
SECTION SIX | Architecture

1. OVERVIEW

At its heart, the August Wilson Center is a focal point for the performing arts and a celebration of African American culture. The design team at Perkins+Will has crafted elegant and meaningful forms that look to become a new icon in downtown Pittsburgh. In an effort to add additional functionality and a new facet to the design, a roof terrace has been designed.

The terrace will be used for outdoor gatherings and performances, with the sail feature acting as a backdrop for temporary stage equipment. A catering/food service/bar area will serve patrons when the space may be used for banquets or other gatherings. When it is not in use for a specific function, the terrace will serve to expand the existing exhibit spaces by housing outdoor art pieces. Both temporary seating and fixed benches are used to help shape the space. Additionally, the terrace may be opened during intermissions from performances to allow patrons a chance to get some fresh air.

The terrace design incorporates approximately 8150 SF of space on the roof that currently did not house other mechanical equipment. This allows for minimal disruption of the existing system. The space is along the Liberty Avenue side of the building, and is ideal for this application.

Based on an initial code analysis, this space will fall under occupancy classification A-3 with an occupant load of one person per 15 square feet. This results in a total occupancy of 543. This is a very large number; however, for certain purposes it may be considered simultaneous occupancy. Logical vertical circulation points exist for two staircases and one elevator. It would be possible to reach additional stair towers if necessary. For the purposes of this design, it will be considered acceptable that the existing restrooms have the capacity to serve this space.

The structural system will be the engineered system most influenced by this addition. With increased loads, the steel framing members will increase in size and the decking system will all require additional support. The roof drainage system will also require additional work as a result of the changes. Finally, the electrical system may require a small expansion. These additional ramifications are not within the scope of this study, however.

The following photographs show the buildings adjacent to the site:



Figure 6.1.1 | The Duquesne Light building rises 16 storey directly adjacent to the west end of the August Wilson Center.
[Personal Photo]



Figure 6.1.2 | The streetscape of Liberty Avenue beyond the future site of the August Wilson Center [Personal Photo]

2. GOALS

The goals for the design of the roof terrace are not simply to create habitable space on the roof, but rather to create the feeling that the design always intended for such a space to exist. Creating a sense of enclosure for this exterior space will be paramount to the user satisfaction and comfort level. Furthermore, it is essential that the elements of the roof terrace do not interfere with the bold volumes of the existing building. In contrast, the design of the roof terrace must integrate with and enhance the volumes by creating additional opportunities to light surfaces.

3. CONCEPTS

Four main elements combine to describe the layout of the terrace. The first element is the top of the prominent sail structure that dominates the Liberty Avenue façade. This feature serves as a logical backdrop for a performance or speaker and the overhanging shape will aid in projecting sound to the audience. The second defining element is the rectangular, slightly out-of-plane wall that extends through the entire building, forming the boundary of the grand staircase. This stone-clad volume houses both a staircase and elevator, creating a logical motivation for extruding this volume and allowing it to become the main access for the roof terrace. The third key element is the curve of the theater drum that already projects from the ground level through the roof. In order to further emphasize this elliptical volume projecting through the rectilinear volume of the building façade, this projection will be extended further to make it more visible from street level. At night, this surface will be illuminated to enhance the perception of intersecting volumes. Finally, the void of space created by Liberty Avenue also is important in defining this space. With the other three key elements closing in the terrace, the treatment of this boundary is essential to completing the design.

4. THE DESIGN

The design for the roof terrace creates two distinct areas which have varying purposes. On the east side of the roof is a public gathering area that will be host to most of the activities. This space has direct access to stairs and the elevator. Four separate storage areas are provided to enable temporary seating or tables to be kept in a convenient location. A food service area is along the south end of the space. The second area is more remote area where exterior sculpture may be exhibited. A schematic floor plane is provided in figure 6.4.1. More detailed drawings are available in Appendix I.

