



TOWN CENTER DISTRICT

APRIL 3, 2024
REVIEW DRAFT

City of Lathrop Planning Commission
Approved - PC Reso. 24-4 - April 17, 2024

ARCHITECTURAL
DESIGN GUIDELINES

&

DEVELOPMENT
STANDARDS

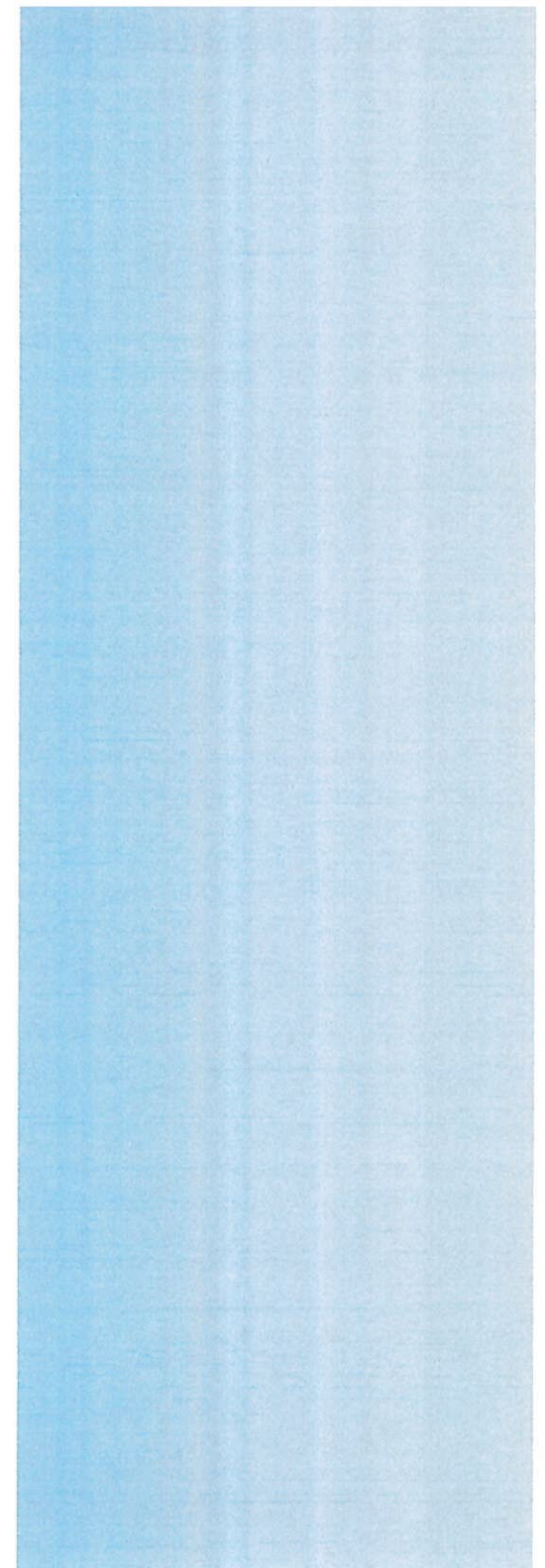


Imagery depicted on this document is used only for purposes of conveying architectural and/or planning concepts and may or may not represent the work of Dahlin Group Architecture Planning or O'Dell Engineering.

RIVER ISLANDS



TABLE OF CONTENTS



CHAPTER 1 COMMUNITY OVERVIEW.....	1
1.1 Introduction	3
1.1.1 Purpose & Intent.....	4
1.1.2 Relationship to West Lathrop Specific Plan	4
1.1.3 Language and Organization of Document.....	4
1.2 Architecture Design Principles	6
1.2.1 Regional Precedents	6
1.2.2 Three Architectural Districts.....	7
1.2.3 Energy Efficiency	8
CHAPTER 2 ARCHITECTURE	9
2.1 Design Guidelines	11
2.1.1 Architectural Character	11
2.1.2 Streetscape.....	11
2.1.3 Building Materials and Colors	12
2.1.4 Delta Agrarian Theme.....	14
2.1.5 Specialized Facilities	14
2.2 Development Standards.....	16
2.2.1 Land Uses and Development Pattern	17
2.2.2 High Density Res. (HDR) Dev. Standards.....	18
CHAPTER 3 LANDSCAPE.....	20
3.1 Introduction	22
3.2 Mixed-Use Landscape	23
3.2.1 Planting Design.....	23
3.2.2 Front and Side Parcels.....	26
3.2.3 Back Side of Parcels.....	26
3.2.4 Levee Landscaping.....	26
3.3 Site Furnishings/ Materials.....	27
3.3.1 Fences	27
3.3.2 Signage.....	28
3.3.3 Landscape Lighting.....	28
3.3.4 Paving and Hardscape	28
3.4 Landscape Construction Practices.....	29
3.4.1 Irrigation and Water Conservation	29
3.4.2 Soil Preparation and Mulching.....	30
3.4.3 Planting.....	30
CHAPTER 4 PROJECT IMPLEMENTATION ...	33
4.1 Project Implementation	35
4.1.1 Stewart Tract Design Review Committee (STDRC)35	
4.1.2 Consistency Requirements.....	35
4.1.4 Design Review Submittal Requirements	35
APPENDIX	37
Builder Identification Signs.....	38
Plant List	43
Shared Parking Analysis.....	51

RIVER ISLANDS



CHAPTER 1

COMMUNITY
OVERVIEW

This page left intentionally blank

1.1 Introduction

River Islands has been designed as the premier master planned community in Northern California. Its island location, on the San Joaquin River in Lathrop, provides a backdrop of nearly 5,000 acres for a mixed use community of 15,010 homes, nearly 5 million square feet of commercial space and seven schools. Such community recreational amenities as lakes, walking trails, parks and a boathouse are all part of the vision for all neighborhoods. The Town Center

District will contain up to 668 high density units and up to 500,000 square feet of commercial/retail/office space; this document is intended to provide a descriptive vision of this unique part of the River Islands master plan.

Figure 1.1 shows the location of River Islands, and its relationship to the major highways and surrounding cities.

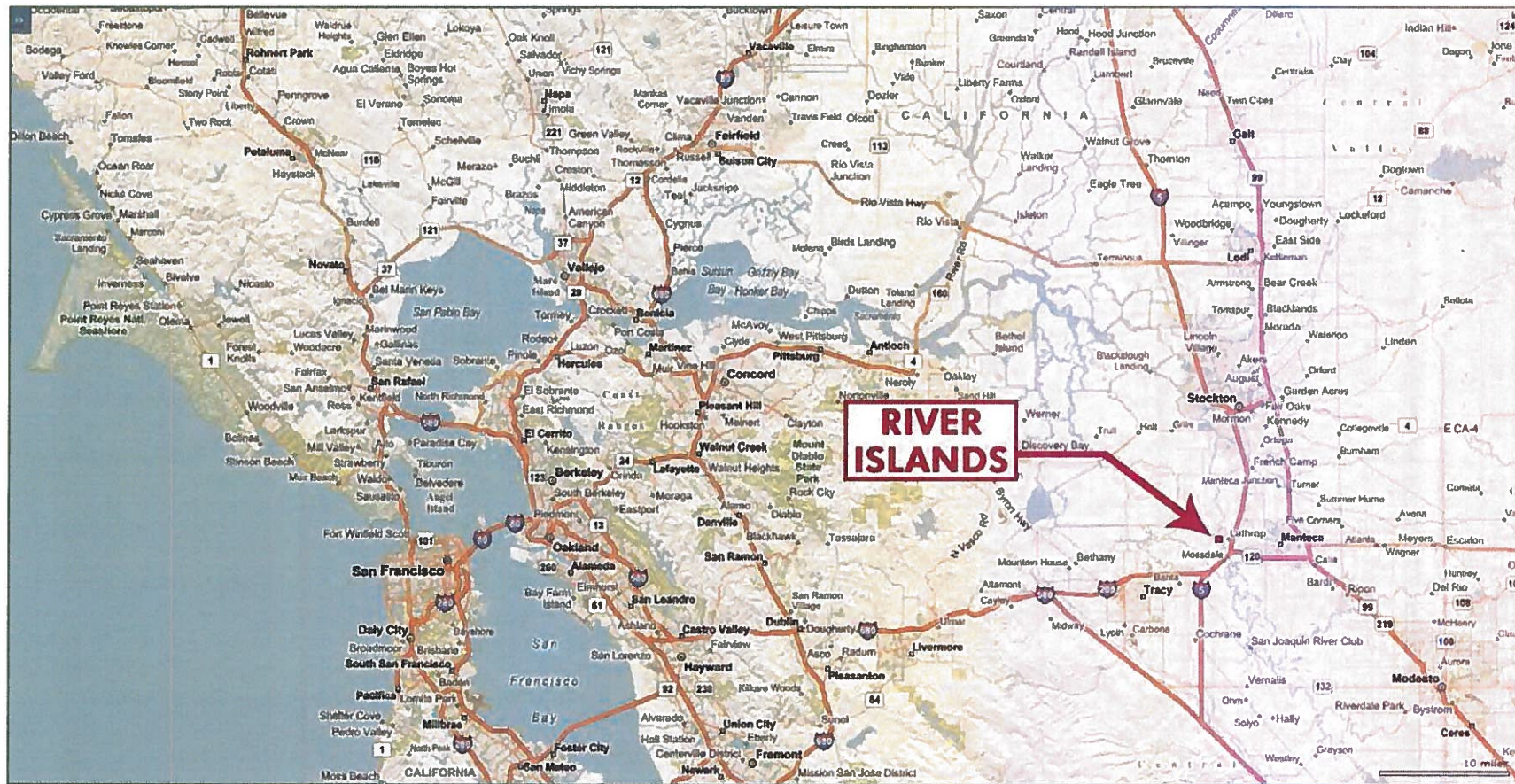


Figure 1.1 Location Map

1.1.1 Purpose & Intent

The Architectural Guidelines and Development Standards of River Islands (AG/DS) complement the River Islands Urban Design Concept (UDC) and Neighborhood Development Plan (NDP), two other documents that are required to direct development within a particular planning district of River Islands. This authority stems from the West Lathrop Specific Plan (WLSP) that provides the land uses, zoning, general development framework and other design policies for both the NDP and the AG/DS. The documents provide the specific standards and guidelines for the Stewart Tract Design Review Committee (STDRC) and Lathrop Community Development Department to review and evaluate new development proposals within the Phase 1 Town Center District.

1.1.2 Relationship to West Lathrop Specific Plan (WLSP)

The West Lathrop Specific Plan (WLSP) provides the authority to which the River Islands AG/DS has been prepared. As described in the WLSP, each sub-area of each District or a District as a whole must have a set of written guidelines and standards for new development. This initial document applies to Areas 3, 4, and 10 of the Town Center District as described further in this document (see Figure 2.2 for a depiction of the areas); these initial areas shall be referred to as "Phase 1 of the Town Center District". However, the Town Center AG/DS and NDP are meant to be "living documents" that will be updated over time to meet the needs of the unique development anticipated for this District, which is by definition, mixed-use. Each area not covered by this initial AG/DS document will require an amendment to provide additional detail to that area. No development permit (e.g. Conditional Use Permit, Site Plan Review) for uses outside of Areas 3, 4, and 10 (Phase 1 of the Town Center District) shall be approved until the Planning Commission has approved an amended AG/DS document. Minor amendments however, may be approved by the Community Development Director as provided by the procedures outlined in the Project Implementation section of this document.

1.1.3 Language and Organization of Document

These DG/DS are divided into three major sections: Architecture; Landscape and Project Implementation. Architecture and Landscape are each further divided into Design Guidelines and Development Standards. Together, these will assure that developers and residents of the Town District have the necessary tools to implement the vision for this mixed use area of River Islands.

The Design Guidelines describe the overall design quality that River Islands envisions. Complementary sketches, imagery, diagrams, and other graphic materials further illustrate the AG/DS design intent. The words "should"; "may" and "can" indicates that the guideline is highly recommended and suggests possible design solutions that are acceptable and encouraged, but not required.

The Development Standards section addresses the particular design criteria, conditions and standards that shall be met when designing both residential and non-residential uses and landscapes associated with these uses. The Phase 1 Town Center AG/DS uses careful language to assist the STDRC and Lathrop City staff in reviewing design proposals. The words, "shall", "will", and "must" are to be implemented requirements. All development standards intended to supplement the WLSP's and City of Lathrop's zoning requirements use this language.

The Project Implementation Section will guide developers, builders and residents through the approval and permit process.

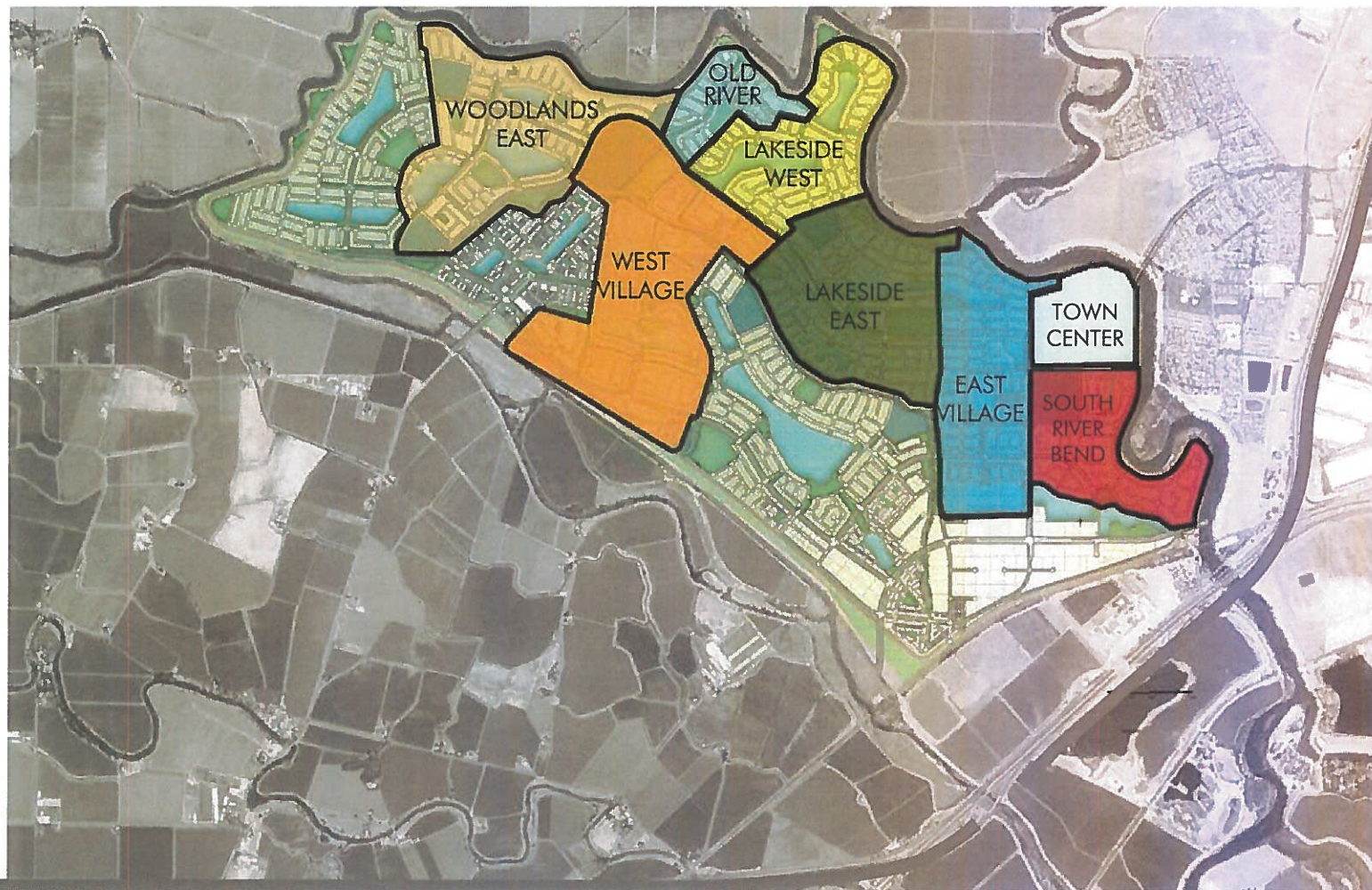


Figure 1.2 River Islands District Diagram (Currently Approved)

1.2 Architecture Design Principles

The character and quality of River Islands' architecture is an important factor in creating the overall identity of the community. Although it is likely that there will ultimately be a variety of architectural styles in the community, the following design principles are intended to provide the guidance that will assure unity and consistency in architectural design.

