CULTIVATING

GROWTH

'Sustainable Communities for Idaho'

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Introduction

This book contains designs by graduate architecture students from the University of Idaho – Idaho Urban Research Design Center (IURDC) for the City of Meridian.

The project site is four square miles located on the western edge of Meridian, bordered by Can-Ada Road on the west, Chinden Boulevard on the north, McDermottRoad (future HWY 16) on the east, and Ustick Road on the south. Transit access is located at Chinden Boulevard and Star Road.

Using principles of sustainability and Smarth Growth, students addressed the development needs of rural Meridian with respect to the preservation of agriculture—both in terms of land use and a culture centering around nature and agricultural cultivation.

Student teams worked collaboratively with Meridian City Planners, and researched topics relating to agriculture ranging from traditional crop production to experimental crop and pharmaceutical production. Issues of particular importance were creating walkable village centers and providing a variety of housing types to promote density near commercial developments—part of sustainable design and a sustainable lifestyle for the approximately 7000 potential residents. Ultimately, these design ideas focused on blending complementary schemes of urban design and protection of rural open space.

Each design specifically addresses the existing characteristics of the site, and meets prescribed programmatic needs for housing, retail, service, industrial, and civic buildings necessary to create a self-sufficient, environmentally conscious, sustainable community in the heart of rural Meridian.

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BLUEPRINT FOR GOOD GROWTH

Ada County experienced record population growth and development during the 1990s because of the desirable climate, the outdoor recreation, and the economic opportunities. Subsequently, the Boise metropolitan area became the seventh-fastest growing region in the United States. However, the unfortunate side-effects of a thriving community are too often sprawl, loss of open space and farmland, and pollution.

The Blueprint for Good Growth attempts to use land and transportation planning to avoid the undesirable results of improperly planned growth and create a place that can be healthy now and in the future. By coordinating land use and public facility decisions, Ada County can establish a framework for policies and strategies which can maintain a vibrant community with employment, education, cultural and recreational amenities. Ada County, its cities, Ada County Highway District (ACHD) and the Idaho Transportation Department (ITD) will collaborate to establish regulations and practices with regards to land use and development, transportation, open space and agriculture preservation, environmental recreation, business and economic development, and intergovernmental coordination. This Blueprint for Good Growth will ensure that growth is orderly and beneficial for the community's continued prosperity and quality of life.

VALUES

- Functional vehicular transportation
- Public transit
- Pedestrian and bicycle amenities
- Preserved agricultural land
- Environmental protection
- Outdoor recreation
- Business and economic development
- Vibrant downtowns

METHODS

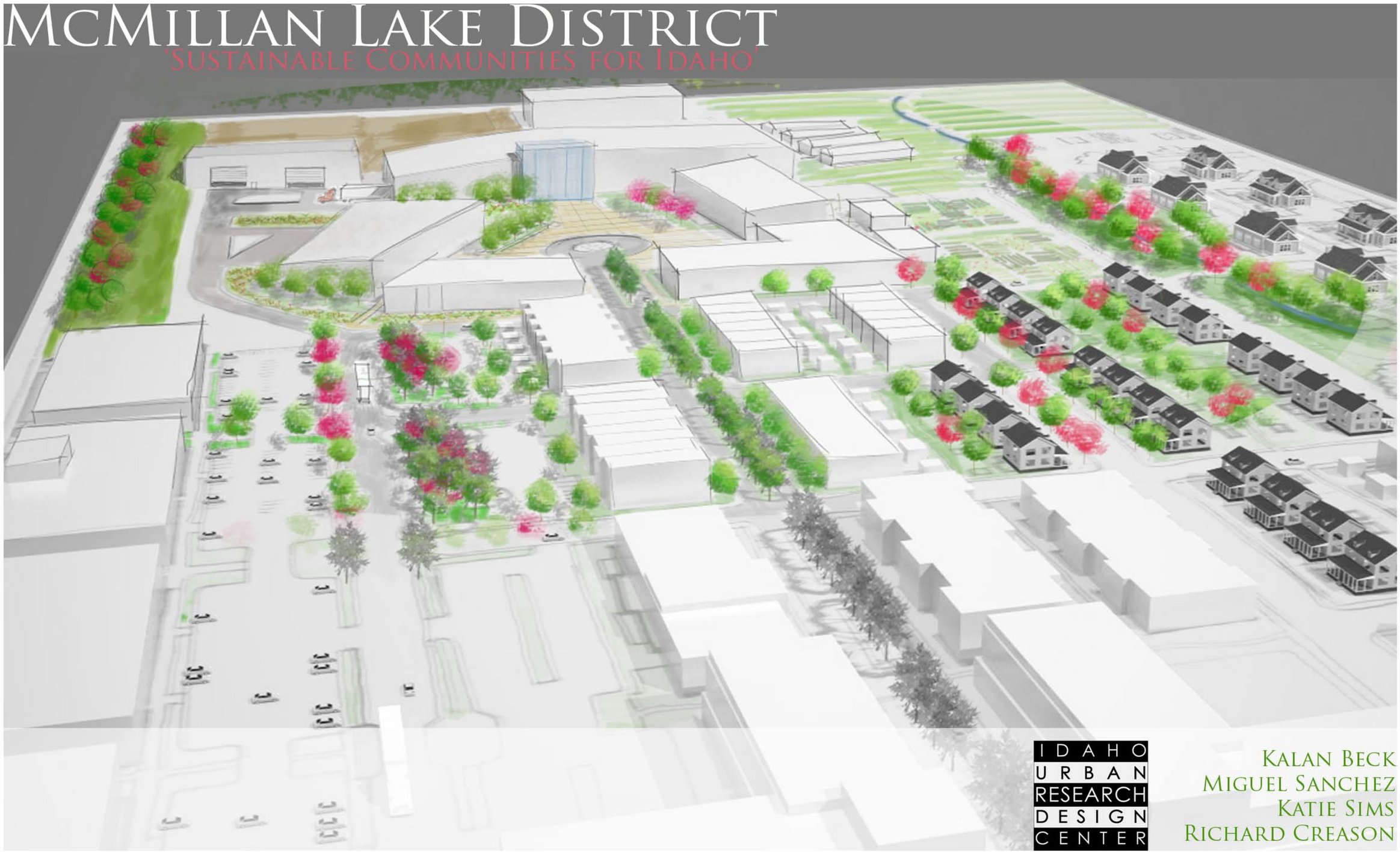
- Higher density development
- Diversity of housing types
- Consideration of natural systems
- Proliferation of sidewalks and paths
- Intergovernmental cooperative planning
- Infill, redevelopment, and then expansion
- Design with 1/4 mile walkability
- Define land parcels as protected open space

Precedent imagery

Precedent imagery

McMillan Lake District

'Sustainable Communities for Idaho'



IDAHO URBAN RESEARCH DESIGN CENTER

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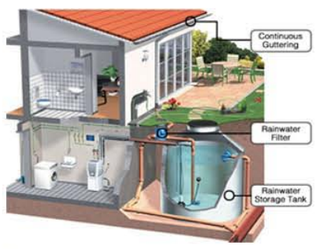



Vision

- promote a safe and vibrant mixed use community
- provide a variety of housing types and work potential
- promote sustainable and smart growth principles
- educate and involve public on urban agriculture and local food
- provide areas for multiple sizes of bio-science and ag research centers
- promote a walkable community that can connected to other sites and the city of Meridian
- provide and preserve areas for open land, natural habitat and farmland
- provide distinct downtown centers and that promote comfort and public involvement
- promote and sustain a development that values economic vitality, sustainable development and living, and responsible leadership to encourage more developments

Sustainable Strategies

As part of a vision to create more sustainable communities in the Treasure Valley and Idaho, certain implementations were added to the master plan to insure this. Such strategies include implementing a central transit to all the villages as to lessen the use of the automobile. As with this such architectural elements and aesthetics need to be in place to create walkable street and corridors for people to travel from village to village. Preserving open land for these corridors and as well as farmland is prime to getting people out into the community and getting them involved. 52 percent of the master plan has designated such areas with a constructed wetland for natural habitat a community park with several retention ponds and biking trails, as well as community garden corridors to each village. Every street is also lined with bioswales that help retain storm water and clarify the water before it hits the natural waterways. The buildings also implement within themselves to have greenroof and water collection systems to help stormwater runoff and to recycle the natural rain fall for use. The entire park and open land, as well as the retention ponds will be supplied with the water sewage treatment plants effluent as to mitigate the use of potable water for landscaping and constructed natural elements.

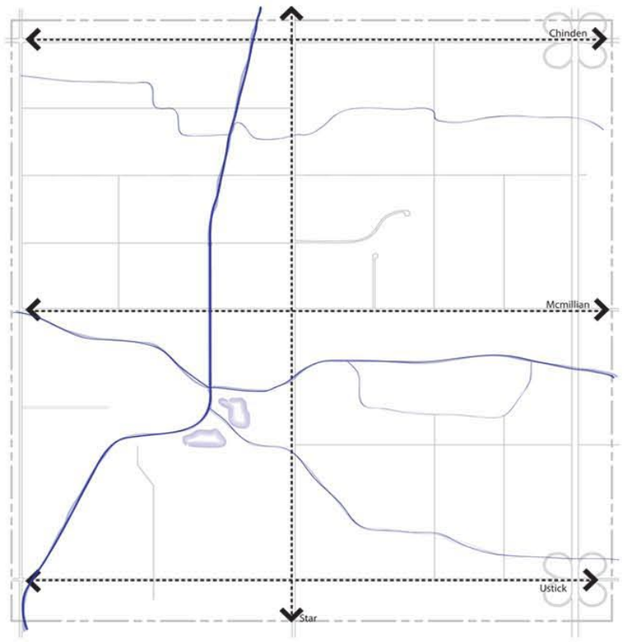
Design criteria

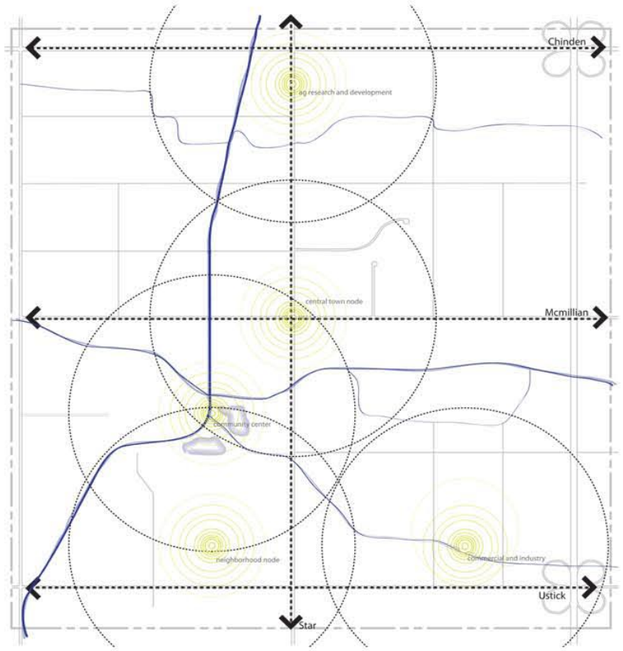
Project Area: 4 square miles = 4 x 640 acres = 2,560acres (roughly) = 111,513,600sf
Population: 1 du/ac = 2,560du x 2.7 (2008 census) persons/household = 6,912people
Residential to include:
Transit Oriented Village at center: Contained within ¼ mile walkable radius of 125 acres at 8du/ac = 1000 du approx. **Have: 1824 du at 5.15 du/acre**
Transit Oriented Village at Chinden: Contained within ¼ mile walkable radius of 125 acres at 8du/ac = 1000 du, approx. **Have: 680 du at 6.6 du/acre**
½ Transit Oriented Village at Ustick:(Other half would be south): Mostly contained within ¼ mile walkable radius of 125 acres at 8du/ac = 500 du, approx. **Have: 1034 du at 6.2 du/acre**

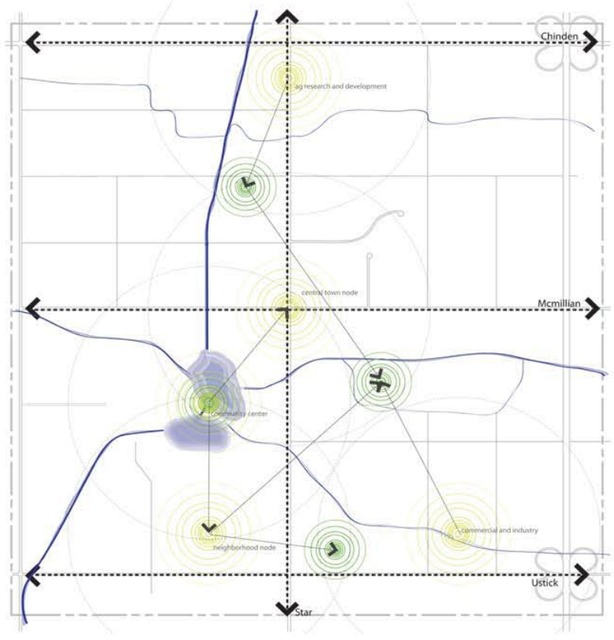
Commercial Area: 30,000sf per 1000 people= 30,000 x 6.912 = 207,360sf.
Have: Big Box: 176,300/ Reg. 132,540
Commercial Parking: 1space/500sf min. = 207,360sf/500sf = 415 spaces x 300sf/space (includes drive aisles) = 124,500sf.
Light Industrial w/ Light Industrial Office Area: 32,200sf per 1000 people = 222,566sf **Have: 284,367**
Light Industrial w/ Light Industrial Parking: 1space/2000sf min = 222,566sf/2000sf = 112 spaces x 300sf/space (includes drive aisles) = 33,600sf
Parks and Open Space: 4 acres/ 1000 people = 28acres
Protected Natural Areas/Green Infrastructure: Target of 15% of the total site.

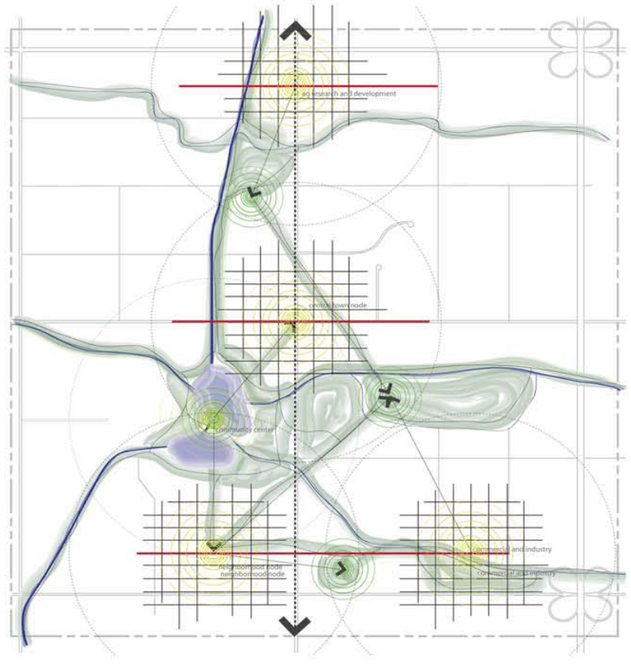
Building Types

The goal of the Mcmillian Lake District was to cluster many different housing types, building types, and amenities throughout the site. These building types included several churches for the three villages, two elementary schools and one junior high. The plan would create communities that have several types of housing in one area such as single family detached home, attached twonhouse, apartments, condos, and mized-use buildings. In the villages that border Chinden and ustick, these communites would also have small regional and some big box retail to get people to drive to the area as an attraction and then using the smaller community uses when they arrive. These villages would also house several light industiral and strictly commercial business parks, including an ag and bio-science reseach center.



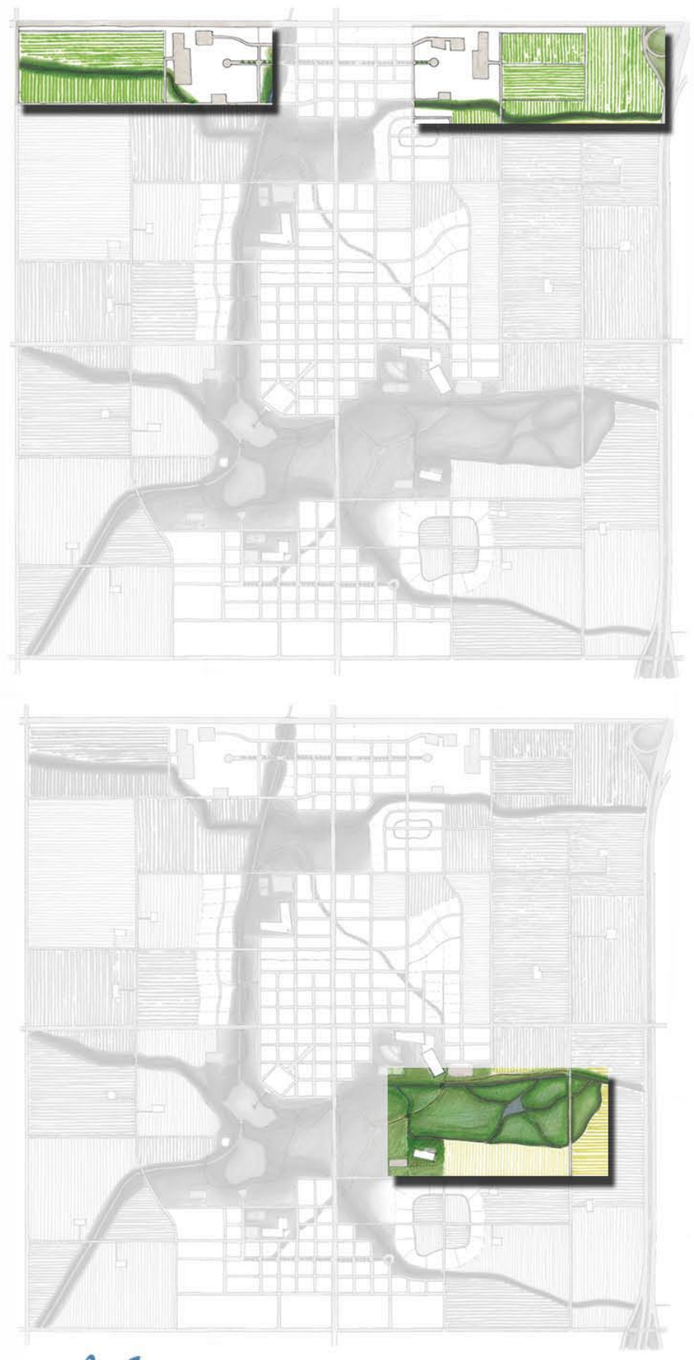






Concepts

These four images begin to tell the journey that our group took to get to the overall plan of the McMillan Lake District. We first began to look at the exisiting condition and quarter mile grid system that had been developed around the existing farmland. Then we began to think about where these three or four village centers would be and where a community center could possibly be. By drawing the 1/2 mile sustainable site circles for each node, we then began to see intersections of where these communites could interact with each other and create gathering areas. By creating connection between these communites the plan begin to create more connection to each community and gets the public more involved with each other and the outdoors through this walkable connection system. To promote this activity walkable corridors were created via nature walkways, existing canal and ditch ways and community garden paths. By applying a grid system to start to cluster development, the plan addresses that Star would be mostly an automobile thoroughfare and the cross axis of each node being more of a pedestrian way, thus making main street boulevards for each area to have and have a main farmers market and pedestrian street in the center node for every community to enjoy.

