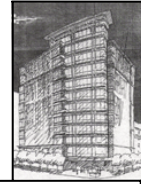


EXECUTIVE TOWER NW WASHINGTON, DC



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ARCHITECTURAL BREADTH

The architectural breadth study on the Executive Tower looks closely at the building's North grounds. Currently the building rests on a sloping terrain that creates an elevation difference of 5' – 6" between the North and South sides. As stated in the proposal, a 12th typical floor is to be added to the Executive Tower in between the floors three and nine. The floor heights of these typical floors are 11' – 6".

It is ideal that the building be designed to gain all of the five and half feet to be saved for developing the 12th floor. However, a few rules were enforced to keep the overall architectural look of the Executive Tower the least affected by the new design. In designing the Executive Tower's first floor the 2003 International Building Code was reference for the building openings, doorways and ramps. The District of Columbia Zoning Regulation was referenced for specific streetscape designing issues.

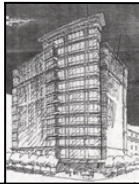
Three trial sketches were drawn before designing to determine which version would fit best for the buildings layout and overall design. On the next is a drawing of the current first floor plan.



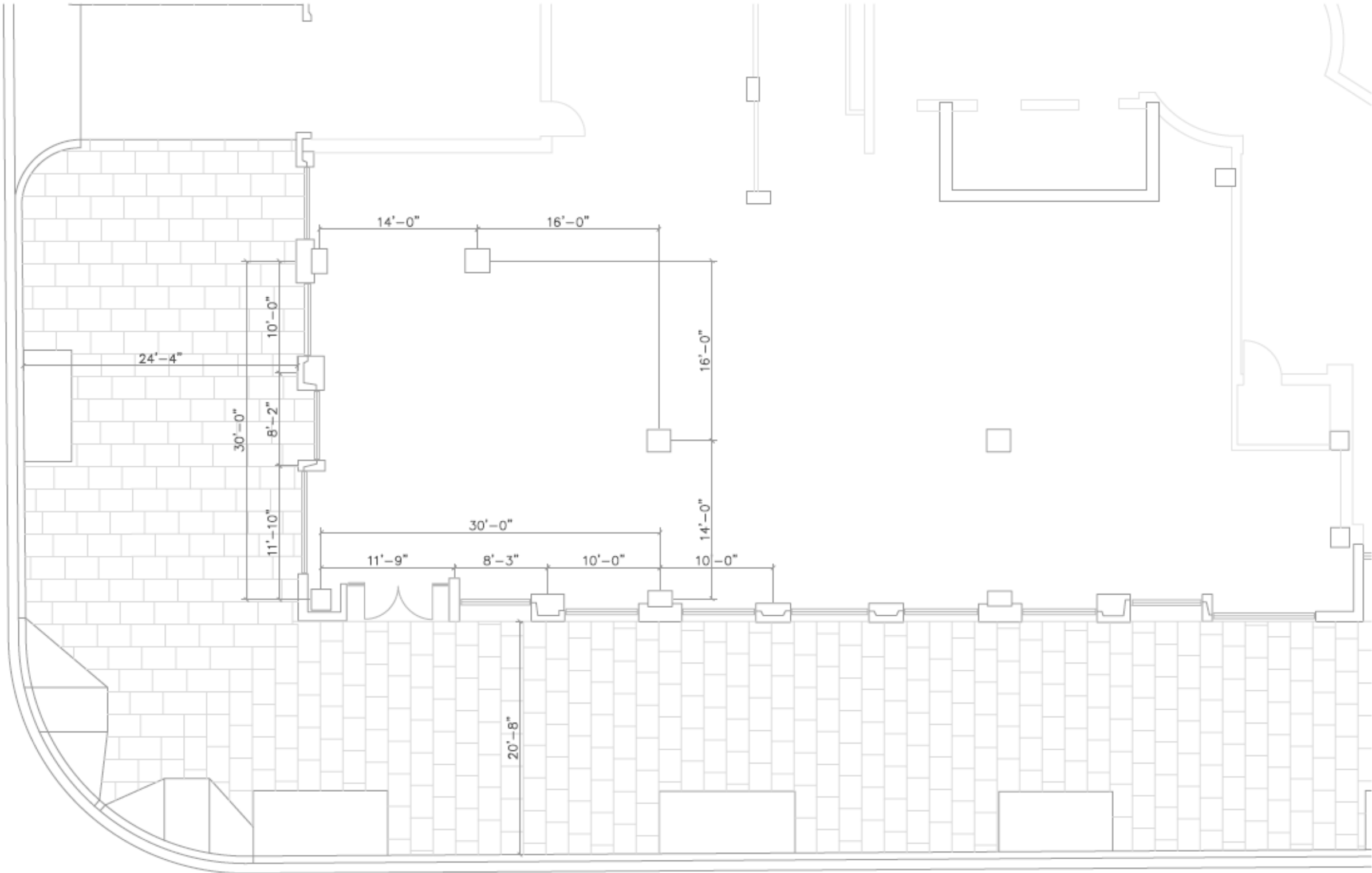
Picture of the North End of the Executive Tower (right). The Picture is blown up to see the retail entrance more easily.



