

**PART II**

**CHAPTER 5**

**Establishing the Area of Potential Effects (APE)**

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## 5-1.0 Overview

As per [36 CFR 800.16\(d\)](#), the area of potential effects (APE) is defined as “. . .the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking...”<sup>1</sup> The APE defines that area within which the identification of historic properties will occur. (Refer to Chapters 6 and 7 for procedures for identifying historic properties.)

The APE for above-ground properties might encompass the entire “view-shed”; i.e., the area in which the project may visually impact above-ground structures. For example, the project area of a newly installed cell tower is relatively small (the area of actual physical boundaries of the undertaking); however, the APE for that cell tower will be much larger in order to reflect the cell tower’s potential to visually impact cultural resources hundreds of feet away.

The APE for archaeological resources would generally encompass portions of the project area where actual ground disturbance will occur (the project footprint). If the APE is used with respect to archaeological resources, it must be differentiated from the above-ground (historic structures) APE, since these areas are not one and the same. INDOT-CRO prefers the use of the terms “project area” or “survey area” when describing the archaeological APE.

The APE should be delineated as precisely as possible using high-quality aerial mapping. A written description and map shall be provided in both the historic property and archaeology report.

## 5-2.0 Procedures for Establishing the APE

When establishing the APE, multiple factors must be considered, including but not limited to physical impacts, and potential visual, auditory and vibration impacts. The APE should also include all areas used for project staging and temporary construction. Defining the APE does not require prior knowledge of the historic properties in the area; the APE is simply the area in which historic properties-- if present--could potentially be affected. It should not be established in relation to the resources that are or may be present.

When assessing the APE it is important to consider both the view from the project looking outward and the view from outside looking into the project. Therefore, it is essential to set the APE in the field, as each case can be highly individual. The APE should include:

- All areas of potential direct or indirect effects;
- All alternative locations;
- All locations where ground disturbance may result;
- All locations where the undertaking may be visible or audible;

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<sup>1</sup> 36 CFR 800—Protection of Historic Properties. See <http://www.achp.gov/regs-rev04.pdf>

- All locations where the activity may result in changes in traffic patterns, land use, public access, and all areas where there may be indirect as well as direct impacts.

While there is no formula for delineating the APE--and every APE should be defined on a case-by-case basis, taking into account the project details and the surrounding environment--below are some baseline recommendations (by project type) based on previous projects and consultation with SHPO.

**Table 5-1-Recommended APE by Project Type**

Project type/elements	Suggested APE
Road resurfacing, sidewalk and curb ramp replacements	Immediately adjacent properties
Streetscape improvements, roundabouts, trail projects	Adjacent properties and properties within viewshed
New bridge overpass, bridge replacement on raised elevation	0.25-mile buffer (this may be increased or decreased based on surrounding topography and built environment)
Added travel lanes	Adjacent properties and properties within viewshed; consider broadening APE as appropriate for potential auditory or noise impacts
New terrain highway/interstate	1-mile buffer beyond corridor (this may be increased or decreased based on surrounding topography and built environment)

### Tips for establishing an APE

- Consider how various environmental factors influence the APE. Is the setting a rural or an urban area? Is the surrounding landscape wooded or open fields? What is the topography--hilly or flat? What is current land use—developed or agricultural? If developed, how (i.e., industrial, residential, commercial)?
- Consider the scale of construction in relation to the surrounding setting;
- The APE(s) should include all of the construction alternatives;
- Consider both the view from the project looking outward and the view from outside looking into the project;
- Consider the project's potential to have more than just visual effects. Will the project have audible effects? Will construction impact undisturbed land? Will the project impact existing traffic patterns, land use, public-access, etc?
- Remember, the APE is not determined on the basis of land ownership;
- The APE should include all locations where the activity may result in changes in traffic patterns, land-use, public-access;
- The APE should include all areas where there may be indirect as well as direct impacts.
- An APE need not be a single area;
- Revising project plans may also lead to revising APE boundaries;
- Determining an APE does not mean that any historic properties within its boundaries must be preserved. It does, however, mean that they have to be taken into account during the Section 106 process.