

MIDDLE GREEN VALLEY
SPECIFIC PLAN



: SOLANO COUNTY, CALIFORNIA :

Adopted July 27, 2010



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[directory]

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{ This is a very significant accomplishment; to work together to accomplish change . . . not based on which side of the issue we are on. We all share a deep feeling for this special place. }

- Herb Hughes, Neighbor and CAC Member

[PREAMBLE]

Middle Green Valley is unique and spectacular. The City of Fairfield, to the south, and unincorporated Solano County to the north, have continued to entitle subdivisions, while Middle Green Valley has remained largely undeveloped agricultural and open space land in the center. There is long-standing conflict between the open space desired by neighbors and development rights desired by landowners. The landowners of Middle Green Valley are under substantial pressure to both preserve their rural culture, even as the basic economics of agriculture are eroding the financial viability of their lands, and to develop their property to realize the economic benefit of their property. Many of the landowners, some whose families have cultivated the land for more than 150 years, wish to realize the development value of their land while, at the same time maintaining the integrity of the open space, agricultural productivity and farming legacy.

In accordance with the goals and policies of the General Plan, the County saw an opportunity to try to resolve this conflict, and avoid the piece-meal subdivision that would inevitably occur in the absence of a comprehensive plan. At the same time, the County also wants to ensure that the houses developed under the plan are in keeping with the unique setting: practical, clustered, rural in character, sustainable, and complementary to the existing landscape.

At significant cost and with no guarantee of success, the Solano County Board of Supervisors proposed a Specific Plan process for this part of Green Valley as part of the updated 2008 General Plan. That General Plan, with landowner and neighbor support in Green Valley, was passed with a 65% approval in November 2008. In January of 2009, the County appointed Hart Howerton, and consultant team to work with a Citizens Advisory Committee (CAC) which was divided equally between landowners and nearby residents. Their joint task was to produce a plan that meets the goal and policies for Middle Green Valley set forth by the General Plan. This Specific Plan is a result of that successful, collaborative effort.

Like all successful designs, this Specific Plan captures a moment in time when community representatives were able to develop a shared vision for an agriculturally-centered community founded on conserving a remarkable landscape, based on a stewardship ethic. No plan can be perfect, however, and many people spent countless hours discussing and ultimately compromising, where necessary, for the long term benefit of the whole area. This was an extraordinary opportunity for neighbors, landowners and local agencies to have an open dialogue about real long-term interests, and understand how financial, environmental, and cultural aspects of a community plan can fit together.

it's all here

*we set the seeds, speak
to the sky
nurture the plants, drink
the rain, give back
to the soil, curse
the cold, dance
to the sun, sing
with the wind, weep
at the passing, dream
with the moon. we open
our hands and accept another
season of hope fulfilled
or not,
balancing burdens with blessings,
rocks and eagle feathers,
carrying the harvest home.
listen.
The birds are singing the earth
awake. the spiraling cosmos
is bursting open seeds climbing
to the light. there's a crackle
of joy in our hearts, ignited
by the sun----a flower filled
with flame. listen. the plants will tell you
of sending roots deep to survive
the dry times.
the seasons will show you how nothing
is ever really gone but keeps
turning out and over
again and again and again,
just as the ancestors
smile down from the clouds
onto the faces of children
yet unborn shining up
from rain spattered stones on the path
we walk.
listen.
it's all here.*

-Sherrie Mickel, 1995





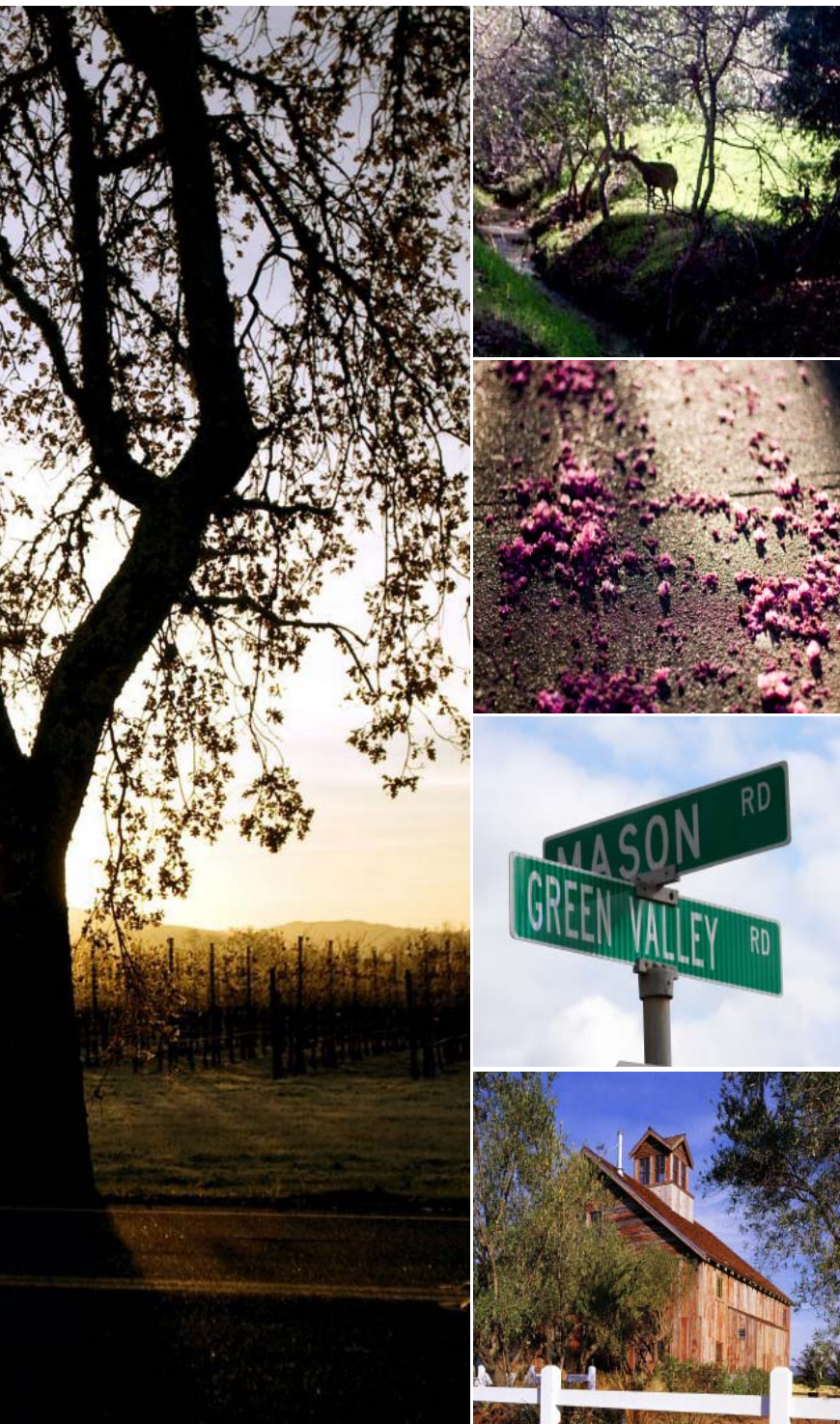
1.0

VISION

“For many of us today hunting and gathering and growing our own food is by and large a form of play... So though a hunter-gatherer food chain still exists here and there to one degree or another, it seems to me its chief value for us at this point is not so much economic or practical as it is didactic. Like other important forms of play, it promises to teach us something about who we are beneath the crust of our civilized, practical, grown-up lives.”

- Michael Pollan, Omnivore's Dilemma





1.1 INTRODUCTION

The **Specific Plan for Middle Green Valley** is built upon the fundamental concepts of conservation, sustainability and community. This Plan works to recognize and enable a rural settlement pattern of varying intensities, uses and opportunities that honors the agricultural legacy of the land while protecting the unique rural setting. The Specific Plan builds upon the goals and policies of the Solano General Plan (General Plan) as well as the recommendations of the Citizens Advisory Committee (CAC) to create an integrated vision based on four overarching Principles. These Principles are supported throughout this Specific Plan by related policies and regulations that direct future actions and implementation methods to create a series of neighborhoods **connected to the land, the place and its history.**





fabric / `fa-brik: (noun)... the arrangement of physical components in relation to each other

- Merriam-Webster Dictionary

1.2 THE MIDDLE GREEN VALLEY PLAN: CREATING A CONSERVATION FABRIC

Envisioned as a collection of small neighborhoods that nestle along the base of the oak wooded foothills, Middle Green Valley is a comprehensively planned community that reflects the traditional rural settlement patterns of the past. The Specific Plan proposes a mix of land uses, including up to 400 new primary residential units, agricultural tourism, local neighborhood retail and community facility uses and over 1,400 acres of protected agriculture and open space. The end result is a multi-layered Plan based on the concepts of clustered development, conservation and limited and appropriate settlement, that provides a certain future for Middle Green Valley.

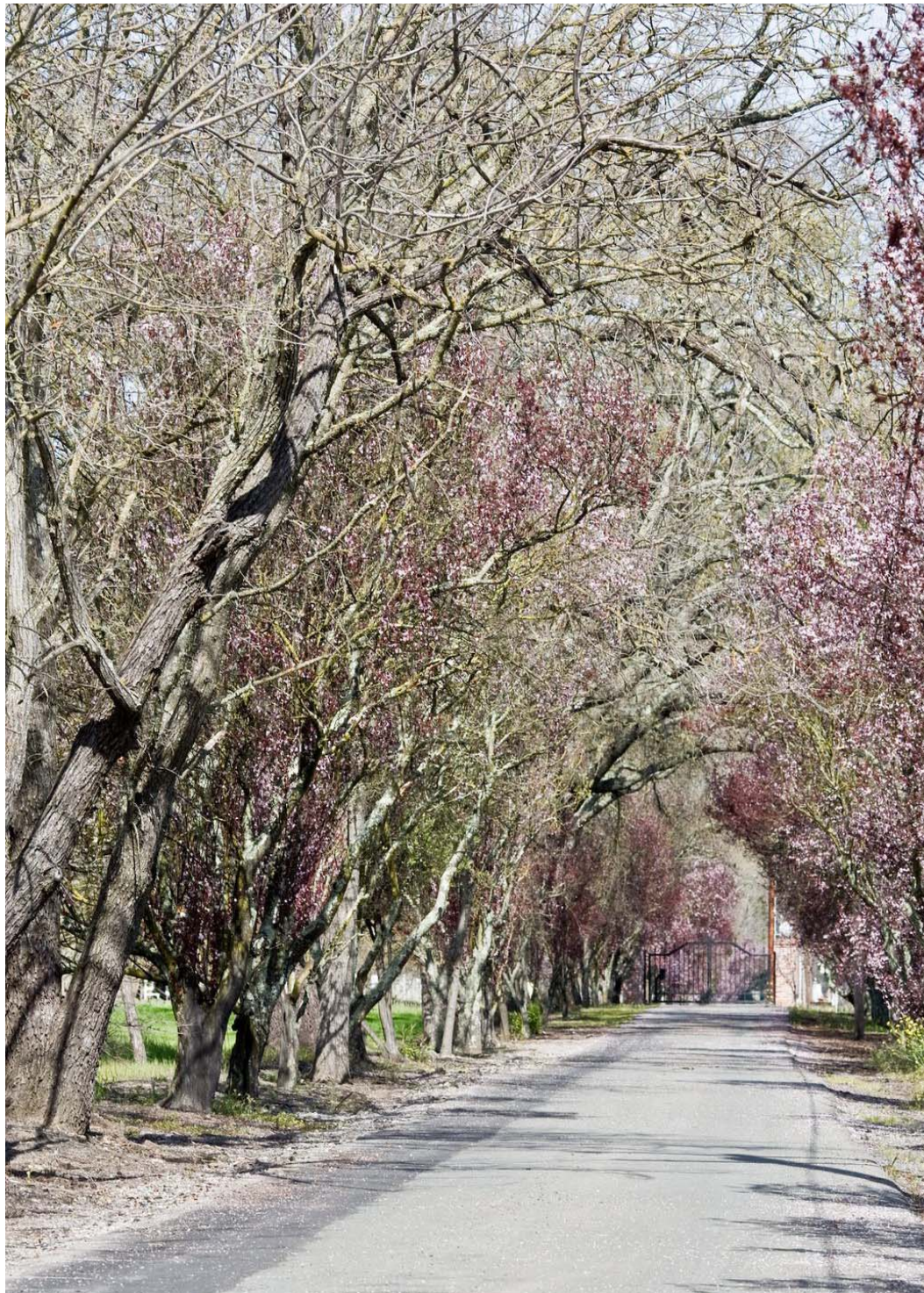
Three patterns work together to give rise to an intricate and interdependent fabric of settlement:





A. THE GREEN FABRIC – THE STARTING POINT

The community plan starts with the Green Fabric (Open Lands) that directs the placement of settled or development areas on the most suitable lands while setting aside the most sensitive, scenic and productive lands in conservation and public spaces. This Open Lands network then provides the basis for a pattern of settlement that is responsive to the natural and cultural setting. A diverse network of passive and active Open Lands results in a quilt of vineyards, riparian corridors, drainages, fields, neighborhood parks, greens, overlooks, meeting places and woodlands **that provides the connective tissue that is the promise and the future of this community.** By letting the landscape drive the development pattern, the Specific Plan reinforces the vast open feeling of the agricultural, pastoral landscape so that over 75% of the Study Area is set aside in Open Lands.





B. THE GRAY FABRIC – CONNECTING UP THE COMMUNITY

Layered over this Green Fabric is a diverse circulation and servicing system that interconnects the neighborhoods as well as the surrounding communities. An informal grid network of rural streets, country lanes, rambling paths and informal driveways utilizes the Green Street approach. This approach combines the old fashioned design goals of walkability, access, and the establishment of rich streetscapes with stormwater technologies and best management practices that maximize the functionality of these areas while **creating beautiful places for people to work, live and play.**





C. THE BUILT FABRIC – COMPLETING THE RURAL AESTHETIC

The final layer is that of the vertical massing and elements – buildings, facades, roofscapes and fencing will evolve over time to reinforce the contrast of the dominance of the pastoral landscape to the understated, rural built environment. Settlement areas are clustered in the most suitable locations in order to aggregate Open Lands areas. The Specific Plan includes a diversity of Building Types and land uses spread between four general neighborhood areas of the Specific Plan Area (Plan Area) to give rise to a small town setting that draws from the principles of rural architecture – **simplicity, craftsmanship and authenticity.**

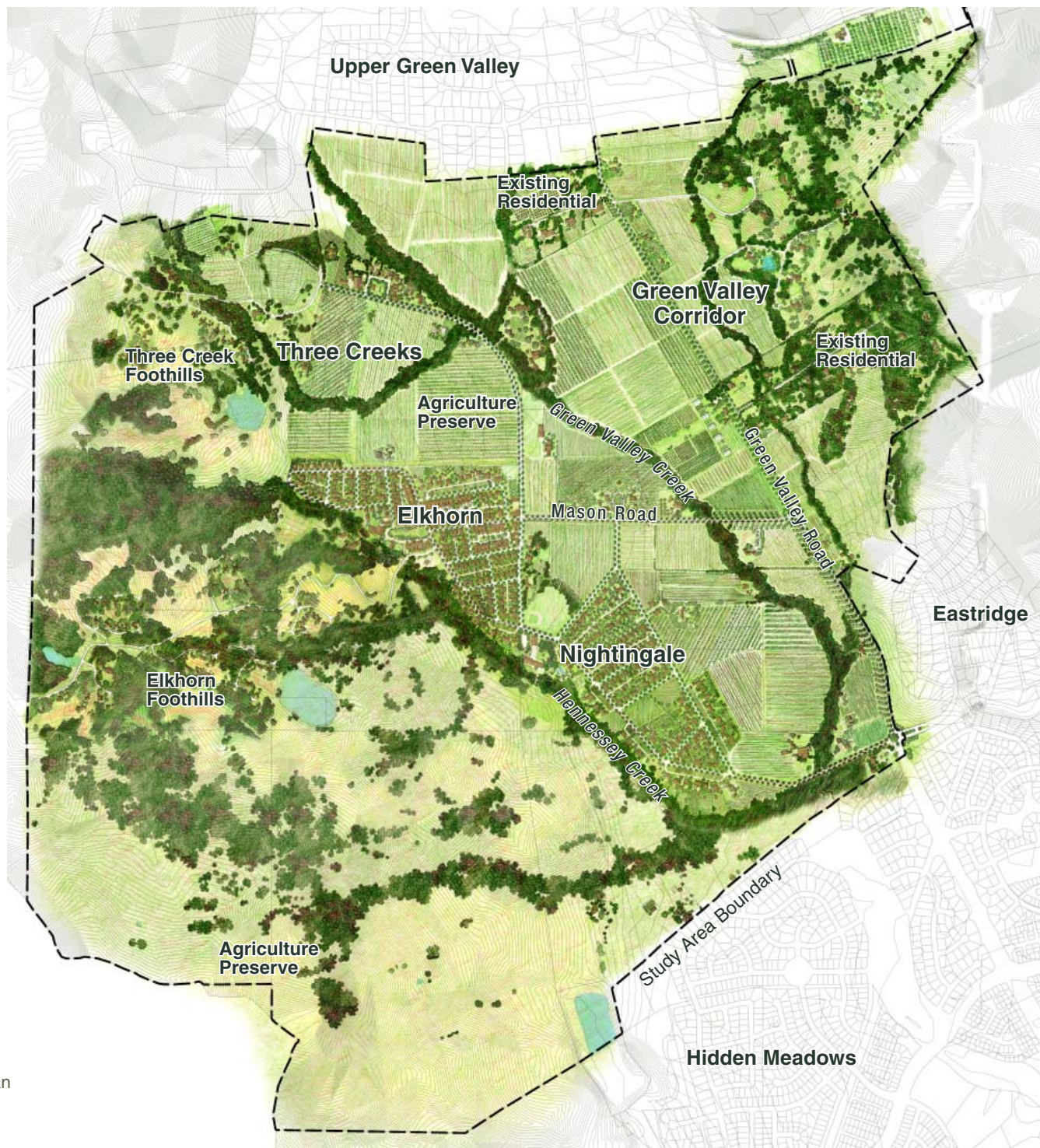


Figure 1-1: Illustrative Plan for Middle Green Valley



D. SHAPING THE COMMUNITY STEWARDSHIP ETHIC – THE ESTABLISHMENT OF THE GREEN VALLEY CONSERVANCY

Preserving the rural beauty and cultural legacy of the Green Valley area is the guiding vision in crafting a long term, equitable, and sustainable development plan. This Specific Plan seeks to celebrate and perpetuate the tradition of the cherished working landscapes that have characterized this part of Solano County for over 150 years. A core component of the plan is the promotion of sustainable food and agriculture systems as a means to synergize the relationships between agricultural lands, the built and natural environments, community health and natural resource stewardship. To provide assurances for the long term preservation and management of the Open Lands, the Specific Plan includes the creation of the **Green Valley Agricultural Conservancy (Conservancy)**, a non-profit organization that manages and oversees the ±1,490 acres of productive agricultural land, pastures, and natural areas placed under conservations easements.

The Conservancy is a defining feature for the Middle Green Valley Plan. It is envisioned as:

- *an agricultural operation*, overseeing the agricultural productivity for the local community and regional foodshed,
- *a land steward*, responsible for managing and oversight of the conservation easements, as well as the evolution of the built environment;
- *a community builder* – providing a framework for educational, interpretive opportunities – the social glue for the new community.

Together, this multi-layered plan creates a small, vital residential community which provides the **philosophical, cultural and financial support required to preserve the rural and cultural heritage of Middle Green Valley.**



Figure 1-2: Conceptual Street View of Elkhorn Neighborhood



With the loss of tradition, we have lost the thread which safely guides us through the vast realms of the past, but this thread was also the chain fettering each successive generation to a predetermined aspect of the past. It could be that only now will the past open up to us with unexpected freshness and tell us things that no one as yet had ears to hear.

- Hannah Arendt

1.3 THE PRINCIPLES

The vision starts with an understanding of the land, the history and the community. Through an extensive community-based design process, a shared vision was crafted that underpins a future of managed and appropriate growth, economic stability, on-going resource preservation and the creation of vibrant and diverse neighborhoods. These aspirations are summed up in four guiding Principles that build upon the initial goal and policies outlined in the General Plan for the Middle Green Valley Special Study Area (SSA), outlined in Section 1.3A at right.

1.3A: GENERAL PLAN CONSISTENCY REFERENCE

:SPECIAL STUDY AREA – GOAL & POLICIES:

A goal and policies were developed for Middle Green Valley based on the initial community vision process. The goal and policies outlined in the General Plan below provide the framework for implementing the future vision of a **“rural community with compatible residential development”**. The Specific Plan Principles and policies described throughout this document build on this goal and policies to outline ways to achieve this community vision.

[GOAL]

SS.G-1: Protect and maintain the rural character of Middle Green Valley while allowing opportunities for compatible residential development to occur.

[POLICIES]

SS.P-1: Maintain the rural character of Middle Green Valley while still allowing development to be guided into areas screened from Green Valley Road because of natural contours in the land, woodland vegetation, and/or riparian vegetation. Locate upland development in areas screened by landforms or vegetation.

SS.P-2: Balance the protection of resources in Middle Green Valley (e.g. view sheds, oak woodlands, riparian habitat, sustainable agricultural use) while allowing development to occur.

SS.P-3: Allow for the migration and movement of wildlife.

SS.P-4: Provide a variety of incentives and techniques to encourage property owners to preserve natural and visual resources, in addition to the transfer of development rights.

SS.P-5: Encourage cluster residential development through incentives to property owners in hillside and valley floor areas that can support residential uses with least affect on resources, steep slopes, or very high wildfire hazard areas.

SS.P-6: In accordance with balancing the protection of resources described in these policies, adopt a program that provides residential development credits to property owners who voluntarily forego or limit development on their lands. The transfer of development rights program should focus incentives on land in areas to be preserved.

SS.P-7: Adopt a specific plan or master plan to implement these policies for Middle Green Valley.

SS.P-8: Create additional methods to assist landowners who choose to continue farming, such as, but not limited to:

- enforcing the right-to-farm act and educating residents on the act; and
- investigating mechanisms for providing farmers with economic assistance to ensure agricultural viability.



1. RESPECT AND HONOR THE CULTURAL LANDSCAPE AND ENVIRONMENTAL SETTING TO ESTABLISH A STEWARDSHIP ETHIC AND SUSTAINABLE WAY OF LIFE.

It is time to take stock of the uniqueness of Middle Green Valley and its surroundings, and ensure that the rural legacy of the area lives on through generations to come. This Specific Plan is built on the foundation of a community shared vision and belief; that of the value of protecting the valley's rural beauty. This is the result of an environmental and cultural analysis that placed development in the most suitable areas while protecting the vast open feeling of the pastoral landscape.

This Specific Plan envisions and describes opportunities to continue these fundamental precepts of shared ownership and stewardship through various design and implementation measures, such as The Conservancy and the Neighborhood Design Code, which are based on giving rise to a built pattern that respects and is connected to this place (Chapters 4 and 5). The framework described in this document has the intended goal of creating a community of stewards **that actively participate in understanding, preserving and making thoughtful decisions regarding the use and treatment of their cultural and natural resources.**





2. REVITALIZE AND RECONNECT THE COMMUNITY TO THE AGRICULTURAL AND RANCHING LEGACIES OF THE AREA.

This Specific Plan is based on honoring, celebrating and weaving the rich agricultural and ranching history into the day-to-day lives of the residents that live here. This Specific Plan describes a diversity of rural Building Types, a mix of agricultural tourism uses, an intricate quilt of row crops, vineyards and/or orchards and informal community gathering and gardening spots. The notion of living in a beautiful, agricultural, working landscape that is connected to the regional network of open space and agricultural lands will shape life in this community in many positive ways. The result is a community that has the opportunity and promise of **reconnecting with the land, its history and agricultural legacy.**





3. VALUE FLEXIBILITY AND ANTICIPATE CHANGE WHILE PROVIDING AN INNOVATIVE, RIGOROUS DEVELOPMENT FRAMEWORK.

The most thriving, diverse communities are those that may evolve and flex to the ever-changing needs of the population, economic setting and the times. This Specific Plan sets out a framework that may be responsive to changing needs and financial realities. Derived from traditional rural settlement concepts, land uses and patterns encourage a dynamic process to take place in the development of the Middle Green Valley neighborhoods. This flexibility includes the use of a form based community design code that is based on Building Types to emphasize the design and character of the environment rather than letting distinct and separate land uses drive development decisions.





4. SUPPORT AND ENABLE THE VALUES OF CRAFTSMANSHIP THAT EMPHASIZE THOUGHTFUL, DURABLE, HIGH QUALITY NEIGHBORHOOD DESIGN CONCEPTS.

At the core of this Specific Plan is that a place is being created rather than a project, and over time this place becomes a living, breathing, dynamic environment. The design of the community is an interrelated, amalgam of the built, natural, and cultural environments -- rather than these components being cleanly separated, very controlled or some non-existent. To this end, policies and standards support an integrated design concept that reinforces a custom, efficient and innovative development approach **that challenges the business-as-usual development models of the past.**



Throughout this document, a summary of the relationship of the Specific Plan Principles to the Specific Plan policies and regulations, as well as their relevance to the goals and policies set out in the Solano County General Plan further clarifies this Specific Plan’s consistency with these documents. Refer to Appendix C for a compilation of these references.

1.4 SPECIFIC PLAN ORGANIZATION

This Plan consists of five primary chapters and related appendices as described below:

Preamble: An overview of the history behind the preparation of this Specific Plan, the lessons learned and why it is important to the future of planning in Solano County.

- 1.0 **Vision:** Presents the overall structure of the Plan, the vision, and the four main planning Principles.
- 2.0 **Plan Purpose, Authority and Context:** Presents the purpose, intent, public participation and background for this Specific Plan.
- 3.0 **The Neighborhood Plan – Patterns, Concepts and Character:** Describes the three Specific Plan design components that make up the development plan -- the **Green**, the **Gray** and the **Built** Fabric and the resource, agriculture, circulation and land use policies related to each of these components.
- 4.0 **Implementation – Finance, Implementation and Execution:** Outlines the administration, implementation measures and necessary utility infrastructure required to carry out this Specific Plan.
- 5.0 **The Neighborhood Design Code:** Presents the Development Standards, regulations, Guidelines and design review process for all development projects within the Plan area, including site, infrastructure, landscape, architectural and sign design.

Appendices: The Appendices contain reference and back up documentation to support and supplement the information contained in this document. The following Appendices have been included:

- A. **Definitions:** Capitalized terms used throughout this document are defined in the Appendix.
- B. **Sustainability Index:** A matrix which lays out the specific sustainable measures that have been included in this Specific Plan.
- C. **General Plan Consistency Reference:** A matrix which lays out each General Plan policy and goal and the Specific Plan section(s) which demonstrate compliance.
- D. **Approved Plant List:** A list of plants suited to the Study Area, including trees, shrubs, ground covers and grasses.
- E. **Acronyms:** A list of commonly used abbreviations, acronyms and corresponding nomenclature used throughout this document.

1.4.1 SPECIFIC PLAN NOMENCLATURE

In reading this Specific Plan, use the following interpretations for Guiding Principles, Development Standards and Design Guidelines:

- **Guiding Principles (“Principles”):** Principles described in this document are a “guide” to achieving the overall objectives and goals for the community. Principles are intended to be used as a map to guide design choices and decisions.
- **Development Standards (“Standards”):** Standards that appear throughout this document may be identified with the use of the phrases “shall” and “is to be.” Standards establish the minimum criteria that must be satisfied to be consistent with the Plan and to gain design review approval.
- **Design Guidelines (“Guidelines”):** Guidelines that appear throughout this document may be identified with the use of the phrases “should,” “may,” “encouraged” or “discouraged.” Guidelines provide a higher level of detail in describing the overall design aesthetic and approach to achieve consistent and high quality community design solutions.
- **Capitalized terms** used throughout this Specific Plan are defined in Definitions in Appendix A.

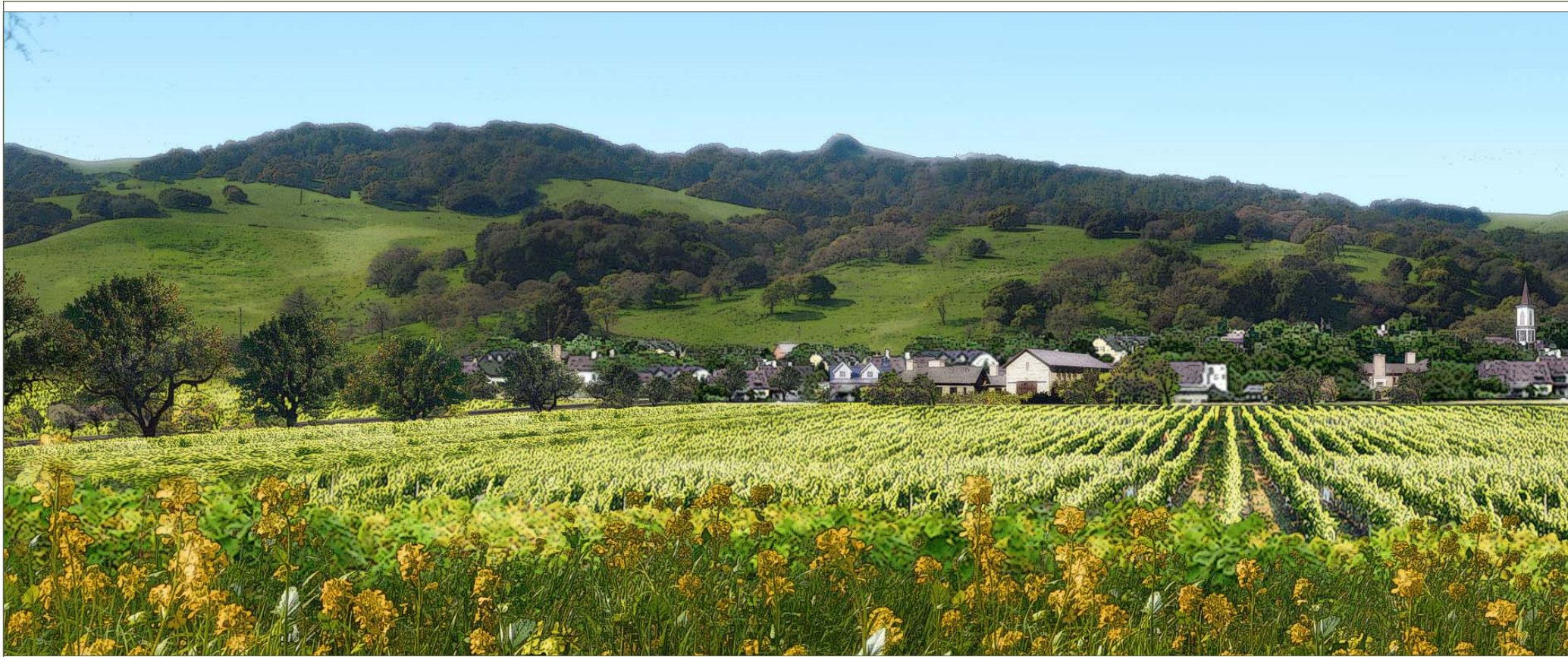


Figure 2-1: Concept View of Elkhorn Neighborhood - Looking West from Mason Road to Elkhorn Peak

2.0

PLAN PURPOSE AUTHORITY & CONTEXT

*Conservation means development
as much as it does protection.*
- Theodore Roosevelt



2.1 PURPOSE AND INTENT

This Specific Plan is a guide for the long-term realization of a series of connected and sustainable rural neighborhoods in the Middle Green Valley Special Study Area (SSA) of Solano County. The creation of this Specific Plan is the result of a community, landowner and County consensus-building odyssey that recognized the need to protect the unique rural qualities of the area, while providing the means for appropriate settlement patterns to take place.

This Specific Plan is intended to build upon the goal and policies set out in the General Plan for the Middle Green Valley SSA to provide a coherent road map, Development Standards and implementation strategies to achieve the intended outcome.

2.2 PLAN AUTHORITY

Solano County is authorized to adopt this Specific Plan under the provisions of California Planning and Land Use Law (Title 7, Chapter 3, Article 8, Sections 65450-65457) of the California Government Code, Section SS-1-1 of the General Plan.

2.3 RELATIONSHIP TO OTHER DOCUMENTS

This section describes the most important aspects of the relationship between this Specific Plan and other existing and future plans and documents.

2.3.1 2008 SOLANO GENERAL PLAN

The goals, policies, plans and programs outlined in the General Plan express a shared vision and commitment toward a more sustainable planning model that interconnects the themes of the environment, the economy and social equity. This shared vision at Middle Green Valley reflects collaboration between County staff, residents, advisory committees, commissions and the Board of Supervisors.

The General Plan identifies the Middle Green Valley SSA (or Plan Area) as an area that needs to focus attention on this area's particular concerns since it faces unique planning issues. To this end, this Specific Plan demonstrates compliance with the overarching sustainable vision of the General Plan as well as the particular goal and policies set out for the Middle Green Valley SSA.

The main goal, related policies and implementation programs for the SSA provided the framework for the creation of a comprehensive development plan. This goal and policies were crafted in an initial community envisioning process that took place in a series of community meetings in 2007. The main goal in the General Plan is as follows:

SS.G-1: Protect and maintain the rural character of Middle Green Valley while allowing opportunities for compatible residential development to occur.

(Page LU-54, Solano General Plan)

Related policies and concept plans in the General Plan describe the conceptual vision for the area and policies pursuant to the main goal, (pages LU-50 – LU-59). As part of the Implementation Programs, the General Plan directs the preparation of a Specific Plan, identifies the boundaries of the SSA, and the particular components and issues the plan is to address:

SS.1-1 Adopt a plan (either a specific plan or master plan) to implement these policies for Middle Green Valley.

(Page LU-58, Solano County General Plan)

The specific policies related to Regulation SS.1-1 and how they have been incorporated into the design and implementation of this Specific Plan are described throughout this document as well as the broader relevant General Plan goals and policies.

2.3.2 ENVIRONMENTAL IMPACT REPORT (EIR)

In conjunction with this Specific Plan a program level EIR has been prepared to study the environmental impacts the project may create. The purpose, policies, design and requirements of this Plan are to achieve a self-mitigated EIR to the extent possible. Refer to Chapter 4 - Implementation.

2.3.3 SOLANO COUNTY ZONING ORDINANCE

This Specific Plan is intended to establish the zoning and development pattern for the Plan Area. The Standards in this Specific Plan supersede the land use designations, public works standards and other applicable regulations of the the Zoning Ordinance and other applicable County regulations. To the extent that Standards or regulations are not specified in this Specific Plan and do not conflict with the implementation of the Specific Plan, the Zoning Ordinance shall continue to apply. This Specific Plan includes definitions in Appendix A that are intended to supersede the definitions in the Zoning Ordinance. To the extent this Specific Plan uses terms that are not defined in Appendix A, any applicable definitions in the Zoning Ordinance shall apply.



[1]



[2]



[3]

2.3.4 DEVELOPMENT AGREEMENT

Concurrent with this Specific Plan, the County Board of Supervisors (Board) shall approve a Development Agreement between the County and the landowners of Middle Green Valley. The Development Agreement provides the landowner’s obligations related to the provision of urban services for the Specific Plan Area (Plan Area), and other obligations that will be imposed by the County as conditions for development. It also provides the landowners with certain vested development rights, which are subject to the conditions in the Development Agreement.

2.3.5 FINANCING PLAN

The financing plan identifies the funding mechanisms required for the capital costs of private and public facilities infrastructure necessary to accomplish Plan Area build-out and funding for necessary public services for the project. Refer to Section 4.6 - Financing Plan.

2.3.6 DESIGN REVIEW

Design review process guidelines as presented in Section 5.9 of this document establishes the framework for the process and submittal requirements for projects within the Middle Green Valley SSA. This process includes design review by the Conservancy Design Review Committee (CRC) and administrative review with the County.

[1] Existing Vineyards on eastern side of Green Valley Road

[2] View from Green Valley Road looking West

[3] View of Western foothills



Figure 2-2: Aerial of Study Area

2.4 PROJECT LOCATION AND CONTEXT

2.4.1 REGIONAL CONTEXT

The Middle Green Valley Specific Plan Area (Plan Area) is located on Green Valley Road, in unincorporated Green Valley, near the western boundary of Solano County; north of I-80, Jameson Canyon, and the Hidden Meadows subdivision (City of Fairfield); south of existing unincorporated subdivisions and the Green Valley Country Club in upper Green Valley; west of Suisun Valley and the Rockville Hills; and northwest of the Eastridge subdivision (City of Fairfield).

The Middle Green Valley SSA is approximately 1,905 acres of land in the western portions of Solano County as described in Figures 2-2 and 2-3. The major roads serving the Plan Area are Green Valley Road and Rockville Road (to the north). A number of smaller country roads and unpaved two lane roads exist within the Plan Area as well. The most prominent are Terminal Reservoir Road along the southern boundary and Mason Road which runs east-west in the more central area of the site.

The Plan Area is comprised of a mixture of cultivated and fallow agricultural lands and north/south drainage features (Hennessy and Green Valley Creeks) on the valley floor. The oak wooded foothills on the east and west sides of the valley consist predominately of undeveloped grazing lands, oak woodlands, rural residential estate development, dirt roads, and pond and drainage features.

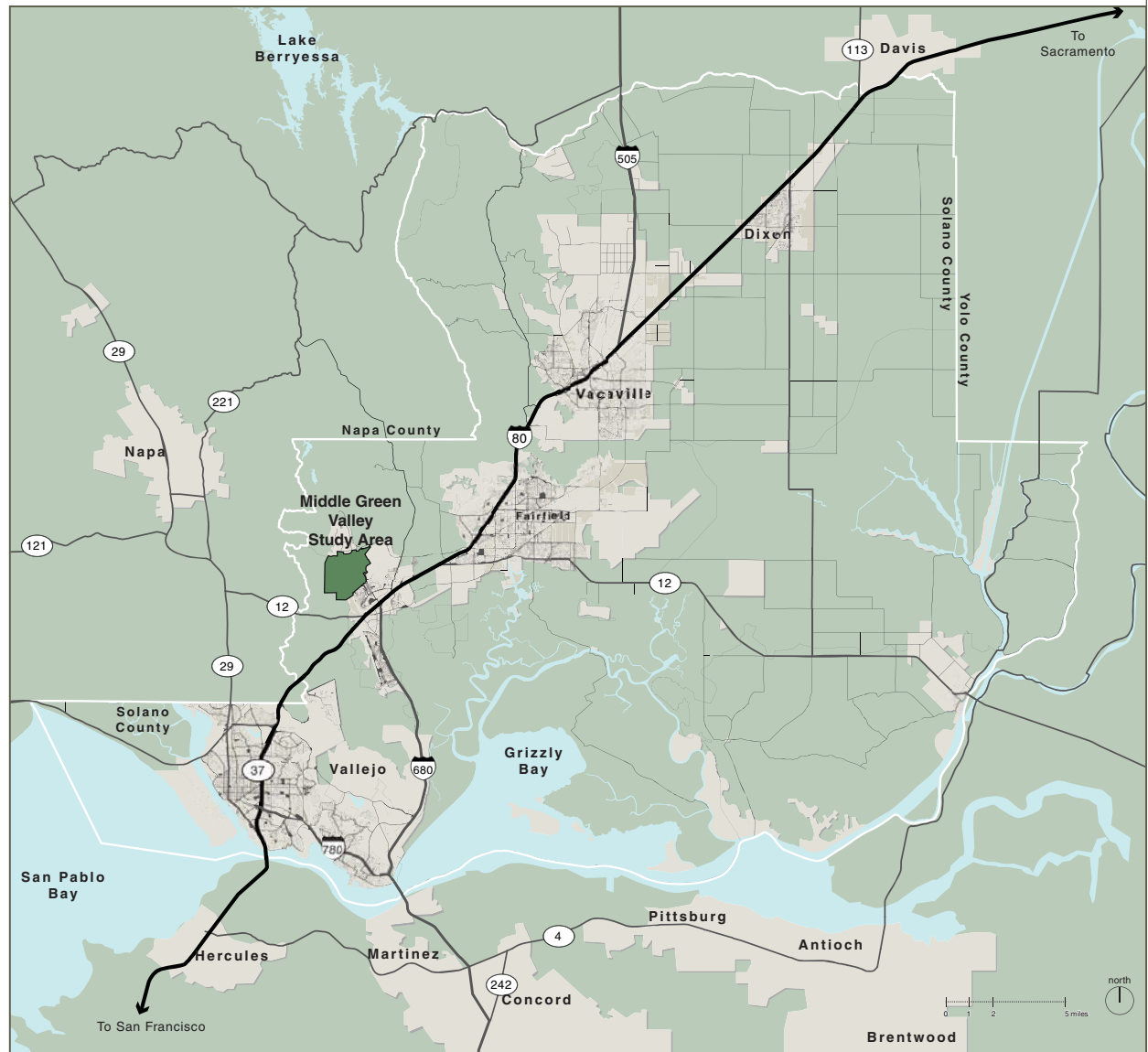


Figure 2-3: Regional Context

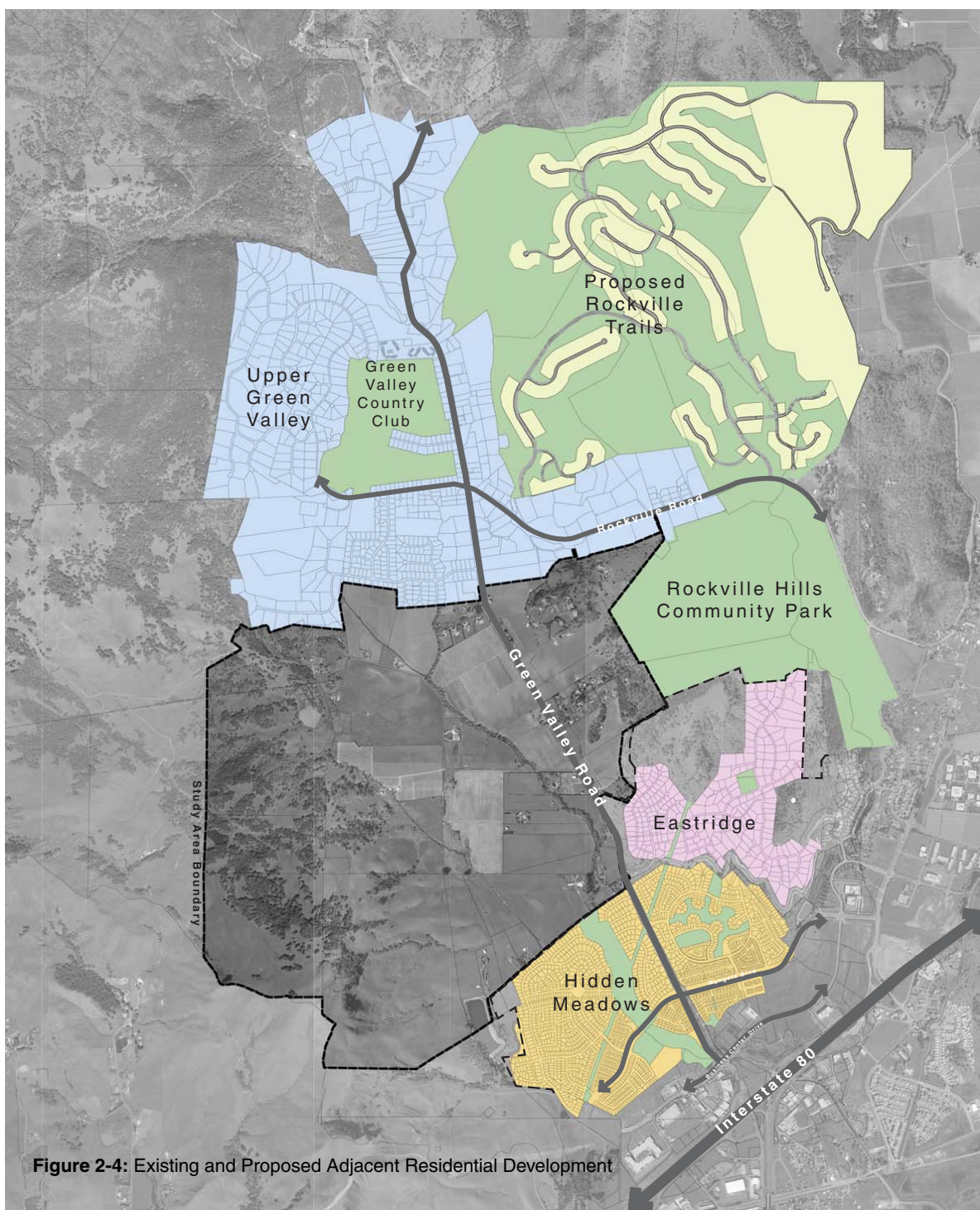






Figure 2-4: Existing and Proposed Adjacent Residential Development

Legend

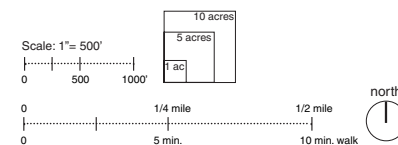
-  Hidden Meadows
-  Eastridge
-  Proposed Rockville Trails*
-  Upper Green Valley

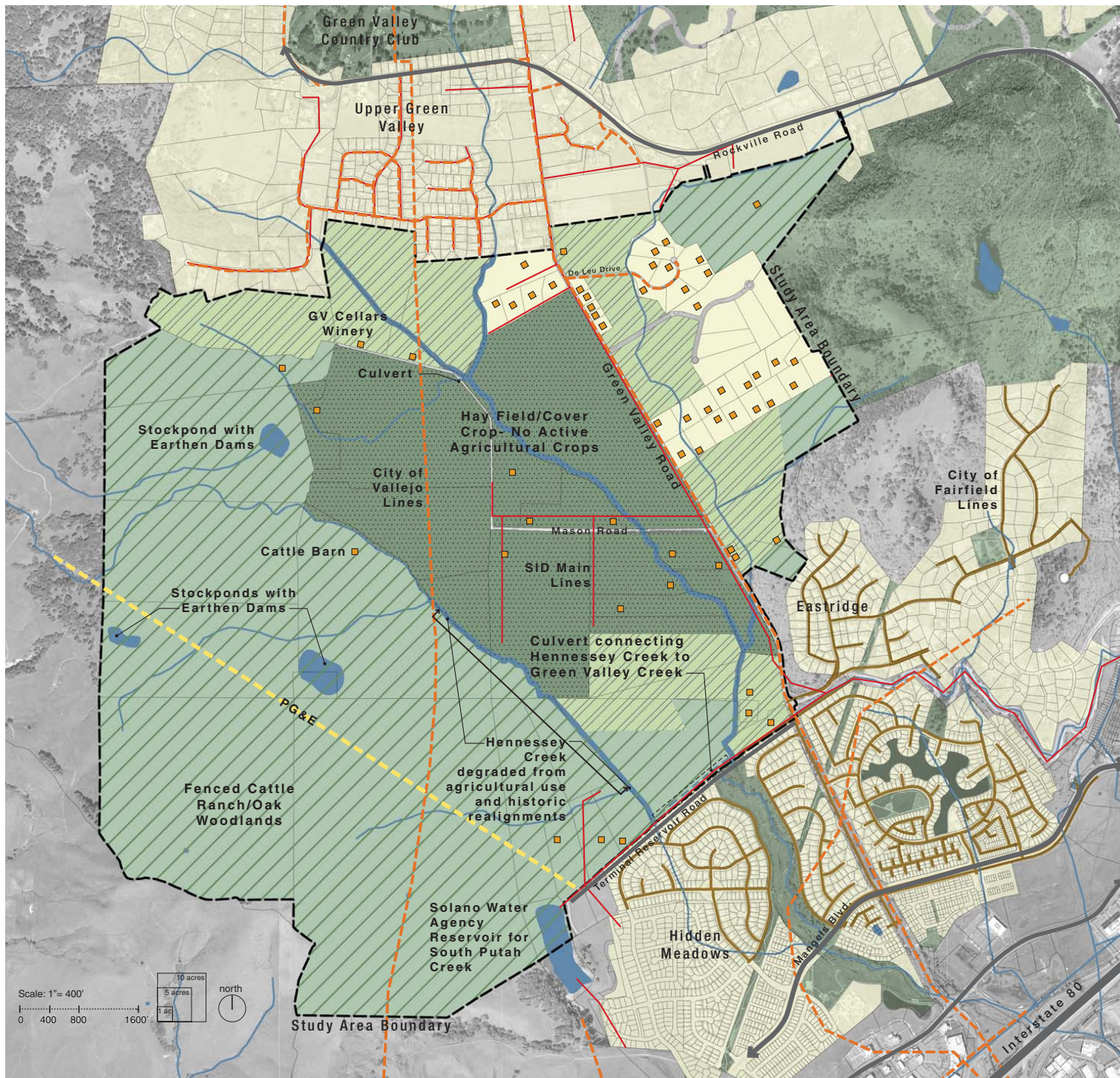
2.4.2 EXISTING LAND USES

Primary land use in the area has historically been agriculture, ranching and large lot rural residential. Approximately 55 single family homes and ancillary agricultural structures exist within the Plan Area boundaries. Agricultural and ranching activities have included vineyards, orchards, grazing land and areas devoted to field crops. In some areas the lands have lain fallow for several years. Currently there are over 200 acres in active agriculture, which are primarily vineyard lands.











Adjacent uses in the area consist of grazing, large and small lot rural residential and residential estate development. Refer to Figure 2-4 for Existing and Proposed Adjacent Residential Development and Figure 2-5 for Existing Context.

* Rockville Trails is an approved residential community with 371 detached residential units and associated access and utility improvements.





LEGEND

-  Cattle Ranch
-  Cover Crops (No Active Agriculture)
-  Existing Vineyards
-  Wetlands and Drainages
-  City of Vallejo Water Mains
-  SID Water Mains
-  City of Fairfield Water Mains
-  PG&E Line
-  Existing Residential
-  Developed Areas

EXISTING BUILDING AND INFRASTRUCTURE INVENTORY

- 10,000 sf commercial winery (GV Cellars)
- 5000 sf refrigerated wine storage facility
- 3 livestock feed barns
- 2 livestock corrals
- approximately 20 miles of fencing including a significant portion of 8' high fencing designed for vineyard protection from deer
- 2 cell towers
- approximately 6 miles of overhead power and phone lines
- 3 stock ponds with earthen dams
- over 25 different agricultural barns and sheds
- approximately 12 productive private wells
- approximately 10 miles of roads ranging from paved county roads to privately maintained pervious ranch roads
- over 6 miles of water mains (City of Vallejo) and irrigation trunk lines (Solano Irrigation District)
- a reservoir built by Solano Water Agency for the South Putah Canal (Terminal Reservoir)
- over 200 acres of existing vineyard

Figure 2-5: Existing Context

Scale: 1" = 400'
 0 400 800 1600'
 10 acres
 5 acres
 1 acre
 north

2.4.3 PHYSICAL, NATURAL & CULTURAL SETTING

This Specific Plan is based on a review and compilation of the cultural and natural setting at Middle Green Valley to craft a development plan based on resources. Below is a brief overview of the main components of the existing setting, which is analyzed in detail in the accompanying Program EIR for this Specific Plan. Refer to Figure 2-6 for the Combined Constraints mapping.

Slope and Topography

The central part of the site is characterized by a valley area, with slopes ranging from 5% to 10%. The surrounding foothill areas range from 450 to 800 feet in elevation. Slopes generally range from 8% in the foothill areas up to 40% in the upper southwestern foothills.

In keeping with the General Plan's desires to minimize disturbance in the foothill areas as well as to preserve Heritage Trees, Section 3.3.2 provides that slopes greater than 30% are designated unsuitable for development. Only minor road crossings and/or utility improvements may occur in these areas.

Drainage and Hydrology

Green Valley Creek is the principal surface drainage feature located in the central area of the Study Area. Two upper tributaries of Green Valley Creek drain the north Green Valley area and converge within the north portion of the Plan Area. Other surface water features include two large stock ponds within the western foothill areas. A smaller drainage feature, Hennessey Creek, that runs along the base of the western foothills drains the upper tributaries of the western foothills, to eventually meet up with Green Valley Creek at the southern boundary. This drainage has been heavily altered and realigned over the past 100 years due to agricultural activities and contributes to downstream water quality issues. Another unnamed north/south drainage feature which runs on the east side of Green Valley Road also occurs in the Plan Area. Terminal Reservoir is located at the southern boundary of the Plan Area.

Potential impacts of placing housing within a 100-year flood hazard area as mapped on the federal Flood Hazard Boundary map were also analyzed. This analysis also includes potential flooding as a result of the failure of a levee of the dams on Lakes Frey and Madigan in the Vallejo watershed area at the headwaters of Green Valley Creek. See Figure 2-6 for a depiction of these dam inundation areas.

As provided in Sections 3.3.2 and 3.3.3, generous vegetation buffers have been planned along each of the on-site drainages to allow for wildlife movement, filter and detain water and preserve and restore degraded slope banks and drainages. Strategies for restoring and protecting the drainage corridors, as well as minimizing flood potential are outlined in Sections 3.3 and 4.3.

Biology

The western foothills are comprised of mixed oak woodland forest, non-native grassland and some pockets of native grassland areas. The valley floor consists of cultivated agriculture, fallow lands and vineyards. The foothills to the east of Green Valley Road consist of vineyards with mixed oak woodland forest and non-native grassland in the upper foothill areas.

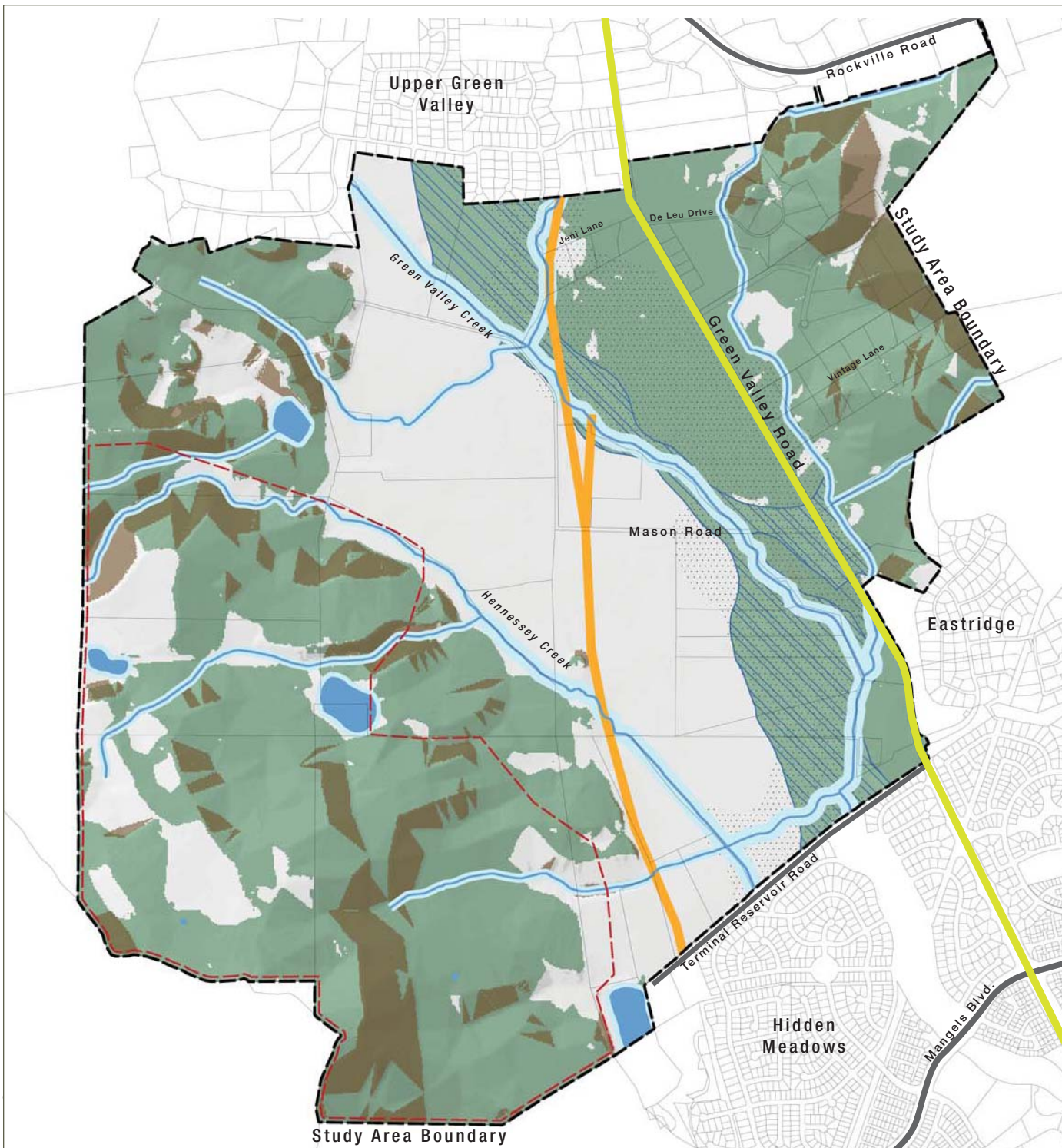
The Middle Green Valley area is included in the proposed Solano Multi-Species Habitat Conservation Plan (HCP) which establishes a framework for complying with federal and state regulations for endangered species while accommodating ongoing urban activities and future urban growth. Vegetation and animal species with potential habitat to occur in the Plan Area include the California Red Legged Frog, Swainson's Hawk, and the Callippe Silverspot Butterfly. A detailed summary and discussion of this HCP is included in the Program EIR.

Scenic Viewsheds

In addition to the environmental constraints, Green Valley Road is designated a "scenic roadway" in the General Plan, (Policy RS.P-37) as well as specifically addressed in the policies for the SSA in policy SS.P-1, which states to:

"maintain the rural character of Middle Green Valley while still allowing development to be guided into areas screened from Green Valley Road because of natural contours in the land, woodland vegetation, and/or riparian vegetation. Locate upland development in areas screened by landforms or vegetation."

As depicted in Figure 2-6, Combined Constraints, a visual analysis was completed that identified those areas obscured from Green Valley Road. As described in Section 3.2, development areas have been directed to these areas to retain this scenic viewshed.



LEGEND

- Land Visible from Green Valley Road
- 100 year Flood Hazard Area
- Wetlands, Drainages, and Buffer Areas
- Dam Inundation
- Green Valley Fault with 50' Setback
- Steep Slopes (30%+)
- Potential California Red-legged Frog Critical Habitat (HCP*)
- Solano County Scenic Roadway

* Mapping was completed as part of the 2007 draft Solano County Multispecies Habitat Conservation Plan (HCP).

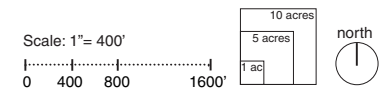
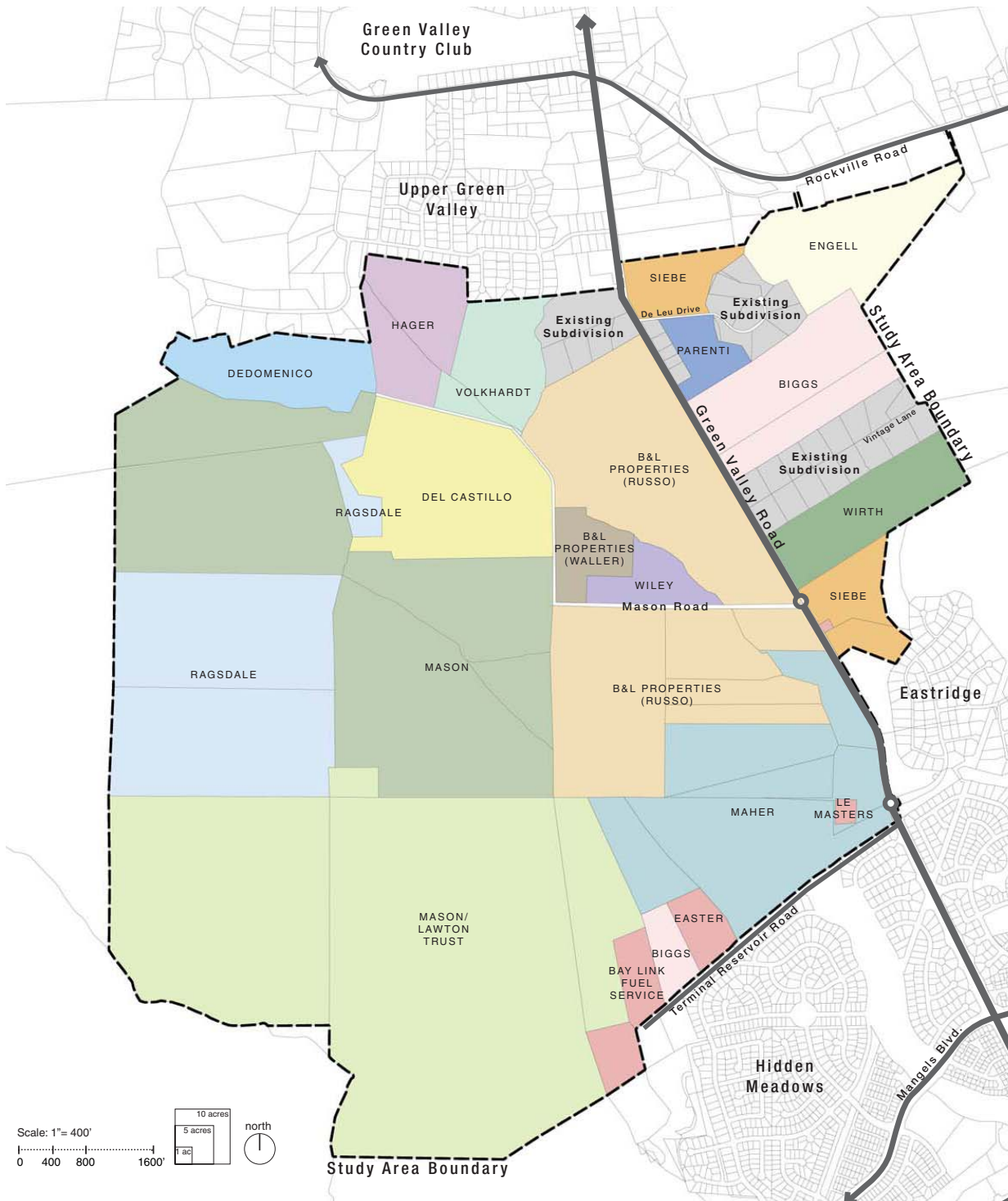


Figure 2-6: Combined Constraints Map



LEGEND

	a. Existing Subdivision	
	b. Engell	52.26 ac
	c. Biggs*	61.61 ac
	d. Wirth/Siebe/Parenti	95.42 ac
	e. Wiley	15.55 ac
	f. B+L Properties (Russo)	235.70 ac
	g. B+L Properties (Waller)	17.33 ac
	h. Maher	146.75 ac
	i. Ragsdale	168.56 ac
	j. Mason	295.95 ac
	k. Mason/Lawton Trust	476.09 ac
	l. Del Castillo	82.41 ac
	m. Dedomenico	40.56 ac
	n. Hager	40.20 ac
	o. Volkhardt	35.24 ac

* Property east of Green Valley Road has an approved tentative map on file with Solano County for 6 new lots. These lots are included in the maximum 400 unit count for this Specific Plan.

2.4.4 SPECIAL STUDY AREA OWNERSHIP

The Middle Green Valley SSA is comprised of over 80 separate parcels and over 15 separate landowners, refer to Figure 2-7 Ownership Map. This Specific Plan is the culmination of bringing together this group of landowners as well as members of the larger Green Valley community to craft an equitable consensus plan and transfer of development rights program (TDR). This Specific Plan describes the specific agreed upon implementation, unit distribution and design initiatives that reflect the conclusions and recommendations of this group as summarized in Section 2.5. See Section 4.2.3 for the transfer of development rights program and unit distribution.

Figure 2-7: Ownership Map

{ *There is no power for change greater than a community discovering what it cares about* }

- Margaret Wheatley

2.5 PROJECT BACKGROUND – ESTABLISHING A SHARED VISION

This Specific Plan has been formulated through an interactive community based design process involving community members, landowners, architects, planners, political officials, County staff, and specialized consultants since early 2007. Through this process, a compelling and rich story of the past, present and future of Middle Green Valley has been developed.

2.5.1 INITIAL COMMUNITY WORKSHOPS

Beginning in 2007 a series of Citizen Advisory Committee (CAC) workshops were held to study the future of Middle Green Valley with the purpose of focusing on several issues, including maintaining rural character, serving the area with water and wastewater, and keeping agricultural viable while coming up with equitable alternatives for landowners. The conclusions and recommendations of these meetings were then reviewed by the Planning Commission and the Board of Supervisors (Board).

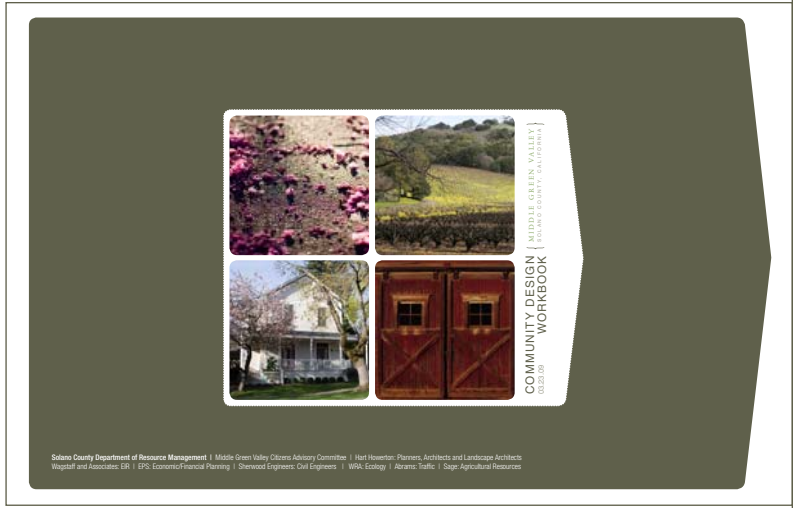
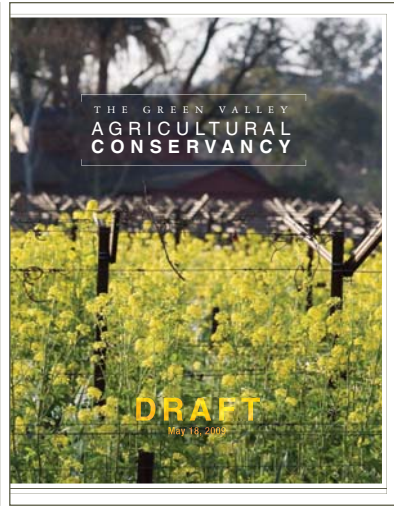
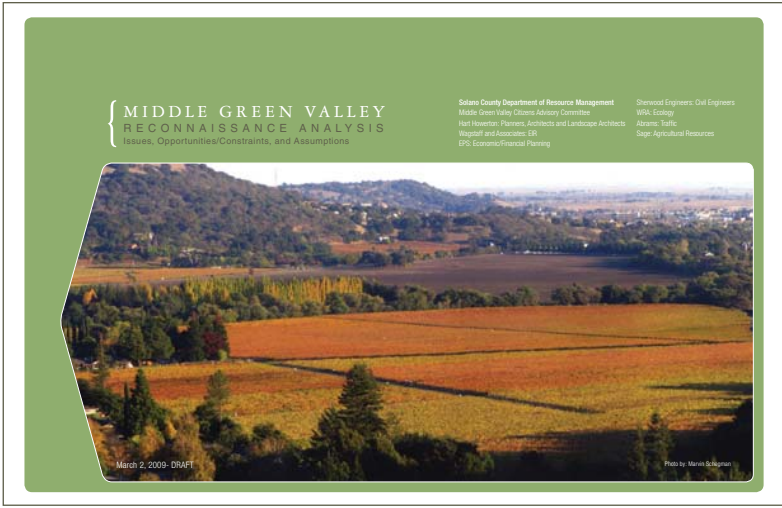
2.5.2 COUNTY ESTABLISHES SPECIAL STUDY AREA (SSA)

As part of the 2008 General Plan update, the community vision crafted by the initial CAC process was incorporated into the General Plan to create a SSA for the Middle Green Valley area. A goal and policies were developed based on this community vision to provide a “*framework for implementing the future vision of a rural community with compatible residential development*” (Solano County General Plan – Page LU-54). This included the provision to prepare a Specific Plan that should address this overarching vision.

2.5.3 FOLLOW-UP COMMUNITY WORKSHOPS

Following the approval of the 2008 General Plan, a series of CAC workshops were completed to craft a long term, equitable and sustainable development plan for this area in the Winter and Spring of 2009. This series of meetings focused on responding to the goal and policies set out in the General Plan, the on-going evolving aspirations of the community, and a full understanding of the land and context. The resulting plan is based on these main precepts of community based planning:

- **A Consensus Built Plan** – The development plan is based on a shared vision and understanding of priorities so that all participants in the design process take ownership and are full advocates of this Specific Plan.
- **A Resource Based Plan** – The design is based on an understanding of the land, resources, opportunities and constraints.
- **A Pattern of Settlement and Conservation** – Proven community design concepts and development incentives are incorporated to maintain the rural aesthetic, preserve resources and create a strategic and sustainable agricultural plan.
- **A Plan Consistent with General Plan Goals and Policies** – The Plan builds on the underlying policies of the General Plan that emphasize maintaining rural quality in open spaces and viewsheds while allowing for appropriate community development.
- **A Plan that Works** – The development plan reflects the realities of strategic financing and phasing concepts as well as integrating other county-wide implementation policies.



This plan compliments the area and is one I can be proud of. I would not have settled for anything less. It is unique in its conservation and in its architecture. It offers a little "something for everyone" in the varied style, size of homes and the lots it offers. More than that, it actually brought two opposing groups together in their acceptance and appreciation of a plan, and caused others to understand, respect and appreciate the land and those who earn their living from it...

Sarah Lindemann – Landowner and CAC Member

I believe the truly unique aspects of Middle Green Valley have yet to be realized. While the plan facilitates some very desirable outcomes, the breakthrough is cultural, and is yet to come. It is human interaction with nature and the production of food that is elemental and necessary to a sane life.

Bill Mayben – Neighbor and CAC Member

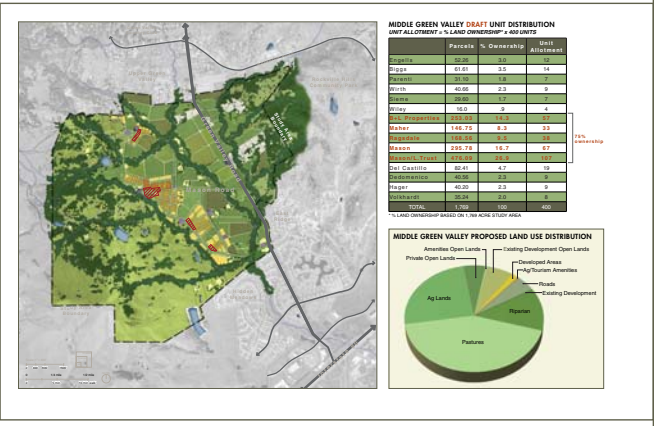
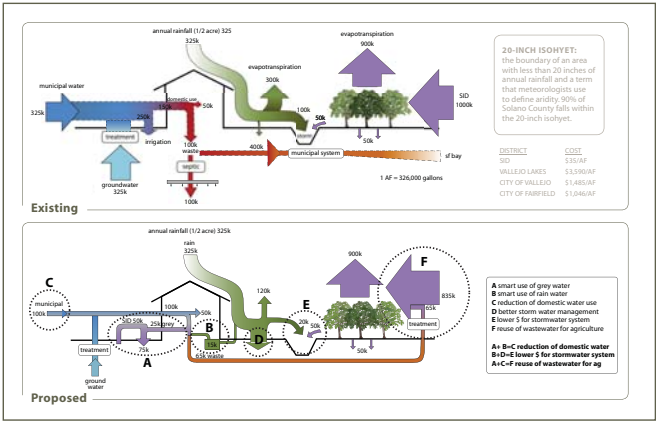


Figure 8-8: CAC Meeting Materials and Handouts



Figure 3-1: The Neighborhood Pattern: View Looking South to the Main Green at Elkhorn Neighborhood

Despite the best of intentions, conventional planning studies frequently overlook some of the most important aspects of a community that make it a special place. This concern was the driving force for local officials and residents in the small valley...to devise a more creative means of identifying the features most needy and worthy of protection. Basic to their approach was the recognition that many times these important elements are either too obvious or too subtle to be noticed until they are gone

- Randall Arendt

3.0

THE NEIGHBORHOOD PLAN PATTERNS, CONCEPTS AND CHARACTER

This chapter sets forth the physical plan framework for development and conservation within the Middle Green Valley SSA. In tandem with Chapter 5 – The Neighborhood Design Code, this Chapter establishes the policies and strategies that support the realization of a community that integrates Open Lands, circulation, land use and built character to create a contemporary, sustainable, small town neighborhood. It includes the types, intensities and allowed land uses, summaries of Building Types and character, Open Lands treatments, and the conceptual street and trail network.

The information described in this Chapter sets out specific policies and concepts related to each of the layers of the plan, (**the Green**, **the Gray** and **the Built**) Fabrics and should be used in conjunction with the balance of the Specific Plan to understand how these elements together create a comprehensive development plan.



3.1 AN OVERVIEW - NEIGHBORHOOD PLANNING POLICIES

The neighborhood planning policies described below are the overarching policies of community design that build on the main goal and policies of the SSA, the relevant goals and policies in the General Plan and the Principles set out in Chapter 1.0. Specific policies related to the Green, the Gray, and the Built fabrics are contained in those respective sections.

[Specific Plan Policies]

Policy NP-1: Promote sustainable development approaches that emphasize the ideals of resource conservation, stewardship, education and community participation.

Policy NP-2: Promote a stewardship ethic by emphasizing the interrelatedness of ecological, cultural and built systems and how the decisions we make affect those systems.

Policy NP-3: Provide a series of distinct, compact, walkable, interconnected neighborhoods, each with a recognizable center and guided by the precepts of traditional neighborhood design.

Policy NP-4: Provide a conservation framework that ensures the long term preservation and viability of resources and productive agricultural lands.

Policy NP-5: Develop a form-based design approach (rather than land use) that emphasizes the concepts of anticipating change, creating human scale environments and ensuring that safe, vibrant streetscapes are realized.

Policy NP-6: Support and develop local opportunities for agricultural tourism uses, related venues, and educational opportunities.

Key Specific Plan Principles:

- 2. Revitalize and reconnect the community to the agricultural and ranching legacies of the area.
- 4. Support and enable the values of craftsmanship that emphasize thoughtful, durable, high quality neighborhood design concepts.

3.1A - GENERAL PLAN CONSISTENCY REFERENCE - NEIGHBORHOOD DESIGN AND PLANNING

The design of the overall neighborhood plan framework and the supporting Specific Plan policies described in this Section are consistent with and build upon the following goals and policies found in the General Plan:

[MIDDLE GREEN VALLEY SSA GOAL AND POLICIES:]

SS.G-1: Protect and maintain the rural character of Middle Green Valley while allowing opportunities for compatible residential development to occur.

SS.P-1: Maintain the rural character of Middle Green Valley while still allowing development to be guided into areas screened from Green Valley Road because of natural contours in the land, woodland vegetation, and/or riparian vegetation. Locate upland development in areas screened by landforms or vegetation.

SS.P-2: Balance the protection of resources in Middle Green Valley (e.g. view sheds, oak woodlands, riparian habitat, sustainable agricultural use) while allowing development to occur.

[LAND USE GOALS AND POLICIES:]

LU.G-2: Encourage a development pattern that first seeks to maintain existing communities, second to develop vacant lands within existing communities presently served by public services, and third to develop lands immediately adjacent to existing communities where services can easily be provided.

LU.G-3: Create sustainable communities with areas for employment, shopping, housing, public facilities and services, and recreation in close proximity to each other.

LU.G-4: Encourage land use development patterns and circulation and transportation systems that promote health and wellness and minimize adverse effects on agriculture and natural resources, energy consumption, and air quality.

LU.P-34: Promote patterns of development that encourage physical activity to reduce obesity, cardiovascular disease, asthma, diabetes, or injury; and that contribute to a “sense of place” and emotional well-being.

LU.P-36: Promote land use decisions that reduce injuries (pedestrian, bicycle, and motor vehicle crashes), and provide access to healthy food choices, including locally grown fresh fruits and vegetables throughout the county.

[AGRICULTURE GOALS AND POLICIES:]

AR.G-1: Recognize, value, and support the critical roles of all agricultural lands in the stability and economic well-being of the County.

AR.G-2: Preserve and protect the county’s agricultural lands as irreplaceable resources for present and future generations.

AR.G-3: Support the ability of farmers to earn sufficient income and expand the county’s agricultural base by allowing for a wide range of economic activities that support local agriculture.

AR.G-8: Seek to increase the value-added component of the county’s agricultural economy to a level that meets or exceeds the state average.

AG.P-12: Promote agriculture as a major county industry and support marketing efforts for Solano County-grown and value added products and agricultural services and compatible activities.

[RESOURCE GOALS AND POLICIES:]

RS.G-3: Repair environmental degradation that has occurred, and seek an optimum balance between the economic and social benefits of the county’s natural resources.

RS.G-5: Ensure availability of affordable energy supplies and require efficiency and conservation measures to minimize energy consumption.

RS.P-1: Protect and enhance the county’s natural habitats and diverse plant and animal communities, particularly occurrences of special-status species, wetlands, sensitive natural communities, and habitat connections.

RS.P-36: Support and encourage practices that reduce light pollution and preserve views of the night sky.

RS.P-46: Encourage local farmers and ranchers to incorporate recreational and educational activities that provide visitor oriented opportunities into agricultural land, in areas deemed appropriate for such opportunities.

RS.P-49: Ensure energy conservation and reduced energy demand in the county through required use of energy-efficient technology and practices.

RS.P-51: Promote Solano County as a model for energy efficiency and green building.

RS.P-53: Enable renewable energy sources to be produced from resources available in Solano County, such as solar, water, wind, and biofuels to reduce the reliance on energy resources from outside the county.

RS.P-54: Reduce Solano County’s reliance on fossil fuels for transportation and other energy-consuming activities.

RS.P-59: Encourage on-site renewable energy production and use and energy conservation measures.

RS.P-65: Require the protection of natural water courses.

[PUBLIC HEALTH AND SAFETY GOALS AND POLICIES:]

HS.G-7: Prepare for and adapt to the effects of climate change.

HS.P-1: Prevent or correct upstream land use practices that contribute to increased rates of surface water runoff.

HS.P-12: Require new development proposals in moderate or high seismic hazard areas to consider risks caused by seismic activity and to include project features that minimize these risks.

HS.P-13: Review and limit the location and intensity of development and placement of infrastructure in identified earthquake fault zones.

HS.P-40: Increase access to healthy foods throughout the county.

HS.P-43: Support land use, transportation management, infrastructure and environmental planning programs that reduce vehicle emissions and improve air quality.

[ECONOMIC DEVELOPMENT GOAL:]

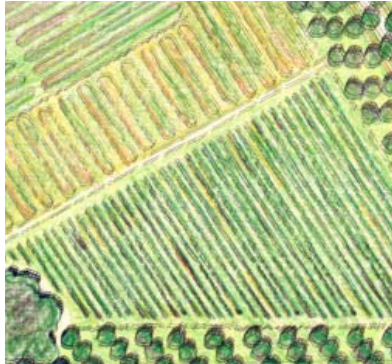
ED.G-6: Preserve and expand the county’s agricultural base by allowing for a wide range of economic activities that support local agriculture.

[PUBLIC FACILITIES AND SERVICES POLICIES:]

P.F.P-20: Minimize the consumption of water in all new development.

P.F.P-33: Require development projects to minimize pollution of stormwater, water bodies receiving runoff, and groundwater, and to maximize groundwater recharge potential by:

- implementing planning and engineering design standards that use low-impact development techniques and approaches to maintain and mimic the natural hydrologic regime;
- using “infiltration” style low-impact development technologies; and
- following stormwater best management practices during and after construction, in accordance with relevant state-required stormwater permits.



The more living patterns there are in a place - a room, a building, or a town - the more it comes to life as an entirety, the more it glows, the more it has that self-maintaining fire which is that quality without a name.

~ Christopher Alexander, *The Timeless Way of Building*

3.2 THE PLAN – LAYING THE FRAMEWORK FOR A NEW RURAL COMMUNITY

This Specific Plan is based on articulating an interwoven pattern of conservation and development that centers on creating a diverse range of housing, recreational, neighborhood commercial and agricultural tourism related opportunities. The intent is to accommodate a limited number of residential units in a compact development pattern that is consistent with the goals and policies of the General Plan (See Section 3.1A) as well as the recommendations of the Green Valley community. Throughout this Chapter, the relevant General Plan goals and policies are referenced for each of the three layers of the Plan.

