Acknowledgement: All persons who have a property interest in this report hereby acknowledge that the Department may publish the full report on the Department's website, release the report in response to a request for public information and make other use of the report as authorized by law.
**I. EXECUTIVE SUMMARY**

Ward, Getz & Associates, LLP (WGA) conducted a site investigation for the proposed Campanile at Briar Hollow Seniors multi-family development in Houston, Texas. The subject site is approximately 1.142 acres and is located near Briar Hollow Lane, north of Audubon Hollow Lane. We researched city and development restrictions, site access, utility availability and various constraints or items that affect the development of the site. The purpose of this report is to provide a summary of our findings from this investigation.

**II. SITE DESCRIPTION**

The site is irregularly shaped with a no street frontage, however the property has access via a private driveway per plat. Adjacent tracts to the property consist of multifamily developments to the North, East, West, and South. The site is currently undeveloped and consists of mainly trees and brush. The site is currently platted, but a re-plat will need to be completed prior to permitting.

*See “Exhibit A” for Aerial Vicinity Map*

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 48201C0665M, effective June 9, 2014, the subject site is partially located in shaded Zone “AE” and partially located in shaded Zone “X” shaded. These are areas determined to be within the 1% (100-yr) and 0.2% (500-yr) annual chance flood plain, respectively.

*See “Exhibit B” for FEMA FIRM Panel Exhibit*

**III. UTILITY SERVICES**

*See Exhibit “C” for Existing Utility Exhibit*

**Water – City of Houston**

There is a 6” water line along the north-west side of the property line. There are no fire hydrants adjacent to the site. A new tap will need to be made in order to tie into the existing water line and a water meter will need to be installed with a corresponding easement. A utility easement may need to be acquired from the neighboring property for the encroaching water line.

**Sanitary Sewer – City of Houston**

There is an existing 12” sanitary lines along Briar Hollow Lane and an 8” line along the north side of the property. The existing sanitary sewer will need to be extended, inside of an easement, in order to service the proposed site. A utility easement will need to be acquired from the neighboring property.
Storm Sewer – City of Houston

There is a HCFCD easement that runs north-south along the East side of the property. There are existing storm lines and manholes on to the property. The closest storm features are an existing 24-inch storm sewer line located on site. The site will collect drainage by sheet flow into inlets and then convey it in underground storm sewer. On-site storm sewer drainage will likely outfall into the HCFCD ditch on the East side, which will require approval from HCFCD. Per property agreement, storm drainage for the Park Square Condominiums must also be maintained. Existing storm lines may be re-routed as necessary, but must maintain equivalent drainage capacity.

Gas – CenterPoint Energy

CenterPoint Energy conducted a preliminary investigation and has confirmed that there are gas mains located in the vicinity of the project site that will be adequate to supply the site’s natural gas demand. Easements may be required to service the site’s gas supply. Service must be coordinated with CenterPoint Energy prior to construction. Contact information for the area’s gas service coordinator is listed as follows:

David Patino
David.Patino@centerpointenergy.com

Electric – CenterPoint Energy

CenterPoint Energy conducted a preliminary investigation and has confirmed that electric service is available for this project. Point of service, voltage supplied, and specific load requirements can be coordinated with CenterPoint Energy prior to construction. Contact information for the area’s electric service consultant is listed as follows:

Michael Allmann
Michael.Allmann@centerpointenergy.com

Telecommunication – AT&T

AT&T has confirmed that they have adequate telephone facilities in close proximity to provide telecommunication services to the site. They will extend those facilities into the development upon request, at a later date. Contact information for the area’s account representative is listed as follows:

Natividad Soto
NS9892@att.com

See “Exhibit D” for Utility Availability Letters

IV. DETENTION & MITIGATION

On site detention will be required for this site per City of Houston standards. Based on the current COH criteria, required detention volumes for areas greater than 1 acre are calculated as follows:
\[ V_T = [43,560 \times (0.50 \times A_{II})] + (1815 \times A_{EI}) \]

- \( V_T \) = Total Required Detention Volume (Cubic Feet)
- \( A_{II} \) = Area of Increased Impervious Cover (Acres)
- \( A_{EI} \) = Area of Existing Impervious Cover (Acres) for which detention is not currently provided

Based on a site plan provided on February 25, 2020 by Mucasey & Associates, WGA has estimated that the proposed development will include 75% impervious cover. This will result in a 0.86 acre increase in impervious cover. The total estimated amount of detention volume required is calculated as follows:

\[ (43,560 \times (0.50 \text{ AC-FT/AC} \times 0.74 \text{ AC}) + 0 = 18,657 \text{ CF} = 0.43 \text{ AC-FT} \]

This detention rate is effective in the City of Houston as of the date of this report. The detention rate is subject to change.

