

## **Finding of No Significant Impact (FONSI) for the Proposed 300-foot Self-Support Tower Telecommunications Tower (referred to as Wisterwood)**

### **Introduction**

The city of Houston proposes to construct a new communications facility with a 300-foot (ft) free-standing self-support telecommunications tower in Harris County, Texas. The Proposed 300-foot Self-Support Tower Telecommunications Tower Environmental Assessment (EA), further referenced as the Wisterwood EA, provides an analysis of potential environmental impacts associated with the use of grant funds issued by the Public Safety Interoperable Communications (PSIC) Grant Program, administered by the National Telecommunications and Information Administration (NTIA) of the U.S. Department of Commerce, to replace this tower and associated equipment.

### **Scope of the Environmental Assessment**

The proposed Wisterwood facility would apply funds issued by the PSIC Grant Program. The PSIC Grant Program was developed to assist State, local, tribal, and non-governmental agencies in developing interoperable communications as they leverage the newly available spectrum in the 700 megahertz (MHz) band. As a condition of the PSIC Grant Program, grantees must comply with all relevant Federal legislation, including the National Environmental Policy Act of 1969 (NEPA).

The NTIA has specified that PSIC grant funds must be used for projects that would improve communications in areas at high risk for natural disasters and in urban and metropolitan areas at high risk for terrorism threats, and should include pre-positioning or securing of interoperable communications for immediate deployment during emergencies or major disasters. Investments receiving PSIC funds can range from the installation of new large-scale infrastructure (i.e., communications towers) to the acquisition of mobile and portable handheld radios. As outlined in the PSIC Grant Program's Programmatic EA (February 2009) and Final Finding of No Significant Impact (FONSI) (April 2009), the proposed Wisterwood communications facility is classified as a transmission and receiving site.

The proposed Wisterwood communications tower project would allow for the following:

- New equipment to support new frequencies to improve and expand voice and data coverage,
- Facilitate reliable interoperable communications among first responder organizations,
- Enhanced security and facility control, and
- Equipment consolidation

This EA examines the Proposed Action to develop a new communications facility in Houston, Texas (Harris County). The proposed Wisterwood communications facility would include a 12 ft x 38 ft equipment shelter with integrated generator room, new utility rack with meter, two 7 ft swing gates, 4 ft concrete sidewalk, waveguide hridge, gravel site surfacing, gravel access road, 125-kilowatt (kW) emergency backup generator, and Payne security fence. The project would also include three antennas, three microwave dishes, and a lightening rod extension on the proposed new tower. Two receiving (RX) antennas would be mounted at 300 ft and one

transmission (TX) antenna would be mounted at 270 ft from ground surface. The microwave dishes would be mounted at 92 ft, 147 ft, and 153 ft. The lightning rod would be extended a minimum of 3 ft above the proposed antennas but would not exceed Federal Aviation Administration (FAA) maximum height. The total ground disturbance would be less than 0.25 acres.

This EA analyses existing conditions and environmental consequences of the Proposed Action with eleven major resource areas: noise, air quality, geology and soils, water resources, biological resources, historic and cultural, land use, aesthetic and visual, infrastructure, socioeconomic resources, and human health and safety.

### **Alternatives Considered**

**No Action Alternative.** Under the No Action Alternative, the current emergency services radio system coverage would not be met causing serious limitation on emergency response, funding for interoperable communications and information systems infrastructure would not be released, and infrastructure would neither be developed nor enhanced. The No Action Alternative would not address the needs for the city of Houston. The new communications tower and facilities at Wisterwood would not be constructed; the existing property would remain as it presently exists. The Proposed Action would not move forward with PSIC funds or any alternate funding sources. The No Action Alternative fails to meet the purpose and need as it cannot support the needs for improving interoperable communications. The No Action Alternative served as the baseline for assessing the impacts of the alternatives

**Proposed Action.** The proposed Wisterwood communications facility would be located along Wisterwood Drive in Houston, Texas, and would include one 300-ft freestanding self-support telecommunication tower, a 12 ft x 38 ft equipment shelter with integrated generator room, new utility rack with meter, two 7 ft swing gates, 4 ft concrete sidewalk, waveguide bridge, gravel site surfacing, gravel access road, 125-kilowatt (kW) emergency backup generator, and Payne security fence. The project would also include three antennas, three microwave dishes, and a lightning rod extension on the proposed new tower. Two RX antennas would be mounted at 300 ft and one TX antenna would be mounted at 270 ft from ground surface. The microwave dishes would be mounted at 92 ft, 147 ft, and 153 ft. The lightning rod would be extended a minimum of 3 ft above the proposed antennas but would not exceed the FAA maximum height.

