KSU Mini-Pavilion @ Cobb County Safety Village (CCSV)

Deploying Research Infrastructure

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Project Statement:

The project is part of a multi-stakeholder co-operation between KSU, the Cobb County Safety Village, and Cobb County Schools. KSU will design, construct, and install a small pavilion representing KSU at the Cobb County Safety Village.

KSU faculty and students are provided with a unique research facility located at the Cobb County Safety Village. Various faculty from the university can leverage the pavilion and partnership between the Cobb County Safety Village and Cobb County Schools for research grants and research experimentation.

The Cobb County Safety Village desires to collaborate with KSU to provide a novel safety program where visitors will experience safety scenarios through virtual reality / augmented reality (VR/AR) experiences.

Cobb County Schools desires to engage middle school and high school students in STEM related activities generated by the KSU structure at the Cobb County Safety Village.

The theme of the pavilion: Smart, Safe, and Sustainable intersects directly with one of the KSU four research themes: Sustainable and Safe Communities. The pavilion can be a didactic tool in demonstrating to middle and high school students the connections and intersections between safety and sustainability.

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Team of KSU Faculty/SA:

Dr. Billy Kihei (PI) Department of Electrical and Computer Engineering - Southern Polytechnic College of Engineering and Engineering Technology, Assistant Professor

Michael James Carroll (Co-PI 1) Department of Architecture - College of Architecture and Construction Management, Associate Professor

Dr. Sanjeev Adhikari (Co-PI 2) Department of Construction Management - College of Architecture and Construction Management, Assistant Professor

Dr. Sandip Das (Co-PI 3) Department of Electrical Engineering - Southern Polytechnic College of Engineering and Engineering Technology, Assistant Professor

Amaal Al Shenawa (Co-PI 4) Department of Construction Management - College of Architecture and Construction Management, Assistant Professor

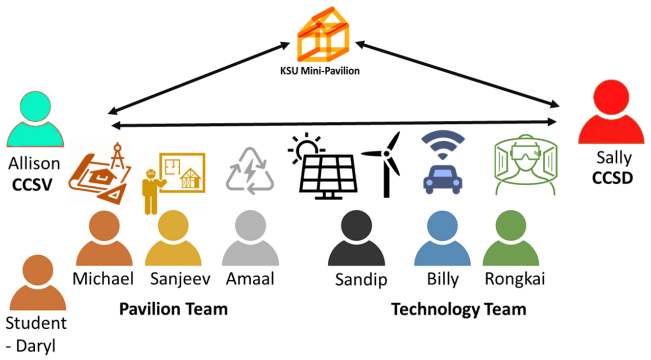
Dr. Ronkai Guo (Co-PI 5) Department of Software Engineering and Game Development - College of Computing and Software Engineering, Assistant Professor

