Unit 08: Foundation Plans

Content Area: **Science**
Course(s): **CAD Architect**
Time Period: **Semester 2**
Length: **2 weeks**
Status: **Published**

Standards

TEC.9-12.	The use of digital tools and media-rich resources enhances creativity and the construction of knowledge.
TEC.9-12.8.2.12.F.3	Select and utilize resources that have been modified by digital tools in the creation of a technological product or system (CNC equipment, CAD software). The use of technology and digital tools requires knowledge and appropriate use of operations and related applications.

Enduring Understandings

- A building requires various components to exist, including aesthetic qualities, necessary utilties, and structural integrity.
- Establishing a foundation for a building is necessary before the structure of the building itself can be implimented.
- Environmental factors can dictact design choices for a home.

Essential Questions

- What elements are necessary to make a home structurally sound?
- Why are proper footing and foundation wall sizes so important?
- Why do different types of foundations exist?

Knowledge and Skills

- Students will be able to define different parts of a foundation and cite how they are assembled together.
- Students will be able to rationalize the need for footings and foundation walls in construction as well as specify the similarities/difference between them.

- Students will be able to explain how implementation of a foundation will depend on the environment it is being established in.
- Students will be able to choose an appropriate foundation type for their design.
- Students will be able to incorporate all structural components of a residential home below the first floor in a foundation plan drawing.

Assessments

https://docs.google.com/document/d/1wR7bQF-8AQoRrt0g4C3hKja0yjwDjC9_BiAmONWbTcI/edit

Modifications

https://docs.google.com/document/d/1ODqaPP69YkcFiyG72fIT8XsUIe3K1VSG7nxuc4CpCec/edit

Resources

- Foundation and Construction Systems Presentation
- Creating a Foundation Plan PowerPoint
- Foundation Plan Examples
- Foundation Plan Rubric