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## Project Scope

The project is an amphitheater design for the Sawmill Museum of Clinton, Iowa. Lots to the north of the museum are available for development. Our choice of lot is the north east. The Sawmill Museum of Clinton wants a welcoming space for both residents and visitors to spend time. The IMU amphitheater here at the University of Iowa is a perfect example of our idea of a welcoming, open space. The museum is also looking to have a space to host events such as its annual Lumberjack Festival. The southern placement of the theater allows further development of the northern portion or leaving it open for the lumberjack festival.



Figure 1. Clinton Lumberjack Festival

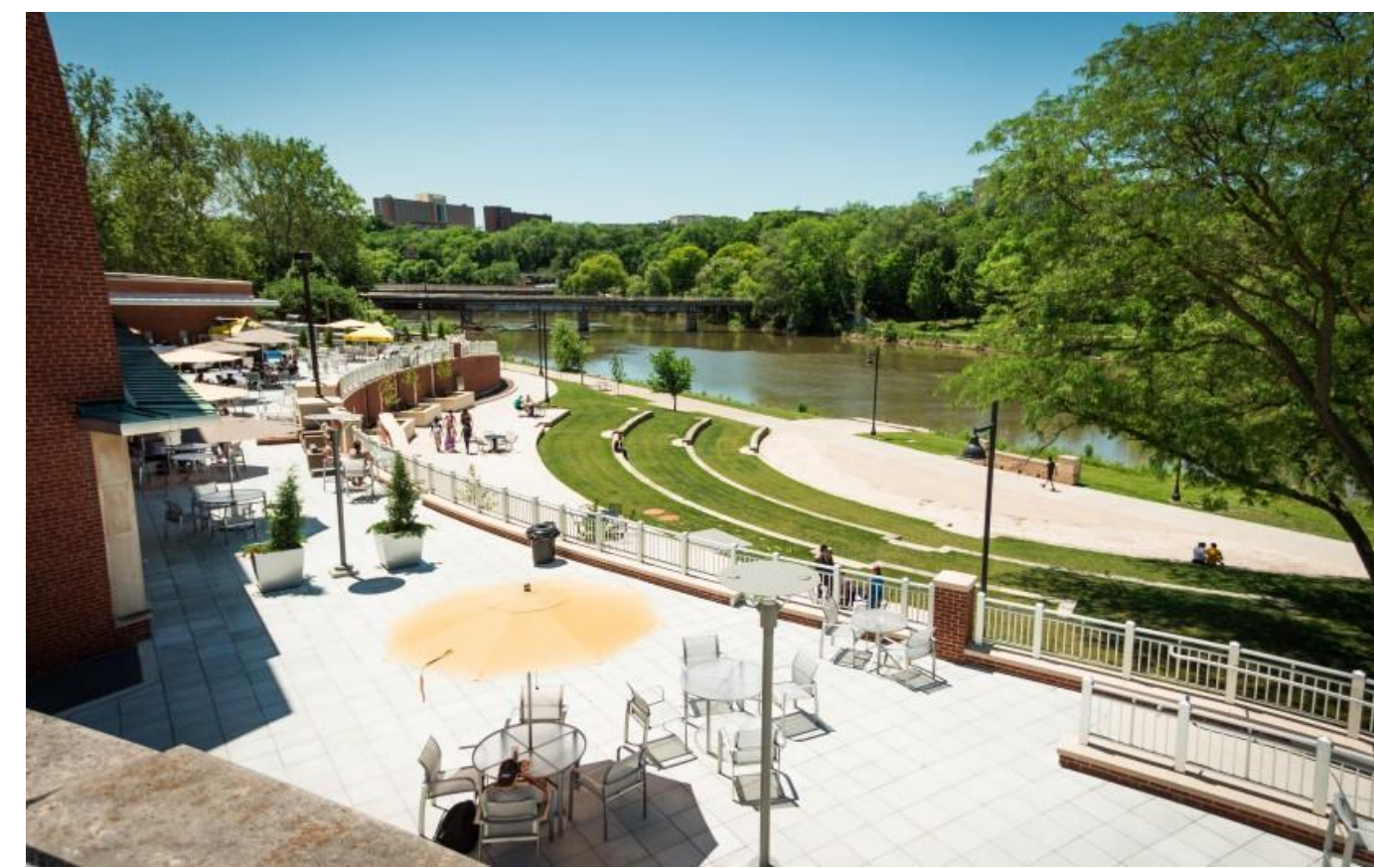


Figure 2. Iowa Memorial Union Iowa city, Iowa

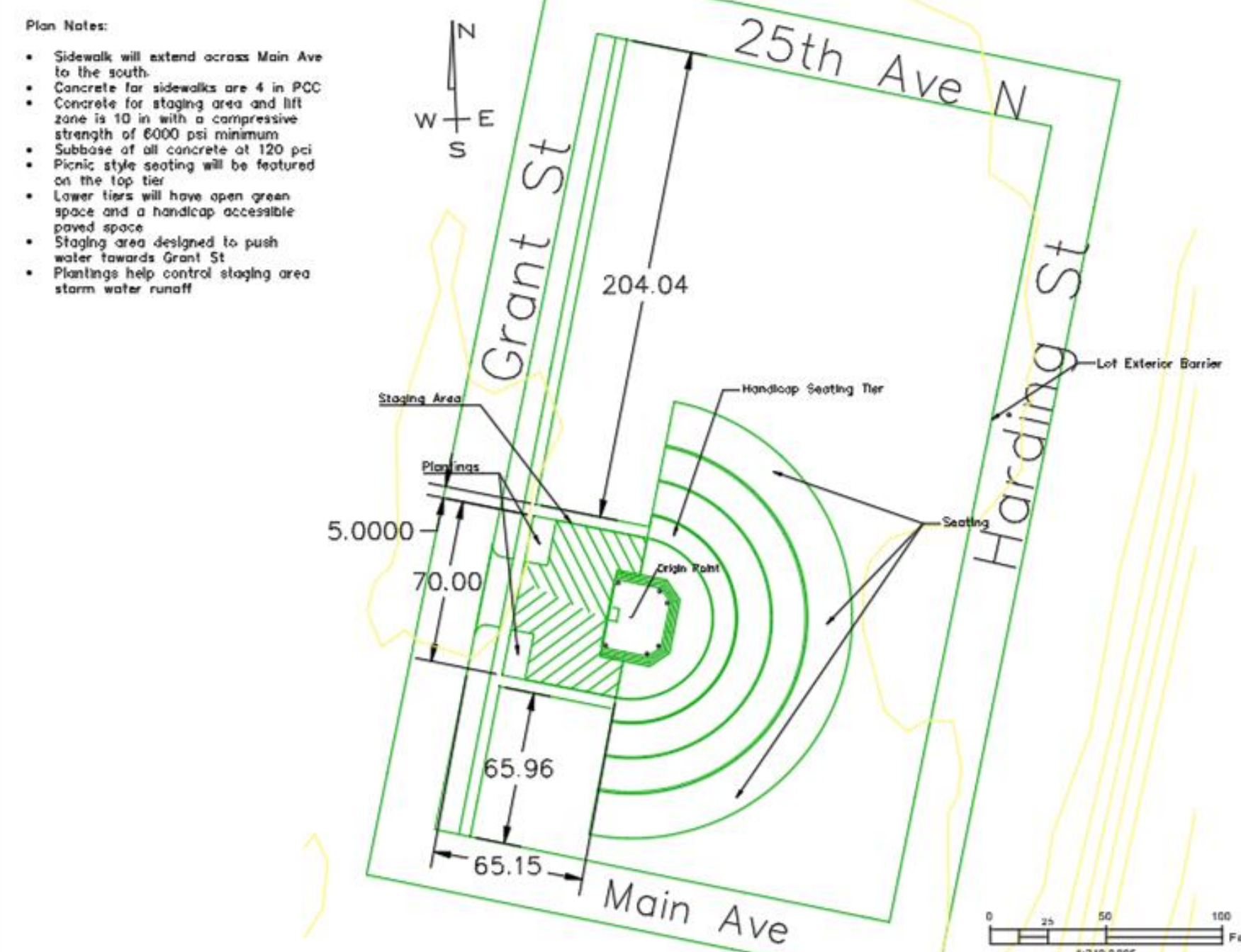


Figure 3. Site Plan of Amphitheater

## Construction Cost Estimate

Each component was evaluated for cost and came out to a total of \$604,343.01. The main provider of cost is the seating area of the theater. The reinforced concrete of the stage also contributes a good portion of the cost. Cost estimates were based on the Iowa DOT bid data for the month of April.

