

APPENDIX A

ACRONYMS AND DEFINITIONS

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ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effect
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
CATEX	Categorical Exclusion
CRM	Cultural Resources Manager
DOE	Determination of Eligibility
DPW	Directorate of Public Works
DPW-E	Directorate of Public Work, Environmental Division, Conservation Branch
EA	Environmental Assessment
EIS	Environmental Impact Statement
GC	Garrison Commander
GIS	Geographic Information System
GPS	Global Positioning System
HABS	Historic American Building Survey
HAER	Historic American Engineering Record
HALS	Historic American Landscape Survey
HCPI	Historic Cultural Properties Inventory
HP	Historic Property
ICRMP	Integrated Cultural Resource Management Plan
IO	Isolated Occurrence
LA	Laboratory of Anthropology
MOA	Memorandum of Agreement
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NMCRIS	New Mexico Cultural Resources Information System
NMSHPO	New Mexico State Historic Preservation Officer
NPS	National Park Service
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PAO	Public Affairs Office
PRD	Programmatic Research Design
REC	Record of Environmental Consideration
RHPC	Record of Historic Properties Consideration
SDZ	Surface Danger Zone
SHPO	State Historic Preservation Officer
TARL	Texas Archaeological Research Laboratory
TCP	Traditional Cultural Property
THPO	Tribal Historic Preservation Officer
TRU	Transect Recording Unit
TXSHPO	Texas State Historic Preservation Officer
UTM	Universal Transverse Mercator

36 CFR Part 800. The Codified Federal Regulation implementing Section 106 of the NHPA.

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917 **Aboveground properties.** Properties or portions of properties, typically buildings, structures, and
918 landscapes that are not archeology.
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920 **Adverse effect.** Includes but is not limited to the physical destruction, damage, or alteration of part or all
921 of a property's characteristics that contribute to the property's eligibility for inclusion in the NRHP.
922 Adverse effects can also include alteration of a property that is not consistent with the Secretary of the
923 Interior's Standards for Treatment of Historic Properties. Examples include the introduction of elements
924 that are out of character with the property or affect its setting, neglect resulting in deterioration or
925 destruction of the property, and transfer, lease or sale of the property.
926
927 **Advisory Council on Historic Preservation.** Established under Title 11 of the NHPA, as amended. The
928 ACHP is to be afforded a reasonable opportunity to comment with regard to proposed federal, federally
929 licensed, federally permitted, or federally assisted undertakings that may affect properties included in or
930 eligible for inclusion in the NRHP.
931
932 **Anti-Deficiency Act.** Legislation enacted by the United States Congress (September 13, 1982) to prevent
933 the incurring of obligations or the making of expenditures in excess of amounts available in
934 appropriations or funds. Prohibits the Federal Government from entering into a contract that is not "fully
935 funded."
936
937 **Area of potential effect.** Geographic area or areas within which an undertaking may cause changes in the
938 character or use of historic properties, if any such properties exist there. The APE always includes the
939 actual site of the undertaking, and may include other areas where the undertaking will cause changes in
940 land use, traffic patterns, or other aspects that could affect historic properties.
941
942 **Artifact.** An object made or modified by human beings.
943
944 **Assessment of Effect.** Fort Bliss shall apply the criteria of adverse effect to historic properties within the
945 APE. Fort Bliss shall consider any previous or known views concerning effects which have been provided
946 by consulting parties and the public. An adverse effect is found when an undertaking may alter, directly
947 or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the
948 NRHP in a manner that would diminish the historic property's integrity.
949
950 **Association.** The link of a historic property with a historic event, activity, or person, also, the quality of
951 integrity through which a historic property is associated with a particular past time and place.
952
953 **Building.** A historic property type that represents a resource, such as a house, created principally to
954 shelter any form of human activity.
955
956 **Consulting Parties.** Those individuals and organizations concerned with the effects of a particular
957 undertaking on historic properties. May include, but not limited to SHPO, ACHP, tribes, preservation
958 groups, etc.
959
960 **Criteria.** The general standard by which the significance of a historic property is judged.
961
962 **Cultural Resources Manager.** The CRM is the DPW-E Conservation Branch Chief that meets
963 qualifications as outlined by the Professional Qualifications and designated by the GC. The CRM is the

964 expert in cultural resources and the administrator of the ICRMP and this PA. The CRM acts on behalf of
965 the GC to coordinate compliance with this PA.

966
967 **Days.** In all instances of time periods for actions, "days" is intended to mean "calendar days" unless
968 otherwise noted.

969
970 **Design.** A quality of integrity applied to the elements that create the physical form, plan, space, structure,
971 and style of a property.

972
973 **Determination of eligibility.** The process of ascertaining a property's eligibility for listing on the NRHP.
974 A property eligible for the NRHP but not actually listed or formally determined eligible by the Secretary
975 of the Interior is afforded the same protection under Section 106 as a listed historic property.

976
977 **Dig Permit.** Form used by Army to request digging or excavation, for construction or training.

978
979 **District.** A historic property type that represents a significant concentration, linkage, or continuity of
980 sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

981
982 **Evaluation.** Process by which the significance and integrity of a historic property are judged for
983 eligibility for the NRHP.

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985 **Feature.** A feature can include any evidence of human activity and is usually non-portable: trash
986 middens, storage areas, houses, hearths, windmills, corrals, and fences, etc. A hearth feature, at a
987 minimum, is defined as 10 or more fire-cracked rocks in a one sq meter area.

988
989 **Feeling.** Quality of integrity through which a historic property evokes the aesthetic or historic sense of
990 past time and place.

991
992 **Geographic Information System.** A computer system capable of capturing, storing, analyzing, and
993 displaying geographically referenced information; that is, data identified according to location.
994 Practitioners also define a Geographic Information System (GIS) as including the procedures, operating
995 personnel, and spatial data that go into the system (from US Geological Survey web site).

996
997 **Ground-disturbing activities.** Any action that disturbs soil either temporarily or permanently
998 accomplished by any method including but not limited to hand or machine excavation, grading and
999 removal of vegetation, rocks, or other ground cover.

1000
1001 **Historic American Buildings Survey.** A program administered by the NPS to record in detail historic
1002 buildings through architectural rendering, large format photography, and written documentation.

1003
1004 **Historic American Engineering Record.** A program administered by the NPS to record in detail historic
1005 structures through engineering drawings, large format photography, and written documentation.

1006
1007 **Historic American Landscape Survey.** A program administered by the NPS to record in detail historic
1008 landscapes through rendering, large format photography, and written documentation.

