 1890        | Repair Warehouse and Office        |
| 43              | 1890        | Repair Warehouse                   |
| 44              | 1892        | Non-commissioned Officers Quarters |
| 45              | 1910        | Non-commissioned Officers Quarters |
| 46              | 1890        | Non-commissioned Officers Quarters |
| 47              | 1891        | Post Exchange                      |
| 48              | 1890        | Administration                     |
| 49              | 1891        | Water Tower                        |
| 50              | 1890        | Administration                     |
| 52              | 1891        | Officers Quarters                  |
| 53              | 1891        | Officers Quarters                  |
| 54              | 1891        | Officers Quarters                  |
| 56              | 1891        | Officers Quarters                  |
| 57A             | 1892        | Magazine                           |
| 59              | 1892        | Non-commissioned Officers Quarters |
| 60              | 1893        | Gymnasium                          |
| 61              | 1910        | Veterinarians Office               |

**TABLE F-2. KNOWN CULTURAL/HISTORIC RESOURCES  
ON FORT SHERIDAN**

**Continued**

| <b>Building</b> | <b>Year</b> | <b>Function</b>                    |
|-----------------|-------------|------------------------------------|
| 62              | 1892        | Administration                     |
| 63              | 1892        | Computer Facility                  |
| 65              | 1893        | Computer Facility                  |
| 66              | 1907        | Administration                     |
| 72              | 1892        | Officers Quarters                  |
| 73              | 1892        | Officers Quarters                  |
| 74              | 1892        | Officers Quarters                  |
| 75              | 1892        | Officers Quarters                  |
| 76              | 1892        | Officers Quarters                  |
| 77              | 1892        | Vehicle Repair                     |
| 78              | 1892        | Non-commissioned Officers Quarters |
| 79              | 1893        | Fire Station                       |
| 80              | 1893        | Warehouse                          |
| 81              | 1905        | Administration                     |
| 82              | 1905        | Administration                     |
| 83              | 1905        | Administration                     |
| 84              | 1905        | Administration                     |
| 85              | 1905        | Warehouse                          |
| 86              | 1905        | Warehouse                          |
| 87              | 1893        | Storage                            |
| 88              | 1893        | Storage                            |
| 89              | 1892        | Storage                            |
| 90              | 1893        | Non-commissioned Officers Quarters |
| 91              | 1893        | Non-commissioned Officers Quarters |
| 92              | 1905        | Officers Quarters                  |
| 93              | 1905        | Officers Quarters                  |
| 94              | 1905        | Officers Quarters                  |
| 95              | 1905        | Officers Quarters                  |

**TABLE F-2. KNOWN CULTURAL/HISTORIC RESOURCES  
ON FORT SHERIDAN**

**Continued**

| <b>Building</b>                                                | <b>Year</b> | <b>Function</b>                    |
|----------------------------------------------------------------|-------------|------------------------------------|
| 96                                                             | 1905        | Officers Quarters                  |
| 97                                                             | 1905        | Officers Quarters                  |
| 98                                                             | 1910        | Warehouse                          |
| 100                                                            | 1897        | Storage                            |
| 102                                                            | 1906        | Non-commissioned Officers Quarters |
| 103                                                            | 1907        | Administration                     |
| 104                                                            | 1907        | Administration                     |
| 105                                                            | 1907        | Administration                     |
| 106                                                            | 1907        | Administration                     |
| 107                                                            | 1907        | Administration                     |
| 108                                                            | 1907        | Administration                     |
| <b>Buildings Recommended for Historic District Eligibility</b> |             |                                    |
| 339                                                            | 1939        | Non-commissioned Officers Quarters |
| 341                                                            | 1939        | Non-commissioned Officers Quarters |
| 342                                                            | 1939        | Non-commissioned Officers Quarters |
| 343                                                            | 1939        | Non-commissioned Officers Quarters |
| 344                                                            | 1939        | Non-commissioned Officers Quarters |
| 345                                                            | 1939        | Non-commissioned Officers Quarters |
| 346                                                            | 1939        | Non-commissioned Officers Quarters |
| 347                                                            | 1939        | Non-commissioned Officers Quarters |
| 348                                                            | 1939        | Non-commissioned Officers Quarters |
| 349                                                            | 1939        | Non-commissioned Officers Quarters |
| 350                                                            | 1939        | Non-commissioned Officers Quarters |
| 351                                                            | 1939        | Non-commissioned Officers Quarters |
| 352                                                            | 1939        | Non-commissioned Officers Quarters |
| 353                                                            | 1939        | Non-commissioned Officers Quarters |
| 355                                                            | 1939        | Non-commissioned Officers Quarters |