## Design References

- Iowa Statewide Urban Design and Specifications (SUDAS)
- Concrete Reinforcing Steel Institute
- 2018 International Building Code
- City of Clinton, Iowa, Code of Ordinances
- 2010 ADA Standards for Accessible Design

## Final Design

The components of the final amphitheater design had a focus on functionality while keeping the natural look of wood throughout. The seating has four tiers including a front handicap-accessible slab and a back picnic table style seating. A gravel-filled steel reinforced concrete stage will be the center of attention. The stage is covered by a pavilion with a removable back sheet for easier viewing of the holiday train. A loading area off Grant St features a stage lift and it is sloped to allow for proper drainage of stormwater. Finally, the back level of seating is supported by a retaining wall with a weep hole to help with drainage there.

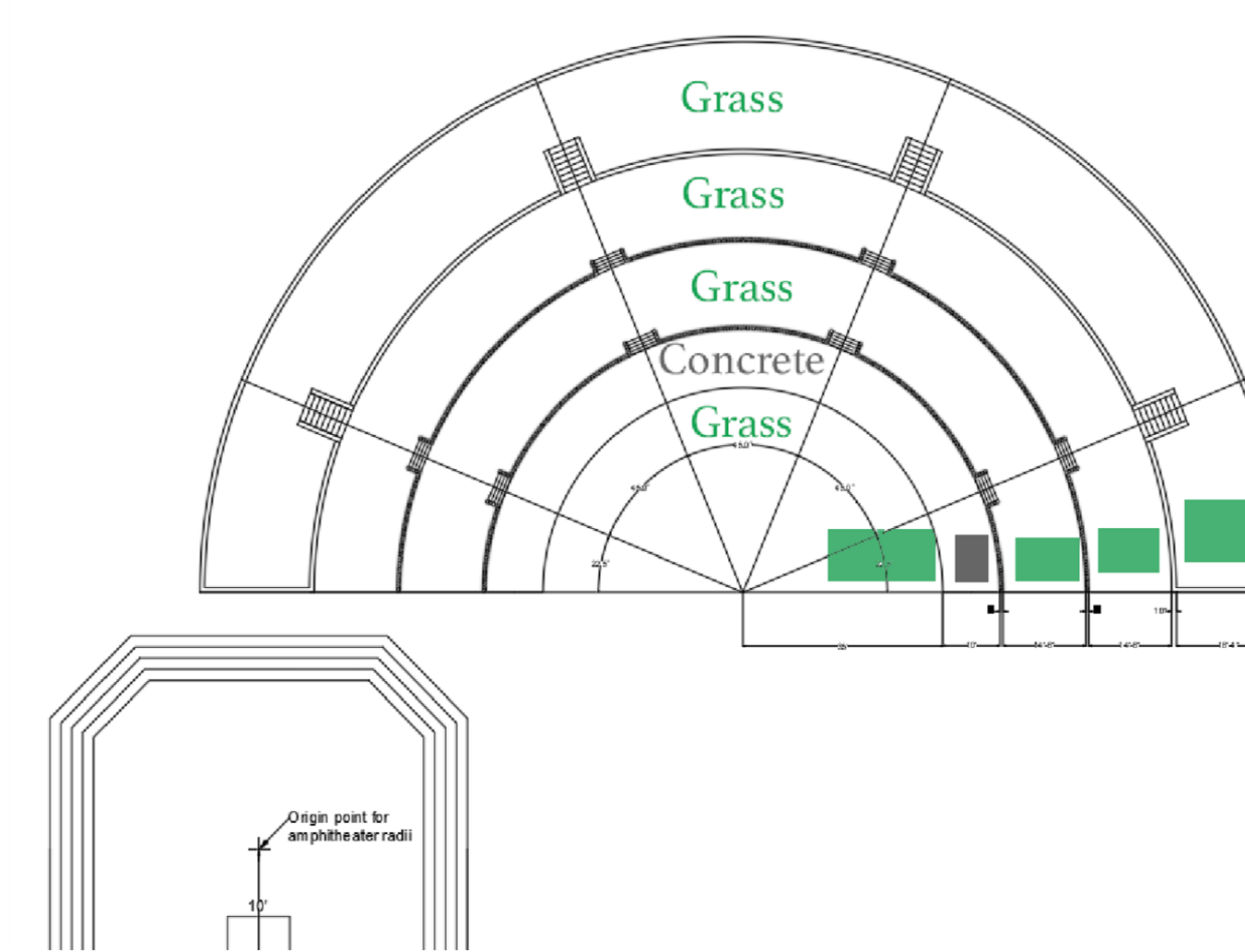


Figure 4. Seating Overview

Retaining Wall Detail

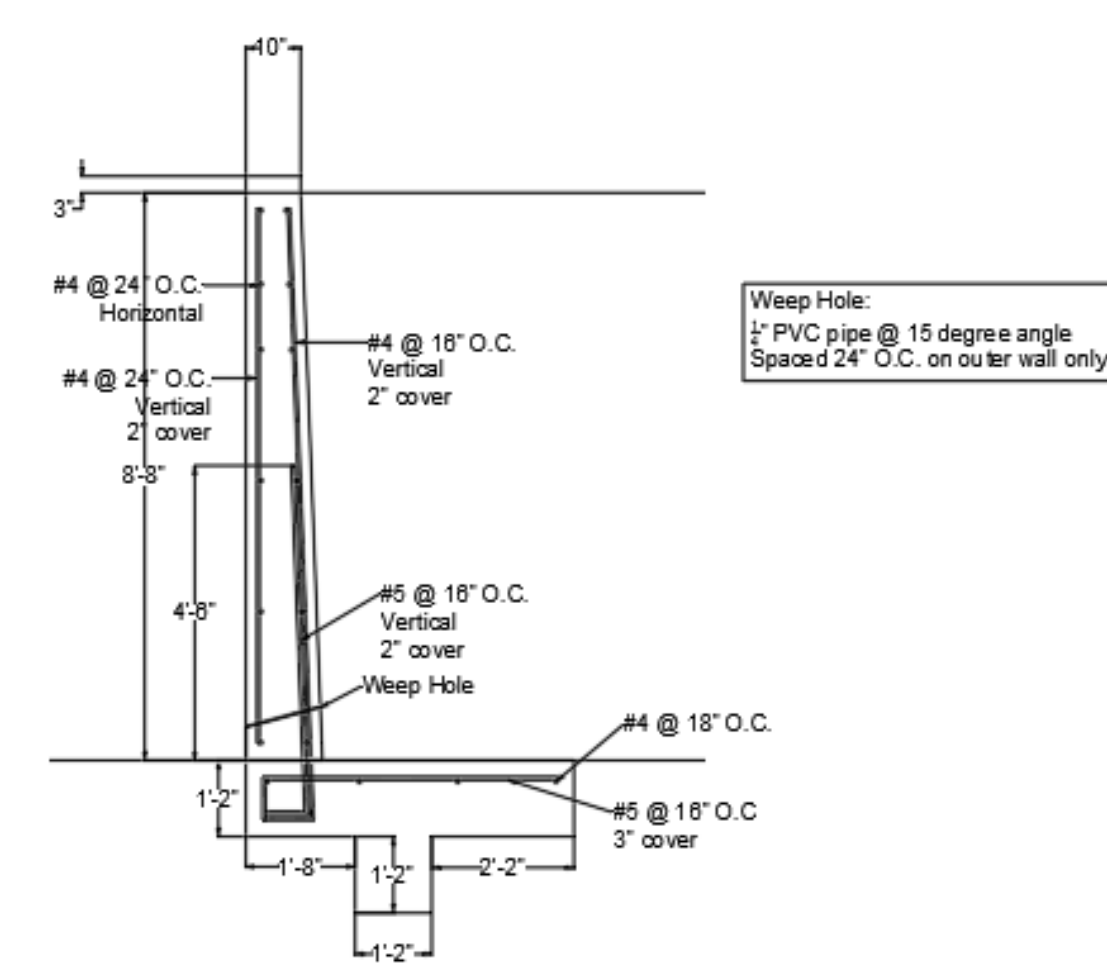


Figure 5. Retaining Wall Detail

Table 1. Construction Cost Breakdown

Component	Price
Pavilion	\$ 46,560.29
Amphitheater	\$ 316,832.12
Stage	\$ 223,167.00
Staging Area	\$ 8,873.60
Cut/Fill	\$ 8,910.00
<b>Total</b>	<b>\$ 604,343.01</b>