The total ground disturbance for the proposed facility would be less than 0.25 acres. The area surrounding the site is previously disturbed land with an existing monopole and a self-support telecommunication tower. The surrounding area is composed of urban development. The site has a combination of utilities (electricity, communications, and potable water) along with an adequate transportation network of roads available in the area. Utilities would be extended to the project site for grid power.

### **Alternatives Considered But Not Carried Forward**

Other alternatives evaluated did not meet the screening criteria established by the city of Houston. These criteria were based on the need for coverage to make proposed microwave paths work for network connectivity as well as available land for the proposed compound. Candidate site locations were then refined to take advantage of existing impervious cover, thus eliminating

the need for a detention pond. Based on this pre-screening, no other alternatives sites were identified and therefore no other alternatives were carried forward for detail analysis in this assessment.

### **Recommended Alternative**

Alternative 1 (Preferred Alternative) to implement the Wisterwood communications facility is recommended for implementation and best meets the purpose and the need of the city of Houston to strengthen the overall local and regional communications capabilities. The tower would provide an increased coverage area for emergency responders connected through the system, provide new equipment to support new frequencies to improve and expand voice and data coverage, facilitate reliable interoperable communications among first responder organizations throughout the City, and provide enhanced security and facility control. The No Action Alternative would not address the need for the city of Houston as existing deficiencies would remain, and vital links with first responders and local agencies would not be provided thereby posing a greater risk to public safety in the event of an emergency or natural disaster.

### **Consultations**

Coordination on fish and wildlife issues to meet the Section 7 requirements of the Endangered Species Act was not required as there was no suitable habitat for any threatened or endangered species present at the site.

Coordination on historic and cultural resources issues was accomplished through correspondence with the Texas State Historic Preservation Office (SHPO)/Texas Historical Commission to determine whether the construction of the proposed communications facility would generate any short- or long-term indirect impacts to historic and cultural resources and would be located within the viewshed of any historic and cultural resources. The proposed project was determined to have no effect on historic properties. The Texas SHPO/Texas Historical Commission concurred in a letter dated July 14, 2010 with the determination that the proposed project would have no effect on historic properties.

Consultation with Federally-recognized Native American tribes was accomplished through correspondence with the Southern Ute Tribe, Comanche Nation, Tonkawa Tribe, and Wichita and Affiliated tribes using the Federal Communication Commission (FCC) Tower Construction Notification System on June 2, 2010 to determine whether the construction of the proposed communication facility would create any short- or long-term, direct or indirect impacts to tribal resources. The Tonkawa and Wichita and Affiliated tribes responded that they had no interest in the project; the Southern Ute Tribe and Comanche Nation provided no written responses. In accordance with the FCC Declaratory Ruling (FCC 05-176), the Tribal Consultation process is considered complete.

No airports are located within 0.5-miles of the proposed site. The FAA conducted an aeronautical study on the proposed tower (2010-ASW-5075-OE) concluding that the structure does not exceed obstruction standards and would have no substantial adverse effect on the safe and efficient visualization of the navigable airspace by aircraft or on the operation of air navigation facilities. The FAA Aeronautical study “determined that the structure would not be a hazard to air navigation.”

**Findings and Conclusions**

The proposed Wisterwood communications facility is not likely to result in any environmental impacts and does not involve any unusual risks or impacts to sensitive areas. The Proposed Action would require the construction of a 300-ft free-standing self-support telecommunication tower and associated equipment with ground disturbance activities (totaling less than 0.25 acres). In accordance with 47 Code of Federal Regulations (CFR) Section 1.1307(a) (1) through (8), an evaluation was made to determine whether any of the listed FCC special interest items would be significantly affected if a tower structure and associated equipment control cabinets were constructed at the proposed site location. No FCC special interest items were identified.