1009
1010 **Historic context.** An organizing structure for interpreting history that groups information about historic
1011 properties that share a common theme, common geographical location, and common time period. The

1012 development of historic contexts is a foundation for decisions about the planning, identification,
1013 evaluation, registration, and treatment of historic properties, based upon comparative significance.
1014
1015 **Historic Cultural Properties Inventory.** A form used by the State of New Mexico to record historic
1016 properties.
1017
1018 **Historic property.** Any prehistoric or historic district, site, building, structure, object, or traditional
1019 cultural property included in, or eligible for inclusion in the NRHP. The term includes artifacts, records,
1020 and remains related to and located in such properties.
1021
1022 **Impact Areas.** (Department of the Army Training Circular No. 25-1). *Impact Area- Dudded* – an area
1023 having designated boundaries within which all dud-producing ordnance will detonate or impact. This area
1024 may include vehicle bodies that serve as targets for artillery/mortar direct and indirect fire. Impact areas
1025 containing unexploded ordnance may not be used for maneuver. *Impact Area – Non-Dudded* – an area
1026 having designated boundaries within which ordnance that does not produce duds will impact. This area is
1027 composed mostly of the safety fans for small arms ranges. These impact areas may be used for maneuver,
1028 at the cost of curtailing use of weapons ranges.
1029
1030 **Integrated Cultural Resources Management Plan.** A required Department of Defense planning tool for
1031 compliance with statutory management requirements.
1032
1033 **Integrity.** Authenticity of a property's historic identity, evidenced by the survival of physical
1034 characteristic(s) that existed during the property's historic or prehistoric period. Integrity consists of seven
1035 elements: location, design, setting, materials, workmanship, feeling, and association.
1036
1037 **Isolated Occurrence.** Any cultural material recorded in a survey that does not fit the criteria for a site
1038 and is not close enough in proximity to other cultural materials to be added to a site boundary.
1039
1040 **Keeper:** NPS employ responsible for the NRHP program.
1041
1042 **Location.** A quality of integrity retained by a historic property existing in the same place as it did during
1043 its period of significance.
1044
1045 **Material.** A quality of integrity applying to the physical elements that were combined or deposited in a
1046 particular pattern or configuration to form a historic property.
1047
1048 **Memorandum of Agreement.** A formal Section 106 document that outlines an agreement made among
1049 individuals, groups, or entities, used to cooperatively work together on an agreed purpose or meet an
1050 agreed objective.
1051
1052 **Mitigate.** Reduce harm to historic properties.
1053
1054 **Native American Graves Protection and Repatriation Act.** Federal Act that describes the rights of
1055 Native American lineal descendants, Indian tribes, and Native Hawaiian organization with respect to the
1056 treatment, repatriation, and disposition of Native American human remains, funerary objects and sacred
1057 objects, and objects of cultural patrimony; also provides greater protection for Native American burial
1058 sites and more careful control over removal of Native American human remains, funerary objects and
1059 sacred objects, and objects of cultural patrimony.
1060

1061 **National Register of Historic Place.** A list of districts, sites, buildings, structures, and objects significant
1062 in American history, architecture, archeology, engineering, and culture.
1063

1064 **National Environmental Policy Act.** A United State environmental law establishing a national policy
1065 promoting the enhancement of the environment and setting up procedures for all federal agencies in
1066 which to consider the effects of their proposed actions on the environment.
1067

1068 **Object:** A historic property type that represents a construction primarily artistic in nature or relatively
1069 small in scale and simply constructed, such as a statue or milepost.
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1071 **Period of significance.** Span of time in which a property attained the significance for which it meets the
1072 NRHP.
1073

1074 **Programmatic Agreement.** A Section 106 agreement document that records the terms and conditions
1075 agreed upon to resolve potential adverse effects, typically developed for a large or complex project or a
1076 class of undertakings that would otherwise require numerous individual requests for ACHP comments
1077 under the NHPA.
1078

1079 **Programmatic Research Design.** A strategic, systematic, and reusable program of identifying research
1080 goals and methods to address data recovery of a class of site types or time periods or some other unifying
1081 characteristic(s).
1082

1083 **Proponent.** The organization with technical and administrative control over the execution of a project or
1084 training exercise; e.g., the DPW acts as the user's agent for construction activity and is the implementing
1085 organization for those projects.
1086

1087 **Red Zones.** Restricted areas on Fort Bliss in which no activity is allowed.
1088

1089 **Record of Historic Properties Consideration.** Fort Bliss documentation of the Section 106 review
1090 process followed by the CRM or CRM Staff to document compliance under Section 106. Information
1091 included on the form includes: initiation date of review, associated Work Order number or Archeological
1092 Project number, name of Proponent, project description, APE, project analysis, documentation of
1093 determinations of eligibility and findings of effect, treatments of adverse effects, and date review closed.
1094

1095 **Section 106 process.** A review process established under NHPA Section 106 and administered by the
1096 ACHP under its regulations. During this process, agencies afford the ACHP an opportunity to comment
1097 on any agency activity or undertaking that may affect historic properties, and must take such comments
1098 into account.
1099

1100 **Section 110.** The section of the NHPA that defines federal agencies' responsibilities to preserve and use
1101 historic buildings and to establish a program to identify, evaluate and nominate historic properties to the
1102 NRHP.
1103

1104 **Service Order.** Request for work that can be completed for under \$1,200 or under 40 man-hours of time.
1105

1106 **Setting.** A quality of integrity applying to the physical environment of a historic property.
1107

1108 **Site.** A historic property type representing a location of a significant event, a prehistoric or historic
1109 occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the

1110 location itself possesses historic, cultural, or archeological value regardless of the value of any existing
1111 structure.

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1113 **State Historic Preservation Officer.** A position created under the NHPA. The SHPO is appointed by the
1114 governor and charged with the administration of the NHPA and to ensure that the state's interests are
1115 considered.

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1117 **Structure.** A historic property type representing a functional construction made for purposes other than
1118 creating shelter, such as a bridge.

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1120 **Surface Danger Zone.** (Department of the Army Pamphlet 385-63) The ground and airspace designated
1121 within the training complex (to include associated safety areas) for vertical and lateral containment of
1122 projectiles, fragments, debris, and components resulting from the firing, launching, or detonation of
1123 weapon systems to include explosives and demolitions. The SDZ is a depiction of the mathematically
1124 predicted area a projectile will return to earth either by direct fire or ricochet. (Exempted from project
1125 review only when active.)

1126

1127 **Tenant.** A person who occupies real property owned by another based upon an agreement between the
1128 person and the landlord/owner, almost always for rental payments.

1129

1130 **Traditional Cultural Property.** Properties associated with the traditional cultural practices of a living
1131 community that (a) are rooted in that community's history or (b) are important in maintaining the
1132 continuing cultural identity of the community. A Traditional Cultural Property (TCP) is the terminology
1133 used by the NRHP program.

1134

1135 **Transect Recording Unit.** A 15 m by 15 m unit or "cell", part of a larger, virtual grid placed over an
1136 archeological survey area, in which all cultural materials are recorded, usually by means of a hand-held
1137 computer, for later projection and use in a GIS.

1138

1139 **Undertaking.** Under this PA, an undertaking is defined as a project, activity, or program funded in whole
1140 or in part under the direct or indirect jurisdiction of a Federal agency including those carried out by or on
1141 behalf of the Army; those carried out in whole or in part with Army funds, and those requiring Army
1142 approval--from 36 CFR § 800.16(y).

1143

1144 **Universal Transverse Mercator.** Geographic coordinate system developed by the U.S. Army Corps of
1145 Engineers, to give locations on the surface of the earth. The system divides the earth into 60 zones, each a
1146 6-degree band of longitude, and uses a secant transverse Mercator projection in each zone.