**TABLE F-2. KNOWN CULTURAL/HISTORIC RESOURCES  
ON FORT SHERIDAN**

**Continued**

| <b>Building</b>                                                                                                                                                                                    | <b>Year</b> | <b>Function</b>           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|---------------------------|
| <b>Contributing Landscapes</b>                                                                                                                                                                     |             |                           |
| Parade Ground (Golf Course)<br>Streetscapes and Landscapes Surrounding the Parade Ground/Golf Course and those associated with the Officers Housing<br>Bartlett and Hutchinson Ravines<br>Cemetery |             |                           |
| <b>Background Buildings Within the National Historic Landmark Area</b>                                                                                                                             |             |                           |
| 119                                                                                                                                                                                                | 1913        | Administration            |
| 140                                                                                                                                                                                                | 1939        | Administration            |
| 180                                                                                                                                                                                                | 1932        | Theater                   |
| <b>Buildings Eligible for Individual Inclusion in the National Register of Historic Places</b>                                                                                                     |             |                           |
| 142                                                                                                                                                                                                | 1939        | Administration            |
| <b>Non-contributing Buildings within the National Historic Landmark Area At Fort Sheridan</b>                                                                                                      |             |                           |
| 29A                                                                                                                                                                                                | Unknown     | Powerhouse                |
| 40                                                                                                                                                                                                 | 1967        | Heating Plant             |
| 46C                                                                                                                                                                                                | 1969        | Detached Garage           |
| 51                                                                                                                                                                                                 | 1931        | Motor Repair Shop         |
| 55                                                                                                                                                                                                 | 1932        | Vehicle Storage           |
| 57C                                                                                                                                                                                                | 1929        | Fixed Ammunition Magazine |
| 58                                                                                                                                                                                                 | 1931        | Vehicle Storage           |
| 64                                                                                                                                                                                                 | 1928        | General Purpose           |
| 71                                                                                                                                                                                                 | 1981        | Powerhouse                |
| 112                                                                                                                                                                                                | 1932        | Vehicle Storage           |
| 115                                                                                                                                                                                                | 1932        | Diesel Station            |
| 118                                                                                                                                                                                                | 1935        | Administration            |
| 121                                                                                                                                                                                                | 1943        | Scale House               |
| 134                                                                                                                                                                                                | 1941        | Administration            |
| 135                                                                                                                                                                                                | 1940        | Oil House                 |
| 154                                                                                                                                                                                                | 1964        | Pool Filter Building      |

**TABLE F-2. KNOWN CULTURAL/HISTORIC RESOURCES  
ON FORT SHERIDAN**

**Continued**

| <b>Building</b> | <b>Year</b> | <b>Function</b>                |
|-----------------|-------------|--------------------------------|
| 156             | 1964        | Bathhouse                      |
| 157             | 1919        | General Storage                |
| 159             | 1964        | Outdoor Swimming Pool          |
| 170             | 1941        | Chapel                         |
| 200             | 1978        | Sentry House                   |
| 201             | 1943        | Bachelors Officers Quarters    |
| 202             | 1934        | Exchange Service Outlet        |
| 204             | 1919        | Family Housing                 |
| 205             | 1941        | Enlisted Service Club          |
| 206             | 1966        | Water Storage Tank             |
| 207             | 1966        | Water Storage Tank             |
| 210             | 1929        | Detached Garage                |
| 216             | 1941        | Small Arms Repair Shop         |
| 216A            | 1941        | Flammable Materials Storehouse |
| 296             | Unknown     | Underground Holding Tank       |
| 297             | Unknown     | Powerhouse                     |
| 298             | 1946        | Beach House                    |
| 370             | 1941        | Vehicle Storage                |
| 400-417         | 1940        | Detached Garage                |
| 700             | 1941        | Administration                 |
| 701             | 1941        | Administration                 |
| 702             | 1941        | Administration                 |
| 703             | 1941        | Administration                 |
| 707             | 1967        | Dispensary                     |
| 718             | 1941        | General Storage                |
| 723             | 1941        | General Storage                |
| 724             | 1942        | Administration                 |
| 725             | 1942        | Skill Development Center       |
| 726             | 1945        | Condemned                      |