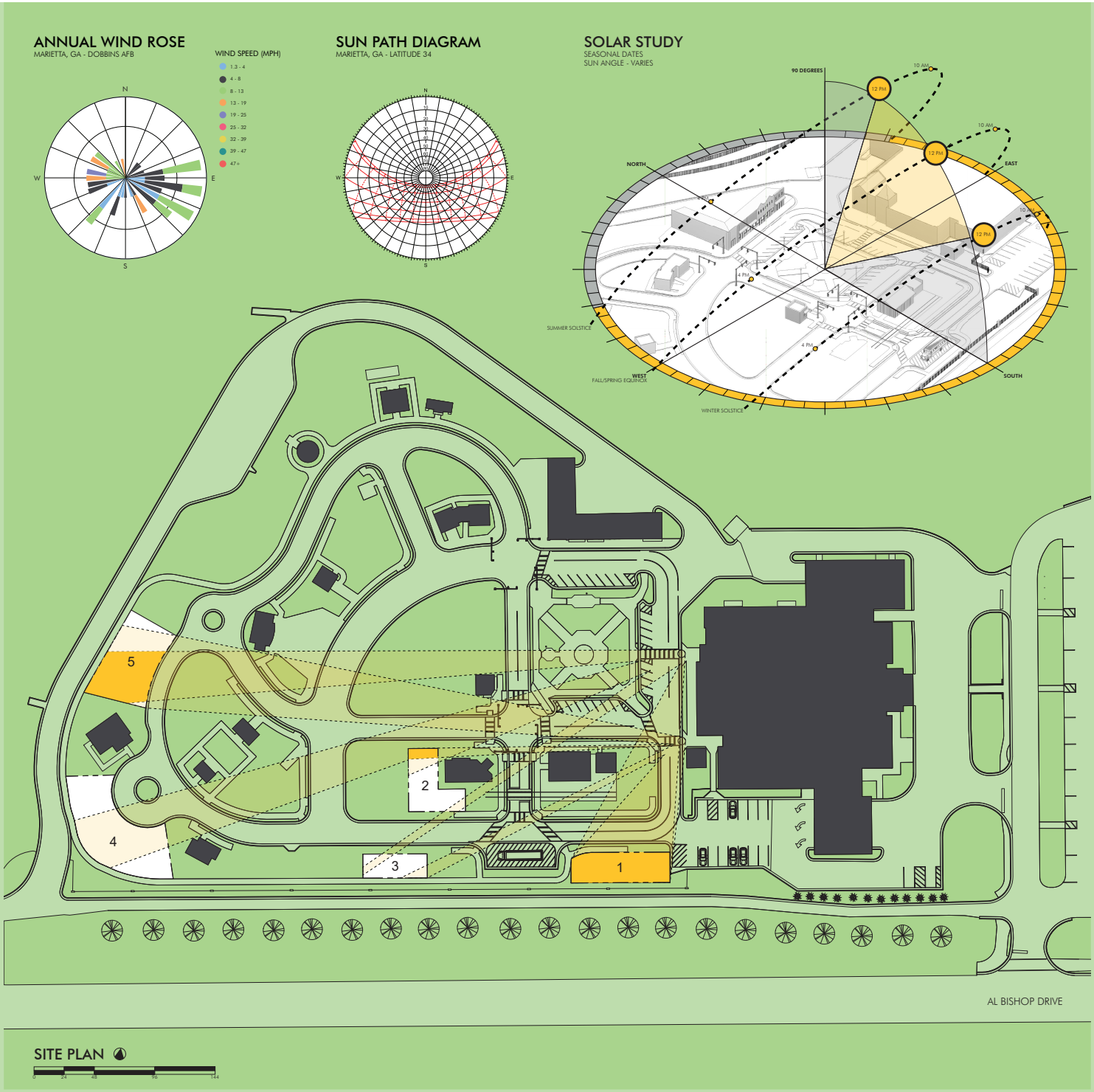
Student Assistant (Summer 2020 Daryl Rowe (4th Year Undergraduate Architecture Student)

External:

Allison Carter (Ext. Co 1) Cobb County Safety Village, Director

Dr. Sally Creel (Ext. Co 2) Cobb County Schools, District Administrator – STEM & Innovation Supervisor