1147

1148 **View shed.** Areas under the direct or indirect jurisdiction of a federal agency that can be seen from
1149 historic properties, typically from the perimeter of a historic district or historic property.

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1151 **Workmanship.** A quality of integrity applying to the physical evidence of the crafts of a particular
1152 culture during any given period or prehistory.

1153

1154 **Work Order.** Requested on Department of the Army Form 4283, a request for maintenance, repair, or
1155 new work over \$1,200 or 40 man-hours.

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APPENDIX B

EXEMPTED UNDERTAKINGS

The categories of undertakings listed below have been determined by Fort Bliss, the SHPOs, and the ACHP to meet the criteria for exemption; i.e., they qualify as undertakings, but will have no effect on historic properties, or their potential effects will not be adverse. An undertaking of one or more of the types listed below will not require further Section 106 review with the appropriate SHPO, so long as the undertaking is limited to the types listed below, and is not a part of another undertaking. In addition, if at any time in the course of the undertaking information becomes available that would make this procedure inapplicable, including but not limited to the discovery of historic properties or human remains, Section 106 review or NAGPRA protocol shall be initiated by Fort Bliss.

A. 32 CFR § 651.9 (b)(1) Emergencies. Immediate actions to promote national defense or security and actions necessary for the protection of life or property, including but not limited to the following:

- 1. In-place disposal of unexploded ordnance
2. disposal of ordnance in existing open burning/open detonation units
3. emergency response to releases of hazardous substances, pollutants, and contaminants (no cultural resources work would be conducted, unless and until the danger to human health and safety has been cleared).
4. military activities in existing designated Surface Danger Zones (SDZ). The exemption will apply to designated impact (duded) areas, or areas with unexploded ordnance. SDZ are exempted only when active; areas within an SDZ that become contaminated with unexploded ordnance are then exempted, unless and until the unexploded ordnance is cleared).

B. Fort Bliss will proceed with undertakings required to support mobilization and training required due to unanticipated deployment, mobilization, or armed conflict. The CRM or CRM Staff with appropriate security clearance will conduct an internal review. In all cases, however, the CRM or CRM Staff will ensure that the effects of these undertakings on historic properties will be considered and a reasonable effort will be made to avoid damage to the historic property. The CRM or CRM Staff will include a summary of the undertaking in the Annual Report, provided no information is classified or would have the potential to affect classified actions.

C. Activities on other areas across Fort Bliss shall be exempted from project review because of the limited (or no) potential for cultural resources sites:

- 1. Steep slopes (greater than 30 percent)
2. Active arroyos
3. Active floodplains
4. Areas disturbed to a depth below the proposed undertaking

D. Decisions made through government-to-government consultation with tribes concerning management options for Sacred Sites.

E. Site Work

- 1. Replace in kind existing damaged landscaping and plant material with native and/or regional landscaping material. New replacement plantings, xeriscaping

- 1206 and ground cover shall meet the following *Fort Bliss Landscape: A Landscape*
 1207 *Handbook for Historic Properties* (2009) and shall maintain overall character of
 1208 adjacent historic properties and historic view shed;
- 1209
- 1210 2. Repair or replace in kind existing streets, driveways, sidewalks and curbing,
 1211 Undertaking includes stripping of pavement, spreading of new gravel on existing
 1212 roads, and concrete formwork and curing;
- 1213
- 1214 3. Repair or replace existing water, sewer, natural gas, and communications lines in
 1215 their present configuration, alignments and depth with no impact to character
 1216 defining features;
- 1217
- 1218 4. Traffic signs as required by law;
- 1219
- 1220 5. Repair or replace in kind existing building signs. Signs should be mounted in a
 1221 way as to minimize physical damage to historic building materials. New sign
 1222 installation shall maintain character of historic properties and not alter character
 1223 defining features;
- 1224
- 1225 6. Temporary buildings or structures that will not have a life longer than five years;
- 1226
- 1227 7. Undertakings that impact areas less than one square meter of ground disturbance;
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- 1229 8. Repair or replace in kind existing fencing and fence screens. Installation of
 1230 perimeter security fencing and gates are acceptable provided surveys have not
 1231 identified historic properties and character defining features are not altered; or
 1232
- 1233 9. No, or minimal, ground disturbance, and ground disturbance within previously
 1234 disturbed areas as long as new disturbance does not exceed dimensions of
 1235 previous disturbance.
 1236
- 1237 E. Roofs
- 1238
- 1239 1. Repair in kind existing roof. If roof is deteriorated beyond repair, a compatible
 1240 replacement roof is acceptable. Replacement roof(s) shall not alter overall
 1241 appearance of exterior or diminish character defining features.
- 1242
- 1243 2. All exempted work shall follow *Fort Bliss Standards for the Treatment of*
 1244 *Historic Buildings: Chapter 7 Maintenance Guide for Roofing* (2008) and/or
 1245 *Project Manual – Rehabilitation and Replacement of Historic Roofing* (2002).
 1246
- 1247 3. Installation of new roofing, including white roofs or cool roofs, on a flat-roofed
 1248 building with a parapet, such that the roofing material is not visible from any
 1249 public right-of-way.
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- 1251 F. Exterior
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1. Repair or replace in kind existing materials that maintain character defining features: stucco, concrete, masonry, wood siding, trim, porch decking, porch rails, joists, columns, and stairs.
 2. Installation of materials such as netting, bird spikes or sonar equipment for the deterring of bird habitat and does not alter character defining features. Installation should be reversible and not result in physical damage.
 3. All exempted work shall follow the following Fort Bliss published material specific guidance documents: *Fort Bliss Standards for the Treatment of Historic Buildings*, all chapters as applicable (2008); *The Adobe Manual* (2004); *The Stucco & Plaster Manual* (2006); *The Wood & Carpentry Manual* (2005); *The Waterproofing Manual* (2004).

1267 G. Doors

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1. Repair in kind existing historic door(s). If door is deteriorated beyond repair, a compatible replacement door is acceptable. Replacement door(s) shall match original design/configuration and shall not alter overall appearance of facade or diminish character defining features. Doors will typically be the same materials unless force protection or safety protocols require otherwise:
 2. Installation of hardware to include dead bolts, door latches and locks, window latches, locks, hinges, and door peepholes, provided historic materials are not removed. New hardware shall be of a plain, contemporary design and made of the same material as existing historic hardware;
 3. Repair in kind door screen(s). Door screen(s) shall be repaired in-kind prior to consideration of replacement. If replacement is necessary, screen shall be replaced in-kind with same material and thickness as existing screen.
 4. All exempted work shall follow the *Fort Bliss Standards for the Treatment of Historic Buildings*, Chapter 8 Maintenance Guide for Doors (2008).

