COTTONWOOD MEADOWS APARTMENTS

PACIFIC WEST ARCHITECTURE, EAGLE, ID
MULTI-FAMILY

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Structural design of an affordable senior housing project.

CHALLENGE

Multi-family developers are driven by leasable square footage – creating as many units as possible within the allotted space. Often times, they face footprint restrictions from mechanical systems (mechanical chases), use of land and construction.

SOLUTION

Structural engineering plays a significant role in plumbing lines, electrical lines, and ducts to ensure that structural members don't need to be cut to run these systems in order to maximize space and avoid additional labor and cost as well as the obvious structural implications. One consideration is how to get the mechanical systems to each of the units while limiting mechanical chases. We solve this by creating chases within the framing system that can easily be achieved through the material choices. Rather than using dimensional lumber as the framing system, at times it can make more sense to utilize trusses where there is space for the lines to run as it was in this project. Also, alignment of the framing systems within the units framing through the corridor helps to create a void space within the corridor to run these main lines. While there are multiple ways to achieve this goal, it is critical to consider this in the design phase to avoid added time and expense in the field. Coordination with the entire design team is also crucial to ensure projects stay on schedule and budget. Though a portion of design may not be specifically within your scope of work the coordination can be priceless.

TEAM MEMBERS

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SERVICES

STRUCTURAL SYSTEM EVALUATION

STRUCTURAL DESIGN & ANALYSIS

CONSTRUCTION ADMINISTRATION

VALUE ENGINEERING

3D MODELING

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