The Transect Model - The Transect model is the underlying framework that organizes the three predominant layers of the development plan. These layers work together to create a pattern of volumes, masses, gathering spaces, events, and outdoor rooms that may evolve over time into a vibrant, memorable place:

- **The Green Fabric:** the interconnected network of green space or Open Lands that conserves natural ecosystem values and functions while providing associated agricultural, recreation, health and social benefits;
- **The Gray Fabric:** the circulation system of streets, bikeways, pedestrian pathways, and trails, that provides the social glue to connect the community; and
- **The Built Fabric:** the pattern of vertical elements and masses that completes the overall small town settlement.

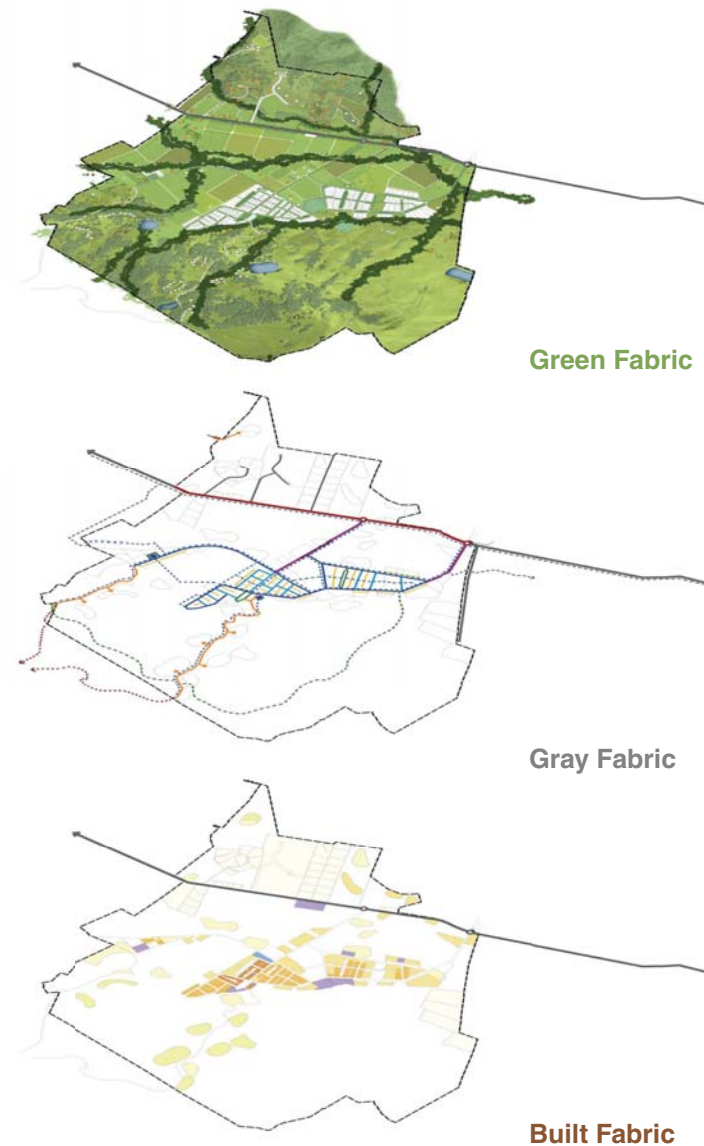


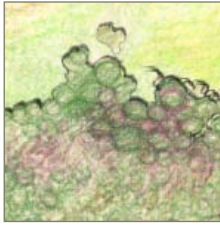
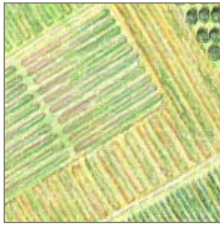




Figure 3-2: The Plan Framework

The Transect is based on the transect of nature that originally depicted geographical cross sections of a region to reveal a sequence of environments. The Transect model applied to the plan for Middle Green Valley shows how environments progress from greater density and intensity of use in the neighborhood cores to less dense and intense uses as settlement moves into the more rural areas.

The emphasis of the Transect is that it seeks to not be specific about zones with prescribed land uses, but emphasizes the characterization of a series of environments, each with an appropriate scale and neighborhood character. This approach identifies the main qualities of each environment allowing more flexibility in creating cohesive and flexible neighborhoods appropriate to the rural setting. This sequence of environments reflects an analysis of identifying the most suitable lands for development and preservation and is used as the basis for the Neighborhood Design Code, as set forth in Chapter 5.

For detailed land use designations and allowed uses refer to land use designations as set out in Section 3.5.3, Figure 3-42 and Table 3-4.

Table 3-1: The Middle Green Valley Transect Overview

ZONE	ID AND DESCRIPTION	
T1	CONSERVATION This Zone consists primarily of drainages and associated vegetated buffers.	
T2	AGRICULTURE This Zone consists of the rural, ranching and productive agriculture lands that are intended to be preserved and remain in active agriculture.	
T3-1 AND T3-2	RURAL 1 AND RURAL 2 This Zone consists of lands that support a more rural residential fabric.	
T4	NEIGHBORHOOD EDGE This Zone consists primarily of a low density neighborhood fabric that provides the edge to the agricultural landscape.	
T5	NEIGHBORHOOD CORE This Zone consists of a low to medium density neighborhood fabric that could accommodate a mix of uses.	
T6	NEIGHBORHOOD CENTER This is the center of the community. This area consists of the widest variety of uses within a medium density mixed-use neighborhood fabric.	

Specific Plan Terminology:

This document uses the following terminology:

Built Fabric - the vertical component of the neighborhood fabric that includes buildings, facades, roofs, fences, building projections, and walls.

Green Infrastructure - is the interconnected network of open spaces and natural areas – greenways, drainages, parks, retention and detention areas, woodlands, and preserves – that naturally manages stormwater, reduces the risk of floods, captures pollution, and improves water quality. In neighborhood areas, that network is extended by means of rain gardens, tree plantings, permeable pavement and other landscape-based drainage features that restore, protect, and mimic natural hydrologic functions within the built environment.

Green Fabric - refers to the overall network of Open Lands as a single comprehensive layer that knits the plan together.

Green Streets - is the application of traditional street design principles that focus on walkability, pedestrian safety, access, and creating attractive streetscape environments while managing stormwater on-site that improves water quality, groundwater recharge, and minimizes flood potential.

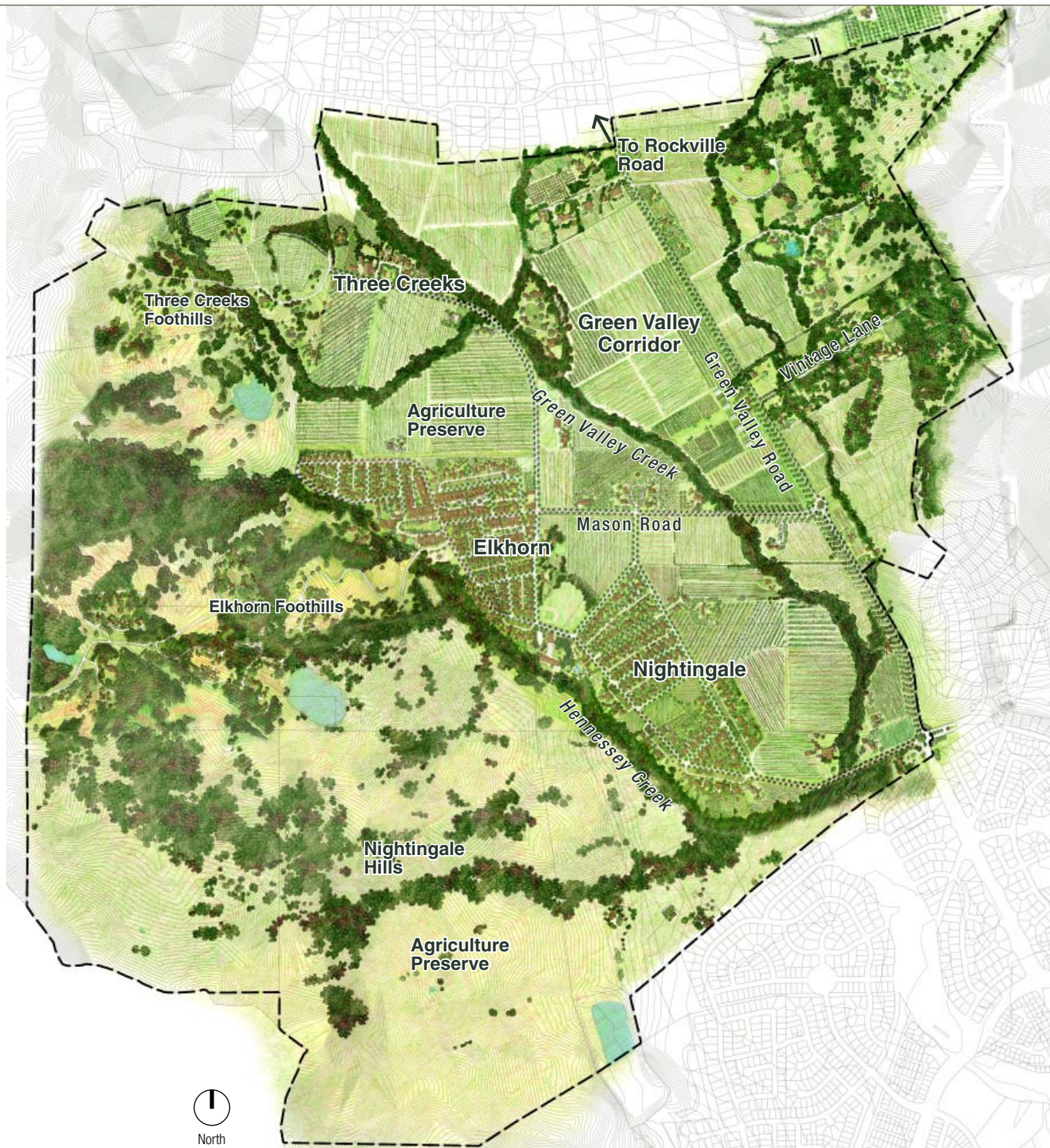
Gray Fabric - refers to the overall network of streets and paths that provides many alternatives to move around the neighborhood.

Low Impact Development (LID) - The primary goal of LID is to mimic the predevelopment site hydrology by using site design techniques that store, infiltrate, evaporate and detain runoff. Stormwater is managed in small, cost effective landscape features rather than being conveyed and managed in large, costly detention pond facilities. This approach also provides aesthetic and quality of life improvements by improved landscape areas, less impervious surfaces, and reduced potential for flooding.

Open Lands – refers to the open spaces threaded throughout the plan which vary from the most passive, natural areas (conservation and riparian areas) to the more intensive, civilized areas, such as parks and working agricultural lands.

Transect - The rural to more urban Transect is divided into six Transect Zones. These six habitats vary by the level and intensity of their physical and social character, providing immersive contexts from rural to more urban form.

A full list of definitions may be found in Appendix A.



3.2.1 PLAN NEIGHBORHOOD FRAMEWORK

The community plan is made up of four component areas. The following section provides a general description of the Green, Gray and Built Fabric layers of each area, the development and conservation concepts and how they may evolve to respond to the changing needs of the community.

THESE FOUR AREAS ARE:

- The Green Valley Road Corridor,
- Elkhorn Neighborhood (including Elkhorn Foothills),
- Three Creeks Neighborhood (including Three Creeks Foothills), and the
- Nightingale Neighborhood.

Figure 3-3: Illustrative Plan of Middle Green Valley Specific Plan Area

A. GREEN VALLEY ROAD CORRIDOR:

The Green Valley Road Corridor provides the main access to the Plan Area and is envisioned as the front door to the series of new Middle Green Valley neighborhoods.



[1]

[Green Fabric:]

Working agricultural lands, vineyards and the Green Valley Creek corridor will continue to be the predominant landscape elements that reinforce the agricultural identity of the area as well as the scenic and rural qualities of Green Valley. Views of the new neighborhoods to the west of Green Valley Creek will be obscured from Green Valley Road. Appropriate restoration and revegetation activities, under the oversight of the Conservancy (refer to Chapter 4), will take place along Green Valley Creek to ensure the re-establishment of this biotic habitat and migration corridor.

- [1] View to Elkhorn from Proposed Farm Stand Site
- [2] Rural Collector - Street Section
- [3] The Green Valley Farm Stand Conceptual Sketch



[2]

[Gray Fabric:]

Green Valley Road will remain at its current width and include improved shoulders, restored vegetated swales, an integrated street tree planting treatment and a new multi-use trail (to replace the existing). Two roundabouts are envisioned, one at Mason Road and one at the Eastridge gate to smooth and calm traffic along this corridor. One new Local Road is proposed at the southerly boundary, which provides an additional access point to the Nightingale neighborhood and the neighborhoods to the north. Mason Road will be improved to a Local Road standard and include street tree plantings and a multi-use trail that connects to the community path system. Appropriate fencing, low walls and/or hedgerow planting treatments will be used along all thoroughfares to provide a transition and buffer to adjoining working agricultural lands.



[3]

[Built Fabric:]

To reinforce the visibility and viability of agriculture, a small local produce stand – The Green Valley Farm Stand with complimentary uses such as a café or restaurant and a community gathering facility (a grange hall) is located just north of the new roundabout at Mason and Green Valley Roads. The Green Valley Farm Stand will be one of the first tangible results of the Specific Plan. It will celebrate and further the area's agricultural traditions and help to satisfy burgeoning local and regional demand for fresh local food. In addition, it will provide the opportunity to strengthen the connections to local farmers and regional farmlands. This facility is a multi-purpose, flexible building that could be used to accommodate open air community, interpretive or educational events.

Existing and new agricultural residential, rural farm and rural meadow residential uses occur in this corridor. Agricultural tourism opportunities are also identified at the existing vineyard operations in the southerly portion of this corridor.



Figure 3-4: Green Valley Corridor Plan Detail



North

--- Trail Connections

B. ELKHORN NEIGHBORHOOD:

This neighborhood is the heart of the community and accommodates the potential for the most varied mix of uses and Building Types.



[1]

[Green Fabric:]

The Main Green, located in the center of this neighborhood, provides the main social, cultural and gathering space for the community. Connected to the balance of the community by a network of paths, trails, streets and rambles, the Green will provide the space for markets, event areas for surrounding potential retail uses, strolling, gathering, gardening, informal meetings and passive recreational activities. Located just to the south of the Main Green is the Elkhorn trailhead that provides overflow, trail access and event parking. Throughout the Elkhorn neighborhood is a network of small and large Open Lands components that tie this neighborhood to the balance of the community.

[1] View to Elkhorn Peak

[2] View of Elkhorn Street Fabric

[3] View of Elkhorn Main Green



[2]

[Gray Fabric:]

An informal grid pattern of tree lined, appropriately sized streets provides access and parking throughout the neighborhood. A one-way street with parking on one side encircles the Main Green to create a park-like atmosphere that ties the area together socially and physically.

Within the foothill areas to the west, new roads are designed to respond to the topography and minimize grading. An improved emergency access link is provided in the foothill areas to the west to link the Elkhorn and Three Creeks foothill neighborhoods.

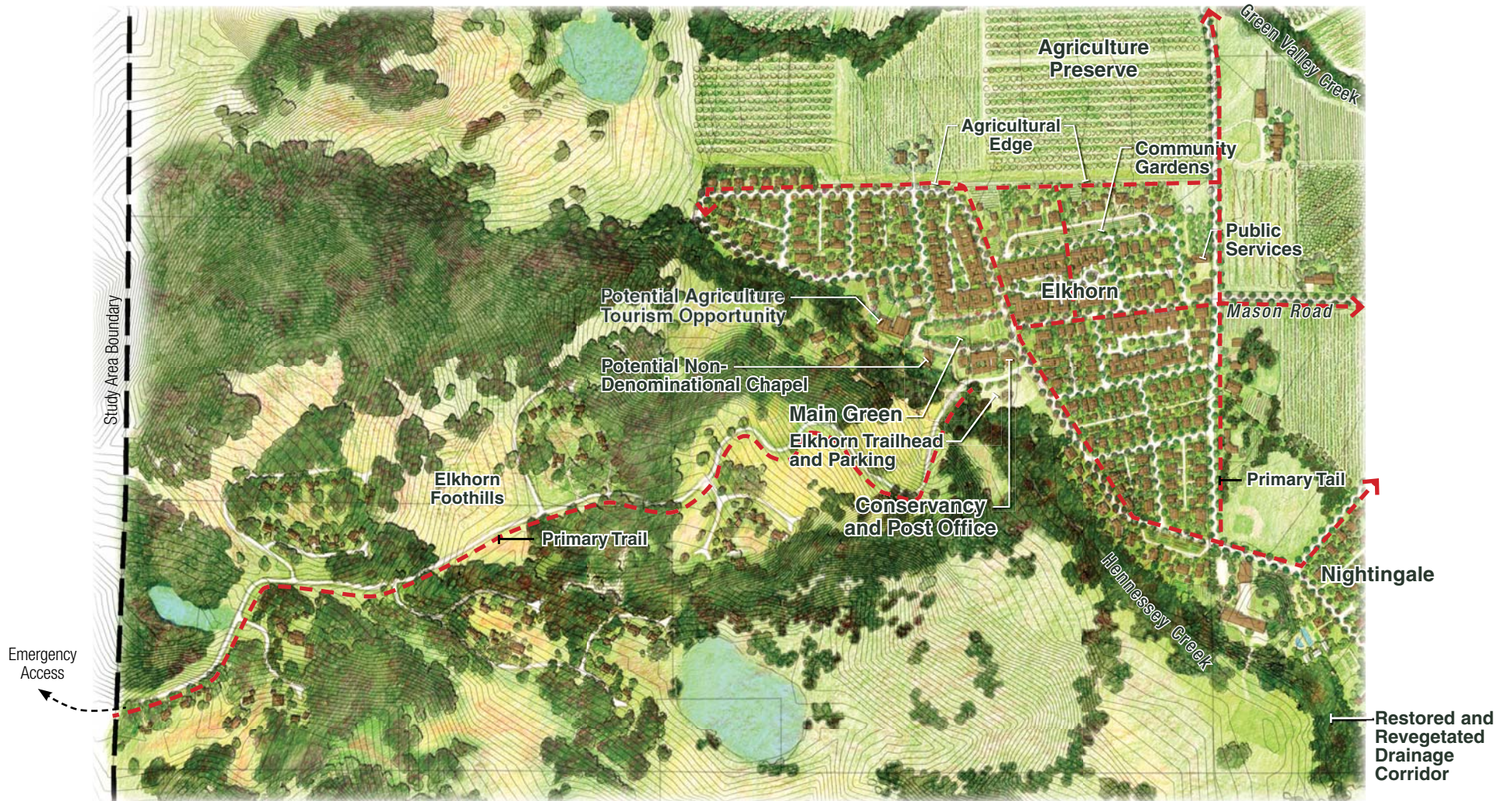


[3]

[Built Fabric:]

This neighborhood includes the widest variety of Building Types and uses within the Plan Area. The most intense development uses are focused around the Main Green. It is envisioned that an agricultural/tourism use is centered on the Green (such as a small Inn - 25 room maximum), a non-denominational Chapel, a building that houses the Conservancy and post office (Conservancy House), and a blend of attached and detached Building Types that house a mix of neighborhood retail and residential uses. The balance of the neighborhood, includes a mix of attached and detached residential Building Types arranged around smaller community green spaces until finally there is a distinct settlement edge where agricultural lands start.

Just west of the main Main Green in the Elkhorn foothills is a mix of rural residential buildings nestled in the oak woodlands and meadows. These residential uses are clustered along the edges of meadow openings which are invisible to the valley floor. Surrounding these areas are Open Lands that consist of woodlands, grasslands and drainage areas to be managed as grazing lands and lands to be preserved and/or restored.



--- Trail Connections

Figure 3-5: Elkhorn Neighborhood Plan Detail



C. NIGHTINGALE NEIGHBORHOOD:

This neighborhood is located just south of the Elkhorn Neighborhood at the base of the southwesterly hills called the Nightingale hills.



[1]

[Green Fabric:]

A network of passive and active Open Lands is envisioned throughout the Nightingale neighborhood centered on a Green that is surrounded by residential detached Building Types. The Open Lands pattern includes the restored and revegetated Hennessey Creek Corridor, sports fields, community gardens, informal recreation areas and/or agriculture uses (orchards, vineyards, rowcrops) that weave throughout the neighborhood.



[2]

[Gray Fabric:]

This neighborhood is accessed from the east by a new local road that originates at Green Valley Road. This new road provides a southerly access for the Plan Area and provides the main link to the Nightingale neighborhood. The neighborhood is also accessed from the north by roads originating from Elkhorn. Like the rest of the valley neighborhoods, this area utilizes an informal street grid of alleys, neighborhood streets and one-way lanes to provide a traditional street network akin to the small towns of California.



[3]

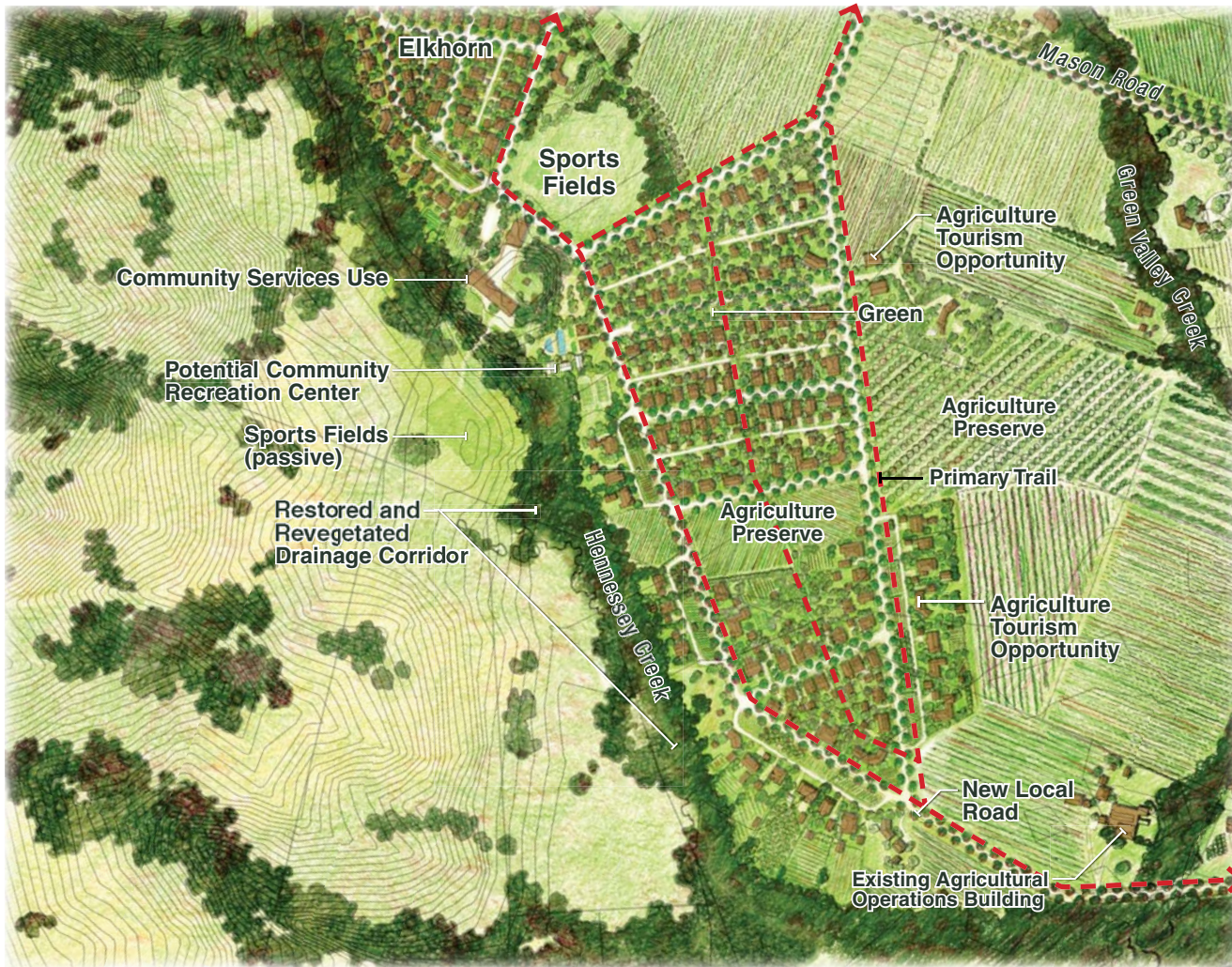
[Built Fabric:]

Nightingale accommodates residential detached Building Types. To compliment the residential uses, key sites have been located for potential neighborhood commercial, community and agricultural tourism uses that work to anchor this neighborhood and provide iconic building forms in the agricultural landscape. A community services use, which could include a private neighborhood elementary school (maximum 100 students) with adjoining sports field is envisioned in the northwesterly portion of the neighborhood. Next to the community services area, a recreational/fitness center (or similar) is located to provide the community with an active gathering space.

[1] Sports Fields at the Nightingale Neighborhood

[2] The Ramble - Trail Section

[3] The Farmstead Building Type



--- Trail Connections

Figure 3-6: Nightingale Neighborhood Plan Detail



D. THREE CREEKS NEIGHBORHOOD:

Just to the north of the Elkhorn neighborhood is the smaller Three Creeks neighborhood that is primarily focused on the existing Green Valley (GV) Cellars winery and related agricultural tourism and operations.



[1]

[Green Fabric:]

This neighborhood is organized around a smaller neighborhood Green that serves as another local gathering spot with opportunities for outdoor gatherings, flexible areas for winery events, community gardens and/or passive recreational venues. The Green is connected to the overall green fabric of small and large Open Lands components that tie this neighborhood to the balance of the Community. The Green also acts as a trailhead with street parking that would provide trail access to community trails.

[1] Neighborhood Green at Three Creeks

[2] Neighborhood Street Design

[3] The Bungalow Building Type



[2]

[Gray Fabric:]

This neighborhood is connected to the community by a neighborhood street originating from the Elkhorn Neighborhood. The street pattern in the valley area is a simple grid that provides easy access to residential and agricultural uses. Within the foothill areas to the west, roads are designed to respond to the topography and minimize grading. An improved emergency access link is provided in the foothill areas to link the Elkhorn and Three Creeks foothill neighborhoods.



[3]

[Built Fabric:]

Three Creeks accommodates the potential for a mix of Building Types, which could house agricultural and residential uses to compliment the existing winery and operations. This includes agricultural tourism uses and detached residential Building Types.

A mix of rural residential and agricultural uses are proposed in the foothill areas just west of the winery. These residential uses are clustered at the edge of meadow openings which are invisible to the lower valley floor. Surrounding these areas are Open Lands that consist of woodlands, grasslands and drainage areas to be managed as grazing lands and/or lands to be preserved.



Figure 3-7: Three Creeks Neighborhood Plan Detail





3.3 OPEN LANDS – THE GREEN FABRIC

The Open Lands network provides the basis for the overall community patterns. This Green Fabric builds on the patterns of the rural setting to create a diverse geography of open spaces, parks, fields, community gardens, creeks, swales, greenways, streetscapes and natural areas. This network of green space is a multi-functional component of the Plan that is more than just a visual amenity. Its main functions are to:

- *conserve and protect the natural ecosystem values and functions,*
- *provide associated recreation, health and social benefits,*
- *preserve and sustain agricultural lands; and*
- *serve as an integral infrastructure role to minimize air pollution, enhance water quality and control flooding.*

The Open Lands information described in this section addresses the resource protection, agriculture, stormwater and Open Lands policies and concepts used to derive the layout of the Green Fabric. This section is to be used in conjunction with the following two layers (the Gray Fabric and the Built Fabric) to understand how these layers work together to create a comprehensive, fully integrated community plan that draws from the underlying concepts of the Transect model. Building Types, landscape and Open Lands requirements and Standards set forth in Chapter 5 provide assurances that this network is realized.

{ *Show me a healthy community with a healthy economy and I will show you a community that has its green infrastructure in order and understands the relationship between the built and the unbuilt environment.* }

- William Rogers, Trust for Public Land

The community described in the Middle Green Valley Specific Plan will be an extraordinary place for people to live. In contrast to typical isolated subdivision housing projects, the plan connects residents to their neighbors, the agricultural landscape, and surrounding open spaces. These connections will have a very positive affect on quality of life for everyone in the Valley.

Nancy Nelson – Neighbor and CAC Member

It has open space galore, a variety of home types for all people, plus commercial and community structures for everyday needs. It is the ideal community location with a perfect country atmosphere. How can you find anything better?

Bob Hager – Landowner and CAC Member

3.3.1 SPECIFIC PLAN OPEN LANDS POLICIES

The Open Lands Policies seek to further the achievement of the Principles of this Plan as well as the applicable goals and policies of the General Plan.

[Resource and Recreation Policies]

Policy OL-1: Ensure that a varied and diverse network of active and passive open lands is distributed throughout the community.

Policy OL-2: Prepare a Resource Management Plan (RMP) to be used by the Conservancy that specifies the long term sustainability and management programs for resource protection and restoration.

Policy OL-3: Utilize green infrastructure techniques to provide an interconnected network of Open Lands and natural areas that naturally manage stormwater, reduce the risk of floods, capture pollution, and improve water quality.

Policy OL-4: Utilize Open Lands to provide visual buffers, land use transitions and the establishment of a distinct edge between agriculture and settlement areas.

Policy OL-5: Repair wetland and riparian areas to improve habitat and water quality for animal populations while minimizing long term project impacts.

Policy OL-6: Develop an integrated Stormwater Management Plan that promotes sustainable alternatives to managing water and water quality.

Policy OL-7: Preserve oak woodlands and the habitat they provide.

Policy OL-8: Promote grazing management standards that protect the long term vitality of the oak woodlands.

Policy OL-9: Promote the use of native and naturalized plantings in community landscaping plans.

[Agriculture Policies]

Policy OL-10: Promote sustainable agricultural practices that minimize affects to ecological systems.

Policy OL-11: Provide appropriate buffers and transition areas to agriculture lands to reduce operational conflicts between residential and agricultural areas consistent with EIR mitigation measure 15-1.

Policy OL-12: Promote the preservation and sustainability of agriculture as a key defining element and catalyst in the creation of a community that values, supports and honors its agrarian history.

Policy OL-13: Support a comprehensive food systems planning strategy at the community and regional levels. Develop an Agricultural Business Plan (ABP) that sets out a strategic business plan to establish a thriving sustainable and feasible agricultural operation linked to the overall regional food system economy.

Policy OL-14: Integrate agriculture and agricultural related activities into the day-to-day social, economic and cultural workings of the community. Encourage and develop complimentary educational and agricultural tourism opportunities that reinforce the importance of agriculture and the understanding that the food system represents an important part of the community and regional economies.

3.3.1A - GENERAL PLAN CONSISTENCY REFERENCE - GREEN FABRIC:

The design of the overall Open Lands framework and the supporting Specific Plan Policies described in this Section are consistent with and build upon these particular goals and policies of the General Plan:

[MIDDLE GREEN VALLEY SSA POLICY:]

SS.P-3: Allow for the migration and movement of wildlife.

[AGRICULTURE POLICIES:]

AG.P-19: Require agricultural practices to be conducted in a manner that minimizes harmful effects on soils, air and water quality, and marsh and wildlife habitat.

AG.P-21: Promote natural carbon sequestration to offset carbon emissions by supporting sustainable farming methods (such as no-till farming, crop rotation, cover cropping, and residue farming), encouraging the use of appropriate vegetation within urban-agricultural buffer areas, and protecting grasslands from conversion to non-agricultural uses.

AG.P-23: Support recreation and open space activities that are complementary and secondary to the primary agricultural activities on the land.

AG.P-25: Facilitate partnerships between agricultural operations and habitat conservation efforts to create mutually beneficial outcomes.

[RESOURCE GOALS AND POLICIES:]

RS.G-4: Preserve, conserve, and enhance valuable open space lands that provide wildlife habitat; conserve natural and visual resources; convey cultural identity; and improve public safety.

RS.G-10: Foster sound management of the land and water resources in Solano County's watersheds to minimize erosion and protect water quality using best management practices and protect downstream waterways and wetlands.

RS.P-5: Protect and enhance wildlife movement corridors to ensure the health and long-term survival of local animal and plant populations. Preserve contiguous habitat areas to increase habitat value and to lower land management costs.

RS.P-6: Protect oak woodlands and heritage trees and encourage the planting of native tree species in new developments and along road rights-of-way.

RS.P-35: Protect the unique scenic features of Solano County, particularly hills, ridgelines, wetlands, and water bodies.

RS.P-44: Support the provision of public lands for use in a trail network and where private land is necessary for creating connections for bike path or trail alignments. Work collaboratively with property owners to secure easements across private lands.

RS.P-45: Support the completion of regional trails that link destinations within Solano County and beyond, including the San Francisco Bay Trail, the Bay Area Ridge Trail...

RS.P-67: Encourage new groundwater recharge opportunities.

RS.P-68: Protect existing open spaces, natural habitat, floodplains, and wetland areas that serve as groundwater recharge areas.

RS.P-69: Preserve and maintain watershed areas characterized by slope instability, undevelopable steep slopes, high soil erosion potential, and extreme fire hazards in agricultural use. Watershed areas lacking water and public services should also be kept in agricultural use.

RS.P-70: Protect land surrounding valuable water sources, evaluate watersheds, and preserve open space lands to protect and improve groundwater quality, reduce polluted surface runoff, and minimize erosion.

RS.P-72: Preserve riparian vegetation along county waterways to maintain water quality.

[WATER RESOURCES AND QUALITY POLICIES:]

RS.P-73: Use watershed planning approaches to resolve water quality problems. Use a comprehensive stormwater management program to limit the quantity and increase the water quality of runoff flowing to the county's streams and rivers.

RS.P-75: Require and provide incentives for site plan elements (such as permeable pavement, swales, and filter strips) that limit runoff and increase infiltration and groundwater recharge.

[PUBLIC HEALTH AND SAFETY GOALS AND POLICIES:]

HS.G-5: Recognize the multiple functions of the natural environment for safety, recreation, protection from climate changes, and economic uses.

HS.G-6: Increase awareness of the effect humans have on the environment and encourage individuals and organizations to modify habits and operations that cause degradation to the environment and contribute to climate change

HS.P-2: Restore and maintain the natural functions of riparian corridors and water channels throughout the county to reduce flooding, convey stormwater flows, and improve water quality.

HS.P-3: Require new developments to incorporate devices capable of detaining the stormwater runoff caused by a 100-year storm event or to contribute to regional solutions to improve flood control, drainage, and water recharge.

HS.P-5: Appropriately elevate and flood proof developments for human occupancy within the 100-year floodplain for the profile of a 100-year flood event.

HS.P-9: Preserve open space and agricultural areas that are subject to natural flooding and are not designated for future urban growth; prohibit permanent structures in a designated floodway where such structures could increase risks to human life or restrict the carrying capacity of the floodway.

HS.P-24: Seek an appropriate balance between preventing and fighting fires and retaining the County's valuable visual and natural resources.

HS.P-45: Promote consistency and cooperation in air quality planning efforts.

[PUBLIC FACILITIES AND SERVICES POLICIES:]

PF.P-13: Support efforts by irrigation districts and others to expand Solano County's irrigated agricultural areas.

PF.P-34: Control the rate and dispersal of runoff from developments through use of detention and retention basins, appropriate landscaping, minimal use of impervious surfaces, and other stormwater facilities.

[PARK AND RECREATION ELEMENT GOALS & OBJECTIVES:]

1. Preserve and manage a diverse system of regional parks and natural resources for the enjoyment of present and future County residents and park visitors.

2. Promote, develop and manage diversified recreational facilities to meet the regional recreation needs of the County.

Objective 2: Ensure that there are at least ten (10) acres of regional and local parkland per each 1,000 persons.

Objective 3: Identify, preserve and manage significant regional recreation and natural areas.

Objective 7: Provide for the regional recreation needs of the County.

B. The County shall encourage development of linkages (such as riding, hiking and biking trails) between population centers and regional recreation facilities. Any trail system which links parklands cannot conflict with agriculture and other land uses.

C. Recreational needs of rural residents shall be considered in the design and development of rural residential subdivisions and parklands. Appropriate buffers will be provided to protect agriculture.

Objective 9: Encourage the development of private recreational areas within the unincorporated area, which complement public recreation facilities within the County. This may include privately developed campgrounds, golf courses, fishing lakes, etc.

B. Private recreation facilities should be located and designed in a manner that minimizes adverse impacts on surrounding residential, agricultural and open space uses.

3.3.2 OPEN LANDS OVERVIEW

A. Establishing the Pattern - The approximate 1,905 acres of the Plan Area is comprised of a valley floor with one main drainage corridor, surrounded by wooded foothills and existing rural residential development on the north, south and east. The topography includes grassy meadows, wooded canyons and ridges, a wide valley floor and one dominant drainage feature. The habitat has been substantially modified by over a century of intensive grazing, residential development and farming. The locations of sensitive resources have been used to locate clustered development in the most suitable areas while setting aside large, contiguous areas of Open Lands for agriculture, recreation and habitat. As a result of the natural and cultural resource mapping an appropriate pattern of Open Lands evolved:

- **Over 75%**, or approximately 1,490 acres of the Study Area is set aside as Open Lands, of which over 450 acres is to be placed in working agriculture.
- **Under 25%** of the Study Area, or less than 500 acres, was identified as the least environmentally sensitive and appropriate for areas for neighborhood development. These areas allow for an informal pattern of roads, residences and community buildings that minimize environmental impacts.



Figure 3-8: Regional Open Lands Map



Figure 3-9: Open Lands Diagram

Natural:

Areas of preservation and restoration that contain the most sensitive natural resources. These areas are able to support limited disturbance such as temporary interpretive, research, maintenance and restoration activities, and minor road, trail and bridge crossings.



Passive:

Areas of low disturbance and low maintenance that have values as environmental and agricultural assets and may support limited recreational and movement functions and on-going grazing activities.



Active:

Higher disturbance and higher maintenance areas that are able to support more active recreational, community and social functions and more intensive agricultural practices.



B. The Framework - Three levels of Open Lands provide a multi-layered framework in which a system of natural and built environments is located. These three levels are designated generally by the degree of disturbance and maintenance associated with them as described in Table 3-2 - Open Lands Summary.

Table 3-2: Open Lands Summary



Restoration and preservation of drainage corridors



Management of oak woodlands



Figure 3-10: Natural Open Lands

[NATURAL OPEN LANDS]

These lands are comprised of the natural resources that are best suited for long term preservation, enhancement and restoration. These lands are privately owned but subject to conservation easements for the long term

monitoring, management, and restoration of the resources and generally are found in the Open Lands - Natural (OL-N) land use category as described in Section 3.5.3. The primary natural Open Lands areas are as follows:

Drainage Corridors and Associated Buffers: The Green Valley Creek corridor, Hennessey Creek and smaller drainage corridors provide the main trunk lines for stormwater management, visual values and habitat movement. These areas include the stream and associated water dependent vegetation and buffers. Restoring and enhancing these corridors is a key element in improving downstream water quality, decreasing flood potential and protecting the functionality of wildlife corridor movement. Refer to Section 3.3.3 for sustainable Stormwater design techniques.

Steep Slope Areas: These areas include slopes greater than 30% which have high soil erosion potential. No structures are permitted on steep slopes and stabilization measures may be necessary to decrease sedimentation potential into nearby drainage corridors.

Oak Woodlands: Oak woodland areas on the surrounding foothills provide ecological and visual values. Monitoring these areas by managing grazing operations is important in protecting long term ecological values, Heritage Trees, and stabilization of slopes. Protection of Heritage Trees is provided in Section 5.5.6.



Continued grazing uses



New trail and interpretive uses

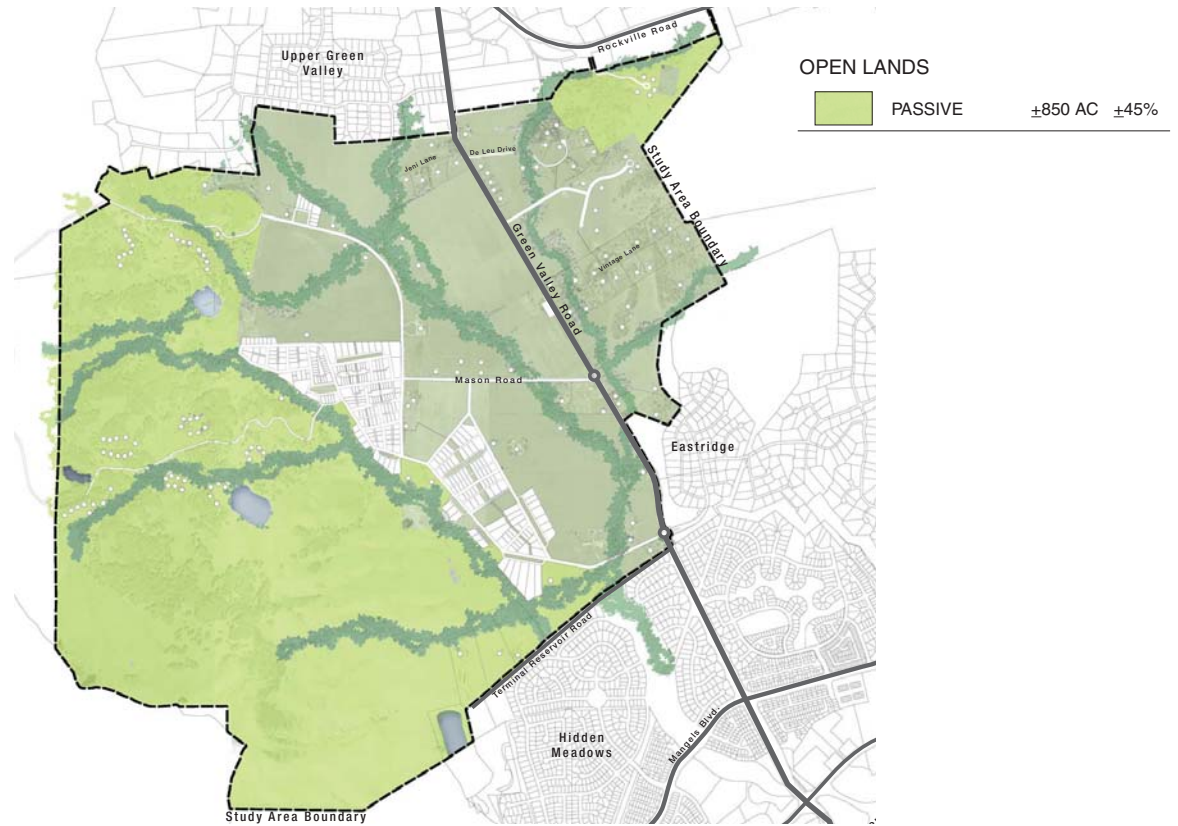


Figure 3-11: Passive Open Lands Map

[PASSIVE OPEN LANDS]

These lands are best suited for passive recreational functions as well as grazing activities. These lands are privately owned but subject to conservation easements for the long term monitoring and management of grazing operations, trail access, trail use and associated opportunities for educational and interpretive uses. These lands are found in the Agriculture land use designations (AG-WS, AG-R) as described in Section 3.5.3. The main passive Open Lands functions are as follows:

Grazing Lands/Livestock: These lands occur in the foothills of the Plan Area and are best suited for continued grazing, livestock operations and associated support structures. Privately owned but subject to conservation easements, these grazing lands will be overseen by the Conservancy to ensure that long term grazing operations remain viable while balancing the need to protect valuable resources. Through these areas, potential public trail easements may be located in order to provide future connections to open space and trail linkages (such as the Bay Area Ridge Trail to the west of the Plan Area) and areas beyond the Plan Area boundary. Appropriate fencing and signing

techniques are described in this Specific Plan to ensure that grazing and trail uses do not conflict.

Passive Recreation: Trails, hiking paths, trailheads and/or fire roads with associated improvements (fencing, trail signs, scenic overlooks, private property markings) used for hiking, biking, educational and interpretive functions and/or emergency access are envisioned within the foothill areas. These trails may provide hiking, interpretive and educational opportunities while providing potential trail access links to regional open space areas.

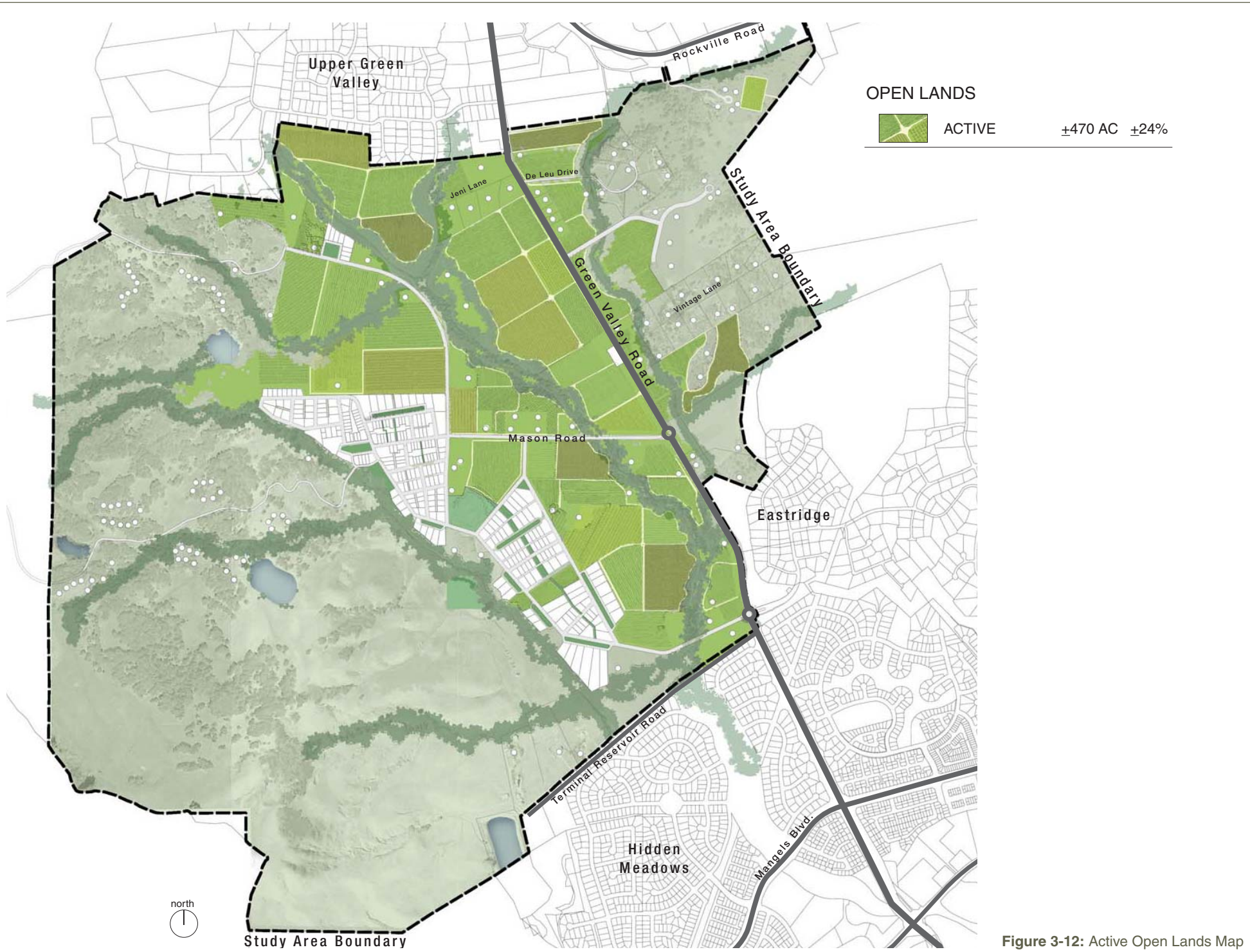


Figure 3-12: Active Open Lands Map



Orchards



Neighborhood Greens and Gathering Areas

[ACTIVE OPEN LANDS]

These lands are best suited for active recreation and the social functions of the community as well as the more intensive agricultural and farming practices. Portions of these lands (predominately the larger agricultural producing lands) are privately owned but subject to conservation easements.

The main functions of the active Open Lands are to provide for farming and food production, recreation, social venues, and a rich streetscape network. These lands occur in the Open Lands - Recreation (OL-R) and the Agriculture - Preserve (AG-P) land use designations as described in Section 3.5.3.

These areas are the most intensively landscaped and/or civilized lands:

Farming/Food Production: The Specific Plan provides for the potential of over 465 acres to be actively farmed which is over 2½ times the amount of currently farmed land in the Study Area. This includes farming or food production at varying scales distributed throughout the community; examples are: orchards, vineyards, kitchen and community gardens, market gardens, and rowcrops. In addition, the potential for complimentary agriculture-oriented activities such as farmers markets, agri-tourism uses, buy-local initiatives, and educational programs that teach children about growing their own food are all supported by the Conservancy and its mission.

Active Recreation: These lands are interspersed throughout the four component areas to provide opportunities for organized community and social functions and recreation. The potential for over 20 acres, including neighborhood Greens, trails, sports fields and pocket parks is designated within the Plan Area. Refer to Section 5.6 - Open Lands Standards for specific requirements within each neighborhood component.

Streetscapes: To reinforce the overall agricultural patterning, an approved street tree palette that utilizes a mix of historical, native and naturalized species provides a consistent landscape framework throughout the Plan Area. A street tree palette and associated shrubs and ground cover treatments have been identified for each of the street types. See Section 5.7.5 - Streetscape Standards for further detail.

Four main strategies for the protection and preservation of agriculture are articulated in the Solano General Plan:

- ensuring that agriculture endures as an essential part of Solano County's identity and lifestyle;
- maintaining and promoting agriculture as an important business and major contributor to Solano County's economy;
- preserving additional values of agricultural land, including important scenic value within the rural environment, providing habitat, providing options for recreation, and serving as community separators defining the county's distinct cities; and
- providing opportunities for agriculture to serve as an educational tool and tourist draw

(Solano General Plan, page AG-2)

C. Agriculture - Living in a working landscape that is connected to the regional network of Open Lands and agricultural lands shapes community life here in many positive ways. It is the intent of this Specific Plan to integrate agriculture into the larger Open Lands framework so the community may craft a lifestyle built around the importance of, and connection to agriculture and regional food systems. By utilizing cluster development principles this Specific Plan organizes the main neighborhood areas on lands best suited for development while leaving over 450 potential acres for working agricultural and over 850 acres of continued grazing lands (See Figure 3-12). This is over twice the amount of agriculture lands presently in the Study Area.

- In addition to setting aside large, continuous acreage for potential agricultural activities, this Specific Plan offers many opportunities **to reconnect to and support the farming legacy and lifestyle of the area.** This Specific Plan provides for the potential of a wide range of agricultural tourism, educational and agricultural related uses that could energize and begin to bring a brand to Middle Green Valley and Solano County. These uses include the establishment of the Green Valley Farm, a local farm stand along Green Valley Road, potential for a 25 room (maximum) inn or bed and breakfast that emphasizes the use of locally grown foods and products, opportunities for wineries, olive oil presses, artisan growers, and/or community gardens and the potential for a neighborhood elementary school that could include programs focused on agricultural awareness and education.
- This Specific Plan relies on two key components to implement and provide incentives for the preservation and long term sustainability of agriculture in the Plan Area:
 - o the use of a **transfer of development rights (TDR)** program and **conservation easements** to set aside areas of contiguous, connected, agriculture lands, and
 - o **the establishment of an independent non-profit Conservancy** to manage and monitor the operation of grazing and agricultural lands.

These key elements provide the promise of equitably consolidating agricultural lands, while providing an objective, non-profit Conservancy to ensure the on-going viability and oversight of agricultural activities. (See Environmental Stewardship - Section 3.3.4 and Chapter 4 - Implementation).

{ Marketing or branding of Solano County's produce and producing regions is another way to add value to agricultural products... the General Plan provides a framework for developing services that support agri-tourism, including restaurants, bed-and-breakfasts, and similar tourist oriented services. }

- Solano General Plan: Page AG-16—AG-17



3.3.3 SUSTAINABLE STORMWATER DESIGN

Integrated site management principles have been incorporated throughout the plan to manage, reduce and reuse stormwater. The main goal is to maintain predevelopment site hydrology to the extent practical by using site and infrastructure design techniques that store, infiltrate, evaporate, filter and detain runoff. This includes no increased runoff from pre-development conditions. The stormwater design plan is intended to be consistent with and supplement the County's National Pollutant Discharge Elimination System (NPDES) permit and Stormwater Management Plan.

Rainwater is often considered a waste product and therefore traditional strategies have targeted removing runoff from a site as quickly as possible. The interaction of stormwater with impervious surfaces, such as streets,

sidewalks, driveways, parking lots, and buildings prevents stormwater from infiltrating into the aquifer basin. Instead, surface runoff picks up speed and pollutants, causing a strain on stormdrain infrastructure and the receiving water bodies. By treating rainwater as a resource it is possible to return to more natural conditions, even within a more urban setting. Low Impact Designs (LID) attempt to mimic the natural hydrologic process by controlling stormwater at the source and allowing it to slowly infiltrate and filter through plants and soils. This process of slowing, filtering, and absorbing rain water results in reduced burdens on stormdrains and downstream discharge points. In addition, cleaner water is discharged into nearby creeks and serves to recharge the aquifer basin.

Sustainable stormwater design principles include the following:

- Reducing hydrologic impacts by minimizing impervious surfaces and graded areas.
- Managing stormwater at the source and on the surface. As soon as rainfall lands on a street or parking lot, allow it to infiltrate into the ground or provide surface flow to nearby landscaping. Promote infiltration whenever possible to recharge groundwater basin.
- Integrate the stormwater system into the Specific Plan as habitat, passive recreational space, and/or landscaped areas. Use plants and soil to absorb, slow, filter, and cleanse runoff. Let nature do its work.
- Design stormwater facilities that are simple, cost-effective and enhance community aesthetics. Decrease the utilization of typical engineering materials such as concrete and/or steel that reduces initial and continuing costs for infrastructure. Use materials such as native plants, soil and/or crushed rock applications to reinforce the rural landscape.
- Use a distributed approach to stormwater management by using a network of smaller, simpler solutions throughout the community. This includes finding increased opportunities for infiltration (utilizing pervious surfaces), depression storage, and vegetated swales that mimic the hydrologic functions of the site while at the same time adding aesthetic and biotic values.
- Collect and reuse treated and/or stormwater for landscape or agricultural purposes as feasible.



Figure 3-13: Roads and Streets Typical Design Approach - This suburban street is almost 100% impervious and designed primarily for auto flow. This combination contributes to higher auto speeds and large quantities of stormwater runoff.



Figure 3-14: Roads and Streets Sustainable Design Approach - By utilizing a more efficient site design, the space can be used for stormwater infiltration and additional landscaping to encourage slower vehicle speeds and increase pedestrian safety.

A number of initiatives have been incorporated into the planning for Middle Green Valley to sustainably manage water resources:

A. Education/Interpretive Opportunities

The design of the community plan emphasizes the importance of the Open Lands in establishing a healthy environment as well as providing for opportunities to engage the community in understanding that they are stewards of this environment. The Conservancy is responsible for organizing and monitoring educational and interpretive programs which include activities focused on understanding the watershed, capturing and utilizing rain water, enhancing migration corridors, restoring drainages, and establishing sustainable farming approaches.

B. Best Management Practices

Water management strategies that work at all scales, from regional solutions to the private backyard is important in creating a multi-layered system so that everyone participates in stormwater management solutions. (Refer to Section 5.5.3 for Grading and Drainage Standards for specific information).

B1 - Agriculture lands: An ecosystem-based agricultural approach that utilizes organic baseline standards, appropriate riparian buffers, native and/or perennial hedgerows or farm borders, and best management practices to protect downstream water quality impacts on neighboring creeks is included in the Conservancy's mission. (Refer to Chapter 4 - Implementation).

B2 - Roads and Streets: All thoroughfares have been designed to reduce impervious surfaces and infiltrate and direct overflow water to vegetated swales and landscape areas to provide for groundwater recharge and filtration. Civil designs are to include measures that address the increased saturation of the road base from utilizing road and street side infiltration techniques. All streets include an integrated planting treatment that creates an aesthetically pleasing streetscape as well as a functional stormwater component. (Refer to Figures 3-13 and 3-14 for road and street design approaches and Section 5.7 for Street and Circulation Standards).

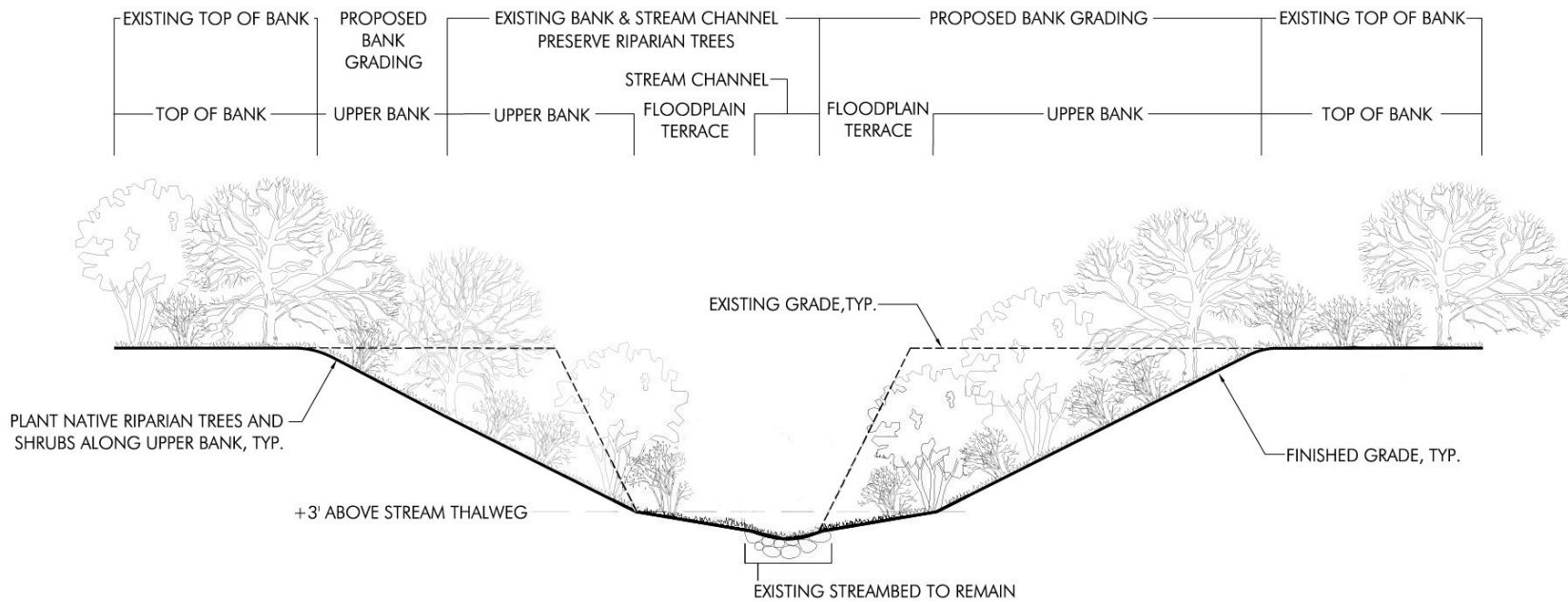


Figure 3-15: Drainage Restoration Concept Section

B3 - Parking Areas: All trailhead and street parking areas shall utilize permeable paving approaches to the extent feasible with vegetated swale components to capture and infiltrate water.

B4 - Greens, Parks, Trails, and Rambles: Outdoor gathering places and trail corridors are distributed throughout neighborhoods to act both as rainwater collection and social gathering areas. These areas use minimal impervious surfaces and provide opportunities for infiltration and recharge. Landscape treatments emphasize the use of native landscaping to reduce the need for regular irrigation. (Refer to Approved Plant List - Appendix D).

B5 - Private Lots: An approved plant list (included in Appendix D) includes native, naturalized and historically appropriate species that reduce

water demand. Private lots are required to utilize this plant list for all landscape materials. As provided in Sections 5.4.1 and 5.5, Building Coverage maximums reduce impervious surface coverage and require the use of permeable solutions where appropriate. Rainwater harvesting systems and installation of bioswales and/or rain gardens are required to capture and filter stormwater.

B6 - Restoration of Drainages: Where degradation has occurred to drainages, a comprehensive restoration plan overseen by the Conservancy will be implemented to reduce downstream water quality effects from siltation. A vegetative buffer will be required to provide filtration and absorption. See Figure 3-15.



[1]

[2]

[3]

[4]

Figure 3-16: Permeable Paving Options

C - Filtration, Treatment and Release Methods: Water quality management strategies are most effective when started at the runoff source – where rain hits the ground. A number of methods are proposed to filter, treat and release water. The design and specifications of each of these methods is dependent on space requirements, soil types and particular locational design goals:

C1 - Permeable pavement: The use of permeable pavement instead of non-porous surfaces increases infiltration opportunities. All trailhead parking, street parking and alley areas may utilize permeable paving alternatives to the extent feasible, such as porous concrete, interlocking pavers, porous asphalt, reinforced grass, crushed gravel with stabilizer or paving block with planted joints. See Figures 3-16 and 3-17 for paving options.

C2 - Vegetated Buffer Areas: Minimum required buffers have been set aside along all drainage corridors to filter water as well as stabilize soils along creek and pond banks. These buffers may be increased and/or enhanced in areas to trap or convert contaminants and may utilize native plantings as appropriate.

C3 - Native Landscape: An approved plant list includes a variety of native and naturalized species suited to this area. These plants are used for landscape areas, vegetated swales, bioswales, landscape buffers and habitat enhancement. The use of these plants supports the preservation of the rural character as well as the on-going enhancement of biotic values. Refer to Appendix D.

[1] Crushed rock with stabilizer [2] Cobble pattern, sand set
[3] Brick paving, sand set [4] Flagstone with planted joints

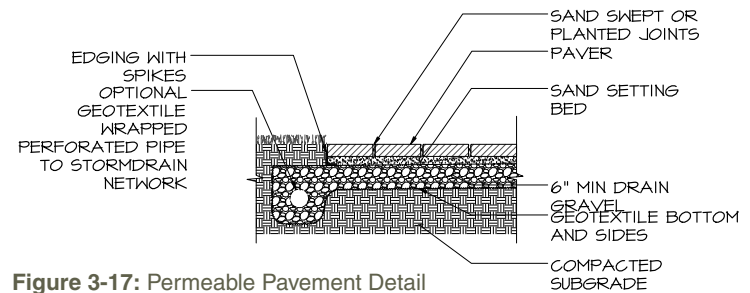


Figure 3-17: Permeable Pavement Detail

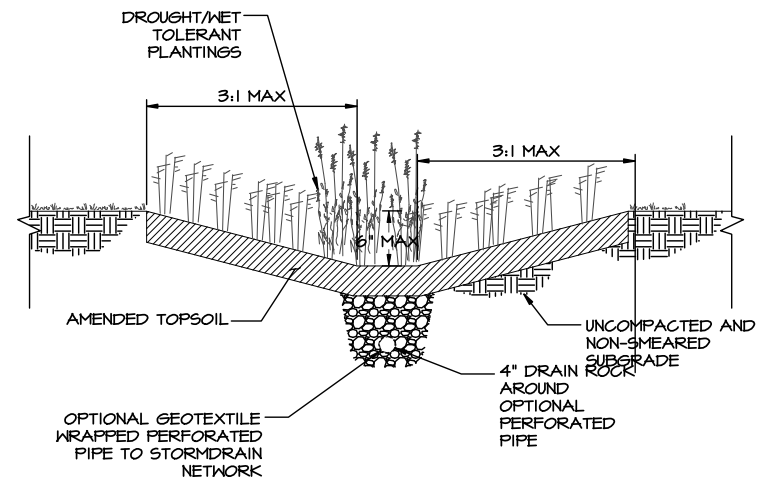


Figure 3-18 : Vegetated Swale

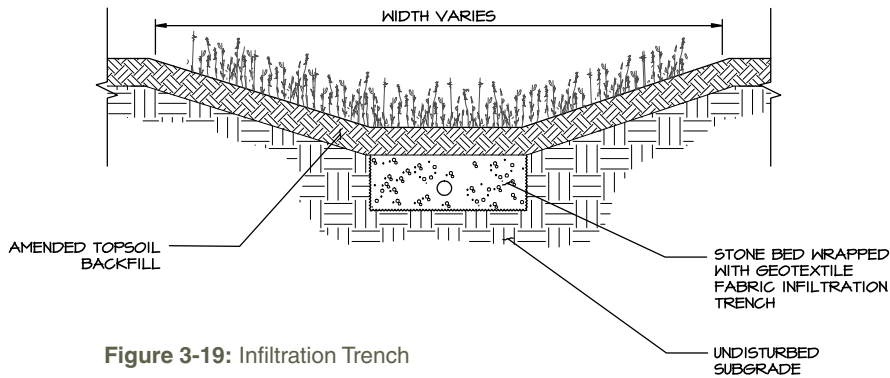


Figure 3-19: Infiltration Trench

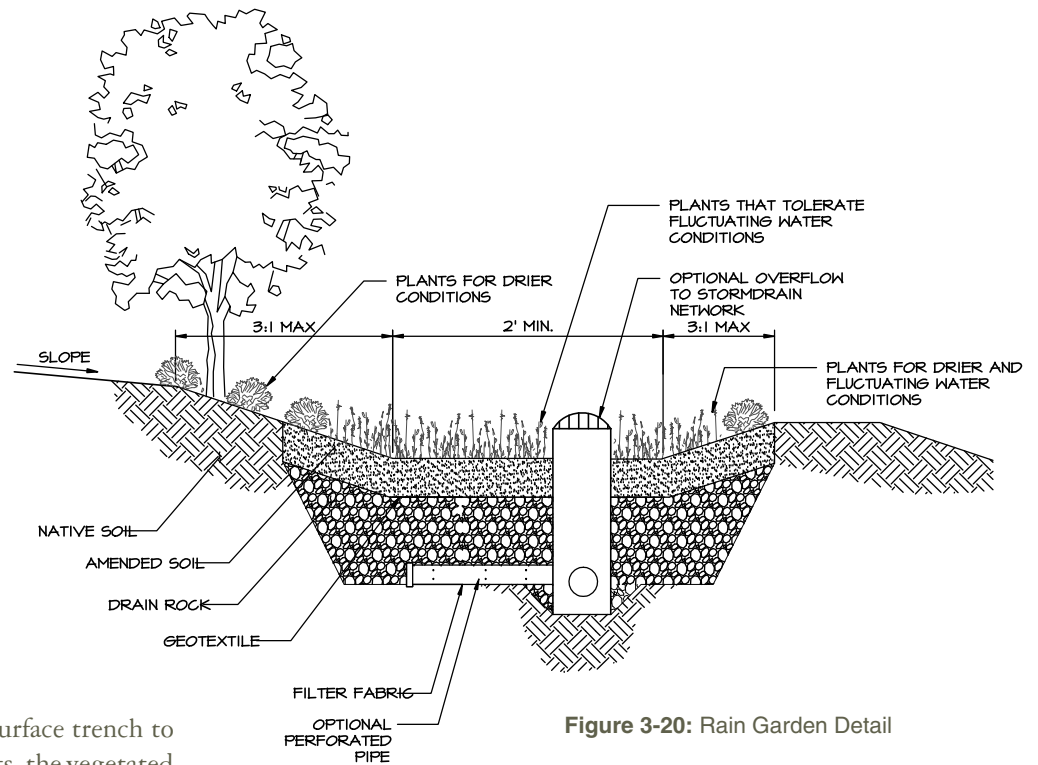


Figure 3-20: Rain Garden Detail

C4 - Vegetated Swales and Infiltration Trenches: These areas utilize a subsurface trench to filter, detain, infiltrate and convey water. Planted with native plants, the vegetated swale reduces runoff and runoff volume, recharges groundwater, reduces sediment loads and nutrient runoff and reduces the need for detention. These may be used along streets and parking lots. See Figures 3-18, 3-19 and 3-21.

C5 - Rain Gardens: These areas are required within private lot areas to retain and infiltrate water. The rain garden utilizes a subsurface trench to filter, detain, and infiltrate water. Planted with native or naturalized plants, the rain garden is part of an overall landscape treatment that provides an aesthetic and functional element in the landscape. See Figure 3-20.

D. Collection and Reuse

An important part of water management is the final component of collecting and reusing rainwater. The main strategy for collection and reuse is:

Rain Barrels/Cisterns: All private lots are required to install a rainwater capture system, such as a cistern or rain barrel system. This system is required to be screened with an integrated landscape treatment. These systems capture rainwater to be used for flushing toilets and/or for irrigation. This system consists of the collection of rainwater from roof surfaces, storage in cisterns or rain barrels, pressurization and plumbing back to toilets or to irrigation systems as applicable.



Figure 3-21: Vegetated swale increases infiltration and provides landscape feature



3.3.4 ENVIRONMENTAL STEWARDSHIP

This Specific Plan emphasizes a new approach to community development. Instead of viewing the community as a new ranch or residential project, the development is viewed as a *community within a conservation framework*. This section summarizes the underlying stewardship framework and plans and programs that support these goals of long term preservation and enhancement. This section should be used in conjunction with Chapter 4 – Implementation and Chapter 5 - Neighborhood Design Code, where specific requirements and timing of these components are discussed in detail.

I feel that the greatest accomplishment of this plan is truly preserving the rural feel and character of this beautiful valley while allowing a new community to take shape. Viewscapes have been preserved and agriculture has actually been enhanced and made viable. Residents of preexisting communities to the north and south will actually have more access to the land.

- Craig Gillespie – Neighbor and CAC Member

A. The Green Valley Conservancy (Conservancy): This Specific Plan calls for the establishment of a Conservancy which will oversee the management and monitoring of conservation easements, to be held by a qualified, accredited non-profit organization for those portions of the Open Lands that require agricultural, grazing and/or on-going resource management. The Conservancy provides an objective organization that brings together the foundational community aspirations of education, resource and open space preservation, community connectivity and agricultural awareness. The Conservancy has oversight over four key initiatives:

- *The preservation, oversight & management of the natural resources,*
- *the on-going viability and sustainability of the agricultural and grazing operations,*
- *the promotion of educational, interpretive and research opportunities, and*
- *the oversight of a comprehensive community design review process.*

The Conservancy would prepare and utilize the following documents as the basis of creating the management framework for the Open Lands and the on-going evolution of the community:

- the **Agriculture Business Plan (ABP)**, to guide the agricultural operations and management of all agricultural lands placed under conservation easements,
- the **Resource Management Plan (RMP)**, which sets out a framework and performance standards for managing the resources, and
- **The Neighborhood Design Code** – described in Chapter 5, which sets out the criteria and performance standards for building and developing sustainably as well as Guidelines for setting up a comprehensive design review process.

Refer to Section 4.2.1 - The Green Valley Conservancy for details regarding the preparation and oversight of these documents.



B. Agriculture Business Plan: This plan will be prepared by the Conservancy to provide a road map to establishing a viable, vital and community based agriculture operation. This plan will include a mission statement, potential business strategies, suggested farming types, sustainable agricultural practices, branding and marketing opportunities, educational, regional tie-in concepts and long term management and educational opportunities. Refer to Section 4.2.1.

C. Resource Management Plan (RMP): An RMP will be developed for the Plan Area by the Conservancy in cooperation with the landowners based on the General Plan, the Specific Plan goals and policies, the Final EIR for Middle Green Valley and all applicable state and federal permits. The purpose of the RMP will be to establish a framework of management standards and performance guidelines for the on-going natural and agricultural resources of the Open Lands. Supported by appropriate technical reports, the RMP will describe specific measures that are required to ensure the protection and vitality of the Green Valley setting. Together with the Agriculture Business Plan and the Neighborhood Design Code in Chapter 5, the RMP will be used by the Conservancy to ensure the on-going protection, productivity and sustainability of the Open Lands. Refer to Section 4.2.1.

D. Transfer of Development Rights (TDR) program: A TDR program has been utilized to aggregate and preserve open space and agricultural lands in the Plan Area. Together with conservation easements, these lands will be

protected and managed as an integral community component. A detailed unit distribution table and map which identifies the general receiving and sending areas is included in Section 4-3.

E. Conservation Easements: As described in Chapter 4 – Implementation, conservation easements will be used to preserve agricultural and open space lands in exchange for development rights. Conservation easements will be held by a qualified, accredited non-profit organization for those portions of the Open Lands that require agricultural, grazing and/or on-going resource management. The Conservancy will assist in overseeing and coordinating these easements. This provides the main tool in preserving and aggregating agricultural and open space lands so that they may be managed comprehensively.

F. Building Sustainably: The Neighborhood Design Code (Chapter 5) integrates requirements, Standards, Guidelines and thresholds to produce high performance and healthy buildings and environments. This process involves the integration and optimization of many aspects of building and site design, including creative programming, appropriate siting, orientation for solar and wind access, quality envelope design, intelligent systems design and attention to detailing and selection of materials. Refer to Chapter 5 for specific details and Appendix B for a summary of the sustainable strategies contained in this Specific Plan.

The road may curve gently away from the straight or it may take a sharp and sudden turn; in either case the village is thereby transformed into a place; a place with a way in and a way out and not merely an incident along the roadside.

- Randall Arendt

3.4 CIRCULATION – THE GRAY FABRIC

The Gray Fabric is the mobility layer that provides the network of rural streets, country lanes, alleys, parking areas, rambling trails, pedestrian pathways and casual driveways that service and link up the community. These spaces are thought about as rooms, and are designed as contained spaces rather than spaces that you move through quickly. The pedestrian rather than the car is the priority in these environments in order to achieve a more rural, human scale setting. The approach to circulation is based on these main principles:

- *connectivity*: design street and path networks that provide several route options,
- *safety*: ensure that speeding is discouraged by using efficient street widths and maximum tree canopy cover,
- *multi-functional*: design roads to minimize paved surfaces and incorporate stormwater treatment, and
- *healthy*: create beautiful, high quality pedestrian and bike environments that encourage walking, socializing and interaction.

The circulation information in this section describes the overall concepts for the thoroughfares, trails, traffic management and parking approaches that make up the Gray Fabric. This section is to be used in conjunction with the Green Fabric and Built Fabric layers to understand how these layers work together to create a fully integrated community plan. Refer to Section 5.7 - Street and Circulation Standards for specific requirements and details.



Figure 3-22: Trail network provides several route options

3.4.1 Specific Plan Circulation Policies - Preserving the Rural Character

The circulation policies seek to further the achievement of the Principles and planning and design themes of this Specific Plan as well as the applicable goals and policies of the General Plan (See 3.4.1A).

Policy CR-1: Ensure that multiple pedestrian and automobile route options are provided to disperse traffic rather than concentrate it in any one area, leading to safer streets.

Policy CR-2: Utilize a “Green Streets” approach that emphasizes environmental quality by including reduced pavement widths, increased tree plantings and integrated stormwater functions.

Policy CR-3: Design streets as outdoor rooms to create beautiful, pedestrian friendly environments that provide social and health benefits.

Policy CR-4: Promote connectivity to destinations both within and outside the Plan Area boundary.

3.4.1A - GENERAL PLAN CONSISTENCY REFERENCE - GRAY FABRIC

The design of the overall Gray Fabric and the supporting Specific Plan policies described in this Section are consistent with and build upon these particular goals and policies of the General Plan:

[GENERAL LAND USE POLICIES]

LU.P-37: Encourage land use patterns and development that will result in fewer and shorter motor vehicle trips, and make transportation choices like transit, biking, or walking more viable alternatives.

[AGRICULTURE POLICIES]

AG.P-17: Minimize potential conflicts between automobile and bicycle traffic and agricultural operations through transportation planning and capital improvement efforts.

[RESOURCE POLICIES]

RS.P-37: Protect the visual character of designated scenic roadways.

RS.P-41: Provide trail links and an integrated trail system to connect people to accessible open spaces and to regional trail routes.

[TRANSPORTATION AND CIRCULATION GOALS AND POLICIES]

TC.G-3: Encourage land use patterns that maximize access and mobility options for commuting and other types of trips, and minimize traffic congestion, vehicle miles traveled (VMT), and greenhouse gas emissions.

TC.G-4: Encourage the use of alternative forms of transportation such as transit, walking and bicycling to alleviate congestion and promote recreation

TC.G-5: Encourage and maintain the safe, convenient transfer of goods and services from agricultural lands and industrial locations to regional and interregional transportation facilities.

TC.P-3: Establish land use patterns that facilitate shorter travel distances and non-auto modes of travel, and limit the extent of additional transportation improvements and maintenance that may be needed with a more dispersed land use pattern.

TC.P-10: Anticipate increases in vehicular traffic on rural roads that serve agricultural-tourist centers, value-added agricultural uses in the interior valleys, and other unique land uses; complete related roadway improvements that support the viability of such uses.

TC.P-24: In collaboration with other agencies and cities, continue to plan, design, and create additional bikeways and bikeway connections to provide intercity and intercounty access and incorporate system needs when approving adjacent developments.

TC.P-25: Encourage access to open space and recreation through the development of safe, convenient, and connected walking paths, trails, bikeways, and neighborhood-based parks and recreation options.

3.4.2 EXISTING TRANSPORTATION CONTEXT

Green Valley Road is the existing main thoroughfare through the Plan Area and is designated as a “scenic roadway” per the General Plan (refer to Figure RS-5 in the General Plan). This road section is currently a 2-lane road with graded 4-6 foot shoulders, and an 8 foot asphalt path on the west side. Other smaller rural roads intersect Green Valley Road to provide access to existing rural residential lots. These roads, moving from south to north in the Plan Area are: Terminal Reservoir Road, Mason Road, Vintage Lane, De Leu Drive, Karl Lane and Jeni Lane. Green Valley Road eventually connects to the south to I-80 to (1 mile south of the Plan Area

southerly boundary) and to Rockville Road to the north, ½ mile from the northerly Plan Area boundary.

Currently, no existing public transit system serves the area. The closest public transit stop (Solano Area Transit) is ½ mile from the southerly Plan Area boundary at the intersection of Mangels Boulevard and Green Valley Road. This bus primarily serves as a commuter bus connection for areas outside the County. The Study Area is 7 miles from the Capital corridor line (Suisun City Station) and 5 miles from the Fairfield Transit Center.

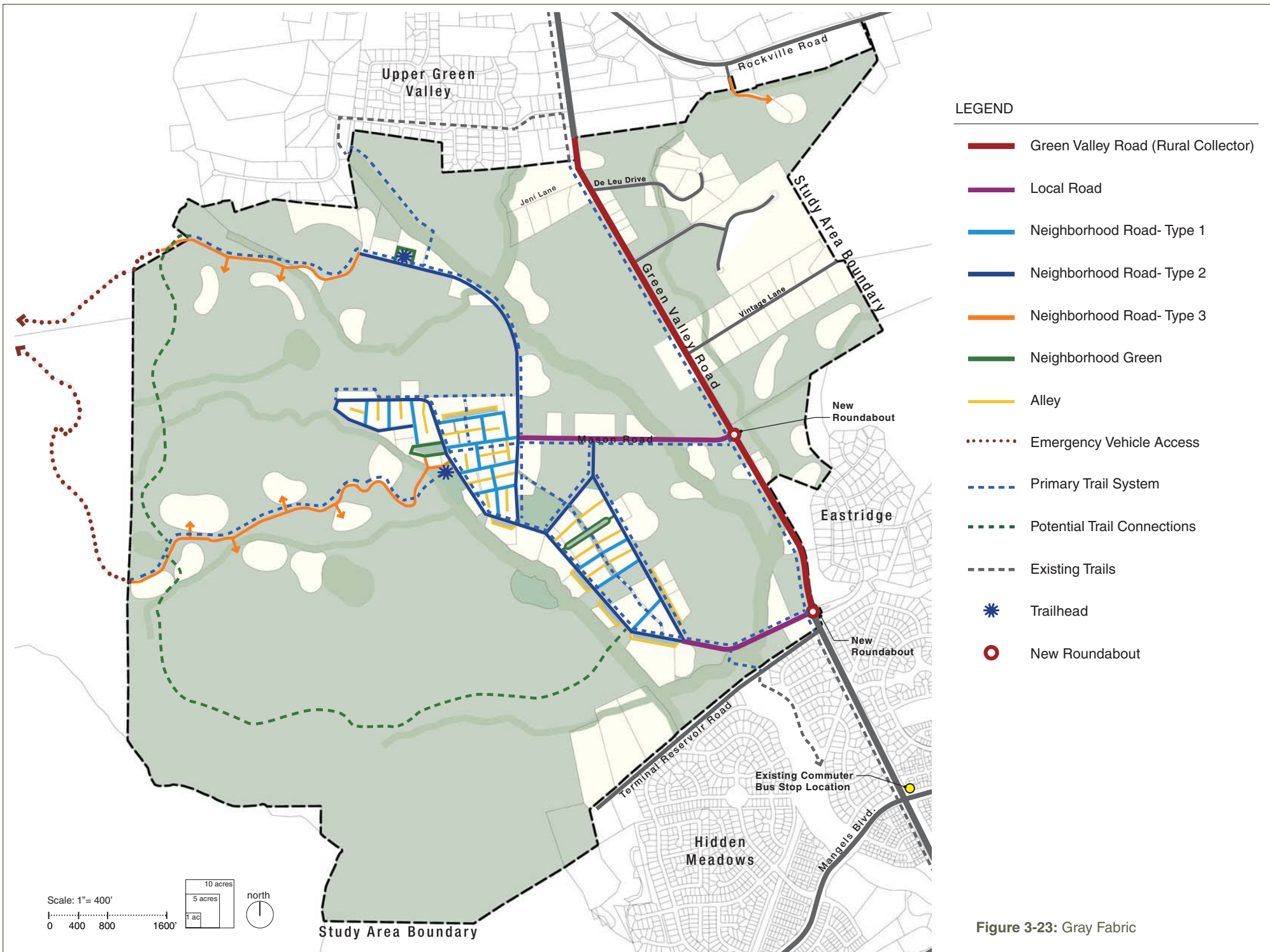


Figure 3-23: Gray Fabric

3.4.3 CIRCULATION CONCEPT

This Specific Plan incorporates a modified, informal grid system that offers a high level of connectivity appropriate to this rural setting while providing safe and efficient access to areas within and outside the Plan Area. A hierarchy of rural roads, neighborhood streets, alleys and pedestrian pathways are sized to be responsive to the specific service and access needs of Building Types, agriculture, and land uses.