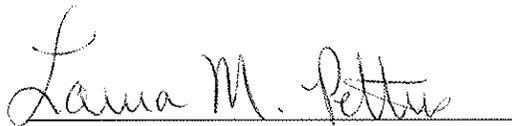
**NTIA Review**

NTIA determined that the April 2011 Wisterwood EA adequately assessed the potential individual and cumulative environmental impacts of the proposed telecommunication facility development, including a 300-ft self-supporting telecommunication tower, shelter, and associated equipment, and that the scope, alternatives considered, and content of the EA are adequate.

This FONSI is based on the attached EA which has been independently evaluated by the NTIA. The NTIA determined that the EA adequately and accurately addresses the environmental issues and impacts of the proposed project and provides sufficient evidence and analysis for determining that an environmental impact statement is not required.

Based on the best available information and NTIA's independent review, NTIA has decided to adopt the April 2011 Draft Environmental Assessment for Proposed 300-Foot Self-Support Telecommunications Tower. This FONSI has therefore been prepared and is being submitted to document environmental review and evaluation in compliance with the NEPA of 1969. The decision documents for the environmental review of the Proposed Action are attached.

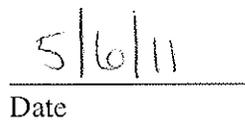
I have considered the information contained in the EA, which is the basis for this FONSI. Based on the information in the EA and this FONSI document, I agree that the Proposed Action as described above, and in the EA, would have no significant impact on the environment.



Laura M. Pettus

Responsible Program Manager

Department of Commerce, National Telecommunications and Information Administration



Date

## ADOPTION OF EXISTING ENVIRONMENTAL DOCUMENT

**Title of document being adopted:** Draft Environmental Assessment for Proposed 300-Foot Self-Support Tower Telecommunications Tower

**Proponent:** City of Houston, Texas

**Location of current proposal:** off of Wisterwood Drive, Houston, Harris County, Texas

**Agency that prepared document being adopted:** City of Houston

**Date adopted document was prepared:** April 2011

**Description of document (or portion) being adopted:** The Proposed Action would require the construction of a 300-foot (ft) freestanding self-support telecommunication tower and would include 12 ft x 38 ft equipment shelter with integrated generator room, new utility rack with meter, two 7 ft swing gates, 4 ft concrete sidewalk, waveguide bridge, gravel site surfacing, gravel access road, 125-kilowatt (kW) emergency backup generator, and Payne security fence. The project would also include three antennas, three microwave dishes, and a lightning rod extension on the proposed new tower. Two receiving antennas would be mounted at 300 ft and one transmission antenna would be mounted at 270 ft from ground surface. The microwave dishes would be mounted at 92 ft, 147 ft, and 153 ft. The lightning rod would be extended a minimum of 3 ft above the proposed antennas but would not exceed the Federal Aviation Administration maximum height. Total ground disturbance for the proposed facility would be less than 0.25 acres. The area surrounding the site is previously disturbed land with an existing monopole and a self-support telecommunication tower located in an area of urban development. The site has a combination of utilities (electricity, communications, and potable water) along with an adequate transportation network of roads available in the area. Utilities would be extended to the project site for grid power. The tower and site construction and equipment acquisition and installation for this Proposed Action do not have any significant environmental impacts or extraordinary circumstances.

**The Department of Commerce has identified and adopted this document as being appropriate for National Telecommunications and Information Administration's (NTIA) purposes after independent review. The document meets its environmental review needs for approval under the PSIC Grant Program and will accompany the proposal to the decision maker.**

**Name of agency adopting the document:** NTIA

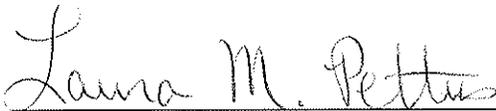
**Responsible Official:** Laura M. Pettus, Responsible Program Manager

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Signed:

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