

Dear Members of Council and Planning Commission,

As Lee St. neighbors of the Park Avenue T-Zones, we have followed closely the proposed rezoning of the nearby properties. We do appreciate the fact that the Council chose to review this zoning. We laud the stated goal of encouraging more housing, particularly more affordable dwellings. We also believe that it is vital to maintain Park Avenue as a pedestrian and bike friendly street so that Falls Church residents can enjoy many fun runs and parades under the shade of street trees for years to come.

However, we feel that there may be some unintended consequences of the specific heights and setbacks currently proposed. The attached research identifies areas of concern. The analysis was done with publicly available data and tools.

How the area looks and feels to a passing pedestrian or neighbor is critical – perhaps more so than specific uses or even exact setbacks. Through this analysis and observations on Park Avenue, we have found that several factors beyond lot coverage significantly impact the “feel” for those walking by. We agree that walkability is an important Falls Church value. Here are some observations that appear to have been minimized in the proposals.

- **Sunlight** needs to be carefully considered. See particularly pages 2 and 3.
- **Trees need sunlight.** They also cannot be planted on top of sewer and utility lines. *Requiring trees but not factoring in sunlight and utilities is useless.*
- **Setbacks and the height of the building** impact the feel of the street, probably more than actual lot coverage. There is much more than lot coverage that impacts the way a building affects the surrounding community. Pages 4-6 illustrate various coverages and their impact.
- **Landscape cannot be an afterthought** because there will be much less open land on T-Zone lots. We must *intentionally* plan for the street trees that we want to have.

As we have walked along Park Avenue with some of you, we have pointed out two informal “pocket parks” between Virginia Avenue and Oak Street. The one that backs onto the Hilton Garage is often occupied and enjoyed by walkers and residents. The one between the two Spectrum office townhomes is dark and dank and used by no one. They are approximately the same size. The difference is the height, not the setback, of the adjacent buildings and the consequential availability of sunlight. Interestingly, the lot coverage by the two Spectrum townhouse office buildings is less than 60%, and less than what is currently being considered for the T-Zone lots down the street.

As you consider the heights, setbacks, and lot coverage changes to the building code, keep in mind how these factors interplay to affect the sunlight that the streetscape needs. We hope these observations will encourage you to get some more data on impacts before setting us up for more Spectrum Townhouse Offices or even worse.

Thank you for your consideration.

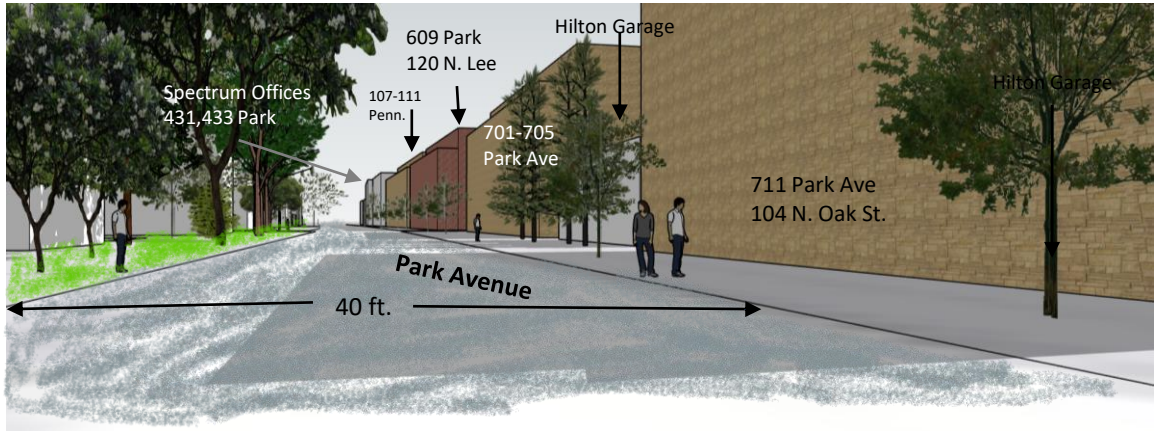
Ruth Brock
North Lee St.

