# SUPERIOR PROPERTIES FEASIBILITY STUDY <br> (Dev. No. 2215) 

FOR
THE CITY OF MONTGOMERY


WGA PROJECT NO. 00574-126
JANUARY 2023
PREPARED BY


## OVERVIEW

1 Executive Summary
2 Introduction
3 Analysis

## Exhibits:

A. Tract Boundary
B. City Zoning
C. Preliminary Site Plan
D. Water and Wastewater Usage Projection
E. Impact Fees
F. Escrow Agreement
G. Public Utility Extension Cost Estimate
H. Thoroughfare Plan

## 1 EXECUTIVE SUMMARY

Superior Properties of Texas, LLC (the "Developer") has requested the City of Montgomery (the "City") to perform a feasibility study for the City to serve a future 15.46 -acre multifamily and commercial development along Lone Star Parkway, also referred to as the Superior Properties tract. All of the tract falls within the City limits and would not require annexation.

This development would consist of 98 multifamily units and approximately 4 commercial reserves for incity service at full build out. The final land plan may affect the estimated costs of and revenues associated with the development.

The analysis shows that the City has the water capacity to serve the development, and existing developments, for the next few years but will need additional water plant capacity to serve all existing and proposed developments at full build out.

The analysis also shows that the City will have the wastewater treatment plant capacity to serve the development and existing developments for the next couple of years but will need additional sanitary sewer plant capacity to serve all existing and proposed developments at full build out.

The estimated total costs that will be associated with the development are:

| Escrow Account | $\$ 14,000$ |
| :--- | ---: |
| Water Impact Fee | $\$ 147,100$ |
| Wastewater Impact Fee | $\$ 328,396$ |
| Offsite Utility Improvements | $\$ 226,000$ |
| Total Estimated Costs | $\$ 715,496$ |

Based on information provided by the Developer the estimated a total assessed valuation for the development would be approximately $\$ 19,764,500$ at full build out. Based on the City's estimated current tax rate ( $\$ 0.1050$ debt service and $\$ 0.2950$ for operations and maintenance) financially, the development will bring in approximate tax revenues as shown below, assuming $95 \%$ collection:

| Operations and Maintenance | $\$ 55,390$ |
| :--- | :--- |
| Debt Service | $\$ 19,715$ |
| Total Estimated Annual Tax Revenue | $\mathbf{\$ 7 5 , 1 0 5}$ |

## 2 INTRODUCTION

This undeveloped tract is located at the northwest corner of Lone Star Parkway and FM 149. An exhibit showing the Tract's boundary in relation to the City's boundary is enclosed as Exhibit A. A preliminary site plan is enclosed as Exhibit C, which indicates the Developer's intentions to subdivide the Tract into multi-family residential and commercial reserves. Currently, the tract is zoned ID - Industrial and would to be required to be rezoned as R2 - Multifamily and B - Commercial prior to service. Enclosed as Exhibit $\mathbf{B}$ is a map showing the current zoning of the area surrounding the property.

Based on information from the Developer, construction of the development is planned to be complete in 2025. The estimates included in this feasibility are based on the anticipated land use provided by the developer at the time of the study. The final land plan may affect the estimated costs and revenues associated with the development.

## 3 ANALYSIS

## Water Production and Distribution

The Tract is located entirely within the City and would not need to be annexed before receiving service. The City has three (3) active water wells and two existing water plants with a capacity of 2,500 connections or 568,000 gallons per day (average daily flow) per Texas Commission on Environmental Quality ("TCEQ") requirements.

The current average daily flow ("ADF") in the City is approximately 418,353 gpd. Inclusive of existing connections, ultimate future projected connections within current platted developments, and developments that are currently in permitting or under construction, the City has committed approximately 593,890 gpd and 1,769 connections. A copy of the updated water usage projections is included as Exhibit D. This equates to approximately $105 \%$ of the total ADF capacity and $71 \%$ of the connection capacity. The City is not expected to hit these numbers or exceed the current average daily flow capacity until 2024. The addition of a booster pump would increase the ADF capacity to approximately $730,000 \mathrm{gpd}$.

Based on historical data from similar developments in the City and information provided by the Developer, the Tract's estimated water capacity requirement is approximately $38,940 \mathrm{gpd}$. Inclusive of existing connections, platted developments, developments currently underway, other developments in feasibility and design, and this development, the City will have committed approximately 900,275 gpd or $158 \%$ of the total ADF capacity and $130 \%$ of the connection capacity at full build out. Based on the projections shown in Exhibit D, the City would need additional water plant capacity around Q2 2024.

Based on the projected ADF, including this Tract, the City is projected to have sufficient water production capacity to meet the demand of the development within the City for the next couple of years. As the existing and upcoming developments build out, the City should be prepared to expand their water production and distribution capacity.

