

USA REQUEST
&
PRELIMINARY ENGINEERING REPORT

Heron Valley Subdivision

PREPARED FOR

SAN ANTONIO WATER SYSTEM
INFRASTRUCTURE PLANNING
DEPARTMENT



April 5, 2023

I. PURPOSE AND SCOPE

The purpose of this engineering report is to provide information to San Antonio Water Systems (SAWS) in order to secure a utility service agreement (USA) for **water and wastewater** service to the Heron Valley Subdivision. The Heron Valley Subdivision Tract is located in northwest Bexar County and are within the City of San Antonio City Limits. The property consists of approximately 25.952 acres and is to be developed in one phase.

II. PROJECT DESCRIPTION

BEING A TOTAL OF 7.352 ACRES OF LAND AND BEING OUT OF A REMAINING 2.668 ACRE TRACT OF LAND OUT OF THE M.G. DE LOS SANTOS SURVEY, ABSTRACT NO. 664, COUNTY BLOCK 4446, N.C.B. 15008 AS RECORDED IN DOCUMENT NO. 20210356496, OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF BEXAR COUNTY, TEXAS. AND BEING OUT OF A 0.574 ACRE TRACT OF LAND OUT OF THE M.G. DE LOS SANTOS SURVEY, ABSTRACT NO. 664, COUNTY BLOCK 4446, N.C.B. 15008 AS RECORDED IN DOCUMENT NO. 20220007352, OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF BEXAR COUNTY, TEXAS. AND BEING A 4.110 ACRES OUT OF LOT 1, BLOCK 1, N.C.B. 15008 AS RECORDED IN JAVIER AND NORMA I. PLATA AND SONS, VOLUME 9650, PAGE 204, DEED AND PLAT RECORDS OF BEXAR COUNTY, TEXAS. ESTABLISHING LOTS 1-41, BLOCK 1, N.C.B. 15008, SAN ANTONIO, TEXAS.

The Heron Valley Subdivision will be developed as a single residential type of development. The development will accommodate 41 single family homes. The property is located inside the city limits of San Antonio and is not over the Edwards Aquifer Recharge Zone.

SEWER SERVICE

The property is in the West Service Area (WSA) for sewer service. The sewage generated by the development will be transported by the sewage infrastructure located in the WSA.

III. DESIGN CRITERIA

The total developable acreage for the Heron Valley Subdivision is 7.352 acres. The tracts will be designed for single family use according to USR.

IV. MAIN ANALYSIS

SEWER SERVICE

The tract will require an 8" sanitary sewer main to serve the development.

TYPE OF DEVELOPMENT	ACRES	EDUs REQUIRED
SINGLE FAMILY USE	7.352	41
TOTALS	7.352	41

The total EDUs based on the type of development for the Tuscany Villas Subdivision are 185 EDUs. The total sewage flow is ({200 GPD / EDU} * {41 EDUs}) = 8,200 GPD/1,000,000 = 0.0082 MGD. The sewage flows for the development are presented as follows:

TYPE OF DEVELOPMENT	EDUs	GPD / EDU	MIN / DAY	GPM
SINGLE FAMILY	41	200	1440	5.69
TOTALS	185			5.69

The gravity outfall main size is computed using the flows and approximate slopes along the main's alignment. The conversion of the flow to cubic feet per second is represented as follows:

TOTAL DEVELOPMENT	GPM	CF / GAL	MIN / SEC	CFS
SINGLE FAMILY	5.69	0.134	0.0166	0.013
TOTALS				0.013

V. RIGHT-OF-WAY

The developer will assist and provide the necessary utility easements that are required for the construction of the on-site water and sanitary sewer mains that will serve the Tuscany Villas Subdivision. The developer is responsible for the right-of-way acquisition of the easements that are necessary for the construction of the sanitary sewer main. The acquisition can be obtained through dedication or by compensation to the property owner. SAWS may utilize its power of eminent domain to take private property for public use.

VI. RECOMMENDATION

The developer hereby requests a utility service agreement (USA) for 41 EDUs for sewer service to the 7.352-acre tract and matching total EDU's for Water Service.

The developer is prepared to pay all the required water and sewer impact fees to SAWS for the 41 EDUs of water and sewer service and infrastructure construction as the land is developed in phases.

VII. SUMMARY

WATER IMPACT FEES: (Low elevation Service Area)

TYPE OF FEE	NUMBER OF EDUs	IMPACT FEE RATE	TOTAL
Flow Development	41	\$1,188	\$48,708
System Development	41	\$885	\$36,285
Water Supply	41	\$2,706	\$110,946
TOTAL			\$195,939

SEWER IMPACT FEES: (Middle Collection Impact Fee Area)

TYPE OF FEE	NUMBER OF EDUs	IMPACT FEE RATE	TOTAL
COLLECTION	41	\$2,013	\$82,533
TREATMENT	41	\$651	\$26,691
TOTAL			\$109,224

Engineer

Gomez-Garcia & Associates, Inc
Alejandro R. Gómez P.E., C.F.M.
President
19230 Stone Oak PKWY, Suite 302
San Antonio, Texas 78258
(210) 832-9608
(210) 832-9615 fax
agomez@ggainc.net
TBPE Firm Registration # 5362

Developer

HYG Homes, LLC
Attn: Mr. Carlos Garza
84 NE Loop 410, Suite 242
San Antonio, TX 78216