Paul and Marilyn Bugg
Park Avenue

Peng Si Highnam
North Lee St.

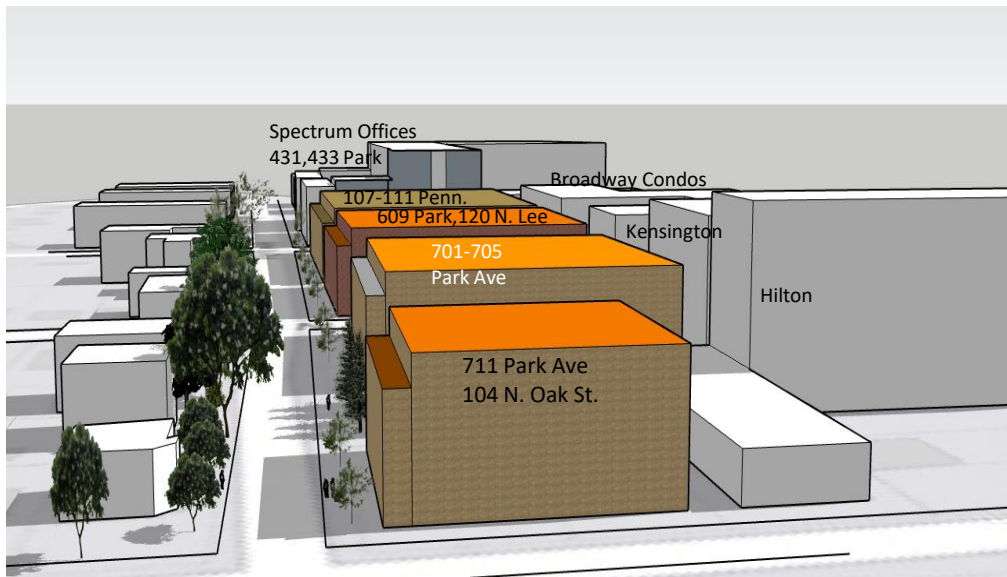
Park Avenue T-Zone Lots Fully Built

Street View



Rendition of Park Avenue with four fully built T-Zone lots between Oak St and Pennsylvania Ave with proposed dimensions of 20 ft. front setbacks, 50 ft. heights with 10 ft. setbacks at 40 ft. in front. This section of Park Avenue is about 40 ft. wide. Shadows as seen on March 21st, 2 p.m.

Aerial View



*Renditions created using Sketchup, an architectural 3D tool that imports GIS data. Drawings are to scale, using estimates from site plans and actual measurements.

Trees (and People) Need Sunlight to Thrive

Underground infrastructure affects where trees can be planted.

