

CHAPTER 2 METHODS

NATIONAL REGISTER OF HISTORIC PLACES ELIGIBILITY

Criteria for Evaluation of Eligibility

As part of the Section 106 review process, cultural resources investigations generally are undertaken with the purpose of identifying resources that are listed on or eligible for inclusion in the NRHP. The assessment of significance of cultural resources is based on federal guidelines and regulations. Any cultural resource that is listed on or eligible for inclusion in the NRHP is known as a “historic property,” and the term “eligible for inclusion in the National Register” includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet NRHP listing criteria (36 CFR [Code of Federal Regulations] §800.2). The criteria for evaluating properties for inclusion in the NRHP (36 CFR §60.4 [a–d]) are codified under the authority of the National Historic Preservation Act of 1966, as amended, and the Advisory Council on Historic Preservation has set forth guidelines to use in determining site eligibility. Subsequent to the identification of relevant historical themes and related research questions, these four criteria for eligibility are applied:

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, material, workmanship, feeling, and association and

- (a) that are *associated with events* that have made a significant contribution to the broad patterns of our history; or
- (b) that are *associated with the lives of persons* significant in our past; or
- (c) that *embody the distinctive characteristics* of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (d) that have yielded, or may be likely to *yield, information important in prehistory or history*. Note that the application of Criterion D presupposes that the information imparted by the site is significant in history or prehistory [36 CFR §60.4, emphasis added].

In addition to the above four major criteria, special consideration can be given to certain properties under the following specific conditions, or *Criteria Considerations* (36 CFR §60.4):

Criteria Considerations. Ordinarily, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for listing in the NRHP. Such properties will qualify, however, if they are integral parts of historic districts that meet the criteria or if they fall within the following categories:

- (a) a religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- (b) a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- (c) a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life; or
- (d) a cemetery that derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- (e) a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- (f) a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance; or
- (g) a property achieving significance within the past 50 years if it is of exceptional importance [36 CFR §60.4; National Park Service [NPS] 2008a].

In general, properties should be at least 50 years of age before they can become eligible for listing in the NRHP. Exceptions are allowed, however, under Criterion Consideration G, set forth in *Properties That Have Achieved Significance within the Last Fifty Years* (NPS 1999b), which states that such properties must also be of “exceptional importance” to qualify for listing. Properties less than 50 years must also meet one of the major criterion for properties 50 years or older (i.e., A, B, C, or D) and must also retain their integrity (NPS 1999b).

In the survey area and within Victoria County in general, common historic themes are those related to agriculture, industry, and community development. The resources recorded within the 10-mile survey area are commonly associated with one of those themes, or areas of significance, as they relate to the region’s history, which is strongly tied to farming, ranching, industrial development, and the patterns of settlement associated with each of those pursuits.

All of the above criteria and guidelines, as well as aspects of integrity discussed below, are considered when evaluating a resource for its potential NRHP eligibility. The NRHP criteria and guidelines were applied in this study in the archaeological investigations, assessment of the rural landscape, historic resources survey, and visual impact analysis. Separate discussions of NRHP eligibility recommendations occur within each chapter for resources encountered in the survey or investigation presented in that chapter.

Resource Types

NRHP criteria recognize five types, or categories, of properties that may be listed in or eligible for the NRHP. Each of these types is defined below (36 CFR §60.3; NPS 1995:4, 5).

- **Building.** A building is a structure created to shelter any form of human activity, such as a house, barn, church, hotel, or similar structure. The term “building” may refer to a historically and functionally related complex, such as a courthouse and jail or a house and barn. Examples of buildings include church, detached kitchen, hotel, house, shed, and train station.
- **Structure.** A structure is a work made up of interdependent and interrelated parts in a definite pattern of organization. Constructed by man, it is often an engineering project large in scale. The term is used to distinguish resources created with some purpose other than the shelter of human activity from buildings. Examples of structures include bridge, canal, corncrib, fortifications, railroad grade, road, and windmill.
- **Object.** An object is a material thing of functional, aesthetic, cultural, historical, or scientific value that may be, by nature or design, movable yet related to a specific setting or environment. Examples of objects include boundary marker, fountain, monument, sculpture.
- **Site.** A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself maintains historical or archaeological value regardless of the value of any existing structure. Examples of a site include battlefield, campsite, habitation site, rockshelter, shipwreck, and trail.
- **District.** A district is a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united by past events or aesthetically by plan or physical development.

