



CITY OF SAN ANTONIO

DEVELOPMENT SERVICES DEPARTMENT

1901 S. Alamo, San Antonio, TX 78204

ADMINISTRATIVE EXCEPTION/VARIANCE REQUEST APPLICATION

Project Name:	San Antonio Water System Silverhorn Golf Course 24-Inch Rehab Project
A/P # /PPR # /Plat #	A/P # 2487238
Date:	7/10/2019
Code Issue:	Tree Preservation Requirement in Floodplain
Code Sections:	35-523

Submitted By:	<input checked="" type="checkbox"/> Owner	<input type="checkbox"/> Owners Agent * (Requires notarized Letter of Agent)
Owners Name:	M. Antonio Leyva, PE	
Company:	San Antonio Water System	
Address:	2800 US Hwy 281 North	Zip Code: 78212
Tel #: 210-233-3943	Fax#	E-Mail: Antonio.Leyva@saws.org
Consultant:	Michael Persyn, PE	
Company:	K. Friese & Associates, Inc.	
Address:	10001 Reunion Place, Suite 404, San Antonio, TX	Zip Code: 78216
Tel #: 210-491-2391	Fax# 512-338-1784	E-Mail: mpersyn@kfriese.com
Signature:		

Additional Information – Subdivision Plat Variances & Time Extensions

- ☐ Time Extension ☐ Sidewalk ☐ Floodplain Permit ☐ Completeness Appeal
☒ Other Environmental Variance
- City Council District 9 Ferguson Map Grid Varies Zoning District R-6 S
- San Antonio City Limits ☒ Yes ☐ No
- Edwards Aquifer Recharge Zone? ☐ Yes ☒ No
- Previous/existing landfill? ☐ Yes ☒ No
- Parkland Greenbelts or open space? Floodplain? ☒ Yes ☐ No



**K FRIESE
+ ASSOCIATES**
PUBLIC PROJECT ENGINEERING

10001 Reunion Place, Suite 404
San Antonio, Texas 78216
P 210.491.2391 | kfriesse.com
TBPE Firm No. 6535

July 15, 2019

Variance Request Review
City of San Antonio
Development Services Department
1901 S. Alamo
San Antonio, TX 78204

RE: San Antonio Water System Silverhorn Golf Course 24-Inch Rehab Package
A/P # 2487238
UDC Section 35-523

✓ Environmental Variance

Dear COSA DSD:

As part of their commitment to the Consent Decree with the EPA, SAWS is required to rehabilitate approximately 3,740 linear feet of deteriorated sanitary sewer pipe within the Silverhorn Golf Course using trenchless techniques. We are requesting consideration for an environmental variance for this project.

We are requesting a variance to the requirements of section 35-523 of the UDC.

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 existing sewer main is nearly 35 years old and is in poor condition, with significantly deteriorated pipe. The pipe must be rehabilitated to prevent overflows and restore the useful life of this asset. As shown in the attached engineering documents, the main is located within the Silverhorn Golf Course, which is upstream of a San Antonio River Authority (SARA) dam. Almost the entire alignment is within the 100-year floodplain or riparian buffer of the creek. We request consideration of this request for the following reasons:

- Proposed tree preservation within the floodplain nearly meets the 80% preservation requirement, with over 72% preservation proposed. Within the riparian buffer, tree preservation is proposed to be 50%. The plans provide strict guidelines on the amount of clearing allowed to reduce the impact to the existing vegetation. Tree preservation outside of the 100-year floodplain exceeds the UDC requirements. All 109 inches of heritage trees have been surveyed and shown on the plans with strict requirements for 100% preservation and protection. Disturbed areas will be seeded with native seeding to restore vegetation upon completion of construction.
- In an effort to minimize disturbance to the environment, the sewer main is proposed to be rehabilitated using trenchless technology. This technology allows for rehabilitation with minimal surface disturbance compared to open cut construction. The design has been optimized to

minimize tree removal to the maximum extent possible. SAWS and Silverhorn are allowing a flexible access route in order to provide greater flexibility to contractors to avoid existing tree stands and minimize tree removal.

- The public interest in preventing sewer overflows outweigh the minor difference in tree preservation requirements for which this variance is requested.

To meet the 80% preservation requirement, we propose mitigation through planting drill seed, where appropriate and safe, and more than 6 acres of native seed mix, ensuring 85% establishment of all disturbed areas within the project corridor. This seeding restores areas where trees were removed as well as areas disturbed by construction that are devoid of trees currently. Tree removal and mitigation acreages are shown in the table below and assume a 50% credit for mitigation. As shown in the table, this mitigation meets the 80% minimum preservation requirement within the floodplain.