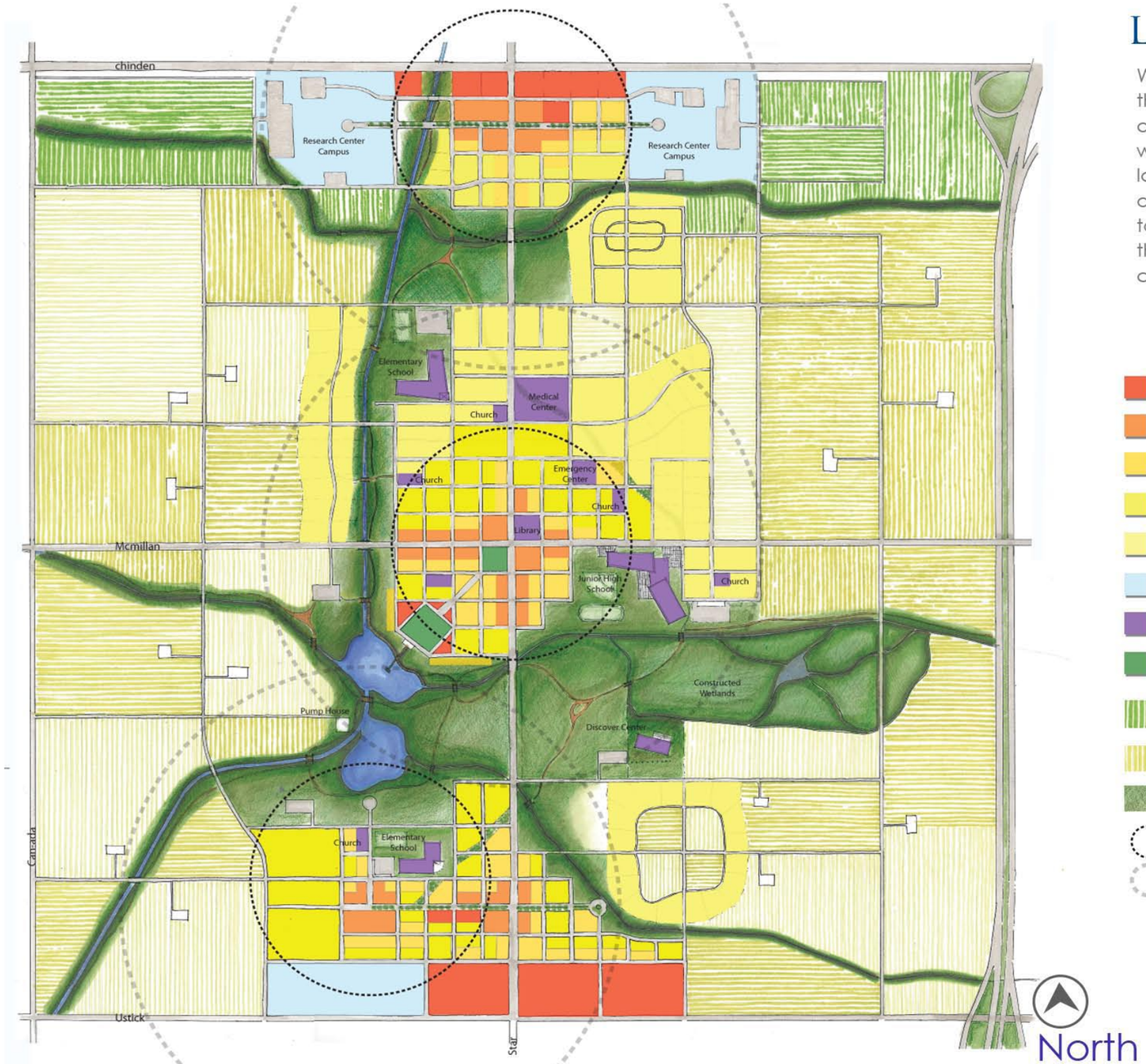


Amenities

The Master Plan provides area for the community to enjoy that they wouldn't have in a normal suburban development. These amenities also provides areas for the region to enjoy and a destination marker for the area that are unique to this community. The obvious attraction that would get people excited to live in the area is the new lakes that were created at the intersections of the existing waterways. These ponds offer several activities such as small boating, fishing, a boardwalk, and several water features. Condos and bed and breakfasts' would line this area as to give people even more reasons to drive to the area. Secondly the plan features a constructed wetland that houses a discovery center. This wetland can provide an academic research area for high schools and colleges, but also provides a natural habitat for animals. THe added nature ways provide many weekend and weekday activities for people that might live in the area, constantly giving them options to be in the outdoors. Finally the Research and Development provides unique campuses that are connected to the community and encourage their involvement i nthe the agriculture that is taking place their. They house classrooms and community plots to learn agriculture and new crops types, also a visitor center so the community and abroad can learn of the inventive activites that go on in the campus.

Land USe

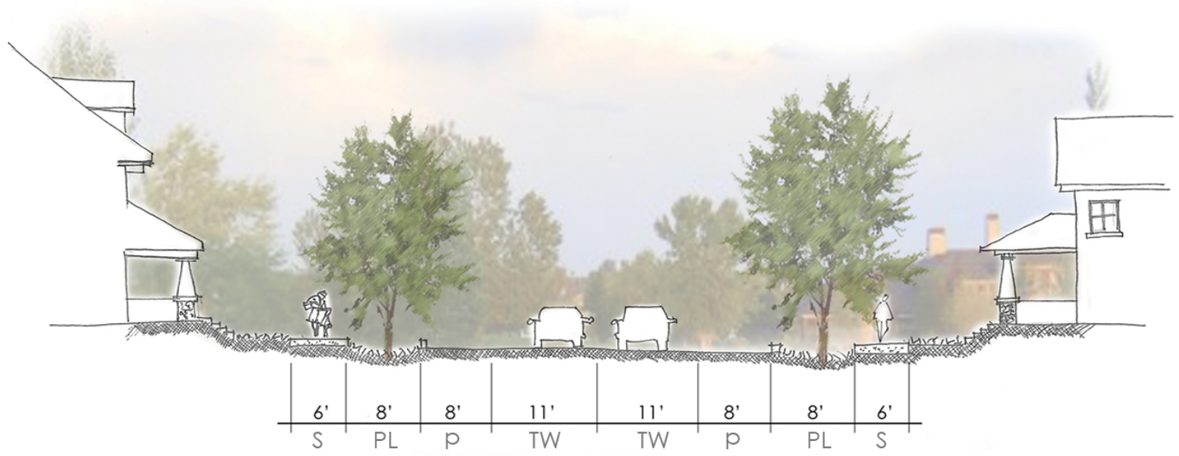
Within a 1.4 mile walkable circle the master plan suggests that we cluster the uses and housing around central nodes to lower infastructure costs and the use of the automobile. The mixed use buildings and apartments, live work units, and attached housing are all within these walkable circles. Then looking at the 1.2 mile circle we wanted to supply each node with a school, a park, and farmland. The intersection of these circles is where each node begins to share uses with other nodes such as schools and parks. Also you can see that the mized use is centered on the main street of each node with the commerical (in red) pushed to the busier streets of Ustick and Chinden.



- commercial/retail
- mixed use
- housing (attached)
- housing (detached)
- housing (detached-low density)
- light industrial
- civic
- plaza space
- ag research land
- privately owned farmland
- parks/open space
- 1/4 mile walkable circle
- 1/2 mile sustainable site

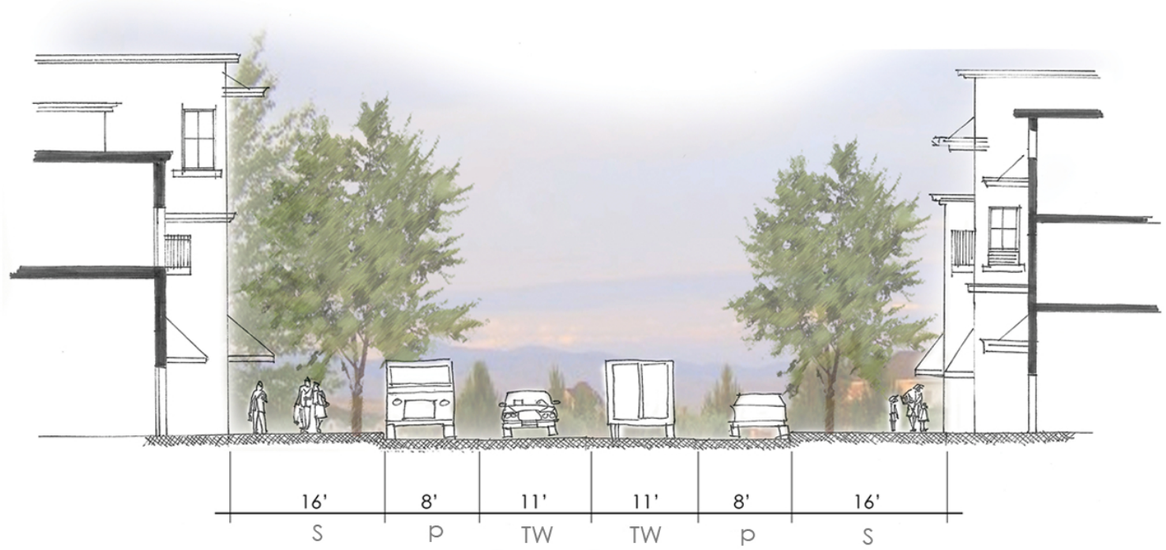
Street Sections

- 2 lane traffic way
- Bio Swales for natural run-off treatement
- Trees provide buffer for pedestrian traffic
- On street parking
- One acre residential lots
- Houses set back from street



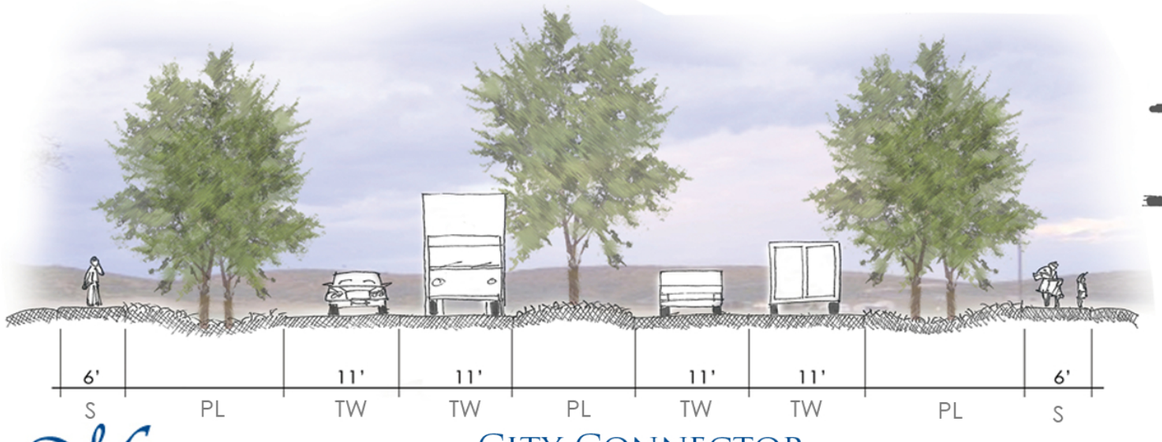
Residential

- 2 to 3 story buildings lining street
- Trees and on street parking create buffer for pedestrian traffic
- building set backs to allow for commercial use to extend onto sidewalks



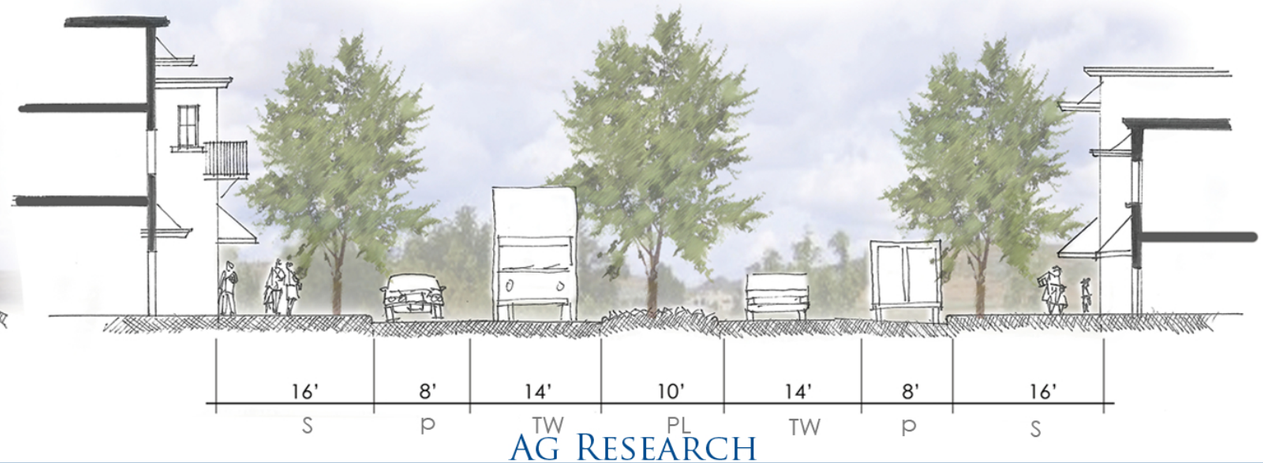
City Center

- 4 lane street with planted median
- Bio swales for natural run-off treatment
- Trees provide buffer for pedestrian traffic
- Higher speed traffic connecting district centers



City Connector

- 2 to 3 story buildings lining street
- Planted median separating traffic flow
- opportunities for retail and commercial along street with large sidewalks
- 2 lane traffic split with planted median
- Paving conditions relate to pedestrian scale
- On street parking and trees create buffer for pedestrian traffic



AG Research

MERIDIAN IDAHO

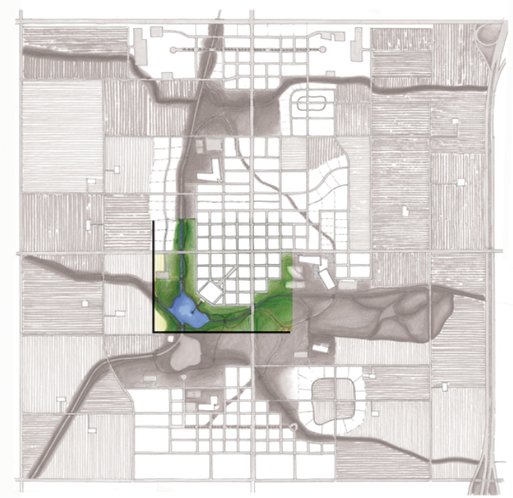
Central Business District

In the central business district our goal was to create a very pedestrian friendly town center that connects open space to a civic core. With that in mind an angled central pedestrian street connects the city plaza and civic structure. Along this pedestrian green-way opportunities for community gathering, farmers markets and community gardens are created.

The city plaza also acts as a great opportunity for gatherings and events. The plaza would be surrounded by a one way street. This street would slow traffic down creating a place that relates well to the pedestrian. The plaza would also be surrounded by small retail and commercial buildings. Ideal businesses for the plaza buildings would include: small boutiques, restaurants, bakeries, and delies.

The area around the pond would be left for up-scale condominiums and green space. The green space would create a place for residents to recreate without having to travel long distances outside of the city.

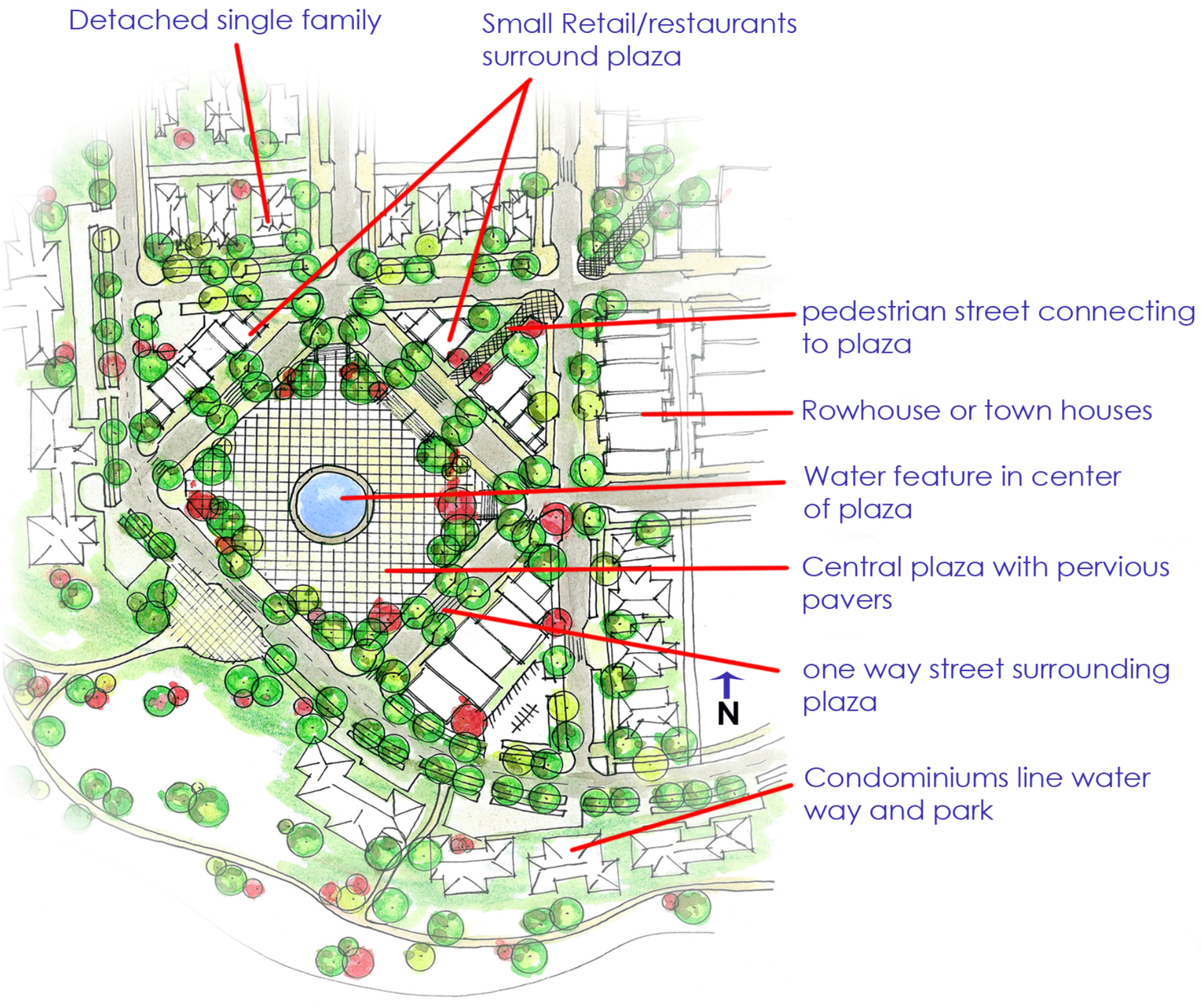
McMillan and star are lined with the most dense structures, mainly mixed use and live/work structures. The green pedestrian street would be surrounded by mainly attached housing units to maintain a significant level of density. Moving out from the city center buildings become less dense with more detached single family residences. Moving further away blocks and lots sizes increase.



The Central Plaza

The central plaza acts as a main gathering space for the business district that accents the surrounding parks and creates a transition from the surrounding open space to the dense city. This space is designed to be a very pedestrian friendly and lively city center.

The streets surrounding this area have large bulb-outs to accommodate large growth trees and to create pedestrian friendly street crossings. Sidewalks would be paved with stone pavers relating to the pedestrian scale. Streets would also have on street parking creating a buffer and slowing down traffic.