City records indicate that there is an existing 12-inch waterline along Lone Star Parkway, which will be able to serve the multi-family development as shown in Exhibit A. The commercial sites being proposed with this development will be able to be served by either the existing 6" line along Lawson Street or the existing 12 " waterline along FM 149 . The remaining management pad will be able to be served by extending the existing $6 "$ line along Lawson Street along the proposed cul-de-sac as shown on the Developer's land plan. A preliminary cost estimate for the construction costs of the waterline extension can be found in Exhibit G. The Developer will be responsible for all costs associated with the waterline extension and required easements.

The proposed multi-family development is to be served via a master meter at Lone Star Parkway. Each commercial building shall have an individual meter at each point of connection to the City's system.

The ultimate alignment of waterlines interior to the Tract will depend on the final land plan of the proposed development. The waterlines behind each master meter are to remain private and must be designed and
constructed per all applicable City and TCEQ design standards. The Developer is responsible for all costs associated with easement acquisitions and recordation.

The Developer is responsible for providing engineered plans and specifications for the water distribution system interior to the development to the City Engineer for review and approval prior to commencing construction, and to obtain all required Planning and Zoning Commission, City Council and development approvals and permits.

## Sanitary Sewer Collection and Treatment

The City's existing wastewater facilities include 18 public lift stations and two (2) wastewater treatment plants (one of which is currently decommissioned). The Stewart Creek Wastewater Treatment Plant (TPDES Permit No. WQ0011521001) has a permitted capacity of $400,000 \mathrm{gpd}$. The current ADF at the Stewart Creek Wastewater Treatment Plant is 185,755 gpd or $46 \%$.

Inclusive of existing connections, platted developments, and developments which are in permitting or under construction, the City has committed approximately 351,623 gpd or $88 \%$ of existing permitted capacity at full build out. A copy of the wastewater usage projections is included as Exhibit D.

Based on the City's historical usage for similar types of development and information from the Developer, the Tract's estimated sanitary sewer capacity requirement is $32,990 \mathrm{gpd}$ at full build out. Inclusive of existing connections, platted developments, developments currently underway, other developments in feasibility and design, and this development, the City will have committed $550,363 \mathrm{gpd}$ or $138 \%$ of existing permitted capacity.

The TCEQ requires the City to initiate design of a wastewater treatment capacity expansion when the ADF exceeds $75 \%$ of the City's 400,000 gpd permitted capacity for 3 consecutive months. The ADF for the City, including these Tracts and other tracts in design/feasibility, is not expected to exceed $75 \%$ of the permitted capacity ( $300,000 \mathrm{gpd}$ ) until around the first quarter of 2024. Additionally, the TCEQ requires the commencement of the construction phase of the expansion after 3 consecutive months of ADF exceeding $90 \%$ of the permitted capacity $(360,000 \mathrm{gpd})$. This is expected to occur around third quarter of 2024. (Note: We are expecting the construction of Nantucket Apartments and Grand Monarch Apartments, consisting of 385 units and 72 units, respectively. The developments will account for $58,600 \mathrm{gpd}$ at full build out. We are not anticipating all units to be filled within 2024 but are accounting for it in these calculations.)

The proposed Tracts will receive sanitary sewer service by extending a gravity sanitary sewer line along the frontage of the tracts, adjacent to Lone Star Parkway from an existing manhole at the northeast corner of Lone Star Parkway and FM 149. From here the Tracts' flow will be routed to Lift Station No. 2 via an existing 8 " gravity sanitary sewer line along FM 149.

Additionally, Lift Station No. 2 is already projected to be over its calculated capacity, based on a 6 hour per day run time, at full build-out of the existing developments, not including this Tract. (The reason to limit the capacity to 6 hours per day is it then allows for the lift station to handle the 4 times peaking factor.)

We also evaluated having Lift Station No. 7 serve the tract via gravity sanitary sewer. Lift Station No. 7 is projected to have capacity, however due to the elevation at Lift Station No. 7, it would not be feasible to provide service to the proposed development via a gravity sanitary sewer.

The ultimate alignment of sanitary sewer lines interior to the Tract will depend on the final land plan of the proposed development. These sanitary sewer lines beyond the point of connection to the City's sanitary sewer system are to remain private and must be designed and constructed per all applicable City and TCEQ design criteria.

The Developer is responsible for providing engineering plans and specifications for the sanitary sewer conveyance system interior to the development, to the City Engineer for review and approval prior to commencing construction. The Developer is also responsible for obtaining all Planning and Zoning Commission, City Council, and development approvals and required permits.

The Developer will need to coordinate the installation of sanitary sewer tap(s) into the public system with the City's department of Public Works and will be responsible for all costs associated with said work.

