

**MONITORING AND DISCOVERY PLAN GUIDANCE
FOR ARIZONA COMMERCE AUTHORITY (ACA)
BROADBAND EQUITY, ACCESS, AND DEPLOYMENT (BEAD) PROGRAM PROJECTS**

This guidance document provides an outline for monitoring and discovery plans developed for BEAD projects, with the goal of promoting consistency across BEAD project documents for agency reviewers. For BEAD projects reviewed under the Program Comment for Communications Projects on Federal Lands and Property, as amended on March 13, 2024 (Program Comment), a monitoring and discovery plan may be required for project deployments that do not meet the Conditional Exemptions (Sections VI–XI of the Program Comment). Situations that may warrant a plan include portions of the area of potential effects (APE) where identified historic properties cannot be avoided; proposed construction in areas of high archaeological potential or in culturally sensitive areas identified by a Tribe where a Class III survey is not feasible; or cases where a Class III survey has identified historic properties that cannot be avoided.

Note that monitoring may be recommended within site boundaries, site boundary buffers as defined by the applicable agency, and culturally sensitive areas identified during the review process. Sections 1 through 7 should be included in the report’s abstract. The content of these same sections should be expounded upon in the report body.

1. REPORT TITLE

- **Report Title:**
- **Report Author(s):**
- **Report Date:** Include report submittal date (month, day, and year), and indicate “Revised,” with revision date, if appropriate.

2. PROJECT INFORMATION

- **Project Name:** Refers to the official project name, as provided by project sponsor or agency.
- **Project Number:** BEAD Project ID Number.
- **Broadband Provider:** Identify the broadband provider.
- **Broadband Project Number:** Provide the broadband provider’s internal project number.
- **Project Location:** Identify the nearest city or town, and county.
- **Project Locator UTM:** Provide one UTM coordinate for the project as a whole. (Northing and Easting in meters, must be NAD 83, and include Zone.)
- **Arizona State Land Department (ASLD) Right-of-Way (ROW) Application Number:** Must be included in all reports involving State Trust land administered by ASLD.
- **Arizona State Museum (ASM) Accession Number:** Obtained from ASM if on state, county, or municipal lands.
- **Arizona Antiquities Act (AAA) Permit Number:** Obtained from the ASM if working under an AAA permit.
- **Other Permit Number(s):** List pertinent agency permit numbers.
- **Burial Discovery Agreement (BDA):** Provide BDA case number if BDA is obtained from ASM for work on state, county, municipal, or private lands.
- **Native American Graves Protection and Repatriation Act (NAGPRA) Plan of Action (POA):** Provide number obtained from federal agency if a POA is required on federal lands.

3. ORGANIZATION/CONSULTING FIRM

- **Consultant Firm/Organization:** Identify the organization or consultant firm that prepared this plan.
- **Internal Report Number:** Provide the organization or consultant report number.

4. LEAD AGENCY

- **Lead Agency:** National Telecommunications and Information Administration (NTIA) (If the project includes Federal Communications Commission [FCC] licensed wireless, the FCC will be the lead federal agency for those portions and consulted separately.)
- **Joint Lead Agency:** Arizona Commerce Authority (ACA) and ‘agency official’ per 36 Code of Federal Regulations (CFR) 800.2(a)
- **Other Involved Agencies:** List all agencies involved in the Undertaking, including land managers and permitting agencies, including the ASM if an AAA permit is involved. Do not include the Arizona State Historic Preservation Office (SHPO) as an involved agency.
- **Funding Source:** Identify as federal (BEAD Grant), and any state, local, or private funds; list all sources.
- **Applicable Legislation:** List all laws and regulations that pertain to the current Undertaking as it relates to review under the State or National Historic Preservation Acts, programmatic agreements, or other state and local ordinances.
 - Section 106 of the National Historic Preservation Act (36 CFR Part 800)
 - Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (amended July 2020)
 - Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings Approved by the FCC (2004)
 - Arizona State Historic Preservation Act (Arizona Revised Statutes [ARS] § 41-861 et seq.)
 - Arizona Antiquities Act (ARS § 41-841 et seq.)
 - Statutes pertaining to human remains, funerary objects, sacred ceremonial objects, or objects of national or tribal patrimony (ARS § 41-844 [state, county, municipal lands]; ARS § 41-865 [private lands])
 - Local ordinances (if any are applicable; project-specific)

5. DESCRIPTION OF UNDERTAKING

ACA is implementing the BEAD Program to achieve the goal of universal broadband service in Arizona. Using federal grant funding from NTIA, the BEAD Program will expand broadband access to unserved and underserved communities using fiber, fixed wireless, and satellite technologies. Projects implemented under the BEAD Program will improve connectivity, support economic growth, enhance education, and improve health care access throughout Arizona. For each Undertaking:

- Describe the Undertaking (e.g., To achieve these goals, [broadband provider] plans to install [XX] amount of fiber/towers for licensed/unlicensed fixed wireless/other...)
- Type of work to be performed (e.g., What ground-disturbing activities will be associated with the project? What type(s) of machinery will be used? What is the depth and areal extent of disturbance?).
- In cases where NTIA applies the *Program Comment to Avoid Duplicative Reviews for Wireless Communications Facilities Construction and Modification* to those licensed fixed wireless

deployments that are either subject to (or excluded from) Section 106 review by the FCC, thus removing NTIA's Section 106 review obligations:

- The FCC is the responsible agency for FCC-licensed spectrum reviews. To avoid the development of multiple MDPs for a single subgrantee project, SHPO recommends delineating the NTIA Undertaking and the FCC Undertaking. Agency review will be limited to the portions of the total project under their individual jurisdiction. This plan may also be submitted in support of the FCC Undertaking once SHPO has reviewed the FCC Form 620 or 621, as applicable, and recommended monitoring.

6. AREA OF POTENTIAL EFFECTS (APE)

- **APE:** Describe the location and size of the APE including acreage and dimensions (length, width, and depth, if known). Include a radius for visual effects for the APE, if applicable:
 - Wireless towers less than 200 feet tall – ½-mile radius
 - Wireless towers more than 200 feet but no more than 400 feet tall – ¾-mile radius
 - Wireless towers more than 400 feet tall – 1-mile radius
- **FCC APE (if applicable):** If the subgrantee project includes an FCC Undertaking, describe the location and size of the FCC APE including acreage, dimensions (length, width, and depth, if known), and a radius for visual effects, as described above.
- **Legal Description:** Township, Range, Section, Quarter-Section (all involved). Reference the appropriate topographic quadrangle map and baseline and meridian. Add a table if many.
- **Land Jurisdiction:** Identify the landowner(s)/land manager(s) and acreage for each. If the land is an easement that is owned by a different entity, also indicate the underlying landowner. All privately owned land can be grouped together as “private.” Add a table if appropriate—see example below in Section 7.
- **Total Acreage:** Refers to the total number of acres in the APE, with all land jurisdictions combined.

7. MONITORING AREA (if not coincident with the APE)

- **Monitoring Area:** Describe the location and size of the monitoring area, including dimensions (length, width, and depth, if known). Refers to the portion of the APE that will be monitored under this plan.
- **Legal Description:** Township, Range, Section, Quarter-Section (all involved). Reference the appropriate topographic quadrangle map and baseline and meridian.
- **Land Jurisdiction:** Identify the landowner(s)/land manager(s) by acreage. If the land is an easement that is owned by a different entity, also indicate the underlying landowner. All privately owned land can be grouped together as “private.”
- **Total Acreage:** Refers to the total number of acres in the monitoring area, with all land jurisdictions combined.

Example Table

Land Jurisdiction	APE Acreage	Monitoring Area Acreage
Arizona Department of Transportation (ADOT)	24.32	2.24
ADOT easement on Bureau of Land Management (BLM)	43.16	4.69

Land Jurisdiction	APE Acreage	Monitoring Area Acreage
ASLD	29.89	14.2
Hopi Tribe	0.36	0
Private	1.53	0.16

8. PREVIOUS RESEARCH (use these buffer radii)

(Select the appropriate infrastructure[s])

Fiber routes and support infrastructure – ¼-mile search radius

Wireless towers less than 200 feet tall – ½-mile search radius

Wireless towers more than 200 feet but no more than 400 feet tall – ¾-mile search radius

Wireless towers more than 400 feet tall – 1-mile search radius

- **ASM and AZSITE:** For work conducted on state, county or municipal land, background research is required to be conducted through both the ASM Archaeological Records Office and on AZSITE, respectively.
 - **ASM:** <https://statemuseum.arizona.edu/crm/archaeological-records-office>.
 - **AZSITE:** <http://azsite3.asurite.ad.asu.edu/azsite/>.
- **NRHP Database:** Required. We recommend using both the National Register of Historic Places (NRHP) database and downloading spatial data for use in Google Earth. See <http://focus.nps.gov/nrhp/Download/>.
- **ADOT Portal:** Valuable resource for projects in ADOT road ROW. See <https://azdot.gov/business/environmental-planning/cultural-resources>.
- **General Land Office (GLO) Maps:** Required. See <http://www.gloreports.blm.gov/search/default.aspx>.
- **Land Managing Agency Files (e.g., City of Phoenix, U.S. Forest Service, BLM):** Records review required for any part of the study area involving federal (e.g., USFS, BLM) land or lands of other entities (e.g., Salt River Project [SRP], Arizona Public Service [APS]).
- **Tribal Cultural Resources Files:** Records review required for any part of the study area involving Tribal land. Permission must be obtained from respective Tribes, not ASM or SHPO.
- **Local Government Websites:** Review of local government websites is recommended to identify historic resources and areas of archaeological/historical sensitivity. Note that Certified Local Governments (CLGs) generally have specific ordinances for identifying cultural resources. See <https://azstateparks.com/certified-local-governments> for a list of CLGs.
- **Other:** List all other sources utilized (e.g., Sanborn Fire Insurance Maps, historic topographic maps, historic road maps, etc.).
- **Previous Projects within the Study Area:** (Include all previous projects that intersect the APE. Expand table as needed.)