1287 H. Windows

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1. Repair in kind existing damaged window components. If window components are deteriorated beyond repair, individual window component shall be replaced in-kind. Complete window replacement requires SHPO review;
 2. Paint window components in-kind. Unpainted surfaces shall remain unpainted;
 3. Adjustments of window counterweights including associated disassembly and reassembly;
 4. Replace in kind existing broken window glazing. Replacement shall be clear glass with same thickness as broken glass;

- 1301 5. Repair or replace in kind existing damaged window screens and storm windows;
1302
1303 6. Installation of hardware to include window latches, locks, hinges, provided
1304 character defining features are not removed. New hardware shall be of a plain
1305 contemporary design and made of the same material finish as remaining existing
1306 historic hardware;
1307
1308 7. All exempted work shall follow these guidance documents: Project Manual –
1309 Construction Documents and Specifications for Rehabilitation and Replacement
1310 of Historic Windows (2002) and/or Fort Bliss Standards for the Treatment of
1311 Historic Buildings: Chapter 9 Maintenance Guide for Windows (2008).
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- 1313 I. Interiors
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- 1315 1. Repair or replacement of existing non-historic flooring, carpets, and blinds that
1316 does not alter character defining features;
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1318 2. Replacement or placement of window treatment such as mini-blinds and curtains;
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1320 3. Repair in kind damaged historic flooring. If flooring components are deteriorated
1321 beyond repair, individual flooring component shall be replaced in-kind.
1322 Replacement flooring shall match original design, color and material and shall
1323 not alter character defining features;
1324
1325 4. Removal of paint coating through hand scraping or sanding that does not alter
1326 character defining features. Removal shall follow Project Manual – *Construction*
1327 *Documents and Specification: Preservation & Rehabilitation of Historic Interior*
1328 *Finishes* (2007);
1329
1330 5. Installation of fire, smoke and security detectors;
1331
1332 6. Installation of new interior furniture/furnishing and information technology
1333 systems and equipment that does not alter or diminish character defining
1334 features;
1335
1336 7. Repair of structural and mechanical systems that are not visible and does not alter
1337 structural integrity or character defining features;
1338
1339 8. Repaint or refinish historic surfaces in kind. New paint color/finish shall match
1340 existing color and texture and does not alter character defining features;
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1342 9. Removal and replacement of non-historic asbestos flooring and mastic and does
1343 not alter character defining features.
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1345 10. All exempted interiors work shall follow Fort Bliss Standards for the Treatment
1346 of Historic Buildings (2008), Sections as applicable and/or Project Manual –
1347 Construction Documents and Specification: Preservation & Rehabilitation of
1348 Historic Interior Finishes (2007).
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J. Electrical/Plumbing/HVAC

1. Repair or replacement of existing electrical, plumbing fixtures, wiring, lines and pipes and does not alter character defining features;
2. Repair or replacement of existing heating and cooling systems, ductwork and ventilation systems that are not considered character defining features and do not alter character defining features;
3. Repair or replacement of existing electrical, power, lighting and communication lines in their present configuration and alignments and depth and do not alter character defining features;
4. Upgrading existing electrical and plumbing components such as hot water heaters, existing wiring, lines and pipes that do not alter character defining features;
5. All exempted mechanical and electrical work shall follow *Fort Bliss Standards for the Treatment of Historic Buildings* (2008).

K. Conservation

1. Repair or installation of insulation in roofs, crawl spaces, ceiling, attics, walls, floors and around pipes and ducts that do not alter character defining features;
2. Repair and installation of weather stripping and caulking that does not alter character defining features. Undertaking shall follow *Project Manual – Construction Documents and Specifications for Rehabilitation and Replacement of Historic Windows* (2002) and *Fort Bliss Standards for the Treatment of Historic Buildings: Preservation & Rehabilitation of Historic Windows*;
3. Repair or replacement of existing non-historic lighting systems that do not alter character defining features;
4. Installation of environmental monitoring units, such as those for water, air quality and electrical usage;
5. All exempted undertakings that affect windows shall follow these guidance documents: *Project Manual – Construction Documents and Specifications for Rehabilitation and Replacement of Historic Windows* (2002) and/or *Fort Bliss Standards for the Treatment of Historic Buildings: Chapter 9 Maintenance Guide for Windows* (2008).
6. Energy audits and feasibility studies.
7. Water conservation measures, such as installation of low-flow faucets, toilets, showerheads, urinals, or distribution device controls, provided that plumbing fixtures to be replaced are not original to the building;

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8. Upgrading existing facility and infrastructure-related pumps and motors, including those water/wastewater facilities, to variable-speed or premium efficiency standards;
 9. Hot water tank replacement that does not require a visible new supply or venting; and
 10. Repairing plumbing systems in a manner that does not affect the interior or exterior of the building.
- L. Maintenance
1. Maintenance and routine housekeeping that does not alter character defining features;
 2. Removal of animals, birds, insects and their associated debris.
- M. New Construction
1. New construction in areas that do not include historic properties or with the view shed of a historic district. New construction in or near a historic district and associated view shed shall be reviewed and approved by the CRM and/or CRM Staff.

APPENDIX C

IDENTIFYING AND EVALUATING PROPERTIES

The following procedures are applicable to all survey and/or evaluation work plans conducted under a Section 106/NEPA Review--or a general Section 110 project as appropriate. And will be applicable throughout the term of the PA. Work plans will describe the scope of work (including the boundaries of the survey area, acreage or numbers of buildings and structures to be inventoried), the methods to be used, and the expected output (or deliverables). All work will be conducted by or under the supervision of a professional who meets the minimum standards as identified in the Professional Qualifications as appropriate for the historic property being addressed and must be consistent with the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716).

I. Archaeological Survey

A. Policy: Fort Bliss shall obtain accurate, descriptive field data of all observed cultural materials in consultation with the appropriate SHPOs and Tribes.

B. Procedure

1. Transect Recording Unit (TRU) Survey

- a) The survey area is gridded into 15 m x 15 m units using GIS software.
- b) Each TRU is identified by the WGS 84 UTM coordinate of its southwest corner. Each crewmember walks a 15 m x 15 m line of units, until all units within the survey area have been observed.
- c) Each crewmember uses a handheld electronic data gathering unit to record all observed cultural materials within each 15 m x 15 m "cell."
- d) The electronic data gathering unit usually includes a GPS application that displays the TRU coordinates, with a correctible accuracy of less than or equal to 1 meter, linked to a menu driven database for recording the artifact and feature types, and other pre-programmed data field.

2. Recording methods

a) Features

- (1) Features are recorded within each 15 m x 15 m unit.
- (2) Data to be gathered when recording a feature include: the type and quantity of materials, the size and shape of the feature, any construction details, probable function, and any relationship to nearby cultural materials.
- (3) Digital photos are taken of each feature.

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(4) If the feature is tested for subsurface depth/content of materials, then plan and/or profile views are drawn.

b) Artifacts

- (1) Artifacts are recorded within each 15 m x 15 m unit.
- (2) Data to be collected can include: type of artifact, size, shape, color, material type (lithic type, ceramic type, glass type), count, maker's mark or other identifiable markings or stamps.
- (3) Crewmembers may estimate the number of artifacts for TRUs where large numbers of artifacts are observed.

