Self-sufficiency for the future of Malden

KEYA PAYNE
SENIOR CAPSTONE
3 KEY ELEMENTS FOR THE SELF SUFFICIENCY FOR THE FUTURE MALDEN
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15 Minute city
KEY ELEMENTS FOR THE SELF SUFFICIENCY FOR THE FUTURE MALDEN

1. 15 min community
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KEY ELEMENTS FOR THE SELF SUFFICIENCY FOR THE FUTURE MALDEN

1. 15 min community

- Self Sustaining Affordable Housing
- Parks, Green Space, and Outdoor Recreation
- Sustainable Mobility
- Transportation
- Wildlife Conservation
- Economic Opportunities
- Community Garden
- Exercise
- Health Services
KEY ELEMENTS FOR THE SELF SUFFICIENCY FOR THE FUTURE MALDEN

1. 15 min community
KEY ELEMENTS FOR THE SELF SUFFICIENCY FOR THE FUTURE MALDEN

Fire resistant design
2. Fire resistant design

KEY

1. Fire resistant roof
2. Fire resistant walls and windows
3. Emergency responder access
4. Home ignition zone
5. Irrigation system
6. Landscaping and fire wise plants
7. Disaster plan
3 Key Elements for the Self Sufficiency for the Future Malden

Restoration
KEY ELEMENTS FOR THE SELF SUFFICIENCY FOR THE FUTURE MALDEN

3. Ecology restoration
ANALYSIS

Ecological restoration needed throughout Malden.
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Irrigation system needed for surrounding environment and to reduce fire risk.
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Possible area for housing, including open spaces.

Improvements needed to Palouse to Cascade State Park Trail.

Possible area for a 15min community.

Open space that could be used for growing produce.

Roads could be reduced to Pine City Maiden RD.

Pedestrian/bicycle circulation can be increased.
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Ecosystem for Malden’s Future
SITE CONCEPT
HOUSING
SITE CONCEPT – HOUSING

KEY
1. Solar panels
2. Steel roof
3. Sewage treatment plants
4. Earth blocks
5. Glass panels
6. Emergency responder access
7. Irrigation system
8. Rainwater collector
SITE CONCEPT
GREENSPACE
This is a view of 1 acre gardens
This is a view of the greenhouses
SITE CONCEPT
TOWN CENTER
SITE CONCEPT – TOWN CENTER
SITE CONCEPT - PARK
SITE CONCEPT
CIRCULATION
SITE CONCEPT - CIRCULATION
This is a view of the city plan
THANK YOU!
REFERENCES


CASE STUDIES