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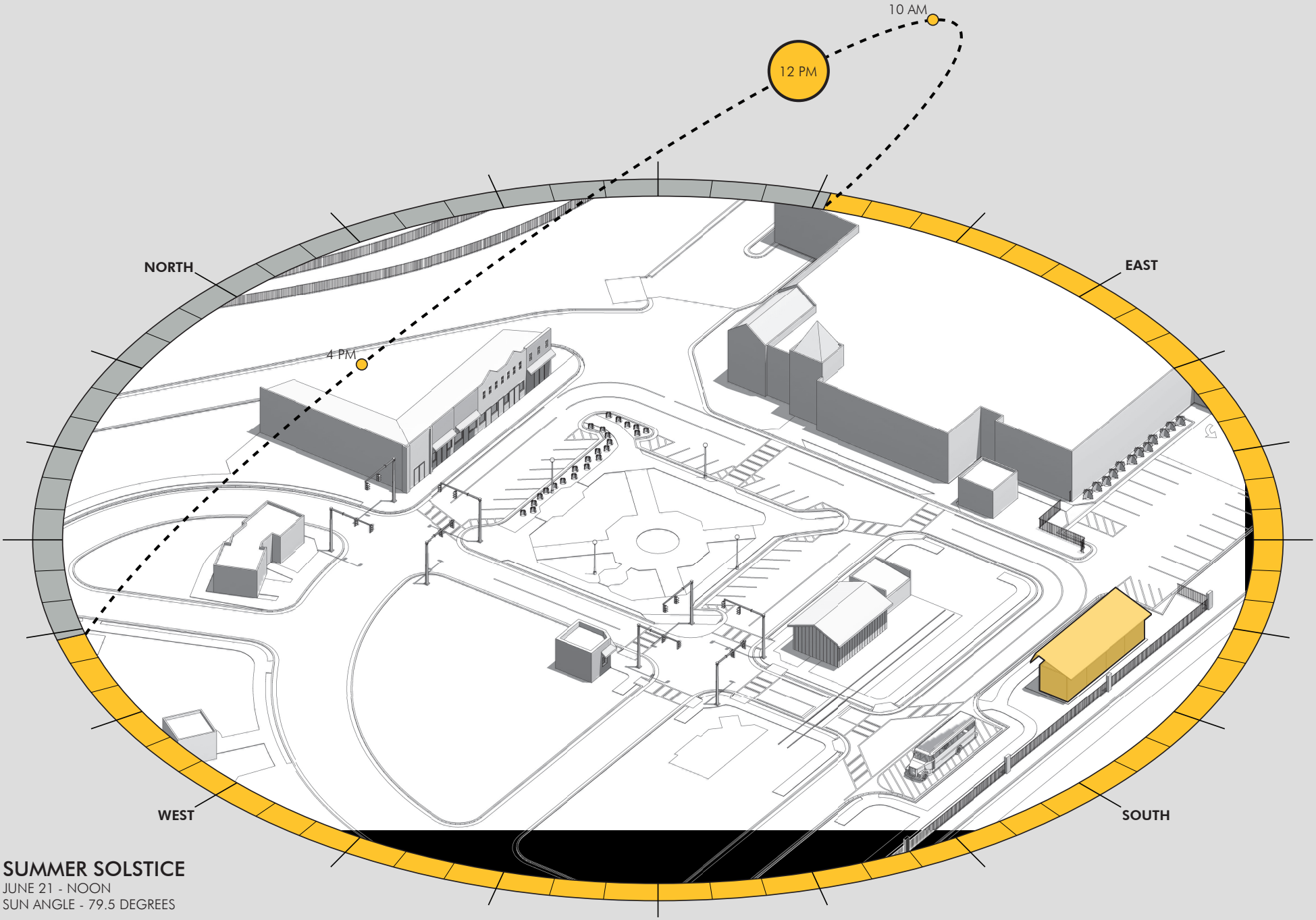
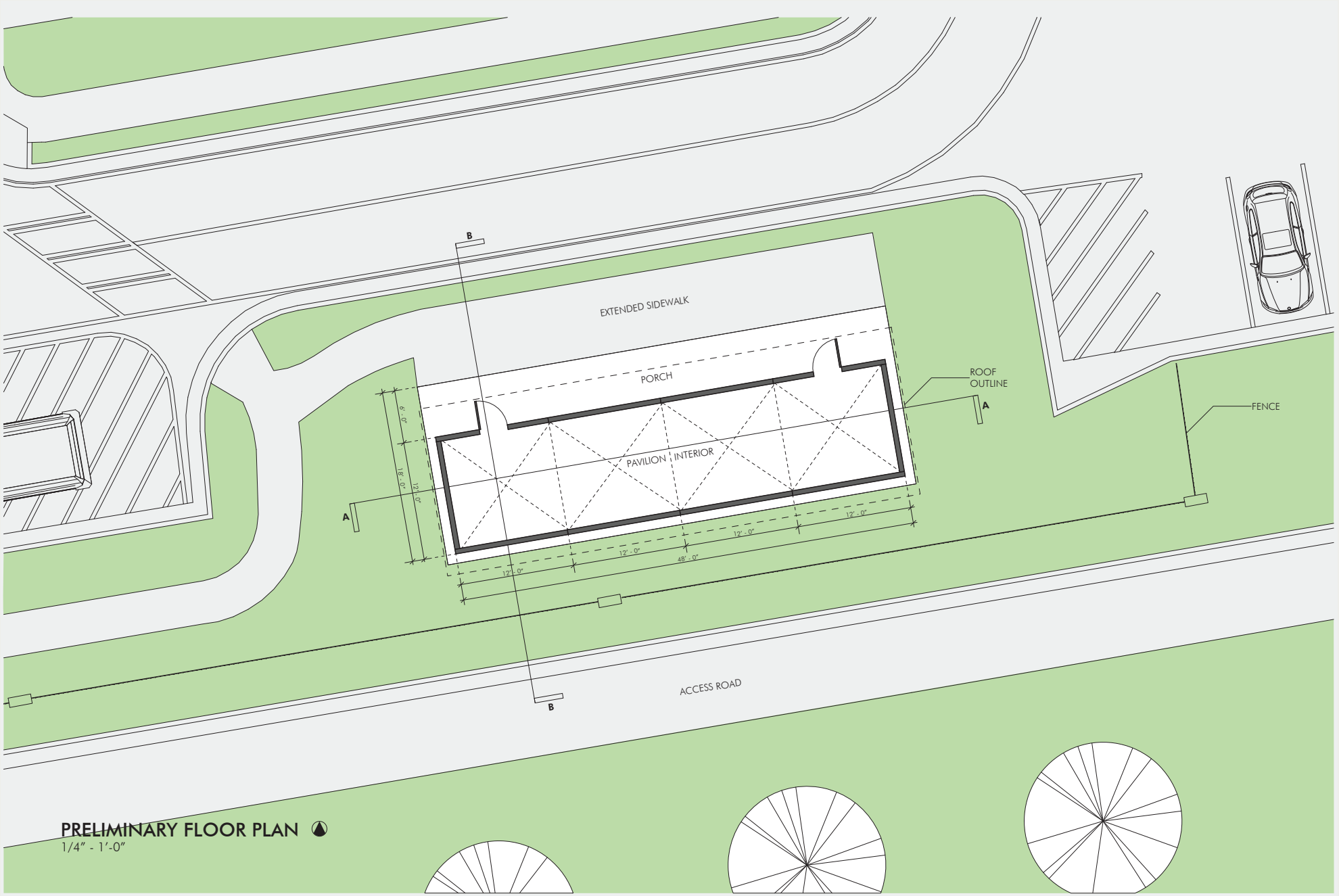