In addition, the NRHP recognizes cultural landscapes as sites or districts, and acknowledges specific types, including rural historic landscapes, which are defined as (1999:1-2):

- **Rural Historic Landscape.** A rural historic landscape is a type of cultural landscape that is a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features (see Chapter 4, this volume).

Integrity

Applying any of the NRHP eligibility criteria involves two tests. First, a property must satisfy one or more of the criteria and, second, the property must retain sufficient integrity (NPS 1995:44–45). The National Park Service defines integrity as “the ability of a property to convey its significance.” According to NRHP criteria, a resource’s integrity is demonstrated through the retention of “seven aspects or qualities that, in various combinations, define integrity.” These seven aspects of integrity, as noted in National Park Service (NPS) Bulletin 15 (NPS 1995:44-45) and Bulletin 30 (NPS 1995:22-23), are defined as follows.

- **Location** is the place where the historic property was constructed or the place where the historic event occurred.
- **Design** is the combination of elements that create the form, plan, space, structure, and style of a property.
- **Setting** is the physical environment of a historic property.
- **Materials** are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
- **Workmanship** is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
- **Feeling** is a property's expression of the aesthetic or historic sense of a particular period of time. Although intangible, feeling is evoked by the presence of physical characteristics that reflect the historic scene. Feeling is also the cumulative effect of other aspects of integrity—setting, design, materials, and workmanship—which creates the sense of past time and place.
- **Association** is the direct link between an important historic event or person and a historic property.

According to federal regulations, an “adverse effect” results from the loss of the above criteria and the term is defined as the following:

An undertaking is considered to have an adverse effect when the effect on a historic property may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects on historic properties include, but are not limited to:

- (1) Physical destruction, damage, or alteration of all or part of the property;
- (2) Isolation of the property from or alteration of the character of the property's setting when that character contributes to the property's qualification for the National Register;
- (3) Introduction of visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- (4) Neglect of a property resulting in its deterioration or destruction; and
- (5) Transfer, lease or sale of the property [36 CFR §800.9].

For an architectural or archaeological resource to be considered eligible for listing in the NRHP, it must retain one or more of these aspects of integrity. Cultural resources that have undergone extensive modifications over time may have lost the characteristics that convey integrity, thereby rendering the properties ineligible for listing in the NRHP.

Although not all seven aspects of integrity must be present for a resource to be eligible, the resource must retain, overall, the defining features and characteristics that were present during the property's period of significance. Defining features are considered those “that define both why a property is significant (Applicable Criteria and Areas of Significance) and when it was significant (Periods of Significance).” Properties eligible under Criteria A and B for their historic association must retain “the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person (s).” Properties eligible under Criterion C for their architectural significance “must retain most of the

physical features that constitute that style or technique.” Properties eligible under Criterion D differ slightly from those under other criteria in that “integrity is based upon the property’s potential to yield specific data that address important research questions” (NPS 1997).

HISTORIC CONTEXT DEVELOPMENT AND LANDSCAPE DOCUMENTATION METHODS

Archival Research Methods

The historic context presented in the earlier Phase Ia report (Peter and Prior 2008) indicated that the potential significance of the McFaddin Ranch involved the cattle ranching and petroleum industries in Victoria County. The ranching and petroleum industries are represented by landscape features, buildings, and structures related to both industries. The Phase Ib investigations were designed to inventory and evaluate the rural landscape represented by the activities associated with each industry. The Phase Ib investigations involved additional archival research designed to expand the preliminary historic context and a field inventory of representative landscape features within the 9,431-acre APE.