A. Block and Street Network: This network provides the basic building blocks for each neighborhood pattern of Open Lands and Built Fabric. In general, blocks have been designed to promote walkability, livability and the achievement of a traditional neighborhood feel. While a grid pattern has been used in valley areas, it has been modified in ways to capture scenic vistas as well as avoid sensitive environmental resources (drainage buffers, fault zone, Open Lands). A more irregular, modified grid system that has infused serendipity into the development pattern has resulted that echoes the way small towns grew over time. Streets located in foothill areas are designed to respond to the topography while minimizing grading impacts.

Blocks, in general, are a maximum of 250 feet long in neighborhood areas. Street widths have been sized to be in scale with the Building Types, parking and access needs and potential mix of land uses that could occur.



Figure 3-24: Three Creeks Street Network Detail



Figure 3-25: Elkhorn Street Network Detail



B. Street Types and Design – Streets and associated circulation improvements are designed to make them pedestrian friendly as well as functional elements of the overall stormwater management plan. Refer to Section 3.3.3 for an overview of the stormwater design approach and Section 5.7 for street Standards and streetscape requirements and palette.

Street design Principles include:

- *Minimizing lane widths to calm traffic and increase infiltration opportunities,*
- *Utilizing tighter curb radii to calm traffic, improve walkability, and reduce pavement while ensuring safety,*
- *Providing ample pedestrian pathways that reinforce neighborhood interaction and a healthy lifestyle,*
- *Utilizing an integral street tree planting program to increase imageability, provide opportunities for carbon sequestration, and reinforce the connection to the agricultural legacy (as provided in Section 5.7.5 - Streetscape Standards),*
- *Applying integrated stormwater design techniques that infiltrate, capture and treat stormwater through the use of pervious materials and bioswales, and*
- *Utilizing minimal street lighting that provides safety while maintaining a rural setting (as provided in Section 5.7.6 - Streetscape Lighting).*

Five street types and two roundabouts occur within the Plan Area:

Roundabouts - Roundabouts provide an appropriately scaled traffic calming tool that will be used along Green Valley Road in two locations, (one at Mason Road, and one at the new southerly intersection at Eastridge) to smooth out traffic flow and provide opportunities to slow traffic down. The roundabout will have 16 foot travel lanes. A street tree pattern will be used around the perimeter of the circle. The central island will have low, native flowering shrubs with informal tree plantings to reinforce the rural setting and provide seasonal color.

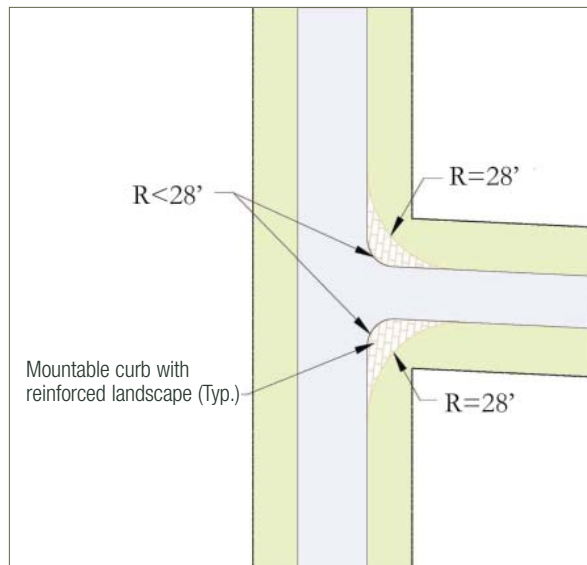


Figure 3-26: Curb design utilizing tight curb radii reduces pavement and calms traffic

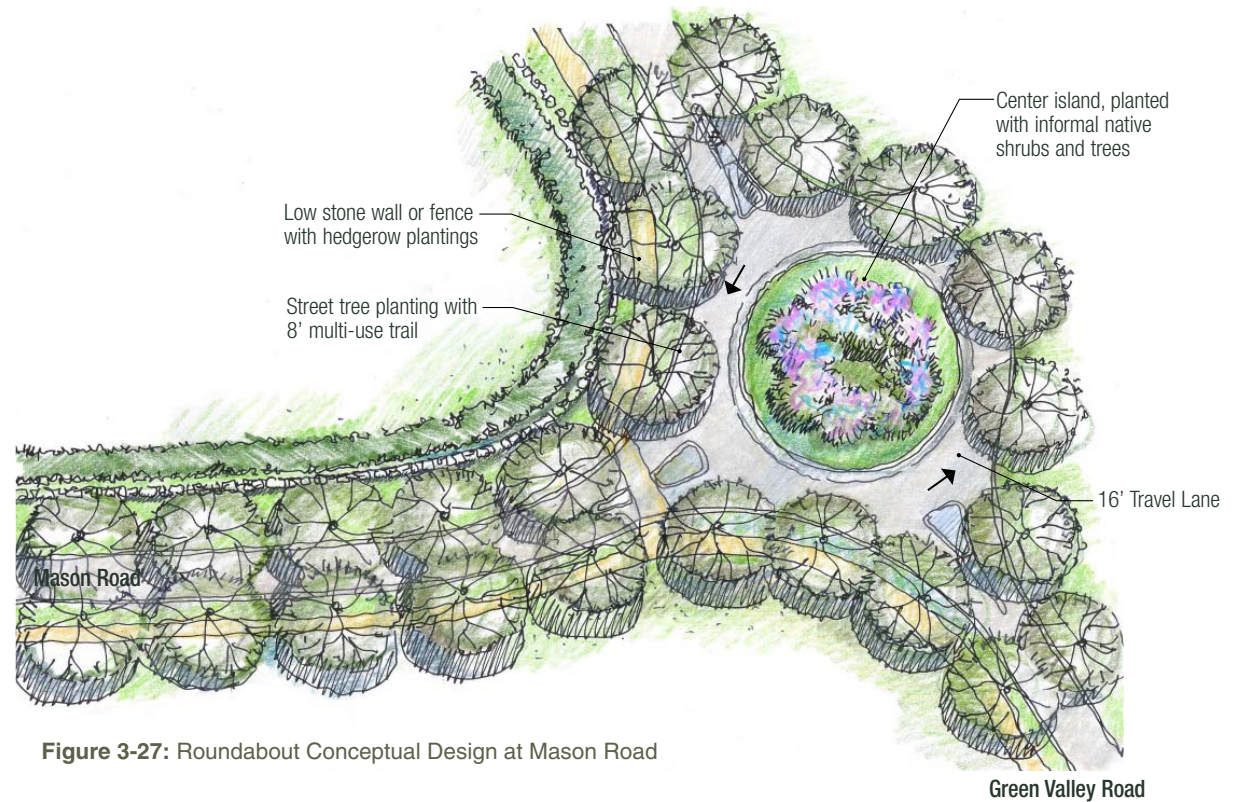


Figure 3-27: Roundabout Conceptual Design at Mason Road

Green Valley Road (Rural Collector)

This is an existing moderately paced 2-lane country road with an existing 6-8 foot asphalt trail on one side. This section occurs along Green Valley Road. This Specific Plan proposes to replace the existing trail with an improved pervious surface and provide a wider (one foot on each side), improved shoulder area (per County request). No widening of the travel way will occur. Street tree treatments and the addition of two roundabouts along the Middle Green Valley portion of the road provide traffic calming. A large canopy “orchard” tree, will be planted in a street tree pattern along the road. A low fence, stone wall and/or integral hedgerow provides an edge and transition zone to agricultural lands beyond.

Local Road

This is a 2-lane country road with a trail on one side. This section occurs along the easterly section of Mason Road and at the southerly boundary of the Nightingale Neighborhood. A large canopy orchard tree, will be planted in a street tree pattern along the road. A low fence and/or stone wall with an integral hedgerow provides an edge and transition to agricultural lands beyond.

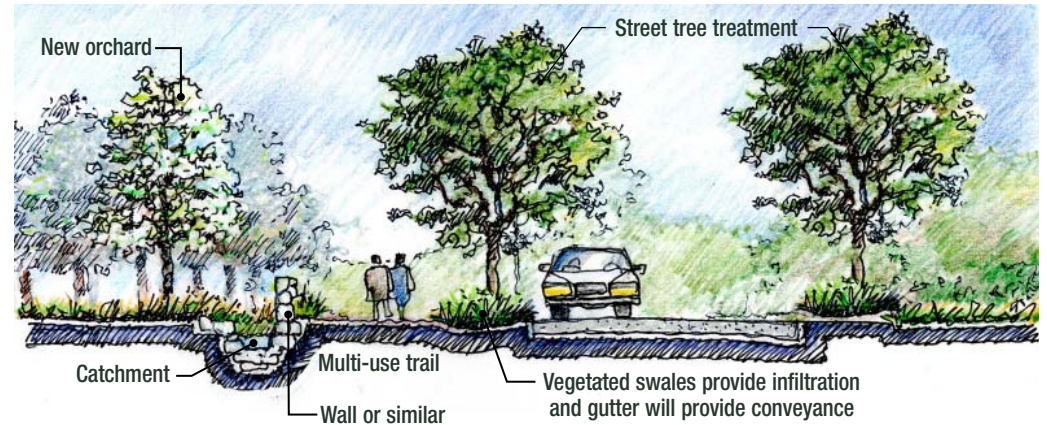


Figure 3-28: Green Valley Road

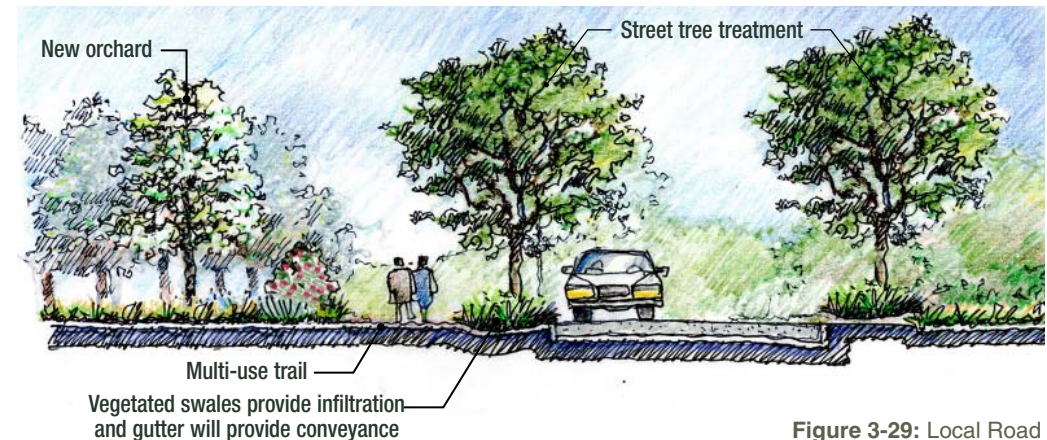


Figure 3-29: Local Road



Figure 3-30: Neighborhood Road - Type 1

Neighborhood Road- Type 1

This road occurs within neighborhoods. It is a slow, 2-lane road with parallel parking and pedestrian pathways located on one or both sides. Landscaped areas alternate with parallel parking pockets to collect and filter stormwater. Medium sized flowering canopy trees are planted in a regular street tree pattern to provide texture and scale.



Figure 3-31: Neighborhood Road - Type 2

Neighborhood Road - Type 2

This road occurs in neighborhoods along the transitions between neighborhoods and adjoining Open Lands. This road is a slow, 2-lane road with parallel parking and pedestrian pathways on one side. Landscaped areas alternate with parallel parking pockets to collect and filter stormwater. Medium sized flowering canopy trees are planted in a regular street tree pattern.



Figure 3-32: Neighborhood Road - Type 3

Neighborhood Road - Type 3

This road occurs in the foothill neighborhoods. This road is a slow, 2-lane road with no street parking that is designed to follow the contours of the land as closely as possible. A meandering pedestrian pathway is located on one side. A naturalistic planting pattern of native oaks and shrubs provides a transition to the native oak woodland landscape.

Neighborhood Green

These one-way roads encircle the community Greens which may also have a mixed use component with complimentary neighborhood commercial and/or agri-tourism uses. These roads are slow, one-lane roads with parking and pedestrian pathways located on one side. Street planting areas alternate with parallel parking pockets to collect and filter stormwater. Medium sized flowering canopy trees, provide a regular street tree pattern along the road and edges of the Greens.

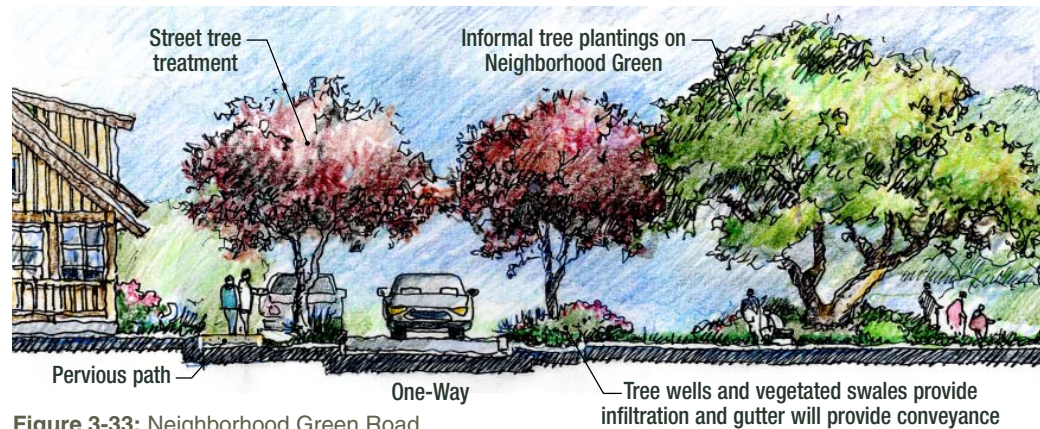


Figure 3-33: Neighborhood Green Road

Alley

These lanes provide rear service access along a shared lane. Drainage is collected in planted, pervious shoulders. Fencing and small scale canopy trees, occur within lot areas to create contained outdoor rooms.

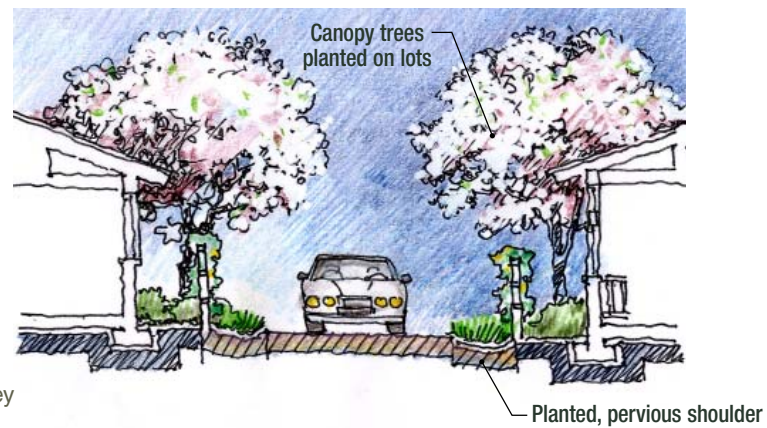


Figure 3-34: Alley



Parking Lot Designs utilize pervious paving applications



Parking areas utilize pervious solutions as feasible



C. Parking: Street parking is provided throughout each neighborhood to serve residential, community, and associated neighborhood uses. Two trailhead locations with parking are located within the Elkhorn and Three Creeks neighborhoods to provide general, overflow and trail access parking. All parking for dwelling units is provided on-site as identified in the applicable Building Type standard in Section 5.4.1.

Parking design principles include:

- *Provide safe, convenient parking in neighborhoods, and in particular in potential neighborhood commercial and community areas.*
- *Use integrated planting concepts with parking designs that utilize trees, shrubs and ground covers to obscure cars from view, provide shade and decrease heat island effects.*
- *Utilize permeable pavement for all parking treatments to the extent feasible to increase water filtration.*

D. Community Paths: A network of trails, paths, and trailheads knits this community together and provides links to regional open space and adjacent residential areas. This Specific Plan shall not be interpreted to preclude the future extension of any trail, bike path or transit connection. A hierarchy of trail types provides many alternative routes. Refer to Section 5.7.4 for specific requirements and details. Trail design principles include:

- *Ensure safe, high quality walking environments along streets by utilizing plantings, appropriate street widths, and street parking to encourage slower driving speeds and to separate the pedestrian from travel-ways.*
- *Utilize rustic, simple treatments for hiking trails and associated improvements that blend into the topography and minimize disruption to the foothill landscape.*
- *Maximize the use of pervious trail and path treatments to the extent feasible to increase water filtration, and reinforce the rural design aesthetic.*
- *All trails within conservation easement areas may be modified as required per state and federal permits including but not limited to location, construction, size and allowed uses.*



Figure 3-35: Pervious pavers or compacted crushed rock may be used for street parking areas



Figure 3-36: Multi-use Trail along Rural Collector



Figure 3-37: Pedestrian Pathway along Neighborhood Street

Multi-Use Trail - This path occurs predominantly along one side of the Rural Collectors and Local Roads. These trails link the community with neighboring residential areas to the south and north as well as within the community.

Pathways – These paths generally run along one or both sides of the Neighborhood Roads and Neighborhood Green Roads.

Rambles – These paths are the short-cuts through the neighborhoods and surrounding agricultural lands.



Figure 3-38: Ramble provides short cut through neighborhoods



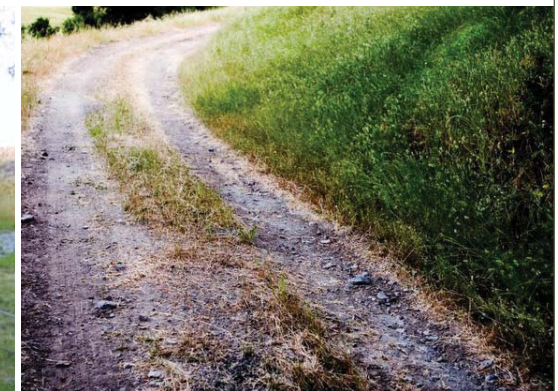
[1]



[2]



[3]



[4]

Figure 3-39: Trail and Access Types

[1] Neighborhood “short cut” provides alternative route [2] Hiking Trail responds to topography [3] Hiking trail with fencing [4] Secondary access Road doubles as “Ranch Road” and trail

Foothill Trails– These trails occur within the foothills, agriculture and Open Lands areas. Appropriate fencing that draws from the rural ranching aesthetic may be used to separate hikers from grazing operations and agricultural activities. Trails labeled as “Potential Trail Connections” are subject to future permit and/or use restrictions as agreed to by the landowner and applicable state and federal permits.

Emergency Access – These roads have a pervious travel way to provide emergency access for the western neighborhood areas of Elkhorn and Three Creeks. These roads may also be used to compliment the trail network. Appropriate fencing that draws from the rural ranching aesthetic may

be used to separate these roads from grazing operations and related agricultural activities.

Trailheads – Two trailheads occur, one at the Green at Three Creeks, and one just south of the Elkhorn main Green area. Trailheads provide parking areas with a range of 8-10 parking spaces with appropriate landscaping for trail access use, overflow event parking and/or general neighborhood parking.

Neighborhood Shuttle - This Specific Plan encourages the establishment of a community shuttle that could provide transit linkages both within the community as well as points north and south.



Figure 3-40: Foothill Trail



Figure 3-41: Emergency Access



Figure 3-42: Conceptual Plan of the Elkhorn Neighborhood - A diverse fabric of Building Types creates a dynamic neighborhood

3.5 LAND USE AND CHARACTER – THE BUILT FABRIC

The Built Fabric is the pattern of vertical elements and massing that completes the overall form of the community. The Transect model offers a framework to create a range of Building Types and uses that work together to create a varied conglomeration of potential activities, uses, textures, shadows, colors and heights. Consistent with the planning Principles, outlined in Chapter 1, it is this diversity and purposeful irregularity that gives rise to establishing a rural built pattern.

The land use and character information in this section describes the fundamental design approach to creating small town character as well as the range of land uses and associated Building Types that together capture the rural aesthetic. This section is to be used in conjunction with the Green Fabric and Gray Fabric layers to understand how this final layer completes the physical and social framework of the Plan.



The land is important to me, but even more important is the idea that it becomes a “place” because someone has been there.

- Marlene Creates

3.5.1 Specific Plan Land Use & Character Policies

These specific land use and character policies seek to further the achievement of the Principles and planning and design themes of this Specific Plan as well as the applicable goals and policies of the General Plan.

Policy LUC-1: Utilize cluster development patterns to preserve agricultural, scenic and biotic resources.

Policy LUC-2: Provide a full range of housing and Building Types that is consistent with rural development traditions.

Policy LUC-3: Deemphasize the distinct separation of land uses to promote flexibility and create a dynamic community environment.

Policy LUC-4: Craft development standards that draw from the design traditions of rural architecture to create contemporary buildings that are both sustainable and connected to the agricultural legacy of the area.

Policy LUC-5: Maintain a distinct edge between the Built Fabric and Open Lands areas to reinforce the dominance of the vast, rural landscape.

Policy LUC-6: Incorporate Secondary and Accessory Unit opportunities to provide workforce and multi-generational housing needs.



Figure 3-43: Conceptual Street Elevation in Elkhorn Neighborhood

3.5.1A GENERAL PLAN CONSISTENCY REFERENCE - BUILT FABRIC

The design of the Built Fabric and the supporting Specific Plan Policies described in this Section are consistent with and build upon these particular goals and policies of the General Plan:

[MIDDLE GREEN VALLEY SSA POLICY:]

SS.P-5: Encourage cluster residential development through incentives to property owners in hillside and valley floor areas that can support residential uses with least affect on resources, steep slopes, or very high wildfire hazard areas.

[RESIDENTIAL POLICIES:]

LU.P-14: Establish rural residential development in a manner that preserves rural character and scenic qualities and protects sensitive resources including agricultural lands, creeks, native trees, open spaces, and views.

LU.P-17: Encourage clustering of residential development when necessary to preserve agricultural lands, natural resource areas and environmental quality, to provide for the efficient delivery of services and utilities, and to mitigate potential health and safety hazards.

[AGRICULTURE GOALS AND POLICIES:]

AR.G-4: Enable the development of housing opportunities for farm families and farmworkers to ensure the continued competitiveness of Solano County agriculture.

AG.P-2: Ensure that residential development is compatible with surrounding agricultural activities.

AG.P-11: Support agricultural production by enabling the development of adequate amounts of farmworker and farm family housing in agricultural areas that meet state housing quality standards.

AG.P-24: Continue to support nursery crop industries at locations with favorable growing conditions and transportation access.

[RESOURCE POLICY:]

RS.P-47: Require recreational uses to be established in a manner compatible with agricultural activities or that minimizes an adverse impact on agriculture.

[PUBLIC FACILITIES AND SERVICES POLICY:]

PE.P-43: Locate educational facilities appropriately to make efficient use of existing and planned facilities, including park and recreational facilities.

[HOUSING ELEMENT, POLICIES AND PROGRAMS]

The County allows accessory dwelling units in Exclusive Agricultural zones and secondary dwelling units in Rural Residential, Residential Estate, and Single-Family Residence zoning districts.

B.5 The County shall actively encourage and facilitate the development of ... accessory dwelling units, and secondary dwelling units as a means to expand the overall supply of housing, especially as a means of providing relatively affordable housing for people employed in the agricultural areas, or for the elderly or disabled, who may need to receive assistance from a relative or caregiver residing on the same property.

B.2 Companion, Accessory, and Secondary Dwelling Unit Program.

To maximize the potential for housing development ... the County will continue to implement streamlined permitting processes for these types of units. The County will recommend that the Board of Supervisors amend the Rural Residential zoning designation to be similar to the Agricultural zoning districts by allowing accessory dwelling units, by right, but subject to size restrictions. In addition, the County will actively promote the opportunities provided to develop these types of units, by distributing information to advocates and service providers for the elderly and disabled populations and farmworkers as well as distributing this information within the agricultural community in general.

[HOUSING ELEMENT, PROGRAMS]

Through provisions of the zoning code, ... second dwelling units including ..., "secondary dwelling units," and "accessory dwelling units" incidental to agricultural uses can be utilized to provide opportunities for low cost housing.

HS.P-16: Require minimum setbacks for construction along creeks between the creek bank and structure, except for farm structures that are not dwellings or places of work, based on the susceptibility of the bank to lurching caused by seismic shaking.

HS.P-22: Require new developments in areas of high and very high wildfire risk to incorporate fire-safe building methods and site planning techniques into the development.

HS.P-38: Integrate public health concerns into land use planning and decision making.



3.5.2 ESTABLISHING SMALL TOWN CHARACTER – THE CONCEPTS

Successful rural architecture begins with the understanding that buildings and related improvements are subordinate to the larger, pastoral, landscape. Within this context, the main design concepts of rural architecture are derived from the straightforward, homesteading traditions of America. The approach to land use, Building Types and establishment of rural character is based on the following main concepts:

- **Simplicity.** Using uncomplicated forms and massing is the foundational idea of creating small town character.
- **Durable materials, structural integrity.** Crafting buildings that utilize materials closer to their natural state reinforces the rural aesthetic. Homesteaders utilized whatever materials were



readily available, which largely meant stone from a nearby quarry and unfinished timber components. Using one or at most two types of exterior materials (stone foundation treatment at base with wood walls above) emphasizes the structural integrity of the materials and straightforward approach of building in this environment.

- **Additive architecture.** Rural buildings grew over time as living needs changed. Designing buildings that utilize building projections or secondary structures, such as covered porches, guest houses, bay windows, and/or dormers adds to the richness of the community fabric.
- **Flexibility.** Contributing to a small town's evolution is the notion that the simple rural building layouts and forms are flexible and may easily convert to respond to the ever-changing needs of the user. Commercial and/or home office uses could be incorporated into the bottom or top floors of existing residential structures. Secondary buildings were built and attached to the main house for additional family members and/or to provide extra work space. This dynamic creates an ever evolving, rather

than static, built and cultural environment. The principle design parameters of buildings then focus on the form of the structure, rather than the use.

- **Human scale sets the standard.** At its root, rural design creates environments that are scaled to human proportions -- it puts the way people live and interact at the center of focus. An unpretentious, honest, unadorned approach creates long-term livable, comfortable and memorable places.
- **Face on the street.** An underlying principle of small town communities is the idea of civic and/or collective stewardship and participation. These ideals are displayed in the way that buildings contribute and interact with the street, public gathering areas and the Open Lands. Deep front porches, low fences, and artisan details all convey a sense of neighborhood pride and community engagement.

These concepts are integrated into the Built Fabric layer and are incorporated into the Neighborhood Design Code, detailed in Chapter 5.

{ My favorite part of the plan are the public spaces, the town green, trails, playfields, community gardens and pocket parks that allow neighbors to build community. Places like this are rare. We are lucky to have them... }














Anthony Russo – Landowner and CAC Member

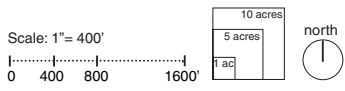
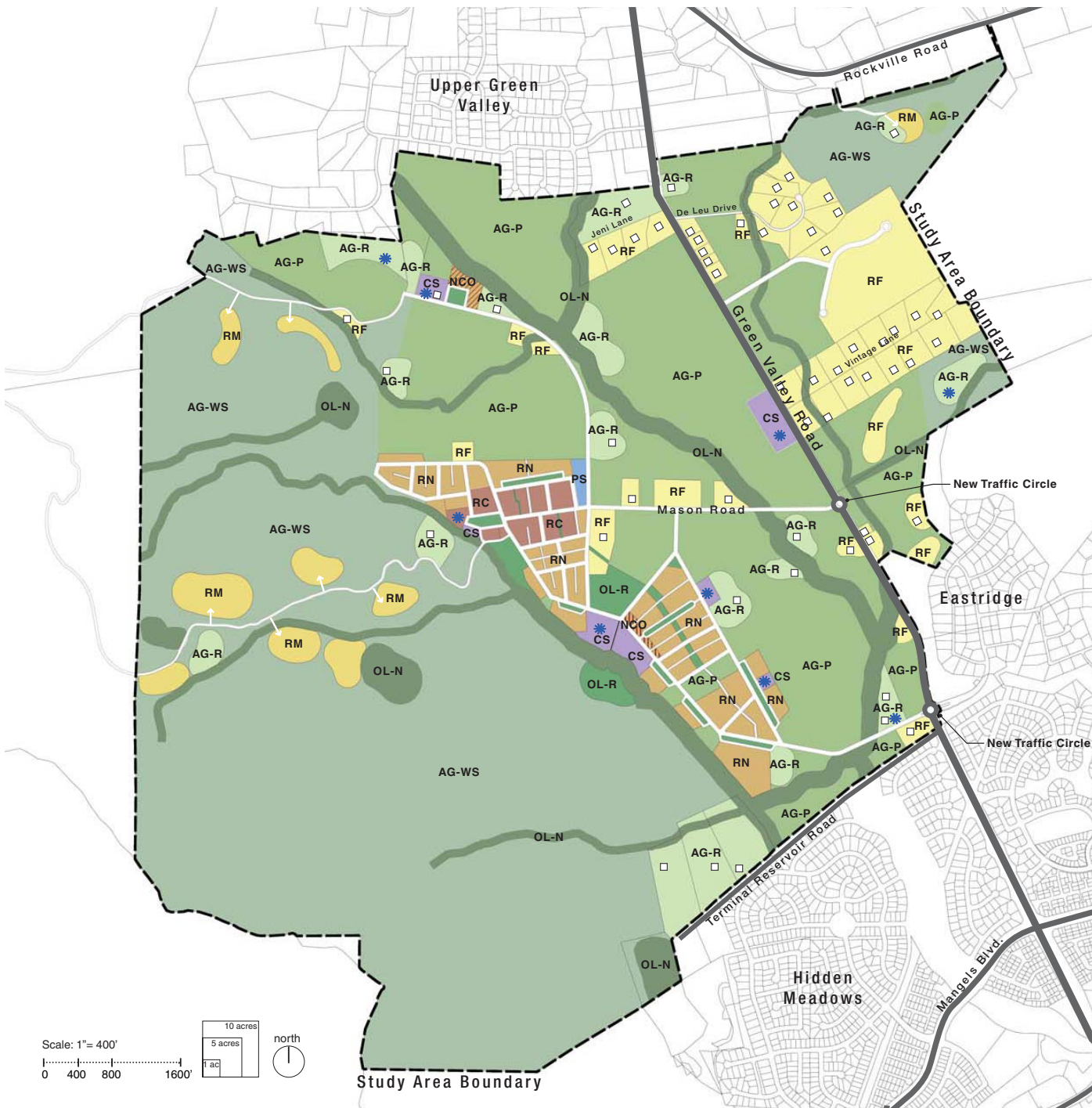
3.5.3 LAND USE DESIGNATIONS

Section 3.5.3A describes the intent of each land use designation. Figure 3-44 details the distribution of land uses within the Plan Area and Table 3-3 presents the overall land use summary and acreage for each land use category. The land use designations and the accompanying table provide the framework for future land use decisions in the Plan Area. Land uses are grouped into five general categories: *Open Lands, Agricultural, Residential, Community Services, and Overlays*. Land use designations are generally grouped in each category by their primary allowed use.

Land uses will be implemented consistent with this Specific Plan. The boundaries of the areas depicted in Figure 3-44 shall be interpreted reasonably in order to carry out the provisions of the Specific Plan. Development densities and intensities are shown in Table 3-3 for each land use designation. In the case conflicts exist within this Specific Plan document regarding allowed land uses, Section 3.5.3A and Table 3-4 are to prevail. A maximum of 400 new residential units are allowed within the Plan Area.

Table 3-3: Land Use Summary

Open Lands Designations			Area (ac)	Density Range	% of Plan Area
	OL-N	Open Lands- Natural	170	n/a	
	OL-R	Open Lands- Recreation	22	n/a	
Subtotal			192 ac.		10%
Agriculture Designations					
	AG-WS	Agriculture- Watershed	851	n/a	
	AG-P	Agriculture- Preserve	450	n/a	
	AG-R	Agriculture- Residential	89	5 ac min.	
Subtotal			1,390 ac.		73%
Residential Designations					
	RF	Rural Farm	139	1-5 acres per unit	
	RM	Rural Meadow	39	1/4 ac. min	
	RN	Rural Neighborhood	56	1-4 du/ac	
	RC	Rural Mixed-Use Center	15	4-8 du/ac	
Subtotal			249 ac.		13%
Community Services Designations					
	CS	Community Services	16	n/a	
	PS	Public Services	2	n/a	
Subtotal			18 ac.		1%
Overlay Designations					
	ATO	Agriculture Tourism Overlay			
	NCO	Neighborhood Commercial Overlay			
Roads and Infrastructure			56		3%
Project Total:			1,905 ac.		400 max. new units



Open Lands Designations

- OL-N Open Lands- Natural
- OL-R Open Lands- Recreation

Agriculture Designations

- AG-WS Agriculture- Watershed
- AG-P Agriculture- Preserve
- AG-R Agriculture- Residential

Residential Designations

- RF Rural Farm
- RM Rural Meadow
- RN Rural Neighborhood
- RC Rural Mixed-Use Center

Community Services Designations

- CS Community Services
- PS Public Services

Overlays

- ATO Agriculture Tourism Overlay
- NCO Neighborhood Commercial Overlay
- Existing Residential

Figure 3-44: The Built Fabric - The Land Use Plan

3.5.3A MIDDLE GREEN VALLEY LAND USE DESIGNATIONS

This section describes the land use designations for the Specific Plan Area. Refer to Section 3.5.4 and Table 3.4 for the allowable uses for each land use designations and Figure 3-44 for the locations within the Specific Plan Area.

As described in Section 2.3.3 of this Plan, each land use designation below references a similar existing County land use designation. Each such referenced existing County land use designation is hereby incorporated by reference into each land use designation and shall apply, but only to the extent they do not conflict with any Standard in this Specific Plan and do not impede the implementation of this Specific Plan.

[OPEN LANDS DESIGNATIONS]

Open Lands - Natural – (OL-N): This designation includes water courses, drainages and open water bodies that are intended to be placed under conservation easements to permanently protect, preserve and enhance these areas. These lands are not suitable for development due to topography, sensitive resources and/or hydrology. The conservation easement holder would monitor and manage lands while the Owner would retain fee ownership. Reference: Section 28-37 Watershed and Conservation District (W-160)

Open Lands – Recreation - (OL-R): This designation provides for passive and active recreation throughout the Plan Area. Reference: Section 28-28 Park (P) District

[AGRICULTURE DESIGNATIONS]

Agriculture - Watershed – (AG-WS): This designation provides for grazing and passive recreational activities to occur to minimize environmental damage to slopes, drainages and woodland areas. These areas are intended to be placed under conservation easements to permanently protect and manage these lands. The conservation easement holder would monitor and manage lands while the Owner would retain fee ownership. Reference: Section 28-37 Watershed and Conservation District (W-160)

Agriculture - Preserve – (AG-P): This designation provides for the preservation and sustainability of working agriculture and farming lands. These areas are intended to be placed under conservation easements to permanently protect and monitor these lands. The conservation easement holder to monitor and manage lands while the Owner would retain fee ownership. Reference: Section 28-21 Exclusive Agricultural (A-20 and A-40) Districts

Agriculture – (AG - R): This designation provides primarily agricultural uses with rural residential uses on minimum lot sizes of 5 acres. Permitted uses include agricultural activities and operations, compound lot uses, Secondary Units and housing for farm labor. Reference: Section 28-21 Exclusive Agriculture (A-20) and Section 28-23 Rural Residential (RR-5) Districts.

[RESIDENTIAL DESIGNATIONS]

Rural Farm – (RF): This designation allows for single family residences on 1 to 5 acre parcels. Reference: Section 28-23 Rural Residential (RR-5, RR-2.5) and Residential Estate (RE-1) Districts.

Rural Meadow - (RM): This designation allows for single family residential development at densities of 1-4 dwelling units per acre. These residential areas are organized around meadow features in the foothill areas to respond to topography and oak woodlands.

Rural Neighborhood– (RN): This designation allows for primarily residential development at densities of 1-4 dwelling units per acre. Reference: Section 28-24 Suburban Residential Districts (R-E-1, R-E-1/2, R-E-1/4) Districts

Rural Mixed–Use Center – (RC): This designation allows for residential development at densities of 4-8 dwelling units per acre with opportunities for neighborhood commercial/office in lower or partial floors. This designation allows for a flexible residential/mixed use setting to provide small business and retail opportunities that support and service the community and neighboring regions.

[COMMUNITY SERVICES DESIGNATIONS]

Community Services – (CS): This designation allows for community serving uses.

Public Services – (PS): This designation allows for public facility serving uses.

[OVERLAYS]

Agriculture Tourism Overlay– (ATO): This designation provides for complementary agricultural and tourism commercial facilities compatible with surrounding agricultural activities. Uses are to enhance and build upon the local agricultural economy, support the goal of Solano County brand recognition, and strengthen the community's connection to agricultural lands.

Neighborhood Commercial Overlay – (NCO): This overlay identifies areas that have the opportunity to provide neighborhood serving commercial and retail uses in ground floor areas or partial floors on single story building types. This designation allows for a flexible mixed used setting to provide small business and retail opportunities that support the community. Reference: Section 28-30 Neighborhood Commercial (C-N) District

3.5.4 USE STANDARDS

Described in Table 3-4 on the following pages, are the variety of uses that may occur within the Specific Plan area by land use designation. These uses are focused on creating a diverse mix of residential, agricultural, neighborhood serving and community related uses that are set within a solid development framework. The intent of this Specific Plan is to create a rigorous framework that provides the opportunities to adapt over time to changing needs and markets.

Allowable Land Uses

A parcel or Building within the Specific Plan area shall be occupied by only the land uses allowed by Table 3-4 within the land use designation applied to the site by the land use plan. Each land use listed in the table is defined in Appendix A of this Specific Plan or in the County Zoning Code.

Multiple Uses

Any one or more land uses listed in Table 3-4 as being allowable within a specific land use designation may be established on any parcel within that area, subject to the applicable permit requirements listed and in compliance with all applicable requirements of this Specific Plan.

Uses Not Listed

A land use that is not listed in Table 3-4 is not allowed within the Specific Plan area. A land use that is listed in the Table, but not within a particular zone, is not allowed within that zone. Similar or compatible uses may be allowed subject to review and approval of applicable Conservancy Review Committee (CRC) and County review processes.

Secondary Units

Secondary Units are allowed with particular Building Types. Please refer to Section 5.4.1 - Building Types for detailed information.

Temporary and Ancillary uses

Temporary and Ancillary uses are allowed within the Specific Plan area in compliance with this Specific Plan and applicable County requirements.

Permit Requirements

Table 3-4 provides an overview of the types of permits required for each use.

1. “p” – These uses are permitted subject to compliance with all applicable provisions of this Specific Plan, and design review requirements.
2. “c” – These uses are allowed subject to the approval of a conditional use permit process.
3. “-” – These uses are not allowed in the applicable area.

The land use concepts articulated in this specific plan build on the following agricultural implementation program from the General Plan:

AG.I-13: Support recreation and open space activities that are complementary and secondary to agricultural activities on the land. Encourage agriculturalists to incorporate compatible recreational and educational activities that provide visitor-oriented opportunities into agricultural land in appropriate areas, minimizing the adverse impact on agriculture.

~ Solano General Plan – Page AG-39

Table 3-4: Allowed Uses

A land use that is not listed in Table 3-4 is not allowed within the Specific Plan area. A land use that is listed in the Table, but not within a particular zone, is not allowed within that zone. Similar or compatible uses may be allowed subject to review and approval of applicable CRC and County review processes. Refer to Chapter 4.0 for information regarding administrative modifications and procedures as applicable. Refer to Appendix A and/or the County Zoning Ordinance for definitions of land uses.

a. Residential

Land Use Designation	Open Lands		Agriculture			Residential				Community		Overlays	
	OL-N	OL-R	AG-WS	AG-P	AG-R	RF	RM	RN	RC	CS	PS	ATO	NCO
Single Family Dwelling	-	-	-	-	p	p	p	p	p	-	-	-	-
Secondary Dwelling ⁽¹⁾	-	-	-	-	p	p	p	(1)	(1)	-	-	-	-
Accessory Buildings	-	-	-	p	p	p	p	p	p	p	p	-	-
Guest House	-	-	-	-	p	p	p	p	p	c	-	-	-
Farmworker Housing	-	-	-	-	p	-	-	-	-	-	-	-	-
Home Occupation	-	-	-	-	p	p	p	p	p	-	-	-	-
Live-Work	-	-	-	-	p	p	p	p	p	-	-	-	-
Day Care Center: Child, Adult (up to 8 persons)	-	-	-	-	-	c	-	p	p	c	-	-	-

b. Recreation, Education and Public Assembly

Land Use Designation	Open Lands		Agriculture			Residential				Community		Overlays	
	OL-N	OL-R	AG-WS	AG-P	AG-R	RF	RM	RN	RC	CS	PS	ATO	NCO
Health/Fitness facility	-	-	-	-	-	-	-	c	-	p	-	-	-
Community Trails ⁽²⁾	-	p	p	p	-	-	-	-	-	-	-	-	-
Trailhead/Comfort Stations	-	p	-	-	-	-	-	-	-	p	c	-	-
Interpretive facility (1000 sf max.)	-	p	-	-	-	-	-	-	c	p	c	-	-
Library	-	-	-	-	-	-	-	-	c	p	c	-	c
Community Assembly	-	-	-	-	-	-	-	c	c	p	c	p	c
Nursery School (up to 12 children)	-	-	-	-	-	-	-	c	-	p	-	-	-
School (Private, Max 100 Students)	-	-	-	-	-	-	-	c	-	p	-	-	-
Sports Fields	-	p	-	-	-	-	-	-	-	-	-	-	-
Passive Recreation ⁽³⁾	-	p	c	-	-	-	-	-	-	p	-	-	-
Teaching Studio – art, dance, fitness, music (1500 sf max.)	-	-	-	-	-	-	-	c	p	p	-	-	p

c. Public Serving

Land Use Designation	Open Lands		Agriculture			Residential				Community		Overlays	
	OL-N	OL-R	AG-WS	AG-P	AG-R	RF	RM	RN	RC	CS	PS	ATO	NCO
Fire Station	-	-	-	-	-	-	-	-	-	c	p	-	-
Police Station	-	-	-	-	-	-	-	-	-	c	p	-	-
Public Utility	-	-	-	-	-	-	-	-	-	-	p	-	-
Post Office	-	-	-	-	-	-	-	-	p	p	p	-	p

d. Agricultural/Tourist Commercial

Land Use Designation	Open Lands		Agriculture			Residential				Community		Overlays	
	OL-N	OL-R	AG-WS	AG-P	AG-R	RF	RM	RN	RC	CS	PS	ATO	NCO
Agricultural Accessory Structure	-	p	p	p	p	p	-	-	-	-	-	p	-
Animal Keeping/Grazing	-	-	p	p	p	p	-	-	-	-	-	p	-
Crop production, horticulture, orchard, vineyard	-	p	-	p	p	p	-	-	-	-	-	p	-
Farmers Market	-	p	-	-	-	-	-	-	p	p	-	p	p
Community Garden	-	p	-	p	-	-	-	-	-	p	p	-	-
Agricultural Processing Facility	-	-	-	-	-	-	-	-	-	-	-	p	-
Agricultural Processing with complimentary agricultural tourist support facilities ⁽⁴⁾	-	-	-	-	-	-	-	-	-	-	-	p	-
Winery, small	-	-	-	-	p	-	-	-	-	-	-	p	-
Winery, large	-	-	-	-	-	-	-	-	-	-	-	p	-
Agriculture tourist commercial (co-op tasting rooms, farm stand, local crafts and related office support)	-	-	-	-	-	-	-	c	p	-	-	p	-
Lodging- Small Inn (25 room max)	-	-	-	-	-	-	-	-	-	-	-	p	-
Lodging- Bed and Breakfast (up to 6 guest rooms)	-	-	-	-	-	c	-	c	p	p	-	p	p
Commercial Nursery	-	-	-	p	-	-	-	-	-	p	-	p	-

e. Neighborhood Commercial

Land Use Designation	Open Lands		Agriculture			Residential				Community		Overlays	
	OL-N	OL-R	AG-WS	AG-P	AG-R	RF	RM	RN	RC	CS	PS	ATO	NCO
Local serving/ convenience (1500 sf max)	-	-	-	-	-	-	-	-	p	-	-	-	p
Café, Restaurant, Coffee Shop (1500 sf max)	-	-	-	-	-	-	-	-	p	-	-	-	p
General Store (2000 sf max)	-	-	-	-	-	-	-	-	p	-	-	-	p
Gallery	-	-	-	-	-	-	-	c	p	-	-	-	p
Bank	-	-	-	-	-	-	-	-	p	-	-	-	p
Tasting Room	-	-	-	-	-	-	-	c	p	-	-	-	p
Local retail/craft (creation and sale)	-	-	-	-	-	-	-	c	p	-	-	-	p

f. Office/Business Services

Land Use Designation	Open Lands		Agriculture			Residential				Community		Overlays	
	OL-N	OL-R	AG-WS	AG-P	AG-R	RF	RM	RN	RC	CS	PS	ATO	NCO
Office: Business, services (1500 sf max)	-	-	-	-	-	-	-	c	p	-	-	-	p
Office: Professional, administrative (1500 sf max)	-	-	-	-	-	-	-	c	p	-	-	-	p
Office: Real Estate (1500 sf max)	-	-	-	-	-	-	-	c	p	-	-	-	p

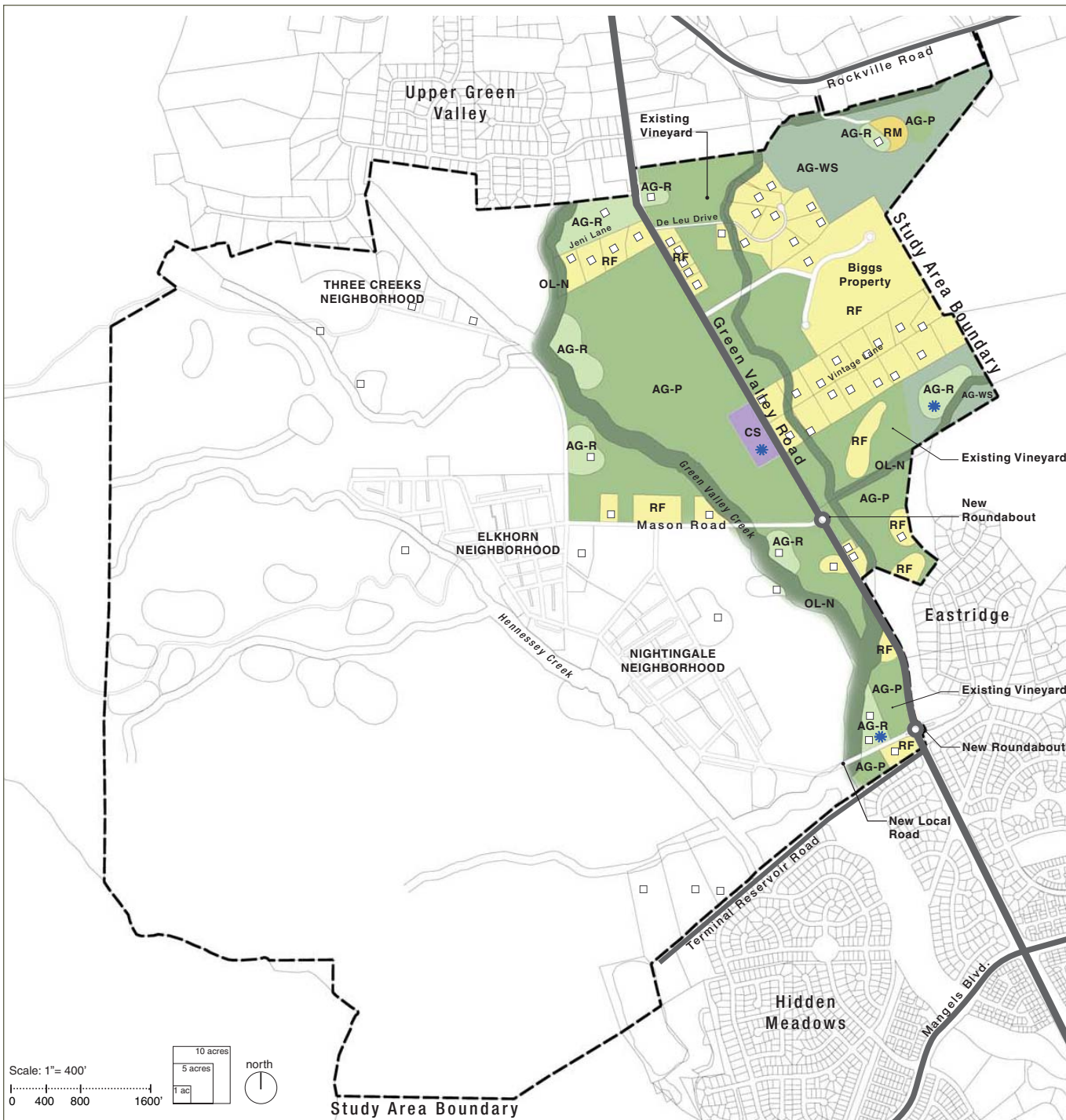
(1) Refer to specific Building Type requirements for permitted Secondary Units, Section 5.4.1.

(2) Trail improvements are to comply with all applicable state and federal permits.

(3) Passive Recreation uses include walking, sitting, picnicking, organized games or events.

(4) Complimentary tourist facilities include tasting rooms, gift shops, galleries, restaurants, cafes, facilities for the sale of local produce, and ancillary offices for the support of agricultural tourism.

p – Permitted Uses
c – Conditional Use Permit Required
-- Uses not allowed



Land Use Summary- Green Valley Road Corridor

		Max. New Units	20
			Acres
	OL-N Open Lands- Natural	78	
	OL- R Open Lands- Recreation	--	
	AG-WS Agriculture- Watershed	52	
	AG-P Agriculture- Preserve	210	
	AG-R Agriculture- Residential	30	
	RF Rural Farm	131	
	RM Rural Meadow	2	
	RN Rural Neighborhood	--	
	RC Rural Mixed-Use Center	--	
	CS Community Services	5	
	PS Public Services	--	
	ATO Agricultural Tourism Overlay		
	NCO Neighborhood Commercial Overlay		
	Existing Residential		

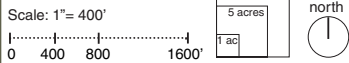


Figure 3-45: Green Valley Road Corridor

3.5.5 NEIGHBORHOOD LAND USE OVERVIEW

The following section describes the general distribution of the four types of land uses and two overlay zones and the maximum number of new residential units allowed in each area. Units may not be transferred from one neighborhood area to another so that the maximum unit number for any neighborhood is exceeded as set out in Table 3-5 - Maximum New Units per Neighborhood. Refer to Table 3-3 for the land use summary and Table 3-4 for allowed uses.

A. Green Valley Road Corridor

Green Valley Road is located in the easterly sector and provides the main access road through the Plan Area. This area is predominately Open Lands and Agriculture designations in order to retain the rural qualities and scenic viewshed from Green Valley Road. The maximum amount of new residential units that may occur in the Green Valley Road Corridor is 20.

Open Lands Designations

The Green Valley Creek corridor (minimum 200 foot wide corridor) as well as the unnamed drainage corridor (minimum 100 foot wide corridor) on the east side of Green Valley Road make up the two main Open Lands (OL-N) components of this area.

Agriculture Designations

Essentially, both new and existing working agricultural lands (AG-P) are preserved on both sides of Green Valley Road to reinforce the scenic and rural qualities of the area. New and existing agricultural residential uses (AG-R) are located in screened and obscured areas within the corridor to complement the rural character.

Residential Designations

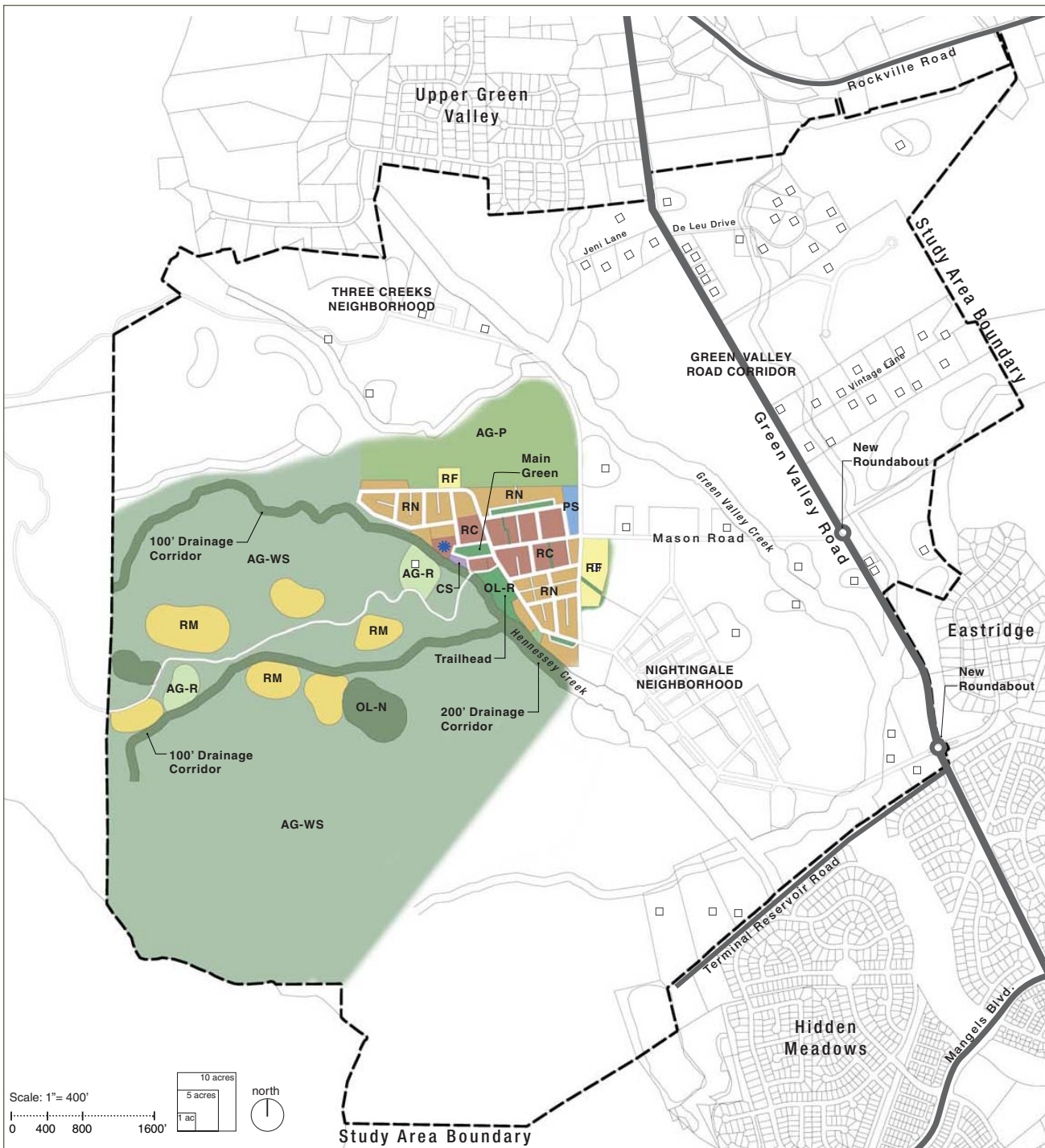
Existing residential lots (Jeni Lane, Vintage Lane, De Leu Drive and lots directly accessed from Green Valley Road) are designated Rural Farm (RF). In the most southeasterly corner Rural Meadow (RM) is designated. An active tentative map exists within the northeasterly area of Green Valley Road (Biggs Property), which is designated Rural Farm (RF).

Community Services Designation and Agricultural Tourism Overlay

A Farm Stand, an agricultural tourism use (ATO) with complimentary uses, and a community gathering facility (CS) such as a grange hall, are located across from the Vintage Lane access drive. These two buildings would be a maximum of 3,000 sf. This farm stand and community assembly area are to support local agricultural viability and provide a gathering place for the community. Refer to Section 4.5 - Development Sequencing, for details regarding development timing requirements.

NEIGHBORHOOD	MAX. NEW UNITS
Green Valley Road Corridor	20
Elkhorn	225
Nightingale	100
Three Creeks	55
TOTAL	400

Table 3.5: Maximum New Units per Neighborhood



Land Use Summary- Elkhorn Neighborhood

	Max. New Units	225
		Acres
OL-N	Open Lands- Natural	41
OL-R	Open Lands- Recreation	5
AG-WS	Agriculture- Watershed	394
AG-P	Agriculture- Preserve	46
AG-R	Agriculture- Residential	8
RF	Rural Farm	6
RM	Rural Meadow	30
RN	Rural Neighborhood	24
RC	Rural Mixed-Use Center	15
CS	Community Services	1
PS	Public Services	2

- ATO Agriculture Tourism Overlay
- NCO Neighborhood Commercial Overlay
- Existing Residential

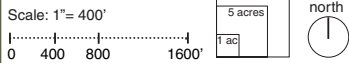


Figure 3-46: The Elkhorn Neighborhood

B. Elkhorn Neighborhood

This neighborhood is located in the central portion of the Plan Area and its primary access is from the existing Mason Road. The maximum number of new residential units that may occur in the Elkhorn neighborhood is 225.

Open Lands Designations

Upper Hennessey Creek (100-200 foot wide corridor), two unnamed tributaries in the western foothills (minimum 100 foot wide corridors) and an existing stock pond make up the main Open Lands- Preserve (OL-N) components of this area.

The neighborhood area is organized around the main Green that offers opportunities for outdoor events, farmer's markets, community gardens and/or recreational venues (OL-R). Linked to the main Green is a network of smaller greens, rambles and community garden opportunities (OL-R). To the south of the Green, a trailhead with associated parking and improvements is located (OL-R).

Agriculture Designations

New productive agricultural lands (AG-P) are located on the northern edge of the neighborhood. One existing and one proposed agricultural residential use (AG-R) are located in screened and obscured areas within the lower and upper foothill areas. In the upper foothill areas, woodland and grassland areas are to be managed as grazing lands (AG-WS).

Residential Designations

A mix of residential designations occurs in this neighborhood. The core of the neighborhood is Rural Mixed-Use Center (RC) surrounded by a mix of detached residential uses in the RN, RC and RF zones. The neighborhood in the western foothills is Rural Meadow (RM) nestled in the oak woodlands and meadows out of view from the valley floor.

Community Services Designations

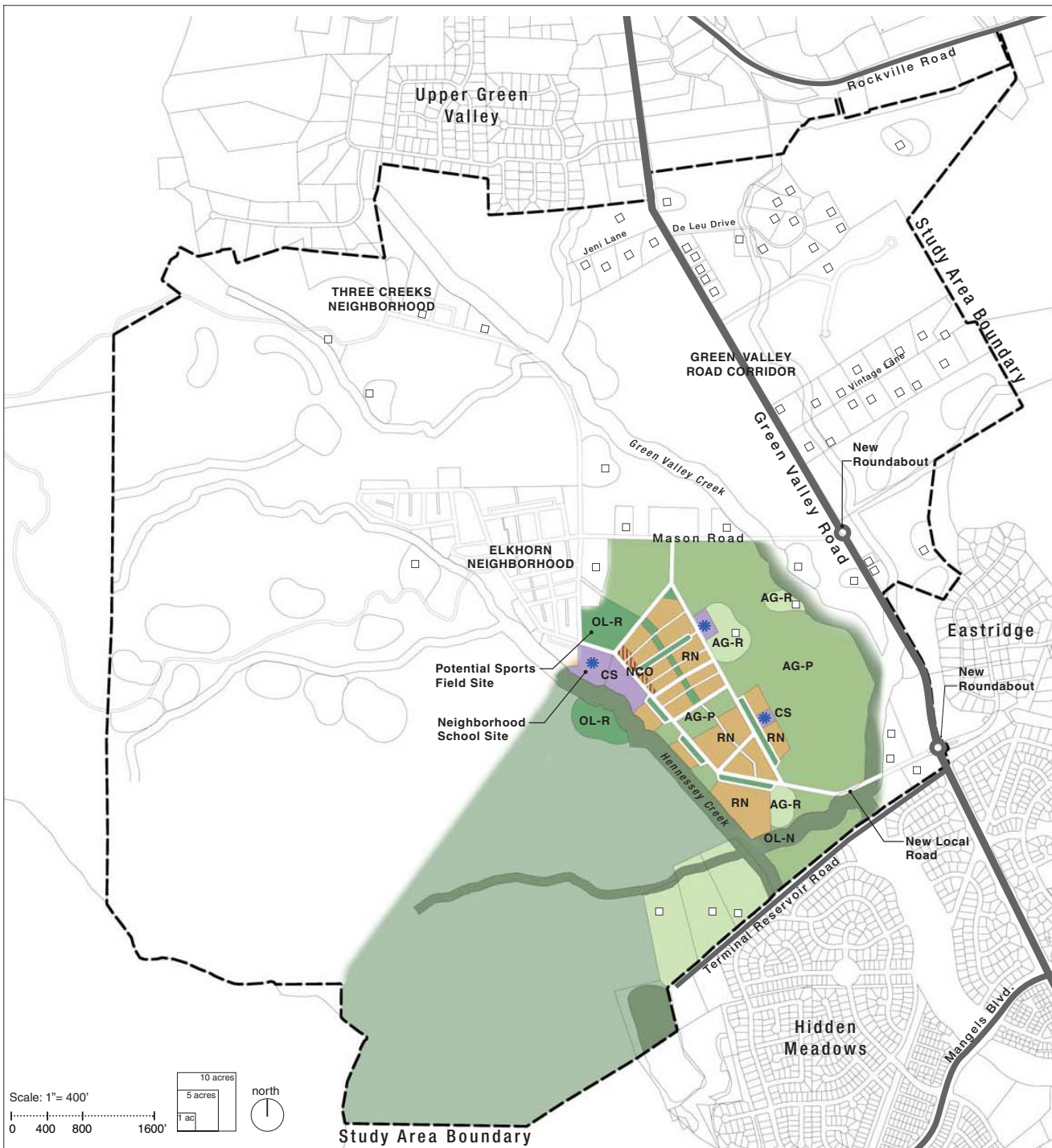
An area for a community assembly use (CS) is located along the Hennessy corridor edge at the main Green area. A non-denominational church is envisioned here as an anchor to the main Green (maximum 60 seats). In addition, a public services site (PS) on the northeasterly edge of the neighborhood may be utilized for public utility infrastructure improvements. Refer to Section 4.5 for development sequencing requirements.

Agricultural Tourism Overlay

An agricultural tourism overlay use is located on the westerly edge of the main Green (ATO) to compliment the community use and neighborhood commercial uses at the main Green. This use is envisioned as a small inn (max 25 rooms) and/or agricultural tourism related use.

NEIGHBORHOOD	MAX. NEW UNITS
Green Valley Road Corridor	20
Elkhorn	225
Nightingale	100
Three Creeks	55
TOTAL	400

Table 3.5: Maximum New Units per Neighborhood



Land Use Summary- Nightingale Neighborhood

	Max. New Units	100	Acres
OL-N	Open Lands- Natural	31	
OL-R	Open Lands- Recreation	16	
AG-WS	Agriculture- Watershed	280	
AG-P	Agriculture- Preserve	93	
AG-R	Agriculture- Residential	36	
RF	Rural Farm	--	
RM	Rural Meadow	--	
RN	Rural Neighborhood	32	
RC	Rural Mixed-Use Center	--	
CS	Community Services	8	
PS	Public Services	--	
ATO	Agriculture Tourism Overlay		
NCO	Neighborhood Commercial Overlay		
Existing Residential	Existing Residential		

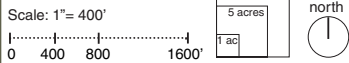


Figure 3-47: Nightingale Neighborhood

C. Nightingale Neighborhood

This neighborhood is located in the southerly portion of the Plan Area, and its main access is from the new local road originating at Green Valley Road. The maximum number of new residential units that may occur in the Nightingale Neighborhood is 100.

Open Lands Designations

Lower Hennessey Creek (minimum 200 foot wide corridor), is the main Open Lands-Natural (OL-N) component of this area which runs along the westerly edge of the neighborhood. The neighborhood area is organized around a network of Open Lands areas, including Greens, rambles and community garden areas (OL-R). At the northerly edge of the neighborhood, a sports fields area (OL-R) is located along with a more informal field area (OL-R) across Hennessey Creek to compliment the school site. Refer to Section 4.5 for development sequencing requirements.

Agriculture Designations

New and existing working agricultural lands (AG-P) are located along the easterly and northerly edges of this neighborhood. Agricultural lands also pierce this neighborhood in the central portion to reinforce the connection to the farmlands and to provide a central organizing Open Lands element.

Two existing and one proposed agricultural residential use (AG-R) are related to the working agricultural field areas.

Residential Designation and Neighborhood Commercial Overlay

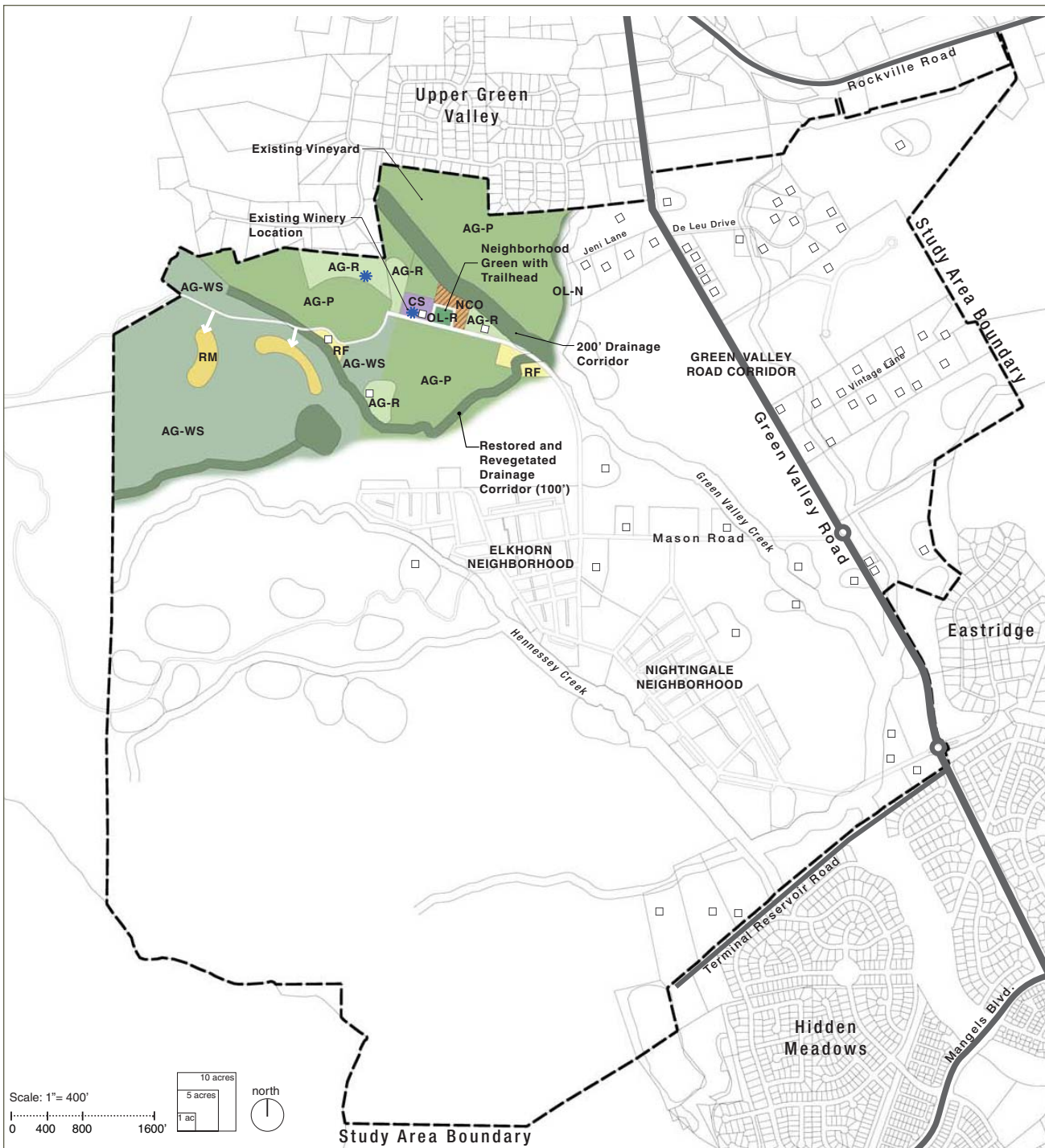
This neighborhood is predominately in the Rural Neighborhood (RN) zone with a Neighborhood Commercial Overlay (NCO) in the northwesterly area to provide a mix of potential neighborhood serving commercial uses.

Community Services Designations and Agricultural Tourism Overlays

Nightingale accommodates the potential for community serving (CS) and complimentary agricultural tourism uses. A private neighborhood school (maximum of 100 students) is envisioned in the northwesterly area. An additional community serving use such as a fitness or recreation center is located just to the south of the school site along Hennessey Creek. Two other community services areas (CS) with agricultural overlays (ATO) are located along the easterly edge of the neighborhood to offer opportunities for agricultural processing and/or agricultural tourism uses (wineries, commercial nurseries, olive oil press).

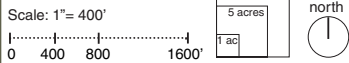
NEIGHBORHOOD	MAX. NEW UNITS
Green Valley Road Corridor	20
Elkhorn	225
Nightingale	100
Three Creeks	55
TOTAL	400

Table 3.5: Maximum New Units per Neighborhood



Land Use Summary- Three Creeks Neighborhood

	Max. New Units	55
		Acres
OL-N Open Lands- Natural	20	
OL-R Open Lands- Recreation	1	
<hr/>		
AG-WS Agriculture- Watershed	125	
AG-P Agriculture- Preserve	101	
AG-R Agriculture- Residential	15	
<hr/>		
RF Rural Farm	2	
RM Rural Meadow	7	
RN Rural Neighborhood	--	
RC Rural Mixed-Use Center	--	
<hr/>		
CS Community Services	2	
PS Public Services	--	
<hr/>		
ATO Agriculture Tourism Overlay		
NCO Neighborhood Commercial Overlay		
Existing Residential		



Study Area Boundary

Figure 3-48: Three Creeks Neighborhood

D. Three Creeks Neighborhood

This neighborhood is located in the northerly portion of the Plan Area and its primary access is from Mason Road. The winery in this neighborhood provides the anchor in this area to establish complimentary community, commercial and agricultural tourism uses. The maximum number of new residential units in the Three Creeks neighborhood is 55.

Open Lands Designations

This area is surrounded by drainage corridors, the Green Valley creek corridor to the east (minimum 200 foot wide corridor), and two unnamed drainages from the western foothills to the south and west (minimum 100 foot wide corridors). These drainages make up the main components of the Open Lands – Preserve areas (OL-N). The neighborhood area is organized around a smaller network of Open Lands areas, including a central Green for outdoor gatherings, trailhead use, events area and community garden areas (OL-R) for passive open space activities.

Agricultural Designations

Existing and new agricultural lands (AG-P) surround this neighborhood on the valley floor along its northern and southern edges as well as in the foothills. Three existing agricultural residential uses (AG-R) are located in screened and obscured areas within the valley and upper foothill areas. In the upper foothill areas, woodland and grassland areas are to be managed as grazing lands (AG-WS).

Residential Designation and Neighborhood Commercial Overlay

This neighborhood is predominately in the Rural Neighborhood (RN) zone with a Neighborhood Commercial Overlay (NCO) area at the neighborhood Green to provide the potential for a mix of neighborhood serving commercial uses that would compliment the existing winery. Within the foothills, single family detached residences occur in the RM zone.

Community Services Designations and Agricultural Tourism Overlays

Three Creeks accommodates a community serving use (CS) with an agricultural tourism overlay (ATO) at the existing winery to provide the opportunity to build on the existing agricultural processing and operations. An additional agricultural tourism overlay occurs in the lower foothills to provide opportunities for an additional winery and/or related use.

NEIGHBORHOOD	MAX. NEW UNITS
Green Valley Road Corridor	20
Elkhorn	225
Nightingale	100
Three Creeks	55
TOTAL	400

Table 3.5: Maximum New Units per Neighborhood

3.5.6 BUILDING TYPES

The Built Fabric is based on 7 Building Types that act as the building blocks for the form-based design of these neighborhoods. The following section summarizes the Building Types of the plan which emphasize the concepts of flexibility and functionality while borrowing from the precepts of rural architecture traditions. Refer to Table 3-4 for allowed uses in specific land use zones, and section 5.4.1 for detailed standards and applicability of Building Types.



A. AGRICULTURAL TOURISM/ COMMUNITY

Forms: These are the dominant, expressive, agricultural building forms that remind us of where we are in the world and the rich legacy we are living in. They draw from the simple, bulky, honest forms of barns, water towers, and agricultural service and utility buildings that dot the farming landscape. These buildings occur throughout the community to frame and punctuate views, provide variety, and stand as sentinels along the edges of the neighborhood fabric.



B. COURTYARD

Forms: This is an attached, zero-lot line Building Type, that viewed together as one mass, borrows from the simple barn and winery forms. Arranged around a network of courtyards and alleys, this building form provides a great deal of flexibility in responding to evolving building uses.





C. BUNGALOW

Forms: This is a smaller detached Building Type that draws from the simple honesty and human scale qualities of rural architecture. Front porches, fences, tree lined streets and paths all work together to create distinct neighborhoods that make up small town character.



D. FARMSTEAD

Forms: This is a larger detached Building Type that is located predominately at the perimeter of the neighborhoods. A collection of informal buildings with wrap around porches, three rail fences, and informal gravel driveways, all work together to reinforce the rural character while providing a distinct edge and transition to the larger agricultural landscape.



E. MEADOW LOT

Forms: This is a detached Building Type organized around informal meadow features in foothill areas. Located at the edges of meadows, these building forms nestle into the landscape and borrow from the horizontal forms of the rural ranch traditions. Rambling building forms with rustic treatments, informal gravel driveways, and dry stacked stone walls, work together to create a ranch character that lets the oak woodland landscape dominate.



F. COMPOUND LOT

Forms: This Building Type is located within the larger agricultural and oak woodland landscapes. This type offers opportunities to create a collection of connected buildings that echo the massing and simple geometric forms of agricultural and family compound buildings as they grew over time.





G. SECONDARY UNIT**/ANCILLARY STRUCTURES

Forms: The intent of this Building Type is to reinforce the idea of a collection of buildings that grew over time to respond to evolving needs. These Building Types are subordinate to the main structure, while utilizing the same, human scale qualities and forms of rural architecture. These buildings are to utilize similar or complementary materials to the main structure but may be more whimsical or playful in style. They may be either connected by architectural projections or freestanding to the main structure. Secondary Units may only occur with specific Building Types, while Accessory Structures may occur with all Building Types. Refer to Section 5.4.1 - Building Types for specific details and Appendix A for specific definitions.

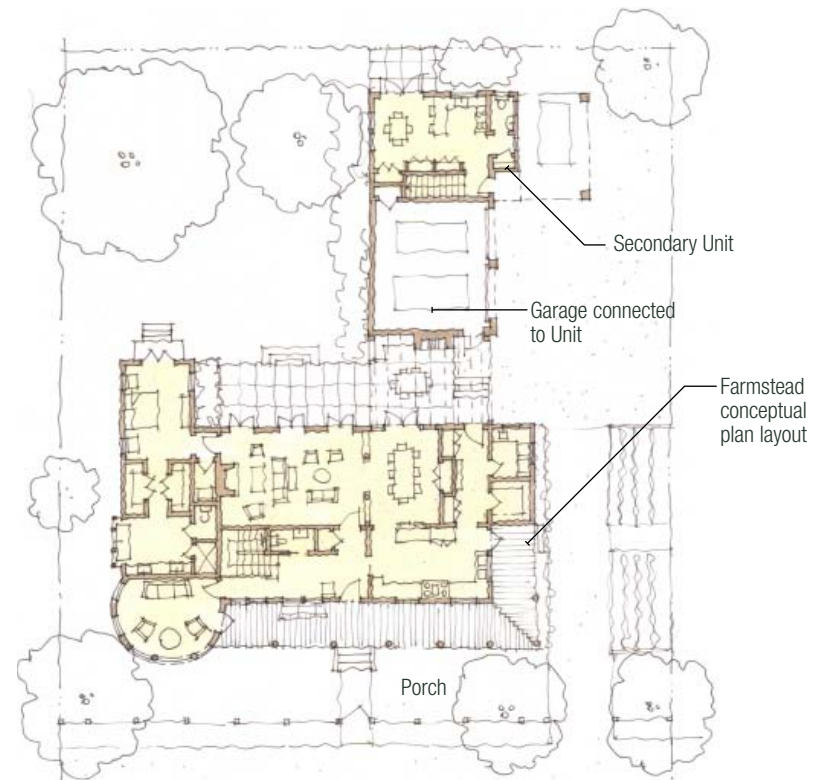


Figure 3-49: Conceptual House Plan with Secondary Unit

**** Secondary Unit (Dwelling, secondary):** One additional dwelling unit on the same ownership as the primary dwelling, providing independent living quarters, including sleeping, eating, cooking and sanitation facilities. Either the primary dwelling or the secondary dwelling shall be owner-occupied. If either dwelling is leased, such lease shall not cause the subdivision of the property. A secondary dwelling shall not be considered an accessory building or an accessory use, as those terms are defined separately. Includes an accessory dwelling established pursuant to Ordinance No. 1679.

- Solano County Zoning Ordinance

3.6 WORKFORCE HOUSING OPPORTUNITIES

The Solano County Housing Element sets forth policies and programs intended to provide the opportunity to develop Secondary Dwelling Units, farm worker housing, and accessory units as a means to expand the overall diversity and supply of housing options and to support the agricultural economy. The Housing Element is updated every 5 years to respond to shifts in local and regional employment and housing opportunities.

To meet the spirit of the Housing Element and to achieve a diverse community both socially and economically, this Specific Plan designates specific Standards, uses and size limitations for Secondary Units, to occur only with specific Building Types within the Plan Area. Refer to Building Types - Section 5.4.1, for additional information regarding where Secondary Units are allowed.

[HOUSING ELEMENT, POLICIES AND PROGRAMS]

B.5 The County shall actively encourage and facilitate the development of ... accessory dwelling units, and secondary dwelling units as a means to expand the overall supply of housing, especially as a means of providing relatively affordable housing for people employed in the agricultural areas, or for the elderly or disabled, who may need to receive assistance from a relative or caregiver residing on the same property.

B.2 Companion, Accessory, and Secondary Dwelling Unit Program.

To maximize the potential for housing development ... the County will continue to implement streamlined permitting processes for these types of units. The County will recommend that the Board of Supervisors amend the Rural Residential zoning designation to be similar to the Agricultural zoning districts by allowing accessory dwelling units, by right, but subject to size restrictions...

[HOUSING ELEMENT, PROGRAMS]

Through provisions of the zoning code, ... second dwelling units including ..., "secondary dwelling units," and "accessory dwelling units" incidental to agricultural uses can be utilized to provide opportunities for low cost housing.

- Solano County General Plan



Figure 4-1 - The Green Valley Farm Stand



The great conservation opportunities of the next century will be on privately owned land, and conservation easements are the most effective way to protect these lands. Landowners like conservation easements because they are a refreshing alternative to government regulation; they are voluntary, local, and respect private property rights. For the many people who love their land, it is the best way to ensure that it will be preserved for all time.

- Rand Wentworth, Land Trust Alliance

4.0 IMPLEMENTATION: **FINANCE, INFRASTRUCTURE AND EXECUTION**

This Chapter sets forth the implementation framework for the realization of a community based on conservation and sustainability. This section is divided into six general sections: Section 4.1, Implementation Policies, describes the overarching policies that underlie the approach to financing, infrastructure improvements and development sequencing, Section 4.2, Implementation Concept describes the conservancy model and underlying policies and programs, Section 4.3, Public Utilities and Services, describes the infrastructure alternatives and concepts to serve the Plan Area, Section 4.4, Administrative Procedures outlines the administrative procedures that identify the procedural steps in implementing the Specific Plan, Section 4.5, Development Sequencing, describes the process and sequence of infrastructure to serve the Plan Area over time, and Section 4.6, Financing Plan, describes the financing methods which will allow development to proceed in an orderly and fiscally responsible manner. The implementation information described in this Chapter should be used in conjunction with the balance of the Specific Plan to understand how all these elements together create a comprehensive development plan.