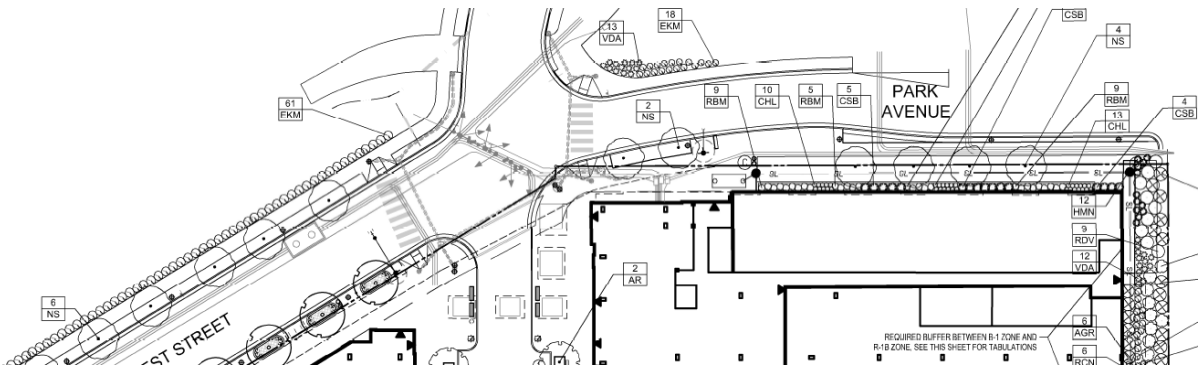


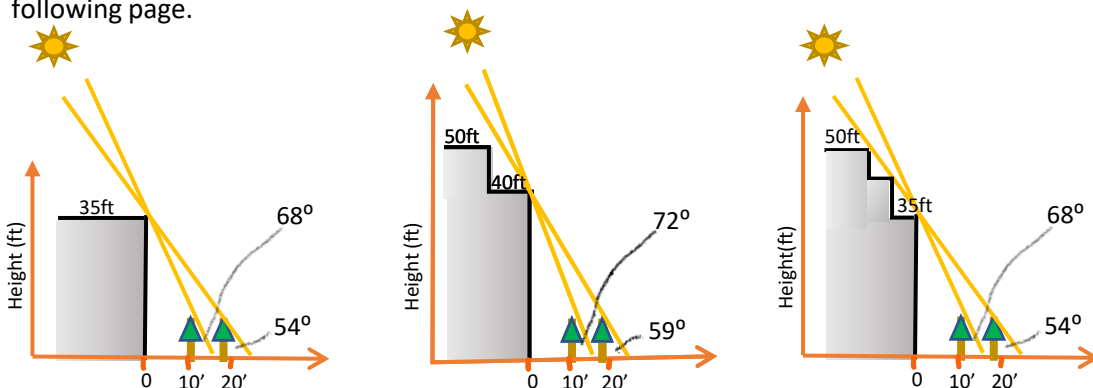
Diagram above is extracted from the Founders Row landscape drawing. It shows sewer lines, electrical lines run along Park, about 2 ft. from the street curb. (Shown as grey lines.) This means that trees have to be planted at least 7 ft. from the curb. These utilities run down the length of Park.

At Founders Row, the setback is at least 24 ft. The trees are planted 10 ft. from the building (14 ft. from the curb) and receive about 4 hours of direct light at the summer solstice, when the sun is at its highest during the year. This is because the trees are on the North side of all buildings on the T-Zone side of Park.

Available sunlight is affected by height of the building, angle of the sun, and distance from the building.