In May 2008, archival research was conducted at the Rice University Fondren Library, the Houston Public Library, the University of Houston M. D. Anderson Library, the Texas General Land Office, Texas State Archives and Manuscripts, University of Texas-Austin Center for American History, Texas Railroad Commission, Victoria College/University of Houston-Victoria Special Collections Library, Museum of the Coastal Bend, and the Tobin Historic Aerial Photography Collection maintained by P2 Energy Solutions.

Research efforts focused on published and secondary sources, including county histories, historic maps, historic pictorial publications, research monographs, and previous cultural resources investigations. Reference librarians at each repository were asked for assistance in identifying appropriate archival materials. The material collected included historic photographs, maps, and aerial photographs; GIS data; newspapers (primarily the various incarnations of *The Victoria Advocate*); and secondary sources. Where available, both large-format copies and digital versions of historic maps were obtained. HRA Gray & Pape also conducted deed and title research at the Victoria County Clerk’s Office to trace the history of landownership at the McFaddin Ranch, including settlement and ownership records dating to the Texas Republic period.

HRA Gray & Pape conducted oral history interviews with Robert McCan, owner of an 11,000-acre portion of the original McFaddin Ranch; Pat Fagan, an employee of McFaddin Enterprises; and Kirk Feuerbacher, a wildlife biologist and ranch employee. HRA Gray & Pape contacted Linda Wolff, the Victoria County Historical Commission Chair, for information about historic ranches in the area. Ms. Wolff directed the researchers to her husband, Henry Wolff, a longtime columnist with *The Victoria Advocate*. Mr. Wolff recommended a number of secondary sources to consult and suggested that the O’Connor ranching enterprise was comparable to the McFaddins’ for comparative purposes.

All of the data gathered during the course of archival research were analyzed and synthesized to prepare a historic context focusing on the McFaddin Ranch and, specifically, the cattle ranching and petroleum operations that have occurred on the ranch during the twentieth century.

Cultural Landscapes

A cultural landscape is a geographic area (including both cultural and natural resources and the wildlife or domestic animals therein) associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values. There are four general types of cultural landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes. Following is a summary of landscape types, as defined by the NPS (NPS 2008b).

- **Historic site:** a landscape significant for its association with a historic event, activity, or person. Examples include battlefields and presidential homes and properties.
- **Historic designed landscape:** a landscape that was consciously designed or laid out by a landscape architect, master gardener, architect, engineer, or horticulturist according to design principles, or an amateur gardener working in a recognized style or tradition. Examples include parks, campuses, and estates.
- **Historic vernacular landscape:** a landscape that evolved through use by the people whose activities or occupancy shaped it. The landscape reflects the physical, biological, and cultural character of everyday lives. Examples include rural historic districts and agricultural landscapes.
- **Ethnographic landscape:** a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples include contemporary settlements, sacred religious sites, and massive geological structures.

Cultural landscapes are listed, or determined eligible for listing, in the NRHP as sites or historic districts. They must meet the NRHP evaluation criteria, described above, in terms of both significance and integrity. Significance of a cultural landscape under NRHP eligibility Criterion A is derived from events that have made a significant contribution to the broad patterns of our history.

Significance of a cultural landscape under NRHP Criterion B is established through association of the resource with the lives of individuals who made important contributions on a local, state, or national level. Significance under Criterion B is often unrelated to historic uses. This is particularly true of farms that were the home of political leaders, writers, poets, artists, or industrialists.

Significance under Criterion C applies to the physical qualities of a landscape. Significant physical qualities may be present in a number of ways. The organization of space, visible in the arrangement of fields or siting of farmsteads, may illustrate a significant pattern of land use associated with traditional practices unique to a specific community. Similarly, an irrigation or transportation system may reflect an important innovation in engineering that fostered a community's prosperity. Historic landscape characteristics are important in establishing the historic association and setting of these properties.

Significance under Criterion D can be associated with landscapes that have yielded or are likely to yield information important to prehistory or history. Abandoned roadways, reforested fields, remnant stone walls, and battlefield earthworks are examples of resources that can possess characteristics that meet the significance requirement of Criterion D.

