

SECTION 2.0
DESCRIPTION OF THE PROJECT

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The locations of the Planned Action are based on a USBP Tucson Sector assessment of local operational requirements, where such infrastructure will assist USBP agents in reducing illegal cross-border activities. USBP will construct, operate, and maintain approximately 7.6 miles of primary pedestrian and vehicle fence, as well as a construction/maintenance road along the U.S./Mexico border in the USBP Tucson Sector. TI will begin approximately 1 mile east of the DeConcini POE and extend 7.6 miles eastward across the Santa Cruz River and end near the western boundary of the CNF. Figure 2-1 illustrates the location of the Planned Action within the Tucson Sector, noted as segments D-5b (5.2 miles) and D-6 (2.4 miles) as well as the access roads and staging areas to be used during the fence construction.

Currently, USBP plans to install the primary pedestrian fence approximately 3 to 6 feet north of the U.S./Mexico border or along the southern toe of the construction/maintenance road. The primary pedestrian fence design will be a personnel-vehicle fence type 1 (PV-1). The design performance measures dictate that the fence must:

- extend 15 to 18 feet above ground and be supported in subsurface footers at depths deemed necessary;
- be capable of withstanding an impact from a 10,000-pound gross weight vehicle traveling at 40 miles per hour (mph);
- be semi-transparent, as dictated by operational need;
- be designed to survive extreme climate changes of a desert environment;
- be designed to allow movement of small animals from one side to the other; and
- not impede the natural flow of water.

The PV-1 fence is an anchored, 23-foot long grout-filled steel bollard-style fence designed to prevent passage by both people and vehicles (Photograph 2-1). Panels of PV-1 fence will be welded together off site and transported on site by small trucks with lowboy trailers. Using a crane, fence panels will be set in concrete-filled trenches. Construction of new fence will be completed using a trencher, a cement mixer, and a crane. No pile driving will be required for construction of PV-1 fence.



Photograph 2-1. Example of PV-1 Fence

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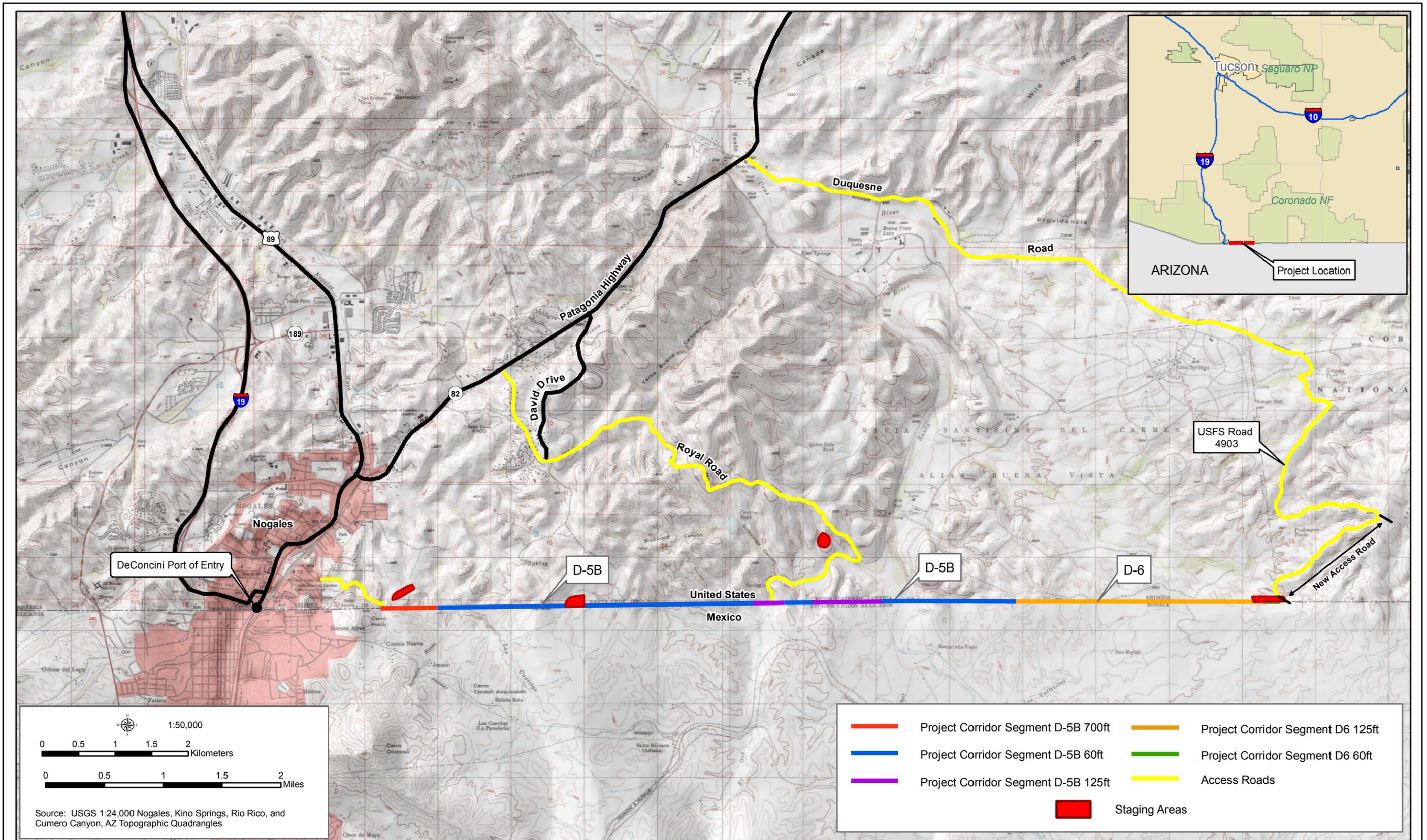