[Policies]

4.1 IMPLEMENTATION POLICIES

The implementation policies seek to build on the main goal and policies of the SSA, the relevant goals and policies in the General Plan as well as the Principles set out in Chapter 1.0 of this Specific Plan.

Policy IM-1: Establish an independent non-profit conservation organization to oversee the management, protection, and restoration of environmental resources, ensure the vitality of the agriculture lands, and monitor the design and build out of the community according to the plans, policies and initiatives described in this Specific Plan.

Policy IM-2: Provide conservation, educational and agricultural programs, initiatives and performance criteria to guide both the conservation organization and the overall community in ensuring the long-term protection of resources, viability of agriculture and the engagement of the community as stewards of these lands.

Policy IM-3: Enhance development flexibility by providing a sensible phasing approach that seeks to reduce upfront costs, allows for development in relatively small increments, and encourages the early establishment of the “agricultural front door”-- the farm stand and related agricultural lands along Green Valley Road.

Policy IM-4: Incorporate incentives in the development standards that foster the utilization of green technologies and innovative designs to reduce resource consumption.

Specific Plan Principles

1. Respect and honor the cultural landscape and environmental setting to establish a stewardship ethic and sustainable way of life.
3. Value flexibility and anticipate change while providing an innovative, rigorous development framework.

4.1A – GENERAL PLAN CONSISTENCY REFERENCE - IMPLEMENTATION PLAN

The implementation framework and the supporting Specific Plan policies described in this section are consistent with and build upon the following goals, policies, and the Middle Green Valley SSA implementation program of the General Plan:

[MIDDLE GREEN VALLEY SSA POLICIES:]

SS.P-4: Provide a variety of incentives and techniques to encourage property owners to preserve natural and visual resources, in addition to the transfer of development rights.

SS.P-6: In accordance with balancing the protection of resources described in these policies, adopt a program that provides residential development credits to property owners who voluntarily forego or limit development on their lands. The transfer of development rights program should focus incentives on land in areas to be preserved.

SS.P-8: Create additional methods to assist landowners who choose to continue farming, such as, but not limited to:

- enforcing the right-to-farm act and educating residents on the act; and
- investigating mechanisms for providing farmers with economic assistance to ensure agricultural viability

[MIDDLE GREEN VALLEY SSA - IMPLEMENTATION PROGRAM:]

SS.I-1: Adopt a plan (either a specific plan or master plan) to implement these policies for Middle Green Valley.

That plan should specify:

- the area covered by the plan;
- techniques to ensure development is compatible with the rural character of Middle Green Valley and surrounding areas. Such techniques should include design guidelines and development standards;
- guidelines for cluster development, including minimum and maximum lot sizes, development standards, and density bonus credits for clustered development;
- the details of a transfer of development rights program (with an implementing ordinance), including: the designation of areas where development is preferred, creating appropriate and equitable re-zoning, clustering of housing, and determining the ratio of credits to property owners who voluntarily forego development;
- the number of units and/or credits, with or without clustering, that will provide incentives for all landowners in the area to participate in a market driven transfer of development rights program, based on 400 units, subject to further study;
- the location and dimensions of a wildlife corridor (“green corridor”);
- the maximum number of units any property owner can develop, with or without clustering;
- the techniques to be applied voluntarily by property owners that ensure permanent protection and maintenance of resources/views on lands to remain undeveloped; and
- the details of how the development would be served with water and wastewater service. Attempt to secure public water and wastewater service through a cooperative effort of property owners, residents, the County, and the City of Fairfield.

Property owners shall receive a minimum development credit for the number of primary dwelling units that would be allowed under the land use designations under the 1980 General Plan.

For land designated as Agriculture, the number of units/credits would be one per 20 acres and for land designated Rural Residential the number of units/credits would be one per 5 acres.

[LAND USE GOAL AND POLICY:]

LU.G-2: Encourage a development pattern that first seeks to maintain existing communities, second to develop vacant lands within existing communities presently served by public services and third not to develop lands immediately adjacent to existing communities where services can easily be provided.

LU.P-35: Promote land use and design standards that create cleaner air and water and safer streets.

[AGRICULTURE GOAL AND POLICIES:]

AR.G-6: Recognize, support, and sustain agricultural water resources for farmlands.

AG.P-9: Promote efficient management and use of agricultural water resources.

AG.P-10: Support efforts by irrigation districts and others to expand the county’s irrigated agricultural areas where appropriate.

AG.P-14: Support and promote streamlined permit processing procedures for agriculture-related buildings on Agriculture designated parcels (including barns, farm stands, and agricultural processing plants).

AG.P-20: Protect, encourage, and provide incentives to agricultural processors that serve local/regional markets.

[RESOURCE POLICIES:]

RS.P-2: Manage the habitat found in natural areas and ensure its ecological health and ability to sustain diverse flora and fauna.

RS.P-4: Together with property owners and federal and state agencies, identify feasible and economically viable methods of protecting and enhancing natural habitats and biological resources.

RS.P-50: Provide incentives for city and county residents and businesses to produce and use renewable sources of energy.

RS.P-52: Ensure adequate and affordable supplies of energy to meet the energy needs of the county.

[WATER RESOURCES POLICY:]

RS.P-71: Ensure that land use activities and development occur in a manner that minimizes the impact of earth disturbance, erosion, and surface runoff pollutants on water quality.

RS.P-76: Promote sustainable management and efficient use of agricultural water resources.

[PUBLIC HEALTH AND SAFETY POLICY:]

HS.P-17: Restrict the crossing of ground failure areas by new public and private transmission facilities, including power and water distribution lines, sewer lines, and gas and oil transmission lines.

HS.P-47: Promote GHG emission reductions by supporting carbon efficient farming methods (e.g., methane capture systems, no-till farming, crop rotation, cover cropping, residue farming); installation of renewable energy technologies; protection of grasslands, open space, and farmlands from conversion to other uses; and encouraging development of energy-efficient structures.

[PUBLIC FACILITIES AND SERVICES POLICIES:]

PFP-3: Increase efficiency of water, wastewater, stormwater, and energy use through integrated and cost-effective design and technology standards for new development and redevelopment.

PFP-6: Guide development requiring urban services to locations within and adjacent to cities.

PFP-7: Coordinate with the cities to strongly encourage compact urban development within city urban growth areas to avoid unnecessary extension or reconstruction of roads, water mains, and services and to reduce the need for increased school, police, fire, and other public facilities and services.

PFP-11: Promote and model practices to improve the efficiency of water use, including the use of water-efficient landscaping, beneficial reuse of treated wastewater, rainwater harvesting, and water-conserving appliances and plumbing fixtures.

PFP-13: Support efforts by irrigation districts and others to expand Solano County’s irrigated agricultural areas.

PFP-15: Domestic water for rural development shall be provided through the use of on-site individual wells or through public water service.

PFP-16: Provide and manage public water service through public water agencies.

PFP-21: Sewer services for development within the unincorporated area may be provided through private individual on-site sewage disposal systems, or centralized community treatment systems managed by a public agency utilizing the best systems available that meet tertiary treatment or higher standards. Use of such centralized sewage treatment systems shall be limited to: (1) existing developed areas, (2) areas designated for commercial or industrial uses, or (3) areas designated for rural residential development when part of a specific plan or policy plan overlay.

PFP-22: Ensure that new and existing septic systems and sewage treatment systems do not negatively affect groundwater quality.

PFP-26: Implement and participate in local and regional programs that encourage source reduction and recycling of solid and hazardous wastes in Solano County.

PFP-50: Locate, design, and construct transmission lines in a manner that minimizes disruption of natural vegetation, agricultural activities, scenic areas, and avoids unnecessary scarring of hill areas.

4.2 THE IMPLEMENTATION CONCEPT: THE CONSERVANCY MODEL

The conservancy model is based on these main concepts, described throughout this document:

- **Protection** - *the long-term protection and support for the unique environmental and cultural values of the land;*
- **Establishing a stewardship ethic** - *a settlement that limits development to environmentally suitable lands and is an integral, interactive part of a healthy, productive, rural ecosystem;*
- **Sustainable** - *a vital, small, residential community that provides the philosophical, cultural and financial support required for the on-going preservation and management of the natural and cultural assets.*

The key to implementing the Plan is a new, independent non-profit organization, to be called the *Green Valley Agricultural Conservancy (Conservancy)* that is established consistent with the Land Trust Alliance's *Land Trust Standards and Practices* to act as an objective body in overseeing the management and monitoring of the Plan Area resources and build-out. The Conservancy, combined with the goals, policies, programs, initiatives and Neighborhood Design Code (Chapter 5) outlined in this document, assures that this resource-based Plan is carried out year-after-year.





4.2.1 THE GREEN VALLEY AGRICULTURAL CONSERVANCY

[PROVIDING FOR THE FUTURE]

Preserving the rural beauty and cultural legacy of the Green Valley area is the guiding vision in crafting a long term, equitable, and sustainable development plan. This Specific Plan seeks to celebrate and perpetuate the tradition of the working landscapes that have characterized this part of Solano County for over 150 years. A core component is the promotion of sustainable food and agriculture systems as a means to synergize the relationship between agricultural lands, the built and natural environments, community health and natural resource stewardship.

To provide assurances for the long term preservation and management of the Open Lands, this Specific Plan envisions the creation of the Conservancy to oversee the ±1,490 acres of productive agricultural land, pastures, and natural areas. The Conservancy has three primary areas of responsibility:

- **Assisting and encouraging the farms in Green Valley** and where appropriate helping to manage agricultural operations and public education activities;
- **Overseeing the management, stewardship, enhancement, restoration** and access easements for conservation lands including oak woodlands, riparian areas, pastures, rangelands, and agricultural lands and assisting landowners to identify and interface with an established, qualified, accredited land trust to hold title to the conservation easements (Conservation Easement Holder);
- **Managing and developing a design review process** for the community consistent with Specific Plan goals and principles.



THE CONSERVANCY: SHAPING THE COMMUNITY STEWARDSHIP ETHIC

THE CONSERVANCY IS A DEFINING FEATURE FOR THE MIDDLE GREEN VALLEY PLAN. IT IS ENVISIONED AS:

- **an agricultural operation**, growing for the local community and regional foodshed,
- **a land steward**, managing conservation and agricultural easements, as well as overseeing the evolution of the built environment through its design review role;
- **a community builder** – providing educational and interpretive opportunities and the social glue for the community.

Living in a working landscape that is connected to the regional network of Open Lands will shape community life in numerous ways. Buying seasonal fresh food from the Green Valley Farm Stand, attending an outdoor fundraiser at the main Green, or helping to restore the creeks and related habitats will be typical events of everyday life in Green Valley.



MAKING AGRICULTURE WORK: [PLANNING TO PROTECT QUALITY OF LIFE]

For over a century, Green Valley, just like neighboring Suisun Valley, was known for the abundance and variety of its orchards and row crops. The conducive agronomic conditions still exist – good soils, moderate climate, and plentiful water. Access to flavorful, fresh local food and awareness of the local foodshed is once again becoming synonymous with quality of life and with community health. What has threatened the rich agricultural valleys of Solano County and metropolitan edge agriculture almost everywhere for the past few decades is the very challenging economics of farming in urban areas while competing in a global marketplace for food products. Local artisan grown food is currently the fastest growing segment in the food industry, but the industry needs support if it is to grow past a boutique exclusive offering to select communities.

[THE GREEN VALLEY FARM STAND]

The Heart of the Neighborhood

The Green Valley Farm Stand, located along Green Valley Road, will be one of the first tangible results of the Plan. It will celebrate and further the area's agricultural traditions. It will help to satisfy burgeoning local and regional demand for fresh local food and provide for strengthening the connections to local farmers and regional farmlands. It will do this by addressing the challenge that has undermined urban-edge farming

economies – **long-term, financial stability**. As described in Section 3.5.5, this Specific Plan requires the design and construction of the Farm Stand to occur in the first phases of the project. The establishment of transfer tax assessments on the properties within the Plan Area may provide for ongoing maintenance and operations, as described in this section.

[CONNECTING ON MANY LEVELS]

Connectivity will be a hallmark of the Conservancy. The Conservancy will be connected to the farmers in the surrounding agricultural areas for the purposes of collaborating on regional branding and opportunities for developing distribution and processing infrastructure. More broadly, the Conservancy will connect the community with the increasing awareness about the greater Bay Area foodshed and the benefits of locally grown food.

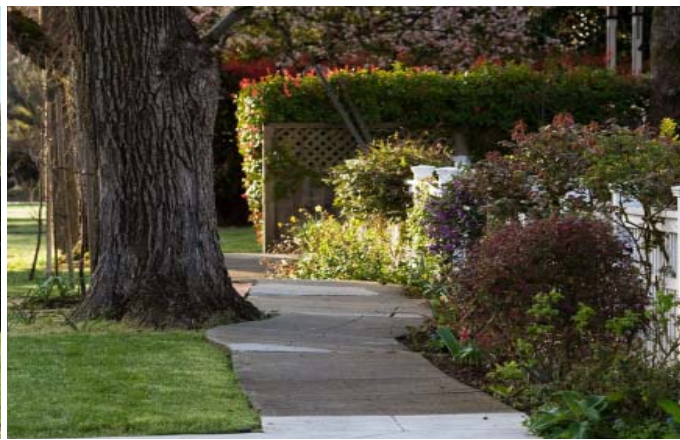
To accomplish the vision, the Conservancy will oversee the management of the Open Lands by the landowners and the Conservation Easement Holder to ensure appropriate stewardship and conservation. Conservation easements will be held by a qualified, accredited non-profit organization for those portions of the Open Lands that require agricultural, grazing and/or ongoing resource management. The Conservancy will assist in overseeing and coordinating these easements to ensure that a comprehensive management strategy is used.

PROTECTING LANDS IN PERPETUITY

THE GREEN VALLEY AGRICULTURAL CONSERVANCY MISSION:

The mission shall be to protect the natural diversity, agricultural vitality and rural character of Green Valley by overseeing the preservation, monitoring and management of the natural and agricultural lands and by fostering an appreciation and understanding of the environment, the connection to regional food systems and a healthy lifestyle.





[CONSERVANCY GOALS:]

Develop a mission statement consistent with these Goals:

- Oversee a conservation easement program to protect significant, scenic and agricultural lands based on developing solid partnerships with landowners for the mutually beneficial goal of practicing excellent stewardship.
- Oversee the appropriate management and monitoring of conservation easements and ensure enforcement of restrictions to protect natural, cultural and agricultural values.
- Support the establishment and management of the Green Valley Farm Stand to provide the heart of the agricultural operation by providing local produce, connections to regional farming activities, and community engagement.
- Utilize farm leases, management agreements, farm subsidies and other tools to support and improve the agricultural production of the Specific Plan Area.
- Provide educational and related interpretive opportunities to foster appreciation and understanding of the natural environment and regional food systems.
- Support the establishment of a stewardship ethic that encourages the conservation of resources, responsible development practices and community participation.
- Effectively communicate with the community and the public to promote greater involvement in Conservancy activities and the region as a whole.
- Create and implement a fair, effective process for design review of all Built Improvements within the Plan Area.
- Continually improve the effectiveness and involvement of the board, staff and volunteers.
- Obtain and manage funds to carry out the Conservancy's work in a fiscally responsible manner.



THE CONSERVANCY STRUCTURE

The Conservancy offers a strategic and powerful land conservation tool that promises a more certain future for the ability to shape and manage the growing community, protect working agriculture and help define the community character and stewardship ethic. The Conservancy will be a nonprofit Internal Revenue Code Section 501(C)(3), tax exempt organization. The Conservancy shall be committed to implementing the *Land Trust Standards and Practices* (Land Trust Alliance) which describes the ethical management and technical guidelines for conservation easements.

This corporation is a nonprofit public benefit corporation and is not organized for the private gain of any person. It is organized under the Nonprofit Public Benefit Corporation Law for charitable purposes.

The specific purposes of this corporation are to:

- (1) Promote and facilitate the stewardship of the agricultural lands through managing and monitoring conservation easements to protect natural, scenic, cultural and agricultural values;
- (2) Provide educational and related interpretive efforts to foster appreciation and understanding of the natural environment and regional food systems
- (3) Plant, cultivate and harvest agricultural products demonstrating sustainable land practices;
- (4) Use farm leases, management agreements, farm subsidies and other efforts to support ecologically sound farming practices and improve the agricultural production of the Middle Green Valley area.

[RESPONSIBILITIES AND OWNERSHIP]

The Conservancy will be formed to oversee the conservation lands, and potentially operate and/or manage certain areas of the agricultural land for the benefit of the community as well as manage the community design review process. The level and type of management and responsibility will vary depending on the needs and plans of each landowner.

In addition, there are several scenarios for land ownership, which may necessitate a mix of legal responsibilities for the Conservancy, depending on the needs and plans of the landowners, including fee title ownership (for lands donated to the Conservancy), leaseholds and/or management agreements for certain agricultural property overseeing easement monitoring and management by the Conservation Easement Holder, and an overall program to provide financial and technical support. The primary legal mechanisms used will be land donations, farm leases, management agreements and conservation easements.

For example, leases with property owners could allow the Conservancy to conduct farm operations itself with employees. Or, the Conservancy through a Request for Proposal (RFP) process could sublease land to individual farmers to operate enterprises on their own, but in accordance with Conservancy policies.

[LAND TRUST STANDARDS AND PRACTICES]

Land Trust Standards and Practices are guidelines for the responsible operation of a land trust, which is run legally, ethically and in the public interest and conducts a sound program of land transactions and stewardship.

The Land Trust Alliance originally developed the standards and practices in 1989 at the urging of land trusts, which believe a strong land trust community depends on the credibility and effectiveness of all its members. Land Trust Standards and Practices was last revised in 2004.

The Land Trust Accreditation Commission is an independent program of the Land Trust Alliance, that provides independent verification of the 37 indicator practices from Land Trust Standards and Practices that show a land trust's ability to operate in an ethical, legal and technically sound manner and ensure the long-term protection of land in the public interest.

[CONSERVANCY PROGRAMS]

The Conservancy will utilize the following documents to establish monitoring, management and education initiatives within the community:

Resource Management Plan (RMP) An RMP will be developed for the Plan Area by the Conservancy in cooperation with the landowners based on the General Plan, the Specific Plan Goals and Policies, the Final EIR (FEIR) and applicable federal or state permits related to natural resources. The purpose of the RMP will be to establish a framework of management standards and performance guidelines for the natural resources within the Open Lands. Supported by appropriate technical reports, the RMP will identify and describe specific management, monitoring and mitigation measures that are required to ensure the protection and on-going vitality of the resources consistent with approved project documents. The Conservancy will use this plan to formulate its management and oversight for the natural lands that are placed under conservation easements. Each landowner will be required to prepare and submit a RMP to the Conservancy for their property as part of their application for design review (as applicable), addressing the following:

- *Purpose and Objectives*
- *The Natural Resource Setting*
- *Identification and Protection of Valuable Resources*
- *Resource and Mitigation Monitoring*
- *Conservancy Education Initiatives*
- *Community Safety and Resource Protection*

The Conservancy shall utilize the following relevant General Plan policies and program to craft the RMP, ABP and community design review process documents:

[AGRICULTURE POLICIES]

AG.P-14: Support and promote streamlined permit processing procedures for agriculture-related buildings on Agriculture designated parcels (including barns, farm stands, and agricultural processing plants).

AG.P-19: Require agricultural practices to be conducted in a manner that minimizes harmful effects on soils, air and water quality, and marsh and wildlife habitat.

AG.P-20: Protect, encourage, and provide incentives to agricultural processors that serve local/regional markets.

AG.P-21: Promote natural carbon sequestration to offset carbon emissions by supporting sustainable farming methods (such as no-till farming, crop rotation, cover cropping, and residue farming), encouraging the use of appropriate vegetation within urban-agricultural buffer areas, and protecting grasslands from conversion to non-agricultural uses.

AG.P-23: Support recreation and open space activities that are complementary and secondary to the primary agricultural activities on the land.

AG.P-24: Continue to support nursery crop industries at locations with favorable growing conditions and transportation access.

AG.P-25: Facilitate partnerships between agricultural operations and habitat conservation efforts to create mutually beneficial outcomes.

[PUBLIC HEALTH AND SAFETY IMPLEMENTATION PROGRAM]

HS.I-58: Encourage agricultural best management practices regarding herbicide and pesticide use, odor control, fugitive dust control, and agricultural equipment emissions to minimize air quality impacts.

Agriculture Business Plan (ABP) – This plan will be developed by the Conservancy and will provide the road map to establish a viable, vital and community based agriculture operation connected to the regional network of open space and agricultural lands. This plan will include potential business strategies, suggested farming types, sustainable agricultural practices, branding and marketing opportunities, educational, regional tie-in concepts and long term management and educational opportunities. The Conservancy will use this plan to formulate its management and oversight of the farming lands placed under conservation easements. Each landowner will be required to prepare and submit an ABP for their property as part of their application for design review (as applicable) addressing the following:

- *Purpose and Objectives*
- *The Agricultural Resource Setting*
- *Identification of potential farming types and consistency with Conservancy sustainable agricultural practices*
- *Branding and marketing opportunities*
- *Financial information and proposed role of the Conservancy*

Community Design Review – Combined with the oversight of the natural and agricultural lands, the Conservancy shall provide the design review functions for all improvements within the Middle Green Valley SSA in accordance with Chapter 5, Neighborhood Design Code. The Conservancy Design Review Committee (CRC) and the design review process shall be developed by the Conservancy in accordance with the Guidelines set out in Section 5.9 of this document. The Conservancy shall ensure that all built improvements and resource and agricultural programs are consistent and complementary to the mission of the Conservancy and community goals. The design review requirements within the Middle Green Valley SSA are in addition to all applicable County, state and federal processing and submittal requirements.

[GOVERNANCE]

The primary purpose of the Board will be to establish organizational objectives and policies and to ensure progress toward those objectives. The Board shall undertake annual long-term planning, and in the early stages, as staff and capacity is built, the Board may need to carry out basic functions of the organization. The Board shall be comprised of property owners and qualified persons with expertise in agriculture, natural resource stewardship, easement management, business development, and agri-tourism. Conservancy staffing should start with a general manager and office manager; additional staff with expertise in marketing, public education, and conservation lands management, would be added as needed over time.

[CONSERVANCY FEES AND REVENUE MECHANISMS]

As the responsible entity for agricultural management, marketing, conservation stewardship, community design review, educational and related activities, the Conservancy will require sufficient initial and long term funding. The Conservancy will be financially supported by a combination of sources, including but not limited to, donations, charitable grants, and an endowment funded by a portion of the sale price for each lot (transfer tax).

Endowments

The Conservancy will set up an endowment that is funded primarily from the transfer tax from the sale and resale of property within the Plan Area. The Conservancy will use this endowment fund as the on-going primary funding mechanism for the management of the Conservancy and its operations.

Grant Funds

The Conservancy may be eligible for County, state, federal and foundation grant funds for various stewardship programs to support the cost of agricultural and resource land management and educational programming expenses. The Conservancy shall examine the requirements of the State Department of Land Conservation criteria and ensure that their articles of incorporation and bylaws contain the required language to make them eligible for these grant programs. These funds may only be for short-term or one-time programs and the Conservancy should anticipate leveraging these grants for long-term programs that generate revenue.

Examples of additional funding programs for the Conservancy include:

- **Green Valley Land Conservation Project** - In 1990, the City of Fairfield, County of Solano and residents of the Green Valley community finalized an agreement designed to foster the preservation of a viable agricultural base to maintain open space within Green Valley. In order to accomplish these goals, the Green Valley community voted to assess itself to generate funds for the acquisition of property and easements of open space and agricultural land, and where necessary, to maintain the same. The City of Fairfield maintains the funds in a separate, interest-bearing account, and provides matching monies from a City-sponsored Mello-Roos tax district, the proceeds of which are to be used in the Green Valley area.

The board of directors of the Solano Land Trust are the trustees for this specific fund. The Board of Supervisors have the final review of the disbursement of these funds and it has established priorities based on advice from the Green Valley Landowners Association (GVLA) as follows:

- Floor of middle Green Valley,
- Lands east of Green Valley and west of the floor of Green Valley,
- More remote and rugged lands west, north and east of Green Valley, and
- Other lands within the service area.

- **Ecosystem Restoration Program for Agricultural Properties** (a draft program of the California Council of Land Trusts)
- **Various State Bond funds**
- **Oak Woodland Conservation Act of 2001** - As referred to in the General Plan, the California Legislature passed the *California Oak Woodland Conservation Act in 2001*. This act grew out of concern that California's oak woodland habitats were threatened and that the State was continuing to lose oaks to development, firewood harvesting, and agricultural conversions. This act recognized the importance of California's oak woodlands - how they enhance the natural and scenic beauty of California, the critical role of the private landowner, and the importance of private land stewardship. The act further acknowledged how oak woodlands increase the monetary and ecological value of real property and promote ecological balance.

[FORMATION OF THE CONSERVANCY]

The establishment of the Conservancy shall be a condition of approval of any subdivision map, which shall require its formation prior to the recordation of the first final map within the Plan Area. The Conservation Easement Holder's governance, mission, operations and regulations shall be in accordance with the *Land Trust Standards and Practices*.



4.2.2 RELATED COUNTY AND STATE-WIDE AGRICULTURAL PRESERVATION PROGRAMS

This Specific Plan encourages and supports the use of existing County programs that focus on the preservation of agricultural lands. These programs will be used in concert with the on-going support and preservation of agricultural lands:

Farmland Mapping and Monitoring Program (FMMP) – The Specific Plan has utilized this program to prioritize lands best suited for agricultural conservation. Currently, 212 acres of vineyards are being actively farmed within the Study Area. As identified on the “Important Farmlands” map (refer to Figure 4-2), Middle Green Valley has two types of farmlands: “*Prime Farmland*” and “*Unique Farmland*.” The resulting development plan places over 55% (or 350 acres) of the identified Prime Farmland and Unique Farmland in protected, productive agriculture.

Williamson Act – As part of reinforcing the ideas of providing financial incentives to landowners to maintain farmland, it is envisioned that agricultural lands to the extent feasible are placed under a Williamson Act contract. In tandem with recordation of a conservation easement on agricultural lands, a 10-year contract may be entered into with the County by the landowner.

Right-to-Farm Ordinance – This Specific Plan recognizes that the Right to Farm ordinance supports and protects the on-going viability of farming in the area. The layout of the community incorporates the concepts of providing transition and buffer areas to farming operations. At the same time though, this Specific Plan celebrates agriculture as a very visible component and the foundation of the community design and ethic.

COUNTY AGRICULTURAL PRESERVATION PROGRAMS: A SUMMARY

Farmland Mapping and Monitoring Program (FMMP)

Prime Farmland is “farmland with the best combination of physical and chemical features able to sustain long term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.”

Unique Farmland consists of “lesser quality soils used for the production of the states leading agricultural crops. This land is usually irrigated, but may include nonirrigated orchards or vineyards as found in some climatic zones in California.”

Williamson Act

The California Land Conservation Act of 1965 (referred to as the Williamson Act) is the most effective agricultural conservation tool currently available. Under the Williamson Act, local governments can enter contracts with private property owners to protect land for agricultural and open space purposes. This voluntary program offers tax breaks by assessing lands based on actual use (agricultural or open space) as opposed to their potential full market value, creating a financial incentive to maintain farmland and open space, as opposed to allowing conversion to other uses.

Right to Farm Ordinance

Chapter 2.2 of the Solano County Code protects farm operations from nuisance complaints associated with residential uses located next to active agricultural operations. These complaints often cause farm operators to cease or curtail operations. They may also deter others from investing in farm-related improvements that would support the county’s agriculture economy. This “right-to-farm ordinance” ..., guarantees the right to continue agricultural operations, including...cultivating and tilling the soil, burning agricultural byproducts, irrigating, raising crops and/or livestock, and applying approved chemicals in a proper manner to fields and farmland. This ordinance limits the circumstances under which agriculture may be considered a nuisance.

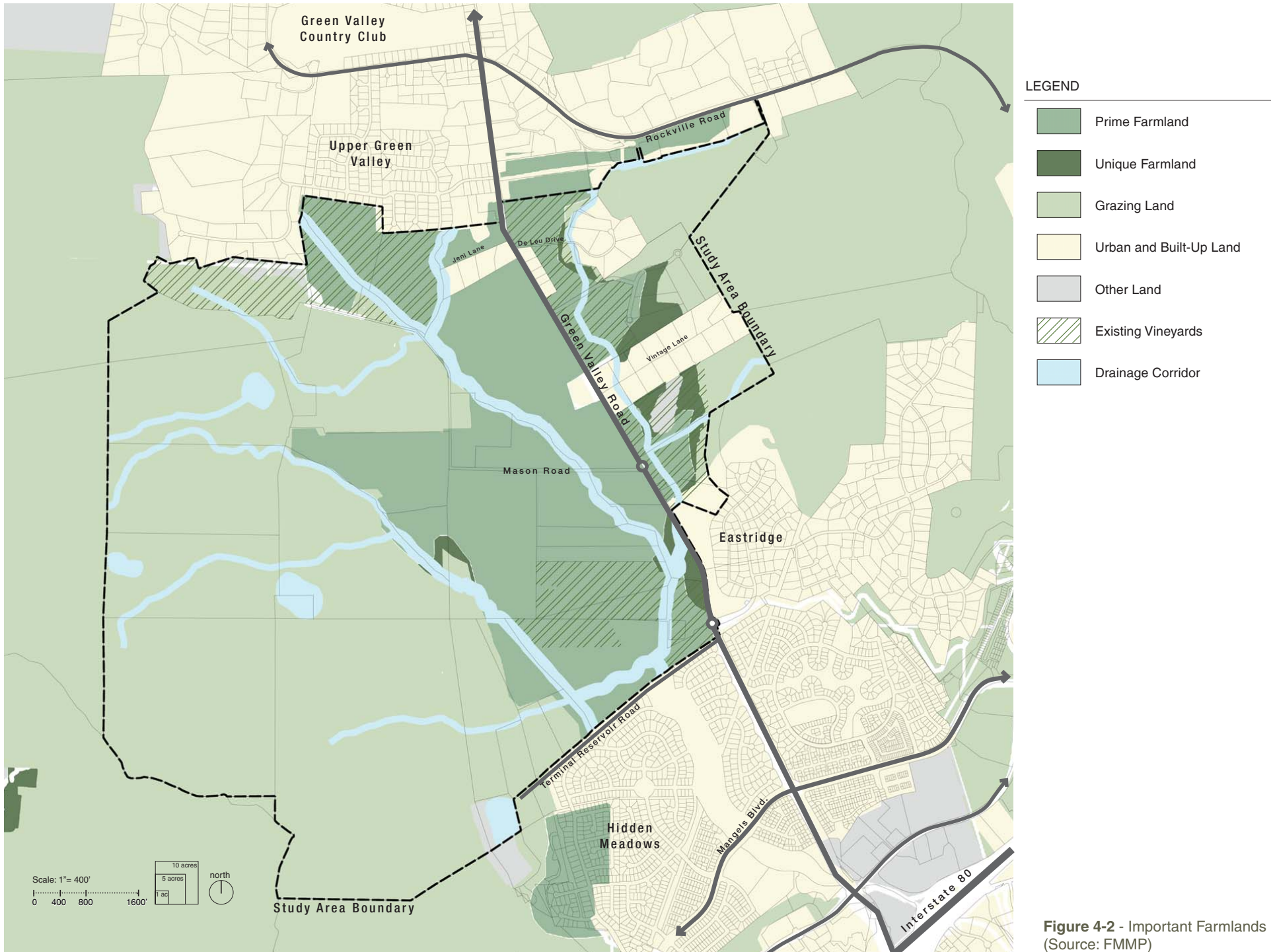


Figure 4-2 - Important Farmlands
(Source: FMMP)

4.2.3 TRANSFER OF DEVELOPMENT RIGHTS PROGRAM

This Specific Plan utilizes a transfer of development rights (TDR) program to provide a fair and equitable incentive for landowners within the SSA to relocate their development rights from areas to be preserved to areas identified as suitable for development. These preserved lands (designated as OL-N, OL-R, AG-WS and AG-P as described in Section 3.5.3A of the Specific Plan) will then be placed under a conservation easement in favor of the Conservation Easement Holder in exchange for these development rights. The desire for a TDR program was agreed upon in a series of community meetings as the most suitable planning tool to preserve the rural character and agricultural viability of Middle Green Valley.

The General Plan specifically outlines this component in Policy SS.P-6 for inclusion in the Specific Plan and outlines the approximate sending and receiving areas in Figure SS-3, which states:

In accordance with balancing the protection of resources described in these policies, adopt a program that provides residential development credits to property owners who voluntarily forego or limit development on their lands. The transfer of development rights program should focus incentives on land in areas to be preserved.

Figure 4-3 is an updated and refined diagram that builds on Figure SS-3 of the General Plan that indicates the approximate sending and receiving zones of the Plan Area. Through a community consensus and environmental review process, development areas were identified by the CAC as the recommended areas for clustered development. Table 4-1 identifies the allocation of the 400 residential units within the Specific Plan Area and designates the specific sending and receiving sites by participating landowner. It is important to note that this TDR Program does not transfer any existing development rights, but simply reallocates the excess residential density created and allocated on a pro rata acre basis by the Specific Plan process.

A conservation easement(s), in a form acceptable to the County Counsel, shall be recorded for the benefit of the Conservation Easement Holder over the conservation lands as a condition of approval of each subdivision map and must be recorded the earlier of:

- The sale of the receiving site, if applicable under the Sales Participation Agreement,
- The recordation of a final map, or
- The issuance of a building permit for any new unit, except a building permit issued which does not require any subdivision approval (including certificate of lot line adjustment, parcel map or tentative subdivision map).

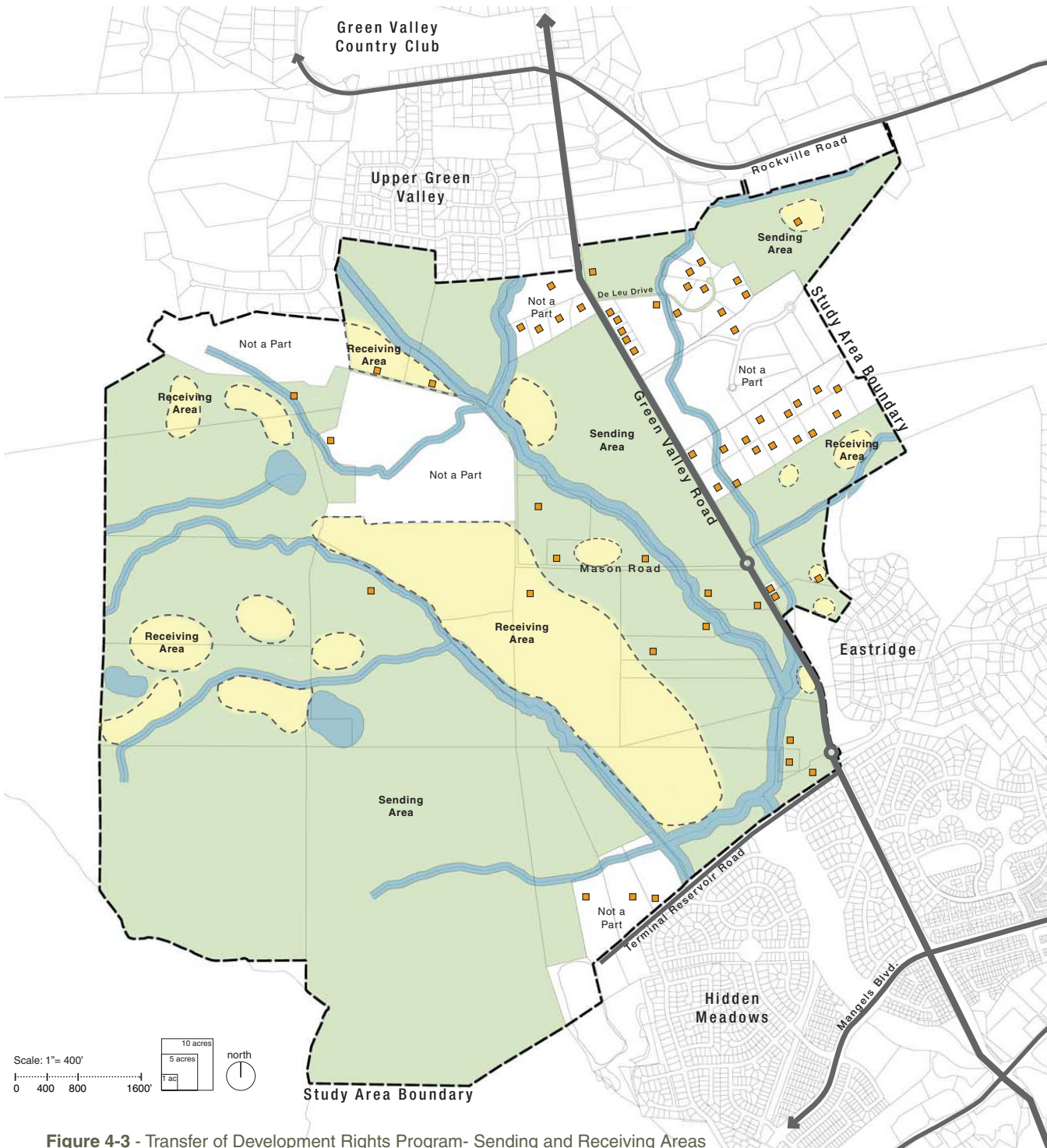
Participating Landowners	Acreage	% of Participating Area	Allowed New Unit Count (TDR Program)	Allowed New Unit Count (No TDR Program)
B+L Properties	253.0	16.1%	63	9
Engell	52.3	3.3%	13	9
Hager	40.2	2.6%	10	2
Mason/Lindemann	296.0	18.8%	73	14
Mason/Lawton Trust	476.1	30.3%	118	21
Maher	146.8	9.3%	36	7
Ragsdale	168.6	10.7%	42	7
Siebe (James)	18.2	1.2%	5	0
Siebe (Jean)	23.7	1.5%	6	0
Volkhardt	40.0	2.5%	10	1
Wiley	15.6	1.0%	4	0
Wirth	40.7	2.6%	10	1
SUBTOTAL	1,571		390	71

Non-Participating Landowners	Acreage	New Unit Count	New Unit Count (No TDR Program)
DeDomenico	40.6	1	1
Del Castillo	82.4	3	3
Parenti	12.9	0	0
Vintage Lane	42.1	0	0
De Leu Drive/GVR	23.5	0	0
Jeni Lane	20.8	0	0
Terminal Reservoir Ln	30.2	0	0
Terminal Reservoir	8.7	0	0
	323	10	10

Existing Infrastructure	11		
TOTAL STUDY AREA	1,905	400	81

Table 4-1 - Unit Allocation

{ What I like best about the project is that all parties concerned got something. }
 Jim Wiley – Landowner and CAC Member



TDR ZONES

- Approximate Sending Area
- Approximate Receiving Area
- Drainage Corridors
- Existing Residential Units
- Not a Part of TDR Program

TRANSFER OF DEVELOPMENT RIGHTS PROGRAM: TERMINOLOGY AND DESCRIPTION

A transfer of development rights program (TDR) is a market tool communities can use to achieve land preservation. The preservation is accomplished by allowing a landowner to sever their development rights in exchange for compensation from another landowner who wants their development rights to increase. TDR programs transfer the development rights of a predetermined lot — known as a “sending area” — to another lot, known as the “receiving area”. While the development rights are reduced or severed on the sending area, increased density and development is allowed on the receiving area. The sending sites are deed-restricted so that only appropriate uses are allowed from the rights sale onward.

- *Flexible Zoning Techniques - American Planning Association*

Figure 4-3 - Transfer of Development Rights Program- Sending and Receiving Areas

4.3 PUBLIC UTILITIES AND SERVICES

This Specific Plan includes the proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the Plan Area needed to support the land uses described in the Specific Plan. Refer to Section 4-6 which describes implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the development plan.

4.3.1 OVERVIEW OF WATER AND WASTEWATER PROVISIONS

Two water and wastewater system options are proposed for the Specific Plan area: Option A would involve connection of the Specific Plan development areas (“neighborhoods”) to the City of Fairfield municipal water and sewer systems; and Option B would involve use of a common “onsite” or “off the grid” water and wastewater system to serve the Specific Plan development areas (“neighborhoods”). The two alternative proposals are summarized below:

Option A:

Water supply system

Option A would involve Specific Plan development area connection to the City of Fairfield municipal water system. The City’s municipal water is partially supplied through the Solano County Water Agency (SCWA). The City operates two water treatment plants, the Waterman Plant and the North Bay Regional Plant. City water distribution infrastructure includes a 24-inch main in Green Valley Road where the Specific Plan development areas would connect. Agricultural irrigation water would continue to be supplied by the Solano Irrigation District (SID). SID water will also be available for domestic irrigation. The proposed water supply infrastructure system under Option A would include approximately 9 miles of onsite pipeline and 500,000 gallons of onsite storage.

Wastewater treatment system

Alternative A would involve Specific Plan development area connection to the Fairfield-Suisun Sewer District (FSSD). The FSSD operates a wastewater treatment plant approximately four miles southeast of the Specific Planning area. The FSSD does not typically provide sewer service outside of the Fairfield and Suisun City city limits. The closest existing FSSD wastewater infrastructure to the Specific Plan area is a 12-inch main in Green Valley Road approximately one quarter mile south of the Specific Plan area boundary. Due to the capacity limitations of this existing sewer main, installation of a new parallel sewer main from the Specific Plan area to the Cordelia Pump Station, approximately 2 miles to the south, may be required. The Cordelia Pump Station and FSSD wastewater treatment plant may also require capacity upgrades to accommodate the Specific Plan. The proposed wastewater system infrastructure under Option B would include approximately 9 miles of onsite pipeline.

Water and wastewater treatment Option A would require City of Fairfield, Solano County, and Solano County Local Agency Formation Commission (LAFCO) approvals. There is also a scenario under Option A whereby the Solano Irrigation District (SID) would “redirect” a portion of the untreated water currently assigned to Middle Green Valley. This amount could be purchased by the City of Fairfield and treated for domestic use and delivered via the existing water infrastructure in Green Valley. Under this scenario, the City of Fairfield would become a wholesale supplier to the County Service Area proposed for Middle Green Valley and virtually no net increase of water would be required for this project than that which is already allocated for this area.

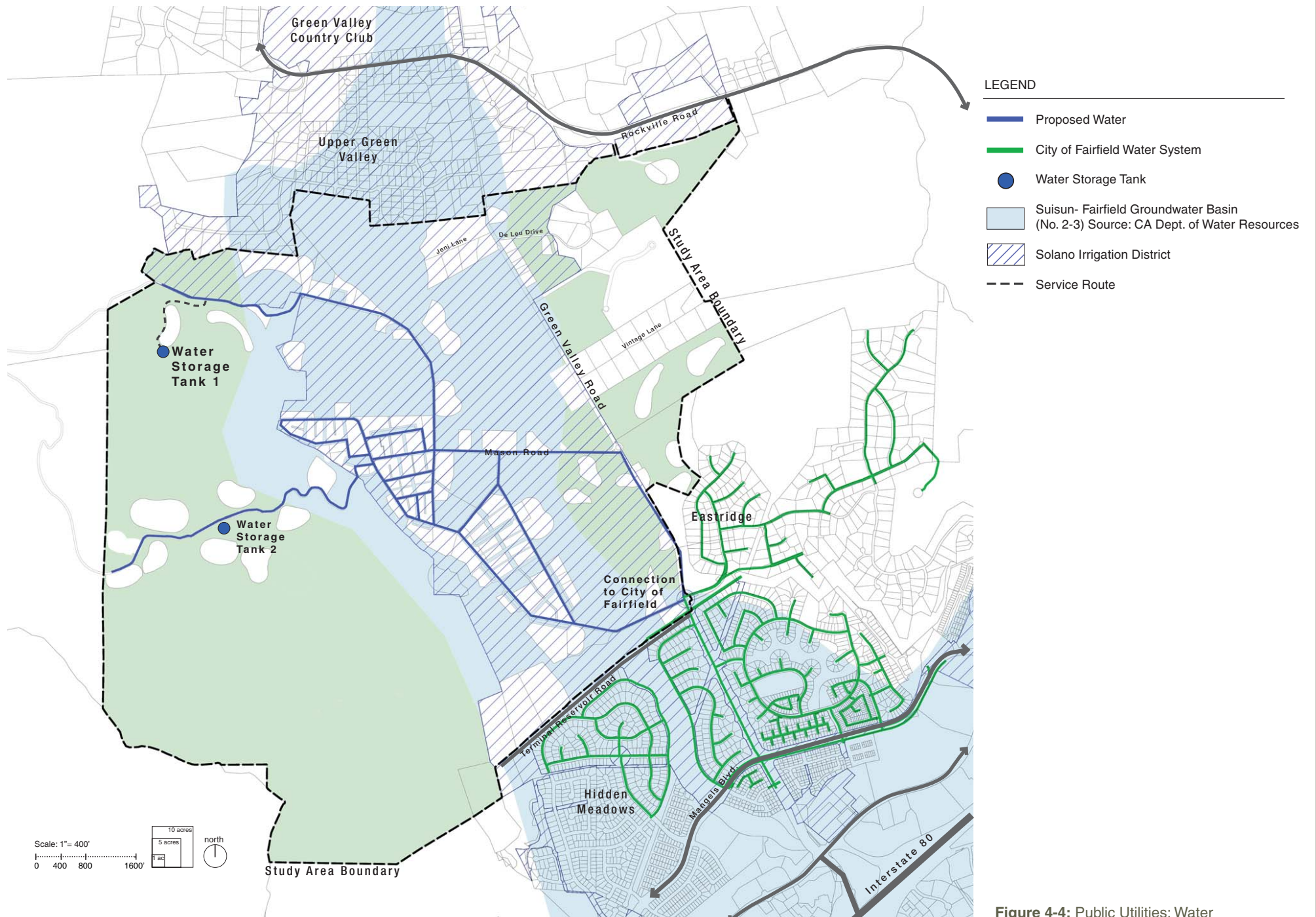


Figure 4-4: Public Utilities: Water

Option B:

Water supply system

Water supply system Option B would utilize local groundwater for domestic supply in the Specific Plan development area. The Specific Plan area lies above the Suisun-Fairfield Valley Groundwater Basin. The Suisun-Fairfield Valley Groundwater Basin is one of the few groundwater basins in California not in overdraft, most likely due to the early development of the Solano Project for regional irrigation demands. A number of landowners within the study area enjoy productive wells of high quality water. Some shallow wells have reported high mineral content. A comprehensive hydrogeology study and test well program would be necessary to verify the potential adequacy of onsite wells for this development. Groundwater use would be solely for domestic purposes. Solano County Irrigation District (SID) reclaimed water would continue to be used for agriculture and domestic irrigation purposes. Water treatment under Option B is predicted to consist of mixed media filtration and disinfection unless measured chemical constituents indicate otherwise. The proposed onsite groundwater system configuration (pending more study) consists of three groundwater wells at a sustained flow of 100 gpm each, approximately 4.5 miles of pipelines, and 500,000 gallons of storage in two tanks at elevation. A County Services Area (CSA) may be required to maintain the system.

Wastewater Treatment System

Under wastewater treatment system Option B, wastewater from the Specific Plan development areas would be collected and treated “onsite” utilizing a local collection system similar to Alternative A, but utilizing an “onsite” Membrane Bioreactor (MBR) package wastewater treatment plant. The MBR tertiary treatment system would include an aeration tank, a membrane operating system and a disinfection unit. All tertiary treated water would be reused onsite for agricultural and domestic irrigation purposes in conjunction with Solano Irrigation District water. The two water systems would not be connected. System sludge yields under Option B, which would be less than from more conventional system designs, would be available for compost and fertilizer use in Solano County and elsewhere. Associated onsite infrastructure would include approximately 5.7 miles of pipeline, two pump stations and the MBR tertiary treatment unit.

MIDDLE GREEN VALLEY UTILITY SUMMARY

WATER

- 135 Acre-ft/year (120k gpd) provided to MGV from Solano County by City of Fairfield.
- 45 Acre-ft/year (40k gpd) provided to MGV from on site water recycling \$10m (approximate) construction cost
- 2 storage tanks for fire hydrant/sprinkler capacity \$500,000 (approximate) revenues from domestic water customers at buildout

WASTEWATER

- 135 Acre-ft/year (100k gpd) produced by 400 homes plus community buildings.
- 54 Acre-ft/year (40k gpd) provided to MGV from on site water recycling
- 81 Acre-ft/year (60k gpd) directed to FSSD and/or Ag Lands depending on seasonal demand.
- 200,000 gal surge tank allows 0.2 cfs to FSSD equivalent to 150 Fairfield Homes \$8m (approximate) construction cost \$250,000 (approximate) revenues from domestic water customers at buildout Connection Fee TBD

ROADS AND DRY UTILITIES

- \$5m (approximate) construction cost
- 6 miles (approximate) of new county roads
- 3 miles (approximate) of new private driveways

Table 4-2: Utility Summary

Solano County General Plan Implementation Program PE.I-15 states: *Investigate the potential for innovative recycled water systems in Solano County, such as the use of graywater for domestic and agricultural purposes, and identify sources of funding for implementation of these systems.*

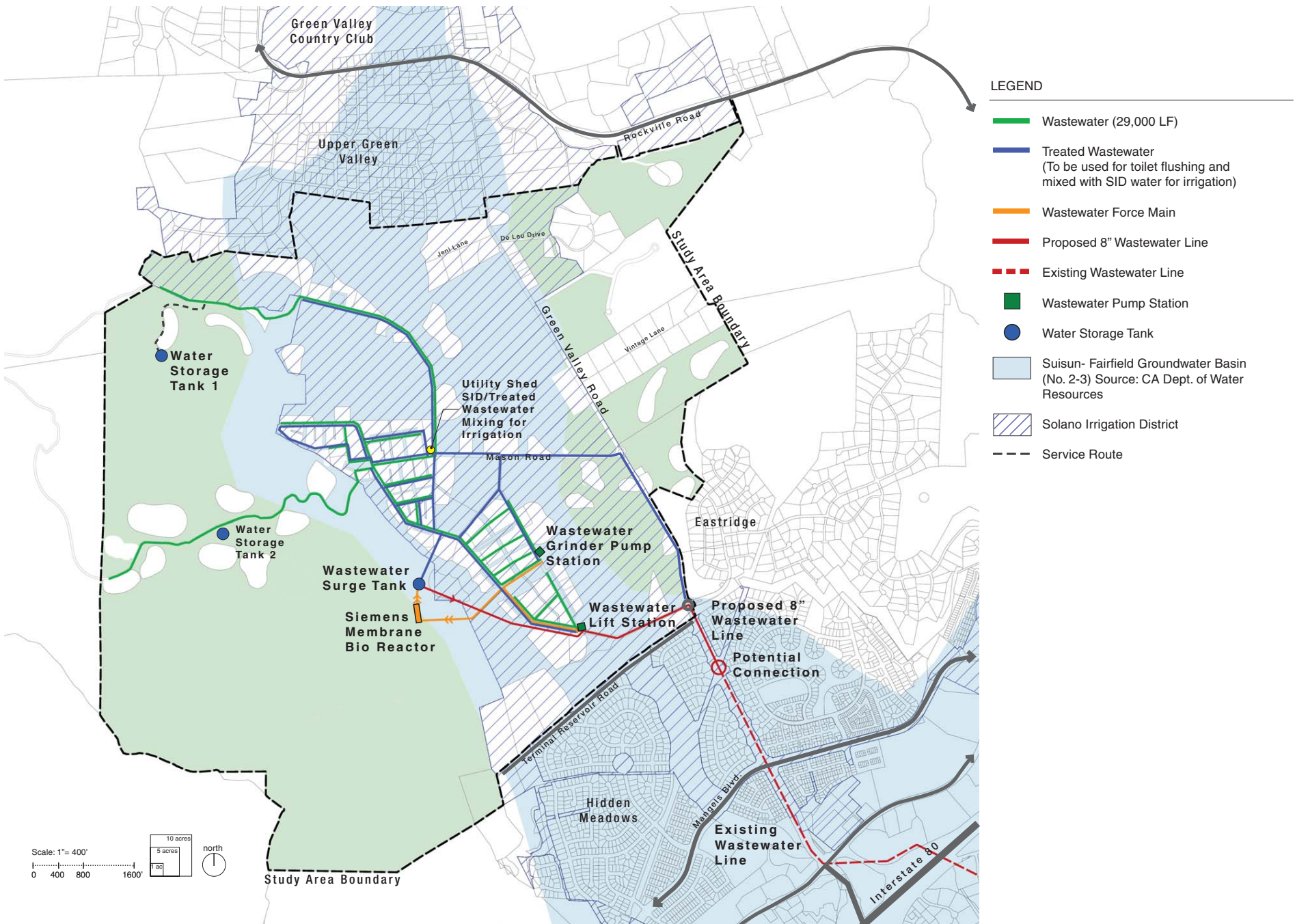


Figure 4-5: Public Utilities: Wastewater

4.3.2 PUBLIC UTILITIES AND SERVICES CONCEPT - THE GREEN VALLEY COUNTY SERVICES AREA

In unincorporated areas of California, basic services like water, sewer, police and fire protection are usually provided by the county. Because counties often consist of large and diverse geographical areas, providing a consistent and adequate service level across all areas can be difficult. Residents of more urban communities may want more services than those residing in rural areas. The County Service Area Law (Government Code §25210 et seq.) was created in the 1950s to provide a means of providing expanded service levels in areas where residents are willing to pay for the extra service. This Specific Plan proposes a County Service Area (CSA and a Mello_Roos Community Facilities district) as the overall organizing implementation structures to bring services to the Plan Area.

Community Service Areas

The County Service Area Law (Government Code sections 25210 et seq.; “CSA Law”), adopted in the 1950s and significantly revised last year, provides a method for counties to finance and provide public facilities and services in unincorporated areas. Specifically, the CSA Law allows for the creation of “county service areas” (“CSAs”) which may provide “any governmental services and facilities within the CSA that the county is authorized to perform and that the county does not perform to the same extent on a countywide basis.” (Gov’t Code § 25213.) Such services and facilities could be in the areas of police and fire protection, parks and recreation, libraries, animal control, wastewater treatment, and garbage collection, to name only a few.

Although they are distinct entities, CSAs are nonetheless governed by their respective county boards of supervisors. In the parlance of the CSA Law, a CSA is a “special district whose affairs and finances are under the supervision and control of the board.” (Gov’t Code § 25214(b).) County boards have been granted broad powers regarding governing CSAs. The formation of a CSA is subject to the county’s LAFCo

To raise funds for the services and facilities utilized, CSAs possess a number of funding tools. These include a share of the property tax revenue (if any), special taxes (more on these below), benefit assessments, user fees, and standby charges. CSAs may also utilize capital financing by issuing general obligation or revenue bonds.

It is worth noting that whenever a county board of supervisors determines that it is in the public interest to provide different services or facilities, or raise additional revenues within, specific areas of a CSA, it may form one or more “zones” to do so.

Community Facilities Districts (Mello-Roos Districts)

The Mello-Roos Community Facilities Act of 1982 (Government Code sections 53311-53368.3; “CFD Law”) provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. Such services include police and fire protection, recreation, and storm protection; such facilities include schools, parks, libraries, and utility infrastructure. These facilities and services are provided within “community facilities districts” (“CFDs”), also called “Mello-Roos districts.”

A CFD isn’t so much a governmental entity as it is a funding mechanism for local agencies. It implements a special tax to fund desired services or facilities within the particular district’s boundaries. The CFD Law expressly states that the tax imposed is “not a special assessment.” (Gov’t Code § 53325.3.) However, it does state that the special tax levied “may be on or based on a benefit received by parcels of real property, the cost of making facilities or authorized services available to each parcel, or some other reasonable basis as determined by the legislative body.” (Id.)

As a special tax, the formation of the CFD is subject to the approval of 2/3 of the district’s residents (or landowners if there are fewer than 12 residents). As with CSAs, a CFD may incur bonded indebtedness.

Determination of the Annual Charge

When a CSA exists, the property owner will pay taxes and fees to the CSA instead of the County for the services provided. These will be billed as line items on the County property tax bill. The taxes may take a variety of forms:

- General property taxes may be levied depending upon Prop. 13 constraints. These taxes, referred to as ad valorem taxes, are based on assessed value.
- Special taxes may be levied for specific purposes. These taxes must be approved by a 2/3rds vote of CSA residents.
- Benefit assessments may be levied for specific purposes and are based on the direct benefit each parcel receives from the improvements or services financed.
- Water or sewer standby charges may be levied to ensure future availability of service, subject to certain limitations.

Additionally, the CSA may charge these fees and taxes according to zones to more accurately bill residents for the particular services provided to their individual property. CSA charges will continue as long as the CSA is providing services to the community.

The CSA will then sponsor a Mello-Roos Community Facilities District (CFD) to fund the infrastructure improvements.

In 1978 Californians enacted Proposition 13, which limited the ability of local public agencies to increase property taxes based on a property's assessed value. In 1982, the Mello-Roos Community Facilities Act of 1982 (Government Code §53311-53368.3) was created to provide an alternate method of financing needed improvements and services. The Act allows any county, city, special district, school district or joint powers authority to establish a Mello-Roos Community Facilities District (CFD) which allows for financing of public improvements and services. The services and improvements that Mello-Roos CFDs can finance include streets, sewer systems and other basic infrastructure, police protection, fire protection,

ambulance services, schools, parks, libraries, museums and other cultural facilities. By law, the CFD is also entitled to recover expenses needed to form the CFD and administer the annual special taxes and bonded debt. A CFD is typically created to finance public improvements and services when no other source of money is available. CFDs are normally formed in undeveloped areas and are used to build roads and install water and sewer systems so that new homes or commercial space can be built. CFDs are also used in older areas to finance new schools or other additions to the community.

A CFD is created by a sponsoring local government agency, in this case, Solano County. The proposed district would include all properties that will benefit from the improvements to be constructed or the services to be provided. A CFD cannot be formed without a two-thirds majority vote of residents living within the proposed boundaries. Or, if there are fewer than 12 residents, the vote is instead conducted of current landowners. In many cases, that may be a single owner or developer. Once approved, a special tax lien is placed against each property in the CFD. Property owners then pay a special tax each year. If the project cost is high, municipal bonds will be sold by the CFD to provide the large amount of money initially needed to build the improvements or fund the services.

By law (Prop. 13), the special tax cannot be directly based on the value of the property. Special taxes instead are based on mathematical formulas that take into account property characteristics such as use of the property, square footage of the structure and lot size. The formula is defined at the time of formation, and will include a maximum special tax amount and a percentage maximum annual increase. If bonds are issued by the CFD, special taxes will be charged annually until the bonds are paid off in full. Often, after bonds are paid off, a CFD will continue to charge a reduced fee to maintain the improvements. This is an area that is about to undergo dramatic change and the mathematical formulas which account for property characteristics such as use of the property, square footage of the structure and lot size needs to reflect the eventual layout in the Middle Green Valley Plan Area. Since the formula is defined at the time of formation, and will include a maximum special tax amount and a percentage maximum annual increase, it will be important for most participants to agree on the Specific Plan.

4.3.3 WATER SUPPLY AND DISTRIBUTION FACILITIES

Water Demand

An acre-foot of water is about 326,000 gallons, or enough water to supply two typical homes for a year. That would mean that 400 new homes would require about 200 acre-ft on an annual basis. However, per capita water use varies around the State; for example, Central Valley residents use up to 300 gallons per person per day, while some Central Coast residents use as little as 50 gallons per day. That translates to about 1.5 acre-ft/year for a family of four in Fresno to about .25 acre-ft/year for a similar size household in Cambria. Landscaping, however, accounts for about half the water Californians use at home. Showers account for another 18%, while toilets use about 20%. The General Plan specifically calls for promotion and model practices to improve the efficiency of water use, including the use of water-efficient landscaping, beneficial reuse of treated wastewater, rainwater harvesting, and water-conserving appliances and plumbing fixtures (PF.P-11). Accordingly, this Specific Plan accounts for the fact that Solano Irrigation District (SID), which already serves this part of Solano County, will continue to supply most of the water required for agriculture and landscaping. On-site water recycling will supply water to almost all of the toilets using recycled water, further reducing domestic water demands. As a result of these two provisions that each new home will have to comply with, the 400 new homes in Middle Green Valley are expected to only require a maximum of 136 acre-ft/year about a 40% reduction in overall water requirements compared to a typical house elsewhere in the County. When other uses for water are considered, the total water demand for Middle Green Valley is approximately 186 acre-ft/year based on the following:

	Water			Wastewater	
	Units	Unit Demand (AFY)	Total Demand (AFY)	Unit Demand (AFY)	Total Demand (AFY)
Residential (units)	400	0.34	136.0	0.25	100.00
Secondary Res. (units)	100	0.17	17.0	0.13	13.00
Chapel (seats)	200	0.09	17.2	0.05	1.00
Meeting Hall/Farm Stand (acres)	0.069	1.73	0.12	1.52	0.10
Community Rec Center (acres)	0.184	1.50	0.28	1.32	0.24
Conservancy/Post Office (acres)	0.057	1.50	0.09	1.32	0.08
School (students)	300	0.02	4.95	0.01	4.36
Commodity Processing, Commercial Nurseries (acres)	1.148	1.00	1.15	0.88	1.01
Ag. Tourism Retail (acres)	0.230	1.73	0.40	1.52	0.35
Inn (rooms)	25	0.15	3.75	0.13	3.25
Winery Production (cases of wine)	100,000	0.00004	4.42	0.00002	2.21
Neighborhood Commercial (acres)	0.230	1.73	0.40	0.88	0.20
Total Annual Water Requirements			185.7		134.8

Table 4-3: Total Water Demand Forecast for Middle Green Valley

A replicable model for water use for all of Solano County.

As a result of the efficiency measures described above, the water use in the Plan Area will be approximately .33 acre-ft/year per dwelling unit or 136 acre-feet per year for the residential units, which is on par with the most efficient users in California. In addition, the 186 acre-ft per year total use is already accounted for in allotted amounts for this region under the Solano Water Agency so it does not represent additional water demand compared to other parts of the County not already served by the irrigation district. The amount of water that is being considered for Middle Green Valley is not typical of other existing subdivisions in the area. If this were a typical subdivision elsewhere in the County, 136 acre-ft would only serve about 250 new homes.

Accessing the 186 Acre-ft of annual water requirements.

There are three alternatives for domestic water to be supplied to Middle Green Valley and each depends on a different source of water and each represents challenges and opportunities for this Specific Plan. The recently approved General Plan calls for domestic water for rural development to be provided through the use of on-site individual wells or through public water service (PF.P-15) and the provision and management of public water service through public water agencies (PF.P-16). Refer to Section 4.1A for policy language.

Alternative Water Source 1

- The City of Fairfield receives most of its water from the Solano Project which is a federal project designed to provide water for drinking and agricultural purposes. Putah Creek is the project's source, and it is stored behind the Monticello Dam, forming Lake Berryessa. The end of the Putah Creek Canal is Terminal Reservoir which is part of the Plan Area. The City of Fairfield gets Solano Project via this canal system and treats their water at the North Bay Regional Water Treatment Plant and the Waterman Treatment Plant. This part of Green Valley is not within the Fairfield city limits but it used to be a part of the City of Fairfield sphere of influence.

Accordingly, there were earlier studies and expansion plans produced by the Fairfield Public Works Department showing several thousand homes in this area. Though this area is no longer in the Sphere of Influence, there is a 24' blank flange at the corner of Eastridge Road and Green Valley Road (at the southeast corner of the Study Area) that would be sufficient to supply the 186 acre-ft required under the proposed development. The City of Fairfield has indicated the City would be willing to consider supplying the proposed Green Valley County Services Area (CSA) with access to this water line along with a single meter in order to determine ongoing water use and subsequent fees associated with this use. The City of Fairfield would not necessarily require annexation for this water service to be provided though they have indicated that ownership and maintenance of all water infrastructure would be the responsibility of the CSA and not the City of Fairfield. Access fees, increment participation from increases in property taxes, and other negotiations about how a municipal service provides services to an unincorporated part of the County have yet to be determined. A memorandum detailing how such an arrangement would be implemented between the proposed CSA, the City of Fairfield, and the Solano Local Agency Formation Commission (LAFCo) is to be completed during 2009 and concurrent with review of the Program EIR. Additional information about LAFCo's role in this Specific Plan is described below.

Alternative Water Source 2- Groundwater which would access the Suisun Fairfield Valley Groundwater Basin via deep wells.

- Prior to the development of the Solano Project, groundwater was extensively used in Solano County both for municipal supplies and for agriculture. One of the main reasons for the development of the Solano Project was to rectify groundwater overdraft in some of the agricultural areas. Once the Solano Project started making agricultural water deliveries, groundwater levels rebounded. The Cities of Rio

Vista and Dixon are served exclusively with groundwater from basins underlying the cities. Vacaville gets approximately one third of its municipal water supply from groundwater underlying the city. Most rural residential landowners in this part of unincorporated Solano County who are not served by the City of Vallejo have individual shallow groundwater wells that serve their domestic needs. There are also some small rural residential water systems in Solano County that distribute groundwater to their customers which is essentially what a CSA would provide to Green Valley under this alternative. Public agencies that overlie this groundwater basin have developed groundwater management plans as specified in AB 3030, the state law that authorizes local agencies to prepare voluntary groundwater management plans. The Solano County Water Agency (SCWA) prepares biannual reports on groundwater levels for the groundwater basin. Groundwater level data comes from California Department of Water Resources (DWR) and local public agencies that utilize the groundwater basin. This aquifer (Suisun-Fairfield Valley Groundwater Basin 2-3) is recognized by the Department of Water Resources (Bulletin 118) with typical wells yielding 200 gal/min and some wells producing up to 500 gal/min. This means just one well approximately 750 deep in Green Valley might be able to supply almost 300 acre-ft/year, more than twice the amount of required by the 400 new homes proposed for Middle Green Valley. These State reports show no trend of overdrafting with current levels of groundwater use. Groundwater levels drop in dry years, but rebound in wet years. The CSA would be responsible for minor treatment of the well for potable use but this “off the grid” alternative has many benefits for the individual landowners considering they are not part of an existing municipal water distribution system. According to the Solano Water Agency, there may be a potential to more aggressively utilize the groundwater basin. Areas that have a surface water supply that are underlain by a

groundwater basin are good candidates for conjunctive use projects. A typical conjunctive use project includes the installation of groundwater wells that are used in drier years instead of surface water that can be sold or exchanged. Though there are no hydrologic studies or test wells that have been drilled for the expressed purpose of this project, the Green Valley Country Club has a productive deep water well already in use which is used in conjunction with SID water to manage demand throughout any given year.

Alternative Water Source 3

- The City of Vallejo owns and operates a public water system referred to as the Vallejo Lakes System. The plant located in Green Valley just to the north of the Study Area, serves approximately 2,800 people in the communities of Gordon Valley, Old Cordelia, Green Valley, and parts of Jameson Canyon, located in Solano County. The City also obtains surface water for its system from Lake Berryessa via the Putah South Canal similar to the City of Fairfield. The City also obtains surface water from Lake Frey and Lake Madigan which are the headwaters of Green Valley Creek which flows through the middle of the Study Area. Though many parcels in this part of Solano County are served by the City of Vallejo, there are capacity limitations at the plant that have forced the City of Vallejo to issue a moratorium on any new services outside its city limits. The City also uses chlorine at its Green Valley Water Treatment Plant to disinfect the surface water it receives from Lakes Berryessa, Frey and Madigan and there may be more effective ways in the future to treat this supply therefore increasing capacity at this plant. There is a 24” line going from the Green Valley Treatment Plant to the City of Vallejo that goes right through the middle of the Study Area. Due to the financial situation in Vallejo, the extraordinary rate increases to existing Green Valley customers, and the current moratorium about accessing water from this treatment facility, it represents only a small possibility for domestic water supply to this Study Area. There is a possibility in the future, however, that the

Green Valley diversion dams are dismantled, the Vallejo Lakes watershed is opened up for public recreational use, and the existing facility in Green Valley is treating only Solano Project Water from Lake Berryessa with more reliable financing. Though it is a distant third possibility, it is possible that the Green Valley watershed may be able to sustain these proposed new homes and restore the watershed to a locally sustainable model dependent only on resources within the watershed itself.

4.3.4 WASTEWATER COLLECTION AND FACILITIES

There are two components to the wastewater (or sewer) requirements for the 400 new homes in Middle Green Valley. The total requirement for wastewater capacity at full build out will be about 135 Acre-ft/year. That number is split between a wastewater recycling effort which will take (and resupply) about 54 acre-ft/year and an onsite wastewater disposal system that will treat about 81 acre-ft/year to Title 22 standards. This amount needs to be irrigated on the surrounding agricultural lands or returned to a municipal sewer system such as the Fairfield Suisun Sewer District (depending on the time of year).

The safety issues of recycled water

Recycled water must meet stringent regulatory requirements monitored by the State Department of Health Services and be treated to the State of California Title 22 standards for tertiary (advanced) treatment of water. It must also meet regional and local standards. Wastewater is treated to these rigid standards to ensure that public health and environmental quality are protected. Recycled water systems have been operating in California and throughout the nation since the early 1960's. Today nearby towns such as Petaluma and Calistoga provide recycled water for irrigation of over 500 acres of agricultural land, a vineyard, and two golf courses. As California water supplies are stretched, using recycled water for irrigation preserves drinking water supplies for people and fresh water for creeks, rivers and wetlands.

STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2009-0011

The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses by 1,725,000 acre-feet per year, in excess of 2002 levels, by 2015, and ensure adequate water flows for fish and wildlife habitat. This Recycled Water Policy (Policy) is intended to support the Strategic Plan priority to Promote Sustainable Local Water Supplies. Increasing the acceptance and promoting the use of recycled water is a means towards achieving sustainable local water supplies and can result in reduction in greenhouse gases, a significant driver of climate change. The Policy is also intended to encourage beneficial use of, rather than solely disposal of, recycled water.

The definition of “reclaimed” or “recycled” water

Reclaimed water, also referred to as *recycled water*, is municipal wastewater that has been cleaned and treated in order to remove pollutants and contaminants so that the water can be safely reused for a variety of uses. The California Department of Health Services has established the treatment standards and regulations regarding any reuse. Middle Green Valley will be treating its wastewater to tertiary recycled water standards (also referred to as advanced water treatment) which is the highest level of treatment defined by the State and allows for unrestricted reuse in virtually all reclaimed water applications (Title 22). Examples of common recycled water reuse applications include: Any agricultural irrigation (food crops, vineyards, sod farms, Christmas tree farms, etc), ornamental plants, parks and playing fields, golf courses, cemeteries and recreational waterways for boating and swimming, cooling tower water, groundwater recharge and toilet flushing. Recycled water is an excellent substitute for potable water in many applications especially in areas experiencing potable water shortages due to droughts or limitations on supply.

Precedents for water reuse in Middle Green Valley

Recycled water is an important water source for over 160 cities in California, including Monterey, Irvine, Rohnert Park, Los Angeles, Windsor, Newport Beach, San Jose, and Sonoma. These cities use recycled water for irrigation of parks, athletic fields, school playfields, edible food crops, flushing of toilets in office buildings, agricultural irrigation, landscape irrigation, irrigation of highway median strips, and to prevent saltwater intrusion in coastal communities.

The wet weather flows required by Fairfield-Suisun Sewer District (FSSD) require an extraordinarily high capacity even considering the saturation of the local soils in the wet weather system. But the County does not prefer stand alone waste treatment facilities because of the lack of redundancy and the difficulty of getting these “off the grid” facilities approved by the Regional Water Quality Control Board. So instead of building an unnecessarily large sewer connection for wet weather flows and the County still requiring this area to be connected to some kind of municipal system as a back-up, this Specific Plan suggests an on-site water recycling system that is connected to the FSSD. This approximate 75 acre-ft/year amount would be controlled via a 250,000 gal surge tank which allows for a steady 0.2 cfs to FSSD. This is important so that the FSSD could accurately predict wet weather flows from this region without the project being required to build a large system designed around only wet weather flows. This amount which would only go to FSSD when the agricultural fields did not require it - is the equivalent to only 150 new homes within the city limits of Fairfield. Again, this Specific Plan is allowing up to 400 new homes, the impact on local water and sewer facilities is much less and provides a replicable model for Solano in the other parts of the County.

Precedents for unincorporated areas of Solano County to be served by a municipal sewer system.

For large, rural counties such as Solano County, sewer and wastewater services in the unincorporated areas serving rural development are expensive to provide. Each of the cities in Solano County - Benicia, Dixon, Fairfield, Rio Vista, Suisun, Vacaville, and Vallejo - is currently served by municipal sewer and wastewater systems. Some parcels in the unincorporated County near cities are served by sewer and wastewater services from adjacent cities and sewer districts so there is considerable precedent for municipal services serving unincorporated parts of the County. The City of Vacaville serves the unincorporated community of Elmira, which is adjacent to the service area for the Vacaville sewer system. The Suisun-Fairfield Sewer District provides sewer service to the unincorporated community of Cordelia and parts of Suisun Valley from Rockville Road south to the Fairfield city limits. The Vallejo Sanitation and Flood Control District provides sewer service to the Vallejo unincorporated islands. The City of Dixon provides service to a few parcels directly outside of Dixon. The General Plan specifically calls for on-site sewage disposal systems for a public agency such as a CSA to manage a centralized community sewage disposal system. If lands proposed to be served by a community sewage disposal system are not within the boundaries or service area of an existing public sewage treatment agency, the Board shall, as a condition of development, designate a public agency to provide and manage the public sewer service. Sewer treatment facilities shall be designed to provide sewer service to existing developed areas, areas designated for commercial or industrial uses, or areas designated for rural residential development when part of a specific plan such as Middle Green Valley. An analysis of the financial viability of constructing, operating, and maintaining a proposed community sewage disposal system shall be required (PFI-24).

Precedent for on-site wastewater treatment in Solano County

A few of the larger developments in unincorporated Solano County have small treatment systems. The Twin Creeks Condominium Project in Green Valley and the recreational vehicle parks within the County have small treatment systems that serve multiple ownerships and users. The majority of developments in the unincorporated County, those not served by municipal sewer or small-scale treatment systems, operate stand-alone septic tanks. There are no plans for any additional septic tanks for Middle Green Valley under this Specific Plan - in fact it will be prohibited for all new home sites on the valley floor.

Other benefits to having on-site wastewater treatment facilities in Middle Green Valley as part of the CSA

One of the benefits of having the ability to provide on-site wastewater treatment in Green Valley is the possible future inclusion of parcels outside the Study Area to be served by the CSA in order that borderline leech fields be incorporated to eliminate chances of further contamination of the Green Valley Creek Watershed.

3 alternatives for wastewater treatments in Middle Green Valley

Alternative Wastewater Treatment 1

- Fairfield-Suisun Sewer District agrees to serve the requirements of the proposed Green Valley CSA with a modified calculation of wet weather flows (ie a 20% increase for wet weather flow rates is typical for municipal systems in the Bay Area). This alternative would require no on-site water recycling and the water saving methods would probably be derived from routing stormwater to cisterns and then to toilets - all currently allowed under state law.

Alternative Wastewater Treatment 2

- An on-site wastewater treatment plant in combination with the Fairfield-Suisun Sewer District would allow the best of each kind of facility. This alternative also allows the first approximately 150 homes to be built connected to only FSSD and then the on-site treatment would only be required for additional homes.

Alternative Wastewater Treatment 3

- An on-site wastewater treatment facility could handle all the sewer flow from this region but it would require a significant amount of time and money to explain how the risks would be accommodated in order for the County and the SF Bay Regional Water Quality Control Board to approve the discharge permit without being connected to FSSD.

Alternative 1 and 2 are equally functional to the design team and would cost approximately the same to the CSA.

Cost differences between wastewater alternatives

The total cost of the waste water/sewer infrastructure for Middle Green Valley - including design - is estimated to cost \$8 Million and there are no significant cost differences between the first 2 alternatives in treating the required 128 acre-ft for Middle Green Valley at this point. Because of the unknown infrastructure entitlement issues related to Alternative 3 (off the grid), there are no identified costs for Alternative 3. There is a known 12" waste line at Mangels Boulevard and Green Valley Road that would be accessed for use by this project if there was an agreement with FSSD. There are significant potential benefits in having both treated wastewater and a reasonable connection option with FSSD since this is a more scalable option for several existing landowners. Refer to Section 4.6 for financing details.

PUBLIC FACILITIES: DEVELOPMENT REVIEW – IMPLEMENTATION PROGRAMS

PF.1-24: On-site sewage disposal systems for individual lots and subdivisions may be operated by private property owners. A public agency shall manage a centralized community sewage disposal system. If lands proposed to be served by a community sewage disposal system are not within the boundaries or service area of an existing public sewage treatment agency, the Board of Supervisors shall, as a condition of development, designate a public agency to provide and manage the public sewer service. Sewer treatment facilities shall be designed to provide sewer service to existing developed areas, areas designated for commercial or industrial uses, or areas designated for rural residential development when part of a specific plan or policy plan overlay. An analysis of the financial viability of constructing, operating, and maintaining a proposed community sewage disposal system shall be required.

- Solano General Plan, Page PF-19.



4.3.5 DISPOSAL OF SOLID WASTE

This Specific Plan recognizes the need to minimize solid waste production and incorporates Policies and Standards to reduce, recycle and reuse solid waste to the extent feasible in conjunction with working with local providers to implement robust recycling and composting programs.

Solid waste in the Plan Area is currently collected by the Solano Garbage Company, a franchised hauler under contract with the County to provide waste collection, recycling, transportation, disposal and related services. After collection, solid waste is hauled to the Portero Hills Landfill located at 3675 Potrero Hills Lane in Suisun City, approximately 10 miles southeast of the Plan Area. This facility accepts solid waste, industrial waste, construction waste, ash, tires and sludge. It also provides a materials processing center where resource recovery activities are conducted and materials are diverted from the landfill through composting, wood recycling, concrete and asphalt rubble crushing and screening, metal salvage recovery, and other recycling services. This landfill recently purchased adjacent land to provide for future operations and buffer area. With this expansion the site is anticipated to be able serve the needs of the Plan Area through the year 2046.

As provided in Section 5.5.11, Utilities and Services and Section 5.4.2(K) Climate Change Initiatives, this Specific Plan addresses waste minimization efforts by the inclusion of appropriate facilities to promote recycling and composting and the recycling of construction waste. In addition, Section 5.4.2(J) encourages building material choices that would help limit long-term generation of solid waste by incorporation of recycled and salvaged materials.

4.3.6 ELECTRICITY AND NATURAL GAS

The Plan Area is located within the Pacific Gas and Electric Company (PG&E) service area for electricity and natural gas. The Specific Plan provides a compact development pattern coupled with energy efficient Guidelines and Standards to reduce energy demand consistent with the Plan's stewardship ethic as well as with relevant County policies and implementation programs.

These Guidelines and Standards are outlined throughout Section 5.4.2 – Building Character, Massing, Proportions and Materials, Section 5.5-Landscape Standards and comprehensively indexed in Appendix B – Sustainable Design Index.



4.3.7 FIRE PROTECTION

This Specific Plan recognizes the potential for increased fire hazards as a result of the Plan Area's setting. Therefore the Specific Plan seeks to protect against the potential for wildfires originating as structure fires.

Currently the Cordelia Fire Protection District (CFPD) provides fire and emergency medical services in the plan area and vicinity. The CFPD maintains two stations (engine companies) that cover a 56 square-mile service area in southern Solano County. The CFPD has an automatic mutual-aid agreement with the California Department of Forestry and Fire Protection (CDF) Lake Sonoma-Napa Unit and the cities of Benicia, Vallejo, and Fairfield, the Suisun Fire Protection District, and the American Canyon Fire Department to provide back-up assistance during an emergency. In particular, the CDF, which is called upon by the CFPD to assist with nearly all wildfires, operations five back-up fire stations in the surrounding counties that serve the Plan Area.

In order to address the wildfire risk the Plan incorporates the following measures:

- **Circulation Pattern** - The Plan includes a modified grid system of streets that provides many alternatives to moving throughout the neighborhoods. A new local road at the southerly boundary will be provided so that there are two main ingress/egress points to the neighborhoods west of Green Valley Creek.
- **Additional Emergency Access** –The Plan proposes to upgrade existing ranch roads to emergency access road standards to link the Elkhorn and Three Creeks Foothill neighborhoods to provide additional accessways to the foothill neighborhoods in the Plan Area.
- **Fire Sprinklers** – As provided in Section 5.4.2(L), all buildings designed for human occupancy larger than 500 square feet, including garages, are to be equipped with interior residential fire sprinkler systems.



4.4 ADMINISTRATIVE PROCEDURES

This section outlines the administration and enforcement components of this Specific Plan including its policies and regulations within the Plan Area.

