CITY OF SAN ANTONIO

DEVELOPMENT SERVICES DEPARTMENT

VARIANCE REQUEST ANALYSIS

Project:	UPRR Bridge 9.0 Replacement
Address:	29.29742° N, 98.42079° W
A/P #/PPR #/Plat#:	AP# 2303513
VR Submittal Date:	December 20, 2017
VR Submitted by:	Ms. Paige Anderson of Olsson Associates on behalf of Mr. Mike Freeman with Union Pacific Railroad
Issue:	Below 80% preservation within 100-year Floodplain (2015 Ordinance)
Code Sections:	Unified Development Code (UDC), Section 35-523 (h).
By:	Herminio Griego, Assistant City Arborist

The Development Services Department (DSD) reviewed the information presented in Ms. Paige Anderson's letter dated December 20, 2017.

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. 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 significant trees within the 100-year floodplain in excess of the 80% minimum preservation of protected trees in place under the 2015 Tree Preservation Ordinance for the removal and replacement of Union Pacific Railroad (UPRR) Bridge 9.0. The bridge is aging and is scheduled for replacement to maintain the integrity of mainline track. UPRR and Olsson Associates staff coordinated with city staff to ensure that the proposed tree mitigation meets desired criteria. The project team also coordinated with Ms. Anderson to evaluate alternatives to ensure the maximum preservation of trees, while maintaining a safe work environment and delivering a high quality product. As part of the tree preservation efforts, Ms. Anderson made an additional trip to the project site to re-evaluate the trees, and logistical and construction options. DSD staff does agree with the applicant's request to mitigate for tree stand below 80% preservation for the following reasons:

1. *Project Information* – This project will eliminate an aging railroad and with a new bridge that will maintain the integrity and safety of the rail line. The bridge replacement requires the use of a large crane to move the "H" piles from the staging area to the new bridge location. The tree removal is required for worker and crane operator line of sight between the new bridge location and the crane, and the along the material swing path from the staging to the bridge location.

2. *Tree Preservation* – Due to the proposed scope of work, the project is unable to preserve the minimum 80% of significant trees within the 100-year floodplain and

Environmentally Sensitive Area (ESA). The tree plan calls for the removal of only three (3) significant trees in the project area that will reduce the preservation to sixty percent (60%) within the floodplain. No heritage trees are located in the project area. No trees will be disturbed in the buffer area. Since replanting within the floodplain is impractical, the project proposes to re-seed all disturbed areas with a native seed mix to help return the ESA area to pre-development conditions. The required tree mitigation for the significant trees removed from the floodplain equates to 73 diameter inches. The project drawings also include the placement of riprap instead of concrete to stabilize the bridge embankments. Riprap is preferred in this instance because the void spaces will fill with dirt and plants will grow between the rocks along the stream bank creating additional habitat.

3. *Tree mitigation* - A grand total of 73 diameter inches of trees will be mitigated by paying in to the Tree Mitigation Fund $14,400.00 (73 inches x $200 per inch). In addition, the **contractor will drill-seed all disturbed areas** (22,000 ft^2) with a native grass seed mix consisting of grasses, legumes and wildflowers native to the San Antonio area. Stabilization measures will also include ensuring an eighty-five percent (85%) survival of the native seed mixture one year after planting. In places where trees are to be preserved, the contractor will also make efforts to preserve the native understory as well

DSD staff supports the applicant's request to fall below 80% of tree stand preservation requirements based on the project type, conditions of the site and design constraints. The proposed Variance Request meets the intent and spirit of the Tree Ordinance therefore, staff recommends approval.

RECOMMENDATION: Approval

Herminio Griego
Assistant City Arborist
DSD – Land Development – Tree Preservation

1/4/18
Date

Kevin Collins
Interim Development Services Engineer
DSD – Land Development - Engineering

1/4/18
Date

I have reviewed the Variance Request Analysis and concur with the recommendation.

Melissa Ramirez
Assistant Director
DSD – Land Development

1/5/18
Date