

Redeveloping the Stanley R. Mickelsen Safeguard Complex

Proposal for redeveloping the decommissioned Stanley R. Mickelsen Safeguard Complex administration block into a community for the new BitZero datamining center development.



This proposal outlines a plan to redevelop the decommissioned Stanley R. Mickelsen Safeguard Complex in North Dakota into a new community focused on providing housing for the development of the BitZero cryptocurrency datamining center that is predicted to bring about 200 new jobs to the area.

The complex, which was an anti-ballistic missile site during the Cold War, would be transformed into a place for families of new employees of the new BitZero datamining center being developed in the main pyramid



Location



Located Outside Nekoma, North Dakota

The complex is situated in the rural town of Nekoma in northeastern North Dakota.



Previously an anti-ballistic missile complex

The site was developed by the US Army as part of the Safeguard Program in the 1970s to house a ballistic missile defense system.

The Stanley R. Mickelsen Safeguard Complex has a unique history and geography that make it an interesting site for redevelopment.



Background

The Stanley R. Mickelsen Safeguard Complex in Nekoma, ND was originally constructed in the 1970s as part of the United States Army's Safeguard anti-ballistic missile system. However, with the advancement of technology and changes in defense strategies, the complex became obsolete and was decommissioned in 1971 right after completion and fully deactivated a few years later.

It was the only site of the Safeguard Program to be fully constructed.

Design Principles



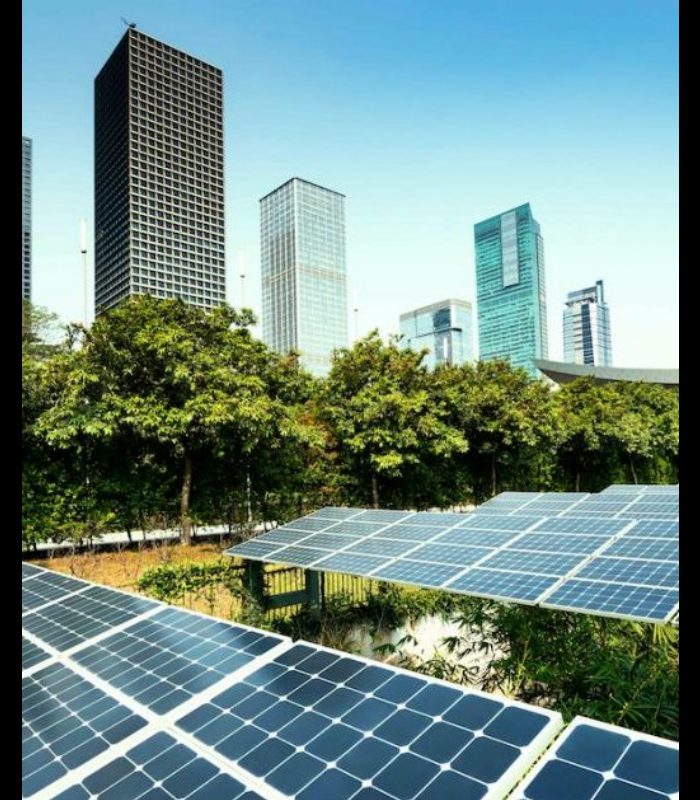
Historical Preservation

Keeping the external appearance of the existing structures.



Adaptive Reuse

Adapting the use of existing structures to better serve the community's needs and requirements.



Sustainable Design

Use sustainable resources and methods to make the community more ecological.

Design Challenges



Remote Location

The site is located outside a small village in the surrounded by agricultural land.



Current Structure Condition

The existing buildings have been vacant for over 40 years. They are also not built to any building code.



Environmental

Development of the site have challenges with the environment due to weather and other natural variables.



Case Study: Presidio

The Presidio is located in San Francisco. The Presidio is a former military installation that has been transformed into a national park and mixed use destination.

The Presidio project involved a strategic approach to repurposing the site, offering a mix of residential, commercial, and recreational spaces while preserving the historic and natural resources of the area.

Community



Greenspaces

The new community will feature parks and recreational opportunities for residents.



Retail Stores

Retail stores will support the needs of residents and provide amenities.