4.4.1 SPECIFIC PLAN APPROVALS

Actions anticipated to occur concurrently with the approval by ordinance of this Specific Plan document include:

- Certification by the Board of Supervisors (Board) of the Final Environmental Impact Report (FEIR) addressing this Specific Plan and any concurrently approved implementing projects.
- Approval of land use designations and rezoning of the entire Plan Area to be consistent with this Specific Plan.
- Approval of a Master Development Agreement.

As a condition of approval for any subdivision within the Specific Plan Area, the following actions shall be required prior to recordation of the first final map.

4.4.2 SUBSEQUENT ENTITLEMENT PROCESS

Development within the Plan Area is subject to approval of subsequent discretionary entitlements by the County and the Conservancy Design Review Committee (CRC). Examples of such entitlements include subdivision maps, Conditional Use Permits, Minor Use Permits, and Design/Site Review applications and ministerial permits such as grading and building permits. Individual project applications will be reviewed to determine consistency with this Specific Plan and other regulatory documents. Application and processing requirements shall be in accordance with this Specific Plan and the Solano County Zoning Ordinance and other regulations, as modified by this Specific Plan. All subsequent development projects, public improvements, and other applicable activities shall be consistent with this Specific Plan and its Appendices, the Development Agreement, and applicable County policies, requirements, and standards. In acting to approve a subsequent project or permit, the County may impose reasonable and necessary conditions to ensure that the project is in compliance with this Specific Plan and all applicable plans, ordinances, and regulations.



Application Requirements - Once the Specific Plan is approved, individual applications for subsequent phased tentative maps and/or other entitlements as necessary may be submitted. Large lot and small lot tentative maps may also be processed concurrently, but will be approved sequentially. Applications shall be made in writing on forms provided by the County Planning Department and shall be accompanied by required application fees and such data and information as may be prescribed for that purpose.

Application Processing - Applications will be analyzed by the County for consistency with this Specific Plan. Specific Plan consistency must be demonstrated in several ways:

- *Consistency with Specific Plan Principles, Policies and program language.*
- *Consistency with land use designations, development density and intensity, circulation, and trails.*
- *Consistency with Neighborhood Design Code.*
- *Consistency with adopted mitigation measures relevant to the requested entitlement.*
- *Consistency with figures and tables.*

- *Consistency with the Development Agreement and other relevant implementation documents.*
- *Consistency with the Specific Plan Mitigation Monitoring and Reporting Program, infrastructure plans, and other implementing documents of this Specific Plan.*

Subsequent Environmental Review - All applications for a development entitlement that are submitted after approval of this Specific Plan shall be reviewed for conformity with the Specific Plan and for compliance with CEQA, Public Resources Code Section 21000 et seq. The FEIR will be certified concurrent with the approval of this Specific Plan and shall serve as the program-level environmental document for subsequent entitlement approvals within the Plan Area. The determination of whether the requested subsequent development entitlement is consistent with this Specific Plan and whether the Specific Plan EIR considered the project-specific effects will be made through the Subsequent Conformity Review process as described in the next section.

Subsequent Conformity Review Process - In conjunction with submitting any required County application for approval of a subsequent development entitlement within the Plan Area, the applicant for each proposed project shall complete a Subsequent Conformity Review questionnaire. The purpose of the questionnaire will be to enable the County to determine whether the proposed project is consistent with the Specific Plan, to examine whether there are project-specific effects that are peculiar to the project or its site that were not considered in the Specific Plan EIR, to determine whether the EIR adequately addresses the proposed project, and to determine whether an event as described in Section 15162 of the State CEQA Guidelines has occurred. The County may require additional information to make such a determination, including, but not limited to, the following:

- *Preliminary Grading Plan (including off -site improvements)*
- *Preliminary Geotechnical Report*
- *Preliminary Drainage Report*
- *Preliminary Water Quality Best Management Practices (BMP) Plan*
- *Traffic Circulation Plan*
- *Traffic Study*
- *Tentative Map*
- *Water Quality Related Studies/Details (BMPs, Preliminary Grading Plan, Preliminary Drainage Plan)*
- *Senate Bill (SB) 221 Water Supply Assessment Information*
- *Biological and Cultural Resources Study*
- *Public Safety Assessment*

Based on the information provided, the County will determine whether the proposed development entitlement is consistent with this Specific Plan and related documents, whether additional environmental review is required, and if so, the scope of such additional review. Based on the content of future submittals and the process described above, and subject to the terms of the Development Agreement, the County will determine whether performance standards are still achievable given the nature of the submittal, current conditions, and/or changed circumstances. The County shall require that adequate water supply is verified as a condition of any subdivision map. In the event that mitigation measures are no longer considered feasible, or the performance standards do not appear to be achievable, the County may perform subsequent environmental review pursuant to Sections 15162, 15163, or 15164 of the State CEQA Guidelines to identify additional or alternative mitigation measures.

4.4.3 DEVELOPMENT AGREEMENT

The landowners and the County will execute a Development Agreement approved by the Board of Supervisors in accordance with Government Code Section 65864 et seq. Once adopted and executed, the Development Agreement will vest (or guarantee) the landowners with the right to develop consistent with density, intensity and locations within the Specific Plan for the term of the Development Agreement subject to the terms, conditions and requirements mutually agreed to by the landowners and Solano County.

4.4.4 ADMINISTRATION

Administration of this Specific Plan includes subsequent application review, amendments, and minor revisions and CEQA review.

Solano County is the public agency responsible for the administration, implementation and the enforcement of this Specific Plan. The Conservancy Design Review Committee (CRC) will be established for internal review of all development proposals within the Plan Area. The CRC review process is in addition to all County, local, state and federal approvals and/or permitting that must take place, as applicable, for any improvement in the Plan Area (Refer to Section 5.9.2 - Conservancy Design Review Committee Organization).

The specific provisions of the Development Agreement will govern enforcement of the Development Agreement as a contract between the County and the landowners.

4.4.5 SPECIFIC PLAN AMENDMENTS

A Specific Plan amendment shall be required when any of the following occurs:

- A new type of land use not specifically discussed in this Specific Plan or identified in the land use concept is introduced.
- A change to this Specific Plan, which could create new or significantly increased previously identified environmental impacts as determined strictly pursuant to the provisions of Public Resources Code Section 21166.
- A change that would result in an increase in the total maximum number of new units proposed in the Specific Plan and/or the total maximum number of new units assigned to any or all neighborhood areas.
- Changes in lot design and/or parcel size which result in a significant change in the character of the area, including significant changes in density, building forms and architectural character.
- Significant changes to the Plan Area's circulation pattern that would result in a substantial alteration of any land uses or circulation concepts set forth in this Specific Plan.
- Significant changes to the distribution of land uses or elimination of a major land use of the Specific Plan, which would substantially alter the overall mix of land uses set forth in Section 3.5 of this Specific Plan.
- Changes to or deletion of any Specific Plan policy that results in a substantial change to the overall character or intent of the Specific Plan.
- The County may also initiate modifications to the Neighborhood Code in the form of a Specific Plan amendment, in addition to the Conservancy Design Review Committee (CRC).

A Specific Plan amendment shall not be required for the following Administrative Modifications:

- Changes in the development sequencing of the Plan Area which does not change the overall balance of providing sufficient infrastructure and Open Lands for the community.
- Deviations in water or sewer line alignments that do not substantially alter the location of the pipe line(s) and that do not alter the level of service required for the overall development of the Plan Area.
- Minor changes to the alignment of streets where the general land use pattern is maintained.
- Minor adjustments to the Neighborhood Design Code and the Standards and Guidelines herein that are consistent with the policies and intent of this Specific Plan.
- Minor deviations in the location of any of the trails within any of the designated Open Lands areas in the Plan Area provided the general land use pattern and overall trail system links are maintained.
- Changes in the location of any of the agri-tourism, civic or community facilities located in the Plan Area provided the overall mix of facilities within the general land use pattern is maintained.

Concurrent Development Agreement Amendment - A Specific Plan amendment will require an amendment to the Development Agreement so long as the Specific Plan is in place.

Specific Plan Amendment Determination - The Director of Resource Management is authorized to determine whether a Specific Plan amendment or an Administrative Modification is required pursuant to this Section 4.4.5. Specific Plan Amendments require Board approval, with a prior recommendation forwarded by the Planning Commission.

4.4.6 INTERPRETATION, APPLICATION OR IMPLEMENTATION

The interpretation, application or implementation of this Specific Plan shall be governed by the provisions of California planning and Land Use Law (Title 7 Chapter 3, Article 8) of the California Government Code, except, if a conflict occurs between these documents and the Zoning Ordinance, the documents herein cited shall apply. However, where a topic is not addressed in this Specific Plan, the Zoning Ordinance shall prevail.

Administrative Modification and Amendment Requests - All requests to amend this Specific Plan shall be made using the appropriate application forms, required documentation, and applicable fees as established by the Resource Management Department. Any or all of the following information may be required:

- A detailed justification statement that explains in detail why an amendment to the Specific Plan is warranted, and any exhibits deemed necessary by the Director of Resource Management.
- A statement of consistency with General Plan policies and Specific Plan land use designations.
- A statement of consistency with this Specific Plan.
- Analysis as required by CEQA and Section 4.4.2.
- Identification of any required modifications of the public infrastructure improvements that are not currently mandated by this Specific Plan (description, location, timing, funding source, method, etc).

Approval of Specific Plan Amendments - Specific Plan amendments shall be processed in the same manner as the original adoption of this Specific Plan. This Specific Plan may be amended as many times as necessary, but shall require findings and conclusions in the affirmative on the following:

- The amendment is consistent with the General Plan.
- The amendment will not have a significant effect on the environment.
- All other plans of the County that are applicable to the same areas or matters affected have been reviewed and amended as necessary to be consistent with the proposed Specific Plan amendment.

Approval of Administrative Modifications - Administrative modifications are those changes that would not have a significant impact on the character of the Plan Area. Administrative modifications are consistent with the spirit and intent of the vision, goals, and Policies of the Specific Plan. Administrative modifications shall conform to the following criteria:

- The Resource Management Director determines that the proposed adjustments to this Specific Plan are offset by the merits of the proposed design and do not significantly change the anticipated physical characteristics, Goals, and intent of this Specific Plan.
- Proposed changes to the alignment of throughways, if adopted, would not substantially alter the land use or circulation concepts set forth in this Specific Plan.

- Proposed changes to land use diagram shapes or to the alignment of throughways maintain the general land use pattern and/or provide an improved circulation system consistent with the intent and direction of the vision, goals, and policies of this Specific Plan as well as the maximum number designated for each neighborhood area, (Green Valley Corridor, Elkhorn, Nightingale and Three Creeks).

An administrative modification may be reviewed and acted upon by the Resource Management Director. Planning Commission or Board review is not required, unless the Administrative Modification is appealed.

4.4.7 MITIGATION MONITORING

A mitigation monitoring and reporting program consistent with Public Resources Code Section 21081.6 will be adopted with the Final EIR for the Specific Plan.

4.5 DEVELOPMENT SEQUENCING

Projected completion of the Plan Area could occur between 8 to 12 years after the approval of the first phase final map subject to market conditions. Development of the Plan Area will generally consist of four phases. The preliminary phasing is presented in Figure 4-6: Phasing Plan.

Within each phase, agricultural, recreation and community facilities, public infrastructure and neighborhood commercial services are planned so that they are available to serve the residential development within each phase. Public infrastructure is phased so that it is in place prior to construction of residential, commercial and recreation facilities.

Precise residential development and phasing is subject to actual market conditions. Within individual neighborhoods, phasing of residential construction and corresponding public facilities may vary slightly to respond to the market's demand for specific Building Types and locations.

The following sequencing requirements are to be implemented during build-out of the Plan Area.

- The Green Valley Farm Stand shall be established prior to the issuance of the 25th building permit in Phase 3A.
- The wastewater treatment plant shall be established prior to the 150th building permit in Phase 3A.
- The Green, Chapel and Conservancy Office shall be established prior to the 25th building permit in Phase 2A.
- The Elkhorn Foothills (Phase 2B) shall be developed concurrently and/or after the development of the balance of the Elkhorn neighborhood (Phase 2A).
- The sports fields (Phase 3A) shall be established prior to the issuance of the 25th building permit within Phase 3A.

4.5.1 LIST OF PERMITS, AGENCIES AND INFORMATION REQUIREMENTS

The following section outlines the state and federal permits that are anticipated to be needed for the project and the general information requirements for each. Refer to the FEIR for more specific details and requirements.

FEDERAL

1. Clean Water Act Section 404 - Fill of Federal Jurisdictional Wetlands/Waters

Agency: U.S. Army Corps of Engineers, San Francisco District

Permit: Either Individual Permit (> 1/2 acre, >300 lf streambed) or Nationwide Permit No. 29 (Residential) (<1/2 acre, <300 lf streambed)

Information Requirements (Wetlands Biologist):

- Verified wetland delineation
- Direct and Indirect Impact Analysis with Maximum Avoidance and Minimization based on conceptual grading plan
- Compensatory Mitigation Plan for "No Net Loss" or approximately 3:1 mitigation to impact ratio of creation/enhancement
- Complete application, including 404(b)(1) Alternatives Analysis for Individual Permit

2. Endangered Species Act - Take of Federal Endangered Species/Habitat Modification

Agency: U.S. Fish & Wildlife Service, Sacramento Office

Permit: Section 7 Consultation (Biological Opinion) or Section 10 Permit (Habitat Conservation Plan (HCP) if approved by Solano County)

Information Requirements (Species Biologist):

- Biological Assessment of Property to identify species and habitat
- Direct and Indirect Impact Analysis with Maximum Avoidance and Minimization based on conceptual grading plan
- Compensatory Mitigation Plan approximately 3:1 mitigation to impact ratio of creation/enhancement/preservation with long term management plan
- Complete Biological Assessment for submission with the 404 Permit Application to allow initiation of consultation.

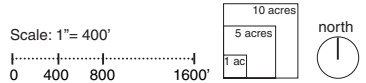
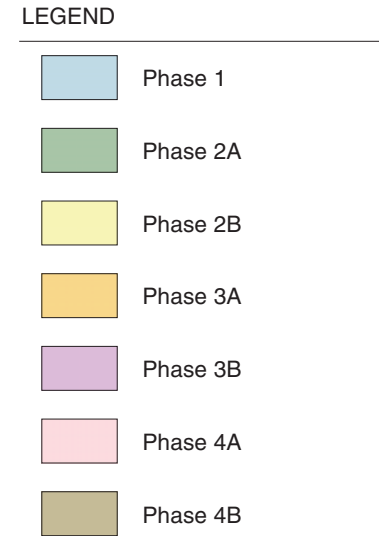
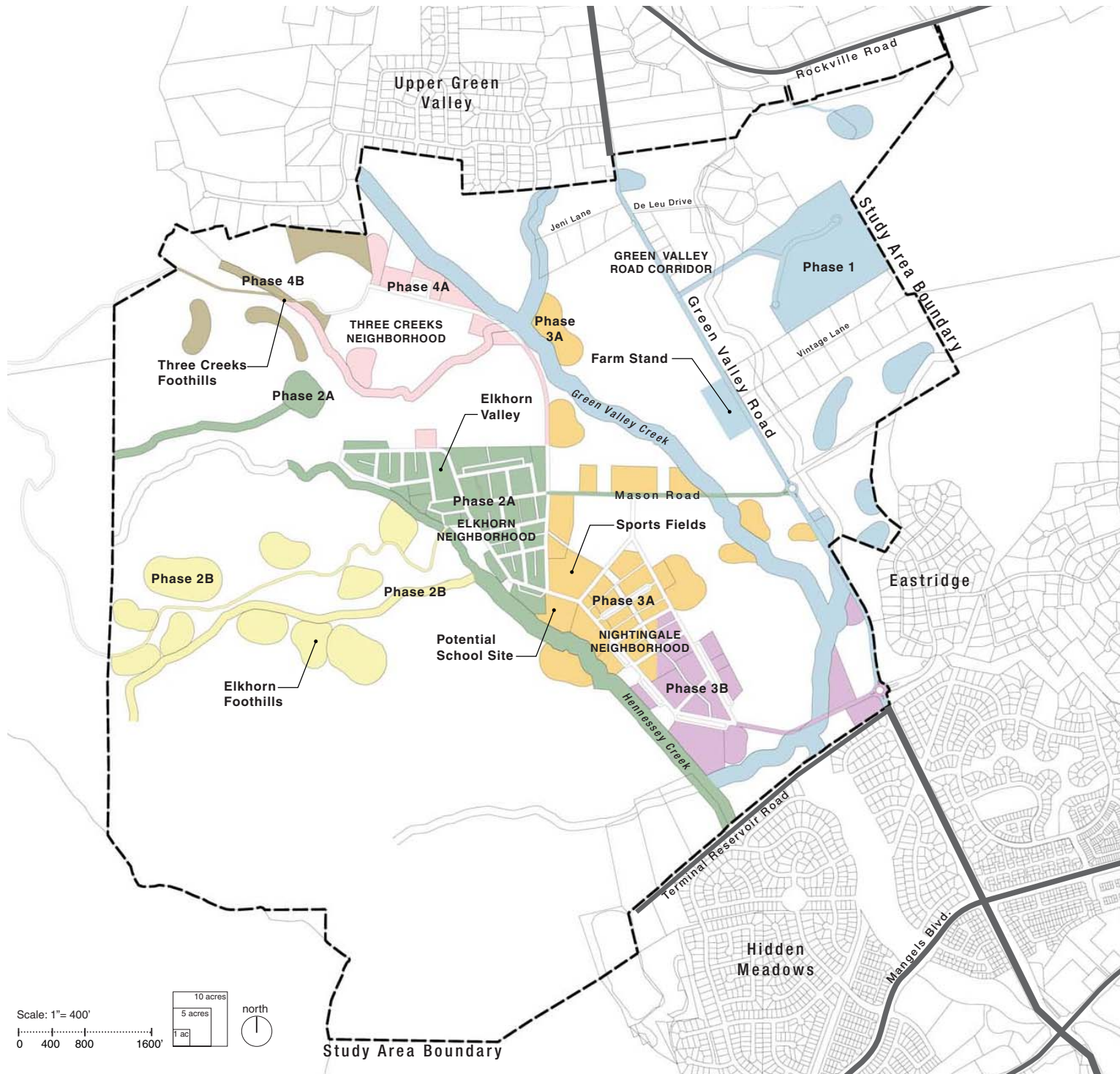


Figure 4-6: Phasing Plan

STATE

3. Water Code/Clean Water Act Section 401 - Water Quality Certification for 404 Permit/Stormwater

Agency: San Francisco Bay Regional Water Quality Control Board

Permit: 401 Certification (Administrative) or Waste Discharge Requirements (WDR) (Board)

Information Needs (Wetlands Biologist/Stormwater):

- Verified Wetland Delineation (with all non-federal waters identified)
- Direct and Indirect Impact Analysis with Maximum Avoidance and Minimization based on conceptual grading plan
- Compensatory Mitigation Plan for “No Net Loss” or approximately 3:1 mitigation to impact ratio of creation/enhancement.
- Stormwater Management Plan
- Stormwater Pollution Prevention Plan (SWPPP)
- Complete Application and Fees

4. Fish & Game Code Section 2080 - Take of State Endangered Species/Habitat Modification

Agency: California Department of Fish & Game

Permit: Section 2081 Permit or Section 2080.1 Consistency Determination (concurrent with Section 7)

Information Requirements (Species Biologist):

- Biological Assessment of Property to identify species and habitat
- Direct and Indirect Impact Analysis with Maximum Avoidance and Minimization based on conceptual grading plan
- Compensatory Mitigation Plan approximately 3:1 mitigation to impact ratio of creation/enhancement/preservation with long term management plan
- Complete Application and Fees

5. Fish & Game Code Section 1600 - Alteration of Lake or Streambed/Impact to Adjacent Riparian Habitat

Agency: California Department of Fish & Game

Permit: Section 1602 Streambed Alteration Agreement

Information Requirements (Wetlands Biologist/Stormwater):

- Verified Wetland Delineation with federal and state waters, including the dripline of riparian habitat
- Direct and Indirect Impact Analysis with Maximum Avoidance and Minimization based on conceptual grading plan
- Compensatory Mitigation Plan for “No Net Loss” or approximately 3:1 mitigation to impact ratio of creation/enhancement.
- Complete Application and Fees

6. Subdivision Map Act/County Subdivision Ordinance

Agency: Solano County

Permit: Tentative Map(s)/Vesting Tentative Map(s)

Information Needs (Civil Engineer)

See Section 26-62 and 26- 63 of the County Subdivision Code.

4.5.2 PROPOSED PROCESS FOR FEDERAL AND STATE PERMITS

The following outlines the anticipated general steps to achieve the federal, state and county permitting for the Specific Plan Area and their timing with regard to tentative and final map recordation. These permit requirements could change, refer to the FEIR for specific permit and mitigation requirements.

Step One: Retain wetlands and species biologists, attorney and civil engineer per Information Needs described above; determine if they can be retained subject to attorney work product.

Step Two: all can be prepared concurrently:

- Wetlands biologist prepares preliminary wetlands/waters jurisdictional delineation, and also identified state waters and riparian habitat.
- Species biologist prepares preliminary biological assessment of property identifying potential species habitat and quality.
- Civil engineer prepares conservative conceptual grading plan and large lot tentative map for impacts analysis.
- County initiates Resolution of Application by Board of Supervisors for formation of Green Valley CSA and publishes Notice of Hearing and mails notice to LAFCO (Gov. Code §§ 25211.1, 25211.3)

Step Three: Coordinate with Civil Engineer and Biologists to overlay impacts to preliminary delineation and habitat mapping to prepare direct and indirect impact analysis with numeric calculations and clear map.

Step Four: Based on first round impact analysis, consider adjustments to grading plan/large lot tentative map to avoid and minimize impacts to resources.

Step Five: Once the development team has settled on a plan and resulting impacts, then prepare a calculation of required compensatory mitigation and have biologists prepare a preliminary mitigation plan to accomplish mitigation on-site if feasible.

Step Six: Review impacts and mitigation plan, make any final adjustments to tentative map as necessary.

Incorporate any necessary LAFCo issues and utility right of ways into tentative map. If LAFCo disapproves of CSA Formation, Fairfield municipal services will not be available to the project and Alternative 2 (groundwater and on-site treatment and disposal of wastewater) will be initiated.

Step Seven: Coordinate one (or more if necessary) informal informational meeting(s) with all agency staff to review impact analysis and mitigation plans. Prepare powerpoint presentation summarizing mitigation plan.

Step Eight: Adjust plans as necessary to respond to comments, and determine if a follow up meeting(s) or site visit(s) are necessary.

Step Nine: Prepare one supporting project description and information package to support applications for all necessary permits. Fill out all applications concurrently and calculate fees. Submit application forms and supporting documentation to all agencies concurrently under one cover letter.

Step Ten: Coordinate with all agencies to ensure receipt of application package and completeness review.

Step Eleven: Coordinate with U.S. Army Corps of Engineers to ensure timely publication of Public Notice (if Individual Permit, should be published within 15 days of receipt of complete application) and Consultation Request Letter to the U.S. Fish & Wildlife Service (triggers 120 day process).

Step Twelve: Meet and negotiate as necessary with regulatory staff to review, supplement and correct project information as necessary. This process can take months or more than a year to complete, depending on staff levels and accuracy/completeness of the project information. Hold joint or separate meetings and/or site visits as necessary.

Step Thirteen: Negotiate specific wording and maps of permits, conservation easements, long-term management plans and endowment Property Assessment Record (PARs) prior to issuance. (WDRs require a public hearing before the Regional Board, all other permits are issued administratively.)

Step Fourteen: Once the basic land plan and mitigation plans have been negotiated, begin processing County approvals for a phased tentative map and conditions of approval which will allow for recordation of separate final maps by individual land owners.

Step Fifteen: The CSA authorizes formation of the CFD which in turn may issue a Bond to assist the developer in financing the public infrastructure.

4.6 FINANCING PLAN

Financing Measures

The Middle Green Valley Specific Plan Preliminary Financial Model prepared for the Plan Area by Economic Planning Systems (EPS) provides cost estimates of public infrastructure and facilities required to serve the Plan Area. This cost information identifies backbone infrastructure improvements, public facilities, and administrative costs needed to serve Plan Area, including information for roadways, sewer, water, drainage, recycled water, micro-detention, open space, and erosion as well as fire, sheriff, and transit. This Financing Plan describes the financing mechanisms that will be used to create these improvements in a timely manner including the possible issuance of Community Facility District bonds with special taxes charged to the approximately 400 new homes located in the Study Area.

Major infrastructure and facilities required for development to proceed in the Plan Area will be funded through a combination of public and private financing. The majority of funding will come from developer equity, developer debt, and land secured public financing. Some additional funding may be available through County and specific District development impact fees. The Financial Model indicated that such an approach to project financing is viable once the market recovers.

A County Services Area (CSA) will be formed to help focus the provision of services and facilitate the establishment of a Community Facilities District for the purposes of issuing infrastructure bonds services by special taxes on the new homeowners. Debt financing will be limited to prudent levels and shall be consistent with State and County guidelines and underwriting standards. Facilities will be constructed as they are needed to serve new development. Development projects will be conditioned during the subdivision process to construct facilities needed to serve the development.

Developers who oversize infrastructure that ultimately serves other developers will be eligible for reimbursements under the County Service Area's reimbursement policies. It is expected that costs will change over time; therefore, each funding mechanism should be as flexible as possible in adjusting the amount of funding to reflect current costs at the time of construction. At any stage, smaller sub-areas may develop, depending on the financing capacity of the area, development plans, and market conditions.

Financing Public Improvements

The construction of backbone and other public improvements designed to serve the Plan Area will be funded by a variety of mechanisms detailed in the Financing Plan: county-wide impact fees, school district impact fees, establishment of special districts and assessments (i.e., County Service Area), developer financing, and other potential methods.

School District Impact Fees

The school district has established fees, in accordance with state regulations, to be used for school facilities. School impact fees are collected by the County before the issuance of a building permit and are forwarded to the applicable school districts.

Community Services Area

A County Services Area (CSA) may be established to help fund the construction and/or acquisition of backbone infrastructure and facilities in the Plan Area. The County Service Area Law (Government Code §25210 et seq.) was created in the 1950s to provide a means of providing expanded service levels in areas where residents are willing to pay for the extra service. This Specific Plan proposes a County Service Area (or CSA) as the overall organizing implementation structure to bring services to the Plan Area. A CSA is initiated by a petition of registered voters or by adoption of a resolution at the county level. Once proposed, the formation of the CSA will be subject to public notice and a public hearing. If more than

50% of registered voters or landowners protest, the CSA may need to be subject to voter approval at a special election. Once approved, the CSA is normally granted limited powers and the Board of Supervisors may act as the CSA board.

Determination of the Annual Charge

When a CSA exists, the property owner will pay taxes and fees to the CSA or a designated Community Facilities District instead of the County for the services provided. These will be billed as line items on the County property tax bill. The taxes may take a variety of forms:

- General property taxes may be levied depending upon Prop. 13 constraints. These taxes, referred to as ad valorem taxes, are based on assessed value.
- Special taxes may be levied for specific purposes. These taxes must be approved by a two thirds vote of CSA residents.
- Benefit assessments may be levied for specific purposes and are based on the direct benefit each parcel receives from the improvements or services financed.
- Water or sewer standby charges may be levied to ensure future availability of service, subject to certain limitations.

Additionally, the CSA may charge these fees and taxes according to zones to more accurately bill residents for the particular services provided to their individual property. CSA charges will continue as long as the CSA is providing services to the community.

Potential Expansion of the Green Valley CSA Though the City of Fairfield abuts the proposed CSA to the south, there is a neighborhood of approximately 700 homes to the north (Upper Green Valley) that may benefit at some future date from public infrastructure improvements such as water and sewer. Whether it is initiated by a petition of registered voters or by adoption of a resolution at the County level, this area has the potential to be included in the Green Valley CSA. Critical issues of local water rates

and sewer infrastructure - especially those services related to the Falls School site and other parcels near Green Valley Creek - could be addressed through this public vehicle.

Other Financing Mechanisms

As described in the Financing Plan, other financing mechanisms, such as creation of private districts or associations, may be used to fund maintenance of certain facilities in the in the Plan Area. Specific financing requirements, improvement obligations, fees, reimbursements, land and easement dedications, conveyances, maintenance, and other financing and improvement-related obligations would be detailed within the documents that form the CSA.

Developer Funding

Developer funding will be used for improvements not included in existing fee programs or the CSA and CFD. Improvements funded through developer funding/private capital, will be subject to, where appropriate, reimbursement agreements with the County. The specific provision of these methods as applied to the Plan Area may be included in the Development Agreement.

It is expected that costs will change over time and, therefore, each funding mechanism will include a method for adjusting the amount of funding to reflect current costs at the time of construction.



In most people's vocabularies, design means veneer. It's interior decorating. It's the fabric of the curtains or the sofa. But to me, nothing could be further from the meaning of design. Design is the fundamental soul of a human-made creation that ends up expressing itself in successive outer layers of the product of service.

- Steve Jobs

5.0

THE NEIGHBORHOOD DESIGN CODE

This Chapter provides the Development Standards (Standards), Design Guidelines (Guidelines) and design review process that guides and directs the development of the neighborhood areas in order to achieve the intended vision described in this Specific Plan. The development plan has been crafted around the main goal of preserving rural character while defining an appropriate development pattern that draws from the settlement traditions of small California towns. These Standards and Guidelines provide a form-based framework that is organized around the use of seven basic rural Building Types for the continuing evolution of these neighborhoods into a thriving, dynamic place.

KEY SPECIFIC PLAN PRINCIPLES:

3. Value flexibility and anticipate change while providing an innovative, rigorous development framework.
4. Support and enable the values of craftsmanship that emphasize thoughtful, durable, high quality neighborhood design concepts.

5.1 COMMUNITY DESIGN THEMES

Guided by the four Principles described in the vision, the following design themes are the common threads that run through the Neighborhood Design Code to establish a small town, rural framework that weaves together the Green, the Gray, and the Built fabrics to create a sequence of environments:



Design Matters

Good design adds value both to an individual building and to a community as a whole. This does not necessarily mean it is more costly. Encouraging the investment in quality (not necessarily quantity) is an underlying and important concept in getting back to using common sense and creating environments that promote interaction and endure over time.

Connect

Providing a myriad of connections at the neighborhood, community and regional levels is a basic tenant of this Specific Plan. This means the establishment of a safe, healthy and dynamic trail and street network that provides many alternatives to getting where you need to go.

Create Centers

Every successful small town has a discernible heart. The Transect approach provides a hierarchy of informal community gathering and focal areas to set up a small town community fabric that endures and evolves over time. A main organizing element is the notion of setting aside the most scenic and valued locations for the special community gathering places.



Celebrate and build on the local context

The rural towns of California used the fundamental concepts of cluster development to grow over time into truly memorable places. The neighborhood designs draw from the farming and ranching legacies to create a place that is connected to this history. This means using simple building forms and human scaled proportions to create a built environment that is comfortable, rich and inviting.



Maintain a crisp edge

Memorable small towns have a distinct edge where settlement stops and the rural landscape begins. Defining and holding this edge is important in maintaining the visual openness of the pastoral setting as well as to reinforce the dominance of the vast landscape.



Infuse serendipity into the settlement pattern

Blending Building Types on a street, varying lot sizes, creating informal public common areas and using irregular street patterns echoes the way small towns grew over time into livable, dynamic places. Avoiding the monotony of homogenous, single Building Type, single use neighborhoods with no public open space is key to creating engaging, participatory community settings.

5.2 NEIGHBORHOOD DESIGN CODE ORGANIZATION

The Neighborhood Code translates the Specific Plan vision into prescriptive Standards and Guidelines that describe a sequence of environments from the least intensive to the most intensive. The Standards and Guidelines in this Chapter are divided into the following main sections:



The Regulating Plan - (Section 5.3) A map that identifies the Transect Zones (Zones) within the Specific Plan area and assigns the Code's various Building Types, Standards and Guidelines (described in each Section) to physical locations. In general, this is the key map to understand what Standards and Guidelines apply to what area of the Plan and in what area certain Building Types may be used.



Architectural Patterns - Building Types, Form and Character – (Section 5.4) This section describes the Building Types that define and shape the Transect. This includes regulations for lot sizes, building placement, parking requirements, encroachments, façade treatments and the architectural character and qualities of the Built Fabric including massing, porch design, openings, materials and colors.



Landscape Patterns - (Section 5.5)

This section regulates the character and quality of the landscape within private spaces. This includes plant and hardscape material palettes, planting concepts and requirements, exterior lighting, and appropriate fencing and wall treatments.

Open Lands Patterns - (Section 5.6)

This section regulates the establishment of an interconnected network of active Open Lands within the block patterns as defined in the Regulating Plan. This section defines the allowable types of Open Lands and the requirements for each including, parking, landscape, hardscape, size and programming Guidelines.

Street and Circulation Standards - (Section 5.7)

This section designates standards for the construction of new streets, trails, and pedestrian pathways. This includes ROW width, travel-way, on-street parking, traffic lanes and maximum design speed.

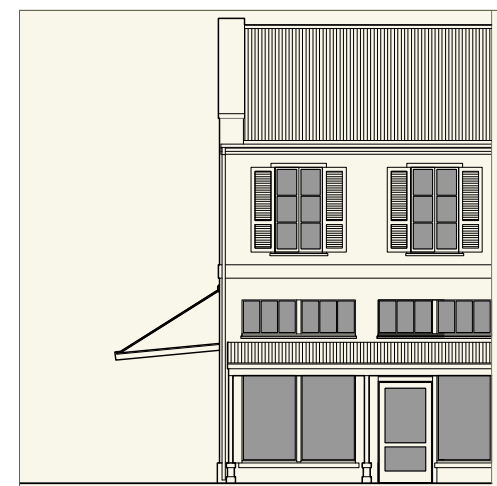


Sign Standards - (Section 5.8)

This section designates the Principles for the design of signs within the Specific Plan area, including regulatory, commercial, trail and directional signage.

Design Review - (Section 5.9)

This section describes the design review organization and the required steps for review and approval of all improvements within Middle Green Valley.



5.3 THE REGULATING PLAN AND ZONES

5.3.1 PURPOSE

This section establishes the Zones applied to property within this Specific Plan by the Regulating Plan (Figure 5-1). The Regulating Plan divides areas into separate Zones that are based on a Transect of development intensity, ranging from the most intensive use of land to the most natural. These Zones are keyed to the balance of the sections in this Code which utilizes a range of Building Types as the organizing principle.

5.3.2 THE RURAL TRANSECT: AN OVERVIEW

There are six (6) Transect Zones that describe a sequence of environments from T1 – Conservation Zone, the most natural and/or sensitive environment, to T6 – The Neighborhood Center, the most intensively developed area of the project and the heart of the Community.


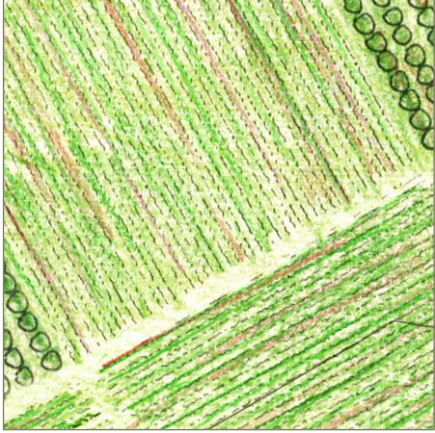
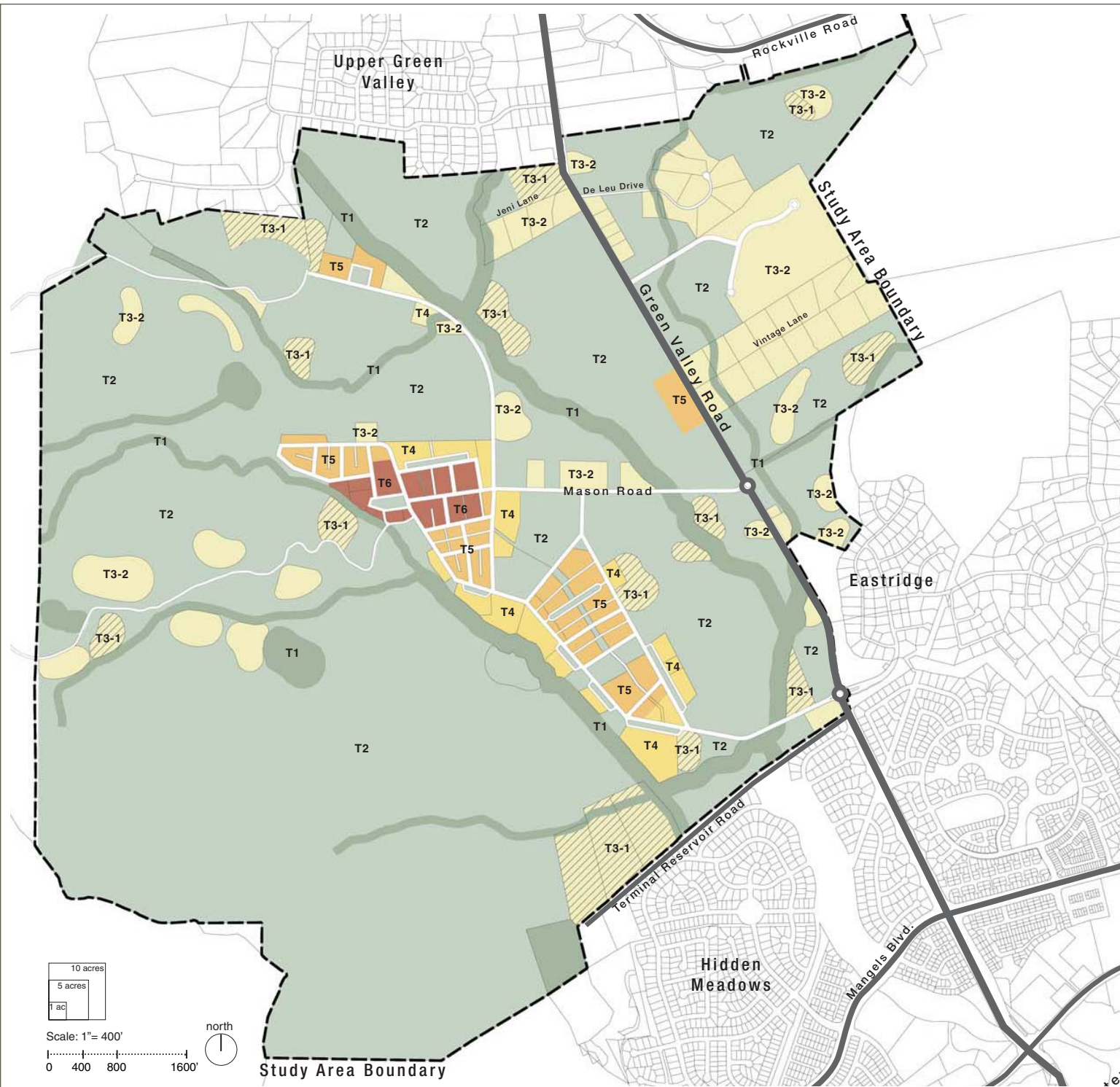
		
ZONE	T1	T2
ID DESCRIPTION	CONSERVATION This Zone consists primarily of drainages and associated vegetated buffers. These lands are to be protected, restored and/or enhanced and are not suitable for development due to topography, habitat, hydrology and/or vegetation.	AGRICULTURE This Zone consists of the rural, ranching and productive agriculture lands that are intended to be preserved and remain in active agriculture. Building Types would include Agriculture/Community buildings for maintenance and operations such as barns, sheds, and/or storage buildings. Fire roads, driveways, maintenance roads and trails make up an informal access network.
OPEN LANDS (Refer to Section 5.6)	Natural - Drainage corridors and buffers - Oak woodlands	Passive and Active - Meadows - Grazing lands - Farmlands/Rowcrops/Orchards/Vineyards - Trails
BUILDING TYPES (Refer to Section 5.4)	None	- Agriculture/Community (for operations and services only)
ROADS AND THROUGHWAYS (Refer to Section 5.7)	- Unpaved service/fire access roads - Minimal bridge crossings	- Unpaved service/fire access roads

Table 5-1: The Middle Green Valley Transect Overview



<p>T3 - 1 AND T3 - 2</p>	<p>T4</p>	<p>T5</p>	<p>T6</p>
<p>RURAL 1 AND RURAL 2</p>	<p>NEIGHBORHOOD EDGE</p>	<p>NEIGHBORHOOD CORE</p>	<p>NEIGHBORHOOD CENTER</p>
<p>This Zone consists of lands that support a rural residential fabric. Building Types include detached buildings such as Compounds, Meadow, Homesteads and Agriculture/Community buildings set within the larger agricultural and foothill landscape. In the foothill areas plantings are naturalistic and roads are irregular to respond to the natural topography.</p>	<p>This Zone consists primarily of a low density, detached residential fabric that provides the edge and the transition to the agricultural landscape. It has a range of Building Types from Agriculture/Community buildings, to Homesteads. Setbacks and landscaping are variable. It has a network of small blocks with paths and formal street tree plantings.</p>	<p>This Zone consists of a low to medium density detached residential neighborhood fabric that would accommodate a mix of Building Types from Agriculture/Community, Bungalows and Farmsteads. The street network is organized as small blocks with paths, regular street tree plantings, and buildings set closer to the street.</p>	<p>This is the center of the community. This area consists of the widest variety of Buildings Types within a medium density mixed-use fabric. The street network is organized around the main Green with a regular street tree treatment and buildings set close to paths.</p>
<p>Passive and Active</p> <ul style="list-style-type: none"> - Meadows - Farmlands/Rowcrops/Orchards/Vineyards (T3-1) - Trails 	<p>Active</p> <ul style="list-style-type: none"> - Parks - Playgrounds - Sports Fields - Greens - Community gardens - Trails/Rambles 	<p>Active</p> <ul style="list-style-type: none"> - Parks - Playgrounds - Sports Fields - Greens - Community gardens - Trails/Rambles 	<p>Active</p> <ul style="list-style-type: none"> - Parks - Playgrounds - Greens - Community gardens - Trails/Rambles
<ul style="list-style-type: none"> - Meadow (T3-2 only) - Compound (T3-1 only) - Farmstead - Agriculture/Community (T3-1 only) 	<ul style="list-style-type: none"> - Bungalow - Farmstead - Agriculture/Community 	<ul style="list-style-type: none"> - Bungalow - Farmstead - Agriculture/Community 	<ul style="list-style-type: none"> - Courtyard - Bungalow - Farmstead - Agriculture/Community
<ul style="list-style-type: none"> - Rural Collector - Local Road - Neighborhood Road (Types 1, 2 and 3) - Unpaved service roads - Driveways - Shared Driveways 	<ul style="list-style-type: none"> - Alleys - Neighborhood Road (Types 1 and 2) - Neighborhood Green - Rural Collector - Local Road 	<ul style="list-style-type: none"> - Alleys - Neighborhood Road (Types 1 and 2) - Neighborhood Green - Rural Collector 	<ul style="list-style-type: none"> - Alleys - Neighborhood Road (Types 1 and 2) - Rural Collector - Neighborhood Green



TRANSECT ZONES

	T1	Conservation
	T2	Agriculture
	T3	Rural 1 and Rural 2
	T3-1	- Rural 1
	T3-2	- Rural 2
	T4	Neighborhood Edge
	T5	Neighborhood Core
	T6	Neighborhood Center

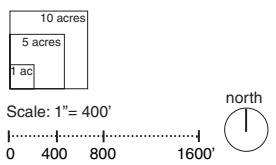


Figure 5-1: The Middle Green Valley Regulating Plan

The following definitions are used throughout the Neighborhood Design Code. A complete list of definitions is provided in Appendix A and further explained in the following Sections.

Key Definitions
Allowable Building Coverage: The maximum portion of the Lot or Building Envelope (as applicable) that may be covered by impervious surfaces. (See Building Coverage definition.)
Building Coverage: That portion of a Lot covered by a building and/or any other impervious surface, including, but not limited to, porches, courtyards, terraces and driveways.
Building Envelope: The area of the Lot within which all improvements are to occur, including all buildings, garages, landscape structures, walls and gates (excluding entry gates, where permitted). The area of the Building Envelope is established by the Setbacks.
Building Height: The vertical distance above the average finish grade of the area covered by Buildings, or adjacent sidewalk grade, whichever is more restrictive, to the highest Eave or Cornice line of the building.
Building Type: A structure defined by the combination of configuration, disposition, and function. (See Section 5.4.1)
Gross Building Square Feet (Gross Building SF): Gross Building SF shall be calculated as the total area of all floors of a building as measured to the exterior finished surface of outside walls or to the centerline of common walls separating buildings, not including any carport, walkway, garage, overhang, patio, enclosed patio, landscape structure, storage areas incidental to the principal use of the building, unenclosed walkway, or utility or disposal areas.
Story: A habitable floor level within a building, typically 8 feet to 12 feet from floor to ceiling, excluding an attic or raised basement.
Frontage: The primary facade of the building facing the street.
Frontage Type: The primary façade or area of the Lot that provides the transition from the more private realm to the public realm. Five main frontage types are defined in this Code: Front Yard, Porch, Stoop, Shopfront and Awning and Gallery.
Encroachment: Any structural element that breaks the plane of a vertical or horizontal regulatory limit, extending into a Setback Area, into the public Frontage, or above a height limit.
Encroachment Zone: The area within a Setback Area where building projections may be located over the prescribed setback line. Building projections include: porches, balconies, trellis, stoop, awning, galleries and/or bay windows.

5.4 ARCHITECTURAL PATTERNS: BUILDING TYPES, FORM & CHARACTER

5.4.1 BUILDING TYPES

The Building Type is the basic organizing principle of the Neighborhood Building Code. The following section describes each Building Type, the Zones in which they may occur, building placement, form, parking, frontage, intensity of use standards and form and character. There are seven primary Building Types within the Plan. Refer to the accompanying Building Type summary for where each Building Type is allowed. The subsequent sections provide detailed urban standards for each. Refer to the Land Use Plan in Chapter 3 for allowed uses. In the case that there are discrepancies regarding allowed uses information, Section 3.5.3 - Land Use Designations and Table 3.4 - Allowed Land Uses shall prevail.




			
	[A] Agriculture / Community	[B] Courtyard	[C] Bungalow
Concept	These are the dominant, expressive, agricultural building forms that remind us of where we are in the world and the rich legacy we are living in. They draw from the simple, bulky, forms of barns, water towers, and agricultural service and utility buildings that dot the farming landscape. These buildings occur throughout the community to frame and punctuate views, provide variety, and stand as sentinels along the edges of the neighborhood fabric.	This is an attached, zero-lot line Building Type, that viewed together, borrows from the simple barn and winery forms. Arranged around a network of courtyards and alleys, this building form provides a great deal of flexibility in responding to evolving building uses.	This is a smaller detached Building Type that draws from the simple honesty and human scale qualities of rural architecture. Front porches, fences, tree lined streets and paths work together with the Bungalow type to create distinct neighborhoods that make up small town character.
Transect Zones	T2, T3-1, T4, T5, T6	T6	T4, T5, T6

Table 5-2: Building Type Summary



[D] Farmstead

This is a larger detached Building Type that is located predominately at the perimeter of the neighborhoods. A collection of informal buildings with wrap around porches, three rail fences, and informal gravel driveways, all work together to reinforce the rural character while providing a distinct edge to the larger agricultural landscape.

T3-1, T3-2, T4, T5, T6



[E] Meadow

This is a detached Building Type organized around informal meadow features in the foothill areas. Located at the edges of the oak woodlands, these building forms nestle into the landscape and borrow from the horizontal forms of the rural ranch traditions. Rambling building forms with rustic treatments, informal gravel driveways, and dry stacked stone walls, all work together to create a ranch character.

T3-2



[F] Compound

This Building Type is located within the larger agricultural and oak woodland landscapes. This type offers opportunities to create a collection of connected buildings that echo the massing and simple geometric forms of agricultural buildings as they grew over time.

T3-1



[G] Secondary Units* and Ancillary Structure

This Building Type may be a small detached single story structure or a living space located above or next to a garage on the same Lot or premises as the main living structure. These living spaces are typically located towards the rear of the Lot, and offer opportunities to provide multi-generational, workforce and/or office spaces.

T3, T4, T5, T6
 *(Secondary Units may only occur with Farmstead, Meadow or Compound Building Types)

TYPE A - AGRICULTURE/COMMUNITY

Definition: These are the dominant, expressive, agricultural building forms that remind us of where we are in the world and the rich legacy we are living in. They draw from the simple, bulky, honest forms of barns, water towers, and agricultural service and utility buildings that dot the farming landscape.

Concept: These buildings occur throughout the community to frame and punctuate views, provide variety, and stand as sentinels along the edges of the neighborhood fabric. In general, these buildings are the dominant, civic buildings that are icons in the neighborhood that stand for community.

Allowed Transect Zones: T2, T3-1, T4, T5, T6



Figure 5-2: The Agriculture/Community Building - Conceptual View Sketch of Farm Stand



Agriculture/Community Building anchors main Green

Community Assembly building utilizes Agriculture/Community Building Types.

Figure 5-3: Building Placement Sketch



Figure 5-4: Agriculture/Community Building Conceptual Massing Sketch - The dominant forms in the neighborhood

1	BUILDING PLACEMENT:	
» Setbacks:		
» Front Yard Setback zone	» 20-30% of average Lot depth	
» Rear Yard Setback	» 20% of average Lot depth	
» Side Street Setback Zone (corner)	» 10% of average Lot width	
» Encroachment Zone:		
» Front	» 50% of front setback zone	
» Side Street (corner or open lands)	» 50% of side setback zone	
» Rear	» 50% of rear setback zone	
» Garage Placement:		
Garages must be located to the rear of buildings, and a minimum of 10' behind the front facing façade.		
» Miscellaneous:		
» Street façade elevation must utilize a minimum of a 5' offset (building projection or jog) for every 60' feet of horizontal plane.		
» Building placement Guidelines for the Agricultural/Community Building are general in nature. Building locations are to respond to the specific setting, use and dimensions of the particular Lot size.		

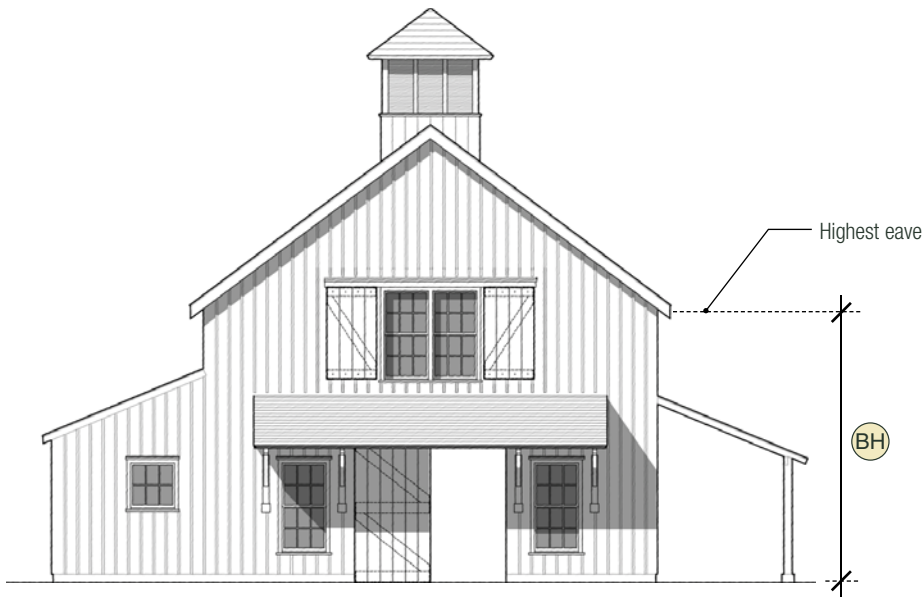


Figure 5-5: Agriculture/Community Building Height

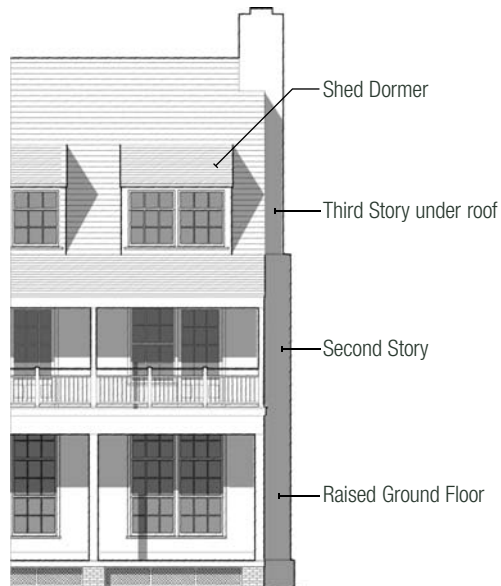


Figure 5-6: Frontage Design - Two Story Porch Element

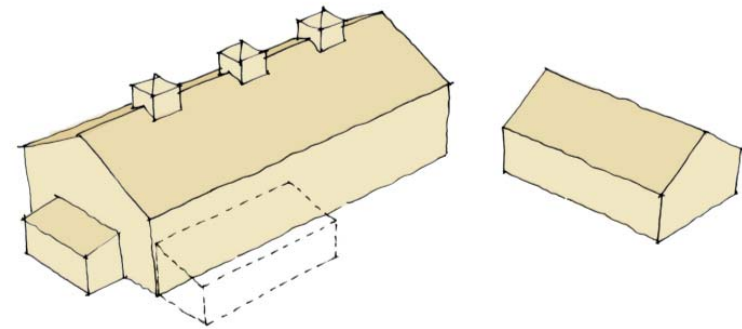
2 BUILDING FORM – MASSING AND SIZE:	
»	<p>Size</p> <ul style="list-style-type: none"> » Minimum Lot Size » NA » Max. allowable gross building sf » NA » Allowable Building Coverage (percentage of Lot) » 25%
»	<p>Height</p> <p>BH</p> <ul style="list-style-type: none"> » Main Building (stories and eave height) » 3 stories or 40' max. height » Secondary Buildings » 1-2 stories, or 30' max height » Ancillary/Guest House » 1-2 stories, or 30' max. height » Agricultural operational/service buildings » 2 stories or 30' max. height » Finish Ground Floor Level » varies » Finish Ground Floor Ceiling » 10' minimum » Upper Floor(s) Ceiling » 8' minimum
»	<p>Miscellaneous</p> <ul style="list-style-type: none"> » Loading docks or other service entry functions may not be located on front facade areas. » Specialty agricultural, operational and servicing buildings may be reviewed on a case by case basis to ensure they are consistent with intent of this Code.

3 PARKING AND SERVICE:	
»	<p>Spaces</p> <ul style="list-style-type: none"> » .5 maximum spaces per Accommodation unit » 3 spaces per 1000 sf for retail related agricultural tourist functions over 500 sf (winery, farmstand, produce market, winery tasting and retail, food and beverage)
»	<p>Miscellaneous</p> <ul style="list-style-type: none"> » Bicycle parking must be provided in a secure environment for community and agricultural tourist uses.

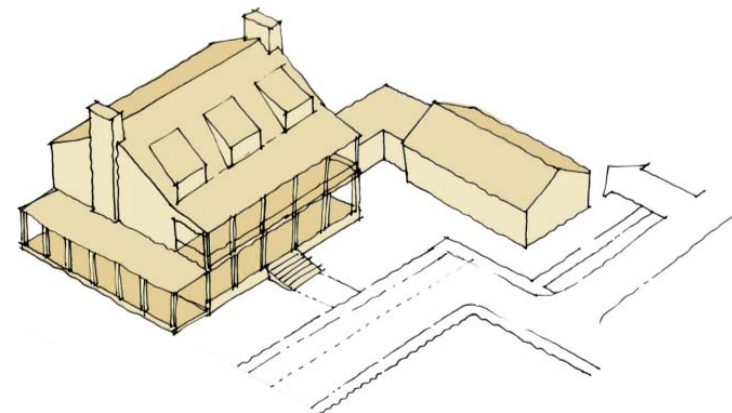
4	ALLOWED USE TYPES:	
»	Ground Floor	» Agricultural tourist, community, agricultural operations/service
»	Upper Floors	» Agricultural tourist, community, agricultural operations/service

5	ALLOWED FRONTAGE TYPES:	
»	Front Yard	» Planted yard which connects to surrounding landscape
»	Porch	» 8' minimum porch depth
»	Miscellaneous	» See Section 5.4.3 for additional information on Frontage Types

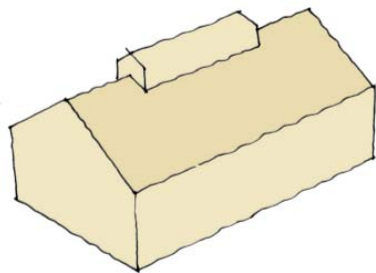
6	LANDSCAPE AND FENCING STANDARDS:	
»	» A total of one canopy tree per 4,000 sf of Lot area, minimum size 24" box, are to be planted in front, side, and rear yard areas of the Lot.	
»	» Along street frontages, a 2'-6" – 4' fence, wall, or hedge may be used to define the property edge along or within 5' of the property line.	
»	Miscellaneous:	» (See Landscape Patterns, Section 5.5 for additional information on landscape, fencing, drainage and grading Guidelines).



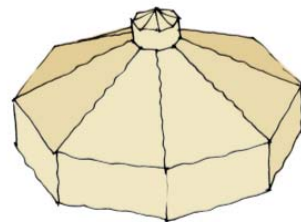
A. Large Barn with Secondary Shed Building



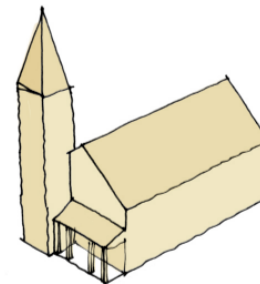
B. Large Family Farmhouse with attached Secondary Masses



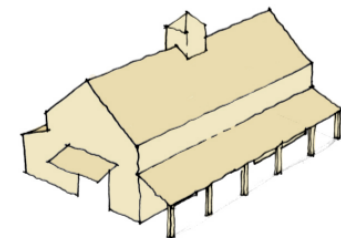
C. Simple Barn with Monitor



D. Unique Barn Forms



E. Civic/Gathering Building



F. Assembly Hall

Figure 5-7: Massing Options: Agriculture/Community Building Forms

TYPE B - COURTYARD

Definition: This is an attached, zero-lot line, mixed-use Building Type, that viewed together, borrows from the simple barn and winery forms. Arranged around a network of courtyards and alleys, this building form provides flexibility in responding to evolving building uses.

Concept: The courtyard houses form a continuous stepped wall along the street and are serviced by alley courts in the rear of the Lots. Borrowing from the local agricultural vernacular, their facades are repetitive and simple, with pedestrian walks interrupting the rhythm every few Lots. Large barn-like openings in the front façade lead into interior courts where the primary living spaces are organized. Second and third bedrooms may be located on upper levels and may have shed-dormers and shallow balconies fronting on the street and courtyards. The use of climbing plants on the street façade helps to blend building forms and create a rich pedestrian streetscape. This Building Type also may accommodate neighborhood retail or office uses and may be detailed accordingly with awnings, arcades, and larger expanses of glass at the ground level.

Allowed Transect Zone: T6



Figure 5-8: The Courtyard Building Type: Conceptual View Sketch

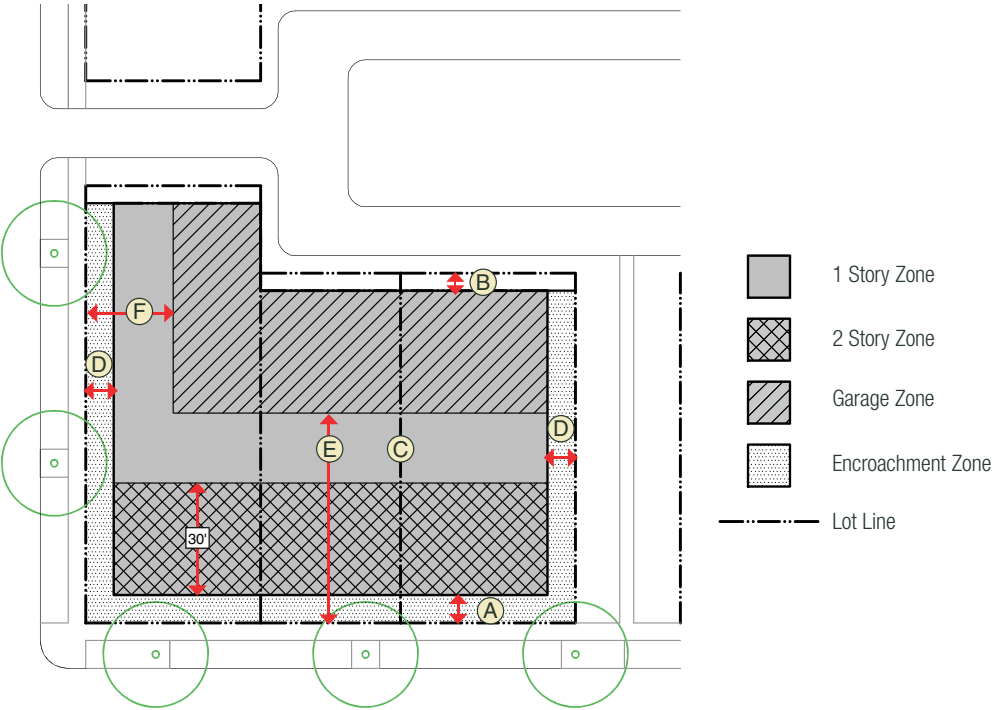


Figure 5-9: Building Placement Diagram

1 BUILDING PLACEMENT:	
Setbacks:	
A	» Front Yard Setback zone » 8'-15'
B	» Rear Yard Setback » 10'
C	» Side » 0'
D	» Side Street Setback Zone (corner or open lands) » 5'-8'
Encroachment Zone*:	
	» Front » 8'
	» Side Street (corner) » 5'
	» Rear » 0'
Allowed Encroachments:	
	» Stoop, awning, balcony, bay window, trellis, gallery
Garage Placement:	
E	» Front Yard Setback » 60'
B	» Rear Yard Setback » 5'
F	» Side Street (corner) Setback » 25'
Miscellaneous:	
	» Street facade location must vary a minimum of 2 feet for every two Lots.
	» Garages must be accessed from alley areas.
	» A maximum of 4 units may be attached before there is a required 20' open space area break.
	» All trail alignments are to be accommodated in compliance with the Regulating Plan. 2nd Story depth is 30'.

*Assigned numbers are projections into Setback Areas, see Encroachment Zone definition.

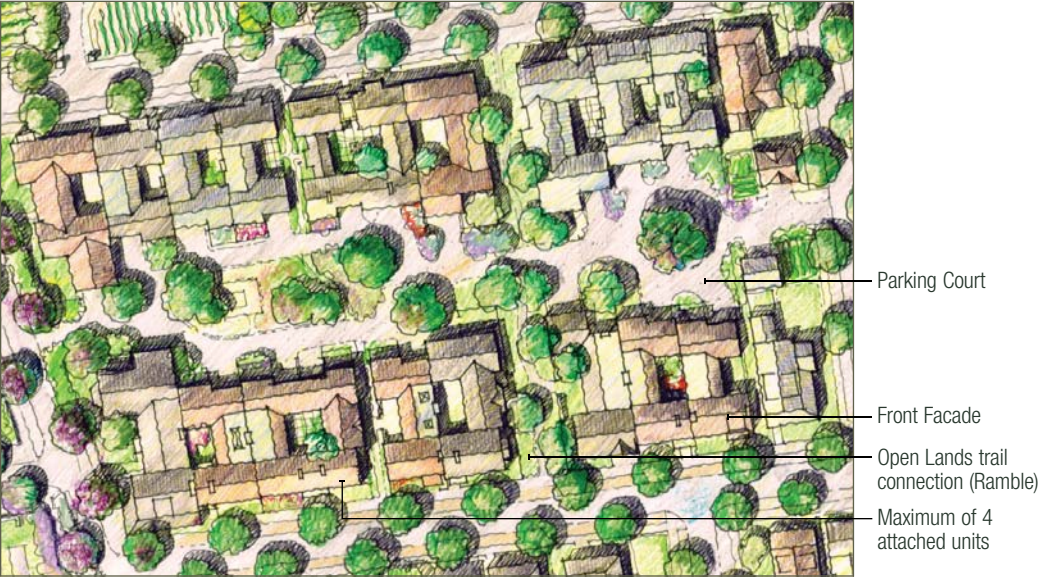


Figure 5-10: Courtyard Conceptual Layout Plan



Figure 5-11: Massing Diagram: Simple Barn or Winery Forms

2	BUILDING FORM – MASSING AND SIZE:	
»	Size	
	» Minimum Lot Size	» 4,000 sf.
	» Max. allowable Gross Building SF	» 3,000 sf
	» Allowable Building Coverage (percentage of Lot)	» 80%
»	Height	
BH	» Main Building	» 1-2 stories, 25' max. height
	» Garage	» 1 story (15' max. height)
	» Finish Ground Floor Level	» 6" maximum above adjacent sidewalk
	» Min. Ground Floor Ceiling Height	» 12'
	» Min. Upper Floor Ceiling Height	» 9'
»	Building Frontage	
	» Minimum Frontage (excluding corner Lots)	» 100% of Lot frontage
	» Maximum Frontage	» NA
»	Miscellaneous	
	» Dormer elements are permitted to exceed maximum Building Height.	
3	PARKING AND SERVICE:	
	Spaces	
	» 1 minimum and 2 maximum spaces per Residential unit	
	Miscellaneous	
	» Bicycle parking must be provided in a secure environment for commercial/mixed uses.	
	» Loading docks or other service entry functions may not be located on front facade areas.	
	» Services, including all utility access, above ground equipment, and trash containers shall be located in alley.	

4 ALLOWED USE TYPES:	
Ground Floor	» Residential, Neighborhood Commercial, Office
Upper Floors	» Residential, Office

5 ALLOWED FRONTAGE TYPES:	
Stoop	» 4' minimum, 6' maximum depth
Shopfront & Awning	» 60% glazing on ground floor, 6' minimum awning depth
Gallery	» 10' min. width
Miscellaneous	» See Section 5.4.2 for additional information on Frontage Types

6 LANDSCAPE AND FENCING STANDARDS:	
	Front/Side and Rear Yards—must utilize a combination of trees, shrubs, ground covers and/or vines to establish complete landscape coverage within 18 months of installation.
Miscellaneous	
	<ul style="list-style-type: none"> » An 18" – 32" fence, wall or hedge may be located along or within 2' of the front and side (as applicable) property line. » Rear alley frontage must be defined by a 4'-0" to 6'-0" fence, wall or hedge that is integrated with the garage building placed along or within 4' of the rear property line. » See Landscape Standards, Section 5.5 for additional information on landscape, fencing, drainage and grading Guidelines.



Figure 5-12: Courtyard Frontage Alternative - Stoop Design

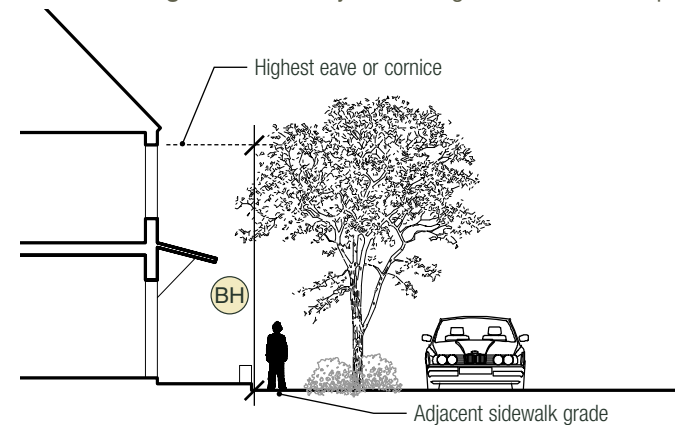


Figure 5-13: Courtyard - Building Height Diagram



Figure 5-14 - Conceptual Street Elevation: Courtyard Building Type

TYPE C – BUNGALOW

Definition: This is a smaller detached Building Type that draws from the human scale qualities of rural architecture. Front porches, fences, tree lined streets and paths work together with the Bungalow type to create small town character.

Concept: These Buildings are detached 1-2 story bungalows with porches fronting on the street and garages facing service alleys at the rear. Lower level living spaces flow into each other and engage both the street towards the front and a functional backyard to the rear. Side-yards are sized to allow sufficient light and ventilation, and outdoor access from front to back. Dormers, bay windows, and recessed sleeping porches break down building masses and allow the upper level to engage the outdoors. This Lot may accommodate a home office or art studio above the garage. Neighborhood commercial uses may occur in the lower floors per allowable use and permit requirements.

Allowed Transect Zones: T4, T5, T6



Figure 5-15: The Bungalow Building Type: Conceptual Sketch

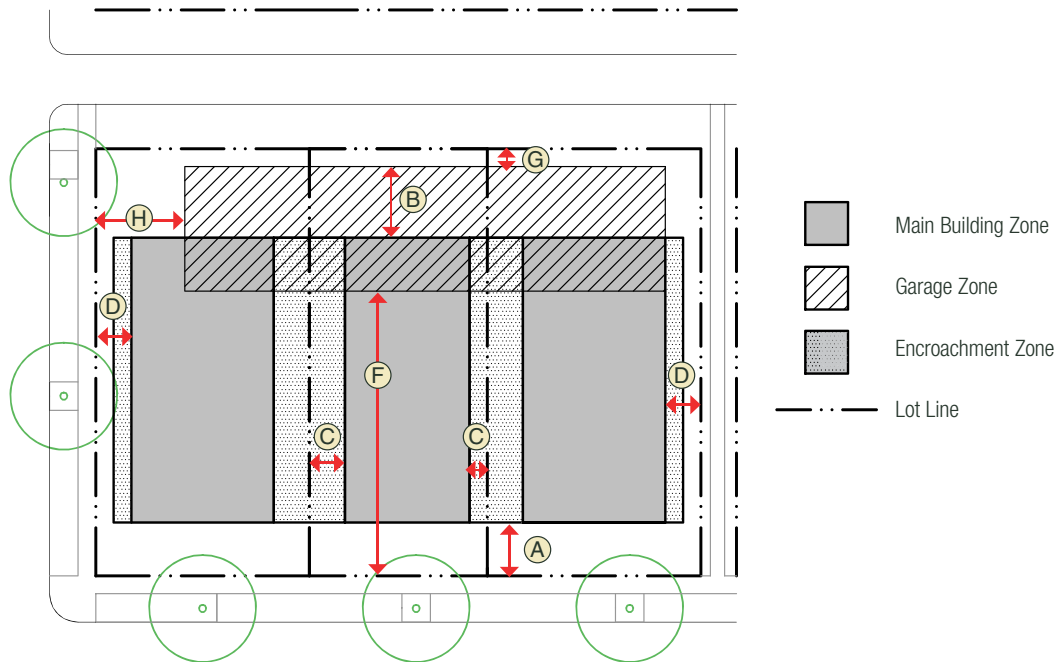


Figure 5-16: Building Placement Diagram



Figure 5-17: Bungalow Conceptual Layout Sketch

1 BUILDING PLACEMENT:	
» Setbacks:	
A	» Front Yard Setback zone » 12'-16'
B	» Rear Yard Setback » 25'
C	» Combined Side Setback » 15' (min. 5' on one side)
D	» Side Street Setback Zone (corner) » 8'-12'
» Encroachment Zone*:	
	» Front » 0'
	» Side Yard » 5' w/ min 10' side setback
	» Rear » 0'
» Allowable Encroachments:	
» Porch, awning, bay window	
» Garage Placement:	
F	» Front Yard Setback » 70'
G	» Rear Yard Setback » 5'
	» Side Yard Setback » 0'
H	» Side Street (corner or open lands) » 25'
» Miscellaneous:	
» Street facade location must vary a minimum of 2 feet from Lot to Lot.	
» Garages must be accessed from alley areas.	
» Only one Main building and one Ancillary Building may be built on each Lot.	
» Secondary Units are not permitted with Bungalow Building Types.	

*Assigned numbers are projections into Setback Areas, see Encroachment Zone definition.



Figure 5-18: Bungalow Massing Diagram: Human Scale Forms

2 BUILDING FORM – MASSING & SIZE:	
» Size	
» Minimum Lot Size	» 5,500 sf.
» Max. allowable Gross Building SF	» 3,500 sf (does not include garage)
» Allowable Building Coverage (percentage of Lot)	» 60%
» Height	
BH » Main Building	» 1-2 stories, 25' max. height
» Garage	» 1-2 stories, 20' max. height
» Finish Ground Floor Level	» 18" minimum above finish grade or adjacent sidewalk
» Min. Ground Floor Ceiling Height	» 10'
» Min. Upper Floor Ceiling Height (average)	» 8'
» Building Frontage	
» Minimum Frontage	» 50% of Lot frontage
» Maximum Frontage	» 70% of Lot frontage

3 PARKING AND SERVICE:		4 ALLOWED USE TYPES:	
» Spaces		» Ground Floor	» Residential, Neighborhood Commercial, Office, Home Office
» 1 minimum and 2 maximum spaces per Residential unit		» Upper Floors	» Residential, Office, Home Office
		» Miscellaneous	» Refer to applicable allowed land uses in Section 3.5.3 - Land Use Designations and Table 3-4 - Allowed Uses

5	ALLOWED FRONTAGE TYPES:
»	<p>Porch (Refer to Figure 5-19)</p> <ul style="list-style-type: none"> » Minimum 8' porch depth with low fence/hedge (see landscape requirements) » Porch elements shall be used on a minimum of 60% of the front facade » Wrap-around porches encouraged
»	<p>Miscellaneous</p> <ul style="list-style-type: none"> » See Section 5.4.2 for additional information on Frontage Types

6	LANDSCAPE AND FENCING STANDARDS:
	<p>Front/Side and Rear Yards – must utilize a combination of trees, shrubs, ground covers and/or vines to establish complete landscape coverage within 18 months of installation. Three canopy trees (24" box min) are to be planted within front, side or rear lot areas.</p>
»	<p>Miscellaneous</p> <ul style="list-style-type: none"> » Frontage must be defined by a 2'6" to 3'6" fence, wall or informal hedge placed either along, or within, 2 feet back of the front and/or side property lines as applicable » Rear alley frontage must be defined by a 4'-0" to 6'-0" fence, wall or hedge that is integrated with the garage building placed along or within 4' of the rear property line. » See Landscape Standards, Section 5.5 for additional information on landscape, fencing, drainage and grading guidelines.

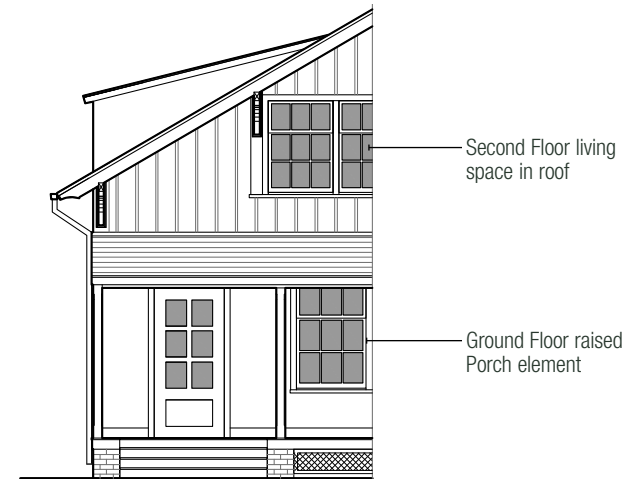


Figure 5-19: Frontage Design - Ground Floor Porch

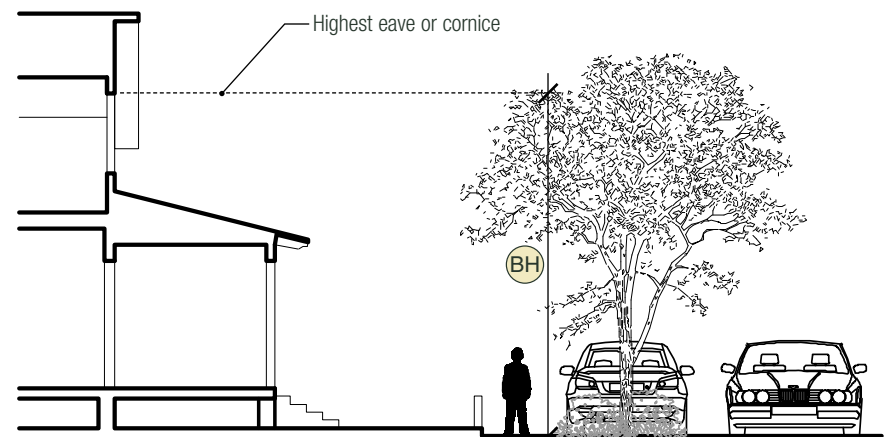


Figure 5-20: Bungalow - Building Height Diagram

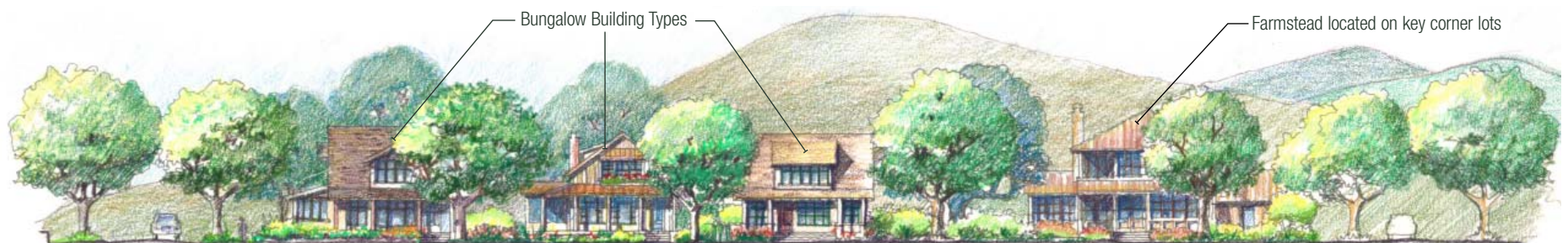


Figure 5-21: Conceptual Street Elevation - Bungalow and Farmstead Building Types

TYPE D - FARMSTEAD

Definition: This is a larger detached Building Type that is located predominately at the perimeter of neighborhoods. A collection of informal buildings with wrap around porches, three rail fences, and informal gravel driveways, work together to reinforce the rural character while providing a distinct edge to the agricultural landscape.

Concept: These types are designed for family-style dwellings surrounded by gardens and often by adjacent agricultural lands. While these structures are one of the larger Buildings appearing in neighborhoods, their forms blend into the surrounding landscape and are inspired by the functional simplicity of historic farmhouses. They are planned for the corner of blocks and for the edges of town as a transition to agricultural fields. These structures are organized around a primary rectangular mass with a simple gabled or hipped roof. Porches, dormers, secondary building masses are subordinate to the main mass and respond to functional needs (secondary uses, necessity for light, circulation, service. Second stories may either be full height, or in the roof, to draw from farmhouse traditions.

Allowed Transect Zones: T3-1, T3-2, T4, T5, T6



Figure 5-22: The Farmstead Building Type - Conceptual View Sketch

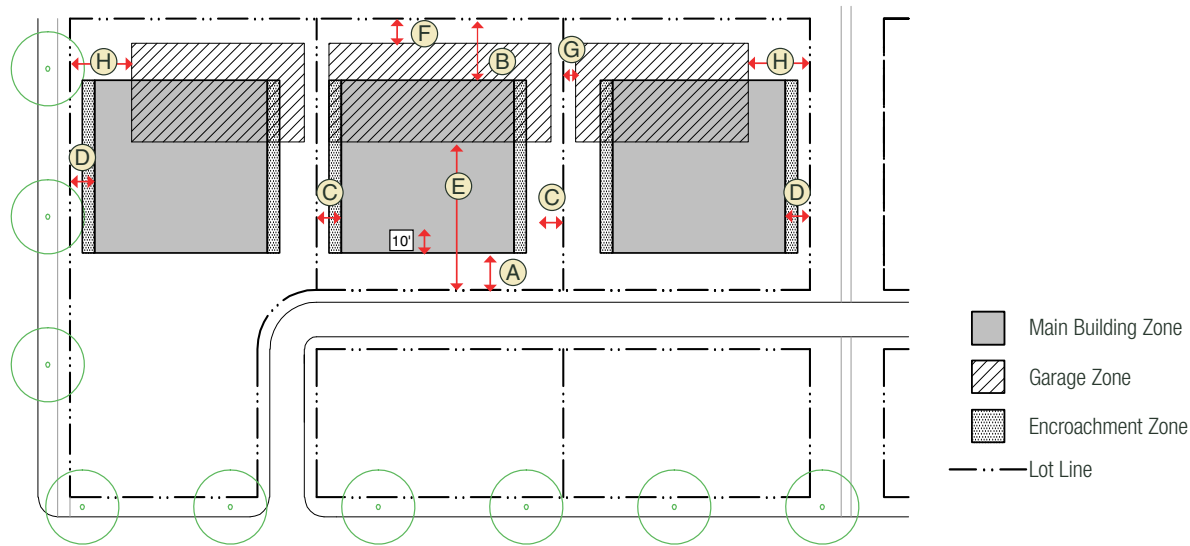


Figure 5-23: Building Placement Diagram



Figure 5-24: Farmstead Conceptual Layout Plan

1 BUILDING PLACEMENT:	
» Setbacks:	
A	» Front Yard Setback zone » 15'-25'
B	» Rear Yard Setback » 20'
C	» Combined Side Setback » 30' (min. 10' on one side)
D	» Side Street Setback Zone (corner) » 10'-12'
» Encroachment Zone*:	
	» Front » 0'
	» Side Yard » 5'
	» Rear » 0'
» Allowable Encroachments:	
» Porch, awning, bay window	
» Secondary/Ancillary/Garage Structure Placement:	
E	» Front Yard Setback » 60'
F	» Rear Yard Setback » 10'
G	» Side Yard Setback » 5'
H	» Side Street (corner or open lands) » 25'
» Miscellaneous:	
» Street facade location must vary a minimum of 2 feet from Lot to Lot.	
» Garages must be accessed from alley areas when applicable.	
» Secondary and Ancillary Units utilize Setbacks as described above.	

