

March 7, 2024

RE: Notice of Scoping: Proposed Construction, Operation, and Maintenance of Border Barrier Lighting in El Paso and Starr counties, Texas

To Whom It May Concern:

U.S. Customs and Border Protection (CBP) seeks input on potential impacts and project alternatives for the proposed construction, operation, and maintenance of border barrier lighting in El Paso and Starr counties, Texas to support U.S. Border Patrol (USBP) operations. The information provided will inform the development of an Environmental Assessment (EA).

The environmental planning effort will include the preparation of an EA consistent with the requirements of the National Environmental Policy Act (NEPA). The proposed action consists of construction, operation, and maintenance of approximately 25.15 miles of new lighting and the operation and maintenance of approximately 19.6 miles of installed, non-operational (constructed) lighting. More information about the proposed action specifications is included in an attachment to this letter. These materials and a Story Map are also available online in English and Spanish: www.cbp.gov/about/environmental-management.

Los materiales en español están disponibles en línea en: www.cbp.gov/about/environmental-management.

CBP is seeking public input and comments on the proposed action and alternatives and environmental issues to be addressed in the EA. The most helpful comments are those that include data or information that could help inform CBP's analysis of potential impacts. Per Department of Homeland Security Directive 023-01, Revision Number 01 (Implementation of the National Environmental Policy Act), CBP will post a copy of the Draft EA for review and comment on CBP.gov.

CBP will be accepting comments until April 22, 2024. Comments can be emailed to CBP at CommentsENV@cbp.dhs.gov. Please include "Texas Lighting Environmental Assessment" in the subject of your email. Comments received in response to this letter, including the names and addresses of those who comment, will become part of the public record.

You may also provide comments, questions, or concerns by calling (888) 322-4958 or by mail:

U.S. Customs and Border Protection U.S. Border Patrol Headquarters 1300 Pennsylvania Ave. 6.5E Mail Stop 1039 Washington, D.C. 20229-1100 ATTN: Michelle Barnes

CBP places a high priority on interaction with, and feedback from, federal agencies, local officials, landowners, Tribal governments, and community members and continues to strive for a transparent process. We appreciate your feedback and help with evaluating the potential impacts of this project.

Sincerely,

Shelly Barnes

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Environmental Branch Chief
Infrastructure Portfolio

Program Management Office Directorate

United States Border Patrol

Enclosure:

Construction, Operation, and Maintenance of Border Barrier Lighting in El Paso and Starr counties, Texas: Description of the Proposed Action



Construction, Operation, and Maintenance of Border Barrier Lighting in El Paso and Starr counties, Texas Description of the Proposed Action

The proposed action would include construction, operation, and maintenance of planned and nonoperational border lighting in El Paso and Starr counties, Texas. The project would comprise approximately 44.75 miles of light-emitting diode (LED) lights, light poles, and associated infrastructure.

The primary goal of and need for implementing operational lighting is to enhance and fortify the capabilities of U.S. Customs and Border Protection (CBP) in fulfilling its mission to safeguard America's borders. Operational lighting is envisioned as a tool to augment CBP's situational awareness, detection, and response capabilities, thereby advancing the agency's commitment to protect the United States.

The proposed action consists of the construction, operation, and maintenance of approximately 25.15 miles of new lighting and the operation and maintenance of approximately 19.6 miles of installed, non-functioning (constructed) lighting. Light would be powered by grid power connected through an underground conduit.

Lighting to be considered as part of the proposed action would be LED, 4,000k Correlated Color Temperature (CCT), (± 300 CCT), 70+ Color Rendering Index (CRI) rating unless otherwise directed. Exterior light fixtures must have surge protective devices to protect against surges and power line disturbances. Exterior light fixtures would need to be able to operate in extreme weather conditions, including low/high temperatures and arid/wet environments, based on the area in which they would be installed.

CCT, CRI, and foot candles are units of measurement for light color and intensity.

- CCT: measures the color appearance of light emitted by a light source, expressed in Kelvins. This characterizes whether the light appears warm, neutral, or cool.
- CRI: is a quantitative measure of a light source's ability to reveal the colors of objects compared to a natural light source of the same color temperature.

 Foot Candles: are a unit of measurement used to quantify the amount of visible light falling on a surface, representing the amount of light that illuminates a one-square-foot surface, one foot away from a standard candle.

Lighting must conform to the latest editions of the Illuminating Engineering Society Guidelines and comply with the latest locally adopted version of the National Electric Code. Additional components that may be evaluated as part of the proposed action and related lighting infrastructure may include the following:

• Gate-Mounted Lights: Where flood lights would be required at vehicular gate locations, the light system would need to be 220 volts, capable of illuminating an area 100 feet wide by 100 feet deep (50 feet on each side of the gate) and would be centered on the gate. CBP environmental subject matter experts would be consulted to confirm the average foot-candle illumination requirements and whether lighting shields should be attached to the luminaries to control light spillage north of the lights.

The lighting controls for the floodlights would need to be in an enclosed secure area near the gate and have an automatic battery backup system for emergency lighting capable of operating for a period of at least 12 hours in the event of power failure.

 Light Poles: The light poles would be a minimum of six inches in diameter at the base of the pole, mounted on reinforced concrete pedestals at a minimum height of three feet above finished grade, and a minimum pedestal diameter of 18 inches which are rigidly connected to the light pole foundation.



- Lighting Controls: Lighting would need to be controlled by photocells, with one photocell controlling no more than one circuit. Each photocell would need to be able to be overridden manually and individually, with on/off/auto controls available at the power distribution location. The lighting controls would be in a secure location.
- Lighting Power Distribution: All wiring between poles and power sources must be buried in conduit, with concrete encasement (3,000 pounds per square inch minimum) required at wash and road crossings. Junction boxes would need to be of concrete construction. Power cables would need to be installed approximately seven feet north of the barrier at a depth of three feet in areas previously excavated for border infrastructure and patrol road construction.
- Maintenance: The maintenance of the proposed lighting systems would be expected upon completion of construction. These activities could include routine upgrades, repairs, and maintenance of the LEDs and poles that would not change their functional use.
- Power Source: CBP plans to evaluate conventional grid power against solar power.
 Current market data will be researched for use in each comparative cost analysis.
- Shielding: The proposed action may include the installation of shielding in order to control the possible spillage of light.
- Vegetation Removal: Clearing would be required of where construction will occur.
 Removing structures and obstructions within the entire easement would also be required.
- Water: Water for construction would be needed. It could be acquired through permitting with local irrigation districts or local landowners with water rights.



Figure 1: Nighttime photo of a border lighting test in Starr County.



Figure 2: Electrical box.



Figure 3: Operational lighting test in Starr County.



Figure 4: Concrete encasement for lighting cables.