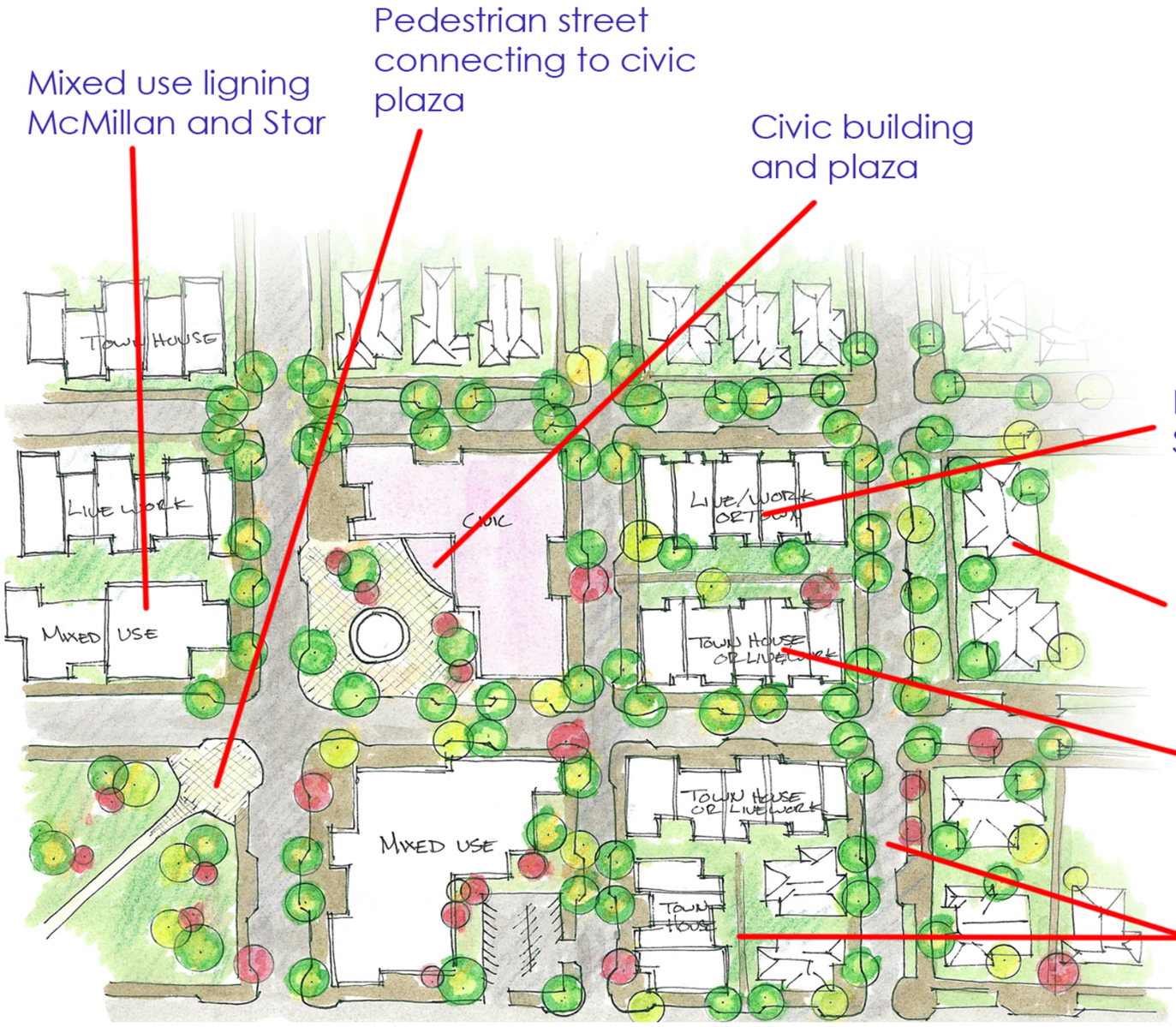
MERIDIAN IDAHO

The Civic Center

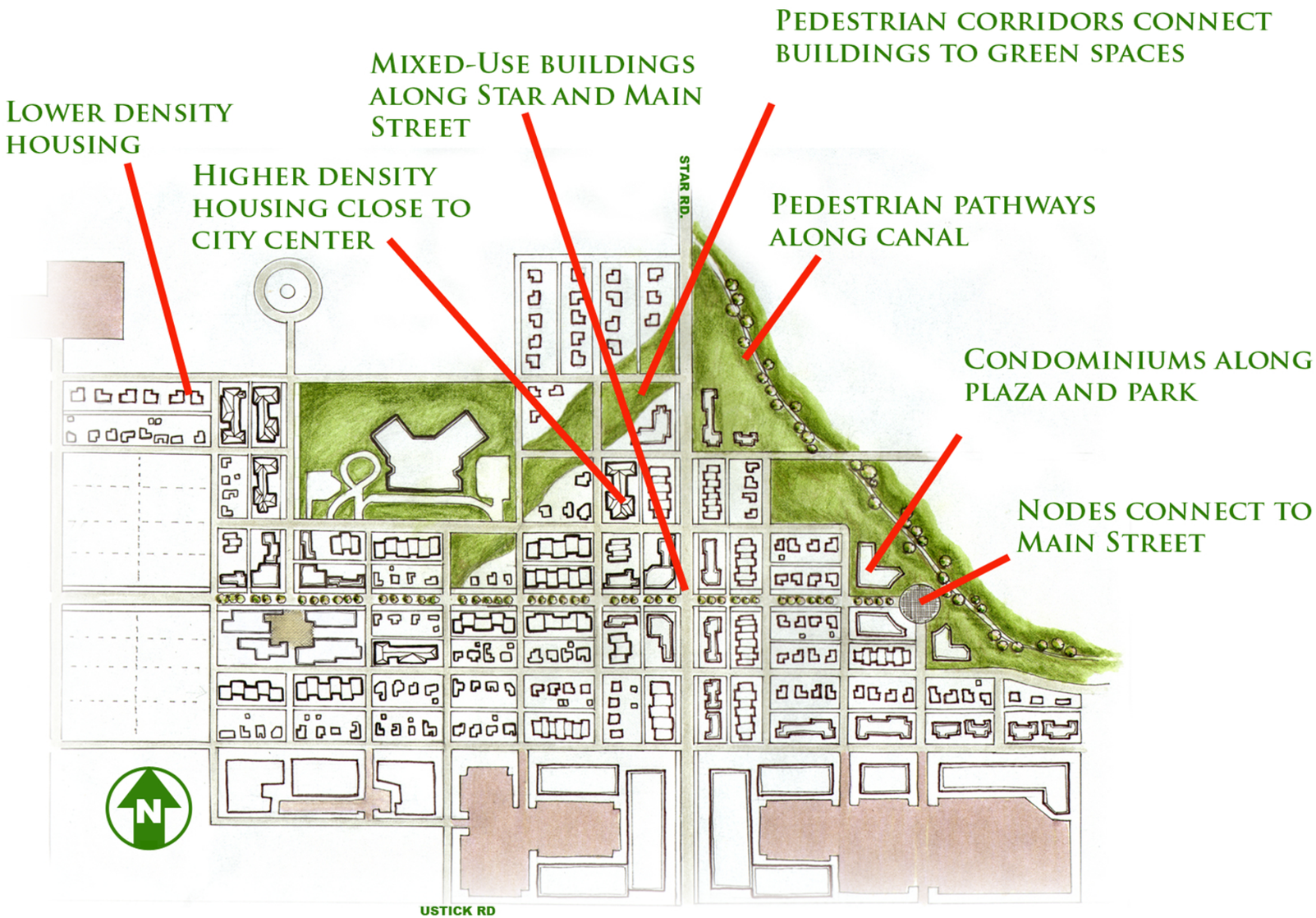
The civic center is connected to the rest of the central business district by the pedestrian green-way. The civic structure is on the corner of McMillan and Star.

The civic building is located here because of its proximity to the surrounding city. The civic center can act as a meeting place for the cities residence.

The surrounding buildings start with mixed use and live/work high density structures. Moving out from here are attached and detached structures. Use transitions are inteded to change at alley ways.



Residential District



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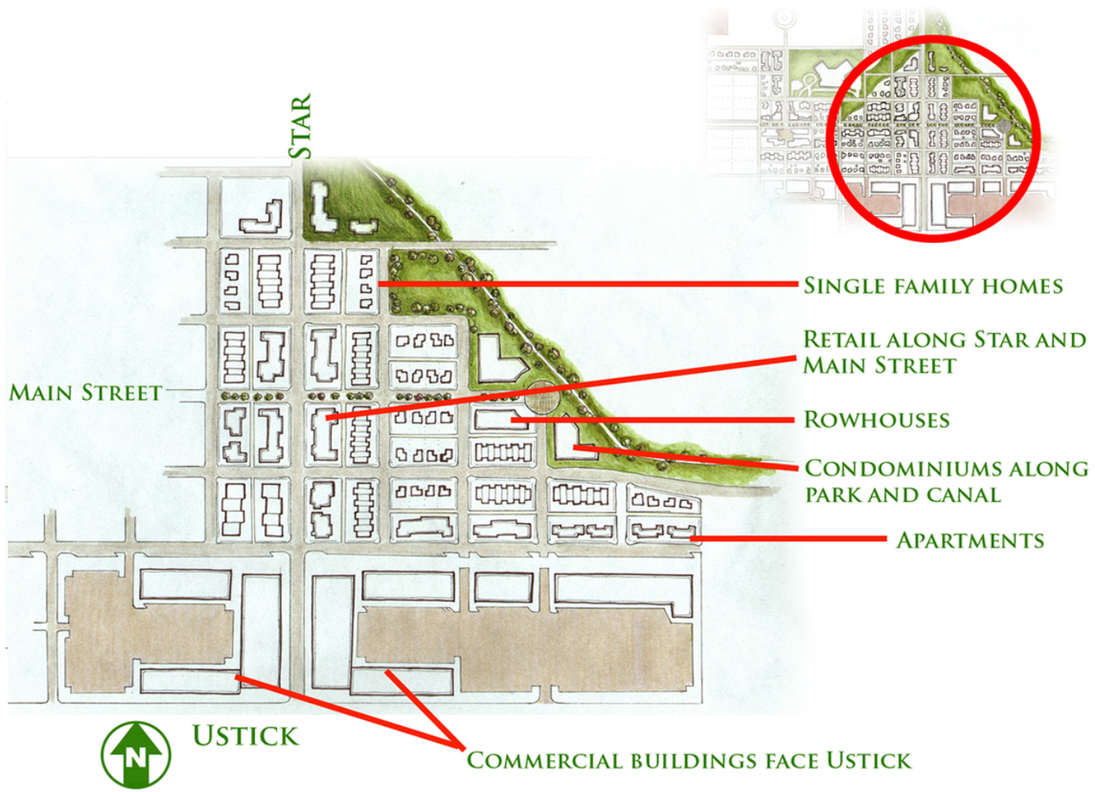
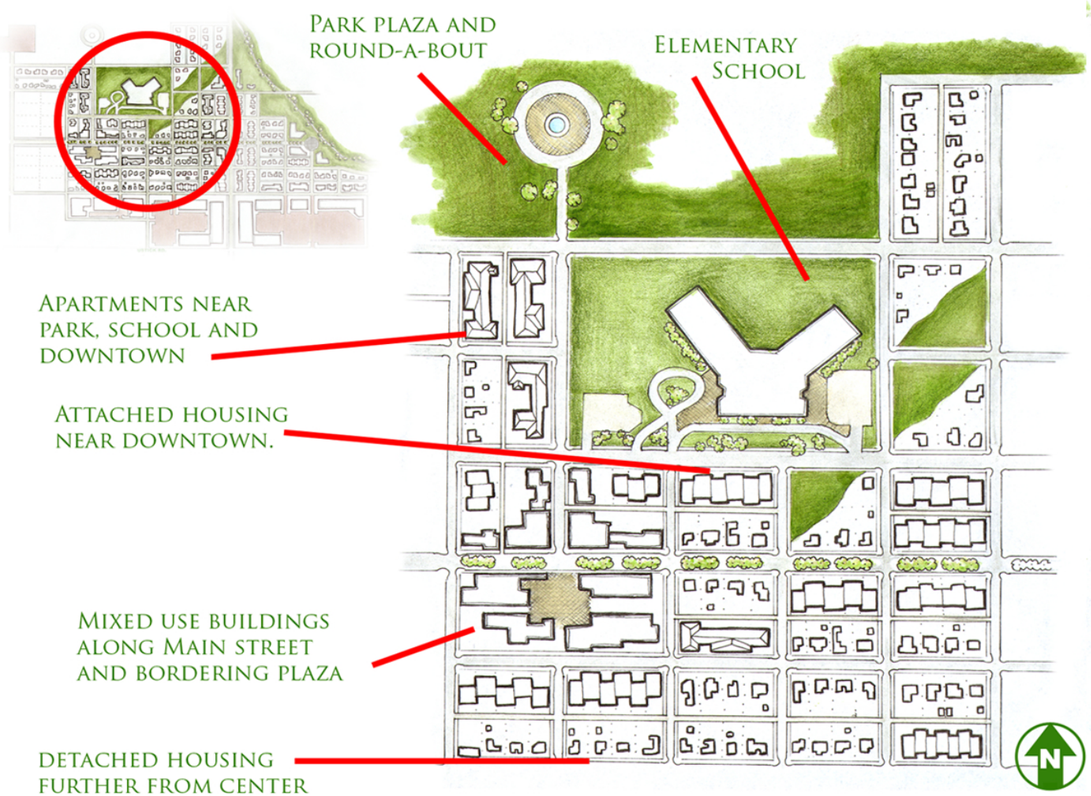
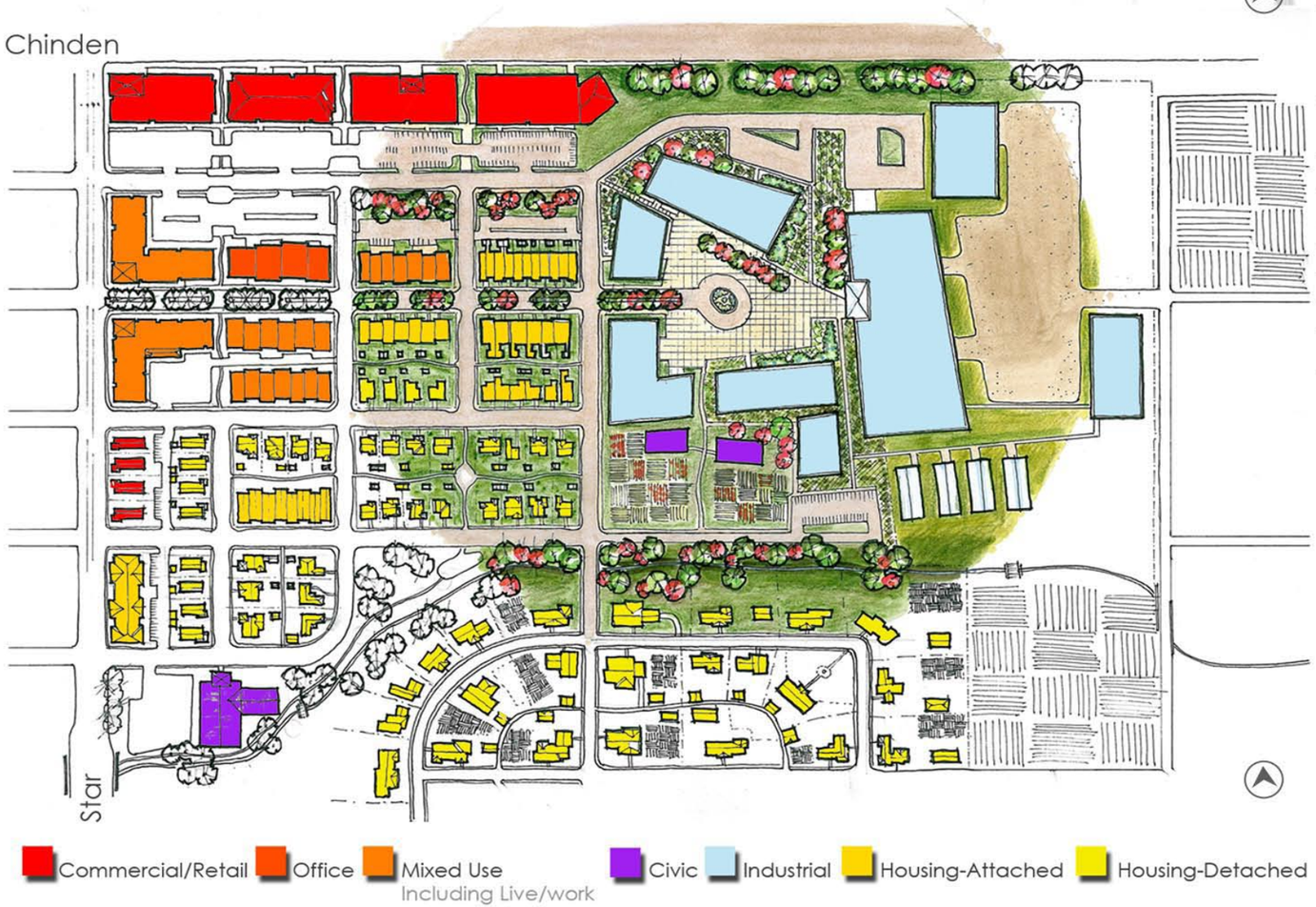




RESEARCH NODE

This detail of the research node shows the public involvement in the research center campus. The connection that is made through the main street of the village encourages the public and the center to get invloved with each and the center to be more involved in community events, etc. This is done by classrooms on the site of the research center classes that the community can come to them and participate in urban agriculture classes as well as the new inventive crops that the companies are creating.

The campus is designed so more than one company can be on one research campus. The idea is that one bigger company will buy and develop the campus while leasing out smaller spaces to beginner companies. they will be equipped with offices, greenhouses, laboratories and equipment shops and storage, all while being close to their crops right across the creek and road. The service entry is on Chinden and Star and then on the street directly north of the main street to make this street disconnected to the pedestrian. The two campuses in this design anchor this top development connected with the pedestrian main street. The master planner group can see this as two competitive campuses working together and connected to each other with development in between, and also having their separate fields.



'SUSTAINABLE COMMUNITIES FOR IDAHO'

BIOPHILIA

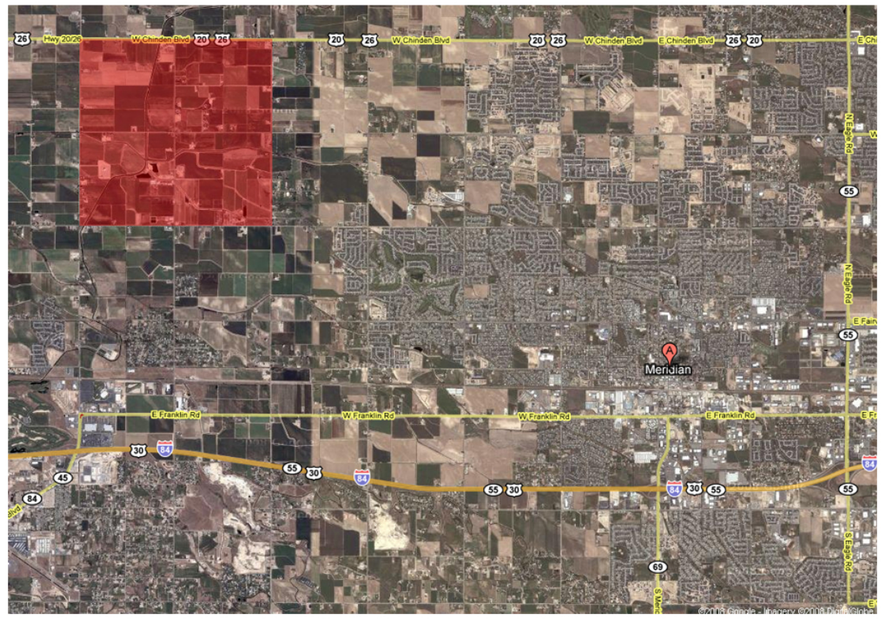
LISA BITTICK

NIKKI CALZACORTA

TIM HEDRICK

IDAHO URBAN RESEARCH DESIGN CENTER

Project Description



PROJECT AREA: 4 SQUARE MILES = 2,560 ACRES
POPULATION: 6,912 PEOPLE

HOUSING: SINGLE FAMILY, ATTACHED TOWNHOMES, APARTMENT COMPLEXES, CONDOMINIUMS, RETIREMENT COMMUNITIES, SENIOR CARE HOUSING, ACCESSORY DWELLING UNITS, RESIDENTIAL ABOVE OFFICE OR RETAIL

SCHOOLS: AGRICULTURAL/TECHNICAL/VOCATIONAL HIGH SCHOOL
MIDDLE SCHOOL
2 ELEMENTARY SCHOOLS
7 PRESCHOOL/DAYCARE

7 CHURCHES
1 FIRE STATION
1 MEDICAL CLINIC

OPPORTUNITIES AND CONSTRAINTS

CONCEPT

"Humanity is exalted not because we are so far above living creatures, but because knowing them well elevates the very concept of life."