3. Defining archaeological sites

a) Minimum standards

- (1) Ten or more artifacts of any class or type (except for fire-cracked rock) within a 15 sq meter area (except when all pieces appear to originate from a single source—a ceramic pot, a broken glass bottle, deteriorated sheet of metal, etc.). An exception might be made for a single knapping area which could be considered an activity area, and thus a site; or
- (2) One or more dateable features (that is, chronometric dating) with or without associated artifacts (associated within a 15-meter radius of the feature); or
- (3) Two or more undateable features within 30 meters of one another; or
- (4) One or more undateable features with any associated artifacts.

b) In general, 30 meters of no cultural materials is the maximum distance allowed between two 15 m x 15 m units containing cultural materials (or "positive" cells) to still be considered part of the same site. Field supervisors will be allowed to assign site status as appropriate to other situations outside of these criteria provided a logical and reasonable justification is made.

c) Prehistoric Site, Historic Site, or Multi-Component Site

- (1) Archeological sites may be historic, or include historic components.
- (2) A historic component is identified when the feature and/or artifacts can be shown to be 50 years of age or older, but not extending into prehistory.

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(3) At Fort Bliss that earliest date is 1659 A.D. (or the establishment of the first Spanish missions).

(4) Relevant historic records searches will be conducted and in New Mexico, the appropriate state forms are completed when historic buildings or structures are present on the site. Appropriate state forms shall be completed by an individual meeting the Professional Standards.

d) Isolated Occurrences

(1) IOs are recorded when there is a positive TRU that contains cultural materials that do not fit the criteria for a site.

(2) Data to be gathered when recording an IO include: the type and quantity of materials, the size and shape of the feature, any construction details, probable function, and any relationship to nearby cultural materials.

4. Conducting Geomorphic Studies

a) Each investigation shall assess the potential for subsurface deposits and the integrity of those deposits at each site through subsurface testing, although natural cuts into the landscape (road cuts, arroyos, and rills) and other previously collected geomorphic/geologic data can be used.

b) Testing shall include trowel tests, auger tests, shovel tests or backhoe tests; testing shall be proportional to the size of the site, but otherwise have a minimal impact.

c) The investigation shall record the soil profile and any other distinguishing characteristics (such as pieces of charcoal or buried artifacts) to identify post-depositional activities that have affected the site (wind or water erosion, man-made impacts, and bioturbation), to estimate the extent of those activities, and to finally arrive at an estimate of the percentage of the site remaining intact.

d) When appropriate for a given project, a geomorphologist shall conduct geomorphological studies.

5. Assessing Chronological and Chronometric Potential

a) Each investigation shall assess the potential for chronological and/or chronometric dating.

b) Chronological or relative dating potential includes the presence of diagnostic ceramics or stone tool types or features; chronometric dating

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potential includes the presence of charcoal pieces or carbon-stained soil for AMS dating techniques.

- c) The potential for other types of chronometric dating methods such as dendrochronological (tree ring) or thermoluminescence (time elapsed since last firing) can also be used.
- d) Actual collection and testing shall be based on the availability of funding.

6. Processing Survey Data

- a) Survey data is downloaded to one unit and/or computer and/or server for later Quality Assurance/Quality Control and further processing.
- b) Those files shall be saved in the ESRI.shp file extension for use in one of the ESRI geographic information system (GIS) products such as ArcMap.
- c) Data collection and summary descriptions shall include:
 - (1) general physical environment;
 - (2) horizontal boundary of the site;
 - (3) quantities and types of artifacts;
 - (4) number, size, and types of features;
 - (5) site integrity based on observation and subsurface testing; and
 - (6) potential for yielding chronometric and/or paleoclimatological samples.
- d) In general, a physical site datum shall be established for each site and a site tag included as appropriate, unless otherwise directed by the CRM or CRM Staff.
 - (1) The datum is usually a piece of rebar with an attached aluminum tag.
 - (2) The tag includes the name of the investigator, date of placement, Fort Bliss project number, and Fort Bliss and appropriate state site numbers.

7. Creating Site Maps

- 1616 a) An overall map of the project area and individual site maps shall be
1617 created for each survey and included in any report or other written
1618 record.
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1620 b) Individual site maps include
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1622 (1) the site boundary;
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1624 (2) nearby physiographic features and landmarks;
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1626 (3) locations of features, site datum, test units, and collections;
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1628 (4) a "north" arrow, a scale and a legend or key;
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1630 (5) source graphics; and
1631
1632 (6) both Fort Bliss and appropriate state numbers.
1633
1634 8. Completing State Site Forms
1635
1636 a) Appropriate state forms shall be completed for each recorded site,
1637 following the appropriate state guidance.
1638
1639 b) Fort Bliss numbers are assigned by the CRM or CRM Staff.
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1641 c) The primary number for any site on Fort Bliss is the "Fort Bliss" or "FB"
1642 number; the appropriate state number is the required secondary number.
1643
1644 d) Site maps attached to state site forms shall conform to the requirements
1645 of the appropriate state.
1646
1647 II. Historic Buildings, Objects, Structures, and District Surveys
1648
1649 A. Policy: Fort Bliss shall obtain accurate, descriptive field data of all buildings, objects,
1650 structures, and districts, not previously surveyed, in consultation with the appropriate
1651 SHPOs and Tribes.
1652
1653 B. Procedure
1654
1655 1. At a minimum the following information shall be collected in a survey of the
1656 built environment:
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1658 a) Building Number;
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1660 b) Year Built;
1661
1662 c) Historic Function;
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- 1664 d) Evaluator/Date of evaluation;
- 1665
- 1666 e) Historic code;
- 1667
- 1668 f) Historic context;
- 1669
- 1670 g) Architectural description; and
- 1671
- 1672 h) Photo of the primary facade
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2. Completing State Forms

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- 1676 a) Appropriate state forms shall be completed for each recorded building,
- 1677 object, or structure following the appropriate state guidance.
- 1678
- 1679 b) Fort Bliss numbers are assigned by the CRM or CRM Staff.
- 1680
- 1681 c) The primary number for any historic property on Fort Bliss is the "Fort
- 1682 Bliss" or "FB" number; the appropriate state number is the required
- 1683 secondary number.
- 1684
- 1685 d) Maps attached to state forms shall conform to the requirements of the
- 1686 appropriate state.
- 1687
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APPENDIX D

RECORD OF HISTORIC PROPERTIES CONSIDERATION

Date: 11/3/2010 State: TX Archeology
RHPC No.: 1 Architecture
RHPC Preparer: Sitton Archeology and Architecture
Dig Permit

NEPA Number: 99-999 Project Number: 9999
Work Order No.: XXX999 Bldg. Number: 2420

Proponent: Proponent(s) Name

Project Name: Project Name

Project Description:

Describe project particulars, location, timelines, etc.

Area of Potential Effect: Describe area at risk for effects

Project Analysis:

Describe process followed to complete review--nature of project, possible issues, research materials used, previous projects and results, any work required or already completed, etc.

Damage Report Acceptable Loss Interior or Exterior: Exterior In District or Viewshed

Criteria for Evaluation

Historic Context: Summarize applicable Historic Context(s)

Criterion A: How site(s) meets the requirements under the criterion

Criterion B: How site(s) meets the requirements under the criterion

Criterion C: How site(s) meets the requirements under the criterion

Criterion D: How site(s) meets the requirements under the criterion

Criteria Considerations Apply to Property

Criterion Considered: test record

Determination of Eligibility

THIS IS A DETERMINATION OF ELIGIBILITY SHPO Consultation Date: 03-Nov-10

Comments: Log Number or Tracking Number, how any comments were addressed, report title and author

Assessing Effects

THIS IS AN ASSESSMENT OF EFFECT

No Historic Properties Affected

Comments: Any comments to better explain findings.