Project Number	Project Name	Author	Year

- **Cultural Resources Summary Table:** (Include all cultural resources within the APE. Include unevaluated (treated as eligible), NRHP-eligible, and NRHP-listed resources that will be monitored under the Treatment column in the table below. No treatment is required for NRHP-ineligible resources.

Site Number	Land Jurisdiction	Eligibility Status/ Criteria(on)	Treatment

9. RESOURCES TO BE MONITORED

Draft a short description for each resource to be monitored. Include a site description, types of features recorded at the site, a discussion of previous work conducted, and a site map depicting known features and the APE.

10. HISTORIC CONTEXT

Provide applicable historic context(s) based on the background information. Do not include a full culture history. Include full citation and brief summary for SHPO Historic Context Study or Studies (<https://azstateparks.com/shpo-historic-context-studies>) that are relevant to the project. If no SHPO Historic Context Studies are relevant, develop and provide context. Historic contexts should minimally include a research theme, a cultural and temporal affiliation, and a geographical location (e.g., Irrigation agriculture among the Hohokam during the Preclassic Period [750–1150] in the Phoenix Basin).

11. RESEARCH QUESTIONS

- **Standard Research Questions:** (that can be applicable to any project)
 - What is the age of the cultural items observed during monitoring?
 - How does the age of the cultural finds compare with our current understanding of the age of the site?
 - What activities are indicated by the cultural finds?
 - What might the identified features/materials indicate about site activities?
- **Research Questions that are Relevant to Named Historic Context(s):** (frame questions in text and discuss their relevance to historic context[s]. Avoid questions with Yes/No answers.)

12. FIELD METHODS

Installation of new wireless or fiber optic infrastructure likely would include one or more of the following methods:

- **Collocation of Communications Antennae:** New antennae would be attached to an existing tower. Archaeological monitoring would likely not be needed, but in the event of ground disturbance (e.g., trenching for new utility installation), archaeological monitors would observe all ground-disturbing activities, examine any excavation walls for evidence of features, and inspect the back dirt for cultural materials, including artifacts and human remains.
- **Above-ground Communications Connections to and Collocations on Buildings:** New above-ground communications connections would be established or collocated on buildings. Archaeological monitoring would likely not be needed, but in the event of ground disturbance (e.g., trenching for new utility installations), archaeological monitors would observe all

ground-disturbing activities, examine any excavation walls for evidence of features, and inspect the back dirt for cultural materials.

- **Placement of Above-ground Communications and Cable Lines on Existing Poles or Structures:** New communications and cable lines would be placed on existing poles or structures. Archaeological monitoring would likely not be needed, but in the event of ground disturbance, archaeological monitors would observe all ground-disturbing activities, examine any excavation walls for evidence of features, and inspect the back dirt for cultural materials.
- **Placement of Above-ground Communications and Cable Lines on New Poles or Structures:** New communications and cable lines would be attached to new poles or structures, with new ground disturbance at the locations of the new poles or structures. Archaeological monitors would observe the new pole or structure excavations, examine the excavation walls for evidence of features, and inspect the back dirt for cultural materials.
- **Installation of Buried Communications Cable via Directional Boring:** New communications cable would be installed using a pilot hole along the communications route, with the new cable being pulled through the hole. Archaeological monitors would observe the excavation of the pilot hole and inspect the loose soil for cultural materials. Note that directional boring is a discouraged deployment measure within the boundaries of historic properties, unevaluated resources, or sensitive cultural areas. If boring is necessary, consult further with consulting parties.
- **Installation of Buried Communications Cable via Vibratory Plowing:** New communications cable would be installed using plowing, which creates a narrow slit (4 to 8 inches wide) in the ground, with the plow blade cutting the slit and new cable being fed through the slit. Archaeological monitors would observe the plowing and inspect any loose soil for cultural materials.
- **Installation of Buried Communications Cable via Trenching:** New communications cable would be installed by digging a trench—typically 12 to 18 inches wide and 24 to 36 inches deep—along the length of the communications route. Archaeological monitors would observe the trench excavations, examine the trench walls for evidence of features, and inspect the back dirt for cultural materials.
- **Communications Tower Replacement or Construction of New Communications Tower:** Fixed wireless would be implemented through tower replacement or construction of a new tower, which would involve demolition or clearing land for the tower site and digging for the tower foundation and any ancillary structures. Archaeological monitors would observe the demolition of the existing tower foundations and new tower excavations, examine the excavation walls for evidence of features, and inspect the back dirt for cultural materials.
- **Removal of Obsolete Communications Equipment and Towers:** Obsolete communications equipment and towers would be removed, which may involve demolition and excavation activities. Archaeological monitors would observe all ground-disturbing activities, including the demolition of the existing equipment and tower foundations, examine all excavation walls for evidence of features, and inspect the back dirt for cultural materials.