Housing

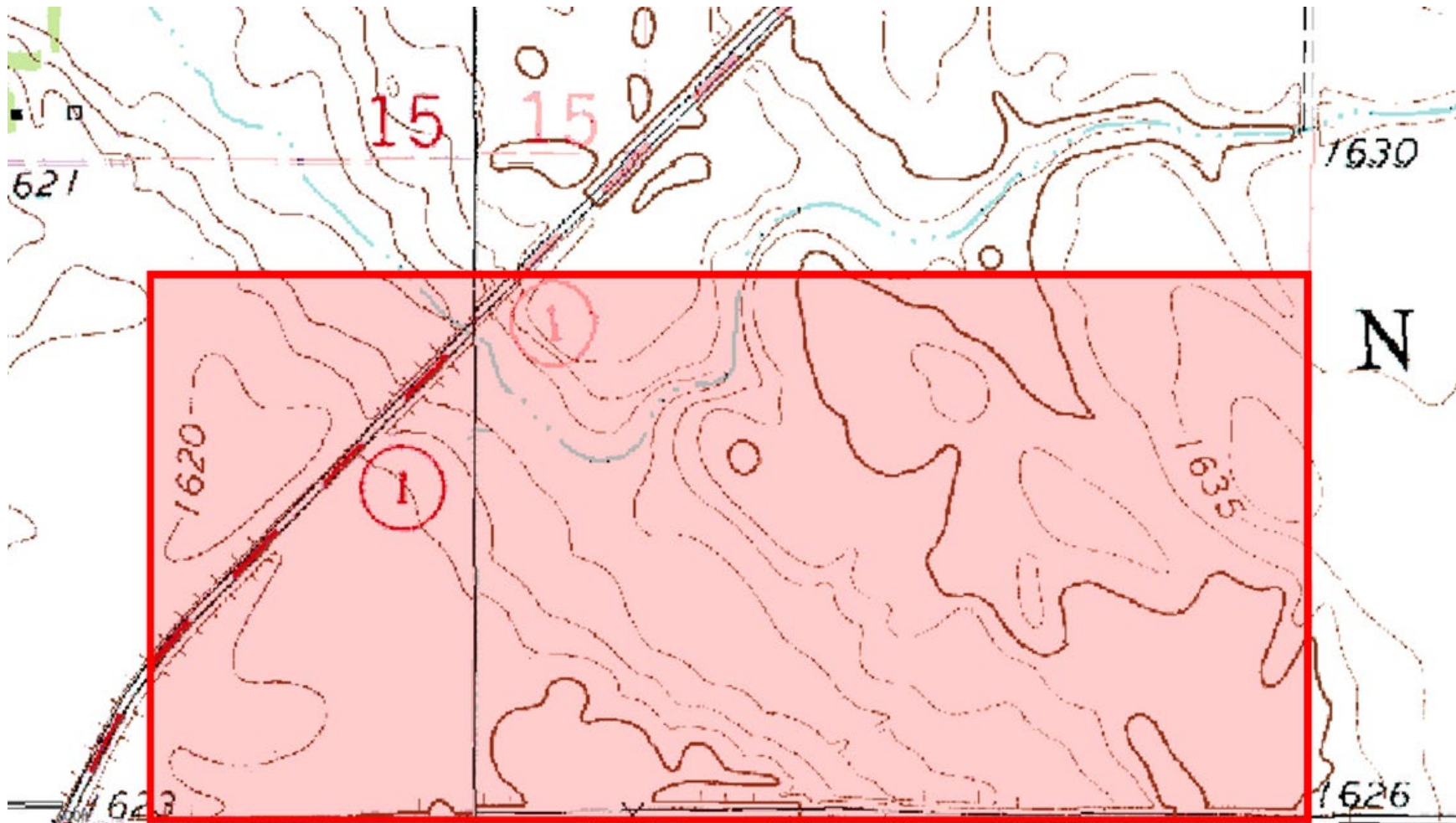
The community will include various housing options for residents.



Education

The addition of an education system will help support the families within and surrounding the community.