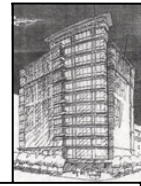
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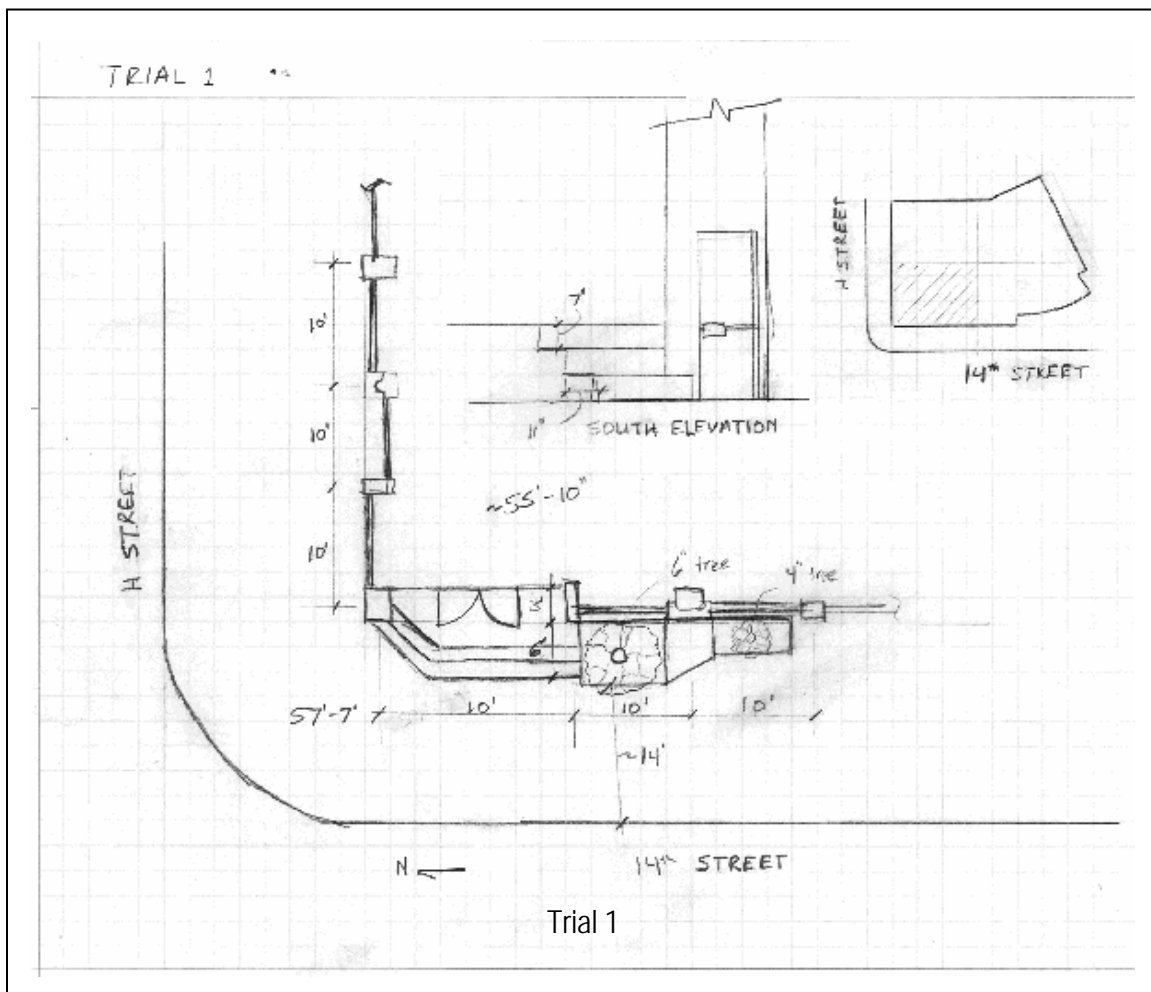
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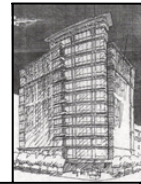
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TRIAL 1