As a cultural landscape, a rural historic landscape such as the McFaddin Ranch generally falls within the category of historic vernacular landscapes. The NPS defines a rural historic landscape as “a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features” (McClelland et al. 1999:3).

Rural historic landscapes are separate and distinct from designed landscapes such as gardens and parkways. Rural landscapes typically reflect day-to-day activities of people engaged in land use activities such as mining, fishing, and various types of agriculture, including ranching. Consequently, they are not the work of a professional designer or landscape architect, but rather have evolved over time to suit changing needs. A rural area may contain one or more rural historic landscapes, as well as other kinds of historically significant properties, such as railroad depots, granaries, livestock markets, warehouses, and farmsteads (McClelland et al. 1999:2).

An understanding of historic context is necessary for identifying properties with historic significance and determining their integrity. Historic significance of a rural historic landscape is established within contexts that take into account patterns of history and development that shaped a particular geographical area. Association with various historic contexts generally is categorized by NRHP eligibility Criteria A, B, C, and D, as defined above. Links to important trends or themes, such as cattle breeding or oil and gas exploration, indicate a given property’s place within historic contexts (McClelland et al. 1999:7).

Historic integrity is a measure of a property’s evolution and current condition. Change over time can contribute to a property’s historic significance if those changes are related to the trends and patterns of development identified in the historic context.

Landscape Documentation Field Methods

HRA Gray & Pape field investigations focused on inventorying and evaluating the extant landscape associated with the 9,431-acre APE associated with the McFaddin Ranch. Documentation of cattle ranching- and petroleum industry-related features was undertaken according to THC standards (THC 2008a, 2008b). Additionally, following guidelines set forth by the NPS, HRA Gray & Pape field investigations sought to identify and document 11 characteristics of rural landscapes: land uses and activities; patterns of spatial organization; response to natural environment; cultural traditions; circulation networks; boundary demarcations; vegetation related to land use; buildings, structures, and objects; clusters; archaeological sites; and small-scale elements (McClelland et al. 1999:4–6).

HRA Gray & Pape undertook field investigations of the 9,431-acre APE in May 2008. Two field survey teams traversed all passable roads within the APE acreage. Using a handheld Trimble GeoXT global positioning system (GPS) unit, locational data were collected for extant resources associated with the cattle ranching and petroleum industries as well as topographic features and resources associated with recreational hunting. Digital photographs were taken of each recorded resource. The complete listing of recorded resources is provided in Table A-1 in Appendix A.

During the field investigations, McFaddin Ranch employee Mr. Kirk Feuerbacher, a wildlife biologist, provided the landscape team with a tour of portions of the ranch. Mr. Joe Freeman, historical architect with extensive experience documenting ranching landscapes in Texas, and Mr. Pat Fagan local site coordinator, also participated in the tour. Changes over time to the ranch landscape and ranching operations, including methods of cattle grazing and wildlife management, were highlighted during the tour.

HISTORIC RESOURCES SURVEY AND VISUAL IMPACT DOCUMENTATION METHODS

The three primary objectives of the Phase Ib investigations concerning historic resources outside of the project site were the identification of historic resources, evaluation of historic resources for their eligibility for listing on the NRHP, and evaluation of the potential visual impact of the proposed project on those historic resources recommended eligible for listing on the NRHP. Typically, resources considered eligible for listing on the NRHP must be at least 50 years of age or older. As such, the historic resources survey included an inventory and evaluation of all resources 50 years of age or older within the survey APE. In this report, the term “historic resource” is used to denote any resource that is 50 years of age or older. The term “eligible” is used to denote a historic resource that is recommended eligible for listing in the NRHP (i.e., a “historic property”).

Determination of APE

The initial step in planning the Phase Ib investigations was to define the size and boundary of the area outside of the project site to be surveyed for the visual impact study. Guidance from Nuclear Regulatory Commission (NRC) regulations combined with GIS-based viewshed analysis and field observations resulted in the establishment of a 10-mile survey radius around the boundary of the proposed Victoria County Station project site. Field observations included visibility assessments of existing buildings in the vicinity of the project site as well as observations in the area surrounding the South Texas Project (STP) Electric Generating Station, a two-unit nuclear power plant located southwest of Bay City, Texas for comparative analysis.