A portion of the site is located in Zone AE (100-YR) with another portion mapped in Zone X Shaded (500-YR) floodplains. Any fill (dirt, structure, etc.) placed within either floodplain elevation will need to be mitigated for at a 1:1 ratio. The BFE for the subject site appears to be approximately 41’. Based on the survey the elevations on site vary from 54’ to 36.9’. The buildings must have finished floor elevations of at least 48.00’ per current City of Houston standards, placing them 2’ above the 500-yr BFE and approximately 0’ – 10’ above natural ground. Detention will need to be provided by underground vaults due to site and elevation constraints. Assuming the structure/slab will be elevated by piers, the volume of the piers will need to be mitigated for in the floodplain.

**V. SITE RESTRICTIONS**

The property is encumbered by various easements that run along the site’s boundaries. There is a 28’ X 100’ private drive easement along the site’s north boundary. Along the east boundary line there is a 30’ HCFCO drainage easement. There is a 15’ building set back along the north side of the property and a building line limit to the east. Per the building line requirement, the eastern edge of the development may not exceed the continued line of the western face of the existing building on the north adjacent property in order to avoid obstructing the existing development’s southern sightline. Site encumbrances can be reference in the H.C.C.F. W750869 easement agreement document.

**VI. ENVIRONMENTAL ASSESSMENT**

A Phase I Environmental Site Assessment was conducted for this site. The results of this assessment can be found in the report performed by Phase Engineers.

**VII. SITE ACCESS**

The site does not have direct frontage access; however, per recorded agreement, the site will be accessed via a private driveway entrance through the Park Square Condominiums.
VIII. TRAFFIC IMPACT ANALYSIS

For each proposed development in City of Houston (COH), an Access Management Data Summary Form must be submitted to determine whether a Traffic Impact Analysis (TIA) is required. According to COH criteria, if the development generates 100 new trips at peak hour, a TIA may be required. Per the ITE Trip Generation Rates, the proposed 93-unit multi-family development generates 20 trips at the AM peak hour and 25 trips at the PM peak hour. According to the City of Houston criteria, a traffic impact analysis should not be required for this development.

IX. HCAD PROPERTY TAX INFORMATION AND MILLAGE RATES

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<thead>
<tr>
<th>Property Identification Number</th>
<th>Taxing Entity</th>
<th>Tax Rate/$100 Valuation¹</th>
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<td>115888000001</td>
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<td></td>
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<td>Harris County Educational Department</td>
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<td></td>
<td>Houston Community College</td>
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<tr>
<td></td>
<td>City of Houston</td>
<td>0.567920</td>
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</table>

¹ Tax Rates shown are from 2019. The Harris County Appraisal District website has not updated its tax rates for 2020 as of February 20, 2020.

See Exhibit “E” for HCAD facet map

X. ZONING REQUIREMENTS

The City of Houston does not have a zoning ordinance.

See Exhibit “F” for City of Houston No Zoning Letter

XI. FIRE DEPARTMENT REQUIREMENTS

According to the City of Houston Code of Ordinances, fire hydrants shall be located along each private street in a manner that will allow firefighting apparatus to park and connect by hose to a hydrant not more than 300 feet away and reach any part of any building within the development with a 200-foot long hose extending from the equipment. The hose distance shall be measured as laid on the ground, around buildings, fences and other obstacles, and not as an aerial radius from a hydrant or parked equipment. Notwithstanding the foregoing, fire hydrants shall be located not more than 600 feet apart, unless the fire chief approves a different configuration where, in his professional judgement, fire protection needs can be adequately provided.
XII. LOCAL APPROVAL PROCESS

a) Subdivision Platting and Requirements
The site is currently platted as part of the “Galleria – Briar Hollow” subdivision and is subject to subdivision requirements per Chapter 42 of the City of Houston Code of Ordinances. The City of Houston Planning Commission will require the site to be re-platted.