Site Analysis



Topography

- 15 ft variation of terrain
- Current use of site: agriculture

Site Analysis



Sun Chart

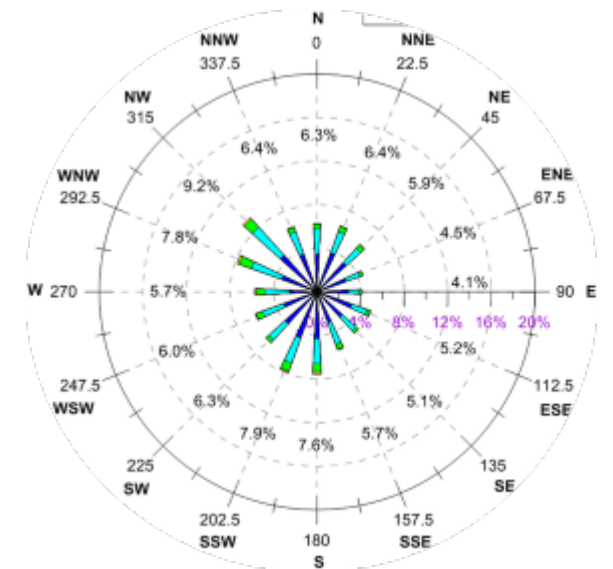
- pale yellow area = sun path throughout the year

