

EverGreen TC

A Community Built for You and for The Planet



A Zero Energy Residential Development Featuring Pocket Neighborhoods

Mission Statement

We believe every one deserves a comfortable, healthy and energy efficient home that contributes to a sustainable future and helps improve the social, economic and environmental well-being of the community and the Earth

EverGreen TC

A Zero Energy Residential Development Featuring Pocket Neighborhoods

The homes are designed and will be built to be energy and resource efficient, more comfortable and healthier to live in, durable and easy to maintain, and have less negative impact on the environment.

What is a Zero Energy Home?

It's a home that over the course of a year produces as much energy as it uses. In simple terms, by the end of the year, the owner's net use from the electric utility is totally offset by their credit from the utility.

How does this happen?

The homes are constructed to perform at a very high level of efficiency, meaning that every building element is designed to use less energy from thermal envelope, heating & cooling systems, and water heating systems etc. In addition, the homes will have a solar electric energy system that over the course of a year will produce as much electricity as the home uses.

Pocket Neighborhoods:

All townhouses will be clustered around common areas often called pocket neighborhoods. The idea is that the homes will be oriented toward a common courtyard area to create a safe, inviting place for children and adults to play and socialize. There will be 27 four-unit buildings and 3 six-unit buildings for a total of 126 units built as eight separate pocket neighborhoods.

Location:

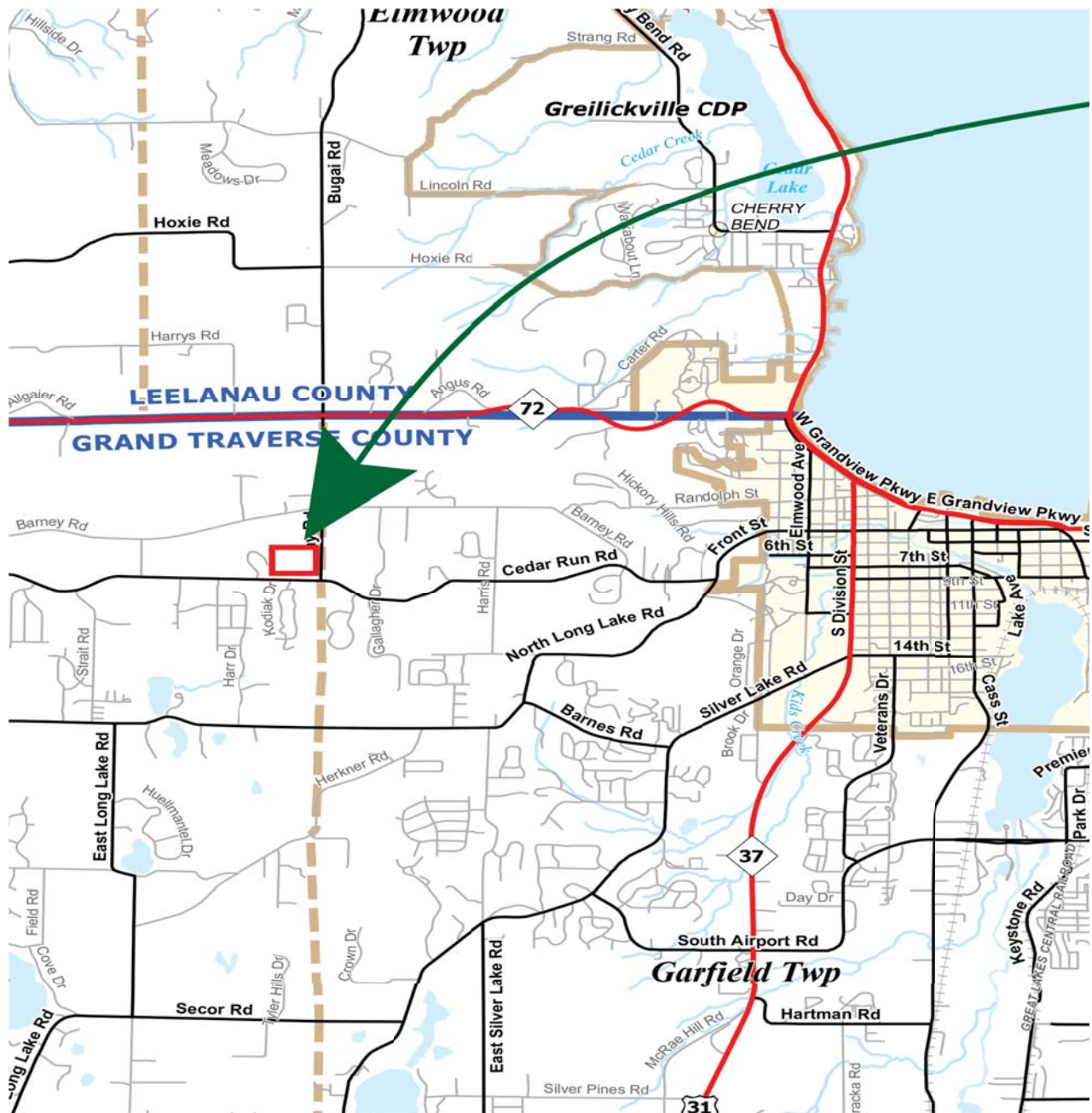
EverGreen TC will be built on Gray Road near Cedar Run Road, minutes west of Traverse City, close to work, entertainment, schools, medical services, shopping, and beaches.

Cost Savings:

The cost of living in the home will be considerably less than living in an average home. The savings on the cost of energy and maintenance on a high-performance home can be as much as \$250,000 over the life of the building.

Market Valuation:

Studies show that homes with high performing features (sometimes referred to as green features) sell faster and command higher prices than homes without these features. A home that is energy and resource efficient is more comfortable and healthier to live in, is durable and easy to maintain, has less negative impact on the environment, and has greater value in the marketplace. Research has also found that owners of high-performance homes are 32 percent less likely to default on their mortgages.



Unit Type and Details

Townhouses #1 End units 1624 sq ft*

Middle units 2322 sq ft**

27 buildings of 4 units each: 108 units total

End units first floor: 812 sq ft

Living room, dining room, kitchen, master suite, walk in closet, full bath, power room, stairway to basement

End units: lower level: 812 sf ft: Roughed in for future:

Family room, (2) bedrooms, full bath, mechanical room, stairway to first floor, (2) 4' X 4' egress windows

Middle units first floor: 673 sq ft

Living room, dining room, kitchen, power room, laundry/mechanical room, stairway to second floor

Middle units second floor: 865 sq ft

Master suite, (2) bedrooms, (2) full baths, walk in closet, large hall way, stair way To first floor

Middle units: lower level: 784 sf ft: Roughed in for future:

Family room, (1) bedroom, full bath, mechanical room, stairway to first floor, (1) 4' X 4' egress window

*** Including lower level and main floor**

**** Including lower level, main floor and 2nd floor**

Townhouses #2 End units 1624 sq ft*
Middle units 2322 sq ft**
1 building of 6 units: 6 units total

End units first floor: 812 sq ft

Living room, dining room, kitchen, master suite, walk in closet, full bath, power room, stairway to basement

End units: lower level 812 sf ft: Roughed in for future:

Family room, (2) bedrooms, full bath, mechanical room, stairway to first floor, (2) 4' egress windows

Middle units first floor: 673 sq ft

Living room, dining room, kitchen, power room, laundry/mechanical room, stairway to second floor

Middle units second floor: 865 sq ft

Master suite, (2) bedrooms, (2) full baths, walk in closet, large hall way, stair way To first floor

Middle units: lower level: 784 sf ft: Roughed in for future:

Family room, (1) bedroom, full bath, mechanical room, stairway to first floor, (1) 4' X 4' egress window

* Including lower level and main floor

** Including lower level, main floor and 2nd floor

Townhouses #3 End units 1399 sq ft
Middle units 1435 sq ft
2 Building of 6 units each: 12 units total

Lower level: Garages built into hill 730 sq ft

Main level: 720 sq ft

Living room, dining room, Kitchen, pantry, stairway to lower level/upper level

Upper level: 730 sq ft

(2) Bedrooms, (2) full baths, walk in closets, laundry room stairway to main level

Third Party Certifications and Ratings

The homes will be designed and built to the following national high performance building standards, programs, ratings, and codes. (See separate sheets for more info on each of these ratings programs).

1) HERS Rating

The homes will have a HERS Score of Zero, meaning that they are going to be 100% more energy efficient than a home built to the 2006 energy code, and about 70% more energy efficient than a home built to today's energy code. Of course, occupant behavior can have a dramatic effect energy use by as much as 50%

2) Energy Star Certified Homes Program

To earn the Energy Star label a home must meet strict guidelines for energy efficiency and water/water vapor management systems. Moisture intrusion -- liquid or vapor -- is the number one maintenance issue in the building industry. The Energy Star program, developed by the U.S. Environmental Protection Agency is based on extensive experience with the nation's homebuilding industry, including builders, architects, materials suppliers, home energy raters, and building scientists. Homes achieving the Energy Star label are required to meet a complete package of building science measures. To ensure that a home meets ENERGY STAR guidelines, third party verification by a certified Home Energy Rater is required. The rater works closely with the builder throughout the construction process to help determine the needed energy-saving equipment and construction techniques, and then conducts the required on-site diagnostic testing and inspections to document that the home is eligible to earn the ENERGY STAR label

3) DOE Zero Energy Ready Home Program

Every DOE Zero Energy Ready Home begins with solid building science specified by Energy Star for Homes and then adds advanced technologies and practices from DOE's world class research program Building America. They are enforced by independent verifiers with detailed checklist and prescribed diagnostics. Compared to a typical home, an ultra-efficient Zero Energy Ready Home is inexpensive to own, operate and maintain. In fact, every DOE Energy Ready Home is so energy efficient that a small solar electric system can easily offset most, or all, of its annual energy consumption. These homes provide value in the form of advanced levels of energy savings, comfort, health, durability,

quality and future performance that will stand the test of time and will meet and exceed most future code requirements.

4) EPA Water Sense Program

Residential water use accounts for more than half of all the publicly supplied water we use as a nation. Each American uses an average of 100 gallons of water each day, but that number can be a lot lower if you live in a Water Sense certified home. The good news is, if you're in the market for a new home using less water can be easy especially if your home does it for you. Choosing a Water Sense certified home means making an investment in the future, an investment that saves water and energy in your community, protects resources for future generations, and can save a family of four up to \$600 per year in utility bills compared to a traditional home.

5) EPA Indoor airPLUS Home Program

The Indoor airPLUS Home Program is designed and built for improved indoor air quality. People are increasingly concerned about mold, radon, carbon monoxide, and toxic chemicals in their homes. Poor indoor air quality can lead to eye irritation, headaches, allergies, respiratory problems such as asthma, and other serious health problems. EPA studies show that levels of many indoor air pollutants can be two to five times higher than outdoor levels. And since most people spend close to 90% of their time indoors, keeping indoor pollution levels as low as possible is the right thing to do for you and your family. Builders can use a variety of construction practices and technologies to decrease the risk of poor air quality, including careful selection and installation of building materials, heating, ventilating, and air-conditioning systems, combustion venting systems, as well as good moisture control techniques. It's not easy for homebuyers to keep track of all the preferred construction details that lead to improved indoor air quality. That's why EPA created the Indoor airPLUS Label. Reduced indoor air pollution helps protect your family inside. Reduced greenhouse gas emissions help protect the air outside. The homes key indoor air quality features are verified by an independent third-party inspector to ensure that the builder has met all of EPA's rigorous guidelines for your indoor air quality.

6) Michigan Residential Code:

These homes will be designed and built to be approximately 70 percent more energy efficient than a home built to the current energy code (per REScheck documents filed with Grand Traverse County).

EverGreen TC Home Features

Foundation: Superior Precast Concrete (R-37 vs. current Code R-10).

Exterior wall: Extended Plate and Beam wall system with vinyl siding. (R-25 vs. current Code R-20).

Roof: Truss with 24" energy heel and 24" over hang all sides (R-70 vs. current Code R-49).

Windows: Triple Pane argon-filled, low E (U .19 vs. current Code U .33 (lower is better)).

Heating & Cooling: Mitsubishi Multi-position Air Handler Heat Pump (360% efficient vs. typical warm air furnace 95% efficient).

Water Heating: Heat Pump Water Heater (280% efficient vs. typical electric water heater 92% efficient).

Fresh Air: Energy Recovery Ventilators -- 80% more efficient than a house built to code.

Strategically placed windows: To provide abundant natural light to interior spaces.

Plumbing: All fixtures are clustered to save construction costs and water, and conform to EPA Water Sense Program certification.

Cathedral ceilings: To make small rooms feel more spacious.

Garage: Two car garages on all units.

Front Porch: Ready to add a three-season feature without requiring major remodeling.

Buildability: Prefabricated wall sections, homes will be framed-in in a few days as opposed to weeks or months for conventionally constructed homes.

Energy use monitoring systems: Each home will have an energy monitoring system giving owners real time energy use and energy production information. Studies have shown monitoring can reduce energy use.

Remember every building feature/element is a tradeoff of some sort, our goal is to build housing that performs at the highest level possible, and still be cost effective!!!

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