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The Village at Waugh Chapel –  
Senior Living Facility III  
2614 Chapel Lake Drive  
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## Structural Concepts / Structural Existing Conditions Report

### Executive Summary

This document is an analysis of the structural framing systems used to design The Village at Waugh Chapel – Senior Living Facility III. Included in this report is: an overall building description, a breakdown of the building's structural components, the codes and standards used to design the building, the calculations for the gravity force resisting system (self-weight of the structure, superimposed dead and live loads) and the lateral force resisting system (wind and seismic loads).

After an examination of the structural systems of the building, it has been determined that the building is composed of two main structural support components, a gravity force resisting system and a lateral force resisting system. Although the building's gravity system is mainly composed of 18" deep, pre-engineered floor trusses, the first floor framing consists of a composite concrete slab and metal deck. The composite deck is 4.5" thick (2" deep decking) with shear studs placed at each beam as required. The interior loads of the building are supported by studded bearing walls and wood beams.

The lateral force resisting system for this building is composed of 13 shear walls covered in 7/16" APA rated sheathing. The majority of the shear walls are located at the separation walls between apartments and are built out of double 2x4 studded walls. For the design cases of seismic versus wind analysis, seismic forces controlled for both the North-South direction as well as East-West direction.

Spot checks for the adequacy of framing member will be performed as part of the technical assignments which correspond to the system in which the member is located.