1.2.1 Regional Precedents

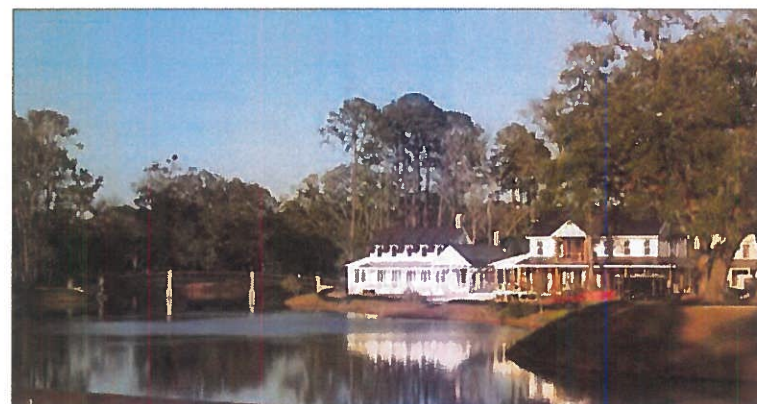
The region of San Joaquin and Sacramento River Deltas is rich in precedents that can serve as the basis for the architecture of River Islands. These include not only the historical architectural tradition, but the climate, natural environment, and cultural history. There are 4 distinct influences identified for this area, that provide us with the architectural styles that will be considered for the River Islands community.

River Edge

The use of the river system for commerce has been largely replaced by recreational use. Still, remnants of the river's use as the primary conduit for goods and materials, as well as the agricultural products of the region, remain. The simple, economical forms and materials of river edge industrial buildings, and their docks and quays provide a meaningful source for the architecture of the Town Center.

River Delta

Because of the abundant water, flat slopes and easily worked soils, river deltas have always been desirable for agriculture. The tradition of farmsteads in the Delta, with their simple farmhouses and outbuildings, can be a particularly rich source for residential building design.



Mediterranean Climate

The climate of the delta is Mediterranean: cool, moist winters are followed by warm, dry summers. The prevailing westerly winds bring in cool air from the Pacific, making evenings pleasant, even in the summer. Often homes in this area were built with large roof overhangs and porches to limit the heat gain in the house, or with carefully placed large trees and shade structures.

Delta History & Culture

Originally part of the Rancho Pescadero, River Islands has a direct historical connection to the Spanish and Mexican Land Grant system that characterized California in the eighteenth and early nineteenth century. The discovery of gold north and east of River Islands, and the subsequent boom are also part of the region's architectural influences. The simple, slapdash architecture of boom towns, and the subsequent opulence of the Victorian Era are a part of the architectural history of the region. The traditions of agriculture and river-based industry are the most prevalent historical influences, however, and provide perhaps the most fitting stimulus for architectural design at River Islands.

1.2.2 Three Architectural Districts

River Islands is divided into three architectural districts based primarily on the dominant use within the district: Residential, Town Center and Employment Center. The requirements for the architecture of each district vary, as described in the following paragraphs.

Residential District

The architecture of the residential districts of the River Islands community will contain a wide variety of architectural styles and influences. The styles will be based on historical precedents from the region, such as those found in farmsteads, the river edge, or in the older residential neighborhoods of valley and delta cities. Modern adaptations of these styles may be proposed, though the intent is to create an appearance and feeling of old tradition architecture. The mixing of styles within individual neighborhoods will be limited so that visual unity can be achieved, and strange juxtapositions avoided.

Employment Center District

As the primary uses of this district are office, retail and commercial, the architectural styles will be the most contemporary of any of the three districts. Office and commercial buildings will generally be simple, modern, rectilinear forms with flat roofs. Masonry, concrete tilt-up and other economical building types will predominate. Buildings with historical references will likely be limited to retail centers or restaurants. Architectural design guidelines & development standards for Town Center and Employment Center Districts will be developed and adapted to supplement the UDC at the appropriate time prior to the official launch of these two districts.

Town Center District

The architecture of the Town Center will vary according to land use and location. Next to the river, particularly in the retail and commercial areas, the architecture should be a modern approach to historical commercial and industrial building types that might have been found in other river front towns. Ideally, this area should appear as if it developed over time, with the participation of numerous designers. Unity will be achieved primarily by uniformity of use and development standards, such as building mass and setbacks.

Residential areas of the Town Center may follow the guidelines for the residential district described previously, or may show the influence of riverfront industrial buildings, or Victorian estates. Individual development proposals will be considered by the Stewart Tract Design Review Committee on the effectiveness with which they create an architectural richness in the Town Center that mimics traditional riverfront towns. This document will introduce a new architectural theme to this end.

Civic buildings, such as schools and city offices, can be special architectural features of the Town Center. They may be traditional or modern in architectural treatment. The construction of the Lathrop Police Station utilizes a more traditional feel, compatible with the previously constructed Islanders Field baseball stadium. Both use neo-traditional elements, including brick and stucco facades. It is expected that this theme and compatible themes will continue throughout the District.

1.2.3 Energy Efficiency

All buildings within River Islands should be designed to conserve energy as required by the State of California's CALGreen Code. Among the methods that should be considered are:

- ^ Passive solar design: thermal masses to absorb winter sun energy, roof overhangs, and carefully placed deciduous trees to provide summer shade;
- ^ Active solar design: solar collectors to heat water, or photo voltaic cells to generate electricity;
- ^ Energy efficient mechanical equipment for heating and cooling, such as heat pumps;
- ^ Extra thermal insulation in roofs and walls to control heat gain and loss;
- ^ Operable windows in commercial buildings; to reduce dependence on mechanical ventilation;
- ^ Home integrated systems: wireless PC based systems that allow homeowners to program appliances to restrict usage during peak energy periods;
- ^ Load shifting technologies: thermal energy storage for residential and commercial use that moves the operation of air conditioning compressors from on-peak operation to off-peak hours;
- ^ Thermal rated glazing, including reflective coatings to reduce heat load in the summer;
- ^ Utilization of Energy Star rated appliances.

RIVER ISLANDS



CHAPTER 2

ARCHITECTURE

This page left intentionally blank

2.1 Design Guidelines

2.1.1 Architectural Character

The primary aim of the Town Center is to provide a community wide mix of commercial, office, residential, recreational and civic uses that provides River Islands with a easily identifiable "downtown" like area.

The overall development pattern, especially north of River Islands Parkway should follow the form of a traditional, downtown setting, with short blocks, and clusters of development at regular intervals.

Since the Town Center is near the geographical center of the City of Lathrop, the area will likely be destination oriented, serving the needs of River Islands residents, but will include retail, recreation, lodging and dining opportunities for the region at large.

Buildings covered by this AG/DS document (Phase 1 of the Town Center District, within Areas 3, 4, and 10) will be designed with a "Delta Agrarian" architectural theme that is historical in nature, but utilizes a modern approach to building materials and energy conservation (see Section 2.1.4). Both Islanders Field and the Lathrop Police Station have already been constructed with this architectural theme. Both the Community Stadium and the Islanders Way Apartment Buildings (located between Marina Drive and Lathrop Landing Community Park), are being designed with the Delta Agrarian theme. Future phases of the Town Center will implement other architectural themes that will require an amendment to this document.

Buildings within Phase 1 of the Town Center will feature solar panels and electric car chargers and modern building materials that have a traditional appearance but are manufactured to be more weather resistant and easier to construct than the original materials used in the historical look of Delta Agrarian. Brick and other masonry treatments with stucco and metal is typical of this style, which is typical of historic buildings throughout the San Joaquin Delta

2.1.2 Streetscape

Major streets in the Town Center include River Islands Parkway, Commercial Street, Garden Farms Avenue, Islanders Way and Riverfront Drive. All of these streets will be built in Phase 1, except Commercial Street will only be built between River Islands Parkway and Garden Farms Avenue. With the initial phase, Commercial Street will provide the main access to the Town Center from existing River Islands Parkway and with future phases, become the central organizing element of the District, easily accessible from the adjacent uses that will create a "main street" effect north of Garden Farms Avenue. Since the Town Center development will continue to be built in phases, certain areas may be programmed to facilitate active uses such as festivals, concerts, movie nights, farmers markets, craft fairs and other community events that will likely move to permanent areas of the Town Center in the future.

With future updates to this document, guidelines will be modified and architectural themes added to employ architectural elevations on Commercial Street north of Garden Farms Avenue encouraging building entries and windows oriented toward the street, aligned along the back edge of adjacent right-of-way, and with parking lots located behind buildings where possible. This will provide a "traditional" pedestrian downtown feel.

Retail, business, office, and residential uses should be encouraged to be mixed within individual buildings or within clusters of development on a project site. Residential and non-residential development shall include higher densities and intensities to encourage a 24-hour population. With all phases of development, pedestrian walkability should be prioritized through site design with connectivity to the adjacent river trail and between Town Center uses and building groups.

2.1.3 Building Materials and Colors

Building materials and color are important elements to maintain the visual quality of development within the Town Center and contribute to the quality streetscapes. Durable and environmental sustainable materials for Phase 1 of the Town Center shall include the following:

- Use of stucco as primary exterior element along with brick masonry blocks or veneer with heavy accent materials. Some projects may also utilize wood siding/Hardie fiber material siding.
- Accent materials shall be primarily brick/brick veneer or other masonry, along with steel elements such as railings, awnings, and overhangs
- Primary building colors shall be neutral/lighter in nature with accent colors being darker in contrast, but compatible with the main structure color.
- Roof materials shall be metal standing seam or equivalent for sloping and shed roofs, built-up systems for flat roofs and other metal roofing compatible to the architectural theme.

2.1.4 Town Center Architectural Styles

In contrast to other districts in River Islands that are largely residential in nature, the Town Center District is meant to be a mixed use area of various land use types, including medium and high density residential, commercial, retail, office, government and recreational uses. As noted, the Delta Agrarian Theme will be employed for Phase 1 of the Town Center, in the same vein as Islanders Field and the Lathrop Police Station. Other styles will be added in future versions of this document.

Since there are several public and semi-public uses that have already been established in and near the Town Center that have a common, unifying theme, including the Lathrop Police Station, Islanders Field Baseball Stadium and Lathrop Manteca Fire Station No. 35, these guidelines will continue this Delta Agrarian theme with additional private and public buildings in Phase 1 of the Town Center.

Other styles will likely be introduced in the future as development within the Town Center occurs over time. However, all adopted themes shall be compatible with each other, no matter the land use type.



Islanders Field



Lathrop Police Station

Delta Agrarian Theme

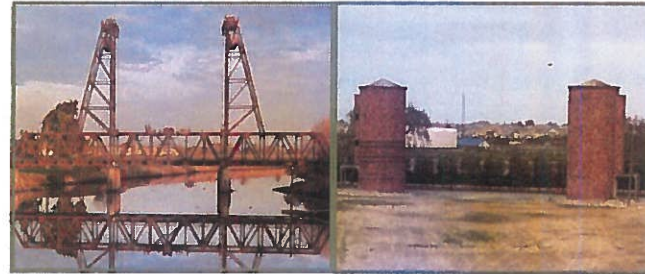
Inspired by early 19th Century industrialism and rail expansion through agricultural lands in the Western United States, and in the San Joaquin Delta in specific, Delta Agrarian architecture combines materials and motifs from the unique architecture of this historic area with traditional housing materials indicative a more modern approach.

Exterior Features

Delta Agrarian is characterized by functional rectilinear forms. The primary exterior mass is characterized by industrial materials such as brick and exposed steel. Less dominant masses or elements employ secondary materials such as stucco and panel siding.

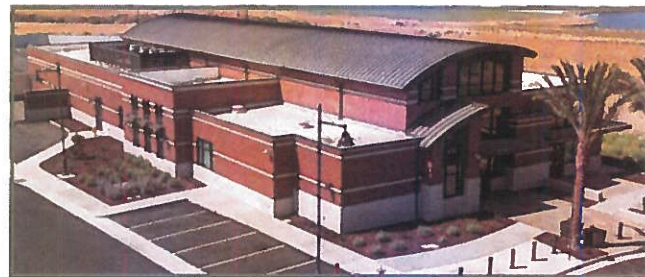
Elements	Minimum	Enhanced
Form	<ul style="list-style-type: none"> -Multi-storied form with varied facade depth (multi-family, commercial, office), including single story buildings -Maximum 30' continuous facade plane -Roof line broken up by rounded or square tower elements. 	<ul style="list-style-type: none"> -Simple exposed structural members on exterior of structure
Roof	<ul style="list-style-type: none"> -Flat rectilinear roofs or barrel vault roofs of varied height -Rooftop equipment screened or kept out of site from pedestrians. Screening materials to reflect Agrarian Railroad Industrial character 	<ul style="list-style-type: none"> -Horizontal accent band or metal trim incorporated into parapet design
Walls	<ul style="list-style-type: none"> -Use of at least two or more exterior materials or colors -Consistent use of horizontally oriented materials 	<ul style="list-style-type: none"> -Asymmetrical facade massing employing two or more materials
Windows	<ul style="list-style-type: none"> -Divided light window -Single hung window -Dark window frames 	<ul style="list-style-type: none"> -Inset windows -Storefront glazing
Details	<ul style="list-style-type: none"> -Exterior details with exposed structural elements -Horizontal accent bands on facades -Ornamental light fixtures of industrial character 	<ul style="list-style-type: none"> -Vertical or Horizontally oriented metal lattice elements. -Exposed trusses

Delta Agrarian Design Images



Union Pacific Railroad Bridge

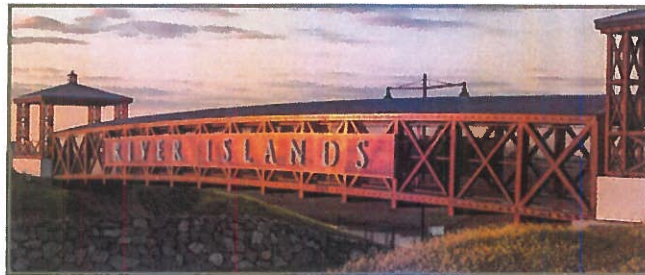
Dell'Osso Farms



Lathrop Police Station



Islanders Field Stadium

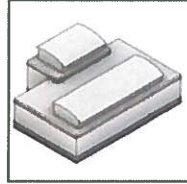
Bradshaw's Crossing Bridge over the
San Joaquin River

