

5.0 Design Summary


5.1 Description of the problem

We were tasked with designing a community space for Sugar Creek Baptist Church. Our job was to design a plan to turn a three acre plot of land into a space that would draw in members of the community and serve as a gathering place for both the community and the congregation. With the goal of creating a fun, family friendly space, our design has to be accessible to everyone for individual activities, group events, and everything in between.

Key:

1. Pickleball court
2. Octoball Court (x2)
3. Swing set
4. Drinking fountain
5. Grill (x3)
6. Basketball hoop
7. Soccer field
8. Tree line
9. Greenhouse



Figure  Aerial image of proposed design layout

 K?

5.2 Boundaries

5.2.1 Sound Dampening

The nearby highway along the southern border causes a noise issue and poses a safety risk for small children. To separate the plot from the highway within regulation, we recommend a line of short, full-fill evergreens along the boundary. The nearly 360 foot long border would require approximately 40 saplings to be planted and allowed to grow over two years to become viable. There is also an underground utility line along the edge of the plot, so the trees would need to be recessed up the swail by a few feet.

5.2.2 Surrounding Infrastructure?

To the North and West of the plot are two residences which would need to be fenced off for privacy on both sides.

5.3 Activities

Soccer Field 5.3.1

We plan to implement a quarter scale soccer field to the north of the plot that can also serve as a multipurpose space during events. To reduce the amount of soccer balls being kicked over the plot and boundaries, we recommend a set of small, flexible poles holding up light plastic netting around the field. These poles can be quickly set up or taken down by pushing them into the ground around the field.

Basketball Court 5.3.2

The south section of the parking lot can be set aside as a basketball court with a permanent net. If more parking space is required, the court will still contain parking spaces and can be the last place for cars to park.

Pickleball/Octoball 5.3.3

The North end of the 3 acre property will include a pickleball and octoball area. These are two main activities that the congregation would like to have implemented and will need to be done separately from the soccer field as they use more than just an open field of grass to be played.

Playground Expansion 5.3.4

The existing playground structure is acceptable as is, but we recommend the addition of a new swing set next to it. New mulch should also be added to the existing area.

Grills and Fountain 5.3.5

We plan to include 3 charcoal standing grills and an outdoor water fountain near the pavilion.

Walking Trail 5.3.6

The walking trail will be the number one advancement to the plot and will border the 3 acre property. People from the congregation, no matter the age, will be able to make use of this improvement by running, walking, skateboarding, biking, or many other activities.

Greenhouse 5.3.7

A greenhouse may be implemented at the north east side of the plot bordering the parking lot and start of the walking trail. While the congregation hosts people of various ages, this will be great for sightseeing and people who would rather not be doing physical activities on the rest of the plot.