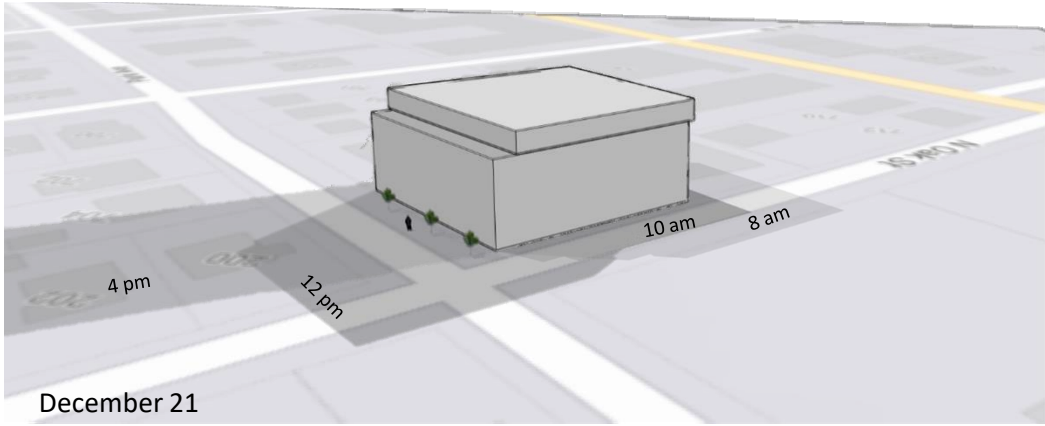
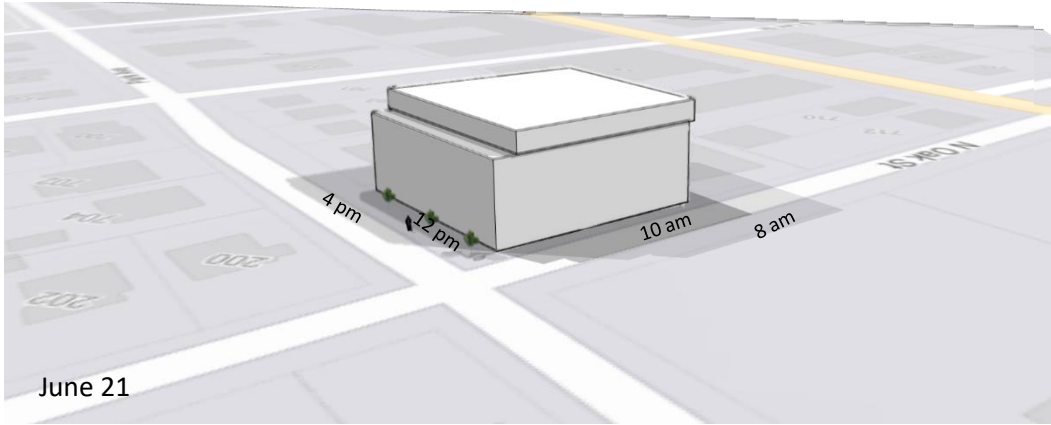
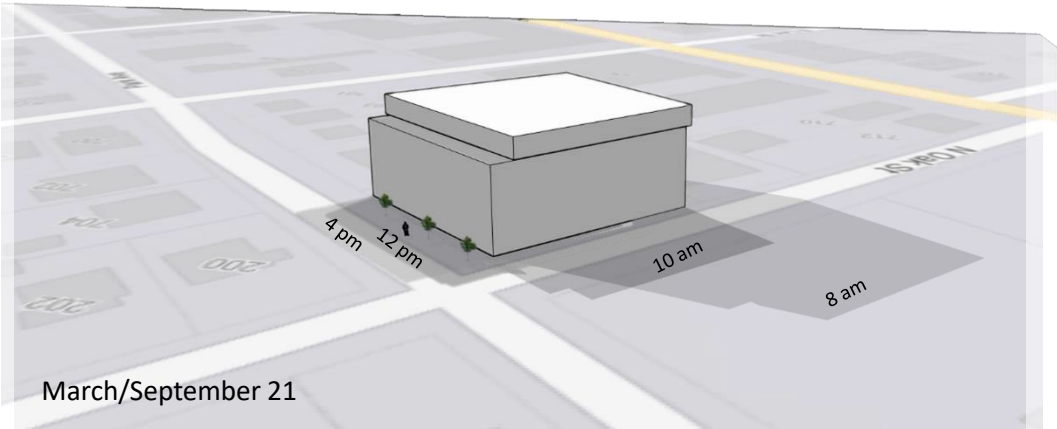
Large street trees need at least 6 hours of direct sunlight daily.

As the sun moves across the sky from sunrise to sunset, its angle to the ground increases and decreases. When the sun is behind the building, the diagrams below show the minimum angles for a young 10 ft. tree, planted 10 ft. and 18 ft. away from a building, to be completely shaded. The sun is behind Park Ave T-Zone buildings starting between 11 am and noon. Thus, a tree planted 18 ft. from a building 35 ft. tall receives sunlight only while the sun's angle is greater than 54° . Between March 20th and September 20th, the sun's maximum angle rises from $\sim 52^\circ$ to $\sim 75^\circ$ (June 21st summer solstice) and back to $\sim 52^\circ$. On December 21st (winter equinox) the maximum is $\sim 25^\circ$. Maximum elevation occurs at noon. Shadows for the proposed allowed building heights at equinoxes and solstices are shown on the following page.