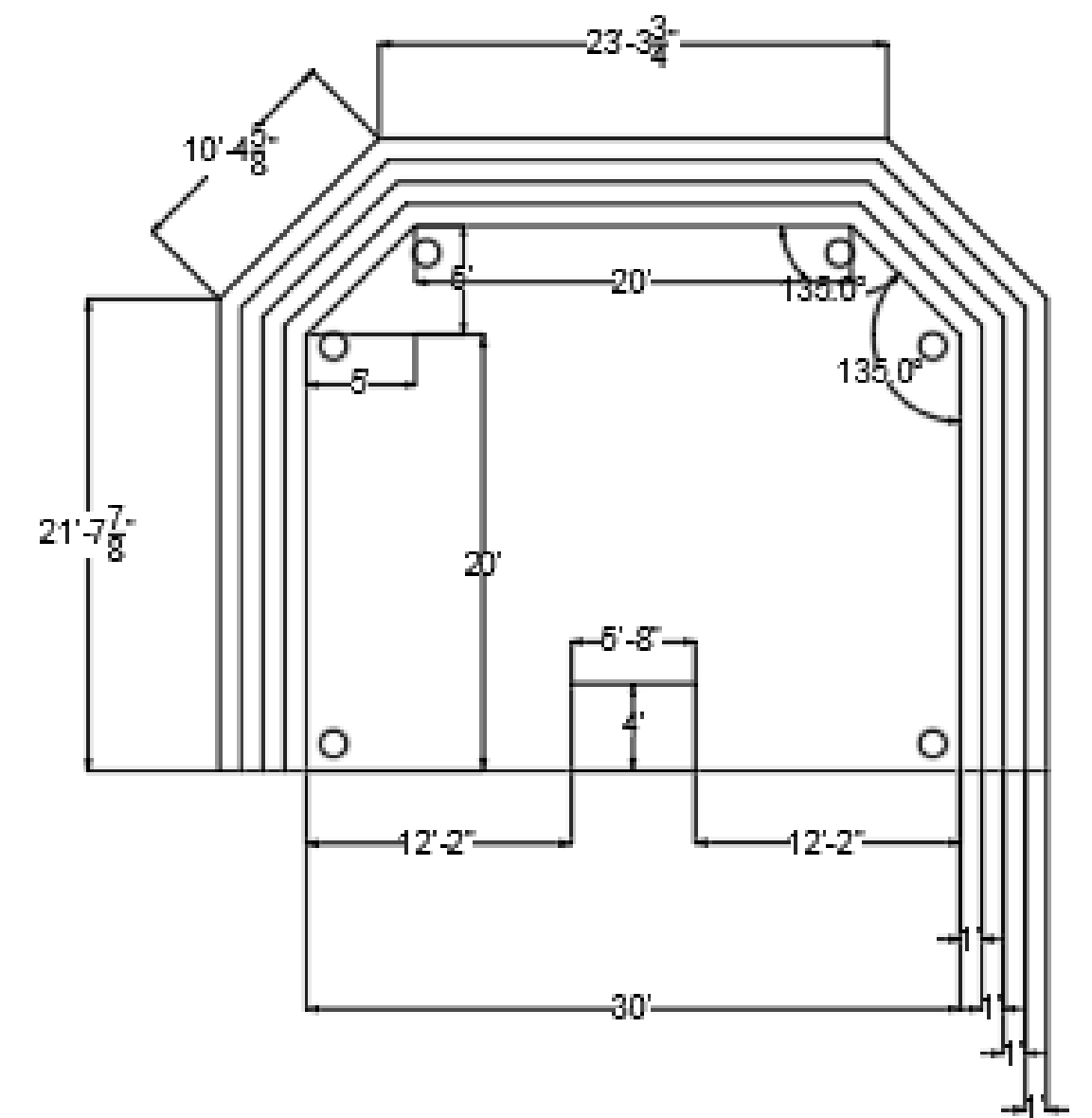


Figure 6. Stage Detail