See Exhibit “G” for City of Houston Platting Process

b) Performance Standards Review
Multi-family developments within the City of Houston are required to submit to the City of Houston Planning and Development Department for a Performance Standards Review. The purpose of the review is to determine whether the proposed site plan meets the requirements set forth by Chapter 42 of the City of Houston subdivision ordinance.

c) Public Works and Engineering Review
Proposed work within City of Houston right-of-way require submittal to the Public Works and Engineering Department for review and approval. The typical review time is generally 30 days. The approval process consists of online submission to the City’s Public Works department. Reviews and approvals are conducted electronically.

d) Commercial Permitting and Code Enforcement Plan Review
The Building Permit Process consists of departmental reviews, code enforcement reviews and a structural plan analysis. This process generally takes 90 to 150 days. The following approvals are required prior to receiving a building permit:
- Subdivision Plat Approval and Recordation
- Performance Standards Approval
- Public Works and Engineering Approval
- Form A Approval
- Other governing agency approvals, if applicable

See Exhibit “H” for City of Houston Construction Code

e) Other Approvals
Private franchise utility approvals (CenterPoint Energy and AT&T) are required prior to receiving Public Works and Engineering approval. The review process takes approximately 3 to 6 weeks and can run concurrently with all other reviews. Private utility signatures are required prior to the Public Works department’s final approval.
XIII. PARK LAND DEDICATION

Residential developments within the City of Houston are required to dedicate land for the creation of parks or pay a fee in lieu of parkland dedication.

a) Park Land Dedication
   Per Chapter 42-252, the amount of land required to be dedicated for parks is calculated on the basis of the following formula:

   
   [10 Acres x DU x PPDU/1,000]

   DU = Number of proposed dwelling units
   PPDU = 1.8 Number of persons per dwelling unit for each dwelling unit

b) Fee Payment in Lieu of Park Land Dedication
   Per Chapter 42-253, the parks director may require the developer to pay fees in lieu of dedicating land. The fees are calculated at $700 per dwelling unit.

XIV. IMPACT, SITE DEVELOPMENT PERMIT, BUILDING PERMIT AND OTHER FEES

Estimated Impact Fees

2 Storm Drainage ................................................................. $814.83
3 Water ..................................................................................... $28,987.52
Waste Water ........................................................................ $43,968.25

Permit Fees
The City of Houston 2020 Building Code Enforcement Permit Fee Schedule can be found at the following link.

https://www.houstonpermittingcenter.org/help/fee-schedules

XV. PRELIMINARY SITE PLAN

Based on the findings of this site investigation, a preliminary site plan has been prepared and included as Exhibit G. The site plan adheres to all known applicable City of Houston zoning, site development and building code ordinances.

See Exhibit “I” – Preliminary Site Plan

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2 Impact fees were estimated based on City of Houston Impact Fees Service Equivalency Table
3 The subject site is located within the Buffalo Bayou watershed, which has a drainage impact fee of $16.38/service unit. 1 service unit = 1,000 square feet of increased impervious cover
XVI. DUE DILIGENCE STATEMENT

Ward, Getz & Associates (WGA) conducted this site investigation in compliance with Texas Administrative Code Title 10, Part 1, Chapter 10, Rule 10.205. This report was compiled based on information ascertained in a field survey, City of Houston Geographic Information & Management System (GIMS), FEMA FIRM Maps, visual observations of the site from Google Earth images, research regarding City of Houston criteria and from extensive experience with prior projects in the City of Houston.

If you have any questions or comments, feel free to contact us at (713) 789-1900

Regards,

Tyler Ray, P.E.
Associate
Exhibit B

FEMA FIRM Exhibit
Exhibit C

Existing Utilities
Exhibit D

Utility Availability Letters
February 12, 2020

Ana Arriola
WGA Consulting Engineers
47 Briar Hollow
Houston, Texas

RE: Briar Hollow Seniors

Dear Ana Arriola:

This letter is in response to your request for information on the availability of service at the above project by AT&T.

This letter acknowledges that the above referenced project is located in an area served by AT&T. Any service arrangements for the development will be subject to later discussions and agreements between the developer and AT&T. Please be advised that this letter is not a commitment by AT&T to provide service to this project.

Please contact me at the phone number included in this letter with any questions.

Thank you for contacting AT&T.

Sincerely,

Nat Soto 713-741-7717
AT&T
February 19, 2020

WGA Consulting Engineers  
2500 Tanglewilde, Suite 120  
Houston, TX 77063

Briar Hollow Seniors  
49 Briar Hollow Ln  
Houston, TX 77027

Re: Natural Gas Availability for proposed 93-unit multifamily development, Key Map 491R, located at 49 Briar Hollow Lane, Houston, Texas.