Historic Properties Not Adversely Affected

Comments: Any comments to better explain findings.

Historic Properties Adversely Affected

Comments: Any comments to better explain findings.

Treatment of Adverse Effect

SHPO Consultation Date: 11/3/2010

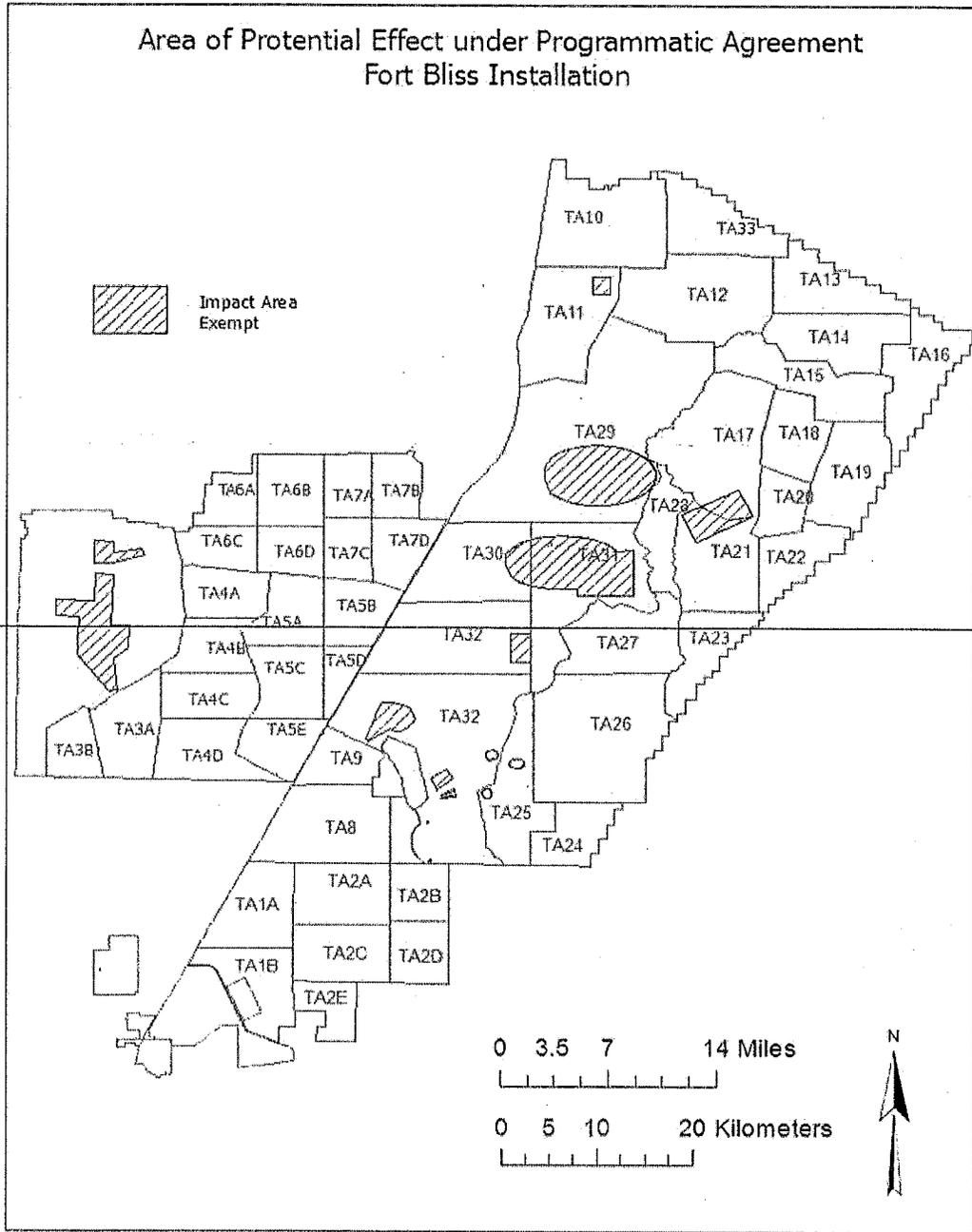
Comments: How any comments were addressed, other consultation conducted, timelines, or other information.

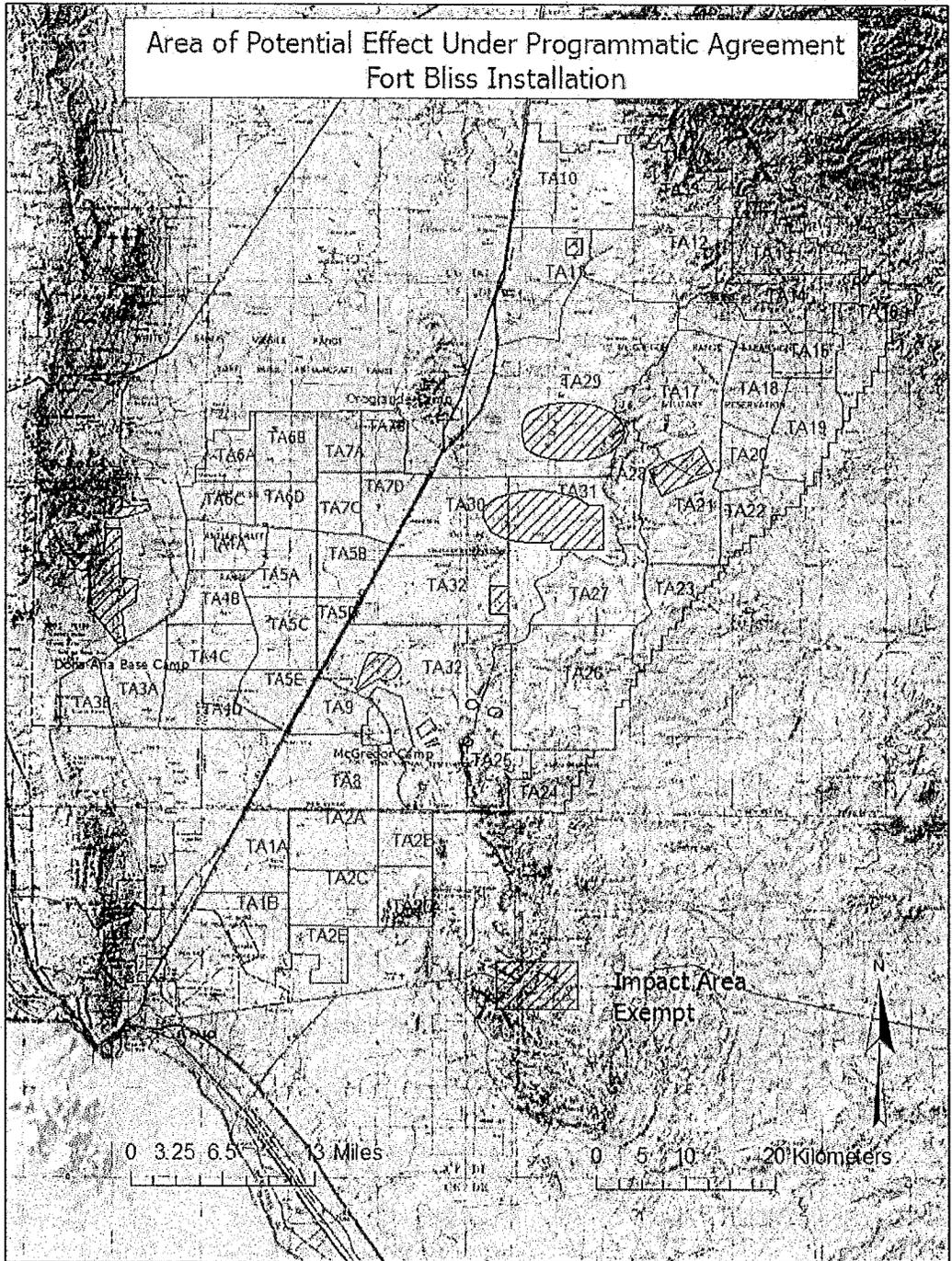
Attachment List: maps, reports, figures, etc.

