The House on Timber Trail Road ~ Notes and Comments from the Seller Ron Welsch

In 1991 a growing home repair, remodeling and construction company needed more space. We found it 4 miles west of Menomonie, north, just off State Highway 29.

We began using the pole and dairy barns for our shop and in 1992 built our home.

In 2023, with the construction company now in other hands, the property is available for the next family to enjoy and grow in.

This presentation primarily focuses on the original house which had a 1-1/2 car garage. Since the first construction, a second 2 car garage was added with an unfinished space above. Then, the upper space became a residential space. Details of those additional spaces are specified along with the descriptions of the main house.

Systems.

Design

My friend, Paul Emmons, an architecture student at UM, Paul, seeing the site, and knowing this builders inclination, presented the basic look and feel of the house. The house is situated up on a clay slope. Two ridges of the home parallel the intersecting ridges behind, blending the home into the natural setting. The home and outbuildings were sided, trimmed and painted to resemble a complement a traditional farm style, White and Dark Green.

Excavation:

Upon taking possession of the property, in February of ‘91, the previous owner burned down his old farm house. The heat of the burn thawed the frozen soil, providing an opening to excavate and begin building the foundation.

Footing and Foundation:
The home incorporates a Permanent Wood Foundation, built according to engineering specs developed by Wayne Kimber. One key to a successful wood foundation is drainage, keeping it dry. Built on clay soils, I relied on the a 2’ by 3’ rock drainage footing and a water barrier of 10 ml poly on the outside, draining to the rock bed

The rock footings include a drainage extension running out under the front lower patio.

The Treated Foundation walls, designed and framed to meet the needs of an uneven soil load and clay conditions, are wrapped in a 10 ml poly membrane and back filled with Pit Sand. The sand drainage plane is capped with local clay and top soil. Over 30 years, the few times I opened lower walls up, for other reasons, I observed the interior of the wall cavities was dry. Two interior bearing walls are also treated lumber on a rock drainage footing.

The joints in the treated plywood are caulked to repel water the top of the foundation and poly is covered with a 1/2” Treated bond breaker, spanning between grade and the upper siding.

Framing
The floor is framed with 2x Douglas fir joists. Floor is sheathed with 3/4" Plywood. The exterior walls are double wall construction, with an outer 2x4 wall, a 2" foam sheathing, an inner vapor diffusion retarder, and an interior 2x4 wall. The roof is framed with 2x fir rafters, secondary framing for ceiling attachment, to increase room for insulation and air venting. The double framing system provides an interior chase for wiring so as not to penetrate the air barrier between the tempered living space and the outdoors. The Efficiency space is framed with floor trusses, 2x6 wall with interior strapping and dense packed cellulose and the roof has a continuous air channel from eave to open attic. The Efficiency floor is insulated with fiber glass batts, protecting the floor heating system.

https://www.midwestmanufacturing.com/MidwestWebsite/web/cms/docs/PermanentWoodFoundations.pdf

https://www.google.com/search?q=dense+packed+cellulose+strap+walls&sca_esv=c815caab5ae43dfb&sca_upv=1&rlz=1C1GCEA_enUS858US858&udm=2&biw=1366&bih=599&sxsrf=ACQVn0-uECnx6oxSLb7hn1QArsLLtHNe8A%3A1712662930717&ei=kikVZva4K4GgwN4PmMmG4AQ&ved=0ahUKEwj2yevMhrWFAxUBENAFHZikAUwQ4dUDCBA&oq=dense+packed+cellulose+strap+walls&gs_lp=Egxnd3Mtd2l6LXNlcnAiImRlbnNlIHBhY2tlZCBjZWxsdWxvc2Ugc3RyYXAgd2FsbHNI0DVQ8AVYmxVwAXgAkAEAmAFboAHoA6oBATa4AQzIAQD4AQGYAgCgAgCYAwCIBgGSBwCgB44C&sclient=gws-wiz-serp#vhid=06qFYc49iRIQ5M&vssid=mosaic

Air Sealing and Insulation

Principles of energy conservation techniques used were from construction manual written by the Cold Climate Institute. Higher insulation level, minimal air transport between skins, and entire vapor diffusion retarder on the warm side of the wall.

Utilities and Mechanical Systems

Well, Pump and Pressure
The well pump and pressure serve the entire property. A new well was put in in 2007. Power for the Well, pump and pressure comes through a third auxiliary electrical meter mounted behind the shop space of the two car garage.

Water Treatment
Current water treatment system is a BrassMaster water softener, single brine tank, installed in 2023. It uses salt and a washable in line filter.

Septic ~ New Mound System Installed in 2023 for a 5 Bedroom home & 2 Employee Office
The Septic systems from the home, the efficiency and the shop drain to a newly remodeled and enhanced mound system. The alarm system is located in the shop space below the loft bathroom. The system uses a Symtec prefilter to lengthen the life of the system. I've cleaned the filter once every 1-2 months.

HVAC
The first and lower floor of the home are served by a high efficient furnace and air conditioner.

The after-thought 3rd floor is heated by gravity and variably a room space heater and cooled variably by room air conditioners. LP fuel for the furnace is currently provided by Synergy. (2) leased LP tanks on the property --- one for home and one for the shop.

The efficiency apt/loft is heated by an in-floor heat / electric hydronic system. A Wood stove remains on property in storage for re installation in the efficiency if desired.

The house uses an Air to Air Heat Recovery Ventilator to manage humidity and exhaust. It incorporate timers in areas of high moisture in conjunction with variable settings on the unit. This system is used in winter to minimize moisture condensation in bathrooms and on windows. In addition, the ceiling fans aid drying off windows in winter. Most windows have a replaceable inner storm panel to also keep moisture off the cold windows. These interior storms are either wood framed from Kolbe and Kolbe, or vinyl friction fit from Vinyl Pro Windows.
https://www.advancedradiant.com/lifebreath-heat-recovery-ventilation-more.php

Electrical

Electricity is provided by Dunn Energy. The shop/barn outbuilding has its own meter. The house and the efficiency apt have a shared meter. The well pump and pressure is served on a third meter.

Communications

Over the years, the house has been wired for phone and for cable. There have been numerous satellite systems installed. Currently the property is served by 24-7 with Fiber Optics. Numerous wiring runs were maintained in the walls.

Appliances

The appliances in the efficiency were new in 2013. The appliances in the home were replaced in between 2004 and 2007.

Noted Features

Newel posts: the constructed newel posts have either sealed caps or variably functioning caps.
Borrowed lights: The otherwise dark hall between the stairway and the half bath is naturally lit by cut in borrowed light, but not just the normal square openings.
Window framing details: With 10" walls I experimented with a variety of treatments.
Barrel vault ceilings: The ceiling of the game room was barrel vaulted and soffited for sound control and pool table lighting in 2003.
Central circle: we had kids and knew that kids like to run around, so we gave them a place to do so.
Cabinets: The area's top Cabinet Builder, Luepke's of Downing built all of the cabinets.
Windows: The windows were clad Hi K units from Kolbe and Kolbe.
Exterior siding: is primed painted hardboard siding. It has been repainted between 2006 and 2008.
Two Level back deck gave separation from kid activities and adult activities.
The front porch: We used the gazebo part a lot. The site seemed to have few mosquitoes. I built with the idea of a parking pad below, with a creative walkway to it. That never materialized. We replaced the gazebos support posts this past year.

In 2004-5, I needed a larger garage for a growing family. We added on the angled two bay garage.

In 2013 or so I finished off the space above the two-car garage for an efficiency apartment for myself. Ikea closet and fixtures, salvaged cabinets, vinyl windows, two dormers, spacious back views, whirlpool shower tub, connected through the house via the garage and the upper floor. Private deck in back.

The Shop and Barn

In 1991, I bought the property as a home for my remodeling, repair and construction company. We removed dairy stanchions from the old barn, removed organic soil from the horse barn. Installed hydronic heating in the floor, filled in sidewalls and framed a ceiling, insulated in the shop area. We added storage racks and the machinery necessary for a viable construction company. We created a finishing room.

The barn proper has undergone changes too. New concrete floor over the old slab. Framed and insulated sidewalls. Ceiling was insulated with fiberglass and foam above and below. Rooms have been repartitioned several times to meet the changing needs of the company. The upper floor is an OSB deck applied over 2" foam insulation. Windows were placed in the upper space for a planned future second floor space. The stairway is contained in the shape of the original bull pen. The roof was shingled in back as a sampler roof while the front had Carriage House shingles and an area of Sealdons, which included the signature Level that is used in Heritage Builders logo.

Notice the wall above the circle drive entry way. That shows the owners artistic flair, which can be also seen inside the office areas with wavy beam covers, round wall, drywall trees and windows placed so the owner would have maximum access to daylight and staff.

Other Outbuildings:

Eyebrow Shed: A storage shed for the gardens we had down there. The floor lays on the soil, the walls are posts in the ground.

Bay View Shed: A shed brought in from another project, outfitted with a salvaged bay window, insulated and used for processing metal parts for recycling.

Sliding Door Shed: Also posts in the ground, build to store used doors and card board for recycling. There was also a burning pile, hence some melted siding on the shed.

The Shop Shed: This is out of building storage of fuels.

The Property: My daughters favorite part was the triangle of woods across the road. It led to an intermittent creek that she explored often. My son and I enjoyed the big Pine behind the house and other trees that received rope swings.

The original driveway was gravel. Heavy rains often gutted it. We chose to pave it, with the money we saved from regrading. The driveway has been added to and re-coated 2 or three times.
Micro-climate: This site, this hillside, is usually up to 10F warmer than the surrounding area in winter. It is protected by the hill behind from winter winds. Those winds though do sneak past at the bottom of the drive, evidenced by frequent drifting.