Zone	Canopy Area (Acres)	Canopy Area (Sq.Ft.)	Required Preservation Area (Sq.Ft.) *	Area Preserved (Sq.Ft.)	Required Mitigation Area (Sq.Ft.)	Calculated No. of Trees **	Actual No. of Trees	No. of Inches for Mitigation Fees (in.) ***	Cost (\$) ****
Floodplain	0.8351	36,378.44	29,102.75	25,876.73	3,226.02	3.69	4	66.80	\$13,360.00
Riparian Buffer	0.0201	876.62	701.296	501.68	199.616	0.23	1	16.70	\$3,340.00
Not in Floodplain	0.7231	31,496.19	12,598.48	15,511.14		N/A			\$0.00
Total Mitigation									\$16,700.00

* 80% Preservation required inside 100-yr floodplain and Riparian Buffer. 40% Preservation required outside of 100-yr floodplain.

** No. of Trees calculated based on shade value from Appendix E of UDC for medium sized trees. (Conversion Factor = 875)

*** No. of Inches for Mitigation calculated based on formula in Division 5 Sec. 35-523 of the UDC.

**** Cost calculated based on fees for medium sized trees in Appendix C of UDC (\$200/inch)

SAWS is requesting that the total mitigation fee of \$16,700.00 be reduced by 50% to \$8,350.00 because of going above and beyond the minimum requirements by: a) using native seed mix, b) using drill seeding where appropriate to ensure better establishment and c) ensuring establishment of 85%.

The following are provided in accordance with UDC Section 35-483(e):

- Strict compliance with these regulations is not possible as the existing sewer main location is fixed and is not proposed to be moved out of the floodplain with this project. The proposed design complies with the spirit of the regulations and maximizes the preservation of existing tree canopy within the floodplain.
- This hardship is due to the location of the existing line (constructed nearly 35 years ago) within the Silverhorn Golf Course.
- The public interest in reducing sewer overflows outweighs the public interest underlying the regulation for which we request a variance.
- The granting of the variance will not be injurious to other property and will not prevent the orderly subdivision of other property in the area in accordance with these regulations.

Development Services
July 15, 2019
Page 3 of 3

In our professional opinion, the proposed administrative variance remains in harmony with the spirit and intent of the UDC as it will not adversely affect the health, safety, or welfare of the public.

Sincerely,



Michael Persyn, PE
Applicant



M. Antonio Leyva, PE
Owner

Attachments: Engineering Plans dated 7/1/2019

For Office Use Only:		AEVR #:	Date Received:	
DSD – Director Official Action:				
<input type="checkbox"/> APPROVED	<input type="checkbox"/> APPROVED W/ COMMENTS		<input type="checkbox"/> DENIED	
Signature:		Date:		
Printed Name:		Title:		
Comments:				



CITY OF SAN ANTONIO

DEVELOPMENT SERVICES DEPARTMENT

VARIANCE REQUEST ANALYSIS

TPV 19-036

Project:	San Antonio Water System Silverhorn Golf Course 24 inch Rehab Project
Address:	Silverhorn Golf Course
A/P #/PPR #/Plat#:	A/P #2487238
VR Submittal Date:	July 15, 2019
VR Submitted by:	Mr. Michael Persyn of K. Friese & Associates on behalf of Mr. Antonio Leyva of the San Antonio Water System.
Issue:	Below 80% significant tree and 100% heritage tree preservation within 100-year Floodplain and Environmentally Sensitive Areas (2010 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 Mr. Michael Persyn letter dated July 15, 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 an Environmental Variance to mitigate for removal of tree stand delineated trees within the Floodplain and Environmentally Sensitive Areas in excess of the 80% minimum preservation of protected significant trees in place under the 2010 Tree Preservation Ordinance for development of San Antonio Water System (SAWS) Silverhorn Golf Course 24-Inch Rehab 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 in the floodplain and environmentally sensitive areas for the following reasons:

1. *Existing site conditions* – The Silverhorn Golf Course 24-Inch Rehab project is required pursuant to the agreement between the City of San Antonio and the United States

Environment Protection Agency to address deteriorated sanitary sewer infrastructure within the Silverhorn Golf Course in City of San Antonio. The Project is essential for the health and welfare of San Antonio's citizenry. The Project consists of replacing 3,470 linear feet of deteriorated thirty-five (35) year old twenty-four (24) inch diameter sanitary sewer pipe using trenchless techniques.