Trial one shows the simplest form where the building will be dropped approximately 2' – 9" while keeping the doorway to Retail 2 in the same place. The stairs were placed 6 ft from the building front leaving roughly 14 ft of space on the sidewalk. A planter of a maximum 5' width according to DC Streetscape code 1106.10 is placed to divert the flow of pedestrians from the steps. This setup would be an acceptable solution; however, this does not leave room for a disabilities ramp and according to 1106.10 of the DC code the depth of the sidewalk is to be taken from the edge of the property line to the curb. Since the steps leading to the entrance way cross the property line, this solution is against DC regulation and must find a different approach to lowering the building.



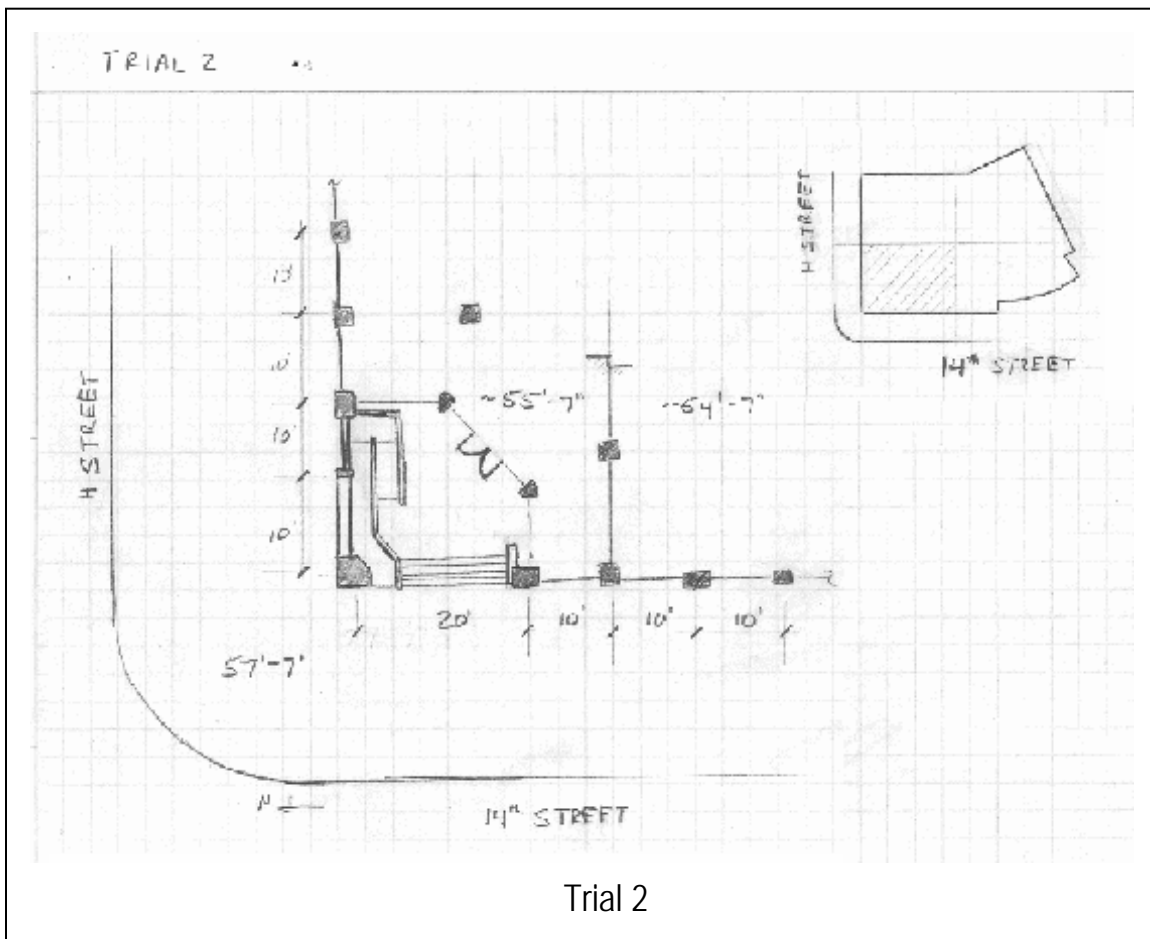
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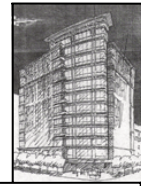
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TRIAL 2