Section 2.5.3 (Historic Properties) of the Environmental Standard Review Plan put forth by the United States Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation (NUREG-1555) guides the NRC review staff “the identification and description of historic properties that could be impacted by construction or operation of the proposed project” (NUREG-1555, October 1999, 2.5.3-1). For NRC review staff to assess the direct and indirect impacts of a facility on historic properties, “a description of historic properties within 16 km (10 mi) of the proposed site that are in or have been determined eligible for inclusion in the *National Register*” (NUREG-1555, October 1999, 2.5.3-2) is necessary. The NRC guidance specifies a survey area for inventorying and evaluating historic resources and assessing the potential visual impact of the proposed structures on those properties recommended as eligible.

Though Section 2.5.3 of NUREG-1555 specifies the NRC guidance for documentation of historic properties, to assist in the visual impact study, viewshed analysis using GIS software was completed to determine the potential visibility of the proposed structures in the surrounding area. A viewshed analysis is a geospatial technique used to address and analyze visibility issues that

aid in the delineation of the portions of the landscape that can be viewed from a three-dimensional observer point, and subsequently identifies those portions of the landscape that would be obscured from this point. The observer point was plotted near the center of the project area upon the highest elevational surface and then processed manually to include approximately an additional 180 feet of elevation initially.

The viewshed analysis for the project area and the surrounding landscape was conducted with ESRI's ArcGIS 9.3 software, including 3-D and Spatial Analyst extensions to create a raster elevation surface. Input elevation surface was provided by the Texas Natural Resources Information System (TNRIS) data catalog available online. Raster Digital Elevation Models were downloaded for the region individually before creating a surface mosaic to encompass the coastal and inland areas within a maximum, predicted radius of visibility. The viewshed calculation was conducted with the 3-D Analyst toolbox utilizing surface analysis tools, specifically the viewshed function. The result was a two-value raster surface calculating the expected portions of the landscape that would be visible and not visible from the observer point. Based upon the results, it was concluded that visibility is widespread, extending outward from the observer point to approximately 10 miles before visibility rapidly diminishes. During the Phase Ia investigations, observations made from certain locations that fell outside the 10-mile radius, including the town of Victoria, confirmed the limited visibility that occurs beyond that point.

In addition to observations within the 10-mile radius, during the Phase Ia investigations several existing structures in the Victoria-Bloomington area were used for comparison in evaluating potential visual impact of the proposed structures. The Wells Fargo Building located in downtown Victoria is the tallest building in the city of Victoria. Standing 13 stories, or approximately 130 feet in height, the Wells Fargo Building served as an example of the visibility of a structure surrounded by land cover (primarily other buildings and small vegetation) in that area. Structures associated with the DuPont-Invista Plant, located south of Victoria between State Highway (SH) 185 and the Victoria Barge Canal, vary in height. Numerous narrow towers associated with the plant are among the tallest structures south of Victoria, and stand approximately twenty to 100 feet in height. These buildings were photographed from various distances and were used to assess the visibility of multi-story structures in the vicinity of the project site.

In order to assess the potential visual impact of a similar project, an architectural historian visited the STP Electric Generating Station, located approximately 60 miles east of Victoria and about 90 miles southwest of Houston, near Bay City. Farm-to-Market Road (FM) 521 is located immediately north of the site, which contains two 200-foot towers. To the west of the STP site, the landscape consists primarily of cleared agricultural fields and is similar to many locations in the Victoria County Station project survey area. Immediately east of the site, along FM 521, is a densely wooded area, which screens the view of the towers for approximately six miles along that portion of the road. Observations from various distances demonstrated the effects of topography, vegetation, and distance on visibility.