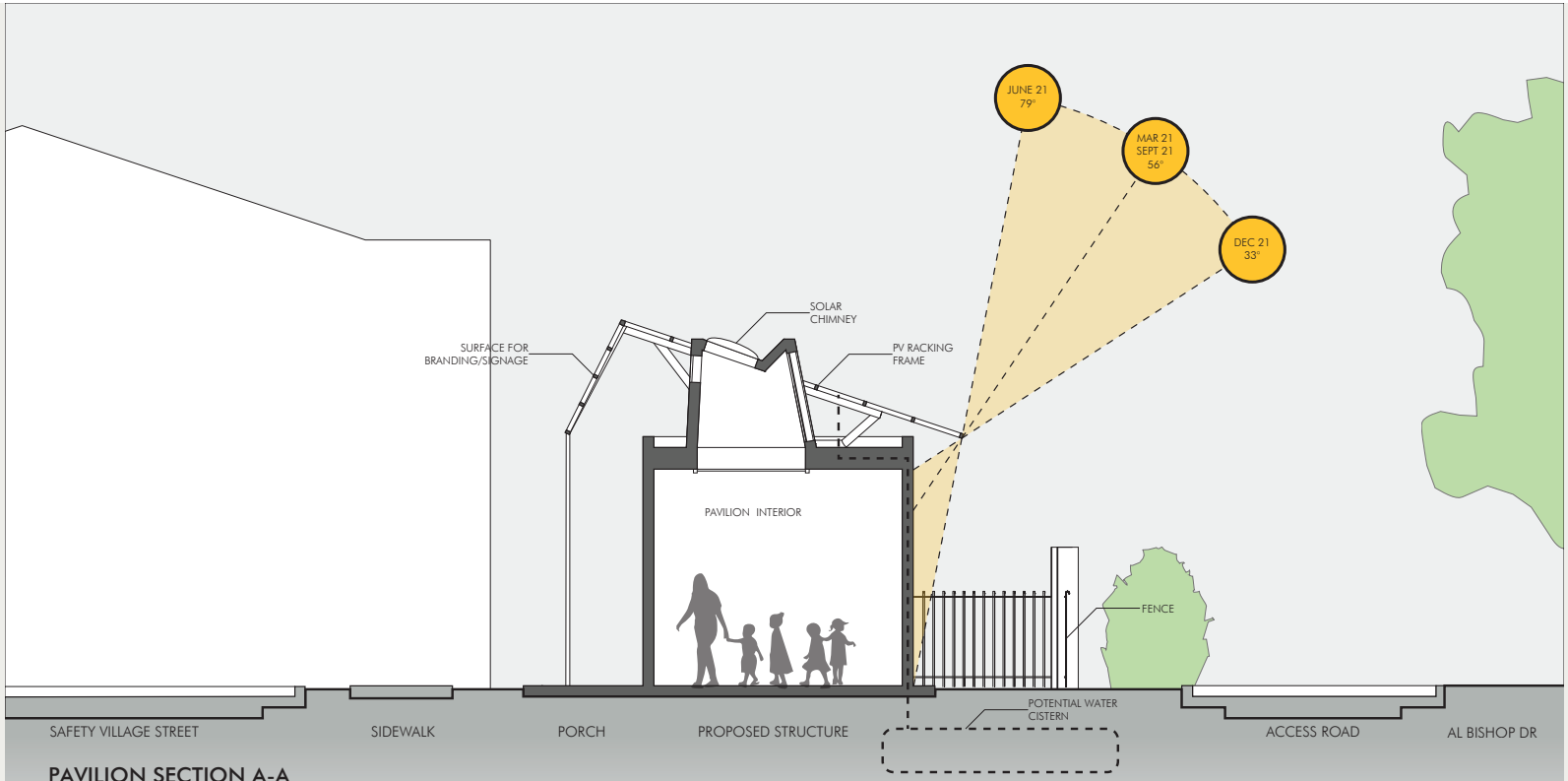
SUMMER SOLSTICE

JUNE 21 - NOON
SUN ANGLE - 79.5 DEGREES