Agrarian Kit of Parts

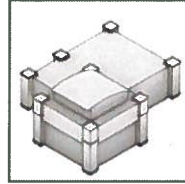
Form



Height variation

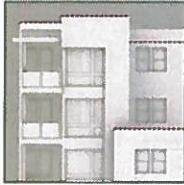


Vaulted roofs



Column articulation

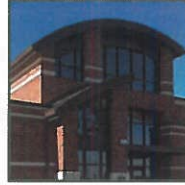
Roofs



Flat Profiles



Height Variation



Plane Change

Railing



Horizontal Thin Metal



Horizontal



Vertical Metal

Windows



Single Hung



Divided Light



Dark Window Trim

Details



Metal Overhang



Accent Band



Metal Lattice



Light Fixtures

Columns



Exposed Wood Column



Overhang Column

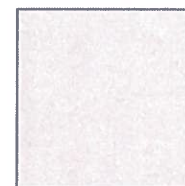


Column with exposed bolts

Materials



Brick



Stucco



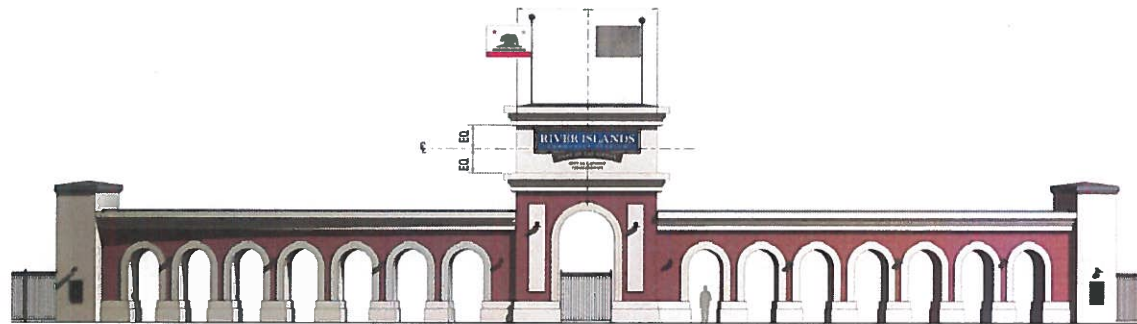
Wood Panel Siding



Dark paint or steel

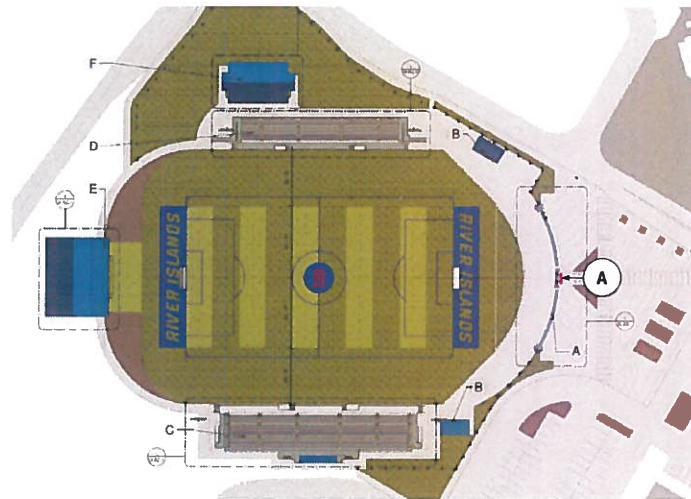
2.1.5 Specialized Facilities

Given the unique nature of the Town Center and its mix of public and private uses, specialized facilities of both a temporary and permanent nature may be proposed. The Town Center already boasts the Islanders Field Baseball Stadium (permanent) and the River Islands Soccer Fields (temporary) which are of a specialty nature. The Town Center will include additional private recreational facilities, including the Community Stadium. Other such uses may come in the future. Such facilities shall be architecturally compatible to the rest of the uses in the Town Center District and be reviewed for recommendation of the Stewart Tract Design Review Committee. The Community Stadium in particular is excellent representation of the Delta Agrarian theme utilized by other community wide buildings in the Town Center (e.g. Islanders Field, Lathrop Police Station).



STADIUM ENTRANCE - FRONT ELEVATION (SOUTH)

SCALE: 1/16" = 1'-0"



SITE PLAN

NOT TO SCALE

Representative Views - Community Stadium

2.2 Development Standards

This AG/DS document contains specific development standards for institutional and multi-family residential development only. Other areas of the Town Center are still under design development and the AG/DS document will be updated to address other land use types and development areas of the Town Center in the future.

The development standards necessary to regulate housing development for high density residential projects are shown in Table 2-1: River Islands Architectural Development Standards Summary.

Development standards for commercial, office, retail and other uses will be added to this document when such development is proposed in the future, prior to the approval any development and building permits for such uses.

To allow future innovative development, architects and planners may be encouraged to propose new design solutions that may deviate from standards set forth in this document.

The City, based on recommendation of the STDRC shall have the authority to accept, review and grant any minor architectural variance on a case by case basis during the Site Plan Review or Conditional Use Permit process.

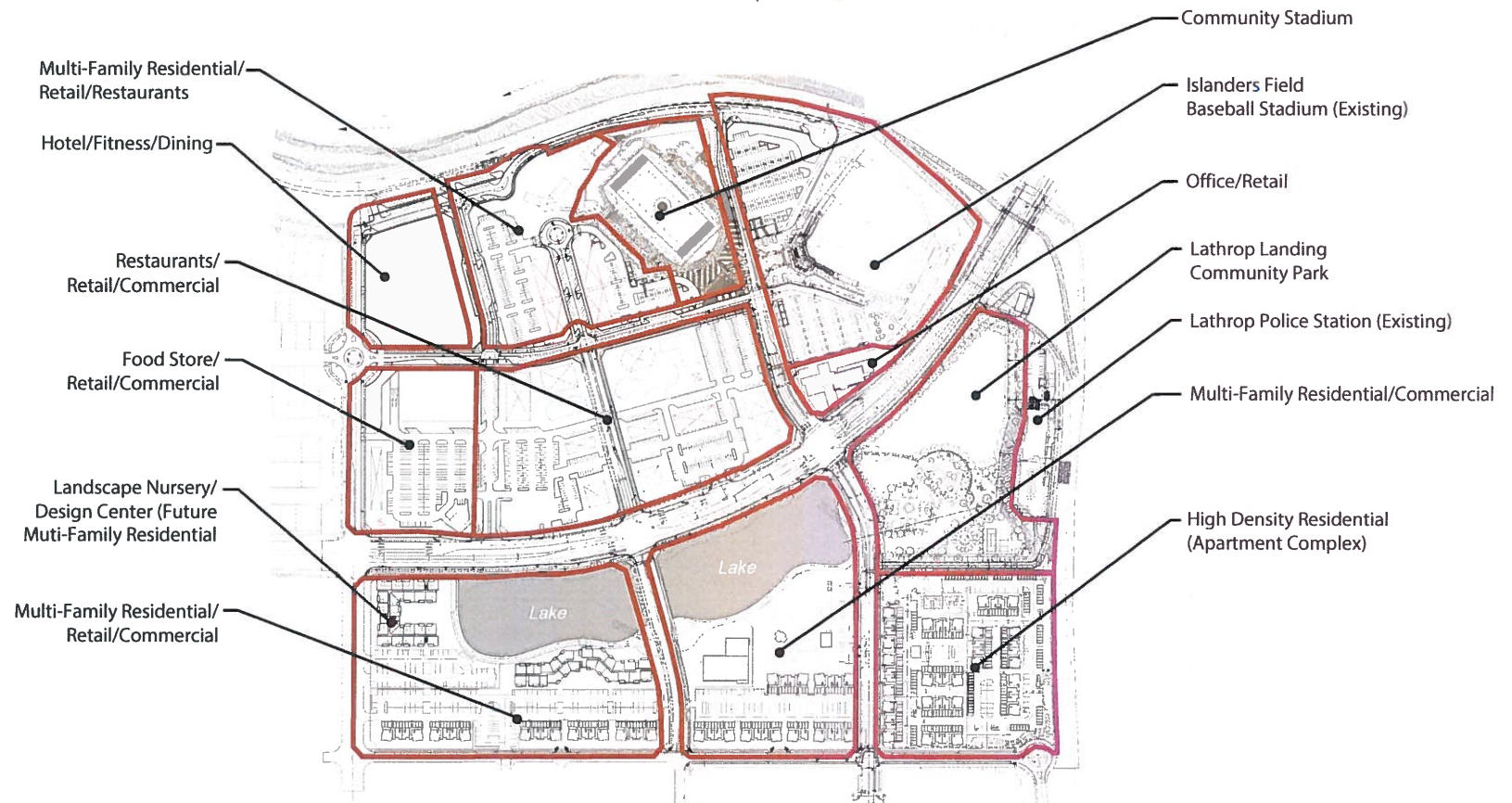


Figure 2.1 Town Center Conceptual Plan subject to change with future development (pending amendment to this document)

2.2.1 Land Uses and Development Pattern

The City's MU-RI Zoning District allows the placement of commercial, office, residential and other permitted and conditionally permitted uses together in the same area and with shared parking arrangements in accordance with the Lathrop Municipal Code and the Town Center NDP.

The planned development areas shown are diagrammatic and preliminary, subject to change with individual development proposals. Existing uses in the Town Center include Islanders Field Baseball Stadium, Lathrop Police Station and the PG&E Natural Gas Pressure Reducing Facility. Interim uses include the River Islands Welcome Center, River Islands Technology Academy, and Lathrop Soccer Facility. These uses are not included below.

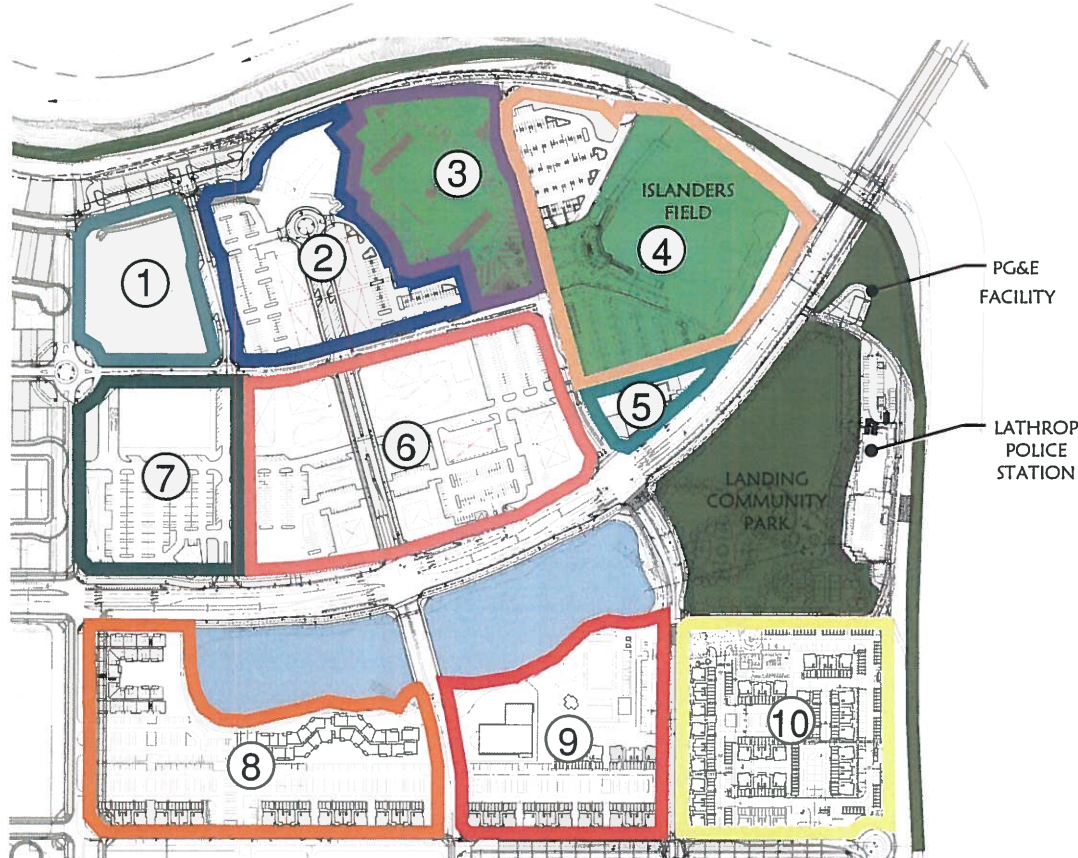


Figure 2.2 Town Center Development Areas subject to change with future development
(Pending amendment to this document)

Lotting/Development Summary

AREA	ID	PRODUCT TYPES	Units*
	AREA 1	Commercial/Mixed	0-448
	AREA 2	MFD/Mixed	0-448
	AREA 3	Private Recreation	N/A
	AREA 4	Private Recreation	N/A
	AREA 5	Office/Mixed	0-448
	AREA 6	Commercial/MFD	0-448
	AREA 7	Commercial/Mixed	0-448
	AREA 8	Commercial/MFD	0-448
	AREA 9	Private Rec./MFD	0-448
	AREA 10	MFD	220
	COMMUNITY PARK	N/A	N/A
	LAKE	N/A	N/A
	TRAIL	N/A	N/A

* - Multi-family dwelling units may vary in each development area based on individual development proposals. The minimum number of multi-family units in the total Town Center District is 668.

Town Center Development Summary

	Gross Acres	Net Acres	Dwelling Units	Non-Residential Dwelling Units	Residential Density (DU/AC)	Non-Residential Intensity (%)
Area 1	4.6	3.6		82,000	-	53%
Area 2	4.9	3.8	64	33,100	17	20%
Area 3	7.4	5.7		15,598	-	6%
Area 4	13.2	10.1		5,700	-	1%
Area 5	1.0	0.8		40,000	-	122%
Area 6	4.9	3.7	16	63,700	4	39%
Area 7	6.4	4.9		36,200	-	17%
Area 8	10.7	8.3	258	22,000	31	6%
Area 9	7.4	5.7	110	23,500	19	9%
Area 10	9.1	7.0	220		32	-
Totals	69.6	53.6	668	321,798		

Notes:

- Summary is based on current development plan and is subject to change.
- Maximum residential density is 40 DU/AC under the MU-RI zoning district.
- Maximum non-residential intensity is 100% and would assume parking garages in-lieu of parking lots currently proposed.
- Phase River Islands approval documents (WLSP, VTM and EIR allow up to 500,000 total non-residential square feet.
- Areas not covered by this document (all areas other than 3, 4 and 10) shall require an updated parking plan with the required update to these guidelines prior to the approval of a development permit in Areas 1, 2, 5, 6, 7, 8 and 9. Currently, parking standards in the Lathrop Municipal Code shall prevail.

2.2.2 High Density Architectural (HDR) Development Standards (Stand Alone Projects)

The HDR land use designation is intended to provide higher density, multi-family products that can be catered to renters as well as buyers (e.g. condos). However, the standards listed below are for stand alone projects only and not for mixed use areas. The permitted density range for this category is between 15~40 dwellings per acre (du/ac).

Lotting of planned units shall be submitted for STDRC review prior to the submittal of a Site Plan Review application to the City for review. Since there are a wide range of product types for this classification, each site plan shall be reviewed on a case by case basis.

Table 2.1 Summary of High Density Residential Development Standards

Setbacks and Lot Depth (minimum)	
Setbacks at Arterial/Collector Streets	10'
Setbacks at Local/Minor Streets	5'
Setbacks at Levee/Lake Slopes/Open Space	20'
Setback from Open Parking Areas	10'
Lot Depth	No restriction
Common Area Uses/Open Space (minimum) ³	50 sq. ft. per unit
Building Height (maximum)	
Five Stories or more	125'
At Four Stories	60'
At Three Stories or less	40'
Building Coverage (maximum) ¹	50%
Building Site (minimum)	No restriction
Lot Width (minimum)	No restriction
Lot Frontage (minimum)	No restriction
Parking	1.5 parking spaces per unit ²
Minimum Usable Private Yard Space (optional) ⁴	80 sq. ft. per unit

1. Exceptions to building coverage may be granted on a case by case basis upon recommendation of the STDRC and approval of the Planning Commission.
2. Additional guest parking may be provided in shared use parking areas within the Town Center and/or on public streets where parking stalls have been provided.
3. Common areas include landscaped areas, open spaces and common area buildings shared by all occupants,
4. When provided, private yards are defined as patios for first story units; balconies for second floor and above. Such yards are optional.