Figure 2-1: Project Location



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The existing temporary vehicle barriers (TVBs) currently within the project corridor were constructed off-site, transported into the border corridor, and placed using cranes and forklifts. This action required minimal clearing of vegetation and ground disturbance. Similar construction techniques are not feasible for the installation of the primary pedestrian fence and construction/maintenance road. Consequently, a road will be constructed adjacent to the border to allow installation of the fence. Construction under the Planned Action will encompass a 60-foot to 125-foot wide project corridor beginning at the U.S./Mexico border and extending northward.

Within the floodplain of the Santa Cruz River, Normandy Style vehicle fence will be installed. An example of this style fence is depicted in Photograph 2-2. The vehicle fence will be placed, using forklifts, along the border. A construction/maintenance road will be constructed in order to place the vehicle fence and is expected to require a width of up to 60 feet. The vehicle fence will be removed by CBP prior to each monsoon season and replaced when flood conditions are no longer eminent.



Photograph 2-2. Example of Normandy Style Vehicle Fence

Additionally, in other washes and arroyos, the fence will be designed and constructed, as appropriate, to ensure proper conveyance of floodwaters and to eliminate the potential to cause ponding on either side of the border.

In order to facilitate operation of equipment, staging of materials, and construction access to the project corridor, four temporary staging areas, totaling 26 acres, and three existing access roads have been identified along the project corridor. Vegetation will be cleared and grading may occur where needed in the staging areas. Upon completion of construction activities, the temporary staging areas will be rehabilitated. No improvements to existing access roads are anticipated, as these roads are currently maintained through use agreements between USBP and landowners. These minor maintenance activities are expected to continue, yet are not expected to be a result of construction activities.

One new access road, however, will be constructed to connect USFS road 4903 to the border. This new road will be approximately 20 to 30 feet wide (including parallel ditches and shoulders) and 1.34 miles long (see Figure 2-1). The road will be built to allow construction access to the east end of the project corridor.

Nighttime construction activities will occur only when absolutely necessary for adequate concrete pours or in the case of an accelerated construction schedule to meet Federal

mandates. Therefore, to account for heat restrictions for adequate concrete drying and curing processes, most concrete pours for low-water crossings, other drainage structures, and fencing will be conducted during the pre-dawn hours of summer months. However, the possibility exists that work will have to occur on a 24-hour basis in order to maintain the work task schedule due to weather or other unforeseen situations. In order to facilitate construction activities during these work hours, portable lights will be used. It is estimated that no more than 10 lights will be in operation at any one time at each project site.

A 6-kilowatt self-contained diesel generator powers these lights (Photograph 2-3). Each unit typically has four 400- to 1000-watt lamps. The portable light systems can be towed to the desired construction location, as needed. Upon completion of construction activities, all portable lights used for construction will be removed from the project corridor. Lights will be oriented to illuminate the work area, but the area affected by illumination will be expected to be limited to 200 feet from the light source. Also, because they will not be deployed specifically for providing lighting for enforcement purposes and due to the fact that no circumstances such as threatened and endangered species warrant it, these lights may or may not have shields placed over the lamps to reduce or eliminate the effects of backlighting.



Photograph 2-3. Portable lights

It is anticipated that construction will begin in July 2008 and be completed by December 2008. Equipment anticipated to be used during the construction will include bulldozers, dump trucks, portable light generators, graders, cement trucks, front-end loaders or forklifts, and flatbed trucks.