*Assigned numbers are projections into Setback Areas, see Encroachment Zone definition.



Figure 5.25: Farmstead Massing Diagram - A collection of informal building masses

2 BUILDING FORM – MASSING & SIZE:	
»	<p>Size</p> <ul style="list-style-type: none"> » Minimum Lot Size » 10,000 sf » Max. allowable Gross Building SF » 5,500 sf » Allowable Building Coverage (percentage of Lot) » 30%
»	<p>Height</p>
BH	<ul style="list-style-type: none"> » Main Building » 1-2 stories, 25' max. height » Garage/Secondary Structure » 1-2 stories, 20' max. height » Finish Ground Floor Level » 18" minimum above finish grade or adjacent sidewalk » Minimum Ground Floor Ceiling Height » 10' » Minimum Upper Floor Ceiling Height » 8'
»	<p>Frontage</p> <ul style="list-style-type: none"> » Minimum Frontage » 40% of Lot frontage » Maximum Frontage » 70% of Lot frontage

3 PARKING AND SERVICE:	
»	<p>Spaces</p> <ul style="list-style-type: none"> » 1 minimum and 2 maximum spaces per Residential unit » 1 space per Secondary Unit (with the exception noted below)
»	<p>Miscellaneous</p> <ul style="list-style-type: none"> » No parking required for Ancillary or Secondary Unit Buildings that are less than or equal to 500 sf.

4 ALLOWED USE TYPES:	
»	<p>Ground Floor</p> <ul style="list-style-type: none"> » Residential, Neighborhood Commercial Office, Home Office
»	<p>Upper Floors</p> <ul style="list-style-type: none"> » Residential, Office, Home Office
»	<p>Miscellaneous</p> <ul style="list-style-type: none"> » Refer to applicable allowed land uses in Section 3.5.3 - Land Use Designations and Table 3-4 - Allowed Land Uses.

5 ALLOWED FRONTAGE TYPES:	
» Front Yard	» Landscaped area that connects to adjacent properties and Open Lands
» Porch	» Minimum 8' porch depth
» Miscellaneous	» Porch elements shall be used on a minimum of 60% of the front facade » Wrap-around Porches are encouraged » See Section 5.4.2 for additional information on Frontage Types)

6 LANDSCAPE AND FENCING STANDARDS:	
» Front Yard	» 2 canopy trees, minimum size 24" box
» Side Yard	» 2 canopy trees, minimum size 24" box
» Rear Yard	» 2 canopy trees, minimum size 24" box
» Miscellaneous	» Frontage may be defined by a 2'6" to 3'6" fence, wall or informal hedge placed either along, or within, 2 feet back of the front property line. » For Lots which utilize rear alley access, rear property lines must be defined by a 4'-0" to 6'-0" fence, wall or hedge that is integrated with the garage building placed along or within 4' of the rear property line. » For Lots which abut Open Lands along the rear property line, a 3'-6" to 4'-6" fence, wall and/or hedgerow must be placed along or within 4'-0" of the rear property line. » See Landscape Standards, Section 5.5 for additional information on landscape, fencing types, drainage and grading guidelines.



Figure 5-26: Farmstead Frontage Design - Wrap-around Porch

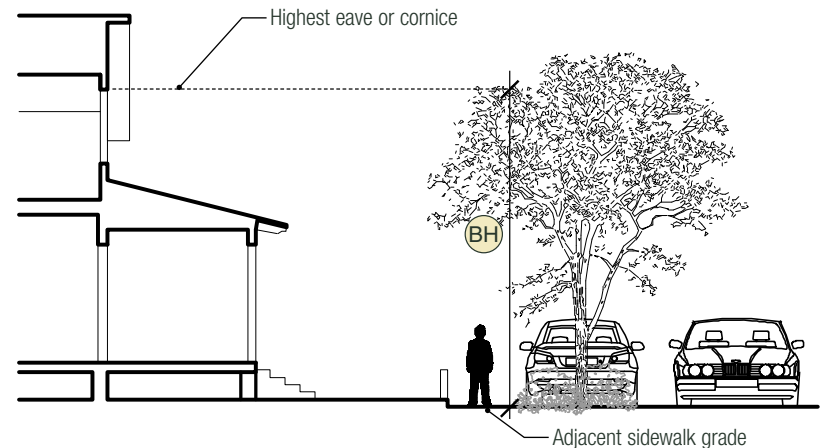


Figure 5-27: Farmstead - Building Height Diagram



Figure 5-28: Conceptual Street Elevation - Bungalow and Farmstead Building Types

TYPE E - MEADOW

Definition: This is a detached Building Type, more informal in its organization to respond to the foothill topography. Located at the edges of meadow openings, these buildings nestle into the landscape and borrow from the more horizontal forms of the rural ranch traditions.

Concept: These Buildings are sited to respond to the natural features of the foothill landscape. Organic in nature, these buildings are to be organized to capture the distant views of the hills and valley. Rambling building forms with rustic treatments, informal gravel driveways, and dry stacked stone walls, work together to create a ranch character that lets the landscape dominate.

Allowed Transect Zones: T3-2



Figure 5-29: Meadow: Conceptual Site Plan - Buildings located at the edge of meadow clearings

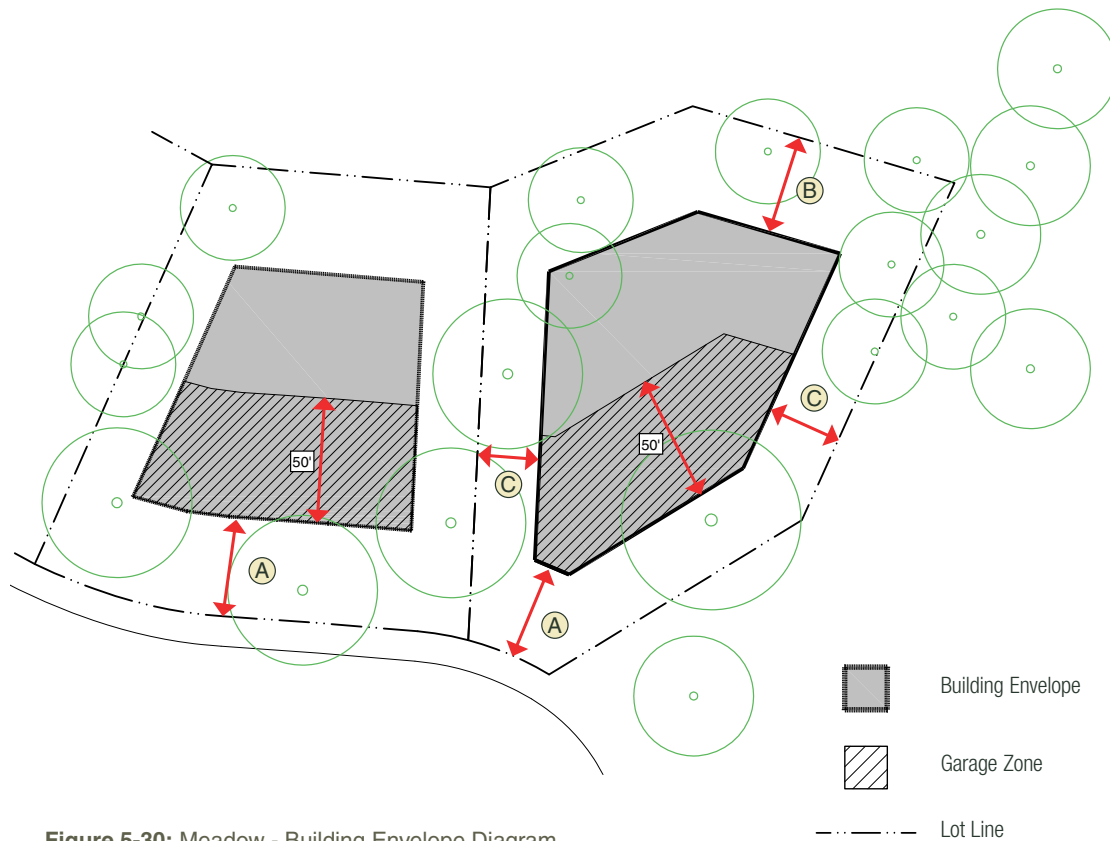


Figure 5-30: Meadow - Building Envelope Diagram

1 BUILDING PLACEMENT:	
» Setbacks:	
The following setback criteria defines the “Building Envelope” in which all improvements are to take place with the exception of utilities and driveway access.	
A	» Front Yard Setback zone
B	» Rear Yard Setback
C	» Combined Side Setback
	» 20% of average Lot depth
	» 25% of average Lot depth
	» 15%-20% of average Lot width
» Encroachment Zone*:	
	» Front
	» Side Street (corner)
	» Rear
	» NA
	» NA
	» NA
» Garage Placement:	
Garages shall be located in front yard areas with garage doors turned to the side in garage zones	
» Miscellaneous:	
» Only one Main building and one Secondary/Ancillary Building may be built on each Lot.	
» Buildings are to be sited to protect and preserve existing vegetation, and to minimize grading (refer to Landscape Standards, Section 5.5).	

*Assigned numbers are projections into Setback Areas, see Encroachment Zone definition.

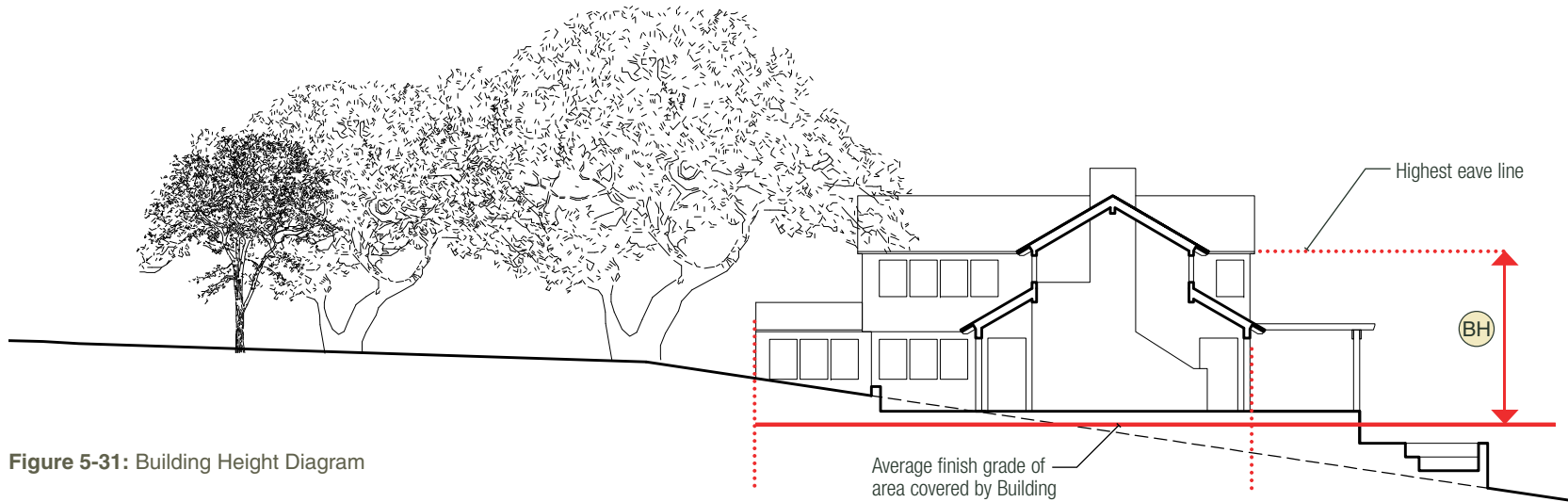


Figure 5-31: Building Height Diagram

2 BUILDING FORM – MASSING & SIZE:	
» Size	
» Minimum Lot Size	» 15,000 sf
» Max. allowable Gross Building SF	» 5,500 sf
» Max. allowable Gross Building SF, Secondary Unit	» 1,000 sf (included in max. sf. above)
» Allowable Building Coverage (percentage of Lot area)	» 30%
» Height	
BH » Main Building	» 1-2 stories, 25' max. height
» Secondary/Ancillary Structures	» 1-2 stories, 25' max. height
» Finish Ground Floor Level	» varies
» Minimum Ground Floor Ceiling Height	» 10'
» Minimum Upper Floor Ceiling Height	» 8'
» Miscellaneous	
» Buildings are to step with the natural grade to minimize grading and the need for retaining walls.	
» Garage/Secondary buildings shall be located in Garage Zone areas as indicated on Building Envelope Diagram, Figure 5-30.	

3 PARKING AND SERVICE:	
» Spaces	
» 1 minimum and 2 maximum spaces per Residential unit	
» 1 space per Secondary Unit (see exception below)	
» Miscellaneous	
» No parking required for Ancillary or Secondary Unit Buildings that are less than or equal to 500 sf.	



Figure 5-32: Conceptual Section: Meadow Building Type - Building arranged on the edge of meadow openings

Building steps with natural grade

Meadow Feature

4	ALLOWED USE TYPES:	
	Ground Floor	» Residential, Home Office
	Upper Floors	» Residential, Home Office

5	ALLOWED FRONTAGE TYPES:	
»	Front Yard	» Front, rear and side yards that utilize native or naturalized plantings that connect to larger oak wooded landscape, see Approved Plant List, Appendix D
»	Miscellaneous	» See Section 5.4.2 for additional information on Frontage Types

6	LANDSCAPE AND FENCING STANDARDS:	
»	Front Yard	» 3 native canopy trees, minimum size 24" box
»	Side Yard	» 2 native canopy trees, minimum size 24" box
»	Rear Yard	» 3 native canopy trees, minimum size 24" box
»	Miscellaneous	» Existing trees located on the Lot may be used to achieve landscape requirement. » Fencing allowed within Building Envelope area to screen service areas and/or demarcate private outdoor areas. Fencing may not be used to define property boundaries. » See Landscape Standards, Section 5.5 for additional information on native and naturalized plant materials, fencing types, drainage and grading Guidelines.

TYPE F – COMPOUND

Definition: This Building Type is located within the larger agricultural and oak woodland landscapes. This Type offers opportunities to create a collection of connected buildings that echo the massing and simple geometric forms of agricultural buildings as they grew over time.

Concept: The fundamental concept of the rural farming tradition is the creation of family compounds to meet all building program needs. Compounds reflect the natural, evolutionary development of rural living that often saw the expansion of, and addition to, original buildings as families grew and activities changed. The Compound is designed so that each mass is indicative in size and appearance of its function and use. The Compound is made up of three main groups of structures: Primary Structures (the hub of all family activities), Secondary Structures (separate living and/or sleeping quarters), and Service/Operational Structures (maintenance, storage, and servicing buildings). All of these structures are designed to work together to create a visible hierarchy and interplay of buildings and outdoor spaces that reflect the informal rural patterns of the ranching and agricultural legacies of the area.

Building Uses: Building uses are primarily for *Residential* and agriculture operations which include *Primary and Secondary dwelling uses, utility, service and operational buildings, home offices, storage uses, and/or agricultural or ranching support facilities (such as farmworker housing).*

Allowed Transect Zones: T3-1

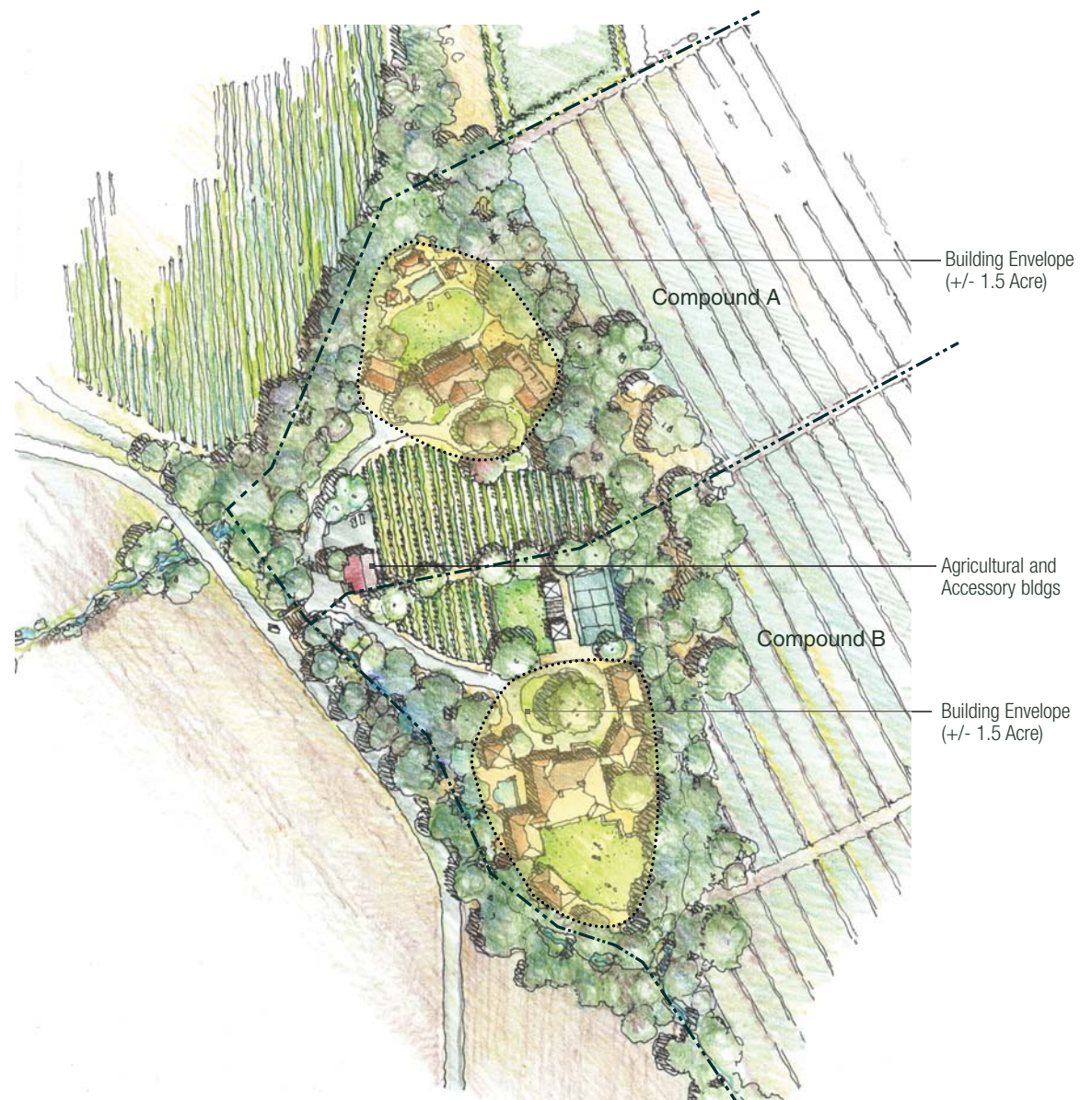


Figure 5-33: Compound Conceptual Layout



Figure 5-34: Compound Building Envelope Diagram

1	BUILDING PLACEMENT:
»	Building Envelope:
	The following criteria defines the creation of “Building Envelope” areas in which all Improvements are to take place with the exception of utilities and access.
	» Each Compound Lot shall have a designated Building Envelope area (exclusive of Conservation Easement areas), a maximum of 2 acres based on the Principles and Goals of the Specific Plan and the Land Use and Regulating Plans.
	» Each Lot may have one Primary Structure and several Secondary and Service/Operational Structures with sizes and total square footages as noted in this section. All habitable structures are to be located within the Building Envelope area. Service and/or operational structures strictly for the support of agricultural and ranching activities may be sited outside the Building Envelope in accordance with best management practices and architectural Standards as noted in this Code.
	» Buildings are to be sited to protect and preserve existing vegetation, and to minimize grading (refer to Landscape Standards, Section 5.5)
»	Miscellaneous:
	» The Land Use Plan (Figure 3-42) depicts the general areas where Building Envelopes may take place

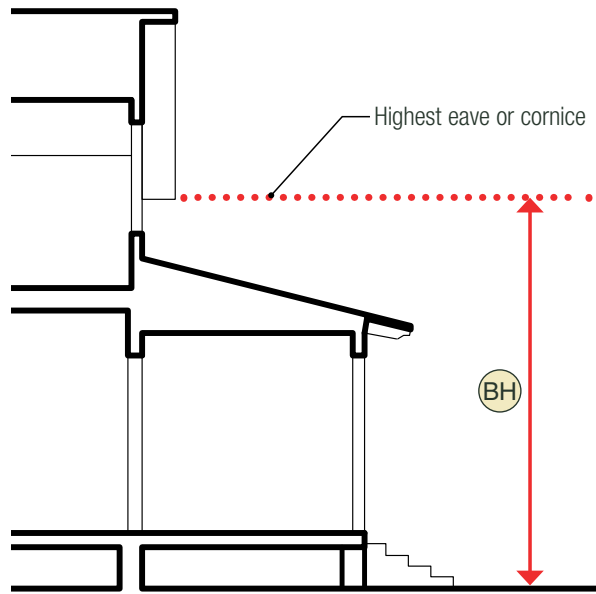


Figure 5-35: Compound - Building Height Diagram

2 BUILDING FORM – MASSING & SIZE:	
» Size	
» Maximum Building Envelope Size	» 2 acres
» Max. allowable Gross Building SF	» 15,000 sf for Primary and Secondary Structures (exclusive of Farmworker and Service/Operational Buildings), to conform to Standards below.
» Primary Structure: The dominant building that provides the main living areas, this structure may be a maximum of 8000 sf provided that building massing is broken up by utilizing secondary wings and/or additions.	
» Secondary Structures: These structures are clearly subordinate to the Primary Structure and provide additional living and guest quarters, they are connected by breezeways and/or informal paths to the Primary Structure:	
» Secondary Unit: One Secondary Dwelling Unit per Compound Lot is allowed. These structures may be a maximum of 1800 sf and may provide a full kitchen and associated living areas.	
» Cottages, Guest Houses, Garages, and/or Ancillary Buildings: These structures may provide sleeping quarters, offices, studio spaces etc, and would not include kitchen facilities. These structures may be a maximum of 2000 sf each.	
» Farmworker Housing: Two farmworker housing units may be located on a Compound Lot. These structures may be provided in accordance with the Solano County Zoning Ordinance regarding Agricultural Employee Housing, and shall be a maximum of 1800 sf each.	
» Service/Operational Buildings: These structures provide the everyday functions to support a productive agricultural and/or ranching operation. These buildings include, maintenance barn, mechanical storage, servicing facility, and/or similar functions. These buildings may be sited outside of the Building Envelope in accordance with the Standards described herein for Agriculture/Community Building Types and the applicable sections of the Solano County Zoning Ordinance.	
» Allowable Building Coverage	» 20% of the Building Envelope area
» Height	
BH » Primary Structure	» 1-2 stories, 30' max. height
» Secondary and Ancillary Structure	» 1-2 stories, 25' max. height
» Farmworker Housing	» 1 story, 18' max. height
» Finish Ground Floor Level	» varies
» Minimum Ground Floor Ceiling Height	» 10'
» Minimum Upper Floor Ceiling Height	» 9'

3	PARKING AND SERVICE:
»	Spaces
	<ul style="list-style-type: none"> » 2 spaces per Residential unit » 1 space per Secondary Unit » 1 space per Farmworker Housing Unit
»	Miscellaneous
	<ul style="list-style-type: none"> » No parking required for Secondary Unit Buildings that are less than 500 sf.

4	LANDSCAPE REQUIREMENT:
	<p>Landscape areas: A minimum of 1 canopy tree per 4,000 SF of Building Envelope area shall be planted to obscure Building improvements, provide shade, and protect viewsheds.</p>
	<ul style="list-style-type: none"> » Existing trees located on the Lot may be used to achieve landscape requirement. » Fencing allowed within Building Envelope area to screen service areas and/or demarcate private outdoor areas. » Fencing may be used to define and separate agricultural and/or ranching functions for safety and protection. » Refer to Approved Plant List in Appendix D for suitable native and naturalized plants. » See Landscape Standards, Section 5.5 for additional information on plant materials, fencing types, drainage and grading Guidelines.



Figure 5-36: Compound Massing Concept Diagram

TYPE G – SECONDARY UNIT OR ANCILLARY STRUCTURES

Definition: This Building Type is a small detached single story structure or a living space located above or next to a garage on the same Lot or premises as the main living structure. Ancillary Structures are allowed with each Building Type, while the Secondary Unit is only permitted with the Compound, Meadow and Farmstead Building Types.

Concept: These living spaces are typically located towards the rear of the Lot, and offer opportunities to provide multi-generational, workforce and/or office space.

Allowed Transect Zones: T3, T4, T5, T6

Refer to Section 5.4.3 for additional architectural massing and character Guidelines.



Figure 5-37: Massing Diagram

1	BUILDING PLACEMENT:
»	Setbacks:
	» Refer to applicable Building Type for setbacks.
»	Encroachment Zone:
	» Refer to applicable Building Type for criteria.
»	Miscellaneous
2	BUILDING FORM – MASSING & SIZE:
»	Size and Height:
	» Refer to applicable Building Type for size and height Standards.
3	PARKING AND SERVICE:
»	Spaces
	» 1 space per Secondary Unit
»	Miscellaneous
	» No parking required for Ancillary or Secondary Unit Buildings that are less than or equal to 500 sf.



Figure 5-38: Conceptual Layout Plan

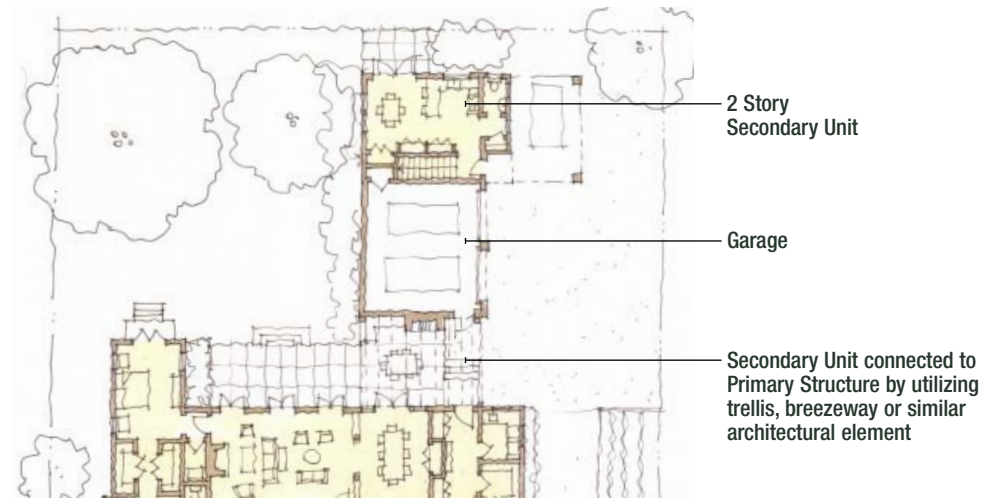
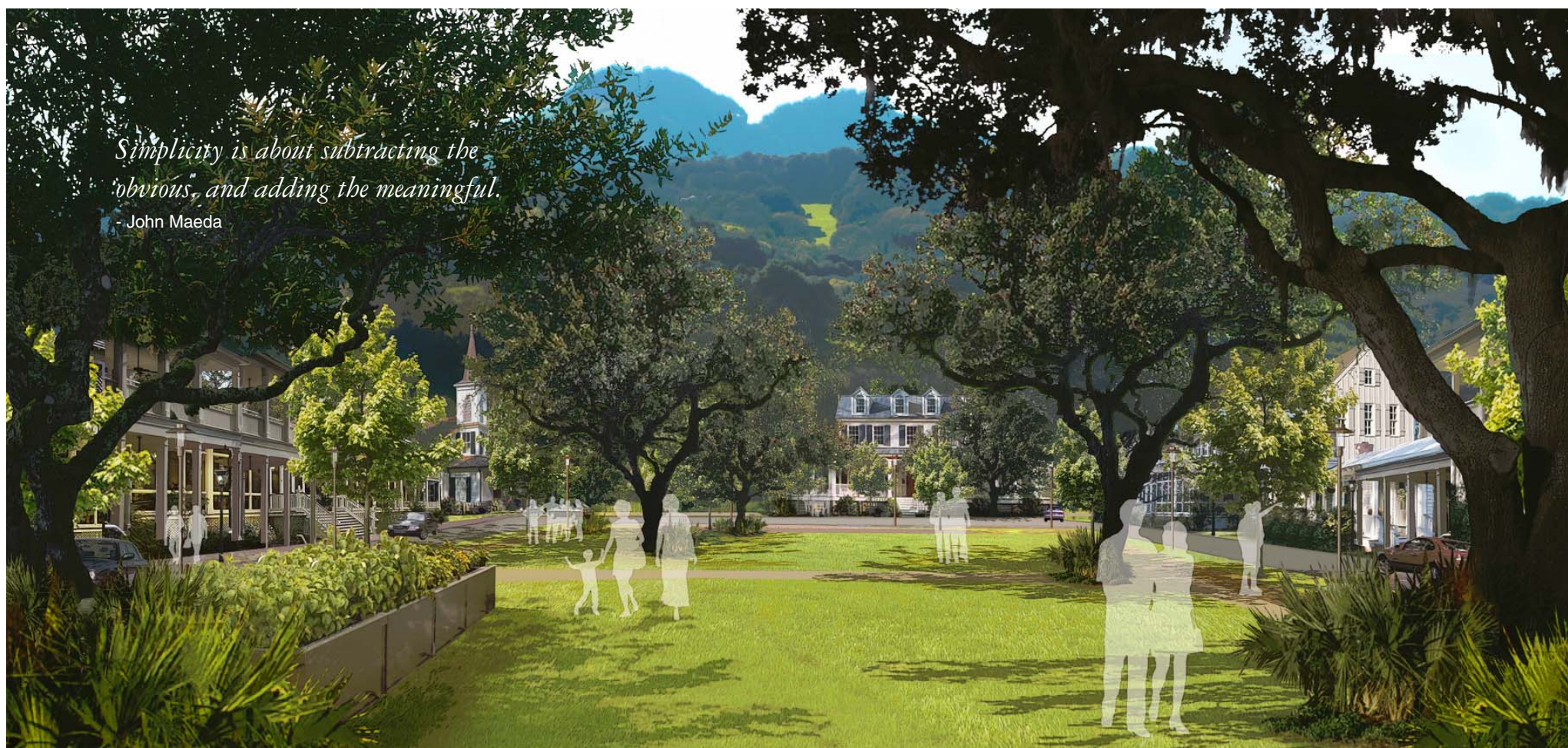


Figure 5-39: Conceptual Secondary Unit Plan Sketch



Simplicity is about subtracting the obvious, and adding the meaningful.

- John Maeda

Figure 5-40: View of Main Green at Elkhorn Neighborhood

5.4.2 BUILDING CHARACTER, MASSING, PROPORTIONS AND MATERIALS – CREATING RURAL CHARACTER

The following section describes the main building patterns and stylistic approach that makes up the rural, small town aesthetic that is rooted in the concept of “simple.” It addresses the basic principles, proportions and key details of massing, windows, doors, porches, balconies and storefronts as well as appropriate materials and colors for all Building Types. The main Principle of embedding a craftsmanship ethic in the way buildings are designed and detailed is a key component of creating this memorable place.

This section also sets out Standards and/or Guidelines to produce high performance and healthy buildings and environments. Refer to Appendix B - Sustainability Index for a compilation of these measures and associated requirements.

Note that throughout this section, specific Standards and Guidelines may be only applicable to the particular Building Type and/or Zone as cited.

A. BUILDING HEIGHT

In order to maintain the dominance of the rural, open landscape, Building Heights are to be:

- *In scale with the surrounding buildings, streetscape, context and size of Lot.*
- *Lower than the existing tree canopy on the Lot or adjoining Lots.*
- *Reinforce the concept that the taller, more dominant buildings are reserved for the cultural and civic functions of the community (Agriculture/Community Building Types)*
- *Responsive to preserving view corridors from Green Valley Road, Neighborhood Green areas and foothill areas.*

Building Height Measurement:

Within the Middle Green Valley Specific Plan area, Building Heights are regulated to the Eave or Cornice Line of Buildings (rather than the topmost point of roofs) and by Stories to enable a variety of roof forms. Building Height shall be measured as follows:

“The vertical distance above the average finish grade of the area covered by Buildings, or adjacent sidewalk grade, whichever is more restrictive, to the highest Eave or Cornice line of the building.”

Story is defined as:

“A habitable floor level within a building, typically 8 feet to 12 feet from floor to ceiling, excluding an attic or raised basement”

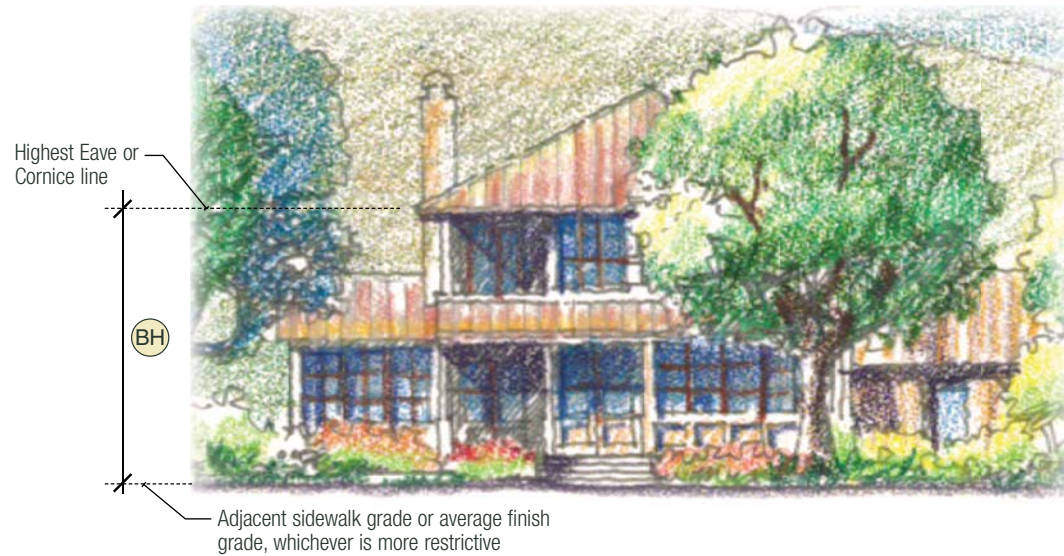


Figure 5-41: Building Height Diagram on gently sloping site

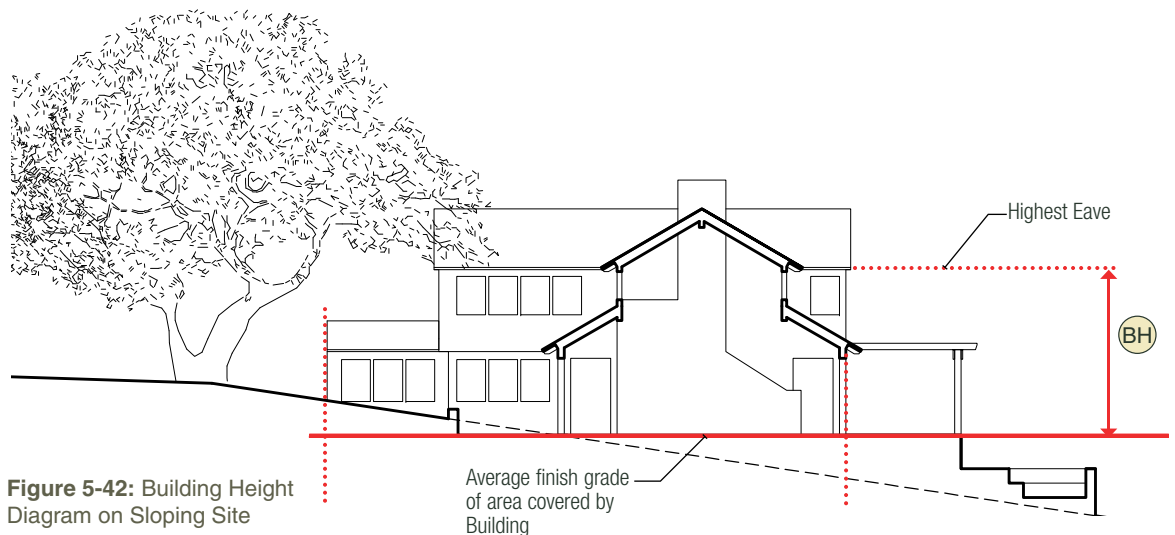


Figure 5-42: Building Height Diagram on Sloping Site



[1]



[2]



[3]



[4]



[5]

B. BUILDING FORMS AND MASSING

In order to reinforce the rural atmosphere, casual and informal building compositions are preferred to static, classical forms such as the single “box.” In general, all new Buildings are to be visually broken up into several masses (or buildings) rather than one main mass and are to promote the effective and energy efficient use of climate conditions.

- The size, massing and placement of buildings are to be responsive to the context of the site. Every Lot in the Middle Green Valley has particular attributes not necessarily shared by adjoining Lots or those in other neighborhoods. This means that building arrangements respond to existing tree locations, placement on the street, offsite views from community spaces (such as Neighborhood Greens, fields, and Open Lands), and any other climatic conditions such as prevailing breezes and sunlight. Designing the building massing to promote effective and energy efficient use of shade, shadow, breezes and daylight is required to decrease long-term energy costs and to exceed Title 24 state energy-efficient requirements by at least 20 percent. See Section 5.4.3 (K).
- Structures are to be simple, rectangular volumes organized in a hierarchy of masses. The composition of structures should have a clearly dominant volume (the main body) and complementary secondary volumes such as wings and/or accessory structures.
- Buildings are to be in scale with the Lot and articulated with generous porches, balconies, breezeways, dormers, overhangs, vertically proportioned windows, and/or exterior stairs.
- Buildings are to be directed outward to reinforce the indoor/outdoor relationship. This means that each room may have an exterior door and an ample amount of windows. In addition, exterior stairways and/or breezeways may be used rather than relying solely on internal stairs and/or hallways.
- Each Building Type has a specified Maximum Gross Building Square Footage, as indicated in Section 5.4.1. Efficient building programming to reduce the size of the building footprint is required. Regardless of the allowable Maximum Gross Building Square Footage, the Massing of any Building shall be responsive to the Lot size and setting. Refer to Section 5.4.3 (K) for energy and water efficiency requirements.

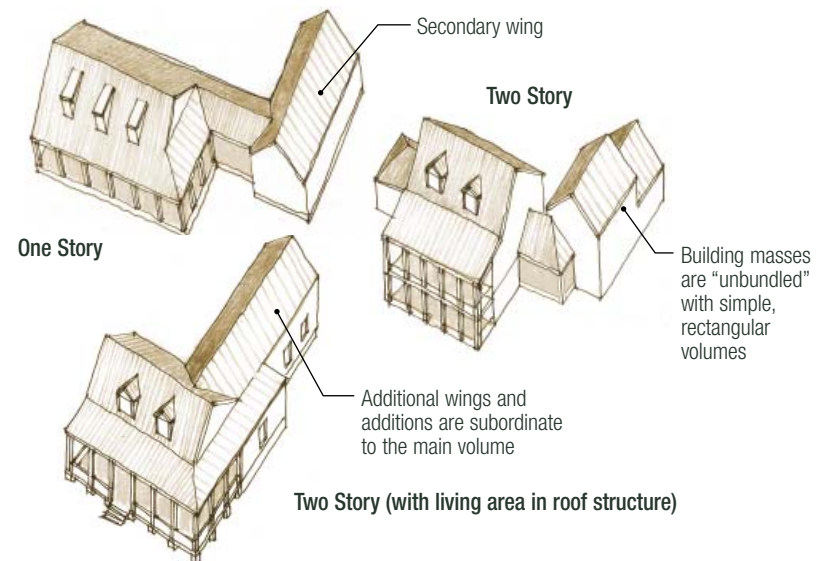


Figure 5-43: Massing Concepts

[1] “Unbundled” Massing [2] Two Story Massing [3] One and a Half Story
 [4] One Story [5] Agricultural Forms



[Roof and Dormer Alternatives]

C. ROOFS

Roof designs are to draw from the forms prevalent in the rural, small town traditions. Those roofs were generally steep and incorporated traditional dormer or shed roof elements.

- Roof pitches for dominant roof forms are to be 5:12 to 12:12. Double pitch roofs may utilize a minimum 5:12 roof for the main body of the roof and a minimum 3:12 roof over the porch elements. Shed roof elements may utilize 2:12 to 4:12 pitches. Flat roof sections are acceptable on porches, connecting elements and minor massing elements.
- Approved roof shapes are the following:
 - *Gable*
 - *Gable on gable*
 - *Partial or full hip*
 - *Double pitched roofs*
 - *Shed roof*
- A visible hierarchy of roof forms is to be incorporated in the overall design of individual buildings as well as the overall “collection” of forms. A dominant “primary” roof plane with “secondary” roof planes shall be established.
- Dormers shall utilize gable, hipped or shed roof styles.
- Roof materials are to be Class A fire rated and non-reflective. Approved materials include:
 - *5 v-crimp metal*
 - *Standing seam metal*
 - *Wood shake/shingle*
 - *Copper shingle or standing seam metal*
 - *Asphalt shingle (minimum weight 400 lbs.)*
 - *Slate*
 - *Flat clay tile or Concrete*
 - *Solar applications*
- Colors of roofs may be weathered greens, grays, browns, brick reds, and natural galvanized tones; selected and textured to blend the building into the overall context. Refer to Section 5.4.3 (I) of this section for Guidelines regarding color selection.
- Gutters and downspouts draining water from roofs are to be designed to empty away from foundations and paved surfaces and be captured in a rainwater collection system. This system consists of the collection of rainwater from roof surfaces, storage in cisterns or rain barrels, pressurization and plumbing back toilets or into irrigation systems. See Section 5.5.3 - Grading and Drainage for rainwater collection requirements.
- Install solar equipment in direct sun with no shade (including shade caused by trees, plumbing vents, chimneys, nearby buildings, poles, etc.). Southern orientation with a 30 degree tilt is optimal, however, high percentages of solar energy is still available at different orientations and tilts. Modeling solar performance is encouraged for each site. Solar equipment should be installed close to the roof and at the same angle as the roof to minimize visibility and wind loads. Refer to Section 5.4.2K and Appendix B for solar requirements.

D. EXTERIOR WALLS

Exterior walls and finishes are to reflect a logical and appropriate combination of colors, textures and forms to both express the structure of the buildings and to complement the more rural aesthetic.

General

- Approved materials for exterior walls for all Building Types are the following:
 - *Painted and or stained wood (clapboard, board and batten, and/or shingle applications)*
 - *Masonry*
 - *Brick*
 - *Cement fiber siding (smooth clapboard and board and batten applications)*
 - *Stucco*
 - *Metal applications (non-reflective, non painted, and could include corten and galvanized finishes or similar)*
- The exterior walls of buildings are limited to a maximum of three materials. Walls should be composed primarily of wood siding with limited amounts of masonry for raised basement walls, foundation elements and/or minor wall areas. Ancillary and/or Secondary Unit Buildings are to utilize the same or similar materials as main structures.
- At a change in wall material, there is to be a break in the plane of the surface and details appropriate to the materials. Materials are to be consistently applied to all elevations of the structure.
- Design and detailing of materials is to result in an authentic appearing structure, with dimensions and spans of the visible materials related to their own structural properties.
- Refer to building materials selection, Section 5.4.3 (J), for the selection of sustainable materials.
- Refer to Section 5.4.3(I) for color palette selection.

Wood

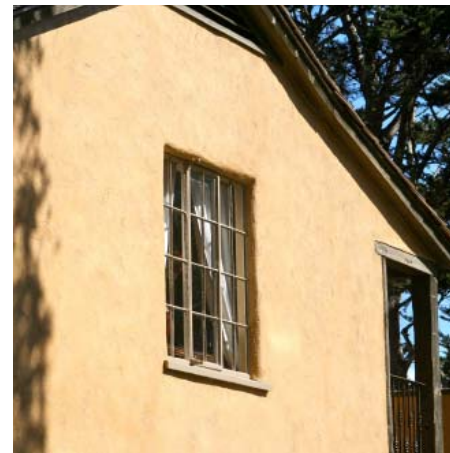
- Wood siding materials may be used for the primary facade elements on all buildings and may be used as infill for foundation elements. In general, wood siding is to be painted or stained.

Stucco

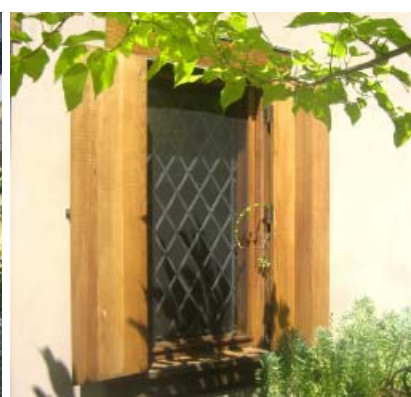
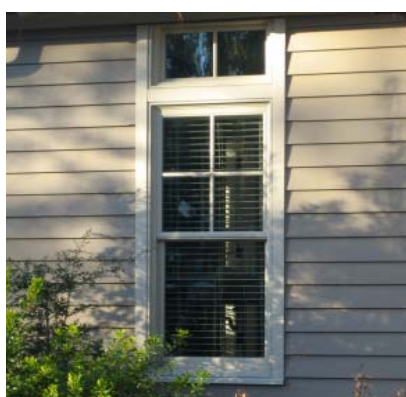
- Stucco is generally to be utilized for wall elements, masonry and/or foundation elements and should be used combined with wood components. The appearance of the stucco should be similar to prevalent rural styles and textures.
- The detailing of stucco surfaces is to result in an authentic appearance including the use of integral pigments, and appropriate header and sill details for windows and doors. Window and door frames shall be recessed a minimum of 4 inches.
- Stucco is to have a smooth to lightly textured finish with a 3 coat application, (scratch coat, brown coat and sand finish coat).
- Large stucco surfaces shall be broken up or recessed behind porches and columns.

Brick

- Foundations and other masonry elements may use patterned brick typical of prevalent rural traditions.
- Brick may be used alone or combined with a wood infill such as lattice or horizontal fencing.
- If brick is used on a two-story façade, it shall be broken up by building projection elements such as porches, balconies and associated columns.



[Exterior Finish Design]



[Window Design]

E. OPENINGS – WINDOWS, DOORS AND SHUTTERS

Openings, in general, shall reflect a consistent composition on all four sides of the building and respond to the site setting to take advantage of sunlight, shade, and prevailing winds to reduce the reliance on building conditioning. Designs should incorporate generous window and door openings to reinforce the connection to the outside.

1. Windows

- Windows or window groupings are to be sized to be in scale with the exterior walls on which they occur. Windows on subordinate wings or on upper floors should typically be smaller than on the dominant volume and/or main floors.
- The window vocabulary is to be based on the traditional principles of multi-paned, vertically oriented, 6 over 6, 4 over 4 or multi-paned over single-paned designs:
 - *Casement, double and/or triple-hung, with a 3 inch sill*
 - *Wood or clad windows*
 - *Large windows that are subdivided with structural members or integral (not snap-in) muntins.*
 - *Accent windows that use a triple unit, round, octagonal or elliptical designs.*
- Window exterior trim is to be 3 ½ inch wood or fiber cement board, window screens are to be framed in wood or fiber cement board or clad metal.
- Window placement is to respond to the site setting to capture daylight, prevailing breezes, and to limit heat gain. Carefully placed window devices, such as clerestories, dormers and skylights, can increase daylighting opportunities. Operable windows are to be incorporated wherever feasible to take advantage of ambient cooling effects from prevailing breezes.
- Vinyl windows are not permitted.



- Large areas of glass (typically for shopfront applications) are to be shaded with projecting roof overhangs, awnings, balconies or porches to minimize glare and decrease heat gain. See Section 5.4.3 (F) for Shopfront and Awning Standards and requirements.
- Using double “super windows” with a high performance low emissivity (low-e) coating on one surface or between glazings to save both on heating and cooling energy is required. Options regarding high performance windows include:
 - *Krypton filled low-e window*
 - *Argon filled low-e window*
 - *Low-e coated window*



2. Shutters

- Shutters may be used both for doors and window elements. Shutters are to be operable and utilize board or louvered designs (wood or synthetic) in typical rural patterns.
- Shutters may be painted brighter historical colors to provide a counterpoint to the more natural earth tone colors of buildings. Colors shall complement the exterior finish materials and trim used on the building.
- Double shutters shall be full sash height and half the sash width for the window or door they adjoin. Single shutters are to be full sash height and the full sash width for the window or door they adjoin.

3. Doors

Door designs traditionally include multi-pane single and double door units that incorporate a panel design in the bottom third of the door. Multi-pane french doors were often used instead of windows on main floor living areas to open out to expansive porches and exterior terraces.

- Doors are to be wood or wood clad in maintenance free metals such as copper, or steel with baked enamel finish.
- Main entry doors may incorporate arched and/or rectangular transoms.
- Screen doors are to be wood with black or silver screen.

- In order to reduce heat loss and lower dependence on mechanical heating and cooling systems, it is required that doors are insulated (double-glazed minimum) and properly weather-stripped. Exterior doors with significant amounts of glazing are to incorporate, at a minimum, a single low-e coating on one side or between glazing.
- When specifying doors, consider specifying doors made with independently certified sustainably harvested solid or veneer wood. Consider locating salvaged doors or reusing and refinishing existing doors.



[Door Design]

F. FRONTAGE TYPES – DESIGN AND APPLICATION

Frontage Types are the primary façade or area of the Lot that provides the transition from the private realm to the public realm. There are five basic Frontage Types that may be used in order to provide a varied and rich streetscape: Front Yard, Porch, Stoop, Shopfront and Awning and Gallery.

Refer to Table 5-3 for a brief summary of each and the associated Building Type that it may be used with. This section describes general Guidelines, Standards and key details that define each Frontage Type and the principals to be used when designing these elements.

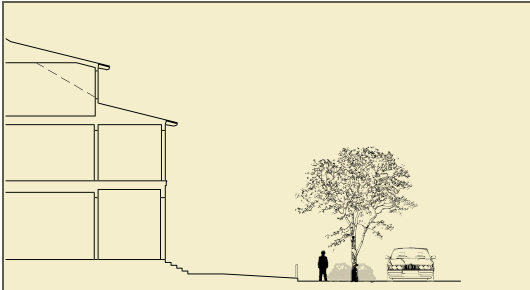




	<p>Front Yard: The main facade of the building has a large setback from the Frontage Line. The resulting front yard can be defined or undefined at the frontage line. This edge is typically defined by a fence or hedge within valley neighborhoods or left undefined within foothill areas. A front porch is optional, but if it is used, it can be one or two story.</p>	<ul style="list-style-type: none"> » Agriculture/Community » Compound » Farmstead » Meadow
	<p>Porch: The main facade of the building has a smaller setback from the frontage line. The resulting front yard is typically small and may be defined by a fence or hedge. The porch can encroach into the setback per encroachment criteria set out in Building Types. The porch can be one or two stories. A minimum depth of 8' clear is required to ensure porch usability.</p>	<ul style="list-style-type: none"> » Agriculture/Community » Farmstead » Bungalow
	<p>Stoop: The main facade of the building is near the frontage line and elevated stoop engages the sidewalk. The stoop should be elevated a minimum of 18 inches above the sidewalk or may be side loaded. The minimum width and depth of the stoop is 4 feet.</p>	<ul style="list-style-type: none"> » Courtyard
	<p>Shopfront and Awning: The main facade of the building is at or near the frontage line and the canopy or awning element may overlap the sidewalk. The canopy is a structural, cantilevered, shed roof and the awning is canvas or similar material and is often retractable. The coverings should extend far enough from the building to provide adequate protection for pedestrians. This type is only appropriate for retail and neighborhood commercial uses because of the lack of a raised ground story.</p>	<ul style="list-style-type: none"> » Courtyard
	<p>Gallery: The main facade of the building may be near the frontage line and the gallery element may overlap the sidewalk. The entry is at the same grade as the sidewalk. This type can be one or two stories and is intended for neighborhood commercial uses. The minimum depth is 8 feet. This type is appropriate for ground floor commercial uses.</p>	<ul style="list-style-type: none"> » Courtyard » Agriculture/Community

Table 5-3: Frontage Types Summary



[Front Yard Treatments]

1. Front Yard

These frontages shall be composed and integrated into the overall landscape treatments of the adjoining street and/or landscape. General Guidelines are:

- Generous porch areas are to be used along the primary façade to reinforce the community ethic and to aid in the transition from the outdoor to indoor areas.
- Fences, hedges and/or low walls may be utilized along the Frontage Line to further define Front Yard areas and are to comply with landscape standards in Section 5.5.
- Tree and shrub plantings in Front Yard areas must be coordinated with and compliment any overall streetscape design so that a unified landscape is achieved. Refer to the streetscape palette in Section 5.7.5 and the Landscape Standards, Section 5.5.8 for fence types.



Figure 5-44: Front Yard Concepts



[Rural Inspired Porch Concepts]

2. Porch

Porches are an important component of establishing small town character. Porches provide a transition between the indoors and outdoors, take advantage of the cooling effects of breezes and lend texture and scale to building facades and streetscapes.

- Porches are to be designed as extensions of the indoor rooms. The foundation element is to raise the porch or first floor level a minimum of 18 inches from finished grade or the adjacent sidewalk.
- Porches are to have a minimum depth of 8 feet and may run the full length of at least one facade. (See Building Type Section 5.4.1 for any applicable porch requirements.) Wrap around porches are encouraged.
- Porches may be one or two stories with either shed-gabled, hipped roofs, or integral with the roof of the Primary Structure.
- Porches may be enclosed by screens using black or silver screen material, or by glass if reflectivity is kept to a minimum.
- Column and railing designs are to be consistent with the detailing of the house and the rural aesthetic— that of a relaxed, informal, small town neighborhood. Column heights are typically 9 to 10 feet for the first floor of a two-story porch, and 8 to 9 feet for a single-story porch. Highly decorated or ornate railing or column styles are inappropriate.



Figure 5-45: Porch Design: Human Scale Proportions

Column types include:

- o simple square, turned or chamfered square columns of 4 to 8 inches
- o square box columns up to 12 inches on major porch elements

Railing types include:

- o square with tight spacing
- o simple cutouts from wide rails
- If visible from the offsite or the street, the underside of porches, decks and balconies shall be finished to a level consistent with the exterior materials and trim of the Building and combined with an integrated planting scheme.



[Railing and Column Design]



[Stoop Design]

Figure 5-46: Stoop Design

3. Stoop

Stoops are to be used in areas with small front setbacks and are to directly compliment and engage the sidewalk and streetscape areas.

- Stoops are to be designed as extensions of the indoor rooms. The stoop is to be raised a minimum of 18 inches from finished grade or the adjacent sidewalk.
- Stoops are to have a minimum depth of 4 feet and a minimum width of 4 feet.
- Stairs from the stoop may lead directly to the sidewalk or be side loaded in corner Lot situations.



Figure 5-47: Retail Frontage Design

4. Shopfront and Awning

Shopfronts and awnings are to be used in neighborhood commercial or agricultural tourist settings to enrich the street level experience by providing imaginative designs and details that distinguish the pedestrian level from upper floors.

- In general, shopfronts are to appear more transparent than upper floors. The façade at pedestrian level is to be more open while the upper floors utilize a more opaque fenestration design. In general, ground level window treatments should occur on a minimum of 60% of the total first floor façade square footage.
- Shopfront windows may be shaded by projecting roof overhangs, awnings, balconies or second story porches. (Refer to Gallery Frontage Type).
- Awnings are to fit the dimensions of the shopfront opening to reinforce and emphasize this proportion and may overlap the sidewalk in accordance with Encroachment criteria outlined in applicable Building Type Standards, Section 5.4.1.
- Awning colors are to compliment the overall color scheme of the building and adjoining buildings.
- Operable awnings are encouraged.



[Gallery Concepts]

5. Gallery

Gallery facades may be used for ground floor neighborhood commercial or agricultural tourist settings to enrich the ground level experience and create a transition area from the outdoors to indoors.

- Galleries may be a one or two story and may overlap the sidewalk.
- Details of the Gallery are to be consistent with porch, rafter and column details described in Porch Frontage Type.

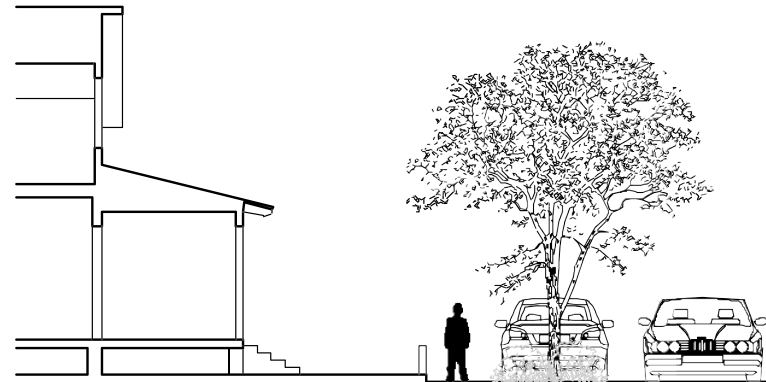


Figure 5-48: Gallery Design



[Chimney Designs]



G. CHIMNEYS AND ROOF PROJECTIONS

Chimney designs and/or roof projections are to be compatible with the structure from which they project. All chimneys are to be built of masonry units drawing on prevalent rural designs, and match or be similar to the masonry foundation materials used. Other projections such as vents and/or flues are to be located in areas not visible from the street and painted to match the roof color. All fireplaces and outdoor firepits (or similar) are to comply with local air pollution standards and building codes.



[Secondary/Ancillary Buildings: Rooted in Rural Settlement Patterns]

H. SECONDARY/ANCILLARY BUILDINGS

Secondary Units, Garages, Carriage Houses, Guest Houses, Farmworker Housing, Service and/or Ancillary Structures

The intent within Middle Green Valley is to create an informal neighborhood environment that uses the principles behind the rural settlement patterns where buildings and wings were added and older buildings adapted for other uses overtime, as the need arose. This generally led to a collection of related, but separate buildings. Secondary/Ancillary Buildings are to be similarly reflective of this evolutionary development pattern. Refer to Type G - Secondary or Ancillary Structures, Section 5.4.1 - Building Types.

- Secondary/Ancillary Buildings are to be subordinate to Primary Buildings and are to utilize the same or similar detailing and stylistic qualities. These Buildings may include Guest Houses, garages, carriage houses, pavilions, gardening sheds, Secondary Living Units, home offices, art studios and /or agricultural service and maintenance structures.
- With the exception of Secondary Units and Farmworker Housing, Secondary/Ancillary Buildings are not to include kitchen facilities.
- In general, Secondary/Ancillary Buildings are to use the same materials as the Primary Structure, but may be more playful and whimsical in design.
- Refer to applicable Building Type for Building Height Standards for Secondary/Ancillary Buildings.
- Secondary/Ancillary Buildings may be freestanding or connected to the Primary Structure by outdoor rooms and/or architectural projections such as breezeways or trellis.
- Single-bay garage doors are required on all Secondary/Ancillary Garage Buildings.





[Foothill Color Palette]

I. COLORS AND FINISHES

There are two general color palette approaches that address the Middle Green Valley landscape zones: That of the valley, the neighborhoods and structures that sit in the flatter, valley areas, and the foothills, those areas located in the rolling oak wooded foothills that encompass Middle Green Valley.

An approved color palette that specifies color ranges for roof, brick, field and accent colors may be obtained from the CRC for each landscape zone. All interior paints, coatings, and sealants shall utilize products that have low levels of Volatile Organic Compounds (VOC's). Stains or opaque and semi-opaque paints are to be used to protect wood from weathering, to give it a more refined texture or to achieve a darker hue.

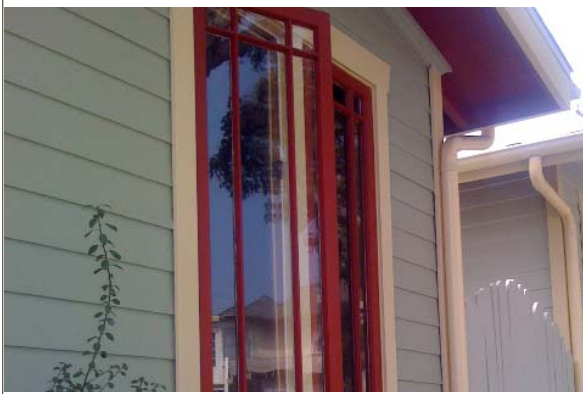
The following is a summary of the color and finish approach for each landscape zone:

Foothill Areas:

The color of exterior elements is to be subdued, recessive and complementary of the primary colors found in the surrounding environment. Accent colors are to be used judiciously to add warmth and visual interest.

- Building elements are to have the following general color ranges and Light Reflective Value (LRV). (All paint manufacturers categorize their products by LRV; this information is readily available from the manufacturers.)
 - *Roofs are to be medium to dark browns, grays (galvanized), greens and dark reds, and may have an LRV of 60 or lower.*
 - *Walls are to be subdued earth tones (a range of browns, grays and/or muted colors found in the surrounding environment) and are to have an LRV of 60 or lower. Generally, the darker the wall color, the better.*
 - *Trim and accent colors are to be rich, warm hues (greens, blues, browns, and/or blacks).*
 - *Wood fence elements are to be stained and left to weather naturally.*





[Valley Color Palette]

Valley Areas:

Within neighborhood areas that sit along the Valley floor, colors may be more vibrant and lively. Bright, historical colors such as green, red or ochre may serve as a beautiful counterpart to the natural landscape.

- Building elements are to comply with the approved color palette and may have the following general color ranges:
 - Roofs are to be medium to dark browns, grays (galvanized), and greens.
 - Walls are to utilize a range of whites, creams, beiges, light yellows, light greens and grays with a non-shiny finish.
 - Trim and accent colors are to be rich in tone (greens, blacks, reds, dark browns, blues).
 - Painted wood fence colors are to be one of the approved wall colors or dark greens.
 - Brick walls and paving are to utilize historic colors and patterns with deep, varied colors typical of those used at the turn-of-the-century.



J. BUILDING MATERIALS SELECTION

One of the main goals in Sustainable Design is to select and specify environmentally preferable materials. In general, criteria for selection should include the conventional selection criteria such as strength, cost, appearance and suitability.

In addition, the following criteria should be used when choosing building materials: *environmental impact, durability and toxicity*. Using the following Guidelines to select building materials, while still retaining the rural aesthetic, is encouraged. Refer to the applicable LEED rating system for additional guidance in selecting sustainable building materials:

- Consider incorporating recycled content materials into the overall building materials selection.
- Consider using building materials that may be recycled at the end of their useful life.
- Consider using wood based materials certified in accordance with the Forest Stewardship Council Guidelines (FSC).
- Consider substituting rapidly renewable building materials (such as bamboo flooring, wool carpet, strawboard, cotton batt insulation, linoleum flooring, poplar OSB, and sunflower seed board) for finite raw and long cycle renewable materials.
- As feasible, specify building products from local and regional resources (within 500 miles) to support local economies and to reduce the environmental impacts of transporting materials over long distances.
- As practical, incorporate salvaged materials into the building design. Materials could include structural timbers such as beams and posts, hardwood flooring, doors and frames, cabinetry, furniture, and brick and decorative detailing salvaged from older buildings that can be refinished and/or remilled.
- Consider using building materials that reduce the emission of Volatile Organic Compounds (VOC's) and other pollutants. (Interior paints and sealants are required to use low levels of VOC's as outlined in Section 5.4.3 (I))

K. CLIMATE CHANGE INITIATIVES

General

As part of the community vision and County wide implementation programs outlined in the General Plan, buildings within Middle Green Valley are to be designed with a strong commitment to sustainable development. (See box on following page for relevant General Plan Implementation Programs). As part of the community, homes are encouraged and sometimes required to follow specific sustainable design initiatives as described below and compiled in Appendix B – Sustainable Design Index in an effort to reduce impacts on global and local climate change and increase the quality of life for members of the community.

- All new and remodeled residential, commercial, industrial, institutional and civic construction is required to exceed current Title 24 state energy-efficiency requirements by at least 20 percent.
- All new residential homes and major renovations are required to meet or exceed the guidelines for the California Energy Star Homes Program.

The Energy Star Program is:

A joint program of the United States Environmental Protection Agency and the Department of Energy. The program establishes criteria for energy efficiency for household products and labels energy efficient products with the Energy Star seal. Homes can be qualified as Energy Star homes as well if they meet efficiency standards. In California, Energy Star homes must use at least 15 percent less energy than the Title 24 regulations, pass the California Energy Star Homes Quality Insulation Installation Thermal Bypass Checklist Procedures, have Energy Star windows and have minimal duct leakage.

- Residential development of more than 6 units shall participate in the California Energy Commission's New Solar Homes Partnership and construct LEED-certified units or meet equivalent performance standards as established by the General Plan, this Specific Plan and the Development Agreement.

- New construction or major renovation of commercial and industrial buildings over 10,000 square feet in size shall incorporate renewable energy generation to provide at least 50 percent of the project's needs.
- Incorporate on-site renewable energy production, including installation of photovoltaic cells or other solar options installed in appropriate high sunlight locations. (See Section 5.4.2 (C) - Roofs for additional Guidelines) and "Mechanical Systems" in this Section.
- Selecting a building's orientation, massing and fenestration design to maximize effective daylighting to reduce building energy requirements, without increasing glare and/or electric lighting loads that offset glare is required. The selection and extent of window glazing should vary, depending on the criteria required by the window's location, including solar heat gain, energy performance, daylighting, views and glare factors. Exterior sun controls (including porches, overhangs, trellises, balconies and shutters) may be integrated into the building's fenestration design to effectively admit and block sun penetration as required.

Mechanical Systems

Utilizing an energy Consultant and/or Architect to establish the minimum level of energy efficiency that the Building and its systems will attain is encouraged to lower long-term energy consumption and costs. Designing buildings to reduce the reliance on mechanical intervention for the maintenance of physical comfort levels is required. The need for air conditioning may be reduced through effective ventilation design and the use of trees and architectural devices for shading. Such designs can reduce heat absorption and maximize exposure to summer breezes by facilitating internal air circulation, effective shading and maximizing exposure to summer breezes. The incorporation of the following Principles are either required or strongly encouraged (as noted). Refer to the applicable LEED rating system for additional guidance in designing efficient buildings:

- All roofs shall incorporate 500 square feet minimum of solar panels to reduce the reliance on energy. Solar panel systems are to be integrated into the roof system and roof materials applications to obscure visibility. See Section 5.4.2 (C) - Roofs for Guidelines.

The following County implementation programs have been incorporated in this Specific Plan relevant to climate change initiatives.

Climate Change Initiatives - Relevant County Implementation Programs

Implementation Program RS.I-38: Require all new and remodeled residential, commercial, industrial, institutional, and civic construction to exceed current (2008) Title 24 state energy-efficiency requirements by at least 20 percent, and require that all new residential homes and major renovations comply with the guidelines for the California Energy Star Homes Program.

Implementation Program RS.I-46: Require residential development of more than six units to participate in the California Energy Commission's New Solar Homes Partnership and to construct LEED-certified units or meet equivalent performance standards. For new affordable housing projects, performance standards shall be established pursuant to the requirements of the funding source(s). Require new construction or major renovation of commercial and industrial buildings over 10,000 square feet in size to incorporate renewable energy generation to provide

the maximum feasible amount of the project's energy needs. Commercial buildings shall incorporate renewable energy generation to provide at least 20 percent of the project's needs.

Implementation Program RS.I-55: Require the design and orientation of all buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, and promote effective use of daylight. Orientation should optimize opportunities for on-site solar generation.

Implementation Program PFI-29: Expand waste minimization efforts, including household recycling, food waste and green waste recycling, business paper recycling, and construction and demolition recycling. Require commercial and industrial recycling. Require building projects to recycle or reuse a minimum of 50 percent of unused or leftover building materials.

- Solano General Plan

- A high level of individual occupant control for thermal, ventilation and lighting systems should be incorporated. Occupancy sensors and time clock controls should be incorporated into the building's mechanical design to reduce energy usage.
- Using CFC-free HVAC & R base building systems is required. Intakes should be located and designed to assure maximum levels of indoor air quality. The use of carbon monoxide monitoring sensors is encouraged.
- Separating ventilation and plumbing systems for those rooms containing contaminants, such as artist studios, from those in the rest of the building is encouraged.
- Retaining a Commissioning Agent (a professional qualified to evaluate and certify that a building is designed, constructed and functions in accordance with the Building's specified operational requirements) is encouraged. Owners may choose to have the Commissioning Agent produce a recommissioning manual for the building to assure it continues to meet established standards such as energy conservation and indoor air quality.

Building Envelope

- The building envelope (which defines the conditioned and unconditioned spaces in the house) should form a continuous insulated barrier and a continuous air barrier. The two barriers are usually formed by different materials. Standard insulation products, such as batt or loose fill products, do not seal against air leakage. For most homes, the sheet goods that form the decking, sheathing, and finish materials are the primary air barrier. Seal holes between materials with durable caulks, gaskets, and foam sealants.
- The use of Energy Star rated windows is required.

Waste Minimization

- Efforts to reduce construction waste are required. All building projects within the Plan Area are required to recycle or reuse a minimum of 50 percent of unused or leftover building materials consistent with County implementation program PE.I-29. (See box on previous page)

Indoor Lighting and Appliances

- It is required that all homes utilize ENERGY STAR® rated appliances and the most energy-efficient Energy Star rated water heater and air conditioning systems that are feasible, including but not limited to dishwashers, refrigerators, ceiling fans and washing machines.
- It is intended that all homes utilize natural gas for clothes dryers, cooking stoves, heating, central air furnaces, water heaters and/or boilers.
- Specifying ENERGY STAR® light fixtures that use less energy and produce less heat than traditional incandescent light fixtures is encouraged. A broad range of choices and styles are available through many lighting manufactures, which can be found at www.energystar.gov.
- Use of compact fluorescent bulbs in recessed can lights is encouraged.

Water Efficient Appliances

- Utilize water-conserving appliances and plumbing fixtures. The following average flow rates shall be met by installing high-efficiency fixtures and/or fittings:
 - *Lavatory faucets must be ≤ 2.0 gpm*
 - *Showers must be ≤ 2.0 gpm*
 - *Toilets must be ≤ 1.3 gpf*
- Utilize flow restrictors and/or reduced flow aerators on lavatory, sink and shower fixtures.
- Commercial buildings are required to utilize automatic fixture sensors and low-consumption fixtures.

L. FIRE SPRINKLERS

In order to ensure adequate fire protection, all buildings, designed for human occupancy, and structures larger than 500 square feet, including garages, must be equipped with interior fire sprinkler systems installed in accordance with current regulations.



[Landscape patterns reinforce the agricultural heritage]

5.5 LANDSCAPE STANDARDS

5.5.1 INTRODUCTION AND LANDSCAPE CONCEPTS

The Plan for Middle Green Valley has been designed to preserve the land's agricultural heritage and pastoral landscape while taking advantage of the rural setting. Landscape patterns are characterized by the dominant landscape within Middle Green Valley: **the foothills** and **the valley**.

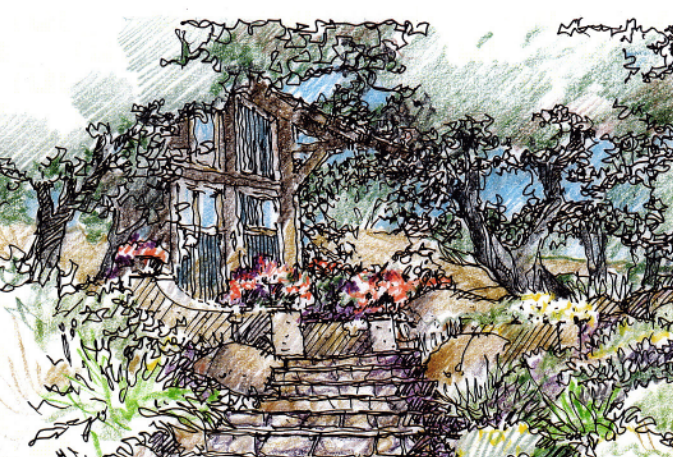
The landscape concepts in the valley focus on creating pedestrian scaled environments set amongst the working agricultural landscape. The Green Valley Road corridor, characterized by the existing and enhanced agricultural patterns of the valley, is preserved with landscape treatments that obscure views to the Built Fabric. Within the residential neighborhoods, small residential scale buildings and associated outdoor areas connect to the larger public spaces and Open Lands, such as orchards, crops, vineyards, streets, paths, alleys and community gardens, to create a diverse network of public and private outdoor rooms.

In the foothills surrounding the valley, the native landscape of oak woodlands, grasslands and meadows drive the landscape design.

This section includes Standards and Guidelines for all site improvements including grading, planting and hardscape. Sustainable requirements and Guidelines are also included to produce healthy environments and reduce resource impacts. Refer to Appendix B - Sustainability Index for a compilation of these measures and associated requirements.

{ One generation plants the trees; another gets the shade. }

- Chinese Proverb



1. **Connect to and extend the overall Open Lands network and the agricultural landscape.** A network of Open Land areas are interwoven throughout the community. Extending and complimenting these areas are important design characteristics to complete the community and reinforce the connection to agriculture.
2. **Utilize natural materials and handcrafted details that complement the agricultural traditions and rural settlement patterns.** Paving, planters, walls, fences, hedgerows and/or any exterior site detailing draw from rural design traditions. These design traditions are a result of the response to the climate, agriculture, local cultural traditions, and the indigenous materials that are available. The resulting simple, informal, straightforward forms and details are well suited to contemporary interpretations.
3. **Create spontaneity and vitality throughout the community.** Consistent with the goals and policies of the Specific Plan, the landscape concepts outlined in this section are intended to create a community of people who value this unique place and its history. At the same time, Owners and members of the community bring their own interests and personalities to Middle Green Valley. It is this individuality that generates the vitality of the community. These Guidelines and Standards provide a framework from which a lively, varied streetscape and landscapes may be realized.
4. **Utilize the landscape as the primary form giver for all Improvements.** The existing context and landscape are the driving forces behind the design of buildings, plantings, driveways and outdoor improvements. The neighborhoods will grow into places nestled into the larger agricultural and woodland landscape to have the qualities of a rural town that has always been there. This objective includes orienting rooms to the outside to reinforce the indoor/outdoor relationship, using plantings to soften and spill over built elements and organizing outdoor spaces that provide a gradual transition between public zones and private garden areas.



[Foothill Zone]



[Valley Zone]

5.5.2 LANDSCAPE ZONES - OVERVIEW

There are two predominant landscape zones within the Plan Area: Foothill and Valley. The landscape concept for each zone supports the overall goal of establishing a gradual transition from the more civilized and cultivated landscapes of the Valley Zone to the more natural oak woodland landscapes in the Foothill Zone.

Below is a description of each landscape treatment area. Please refer to the Sections below for more detailed Guidelines and Standards for plant materials, planting concepts, walls, fencing and screening, and lighting.

Foothill Zone:

Areas within the Foothill Zone are essentially the settlement areas located in the upper oak woodland foothills surrounding the Valley. Landscape treatments work to anchor structures to the woodlands landscape. Built improvements are nestled into the topography of the foothills. The landscape is to remain natural with open grazing lands interspersed with trees and meadow areas. Landscape treatments within the Foothill Zone are predominantly for restoration and preservation purposes and include appropriate ranch fencing (refer to Section 5.5.7 below) for grazing lands and areas around operational/support buildings.

Valley Zone:

These areas are the more cultivated landscapes, characterized by the agricultural traditions of Green Valley. Landscape treatments surrounding Agricultural/Community, Courtyard, Bungalow, Farmstead and Compound Lot Building Types provide a defined line between the residential Built Fabric and the agricultural lands such as orchards, vineyards and/or row crops, allowing for more formal landscape treatments around buildings. The edge between agricultural land and residential areas may be defined by appropriate fencing and hedgerow solutions to ensure that adequate buffers are established between agriculture and residential uses. Typical landscape treatments in the center of neighborhoods are more formal and connect to the community path and street tree landscapes.



Figure 5-49: Landscape Zones

5.5.3 GRADING AND DRAINAGE

Objectives:

- *Protect and preserve woodland and riparian areas.*
- *Preserve and/or mimic the natural hydrology of the site.*
- *Incorporate LID concepts into site and landscape design. Utilize a network of small, simple stormwater control solutions to contain and infiltrate all runoff on site and decrease flooding potential.*
- *Control stormwater at the source by utilizing on site retention and infiltration techniques.*

Grading and drainage improvements are to focus on minimizing impacts to the site and landscape, protecting water quality, minimizing removal of existing trees and promoting the continued use of natural drainage systems. The Standards and Guidelines for grading and drainage should follow the general principles of Low Impact Design (LID) as described herein and in Section 3.3.3 - Sustainable Stormwater Design.

A Landscape Architect or Engineer, appropriately licensed per the legal requirements of the State of California, is required to prepare a full set of drawings including grading, drainage, and utility locations for new construction on all Lots.

The design of all site improvements focuses on integrating LID concepts into site designs in order to preserve and enhance the site's unique quality and character. The following is a summary of applicable LID concepts.

Low Impact Design Strategies

A building's design and siting determines its overall ecological impact. The following Guidelines summarize overall design strategies and fundamental site planning concepts of LID. The essential goal of LID is to maintain or replicate the predevelopment hydrologic functions of the site through the use of design techniques. These techniques are to be utilized to the greatest extent possible in stormwater management and site planning design. Refer to Section 3.3.3 for additional information on sustainable stormwater design.

- Site buildings to minimize grading and earthwork. This reduces construction costs, such as those associated with retaining systems and drainage redirection, and minimizes soil erosion and downstream water impacts.
- Reduce hydrologic impacts by minimizing impervious surfaces, graded areas, and vegetation clearing.
- Allow for a distributed control of stormwater methods by using a network of smaller, simple solutions throughout the site. This includes finding increased opportunities for infiltration (utilizing pervious surfaces) or containment on-site, depression storage, bioswale applications and vegetated swales, which mimic the natural hydrologic functions of the site while at the same time adding aesthetic value.
- Control stormwater at the source rather than only using end-of-pipe solutions. Minimizing or mitigating hydrologic impacts of land use activities closer to the source of generation by infiltration, interception, retention ponds, and/or depression storage decreases the need for pipe and protects the landscape and water quality.
- Decrease the utilization of typical engineering materials such as concrete and/or steel. By using materials such as native plants, soil crushed rock applications and/or water features, a more integrated natural landscape will result.

Grading Standards

- Reduce hydrologic impacts by minimizing impervious surfaces, graded areas, and vegetation clearing. A maximum Building Coverage percentage has been noted for each Building Type to reduce impervious surface coverage in Section 5.4.1. Building Coverage is defined as “*the maximum portion of a Lot that may be covered by a building and/or any other impervious surface, including, but not limited to, porches, courtyards, terraces and driveways.*”
- All topsoil disturbed by grading operations is to be stockpiled within the construction site and reused as part of landscape restoration plans. Excavated topsoils shall be protected from erosion by wind or rain by tarps or other suitable materials.
- Control runoff with silt fencing.
- Protect on-site storm sewer inlets and streams with straw bales, silt fencing, silt sacks, rock filters, or comparable measures.
- Provide swales to divert surface water from hillsides.
- Utilize erosion and soil stabilization techniques on disturbed slopes.
- Any existing trees on-site are to be protected by fencing during any grading operations including protection from soil compaction within the drip line. See Section 5.5.6 for tree protection and removal Standards.
- Retaining walls may be used when it is necessary to preserve unique site attributes such as existing trees or where they are designed as extensions of the architecture. Retaining walls are to be a maximum of 4 feet in height and utilize materials that complement the architecture such as brick, dry stacked stone or tabby.
- Site buildings to minimize grading and earthwork to reduce construction costs, such as those associated with retaining systems and drainage redirection, to minimize soil erosion and downstream water impacts.
- The extent of grading and site disturbance is to be limited to the Building Envelope. Balancing cut and fill quantities on-site is required.



[Foothill landscape blends improvements into topography]

In addition to the general grading Standards above, the following Standards apply to Foothill Zones:

- Grading designs are to utilize natural and/or curvilinear shapes that blend into the natural landscape, rather than straight and angular solutions.
- Cut and fill slopes on the foothills are to be revegetated and blended into the surrounding environment.

