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MEMORANDUM

To:	The Spanos Corporation
From:	HR&A Advisors, Inc.
Date:	June 28, 2018
Re:	Preston Hollow Site Study Findings

EXECUTIVE SUMMARY

On behalf of AG Spanos Companies, HR&A Advisors, Inc. (HR&A) conducted a series of analyses to study the current financial feasibility of the Northwest Highway and Preston Road Area Plan Advisory Task Force's vision for Zone 4 of the Area Plan in order to inform the PD-15 Authorized Hearing Process currently underway in Dallas, Texas. In particular, HR&A examined the redevelopment feasibility of the site that is currently occupied by the Diplomat Condominiums (the "Site") located at 6307 Diamond Head Circle. Our findings indicate that development on the Site will not be financially feasible if the vision of the Northwest Highway and Preston Road Area Plan Advisory Task Force for Zone 4 is adopted as part of the rezoning for PD-15 under the Authorized Hearing Process. The combination of the current achievable market rents, the high construction costs associated with 100% below-grade parking, a low anticipated site density and the current state of the real estate capital markets do not allow adequate margin for a developer to pay market land values and achieve a reasonable risk-adjusted return on the investment if the vision is adopted. The resulting market economics would reduce the likelihood of the Site's redevelopment and could reduce market land values for existing property owners relative to current perceived market land values.

METHODOLOGY

We conducted a series of analyses to determine the type of multifamily development best-suited to the Site and the financial feasibility of that development:

- ***Real Estate Market Study***: HR&A conducted a high-level study of the urban infill multifamily submarkets in Dallas using data from CoStar and local market participants to create a holistic understanding of the real estate market in the area. HR&A (1) described anticipated demand, (2) quantified likely rents and performance, and (3) identified the estimated construction cost and subsequent relative future value of a to-be-developed project on the Site. This study informed our estimates for residual land value.
- ***Residual Land Value Analysis***: Based on the real estate market study, we sought to determine if a conceptual configuration of a market-supportable project would be financially feasible and support current market land values in the area. We collaborated with WDG Architecture to develop nine conceptual development options for the Site, based on the combination of three different building construction typologies ranging in height from 4-stories to 10-stories and three different project densities based on an average unit size ranging from 825 square feet to 1,450 square feet. We then created a financial model that relied on data gathered in the market study to inform our estimate of a residual land value for the Site. This form of top-down analysis

better estimates current land values by calculating the maximum land price that can be supported by market rents and construction costs in order for a developer to achieve a reasonable risk adjusted return for the development of the project.

The underlying assumptions for the potential development of the Site were informed by the Northwest Highway and Preston Road Area Plan, which was completed in December 2016. According to the Area Plan, the vision for Zone 4 would "allow for the gradual augmentation of various housing types in the neighborhood, with higher density than now exists, but with the understanding that particular attention be given to the need for improved infrastructure, most especially the enhancement of existing storm water drainage systems. In addition, new developments should include on-site parking for residents and guests (preferably underground), greater landscaping and open space, and pedestrian-friendly amenities. Building heights within the zone should be restricted by the existing City of Dallas proximity slope limitations designed to protect the single-family neighborhoods located north of Bandera Avenue; and throughout the zone, new multi-family residential structures would not exceed four stories in height."[1] Taking the elements of this vision into account, each of the building typologies studied for the site are within the single-family residential proximity slope limitations for the Site and include 100% below-grade parking (see Appendix 1 for conceptual site diagrams).

REAL ESTATE MARKET STUDY FINDINGS

Based on our analysis of current market data, we established the following assumptions to inform our analysis:

- ***Current submarket multifamily rental rates:*** We estimated an achievable rental rate today to be $2.50 per square foot per month for low-rise and mid-rise properties (< 7 stories) and $2.85 per square foot per month for high-rise properties (> 10 stories).
- ***Stabilized market occupancy**:* We estimated a stabilized market occupancy level to be approximately 94% based on current supply estimates and landlord rent concession levels.
- ***Anticipated property operating expenses***: We estimated that a to-be-developed project on the Site would generate operating expenses on the order of 45% of effective gross income due to low economies of scale and rapidly rising property tax valuations.
- ***Construction costs**:* We found that estimated construction costs vary greatly both by building construction type and average unit size and have continued to rise much faster than the overall rate of inflation with no sign of slowing markedly. Additionally, the cost of 100% below-grade parking is highly variable upon the efficiency of the parking garage layout, which is limited by site dimensions.
- ***Property market values:*** A common method of estimating commercial real estate property values is to observe the relationship between property-level net operating incomes and market-derived capitalization ("cap") rates, which are a proxy for acceptable risk-adjusted initial investor yields. Informed by recent comparable sales, we estimated a reasonable assumption for a market cap rate for a to-be-developed property within the submarket to be on the order of 5%.

RESIDUAL LAND VALUE ANALYSIS

Our findings indicate that development on the Site will not be financially feasible if the vision of the Northwest Highway and Preston Road Area Plan Advisory Task Force is adopted as part of the rezoning for PD-15 under the Authorized Hearing Process. The combination of the current achievable market rents, the construction costs required to achieve said market rents which include 100% below-grade parking, the anticipated site density and the current state of the real estate capital markets do not allow adequate margin for a developer to pay market

[1] Northwest Highway and Preston Road Area Plan, p.24

land values and achieve a reasonable risk-adjusted return on the investment. Not only were the calculated residual values not on par with current market land values, but the residual land value calculated for each of the scenarios studied actually yielded negative land values for the Site.

Sensitivity analysis of our assumptions indicates residual land values would only start to approach current perceived market land values if:

- Current rental rates were at least 15% higher than our assessment of achievable market rent today; and
- A developer was able to simultaneously reduce construction hard costs for the project by at least 25% while holding all other assumptions constant (project density and market cap rate).

Given current inflationary trends in construction costs and interest rates, along with a slowing in market rental rate growth, it will be challenging for a developer to proceed with a project within the constraints established in the Northwest Highway and Preston Road Area Plan unless the developer can increase the number of units to be developed on the site, achieve a higher average market rental rate and simultaneously reduce project construction costs without sacrificing project quality.

There is an acknowledgment in the Northwest Highway and Preston Road Area Plan that redevelopment will likely continue to occur within Zone 4.[2] The Advisory Task Force established a vision for the Area Plan that was based on the assumption that existing zoning rights for property owners would not be removed or downgraded, and additional zoning incentives should be established to encourage particular types of redevelopment.[3] Based on the assumption of market expectations for risk-adjusted returns, the site development constraints established in the Area Plan's vision for Zone 4 are not financially feasible for the redevelopment of the area given current market conditions and could reduce market land values for existing property owners relative to current perceived market land values.