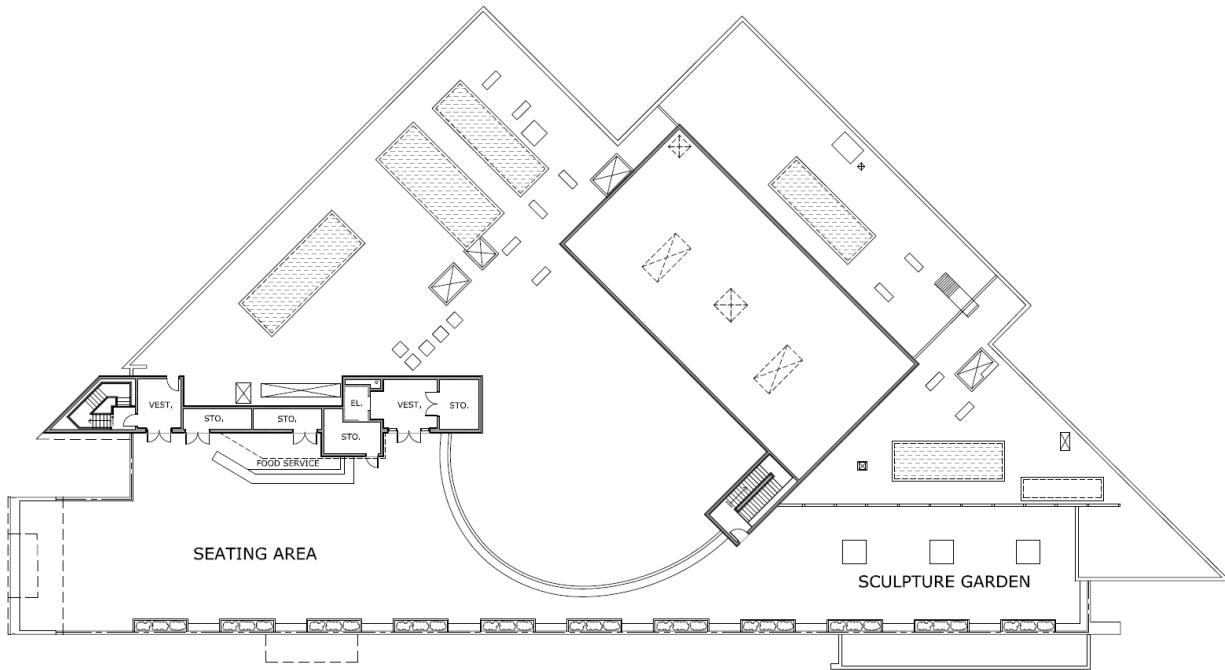


Figure 6.4.1 | Schematic plan of the Roof Terrace. Please see Appendix L for more detailed drawings.

The fence that forms the extension of the theater drum has been extended to a height of 16', making it clearly visible from the street. To prevent this large wall from towering over the space and to provide a discreet, glare-free location for light fixtures, a step-down fence has been created at a height of six feet. The service core has been face in the same stone that continuous from below. A small roof area has been designed to better define the food service area and allow for lighting equipment. Along the south edge of both spaces an alternating system of benches and planters has been established to give the space some color and eliminate any unease that may be created by the drop to the sidewalk below. To meet IBC code requirements of 42" for guardrails, a tempered and laminated glass guard has been added to increase the height of the parapet. Glass was chosen for its distinct appearance from the street level. The floor will be finished with 2' by 2' concrete tiles with a slightly polished finished. This allows for the necessary durability while maintaining an appearance that is more finished than a sidewalk.

The following renderings show the conceptual design for the roof terrace.