This page left intentionally blank

RIVER ISLANDS



CHAPTER 3

LANDSCAPE
GUIDELINES AND
STANDARDS

3

This page left intentionally blank

3.1 INTRODUCTION

This chapter addresses guidelines and standards for landscape elements to be installed by Builders. These elements include planting and irrigation of commercial common spaces, residential common spaces, driveways, site furnishings, and sustainable design measures. The provisions set forth within this chapter will provide a closely coordinated, cohesive, and memorable landscape experience to unify neighborhood character and ensure that every resident feels well-connected to site and landscape. The goal is to create a welcoming residential landscape that enhances the living experience, adds lasting value to homes and the neighborhood as a whole, and incorporates sustainable measures for landscape design and construction.

The River Islands Town Center District should reinforce the overall theme of River Islands, with an urban community that feels as if it grew within the context of the California Delta as a corridor between the rural agricultural and country living of the San Joaquin Valley. The concept seeks to blend the modern multi-family development and commercial spaces into the historical land use of the natural environment of the Central Valley's farm land and the surrounding waterways, which give such life to the environment. This theme may be expressed through use of orchard-style planting, wildlife-attracting hedgerows, riparian-type planting, abundant trees, and durable, long-lasting materials that convey a genuine sense of place. The City of Lathrop Municipal Code, Chapter 17.92: Landscape and Screening Standards and the City of Lathrop Design and Construction Standards provide additional requirements for landscape. Where documents differ, these Builder Guidelines and Standards shall apply.



Typical streetscape planting along multi-family buildings



Parkway strip shrub, tree and rock groupings create a sense of place

3.2 MIXED-USE LANDSCAPE

3.2.1 Planting Design

Guidelines

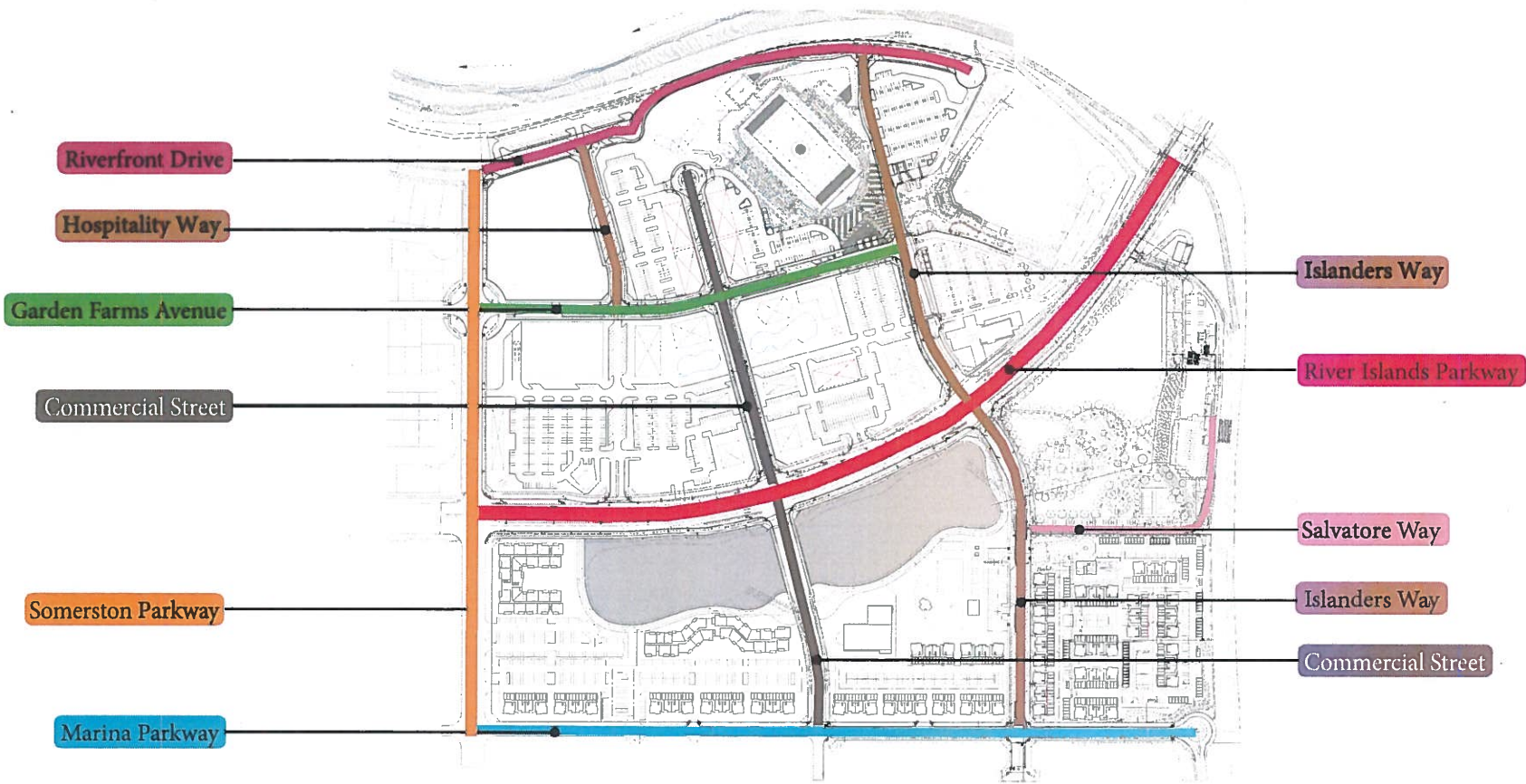
- Planting themes have been selected to mimic existing characteristics and habitat of the delta waterways and vegetated agricultural hedgerows. Plant material selection should strongly consider the use of drought-tolerant, durable and long-lived species that give the appearance and imagery of the Delta Valley. Species should be well adapted to the climatic conditions and soil types typical of the River Islands Development. Robust evergreen shrub species intermixed with flowering native shrub species are strongly encouraged. Large naturally shaped flowering shrubs species should be selected to mimic the image of traditional hedgerows typical of the surrounding agricultural region. Flowering species that create year-round interest are of high preference.
- Landscape design should emphasize the use of nectar-producing and flowering plants that supply food, shelter and breeding habitat for beneficial insects that pollinate edible crops and control pests. Gardens for butterflies, hummingbirds, and native bees are encouraged.
- Landscape design should provide effective screening of retaining walls, utility enclosures, utility cabinets, or service areas to reduce negative visual impacts. Screen landscaping should incorporate evergreen plant species in order to maintain year-round leaf cover.
- Plant selection should avoid the use of tree species with invasive root systems near utility lines and paving and avoid the use of non-native, invasive species that may spread into open space areas. All plants should be carefully selected to avoid toxic species that could be harmful to children or cause allergic reactions.
- Low groundcover of robust evergreen species should be used for ground plane landscape, as an alternative to turf. Turf should only be used for high use areas and the selected turf should be a deep rooting variety or a California Native variety. The use of turf should

follow the guideline and requirements as described in AB1881.

- Plants with higher water demands should be located in shade or where more runoff occurs.
- Landscape around buildings should be designed to provide shading in the summer months and solar access during the winter. Planting deciduous trees next to buildings will reduce ambient temperature, reduce heat gain, and allow for cooler natural ventilation. Deciduous trees and vines in front of south-facing walls and windows will further cool buildings by intercepting sunlight during summer months, yet allow direct sunlight during the winter.
- Energy-efficient landscaping techniques are encouraged such as use of local materials, on-site composting, and chipping to reduce green waste hauling.
- Structures such as trellises and porticoes may be incorporated into the building/landscape edge, especially on south- and west-facing exposures, to provide shade in the summer and allow solar penetration when the sun is at a low angle in the winter.

Standards

- All private areas visible from public parks, streets, alleys or lakes shall be landscaped by the Builder/Developer. Property owners shall be responsible for private yard areas enclosed within fences.
- Landscape plans for all areas where the builder is required to install landscaping shall be prepared by a landscape architect registered to practice in the State of California.
- Landscape construction practices shall adhere to the provisions in Section 3.4, below.
- Landscaping and screening standards from Lathrop Municipal Code Section 17.92.030 shall be met for all commercial developments.



STREET TREE LIST BY CONNECTOR STREET

STREET	BOTANICAL NAME	COMMON NAME
Marina Drive	Tilia c. 'Greenspire'	Little-Leaf Linden
Garden Farms Avenue	Ulmus p. 'Drake'	Chinese Elm
Commercial Street	Zelkova s. 'Green Vase'	Green Vase Zelkova
Islanders Way	Acer rubrum 'October Glory'	October Glory Red Maple
River Islands Parkway	Quercus coccinea	Scarlet Oak
Riverfront Drive	Malus x. 'Prairie Fire'	Prairie Fire Crab Apple
Somerston Parkway	Quercus lobata	Valley Oak
Salvatore Way	Ulmus p. 'Drake'	Chinese Elm
Hospitality Way	Tilia c. 'Greenspire'	Linden "Greenspire"

ACCENT TREE LIST

BOTANICAL NAME	COMMON NAME
Cercis occidentalis	Western Redbud
Chitalpa tashkentensis	Chitalpa
Lagerstroemia indica	Crape Myrtle
Prunus c. 'Krauter Vesuvius'	Purple Leaf Flowering Plum
Prunus serrulata 'Kwanzan'	Kwanzan Flowering Cherry

Note: These species are for reference and are not intended to be the only type of accent trees. See Appendix for additional species.

Figure 3-1: Street Tree Master Plan

PARKWAY STRIP MASTER PLANT LIST

VILLAGE / STREET	STREET / DIRECTION	BOTANICAL NAME	PLANT SPACING
Marina Parkway	East/West	Festuca mairei	36" O.C
River Islands Parkway	North/South	Mixed, including species listed below	36" O.C
Garden Farms Avenue	East/West	Myoporum parvifolium 'Putah Creek'	36" O.C
Commercial Street	North/South	Myoporum parvifolium 'Putah Creek'	36" O.C
Islanders Way	North/South	Rosa x 'Noaschnee'	36" O.C
Somerston Parkway	North/South	Mixed, including species listed below	36" O.C
Riverfront Drive	East/West	Coprosma p. 'Verde Vista'	36" O.C
Hospitality Way	North/South	Cotoneaster d. 'Coral Beauty'	36" O.C



PARKWAY STRIP PLANT LIST

BOTANICAL NAME	COMMON NAME
Juniper	Juniper
Coprosma p. 'Verde Vista'	Coprosma
Cotoneaster dammeri 'Coral Beauty'	Bearberry Cotoneaster
Arctostaphylos 'Pacific Mist'	Manzanita
Cistus Salvifolius	Sageleaf Rockrose
Myoporum parvifolium	Australian Racer
Rosa x 'Noaschnee'	Flower Carpet White Rose
Rosmarinus offic. 'Huntington Carpet'	Huntington Carpet Rosemary
Teucrium chamaedrys 'Prostratus'	Germander
Rosmarinus O. 'Prostratus'	Dwarf Rosemary

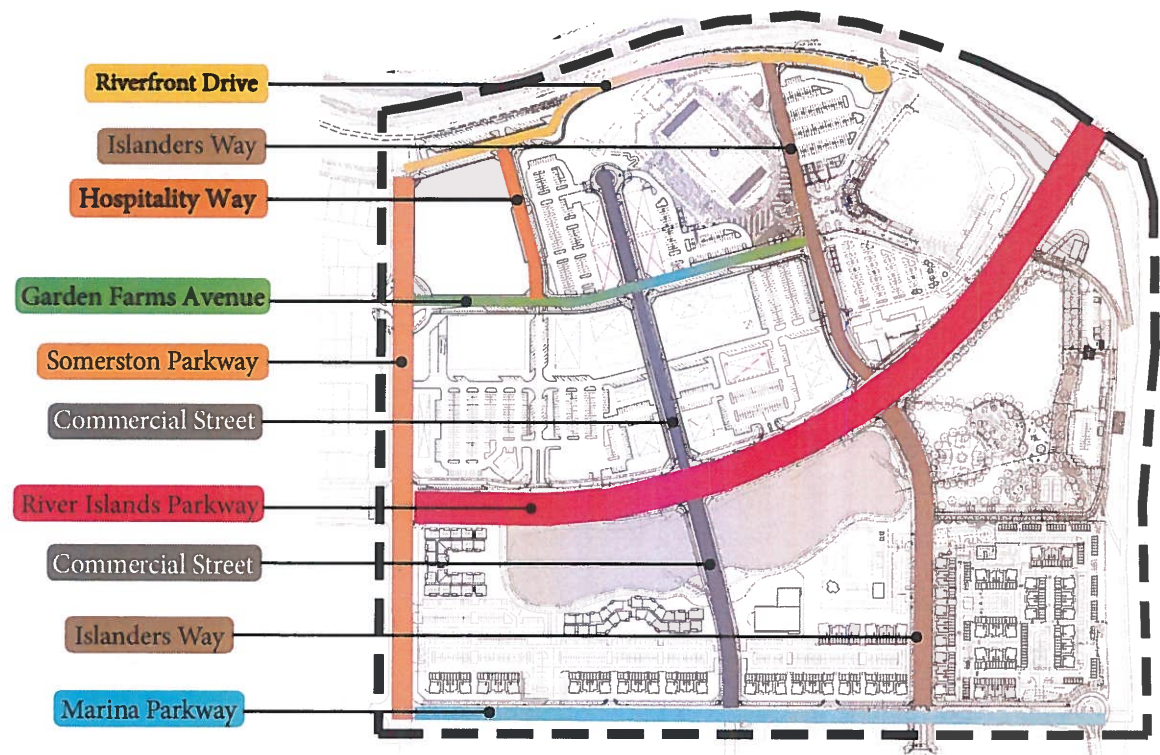


Figure 3-2: Parkway Strip Planting Master Plan

3.2.2 General Guidelines

- Common areas of properties should be designed and installed by the Builder as a continuous landscape with consistent plant materials and dimensions that unify the street edge (see Figure 3-1). Dominant ground plane plant material should consist of shrubs, perennials and grasses that maintain an attractive appearance and enhance natural habitat values.
- Hedgerows may be used on side property lines for privacy and definition of yard areas, and a continuous low border of low shrubs or groundcover may be installed adjacent to the sidewalk (see Figure 3-2).
- Shrubs located near street frontages or on corner lots should not exceed three feet in height.
- Builder is responsible for landscape, irrigation and maintenance of private yards.

Standards

- Landscaping for all common areas shall be installed by the Builder.
- The Builder shall design common area landscape for all properties. These areas shall include a minimum of one street tree for every 40 lineal feet of frontage and shall comply with Lathrop Municipal Code regulations for parking lots, landscape areas, and hardscape areas and shall match the species and size of the adjacent street trees or as indicated in Figure 3-1. Additional "accent" trees installed outside of the park-way strip areas may be of a different species (refer to figure 3-1 for a list of acceptable "accent trees").
- Other common areas shall be planted with shrubs and perennials that enhance habitat values and maintain an attractive year-round appearance along the street.
- All common areas shall be maintained by the property owner.
- Irrigation shall be provided for all planted areas (see Section 3.4). The Builder shall install irrigation for all areas that they landscape. After construction, property owners shall be responsible for irrigation of all common areas and adjacent parkway strips.

3.2.3 Lake Slopes

See Section 3.3 for fencing requirements along lakes .

Guidelines

- Areas adjacent to lake slopes should contain a minimum of trees planted at 40 lineal feet on center.
- For lakeside parcels, the slope area from the rear yard fence to the lake edge should be planted in informal drifts of shrubs, grasses and perennials. Plant material should be located to maintain views of the water, with higher planting allowed on lower terraces and shorter species on upper portions of the slope. No trees are allowed within the slope areas outside of the 6' tubular steel fence.

Standards

- Areas of parcels adjacent to the lake (from back side of parcels view fence to lake edge) shall be landscaped and mulched (with bark or gorilla hair) by the Builder. This includes view fencing installation at the top of rear yard slopes and side yard fencing installation.
- Developer may install pilasters at a consistent interval along the lake edge (see Figure 3-4). (Builder may install with the consent of the Developer).
- Irrigation shall be provided for all planted areas (see Section 3.4). The Builder shall install irrigation for all areas that they landscape. After construction, property owner shall be responsible for irrigation of all common areas and adjacent parkway strips.

3.2.4 Levee Landscaping

Standards

- All levee landscape areas adjacent to commercial or multi-family parcels and roadways shall be landscaped with hydroseed mix (Figure 3-7).
- Areas adjacent to levee shall be the responsibility of the Reclamation District to maintain from toe of slope to crown.

3.3 SITE FURNISHINGS/ MATERIALS

3.3.1 Fences

Figure 3-3 illustrates the location of fencing that may be used. Except for the high-density residential use in Area 10 that will have a 6' tubular steel fence, there a number of suggested areas that may also have fencing. The type, size and location may vary based on individual uses and conditions. Additional fencing and walls, including view fencing in the back area of parcel of lakeside parcels, may be installed by the Developer or RD 2062 depending on adjacent uses determined in the future (Figure 3-3).

Guidelines (All Uses)

- In general, fencing should be designed to be natural-appearing and durable, compatible with neighborhood character, and reflective of the "Delta Agrarian" character of River Islands.
- Fencing should be made from high quality materials, be of durable construction, and present a "finished" appearance from adjacent properties.
- Solid side lot privacy fencing that intersects open space view fencing should not exceed 5 feet in height within the rear set-back.
- To reduce their visual prominence, fences should be used in combination with tree, vine, shrub, and hedge planting.




Fencing Legend	
SYMBOL	FEATURE TYPE
	Open Space Railing
	6' Open View Fence (6' Tubular Steel)
	Security/View Fence (Determined at Apartments Site Plan Review)



Figure 3-3: Fencing Locations

Standards (All Development)

- In sloping areas visible from public streets or public use areas, fencing shall step down the slope. Fencing may slope with the grade in areas that are outside of public view.
- On corner parcels, front fencing shall be continuous along the front and side property line. Where slopes occur, fencing shall be installed along the top of slope. For corner parcels, side parcel fencing along street frontages should be located a minimum of five (5) feet from the sidewalk where possible.
- Maximum unbroken length of side parcel fences should be 100 feet for adjacent street-facing lots. Fencing can be reduced in height at corners as required to allow for traffic safety and visibility.
- Security fencing shall be provided around pool and spa areas in compliance with all applicable codes and ordinances.
- Barbed or razor wire, chain link and plastic/vinyl fencing is prohibited on a permanent basis. Security chain link may be used as temporary construction fencing.

3.3.2 Signage

- Temporary signage to market the sale of parcels/spaces – to be provided by River Islands. Signage should conform to the signage types and hierarchy described in the Appendix.
- Permanent signage for uses established in Phase 1 (Areas 3, 4, and 10) shall be proposed with individual development proposals for each area. Such signage shall include details on signs placed on buildings and monument signs addressing the site. Freestanding or pylon signs shall not be allowed in Phase 1 of the Town Center. Future phases of the Town Center shall include a comprehensive signage plan for building signs monumentation, freestanding signs, banners and other types of commercial signage.

3.3.3 Landscape Lighting

Guidelines

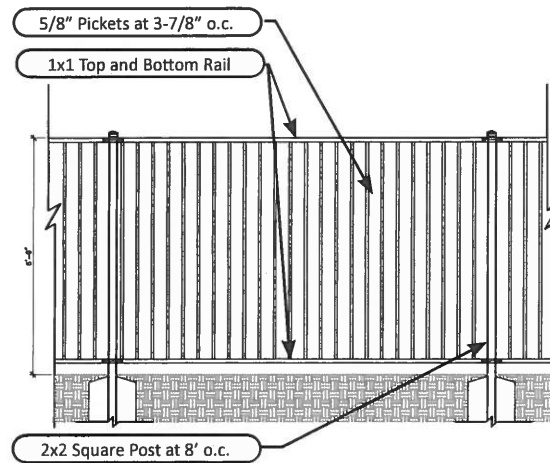
- Landscape lighting should be designed to be hidden from direct view and to minimize glare and impacts to adjacent land uses, especially residences. Low-level, pedestrian-scale fixtures should be utilized to the degree possible.

- Landscape lighting should utilize durable, energy-efficient fixtures that provide pleasing color. High efficiency fixtures are encouraged to direct light where it is needed to avoid excessive glare and reduce impacts upon night sky and open space. No lighting should blink, flash, or be of unusually high intensity or brightness, except in the case of holiday lighting.
- Landscape lighting should be minimized to reduce light pollution and minimize energy usage.
- LED fixtures and intelligent control systems should be utilized to the extent possible.

3.3.4 Paving and Hardscape

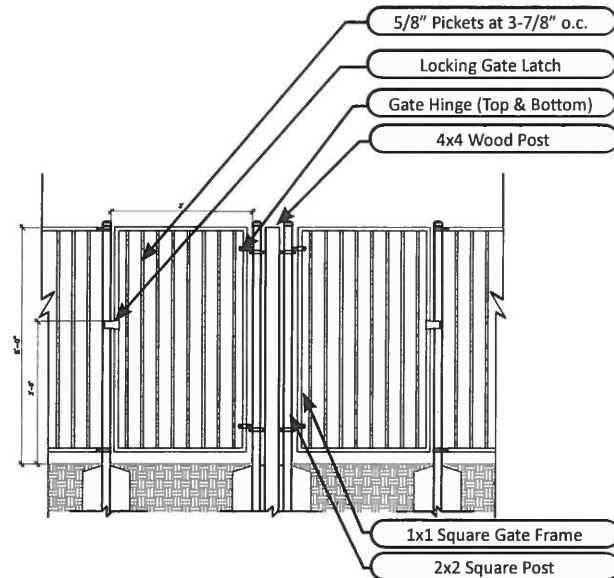
Guidelines

- Textured or stamped concrete/asphalt shall be used on the sidewalk on Commercial Street north of Garden Farms Avenue and in high traffic pedestrian crossings as determined by the City Engineer
- Raised crossings (tables or undulations) shall be employed to increase pedestrian safety. Additional treatments may be proposed in the future for pedestrian oriented Commercial Street corridor north of Garden Farms Avenue.
- The general intent of pavement design is to provide an aspect of permanence with subtle textural variety using materials that appear related to the natural landscape. Brightly-colored and highly reflective materials are not acceptable. Pervious paving is encouraged to the extent feasible.
- Use of enhanced paving materials (exposed aggregate, broom finish, integral color, unit pavers, stamped concrete, and bricks, etc.) is encouraged.
- Planting areas are recommended between pavement and walls or fences. Concrete areas on the landscape plans should be designated with surface finish, color, expansion joints, and score joints. Expansion and score joints help isolate cracking locations in concrete and should occur 8 feet on center (max.) in each direction.
- Selected paving color/albedo should meet a minimum SRI (Solar Reflective Index) value of 29 in order to aid in reducing the heat island effect (note: typical grey concrete usually falls between 38-52).



6' TUBULAR STEEL
FENCE AT LAKE
FRONTAGE (WHEN USED)

NOTE: Tubular steel fences will only be employed on a case by case basis depending on the adjacent use. Lighted or unlighted pilasters or open railings may be employed instead. Implementation shall be made at the development permit issuance.



6' TUBULAR STEEL FENCE WITH 3' GATE
AT LAKE FRONTAGE (WHEN USED)

Figure 3-4: Prototypical Fence Conditions (For Builder)

3.4 LANDSCAPE CONSTRUCTION PRACTICES

The following provisions address construction practices techniques to ensure healthy and successful projects and adhere to requirements and measures for sustainable landscape.

3.4.1 Irrigation and Water Conservation

The City of Lathrop Municipal Code, Chapter 17.92 Landscape and Screening Standards, contains additional requirements for irrigation and water conservation.

Guidelines

- The irrigation system should be designed to conserve water resources by efficiently and uniformly distributing water. Designs should be based upon applicable California Department of Water Resources ordinances and tailored to the climate of the City of Lathrop.
- Use of low volume spray heads and drip irrigation systems should be maximized. New irrigation techniques and drip irrigation systems should be used to ensure more efficient delivery of water.
- Irrigation design should accommodate hydrozones accordingly, separating high, medium and low water-use plants. Trees should be put on a separate system, specifically in lawn areas, and shrubs and trees should be irrigated with a drip or bubblers to provide deeper, more even watering and promote water conservation. Systems should also be separated by sun exposure, i.e., north/east exposures versus south/west exposures.
- Turf and groundcover should be irrigated with a conventional rotary nozzle spray system, using head-to-head spray coverage. In-stem pressure regulation and check valves are required on all heads. To effectively meet the intent of the state of California's conservation effort sub-surface drip irrigation should be the primary irrigation method. No above ground irrigation distribution method should be incorporated in areas less than ten feet (10') wide and shall maintain a twenty-four inch (24") offset from all pavement surfaces that drain directly to catchbasins.

- The irrigation controllers should be programmed according to the water needs of plants on each circuit, with consideration of the time of year and plant maturity. If precipitation rate exceeds the soil absorption rate, multiple shorter cycles should be programmed as required to allow absorption.
- Automatic irrigation controllers should be automatically adjusted using, at a minimum, daily ET (Evapotranspiration) rates and preferably hourly ET with an onsite rain shut-off device. Should an ET based controller not be utilized an onsite rain sensor with active moisture sensor may be used.
- All parcels should be installed with an automatic master valve at the irrigation point of connection in conformance with AB1881 (MWEL0)
- Main lines should have 18" of cover.
- Irrigation valves should be screened from view from the street by landscaping or other attractive site materials.
- Irrigation systems should be monitored regularly for proper operation, leaks and broken heads, adjustment of controller programming, and elimination of excessive over spray and runoff.

Standards

- Irrigation shall be provided for all planted areas.
- Builder shall provide each parcel with an automatic irrigation controller that accommodates all aspects of the landscape design, including independent programming of multiple stations to cover the entire parcel (including parkway strip)

3.4.2 Soil Preparation and Mulching

Standards

- Finish landscape grading by Builders after construction of buildings, if required, shall maintain or re-establish the overland release per the design intention of the Developer's Civil Engineer. Builders shall be responsible for maintaining proper drainage without creating depressions or dams.
- Builders should require an Agricultural Suitability Soil Test. The soils

should be tested for agricultural suitability, parasitic nematodes and herbicide or deleterious contamination. The test should be completed by a reputable testing agency and should include recommendation for amendments, soil conditioners, pH correction, and fertilization.

- Subsequent to installation of underground utilities, soil compacted by construction should be rototilled to a minimum depth of eight (8) inches. In order to prevent interface layers between import topsoil and native soil, native soil should be broken up by ripping or rototilling to a depth of 8 to 12 inches before the addition of import topsoil or amendment.
- All planted areas should be amended to provide for an optimum growing media for most plants.
- Amendments (e.g. nitrolized compost, gypsum, soil sulphur, fertilizer, iron sulfate, etc.) should be rototilled into the soil to a depth of 4 to 6 inches. Amendments are more effective when thoroughly incorporated into the soil. Avoid staining when using ferrous sulfate as an amendment by washing off all hardscape immediately after applying or mixing.
- At all planting areas except lawns, a minimum of two inches of organic mulch shall be applied on top of the soil surface after planting in order to cool the soil surface, reduce evaporation, and suppress weed growth. Organic mulches, including wood chips, shredded bark, and other commercially available mulches are preferred to inorganic materials. Organic mulches should not be dyed an artificial color, but should be a natural brown or dark brown in color. Permanent visible applications of inorganic sheeting, fabric, netting, etc. are not acceptable.

3.4.3 Planting

Standards

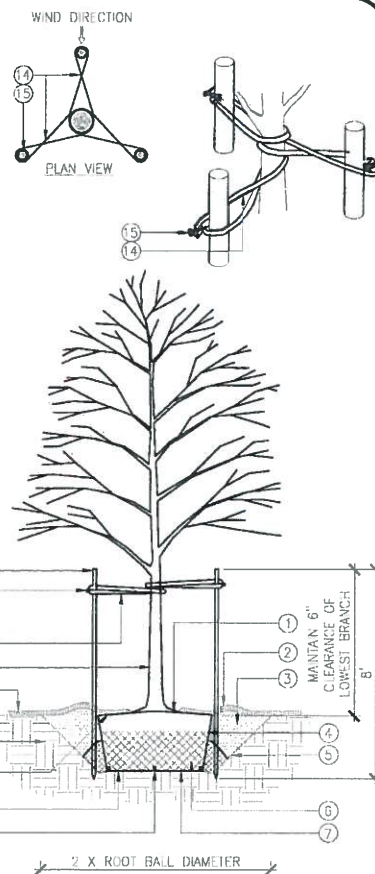
- Plant materials shall be selected from Appendix: Plant Selection Guide. Substitutions or additions may be considered by the DRB based on the suitability of the species in terms of similarity of form, adaptability, tolerance to site soils, climatic conditions or water

- quality, or other pertinent characteristics.
- Plant sizes and spacing shall comply with the specifications noted on Appendix: Plant Palette and shall be sufficient to provide healthy growth, attractive appearance, and full coverage of planting areas when plants are mature. In general, size and spacing requirements are as follows:
 - Parcel tree: Size to match adjacent street tree (24" box); spacing per requirements in Section 3.2 above.
 - Other trees or side/rear parcel trees: 15 gallon min.; spacing varies.
 - Hedgerows: 5 gallon; 36" o.c. or as needed to create hedge, given anticipated growth pattern
 - Other shrubs: 5 gallon; 48" o.c. or as needed for full cover, given anticipated growth pattern.
 - Groundcovers for habitat and border planting: 1 gallon; 18" o.c. or as needed for full cover, given anticipated growth pattern.
 - Smaller groundcovers or perennials for parkway strips or parcels: 1 gallon; 12" o.c. or as needed for full cover, given anticipated growth pattern.
 - Riparian planting for lakeside slope area: see Figure 3-2.
 - See Figure 3-5 for tree and planting details.

- ① EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.
- ② 4" HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL.
- ③ SEE PLANTING NOTES FOR SOIL AMENDMENT MIXTURE. AMENDED SOIL MUST NOT BE SO COMPACTED AS TO IMPEDE ROOT GROWTH OR DRAINAGE. THE SOIL STRUCTURE SHALL NOT BE PLATY OR MASSIVE.
- ④ REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM TOP HALF OF ROOT BALL.
- ⑤ 1:1 SLOPE ON SIDES OF PLANTING HOLE.
- ⑥ IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN 200MM (8") INTO PLANTING HOLE.
- ⑦ PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
- ⑧ FERTILIZER PLANT TABS: 5 PER 15 GAL TREE, 8 PER 24" BOX TREE, 12 PER 36" BOX TREE.
- ⑨ TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.
- ⑩ SET TOP OF ROOT BALL FLUSH TO GRADE OR 1"-2" HIGHER IN SLOWLY DRAINING SOILS.
- ⑪ NATIVE SOIL.
- ⑫ MULCH RING 3' DIAMETER MIN., 4' DIAMETER PREFERRED. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE DURING THE MAINTENANCE PERIOD.
- ⑬ MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE.
- ⑭ GRO STRAIT 36" "Z" STRAP OR EQUAL.
- ⑮ SECURE WITH 2" GALVANIZED NAIL OR SCREW.
- ⑯ 2" DIA. X 8' (15 GAL.-24" BOX), 3" DIA. X 10' (36"-48" BOX) HARDWOOD LODGEPOLE STAKES OR OTHER APPROVED STAKE MATERIAL. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOTBALL.

NOTES:

- A. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
- B. FASTEN ARBORTIE TIGHT ENOUGH TO KEEP FROM SLIPPING WHILE ALLOWING FOR SOME TRUNK MOVEMENT.
- C. REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS.
- D. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED TO BE REJECTED.
- E. TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS TO BE REJECTED.



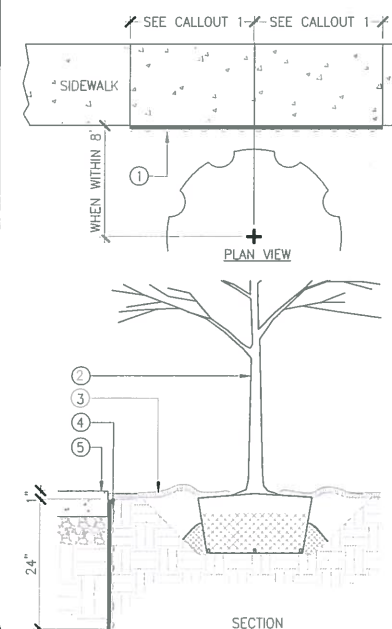
1 TREE PLANTING AND STAKING

NOT TO SCALE

- ① LINEAR ROOT BARRIER INSTALLATION. INSTALL 10' O.C.
- ② SEE TREE PLANTING DETAIL.
- ③ MULCH. SEE PLANTING NOTES.
- ④ ROOT BARRIER. ROOT INHIBITOR IMPREGNATED NODULES OR FABRIC
- ⑤ BACK OF CURB OR WALK

NOTES:

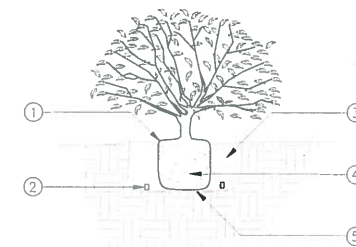
- A. ALL TREES WITHIN 8' OF A CURB OR SIDEWALK SHALL HAVE ROOT BARRIERS INSTALLED.
- B. INSTALL ROOT BARRIERS PER MANUFACTURER'S RECOMMENDATIONS.



2 ROOT BARRIER DETAIL

NOT TO SCALE

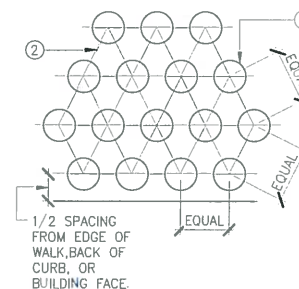
- ① CROWN 2" ABOVE GROUND
- ② FERTILIZER PLANT TABS: 1 PER 1 GAL, 3 PER 5 GAL
- ③ BACKFILL MIX (SEE PLANTING NOTES)
- ④ ROOTBALL
- ⑤ SCARIFY BOTTOM OF HOLE



3 SHRUB PLANTING

NOT TO SCALE

- ① SHRUBS
- ② SHRUBS SHALL BE TRIANGULAR SPACED PER O.C. SPACING ON PLANTING LEGEND AND/OR PLANTING PLAN.



4 SHRUB SPACING

NOT TO SCALE

Figure 3-5: Planting Detail

RIVER ISLANDS



CHAPTER 4

PROJECT
IMPLEMENTATION

This page left intentionally blank

4.1 Project Implementation

4.1.1 Stewart Tract Design Review Committee (STDRC)

All projects shall be subject to the design review process and submittal requirements described in the following sections. Projects will be reviewed by the Stewart Tract Design Review Committee (STDRC), according to the requirements set forth below and Section 17.61.160 of the Lathrop Municipal Code. The STDRC is a group of three design professionals that represent the master developer. The STDRC will review design and improvement plans for new construction on undeveloped and improved lands within the community for conformance with these Town Center Architectural Guidelines/Design Standards (AG/DS) and with all applicable plans (described below). The STDRC's review is advisory only and does not guarantee approval of any permit from other agencies. The City of Lathrop utilizes the STDRC's recommendation for certain approvals to Building Division, Planning Commission and some cases Lathrop City Council, if applicable.

After STDRC review is advisory only, applicants are still required to obtain approval by the City of Lathrop for all construction projects and necessary approvals and permits. This includes landscaping and infrastructure permits if applicable.

Prior to the submission of development proposals to the City of Lathrop, the STDRC shall review such proposals and make recommendations to the Master Developer and the City; the STDRC shall also recommend exceptions and revisions to the Town Center District AG/DS to the City for further consideration and potential action by the Planning Commission. The STDRC may create exceptions to the AG/DS to accommodate development proposals which might suggest minor design changes or adjustments that are consistent with the intent of these AG/DS; in some cases, an exception might apply to a design condition not foreseen in the original drafting of the AG/DS. A STDRC recommendation to grant an exception may or may not be coupled with a proposed project

proposal already being reviewed by the STDRC. A request for revision to the AG/DS must be made in writing to the City of Lathrop Community Development Department and be approved by the Planning Commission after review and recommendation of the STDRC.

4.1.2 Consistency Requirements

Plans must be found consistent with this document and other applicable City of Lathrop land use entitlements, as well as any recorded River Islands CC&Rs. While the adopted AG/DS document itself is consistent with previously approved planning documents for River Islands, the Builder should be aware of requirements of other applicable entitlements/plans that may also apply to your project. These entitlements/plans include:

1. City of Lathrop Comprehensive General Plan (as amended)
2. West Lathrop Specific Plan (as amended)
3. River Islands Phase 1 Urban Design Concept (UDC)
4. City of Lathrop Development Title (zoning and subdivision ordinances)
5. River Islands Development Agreement and Performance Standards
6. Vesting Tentative Map No. 3694 Conditions of Approval (as amended)
7. Town Center District Neighborhood Development Plan (NDP)
8. Adopted River Islands Conditions, Covenants and Restrictions (CC&Rs), if applicable

4.1.3 Design Review Submittal Requirements

As a minimum, all applicants shall provide the following to the Master Developer for processing STDRC review:

1. Location Map - should include Tract, lot and/or parcel numbers if available.
2. Conceptual Plans and Elevations- this shall include preliminary building floor plans for each architectural style and model type represented. This includes enhanced

elevations for those structures which will be adjacent to major streets and project features which are exposed to the public.

3. Conceptual on-site and off-site landscaping plans.
4. Preliminary Color Palette & Materials (can be submitted in a "board" format or electronically).
5. Conceptual Streetscape Plan – shall show all proposed models and architectural themes on one elevation in color to depict the representative streetscape.
6. Parking Lot plan and parking details.

All submitted architectural plans and elevations shall be at a minimum scale of 1/8" to 1/4" = 1'-0" on 24" x 36" paper, as well provided as an electronic file in PDF format. 11" x 17" sized documents may be allowed on a case by case basis. Any other exceptions to the submittal requirements must be approved by the Master Developer.

At least one STDRC meeting shall be held to review the application materials. Each applicant is strongly encouraged to have the architect and other design professionals in attendance for this meeting. Additional meetings may be required if the submittal is incomplete or additional questions or issues cannot be addressed in the initial meeting. STDRC can conduct subsequent meetings via an e-mail discussion once the supplemental information has been provided which addresses the concerns raised.

The STDRC will submit a written recommendation letter and minutes reflecting the STDRC action to the applicant and to the City of Lathrop and any other applicable agencies after its review. The Master Developer may also provide a separate recommendation letter based upon the STDRC's recommendation as may be required by CC&Rs or individual agreements between the Master Developer and the applicant.

All applicants shall be advised that the City of Lathrop has a separate design review process for review of proposed model units and construction documents prior to planning and/or building permit approval. The actions taken by the STDRC shall be used to supplement the application process required by the City of Lathrop. The City of Lathrop Planning Division should be contacted for specific Information related to the requirements associated with Architectural Design Review, Site Plan Review, Conditional Use Permit and Administrative Approval processes as applicable.

4.1.4 Minor Amendments to AG/DS Document

This document may be amended by administrative action of the Community Development Director by application of the Master Developer. A minor amendment to this document may include, but not be limited to the following actions:

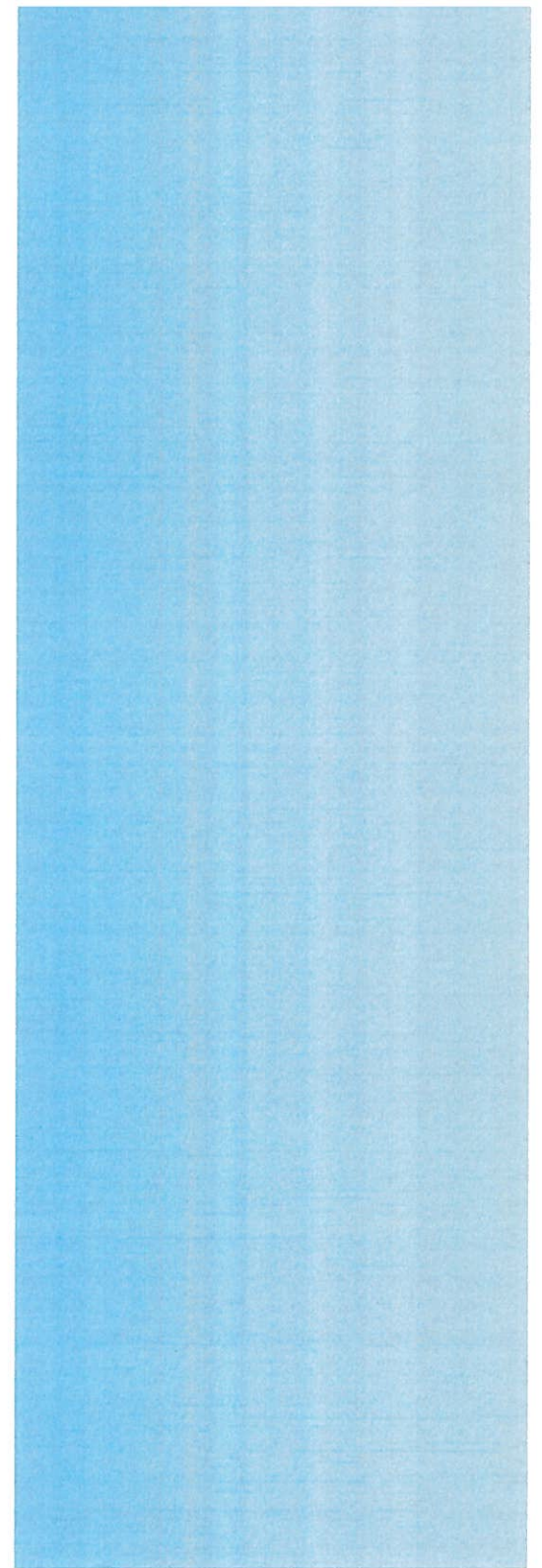
- Simple edits or clarification to text and figures that do not change the meaning or intent of the document;
- Revisions in the configuration, orientation, and size of building footprints, parking areas, recreational amenities, and landscape areas for a site plan as long as minimum standards are met;
- Modifications of design elements, such as colors, architectural details, signs, landscaping, street furnishings, lighting, and entry treatments that are compatible with previous development approvals in the District and recommended by the STDRC;
- Small reductions in setbacks, densities, intensities and FAR provided that such reductions are necessary due to unusual site conditions, lot geometry or obstructions. The Community Development Director shall determine at his or her direction what shall constitute a small reduction.

Any revision or amendment to this document deemed not to be minor by the Community Development Director shall constitute a major amendment and such revisions or amendments shall only be approved by the Planning Commission after review and recommendation of the STDRC.

RIVER ISLANDS



APPENDIX



Builder Identification Signs

Builders are to choose from 3 style options as shown on following pages.

River Islands Builder Site Signs

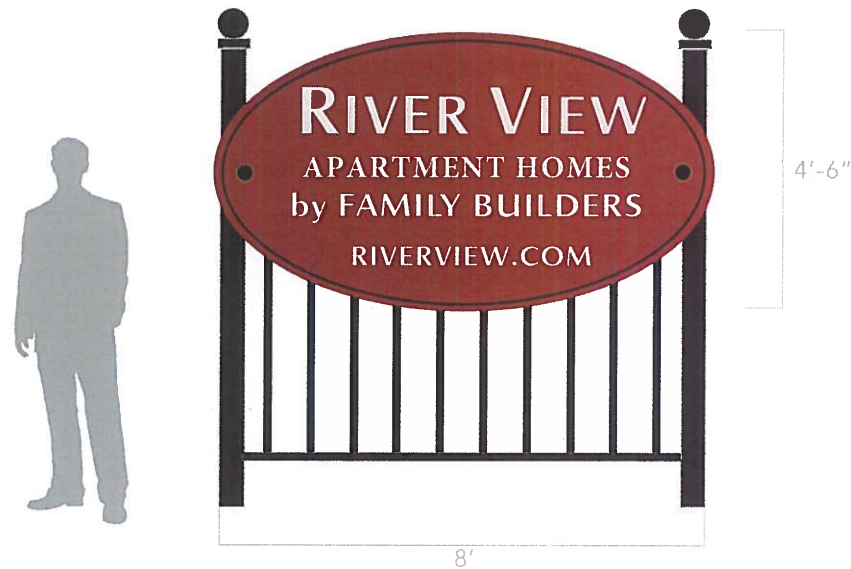
Option 1

Scale: .5"=1'

AMERICAN TRADITIONAL

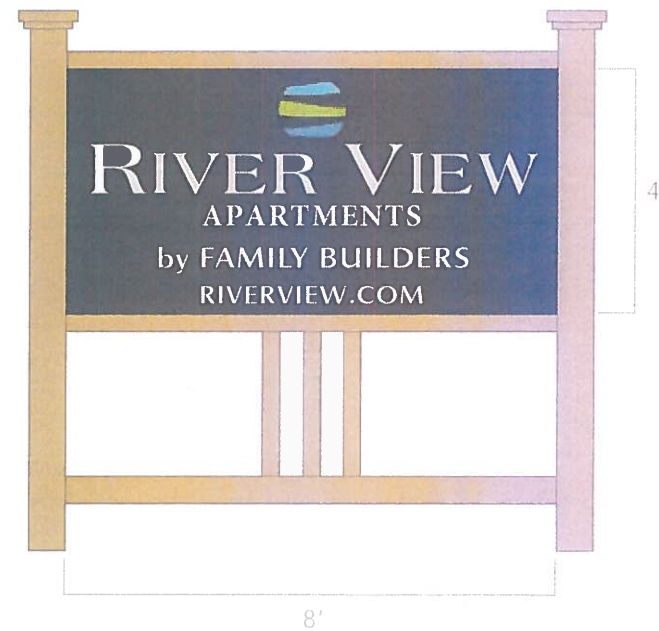
Black Steel Fence,

Digital Print on Aluminum



River Islands Builder Site Signs
Option 2
Scale: .5"=1'

CRAFTSMAN COTTAGE
Wood Frame with Pickets,
Digital Print or
Blasted Sign Foam



River Islands Builder Site Signs

Option 3a

Scale: .5"=1'

CALIFORNIA RANCH

Wood Frame with Pickets,

Digital Print or

Blasted Sign Foam



APPROPRIATE PLANT SPECIES FOR RI PHASE I TOWN CENTER

APPENDIX 43

APPROPRIATE PLANT SPECIES FOR RI PHASE 1 TOWN CENTER

	Thompson Avenue Mid and Wide	Thompson Parkway Strip	Thompson Medians	Thompson Six-Side (Interior Lanes Rd.)	Public & Open Space	In-Town Street Trees	In-Town Parkway Strip	In-Town Rear-Yard Landscape	Green, Trees and Plantings		Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
											<i>Quercus lobata</i>	Valley Oak	50'-75'	50'-80'	L	
											<i>Quercus muhlenbergii</i>	Quinkpin Oak			?	
											<i>Quercus robur</i>	English Oak	50'-60'	30'	M	
											<i>Quercus suber</i>	Cork Oak	30'-60'	30'-60'	L	
											<i>Quercus virginiana</i>	Southern Live Oak	40'-80'	60'-90'	M	
											<i>Quercus wislizenii</i>	Interior Live Oak	30'-70'	30'-70'	VL	
											<i>Robinia 'Purple Robe'</i>				L	
											<i>Salix goodingii</i>	Gooding's Black Willow	10'-25'		H	
											<i>Salix laevigata</i>	Red Willow	15'-30'		H	
											<i>Salix lucida var. lasioandra</i>	Pacific Willow			H	
											<i>Schinus molle</i>	California Pepper tree	25'-40'	25'-40'	L	
											<i>Sophora japonica 'Regent'</i>	Pagoda Tree	40'	40'-60'	L	
											<i>Syringa reticulata</i>	Japanese Tree Lilac	30'	20'	M	
											<i>Tilia cordata 'Greenspire'</i>	Littleleaf Linden	30'-50'	15'-30'	M	
											<i>Ulmus parvifolia 'Drake'</i>	Chinese Elm	50'-70'	30'-50'	M	
											<i>Ulmus wilsoniana 'Frontier'</i>		20'		M	
											<i>Ulmus wilsoniana 'Patriot'</i>		30'		L	
											<i>Ulmus wilsoniana 'Emerald Sunshine'</i>				L	
											<i>Ulmus wilsoniana 'Prospector'</i>				L	
											<i>Umbellularia californica</i>	California Laurel	20'-35'	20'-35'	M	
											<i>Vitex agnus-castus</i>	Chaste Tree	15'-20'	15'-20'	L	
											<i>Zelkova serrata 'Green Vase'</i>	Zelkova, Green Vase	50'	50'	M	
Shrubs (Large Background)																
											<i>Abelia grandiflora</i>	Glossy Abelia	8'	5'	M	
											<i>Agave filifera</i>				L	
											<i>Alyogyne heuglii</i>	Blue Hibiscus	6'-10'	6'-8'	L	Light blue flowers
											<i>Anisodonta x hypomandaram</i>	Cape Mallow	4'	4'	M	Purple/pink flowers
											<i>Arbutus u. 'Oktoberfest'</i>	Strawberry Tree	6'-8'	6'-8'	L	Dark green foliage
											<i>Arctostaphylos densiflora 'Howard McMinn'</i>	Howard McMinn	5'-6'	7'	L	
											<i>Berberis thunbergii</i>	Japanese Barberry	4'-6'		L	
											<i>Buddleja davidii</i>	Butterfly Bush	6'-10'	6'-10'	M	
											<i>Carpenteria californica</i>	Bush Anemone	3'-6'		L	
											<i>Cephalanthus occidentalis</i>	Button Willow	3'-15'	3'-15'	M	
											<i>Cistus hybridus (Cistus corbariensis)</i>	White Rockrose	2'-5'	2'-4'	L	
											<i>Cistus ladanifer (Cistus ladaniferus maculatus)</i>	Crimson-Spot Rockrose	3'-5'	3'-5'	L	
											<i>Cistus x purpureus</i>	Orchid Roserock	4'	4'	M	Dark pink flowers
											<i>Coprosma repens</i>	Mirror Plant	10'	6'	M	
											<i>Cornus stolonifera (sericea) 'Bailey'</i>	Red-Twigged Dogwood	6'-8'	6'-8'	H	
											<i>Collins coggygia (Rhus cotinus) 'Purpureus'</i>	Smoke Bush	15'	15'	L	
											<i>Dodonaea viscosa 'Purpurea'</i>	Purple Hopseed Bush	10'	8'-10'	L	Red/burgundy foliage
											<i>Elaeagnus pungens</i>	Silverberry	6'-15'		L	
											<i>Eriogonum fasciculatum</i>	California Buckwheat	1'-3'	4'	L	
											<i>Fremontodendron californicum</i>	California Flannelbush			VL	
											<i>Grevillea x 'Noell'</i>	Noell Grevillea	5'	6'	L	Glossy lime green needle-like foliage with pink and white flowers
											<i>Heteromeles arbutifolia</i>	Toyon	6'-10'		VL	
											<i>Laurus nobilis</i>	Bay Laurel	12'-40'		L	
											<i>Lavatera maritima</i>	Tree Mallow	6'	6'	L	Gray-Green foliage with light pink/purple flowers
											<i>Lavatera thuringiaca 'Mrs Bamsley'</i>	Mallow			L	
											<i>Leucophyllum frutescens 'Compactum'</i>	Texas Ranger	4'-5'	4'-5'	L	
											<i>Lupinus arboreus</i>	Yellow Bush Lupine	5'-8'	5'-8'	L	
											<i>Mahonia aquifolium</i>	Oregon Grape	6'		M	
											<i>Myrtus communis</i>	True Myrtle	5'-6'	4'-5'	L	
											<i>Nandina domestica</i>	Heavenly Bamboo	3'-8'	2'-4'	L	
											<i>Nerium oleander 'Little Red'</i>	Dwarf Red Oleander	4'	4'	L	Red flowers

	Shrub Height	Shrub Width	Water Use	Attractives	
Nerium oleander 'Petite Pink'	Dwarf Pink Oleander	4'	4'	L	Pink flowers
Osmanthus fragrans	Sweet Olive	10'	10'-12'	M	
Osmanthus x fortunei	Hybrid Tea Olive	6'-20'	10'-12'	M	
Philadelphus lewisii	Wild Mock-orange	4'-10'	6'-10'	M	
Philadelphus 'Belle Etoile'	Purple Spot Mock Orange	5'-7'	5'-7'	M	
Phormium tenax 'Atrapurpureum'	New Zealand Flax	4'-5'	4'-5'	L	Burgundy-bronze bladed foliage
Phormium 'Yellow Wave'	Yellow Wave New Zealand Flax	4'-5'	4'-5'	M	Yellow and lime green bladed foliage
Prunus caroliniana 'Bright 'N' Tight' (Compact)	Bright N' Tight Cherry Laurel	8'-10'	6'-8'	L	
Raphiolepis indica	India Hawthorn	4'-5'		L	
Raphiolepis indica 'Clara'	India Hawthorn	3'-5'	3'-5'	L	
Raphiolepis indica 'Springtime'	India Hawthorn	4'-6'		L	
Raphiolepis umbellata	Yeddo Hawthorn	4'-6'	4'-6'	L	
Rhamnus californica 'Mound San Bruno'	San Bruno Coffeeberry	3'-15'	8'	L	
Rhamnus californica 'Eve Case'	Dwarf Coffeeberry	4'-8'	4'-6'	L	
Rhamnus crocea	Redberry				
Rhamnus tomentella	Hoary Coffeeberry			L	
Ribes aureum (var. gracillimum)	Golden Currant	3'-6'		L	
Ribes sanguineum	Pink Flowering Currant	4'-12'		M	
Rosa californica 'Plena'	California Wild Rose			L	
Teucrium fruticans	Bush Germander	5'-6'	5'-6'	L	Gray leaves, lavender flowers
Teucrium fruticans	Bush Germander	4'-8'	4'-10'	L	
Viburnum l. 'Spring Bouquet'	Spring Bouquet Viburnum	4'-6'	4'-6'	M	Deep green leathery foliage with tight clusters of pink buds and white flowers
Xylosma congestum	Shiny Xylosma	8-10'	8-10'	L	
Shrubs (Medium Foreground) [species appropriate within sight-line view corridor]					
Abelia x grandiflora 'Kaleidoscope'	Glossy Abelia	2'-2.5'	3'-4'	M	White flower
Berberis thunbergii 'Crimzam'	Crimson Ruby Japanese Barberry	2'	2'	M	Deep red/burgundy foliage
Callistemon citrinus 'Compacta'	Bottlebrush			L	
Callistemon citrinus 'Little John' or 'Captain Cook'	Dwarf Bottlebrush	3'	3'	L	
Coleonema pulchrum 'Varities'	Pink Breath of Heaven	3'-4'	4'	M	Light green foliage with tiny pink flowers
Mahonia aquifolium 'Compacta'				M	
Myrsine africana	African Boxwood	3'-8'	3'-6'	L	
Pittosporum l. 'Wheeler's Dwarf'	Mock Orange	3'-4'	4'-5'	M	White flower
Punica granatum 'Nana'	Dwarf Pomegranate	3'	5'	L	Orange flowers
Raphiolepis indica 'Ballarina'	Dwarf Pink Indian Hawthorne	2'	4'	L	Pink flowers
Salvia greggii / Salvia x jamensis	Autumn Sage	3'-4'	2'	L	
Salvia greggii 'Alba'		1'-4'	1'-4'	L	
Salvia microphylla	Mint Bush Sage	3'-5'	4'-8'	M	
Spiraea bumalda	Spiraea	2'-3'	3'-4'	M	
Spiraea x bumalda 'Goldflame'	Goldflame Spirea	3'-4'	4'	M	Yellow-green foliage with pink/red flowers
Viburnum davidii	David Viburnum	3'	3'	M	Large glossy green deep veined foliage, light clusters of pink buds and white flowers
Zauschneria californica	California Fuschia	3'	3'-4'	L	Gray leaves w/ red flowers
Shrubs (Accents) [species appropriate within sight-line view corridor]					
Achillea millefolium californica	Yarrow	1-3'	1-3'	L	
Achillea millefolium rosea 'Island Pink'	Pink Yarrow	1'-3'		L	
Achillea tomentosa	Woolly Yarrow	6"		L	
Agapanthus africanus	Iily-of-the-Nile	1.5'-2'	1.5'-2'	M	Blue/white flower
Aloe species		varies		L	
Amsonia tabernaemontana	Blue Star Flower	2'-3'		?	
Aquilegia eximia	Serpentine Columbine	2'	1-3'	L	
Artemisia 'Powis Castle'	Powis Castle Sagebrush	3'	6'	L	
Asclepias fascicularis	Narrow-leaved Milkweed	1'-3'	1'	?	
Ceratostigma plumbaginoides	Plumbago	0.75'-1'	1'-1.5'	M	Deep blue flower
Carex divulsa	Berkeley Sedge			L	Deep green clumping evergreen grass

APPROPRIATE PLANT SPECIES FOR RI PHASE 1 TOWN CENTER

	Shrubscapes between Wall and Walk	Shrubscapes Parkway Strips	Shrubscapes Medians	Shrubscapes Bio-Retention (Interlock Joints Rd.)	Park & Open Spaces	in-Tree Street Trees	in-Tree Parkway Strips	in-Tree River-Yard Lakes	in-Tree Frontage	in-Tree	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
											<i>Diets bicolor</i>	Fortnight Lily, Bicolor Iris			L	
											<i>Diets vegeta</i>	Fortnight Lily	3'-4'	2'-3'	M	White flower
											<i>Erigeron karvinskianus</i>	Santa Barbara Daisy	1'-2'	3'-5'	L	White with some pink flowers
											<i>Eschscholzia californica</i>	California Poppy	1'	1.5'	VL	
											<i>Festuca idahoensis</i> 'siskiyou blue'	Blue Bunch Grass	1.4"	10"	L	
											<i>Festuca mairei</i>	Atlas Fescue	2'-3'	2'-3'	L	Evergreen clumping yellowish gray-green foliage
											<i>Festuca ovina</i> 'Glaucia'	Elijah's Blue, Blue Festuca	4'-10"	6"	M	
											<i>Festuca rubra</i>	Red Fescue	3'-12"	6"	M	
											<i>Helleborus x hybridus</i>	Lenten Rose			M	
											<i>Hemerocallis x 'Stella de Oro'</i>	Stella De Oro Dwarf Daylily	2'	2'	M	Heavy clusters of large yellow flowers
											<i>Hemerocallis fulva</i>	Orange Daylily	2'-2.5'	2'-2.5'	M	Tawny orange
											<i>Hesperaloe parviflora</i>	Coral Yucca	2'	2'	/	
											<i>Heuchera 'Lillian's Pink'</i>	Lillian's Pink Coral Bells			/	
											<i>Heuchera 'Rosada'</i>	Rosada Coral Bells			?	
											<i>Heuchera sanguinea</i>	Coral Bells			M	
											<i>Iris 'Canyon Snow'</i>	Canyon Snow Pacific Iris			?	
											<i>Juncus patens</i>	CA Gray Rush	2'	2'	H	
											<i>Kniphofia uvaria</i>	Red Hot Poker			M	
											<i>Lavandula angustifolia</i>	English Lavender	8"-2'	8"-2'	L	
											<i>Lavandula a. 'Buena Vista'</i>	English Lavender	2'	2'	L	Gray-green foliage with deep violet blue flowers
											<i>Lavandula 'Goodwin Creek Grey'</i>	Goodwin Creek Lavender			L	
											<i>Lavandula stoechas</i> 'Otto Quast'	Otto Quast Spanish Lavender	18"-3'	2'	L	
											<i>Leymus condensatus</i> 'Canyon Prince'	Canyon Prince Wild Rye	2'-4'	2'	VL	
											<i>Liriope muscari</i>	Lily Turf			M	
											<i>Lomandra l. 'Breeze'</i>	Dwarf Mat Rush	2'-3'	2'-4'	L	
											<i>Lupinus albilfrons</i>	Bush Lupine	3'-5'	2'-3'	L	
											<i>Miscanthus sinensis</i> 'Morning Light'		5'-6'	3'-4'	M	
											<i>Muhlenbergia dubia</i>	Mexican Deergrass	2'-3'	2'-3'	L	
											<i>Pennisetum setaceum</i> 'Cupreum'	Red Fountain Grass	3'-4'	3'-4'	L	
											<i>Penstemon heterophyllus</i> 'Margarita'	Foothill Penstemon	1'-3'	1'-2'	L	Lavender flowers
											<i>Penstemon species</i>				M-L	
											<i>Penstemon spectabilis</i>	Showy Penstemon	3'		M-L	
											<i>Perovskia a. 'Little Spire'</i>	Russian Sage	2'	2'	L	Vertical spikey gray-green foliage with lavender-blue flowers
											<i>Phormium tenax</i> 'Apricot Queen'	New Zealand Flax	3'	4'	L	Yellow wit green margined bladed foliage
											<i>Phormium tenax</i> 'Dusky Chief'	New Zealand Flax	5'-6'	4'-5'	L	Reddish brown bladed foliage
											<i>Phormium tenax</i> 'shirazz'	New Zealand Flax			L	
											<i>Phormium tenax</i> 'Tom Thumb'	New Zealand Flax	1'-2'	1'-2'	L	
											<i>Salvia</i>				L-M	
											<i>Salvia 'Bee's Bliss'</i>	Bee's Bliss Salvia	1'-2'	8"	M	
											<i>Salvia m. 'Hot Lips'</i>	Hot Lips Sage	3'	3'	L	Red/white flowers
											<i>Salvia 'Mrs. Beard'</i>	Mrs. Beard Salvia	2'	3 - 6'	L	
											<i>Salvia sonomensis</i>	Creeping Sage			L	
											<i>Salvia spathacea</i>	Hummingbird Sage			L	
											<i>Solidago californica</i>	California Goldenrod	1-3'	18"-3'	L	
											<i>Symphoricarum chilense</i>	California aster	1-3'		L	
											<i>Tulbaghia violacea</i>	Society Garlic	18"	18"	L	Purple flowers
											<i>Tulbaghia v. 'Silver lace'</i>	Variegated Society Garlic	18"	18"	L	Silver/white blades w/purple flowers
											<i>Veronica austriaca</i> 'Crater Lake Blue'	Crater Lake Blue Speedwell	18"	12"	M	Gentian blue
											<i>Zauschneria californica</i> 'Catalina'	Island California Fuschia	1-3'	1-3'	L	
											<i>Zauschneria cana</i>	California Fuschia	2-3'	18"-3'	L	
											Shrubs (Grasses) (species appropriate within sight-line view corridor)					
											<i>Bouteloua gracilis</i>	Blue Grama Grass	6"-18"	6"-1'	L	
											<i>Calamagrostis x acutiflora</i> 'Karl Foerster'	Karl Foerster's Feather Reed Grass	2'	2'	L	Stunning vertical feathery plumes, turn golden in fall
											<i>Carex barbarae</i>	White Root Sedge	1'-3'	1'-3'	M	Deep green native meadow grass

[illegible]

APPROPRIATE PLANT SPECIES FOR R1 PHASE 1 TOWN CENTER

[illegible]

APPROPRIATE PLANT SPECIES FOR RI PHASE 1 TOWN CENTER

[illegible]

APPROPRIATE PLANT SPECIES FOR RI PHASE 1 TOWN CENTER

Streetscape Between Walk and Walk	Streetscape Parkway Strips	Streetscape Medians	Streetscape Bio-Swale (Intersecter Levee Rd.)	Parks & Open Spaces	In-Tract Street Trees	In-Tract Parkway Strips	In-Tract Back-Yard Lot/Lot Frontage	Avenues, Trails and Restoration Areas	Botanical Name	Common Name	Use Height	Use Width	Water Use	Attributes
									Clytostoma callistegioides	Violet Trumpet Vine			M	
									Distictis buccinatoria	Trumpet Vine	20'-30'		M	
									Ficus pumila	Creeping Fig	10'		M	
									Gelsemium sempervirens	Carolina Jessamine	20'		L	
									Hardenberdia violacea 'Happy Wanderer'	Hardenbergia Vine	10'		M	
									Jasminum polyanthum	Pink Jasmine	20'		M	
									Lonicera hispidula	Honeysuckle	3-10'		L	
									Macfadyena unguis-cati	Cats Claw	20-40'		L	
									Vitis californica	California Wild Grape	12-30'		VL	
									Wisteria sinensis 'Alba' or 'Cooke's Special'				M	

Shared Parking Analysis

The following shared parking analysis is applicable to those areas north of River Islands Parkway only. Development areas south of River Islands Parkway shall be governed by the Lathrop Municipal Code until such time a specific parking plan is developed for those areas in the future.