[2] Northwest Highway and Preston Road Area Plan, p.18, 24
[3] Northwest Highway and Preston Road Area Plan, p.22

REAL ESTATE MARKET ANALYSIS

METHODOLOGY

HR&A conducted a high-level real estate market study of the Dallas multifamil residential rental market, and the Preston Hollow/North Dallas submarket. The market assessment provided an understanding of the type of building, unit size and parking needs that would be necessary for a newly constructed building to be economically feasible. In order to assess the market, HR&A:

- Analyzed the competitive set of rental properties in the surrounding submarkets using CoStar data, specifically looking at unit size, unit mix, number of units per building, building location and building amenities in order to understand and project rental rates and stabilized occupancy for a to-be-developed multifamily rental property within PD-15; and
- Conducted interviews with developers, general contractors and brokers to verify assumptions on market rents, construction cost data and cap rates/residual sales values.

MARKET CONDITIONS

The Site is located in the well-established submarket of Preston Hollow, adjacent to Park Cities, with access to major employee access routes and high-quality retailers. The area has higher land and home values than most submarkets in Dallas and higher than average household incomes. The property will capitalize on the neighborhood's ability to attract residents with higher incomes who are looking to take advantage of the site's proximity and access to employment centers or to possibly down-size from a larger single-family home without forfeiting the nearby amenities. Preston Hollow, within the North Dallas submarket, has had very little new supply constructed over the past few years due to the lack of vacant land. As a result, new development will likely only occur if it is of very high quality and price and as older improvements are demolished for new construction.

In looking at the broader context of competitive infill, urban properties, since 2014, over 16,000 new Class A multifamily rental units have been built or are currently under construction in the Uptown, East Dallas, Park Cities and North Dallas submarkets. Approximately 80% of these units are smaller than 1,000 square feet, and almost 50% are between 800-900 square feet. While the average market occupancy remains high at approximately 94%, this concentration of supply of smaller average size units is forcing building owners to increase rent concessions to approximately 5%-8% of asking rents to maintain current occupancy levels. Since 2014, the market also has seen the introduction of a smaller number (10% of new supply since 2014) of new units with an average unit size greater than 1,200 SF. These units, with the exception of the Laurel, are in high-rise buildings that are among the highest quality and most luxurious rental properties in Dallas. Given that the majority of these large average unit size properties are currently in lease-up with low current rates of occupancy, it is unclear how much additional demand there will be for units of this size.

Figure 1: Competitive Direct Submarket Rental Rates by Unit Size

Average Unit Size	Average Number of Units Per Property	Average Effective Rent Per SF Per Month
Less than 900 SF	280	$1.90
900 SF - 1,000 SF	340	$2.10
1,000 SF - 1,200 SF	170	$2.00
More than 1,200 SF	150	$2.30

Source: Costar

Under normal market conditions, the rents per square foot for smaller units should be higher than those for larger units given the relative whole rent affordability of a smaller unit and the premium for unshared space. While it appears that there is currently not a rent premium per square foot for smaller units in the infill Dallas market, we believe that this is a short-term phenomenon due to the changes in supply noted above in the market.

RESIDUAL LAND VALUE ANALYSIS

BUILDING TYPOLOGIES

Informed by the market analysis and local market engagement, HR&A, in collaboration with WDG Architecture, developed nine conceptual plans for the Site to illustrate the relative value of different building heights and densities. The variables examined are:

- ***Building Structure***: The building typologies are reflective of a series of site-specific studies prepared by WDG Architecture. HR&A and WDG posited three building construction types:
    - 10-story concrete construction (Type I construction);
    - 7-story wood frame above a 2-story concrete podium (Type III A construction); and
    - 4-story wood frame (Type V construction)
- ***Building Density:*** Using the three building typologies above, WDG and HR&A illustrated 3 levels of building density informed by market assessments by testing three different average unit sizes:
    - 825 square feet, similar in size to the urban infill high-rise buildings that have been built throughout the Dallas metro area since 2016;
    - 950 square feet, reflective of the mean unit size the market is currently demanding; and
    - 1,450 square feet, most comparable to the Laurel, which is the site's closest competitive property.
- ***Parking***: In all scenarios, parking was anticipated to be 100% below-grade, which is consistent with the desire of the Northwest Highway and Preston Road Area Plan Advisory Task Force's vision for Zone 4.

Figure 2: Building Typology Density Scenario Assumptions

		Building Height		
		4 Stories	**7 Stories**	**10 Stories**
Unit Size	**825 SF**	90 units	160 units	170 units
	950 SF	80 units	140 units	150 units
	1,450 SF	50 units	90 units	100 units

For each of the nine scenarios, HR&A estimated the residual land value, which is the maximum land acquisition cost to achieve a developer's minimum expected rate of return. The model considered hard and soft construction costs, rental revenues, and operating expenses as a percentage of revenues for each of the scenarios. At a high level, real estate developers seek projects that return a positive spread between the stabilized future value of a property and the anticipated total cost of that property.

A common method of approximating the future stabilized value of a property is to divide the property's anticipated stabilized net operating income by a market established capitalization ("cap") rate. Cap rates are the equivalent of the initial yield an investor can expect to receive from a given level of net operating income based on a given acquisition price. Real estate investors commonly use cap rates as an indicator of how the broader markets are pricing the risks of specific property types within individual markets. Given the fact that income producing properties can differ not only in physical form but also in the quality, consistency and duration of underlying cash flows, the examination of market cap rates enables investors to better assess the relative valuation of target properties with comparable properties. As such, cap rates are reflective of both property and local market risk as well as macroeconomic risk in the broader investment capital markets.

Once developers establish an assumption for an appropriate market cap rate for the property they are seeking to develop, they must then account for the future risk of declining market rents, construction cost overruns and/or changes in the market's perception of a property's risk during the development of the project. The risks of these unanticipated changes are captured in the desired spread between the ultimate value of the property and its cost. A high-level method of underwriting these risks is to seek projects with a spread of 1.5% - 2% between a market cap rate for the property and the developer's yield on cost, which is calculated by dividing the same stabilized net operating income used in the cap rate calculation by the total development cost of the project.

COMPETITIVE PROPERTY RENTAL RATES AND VACANCY FACTOR

HR&A identified five competitive properties to determine baseline rental rate assumptions for the Site. As shown below in Figure 3, the average current rental rate across the five most competitive properties to a proposed Class A project on the Site is approximately $2.45 per square foot per month. Our market analysis indicated that residential high-rises achieve a rent premium over comparable low and mid-rise buildings. HR&A assumed new development on the Site would achieve average rents of $2.50 per square foot per month for the four-story and seven-story scenarios. HR&A likewise projected that the 10-story scenario would achieve an average rent of $2.85 per square foot per month if completed today. With a significant number of new units having come online in 2017, and even more in 2018, along with the increasing rent concessions noted above, we assumed an average vacancy factor of 6% of potential gross rental revenue, which is in line with the submarket's Class A multifamily rental vacancy rate in 2017.

