Engineering Report

Villas At Augusta, Zaragoza Rd., El Paso, Texas

Owner: Investment Builders, Inc.

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February 2019
# Engineering Report
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abstract

This study is intended to assist the owner/developer in meeting the 2019 HTC requirements for an engineering Analysis of the proposed development. The study will assess the existing conditions of the site.

limitations

This report has been prepared for the exclusive use of Investment Builders, Inc., and its consultants for evaluation purposes and does not contain information for other parties or other uses. Mr. Ike Monty authorized this study on January 2019 during our regular weekly meetings.

The results submitted in this report are based on data obtained from the following sources:

1. SLI Engineering, Inc.
2. The EL Paso County
3. Texas Department of Transportation
4. Investment Builders, Inc.
5. Field data collected during the study

If the project information described in this report is incorrect or altered, or if new information is available, we should be retained to review and modify the results of this study.

Introduction

Investment Builders Inc. is preparing an application for a Tax Credit Development consisting of 267,676 square feet, located along N. Zaragoza Road on the far east side of El Paso Texas. The proposed development will include 104 units with a combination of 1, 2, 3 and 4 bedrooms, and a club house. There are 12 (1-bedroom) units, 44 (2-bedroom) units, 44 (3-bedroom units) and 4 (4-bedroom) units. In addition to the units, the developer is building a common center consisting of 1,262 square feet. The development requires 196 parking spaces and the developer is providing 228 parking spaces to include 14 accessible parking spaces. The site does not appear to have any onerous development requirements. It is fronting an arterial street, with utilities nearby, the soil condition is acceptable, and access is available and no problematic visible issues. The site identification number is L62099902300100
Existing Conditions

Site Location
The proposed site consists of a parcel of land located East El Paso, El Paso County, Texas. The parcel is shown on the following exhibit.

Figure 1: General Location of Site
The site is bound by vacant residential land along the east boundary, residential along the southern boundary, Zaragoza Road along the northern boundary and Vacant commercial to the west.

Site Description

Platting Determination & Physical Boundary

The site is subdivided. The legal description is Portion of Lot 1, Block 23, Lomas Del Este Subdivision, El Paso, El Paso County Texas.

Zoning and Proposed Uses:

The site is zoned C-4, c, Commercial that permits the development. The following exhibit is obtained from the City of El Paso Zoning Map.

There is a zoning contract associated with the site. Further, that the property be subject to the following conditions, which is necessitated by and attributable to the increased intensity of use generated by the change of zoning in order to protect the health, safety and welfare of the adjacent property owners and the residents of this City:

Figure 2: Site Location
a. That a detailed site development plan be reviewed and approved per the El Paso City Code in effect at the time of submittal of the application for detailed site development plan review, prior to the issuance of any building permits; and,

b. That a twenty-five foot (25') wide landscape buffer with high profile native trees be placed at ten feet (10') on center, and if Mondale pine trees, fifteen feet (15') on center, be required along the property line abutting any residential zone prior to the issuance of any certificate of occupancy for this Parcel.”

![Figure 3: Zoning Designation](image)

**PROPERTY Tax Information and millage rates**

The site Parcel (Property) Identification Number is L62099902300100, as assigned by the Central Appraisal District.

As per the Consolidated Tax Office, City of El Paso, the proposed site is subject to property-tax levies from a total of five taxing entities:

1. City of El Paso 0.843332
2. El Paso County 0.447819
3. University Medical Center 0.251943
4. El Paso Community College 0.140273
5. Socorro Independent School District 1.380594

The millage rates provided above are based on 100 percent assessed valuation and are expressed per $100 of value:

Flood zone
The site is located in Flood Zone X, areas determined to be outside the 100 year flood as per FIRM No. 480212 0175 B dated September 4, 1991.

Figure 7 Flood Zone Designation, Source FEMA Firm Maps.
DEVELOPMENT ORDINANCES
The site will be developed as per the “City of El Paso – Subdivision and Development Plats Ordinance”.

Survey
The survey prepared by SLI engineering, Inc. shows a frontage of 1,138.66 feet along Zaragoza Road and 732.21 feet along Augusta Dr. The site is 10.00 acres. There are several easements associated with the site:

➢ Utility Easement. This easement is 30 feet wide and it is used to extend overhead lines across the site. The easement is located along the northern property line. Parking is allowed within the easement.
➢ Utility Easement. This easement is 20 feet wide and it is used to extend utilities lines across the site. The easement is located along the southern property line. Parking is allowed within the easement.
Geotechnical review

The General Soil Map for El Paso County issued by the U. S. Department of Agriculture Soil Conservation Service classifies the site in the Hueco Wink Association (HW), 100%

This soil is Nearly level and gently sloping soils that have a fine sandy loam subsoil and are moderately deep over caliche; in the Hueco Bolson.

This association occupies a large area consisting mainly of nearly level and gently sloping soils in the Hueco Bolson. The Hueco soils typically have a brown loamy fine sand surface layer, about 4 inches thick, that is mildly alkaline and noncalcareous. The subsoil is brown and yellowish-brown, calcareous fine sandy loam about 22 inches thick. At a depth of 26 inches, there is a layer of indurated caliche about 32 inches thick. This soil is suitable for the development

A site-specific soils test using samples from on site would be required to obtain more specific and/or detailed information.
Proposed development

The following exhibit is the proposed site plan showing the proposed layout of the buildings. The plan materially adheres to all applicable zoning, site development, and building code ordinances.