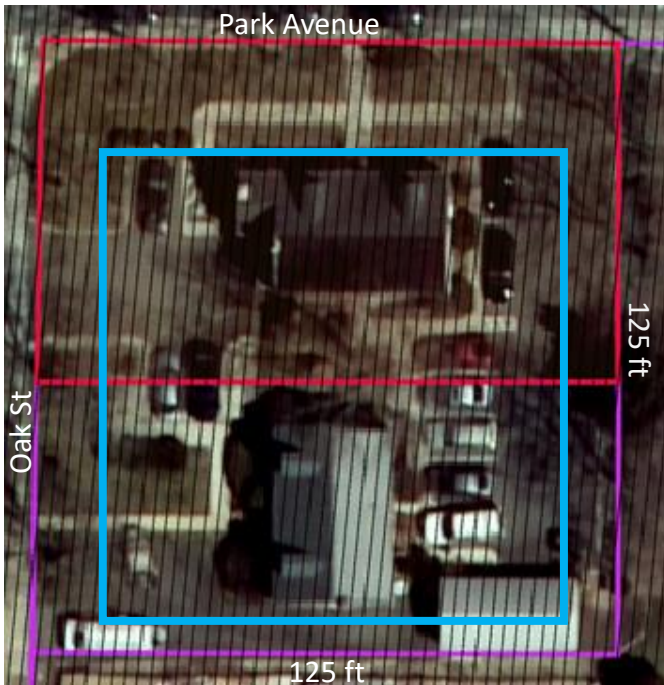


Shadows made by a 40-50 ft. building on Park Avenue.

The shadows for the 2 solstices and 2 equinoxes are shown using the Park/N. Oak location as reference. Trees placed 10 ft. from the building will get at most 4 hours of light for 3 months around June 21st.



Future Developments: Analysis of Building Coverage



711 Park, 104 N. Oak

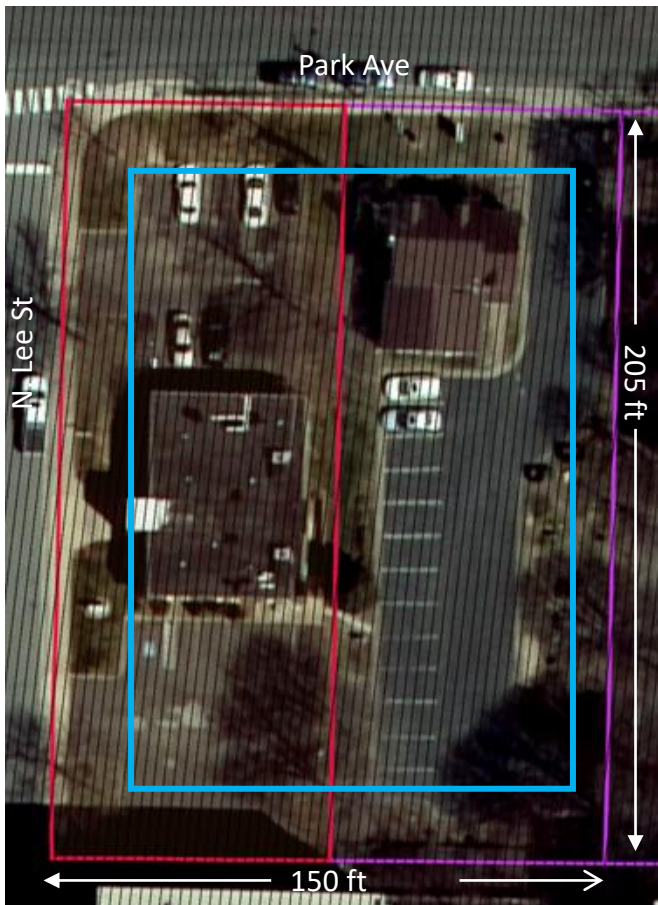
Total Area is 125 ft. x 125 ft.
recorded as 15,625 sq ft. (0.36 ac)

Case 1:

20 ft. front setback on Park Ave
15 ft. setback on Oak, 10 ft. rear, sides
Buildable area (in blue) = 95 ft. x 100 ft.
= 9,500 sq ft.
or 61% of lot

Case 2:

15 ft. front setback on Park Ave
15 ft. setback on Oak, 10 ft. rear, sides
Buildable area = 100 ft. x 100 ft.
= 10,000 sq ft.
or 64% of lot



609 Park Ave, 120 N Lee

Total Area approx. 150 ft. x 205 ft.
recorded as 29,850 sq ft. (0.69 ac)

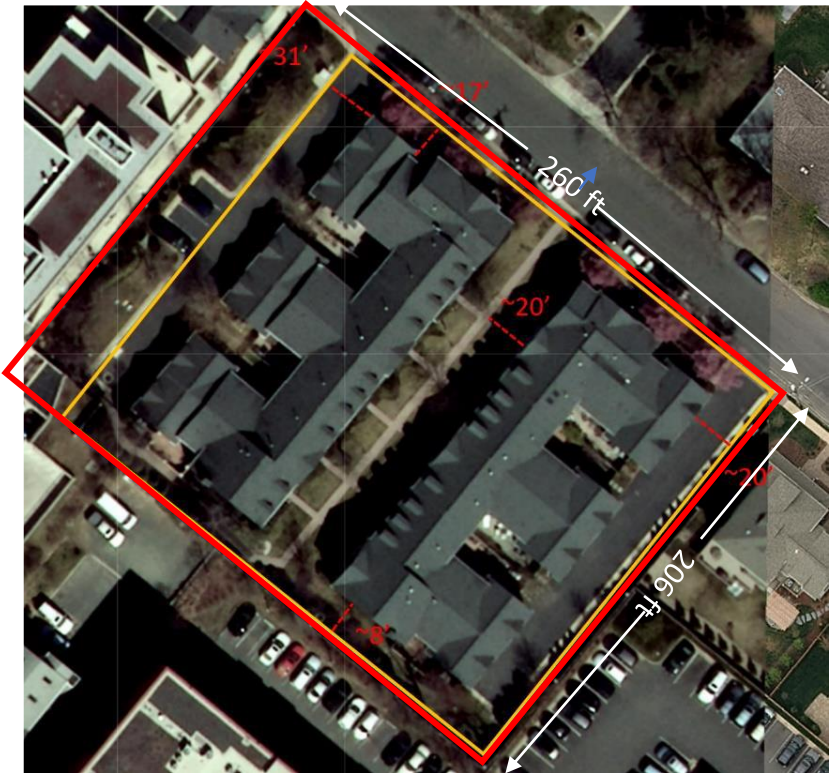
Case 1:

20 ft. front setback on Park Ave
15 ft. setback on Lee, 10 ft. side
20 ft. rear setback
Buildable area (in blue) = 125 ft. x 165 ft.
= 20,625 sq ft.
or 69% of lot

Case 2:

20 ft. front setback on Park Ave
15 ft. on Lee
10 ft. rear and side
Buildable area = 125 ft. x 175 ft.
= 21,875 sq ft.
or 73% of lot

Existing Developments: Analysis of Building Coverage



Madison Townhomes, Park Ave.

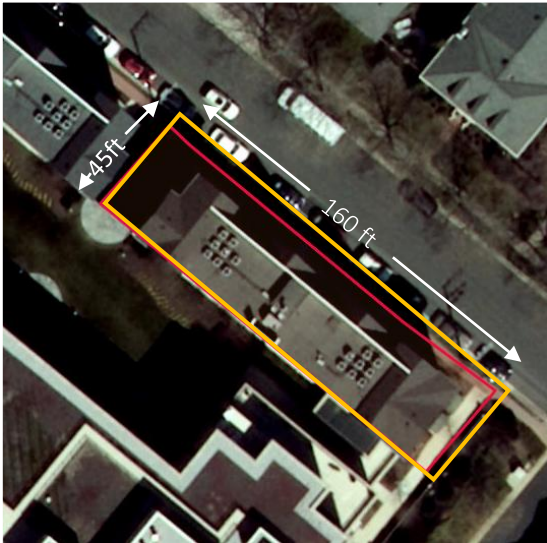
(Information from City Planning Dept)
Actual lot lines are in red.