~ Edward O. Wilson, Biophilia, 1984, pg. 22

LOVE OF LIFE, LOVE OF LIVING THINGS

CONNECTION TO NATURE

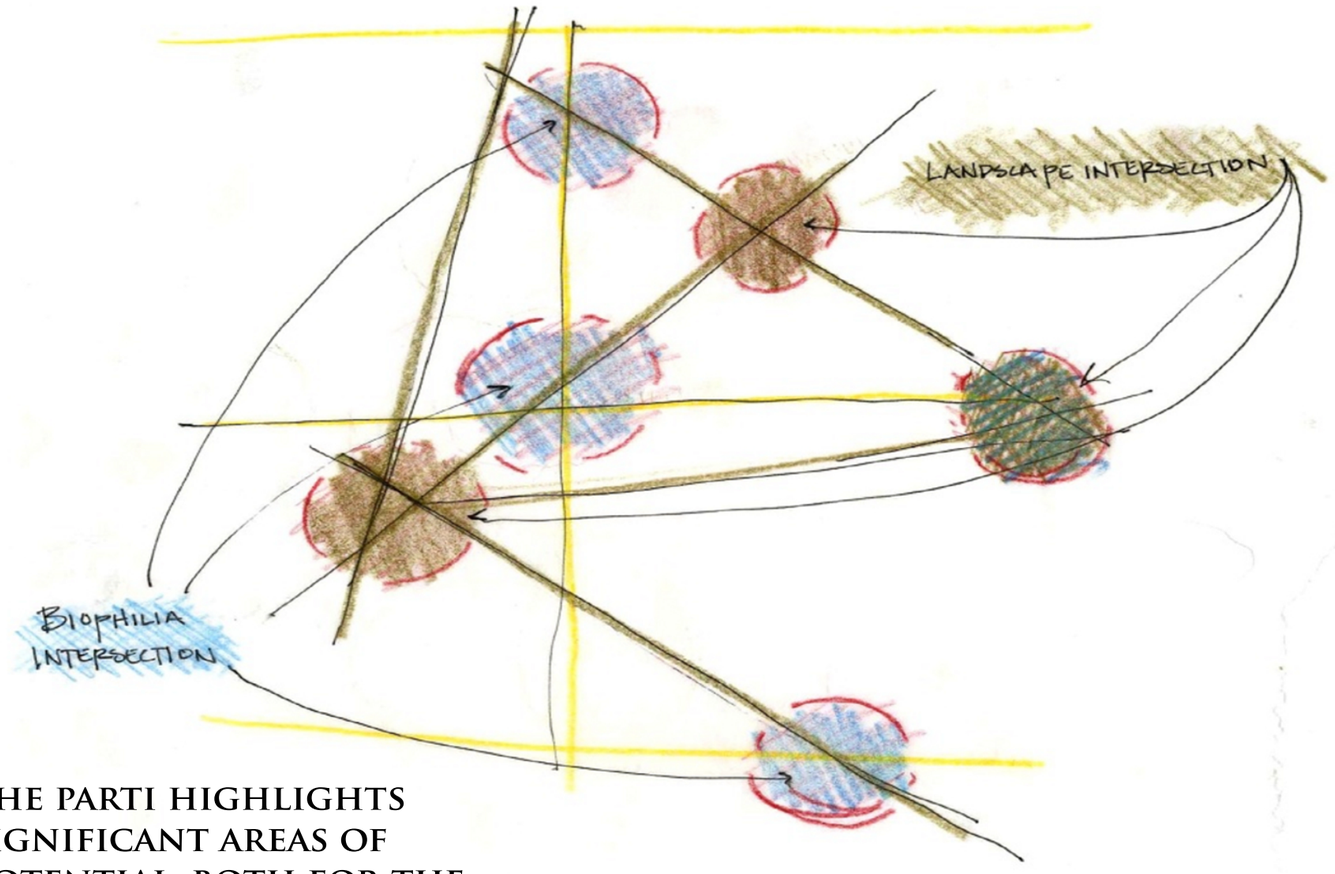
"I have argued in this book that we are human in good part because of the particular way we affiliate with other organisms. They are the matrix in which the human mind originated and is permanently rooted, and they offer the challenge and freedom in which our thoughts and feelings reach their fullest expression. If each person can feel like a naturalist, the old excitement of the untrammeled world will be regained. I offer this as a formula of reenchantment to invigorate poetry and myth: mysterious and little known organisms live within walking distance of where you sit. Splendor awaits in minute proportions." Edward O. Wilson, Biophilia, 1984, p. 139

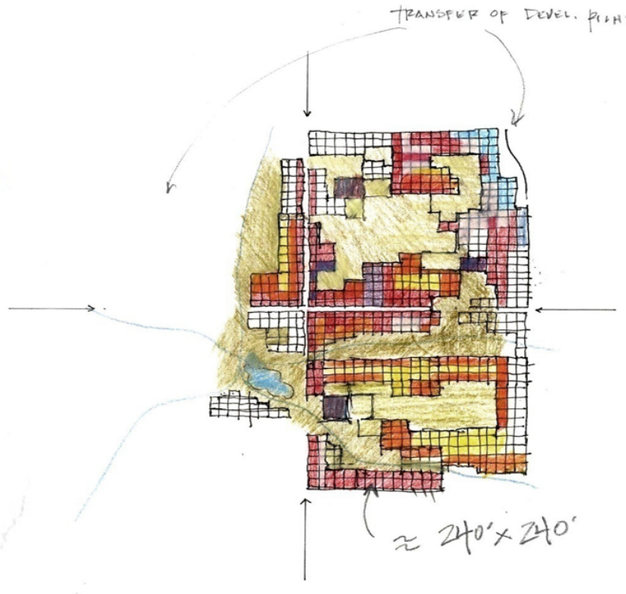
BEING A STEWARD OF NATURE

Our concept for the Meridian Four Square Miles development is centered around vast expanses of vegetation, water, and open space for wildlife corridors which filter around and through residential, civic, and commercial areas, and are criss-crossed with pathways and connections to village centers.

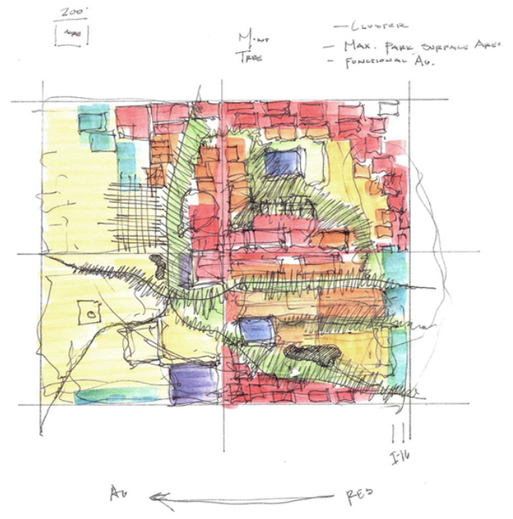
It is our intention that these green pathways through the development, in addition to being functional and convenient for pedestrian traffic, will infuse the residents who live, work, and play in the meridian Four Square Miles with the vibrancy of nature.

PROCESS

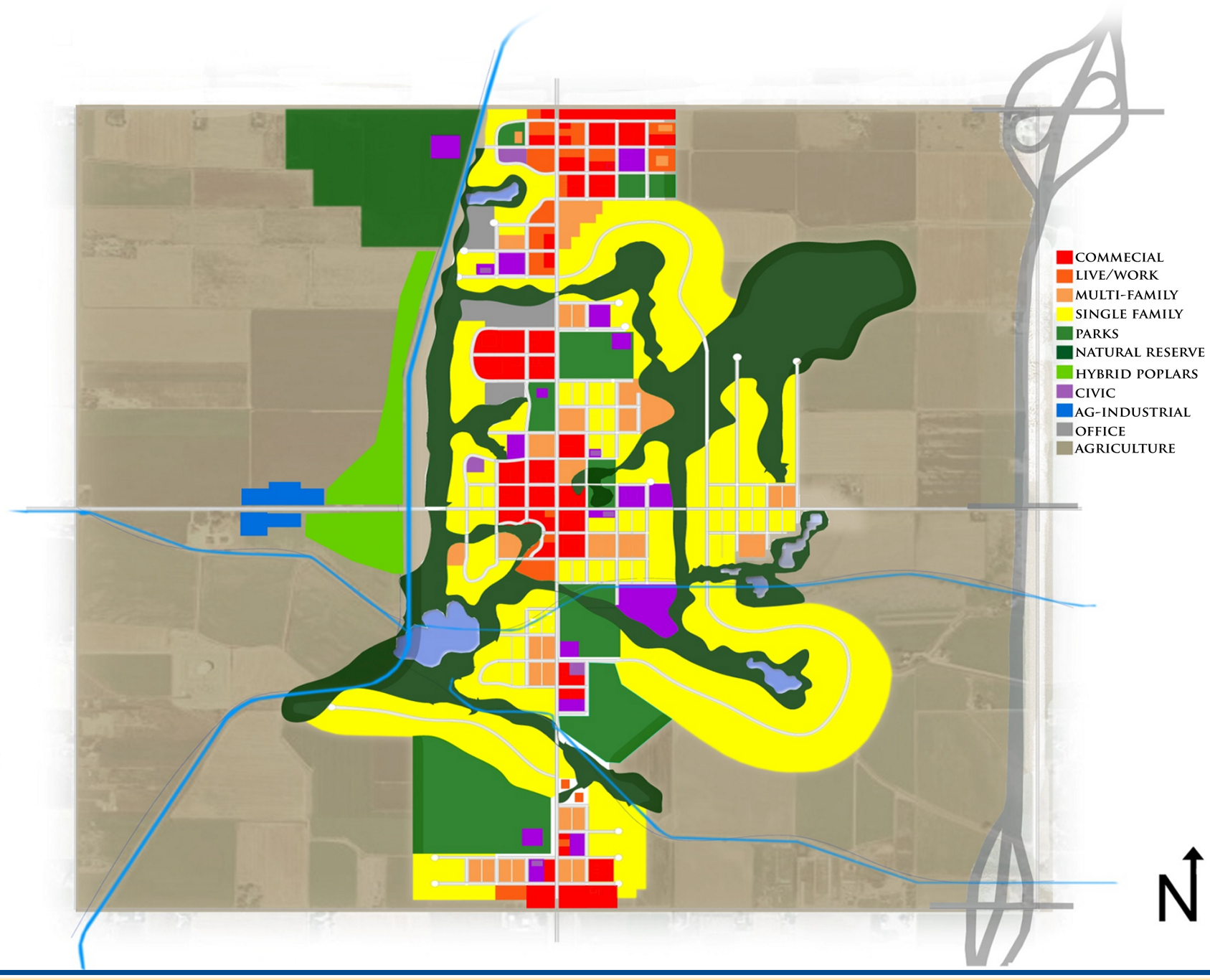




THE PARTI HIGHLIGHTS SIGNIFICANT AREAS OF POTENTIAL, BOTH FOR THE BUILT ENVIRONMENT AND THE NATURAL, AND BEGINS TO EXPLORE RELATIONSHIPS AND CONNECTIONS BETWEEN EACH OF THE NODES



MASTER PLAN



THE PLAN WAS DEVELOPED ALONG STAR ROAD TO MAINTAIN A COHESIVENESS THROUGHOUT THE DEVELOPMENT. WE TRIED TO PRESERVE AS MUCH AGRICULTURAL AREA AS POSSIBLE AND USED GREEN PARK SPACE AND NATURAL CORRIDORS AS A TRANSITION INTO THE DEVELOPED ZONES.

GREEN SPACE AND PARKWAYS

By narrowing nature reserves and park areas, we are able to create a greater park surface area. This means that more people are immediately adjacent to park space. This chain of natural reserves is able to reach around the entire developed area and act as a buffer to the agricultural areas.

This natural corridor could change depending on contiguous uses; areas of manicured grass would exist closer the community cores while gravel trails and taller grasses could be in place closer to the periphery.

The large natural reserve was designed as a site that natural vegetation would grow. This site would operate two-fold as a seed supplier that would help reseed wildfire bioremediation sites and overgrazed land as well as an educational tool.

The stormwater systems flush rainwater quickly from streets and gutters and into the nearest waterway. Unfortunately, stormwater is not treated and often contains many pollutants including car fuel, oil, and sediments.

Retention ponds are beneficial for providing stormwater abatement and the removal of pollutants from stormwater. Also they provide an attractive amenity for residents and visitors.

BUILDING TYPES

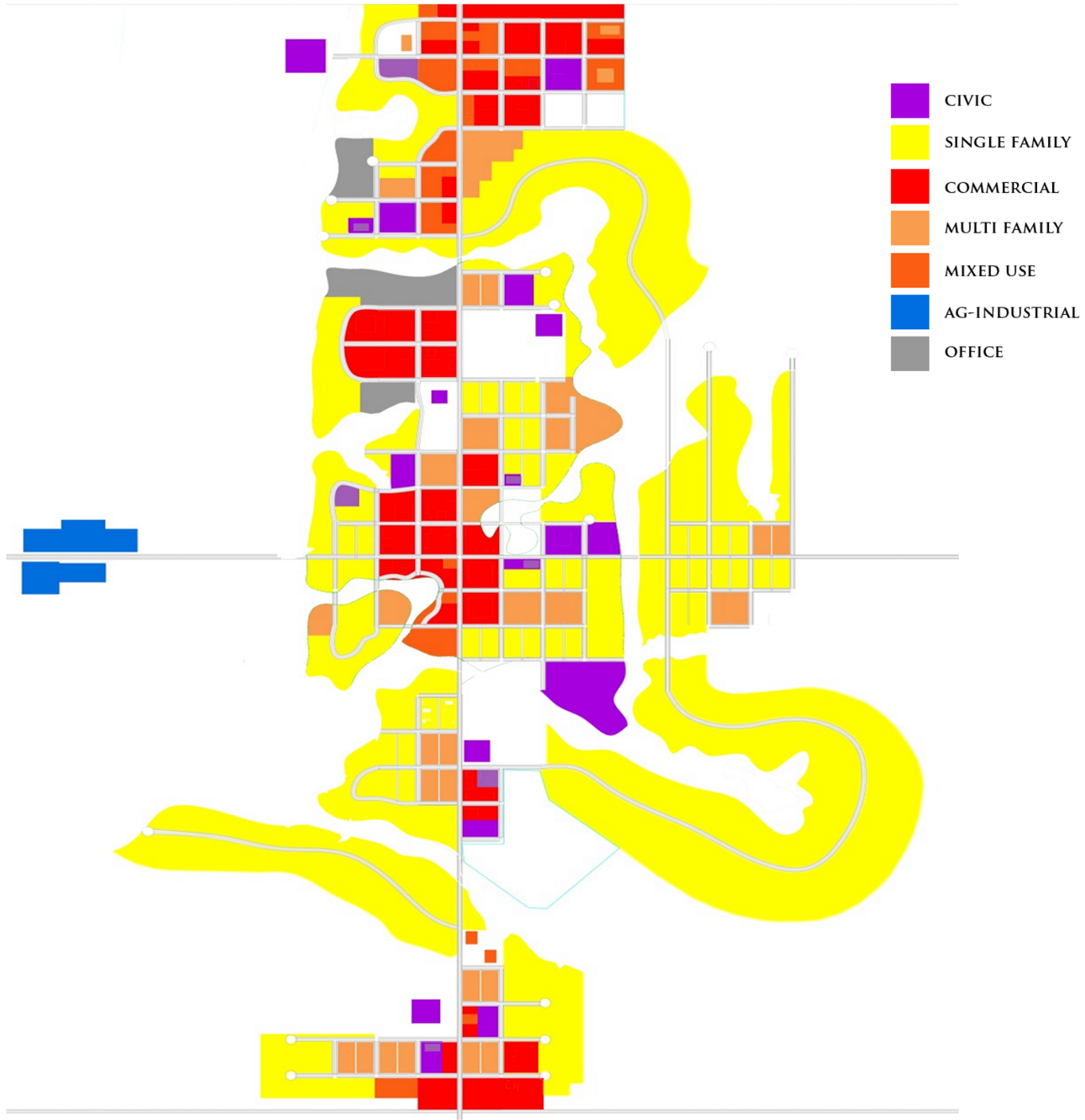
Buildings are clustered along Star Rd. to create a cohesiveness to the development as well as minimize infrastructure costs.

Three villages were designed (North, Central, and South) where the density is clustered and then tapers off into single family housing along the periphery.

Civic spaces were designed to connect each village and to be adjacent to large areas of green space.

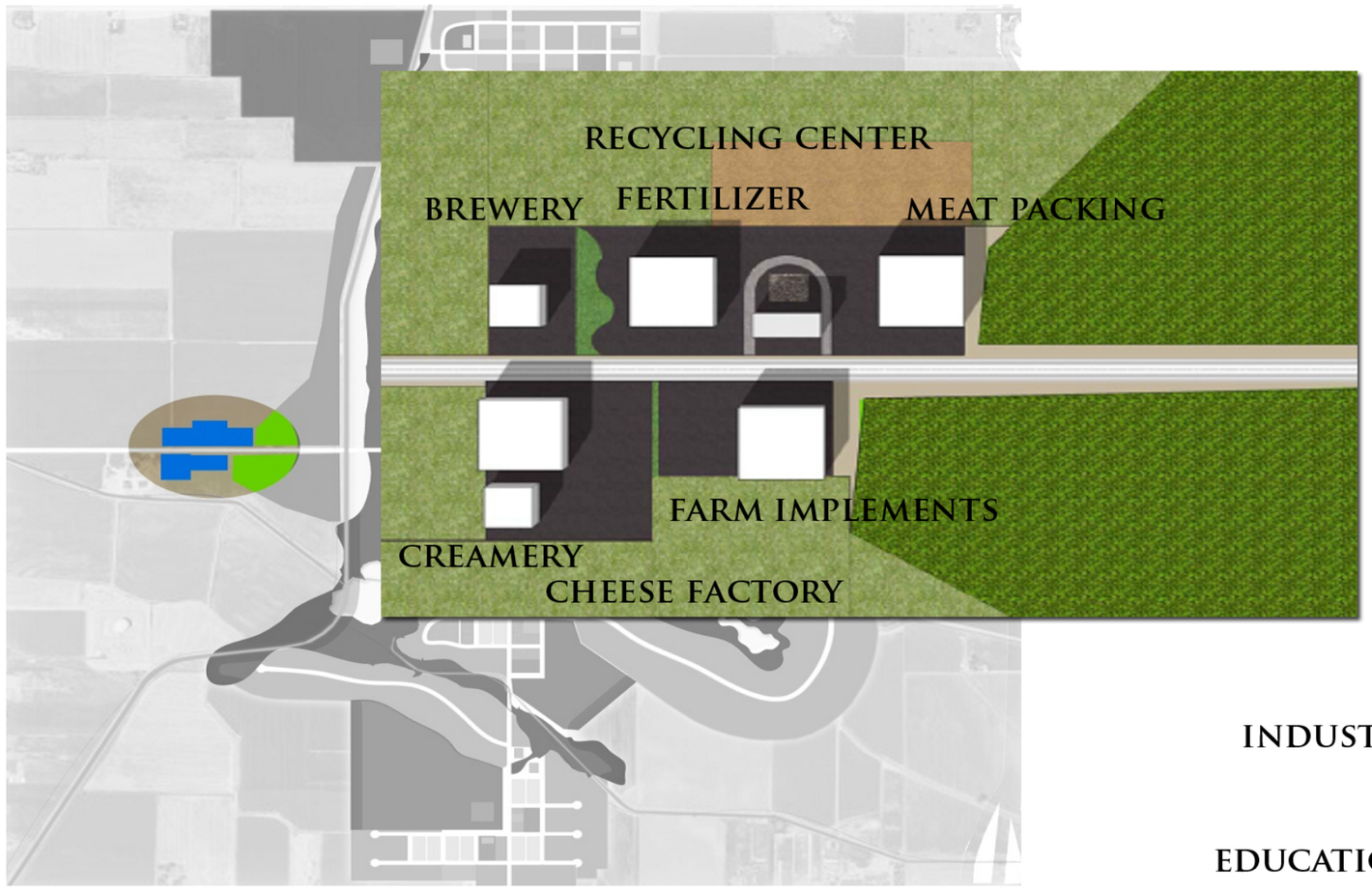
The ag-industrial zone was place to the west for vehicular access and its proximity to agricultural areas.

Hybrid poplars are planted between the ag-insutrial area and the rest of the development as a visual and acoustic buffer.



AGRICULTURE

AGRICULTURE IS ESSENTIALLY THE BEGINNING OF CIVILIZATION.
THE ABILITY TO GROW FOOD CHANGED HUMAN SOCIETY FOREVER.



INDUSTRY

EDUCATION

ORGANIC FARMING

ENTERTAINMENT AND TOURISM

MidNorthern Node

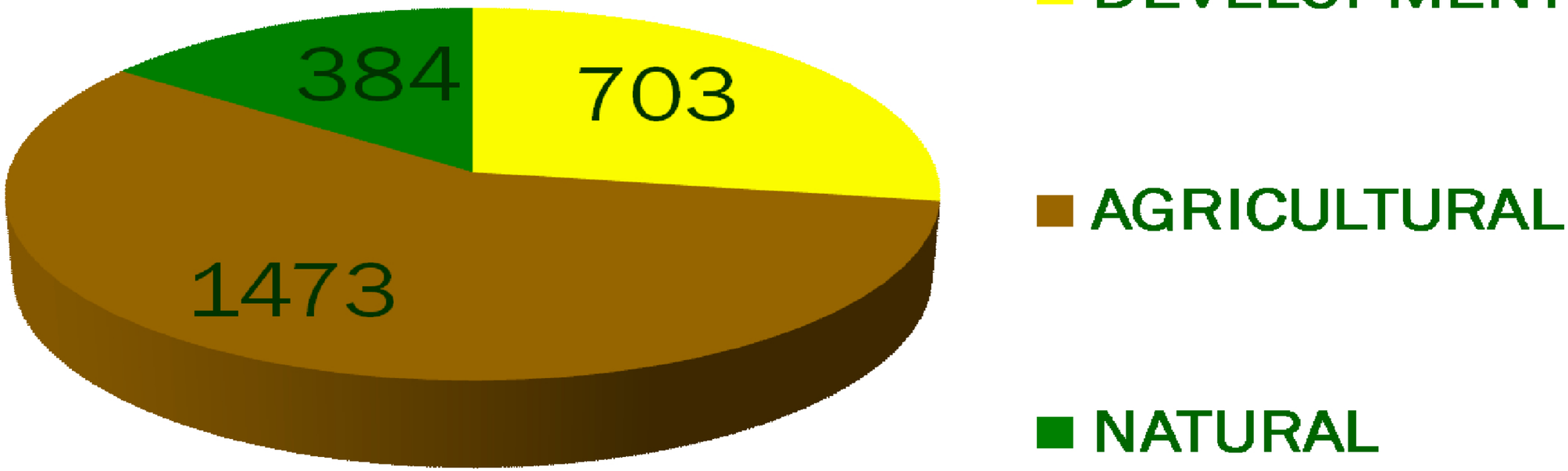
This node is characterized by single family homes and townhomes near an elementary school and mixed-use commercial. Access to green space from this node is within the ¼ walkable mile, and the node is equidistant from the northern and central villages.