Signatures For Findings of Adverse Effect

Preparer: Date:

APPENDIX E



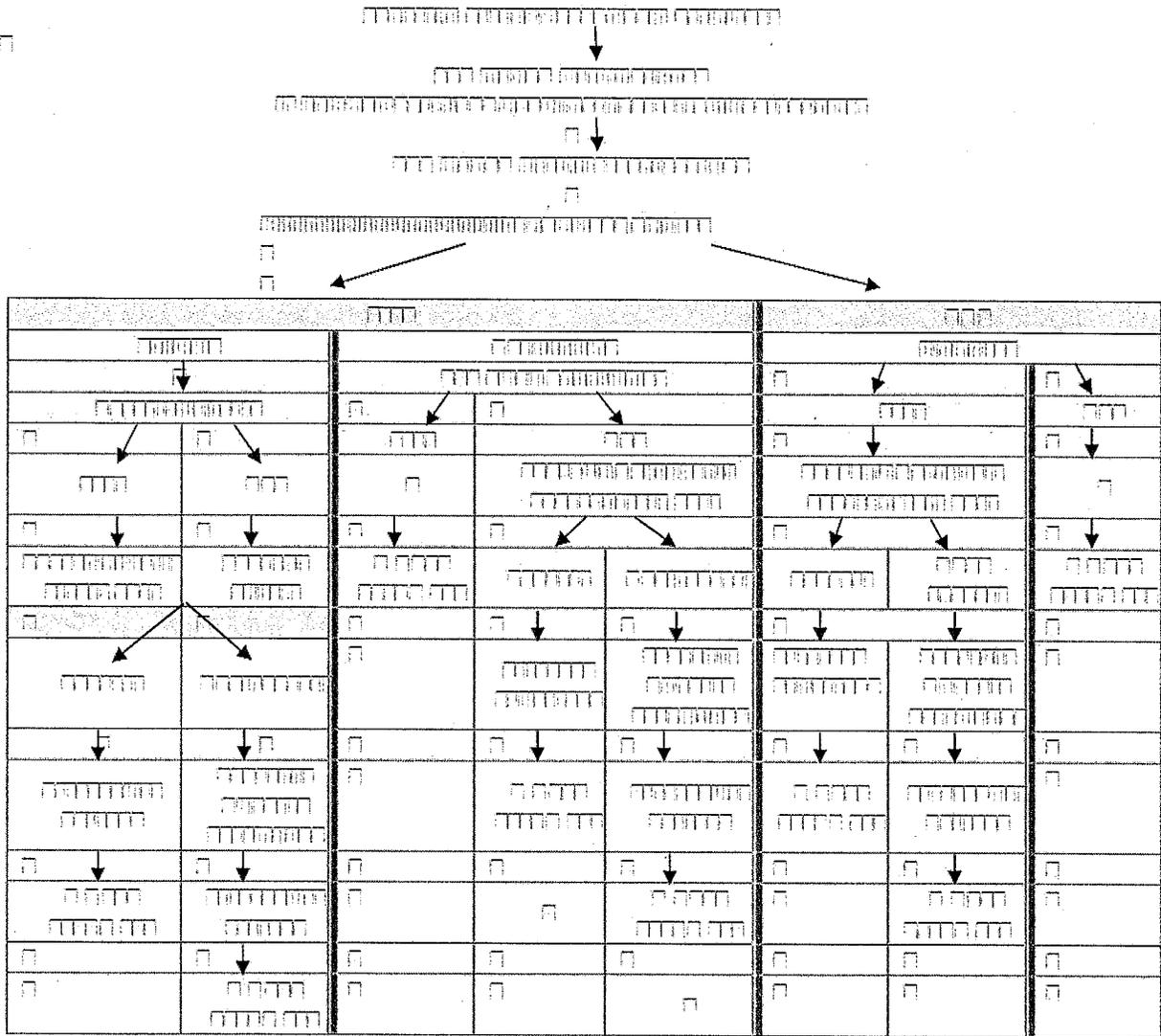


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APPENDIX F

Flowchart – Inadvertent Discovery Procedures



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APPENDIX G

Standard Mitigation Measures

If the CRM and/or CRM Staff make a finding of Adverse Effect, Fort Bliss has identify consulting parties, including Tribes, and have considered all comments on this plan to mitigate those adverse effects. Options for mitigating those effects which include avoiding the site or sites by design, data recovery, or some other creative mitigation plan (trade-offs, preservation of another site, development of a new historic context in lieu of data recovery, etc), or other plans as may be developed during consultation.

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I. Recordation

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A. Digital Photography Package: Prior to project implementation, the CRM and/or CRM Staff shall oversee the successful delivery of a digital photography package prepared by staff or contractors meeting the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate. The digital photography package will meet the standards cited in the NPS' National Register of Historic Places Photographic Policy March 2010 or subsequent revisions (<http://www.nps.gov/nr/publications/bulletins/photopolICY/index.htm>).

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1. The package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.
 2. The package shall include printed color copies of the digital photographs (on appropriate paper, per NPS Photographic Policy), a CD/DVD of the digital photographs (per NPS Photographic Policy), the completed appropriate state inventory form, select existing drawings, where available, and a written site history of the historic property.
 3. The CRM and/or CRM Staff shall submit the package to the appropriate SHPO for review and approval. Once approved by the appropriate SHPO, the CRM and/or CRM Staff shall submit a copy of the approved documentation to a state or local historical society, archive, and/or library for permanent retention.

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B. 35mm Black and White Photography Package: Prior to project implementation, the CRM and/or CRM Staff shall oversee the successful delivery of a 35 mm black and white film photography package prepared by staff or contractors meeting the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.

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1. The package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a

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site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.