Total Area is approx. 53,560 sq ft.
or 1.2 ac

- ~17 ft. setback from Park
- ~31 ft. side setback
- ~20 ft. side setback
- ~ 8 ft. rear setback

Building coverage = 50%

For these two existing developments, lot measurements were made using GIS tool. Setback measurements were made on the actual location with a tape measure. Lot lines (in yellow) come to the curb and fence.



431 Park Avenue

Lot size based on estimates = 45 ft. x 160 ft.
= 7,200 sq ft. (0.17 ac)

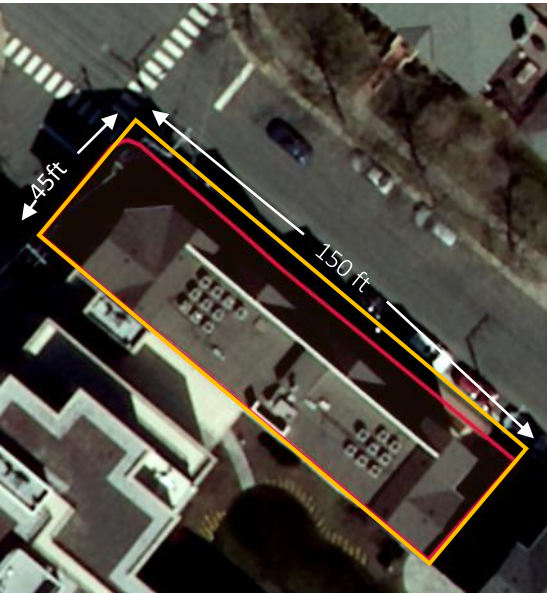
Front setback (Park Ave) is 15 ft.

West side setback is 20 ft.

East side setback is 18 ft.

Rear setback is 0 ft.

Est. building coverage = 122 ft. x 30 ft.
= 3,660 sq ft.
or 51%



433 Park Avenue

Lot size (estimated) = 45 ft. x 150 ft.
= 6750 sq ft. (0.15 ac)

Front setback (Park Ave) is 15 ft.

Side setback (Pennsylvania) is 15 ft.

East side setback is 3 ft.

Rear setback is 0 ft.

Est. building coverage = 132 ft. x 30 ft.
= 3960 sq ft.
or 59%

Estimates for Building Setbacks and Heights

Founders Row

At the narrowest area, the Park Ave. setback was measured at 24 ft.

Trees were planted 10 ft. from the building. The city records contain a response from the developer explaining that the trees could not be planted next to the curb because of underground utilities.

Hilton Garden Inn

On city website, the Hilton project is stated as having a height of 65 ft. The garage was measured at 18 ft. in height and set back 26 ft. from the Park Avenue curb.

Kensington

The site plan gives a height of 69 ft.

Broadway

Residents give the height as 55 ft. City staff concurs.

Spectrum Offices (431, 433 Park Avenue)

By counting the rows of bricks, the height was estimated at 50 – 55 ft. 50 ft. was used in the 3D model. The setback from the curb of Park Avenue was measured and found to be just under 15 ft. The lot line abutting the townhomes was confirmed by residents of the townhomes as running along the wooden fence that separates the two properties. This fence was measured to be 18 ft. from 431 Park Ave.

Trees are planted less than 5 ft. from the building.

Madison Townhomes

Residents confirm the townhomes' boundary reaches the Spectrum wooden fence. Setbacks were taken from the City Planning Staff report of March 6, 2023.

Park Avenue

The width of Park Avenue was measured in front of the T-Zone lot at 711 Park Avenue, between Oak St. and Lee St. This was found to be 40 ft.