Site Analysis



Wind

- Average Wind direction: from the Northwest
- Average Max Wind Speed: 21-27 mph



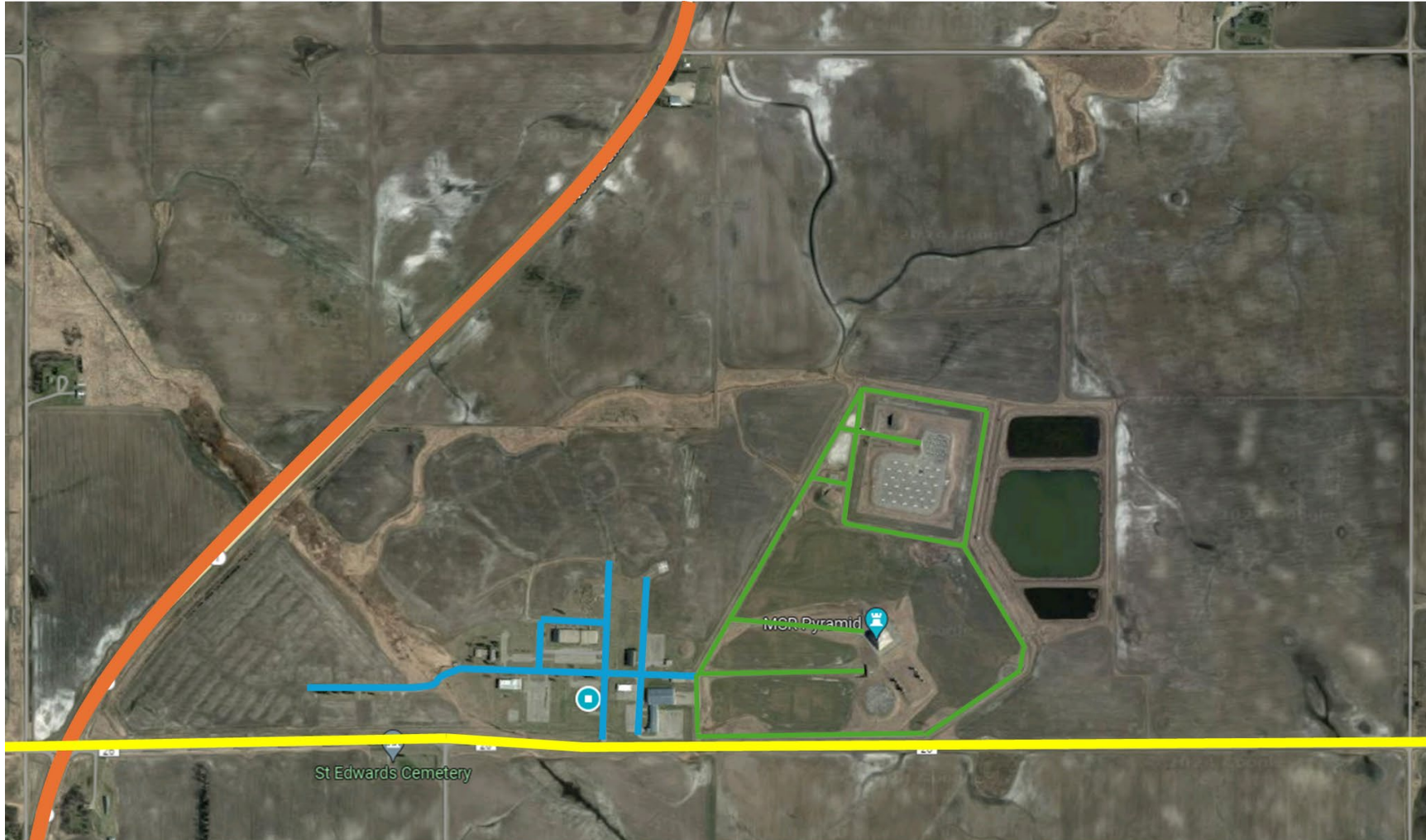
Site Analysis



Noise

- Main Contributors:
 - highway
 - agricultural equipment

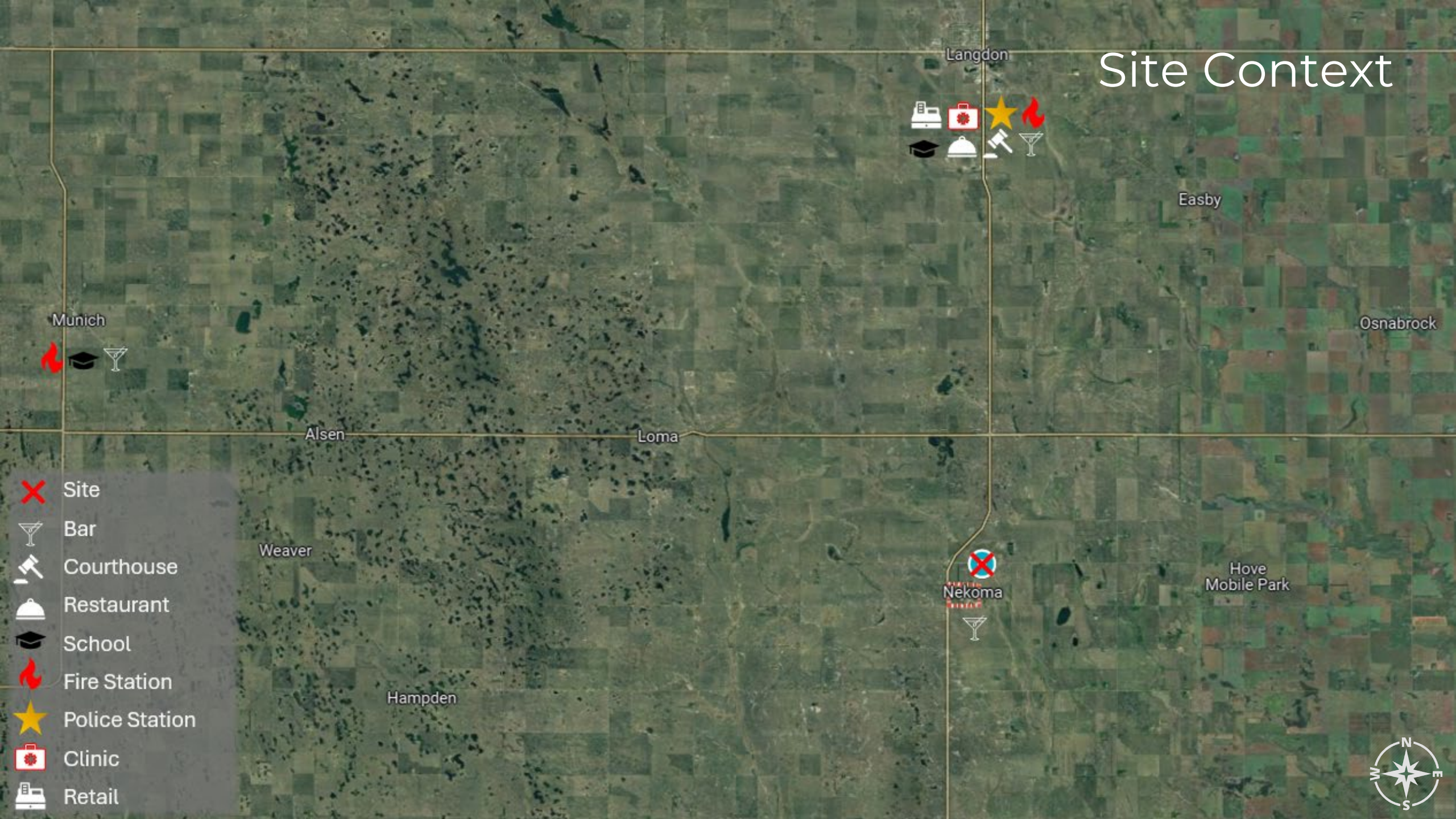
Site Analysis












Circulation

- Green = Silo site roads
- Blue = Admin. site roads
- Yellow = 81st St NE
- Orange = Highway 1

Site Context



-  Site
-  Bar
-  Courthouse
-  Restaurant
-  School
-  Fire Station
-  Police Station
-  Clinic