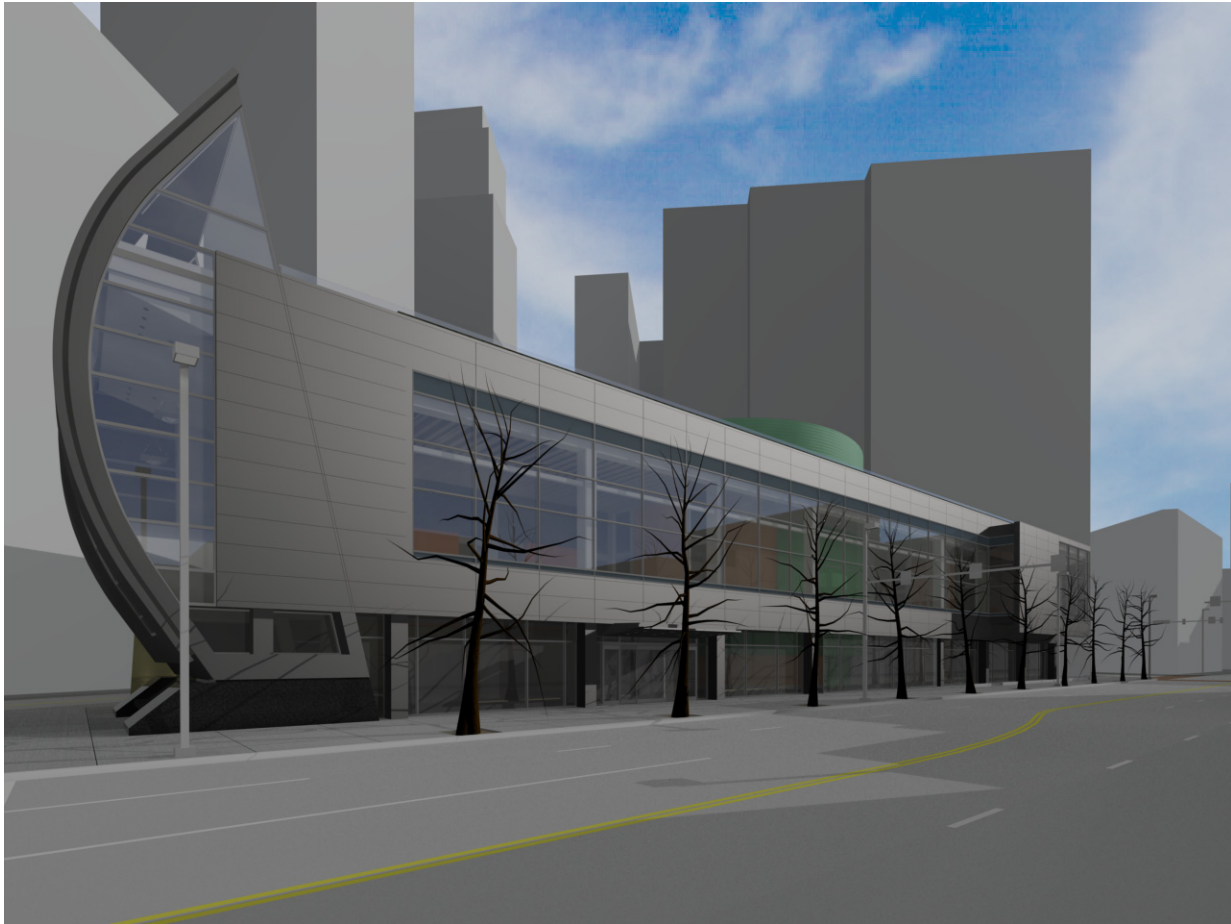


Figure 6.4.2 | The view from Liberty Avenue with the roof terrace addition. The only visible elements are the extended theater drum and the glass guardrail at the top of the parapet. Both of these features enhance the existing architecture while serving a practical purpose.