Taking into consideration all of the aforementioned factors, an APE with a survey radius of 10 miles was set for the visual impact analysis and survey of historic resources for the Phase Ib investigations. Using ESRI's ArcGIS 9.3 software, maps illustrating the perimeter of the 10-mile survey radius were plotted over topographic maps to aid in the fieldwork and assure all areas within the 10-mile radius were surveyed. Portions of the 10-mile survey radius are located in Victoria, Refugio, and Calhoun counties.

Reassessment of the Survey APE for Increased Building Heights

At the time of the initial Phase Ib investigations, plans for the proposed construction at the Victoria County Station site specified two units, the tallest of which would be 166 feet in height. In August 2009, design specifications for the proposed construction changed, with new proposed heights being between 230 and 250 feet. As a result of the increase in proposed building height, in October 2009, GMI revisited the APE for the Phase Ib investigations to ensure that a 10-mile radius outside the project site was an adequate APE for assessing the visual impact of buildings 250 feet in height. The considerations remained the same as those for the original APE determination, and the assessment centered on GIS-based viewshed analysis and field observations. Additional viewshed analysis using ESRI's ArcGIS 9.3 were completed for the increased building height at the Victoria County Station site (Figure 3), as well as the structures at the existing STP site (Figure 4). Additional field observations and photography were completed in both Victoria and at the STP site (see Figures 3 and 4 for photo locations).

Prior to conducting the additional field survey in Victoria, an additional visibility assessment at the STP site was conducted. ArcGIS 9.3 viewshed analysis for the 200-foot structures at the STP site indicated that those structures would be visible from most areas within a 15-mile radius around the site's boundaries, and from some areas within a 20-mile radius (see Figure 4). Observations from various points within a 20-mile radius, however, revealed much more limited visibility attributed to distance, topography, or often a combination of both. Field survey revealed that the structures were first visible from the west at a distance of approximately 4.7 miles (Figure 5). The structures were not visible from 18.5 miles (Figure 6) or 9.5 miles (Figure 7) as the elevation data suggests. From the east, visibility was more limited; the structures were visible from 2.0 miles (Figure 8), but were not visible at a distance of 4.0 miles (Figure 9) or 5.25 miles (Figure 10). Farther north and east, the structures were partially visible at a distance of 6.7 miles (Figure 11 [Figure 12 is from the same vantage point, but was taken at 12 time optical zoom]) but were not visible from a distance of 11.0 miles (Figure 13). The landscape surrounding the STP site provided examples of visibility from an area of cleared agricultural fields and areas with vegetation between the observation point and the project site, demonstrating the effect of distance and topography.

In Victoria, the ArcGIS 9.3 viewshed analysis indicated that a building 250 feet in height at the center of the project site would be visible from certain locations within a 15- and 20-mile radius around the project site (see Figure 3). As the observations at the STP site revealed, distance and vegetation dramatically reduce the visibility between two points even in areas where the ArcGIS 9.3 viewshed analysis projected the proposed structures would be visible. Taking into account the distance from the project area and observations from the STP site, field survey in Victoria demonstrated very similar landscape features throughout the APE; additional field survey, like the original field survey, concluded that the proposed structures would not be visible from a distance of 10-miles or more southwest (Figure 14), west (Figure 15), northwest (Figure 16), northeast (Figure 17), east (Figure 18), or southeast (Figures 19 and 20) of the project site. The greatest distance that a 250-foot building would be visible in Victoria is northeast of the project site, in the vicinity of Guadalupe. The landscape between certain portions of Guadalupe and the project site consists of agricultural fields with no pockets of taller vegetation in the immediate vicinity of some observation points. In those locations, approximately six miles from the project site, the top portion of a 250-foot building may be visible over distant vegetation, but the effect would be similar to that of the STP site towers from seven miles away (see Figures 11 and 12).