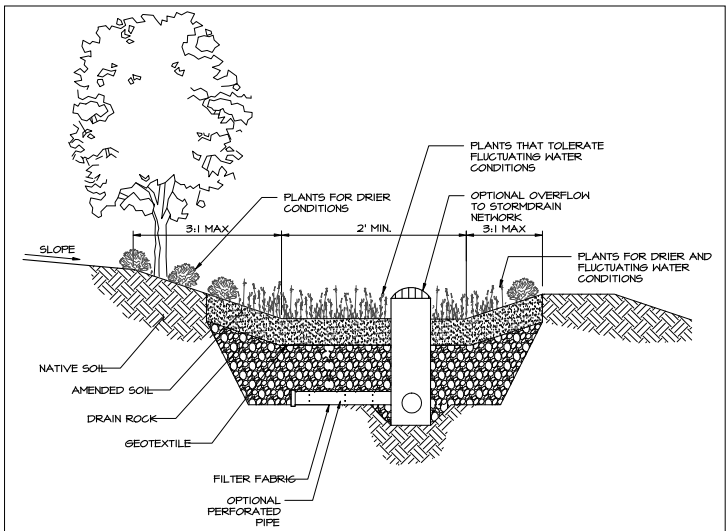


Figure 5-50: Rain Garden Detail

[Vegetated Swale]

[Impervious Paving and Drain]

Drainage

- Increased water flow from Lots is not permitted. All stormwater runoff is to be managed on-site and rainwater runoff from all impervious surfaces is to be treated using vegetated swales and rain gardens as feasible. Rain gardens or manmade depressions planted with native or naturally adapted plants can be created at locations where they will collect, store and filter water back into the soil.
- Utilize captured rainwater for on-site non-potable uses. A rainwater collection system is required for these uses, such as flushing toilets and/or irrigation. Cisterns should be sized and located on the Lot as to be out of public view and landscaped appropriately to obscure them from view.
- Drainage design must minimize any potential for erosion and consequent downstream water quality impacts.
- Allow for a distributed control of stormwater methods by using a network of smaller, simple solutions on the Lot. This includes infiltration (utilizing pervious surfaces) or containment on-site,

depression storage, bioswale applications, rainwater gardens and vegetated swales that mimic the hydrologic functions of the site while at the same time adding aesthetic value.

- Impervious surfaces are to be minimized to encourage water percolation. The use of pervious (water permeable) materials, such as porous concrete, open-celled pavers or stabilized crushed rock for driveways and outdoor improvements is encouraged. See exterior paving, Section 5.5.8.
- Gutters and downspouts are to direct drainage away from foundations and paved surfaces into rain barrel systems. Gutters and/or downspouts may not direct drainage onto adjacent Lots, sidewalks or Open Lands.
- An improved surface, such as stabilized crushed rock, is to be placed under the dripline of non-guttered roofs to prevent soil erosion and increase ground absorption.



[Community garden reinforces agricultural setting]



[Flowering vines coupled with wood and wire mesh fence creates a functional hedgerow treatment]



[Landscape structure with integrated planting treatment]

5.5.4 PLANTING CONCEPTS

Objectives:

- *Create landscape areas with unique landscape structures and details that reinforce rural traditions and connect to the overall community Open Lands network.*
- *Integrate flowering vines and perennials at garden structures and entry designs to enhance the streetscape character.*
- *Integrate kitchen, herb or cottage gardens into private landscape areas to reinforce the connection to the larger agricultural landscape.*
- *Establish a defined edge that establishes where agriculture starts and the built environment stops.*
- *Utilize plant materials and existing vegetation to anchor buildings to the site and provide screening.*
- *Landscape treatments should focus on obscuring built improvements from views from Green Valley Road.*
- *Ensure that planting designs at maturity do not obstruct solar access for adjacent solar installations.*

Planting design emphasizes strengthening the links between indoor and outdoor spaces, creating a rich streetscape character, and connecting to the agricultural landscape. Residences and related buildings are to be designed to “look outward.” Landscape treatments reinforce this principle by providing a gradual transition from public community spaces, such as streets, alleys, parks and Open Lands, to the more private outdoor and indoor spaces.

In the Valley Zone, planting concepts are derived from historic agricultural traditions and patterns such as row crops, vineyards, orchards, allees, hedgerows and fencing that create a distinct and legible landscape mosaic. In the Foothill Zone, grazing lands, meadow areas and informal groupings of trees are historically part of the ranching landscape.

Refer to the Approved Plant List in Appendix D, which includes a combination of indigenous and naturalized or historically significant plant species that are derived from the agricultural heritage of the area. These plants are adapted to the climate, are less invasive, and require less water and less maintenance. Plants not included on the Approved Plant List may be used provided they are suited to the natural setting and design concept, require less water and are not invasive.



[Planting patterns reflect agricultural and rural influences]

General planting Guidelines and Standards

- Residential landscape designs are to be interpretations of historical agricultural traditions and, within those traditions, are to be informal and playful rather than highly manicured and controlled. Shrubs may be planted informally to create outdoor spaces, give definition to the street (rather than a fence) and/or to screen service areas and/or driveways.
- Existing trees and other vegetation are to be incorporated into designs and dictate the placement of buildings and related improvements.
- Plant trees and vegetation near structures to shade buildings and reduce energy requirements for heating/cooling while respecting the need to prevent shading of rooftop solar systems.
- Locate trees and other planting to provide shading of sidewalks, patios and driveways.
- Landscape is to be pervasive and intertwined with built elements. Plantings are to spill over onto, climb up or otherwise soften surrounding site walls, foundations, paving, steps and fences to blend the built fabric with the Green Fabric. Vines may be used to fill between structural components of walls and/or stairs.
- Fences and/or site walls are to be planted with low informal shrubs and intertwined with vines to establish a strong landscape edge. Plant materials may be combined with wire fencing to create a “living” fence. Alternatively, hedgerows are to be used to define agricultural edges and transitions. See Section 5.5.7 – Landscape Edges: Fences, Walls, Shrub Screens and/or Gates.
- On Lots with driveway access from a neighborhood street, planting materials should be placed to obscure views of the garage and driveway.
- Expansive turf areas are to be limited to reduce irrigation, fertilization and maintenance requirements. Informal lawn areas that utilize a native seed mix and are drought tolerant are encouraged. Lawn areas that do not utilize a native seed mix are to be equal to or less than the area of the Building Footprint. Refer to the Approved Plant List.
- Avoid using turf in areas with a slope of 4:1 or greater and in densely shaded areas.
- The use of mulch at least four (4) inches deep in planting areas is required to retain moisture and reduce erosion.



- The integration of kitchen, herb and cottage gardens are encouraged to provide aesthetic benefits of cultivated gardens in addition to fresh, home grown vegetables, herbs, fruits and berries that can be used in the kitchen and shared with the community.
- Next generation oaks are to be included in landscape designs, see Approved Plant List in Appendix D.

Foothill planting Guidelines and Standards

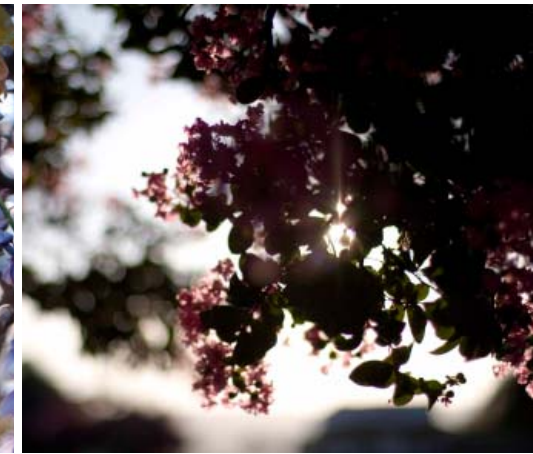
- Oak woodlands are to be maintained, extended and preserved on each Lot so that built improvements are set into and viewed through the oak woodland canopy.
- Areas of ornamental planting and intensive irrigation are to be minimized. Manicured lawns, ornamental planting, and outdoor room areas should be restricted to spaces confined by buildings, walls and plantings.
- Areas adjacent to buildings and surrounding landscape improvements are to be enhanced with native or naturalized plant materials to effectively transition to the surrounding natural areas. Areas

immediately adjacent to building improvements that are not visible from off-site may use a greater variety of plant material.

- Planting outside of the Building Envelope is to be limited to native plant material as specified on the Approved Plant List.
- Plantings, particularly along house foundations, are to appear untamed and loose rather than formal, aligned and/or patterned.
- Any trees to be removed must be mitigated with a tree 15-gallon or larger in size. (See Section 5.5.6.)

Valley planting Guidelines and Standards

- Where buildings are closer together, planting clusters should be planted between individual buildings to provide privacy and to help subordinate buildings to the landscape.
- Within neighborhoods, landscape treatments are to extend and connect to community elements such as streetscapes and adjacent parks.
- Hedgerows and other planting solutions should be utilized to reinforce the agricultural edge.



[Plant Materials]

5.5.5 PLANT MATERIALS

Planting designs within valley areas are to extend and continue the community’s agricultural landscape framework. Within foothill areas, designs are to extend, reestablish and/or continue the oak woodland landscape, native understory and grazing/meadow lands. An integrated planting concept is to be applied to supplement existing trees, complete the streetscape and/or introduce complimentary vegetation with large canopy trees, understory trees and shrubs to create a variety of levels in the landscape. In order to meet this objective, each Building Type has planting requirements; refer to Section 5.4.1. Refer to the Approved Plant List for appropriate plant materials for Valley and Foothill Zones.

5.5.6 TREE AND HABITAT PROTECTION, REMOVAL, PRUNING AND DEFENSIBLE SPACE

Objectives:

- *Protect existing mature hardwood and oak trees. Preserve, conserve and enhance valuable Open Lands that provide wildlife habitat.*
- *Minimize tree and shrub removal in foothill areas by locating improvements in existing cleared areas.*
- *Avoid removal of Heritage Trees.*
- *Repair environmental degradation that has occurred, and seek an optimum balance between the economic and social benefits of the valley’s natural resources.*
- *Maintain defensible space around structures for wildfire protection.*

In order to maintain the existing oak woodland forest and the habitat it provides, the removal of trees is to be avoided whenever practical. Tree removal and/or selective tree thinning may be approved provided the Owner documents the reasons for the request.

- Prior to siting any buildings, the driveway or other improvements, an oak woodland management plan is to be developed along with an arborist’s report for any Lot with existing oak trees. The plan should address tree health and structural stability for all Heritage Trees located within the Building Envelope. In addition all trees within 30 feet of all built improvements, within 10 feet of driveways and other site improvements, or where construction and grading would encroach within the tree’s dripline are required to be included. The health and structural integrity of trees should be a key factor in determining the locations of buildings and driveways within the Lot.

- No tree, regardless of size, is to be removed without prior approval of the CRC. The removal of any Heritage Trees is to be mitigated with a native tree of 24" box or larger in size. A Heritage Tree is defined as:

(a) Any tree that measures greater than 15 inches in diameter at a point 54 inches above natural grade. (b) Any oak tree native to California, with a diameter of 10 inches at natural grade. (c) Any tree or group of trees specifically designated by the County for protection because of its historical significance, special character or community benefit.

Heritage Trees provide a sense of place, increase the aesthetics of the community and roadways, and when located near Building improvements reduce energy costs associated with air conditioning.

- Where possible, existing trees within the Building Envelope may be spaded and transplanted to other locations within the Lot.
- Unauthorized removal or cutting of trees is subject to fines imposed by the CRC. If fines are assessed and not promptly paid, the CRC has the right to replace trees, at the Owner's expense, in accordance with a mitigation plan.
- Prior to thinning and pruning of trees and other vegetation outside of designated Building Envelope areas, the proposed work is to be reviewed and approved by the CRC.
- Protect against wildfire by maintaining a minimum 30 feet of defensible space around the perimeter of all structures by adhering to the following Guidelines within this defensible space:
 - *Only fire retardant materials, which tend to be more open in structure, have thick stems and are more succulent are to be planted within the defensible space.*
 - *Eliminate ladder fuels and lower limbs of trees.*
 - *Remove dead vegetation and piled debris (such as firewood) from the defensible space and break up the continuity of brush species.*
 - *Replace shrubs with low ground cover and maintain a height of 4 inches.*
 - *Reduce continuous brush fields to individual plants or small clusters at least 15 feet apart. Use driveways, paths, turf areas and trails to break up plant continuity.*

5.5.7 IRRIGATION

- *Minimize irrigation requirements by using the Approved Plant List, which contains native plant materials and plants well suited to the local climate.*
- *Utilize efficient irrigation systems such as drip irrigation with rain/moisture sensors.*
- *Limit manicured lawn areas.*

To aid in water conservation, planting design is to reduce water consumption while using minimal and efficient irrigation systems.

- Utilizing indigenous or naturalized plant materials, grouped according to water consumption needs, is required to reduce water needs and to extend the natural ecosystems and habitat of Middle Green Valley.
- All permanent irrigation systems are to be below ground and fully automatic. Use of water conserving systems, such as drip irrigation and moisture sensors, is required. An electric, solid state controller is required for all systems and shall be equipped with a master valve terminal and at least two fully independent programs.
- Rain/moisture sensors that shut off irrigation during or after rainfall are to be installed.
- Temporary irrigation systems are required at all revegetation areas. These systems may be abandoned when plantings have been clearly established after a minimum of one growing season.
- Refer to 5.5.4 - Planting Concepts for additional Guidelines and Standards regarding planting design.



Figure 5-51 - Wall design with integrated planting treatments

5.5.8 LANDSCAPE EDGES: FENCES, WALLS, SHRUB SCREENS, HEDGEROWS AND/OR GATES

Objectives:

- Reinforce the rural character of the community by utilizing crafted garden design details and materials to create a multi-layered landscape.
- Utilize fences and hedgerows along agricultural edges to define boundaries and direct site lines.
- Integrate vines and plants with walls, fences and gates to reinforce the dominance of the landscape.
- Allow for privately fenced or walled areas within private areas of Lots that maintain views while minimizing off-site visibility.

Fences, walls, shrub screens and gates are to extend the architecture of buildings, give definition and variety to the streetscape, outdoor spaces and agricultural lands, and screen service areas. Designs within Valley areas are to draw from the rural town tradition, which are generally painted picket or informally spaced shrubs and vines that create a soft edge along the street. Designs in the Foothill areas draw from the ranching traditions that relied on wood board or three rail designs. Refer to the applicable Building Type for any fencing requirements.

- Fencing solutions are to be used to block views of utilities, trash enclosures and outdoor work areas. Mechanical units may be screened with vegetation. Spacing and size of shrubs must be sufficient to screen all mechanical units at the time of initial planting installation.
- All fences and walls are encouraged to be combined with an integrated shrub screen and vine plantings.
- Placement of fences/walls/screens is to respond to existing tree locations, parking areas and/or sidewalks.
- Walls extending the architecture of a building to enclose outdoor rooms such as patios or courtyards may be up to 8 feet in height. Other free standing walls within the Building Envelope may not exceed 4 feet in height.

The following is a list of approved types of edge treatments; see below for Standards regarding maximum heights and treatments in specific Zones.

Walls

- Approved masonry types include:
 - Low stone
 - Low stucco



Figure 5-52: Fence or Fence/Wall Combination Designs

Fences or Fence/Wall Combinations

- Approved fence, fence/wall combinations and/or planting designs include:
 - *Wood picket and/or spindle, painted (approved colors) or stained*
 - *Grape stake*
 - *Wood and brick or stone combinations*
 - *“Living fences” (wire fencing planted heavily with vines or other vegetation)*
 - *Perennial and native grasses combined with wire or wood fencing*
 - *Informal shrub screen*
 - *Informal 2, 3 or 4 wood rail, stained*
 - *Wood board fence with mesh (for agricultural and ranching applications)*

Hedgerows

- Approved hedgerow treatments include:
 - *Fruit/Berry hedge*
 - *“Living fences” (wire fencing planted heavily with vines or other vegetation)*
 - *Dense row of shrubs, informally trimmed*
 - *Hedgerow shrubs*
 - *Fence and shrub combinations*
- Refer to the Approved Plant List for appropriate hedgerow plant materials. Hedgerow treatments may vary in height and width but are to be generally no higher than 6 feet.



Figure 5-53: Hedgerow Treatments

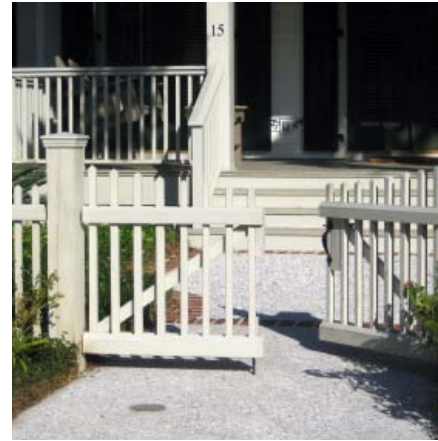


Figure 5-54: Gate Design

Gates and Monuments

- Approved gate designs and associated monuments include:
 - *Wood picket, single or double leaf gate*
 - *Handcrafted, wire, single leaf gate*
 - *Low brick monuments*

Inappropriate Fence, Gate and Wall Types

- Inappropriate edge treatments include:
 - *Concrete block*
 - *Chain link*
 - *Woven wood slat or solid board fence or solid gate designs*
 - *High walls (over 4 feet) that utilize solid, opaque masonry designs that are not connected to buildings*
 - *Brick designs that utilize pre-cast concrete or manufactured brick with a sharp, machined edge*

The following are Guidelines and Standards for edge treatments within each landscape zone:

FOOTHILL ZONE

- Fencing and edge treatments are to be less formal and be characterized with a rural, ranching design tradition.
- Walls and fences are to be located within the Building Envelope with the exception of fences used for grazing operations.
- Appropriate fence types include wood applications that may be coupled with a mesh metal screen or heavy gauge wire within Foothill areas include (See Figure 5-56):
 - *Board*
 - *Split-rail*
 - *Grape stake*
- Fences within the Building Envelope (defined by setbacks) may be a maximum of 6 feet in height and are to be extensions of the architecture.
- Fences associated with managing grazing operations shall be consistent with Conservancy management requirements.

VALLEY ZONE

See specific Building Type for additional requirements regarding required fencing and frontage treatments. See also Figure 5-57.

Front Yard Area

- Edge treatments (fences, brick walls and/or shrub screens) in front yard areas (between front property lines and 5 feet back of front building facades) are to be between thirty inches (30”) and 42 inches (42”) in height and placed along or within 2 feet back of the property line.
- Low masonry walls (18 to 24 inches in height) are to be combined with a 3 foot minimum shrub screen behind the wall.
- Gates and/or entry monuments may be used in combination with front yard treatments (hedges and/or fences) but may not exceed 5 feet in height.

Side / Rear Yard Areas

- Fences within side and back yard areas (starting 5 feet back from the front building facade) may step up to 6 feet in height, utilizing a semi-opaque fence or wall design heavily planted with shrubs and vines.
- The height transition from the front yard edge treatment to the side/rear yard treatment is to be gradual and utilize stepped height transitions.
- A hedgerow treatment is required along the rear property line for all Lots that are located on the residential/agricultural edge.

Alley Areas

- An edge treatment along the rear yard property line along alley's is to be a minimum of 4 feet and a maximum of 6 feet to create more closure for the alley. All fences along alleyways are to be combined with shrubs and vines that cover a minimum of 50% of the wall/fence facade at maturity.
- Gates and monuments may be used along alleys provided they are a maximum of 6 feet in height.

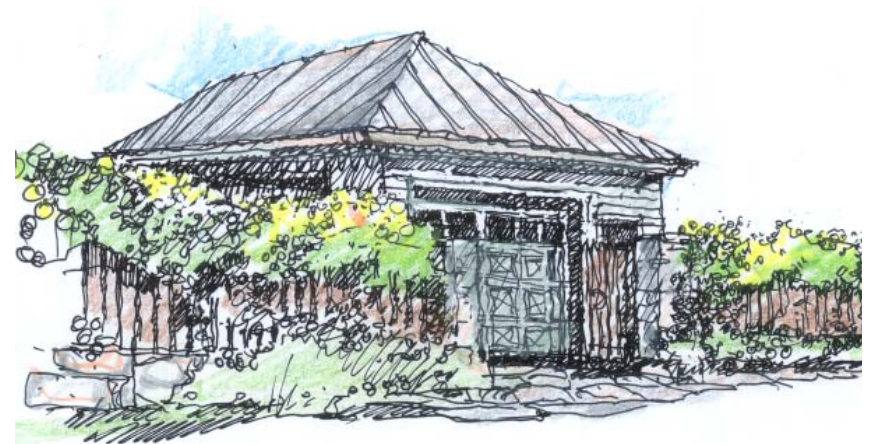


Figure 5-55: Alley Area Fence

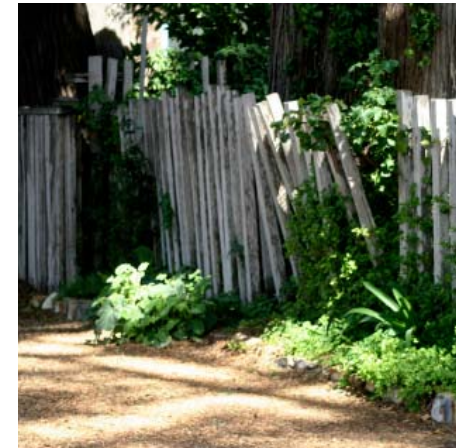


Figure 5-56: Appropriate Foothill Zone Fence Treatments



Figure 5-57: Appropriate Valley Zone Fence Treatments

5.5.9 EXTERIOR PAVING: PATHS, TERRACES, COURTYARDS AND DRIVEWAYS

Objectives:

- *Design outdoor terraces, rooms and spaces that are natural extensions of the indoor.*
- *Utilize materials that complement the architecture of the Building.*
- *Utilize pervious materials to maximize stormwater infiltration.*
- *Preserve the natural features of the Lot.*

Paths, outdoor terraces and courtyards are to be combined with plant materials, fencing, walls and architectural devices such as balconies, verandas, trellises, and/or arcades to create a series of outdoor garden rooms. Flagstone, pavers or brick (impervious materials) may be used in areas immediate to buildings. Moving away from the house there is to be a gradual transition to pervious or softer surfaces such as compacted earth or open celled pavers.

- Impervious surface areas are to be limited and pervious materials utilized instead (such as compacted earth, compacted crushed stone or open-celled pavers). Pervious paving solutions include:
 - *Crushed rock/pea gravel*
 - *Compacted earth (paths only)*
 - *Mulch*

Any of the above materials may be edged in brick, stone or steel.

- Paved areas are to minimize the number of different types of paving materials in order to produce an understated, unified design.
- Vines, shrubs and ground covers are to be planted on and adjacent to outdoor stairways, paths, building projections and terraces to reinforce the dominance of the landscape and its integration with the architecture.
- The selection of materials from local sources (within 500 miles of the site) and the use of salvaged materials are encouraged.

Driveways

Driveways, garage aprons and garage doors are to be designed to minimize their visibility from the street and the principal rooms, porches or terraces of adjoining houses. Driveways are to be subordinate to overall neighborhood landscape. In the Foothill Zone driveways are to blend into the landscape through careful siting, design, use of architectural devices and plant materials.

- Maximum width: 12 feet.
- Maximum apron width (where driveway meets adjoining road): 14 feet.

Paving Materials

Approved pervious paving materials include:

- *Open-celled pavers*
- *Native stone (sand set)*
- *Mulch*
- *Pervious concrete or asphalt*
- *Compacted earth*

Approved impervious paving materials include:

- *Asphalt (driveways only)*
- *Unit/pre-cast pavers*
- *Brick*
- *Integral colored concrete, banded with stone and/or seeded*
- *Native stone (mortared)*



[Impervious Paving Details]

[Patio and Path Details]

[Brick Details]

[Driveway Solutions]

Figure 5-58: Paving Design



Figure 5-59: Exterior Lighting Solutions

5.5.10 EXTERIOR LIGHTING

Objectives:

- *Maintain the dark night-time sky.*
- *Restrict light spill to those areas directly adjacent to buildings.*
- *Maintain the rural character*

Permanent exterior lighting is permitted only in conformance with the following standards:

- Lighting luminaires, sconces and path lights shall be designed and finished using traditional rural precedents.
- Pole-mounted luminaires, sconces and path lights for residential uses shall be substantially consistent with the Model Lighting Ordinance (prepared jointly by the IES and ISA dated June 22, 2010) Second Public Review Draft LZ0 Zone for land use designations OL-N, OL-R, AG-WS and AG-P (the areas that will be subject to conservation easements) and LZ1 for all other land use designations.
- On alleys, the use of lantern designs at garages is required in order to provide subtle alley illumination.
- Uplighting is not permitted. “Full cut off” lighting luminaires that do not allow for uplighting are to be specified. All direct light is to shine a minimum of 20 degrees below the horizontal plane.
- Low-intensity light sources shall be used with translucent or frosted glass lenses. Lamps with a maximum of a 25-watt bulb or gas lights that complement the community lighting system are allowed for site lighting and shall be shielded with simple shade devices. Lower intensity bulbs shall be used in architectural fixtures such as step lights.
- Lighting that uses timing mechanisms to shut off lights automatically is encouraged in parking and/or service areas. Motion detectors may be used, where appropriate. Infrared sensors are preferable to ultrasonic types.
- After installation of exterior lighting, all lighting shall be tested by an independent lighting professional acceptable to County staff to ensure that there is no light spill in unintended areas.
- High efficiency exterior lighting such as light-emitting diode (LED) lighting, fluorescent, or other high efficient equivalents are recommended. Use automatic photocell, motion or timer controls on exterior lights.
- The use of incandescent lighting shall be avoided because of its inefficient energy use. Low voltage lamps and/or compact fluorescent lamps (CFLs), which are four times more efficient and last ten times longer than incandescents, are good alternatives. If incandescent bulbs are used they shall be installed with dimming controls.
- Alternative power technologies for lighting, such as solar photovoltaics or fuel cells are encouraged.
- All residential parcels (including all ancillary buildings) shall be substantially consistent with the Model Lighting Ordinance June 22, 2010, Second Public Review Draft LZ0 zone for land use designations OL-N, OL-R, AG-WS and AG-P (the areas that will be subject to conservation easements) and LZ1 for all other land use designations.



5.5.11 UTILITIES AND SERVICE AREAS

- Trash disposal, outdoor work areas, utility meters and connections, transformers, air conditioning units, pool/spa equipment and similar above-ground devices are to be completely screened from off-site views by the use of architectural devices and/or plant materials. Where feasible, these areas are to be integrated into the building's architecture. Noise emission from such devices is to be contained.
- Owners are responsible for providing utility service lines to their homes and service areas.
- In order to minimize site disturbance, all utility lines are to be located underground, and when feasible, under or along driveways. Utility alignments are to minimize grading, clearing and tree removal.
- Service, trash and storage areas are to be made inaccessible to animals. Trash storage areas are to be easily accessible to service personnel and contain odors. Trash storage areas are to be sized to accommodate a minimum of three full-sized garbage containers (garbage, recycle and compost waste bins).

- Comply with Solano County and Solano Garbage Company guidelines for bin placement.
- Utility boxes, including meters, are to be attached to or incorporated into the building's architecture and screened from off-site views. All exposed metal related to utilities (meters, outlet covers, etc.) is to be painted to match adjacent natural and/or building materials.

5.5.12 LANDSCAPE INSTALLATION REQUIREMENTS

In order to ensure that a complete environment is established, all landscape and irrigation improvements are to be fully installed and operational prior to issuance of a certificate of occupancy (CO).

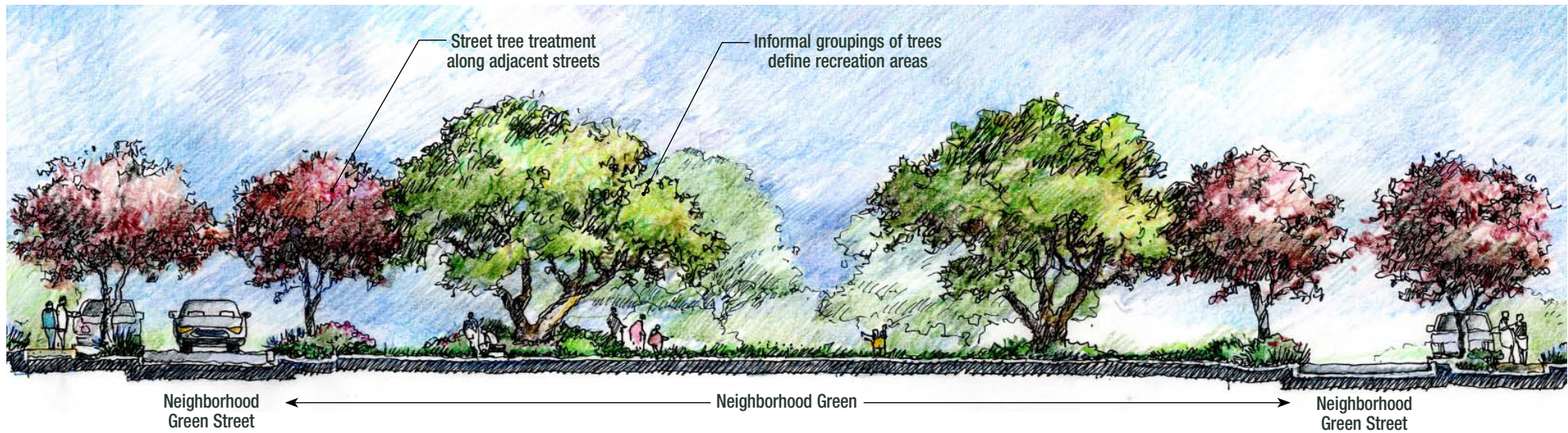


Figure 5-60: The Neighborhood Green - The Central Gathering Place for Neighborhoods

5.6 OPEN LANDS PATTERNS

5.6.1 INTRODUCTION

The Open Lands network is the primary organizing element of the community that knits together the Plan. This section focuses on describing the general requirements for the five primary Open Lands - Recreation (OL-R) to be distributed effectively throughout the community:

- Neighborhood Green,
- Playground /Pocket Park,
- Ramble,
- Sports Fields and
- Community Gardens

The Open Lands requirements described in this section translate the goals and policies of the Specific Plan to provide a multi-layered open space system of civic spaces that creates vibrant and healthy neighborhood environments.

5.6.2 PURPOSE

This section establishes the Standards and requirements for incorporating the Open Land - Recreation types throughout each neighborhood area. These requirements address the design, general size and character, locations and integration of these areas as applicable and as consistent with the Land Use and Regulating Plans to ensure that these open spaces areas are distributed appropriately throughout the neighborhoods.

5.6.3 ALLOWABLE TYPES AND REQUIREMENTS

The section describes five general Open Lands - Recreation types as summarized in Table 5-4 – Open Lands and Requirements Types and describes how these Open Lands - Recreation types are integrated with the agricultural and natural Open Lands types.

5.6.4 DESIGN OBJECTIVES

- Provide a similar ratio of Open Lands areas in each neighborhood area as described in this Section, and as shown on the Land Use and Green Fabric of this Specific Plan.
- Provide one prominent Open Lands area within each of the four neighborhood component areas, as described in this section and as described in Section 3.3 – Open Lands – The Green Fabric.
- Connect and compliment the overall Green Fabric as identified in Section 3.3 and 3.4 of this Specific Plan.
- Be in scale and compatible with adjacent neighborhood uses, streetscape environments, and drainage concepts.
- Preserve or replace on-site trees that are removed due to development as a means of providing carbon storage. See Section 5.7.5 - Streetscape Standards and Section 5.5 - Landscape Standards for specific details.

5.6.5 OVERVIEW OF OPEN LANDS

The following Section describes the main Open Lands types and related concepts that are to occur in each of the four neighborhood component areas of the Plan



Figure 5-61: The Main Green at Elkhorn

Open Lands	General Description	Transect Zones	Size/Area	Parking
Neighborhood Green	The Neighborhood Green is intended to be a community gathering space available for unstructured recreation as well as organized community events. The Neighborhood Green provides a central civic space. This area is available for special events, neighborhood purposes and commercial activities (such as markets, fairs). It is spatially defined by street trees and one-way streets.	T4, T5, T6	Min: 10,000 sf	Street parking
Playground/Pocket Park	An open space designed and equipped for the recreation of children. A playground shall be fenced according to local codes and may include an open shelter and comfort station. Playgrounds are interspersed within residential areas. Playgrounds may be included within Neighborhood Greens. Pocket Parks are available for unstructured recreation throughout the community. These small parks consist of an open area and trees that provide passive recreation areas.	T5, T6	Min: 1 acre Max: 7 acres	Street Parking
Ramble	These are the neighborhood trails/paths that provide the cut throughs in residential areas and community amenities. Rambles are naturally landscaped with a pervious path within an ample landscape buffer. They often open up to pocket parks creating gathering and passive recreation spaces.	T3, T4, T5, T6	Min: 5,000 sf Max: 10,000 sf	Street parking
Sports Fields	Playfields are designed for structured recreation and organized sports. They are to be sized and designed to current athletic standards.	T4, T5	Min: 1 acre	Minimum 6 spaces per acre of Sports Field. May be accomplished with adjacent street and/or shared parking with neighboring uses.
Community Gardens	Areas gardened and maintained by members of the community intended to engage members of the community in social interaction, improve quality of life, connect the community to the agriculture legacy and provide food for the community. Gardens may contain vegetables, herbs or flowers. Community Gardens may be included within Neighborhood Greens or Pocket Parks.	T3, T4, T5, T6	N/A	Street parking

Table 5-4 - Open Lands Recreation - Types and Requirements

Landscape Character	Hardscape	Frontage	Buildings and Improvements	Programming and Uses
Passive/Active space » Assembly and event space, may utilize paved areas and seating » Formal street tree plantings on edges of greens. Informal tree plantings within Green define passive and active zones. » Pervious paths and trails » Manicured turf areas » Water features » Gardens » Passive recreation spaces	» Simple paving patterns encouraged	» Fronts at least 2 streets with formal street tree treatment and street parking » Depending on the context each frontage may respond differently to it's setting	» Comfort Station » Paths » Picnic shelters » Event equipment (kiosks, bandstands, etc.) » Pedestrian amenities (benches, tables, etc.) » Low fences and/or walls to define passive recreational and/or community spaces » Utility infrastructure » Passive recreational improvements such as shuffleboard and bocce ball courts.	» Event and assembly space » Interpretive and educational activities » Passive recreation » Playgrounds » Community Gardens
Active space » Playgrounds will be maintained according to specific use with either turf area, woodchips or pavement. Impervious pavement is to be limited	» Materials shall respond to their context. Paved areas for access. » Playground areas may utilize pervious concrete or asphalt » Simple paving patterns encouraged » Impervious surfaces are to be minimized.	» Fronts at least 1 street unless directly related to a recreational facility. » A vegetated buffer around play structures is required	» Pedestrian amenities (benches, tables, etc.) » Playground equipment » Fencing » Turf area » Utility infrastructure	» Playground amenities (basketball court, tether ball, handball) » Playgrounds and play structures.
Passive space » Informal grouping of trees and passive gathering spaces	» Paved areas for access.	» Fronts at least 1 street	» Pervious paths » Pedestrian amenities (benches, tables, etc.) » Utility infrastructure	» Walking, hiking » Path connections and gathering spaces
Active space » Playfields will be maintained according to specific use with either turf area, woodchips or pavement. Impervious pavement is to be limited » Open areas are characterized by meadows and groupings of trees	» Paved areas for access are permitted. » Simple paving patterns permitted » Impervious surfaces are to be minimized.	» Fronts at least 1 street unless directly related to a recreational facility. » A vegetated buffer around sports fields is required	» Pedestrian amenities (benches, tables, etc.) » Athletic courts and fields » Fencing » Turf area » Utility infrastructure » Kiosks or concessions buildings » Comfort Stations	» Sports amenities (basketball court, baseball field, tennis court, etc.) » Playgrounds
Passive space » Garden landscape	» Paved areas for access.	» Fronts at least 1 street unless incorporated into a Neighborhood Green. » Frontage along a neighborhood street shall include an approved fence/hedgerow combination	» Low fences, hedgerows and/or walls » Pedestrian amenities (benches, tables, etc.) » Utility infrastructure	» Kitchen Gardens » Flower Gardens » Passive recreation

Green Valley Road Corridor

This area is the front door to the Middle Green Valley community where the agricultural fields, including orchards, vineyards and/or row crops, dominate the landscape and provide a scenic view to the agricultural lands, the Green Valley Creek Corridor and the foothills beyond. No Open Lands - Recreation uses occur in this component.

The Open Lands concept of this area is centered around the Green Valley Farm Stand and/or Grange Hall which acts as the main civic space oriented to support the connection to the surrounding productive agricultural lands. This element is envisioned as a farm stand with an associated community meeting function, events space for community gathering events, situated among working fields and related agricultural operations. Refer to Chapter 4 for implementation requirements.

The agricultural fields dominate both sides of Green Valley Road with an associated hedgerow and/or fence treatment along the western side of Green Valley Road, which creates an edge and buffer to the agricultural lands beyond. The Green Valley Creek, a preserved and enhanced drainage corridor, provides the buffer and foreground natural landscape to the western neighborhoods of the Plan Area.

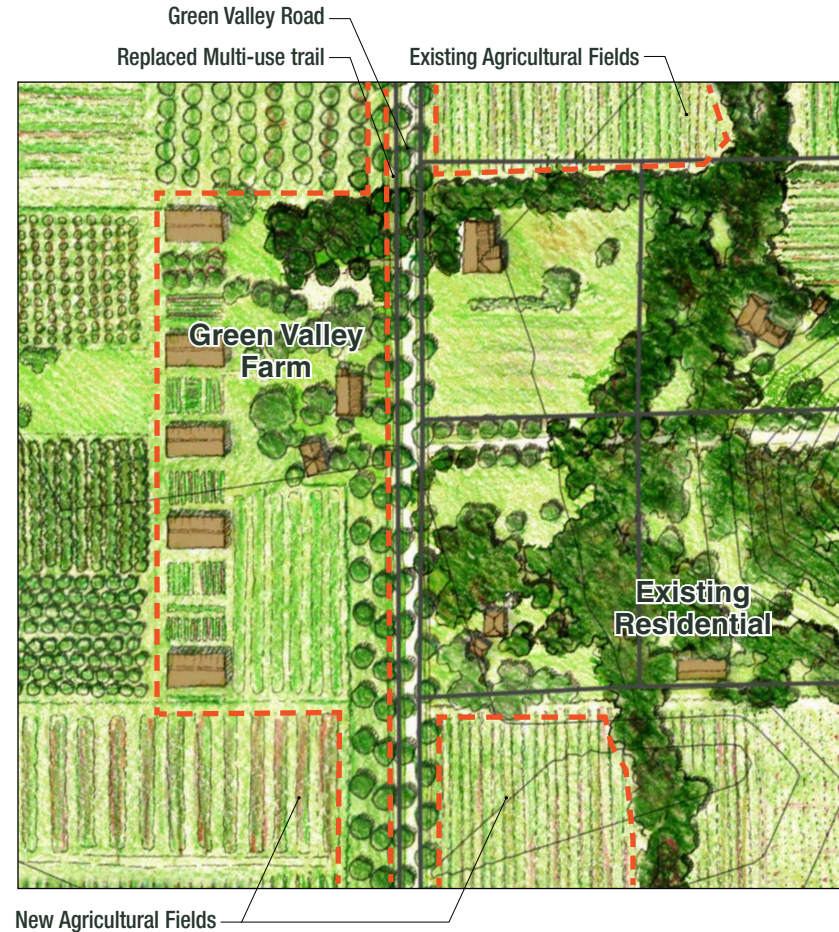


Figure 5-62: Green Valley Road Corridor

Elkhorn Neighborhood

The Elkhorn Neighborhood is located at the core of the community where it provides the main social, cultural and gathering space for the community. This neighborhood is to contain a minimum of 5 acres of Open Lands Recreation areas, as described below:

The main Open Land - Recreation elements of this area are:

- **The Main Neighborhood Green** – This area is envisioned as providing a variety of community uses, such as community garden space, event space, and passive recreational space of approximately 1 - 1.5 acres.
- **Trailhead** – A trailhead with parking is located to the south of the Main Green for overflow event parking and trail access.
- **Rambles** – Rambles are located within Elkhorn to provide alternate access routes through the community. These areas may be complimented with smaller pocket park areas and/or playground improvements if compatible with adjacent uses.
- **Pocket Parks and Playgrounds** – As noted above, small parks and/or playground facilities may be located adjacent to Ramble areas and/or provided in areas where they are easily accessible to residents. A minimum of 2 Pocket Parks and 1 Playground are to occur within this Neighborhood, (either separately or together).
- **Community Gardens** – Several opportunities for community garden areas may occur within this neighborhood. Community gardens may occur near, adjacent to, or within Neighborhood Green areas, or within Open Lands Recreation areas.

The agricultural/passive Open Lands that occur in this area are:

- **Meadows** – These areas are to remain natural and are the organizing elements for homesites and related improvements in the foothill neighborhoods. Homesites are to be arranged around the edges of meadow openings, (minimum size 0.25 acres).

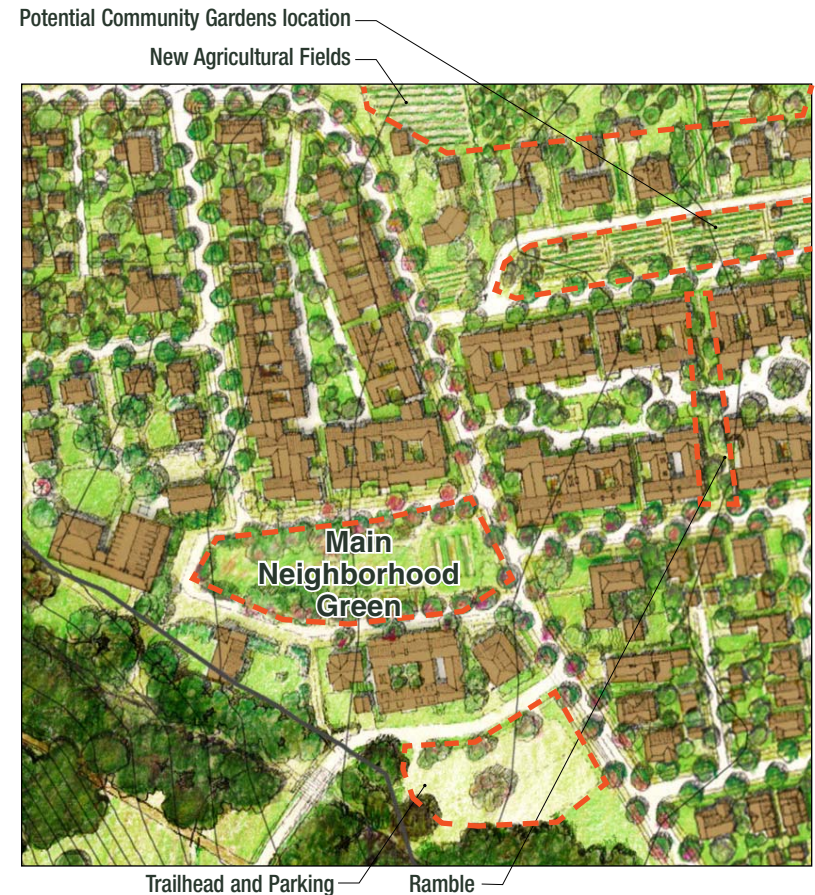


Figure 5-63: Elkhorn Neighborhood

- **Agricultural Fields** – Surrounding Elkhorn are active agricultural fields. A hedgerow/fence treatment is required along all rear lot lines and roads that abut fields to provide an adequate buffer and transition to working agriculture.

Nightingale Neighborhood

This area is envisioned to have a variety of Open Land areas that provide a varied and balanced range of recreational activities. This neighborhood is to contain a minimum of 10 acres of Open Lands Recreation areas.

The main Open Lands - Recreation elements of this area are:

- **Sports Fields** – This area shall be the main sports fields area for the community. A minimum of 5 acres is required, which includes a baseball/soccer field on the valley floor and a more informal field west of the Hennessy Creek corridor in the lower Nightingale foothills. See Chapter 4 for implementation requirements.
- **Rambles** – Rambles are located within Nightingale to provide alternate access routes through the community. These areas may be complimented with smaller pocket park areas and/or playground improvements if compatible with adjacent uses.
- **Pocket Parks and Playgrounds** – As noted above, small parks and/or playground facilities may be located adjacent to Ramble areas and/or provided in areas where they are easily accessible to residents. A minimum of 1 Pocket Park and 1 Playground are to occur within this Neighborhood, (either separately or together). Playgrounds may also occur within the Sports Field areas.
- **Community Gardens** – Several opportunities for community garden areas may occur within this neighborhood. Community gardens may occur near, adjacent to, or within Neighborhood Green areas, or within active Open Lands areas.

The agricultural Open Lands that occur in this area are:

- **Agricultural Fields** – Integrated throughout and around Nightingale are active agricultural fields. A hedgerow/fence treatment is required along all rear Lot lines, trails and roads that abut fields to provide an adequate buffer and transition to working agriculture.



Figure 5-64: Nightingale Neighborhood

Three Creeks Neighborhood

This neighborhood is anchored by the existing winery and smaller neighborhood Green. This neighborhood is to contain a minimum of 2.5 acres of Open Lands Recreation areas.

The main Open Lands - Recreation elements of this area are:

- **The Neighborhood Green** provides the central civic space. This area is envisioned as providing a variety of community uses, such as event space, trailhead staging, passive recreational space and/or a playground facility. This area is to be a minimum of 0.75 acres.
- **Pocket Parks and Playgrounds** – As noted above, a playground/pocket park may be located within the smaller Green or provided in an area where it is easily accessible to residents. A minimum of 1 Pocket Park and/or 1 Playground is to occur within this Neighborhood.
- **Community Gardens** – A main community garden space is envisioned within this neighborhood in the southerly area. This space may be used for Open Lands - Recreation types such as pocket parks, playground and and/or passive recreational space.
- **Meadows** –These areas are to remain natural and are the organizing elements for homesites and related improvements in the foothill neighborhoods. Homesites are to be arranged around the edges of meadow openings, (minimum size 0.25 acres).

The agricultural Open Lands that occur in this area are:

- **Agricultural Fields** – Surrounding Three Creeks are active agricultural fields. A hedgerow/fence treatment is required along all rear lot lines that abut fields to provide an adequate buffer and transition to working agriculture.



Figure 5-65: Three Creeks Neighborhood

First and foremost, a great street should help make community: should facilitate people acting and interacting to achieve in concert what they might not achieve alone. Accordingly, streets that are accessible to all, easy to find and easy to get to...the best streets will be those where it is possible to see other people and to meet them; all kinds of people. Participation in the life of a street involves the ability of people who occupy buildings (including houses and stores) to add something to the street, individually or collectively, to be part of it. Responsibility, including maintenance, comes with participation.

- Allan Jacobs, Great Streets

5.7 STREET AND CIRCULATION STANDARDS

The street and circulation Standards in this section translate the Specific Plan policies (refer to Section 3.4, The Gray Fabric) and related General Plan goals policies into more specific Standards that are designed to fit the particular neighborhood environment, function and location. These Standards are to be used to establish a Gray Fabric that creates a variable block and street pattern reminiscent of traditional town settlement patterns.

5.7.1 GRAY FABRIC CONCEPTS

The specific dimensions and details in these streets and trails are based on establishing a rural aesthetic to create a series of walkable, compact and interconnected neighborhoods. To implement the Goals and Policies of the Specific Plan and the General Plan, these Standards emphasize minimizing paved surfaces, improving stormwater management, encouraging slower vehicle speeds and enhancing pedestrian safety, access and mobility. These street standards represent the main conceptual direction of each improvement. Detailed design for all thoroughfares shall be finalized in consultation with relevant county staff and agencies.

There are two roundabouts, seven street types and five general trail types within the Specific Plan area. The three “primary” road improvements (the roundabouts, rural collector, and local road are designed to provide principle travel (pedestrian, bicycle and automobile) routes and movement to, through and from the Plan Area. The remainder of the street and trail types, or “secondary” circulation improvements, are designed to provide neighborhood scaled, pedestrian oriented environments that secondarily provide access and parking for building uses. Utilities shall be located underground in all cases.

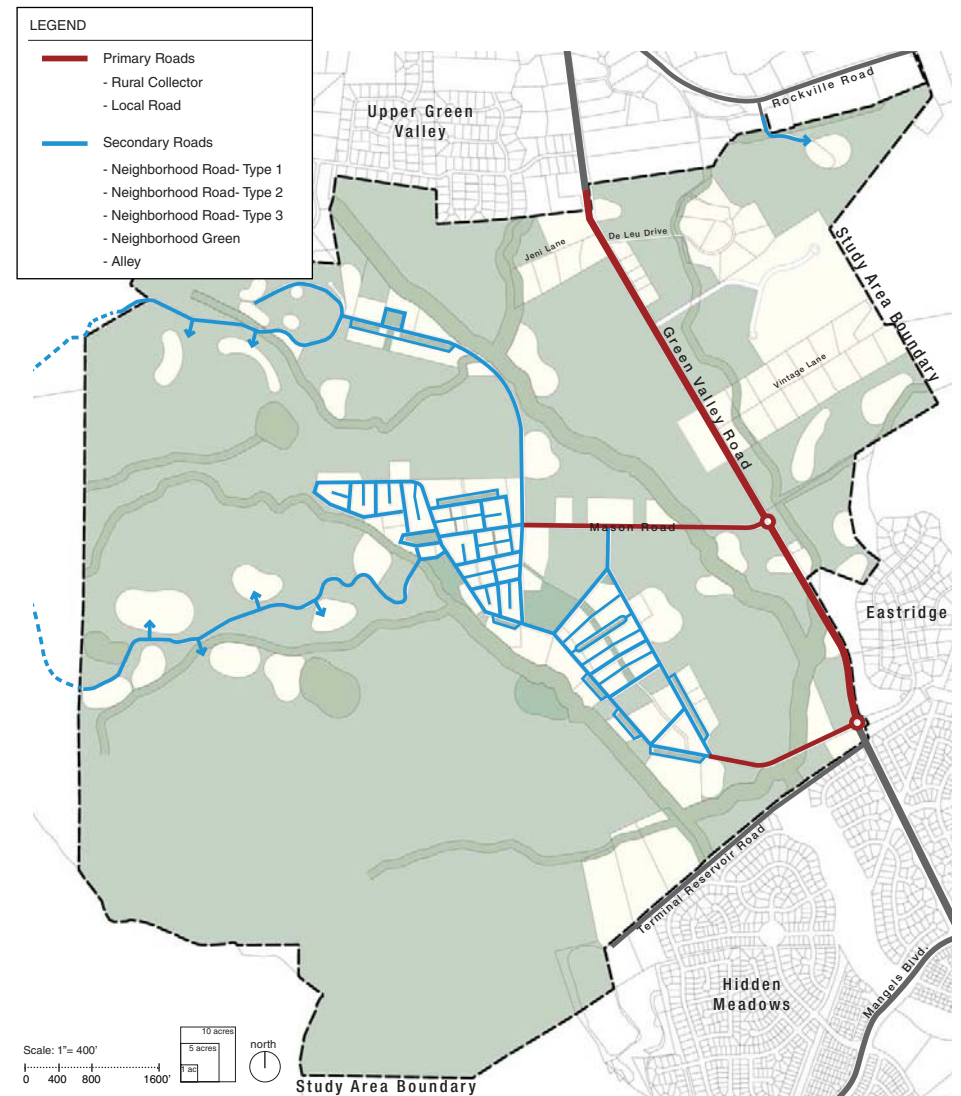


Figure 5-66: Primary and Secondary Thoroughfares

5.7.2 BLOCK AND STREET PATTERN

The Specific Plan incorporates a modified, informal grid system that offers a high level of connectivity appropriate to this rural setting while providing safe and efficient access to areas within and outside the Plan Area.

In general, blocks should be designed to promote walkability, livability and the achievement of a traditional neighborhood feel. Patterns are to be a more irregular, modified grid system that infuses serendipity into the pattern to echo the way small towns grew over time. Streets located and/or emergency access improvements in foothill areas are to be designed to respond to the topography while utilizing historical fire road and/or maintenance road alignments to minimize grading impacts.

Block Requirements:

Block Length: Maximum: 300 linear feet.

Blocks of various designs and functions are allowed as long as compliance with the Regulating Plan, the Green Fabric and access concepts and policies are demonstrated.

Lot Width: Lots shall comply with minimum widths as set out in Building Types, Section 5.4.1.

Street/Trail Rights of Way: All blocks and throughways shall be designed per the allowable street and trail types, as identified in the Regulating Plan and Gray Fabric diagram (Figure 3-23).



Figure 5-67: Block Pattern - Detail of Elkhorn Neighborhood

5.7.3 ROUNDABOUT AND STREET STANDARDS

The following section provides the traffic circle and street standards for all streets and throughways within the Plan Area:

Roundabout – Roundabouts provide an appropriately scaled traffic management tool that will be used along Green Valley Road in two locations, (one at Mason Road, and one at the new southerly intersection at Eastridge) to smooth out traffic flow and provide traffic calming. The roundabout will have a 16 foot travel lane with an approximate inside radius of 40 to 50 feet (to be determined in consultation with County staff). A street tree pattern will be used around the perimeter of the circle. These trees shall be positioned to ensure that they do not obstruct the travel way or potentially obstruct large equipment while still creating an enhanced streetscape. The central island will have low, native flowering shrubs with informal tree plantings to reinforce the rural setting and provide seasonal color.

Roundabout Specifications	
Maximum Design Speed:	25-35 mph
ROW Width:	100-120 ft (for circle)
Travel Lanes:	2
Parking Bays:	NA
Travel Lane Width:	16 ft
Parking Bay Width:	NA
Shoulder Planting Width:	8 ft min
Trail Type/Width:	8 ft
Curb Type:	Landscape shoulder and/or mountable curb in specific areas
Tree and Shrub Species:	See Tables 5-15 and 5-20
Street Lighting:	See Section 5.7.6

Table 5-5 - Roundabout Specifications



Figure 5-68: Roundabout at Mason and Green Valley Roads



Figure 5-69: Roundabout at Green Valley Road and Eastridge Road

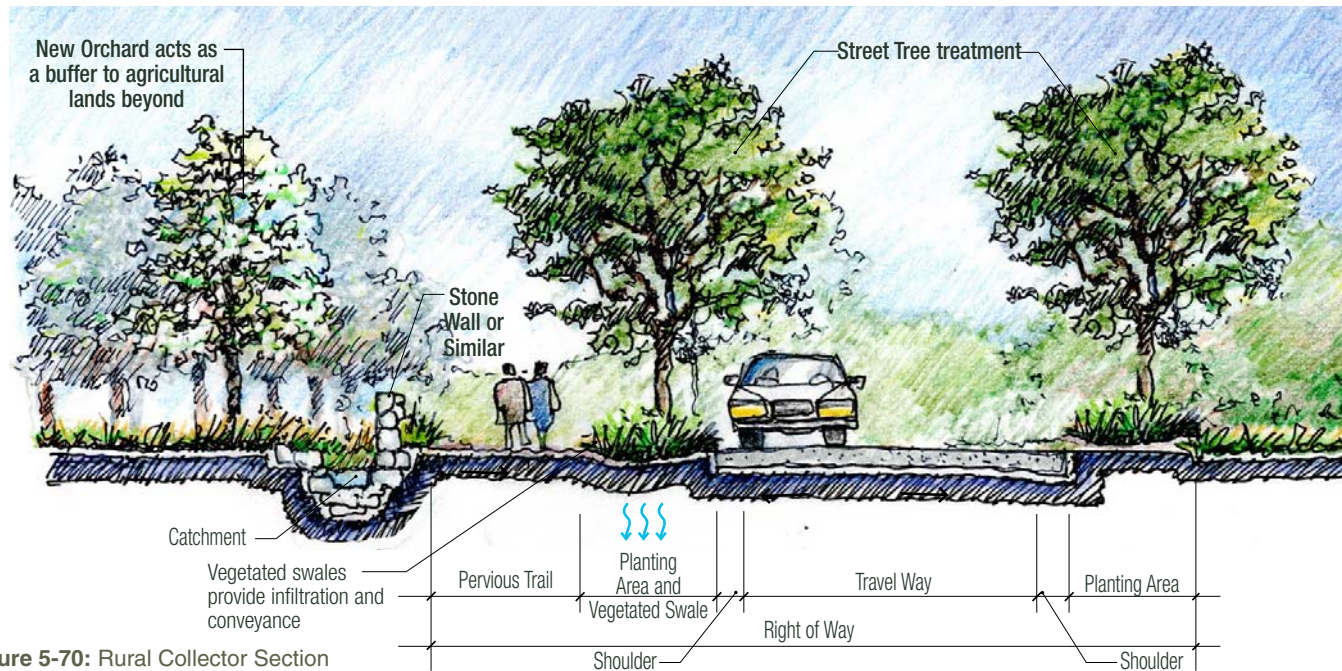


Figure 5-70: Rural Collector Section

Green Valley Road (Rural Collector)

This is a moderately paced 2-lane country road with a multi-use trail on one side. This section occurs along Green Valley Road. A large canopy orchard tree, such as a Black Walnut or similar will be planted in a street tree pattern along the road. A low fence and/or stone wall with an integral hedgerow provides an edge to the agricultural lands beyond. Drainage is handled in vegetated swales along the road.

Green Valley Road Specifications			
Maximum Design Speed:	35-45 mph	Parking Bay Width:	NA
ROW Width:	60-80 ft	Planting Width:	6 ft min
Travel Lanes:	2	Trail Type/Width:	8 ft
Parking Bays:	NA	Curb Type:	Landscape shoulder
Travel Way Width:	22 - 24 ft	Tree and Shrub Species:	See Tables 5-15 and 5-20
Travel Lane Width:	11 - 12 ft	Street Lighting:	See Section 5.7.6.

Table 5-6: Green Valley Road Specifications

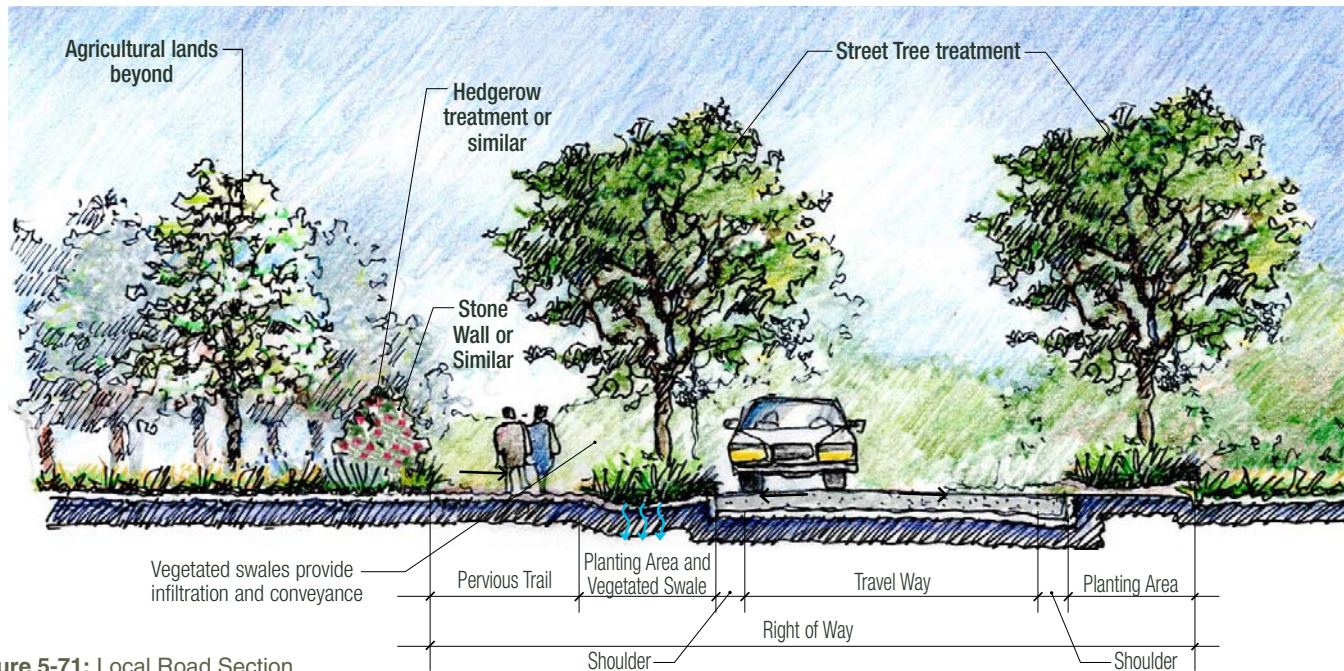


Figure 5-71: Local Road Section

Local Road

This is a moderately paced 2-lane country road with a and multi-use trail on one side. This section occurs at the easterly section of Mason and at the new rural connector at the southerly boundary. A large canopy orchard tree, such as a Black Walnut or similar will be planted in a regular street tree pattern along the road. A low fence, stone wall and/or an integral hedgerow provides an edge to the agricultural lands beyond. Drainage is handled in vegetated swales along the road.

Local Road Specifications			
Maximum Design Speed:	25-35 mph	Parking Bay Width:	NA
ROW Width:	50-70 ft	Planting Width:	6 ft min
Travel Lanes:	2	Trail Type/Width:	8 ft
Parking Bays:	NA	Curb Type:	Landscape shoulder
Travel Way Width:	22 ft	Tree and Shrub Species:	See Tables 5-15 and 5-20
Travel Lane Width:	11 ft	Street Lighting:	See Section 5.7.6.

Table 5-7: Local Road Specifications



Figure 5-72: Neighborhood Road - Type 1 Section

Neighborhood Road - Type 1

This road occurs within neighborhoods. It is a slow, 2-lane road with parallel parking on both sides. Pedestrian pathways are located on one or both sides. Landscaped areas alternate with parallel parking pockets to collect and filter stormwater. Medium sized flowering canopy trees are planted in a regular street tree pattern to provide texture and scale.

Neighborhood Road - Type 1 Specifications	
Maximum Design Speed:	15-25 mph
ROW Width:	50-60 ft
Travel Lane(s):	2
Parking Bay(s):	2
Travel Way Width:	20 ft
Travel Lane Width:	10 ft

Parking Bay Width:	8-10 ft
Shoulder and Planting Width:	8 ft min
Trail Type/Width:	5 ft pervious path (one or both sides)
Curb Type:	Low curb
Tree and Shrub Species:	See Tables 5-16 and 5-20
Street Lighting:	See Section 5.7.6

Table 5-8: Neighborhood Road - Type 1 Specifications

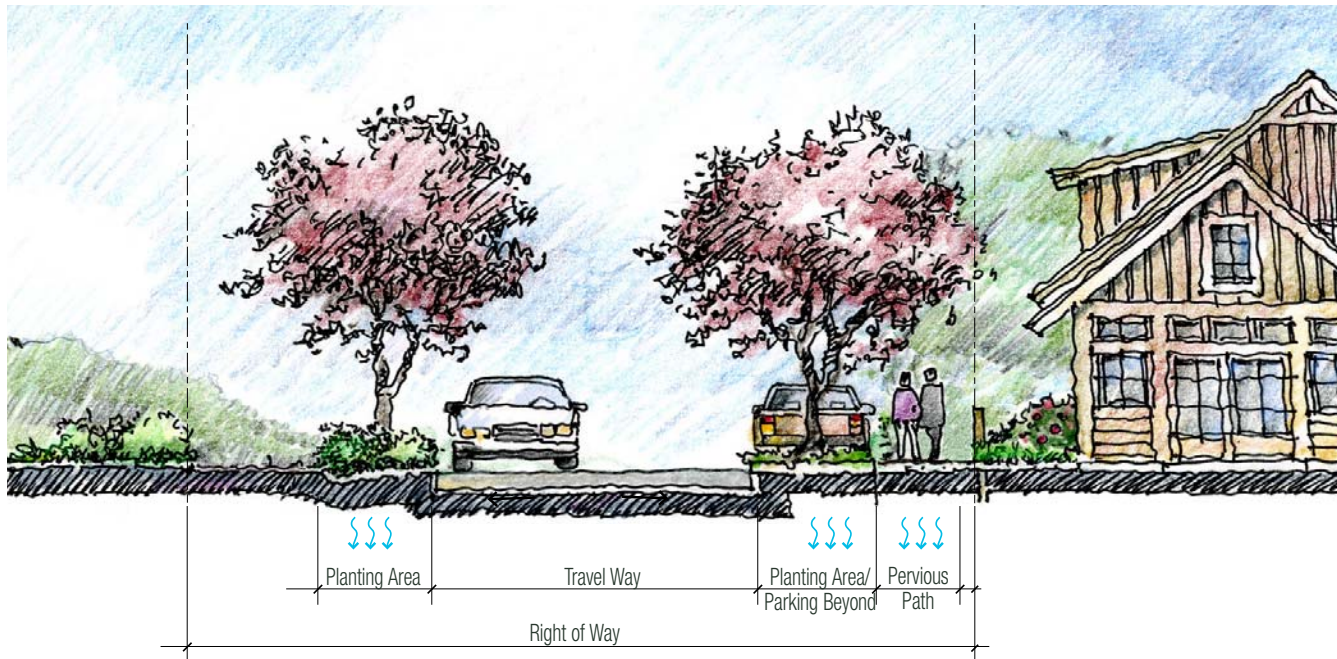


Figure 5-73: Neighborhood Road - Type 2 Section

Neighborhood Road - Type 2

This road occurs in neighborhoods along the transitions between neighborhoods and adjoining Open Lands. This road is a slow, 2-lane road with parallel parking on one side. Pedestrian pathways are located on one side. Landscaped areas alternate with parallel parking pockets to collect and filter stormwater. Medium sized flowering canopy trees are planted in a regular street tree pattern to provide a strong edge to the Open Lands beyond.

Neighborhood Road - Type 2 Specifications			
Maximum Design Speed:	15-25 mph	Parking Bay Width:	8-10 ft
ROW Width:	50-60 ft	Shoulder and Planting Width:	8 ft min
Travel Lanes:	2	Trail Type/Width:	5 ft pervious path on one side
Parking Bay:	1	Curb Type:	Low curb/landscape shoulder
Travel Way Width:	20 ft	Tree and Shrub Species:	See Tables 5-17 and 5-21
Travel Lane Width:	10 ft	Street Lighting:	See Section 5.7.6

Table 5-9: Neighborhood Road - Type 2 Specifications

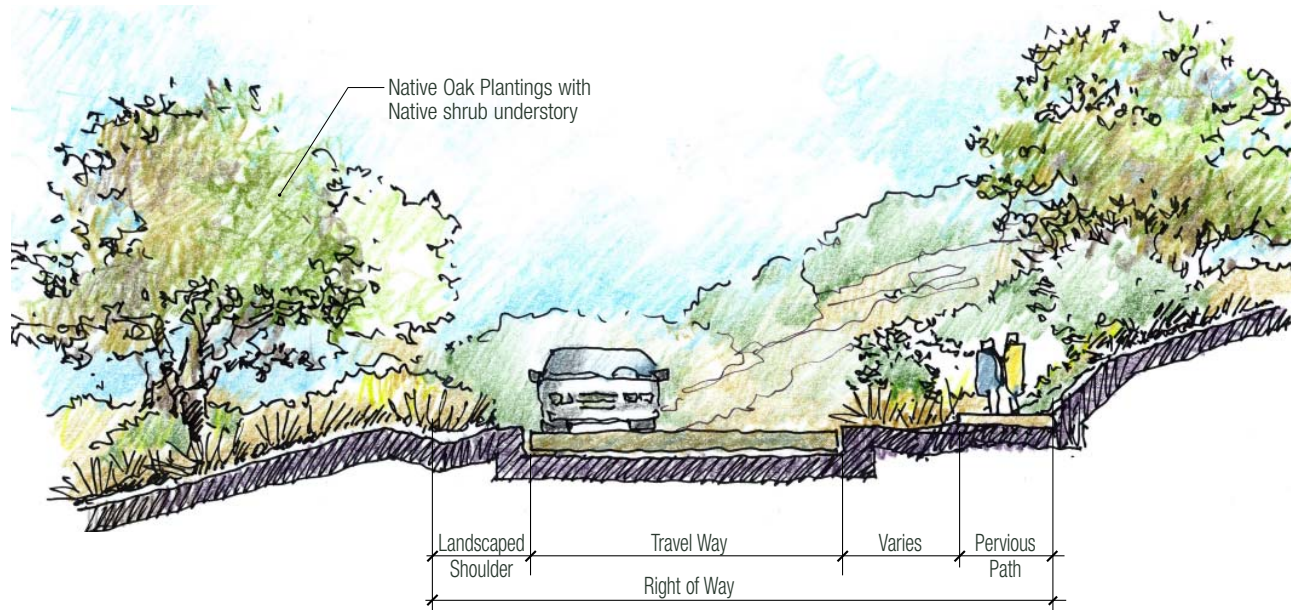


Figure 5-74: Neighborhood Road - Type 3 Section

Neighborhood Road - Type 3

This road occurs in the lower foothill areas. This road is a slow, 2-lane road with no street parking. A meandering pedestrian pathway is located on one side. A more naturalistic planting pattern of native oaks and shrubs will provide a transition to the native oak woodland landscape.

Neighborhood Road - Type 3 Specifications		Neighborhood Road - Type 3 Specifications	
Maximum Design Speed:	15-25 mph	Parking Bay Width:	NA
ROW Width:	50-60 ft	Shoulder and Planting Width:	8 ft min
Travel Lane(s):	2	Trail Type/Width:	5 ft pervious trail
Parking Bay(s):	NA	Curb Type:	Landscape shoulder
Travel Way Width:	20 ft	Tree and Shrub Species:	See Tables 5-18 and 5-22
Travel Lane Width:	10 ft	Street Lighting:	See Section 5.7.6

Table 5-10: Neighborhood Road - Type 3 Specifications

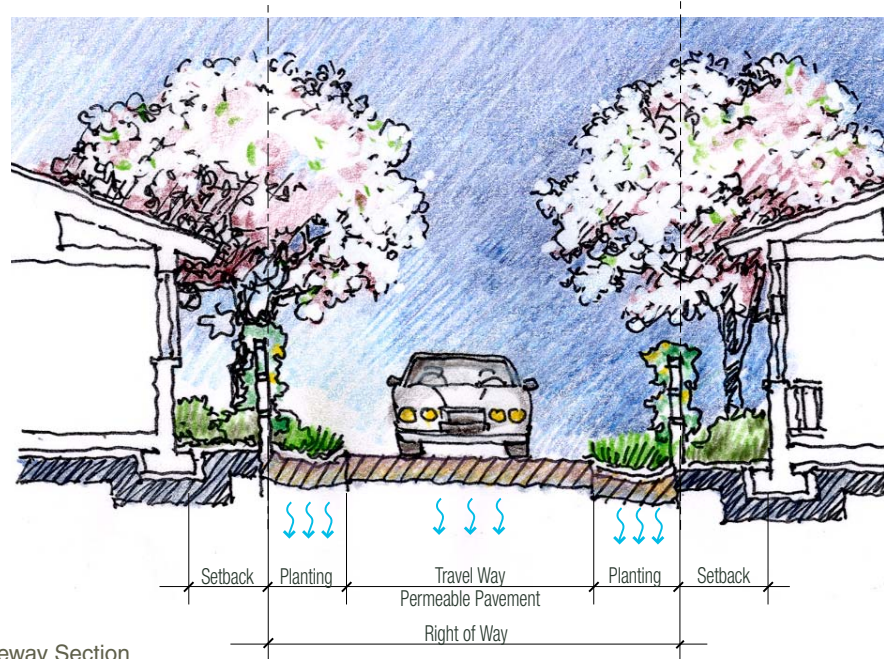


Figure 5-75: Alley/Driveway Section

Alley/Driveway

These lanes provide rear service access along a shared lane. Drainage will be collected in planted, pervious shoulders. Fencing and small scale canopy trees, such as Snowdrift Crabapple, occur within Lot areas to create a contained outdoor room. Refer to applicable Building Type in Section 5.4 for required fencing and tree planting.

Alley/Driveway Specifications	
Maximum Design Speed:	15 mph
ROW Width:	24 ft
Travel Lane:	1
Parking Bay:	NA
Travel Way Width:	14 ft permeable pavement
Travel Lane Width:	14-16 ft

Parking Bay Width:	NA
Shoulder and Planting Width:	5 ft min
Trail Type/Width:	NA
Curb Type:	Landscape shoulder
Tree and Shrub Species:	See Appendix D
Street Lighting:	See Section 5.7.6

Table 5-11: Alley/Driveway Specifications

Neighborhood Green

These one-way roads encircle the community Greens. These roads are slow, one-lane roads with parking on one side. Pedestrian pathways are located on one side, while more meandering paths are located within Green areas. Street planting areas alternate with parallel parking pockets to collect and filter stormwater. Medium sized flowering canopy trees, such as Ornamental Pear or Purple Leaf Plum will be planted in a regular street tree pattern along the road and edges of the Greens to contrast with the more informal native tree groupings (California Sycamore, Coast Live Oak) located within Green areas.

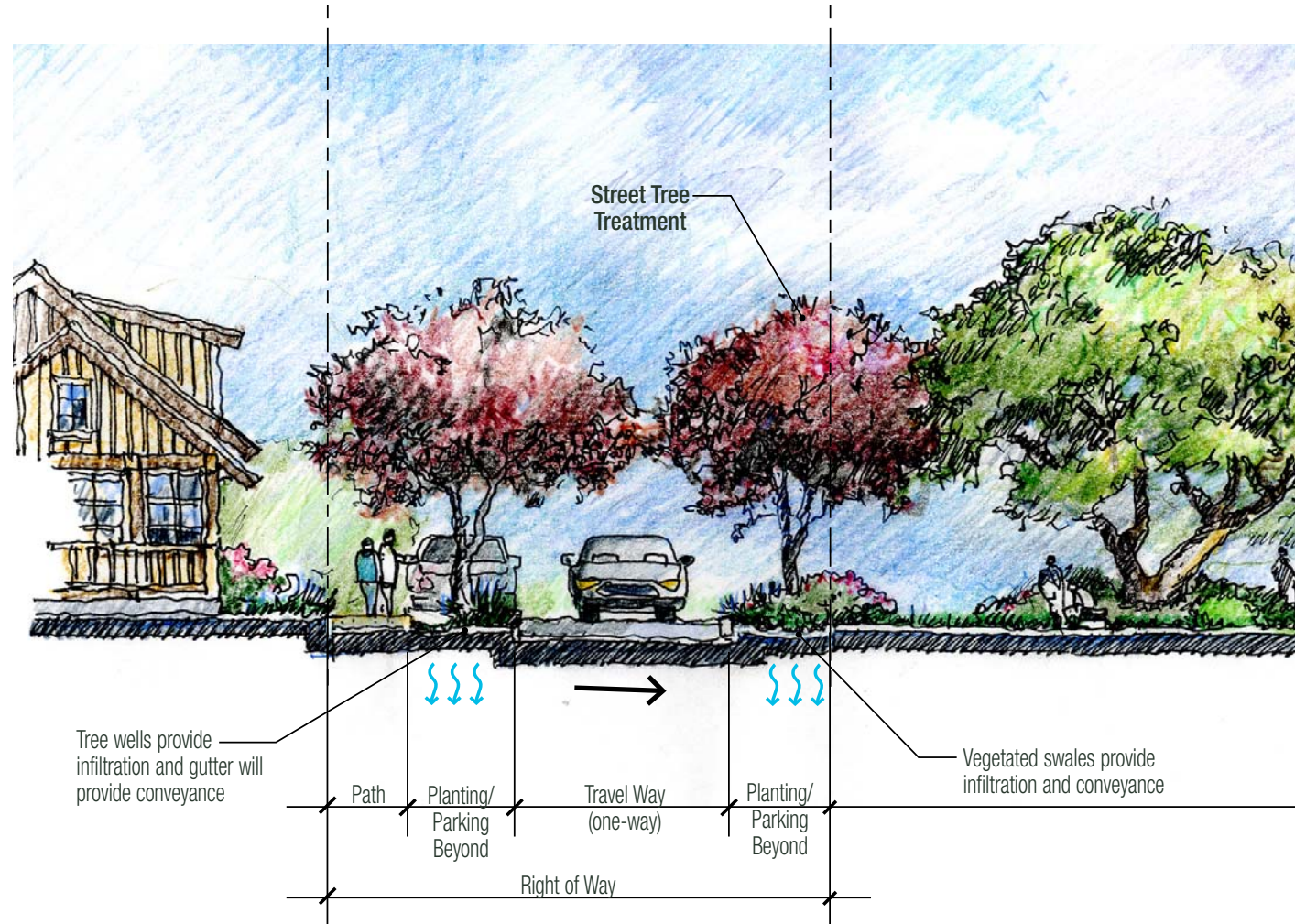
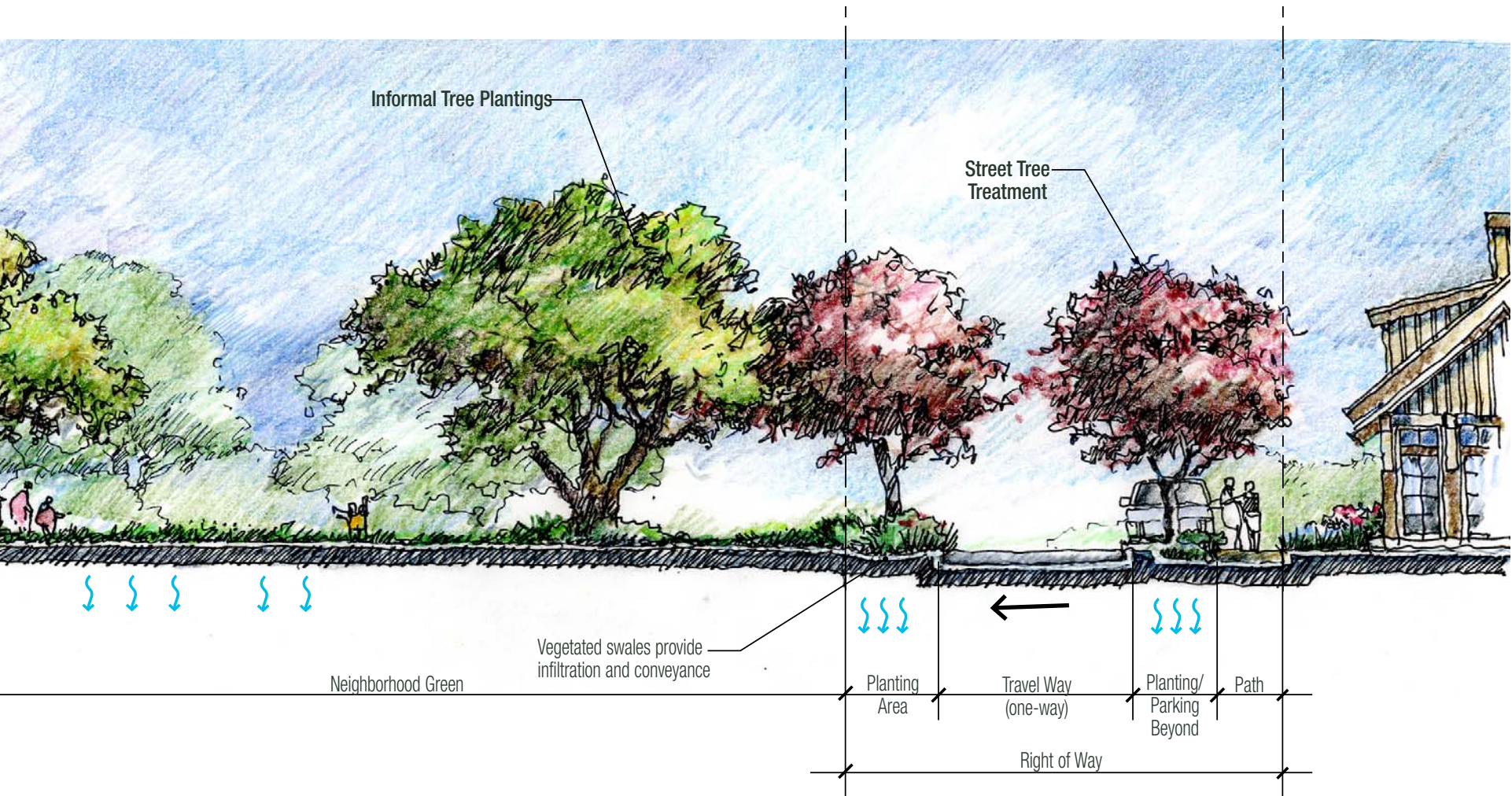


Figure 5-76: Neighborhood Green Section

Neighborhood Green Lane Specifications			
Maximum Design Speed:	15-25 mph	Parking Bay:	1
ROW Width:	35 ft	Travel Way Width:	14 ft
Travel Lane:	1	Travel Lane Width:	14 ft

Table 5-12: Neighborhood Green Lane Specifications



Parking Bay Width:	8-10 ft
Shoulder Planting Width:	8 ft min
Trail Type/Width:	5 ft

Curb Type:	Low curb/landscape shoulder
Tree and Shrub Species:	See Table 5-19
Street Lighting:	See Section 5.7.6

5.7.4 TRAIL NETWORK – HIKING, BIKING AND PEDESTRIAN CONNECTIVITY

A network of trails, paths, and trailheads are to knit the community together and provide links to regional open space and adjacent residential areas. A hierarchy of trail types provides a multi-layered system that offers many alternative routes to move around the community on foot or by bike. Trail design principles center on creating safe, high quality walking environments while utilizing softer and more rustic paving (such as stabilized crushed rock), and wall and fence treatments, to reinforce the rural design aesthetic.