## Drainage

The onsite storm sewer system will be designated private and will not be accepted by the City upon completion of the development. Any detention ponds will remain the responsibility of the Developer. All drainage and detention improvements must be designed per the City's Code of Ordinances requiring compliance with the City's floodplain regulations and all applicable Montgomery County Drainage Criteria Manual Standards. The Developer will also be required to perform and submit a drainage study showing the development ultimately has no impact on the drainage downstream of the Tract and on adjacent properties. The drainage study must be submitted to the City for review and approval prior to approval of the construction plans.

The Developer is responsible for providing engineering plans and specifications for the drainage and detention system interior to the development to the City Engineer for review and approval prior to commencing construction, and to obtain all required Planning and Zoning Commission, City Council, and development approvals and permits.

## Paving and Traffic

Per the preliminary land plan submitted by the Developer, the streets are proposed to be private, with the exception of a proposed public cul-de-sac at the end of Lawson Street. The Developer is responsible for providing engineered plans and specifications for the roads interior to the development to the City Engineer for review and approval prior to commencing construction, and to obtain all required Planning and Zoning Commission, City Council, and development approvals and permits.

Currently, the preliminary land plan, provides for three (3) proposed access points along Lone Star Parkway and a proposed extension of Lawson Street to the Development to provide access to the entire multifamily and commercial developments. Due to the anticipated volume from the multi-family development and the current size and material of Lawson Street, the proposed multi-family access point onto Lawson Street will be for emergency vehicles only and will not allow for regular traffic to utilize Lawson Street. Additional
analysis of the anticipated vehicle traffic from the proposed commercial sites will be needed to determine the adequacy of Lawson Street and any potential improvements to be made. The Developer is responsible for Montgomery County approval for the proposed access points onto Lone Star Parkway and must obtain City approval for the proposed extension of Lawson Street.

Per the 2021 Montgomery County Major Thoroughfare Plan, there are no plans for any proposed collector streets or thoroughfares within or nearby the tract limits as shown in Exhibit H.

Per the City of Montgomery Code of Ordinances, the City requires that each multi-family unit shall have off street parking for at least two vehicles. Additionally, the City requires that Commercial developments allocate at least $75 \%$ of the gross building space to parking, excluding family dining which is to include 1 space for every 6 customer seating, as well as 1 space for every 2 employees.

## Development Costs

The Developer will need to engineer and construct the on-site and off-site water, sanitary sewer, paving, and drainage facilities to serve the proposed Tract.

The Developer will also need to pay water and wastewater impact fees to the City. The impact fees will be assessed at the time of recordation of the final plat and collected prior to receiving water and sanitary sewer taps. Enclosed as Exhibit F is Table 1.1 of the 2017 Revisions to the Montgomery Impact Fee Analysis Report.

The estimated ADF provided by the developer requires the equivalent use of 18 - inch ( 8 ") master meter for the multi-family and 41 - inch ( 1 ") water meters for the multifamily and commercial lots respectively.

An escrow agreement has been entered into between the Developer and the City and funds have been deposited to cover the cost of this feasibility study. An estimated additional $\$ 14,000$ will be required to cover the City's remaining expenses for the development, which includes administrative costs, legal fees, plan reviews, developer and construction coordination, construction inspection, and one year warranty expenses. The fees calculation can be seen in Exhibit G. These additional funds must be deposited into the escrow prior to any work being completed by the City.

Below is a summary of the estimated costs associated with the development:

| Escrow Account | $\$ 14,000$ |
| :--- | ---: |
| Water Impact Fee | $\$ 147,100$ |
| Wastewater Impact Fee | $\$ 328,396$ |
| Offsite Utility Improvements | $\$ 226,000$ |
| Total Estimated Costs | $\$ 715,496$ |

These estimates are based on the projected water and wastewater usage provided by the developer. The actual costs will depend on the final land plan, final design, and actual construction costs.

## Financial Feasibility

The Developer estimates the total assessed value (A.V.) at full development to be approximately $\$ 19,764,500$. Based on the estimated total A.V., and assuming $95 \%$ collection the in-city development would generate approximately $\$ 19,715.09$ per year in debt service revenue, and approximately $\$ 55,390.01$ per year in operations and maintenance revenue. These estimates are based on the City's $\$ 0.1050 / \$ 100$ valuation debt service tax rate and the $\$ 0.2950 / \$ 100$ valuation Operations \& Maintenance (O\&M) tax rate.

This report is our engineering evaluation of the funds required to complete the anticipated future capital improvement for this Tract and of the potential increase in tax revenue to the City. This report is not intended to be used for the issuance of municipal financial products or the issuance of municipal securities. The City's Financial Advisors) can address potential recommendations related to the issuance of municipal financial products and securities.

Thank you for the opportunity to complete this feasibility study and offer our recommendations. Please contact me or Mr. Chris Roznovsky should you have any questions.