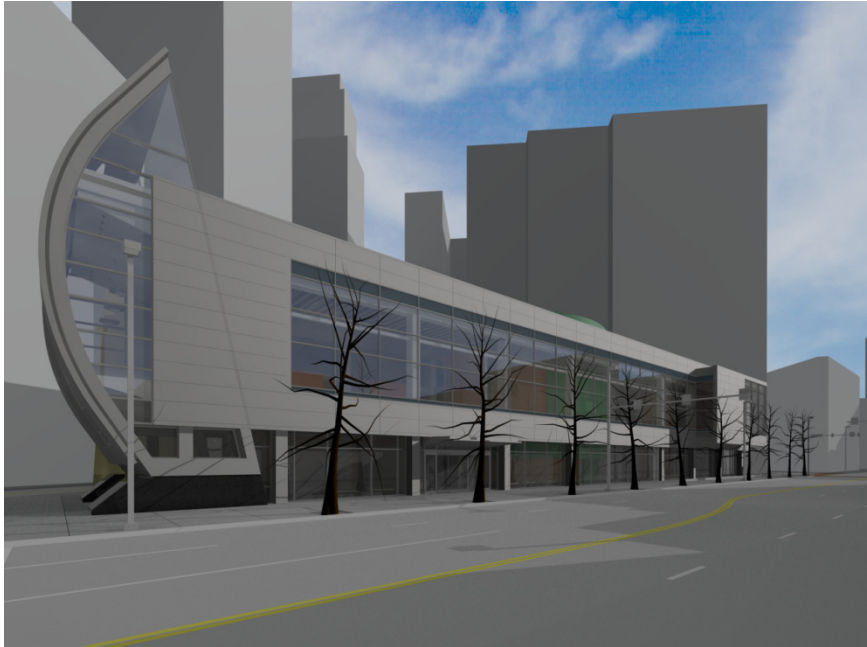


Figure 4.6.3 | View from Liberty Avenue of the existing design for the August Wilson Center.