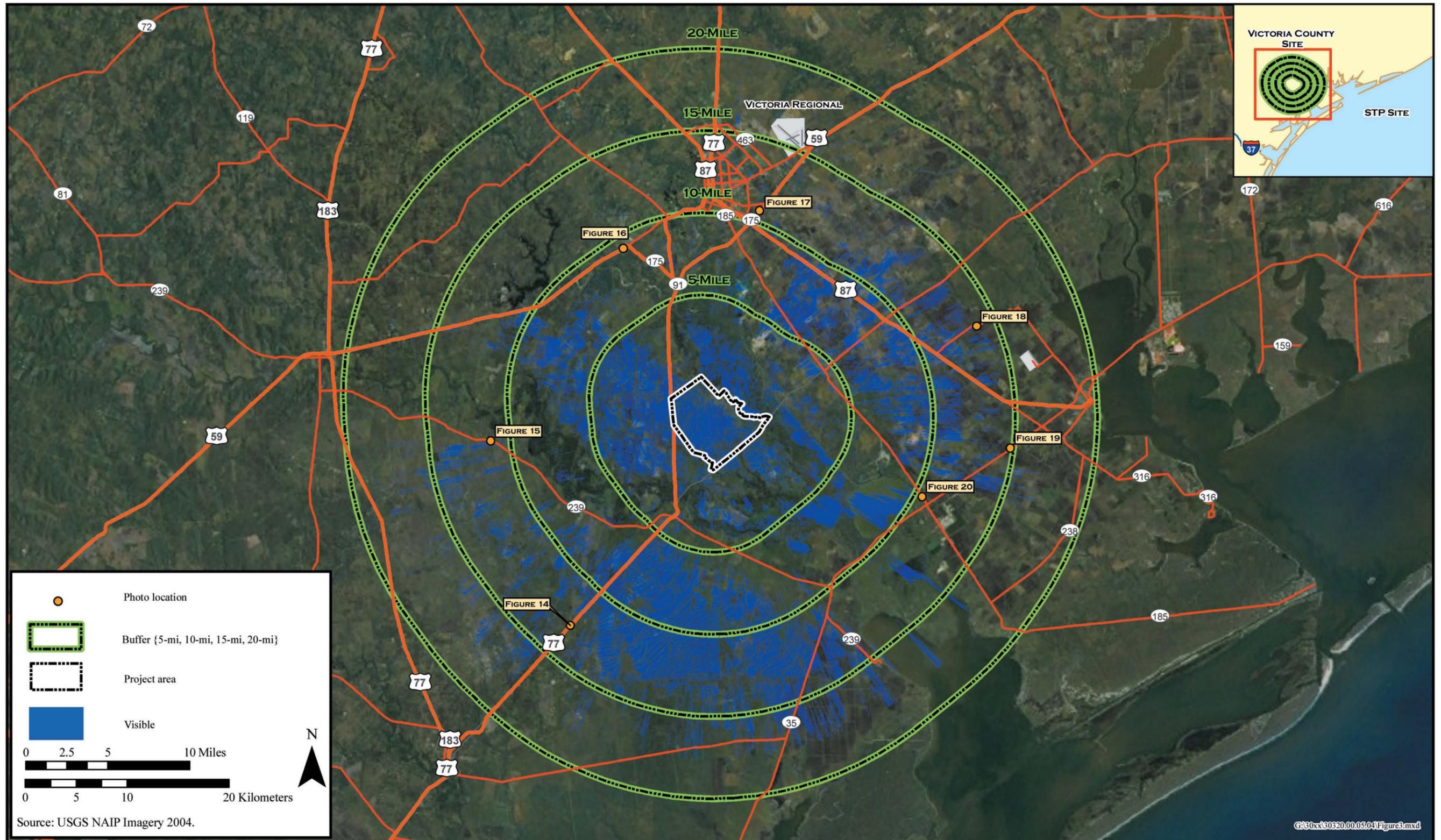


Figure 3. Viewshed analysis for the proposed 200-foot tall structures at Victoria County Station site.