CenterPoint Energy has natural gas available in the vicinity of the above referenced location adequate to supply natural gas to your proposed development.

We are very interested in working with you to introduce the many advantages of natural gas in multi-family properties here in Houston, TX. The affordability of natural gas appliances and amenities help a development stand out in the crowded and highly competitive multi-family market.

To help promote the use of natural gas in multi-family properties, CenterPoint Energy is providing incentives for the installation of year round gas appliances in the residences and individual meters for each condo unit. Incentives are determined on a case by case basis dependent upon such factors as our cost to serve the development, gas load and number of metered residences. The incentives are based upon current availability of promotional funds. Please give me a call at 713-207-5470 or email at eisen.scherwitz@centerpointenergy.com to discuss the possibilities at your development.

Cost to serve (if applicable) and location of service line(s) will be determined after the following is received:

✓ Copy of “recorded” site plan  
✓ Site plan showing meter location  
✓ List of gas equipment and BTU input rating of each gas appliance  
✓ Required delivery pressure

CenterPoint Energy appreciates your interest in natural gas and looks forward to working with you on this and future projects.

Sincerely,

[Signature]

Eisen Scherwitz  
Sales Rep. - Texas Region, Natural Gas
February 26, 2020

Re: Availability of Electrical Service
49 Briar Hollow Ln.

CenterPoint Energy serves this area and sufficient electric service to meet your need is available to this location. Electric service will be extended to your project in accordance with our Service Standards, which are located at http://www.centerpointenergy.com/en-us/Documents/Service-Standards.pdf. The location and size of electric distribution facilities, and any associated cost and/or easements, will be determined after we receive and review the site plans and load analysis for the project.

Careful scheduling and enough lead-time will also expedite the process of installing the facilities. Upon execution of any easement documents and payment of any monies, a construction work order will be released for scheduling, which may take up to eight weeks to commence. To avoid the expensive burden of idle facilities, CenterPoint Energy will install equipment only as needed.

Sincerely,

Michael J. Allmann, P.E. - Consulting Engineer
CenterPoint Energy - Major Underground Department
3000A Harrisburg, Houston, TX  77003
Phone: 713-207-6158   Fax: 713-207-6162
Michael.Allmann@CenterPointEnergy.com
Exhibit E

HCAD facet Map
Exhibit F

City of Houston No Zoning Letter
Effective Date: January 1, 2020

OFFICIAL CITY OF HOUSTON ZONING LETTER

To: Whom It May Concern

The City of Houston does not have a city-wide comprehensive zoning ordinance. However, there are certain land use regulations for properties located within the area described below and in attached map:

- Land surrounding the Houston airports, including George H. Bush Intercontinental Airport (IAH), Houston Hobby Airport (HOU), and Ellington Airport (EFD). There are certain land use regulations and height/hazard area regulations for properties located within the airport land use envelope and federally regulated airspace. The regulations can be viewed in the City of Houston Code of Ordinances, Chapter 9, Article VI and VII at https://library.municode.com/tx/houston/codes/code_of_ordinances?nodeId=COOR_CH9AV
  Regulations and maps for each airport are also available at https://www.fly2houston.com under the Resources/Regulatory tab

- Tax Increment Reinvestment Zone (TIRZ) # 1, St. George Place- Zoning regulations control the use of land within the TIRZ boundaries. A copy of the TIRZ 1 planning and zoning regulations is available at http://stgeorgeplace.org/

All other applicable development regulations can be found in the Code of Ordinances. The direct link to the codes site is https://library.municode.com/tx/houston/codes/code_of_ordinances

This letter does not address any separately filed restrictions that may be applicable to a property.

For the most up to date City of Houston boundary, visit https://cohegis.houstontx.gov/cohgisweb/houstonctp/

Margaret Wallace Brown, Director
City of Houston
Land Use Boundary Map

1 George H. Bush Intercontinental Airport (IAH)
2 Hobby Airport (HOU)
3 Ellington Field (EFD)
4 St. George TIRZ #1

Legend:
- Land Use Boundaries
- Expressway
- Major Thoroughfare
- Houston Thoroughfare
- Houston City Limits
- Houston ETJ

Source: City of Houston GIS Division, Harris County Appraisal District, Harris County Engineer's Office, Houston Airport System
St. George TIRZ 1
Date: 12/27/2018
Reference: NAD 1983 StatePlane Texas South Central FIPS 4204 Feet

This map is made available for reference purposes only and should not be substituted for a survey product. The City of Houston will not accept liability of any kind in conjunction with its use.