Sincerely,


Katherine Mu, PE, CFM
Engineer for the City
KMV/zlgt










Table 1.1 September 2017 ESFC Table for Commonly Used Meters

| Meter Size | Maximum Continuous <br> Operating Capacity <br> (GPM) | Equivalent <br> Single Family <br> Home <br> (ESFC) | Maximum <br> Assessable Water <br> Fee <br> (\$) | Maximum <br> Assessable Waste <br> Water Fee <br> (\$) | Maximum <br> Assessable Fee <br> ( $\mathbf{~})$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5 / 8^{\prime \prime}$ | 15 | 1.00 | 1,126 | $\$ 2,513$ | $\$ 3,639$ |
| $3 / 4^{\prime \prime}$ | 25 | 1.67 | 1,881 | $\$ 4,198$ | $\$ 6,079$ |
| $1^{\prime \prime}$ | 40 | 2.67 | 3,001 | $\$ 6,711$ | $\$ 9,712$ |
| $11 / 2^{\prime \prime}$ | 120 | 8.00 | 9,006 | $\$ 20,103$ | $\$ 29,112$ |
| $2^{\prime \prime}$ | 170 | 11.33 | 12,755 | $\$ 28,471$ | $\$ 41,226$ |
| $3^{\prime \prime}$ | 350 | 23.33 | 26,264 | $\$ 58,626$ | $\$ 84,890$ |
| $4 \prime$ | 600 | 40.00 | 44,942 | $\$ 100,517$ | $\$ 145,429$ |
| $6^{\prime \prime}$ | 1,200 | 80.00 | 90,064 | $\$ 201,035$ | $\$ 291,099$ |
| $8^{\prime \prime}$ | 1,800 | 120.00 | 135,096 | $\$ 301,552$ | $\$ 436,648$ |

# ESCROW AGREEMENT, SECTION 2.03 ATTACHMENT 

 BY AND BETWEEN
## THE CITY OF MONTGOMERY, TEXAS,

AND

## Superior Properties of Texas, LLC

## Dev. No. 2215

## THE STATE OF TEXAS э

COUNTY OF MONTGOMERY
$\ni$

As per section 2.03, the Feasibility Study completed an estimate of the additional escrow amount, which was determined for administration costs, legal fees, plan and drainage report reviews, developer coordination, construction coordination, construction inspection, and warranty of services. The required additional amount is below:

| Administration | $\$ 500$ |
| :--- | :--- |
| City Attorney | $\$ 500$ |
| City Engineer | $\$ 13,000$ |
| TOTAL | $\$ 14,000$ |

## Preliminary Cost Estimate FOR <br> PUBLIC UTILITY IMPROVEMENTS

## Superior Properties

1/19/2023

| Item No. | Description | Quantity | Unit | Unit Price |  | Cost |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General |  |  |  |  |  |  |
| 1 | Contractor Mobilization, Bonds, \& Insurance | 1 | LS | \$ 20,000 | \$ | 20,000 |
| 2 | Trench Safety | 1,370 | LF | 1 |  | 1,000 |
| 3 | Stormwater Pollution Prevention Plan | 1 | LS | 15,000 |  | 15,000 |
| 4 | Site Restoration | 1 | LS | 10,000 |  | 10,000 |
| 5 | Traffic Control Plan | 1 | LS | 12,000 |  | 12,000 |
| Water |  |  |  |  |  |  |
| 6 | 6" Waterline via Open Construction | 250 | LF | 40 |  | 10,000 |
| 7 | 6" Wet Connect | 1 | EA | 4,000 |  | 4,000 |
| 8 | 6" Plug and Clamp | 1 | EA | 1,000 |  | 1,000 |
| 9 | 2" Blowoff valve | 1 | EA | 1,500 |  | 1,000 |
| Sanitary Sewer |  |  |  |  |  |  |
| 10 | 8-inch (8") Sanitary Sewer via Open Construction | 1,120 | LF | 40 |  | 45,000 |
| 13 | 8" Sanitary Sewer via Trenchless (with 16" steel casing) | 60 | LF | 225 |  | 14,000 |
| 11 | 48" Sanitary Sewer Manhole | 4 | EA | 4,000 |  | 16,000 |
| 12 | Connection to Existing Manhole | 1 | EA | 2,000 |  | 2,000 |
|  |  |  | Construction Subtotal |  | \$ | 151,000 |
|  |  |  | Contingencies (15\%) |  | \$ | 23,000 |
|  |  |  | Engineering |  | \$ | 25,500 |
|  |  |  | Construction Phase Services |  | \$ | 16,500 |
|  |  |  |  | Reimbursables | \$ | 10,000 |
|  |  |  |  | Total | \$ | 226,000 |

Notes:


