RESEARCH CONCEPTS

INTRODUCTION

The dawn of a ***new energy era***, influenced by climate change, peak oil, water scarcity, and an era of fragile social systems, of which obesity and an aging population are of primary importance, is upon us. These global pressures call for a restructuring of government policy, business practices, and human interaction in ways that ***link communities and resources*** throughout the Palouse bioregion.

Mass transit systems, including passenger rail, will need to connect urban and rural communities for mutual benefit. Regions must become ***energy independent*** while conserving resources, including water. Communities will need to bolster their ***local economies*** if they want to adopt development patterns that improve public health.

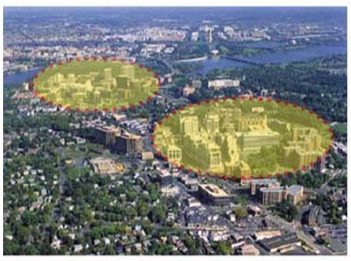
People will need to rediscover a ***sense of place***, both in the context of locale and culture, that encourages cooperation and self-affirmation. Our conclusion is that existing and future communities must be designed around ***mass transit systems and interdependent bioregional resource networks***.

PROJECT GOALS

1. Design for a shift in businesses and increase the opportunities for employment
2. Increase access to a range of better foods via regional and local agricultural cooperatives
3. Bring outside dollars into the community to bolster the economy
4. Protect and restore environmentally sensitive areas
5. Promote transit options and community interconnectivity
6. Improve and diversify living conditions for all demographics
7. Retain and enhance aspects of the urban and rural character
8. Develop a culture of environmental and so cial responsibility
9. Implement sustainable growth management strategies

PRIMARY RESEARCH SUBJECTS

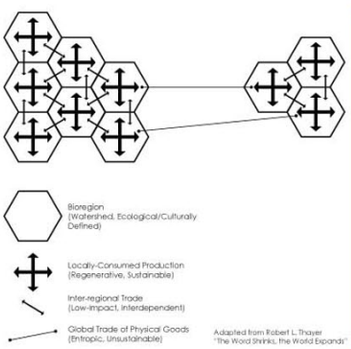
Transit Oriented Development (TOD)



According to the American Public Transport Association, TOD is compact, mixed use development near new or existing public transportation that serves housing, transportation and neighborhood goals. Its pedestrian-oriented design encourages residents and workers to drive their cars less and ride mass transit more. The basic elements of TOD are:

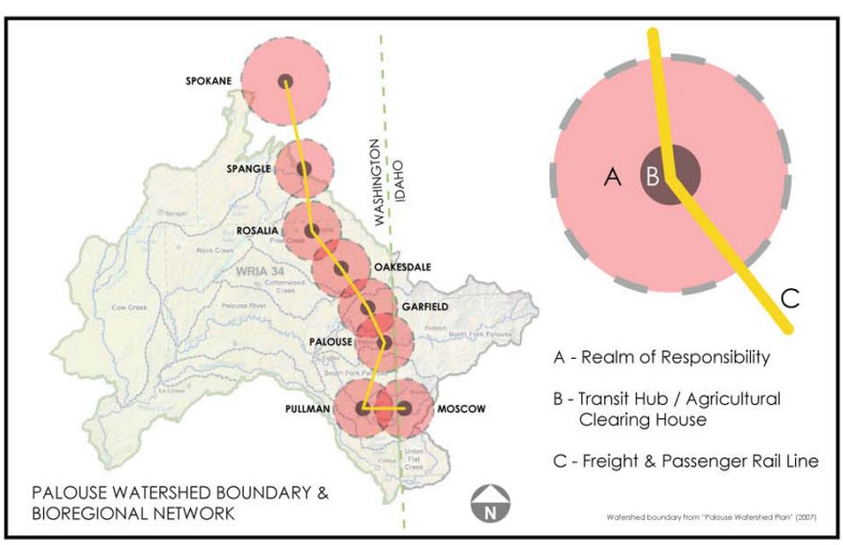
- Moderate to higher density development
- Easy walking distances
- A mix of land uses
- Pedestrian-scale
- Increased transit ridership

Bioregionalism



A bioregion, as defined by Peter Berg of the Planet Drum Foundation, is a "geographical province of marked ecological and often cultural unity often delimited by watersheds (water divides) of major streams." Its cultural aspect, or local "terrain of consciousness," is formed by the environmental limitations of place and informs ideas about how someone should live in that place. The benefits of such an approach to planning are crucial to living successfully as a small town in the face of mounting resource constraints. Its critical components involve:

- Self reliance
- Appropriate technology
- Local control over energy, economy, equity
- Responsible stewardship of the land,
- A strong sense of place



POWERING THE PALOUSE
ROSALIA
connecting PEOPLE PRODUCTS IDEAS

A Master Plan Set in the Palouse Bioregion

DR. BOB SCARFO - SPRING 2009 - TREVOR KOKENGE & ALEX MANN
WSU-SPOKANE INTERDISCIPLINARY DESIGN INSTITUTE

SITE INVENTORY

Rosalia, WA
Current Population: 600

COMMUNITY PROFILE

WHY ROSALIA?

Rosalia is the Gateway to the Palouse for north-to-south travelers. Its equal proximity to Spokane and Pullman makes it an ideal stepping stone between the two. It is a small, safe, growth-oriented, rural community that exhibits a dense development pattern. Its existing industrial Infrastructure is intact and ready for retrofit.

Historical Significance

- Steptoe Battlefield Site and Monument
- Rosalia Museum
- Old Milwaukee Bridge
- Developed Around the Rail Line
- Historic Buildings
- Texaco Visitor's Center

Natural Features

- Pine Creek
- Near Steptoe Butte
- South of Large Wetland Site
- Wind Energy Potential
- Over 100 lakes within 1 hour drive
- Palouse Prairie Remnant

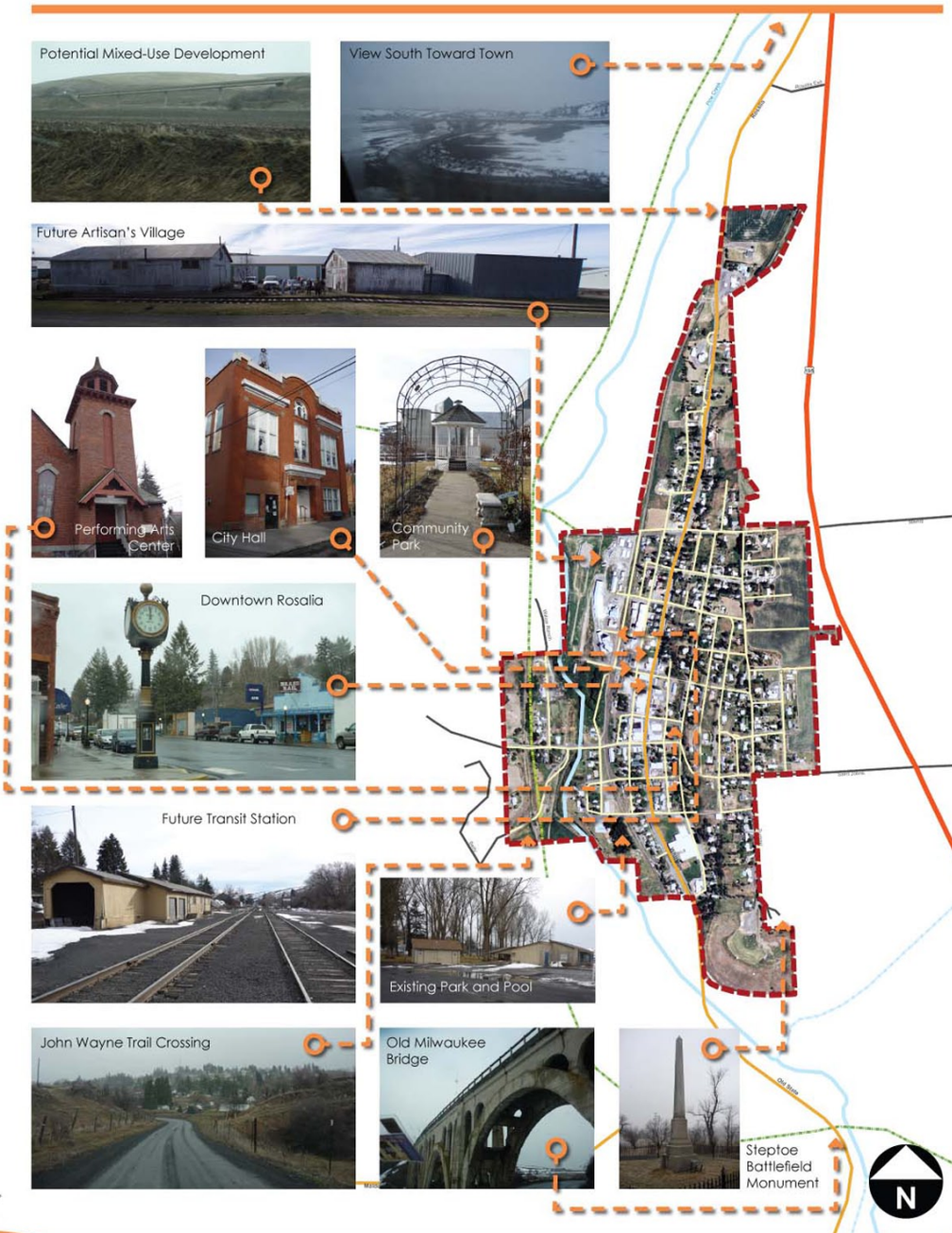
Community Resources

- Award-winning High School
- Medical Clinic
- Tavern
- Restaurant
- Cafes
- Library
- Banks
- Churches
- Dentist
- Neighborly People

Recreational Opportunities

- John Wayne Trail
- Performing Arts Center
- Art Gallery
- Public Pool
- RV Park
- Along the Palouse Scenic Byway
- Rodeo Grounds
- Nearby Golf Courses
- Best Place in America for A Bike Race
- Community Park

WALKABILITY	SENSITIVE AREAS	LAND USE	ACCESSIBILITY
Short walks are key to creating a well-frequented downtown.	Environmentally sensitive areas should be protected.	Existing land uses provide guidance for future development.	Slopes can potentially impede movement for certain users.



POWERING THE PALOUSE
ROSALIA
connecting PEOPLE PRODUCTS IDEAS

SITE ANALYSIS & CONCEPT

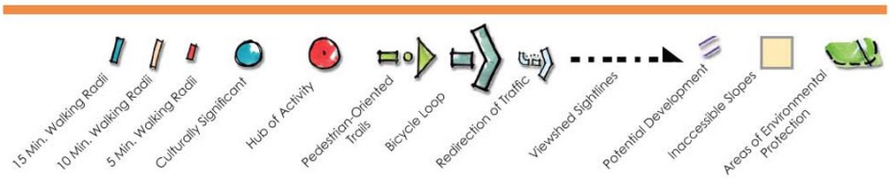
DESIGN CONCEPT

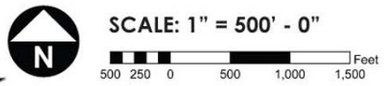
Developing a ***regional agricultural exchange system*** accomplishes two things. First, it brings a higher level of sustainability to the region. Second, it enables the region to retain a greater percentage of its economic wealth. The Rosalia project identifies the location and means for growing produce, raising livestock, and distributing them throughout the bioregion.

The appropriate patterns of sustainable trade are achieved by ***interrelating*** geographic information that includes agricultural potentials, microclimates, historical land use patterns, and other existing landscape characteristics. From that information, patterns are identified that inform distinct opportunities to be built into the proposed design. The identification of ***opportunities and limitations*** within Rosalia will determine its role within the larger bioregional system.

Social capital is a communal quality. People know each other across the community and feel secure in relying on each other. Rosalia's proposed physical infrastructure can ***retain and improve*** the already strong people-to-people relationships that build social capital. The link between physical infrastructure (farmer's markets, greenhouses, community gardens, pastures, parks, downtowns, greenways, etc.), culture (gathering, stories, friendships, self-actualization, & security), and the ***proposed rail line*** is significant to the vitality and health of the community and the region.

SITE ANALYSIS LEGEND





POWERING THE PALOUSE
ROSALIA
connecting PEOPLE PRODUCTS IDEAS

A Master Plan Set in the Palouse Bioregion

DR. BOB SCARFO - SPRING 2009 - TREVOR KOKENGE & ALEX MANN
WSU-SPOKANE INTERDISCIPLINARY DESIGN INSTITUTE

ROSALIA MASTER PLAN

Set in the Palouse Bioregion

PHASING STRATEGY

Implementing this ecological approach occurs through small steps perceived by the community as revitalization from within. We cannot entirely anticipate the actual lived-in results of certain developments. A phasing plan allows the community to assess the value of each step of the plan and develop either an appreciation for it or a new strategy to mitigate for unwanted results. This strategy enables changes to the master plan that are small in nature and do not disrupt the overall vision. The phasing can be characterized as a journey of sequential steps toward realizing a holistic town design.

LEGEND

Transit-Oriented Growth

- *Transit Hub*
- *Mixed-use*
  - Live-in / Work-in Units
  - Commuter Housing (Students)
- *High Density Single-family*
  - Permanent occupants
- *Future Residential Sites*
  - *Acceptable Proximity to Hubs*

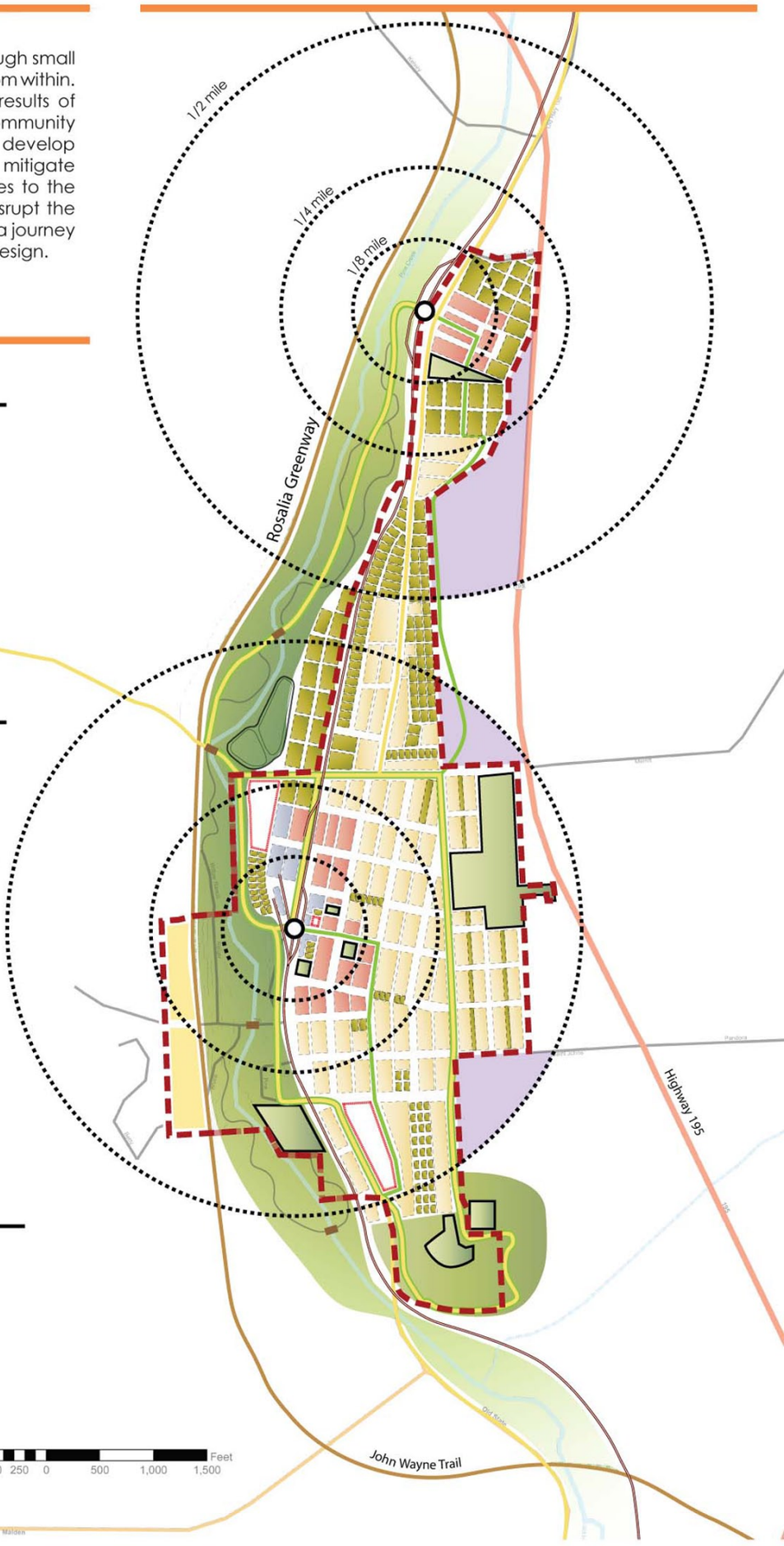
Agricultural Districts

- *Urban Agriculture Zoning*
  - Plots within the urban boundary
  - Small-scale community gardens
- *Regional Supply Zoning*
  - Agricultural land intended to fulfill local as well as regional agricultural needs
  - Necessitates different technologies and tactics
  - Facilities not conducive to urban situations (i.e. Composting)
- *Industrial Agriculture Zoning*
  - Retrofit existing infrastructure
  - Build in close proximity to rail

Recreational Facilities and Community Health

- *Rail Line*
- *Bike Path*
- *Walking Path*
- *Shared Path*
- *Trails*
- *Parks and Open Space*
- *Bridge*
- *Slope Revitalization*

MASTER PLAN



POWERING THE PALOUSE
ROSALIA
connecting PEOPLE PRODUCTS IDEAS

A Master Plan Set in the Palouse Bioregion

DR. BOB SCARFO - SPRING 2009 - TREVOR KOKENGE & ALEX MANN
WSU-SPOKANE INTERDISCIPLINARY DESIGN INSTITUTE

MIXED-USE TRANSIT VILLAGE

Downtown Rosalia

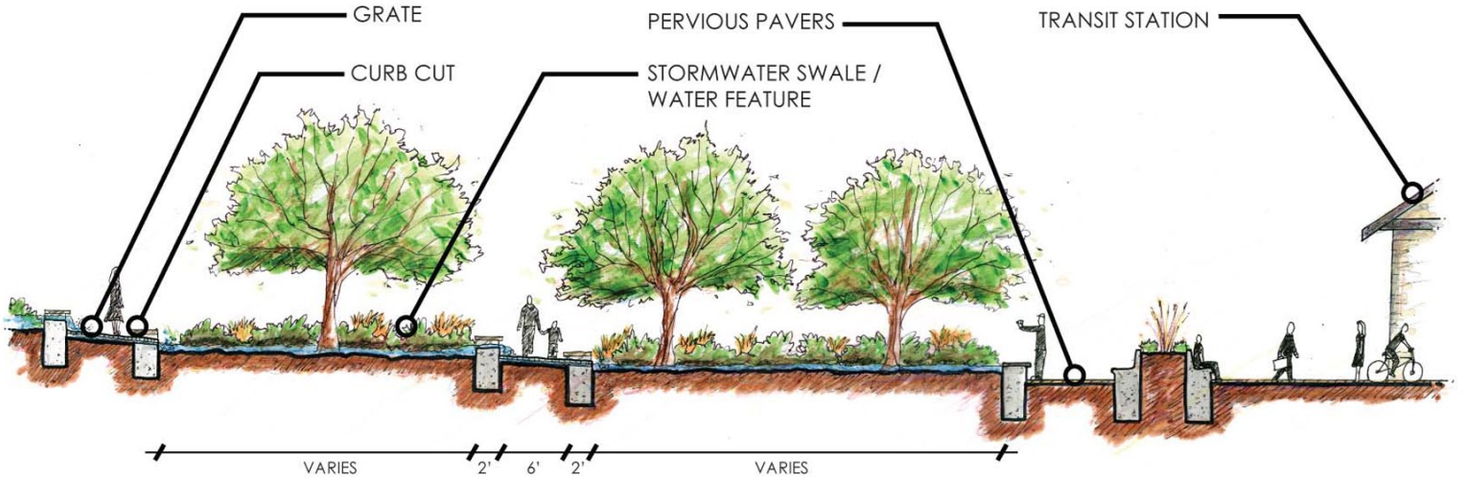
1. SMART CAR / ATV LOADING ZONE
2. COMMUTER BOARDING DOCK
3. REVITALIZED STREET SCAPE
4. NATIVE SLOPE PLANTING
5. URBAN AGRICULTURE
6. FARMER'S MARKET
7. TRAIN STATION
8. RAIN GARDEN
9. PUBLIC PLAZA
10. RAIL LINE
11. CITY HALL
12. BOARDWALK
13. GREENHOUSES
14. PEDESTRIAN ALLEYS
15. PEDESTRIAN WALKWAY
16. EXISTING COMMUNITY PARK
17. HOLIDAY GATHERING SPACE
18. HISTORIC BARN INTERPRETIVE SITE