MERIDIAN IDAHO

Southern Village

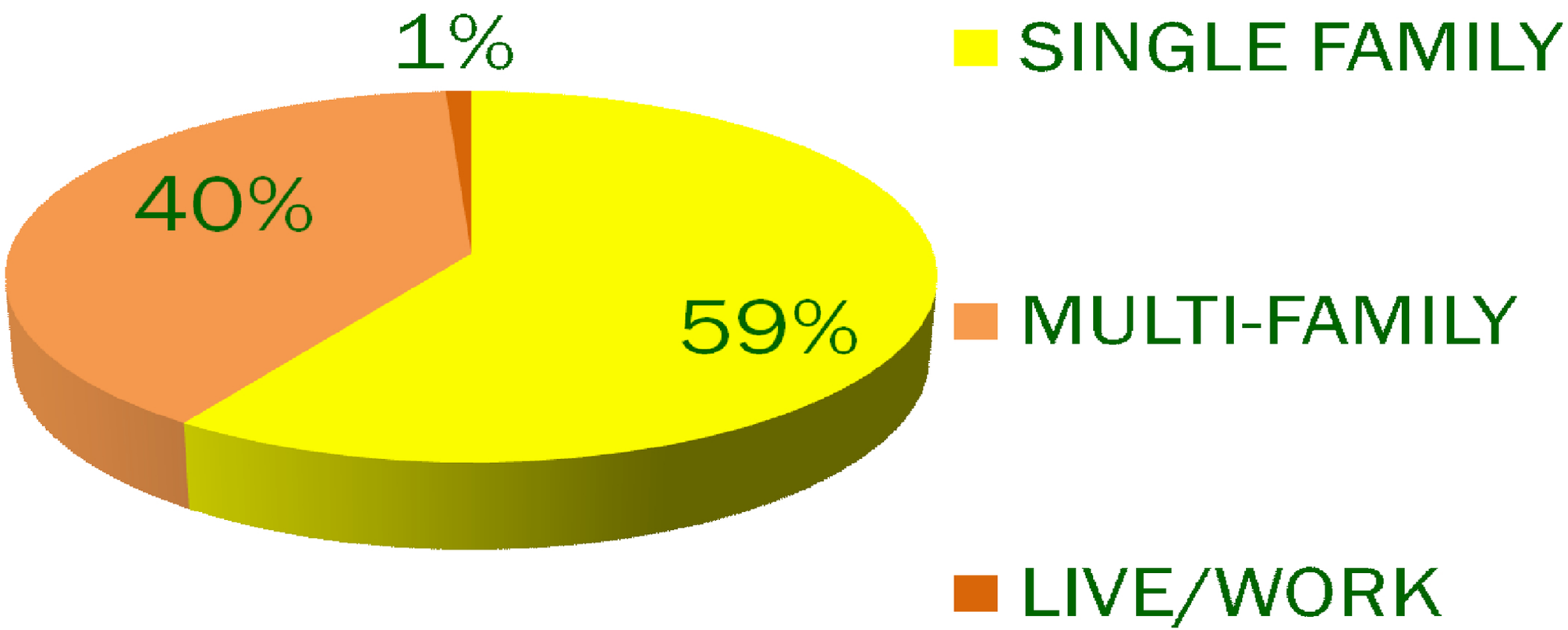
The less dense southern village takes advantage of the Star and Ustick intersection as a transit corridor. Retail/Commercial development is at its highest density near the intersection, and housing transitions from higher to medium to low density outward toward green space and farmland.

Acreage Land Use



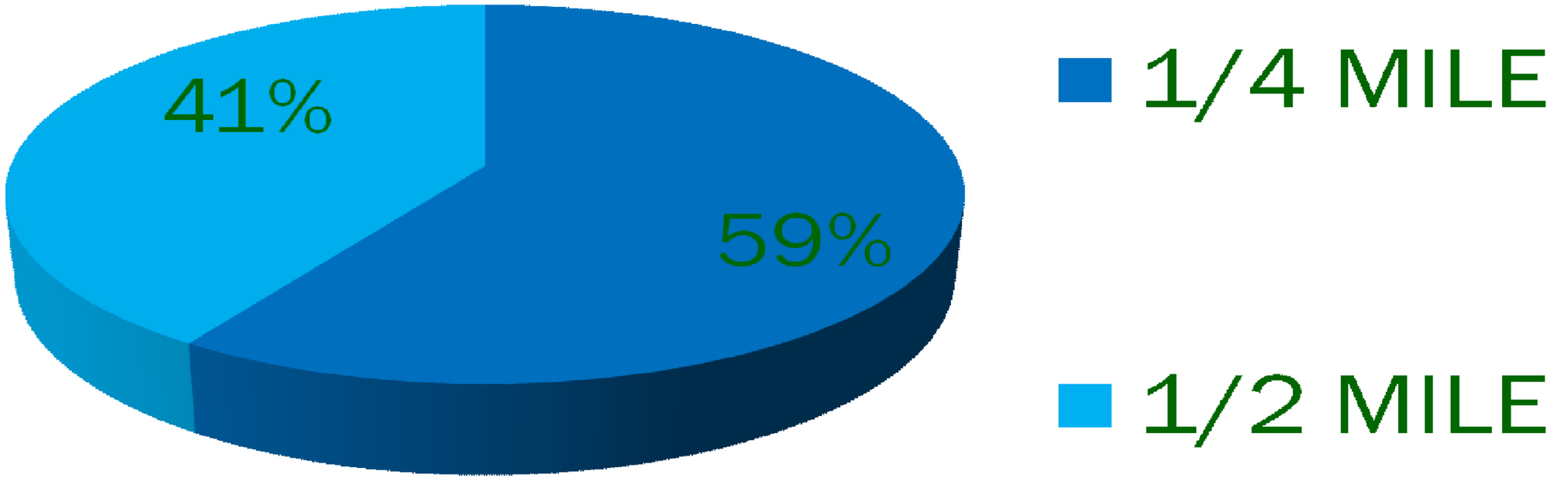
By increasing density and clustering areas of development, we have reduced infrastructure costs and preserved as many agricultural areas as possible.

Housing Diversity



Walkability

RETAIL/SERVICE/COMMERCIAL/CIVIC/RECREATIONAL
AREAS WITHIN WALKING DISTANCE FROM HOUSING



By designing with proximites in mind, we are providing for the walkability of the community.

BIOPHILIA

By preserving and promoting agricultural and ag-industry while designing healthy, walkable neighborhoods infused with natural corridors, we are creating a sustainable biophilic community.

LISA BITTICK

NIKKI CALZACORTA

TIM HEDRICK

MERIDIAN COMPREHENSIVE PLAN

NICK HUBOF
KYNDELL MADSEN
JOSH MGONJA
JASON YATES

IDAHO
URBAN
RESEARCH
DESIGN
CENTER

Project Description:

• The City of Meridian has asked the IURDC to explore design solutions for the NW corner of their Impact Area—4 square miles.

• The area will be isolated somewhat by a new alignment of Highway 16 and future highway type interchanges.

• The City would like us to look at small agricultural villages, agriculture preservation, viticulture and BioAg as part of the future for this area.

• With guidance from experts from land use planning, economists, BioAg and viticulture experts, and transportation/transit planners to determine the project program.

Opportunities and Constraints:
• pedestrian refuge spaces (Parks, trails etc)
• Potential Marker or public art to define zone (farmland, canal)

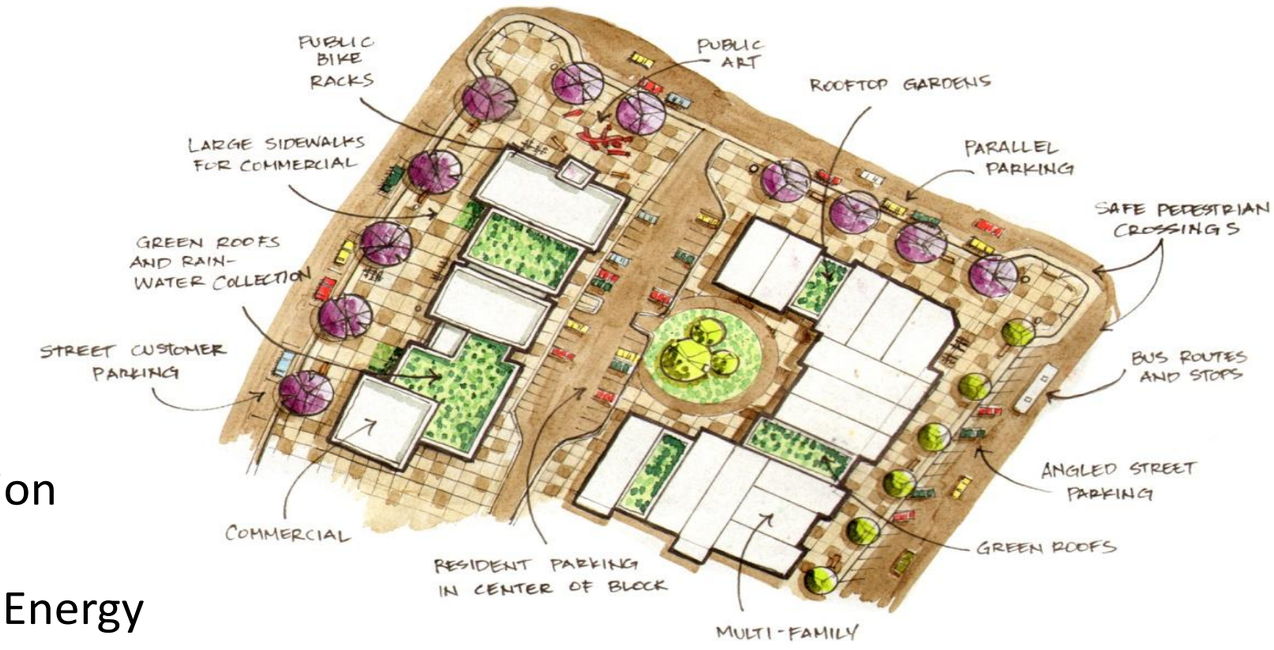
Cons:
- Limited access from McDermott
- Limited transportation routes

"Meridian is a vibrant and caring community that promotes itself as a premier place to live, work, and raise a family."

SUSTAINABLE STRATEGIES:

Architecture Priorities for Sustainable Urbanism:

- Design High Performance and Carbon-Neutral Buildings and Developments
- Smart Growth Urban Density
- Transit and Pedestrian Oriented Design
- Solar / Wind Orientation
- Biophilia
- Recycle / Reuse Materials / Limit demolition
- Create On-site Energy or Buy Sustainable Energy
- Resource Conservation / Reuse



Sustainable Strategies Cont.:

Food Production

Empowering individuals & communities to grow their own food

Individuals

- Roof top gardens
- Household gardens
- Household greenhouses

Neighborhood Infrastructure

- Community gardens
- Community orchard
- Community greenhouse
- Edible landscape
- Community farms
- Urban aquaculture

National distribution companies vs. Farmers Market

Sustainable Strategies Cont.:

Solar Orientation

- Developments must consider solar orientation of lots and solar access to buildings.
- Use of Shading Devices and Building / Landscape Massing to maximize efficiency

Walkability

- Concentration of pedestrians
- Residential s densities
- Human scale dimension
- Active and diverse retail
- Traffic calming
- 24 hrs activity

Transit

- Biking
- Commuter alternatives program
- Public transit – Buses

Sustainable Strategies Cont.:

Bioswales

- Runoff volumes
- Pollutant removal
- Ground water recharge
- Siting
- Size

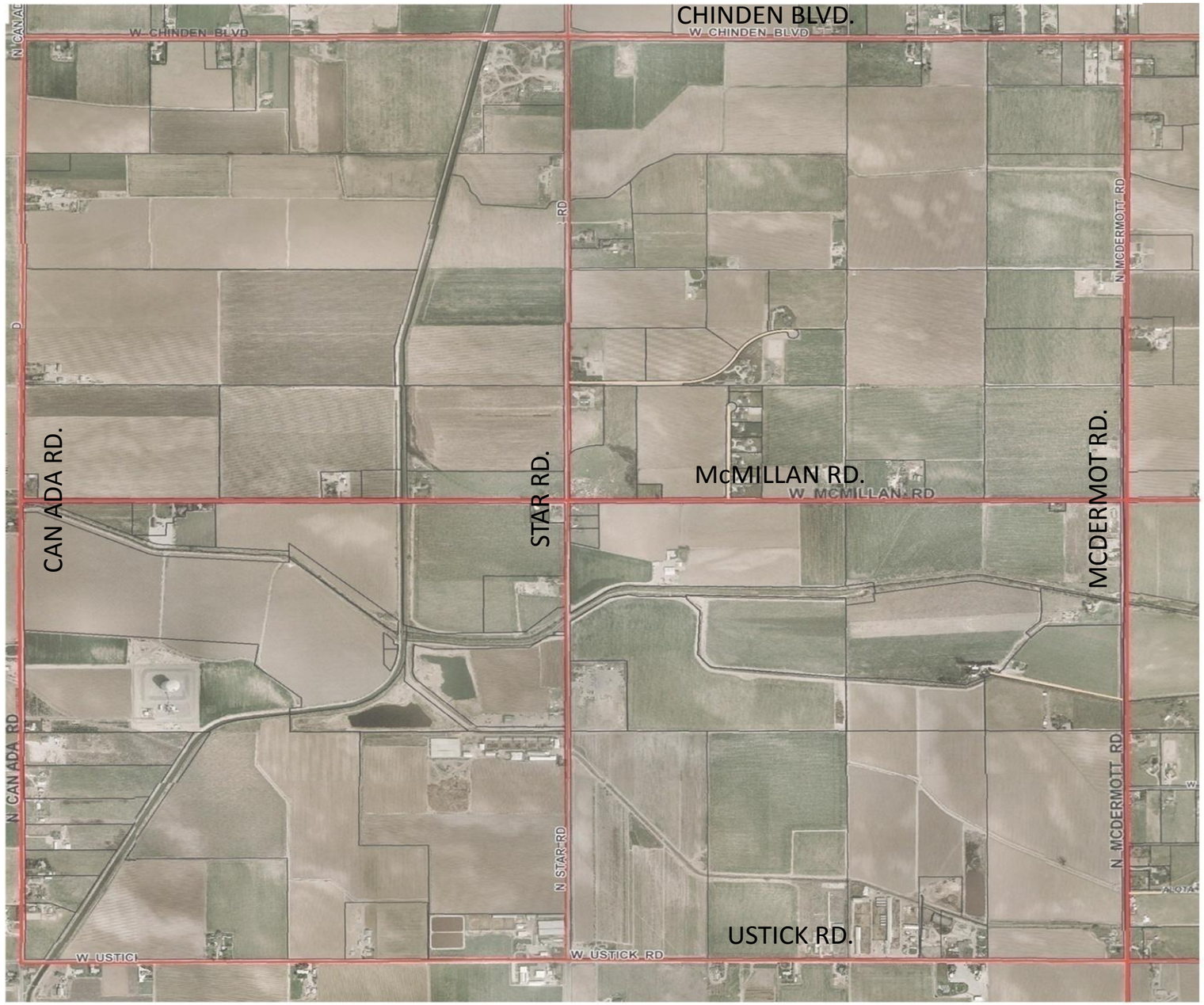
www.crd.bc.ca/


SITE LOCATION
CHINDEN BLVD.
SITE
USTICK RD.
EAGLE RD.
CAN ADA RD.
MCDERMOTT RD.
I-84
I D A H O
A D A
A N Y O N
Settlers Park
Tulley Park
Fuller Park
Somna
Meridian
W Chinden Blvd
E Chinden Blvd
W McMillan Rd
E McMillan Rd
W Ustick Rd
E Ustick Rd
W Cherry Ln
E Fairview Ave
E Pine Ave
E Franklin Rd
W Overland Rd
E Overland Rd

