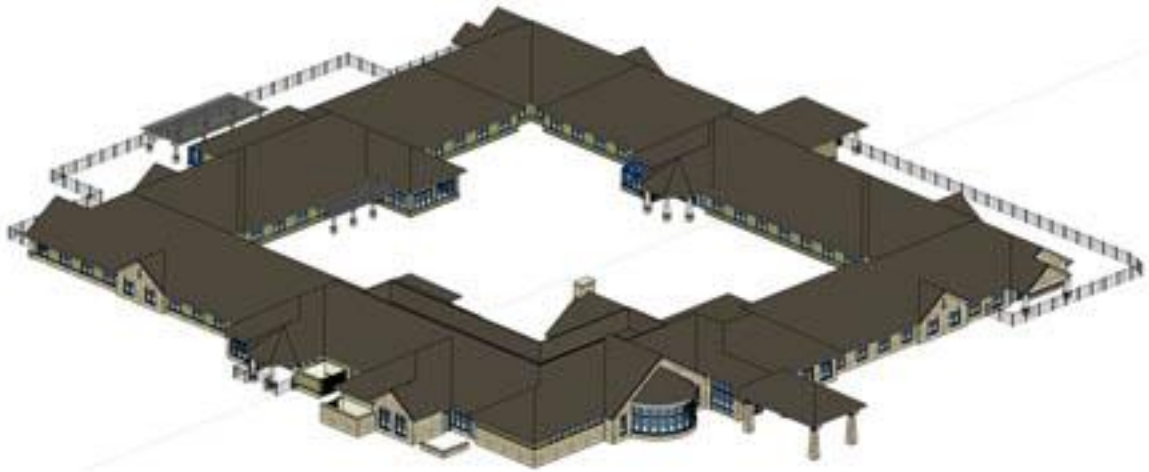


Building Statistics

Part 1

Cameron Mikkelson



Silverado Senior Living

1105 Davidson Road
Brookfield, WI 53095

Project Team

General Contractor:	Hunzinger Construction Company
Architect:	Eppstein Uhen Architects, Inc.
MEP and Fire Protection Engineer:	Matrix Group Engineering Consultants
Structural Engineer:	Pierce Engineers, Inc.
Civil Engineer:	JSD Professional Services, Inc.
Landscape Architect:	R.A. Smith National, Inc.

Project Information

Building Name:	Silverado Senior Living
Location:	Brookfield, WI
Building Owner:	Silverado
Occupancy:	I-2
Delivery Method:	Design-Bid-Build
Dates of Construction:	September 2012 – September 2013
Size:	45,230 sq. ft.
Total Project Cost:	\$9.2 million
Stories above Grade:	One

Architecture

Located just West of Milwaukee, in Brookfield, Wisconsin the Silverado Senior Living building is located adjacent to a private school, houses, and a heavily forested area up on a ridge. With 31 facilities nationwide, Silverado has become a leader in senior living specializing in memory and dementia care. Divided up into four quadrants of roughly equal size, this building completely encloses a courtyard containing a gazebo, walking paths, and a putting green.

In addition to the fifty rooms where the residents sleep, there are two bistros with adjacent dining rooms where the residents can enjoy a meal. These and several great rooms located throughout the building incorporate large windows to invite light

inside the building as well as stone fireplaces the compliment the exterior natural stone veneer. A solarium on the South portion of the building provides an area where residents can go to soak in natural sunlight while being shielded from cold Wisconsin winters. The kitchen, employee break rooms, interior mechanical, telecommunication and admin rooms are located in quadrant B in the South East corner. This keeps the functional areas of the building separate from the residents, which promotes a more “natural” living environment. The exterior mechanical areas are located at the interior corners of each quadrant which houses the air handlers and other HVAC equipment.

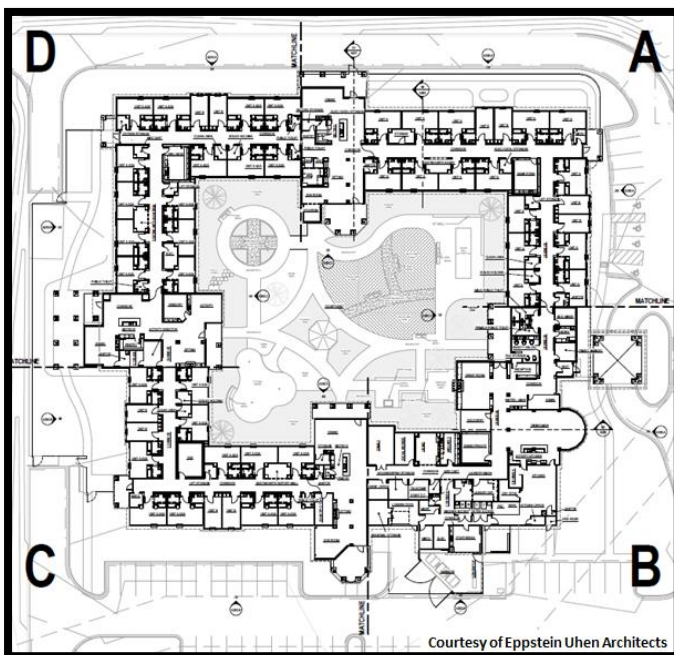


Figure 1 – First Floor Plan

Major National Building Codes:

- International Building Code 2009
- International Plumbing Code 2009
- International Mechanical Code 2009
- International Energy Conservation Code 2009
- International Residential Code 2009
- National Electric Code 2009
- NFPA 101 Life/Safety Code 2000
- DHS 83: Community Based 2011 Edition Residential Facilities
- Ordinance 1293 of City of Brookfield Zoning Code

Zoning and Historical Requirements

Due to the fact the property was located in a Conditional Use/Special Exceptions (CU/SE) zone, a twenty five foot building interior setback was required for a building zoned as Industrial I-2. Ordinance 1293 of the City of Brookfield Zoning Code permitted the construction of the Silverado Senior Living building. There were no special historical requirements for this project.

Façade

On the exterior building façade, a natural stone veneer encases the building until it transitions to fiber cement siding via a precast concrete sill. Behind the stone veneer are two layers of air/moisture barrier which is adhered to 7/16" OSB sheathing. A 6 mil vapor barrier is on the inside of the OSB and is then supported by 2x6 wood studs which contain R-19 Rockwool insulation with the interior finish being 5/8" gypsum board. The exterior wall on the inner rectangle of the facility is primarily composed of the same materials except it only contains one layer of air/moisture barrier. Also, because the Packed Terminal Air Conditioners (PTAC) units could only be used for the interior rooms adjacent to the courtyard, each sleeping unit has one PTAC built into its exterior wall.

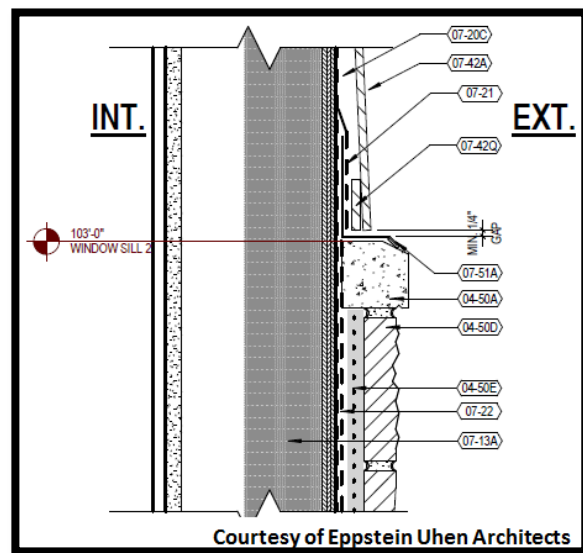


Figure 2 – Typical Wall Section at Precast Sill Transition



Figure 3 – Exterior Façade

Double hung cottage style windows with aluminum framing and low-e glazing are mostly used throughout the building for sleeping units, dining areas, and great rooms. The solarium on the South side of the building also uses an extruded aluminum insulated glazing system.

Roofing System

Supported by wood trusses, the roofing system contains glass fiber reinforced asphalt shingles on the exterior. Behind this is a 60-mil fully adhered ETHYLENE-PROPYLENE-DIENE-MONOMER (EPDM) roofing membrane which sits on three sheets of 5/8" exterior grade plywood and a polyisocyanurate insulation board. Beneath this is attic space that acts as an air barrier between the roof and the ceiling below.

Sustainability Features

The focus of this building was to provide an above average assisted living facility through amenities that would make the residents feel at home. Because this was the primary focus of this project, many of the sustainable aspects came from the construction and procurement processes. Local materials such as mechanical equipment for the HVAC system came from Rockwell Automation. Hunzinger, the general contractor, also incorporated recycling and other waste management programs that will ultimately minimize the impact on the surrounding environment.