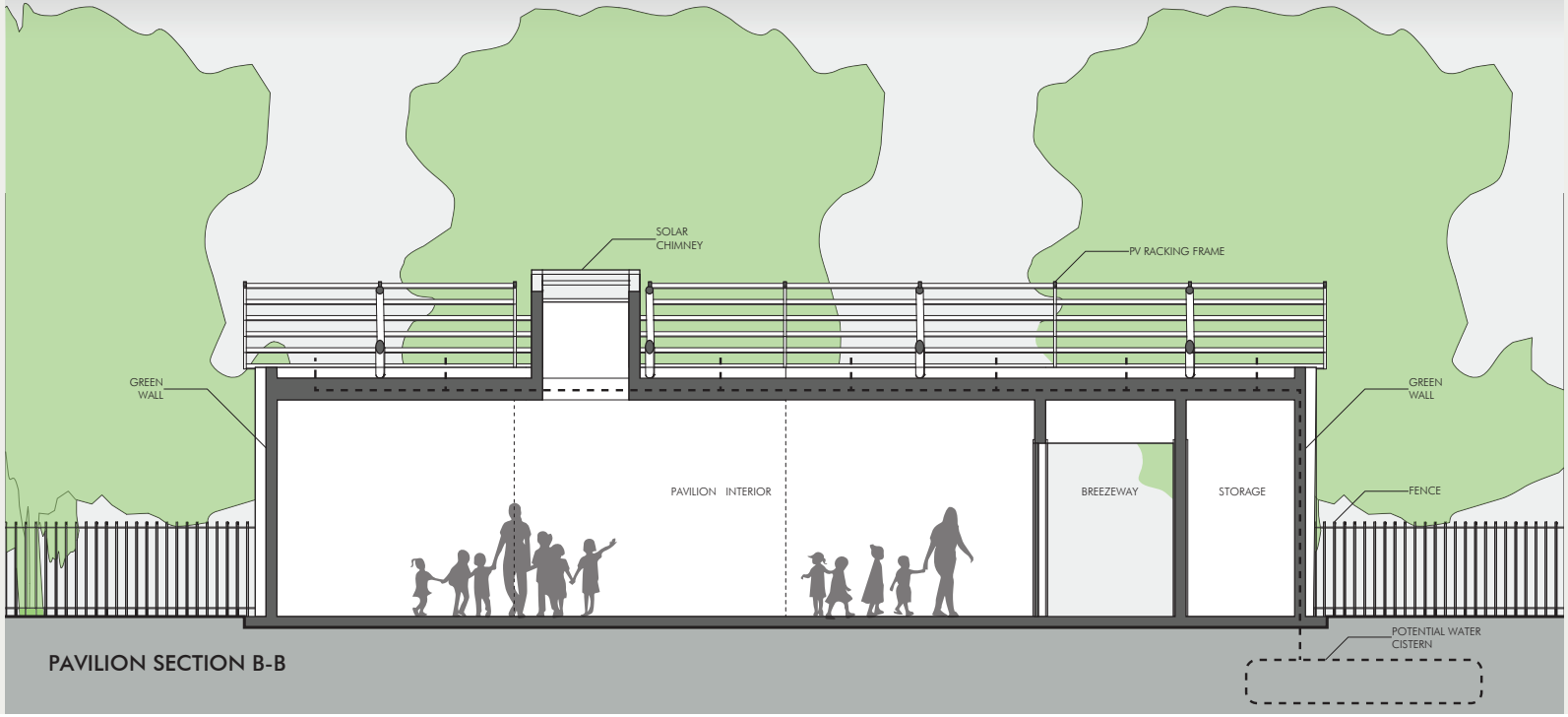


PRELIMINARY FLOOR PLAN

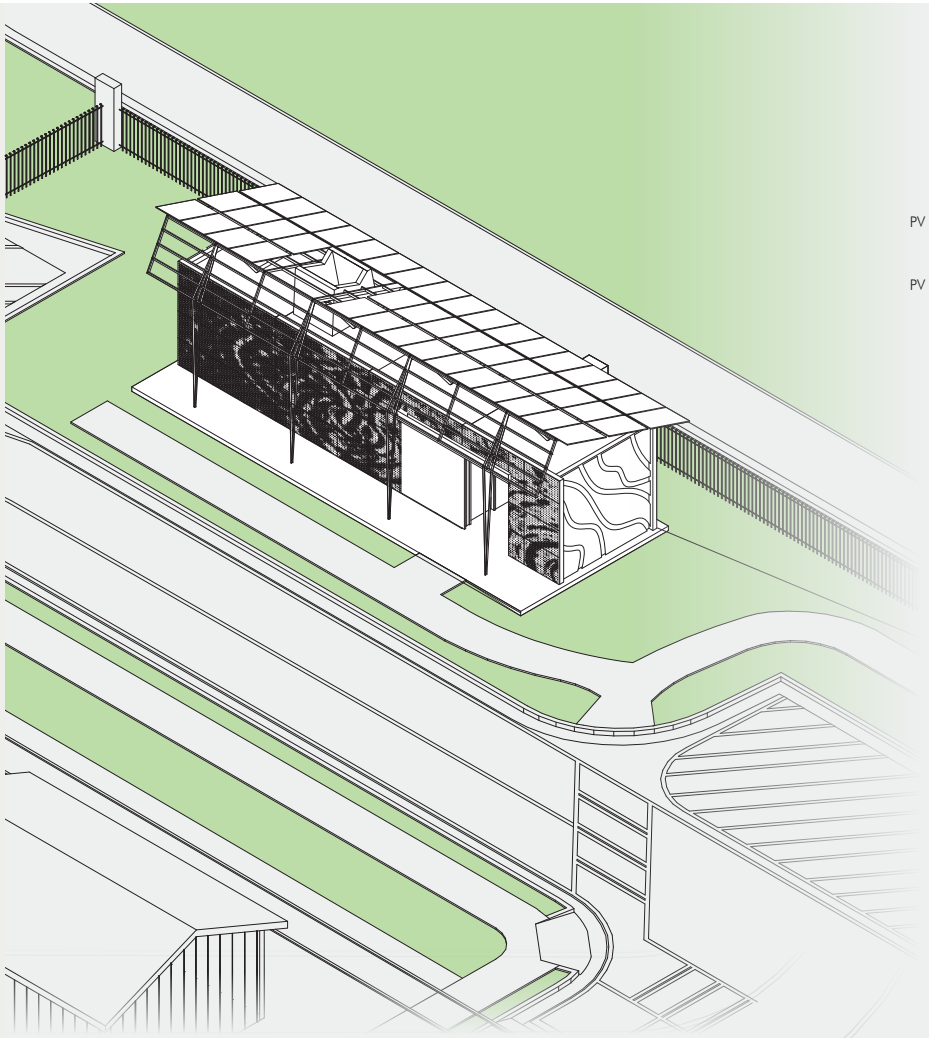
1/4" - 1'-0"