2. The package shall include one full set of 35mm black and white photographs printed on fiber-based paper, the corresponding 35mm film negatives in acid free sleeves, the completed appropriate state inventory form, select existing drawings, where available, and a written site history of the historic property.
3. The CRM and/or CRM Staff shall submit the package to the appropriate SHPO for review and approval. Once approved by the appropriate SHPO, the CRM and/or CRM Staff shall submit a copy of the approved documentation to a state or local historical society, archive, and/or library for permanent retention.

C. Large Format Photography Package: Prior to project implementation, the CRM and/or CRM Staff shall oversee the successful delivery of a large format photography package prepared by staff or contractors meeting the Professional Qualifications for Architectural History, History, Architecture, or Historic Architecture, as appropriate.

1. The package shall include a comprehensive collection of photographs of both interior and exterior views showing representative spaces and details of significant architectural features and typical building materials. Exterior photographs shall include full oblique and contextual images of each elevation. Exterior views shall be keyed to a site plan while interior views shall be keyed to a floor plan of the building/structure. The photographs shall be indexed according to the date photographed, site number, site name, site address, direction, frame number, subject matter and photographer's name recorded on the reverse side in pencil.
2. The package shall include one full set of 4x5 or 5x7-inch photographs printed on fiber-based paper, the corresponding 4x5 or 5x7-inch negatives in acid free sleeves, the completed appropriate state inventory form, select existing drawings, where available, and a written site history of the historic property.
3. The CRM and/or CRM Staff shall submit the package to the appropriate SHPO for review and approval. Once approved by the appropriate SHPO, the CRM and/or CRM Staff shall submit copies of the approved documentation to a local historical society, archive, and/or local library for permanent retention.

D. Data Recovery: Prior to project implementation, the CRM and/or CRM Staff shall oversee the successful completion of data recovery undertaken by staff or contractors meeting the Professional Qualifications for Archaeology.

1. If data recovery for an archeological site is the chosen mitigation method, a Data Recovery Plan will be developed in accordance with the ACHP's *Recommended Approach for Consultation on Recovery of Significant Information from Archeological Sites* (1999), and consultations under this PA.

- 1810 a) The Plan will be submitted to the appropriate SHPO and the Tribes for a
1811 30 day review and comment period. If no comments are received, Fort
1812 Bliss will assume there are no objections and proceed with the Plan; if
1813 comments are received, the CRM and/or CRM Staff will continue
1814 consultation until that Plan is acceptable.
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1816 b) A copy of the finalized Plan will be provided to the appropriate SHPO
1817 and the Tribes.
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1819 c) Upon request of any party, the Plan may be submitted to the ACHP for
1820 review and comment, also with a 30 day review and comment period.
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1822 d) The final report of the execution of any Plan will be submitted to the
1823 appropriate SHPO and the Tribes.
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1825 2. Fort Bliss may propose to use a previously accepted Programmatic Research
1826 Design (PRD) to implement the mitigation.
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1828 a) The appropriate SHPO and the Tribes will continue to be given a 30 day
1829 review and comment period, the PRD may still be sent to the ACHP if
1830 requested, and the final report of the execution of the Plan will be
1831 submitted to the appropriate SHPO and the Tribes.
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1833 **II. Public Interpretation**
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- 1835 A. Prior to project implementation, the CRM and/or CRM Staff shall work with the appropriate
1836 SHPO to design an educational interpretive plan.
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1838 B. The plan may include signs, displays, educational pamphlets, websites, workshops and other
1839 similar mechanisms to educate the public on historic properties within the local community, state,
1840 or region.
1841
1842 C. Once an interpretive plan has been agreed to by the parties, the appropriate SHPO and the CRM
1843 and/or CRM Staff shall continue to consult throughout implementation of the plan until all agreed
1844 upon actions have been completed by Fort Bliss.
1845

1846 **III. Historical Context Statements and Narratives**
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- 1848 A. Prior to project implementation, the CRM and/or CRM Staff shall work with the appropriate
1849 SHPO to determine the topic and framework of a historic context statement or narrative Fort Bliss
1850 shall be responsible for completing.
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1852 B. The statement or narrative may focus on an individual historic property type, a set of related
1853 properties, or relevant themes as identified in the statewide preservation plan.
1854
1855 C. Once the topic of the historic context statement or narrative has been agreed to, the CRM and/or
1856 CRM Staff shall continue to coordinate with the SHPO through the drafting of the document and
1857 delivery of a final product.
1858

- 1859 D. The appropriate SHPO shall have final approval over the end product.
1860
1861 E. Fort Bliss shall use staff or contractors that meet the Secretary's Professional Qualifications for
1862 the appropriate discipline.
1863

1864 **IV. Oral History Documentation**
1865

- 1866 A. Prior to project implementation, the CRM and/or CRM Staff shall work with the appropriate
1867 SHPO to identify oral history documentation needs and agree upon a topic and list of interview
1868 candidates.
1869
1870 B. Once the parameters of the oral history project have been agreed upon, the the CRM and/or CRM
1871 Staff shall continue to coordinate with the appropriate SHPO through the data collection, drafting
1872 of the document, and delivery of a final product.
1873
1874 C. The SHPO shall have final approval over the end product.
1875
1876 D. Fort Bliss shall use staff or contractors that meet the Secretary's Professional Qualifications for
1877 the appropriate discipline.
1878

1879 **V. Historic Property Inventory**
1880

- 1881 A. Prior to project implementation, the CRM and/or CRM Staff shall work with the SHPO to
1882 establish the appropriate level of effort to accomplish a historic property inventory.
1883
1884 B. Efforts may be directed toward the resurvey of previously designated historic properties and/or
1885 districts which have undergone change or lack sufficient documentation, or the survey of new
1886 historic properties and/or districts that lack formal designation.
1887
1888 C. Once the boundaries of the survey area have been agreed upon, the designated responsible party
1889 shall continue to coordinate with the appropriate SHPO through the data collection process.
1890
1891 D. The designated responsible party shall use appropriate SHPO standards for the survey of historic
1892 properties and appropriate SHPO forms as appropriate.
1893
1894 E. The CRM and/or CRM Staff shall prepare a draft inventory report, according to appropriate
1895 SHPO templates and guidelines, and work with the appropriate SHPO until a final property
1896 inventory is approved.
1897
1898 F. Fort Bliss shall use staff or contractors that meet the Secretary's Professional Qualifications for
1899 the appropriate discipline.
1900

1901 **VI. Geo-References of Historic Maps and Aerial Photographs**
1902

- 1903 A. Prior to project implementation, the CRM and/or CRM Staff shall work with the SHPO to
1904 identify the historic maps and/or aerial photographs for scanning and geo-referencing.
1905
1906 B. Once a list of maps and/or aerial photographs have been agreed upon, the designated responsible
1907 party shall continue to coordinate with the appropriate SHPO through the scanning and geo-

- 1908 referencing process and shall submit drafts of paper maps and electronic files to the appropriate
1909 SHPO for review.
- 1910
- 1911 C. The appropriate SHPO shall have final approval on the quality of the documentation provided by
1912 Fort Bliss.
- 1913
- 1914 D. The final deliverable shall include a paper copy of each scanned image, a geo-referenced copy of
1915 each scanned image, and the metadata relating to both the original creation of the paper maps and
1916 the digitization process.