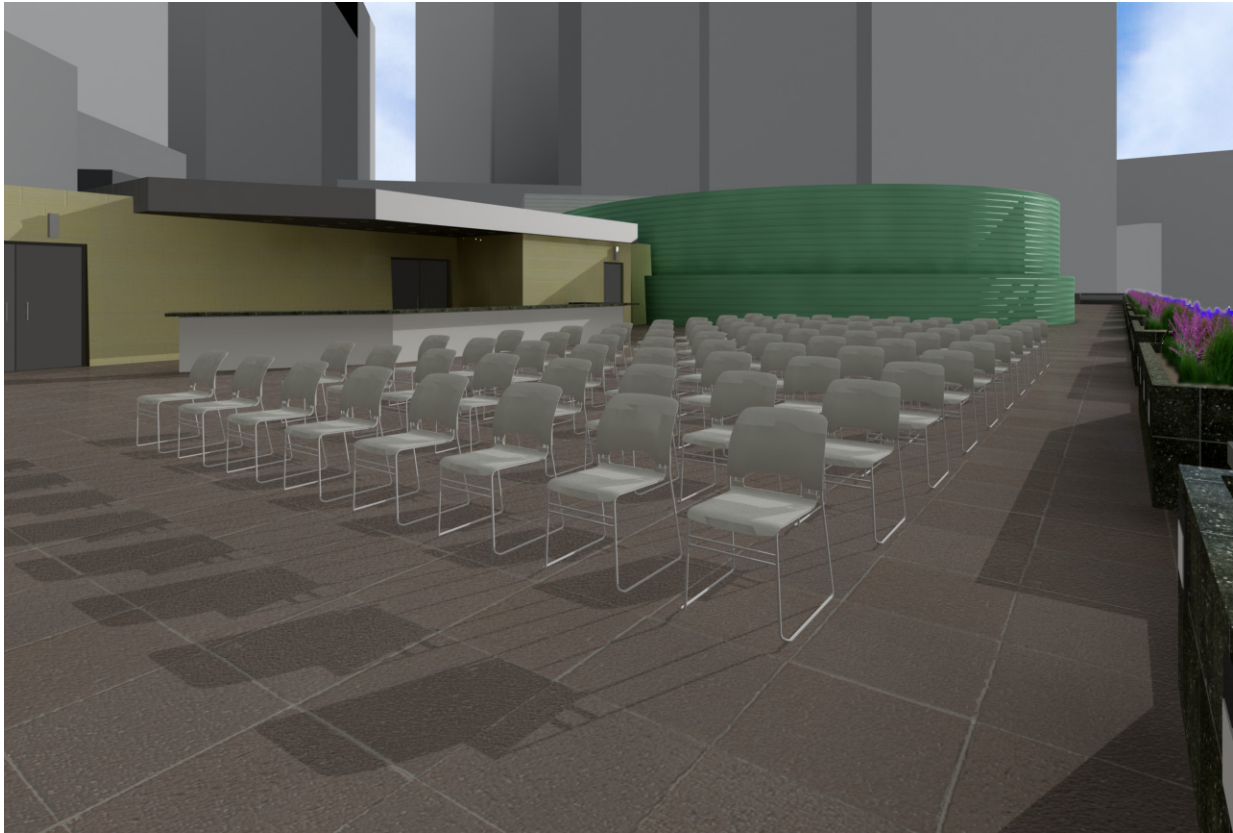


Figure 6.4.4 | Late afternoon view of the roof terrace looking west with temporary seating for a performance.

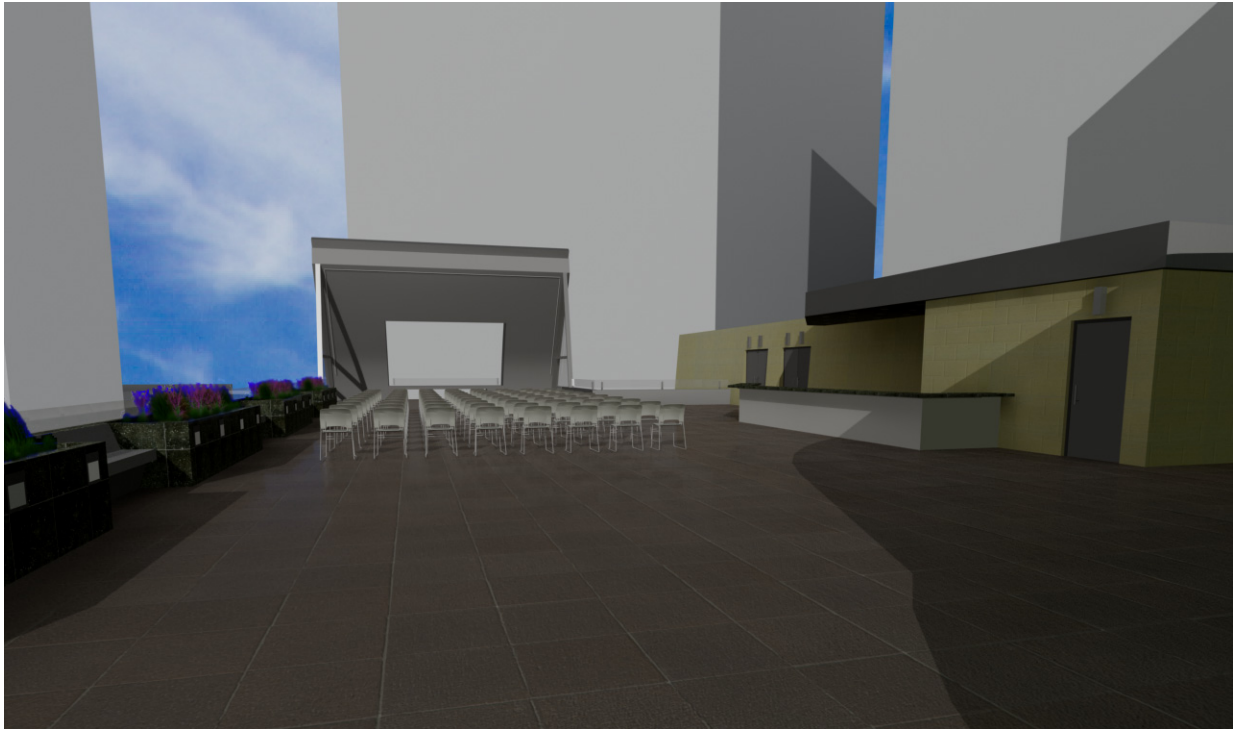


Figure 6.4.5 | Late afternoon view of the roof terrace looking east with the top of the sail as a backdrop.