-  Retail



Infrastructure



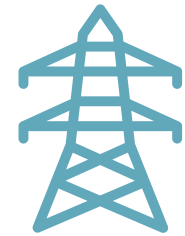
Medical

The nearest medical assistance to the site is a clinic 16 minutes away in Langdon, ND and the nearest hospital is located an hour away in Devils Lake, ND.



Emergency Response and Security

The nearest police, ambulance, and fire station is 16 minutes away from the site.



Utilities

The site would have to be connected to utilities provided by surrounding towns as it previously had its own utility provisions.

The Safeguard Complex has no current operational infrastructure or utilities.

Sustainability



Greenspaces

Greenspaces provide spaces for spending time and allow for a calm, open environment to enjoy.



Water Retention

Water retention ponds allow for the use of collected rainwater throughout the site to be used for both aesthetic and functional purposes



Renewable Energy

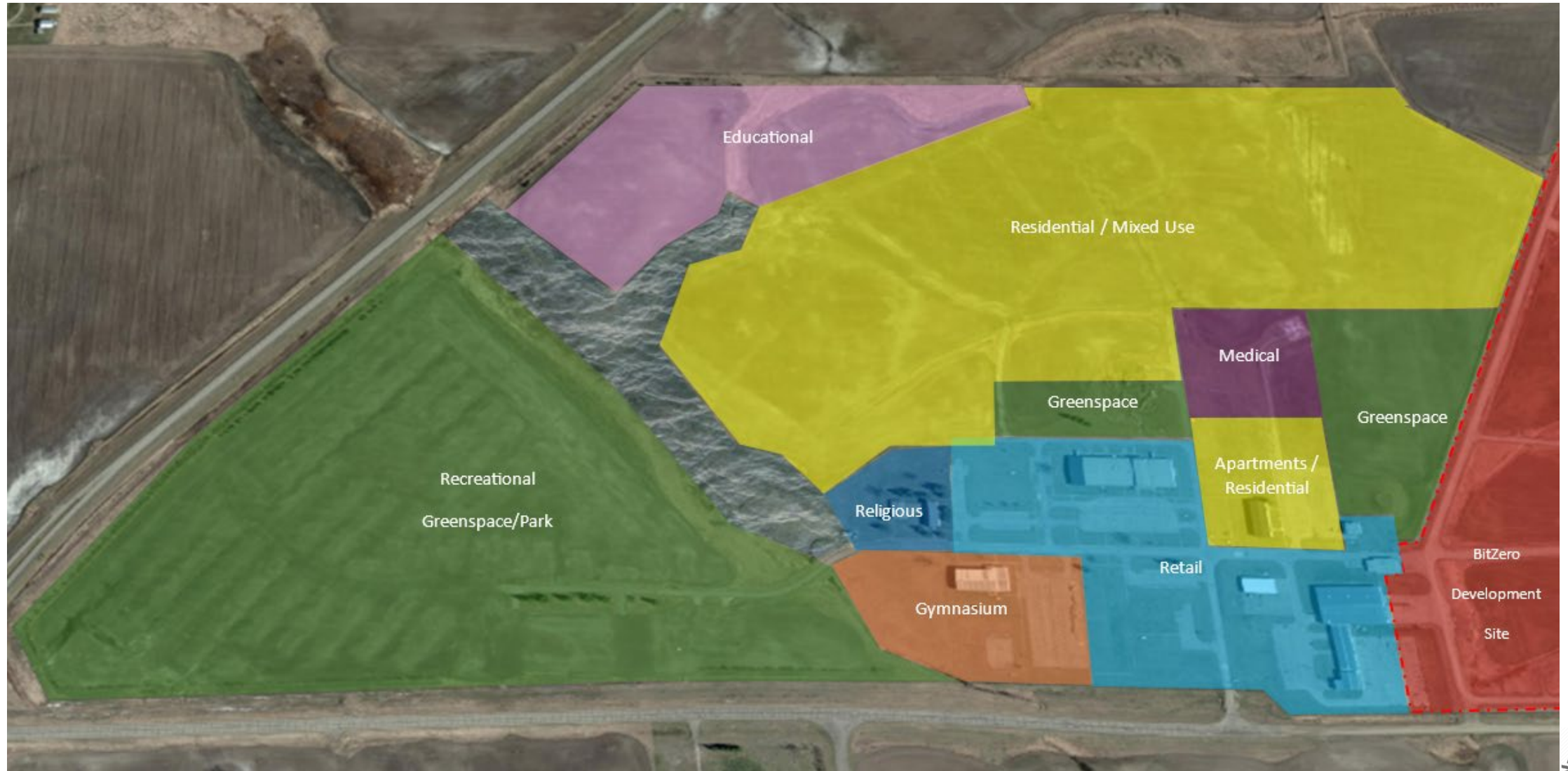
The use of renewable energy helps households and businesses use a source of cleaner energy to assist the use of local power sources.