Figure 4: proposed site plan
Utilities
Domestic Water
Within the Lomas Del Este Subdivision along Augusta Dr., there is an existing eight (8) inch diameter water main. This main is a stub out from a main line along John Hayes Dr. This stub out has to be extended to the site along an existing 20 ft easement at the south side of the property. Service to the subject Property is anticipated by means of a water main extension to connect the above-mentioned mains. 

The owner is responsible for the cost of the extension.

Figure 5: Domestic Water Main Line Location, Source El Paso Water
Sanitary Sewer Service:
There is an existing twelve (12) inch diameter sanitary sewer main stub-out. This stub-out dead-ends approximately at the boundary line of the subject Property. This main is available for main extensions.

Service to the subject Property is anticipated by means of sanitary sewer main extensions from the described main stub-out. The connection might require a special design in order to accommodate the depth of the existing sewer line.

Easements will be required to accommodate the proposed main extensions.

Figure 6: Sanitary Sewer Main Line Location, Source El Paso Water
There is electric overhead line located along the easterly property line. This line will be used to extend electrical service line to the proposed development. Electric Service will be provided by the El Paso Electric Company.

Telephone service will be provided to the site along with the electric service. The Service is provided by Southwestern Bell.

Gas service is also available nearby the site.

**FIRE DEPARTMENT REQUIREMENTS**

It appears that there are not any off-site Fire Department requirements. The site will be developed as per “2015 International Fire Code”.

### Off Site Requirements

The off-site costs consist of constructing sidewalks along Zaragoza Road, 2 deceleration lanes on Zaragoza Road and the sidewalks along Augusta Dr. Our opinion of the cost is shown in the following table:

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total</th>
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<tr>
<td>Sidewalks</td>
<td>1,375</td>
<td>SY</td>
<td>$30</td>
<td>$41,250</td>
</tr>
<tr>
<td>Deceleration Lanes</td>
<td>2</td>
<td>Ea</td>
<td>$40,000</td>
<td>$80,000</td>
</tr>
<tr>
<td>Install Fire Hydrant</td>
<td>2</td>
<td>Ea</td>
<td>$27,000</td>
<td>$54,000</td>
</tr>
<tr>
<td>Extend Water Main</td>
<td>600</td>
<td>LF</td>
<td>$100</td>
<td>$60,000</td>
</tr>
</tbody>
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**Table 1: Off-Site Opinion of Cost**

On-site requirements

The onsite requirements are typical of any development
Ingress and egress requirements
The site will have 3 access points. The site plan show 2 proposed driveways off Zaragoza Rd. and 1 proposed driveway off Augusta Dr. We recommend coordinating the location of the driveways with the Texas Department of Transportation.

Drainage and detention /retention requirements
Proposed Drainage
As of today, all storm water is to be retained on site. The site is included within the master drainage plan of the Lomas Del Este Subdivision. The Storm Water runoff will be collected in an existing inlet and be transported into the existing pond located just south of the site.

Required approvals
The site is already a portion of a legal subdivision. There will not be a need to subdivide.

A building permit has to be obtained from the City after their review. This process might take 21 working days plus or minus depending on the amount of details needed.

Other necessary fees
The City of El Paso Engineering and Construction Department has an established Building Permit process and also has a Customize Plan Review process to expedite the permit in cases where this is desired. The Building Permit Fee for the standard process will depend on the scope and value as follows:

For Structural repair work costing over five hundred dollars ($500.00) and less than fifteen thousand dollars ($15,000.00), all repair work, new work and remodeling with a valuation up to and not including fifteen thousand dollars and requiring plans and plan review, the fee shall be one hundred sixty dollars and forty-nine cents ($160.49) plus plan review fee and applicable technology fee.

For a valuation from fifteen thousand dollars and including one hundred thousand dollars, the fee shall be one hundred sixty-one dollars and twelve cents ($161.12) for the first fifteen thousand dollars plus eight dollars and forty-eight cents ($8.48) per thousand for each additional thousand or fraction thereof by which the valuation exceeds fifteen thousand dollars plus plan review fee and applicable technology fee.
For a valuation over one hundred thousand dollars up to and including five hundred thousand dollars, the fee shall be eight hundred thirty-seven dollars and forty cents ($837.40) for the first one hundred thousand dollars, plus six dollars and thirty-six cents ($6.36) for each one thousand dollars or fraction thereof by which the valuation exceeds one hundred thousand dollars plus plan review fee and applicable technology fee.

For a valuation over five hundred thousand dollars up to and including one million dollars, the fee shall be three thousand one hundred twelve dollars and seventy-two cents ($3,112.72) for the first five hundred thousand dollars plus three dollars and twenty eight cents ($3.28) for each one thousand dollars of fraction thereof by which the valuation exceeds five hundred thousand dollars plus plan review fee and applicable technology fee.

For a valuation over one million dollars, the fee shall be four thousand seven hundred fifty-eight dollars and thirty-four cents ($4,758.34) for the first one million dollars plus two dollars and twelve cents ($2.12) for each one thousand dollars of fraction thereof by which the valuation exceeds one million thousand dollars plus plan review fee and applicable technology fee.

Building Design Codes and Ordinances:
The Villas at Augusta Apartment Complex design will comply will all of the current and adopted building codes and local ordinances. The City of El Paso has adopted and is currently using the following codes and ordinances:
2015 International Building Code
2015 International Plumbing Code
2015 International Mechanical Code
2015 International Fire Code
2015 National Electric Code
2015 International Energy Conservation Code
Texas Accessibility Code
Uniform Federal Accessibility Standards
City of El Paso Ordinance No. 017413
City of El Paso Landscape Ordinance 18.46
APPENDIX A : SURVEY
APPENDIX B: SITE PLAN