SITE GRID

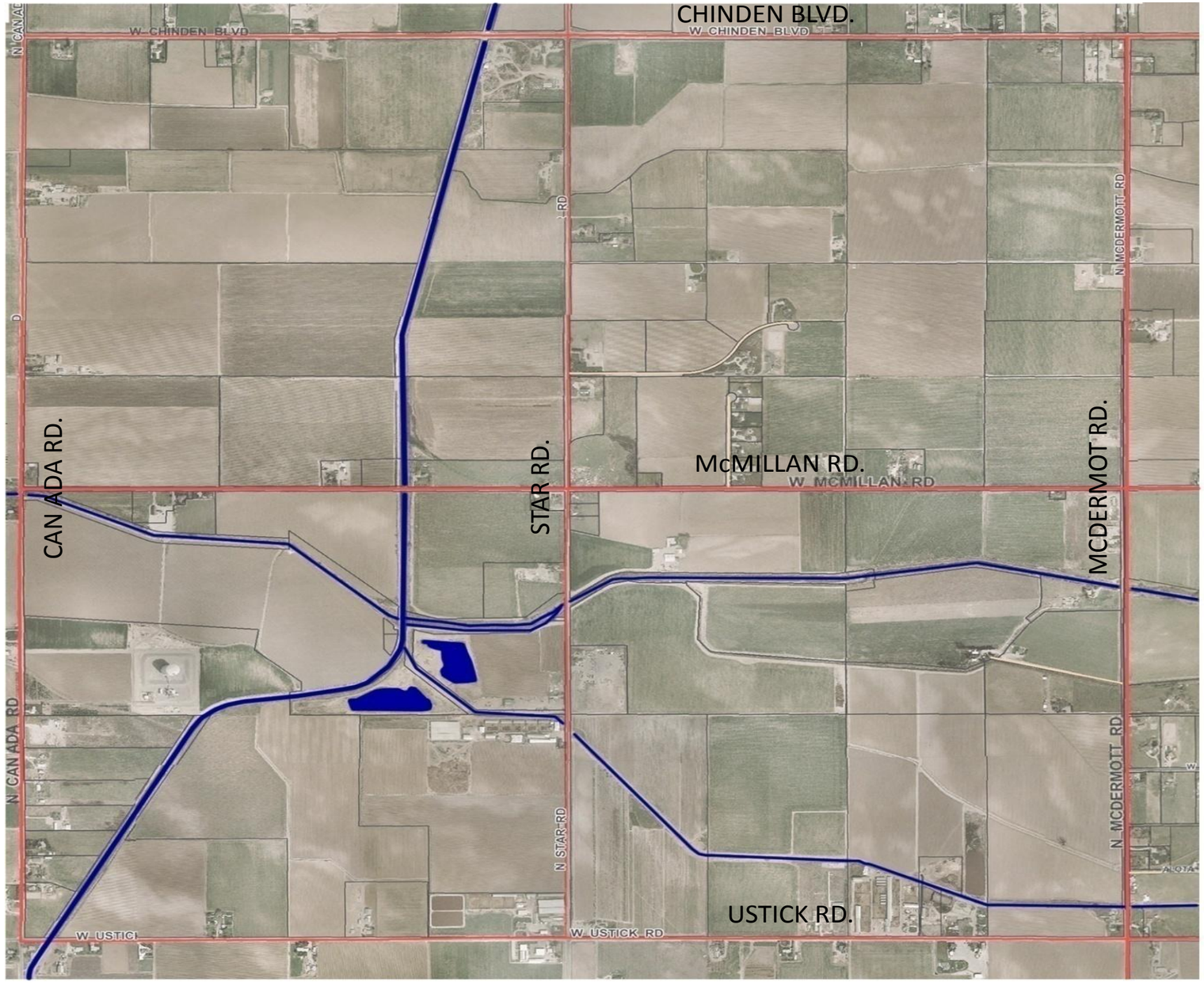
SITE
4 SQUARE MILES
IN NW MERIDIAN

EXISTING STREETS



PROPOSED HIGHWAY

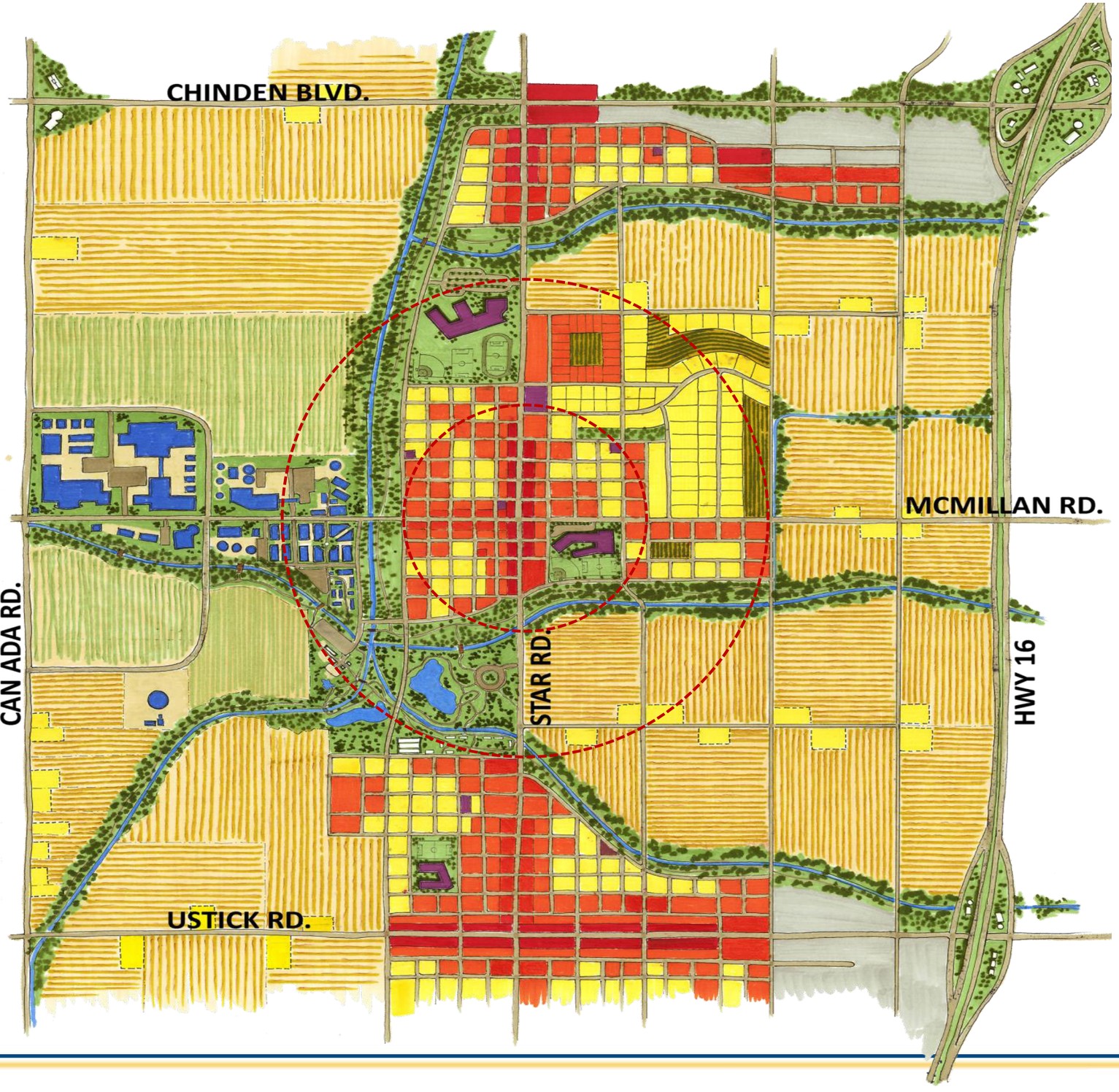
EXISTING CANAL



KEY USES

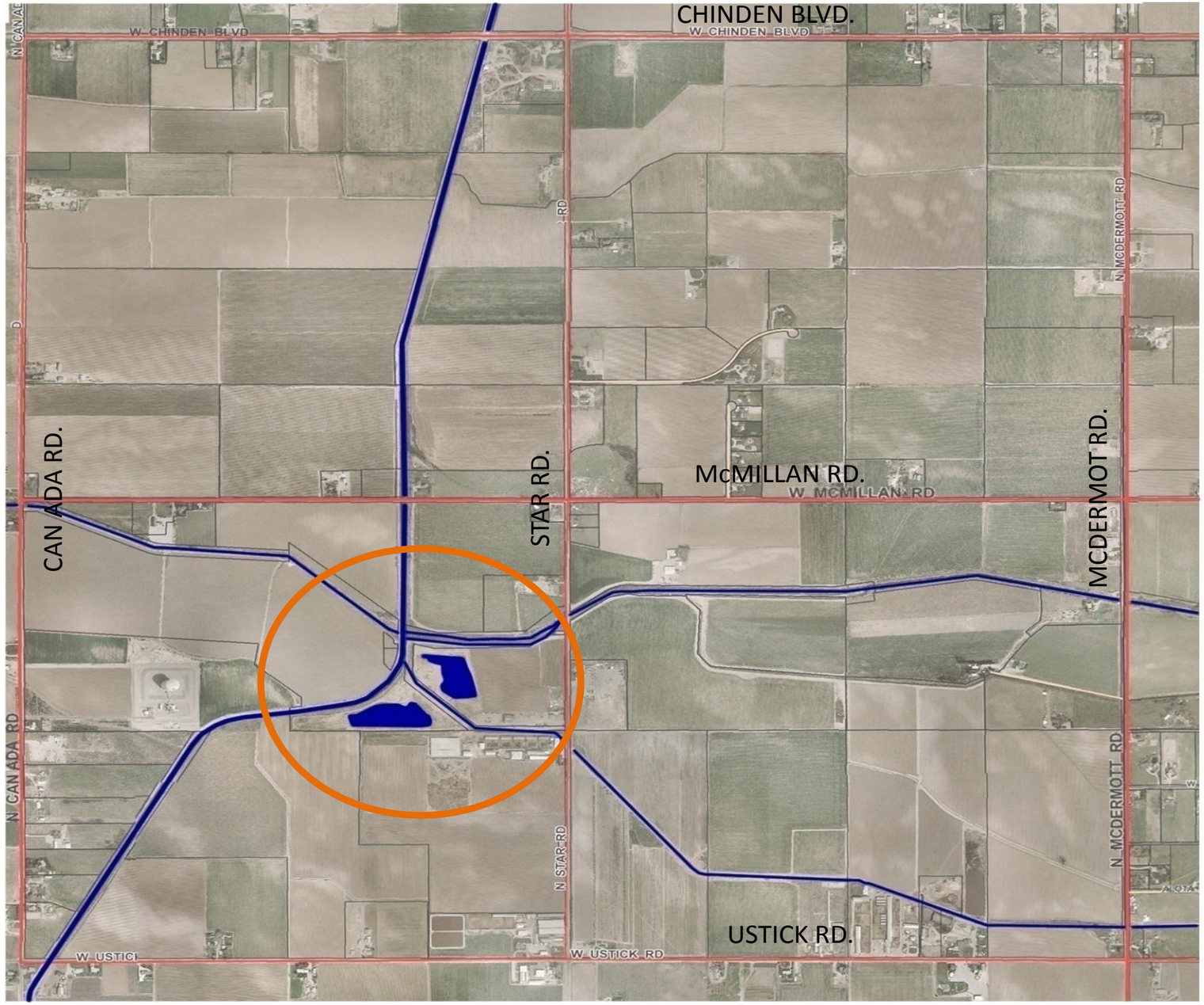
- RETAIL, RESTAURANT, COMMERCIAL
- MULTI-FAMILY (NO TOWNHOMES)
- SINGLE FAMILY & TOWNHOMES
- GREENSPACE, PARKS
- INDUSTRIAL / HIGH TECH AG-BIO
- LIVE / WORK
- CIVIC AND SCHOOLS
- OFFICE ONLY
- FARMLAND
- ROADS

N



CANAL CONDITION

PARK LOCATION



PARK DESIGN

EXISTING STREETS

- RETAIL, RESTAURANT, COMMERCIAL
- MULTI-FAMILY (NO TOWNHOMES)
- SINGLE FAMILY & TOWNHOMES
- GREENSPACE, PARKS
- INDUSTRIAL / HIGH TECH AG-BIO
- LIVE / WORK
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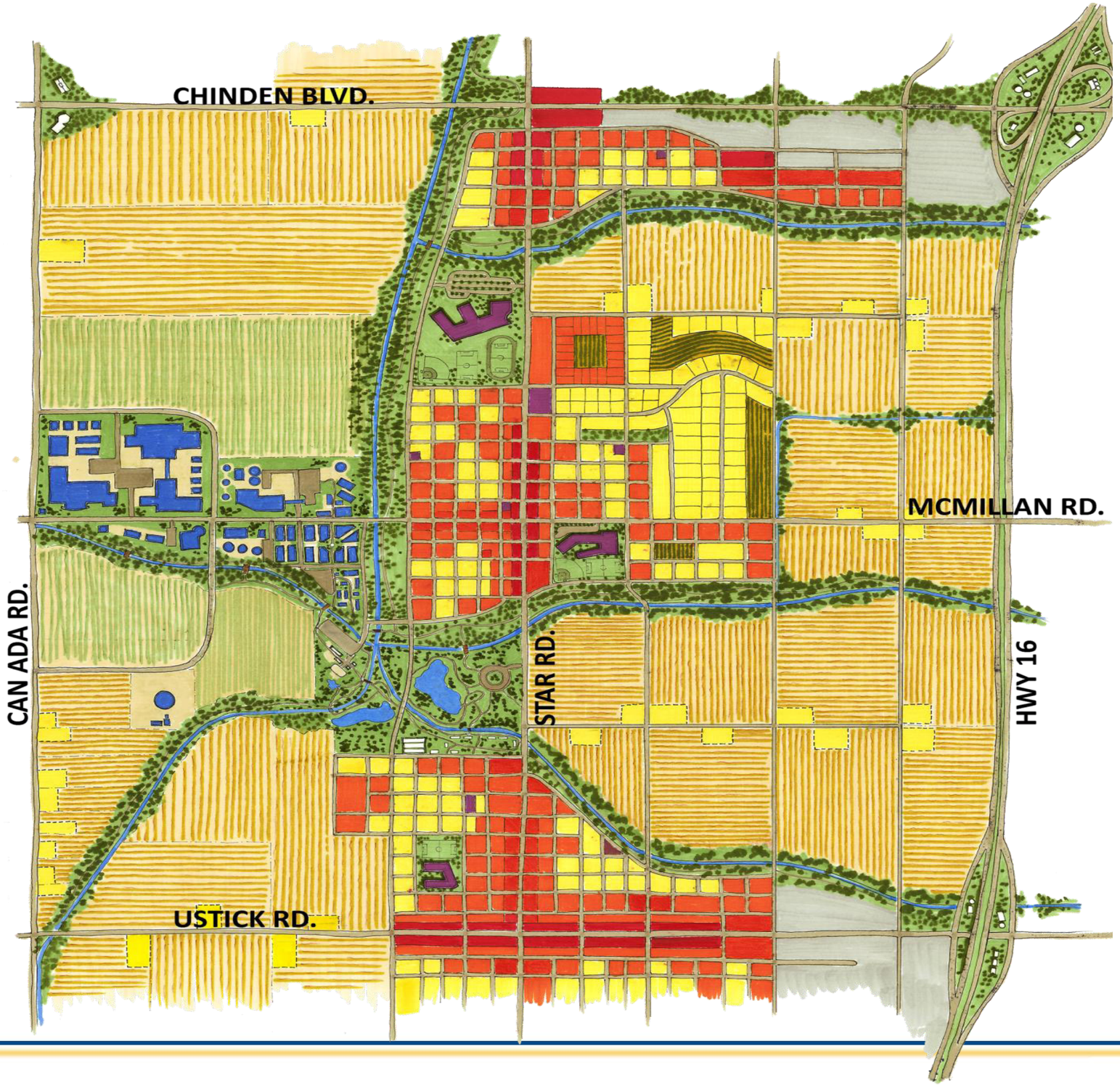
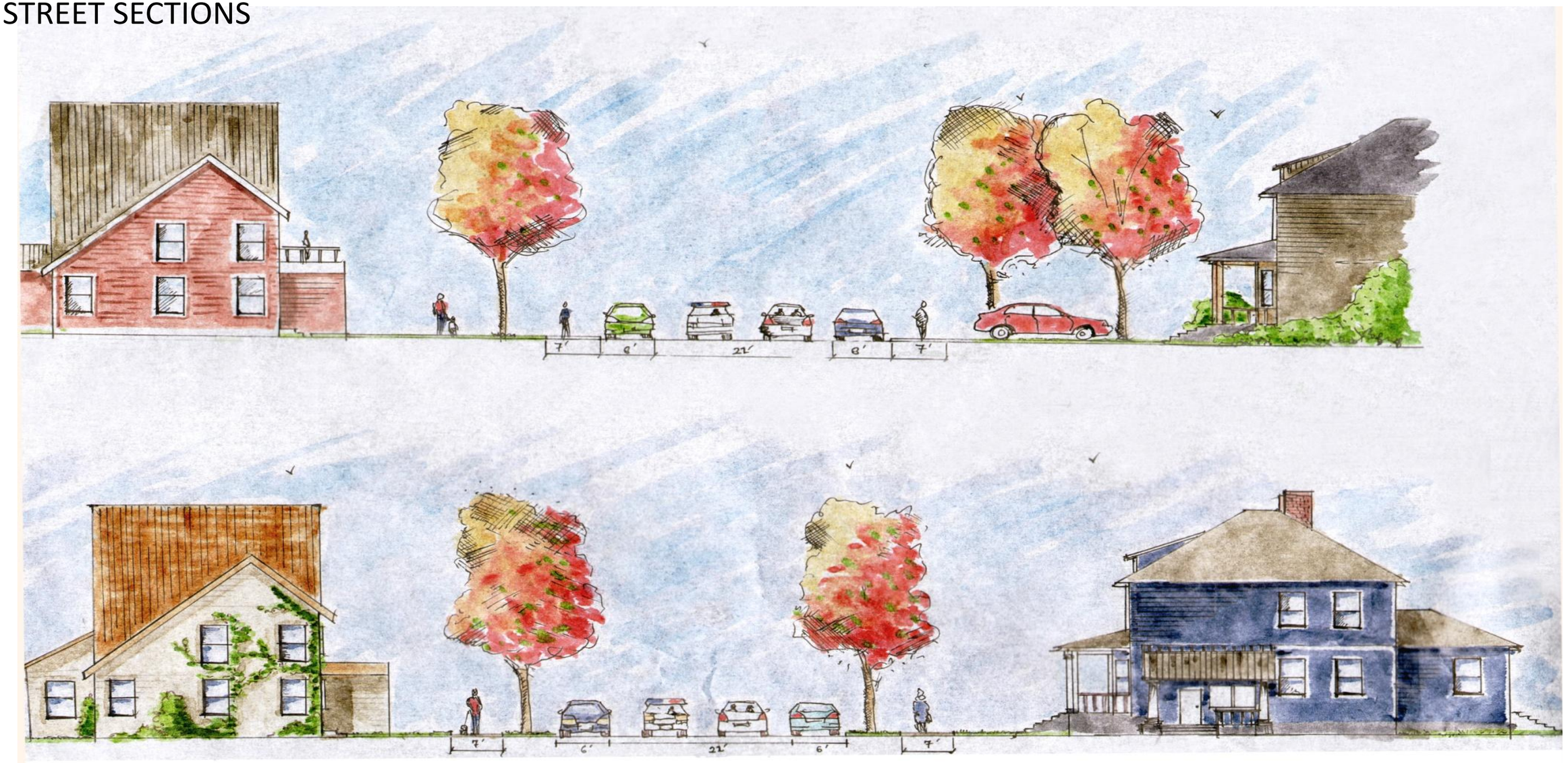
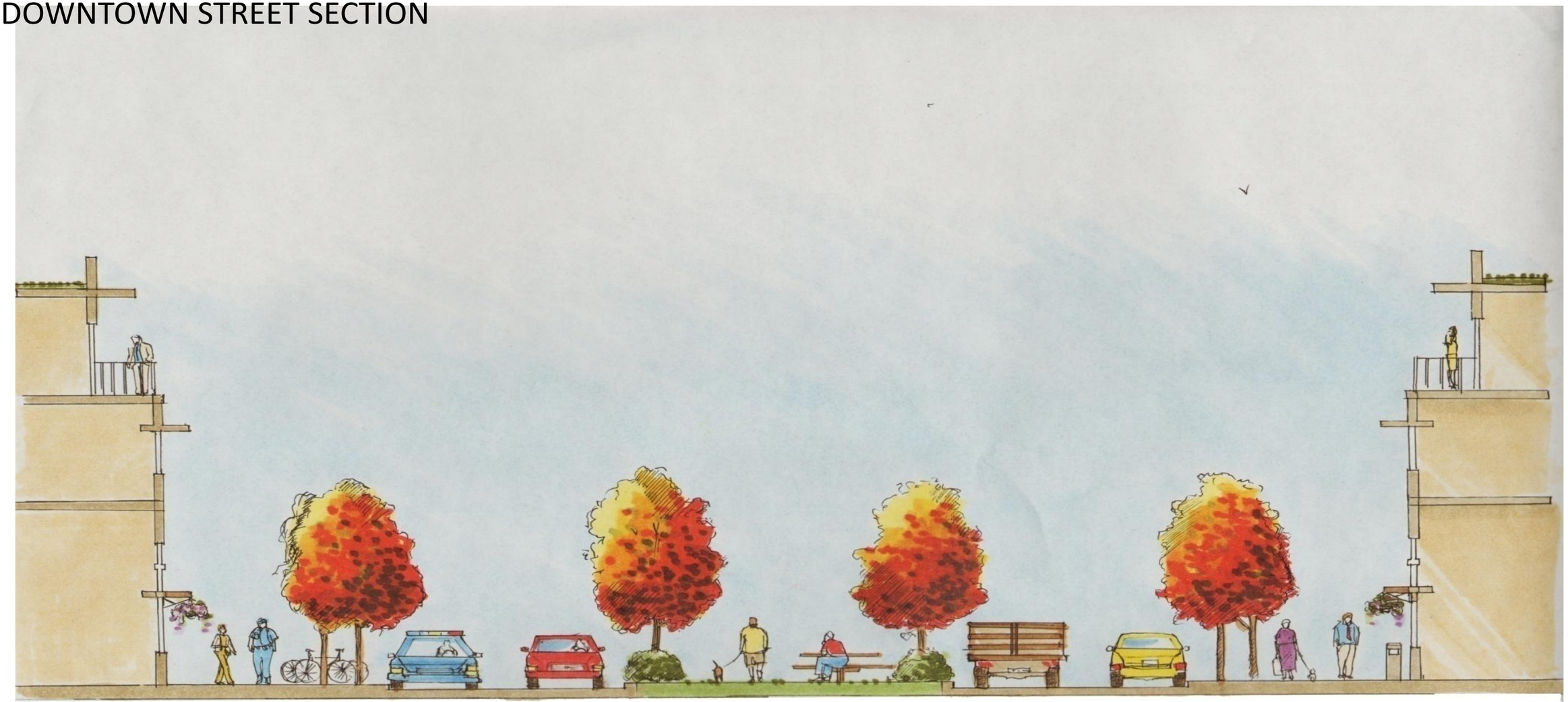