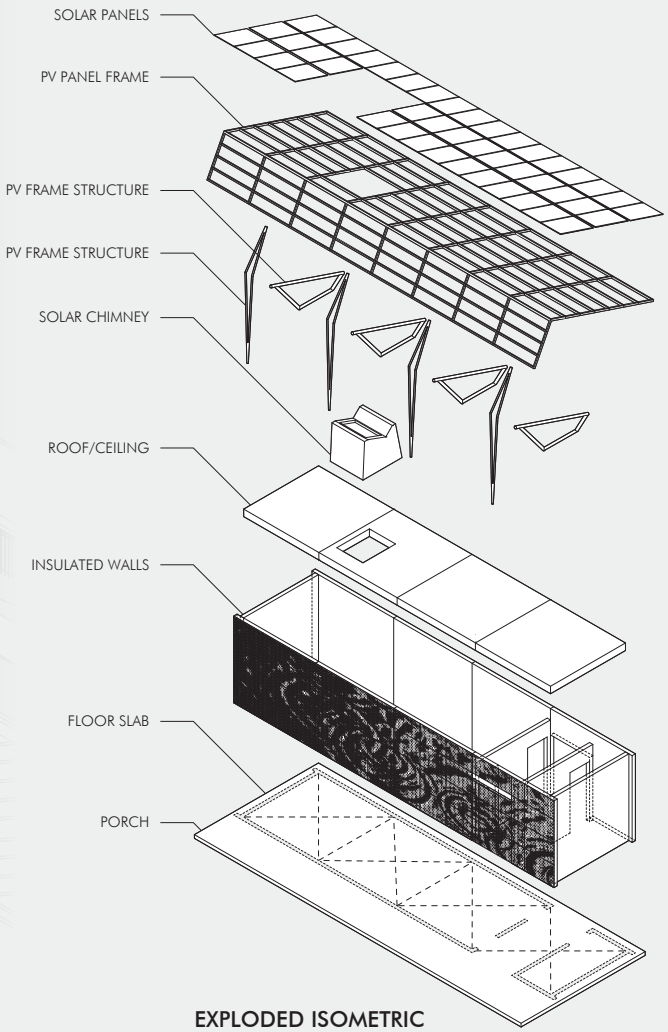
PAVILION SECTION A-A



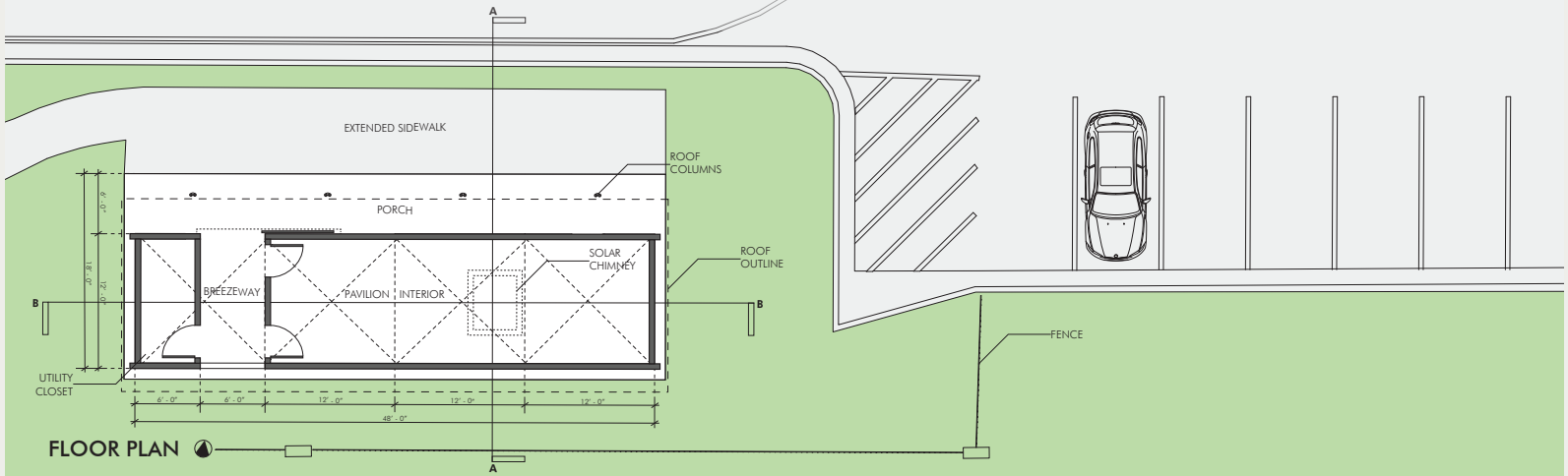
PAVILION SECTION B-B



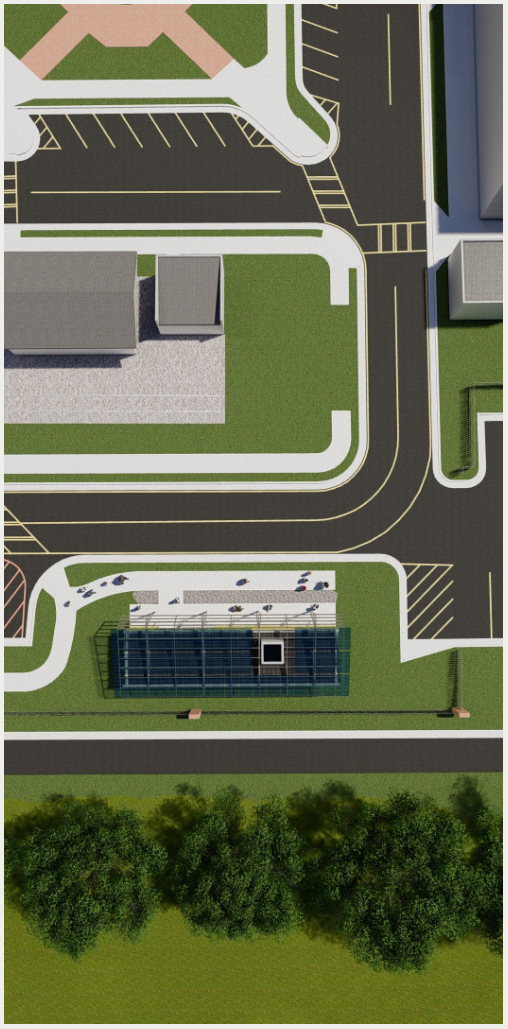
NORTHWEST ISOMETRIC