Trial two takes the approach of creating a small inlet to drop the building approximately two feet and allowing the space for a wheelchair ramp. It is a provision of this study to attempt at leaving the overall structure mostly unchanged. In this trial the first nonbearing column is removed to allow more space to create the inlet. The façade on the north wall remains the same and a ramp is constructed to IBC 2003 regulations adjacent to the north wall. In this trial, the majority of the façade remains unchanged and a minimum amount of floor space from Retail 2 is lost. The drawback from using this trial is the possibility of the entranceway feeling too low as people walk down the stairs.



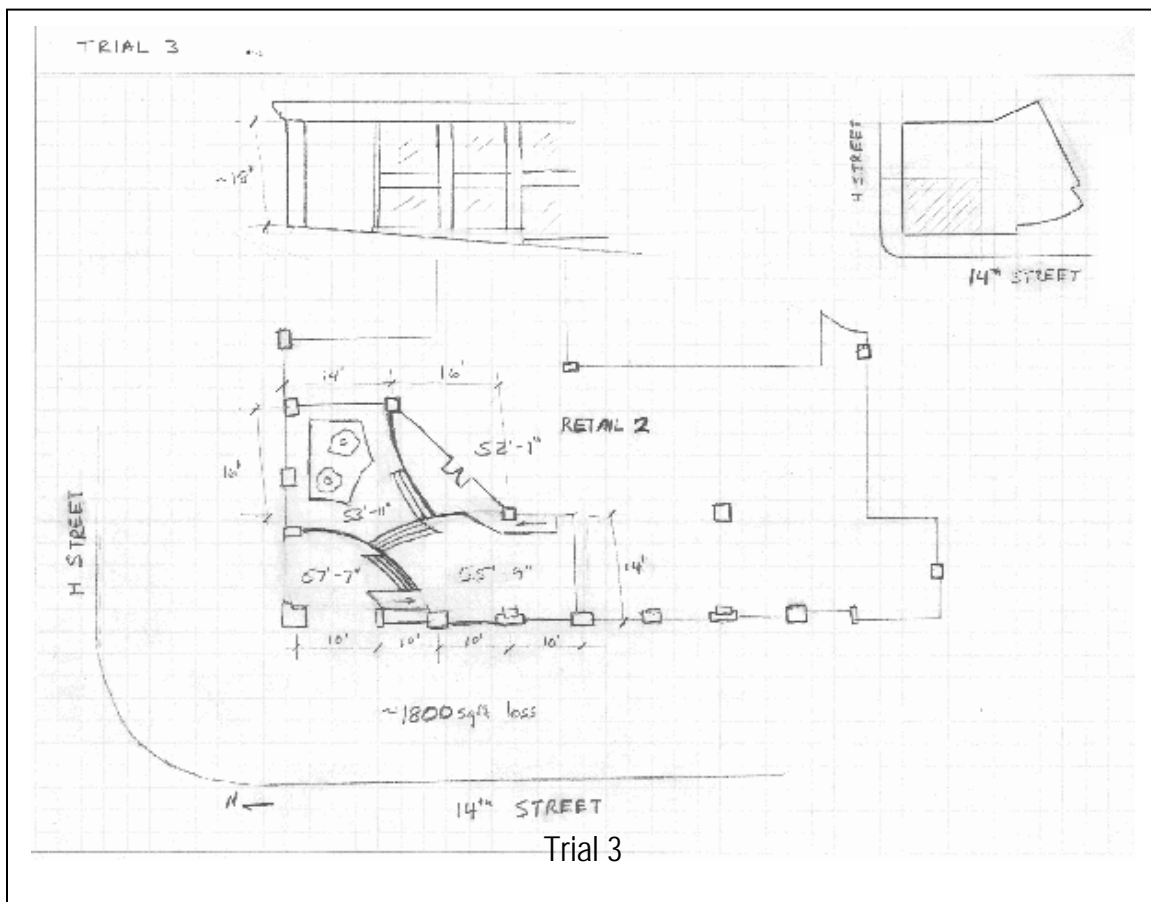
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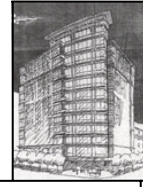
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TRIAL 3

Trial three takes into consideration a wide open atrium space to enter Retail 2. The space removes no columns from the original design. People enter through at the corner where previously window panels were. The plan takes advantage of using all five and half feet the elevation has to lower the overall building height by creating a three tier gradual step down system. By doing this, less material can be taken away in the other studies making the proposal more feasible. Handicap ramps can be constructed between the first and second tier and the second and ground level to allow access to Retail 2 to all people. A small green space can be built in the atrium on the third level to create a friendlier environment. In using trial three, the entrance height would approximately be 6' - 10" and this would be in violation of IBC provision 1003.2-ceiling height. Thus as seen in the section sketch, a space from the second floor would need to be remove to allow headroom at the entrance.



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DESIGN SUMMARY AND CONCLUSION