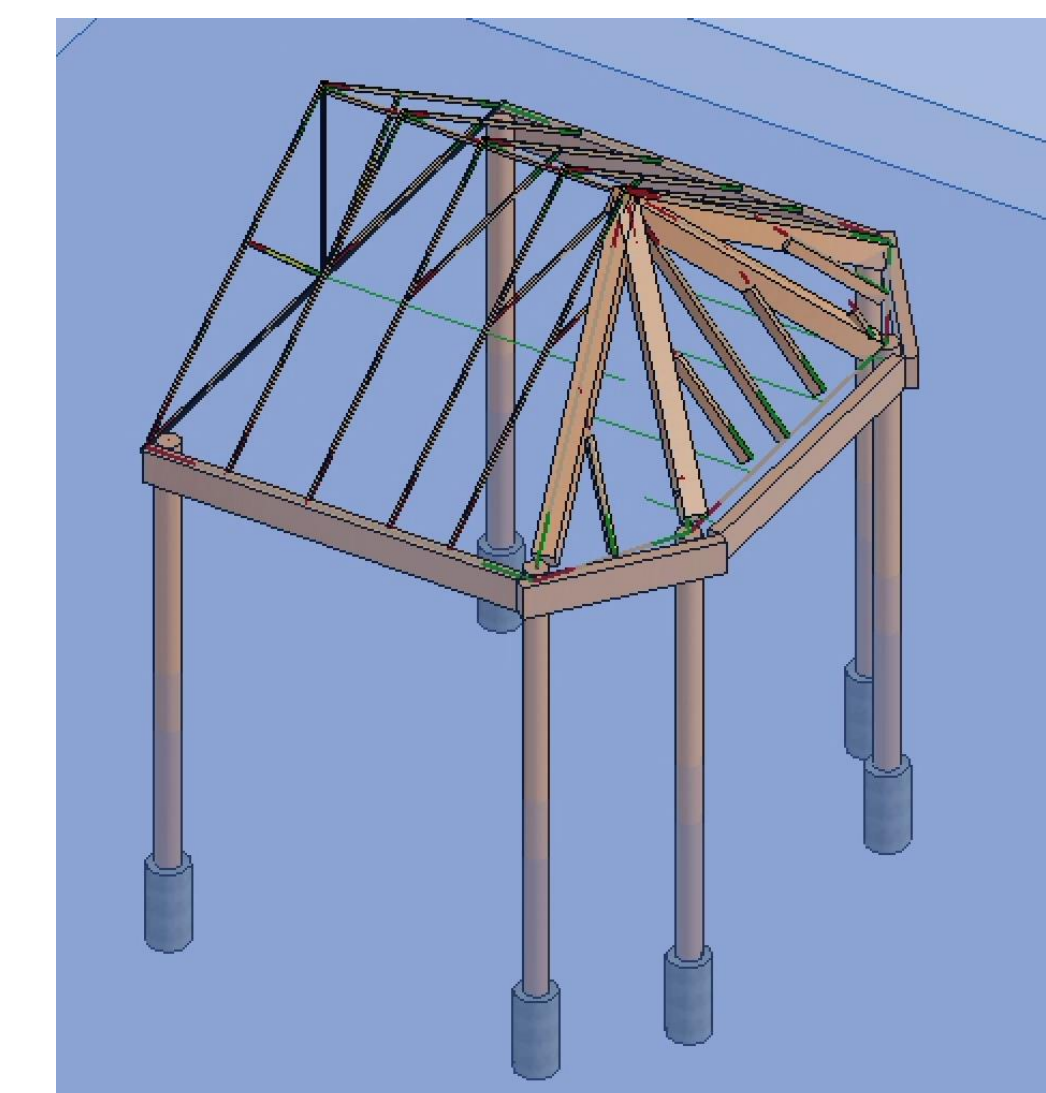


Figure 7. Pavilion Rendering