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date: January 16, 2024
To: Ramon Batista
From: At van den Hout, Ollie Zhou, T.E.
Subject: Town Center (River Islands Lathrop) Shared Parking Analysis

Introduction

Hexagon Transportation Consultants, Inc. has completed this shared parking study for the most recent development plan of the River Islands Town Center (see Figure 1). The proposed project evaluated under this study includes the following land uses.

- ☑ Residential: 80 units
- ☑ Hotel: 117 rooms
- ☑ Office/Medical Office: 40,000 s.f.
- ☑ Retail (inclusive of gas station, winery, grocery store, hardware store, health club, and general retail): 193,100 s.f.
- ☑ Football and baseball stadiums: 4,280 seats (total)

Many of the project's proposed land uses generate their highest parking demands at different times of the day. For example, residential land use parking demand generally peaks in the late evening, while office parking demand generally peaks during working hours. The project's actual parking demand at any time of the day would be lower than the sum of individual land use's peak parking demands. A shared parking analysis is conducted to estimate the project's hourly parking demand, and determine whether the project's proposed parking spaces (1,914 spaces) would be sufficient.

Analysis Methodology

The shared parking analysis is conducted in two steps:

1. Each land use's individual peak parking demand is estimated. The Institute of Transportation Engineers (ITE) *Parking Generation, 6th Edition* publishes parking demand rates derived from parking surveys conducted across the nation. General engineering practice references the 85th percentile parking demand as the rate used to determine peak parking demands.
2. Each land use's parking demand varies by the hour. The hourly parking demand is typically expressed as a percentage of the peak parking demand; these factors are also known as diurnal factors. The Urban Land Institute (ULI) *Shared Parking, 3rd Edition* publishes diurnal factors for most common land use categories. The hourly parking demands for the individual land uses are then summed to derive the project's hourly parking demand estimate. The hour of the day when the project generates the highest parking demand is compared to the project's proposed parking supply to determine whether the proposed parking supply is sufficient.

100 Century Center Court, Suite 501 • San Jose, California 95112 • phone 408.971.6100 • fax 408.971.6102 • www.hextrans.com

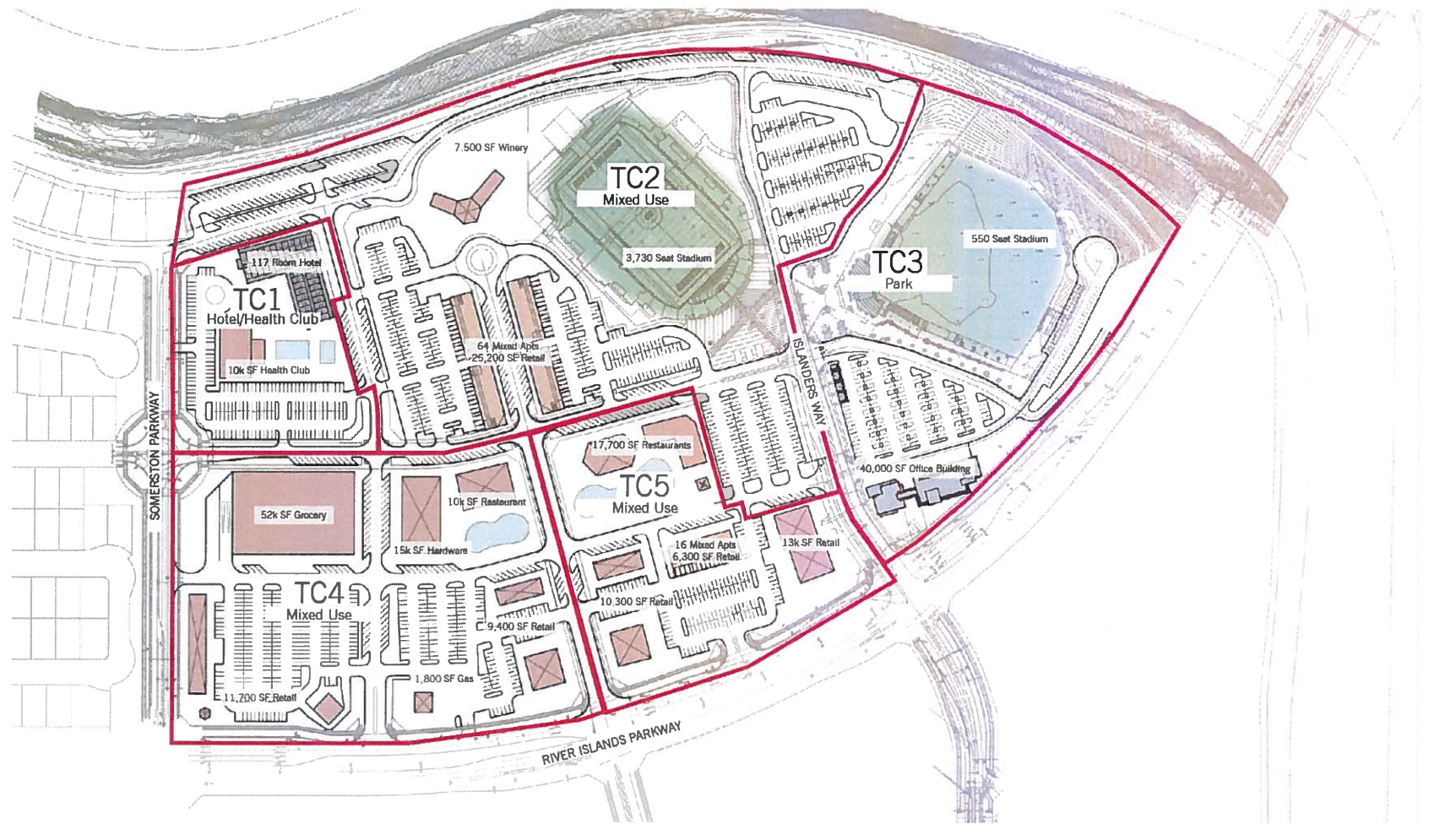


FIGURE 1 RIVER ISLANDS TOWN CENTER

LATHROP, CA

CALIFIA, LLC.

DAHLIN

DATE: 01.15.2024
JOB NO: 308.002

5865 Owens Drive
Pleasanton, CA 94588
925.251.7200

A1.100

Individual Land Use's Peak Parking Demand

This study evaluated each land use's peak parking demand for a typical weekday and a weekend day. Table 1 below summarizes each land use's peak parking demands.

The project's retail land uses, consisting of a winery, gas station, restaurant, grocery store, hardware store, health club, and general retail exhibit characteristics of an integrated shopping center that is best represented by the ITE Land Use Code 820: Shopping Center (>150,000 s.f.). Therefore, the peak parking demands for these retail land uses is summarized in Table 1 under "retail".

The project's football and baseball stadium land use does not have a corresponding ITE land use code with parking rates. Therefore, this study references Lathrop's parking code for stadium land use, which is 1 space per 4 seats, plus 1 space per employee. At the time of this study, the project does not have an estimate on the employee count for the stadiums. Assuming an employee-to-seat ratio of 1% (derived from ULI Shared Parking data), the stadiums would have a total of approximately 43 employees. It should be noted that as a conservative analysis, this study assumes both stadiums would have events at the same time.

For the office/medical office land use, the study assumed the higher parking generator of the medical office for a conservative analysis. While ITE did not publish any parking rates for the weekends, it stated that generally, the weekend peak parking rates are approximately 22% of the weekday peak parking rates. Hexagon derived the weekend peak parking demand rate for the medical office land use accordingly.

Table 1
Individual Land Use's Peak Parking Demand

Land Use	Size	Unit	ITE Code ¹	Peak Parking Demand ¹			
				Weekday		Weekend	
				Rate	Spaces	Rate	Spaces
Residential	80	units	220	1.59	127	2.05	164
Hotel	117	rooms	310	0.87	102	0.98	115
Medical Office ²	40	ksf	720	4.28	171	0.94	38
Retail ³	193.1	ksf	820	2.72	525	3.08	595
	4,280	seats	Lathrop	0.25	1,070	0.25	1,070
Stadiums ⁴	43	employees	Code	1	43	1	43
<u>Stadium Subtotal</u>					1,113		1,113

Notes:

1. Peak parking demand rates referenced Institute of Transportation Engineers (ITE) *Parking Generation, 6th Edition*, 85th percentile parking demand rates.
2. While the ITE publication did not publish weekend parking rates for medical office land use, ITE noted that Saturday peak parking demand is on average 22% of the weekday peak parking demand.
3. Retail land use is inclusive of the project's winery, gas station, restaurant, grocery store, hardware store, health club, and general retail land uses.
4. Stadium parking demand is based on Lathrop's parking code. Employee estimate derived from Urban Land Institute data, suggesting 1 employee per 100 seats.

Individual Land Use's Peak Parking Demand

This study evaluated each land use's peak parking demand for a typical weekday and a weekend day. Table 1 below summarizes each land use's peak parking demands.

The project's retail land uses, consisting of a winery, gas station, restaurant, grocery store, hardware store, health club, and general retail exhibit characteristics of an integrated shopping center that is best represented by the ITE Land Use Code 820: Shopping Center (>150,000 s.f.). Therefore, the peak parking demands for these retail land uses is summarized in Table 1 under "retail".

The project's football and baseball stadium land use does not have a corresponding ITE land use code with parking rates. Therefore, this study references Lathrop's parking code for stadium land use, which is 1 space per 4 seats, plus 1 space per employee. At the time of this study, the project does not have an estimate on the employee count for the stadiums. Assuming an employee-to-seat ratio of 1% (derived from ULI Shared Parking data), the stadiums would have a total of approximately 43 employees. It should be noted that as a conservative analysis, this study assumes both stadiums would have events at the same time.

For the office/medical office land use, the study assumed the higher parking generator of the medical office for a conservative analysis. While ITE did not publish any parking rates for the weekends, it stated that generally, the weekend peak parking rates are approximately 22% of the weekday peak parking rates. Hexagon derived the weekend peak parking demand rate for the medical office land use accordingly.

Table 1
Individual Land Use's Peak Parking Demand

Land Use	Size	Unit	ITE Code ¹	Peak Parking Demand ¹			
				Weekday		Weekend	
				Rate	Spaces	Rate	Spaces
Residential	80	units	220	1.59	127	2.05	164
Hotel	117	rooms	310	0.87	102	0.98	115
Medical Office ²	40	ksf	720	4.28	171	0.94	38
Retail ³	193.1	ksf	820	2.72	525	3.08	595
	4,280	seats	Lathrop	0.25	1,070	0.25	1,070
Stadiums ⁴	43	employees	Code	1	43	1	43
			<u>Stadium Subtotal</u>		1,113		1,113

Notes:

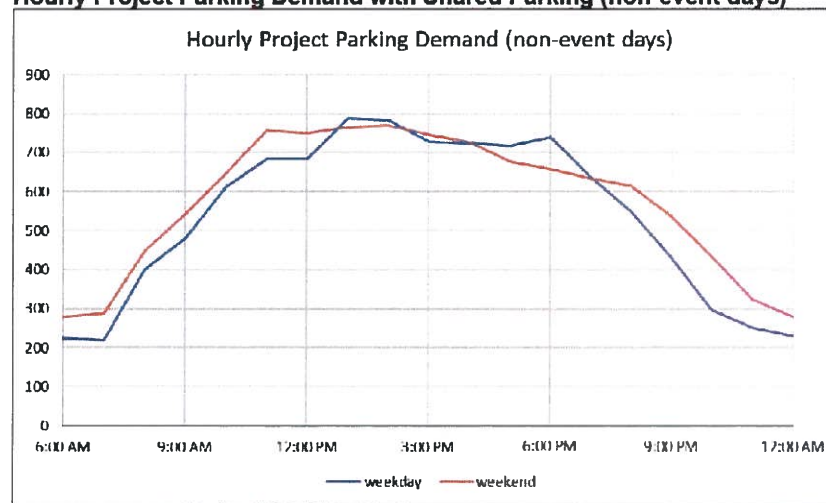
1. Peak parking demand rates referenced Institute of Transportation Engineers (ITE) *Parking Generation, 6th Edition*, 85th percentile parking demand rates.
2. While the ITE publication did not publish weekend parking rates for medical office land use, ITE noted that Saturday peak parking demand is on average 22% of the weekday peak parking demand.
3. Retail land use is inclusive of the project's winery, gas station, restaurant, grocery store, hardware store, health club, and general retail land uses.
4. Stadium parking demand is based on Lathrop's parking code. Employee estimate derived from Urban Land Institute data, suggesting 1 employee per 100 seats.

Hourly Project Parking Demand with Shared Parking

This shared parking analysis assumes that there are no reserved spaces on site. Furthermore, because stadium events happen only once in a while, not necessarily at the same time of day for every event, and both stadiums may not necessarily have events at the same time, this analysis is separated into a non-event-day analysis and an event-day analysis.

As shown in Figure 1 below, on non-event days, the project's parking generally is estimated to peak at around lunchtime on either weekdays or weekends. On weekdays, the project's parking demand would peak at 1 PM with a parking demand of 786 spaces. On weekends, the project's parking demand would peak at 2 PM with a parking demand of 770 spaces. Both of which would be much lower than the project's proposed 1,914 parking spaces.

Figure 2
Hourly Project Parking Demand with Shared Parking (non-event days)



At this stage of the project, there is no detailed information regarding the operations of the stadium events. For a conservative analysis, this study assumes both stadiums would hold events at the same time, at full occupancy, at the times when the project's parking demand peaks (1 PM on weekdays and 2 PM on weekend days). The stadium events would generate a peak parking demand of 1,113 spaces, per Table 1. Adding this demand onto the non-event days parking demand would yield a peak parking demand of 1,899 spaces on weekdays and 1,883 spaces on weekend days. Even with this very conservative and highly unlikely scenario, the project's proposed parking of 1,914 spaces would be sufficient.

Conclusion

Hexagon conducted a shared parking analysis of the proposed project using ITE 85th percentile peak parking demand rates and ULI's time-of-day parking demand factors. The analysis was conducted with conservative assumptions and tested the worst-case scenario assuming both stadium events would occur at the same time, at full occupancy, during the times when the rest of the project's parking demand peaks. The analysis showed that the project's proposed 1,914 parking spaces would be sufficient to accommodate even the worst-case scenario. Therefore, the project's proposed parking of 1,914 spaces would be sufficient for the proposed project.