



# City of San Antonio

## Agenda Memorandum

**File Number:**19-7853

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**Agenda Item Number:** 14.

**Agenda Date:** 10/23/2019

**In Control:** Planning Commission

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**DEPARTMENT:** Development Services

**SUBJECT:** TPV 20-002 Tree Preservation Variance for CPS Energy Shepherd Substation Transmission Line

**SUMMARY:**

Ms. Christine Westerman for approval of a tree preservation variance request from the Unified Development Code 35-523 (h), “significant trees shall be preserved at eighty (80) percent and heritage trees at one hundred (100) percent preservation within both the 100-year floodplains and environmentally sensitive areas”, located along the CPS Energy Shepherd Substation Transmission Line alignment. Staff recommends approval. (Herminio Griego, (210) 207-6042, herminio.griego@sanantonio.gov, Development Services Department)

**BACKGROUND INFORMATION:**

Project A/P# 2485351

Council District: Bexar County

Consultant: Ms. Christine Westerman

Staff Coordinator: Herminio Griego, Assistant City Arborist, (210) 207-6042

**ANALYSIS:**

The Development Services Department (DSD) reviewed the information presented in Mr. Juan Sandoval’s revised letter submitted October 7, 2019.

The Unified Development Code (UDC) - Article V, Section 35-523 (h), 100-Year Floodplain(s) and Environmentally Sensitive Areas states that, “Significant trees shall be preserved at eighty (80) percent preservation within both the 100-year floodplains and environmentally sensitive areas. Heritage trees shall be preserved at one-hundred (100) percent preservation within the 100-year floodplains and environmentally sensitive areas. Mitigation shall be prohibited in floodplains and environmentally sensitive area except when a variance is granted by the Planning Commission.”

The applicant is requesting a Variance Request to mitigate for removal of tree stand within the Floodplain in excess of the 80% minimum tree stand preservation requirement and 100% minimum preservation requirement of heritage trees within the floodplain and Environmentally Sensitive Areas (ESA) in place under the 2010 Tree Preservation Ordinance for development of the CPS Energy Shepherd Transmission Line project (the Project). DSD staff does agree with the applicant’s request to mitigate via enhanced revegetation and payment into the

Tree Mitigation Fund for tree stand determined to be below 80% significant tree preservation and heritage tree preservation determined to be below 100% preservation in the floodplain and ESA for the following reasons:

1. *Existing site conditions* - The Shepherd Transmission Line is needed to connect the Shepherd Substation (currently under construction) to the existing CPS Energy Valley Road to Cagnon 138-kV transmission line. The transmission line easement is approximately 29,000 feet long and encompasses 69.3 acres. The new Shepherd Substation and associated transmission line is needed for the following reasons: 1) to meet the expected 20-25% increased utility load in the service area, 2) maintain service reliability, 3) reduce the risk of overloaded circuits, and 4) reduced the risk of service outages. In addition, the new substation and transmission line will strengthen the primary distribution backbone and help prevent the loss of service during fault conditions.

CPS Energy evaluated the following potential impacts and criteria during the design process including impacts on: 1) ecological resources, 2) habitable structures, 3) land use, 4) cultural resources, and 5) tree canopy and heritage trees. They also incorporated the desires of current landowners into design considerations. The designs were also required to meet the state and federal requirements for minimum distances between the power lines and existing vegetation. CPS Energy evaluated 8 substation sites and 89 combinations of substation locations and transmission line alignments during the design process to accommodate all of the design requirements and minimize tree impacts. The final design results in the preservation of 68 percent of the tree canopy in the floodplain which is below the 80 percent preservation requirements. In addition, the final plan results in the removal of seven heritage trees (227 inches) in the flood plain and one heritage tree (39 inches) in the ESA.

2. *Tree mitigation* -The Project will meet the Floodplain/ESA preservation and heritage tree removal mitigation requirements as follows:
  - a. Tree Stand tree mitigation:
    - i. CPS Energy will reseed 871,000 square feet of project area with native seed mix. Only 34,143 square feet within the floodplain would be required to be mitigated, which would be equivalent to = 651 Inches
  - b. Heritage Trees Mitigation:
    - i. 1:1 ratio = 59 inches (2 trees)
    - ii. 3:1 ration = 624 Inches (6 trees)
  - c. Mitigation = 1,334 Inches = (651 + 59 + 624)
  - d. Mitigation/Preservation Summary:
    - i. Preserving 96 percent of the tree canopy in the ESA, exceeding the 80% the minimum requirements;
    - ii. Preserving 56 percent of the tree canopy in the non-floodplain area, exceeding the 25 percent minimum requirements;
    - iii. Meeting and exceeding reclamation and mitigation requirements by reclaiming disturbed areas by drill seeding with a native seed mix and ensuring 85% establishment; and
    - iv. The need to address the current and future energy capacity demands and

reliability;

- v. Total Mitigation -= 667 Inches
- vi. Payment to the Tree Mitigation Fund will be \$133,400.00

DSD staff supports the applicant's request to fall below 80% Tree Stand preservation and 100% Heritage Tree preservation requirements in the floodplain and ESA by providing mitigation through preservation, reseedling, payment into the Tree Mitigation Fund; and alternate planning and design to minimize tree impacts.