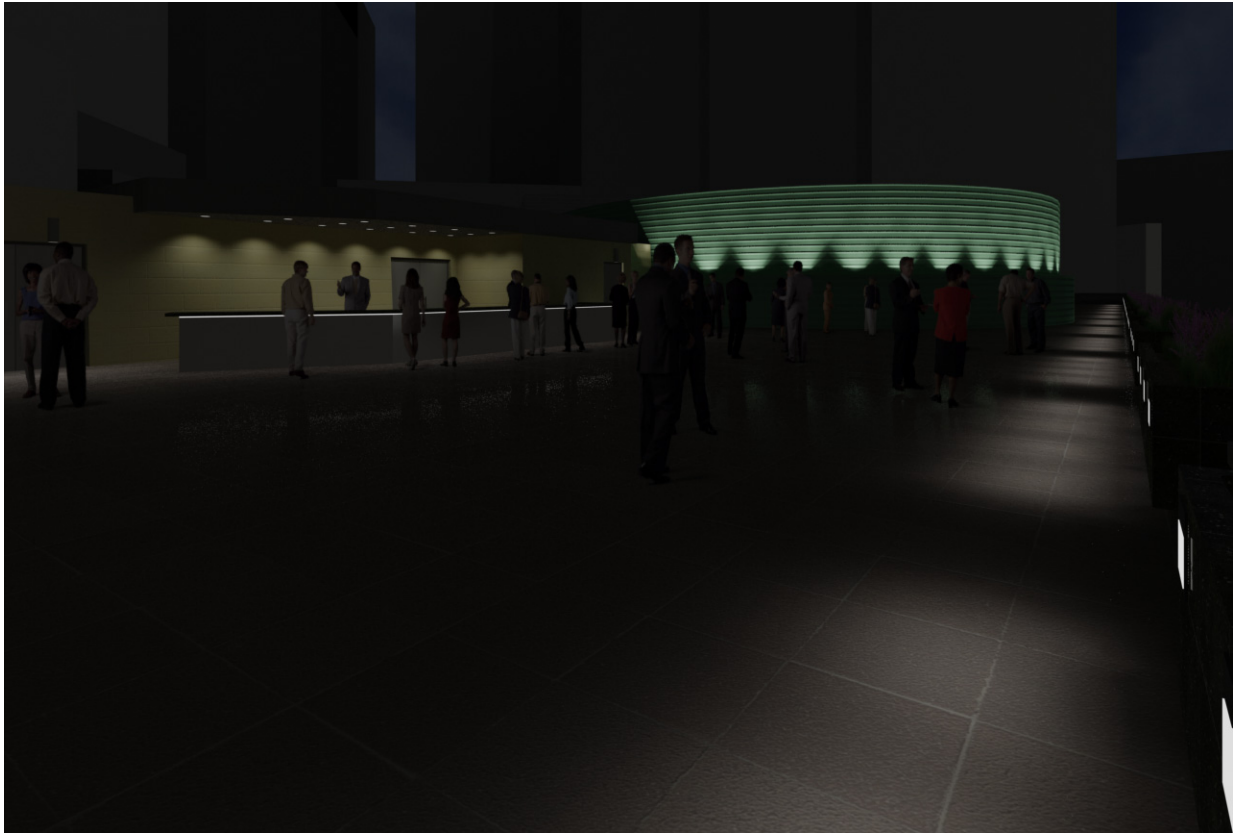


Figure 6.4.6 | Night view of the roof terrace looking west.

