

## Challenges and Constraints:

When talking about the project in hand, multiple potential challenges appeared. These include the fact that the metal structure building was designed prior to the completion of the foundational requirements. This means that the foundation must be addressed after design according to the 2018 International Building Code (IBC) as well as the Yavapai County building code requirements, which could prove difficult in some scenarios as the foundation is the absorbent of all the loading and forces that occur on the building structure.

The second potential challenge that could be present during the design choice, is the assessment of the uplift forces that the metal structure building will face. As metal structure buildings are typically light weighted and are easily countered by wind force or uplift. This should be considered during the foundation choice as a wider base foundation could prove beneficial due to the increase in downward vertical force.