AG-BIO TECH FACILITY

STREET SECTIONS



DOWNTOWN STREET SECTION

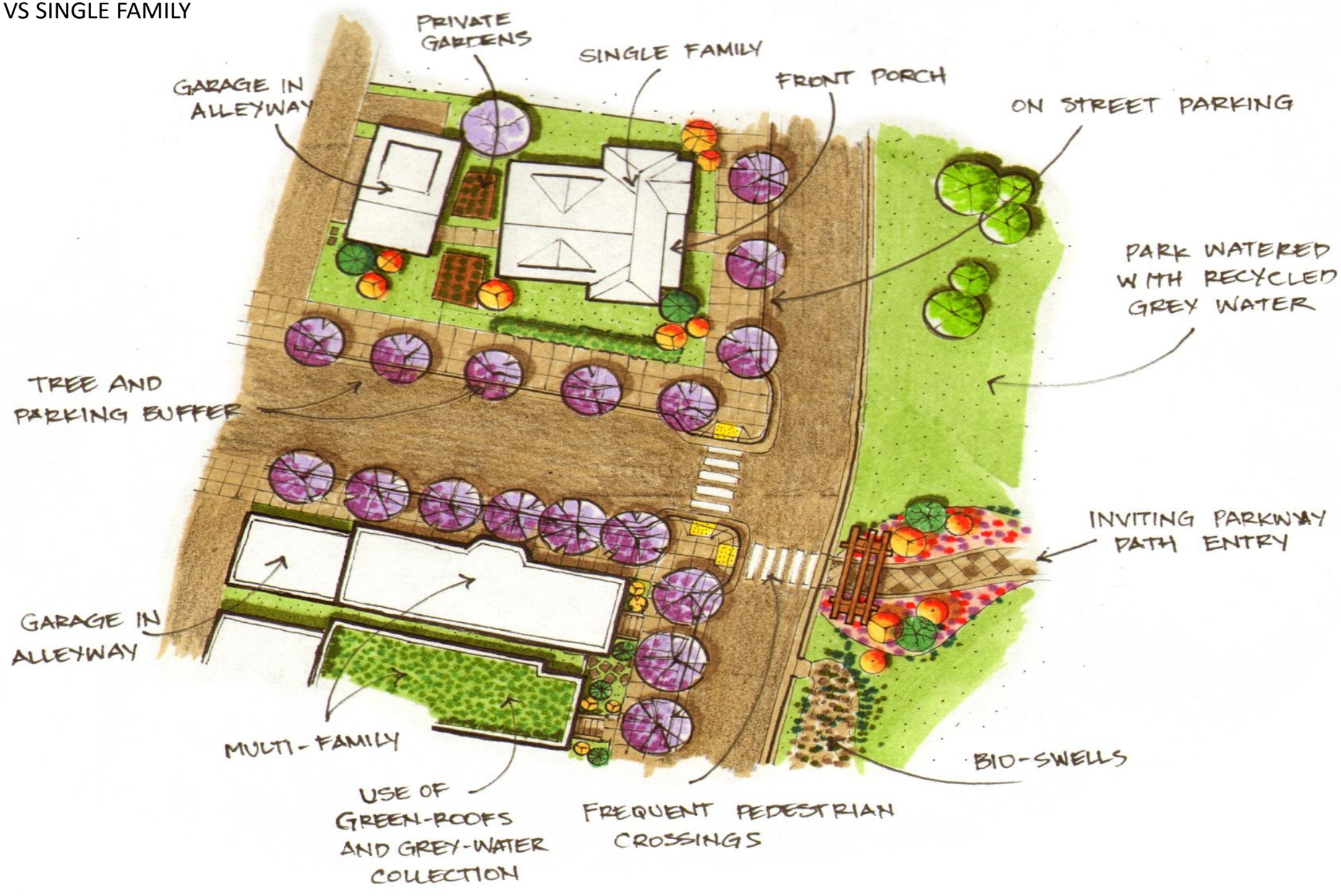


25’ MEDIAN PARK

STREET SECTION

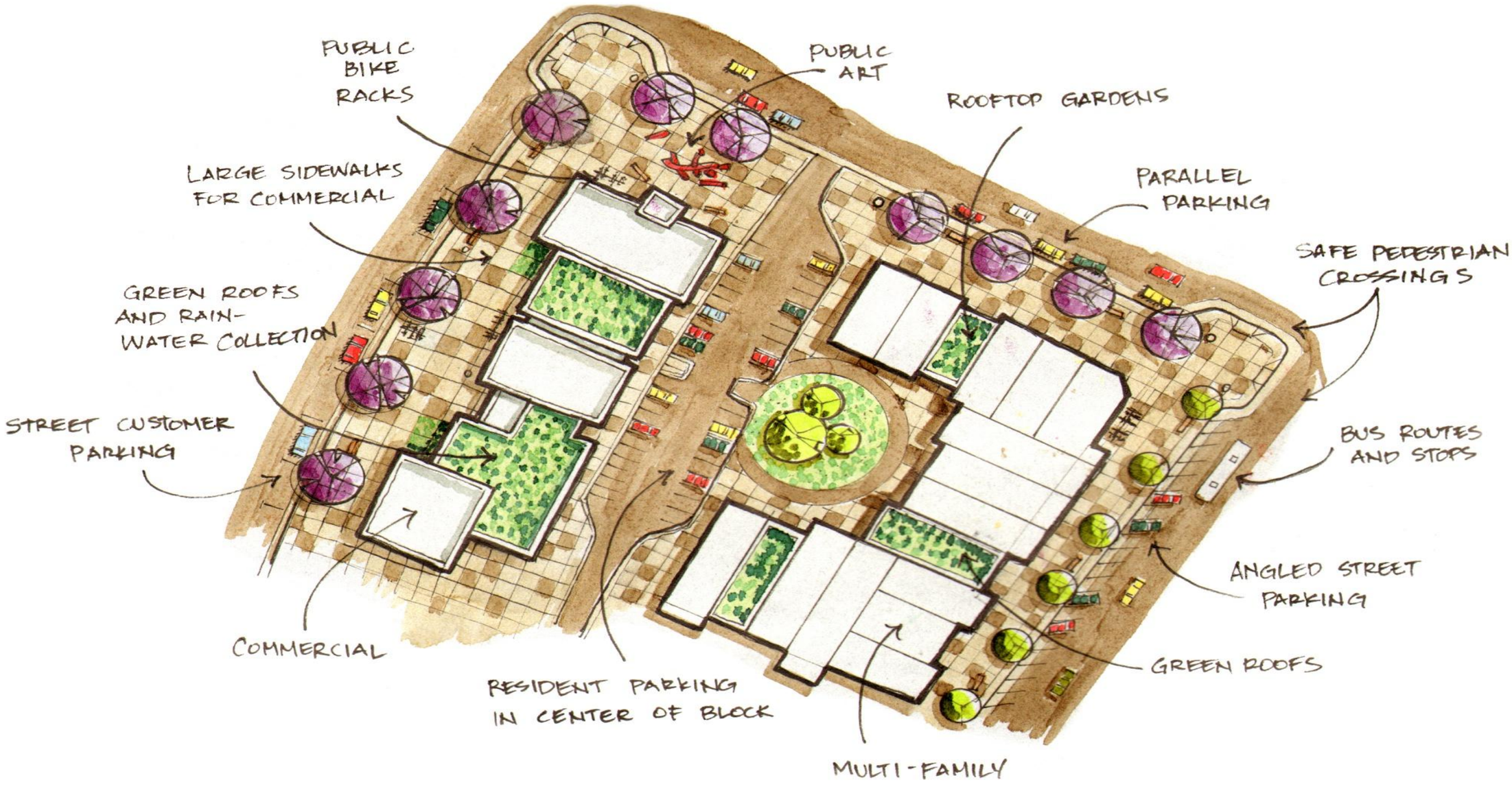
SHARED AMENITIES

MULTI-FAMILY VS SINGLE FAMILY



SHARED AMENITIES

MULTI-FAMILY VS COMMERCIAL



Four Square Mile Project

Connectivity and Sustainability in planning for Meridian, Idaho

Kelsie Wahlin, Joshua Fusselman, Andrew Wheeler and Kim Holderman

IDAHO URBAN RESEARCH DESIGN CENTER

Sustainable Communities for Idaho

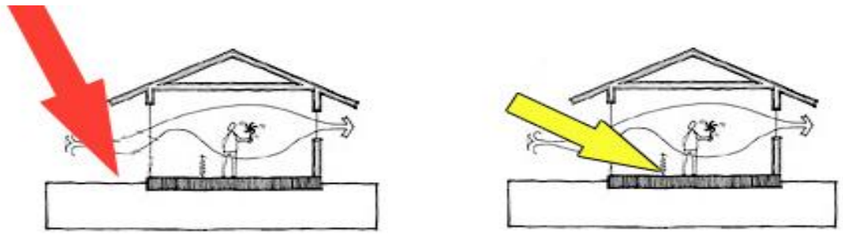
MERIDIAN IDAHO

Our Goal:
To create a sustainable community promoting healthy lifestyles and bringing about an awareness of sustainable growth in new developments.

community
mixed use
local food production
solar orientation
Diverse housing options
relationships
Walk-ability
transit oriented
bike-ability
connection paths
Storm water treatment
connection

Design Criteria
4 square miles
Population: 1 du/acre = 6,912people
Housing Choices: a wide range of housing including single family, attached townhome/row houses, condos/apartments above retail or office, accessory dwelling units on single family property or townhome property (i.e. above garages)
Schools: 2 elementary schools
1 middle school
Church: 7
Fire Station
Medical Clinic/Community Health Facility
Commercial Area: = more than 207,360sf.
Light Industrial w/ Light Industrial Office Area: more than 22,566sf
Parks and Open Space: 4 acres/ 1000 people: more than 28 acres
Protected Natural Areas/Green Infrastructure: Target of 15%
Area of farmland: 51%

solar orientation



energy sources

Stormwater treatment

Bike/walk to work

Transit Oriented Design

Mixed Use Development

Iantherev (Flickr)

local food production

For agriculture to be truly sustainable it must do three things at the same time:

- Enhance the environment
- Support the farm family at an acceptable economic level
- Benefit the local community

urbanearthcoop.com

Tobo (Flikr)

Fusselman

ljc@flickr (Flickr)

community farming

"Since our existence is primarily dependent on farming and a small farming population consisting of just 2% of Americans, farming has become more and more remote from the life of the average person, becoming less able to provide us with clean, healthy, food or a clean, healthy, environment. More and more people are coming to recognize this, and they are becoming ready to share agricultural responsibilities with the active farmers."

sustainable strategies

crop ideas

TREE FARM

Social Benefits: Trees have been a part of our existence since pre-historic ‘man’ as they are a part of our ‘human’ fabric.

Community Benefits: Even though trees may be private or state property, their size often makes them part of the community. With proper selection and maintenance, trees can enhance and function on one property without infringing on the rights and privileges of neighbors.

Environmental Benefits: Trees alter the environment in which we live by moderating climate, improving air quality, conserving water and harboring wildlife.

Economic Benefits: Property values of landscaped homes are 5-20% higher than those of non-landscaped homes.

Trees Require an Investment: Trees provide numerous aesthetic and economic benefits but also incur some costs.

crop ideas

Truffles

•Highly profitable and interesting landscape

Amaranth

•Amaranth grain can be popped, flaked, or ground into a high-protein flour.

•Currently in the U.S., more than 40 products contain amaranth grain in one form or another.

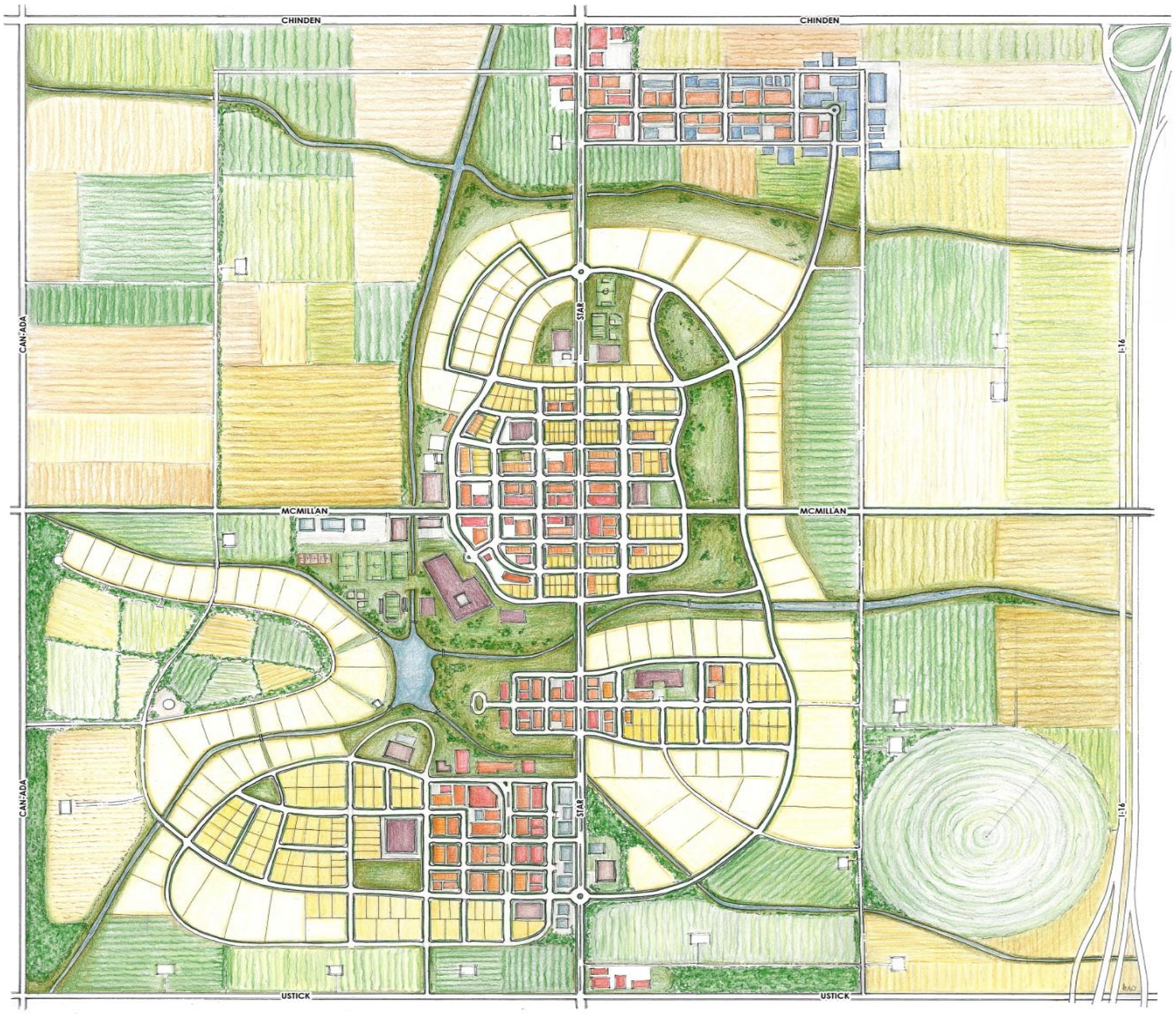
•The crop is well adapted to the Mid-western and western U.S. It is drought tolerant.

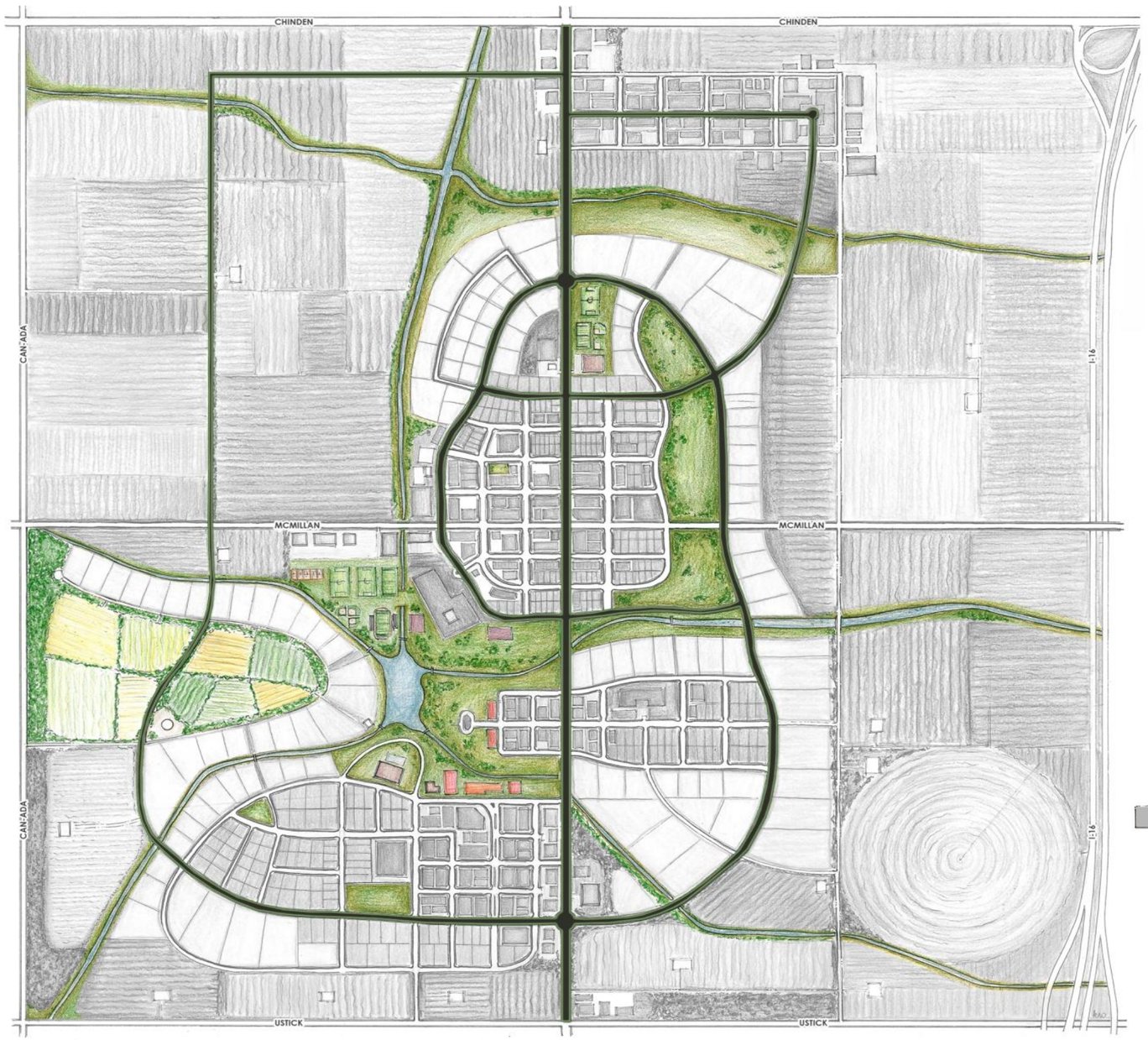
Alfalfa

•alfalfa is a good rotational crop because of its soil conditioning abilities.

• In addition, the perennial nature of alfalfa creates a favorable habitat for many Beneficial species including pollinators and natural enemies of pests.

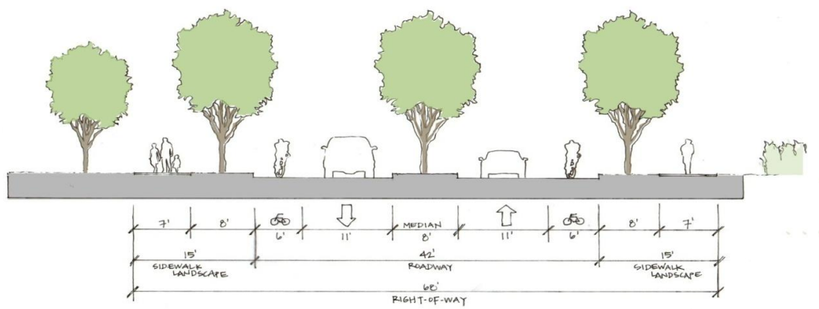
overall site plan

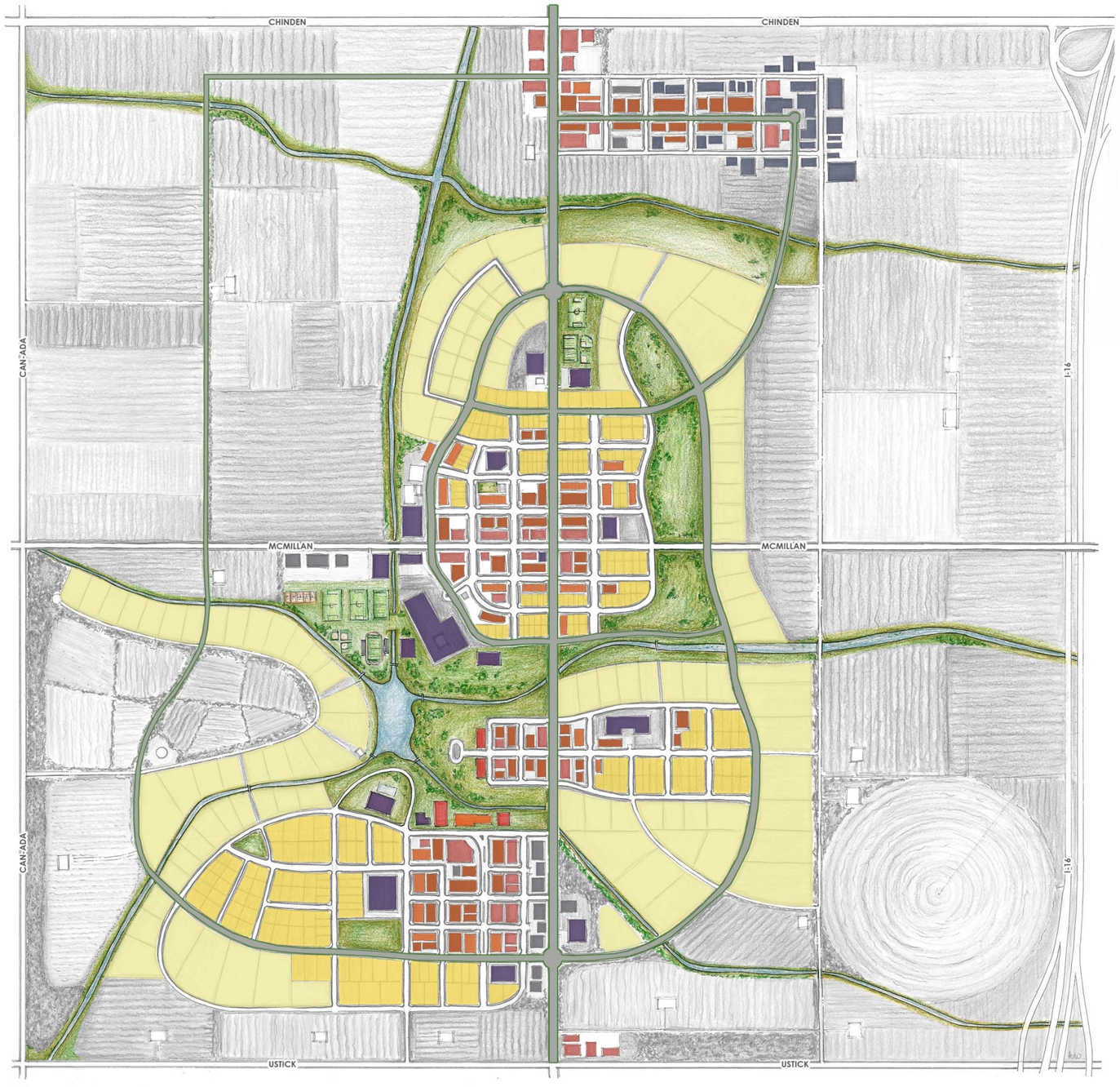




Main Pedestrian Connections

The Main Bouldevard is intended to connect the neighborhoods and provide alternative routes throughout the site. Between this Main Boulevard and the Public Park Trail system, pedestrians and bicyclists are able to circulate freely throughout the developed areas of this four square mile site.