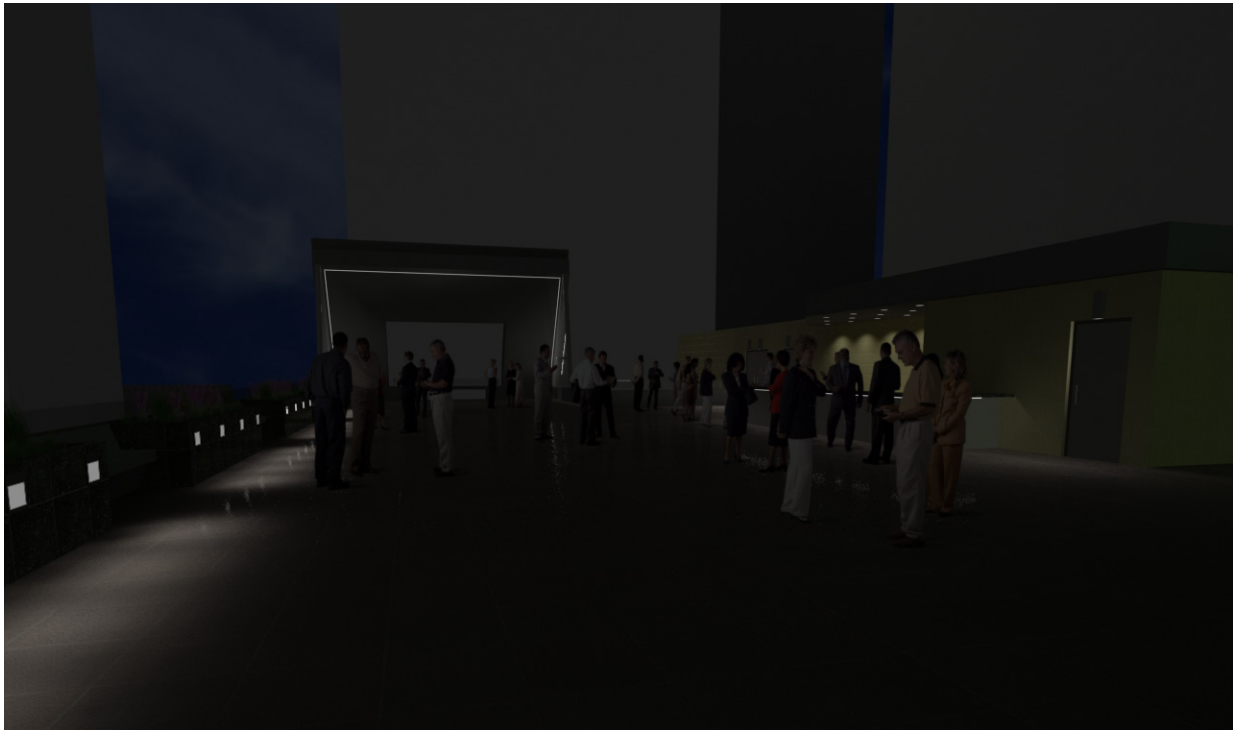


Figure 6.4.7 | Night view of the roof terrace looking east.

5. ANALYSIS AND CONCLUSIONS

With any proposed add-on feature, the owner must decide if the additional functionality is worth the additional cost. For the August Wilson Center, the addition of a roof terrace will add a great deal of useable space that provides a different venue than what is already designed. The design imposes minimally on the existing architecture while creating certain enhancements that integrate with other building systems. Specifically, the vertical extrusion of the theater drum is essential to the lighting design.

The only significant architectural changes would come in the form of egress width and restroom quantity requirements. These areas would have to be accounted for in the design of the whole building. Because of the larger scope of this work, these requirements were not entirely met for this study. Egress and restroom requirements mean that the roof terrace, as currently designed, would not function well as a post-construction addition. Changes to the structural system would also occur, but if designed concurrently with the existing building, these changes would not have a costly impact on the building.

Overall, the roof terrace would be worth pursuing if it were considered at the time of the initial design. However, as a post-construction addition, there are several setbacks that would have to be overcome.