PLANNING & DEVELOPMENT DEPARTMENT
0 1 2 Miles
Exhibit G

City of Houston Platting Process
FIGURE 4.1
CLASS III PRELIMINARY PLAT

Class III preliminary plat

Applicant submits C3P plat to Planning & Development (P&D)

P&D distributes C3P to Public Works and Engineering (PWE)

PWE reviews C3P for major impediments (if any) to water supply, wastewater collection and treatment, and storm sewer drainage systems

PWE submits C3P plat review comments to P&D

C3P plat acted upon by City Planning Commission (CPC)

P&D prepares CPC 101 Form plat review comments based on CPC action and provides comments to the applicant

Optional meeting to discuss CPC 101 Form comments and plat

Applicant submits one-line drawings to PWE

PWE reviews one-line drawings and returns drawings and review comments to the applicant

Applicant prepares final plat

Optional meeting to discuss comment by PWE

One-line drawing required

Preliminary meeting strongly recommended but not required
FIGURE 4.2
CLASS III FINAL PLAT (OR CLASS II PLAT)

Class III final plat 
(or Class II plat)

Applicant submits plat to 
P&D

P&D distributes plat to PWE

PWE reviews plat

PWE submits plat review comments to P&D with a recommendation to approve, conditionally approve, defer, or disapprove

CPC gives conditional approval or disapproval

Plat is returned to applicant with conditions for approval or disapproval listed. These include PWE comments (if any)

Applicant submits to PWE completed final original design drawings for signature and copies of corrected plat

PWE signs final design drawings releasing plat

Applicant submits signed plat release letters and other materials to P&D for recordation process

END

Applicant submits copies of final design drawings and specifications to PWE

PWE reviews final design drawings and specifications

PWE submits review comments to applicant

END

Optional meeting to discuss comments by PWE

Construction may commence
Exhibit H

City of Houston Construction Code
The following are the current construction codes enforced by the City of Houston.

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<thead>
<tr>
<th>Code</th>
<th>Publisher</th>
<th>Effective Date</th>
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<tbody>
<tr>
<td>2012 International Residential Code (with Houston Amendments)</td>
<td>ICC</td>
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<tr>
<td>2012 International Building Code (with Houston Amendments)</td>
<td>ICC</td>
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<td>2012 International Fire Code (with Houston Amendments)</td>
<td>ICC</td>
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<tr>
<td>2012 Uniform Mechanical Code (with Houston Amendments)</td>
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<td>2012 Uniform Plumbing Code (with Houston Amendments)</td>
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<tr>
<td>2017 National Electrical Code (State Mandated)</td>
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<tr>
<td>Sign Code</td>
<td>COH</td>
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<tr>
<td>2015 International Energy Conservation Code (with Houston Amendments) - For One and Two-Family Dwellings and Multi-Family 3 stories or less.</td>
<td>ICC</td>
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<td>2015 International Energy Conservation Code (with Houston Amendments) - For Commercial Structures, including Residential Structures more than 3 stories</td>
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<td>ASHRAE 90.1-2013 (with Houston Amendments) For Commercial Structures, including Residential Structures more than 3 stories</td>
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<td>2012 Code Word - various sections interpreted</td>
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<td>N/A</td>
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**ACCESSIBILITY**
For regulations pertaining to Accessibility, please contact:

Texas Department of Licensing & Regulation
920 Colorado P.O. Box 12157
Austin, Texas 78711

Toll-Free (in Texas) 800-803-9202
Tel: (512) 463-6599
Fax: (512) 475-2854
TDD: (800) 735-2989
[http://www.license.state.tx.us/](http://www.license.state.tx.us/)

The Houston Amendments to the Codes, the Sign Code, and 2012 Code Word can be downloaded at: [https://www.houstonpermittingcenter.org/help/codes](https://www.houstonpermittingcenter.org/help/codes)
Exhibit I

Preliminary Site Plan
This preliminary site plan is released for planning purposes only. It is not to be used for building permits, bidding or construction. This preliminary site plan materially adheres to all applicable zoning, site development, and building code ordinances.