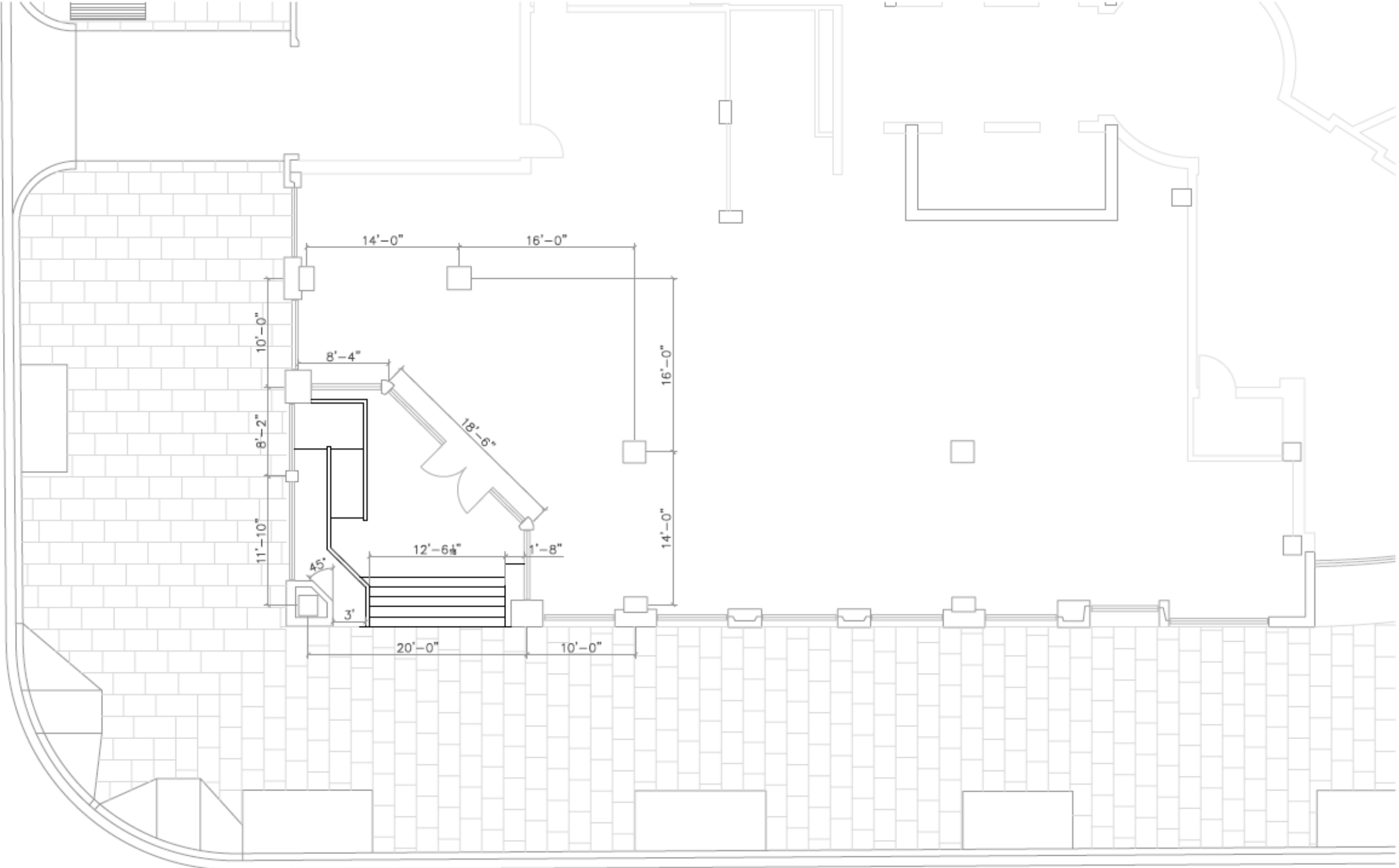
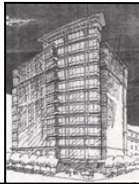
The loss of rentable space from Retail 2 is approximately 400 sqft whereas using trial three would result in a loss of over four times that at 1,800 sqft; a total of 900 sqft from Retail 2 at \$38 per sqft and the equivalent space from the second floor office space at \$47 per sqft creating a loss of monthly revenue of over \$76,500. The rent lost from the area in trial two resulted in approximately \$16,700 per month. Aside from the lost funds, construction of trial three would probably be too large scale and distracting from the main entrance on the south side of the building.

After review the three choices in the design of the first floor entrance it was decided to use trial two for the starting design. Trial two fits the purpose of lowering the building at least two feet without retracting too much from the overall design. The details for the full design are as follows.

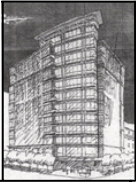
The building is lowered three feet below its original level. The steps are to DC code at a 12 inch run by 6 inch drop. The wheelchair ramp switches back (as originally expected) to allow for a 12 to 1 grade. The left side the wall remains unchanged from the original design. Only the non-loading bearing column 10' from the corner was removed to make enough room for this design. The floor plan for this design can be seen on the following page including a 3D rendering on the next page.

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