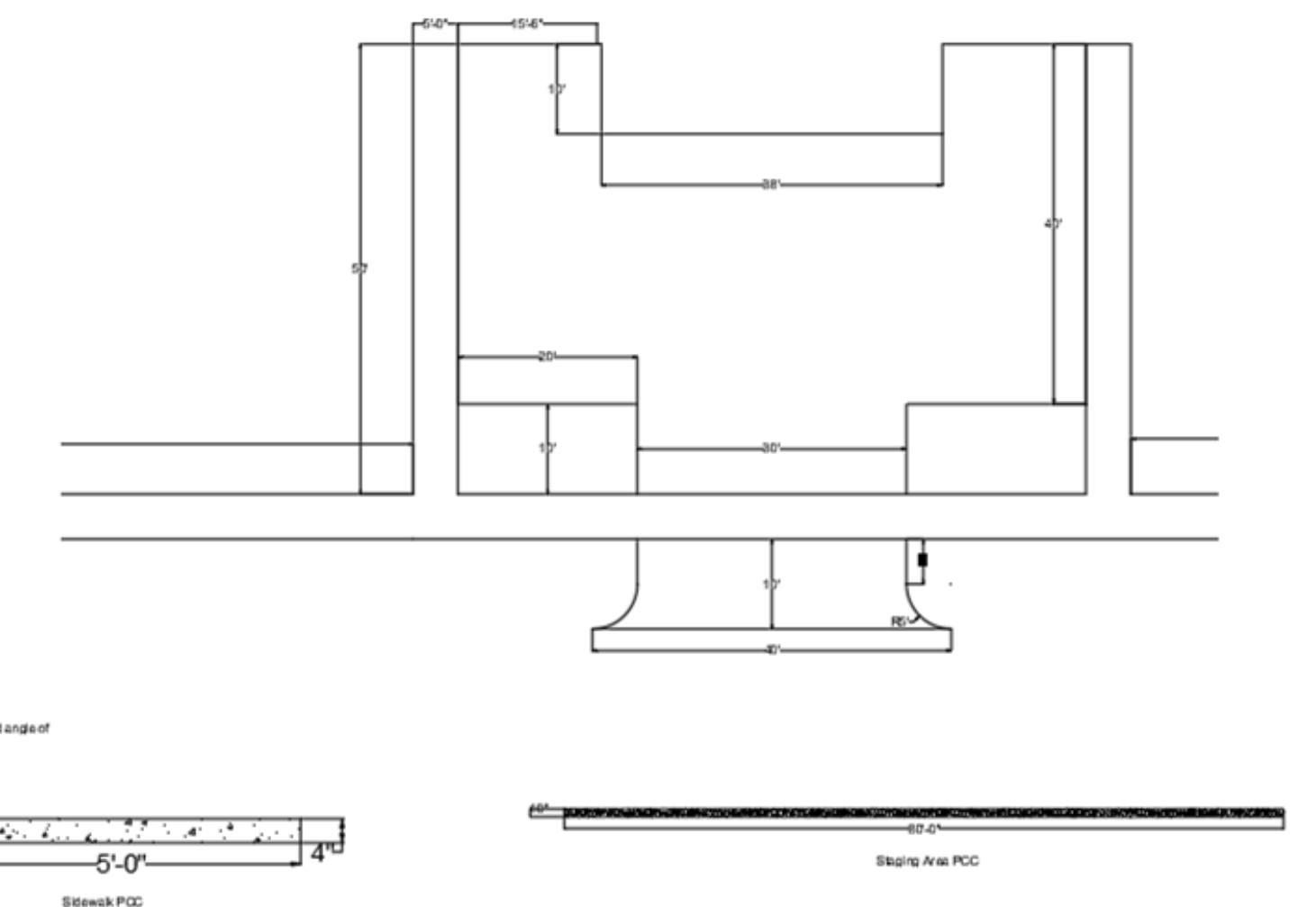


Figure 8. Staging Area Detail