Figure 3: Competive Property Analysis

Competitive Property	Average Unit Size	Average Rent PSF
The Katy	1,340	$2.64
The Laurel	1,467	$2.56
Armstrong at Knox	1,102	$2.35
Preston Hollow Village	1,068	$2.12
Knox Heights Apartments	957	$2.50
Average of Competitive Properties	**1,186**	**$2.43**

Source: Costar

Figure 4: Comparable Property Rental Rates by Building Typology

Building Typology	Average Effective Rent PSF
Low-Rise (1 - 4 Stories)	$1.70
Mid-Rise (5 - 9 Stories)	$2.00
High Rise (10 or More Stories)	$2.60
Average of Rental Rates	**$2.02**

Source: Costar

OPERATING EXPENSE RATIOS

Operating expense ratios vary relative to product type, but the industry standard assumption is that operating expenses should approximately be 40% of effective gross income (potential gross income less a vacancy

factor). In determining a proper operating expense ratio assumption for the various scenarios, we considered the effects of density, building type and property taxes. Generally, operating expense ratios are higher for denser high-rise properties as they are typically more highly amenitized and staffed. Equally, properties with fewer units have smaller economies of scale by which to distribute the expenses. Additionally, based on our discussions with local market experts, we learned that operating expense ratios are rising significantly in Dallas due to high property tax valuations. Based on these observations, HR&A projected a 45% operating expense ratio across all scenarios.

CONSTRUCTION COSTS

HR&A prepared schematic, high-level construction cost estimates based on interviews with local developers and general contractors who are active in the market. We found that construction costs vary based on both building typology and average unit size. Market research provided the relative construction costs for various building heights based on the structure required to support the height. Our analysis indicates that buildings with smaller average units (825 SF) cost approximately 15% more per square foot to construct over equivalent buildings with larger average units (1450 SF) due to the additional costs associated with increased density (i.e. more bathrooms, kitchens and associated building infrastructure). For the purposes of our analysis, HR&A assumed that a building with an average unit size of 950 SF unit would cost approximately 5% less than an equivalent building with an average unit size of 825 SF. Beyond the hard costs of construction, we additionally assumed that the soft costs of development, which include architectural, legal and engineering fees, construction period interest expense, and developer overhead costs would be 20% of the project's hard costs, which is in line with industry standards.

Figure 5: Construction Hard Cost Estimates Per Rentable Square Foot

		Building Height		
		4 Stories	7 Stories	10 Stories
Unit Size	825 SF	$230	$280	$320
	950 SF	$210	$270	$300
	1,450 SF	$190	$240	$270

PARKING COSTS

The Site's construction costs are higher than most comparable properties due to the high costs of below-grade parking. HR&A included the parking construction expense in the hard cost estimates described above. While no other multi-family residential projects built in North Dallas in recent years beyond the Laurel have 100% below-grade parking, the vision established by Northwest Highway and Preston Road Area Plan Advisory Task Force indicated a desire for projects within Zone 4 to be built with 100% below-grade parking whenever feasible. Based on interviews with local experts, it is reasonable to assume that the construction cost of below-grade parking is approximately $70 per square foot of parking area. Taking the Site's dimensions into account, this translates into a cost of approximately $26,000 per space, plus a 20% soft cost factor.

The parking ratio determines the total number of parking spaces required to support the building's residents. The conceptual site plan scenarios assume a parking ratio of 1.7 parking spaces per unit, which is typically higher than the ratio provided by most developers. The higher ratio was used to minimize the impact of on-street parking in the surrounding neighborhood by either tenants or guests of the prospective development, which was also desired as part of the vision of the Northwest Highway and Preston Road Area Plan. The combination of the premiums for below-grade parking and a higher than average parking ratio added approximately $20 to $40 in hard costs per square foot of rentable area.

PROPERTY CAPITALIZATION RATES

The residual land value of each scenario is calculated based upon the capitalized value of future development revenues. HR&A considered recent sales for Dallas urban infill properties and categorized properties by average unit size as a proxy for density to estimate an average market capitalization rate. The average cap rates across all competitive sales ranged from 4.5%-5.5%; however, many risk factors can trigger cap rate expansion as noted above. Given an apparent slowing in rental rate growth locally, along with increases in the cost of capital for real estate investors and developers, we assumed an average market cap rate of 5% for the analysis, which was confirmed by developers and brokers with local expertise.

Figure 6: Sales Comp Cap Rates by Average Unit Size

Average Unit Size of Building	Cap Rate
Less than 900 SF	5.14%
900 – 1,000 SF	5.06%
1,000-1,300 SF	4.99%
More than 1,300 SF	4.79%
Average Sales Comps	**4.99%**

Source: Real Capital Analytics, Market Participant Interviews

FINDINGS AND CONCLUSIONS

Based on the assumptions and calculations established above, our model shows a negative residual land value for all posited scenarios. These results indicate that development will not be feasible on the Site unless:

- A developer can achieve a higher than anticipated rental revenue stream in terms of rental rate and/or density, or
- The developer can significantly reduce construction costs without a loss in rental revenue.

Figure 7: Total Residual Site Land Value Per Scenario

		Building Height		
		4 Stories	**7 Stories**	**10 Stories**
Unit Size	**825 SF**	($3.70 M)	($14.50 M)	($17.70 M)
	950 SF	($1.96 M)	($13.01 M)	($14.56 M)
	1,450 SF	($0.13 M)	($8.07 M)	($9.60 M)

The conclusions of the model vary significantly depending on the assumptions used. HR&A assessed the sensitivity of the residual land valuation for a seven-story building with an average unit size of 950 square feet by varying the following assumptions:

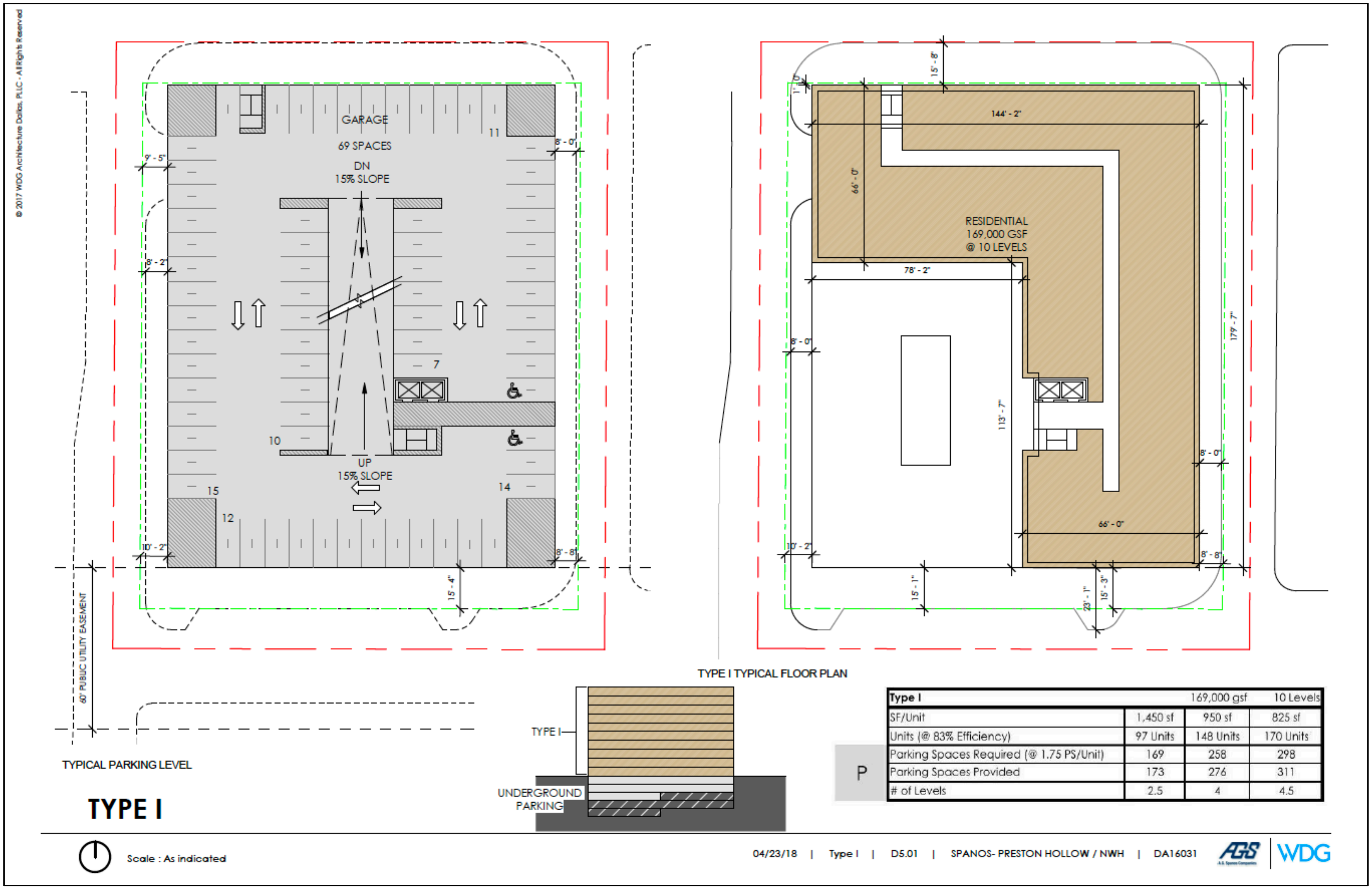
- Cap rates,
- Market rents,
- Construction costs, and
- Density (i.e. number of units developed).

The sensitivity analysis reveals that the site's residual land value is particularly subject to construction cost and rental rate changes. As shown in Figure 8, in order to achieve a positive residual land value for the site, a developer would need to be able to achieve a rental rate of at least $2.80 per square foot (an increase of 12% over our assessment of achievable market rent today), while simultaneously reducing construction hard costs by 26% to $200 per rentable square foot and holding all other assumptions constant (number of units and market cap rate). Given the current inflationary trends in construction costs and interest rates, along with a slowing in market rental rate growth, it will be challenging for a developer to proceed with a project within the constraints established in the Northwest Highway and Preston Road Area Plan unless the developer can increase the number of units to be developed on the site, achieve a higher average market rental rate and reduce project construction costs without sacrificing project quality and rental revenue.

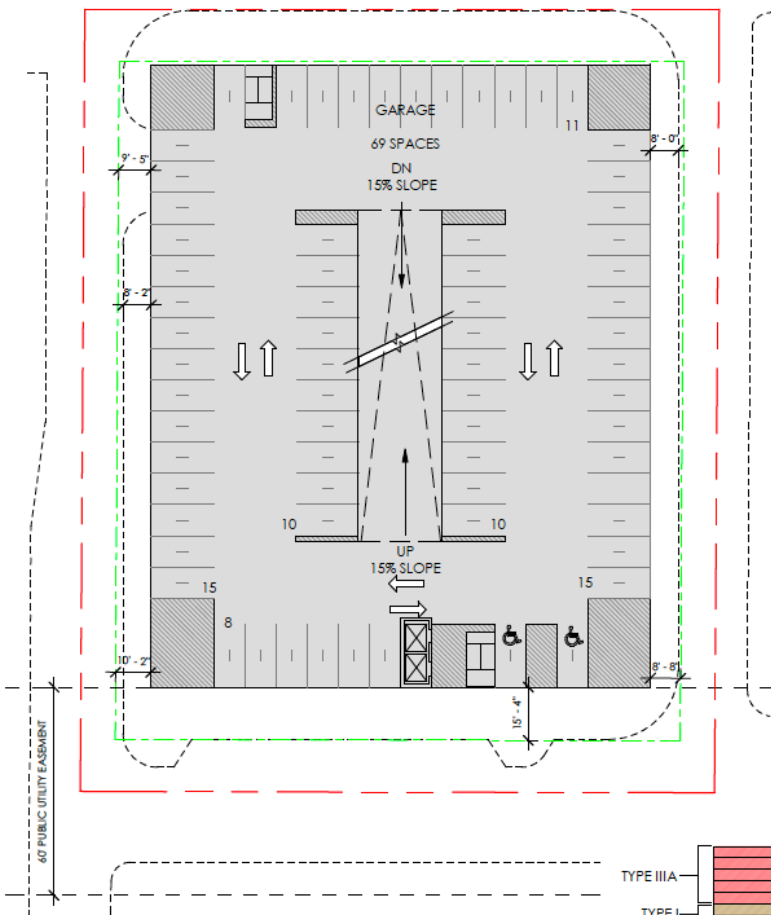
Figure 8: Residual Land Value Sensitivity Analysis (7 story building with 950 SF average unit size)

		Decrease in Construction Cost and Increase in Rents			
		Construction Hard Costs Per Rentable Square Foot			
		$270	$230	$200	$175
Rent PSF	$2.50	($13.01 M)	($6.63 M)	($1.84 M)	$2.15 M
	$2.65	($11.21 M)	($4.82 M)	($0.04 M)	$3.95 M
	$2.80	($9.40 M)	($3.02 M)	$1.77 M	$5.76 M
	$2.95	($7.60 M)	($1.22 M)	$3.57 M	$7.56 M