Pavers

The use of pavers rather than asphalt allows for the movement of the road surface to allow for less need for repair and allows greenery to grow between.

Site Proposal

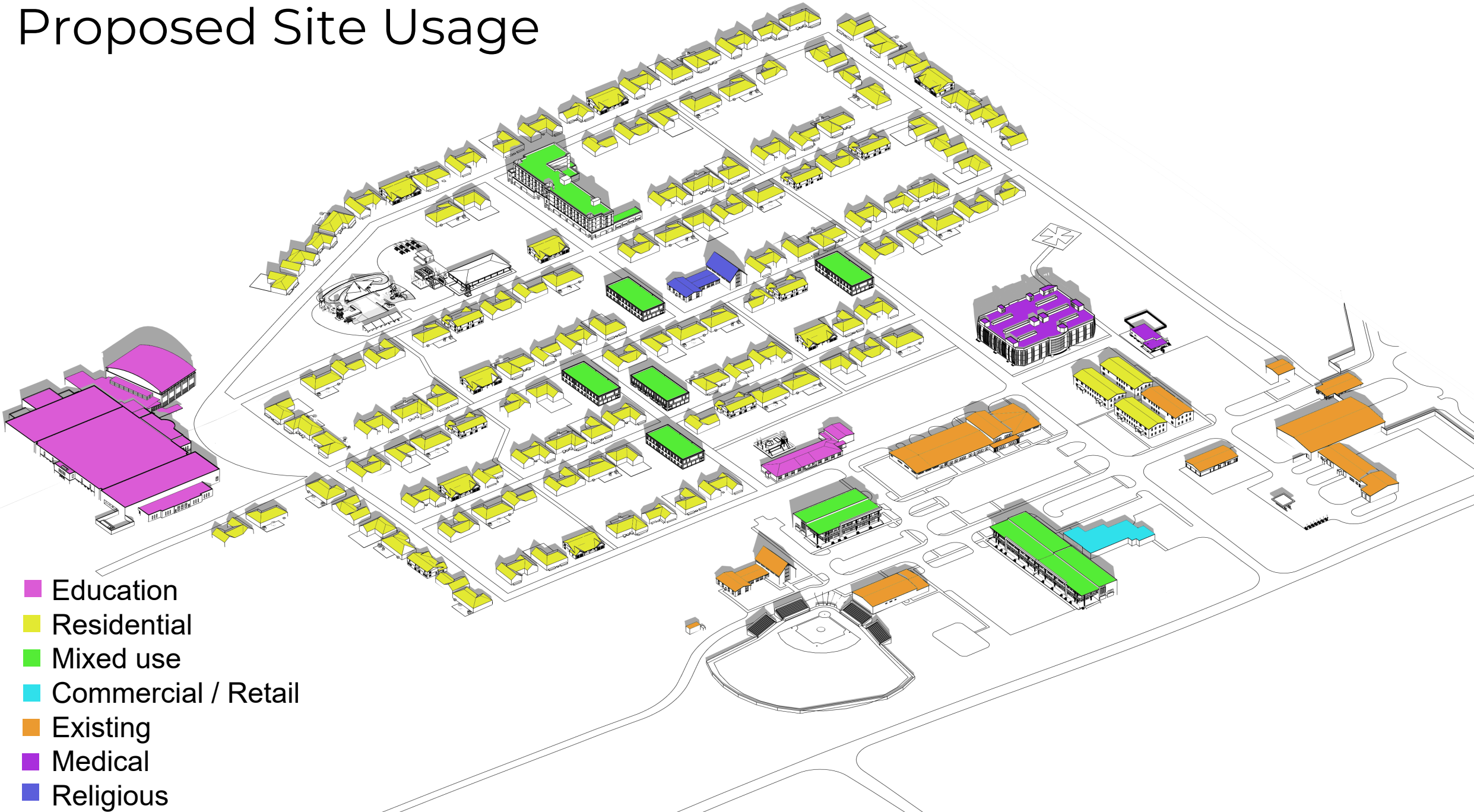


Proposed Master Plan





Proposed Site Usage



- Education
- Residential
- Mixed use
- Commercial / Retail
- Existing
- Medical
- Religious

Safeguard Community

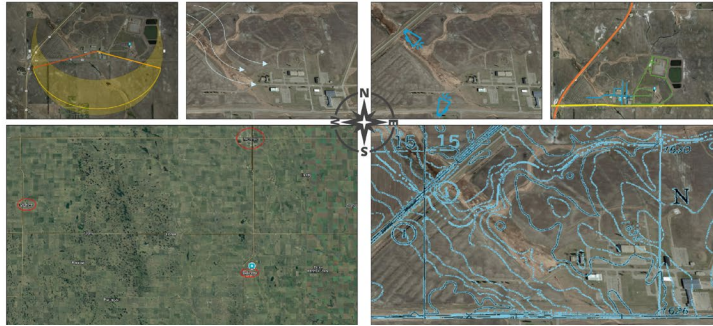
The redevelopment of the Stanley R. Mickelsen Safeguard Complex into a new community is a multi-phased process that involves a series of construction and infrastructure. On a central of natural county during the height of the Gold Rush, the complex now stands as a testament to history, awaiting a new chapter in its history with contemporary needs and aspirations.

As such, this redevelopment project is about more than just reimagining physical structures, it is about reimagining the very essence of the site. The expansive grounds and sturdy infrastructure provide solid foundation for the creation of a modern, sustainable and thriving community.

While planning also considers the layout and design of the new community. Careful consideration is given to factors such as land use, transportation networks, and green spaces to ensure a cohesive and functional environment. Strategic development will be incorporated to create a vibrant, interconnected, and recreational spaces, fostering a sense of community and vitality.

Environmental sustainability is a key priority throughout the redevelopment process. Efforts are made to incorporate green building practices, renewable energy sources, and water conservation measures. Green roofs, rainwater harvesting, and solar panels are incorporated to promote a healthier and more sustainable way of living.

Economic considerations are also carefully weighed to ensure the long-term viability and prosperity of the new community. Job creation, business opportunities, and property values are all factors that are taken into account to ensure economic growth and stability.



Conclusion

Redeveloping the historic Stanley R. Mickelsen Safeguard Complex site will bring economic benefits by creating construction jobs and long-term employment opportunities. It will bring social benefits by preserving an important piece of history and providing community amenities. Environmentally, redevelopment promotes sustainability through adaptive reuse rather than demolishing old structures.