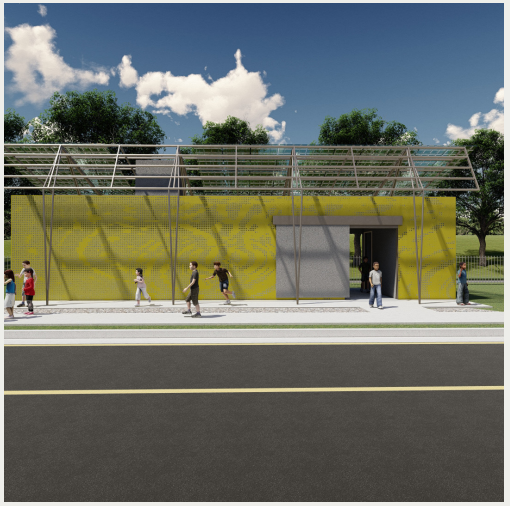


EXPLODED ISOMETRIC

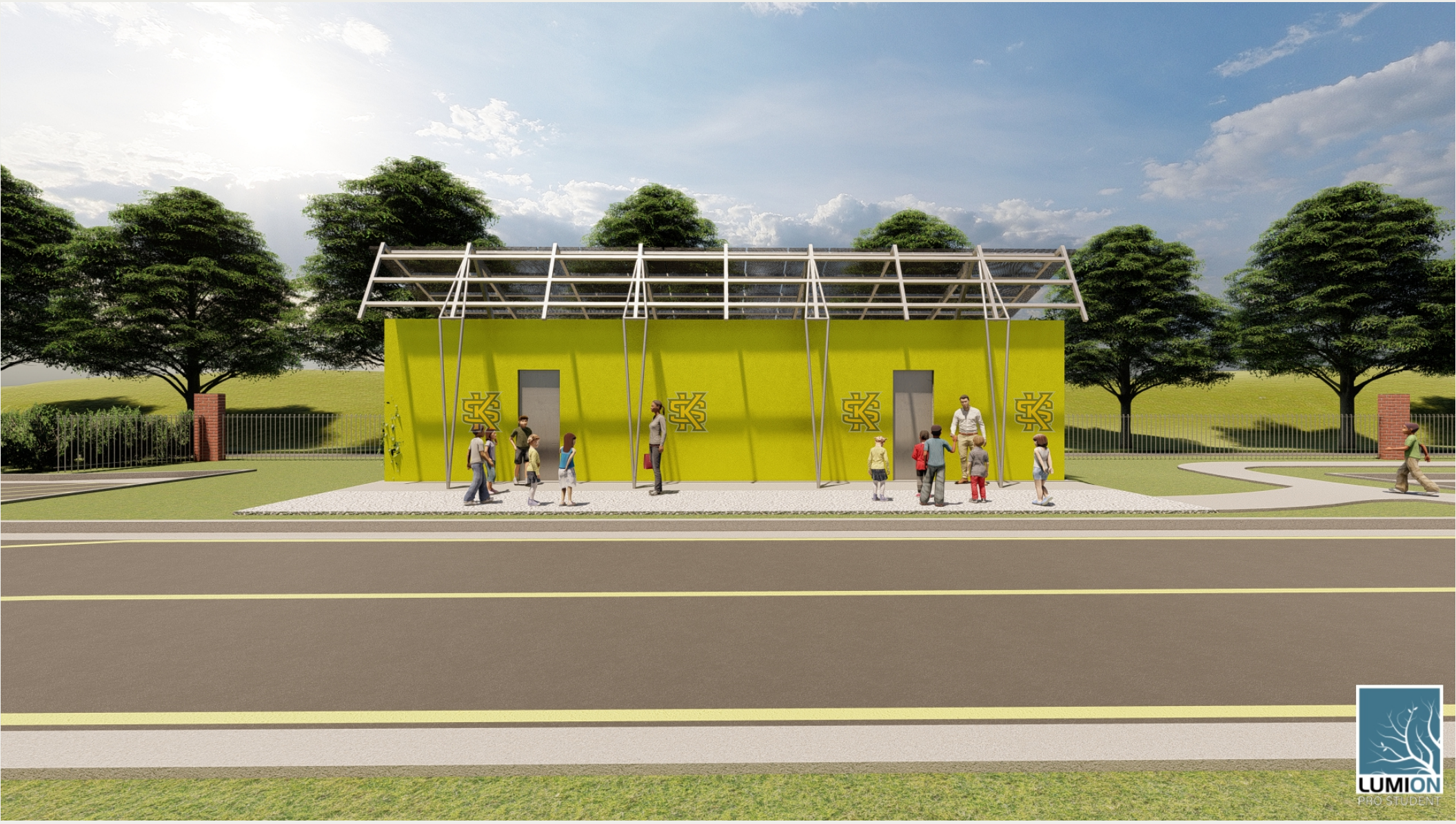


FLOOR PLAN





Preliminary Design: Exterior Rendering



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