Appendix 1: Conceptual Site Diagrams

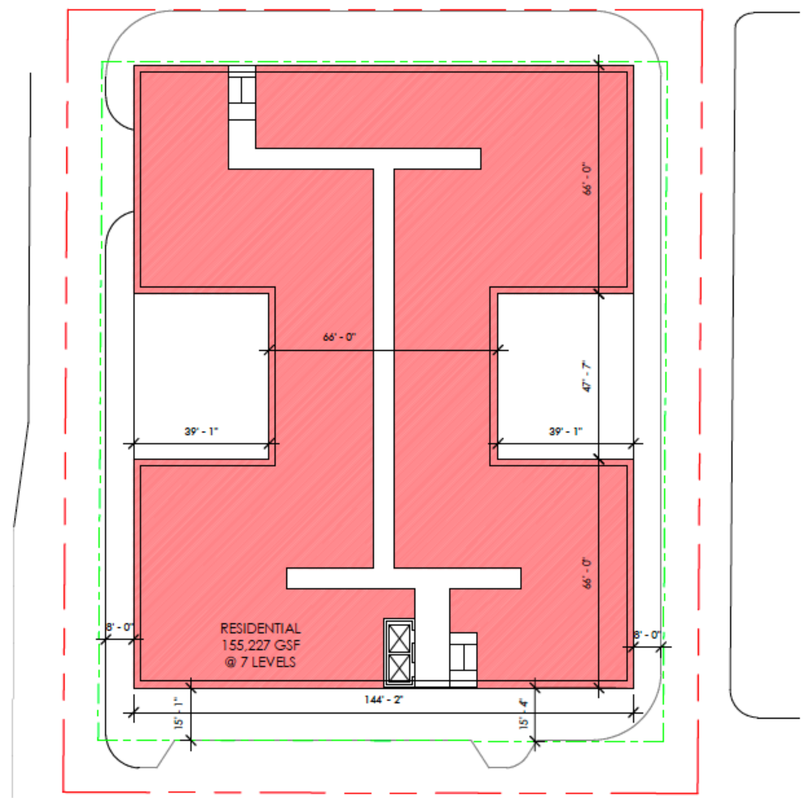


Type I		169,000 gsf	10 Levels
SF/Unit	1,450 sf	950 sf	825 sf
Units (@ 83% Efficiency)	97 Units	148 Units	170 Units
Parking Spaces Required (@ 1.75 PS/Unit)	169	258	298
Parking Spaces Provided	173	276	311
# of Levels	2.5	4	4.5

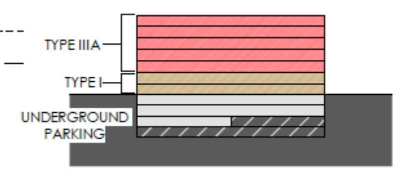


TYPICAL PARKING LEVEL

TYPE III A



TYPE III A TYPICAL FLOOR PLAN



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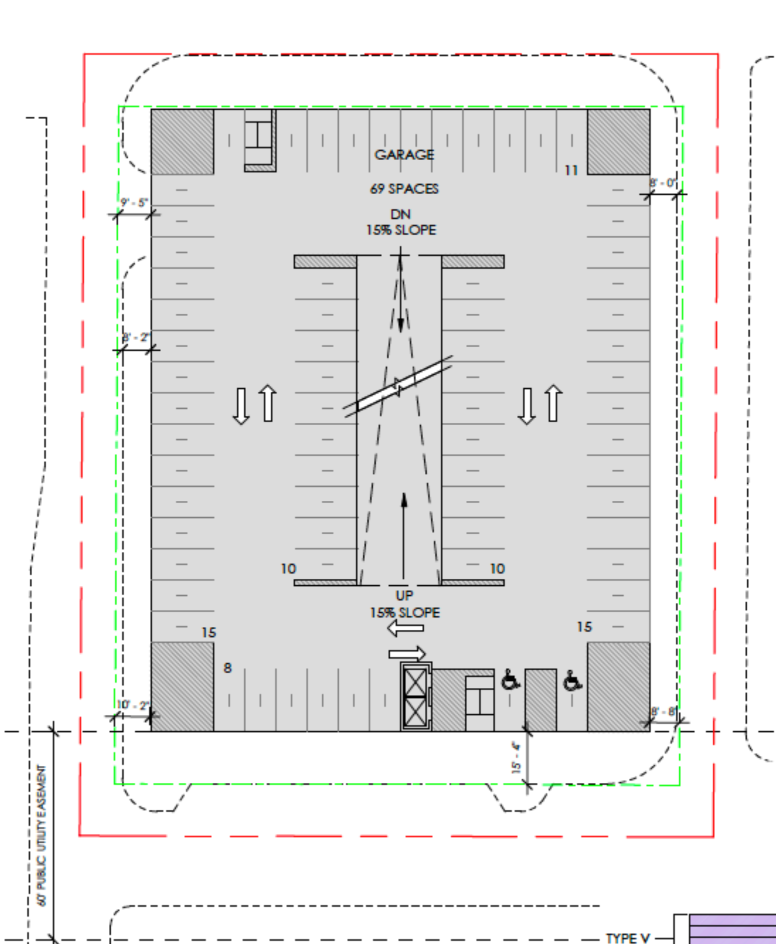
Type III A		155,227 gsf	7 Levels
SF/Unit	1,450 sf	950 sf	825 sf
Units (@ 83% Efficiency)	89 Units	136 Units	156 Units
Parking Spaces Required (@ 1.75 PS/Unit)	155	237	273
Parking Spaces Provided	173	242	276
# of Levels	2.5	3.5	4

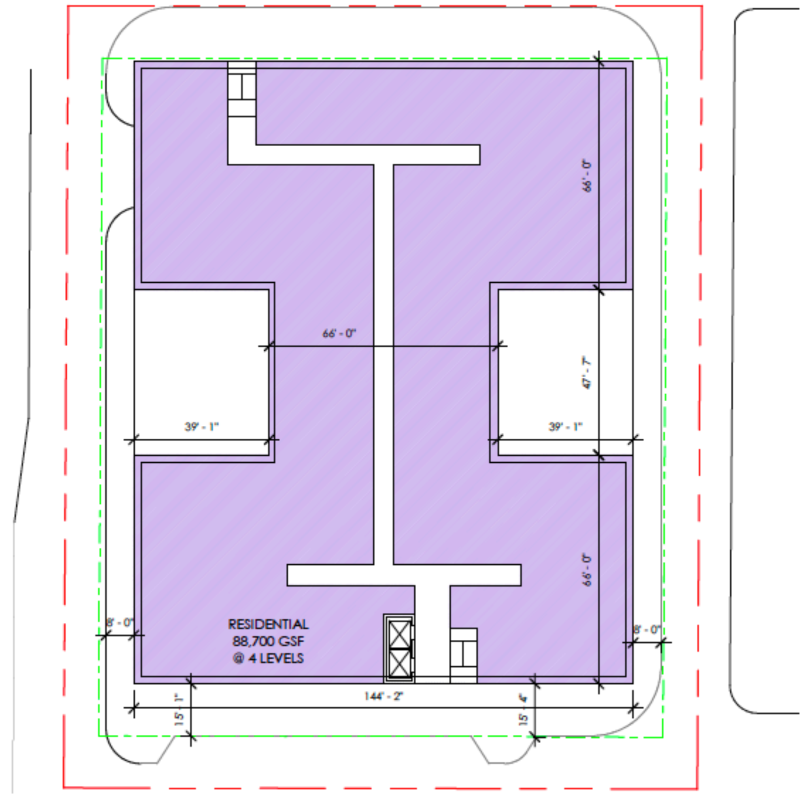
Scale : As indicated

04/20/18 | Type III A | D5.02 | SPANOS- PRESTON HOLLOW / NWH | DA16031

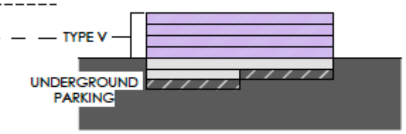


TYPICAL PARKING LEVEL

TYPE V



TYPE III A TYPICAL FLOOR PLAN



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Type V		88,700 gsf	4 Level
SF/Unit	1,450 sf	950 sf	825 sf
Units (@ 83% Efficiency)	51 Units	77 Units	89 Units
Parking Spaces Required (@ 1.75 PS/Unit)	89	136	156
Parking Spaces Provided	103.5	138	173
# of Levels	1.5	2	2.5