VILLAGE PLAN

N

SCALE: 1" = 50' - 0"

0 25 50 100 150



PLAZA SECTION FACING SOUTH

NOT TO SCALE

POWERING THE PALOUSE
ROSALIA
connecting PEOPLE PRODUCTS IDEAS

A Master Plan Set in the Palouse Bioregion

DR. BOB SCARFO - SPRING 2009 - TREVOR KOKENGE & ALEX MANN
WSU-SPOKANE INTERDISCIPLINARY DESIGN INSTITUTE

PRIMARY COMPONENTS

COMPONENT DETAILS

Train Station

Magnitude: Single-story station with shops above
Area: Nexus of commercial and recreational uses; town center along creek
People: 200 people at peak hours
Details:

- Passengers board train at grade
- Pedestrian entrance adjacent to farmer's market
- A "back exit" for deliveries of supplies to businesses
- Open space adjacent to depot for waiting and play outdoors

Public Plaza / Farmer's Market

Magnitude: Modest public plaza
Area: Adjacent the Train Depot
People: Supports an estimated 200-300 people in addition to projected weekday/ weekend crowds
Details:

- Serves as an experience market / third place
- Multi-seasonal / Multi-Use
- Accessible / Inter-generational
- Supports local business and adjacent amenities
- Certified Kitchen
- Restaurant & Market
- Organic "Home-Grown" Gardens
- Window Shops and Studios
- Farmer's Community Atmosphere with Links to Train History

Streetscape

Magnitude: One block of Whitman Avenue, Rosalia's Main Drag
Area: Adjacent to Train Station, Primary Commercial District
People: Locals and Tourists
Details:

- Provides accessible parking for young and old alike
- Reduces the urban heat island effect through the use of vegetation
- Paving upgrades signal the pedestrian realm
- Traffic calming

Industrial / Agricultural District

Shipping Site

- Grain Elevators
- Silos
- Loading Dock

Urban Agriculture

- Greenhouses above Mixed-Use Buildings
- Polytunnels
- Food Processing Facility

Parking

- Area: Enough to handle possible demands in winter, while also making walking a preferred choice.
- People: Bicyclists, Motorcyclists, ATV-Users, Equestrian, Limited vehicular

Details:

- Near or surrounded by businesses in order to build clientele and make it a more attractive urban space
- Placed away from station leaving prime land for development
- Parking for only the projected portion of the population with special needs requiring a vehicle (i.e. ADA, tourists)

Greenway

Magnitude: Long, linear green space
Area: From current community park north along the west end of the creek to the rodeo grounds
People: Youth, Adults, Elderly, Bikers, Joggers, Walkers, Wildlife Viewers
Rosalia residents in addition to tourists and outside townspeople
Details:

- Addresses need for mixed-use zoning and open space
- Recreational opportunities near the downtown core improve quality of life
- Connects and facilitates movement between park, rodeo grounds, outlying residential areas, downtown, and transit station
- Preserves river bank habitat and flood zone as a green space
- Limited development within 100-year flood plain
- Raised boardwalk in sensitive areas

View of Rain Garden Facing East

View of Public Plaza Looking Toward Station and City Hall

View of Revitalized Whitman Avenue Facing North