Industrial

Office

Civic

Schools, Churches,
Fire and Police Station,
and Medical Center

Commercial

Mixed Use

Attached Housing

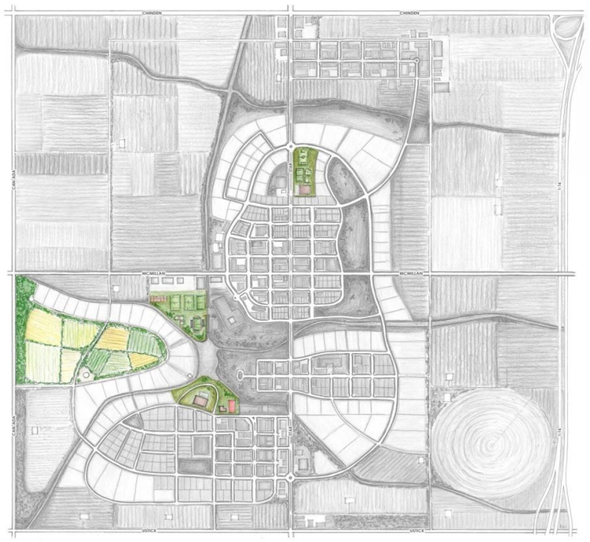
Single Family Lots

Low Density Residential

Park Space

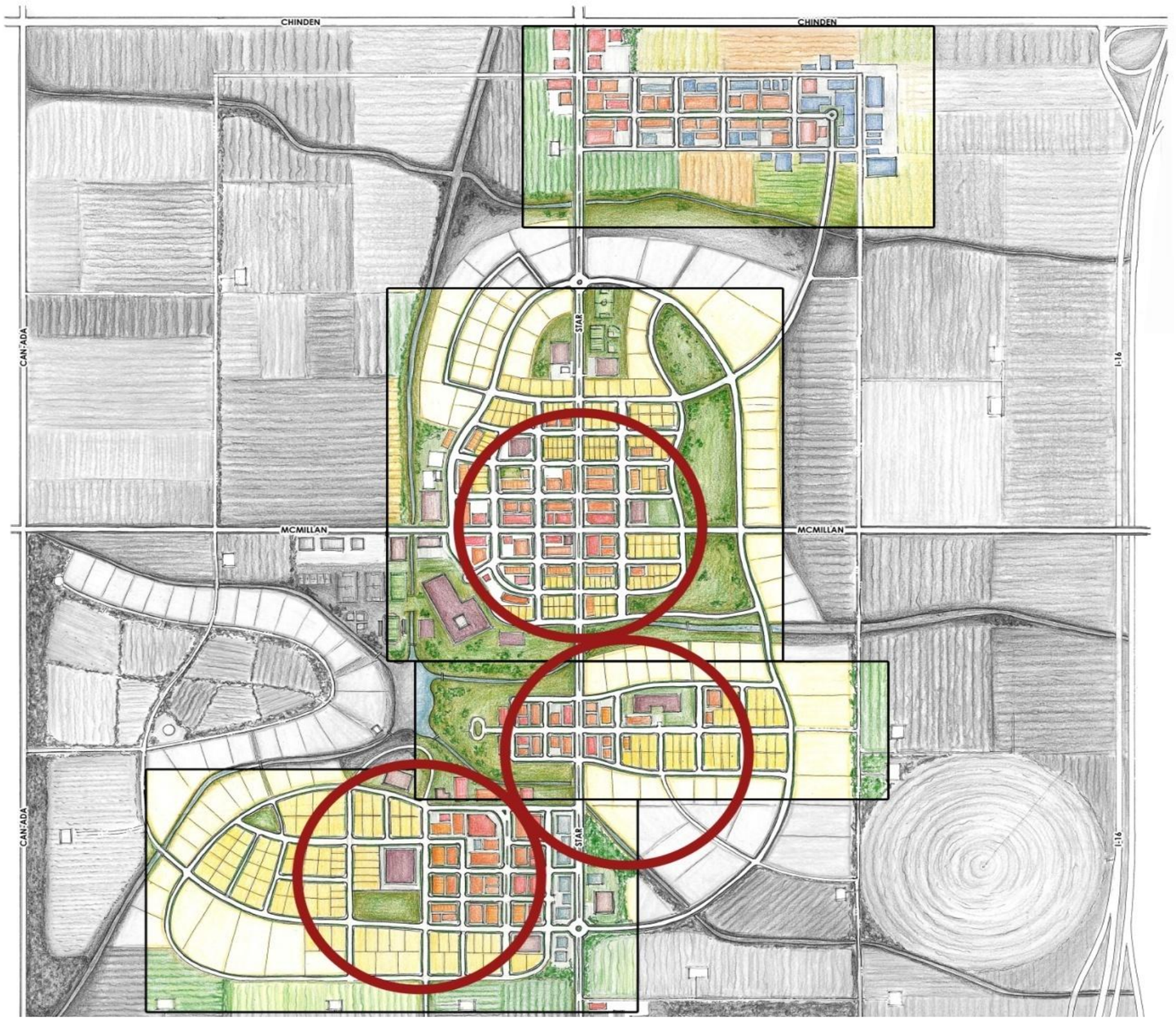
Existing farmland, homesteads, homes, and cemetery

Walkable Radius=1/4 Mile



Shared
Community
Amenities

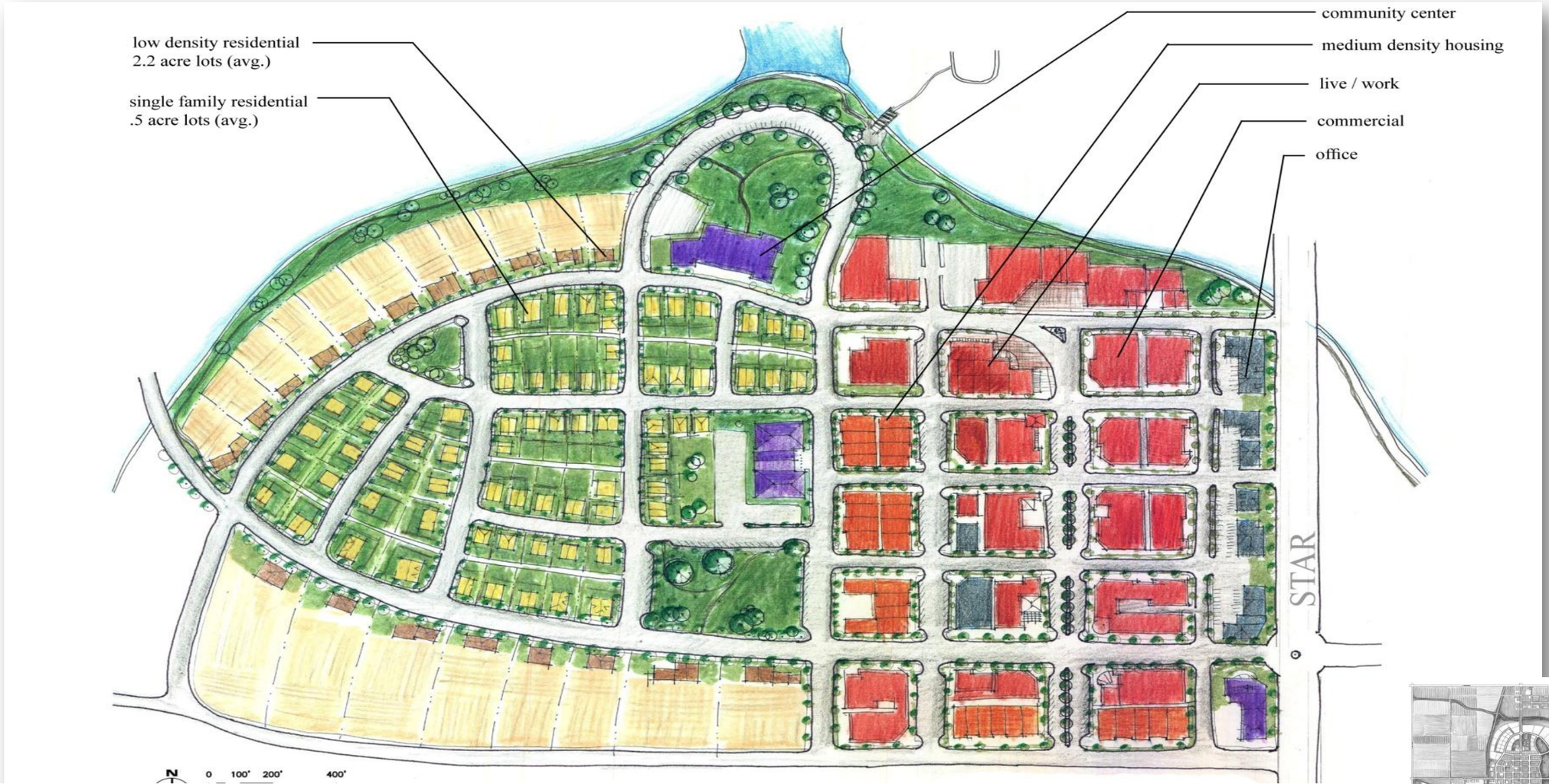
Includes sports fields and pools
as well as community farms.



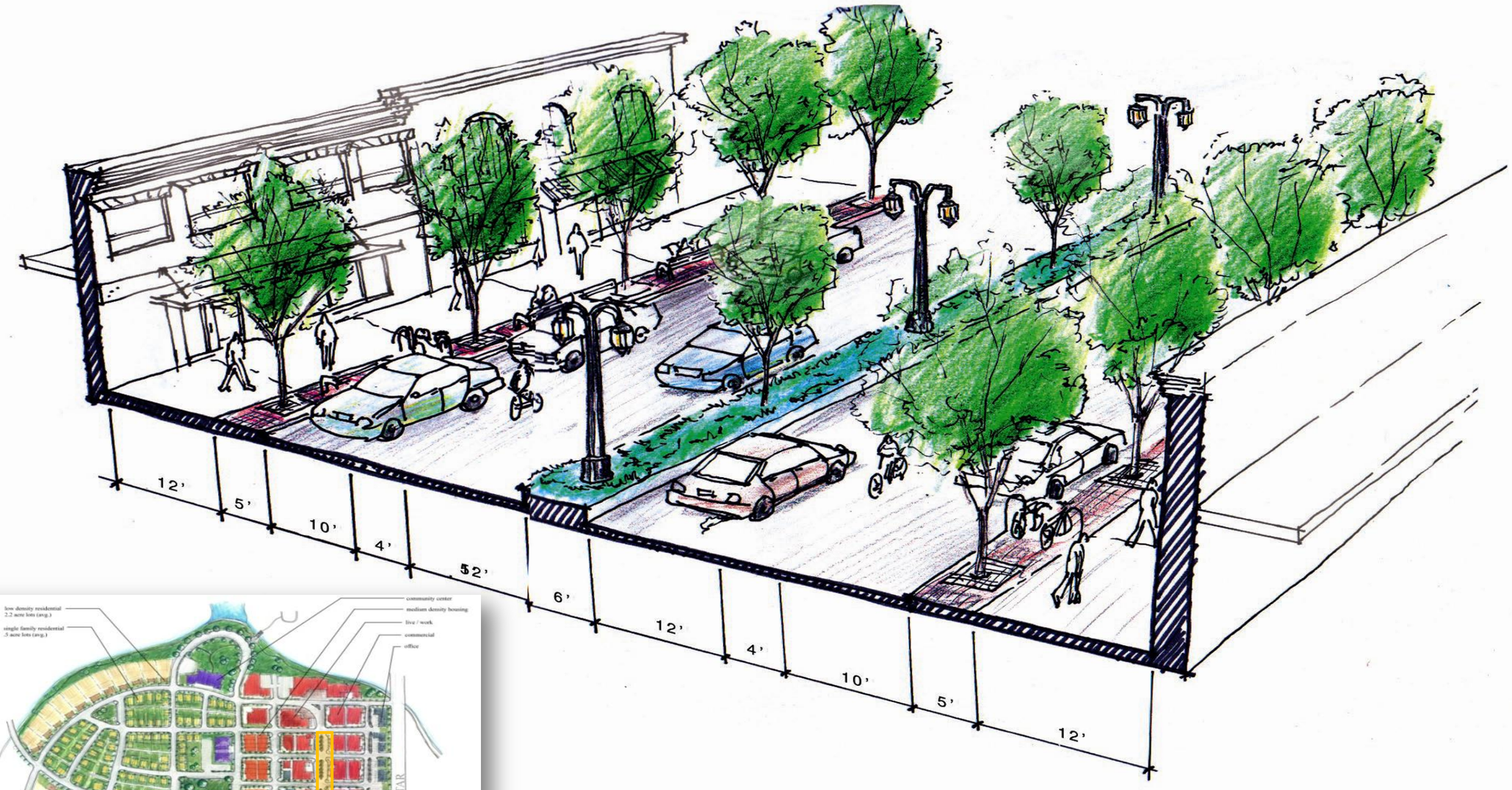
Southwest Node
Overall Site Plan

Civic
Live/Work
Medium Density
Rural Residential

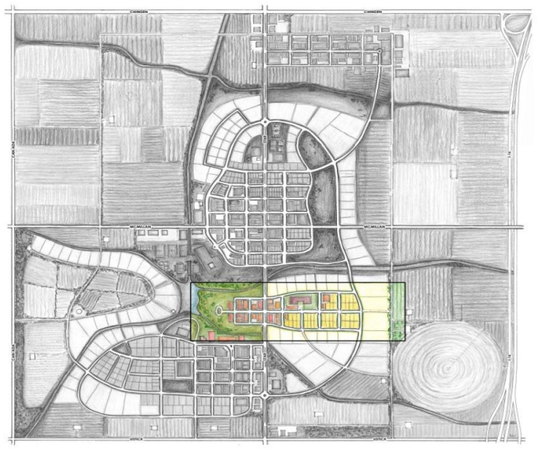
Commercial
Office
Single Family Residential
Open Space



Southwest Node Main Street section



Line Street Node

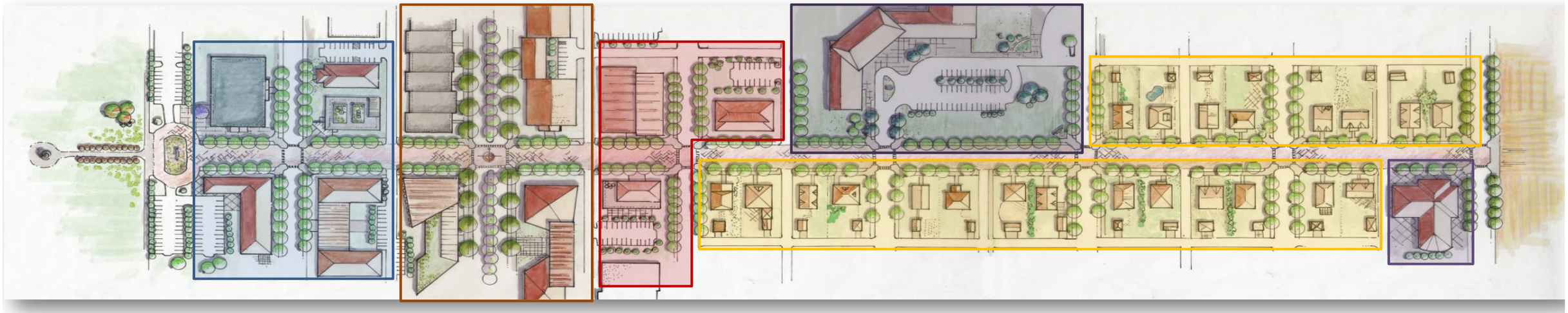


Line Street Node
Axial Connection from Park to farm

Line Street Node
Connection to Main Boulevard

Line Street Node
Zoning

Offices Mixed Use Commercial Elementary School Single Family Houses Church



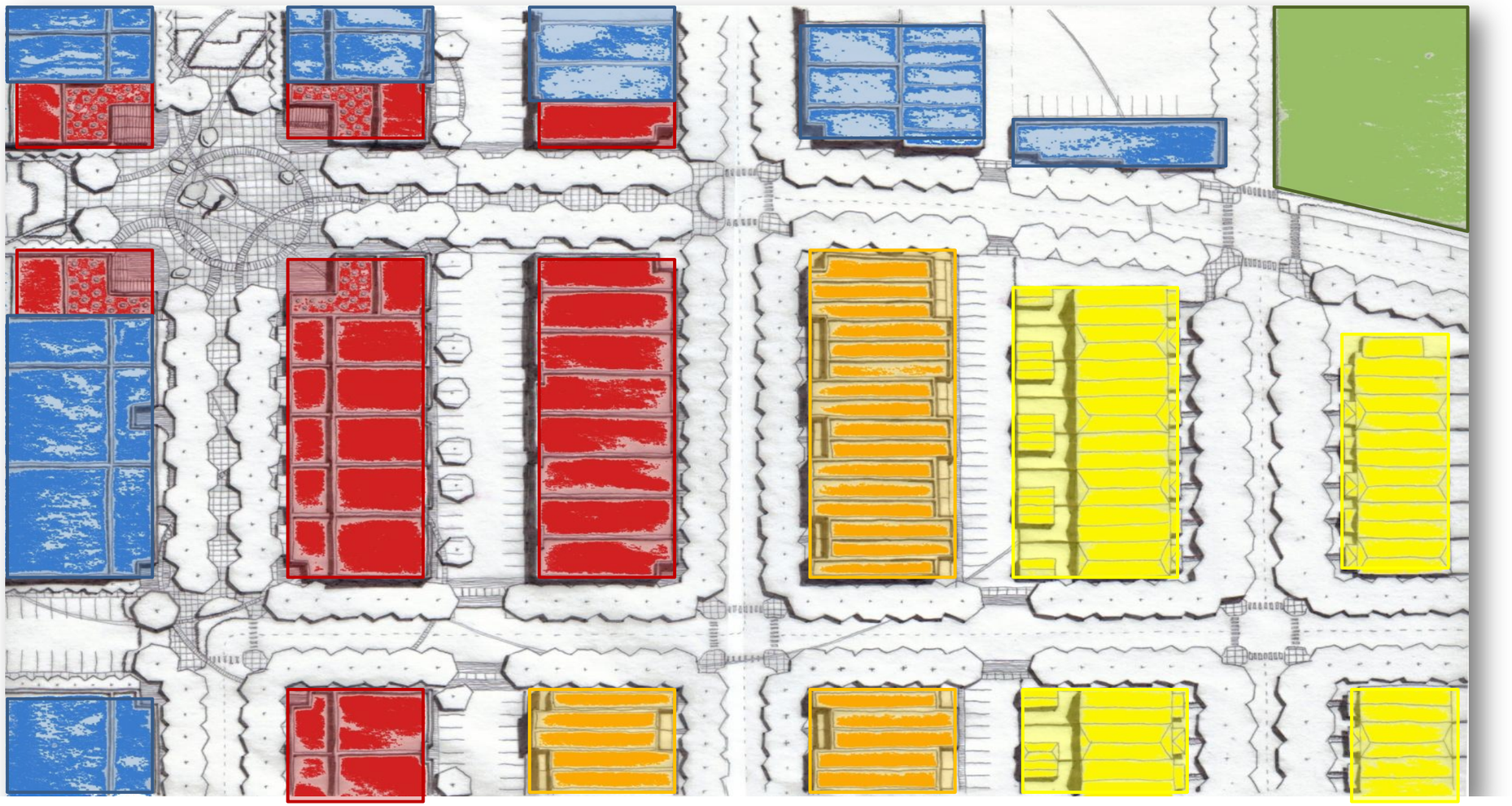
line street node street section

88’-0”

Scion City Node

mixed use industrial open space high density residential
medium density row-house residential

Scion City Node



Scion City Node
Diagrammatic Site Section