Scale : As indicated

04/25/18 | Type V | D5.03 | SPANOS- PRESTON HOLLOW / NWH | DA16031

Appendix 2: Competitive Urban Infill Properties by Average Unit Size, Constructed 2014-2018

Building Name	Year Built	Submarket Cluster	Average SF Per Unit	Units	Stories	Average Asking Rent PSF	Average Concessions	Average Effective Rent PSF	Vacancy[10]
The McKenzie	2018	Uptown/Park Cities MF	1,607	183	22	$3.04		$3.04	
Veranda 2	2014	East Dallas MF	1,585	26	3	$1.97	1%	$1.95	15%
Residences at Park District	2018	Uptown/Park Cities MF	1,571	253	34	$3.33	0%	$3.33	94%
The Laurel	2018	North Dallas MF	1,528	49	4	$2.52	0%	$2.52	98%
Hartford Townhomes	2017	Uptown/Park Cities MF	1,512	30	3	$1.74	1%	$1.73	3%
Hartford Townhomes Phase II	2018	Uptown/Park Cities MF	1,494	32	3				
The Laurel- Phase II UC	2018	North Dallas MF	1,424	110	4				
The Katy	2017	Uptown/Park Cities MF	1,313	215	7	$2.64	13%	$2.31	41%
Brady	2015	Uptown/Park Cities MF	1,260	299	18	$3.31	1%	$3.30	3%
The Nash	2017	East Dallas MF	1,246	302	4	$1.28	13%	$1.11	73%
Loft+Row	2015	East Dallas MF	1,240	180	3	$1.59	7%	$1.47	9%
Avg. Unit Size > 1200			**1,435**	**153**		**$2.38**	**4%**	**$2.31**	**42%**
Bandera Apartments	2016	North Dallas MF	1,179	180	7	$1.81	8%	$1.66	13%
Park Fountains at Preston Hollow	2016	North Dallas MF	1,156	30	3	$1.50	1%	$1.49	3%
Armstrong at Knox	2016	Uptown/Park Cities MF	1,102	165	6	$2.45	11%	$2.18	14%
Carlisle & Vine	2018	Uptown/Park Cities MF	1,086	150	15				0%
The Jordan	2016	Uptown/Park Cities MF	1,048	212	23	$3.07	14%	$2.65	6%
28TWENTYEIGHT	2017	Uptown/Park Cities MF	1,046	94	6	$2.22	8%	$2.03	26%
The Ellison	2018	East Dallas MF	1,019	240	4	$1.85	17%	$1.55	84%
The Galleries at Park Lane Apartments	2017	East Dallas MF	1,015	246	8	$1.83	1%	$1.81	5%
One Uptown	2017	Uptown/Park Cities MF	1,004	198	20	$3.16	8%	$2.90	7%
Avg. Unit Size 1000-1200			**1,073**	**168**		**$2.24**	**8%**	**$2.03**	**17%**
Gables McKinney Ave	2015	Uptown/Park Cities MF	979	239	7	$2.58	0%	$2.58	5%
Cantabria at Turtle Creek	2014	Uptown/Park Cities MF	975	249	9	$2.16	1%	$2.15	4%
The Ascent Victory Park	2017	Uptown/Park Cities MF	974	302	23	$3.06	13%	$2.67	60%
Knox Heights Apartments	2016	Uptown/Park Cities MF	957	182	6	$2.49	14%	$2.15	6%
Uptown @ Cole Park	2016	Uptown/Park Cities MF	953	179	7	$1.95	3%	$1.89	2%
The Branch	2015	East Dallas MF	944	512	4	$1.85	0%	$1.85	7%
M-Line Tower	2017	Uptown/Park Cities MF	943	261	20	$2.74	10%	$2.48	48%
The Alexan	2016	Uptown/Park Cities MF	937	365	15	$2.07	10%	$1.86	24%
The Ash at the Branch	2017	East Dallas MF	925	402	4	$1.92	6%	$1.81	70%
ilume Park	2014	Uptown/Park Cities MF	923	240	4	$1.49	1%	$1.48	6%
Ardan West Village Ardan West Village	2018	Uptown/Park Cities MF	918	390	23	$3.31	10%	$2.99	98%
3700M	2014	Uptown/Park Cities MF	918	380	21	$2.51	0%	$2.51	6%
Landmark on Lovers	2014	East Dallas MF	918	336	4	$1.76	6%	$1.65	9%
Domain at Midtown Park	2016	East Dallas MF	909	395	4	$1.65	17%	$1.37	22%
The Katy in Victory Park	2017	Uptown/Park Cities MF	906	463	30	$2.55	12%	$2.26	76%

[10] Properties without reported vacancy are currently being pre-leased.

