Overall Concept
This design works to focus the main road alignment or ‘Village Green Road’ into an arc-shape around the Town Center. The Town Center buildings are focused around a central Village green. This concept also retains a green ring around the Town Center core, which envelops the Town Center in vegetation as a separation of the Town Center core from the surrounding residential areas.

Green Infrastructure
Utilities all lie along the infrastructure ‘spine’ that runs from the Town Center core uphill to the northwest. This green spine doubles as the main pedestrian connection to the Town Center core from the northwest. All wastewater and sewage flow downhill from adjacent developments towards the main collector, and then via that collector downhill to the Town green, and then downhill again to the package plant east of the Town Center core. This gravity-fed system reduces the initial investment and the total energy consumption of the town by minimizing the need for electric pumping of waste to adjacent areas. This infrastructure spine also houses the electric and other utility main lines for efficient installation and maintenance.

Circulation
Village Green Road is entered from Highway 61 or the Frontage Road. Minor entries onto the Frontage Road or into the Town Center are eliminated to reduce driver confusion and allow for larger stormwater detention areas. Two additional village accesses into the Town Center are provided by a road east of Lutsen Church and by the neighborhood street to the west. The circulation provided by the Village Green Road accommodates both pedestrians and vehicles. There are sidewalks and intersecting trails for pedestrians and on-street parking for business patrons and residents. Pedestrian pathways along the creeks and the Gitchi Gami Trail that runs through the central Village green and continues past the east side of the church also provide connections to the Town Center. The frontage road is widened to a continuous 30-foot width through the Town Center. There is enough room to expand the frontage road if the gas pumps at Clearview were to be moved to the new location west of the West Creek in a new commercial frontage road building.

Village Green Core
The Village Green Core is described in detail in pages 35-36.

Town Center Residential
The two main residential areas in the scheme are located west of the western creek and northwest of the Town Center retail/commercial area. As shown, these areas are developed with single family housing, but they could easily accommodate multi-family housing or assisted living facilities. The design fosters increased density for walkability, efficient use of land, and economical and sustainable utility installation and operation. A terracing strategy is used for the housing. Garages face onto a shared driveway and the home faces onto a shared common green with a pedestrian pathway leading to the Town Center.

Rental housing could be developed on the second floor of the commercial buildings. This might transform the commercial buildings into mixed-use buildings whose living units could accommodate tourism-related workers. The mixed-use buildings could also be live-work units for artists and artisans where they could live above their shop.

Gitchi Gami Trail Alignment
The Gitchi Gami Trail follows the highway right-of-way on its north side past Arrowhead Electric until it reaches the West Creek. It crosses the creek, heads north through the creek’s vegetative buffer, and enters the Village Green. The trail follows the top of the central Village Green and exits on the east side to follow the new connection to the church. The trail continues to travel on the east side of the church until it reaches the highway right-of-way again. This alignment avoids the safety issues and pinch points that arise if the trail followed the frontage road through the main town center area.

By drawing trail users into the Village Green along this alignment, the trail will bring visitors to Lutsen’s businesses without going through the community’s main residential areas.
The buildings facing the frontage road have a commercial/retail designation. New mixed-use buildings front the Village Green Road and open out onto the central Village green. These buildings have commercial/retail space designated for their 1st-floor use, and residential distinction for their 2nd-floor. The central Village green is accessible to non-motorized traffic only. Trees enclose and frame this civic space.

Dense vegetation around the perimeter of the Town Center reinforces that the community is nestled within the forest, blurring the separation between town and the surrounding land. Parking is only located on the building-side of Village Green Road to reinforce the separation between Town Center core and the surrounding forest.
Highway 61 must be designed for a 30-m.p.h. speed limit throughout the town center area in order to achieve a narrow visual corridor, distinctive town center entrances, and safer intersections. This Town Center highway segment starts and ends at the Town Center Gateways. The western gateway is located west of Arrowhead Electric, and the eastern gateway is located approximately 200 feet before the end of the frontage road. Distinctive town center signage that matches the existing character of Lutsen is to be located at these gateway locations.

A curb and gutter profile is added to the highway along the 30-m.p.h. segment that provides room for trees and turning lanes. A turn lane is added to this whole stretch as indicated in green. Left turn lanes would primarily be used for access to the north into the town center. The numbers of access points, as represented by the dashed circles, are reduced greatly from existing conditions to give more importance to the main intersections and to provide safer interactions between the frontage road and the highway.

Cross-sections lines as shown in black were cut through the middle of the Village Green, East of Lutsen church, at the ‘pinch point,’ and near the Caribou Trail to help express the relationship between the proposed highway configurations, the Gitchi Gami Trail, and the town center design. Cross-section drawings are located on pages 39 to 42.
VILLAGE GREEN SECTIONS & ELEVATION

Village Green Sections:

**Existing Conditions (Section A)**
This section cut just to the west of the existing credit union building includes the following elements:
- Highway 61 at 40 M.P.H design speed,
- Extensive ditches,
- A dirt/gravel service road,
- Steep slopes up to the existing building pad, and
- A one-way frontage road with perpendicular parking to the storefront

**Proposed Village Green (Section A)**
This section cut just to the west of the existing credit union building shows the proposed Village Green and Town Center highway segment includes the following elements:
- New Highway 61 configuration at 30 M.P.H design speed with curb and gutter, turn lanes, and tree plantings,
- Ditch is regarded and planted with native species to act as a stormwater detention/treatment system,
- New stone retaining wall,
- New expanded two-way frontage road,
- New stairs with landings up to Village Green terrace, the proposed buildings shown behind,
- New pathways through the Village Green which include the 10 foot wide Gitchi Gammi Trail at the top of the green, and
- New stairs and landings up to top of Village Green commercial/retail plaza.

**Proposed Village Green Elevation**
This elevation focuses on how the commercial frontage of the proposed Lutsen Village greets passersby. It is drawn as seen from Highway 61 and incorporates the following elements:
- A remodeled Clearview building with truck access to the lower floor,
- A view of the new stone retaining wall along the entire frontage,
- A new commercial building with the same dimensions as the existing coffee shop,
- The two entrances to the new Village Green Road from the highway, and
- New mixed-use buildings are up the hill as seen in the background.
GITCHI GAMI TRAIL ALIGNMENTS

East of Lutsen Church (Section B)

Existing Conditions
This section includes the following elements:
- Highway 61 at 40 M.P.H design speed,
- Steep ditches, and
- An unpaved frontage road.

Proposed Design
This design is part of the Town Center Highway Segment; it includes the following elements:
- A 30-m.p.h. speed limit,
- Curb and gutter on Highway 61,
- Roadside plantings that include trees along the highway and the frontage road,
- A stormwater swale with graded side slopes designed to
- MnDOT standards helps retain, slow, and filter runoff from the roads and the highway,
- A two-way frontage road, and
- The 10 foot wide Gitchi Gami Trail with at least 2 feet buffers on each side.

Towards the Caribou Trail (section D)

Existing Conditions
This is a typical Highway 61 section approaching the Caribou Trail.

Proposed Design
This section is taken outside the Town Center Highway Segment so it does not conform to the opportunities and restraints that the 30-m.p.h segment presents. It features:
- Highway 61 at 45-m.p.h design speed,
- Very steep ditches, and
- An old road grade.

The “Pinch Point” (Section C)

Existing Conditions
This section includes the following elements:
- Highway 61 at 40-m.p.h. design speed,
- Steep ditches, and
- An unpaved frontage road.

Proposed Design
The pinch point design is within the Town Center highway segment. It includes:
- Highway 61 at 30-m.p.h. design speed,
- Curb and gutter on Highway 61, and
- Roadside plantings including trees along highway and frontage road,
- The stormwater swale has side slopes graded to MnDOT standards to help retain, slow, and filter runoff from the roads and the highway,
- The one-way frontage road ends after this point,
- The turning lane is phased out at this point,
- The Gitchi Gami Trail is 9 feet wide with a buffer between frontage road and trail, and
- A retaining wall that is needed at this pinch point to maintain slope standards for the trail and the existing driveways.

Towards the Caribou Trail (section D)

Existing Conditions
This section includes the following elements:
- Highway 61 at 45-m.p.h design speed,
- Very steep ditches, and
- An old road grade.

Proposed Design
This section is taken outside the Town Center Highway Segment so it does not conform to the opportunities and restraints that the 30-m.p.h segment presents. It features:
- Highway 61 at 45-m.p.h. design speed,
- Rural road cross-section design that features no curb and gutter,
- Meets MnDOT minimum design standards which includes swale and no tree plantings close to the road,
- No frontage road,
- A 10-foot wide Gitchi Gami Trail with at least 2 foot buffers on either side,
- Trees planted just off the trail provide a buffer between local residences and the trail and offer some greening and noise reduction on this stretch of Highway 61, and
- A retaining wall would be needed to provide space for a multi-use trail in order to maintain highway and Gitchi Gami Trail slope standards.
Section B: East of Lutsen Church
Existing Conditions

Section B: East of Lutsen Church
Proposed 30 m.p.h. design speed, curb and gutter, stormwater mgmt. swale, 10' trail

Section C: The “Pinch Point”
Existing Conditions

Section C: The “Pinch Point”
Proposed 30 m.p.h. design speed, curb and gutter, stormwater mgmt. swale, 9’ trail w/ retaining wall

Section D: Near the Caribou Trail
Existing Conditions

Section D: Near the Caribou Trail
45 m.p.h. design speed, rural section to minimum MNDOT standards, no frontage road, 10’ trail
In response to the community's request, the Center for Changing Landscapes included phasing diagrams as part of the final design work.

However, phasing is completely dependent on market forces, the landowners, developers, and highway/trail construction timelines. The diagrams provided should only be seen as one idea of how the Village Green Design Scheme could be implemented. The phases do not preclude several smaller incremental changes over time.

**Phase 1 Frontage Road and Building Changes**
- Create a new retail building west of existing coffee shop,
- Prepare for future Clearview store renovation,
- Expand Clearview store parking lot,
- Grade package plant building pad site,
- Expand the frontage road to a 30-foot width with swales to integrate storm water management with the road,
- Remove a number of access points to Highway 61,
- Relocate gas and service station west of Western Creek,
- Phase out trailer park, and
- Phase out existing laundromat/County Plumbing & Heating building and relocate in new Village Green building.

**Phase 2 Infrastructure Investments**
- Build new package plant on shared parking lot with the Clearview store,
- Install main wastewater collector under the pedestrian green spine and connect to new package plant. This infrastructure spine would also house the electric and other utility main lines for efficient installation and maintenance,
- Lay the groundwork for future residential areas to connect to this collector,
- Install new Village Green Road alignment, and
- Re-configure Norbakken Road to meet the northeast side of the Village Green Road.

**Phase 3 Mixed Use, Housing, and Circulation**
- Build new mixed use commercial/housing buildings on the Village Green as shown,
- Build new single-family housing west of the creek and link to shared package plant,
- Create new single-family housing north of the Village Green and link to shared package plant,
- Complete green spine to the Village Green,
- Build new road connections from Village Green Road to east of church and to the neighborhood in the west,
- If desirable, create new church access and parking,
- Site Gitchi Gami trail through the Village Green,
- Relocate majority of Clearview existing businesses and the post office in buildings on the new Village Green,
- If desirable, expand Clearview general store into a grocery.

**Potential Future Expansion**
If the market is good, there is plenty of room to grow within the Village Green design concept, such as:
- New development beyond existing residential to create common green
- Additional development in designated (highlighted) area for additional retail/mixed-use or multi-unit housing

**Additional Comments on Phasing**
Presently, dense growth (LGC zoning) is limited by having a common septic/wastewater treatment facility. In order to encourage 'smart growth' and to be able to follow the Village Green concept plan, landowners should be allowed to start the build out (with LGC zoning standards) using existing septic systems with the idea that these buildings will be eventually connected to a common package plant system.
NEXT STEPS

PHASE 1

COMPONENTS:
- New building west of existing coffee shop building for additional retail
- Model existing Clearview store & entrances
- Expand Clearview store parking lot & divide package plant building pad
- Expand frontage road to 300 feet
- Expand adjacent drainage/STORM WATER MANAGEMENT
- Remove accessory access points to frontage road
- Build new gas service station west of Western Creek and move existing business to that location
- Phase out trailer park
- Phase out existing laundromat, county plumbing & heating building

PHASE 2

COMPONENTS:
- New package plant on shared parking lot with Clearview store
- Install green infrastructure culmings ring and main roads
- Install main grey pipes, etc. for future town development

PHASE 3

COMPONENTS:
- New building built on Village Green as Sherman
- New single-family housing west of center that links to shared package plant
- New single-family housing north of Village Green that links to shared package plant and utilities greenway to Village Green
- New road to church boundaries the town center development area
- Suggested new parking/driving configuration for church
- Gateway green trail through town center's Village Green

POTENTIAL FUTURE EXPANSION

COMPONENTS:
- New development beyond existing Millennial Hall to create common green
- Additional development in designated area for additional retail/mixed-use or multi-unit housing