Note that a project may include other activities not listed above, and such activities would also need to be described, along with monitoring activities.

Please address these questions that are specific to your project:

- What areas will be monitored? Include NRHP-eligible properties, unevaluated properties, and culturally sensitive areas, or areas that have not been surveyed.

- Characterization of areas identified for Tribal monitoring. (Tribal monitoring may be requested if the proposed work is within a culturally sensitive area.)
- What will the monitor do? And what authorities will they have (e.g., temporarily stop work to investigate a discovery)? Number of monitors per ground-disturbing location?
- Anticipated feature types, generally (e.g., pits, structures, surfaces, etc.).
- Documentation of monitoring activities (locations, soil matrix, disturbances, photographs, etc.).
- **Discovery Plan/Protocol.** Include all that apply:
 - Documentation of features. (Discuss necessary contextual and graphic information; e.g., feature narrative, photographs, field forms, feature map/profile.)
 - Treatment of artifacts (collection/non-collection).
 - Types of analyses. (Include field and/or laboratory analyses that will be employed.)
 - Statement that data recovery will be limited to the recovery of human remains, formally interred animal remains, associated and unassociated funerary objects, sacred ceremonial objects, and objects of cultural patrimony or objects of national or Tribal patrimony.
 - Data management. (Consider what data will be recorded; e.g., daily logs, discoveries, photographs, Global Positioning System [GPS].)

13. TREATMENT OF HUMAN REMAINS, FORMALLY INTERRED ANIMAL REMAINS, ASSOCIATED AND UNASSOCIATED FUNERARY OBJECTS, SACRED CEREMONIAL OBJECTS, OBJECTS OF CULTURAL PATRIMONY, OR OBJECTS OF NATIONAL OR TRIBAL PATRIMONY

- Include protocols for recovery, documentation, housing, and repatriation.
- Include specific protocols for federal lands (e.g., NAGPRA POA).
- Include specific protocols for state, county, municipal, or private lands (e.g., ARS § 41-844 or § 41-865, ASM BDA).

14. CURATION METHODS (if collections occur)

- Federal lands. Refer to 36 CFR Part 79.
- State, county, municipal lands. Any collections, except those covered by ARS § 41-844(b.-m.), will be submitted to ASM or an ASM-approved repository for curation.
- Private lands. Excepting items covered by ARS § 41-865, items collected from private lands belong to the landowner. Subgrantees will work with the landowner to obtain a Deed of Gift and offer the items to an approved repository for curation purposes.

15. REPORTING

- Monitoring report. (With the land managing agency's approval, ASM's Summary Report of Negative Archaeological Monitoring should be used if no cultural deposits of any kind are identified. If cultural deposits are identified, a full report would be required, regardless of jurisdiction.)
- Monitoring reports should include project information, environmental information, a description of sites that were monitored, a summary of monitored activities, a description of the general soil profile, the results of monitoring, individual feature descriptions and drawings or profiles, photographs of the monitored areas and features, and a synthesis of the research questions.
- Report of Remains. (Required if human remains, funerary objects or other cultural materials subject to repatriation are recovered from state, county, municipal, or private land.)
- Include proposed timelines for report submission and reviews.

16. REFERENCES

Use *American Antiquity* format (<https://www.saa.org/publications/american-antiquity>).
References are required for all background research results, as well as source information.

17. MAPS

(Refer to attached guidance from ASM regarding map requirements and placement within the report if working on state, county, and municipal lands.)

- **APE:** Include map(s) depicting the APE.
- **Class I Research:** Include map(s) depicting the results of Class I research.
- **Monitoring Areas:** Include map(s) depicting areas subject to archaeological monitoring and, if appropriate, Tribal monitoring.