Building Name	Year Built	Submarket Cluster	Average SF Per Unit	Units	Stories	Average Asking Rent PSF	Average Concessions	Average Effective Rent PSF	Vacancy
Preston Hollow Village Apartments	2017	North Dallas MF	906	526	7	$2.09	13%	$1.83	74%
Avg. Unit Size 900-1000			**937**	**339**		**$2.26**	**7%**	**$2.10**	**32%**
Hanover Midtown Park	2017	East Dallas MF	894	422	4	$1.85	0%	$1.85	61%
Crest at Park Central	2015	North Dallas MF	893	387	3	$1.50	8%	$1.38	9%
Lookout at Lake Highlands Town Center	2018	East Dallas MF	888	259	4	$1.76	12%	$1.54	96%
Camden Victory Park	2016	Uptown/Park Cities MF	885	423	4	$1.98	0%	$1.98	6%
The 23	2018	Uptown/Park Cities MF	884	285	23	$2.60	11%	$2.31	93%
B&F Flats	2017	East Dallas MF	881	364	5	$2.31	2%	$2.27	14%
Aura on McKinney	2016	Uptown/Park Cities MF	880	190	7	$2.16	4%	$2.08	10%
The Callie	2016	East Dallas MF	876	261	4	$1.58	0%	$1.58	17%
Modera Hall Street	2018	East Dallas MF	867	340	5	$1.77	8%	$1.63	91%
Miro	2016	Uptown/Park Cities MF	863	180	14	$2.32	6%	$2.18	3%
The Parc at White Rock	2016	East Dallas MF	862	291	5	$1.88	4%	$1.80	20%
Arpeggio at Victory Park	2014	Uptown/Park Cities MF	858	377	5	$1.81	3%	$1.76	8%
Century Lake Highlands	2015	East Dallas MF	847	362	3	$1.51	7%	$1.42	7%
One Oak Grove	2016	Uptown/Park Cities MF	845	149	6	$2.27	11%	$2.01	9%
The Taylor	2014	Uptown/Park Cities MF	841	308	17	$2.41	1%	$2.39	10%
Modera Turtle Creek	2018	Uptown/Park Cities MF	841	207	5	$2.18	8%	$2.00	83%
Alexan Henderson	2017	East Dallas MF	833	321	4	$2.08	11%	$1.84	30%
Magnolia on Gilbert	2016	Uptown/Park Cities MF	814	31	3	$1.93	1%	$1.92	10%
The Gentry on M Street	2015	East Dallas MF	811	180	3	$1.68	7%	$1.56	7%
Victory Place	2017	Uptown/Park Cities MF	797	352	25	$2.41	10%	$2.17	39%
Olympus at Ross	2015	East Dallas MF	796	368	5	$1.95	0%	$1.95	8%
Modena	2017	East Dallas MF	796	230	5	$1.78	1%	$1.76	7%
SkyHouse Dallas	2015	Uptown/Park Cities MF	782	336	24	$2.36	8%	$2.18	10%
The Mark at Midtown Park	2017	East Dallas MF	779	274	4	$1.80	6%	$1.70	27%
LBJ Station	2016	East Dallas MF	770	249	4	$1.65	0%	$1.65	10%
Elan City Lights	2015	East Dallas MF	763	424	6	$1.98	3%	$1.92	9%
Haskell Flats	2017	East Dallas MF	696	62	4	$1.91	6%	$1.80	24%
Avg. Unit Size 800-900			**835**	**283**		**$1.98**	**5%**	**$1.88**	**27%**

Source: CoStar

Appendix 3: Properties by Number of Stories

Building Name	Year Built	Submarket Cluster	Average SF Per Unit	Units	Stories	Average Asking Rent PSF	Average Concessions	Average Effective Rent PSF	Vacancy[11]
Veranda 2	2014	East Dallas MF	1,585	26	3	$1.97	1%	$1.95	15%
Hartford Townhomes	2017	Uptown/Park Cities MF	1,512	30	3	$1.74	1%	$1.73	3%
Hartford Townhomes Phase II	2018	Uptown/Park Cities MF	1,494	32	3				
Loft+Row	2015	East Dallas MF	1,240	180	3	$1.59	7%	$1.47	9%
Park Fountains at Preston Hollow	2016	North Dallas MF	1,156	30	3	$1.50	1%	$1.49	3%
Crest at Park Central	2015	North Dallas MF	893	387	3	$1.50	8%	$1.38	9%
Century Lake Highlands	2015	East Dallas MF	847	362	3	$1.51	7%	$1.42	7%
Magnolia on Gilbert	2016	Uptown/Park Cities MF	814	31	3	$1.93	1%	$1.92	10%
The Gentry on M Street	2015	East Dallas MF	811	180	3	$1.68	7%	$1.56	7%
The Laurel	2018	North Dallas MF	1,528	49	4	$2.52	0%	$2.52	98%
The Laurel- Phase II UC	2018	North Dallas MF	1,424	110	4				
The Nash	2017	East Dallas MF	1,246	302	4	$1.28	13%	$1.11	73%
The Ellison	2018	East Dallas MF	1,019	240	4	$1.85	17%	$1.55	84%
The Branch	2015	East Dallas MF	944	512	4	$1.85	0%	$1.85	7%
The Ash at the Branch	2017	East Dallas MF	925	402	4	$1.92	6%	$1.81	70%
ilume Park	2014	Uptown/Park Cities MF	923	240	4	$1.49	1%	$1.48	6%
Landmark on Lovers	2014	East Dallas MF	918	336	4	$1.76	6%	$1.65	9%
Domain at Midtown Park	2016	East Dallas MF	909	395	4	$1.65	17%	$1.37	22%
Hanover Midtown Park	2017	East Dallas MF	894	422	4	$1.85	0%	$1.85	61%
Lookout at Lake Highlands Town Center	2018	East Dallas MF	888	259	4	$1.76	12%	$1.54	96%
Camden Victory Park	2016	Uptown/Park Cities MF	885	423	4	$1.98	0%	$1.98	6%
The Callie	2016	East Dallas MF	876	261	4	$1.58	0%	$1.58	17%
Alexan Henderson	2017	East Dallas MF	833	321	4	$2.08	11%	$1.84	30%
The Mark at Midtown Park	2017	East Dallas MF	779	274	4	$1.80	6%	$1.70	27%
LBJ Station	2016	East Dallas MF	770	249	4	$1.65	0%	$1.65	10%
Haskell Flats	2017	East Dallas MF	696	62	4	$1.91	6%	$1.80	24%
Low-Rise (1 - 4 Stories)			**1,031**	**235**	**4**	**$1.76**	**5%**	**$1.68**	**29%**
B&F Flats	2017	East Dallas MF	881	364	5	$2.31	2%	$2.27	14%
Modera Hall Street	2018	East Dallas MF	867	340	5	$1.77	8%	$1.63	91%
The Parc at White Rock	2016	East Dallas MF	862	291	5	$1.88	4%	$1.80	20%
Arpeggio at Victory Park	2014	Uptown/Park Cities MF	858	377	5	$1.81	3%	$1.76	8%
Modera Turtle Creek	2018	Uptown/Park Cities MF	841	207	5	$2.18	8%	$2.00	83%
Olympus at Ross	2015	East Dallas MF	796	368	5	$1.95	0%	$1.95	8%
Modena	2017	East Dallas MF	796	230	5	$1.78	1%	$1.76	7%
Armstrong at Knox	2016	Uptown/Park Cities MF	1,102	165	6	$2.45	11%	$2.18	14%
28TWENTYEIGHT	2017	Uptown/Park Cities MF	1,046	94	6	$2.22	8%	$2.03	26%
Knox Heights Apartments	2016	Uptown/Park Cities MF	957	182	6	$2.49	14%	$2.15	6%
One Oak Grove	2016	Uptown/Park Cities MF	845	149	6	$2.27	11%	$2.01	9%
Elan City Lights	2015	East Dallas MF	763	424	6	$1.98	3%	$1.92	9%

[11] Properties without reported vacancy are currently being pre-leased.