The majority of the project is located within the 100-year floodplain. SAWS decided to use the Cure In Place Pipe (CIPP – trenchless technique) methodology to minimize the impact on stands of trees within the Project limits. Even though replacement will be with trenchless techniques, the Project requires the removal of tree stand for access to the sanitary sewer.

The Tree Stand Delineation Plan indicates that seventy two (72) percent of the total canopy in the floodplain will be preserved; fifty (50) percent of the canopy will be preserved in the environmentally sensitive areas (ESA); and approximately forty-five (45) percent of the canopy will be preserved in the non-floodplain/non-ESA. The Project includes one-hundred (100) percent preservation of the 109 inches of heritage trees within the operating limits.

2. *Tree mitigation and canopy diversity* – The applicant opted to provide mitigation above and beyond the minimum required in the UDC as identified below: The Project will meet the Floodplain Tree Stand Delineation mitigation requirements as follows:
 - a. Re-seeding six (6) acres of disturbed area, both inside and outside of the floodplain;
 - b. Reclaiming disturbed areas by drill seeding with a native seed mix and ensuring 85% establishment; and
 - c. Payment into the Tree Mitigation fund of \$16,700.00:

SAWS is requesting consideration of a fifty percent (50%) reduction in the mitigation fee for going above and beyond with regards to reseeded techniques inside and outside of the floodplain and environmentally sensitive areas. If approved, the reduced mitigation payment would be \$ 8,350.00.

DSD staff supports the applicant's request to fall below 80% tree stand in the floodplain and ESA based on the conditions of the site, need to replace existing deteriorated sanitary sewer lines with new sanitary sewer lines, and exceeding mitigation and tree stand delineation requirements. The proposed Variance Request meets the intent and spirit of the Tree Ordinance therefore, staff recommends approval.

RECOMMENDATION: Approval of Variance Request



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

7.17.19

Date



Kevin Collins
Development Services Engineer
DSD – Land Development - Engineering

7/17/19

Date

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



Melissa Ramirez
Assistant Director
DSD – Land Development

July 18, 19

Date



CITY OF SAN ANTONIO
CAPITAL IMPROVEMENT PROJECTS
TREE PERMIT APPLICATION

Date: 07/01/2019

A/P # 2487238 Permit Fee \$ _____
____ APPROVED _____ NOT APPROVED Inspector / Arborist _____ Date _____

Project Address/Location: <u>Silverhorn Golf Course and Park at West Avenue</u>		District: <u>Apartments</u>
Project Name: <u>SAWS Silverhorn Sewer Rehab Package</u>		Proj. Mgr: <u>Michael Persyn, P.E.</u>
Est. Project Starting Date: <u>12/1/19</u>		Acres: <u>6.11</u>
Project Type (New): <input type="checkbox"/> Street <input type="checkbox"/> Drainage <input checked="" type="checkbox"/> Utility <input type="checkbox"/> Other (specify) _____		
Project Type (Existing): <input type="checkbox"/> Street <input type="checkbox"/> Drainage <input checked="" type="checkbox"/> Utility <input type="checkbox"/> Other (specify) _____		
Staff Contact: <u>Alla Korostyshevsky, P.E.</u> Phone #: <u>210-233-3447</u> Fax #: <u>210-233-4198</u>		
Email Contact: <u>Alla.Korostyshevsky@saws.org</u>		
Consultant: <u>Michael Persyn, P.E.</u> Phone #: <u>210-491-2391</u> Fax #: <u>512-338-1784</u>		
Email Contact: <u>mpersyn@kfriese.com</u>		

- ☐ 1. has no Significant, Heritage, or Historic trees as defined in Article V, section 35-523 of the U.D.C. (*Plan submittal not required*)
- ☐ 2. has Significant, or Heritage trees, but this work will in no way cause damage to or the destruction of said trees. (*Plan submittal required with tree preservation plan, site plan indicating location of trees, and tree protection specifications*)
- ☐ 3. Not Applicable
- ☒ 4. has Significant, or Heritage trees, that will be removed. (*Plan submittal required with tree preservation plan, site plan indicating location of trees, tree protection specifications with tree inventory*)

Significant:

Total Area Sq. Feet 68,825 Area Sq. Feet Preserved 40,946 % Preserved 59.49%

Small Species:

Total Diameter Inches _____ Diameter Inches Preserved _____ % Preserved _____

Heritage:

Total Diameter Inches 109 Diameter Inches Preserved 109 % Preserved 100%

Flood Plains:

Total Area Sq. Feet 36,155 Area Sq. Feet Preserved 26,136 % Preserved 72.29%

Please submit plans to: Environmental Review Division • 1901 South Alamo Street • San Antonio, Texas • 78205