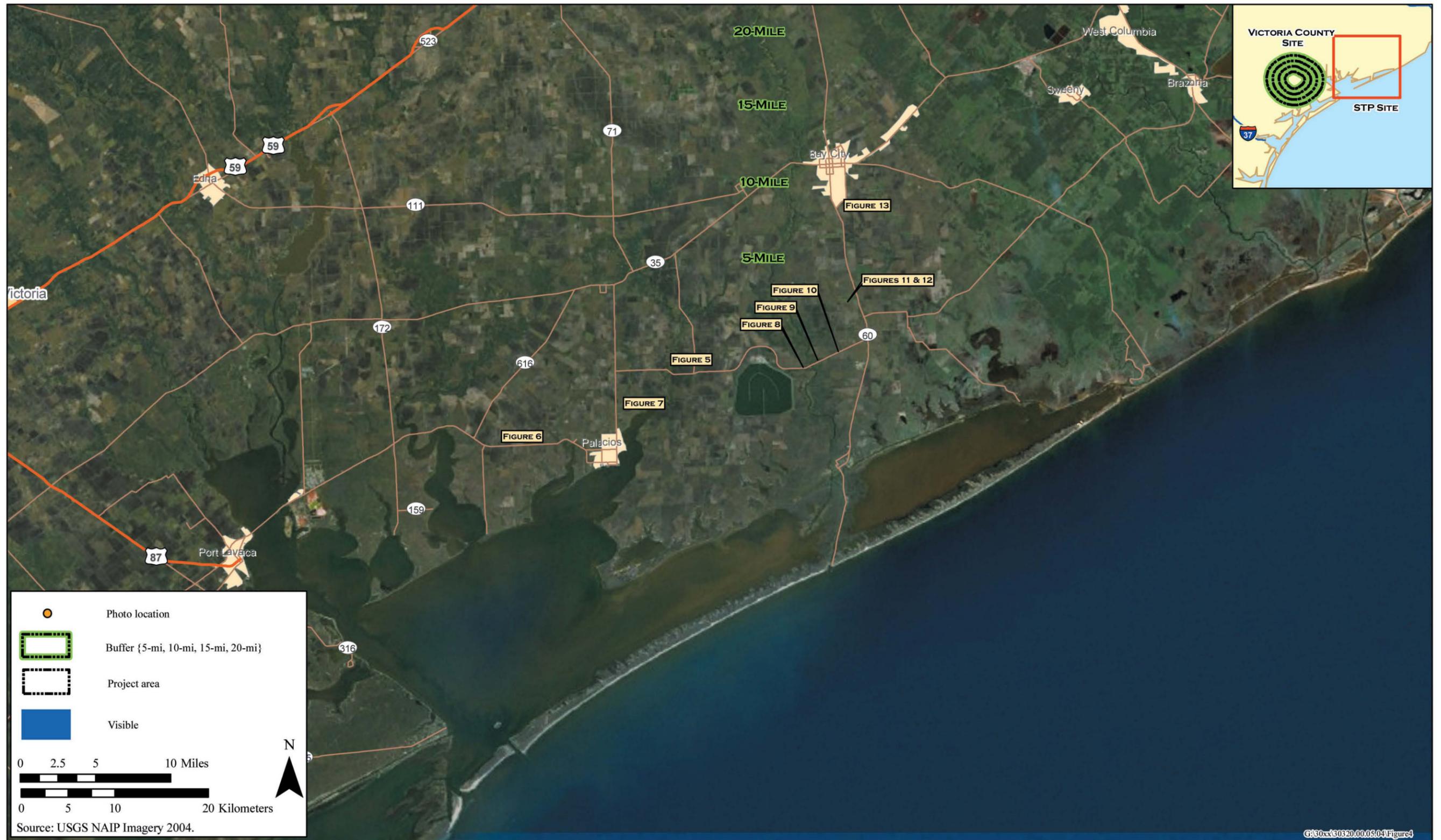


Figure 4. Viewshed analysis for the existing 200-foot tall structures at the South Texas Project (STP) Electric Generating Station.



Figure 5. View toward the STP site from FM 521, looking east at a distance of 4.7 miles.



Figure 6. View toward the STP site from SH 35, looking northeast at a distance of 18.5 miles (Note: STP Site is not visible).



Figure 7. View toward the STP site from [Matagorda] County Road 305, looking northeast at a distance of 9.5 miles (Note: STP Site is not visible).



Figure 8. View toward the STP site from FM 521, looking west at a distance of 2.0 miles.