Building Name	Year Built	Submarket Cluster	Average SF Per Unit	Units	Stories	Average Asking Rent PSF	Average Concessions	Average Effective Rent PSF	Vacancy
The Katy	2017	Uptown/Park Cities MF	1,313	215	7	$2.64	13%	$2.31	41%
Bandera Apartments	2016	North Dallas MF	1,179	180	7	$1.81	8%	$1.66	13%
Gables McKinney Ave	2015	Uptown/Park Cities MF	979	239	7	$2.58	0%	$2.58	5%
Uptown @ Cole Park	2016	Uptown/Park Cities MF	953	179	7	$1.95	3%	$1.89	2%
Preston Hollow Village Apartments	2017	North Dallas MF	906	526	7	$2.09	13%	$1.83	74%
Aura on McKinney	2016	Uptown/Park Cities MF	880	190	7	$2.16	4%	$2.08	10%
The Galleries at Park Lane Apartments	2017	East Dallas MF	1,015	246	8	$1.83	1%	$1.81	5%
Cantabria at Turtle Creek	2014	Uptown/Park Cities MF	975	249	9	$2.16	1%	$2.15	4%
Mid-Rise (5 - 9 Stories)			**941**	**261**	**6**	**$2.12**	**6%**	**$1.99**	**23%**
Miro	2016	Uptown/Park Cities MF	863	180	14	$2.32	6%	$2.18	3%
Carlisle & Vine	2018	Uptown/Park Cities MF	1,086	150	15				
The Alexan	2016	Uptown/Park Cities MF	937	365	15	$2.07	10%	$1.86	24%
The Taylor	2014	Uptown/Park Cities MF	841	308	17	$2.41	1%	$2.39	10%
Brady	2015	Uptown/Park Cities MF	1,260	299	18	$3.31	1%	$3.30	3%
One Uptown	2017	Uptown/Park Cities MF	1,004	198	20	$3.16	8%	$2.90	7%
M-Line Tower	2017	Uptown/Park Cities MF	943	261	20	$2.74	10%	$2.48	48%
3700M	2014	Uptown/Park Cities MF	918	380	21	$2.51	0%	$2.51	6%
The McKenzie	2018	Uptown/Park Cities MF	1,607	183	22	$3.04	0%	$3.04	0%
The Jordan	2016	Uptown/Park Cities MF	1,048	212	23	$3.07	14%	$2.65	6%
The Ascent Victory Park	2017	Uptown/Park Cities MF	974	302	23	$3.06	13%	$2.67	60%
Ardan West Village	2018	Uptown/Park Cities MF	918	390	23	$3.31	10%	$2.99	98%
The 23	2018	Uptown/Park Cities MF	884	285	23	$2.60	11%	$2.31	93%
SkyHouse Dallas	2015	Uptown/Park Cities MF	782	336	24	$2.36	8%	$2.18	10%
Victory Place	2017	Uptown/Park Cities MF	797	352	25	$2.41	10%	$2.17	39%
The Katy in Victory Park	2017	Uptown/Park Cities MF	906	463	30	$2.55	12%	$2.26	76%
Residences at Park District	2018	Uptown/Park Cities MF	1,571	253	34	$3.33	0%	$3.33	94%
High Rise (10 or More Stories)			**1,020**	**289**	**22**	**$2.77**	**7%**	**$2.58**	**36%**

Source: CoStar

Appendix 4: Detailed Residual Land Value for Low-Rise Building Typology

	Scenario 1	Scenario 2	Scenario 3
Building Height	**4 Story**	**4 Story**	**4 Story**
Average Unit Size	**825 SF**	**950 SF**	**1,450 SF**
Net Operating Income	$1,090,000	$1,120,000	$1,070,000
Total Development Costs	($20,490,000)	($19,150,000)	($16,530,000)
Total Development Costs Per Unit	($230,000)	($240,000)	($330,000)
Capitalized Value at 5% Cap Rate	$21,830,000	$22,340,000	$21,320,000
Capitalized Value Per Unit	$243,000	$279,000	$426,000
Residual Land Value	**($3,700,000)**	**($1,960,000)**	**($130,000)**

Appendix 5: Detailed Residual Land Value for Mid-Rise Building Typology

	Scenario 4	Scenario 5	Scenario 6
Building Height	**7 Story**	**7 Story**	**7 Story**
Average Unit Size	**825 SF**	**950 SF**	**1,450 SF**
Net Operating Income	$1,940,000	$1,960,000	$1,920,000
Total Development Costs	($44,350,000)	($43,090,000)	($37,580,000)
Total Development Costs Per Unit	($280,000)	($310,000)	($420,000)
Capitalized Value at 5% Cap Rate	$38,810,000	$39,100,000	$38,370,000
Capitalized Value Per Unit	$243,000	$279,000	$426,000
Residual Land Value	**($14,500,000)**	**($13,010,000)**	**($8,070,000)**

Appendix 6: Detailed Residual Land Value for High-Rise Building Typology

	Scenario 7	Scenario 8	Scenario 9
Building Height	**10 Story**	**10 Story**	**10 Story**
Average Unit Size	**825 SF**	**950 SF**	**1,450 SF**
Net Operating Income	$2,350,000	$2,390,000	$2,430,000
Total Development Costs	($53,860,000)	($51,300,000)	($46,980,000)
Total Development Costs Per Unit	($320,000)	($340,000)	($470,000)
Capitalized Value at 5% Cap Rate	$47,010,000	$47,760,000	$48,600,000
Capitalized Value Per Unit	$277,000	$318,000	$486,000
Residual Land Value	**($17,700,000)**	**($14,560,000)**	**($9,600,000)**

Appendix 7: Residual Land Value Sensitivity Analysis (7 story building with 950 SF average unit size)

	Decrease in Construction Cost and Increase in Rents			
	Construction Hard Costs Per Rentable Square Foot			
Rent PSF	$270	$230	$200	$175
$2.50	($13.01 M)	($6.63 M)	($1.84 M)	$2.15 M
$2.65	($11.21 M)	($4.82 M)	($0.04 M)	$3.95 M
$2.80	($9.40 M)	($3.02 M)	$1.77 M	$5.76 M
$2.95	($7.60 M)	($1.22 M)	$3.57 M	$7.56 M

	Increase in Rents and Density Developed			
	Number of Units Developed			
Rent PSF	140	170	200	230
$2.50	($13.01 M)	($15.80 M)	($18.59 M)	($21.38 M)
$2.65	($11.21 M)	($13.61 M)	($16.01 M)	($18.41 M)
$2.80	($9.40 M)	($11.42 M)	($13.43 M)	($15.45 M)
$2.95	($7.60 M)	($9.23 M)	($10.86 M)	($12.48 M)

	Decrease in Construction Cost and Increase in Density			
	Construction Hard Costs Per Rentable Square Foot			
# Units	$270	$230	$200	$175
140	($13.01 M)	($6.63 M)	($1.84 M)	$2.15 M
170	($15.80 M)	($8.05 M)	($2.24 M)	$2.61 M
200	($18.59 M)	($9.47 M)	($2.63 M)	$3.07 M
230	($21.38 M)	($10.89 M)	($3.03 M)	$3.53 M

	Increase in Rental Rates and Decrease in Cap Rates			
	Rental Rates Per Square Foot			
Cap Rate	$2.50	$2.65	$2.80	$2.95
5.00%	($13.01 M)	($11.21 M)	($9.40 M)	($7.60 M)
4.75%	($11.81 M)	($9.93 M)	($8.06 M)	($6.18 M)
4.50%	($10.51 M)	($8.55 M)	($6.60 M)	($4.64 M)