The following section provides the trail and trailhead Standards within the Plan Area. Refer to applicable street types (Section 5.7.3) for trail types, which occur along roads.

LEGEND

- - - Primary Trail System
- - - Ramble
- - - Potential Trail Connections
- - - Existing Trails
- ★ Trailhead

Figure 5-77: Trail Network

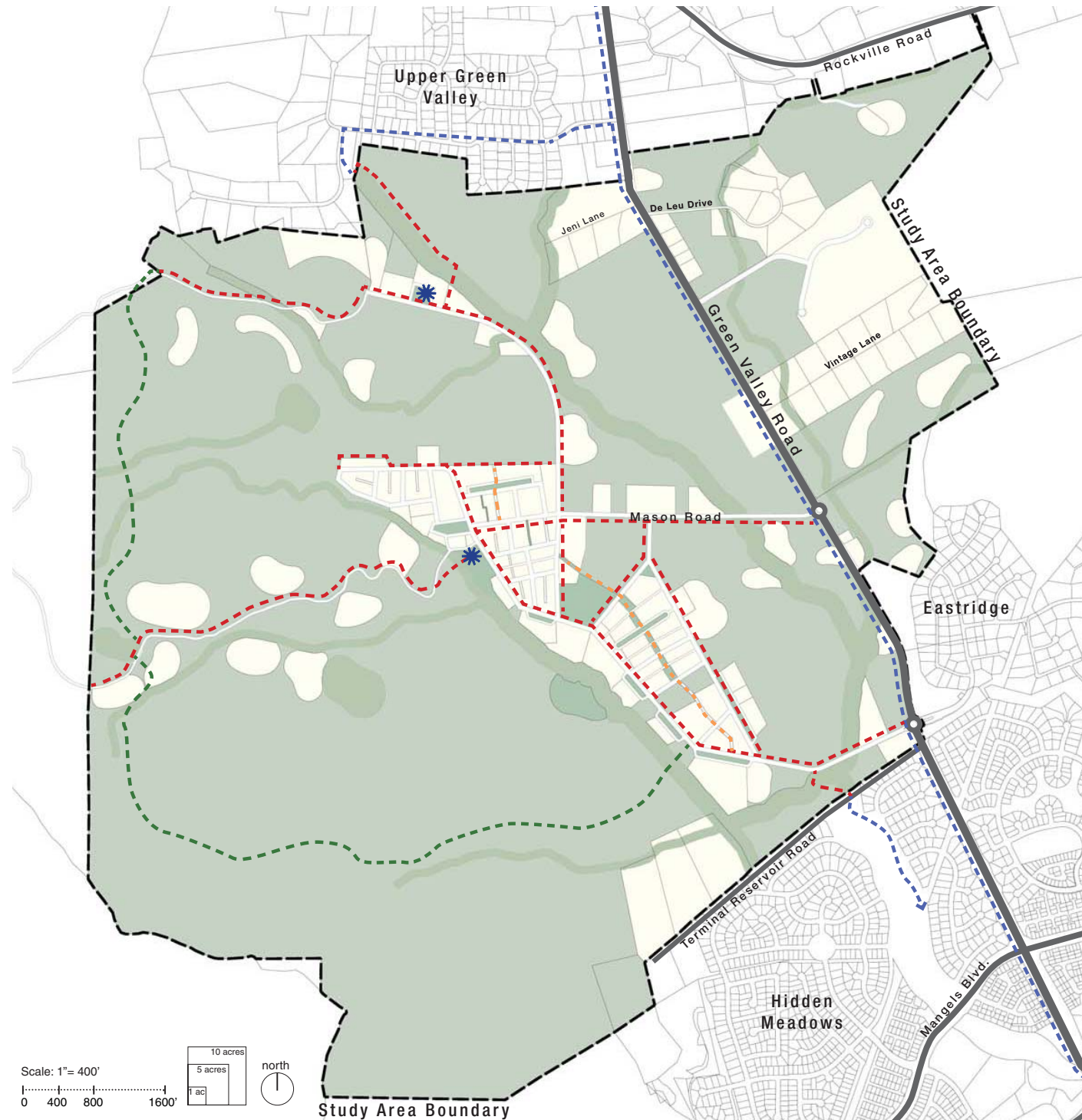




Figure 5-78: Foothill Trail Section

Foothill Trail

These paths vary from 4-5 feet and may occur within the hillside, agriculture and open space areas. Appropriate fencing that draws from the rural ranching aesthetic may be used to separate hikers from grazing operations and activities. Trails identified as “potential trail connections” are subject to permit and use restrictions as agreed to by the landowner and applicable state, federal and local permits. See appropriate fencing types in Section 5.5 - Landscape Standards.

Foothill Trail Specifications

Trail Type/Width:	4-5 ft pervious trail
-------------------	-----------------------

Table 5-13: Foothill Trail Specifications

TRANSPORTATION AND CIRCULATION - DEVELOPMENT REVIEW IMPLEMENTATION

TC.I-25: Require projects to facilitate bicycle and walking access when feasible. Adopt development standards and design guidelines that support such access.

- Solano General Plan – Transportation and Circulation Chapter



Figure 5-79: Ramble Section

Ramble

These paths vary from 6- 8 feet and are the meandering short-cuts through the neighborhoods and surrounding agricultural lands that provide opportunities to connect to the agricultural environment.

Ramble Specifications	
ROW Width:	30-50 ft
Shoulder Planting Width:	Varies
Trail Type/Width:	6-8 ft pervious trail
Tree and Shrub Species:	See Appendix D
Landscape Lighting:	See Section 5.7.6

Table 5-14: Ramble Specifications

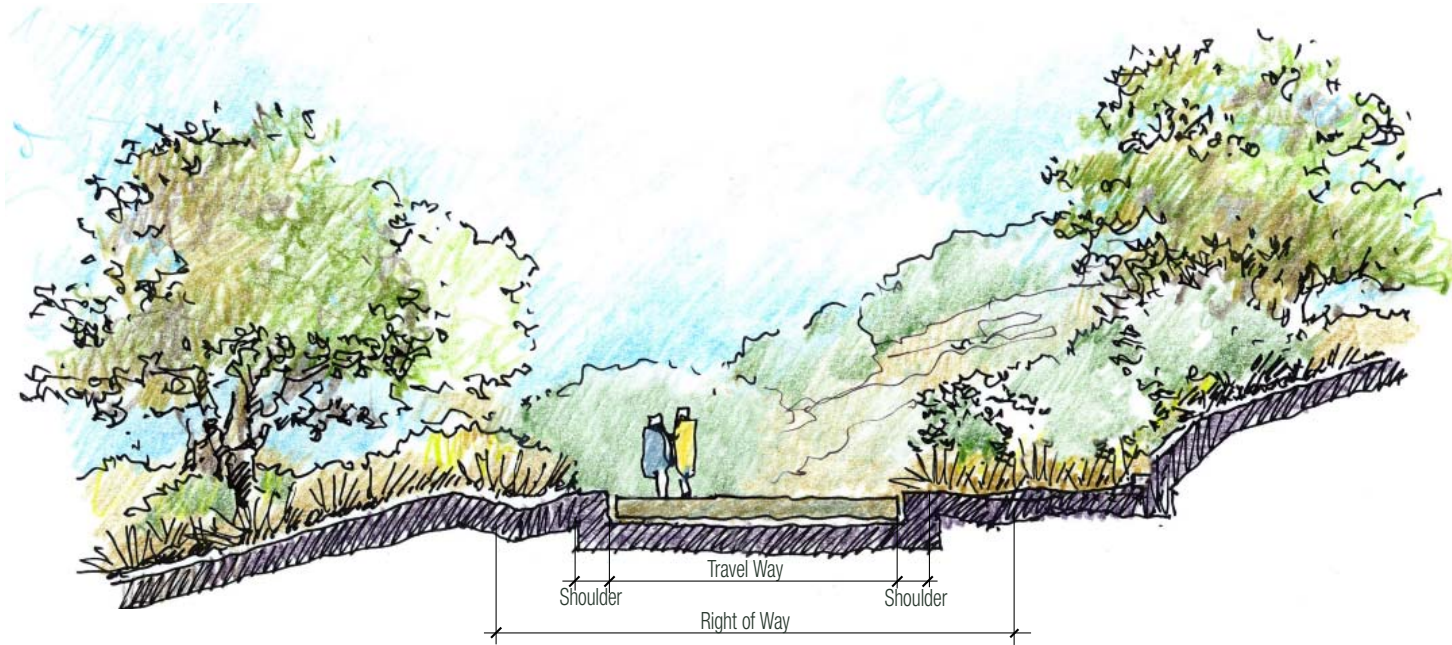


Figure 5-80: Emergency Access/Fire Road Section

Emergency Access

These roads will have a 16 foot pervious travel way to provide emergency access for the western neighborhood areas of Elkhorn and Three Creeks. These roads will also be used to compliment the trail network. Appropriate fencing that draws from the rural ranching aesthetic may be used to separate these roads from grazing operations and related activities. Refer to Section 5.5 - Landscape Standards for appropriate fence types.

Secondary Access Specifications	
Maximum Design Speed:	15 mph
ROW Width:	30 ft
Travel Lane:	1
Parking Bay:	NA
Travel Way Width:	12 ft (20ft unobstructed)
Travel Lane Width:	12 ft

Shoulder Width:	2 ft
Trail Type/Width:	NA
Curb Type:	Landscape shoulder
Tree and Shrub Species:	See Appendix D
Street Lighting:	See Section 5.7.6

Table 5-15: Emergency Access Specifications

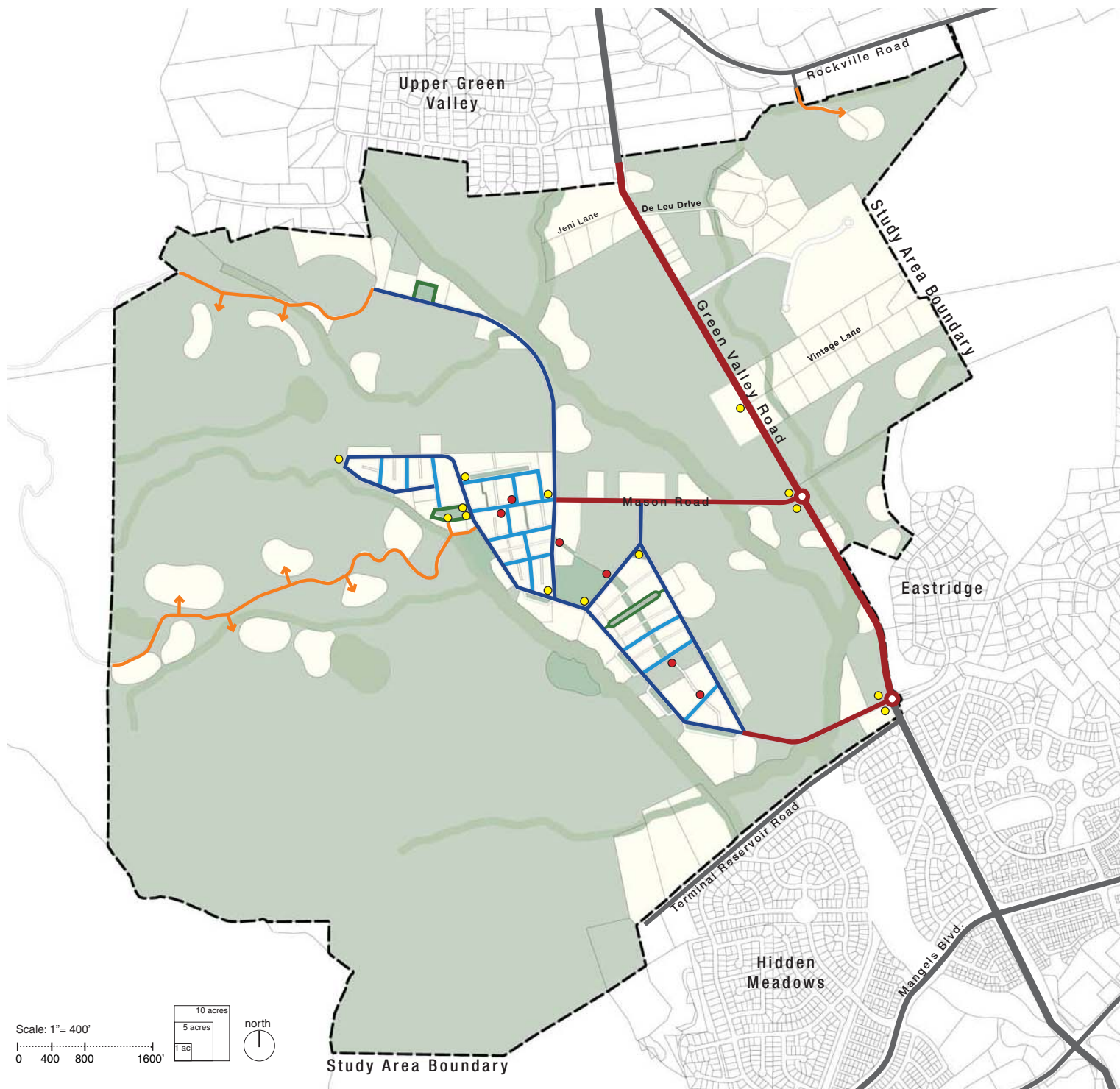
5.7.5 STREETScape STANDARDS

To support the establishment of an integral Open Lands network of connected pedestrian oriented street spaces, the following section sets out a well-defined street tree palette, associated planting concepts and street and path lighting Standards. Streetscapes are designed per the street types to respond to spatial and neighborhood location characteristics. The streetscape palette draws on historically significant and native or naturalized species to reinforce the agricultural legacy of the area and the strong geometric patterning of the farming landscape. It is envisioned that a healthy diversity of tree species is established within the Plan Area in order to reduce monotony and/or potential pest infestations that could affect large populations of trees.

There are several tree alternatives that have been designated for each street type. In this way, other tree species may be substituted as long as the form, habit and cultural characteristics are clearly similar to the tree alternatives included in this Specific Plan. In addition, a plant list of compatible ground covers, shrubs and accent trees are provided to complete the understory and ground plane treatments of the streetscape environment.



Figure 5-81: Regularly spaced street trees are used throughout Neighborhoods to reinforce the small town aesthetic



LEGEND

- Rural Collector and Local Roads
Juglans californica hindsii
Fraxinus velutina 'Fan-Tex'
Platanus x acerifolia 'Columbia'
- Neighborhood Road- Type 1
Lagerstroemia x 'Natchez'
Malus 'Snowdrift'
Olea europea 'Swan Hill'
Pistacia chinensis
Platanus x acerifolia 'Columbia'
Prunus serrulata 'Kwanzan'
Robinia x ambigua 'Purple Robe'
Ulmus parvifolia 'Dynasty'
- Neighborhood Road- Type 2
Fraxinus velutina 'Fau-Tex'
Pyrus calleryana
Prunus cerasifera 'Krauter Vesuvius'
Robinia x ambigua 'Purple Robe'
- Neighborhood Road- Type 3
Quercus agrifolia
Quercus douglasii
Quercus lobata
Quercus wislizenii
- Neighborhood Green
Platanus x acerifolia 'Columbia'
Pistacia chinensis
- Proposed Street Lighting Locations
- Proposed Path Lighting Locations

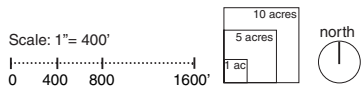


Figure 5-82: Standard for Maximum Number of Street Lights

Rural Collector and Local Road



Juglans californica hindsii:
Hinds' Black Walnut

Native to Northern California. Endangered as a native, but used as a rootstock for English Walnut and as a parent to J. hindsii x J. regia 'Paradox.' Grow in single species stands or mixed with Quercus and Populus species.

Type: Deciduous.
Growth: To 30' -60' height and width, single trunk.
Form: Rounded oval



Fraxinus velutina "Fan-Tex":
Fan-Tex Ash

Thrives in hot, dry climates and in alkaline soils. Good yellow fall color & resistance to wind burn.

Type: Deciduous
Growth: Fast, to 40' to 50' tall and 30' spread
Form: Rounded



Platanus x acerifolia 'Columbia':
London Plane Tree

Tolerant of many different soil conditions and urban conditions such as soot, dust and reflected heat; good tree for streets, avenues, parks. Variegated cream and gray bark provides visual interest in winter.

Type: Deciduous
Growth: Fast-growing to 40' to 80' height and 30'- 40' spread.
Form: Spreading vase
(Platanus racemosa, the native species, is generally recommended for wild or informal gardens)

Neighborhood Road - Type 1



Lagerstroemia x 'Natchez'
Natchez Crape Myrtle

Showy white summer flowers, attractive mottled bark, and orange-red autumn color. Drought and heat tolerant.

Type: Deciduous
Growth: Moderate to 15' tall and 12' wide
Form: Vase, rounded.



Malus 'Snowdrift':
Snowdrift Crabapple, or
Malus arnoldiana:
Arnold Crabapple

Small tree or possible hedge, with showy white flowers in spring. Arnold has fragrant flowers. Can tolerate clay, loam and sand. Moderate water needs.

Type: Deciduous
Growth: Medium growth to 25' height and width
Form: Small umbrella



Olea europea 'Swan Hill'

Non-fruiting olive, tolerant of heat and drought. Will grow in sand, loam and clay soil conditions.

Type: Evergreen
Growth: Fast, to 30' to 35' height and width
Form: Rounded or vase



Pistacia chinensis:
Chinese Pistache

Tolerates various watering regimes. Good fall color.

Type: Deciduous
Growth: Slow to moderate growth to 30' to 60' height and width.
Form: Oval



Platanus x acerifolia 'Columbia':
London Plane Tree

Tolerant of many different soil conditions and urban conditions such as soot, dust and reflected heat; good tree for streets, avenues, parks. Variegated cream and gray bark provides visual interest in winter.

Type: Deciduous
Growth: Fast-growing to 40' to 80' height and 30'- 40' spread.
Form: Spreading vase
(Platanus racemosa, the native species, is generally recommended for wild or informal gardens)



Prunus cerasifera 'Krauter Vesuvius':
Krauter Vesuvius Purple Leaf Plum

Darkest purple-leaved plum, seldom fruits. Abundant pink flowers in spring. Prefers regular summer water.

Type: Deciduous
Growth: Fast growing to 20' height by 20' width.
Form: Oval

Table 5-16: Rural Collector and Local Road Streetscape Trees

Table 5-17: Neighborhood Road - Type 1 Streetscape Trees

Neighborhood Road - Type 2



**Robinia x ambigua
'Purple Robe':**

Purple Robe Locust

Dark purple-pink flowers from mid-spring to early summer. Reddish-bronze new growth. Tolerates heat, drought and poor soils.

Type: Deciduous

Growth: Medium-fast to 40' tall and 30' wide

Form: Oval



Fraxinus velutina "Fan-Tex":

Fan-Tex Ash

Thrives in hot, dry climates and in alkaline soils. Good yellow fall color & resistance to wind burn.

Type: Deciduous

Growth: Fast, to 40' to 50' tall and 30' spread

Form: Rounded



Prunus cerasifera 'Krauter Vesuvius':

Krauter Vesuvius Purple Leaf Plum

Darkest purple-leaved plum, seldom fruits. Abundant pink flowers in spring. Prefers regular summer water.

Type: Deciduous

Growth: Fast growing to 20' height by 20' width.

Form: Oval



Ulmus parvifolia 'Athena' or 'Allee':

Chinese Elm, upright varieties

Disease-resistant, as a street tree will require some pruning for form and structure. Reddish flaking bark provides visual interest, texture.

Type: Deciduous (or semi-deciduous)

Growth: Fast, to 40' to 60' tall and up to 70' wide

Form: Vase



Pyrus calleryana:

Flowering Ornamental Pear

Can tolerate moist to dry soils, including clay, sand and loam. Produces fragrant white flowers in spring and tiny (0.25" < 0.50"), relatively insignificant fruit. Red-gold-purple fall color.

Type: Deciduous

Growth: Fast growing to 50' height, 30' width.

Form: Oval to rounded



**Robinia x ambigua
'Purple Robe':**

Purple Robe Locust

Dark purple-pink flowers from mid-spring to early summer. Reddish-bronze new growth. Tolerates heat, drought and poor soils.

Type: Deciduous

Growth: Medium-fast to 40' tall and 30' wide

Form: Oval

Table 5-18: Neighborhood Road - Type 2 Streetscape Trees

Neighborhood Road - Type 3



Quercus agrifolia:
Coast Live Oak

Native to Chaparral, Coastal Sage Scrub, Mixed-Evergreen Forest, Riparian (rivers and creeks) and Southern Oak Woodland communities in Coastal California. Will not tolerate summer water, excess water from lawns, etc., or fertilizer.

Type: Evergreen.

Growth: To 20' to 60' height, 20' to 35' width depending upon growing conditions

Form: Irregular umbrella.



Quercus lobata:
Valley Oak, Water Oak

Will send roots down deep to find water – like and need a high water table especially to establish. Majestic, irregular natural form. Historically found on grasslands of Solano County region's valley floors.

Type: Deciduous.

Growth: Fast-growing to 70' – 80' height, 30' to 50' spread.

Form: Irregular umbrella



Quercus douglasii:
Blue Oak

Low-branching, wide-spreading native to the dry foothills around Central Valley. Good fall color.

Type: Deciduous

Growth: 30' to 50' high, 40' to 70' wide

Form: Wide, irregular umbrella



Quercus wislizenii:
Interior Live Oak

Native to eastern side of Coast Ranges, interior valleys. Per Sunset, "handsome tree for parks and big lawns."

Type: Evergreen

Growth: To 30' – 75' tall and wide, often wider than tall.

Form: Irregular, wide umbrella

Table 5-19: Neighborhood Road - Type 3 Streetscape Trees

Neighborhood Green



Platanus x acerifolia
'Columbia':

London Plane Tree

Tolerant of many different soil conditions and urban conditions such as soot, dust and reflected heat; good tree for streets, avenues, parks. Variegated cream and gray bark provides visual interest in winter.

Type: Deciduous

Growth: Fast-growing to 40' to 80' height and 30' - 40' spread.

Form: Spreading vase

(Platanus racemosa, the native species, is generally recommended for wild or informal gardens)



Pistacia chinensis:
Chinese Pistache

Tolerates various watering regimes, although regular lawn watering runs risk of verticillium wilt. Good fall color.

Type: Deciduous

Growth: Slow to moderate growth to 30' to 60' height and width.

Form: Oval

Table 5-20: Neighborhood Green Streetscape Trees

Table 5-21: Rural Collector and Neighborhood Roads - Type I Shrub and Ground Cover Palette

SMALL TREES/SHRUBS

<i>Acer campestre</i>	Hedge Maple
<i>Aesculus californica</i>	California Buckeye
<i>Amelanchier alnifolia</i>	Saskatoon
<i>Arbutus unedo</i>	Strawberry Tree
<i>Arctostaphylos densiflora</i> <i>'Howard McMinn'</i>	Manzanita
<i>Arctostaphylos densiflora</i> <i>'John Dourley'</i>	Manzanita
<i>Baccharis pilularis</i>	Coyote Brush
<i>Carpenteria californica</i>	Bush Anemone
<i>Ceanothus spp.</i>	Ceanothus
<i>Cercis occidentalis</i>	Western Redbud
<i>Cistus spp.</i>	Cistus
<i>Cotoneaster spp.</i>	Cotoneaster
<i>Eleagnus angustifolia</i>	Russian Olive
<i>Heteromeles arbutifolia</i>	Toyon
<i>Philadelphus lewisii</i>	Mock Orange
<i>Prunus caroliniana</i> <i>'Compacta'</i>	Carolina Laurel Cherry
<i>Punica granatum</i> <i>'Nana'</i>	Dwarf Pomegranate
<i>Rhamnus californica</i> <i>'Eve Case'</i>	Coffeeberry
<i>Rhamnus californica</i> <i>'Mound San Bruno'</i>	Coffeeberry

<i>Ribes sanguineum</i>	Red-flowering Currant
<i>Rosmarinus 'Tuscan Blue'</i>	Rosemary
<i>Rubus ursinus</i>	California Blackberry
<i>Salvia clevelandii</i>	Cleveland Sage
<i>Salvia apiana</i>	White Sage
<i>Symphoricarpos alba</i>	Snowberry
<i>Teucrium fruticans</i>	Bush Germander
<i>Vaccinium ovatum</i>	Evergreen Huckleberry

* NOTE: Shrubs along these roads may be used in conjunction with fencing as hedgerows.

GROUND COVERS

<i>Arctostaphylos 'Emerald Carpet'</i>	Groundcover Manzanita
<i>Ceanothus 'Centennial'</i>	Groundcover Ceanothus
<i>Cotoneaster dammeri 'Lowfast'</i>	Cotoneaster
<i>Helianthemum nummularium</i>	Sunrose
<i>Iris x douglasiana</i>	Douglas Iris
<i>Rosmarinus 'Irene'</i>	Groundcover Rosemary
GRASSES	
<i>Carex barbarae</i>	White Root Sedge



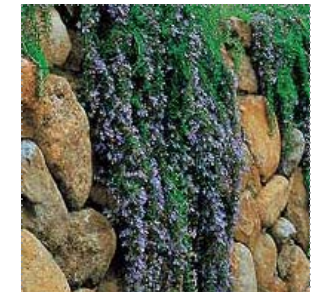
[*Aesculus californica*]



[*Baccharis pilularis*]



[*Rhamnus californica*
'Eve Case']



[*Rosmarinus 'Irene'*]

<i>Chondropetalum tectorum</i>	Small Cape Rush
<i>Elymus glaucus</i>	Blue Wildrye
<i>Festuca Mairei</i>	Atlas Fescue
<i>Festuca rubra</i>	Red Fescue
<i>Juncus patens</i>	California Gray Rush
<i>Leymus condensatus</i>	Giant Wildrye
<i>Muhlenbergia rigens</i>	Deergrass
<i>Nassella pulchra</i>	Purple Needlegrass

WILDFLOWERS (SEEDED)

<i>Achillea millefolium</i>	Achillea
<i>Eschscholzia californica</i>	California Poppy
<i>Gaillardia x grandiflora</i>	Blanketflower
<i>Lupinus nanus</i>	Lupine

SMALL TREES/SHRUBS

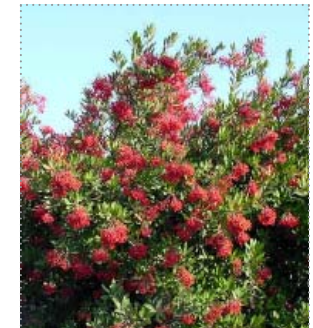
<i>Acer campestre</i>	Hedge Maple
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Table 5-22: Neighborhood Roads - Type 2 Shrub and Ground Cover Palette

<i>Amelanchier alnifolia</i>	Saskatoon
<i>Arbutus unedo</i>	Strawberry Tree
<i>Arctostaphylos densiflora</i> <i>'Howard McMinn'</i>	Manzanita
<i>Arctostaphylos densiflora</i> <i>'John Dourley'</i>	Manzanita
<i>Carpenteria californica</i>	Bush Anemone
<i>Ceanothus spp.</i>	Ceanothus
<i>Cercis occidentalis</i>	Western Redbud
<i>Cistus spp.</i>	Cistus
<i>Cotoneaster spp.</i>	Cotoneaster
<i>Heteromeles arbutifolia</i>	Toyon
<i>Osmanthus spp.</i>	Osmanthus
<i>Philadelphus lewisii</i>	Mock Orange
<i>Prunus caroliniana</i> <i>'Compacta'</i>	Carolina Laurel Cherry
<i>Punica granatum</i> <i>'Nana'</i>	Dwarf Pomegranate
<i>Rhamnus californica</i> <i>'Eve Case'</i>	Coffeeberry
<i>Rhamnus californica</i> <i>'Mound San Bruno'</i>	Coffeeberry
<i>Ribes sanguineum</i>	Red-flowering Currant
<i>Rosmarinus</i> <i>'Tuscan Blue'</i>	Rosemary
<i>Salvia clevelandii</i>	Cleveland Sage
<i>Salvia apiana</i>	White Sage
<i>Teucrium fruticans</i>	Bush Germander
<i>Vaccinium ovatum</i>	Evergreen Huckleberry
<i>Westringia fruticosa</i>	Westringia



[*Eschscholzia californica*]



[*Heteromeles arbutifolia*]



[*Westringia fruticosa*]



[*Ceanothus* 'Centennial']



[*Trachelospermum jasminoides*]



[*Juncus patens*]

GROUNDCOVERS AND PERENNIALS

<i>Arctostaphylos</i> 'Emerald Carpet'	Groundcover Manzanita
<i>Artemisia</i> spp.	Artemesia
<i>Ceanothus</i> 'Centennial'	Groundcover Ceanothus
<i>Cotoneaster dammeri</i> 'Lowfast'	Cotoneaster
<i>Erigeron karvinskianus</i>	Samta Barbara Daisy
<i>Helianthemum nummularium</i>	Sunrose
<i>Hemerocallis</i> spp.	Daylilly
<i>Iris x douglasiana</i>	Douglas Iris
<i>Lavandula</i> spp.	Lavender
<i>Nepeta</i> spp.	Catmint
<i>Pentstemon</i> spp.	Pentstemmon
<i>Rosa</i> spp.	Groundcover Roses
<i>Rosmarinus</i> 'Irene'	Groundcover Rosemary
<i>Santolina chamaecyparissus</i>	Santolina
<i>Salvia</i> spp.	Salvia
<i>Thymus vulgaris</i>	Thyme
<i>Trachelospermum jasminoides</i>	Asian Jasmine
<i>Verbena</i> spp.	Verbena

GRASSES

<i>Carex barbarae</i>	White Root Sedge
<i>Agrostis exarata</i>	Agrostis
<i>Chondropetalum tectorum</i>	Small Cape Rush
<i>Elymus glaucus</i>	Blue Wildrye
<i>Festuca mairei</i>	Atlas Fescue
<i>Festuca rubra</i>	Red Fescue
<i>Juncus patens</i>	California Gray Rush
<i>Leymus condensatus</i>	Giant Wildrye
<i>Muhlenbergia rigens</i>	Deergrass
<i>Nassella pulchra</i>	Purple Needlegrass

Table 5-23: Neighborhood Roads - Type 3 Shrub and Ground Cover Palette

SMALL TREES/SHRUBS

<i>Aesculus californica</i>	California Buckeye
<i>Arctostaphylos densiflora</i> 'Howard McMinn'	Manzanita
<i>Baccharis pilularis</i>	Coyote Brush
<i>Carpenteria californica</i>	Bush Anemone
<i>Ceanothus spp.</i>	Ceanothus
<i>Cercis occidentalis</i>	Western Redbud
<i>Corylus cornuta var. californica</i>	California Hazelnut
<i>Fremontodendron californicum</i>	Flannel Bush
<i>Garrya fremontii</i>	Fremont Silktassel
<i>Heteromeles arbutifolia</i>	Toyon
<i>Prunus caroliniana</i> 'Compacta'	Carolina Laurel Cherry
<i>Rhamnus californica</i> 'Eve Case'	Coffeeberry
<i>Rhamnus californica</i> 'Mound San Bruno'	Coffeeberry
<i>Ribes sanguineum</i>	Red-flowering Currant
<i>Rosmarinus</i> 'Tuscan Blue'	Rosemary
<i>Rubus ursinus</i>	California Blackberry
<i>Symphoricarpos alba</i>	Snowberry
<i>Vaccinium ovatum</i>	Evergreen Huckleberry

GROUNDCOVERS AND GRASSES

<i>Arctostaphylos</i> 'Emerald Carpet'	Groundcover Manzanita
<i>Carex barbarae</i>	White Root Sedge
<i>Ceanothus</i> 'Centennial'	Groundcover Ceanothus
<i>Elymus glaucus</i>	Blue Wildrye
<i>Festuca Mairei</i>	Atlas Fescue
<i>Festuca rubra</i>	
<i>Iris x douglasiana</i>	Douglas Iris
<i>Leymus condensatus</i>	Giant Wildrye
<i>Muhlenbergia rigens</i>	Deergrass
<i>Nassella pulchra</i>	Purple Needlegrass

WILDFLOWERS (SEEDED)

<i>Achillea millefolium</i>	Achillea
<i>Eschscholzia californica</i>	California Poppy
<i>Gaillardia x grandiflora</i>	Blanketflower
<i>Lupinus nanus</i>	Lupine



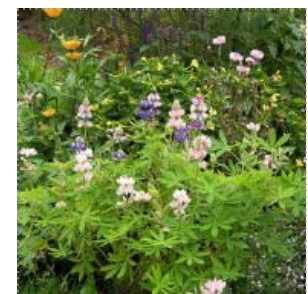
[*Carpenteria californica*]



[*Ribes sanguineum*]



[*Elymus glaucus*]



[*Lupinus nanus*]

5.7.6 STREETScape LIGHTING

The exterior lighting objective for Middle Green Valley is to preserve the rural character and the dark, nighttime sky. With that in mind, only key intersections and the proposed roundabouts will have street lighting and shall be minimized to the street lighting necessary to comply with the public safety requirements of the County. In common areas, standard pole street lighting may only be used at these key intersections and proposed roundabouts. (See Figure 5-82 for the limited street light locations and Figures 5-83 and 5-84 for fixture design concepts). The ambient lighting from houses and community buildings will be used to service the minimal lighting needs in neighborhoods. Final street light and path light locations will be finalized in consultation with County staff and shall comply with the goals of preserving the rural character of Middle Green Valley and the dark, nighttime sky by allowing only the street lighting that is required to protect public safety.

At community facilities and trails, low-level landscape lighting will be employed where nighttime events warrant a lighted trail or path of travel for safety (such as near the Sports Fields). Directional and/or facility identification signs may integrate low levels of light for visibility. All fixtures used in the landscape will be full-cut-off fixtures that will help maintain the dark nighttime sky.



Figure 5-83: Full cut-off path light concept



Figure 5-84: Full cut-off street light concept



Figure 5-85: Rural Sign Precedents

5.8 SIGNAGE

5.8.1 GUIDING PRINCIPLES

The main goal of the signage section is to provide a coordinated aesthetic direction for community and commercial signage that regulates the placement, type, size and number of signs and communicates information in a visually pleasing manner.

The objectives for sign design are:

1. All sign systems are to relate to the rural, agricultural aesthetic. Signs are to use unadorned, simple and refined forms. Details and materials should draw from historical designs and build upon the design vernacular of the rural, valley and foothill setting.
2. Signs should be in scale with adjoining roadways, trails and buildings. Signs are to be sized and designed so that a perceivable sense of scale exists between the sign and its setting. Materials and colors are to complement surrounding buildings and the landscape, while still emphasizing and maintaining a unique personality indicative of the Middle Green Valley community as applicable and/or a building's specific purpose.

3. Signs should help create and enhance a rich pedestrian and interpretive experience. Sign design should deemphasize the importance of the automobile and promote the pedestrian oriented and environmental values of the community.
4. Signs should safeguard and protect the public health, safety and general welfare of the community. Signs are to avoid creating traffic safety hazards caused by visual distractions and obstructions.

The Solano County Sign Ordinance shall apply where provisions for signage are not contained herein. If a conflict exists between these Standards and the Zoning Ordinance, the signage Standards contained herein shall apply. Project signage does not require a conditional use permit. Signage is subject to review by the Conservancy Review Committee (CRC).

5.8.2 GENERAL SIGNAGE STANDARDS AND GUIDELINES

All signs within the Plan Area shall be designed to satisfy the following Standards and Guidelines and applicable provisions of the Solano County Zoning Ordinance.

- Signs shall be maintained in good condition, always clean and free from graffiti or other disfigurements.
- Surrounding landscaping should be maintained to allow for visibility and to enhance the sign face and structure. Plantings surrounding the sign should help blend the sign with the landscape setting.
- Signage shall be reviewed and approved for compliance with the Standards described in this Section.
- Signs shall be constructed of durable, long lasting materials of high quality.
- Illumination of signs shall minimize light and glare on surrounding areas including roads, Lots, trails and Open Land areas.
- Any lighted sign shall be illuminated only by continuous and stationary light sources. If the light sources are external to the sign or are otherwise physically detached from the sign, they shall be directed at the sign so that only the sign face is illuminated.
- Lettering on signs shall be proportional to the sign and shall be in a font and style that is consistent with project signage throughout the Plan Area. All materials are to be non-reflective. This standard does not apply to street signage.
- Business signs shall not be lighted when a business is closed.
- Sign lighting shall be substantially consistent with the Model Lighting Ordinance June 22, 2010 Second Public Review Draft LZ0 zone for land use designations OL-N, OL-R, AG-WS and AG-P (the areas that will be subject to conservation easements) and LZ1 for all other land use designations.



Figure 5-86: Monument Sign Treatments

Figure 5-87: Residential Marker Alternatives

5.8.3 PROHIBITED SIGNAGE

Prohibited signs include, but are not limited to, the following:

- a. Billboards or any large signs that change regularly
- b. Inflatable signs, icons or logos
- c. Animated, flashing or moving signs
- d. Signs with exposed fluorescent lighting
- e. Exterior signs with flags or banners attached
- f. Permanent banner signs

5.8.4 MONUMENT SIGNS

Monument signs are intended to be used to mark the community destinations within the Plan Area including, but not limited to, neighborhood greens, playground/pocket parks, interpretive functions, playfields, trailheads and community/agricultural buildings.

Monument signs shall comply with the following Standards:

Sign Location

- Monument signage shall be located to identify the entrance or location of a destination within the community. Monument signage shall not be used to identify individual neighborhoods.

Sign Area and Height

- The size of the sign shall be in scale to the surrounding landscape and/or adjoining road and shall not exceed six feet (6') in width and four feet (4') in height.

Materials and Structure

- Monument signage shall be constructed of a combination of wood and/or natural appearing stone treatments.
- All finishes shall be non-reflective.
- Landscaping shall be incorporated at the base of the sign to blend the signage into the natural landscape.

Copy Design

- Lettering on the sign shall not exceed five inches (5") in height.

5.8.5 RESIDENTIAL MARKERS

Residential markers shall be consistent with the overall community sign aesthetic of Middle Green Valley, while relating to the character of individual neighborhoods. In general, residential signs shall be understated and utilize natural materials that are consistent with landscape design.

General residential markers shall comply with the following Standards:

Sign Location

- Address markers or placards may be attached to pedestrian entry piers, fences or walls. Alternatively, address markers may be mounted on a simple, freestanding wood post.
- On Compound Lots the address markers is to be located within 20 feet, but not closer than 6 feet, of the intersection of the driveway and the road.

Sign Area and Height

- Posts shall not exceed five feet (5') in height.

Materials and Structure

- Residential signage should be constructed predominately of wood, with metal and/or stone accents.
- Landscaping shall be incorporated at the base of the post to blend the marker into the landscape.

Copy Design

- Lettering on the sign shall not exceed four inches (4") in height.
- Address fonts are to be consistent or related to that found on community signs.



[Projecting/Hanging Sign]



[Awning]



[Wall Sign]



[Freestanding Sign]



[Window Sign]



[Freestanding Sign]

Figure 5-88: Sign Types

5.8.6 COMMERCIAL SIGNAGE

Commercial signs are to provide another layer of richness and texture to the streetscape. The following sign types are permitted within Neighborhood Commercial and Agricultural Tourist areas:

1. **Projecting/Hanging** - Signs that project six (6) inches or more from, and are supported by, the wall of a building or structure (excluding wall signs). Projecting/hanging signs are the preferred sign type.
 - *Projecting/hanging signs are not to extend more than five (5) feet out from a building wall.*
 - *Projecting/hanging signs are generally not to exceed twelve (12) inches in thickness. Projecting signs that exceed twelve (12) inches in thickness may be considered for approval by the CRC on a case-by-case basis.*
2. **Awning** - Signs or lettering affixed to or painted on an awning.
3. **Wall** - Signs affixed to, painted on, or erected flush with a building or structure so that the text and/or image of the sign is displayed in a plane parallel to the wall or structure. Individual, cut and/or raised lettering attached to walls are likewise considered wall signs.
 - *Wall signs are not to project more than six (6) inches from the building in any area.*
4. **Freestanding** - Signs that are supported from the ground by some structural element, such as columns, poles or braces, or by the sign itself and is not in any way connected to any part of the building.
 - *Freestanding signs are only permitted when set in an adequately-sized landscape area that does not impede or obstruct the pedestrian movement (minimum four (4) feet of pedestrian clearance).*
5. **Window Sign** - a sign that is painted on or attached to a window or a sign that is displayed inside a building so that it is easily readable from outside the building.

- *Only one window sign is permitted per window unless otherwise approved by the CRC.*

6. **Menu Box** - Any sign that is enclosed in glass to exhibit a menu. Menus posted flat against the interior of a window are also defined as a menu box.

Sign Location

- Commercial signs may be located only within the property boundaries of the business which they advertise.

Sign Area and Height

The maximum sign area is based on the lineal footage of each commercial building front. The maximum area of signs is as follows:

- The maximum square footage of sign area allotted any one building is equal to 150% of the total linear feet of the building frontage:
Total area = (linear feet of store frontage) x 1.5.

For example, a building with a storefront of 25 feet in length may have a total of 37.5 square feet of signage. (37.5 s.f. = 25ft x 1.5)

- If a building has more than one sign, the total area of all the signs must be equal to, or less than, the maximum area allowed per the maximum area formula given above.
- The maximum sign area allotted any multi-business building is equal to the total calculated in the formula above, plus 50% of that total for a separate second-story business. This additional allowance applies only when the commercial space of the accessory floors is open to the public.
- Only 66% of the surface area of double-faced signs is to be counted against the maximum square footage, provided the two faces are parallel and mounted flush with each other.



Awning sign with woodcut letters (13.5 square feet)

Hanging wood relief sign (14 total square feet, 7 each side)

Menu Box (7.5 square feet)

Sign Type	Calculation	s.f.
Awning Sign	(13.5 square feet x 0.85)	11.5
Hanging Sign	(14 square feet x 0.66 x 0.85)	8.0
Menu Box		7.5
Total sign area	11.5 + 8.0 + 7.5	27.0

Figure 5-89: Sign Calculation Example

- 100% of the surface area of the two (2) faces of a sandwich board shall be included in the maximum square footage.
- Only 85% of the surface area of a wood relief sign, or of a wall or awning sign with wood cut lettering, is to be counted against the maximum square footage.
- The square footage of lettering painted on or otherwise applied directly to a wall, window and/or awning is to be measured as the area of the perimeter formed by the words and/or phrases in whole and is to be included in the maximum allowable area.
- Any structural element supporting a sign is not to be included in the

maximum square footage.

- All signs, regardless of maximum area allowed, must be appropriately scaled to surrounding buildings, streets, and pedestrian areas.
- The following sign area maximums are to be observed, independent of the above restrictions, for the following sign types:
 - Hanging Signs - ten (10) square feet maximum on any one facade prior to any area reduction calculations.
 - Wall Signs (at the second floor) - ten (10) square feet maximum.
 - Window Signs (except lettering painted directly on the window) - three (3) square feet maximum.

The following sign heights are permitted for each sign type:

- Projecting/Hanging signs are not to extend above the eavline of one-story buildings or above the finished floor of the second story. The bottom of hanging signs are to be located a minimum of eight (8) feet above finished grade when located adjacent to, or



Figure 5-90: Painted Wall Sign reflects agricultural legacy

above, any pedestrian corridor or public right-of-way.

- Freestanding signs are not to exceed thirty-six (36) inches in height as measured from ground level.

Materials and Structure

- Commercial signs are to be constructed predominately of natural materials.
- Approved materials include carved and/or painted wood and hammered metal signs with a handcrafted appearance. Signs with highly reflective materials, plastics, neon and illuminated letters are not permitted.
- Sign colors are to complement the surrounding architecture and may utilize those colors specified as accent and/or trim colors on the approved color palette. Generally, signs should utilize one base color with one or two accent colors.

Copy Design

- Signs are to utilize designs and letter fonts that reflect the rural aesthetic and vintage produce and agricultural traditions.
- The use of “non-square”, relief, pictographic and statuary (three-dimensional) signs is encouraged.
- Signs shall blend natural textures and materials, such as wood with hammered metal, and use symbols, images and/or three-dimensional carvings to portray the nature of the business and/or service advertised.
- Contemporary interpretations of traditional sign designs that draw from historical details are encouraged.

Sign Illumination

Sign illumination is to be designed together with the exterior building and store window lighting so that all commercial lighting combines to create a warm, indirect, subdued light that encourages nighttime pedestrian



Figure 5-91: Regulatory Sign

activity while maintaining a dark nighttime sky.

- All lighting is to be shielded and directed downward, reflecting directly off the sign. Light bulbs and/or tubes should not be visible to passing vehicle and/or pedestrian traffic.
- The intensity of lighting is to be subdued so that the illumination of the sign does not exceed that necessary to make the sign visible to vehicle and/or pedestrian traffic along the nearest street or pedestrian corridor.
- Sign illumination may not cast any light directly onto the street or pedestrian corridor.
- Internally lit signs are not permitted.
- All light fixtures, conduit and shielding are to utilize simple design details and natural, handcrafted finishes. They are to be painted colors consistent with those used on the sign itself.
- Illuminated signs are not to be directed toward any residential living space.
- Low intensity light sources are to be used, preferably with translucent or frosted glass lenses. The color of light is to be “warm”, similar to that of daylight, rather than “blue” light. Sources are to be color corrected to achieve this result. The use of incandescent lighting is to be avoided because of its inefficient energy use.

5.8.7 DIRECTIONAL SIGNAGE

Directional signage assists in navigation through the community and assists in locating community features such as agricultural and community buildings, Open Land areas and natural features.

The following Standards shall apply for directional signs:

Sign Location

- Directional signs shall be located near major intersections or decision points along streets or trails.
- The signage shall not be located where it will impair the visibility for passing motorists, pedestrians, or cyclists.

Sign Area and Height

- The size of the sign should not exceed two feet (2') in width and nine feet (9') in height (including base) with a six foot minimum clearance to the bottom of the sign, or in accordance with local codes.

Materials and Structure

- Directional signage shall be constructed predominately of wood and/or masonry treatments with metal accents.
- Landscaping shall be incorporated at the base of the sign to blend the signage into the natural landscape.

Copy Design

- Lettering on the sign shall not exceed four inches (4”) in height and should reflect a relaxed character.
- Vehicular signs lettering should be scaled to be legible from automotive speeds.
- Signage should not include more than four directional location



Figure 5-92: Trail Sign Design



5.9 DESIGN REVIEW

Included in the Conservancy goals of promoting conservation, education, agricultural awareness and community building is the establishment of an effective design review process for all improvements within the Plan Area that ensures that a small town aesthetic is realized.

The following section sets out Guidelines and Standards for the establishment and organization of the Conservancy Design Review Committee (CRC) and a design review process for all built improvements within the Plan Area.

The Conservancy shall prepare a document that outlines the Middle Green Valley design review process that meets the goals, Guidelines and Standards as set out in this section and as described throughout this Specific Plan.

5.9.1 HOW THIS SECTION IS ORGANIZED

This section is organized in two parts as follows:

1. **CRC Organization** – Section 5.9.2 provides a description of the structure of the CRC, through which the design and construction review process operates. It describes the composition of the CRC, its function and jurisdiction, as well as its responsibility to uphold the Principles, Goals, Standards and Guidelines set out in this Specific Plan.

2. **Design Review Process Guidelines** – Section 5.9.3 provides a description of the design review goals, project types to be reviewed and general procedures and Guidelines that the design review process is to include. These Guidelines provide the basis for the preparation of a review process document that the Conservancy shall prepare.

5.9.2 CONSERVANCY DESIGN REVIEW COMMITTEE ORGANIZATION

The CRC will be formed to oversee the design review process as set out in Section 5.9.3 within the Middle Green Valley Specific Plan Area. The CRC is an advisory body to the County. This review process is in addition to all County, local, state and federal approvals and/or permitting that must take place, as applicable, for any Improvement within the Plan Area.

A. Membership

The CRC will consist of at least three, but not more than five, members appointed by the Conservancy Board (Board). The Board shall select individuals whose occupations or education provides technical knowledge and expertise relevant to matters within the CRC's jurisdiction. If a licensed Landscape Architect, Architect, and/or civil engineer do not sit on the CRC, one each shall be retained by the CRC as needed. As needed, the CRC shall retain a Commissioning Agent or other qualified consultant



to advise on the design, construction and maintenance of sustainable design considerations, including water, resource and energy conservation in addition to indoor air quality.

B. Appointment and Term of Members

The Board retains the right to appoint all members of the CRC who shall serve at the Board’s discretion. The Board shall retain the power to remove any CRC member and to appoint his or her successor.

C. Resignation of Members

Any member of the CRC may at any time resign upon written notice stating the effective date of the member’s resignation to the Board. The Board, with or without cause, may remove any member at any time.

D. Functions of the CRC

It will be the duty of the CRC to consider and act upon such proposals or plans from time to time submitted to it in accordance with the design review process as outlined in this Specific Plan; to amend the Neighborhood Design Code as deemed appropriate with required approvals of the Board and Solano County; and to perform any duties assigned to it by the Conservancy as set forth in this document. The CRC will meet regularly as needed to perform its duties.

E. Compensation

The Board shall determine what compensation, if any, CRC members are to receive for services performed pursuant to their duties. All members will be entitled to reimbursement for reasonable expenses incurred by them in connection with the performance of any CRC function or duty. The CRC may contract and/or assign some of the CRC’s administrative duties, but not authority, to any qualified design professional as needed.

F. Amendment of the Neighborhood Code

The CRC from time to time may find it necessary to make adjustments or amendments to the Neighborhood Design Code that are consistent with the overall Goals and Principles of the Specific Plan. Provided that the changes are consistent with the Specific Plan, the County may initiate modifications to the Neighborhood Design Code in the form of a Specific Plan amendment to be reviewed and approved by the Board. Upon approval, these changes are to be reviewed and approved by the County in accordance with Section 4.4.5 and 4.4.6 of this Specific Plan.

G. Non-Liability

Provided that CRC members act in good faith, neither the CRC nor any member will be liable to the Conservancy, any Owner or any other person for any damage, loss or prejudice suffered or claimed on account of:

1. Approving or disapproving any plans, specifications and other materials, whether or not defective.
2. Constructing or performing any work, whether or not pursuant to approved plans, specifications and other materials.
3. The development or manner of development of any land within Middle Green Valley.
4. Executing and recording a form of approval or disapproval, whether or not the facts stated therein are correct.
5. Performing any other function pursuant to the provisions of this Specific Plan.

H. Actions and Approvals

The CRC's actions on matters will be by a majority vote of the CRC. Any action required to be taken by the CRC may be taken regardless of its ability to meet as a quorum, if a majority of the CRC is able to review the matter individually and come to a majority opinion. In such cases, the CRC shall make every effort to facilitate a discussion of the matter amongst all members through teleconferencing and/or other means of communication. The CRC will keep and maintain a record of all actions taken by it. The powers of the CRC relating to design review will be in addition to all design review requirements imposed by Solano County.

I. Appeals

The CRC shall establish an appeals process whereby applicants may appeal decisions by the CRC to the Board and finally to Solano County as applicable.

5.9.3 DESIGN REVIEW PROCESS GUIDELINES

The design review process shall be developed by the Conservancy in accordance with the following Guidelines. The Conservancy shall ensure that all built improvements and resource and agricultural programs are consistent and complementary of the mission of the Conservancy and community goals.

The Conservancy shall establish a website to help expedite its goals, and shall include a section for the CRC. Once an application is submitted, the CRC shall post notice of new applications on the website with relevant application documents. The website shall allow the public to submit comments via email through the website to the CRC on any pending application and the CRC shall transmit all comments received to the County with its recommendation on the application.

A. Design Review Process Goals

The Conservancy shall use the following goals to develop a fair and effective design review process:

- *Establish a design and construction review process that emphasizes the on-going protection of significant, scenic and agricultural lands to reinforce the concepts of community stewardship.*

- *Provide educational opportunities to foster understanding and awareness of the natural environment and regional food systems and how the decisions we make regarding our built environment affect those systems.*
- *Incorporate incentives in the design review process that foster utilization of green technologies and innovative designs to reduce resource consumption.*
- *Continually improve the effectiveness and involvement of the CRC and the Board.*
- *Obtain and manage funds to carry out the design review process in a fiscally responsible manner.*

B. Project Types to be Reviewed

The design review process shall include specific review and approval procedures for the following general project types:

1. **Neighborhood Plan- Five or more Lots** - Creation of five or more Lots or units in preparation for Solano County subdivision approval, which requires submission of a tentative map and final map to the County (refer to Section 26-31 of Article III – Map Requirements of the Solano County Subdivision Ordinance).
2. **Neighborhood Plan- Four or fewer Lots** - of four or fewer Lots or units in preparation for Solano County subdivision approval by the County, which requires submission of a tentative map and parcel map to the County (refer to Section 26-32 of Article III – Map Requirements of the Solano County Subdivision Ordinance).
3. **New Construction** - Construction of any new, freestanding structure (s), whether as a residential, commercial, mixed-use or landscape structure.
4. **Alterations, additions or rehabilitation of an existing structure** - Any new construction or rehabilitation to an existing building that alters the original massing, exterior finishes, window placement, roof design and/or other significant design elements.
5. **Major site and/or landscape Improvements** - Any major Improvements, including, but not limited to grading (for any excavation and/or

fill involving more than 50 cubic yards of dirt), swimming pools, driveways, fencing, paving and/or drainage, which alter an existing landscape.

6. **Sign work** - Any installation or alteration to commercial or residential signs is subject to an abbreviated review process.
7. **Variance Requests** - Alterations to any property lines, setbacks or Building Envelopes.

C. Design Review Process Required Steps

The design review process for project types 1, 2, 3 and 4 as noted above in will include at a minimum the following three steps:

Pre-Design Conference - Prior to preparing any drawings for a proposed project, the Developer/Owner, Architect, Landscape Architect and any other key project team members are to meet with representatives of the CRC to discuss the proposed project and program.

Preliminary Design Review - The Applicant shall prepare and submit to the CRC for review and approval a preliminary design review package, which may include information concerning existing site conditions, constraints, Building Types, building orientation, vehicular and pedestrian circulation, and streetscape design as applicable and as set out in the design review process document.

Final Design Review - Within one year of preliminary design review approval, the Developer/Owner shall initiate final design review by submitting applicable application and final design documents. This review will cover more detail of all items that need to be in compliance with the sustainability and aesthetic goals of the Specific Plan.

Projects to be reviewed will require and be preceded by the submission of plans and specifications as set out in the design review process document. The Developer/Owner shall retain competent assistance

from an Architect, Landscape Architect, Arborist, Civil Engineer, and Soils Engineer (Consultants) as appropriate. The Developer/Owner and Consultant(s) shall carefully review the Specific Plan prior to commencing the design review process.

Submittals to, and approvals by, the CRC shall occur prior to County approvals. Having secured final approvals from the CRC, the Owner/Developer is required to meet all the submittal and approval requirements of for Solano County to move forward with development.

D. Design Approved Professionals

Design teams are to be comprised of the following Consultants, as applicable:

1. Licensed Architect
2. Licensed Landscape Architect
3. Licensed Civil Engineer
4. Additional professional services, as required, to provide consultation regarding energy efficient and environmentally sensitive design.

Strong project management and teamwork must be maintained to assure that sustainable design measures are integrated throughout the planning, design and construction stages of any project while adhering to the aesthetic goals at Middle Green Valley. Refer to Appendix B for the Sustainability Index.

E. Sustainable Principles Training Programs

The CRC shall provide programs and/or information that explain the required and recommended sustainable measures as set out in the Neighborhood Design Code. These measures should be continually updated and reviewed by the CRC to ensure that current methods and thresholds are being used. These programs could include training sessions, one-on-one meetings with Owners/Developers and publishing manuals on-line for owner's use to increase building performance and innovative measures for incorporation in building programs.

F. Application Fees

In order to defray the expense of reviewing plans, monitoring construction and related data, and to compensate consulting Architects, Landscape Architects and other professionals a design review fee shall be established by the CRC payable upon submittal of initial project application materials. Fees for resubmission shall be established by the CRC on a case-by-case basis. Application fees may be amended annually, as needed.

Fees should be structured to provide incentives to projects that include a high level of recommended green building and sustainable measures as set out in Appendix B – Sustainability Index.

G. Application Format

An application and information package shall be available from the CRC for each submission. Each submission must be accompanied by the required information, as specified in the design review process document. Submissions will not be reviewed without all of the required materials being submitted.

H. County Approval

The Developer/Owner shall apply for required approvals from Solano County. Any adjustments to CRC approved plans required by the County review must be resubmitted to the CRC for review and approval prior to commencing development. The CRC shall work with the County to provide opportunities to streamline permit processing for projects already approved by the CRC. The issuance of any approvals by the CRC shall not imply corresponding compliance with the legally required demands of local, state and federal agencies. The CRC's decision after County adjustment to plans previously approved by the CRC is appealable to the County, and the County's determination on appeal is not then subsequently appealable to the CRC.

I. Work in Progress Observations

During construction, the CRC shall establish a schedule to check construction to ensure compliance with approved final design documents, as applicable. These observations shall be specified in the design review process document. If changes or alterations have been found that have not been approved, the CRC shall utilize a “notice to comply” process in order to ensure that Improvements are installed per approved plans.

J. Notice of Completion

The CRC shall establish a notice of completion process that includes the following steps:

- Upon completion of construction, the Owner and/or Contractor shall submit to the CRC a Construction Observation Request Form for any Improvement(s) given final design approval by the CRC.
- The CRC shall make a final inspection of the property within a set amount of working days of notification.
- The CRC will issue in writing a Notice of Completion within a set amount of working days of observation. The Owner, however, cannot take occupancy of any Improvement(s) until a Notice of Completion is issued or an appropriate bond is filed with the CRC.
- If it is found that the work was not done in compliance with the approved final design documents, the CRC shall issue a Notice to Comply within three (3) working days of observation.



MIDDLE GREEN VALLEY
SPECIFIC PLAN
APPENDICES

Adopted July 27, 2010



MIDDLE GREEN VALLEY
SPECIFIC PLAN
APPENDICES

: SOLANO COUNTY, CALIFORNIA :

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A

APPENDIX A DEFINITIONS

Unless the context otherwise specifies or requires, the following words or phrases when capitalized in this Specific Plan shall have the following meanings. Please refer to the Solano County Zoning Ordinance for definitions not cited here.

DEFINITIONS

Agricultural Accessory Structure: A structure for sheltering animals, or agricultural equipment, hay, feed, etc. Examples of these structures include barns, non-commercial greenhouses, tasting room, shops, caretaker/employee housing, coops, corrals, indoor/outdoor arena and pens. May also include storage of petroleum products for an on-site agricultural use allowed in the Zone.

Accessory Structure: A detached building or structure, which is incidental or subordinate to the primary use of the land or building located on the same Lot, without cooking facilities (storage shed, garage, gazebo).

Adapted plants: See “Naturalized” plants.

Agricultural processing facility: A fixed establishment performing any processing or packaging of crops after harvest, whether or not value is added, to prepare them for market on-site or for further processing and packaging elsewhere, including but not limited to: alfalfa and hay cubing; corn shelling; drying of corn, rice, hay, fruits, and vegetables; pre-cooling and packaging of fresh or farm-dried fruits and vegetables; grain cleaning and custom grinding; custom grist mills; custom milling of flour, feed and grain; sorting, grading and packing of fruits and vegetables; canning, freezing, or preserving fruits and vegetables; tree nut hulling and shelling; and alcohol fuel production. Does not include “wineries” which are defined separately. Note: any of the above activities performed in the field with mobile equipment not involving permanent buildings are included under “Crop Production”.

Agricultural processing facility with special events: A facility that handles agricultural products in which the nature of the product is changed or altered, that as an accessory use, conducts social gatherings for hire at the facility.

Alley: A passage or way open to public travel, affording a secondary means of vehicular access to abutting lots, and not intended for general traffic circulation.

Allowable Building Coverage: The maximum portion of the Lot that may be covered by impervious surfaces. (See Building Coverage definition.)

Ancillary Buildings: A detached building or structure, part of a building or structure, which is incidental or subordinate to the main building, structure or use on the same parcel, without cooking facilities (e.g., storage shed, garage, gazebo).

Block: A block is defined as any grouping of lots that is bounded on at least two sides by public right-of-ways and/or open space.

Building, Accessory: See Accessory Structure.

Building Coverage: That portion of a Lot covered by a building and/or any other impervious surface, including, but not limited to, porches, courtyards, terraces and driveways.

Building Envelope: The area of the Lot within which all improvements are to occur, including all buildings, garages, landscape structures, walls and gates (excluding entry gates, where permitted). The area of the Building Envelope is established by the Setbacks.

Building Footprint: The total area of land covered by buildings, including porches.

Building Height: The vertical distance above the average finish grade of the area covered by Buildings, or adjacent sidewalk grade, whichever is more restrictive, to the highest Eave or Cornice line of the building

Building Type: A structure defined by the combination of configuration, disposition, and function.

Buildout: The time at which all habitable buildings on the project are complete and ready for occupancy.

Built Fabric: The vertical component of the neighborhood fabric that includes buildings, facades, roofs, fences, building projections, and walls.

Civic: A term defining not-for-profit organizations, dedicated to arts, culture, education, religious activities, government, transit, municipal parking facilities and clubs.

Comfort Station: A facility that provides restrooms, including showers, toilets and sinks in accordance with applicable code requirements.

Commercial: A term defining workplace, office and retail use collectively.

Commercial Nursery: A commercial establishment engaged in the propagation and sale of horticultural and ornamental plants and related products. Products may be grown under cover or outdoors. A nursery with public sales shall be subject to sales and display area restrictions as may be specified by the applicable Zoning District.

Commercial Recreation Facility – Indoor: An establishment providing indoor amusement and entertainment services for a fee or admission charge,

Community Assembly: Group gatherings conducted indoors such as synagogues, mosques, temples, churches, community centers, bingo halls, private clubs, fraternal, philanthropic and charitable organizations and lodges.

Community Supported Agriculture (CSA): A farm operation for which a community of individuals pledges support so that the farmland becomes, either legally or informally, the community’s farm. The growers and consumers provide mutual support, sharing the risks and benefits of food production. Consumers receive portions of the farm’s harvest throughout the growing season.

Conservation Easement Holder: The entity or entities that are the named grantee(s) of the Conservation Easements within the Specific Plan Area. Such entity(ies) shall be authorized to hold conservation easements pursuant to Civil Code Section 815.3, Fish and Game Code Section 1348 (if applicable), and other relevant provisions of California law.

Cornice: The horizontal projection on a Building at the top of a wall.

Covenants, Conditions and Restrictions (CC&Rs): Limitations that may be placed on a property and its use, and which are made a condition of holding title or lease.

Crop Production, Horticulture, Orchard, Vineyard: Commercial agricultural production field and orchard uses, including the production of the following, primarily in the soil on the site and not in containers, other than for initial propagation prior to planting in the soil on the site: Field crops, flowers and seeds, fruits, grains, melons, ornamental crops, tree nuts, trees and sod, vegetables, wine and table grapes. Also includes associated crop preparation services and harvesting activities, such as mechanical soil preparation, irrigation system.

Cul-de-sac: A street segment that terminates without intersecting another street segment.

Day Care Facility: Non-medical care provided on a less than 24-hour basis to persons in need of personal services, supervision, counseling, or assistance essential for sustaining the activities of daily living or for the protection of the individual.

Design Guidelines (“Guidelines”): Guidelines that appear throughout this document may be identified with the use of the phrases “should”, “may”, “encouraged” or “discouraged”. Guidelines provide a higher level of detail in describing the overall design aesthetic and approach to achieve consistent and high quality community design solutions.

Density: The amount of building structures constructed on the project site, measured for residential buildings as dwelling units per acre of buildable land available for residential uses, and for non-residential buildings as the floor area ratio of buildable land area available for non-residential uses. In both cases, structured parking is excluded.

Development Footprint: The total land area of a project site covered by buildings, streets, parking areas, and other typically impermeable surfaces.

Development Standards (“Standards”): Standards that appear throughout this document may be identified with the use of the phrase “shall”. Standards establish the minimum criteria that must be satisfied to be consistent with the Plan and to gain design review approval.

Dwelling, primary (Primary dwelling): If a lot is improved, or proposed to be improved, with two or more detached dwellings, the first dwelling constructed shall be the primary dwelling unless a later constructed dwelling is larger in gross floor area than an existing dwelling, in which case the larger dwelling shall be the primary dwelling, except in the RD and RM districts, where more than one primary dwelling is allowed.

Dwelling, secondary unit (Secondary dwelling): One additional dwelling unit on the same ownership as the primary dwelling, providing independent living quarters, including sleeping, eating, cooking and sanitation facilities. Either the primary dwelling or the secondary dwelling shall be owner-occupied. If either dwelling is leased, such lease shall not cause the subdivision of the property. A secondary dwelling shall not be considered an accessory building or an accessory use, as those terms are defined separately. Includes an accessory dwelling established pursuant to County Ordinance No. 1679.

Eave: The lower edge of a roof.

Encroachment: Any structural element that breaks the plane of a vertical or horizontal regulatory limit, extending into a Setback Area, into the Public Frontage, or above a height limit.

Encroachment Zone: The area within a Setback Area where building projections may be located over the prescribed setback line. Building projections include: porches, balconies, trellis, stoop, awning, galleries and/or bay windows.

Farmers Market: The temporary use of a site for the outdoor sales of food and farm produce items, in compliance with California Agriculture Code Sections 1392 et seq.

Energy Star: ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy establishing a standard set of guidelines to recognize the energy efficiency of various products.

Farmworker Housing: A dwelling unit for the housing of employees directly involved in the agricultural production and practices of the Owner or leaser of the parcel.

Finished Ground Floor Level Height: The vertical distance allowed between finished grade or the adjacent sidewalk, and the top of the finished floor on the ground level.

Floor Area Ratio (FAR): The density of non-residential land use, exclusive of parking. It is the total non-residential building floor area divided by the total buildable land area available for non-residential structures. For example, on a site with 10,000 square feet of buildable land area, an FAR of 1.0 would be 10,000 square feet of building floor area. On the same site, an FAR of 1.5 would be 15,000 square feet of built floor area; an FAR of 2.0 would be 20,000 built square feet and an FAR of 0.5 would be 5,000 built square feet.

Frontage: The primary facade of the building facing the street.

Frontage Line: A Lot line bordering a public Frontage. Facades facing Frontage Lines define the public realm, and are therefore more regulated than the Elevations facing other Lot Lines.

Frontage Type: The primary façade or area of the Lot that provides the transition from the more private realm to the public realm. Five main frontage types are defined in this Code: Front Yard, Porch, Stoop, Shopfront and Awning and Gallery.

Front Yard: Area of a Lot between the front property line and building facade.

Gallery: A Private Frontage conventional for Retail use wherein the Façade is aligned close to the Frontage Line with an attached cantilevered shed or lightweight colonnade overlapping the Sidewalk.

Graywater: Untreated household wastewater which has not come into contact with toilet waste. Gray water includes used water from bathtubs, showers, bathroom wash basins, and water from clothes washers and laundry tubs. It shall not include wastewater from kitchen sinks or dishwashers, unless superseded by graywater definitions as established by the authority having jurisdiction in their areas.

Gray Fabric: The overall network of streets and paths that provides many alternatives to move around the neighborhood.

Green (Neighborhood, Main): A community gathering space available for unstructured recreation as well as organized community events. The Main Neighborhood Green provides a central civic space. This area is available for special events, neighborhood purposes and commercial activities (such as markets, fairs). It is spatially defined by street trees and one-way streets that are lined with mixed-use and/or residential uses.

Green Fabric: The overall network of Open Lands as a single comprehensive layer that knits the Plan together.

Green Infrastructure: The interconnected network of open spaces and natural areas – greenways, drainages, parks, retention and detention areas, woodlands, and preserves – that naturally manages stormwater, reduces the risk of floods, captures pollution, and improves water quality. In neighborhood areas, that network is extended by means of, rain gardens, tree plantings, permeable pavement and other landscape-based drainage features that restore, protect, and mimic natural hydrologic functions within the built environment.

Green Streets: is the application of traditional street design principles that focus on walkability, pedestrian safety, access, and creating attractive streetscape environments while managing stormwater on-site that improves water quality, groundwater recharge, and minimizes flood potential.

Gross Building Square Feet: Gross Building Square Feet shall be calculated as the total area of all floors of a building as measured to the exterior finished surface of outside walls or to the centerline of common walls separating buildings, not including any carport, walkway, garage, overhang, patio, enclosed patio, landscape structure, storage areas incidental to the principal use of the building, unenclosed walkway, or utility or disposal areas.

Guest house: Detached living quarters of a permanent type of construction, without kitchens or cooking facilities, clearly subordinate and incidental to the main building on the building site, and not to be rented, let or leased, whether compensation be direct or indirect.

Guidelines (“Design Guidelines”): See Design Guidelines definition.

Guiding Principles (“Principles”): Principles are a “guide” to achieving the overall objectives and goals for the community. Principles are intended to be used as a map to guide design choices and decisions.

Health / Fitness Facility: A fitness center, gymnasium, health and athletic club, which may include any of the following:

Exercise machines, weight facilities, group exercise rooms, day care, sauna, spa or hot tub facilities, indoor tennis, handball, racquetball and other indoor sports activities, indoor or outdoor pools.

Heritage Tree: (a) Any tree that measures greater than 15 inches in diameter at a point 54 inches above natural grade. (b) Any oak tree native to California, with a diameter of 10 inches at natural grade. (c) Any tree or group of trees specifically designated by the County for protection because of its historical significance, special character or community benefit.

Home Occupation: A small home business involving the limited provision or sale of goods or services which is accessory to, and conducted by the resident family entirely within, a dwelling unit.

Invasive plants: Plants that may be either indigenous or non-indigenous species or strains that are characteristically adaptable, aggressive, have a high reproductive capacity and tend to overrun the ecosystems in which they inhabit.

Kitchen: Any room or portion of room that contains facilities for the preparation, cooking and/or serving of food, and includes a sink and either a stove, range, grill or oven.

LEED: An internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that matter most: energy savings, water efficiency, CO2 emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Live-Work Unit: An integrated housing unit and working space, occupied and utilized by a single household in a structure that has been designed or structurally modified to accommodate joint residential occupancy and work activity.

Lodging – Bed and Breakfast (B&B): A residential structure with one or more bedrooms rented for overnight lodging, where meals may be provided subject to applicable Environmental Health Department regulations.

Lodging – Small Inn: A facility with guest rooms or suites, with or without kitchen facilities, rented to the general public for transient lodging. Inns typically include a variety of services in addition to lodging: such as restaurants, accessory retail, meeting areas, personal services etc. Also includes facilities such as swimming pools, indoor athletic areas, and/or kitchen gardens.

Low Impact Development (LID): The primary goal of LID is to mimic the predevelopment site hydrology by using site design techniques that store, infiltrate, evaporate and detain runoff. Stormwater is managed in small, cost effective landscape features rather than being conveyed and managed in large, costly pond facilities. This approach also provides aesthetic and quality of life improvements by improved landscape areas, less impervious surfaces, and reduced potential for flooding.

Lot: An area of land under one ownership and having fixed boundaries depicted on a final map or parcel map or described by an instrument of conveyance defining land held in fee title as a discrete unit. Excludes condominium units consisting of airspace, and mere easements.

Mixed use: Multiple functions within the same building or the same general area through superimposition or within the same area through adjacency.

Native (or indigenous) plants: A plant is considered native if existing information suggests the species did, or would have occurred on the site or within the County prior to widespread land alterations that accompanied European Settlement. Cultivars of native plants may be considered native plants.

Naturalized plants (Adapted plants): Plants that reliably grow well in a given habitat with minimal attention from humans in the form of winter protection, pest protection, water irrigation, or fertilization once root systems are established in the soil. Naturalized plants are low maintenance but not invasive.

Neighborhood Market: A neighborhood serving retail store of 2,500 square feet or less in gross floor area, primarily offering food products, which may also carry a range of merchandise oriented to daily convenience shopping needs, and maybe combined with food service (e.g., delicatessen).

Nursery: A commercial establishment engaged in the propagation and sale of horticultural and ornamental plants and related products. Products may be grown under cover or outdoors. A nursery with public sales shall be subject to sales and display area restrictions as may be specified by the applicable Zoning District.

Nursery School: A state-licensed facility that provides supervision for minor children for periods of less than 24 hours a day.

Open Lands: The open spaces threaded throughout the Plan which vary from the most passive, “natural” areas (conservation and riparian areas) to the more intensive, “civilized” areas, such as parks and working agricultural lands.

Office: Premises available for the transaction of general business but excluding Retail, artisanal and manufacturing uses.

Office, business: An office which has as its main function the arrangement of business transactions, the holding of sales meetings and administrative conferences, the receiving of client payments, and the keeping of records and accounts pertaining to the particular business.

Office, professional: An office from which a doctor, lawyer, engineer, or architect, etc., may offer services.

Park, Playground: An outdoor recreation facility that may provide a variety of recreational opportunities including playground equipment, open space areas for passive recreation and picnicking, and sport and active recreation facilities.

Parking space: A usable and accessible space for parking of a standard-sized motor vehicle off the street.

Post-consumer: Generated by households or commercial, industrial or institutional facilities in their role as end-users of a product, which can no longer be used for its intended purpose.

Pre-consumer: Diverted from the waste stream during the manufacturing process. It does not include the reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Pre-development: Before any development occurs on the site. Pre-development conditions describe the natural conditions of the site prior to any human alteration, e.g. development of roads or buildings.

Primary dwelling (Dwelling, primary): If a lot is improved, or proposed to be improved, with two or more detached dwellings, the first dwelling constructed shall be the primary dwelling unless a later constructed dwelling is larger in gross floor area than an existing dwelling, in which case the larger dwelling shall be the primary dwelling.

Principles (“Guiding Principles”): Principles are a “guide” to achieving the overall objectives and goals for the community. Principles are intended to be used as a map to guide design choices and decisions.

Residential care facility: Non-medical care provided on a 24-hour basis to persons in need of personal services, guidance, counseling, supervision, recovery services, supportive services, or assistance essential for sustaining the activities of daily living or for the protection of the individual.

Retail: Premises available for the sale of merchandise and food service.

Secondary Unit (Dwelling, secondary): One additional dwelling unit on the same ownership as the primary dwelling, providing independent living quarters, including sleeping, eating, cooking and sanitation facilities. Either the primary dwelling or the secondary dwelling shall be owner-occupied. If either dwelling is leased, such lease shall not cause the subdivision of

the property. A secondary dwelling shall not be considered an accessory building or an accessory use, as those terms are defined separately. Includes an accessory dwelling established pursuant to Ordinance No. 1679.

Secondary living unit: See “Secondary Unit”.

Setback: The mandatory distance between a property line and a building or appurtenance. Setbacks define Building Envelop areas where applicable (see Building Envelop definition).

Setback Area: The area between Lot lines and Setbacks.

Shopfront and Awning: A private Frontage conventional for Retail use, with substantial glazing and an awning, wherein the façade is aligned close to the Frontage Line with the building entrance at sidewalk grade.

Sign: Anything whatsoever placed, erected, constructed, posted, painted, printed, tacked, nailed, glued, stuck, carved or otherwise, fastened, affixed, or made visible for out-of-door advertising purposes in any manner whatsoever, on the ground or on any tree, wall, bush, rock, post, fence, building, structure, or thing whatsoever. The two sides of a double-faced sign shall be counted as only one sign. Wedge-shaped or V-shaped signs where messages are not carried back-to-back shall be counted as two signs even though they may be attached. This definition shall not include official notices issued by a court or public body or officer, or directional warning or information sign or structures required by or authorized by law or by federal, state, county, or city authority.

Sign area: The area of a sign or other advertising device shall be measured to the outside of the sign frame, or where there is no sign frame, to a simple boundary perimeter around the outer limits of the sign elements, including any voids within such perimeter. The two sides of a double-faced sign shall be counted as one sign. Wedge-shaped or V-shaped signs where messages are not carried back-to-back shall be counted as two signs, even though they may be attached.

Sign, general advertising: A sign which directs attention to a business, profession, organization, commodity, service, or entertainment conducted, sold, or offered elsewhere than upon the same lot or parcel on which such sign is located.

Sign, on-site: A sign which directs attention to a business, profession, organization, commodity, service, or entertainment conducted, sold, or offered upon the lot or parcel on which the sign is placed.

Standards (“Development Standards”): Standards that appear throughout this document may be identified with the use of the phrase “shall”. Standards establish the minimum criteria that must be satisfied to be consistent with the Plan and to gain design review approval.

Stoop: An elevated entry porch/stair placed close to the Frontage Line with the ground story elevated from the Front Yard, securing privacy for windows and front rooms.

Story: A habitable floor level within a building, typically 8 feet to 12 feet from floor to ceiling, excluding an attic or raised basement.

Street: A dedicated right-of-way that can accommodate one or more modes of travel, but excluding alleys. A Street is suitable for primary entrances and provides access to the front and/or sides of buildings and lots.

Swale: a low or slightly depressed natural area for drainage.

Tasting room: A facility in which one or more agricultural products grown or processed in the county may be tasted and sold.

Teaching Studio (“Studio”): A small-scale facility intended for art, dance, fitness or music instruction with a maximum size of 1,500 square feet, typically accommodating no more than two groups of students at a time, in no more than two instructional spaces.

Trailhead: Access points throughout the community that provide a specific area to begin a walk or run on community trails that may include parking, signs, and a Comfort Station.

Throughfare: a way for use by vehicular and pedestrian traffic and to provide access to Lots and Open Spaces, consisting of Vehicular Lanes and the Public Frontage.

Transect: The rural to more urban Transect is divided into six Transect Zones for applications on zoning maps. These six habitats vary by the level and intensity of their physical and social character, providing immersive contexts from rural to more urban form.

Transect Zone: One of several areas on the Regulating Plan. Transect Zones are administratively similar to land use zones except that in addition to the usual building use, Density, height, and Setback requirements, other elements of the intended environment are integrated, including those of the private Lot and building and Public Frontage.

Winery: An agricultural processing facility used for the commercial purpose of processing grapes, berries, or other fruit products, to produce wine or similar wine products. Processing includes wholesale sales, crushing, fermentation and re-fermentation, blending, bottling, packaging, storage, aging, handling, shipping, and receiving of such products. Includes related accessory uses such as: office, laboratory, wine tasting facilities, retail sales of wine and other agricultural products produced on the premises or off-site by the winery operator, retail sales of wine and agricultural related promotional and/or educational items, and winery tours.

Winery, small: A winery with annual production not exceeding 20,000 gallons, in bulk and bottles combined.

Winery, large: A winery with annual production greater than 20,000 gallons, in bulk and bottles combined.

B

APPENDIX B SUSTAINABLE DESIGN INDEX

The Sustainability Index provides a matrix of sustainable measures required or recommended for all improvements within this Specific Plan. Refer to specific sections of the Specific Plan and the applicable LEED rating system for more detailed information.

SUSTAINABLE DESIGN INDEX

Sustainable Design Standard		Required	Recommended	Section
Sustainable Site and Landscape Design				
1	Erosion Controls During Construction			
	Stockpile topsoil disturbed by grading operations within the construction site and reuse it as part of the landscape restoration plans. Protect excavated topsoil from erosion by wind or rain.		x	5.5.3 Grading/Drainage
	Control runoff with silt fencing	x		5.5.3 Grading/Drainage
	Protect on-site storm sewer inlets and streams with straw bales, silt fencing, silt sacks, rock filters, or comparable measures	x		5.5.3 Grading/Drainage
	Provide swales to divert surface water from hillsides	x		5.5.3 Grading/Drainage
	Utilize erosion and soil stabilization techniques on disturbed slopes	x		5.5.3 Grading/Drainage
2	Low Impact Design Strategies			5.5.3 Grading/Drainage
	Site buildings to minimize grading and earthwork.		x	5.5.3 Grading/Drainage
	Reduce hydrologic impacts by minimizing impervious surfaces, graded areas, and vegetation clearing.		x	5.5.3 Grading/Drainage
	Allow for a distributed control of stormwater methods by using a network of smaller, simple solutions throughout the site.		x	5.5.3 Grading/Drainage
	Control stormwater at the source rather than only using end-of-pipe solutions.		x	5.5.3 Grading/Drainage
	Decrease the utilization of typical engineering materials such as concrete and/or steel. By using materials such as native plants, soil crushed rock applications and/or water features, a more integrated "natural" landscape will result.		x	5.5.3 Grading/Drainage
3	Utilize indigenous and/or naturalized plant species that are suited to the natural setting, require less water and are not invasive.	x		5.5.4 Planting Concepts
4	Landscape Design			5.5.4 Planting Concepts
	Protect existing trees on-site with fencing during any grading operations, including protection from soil compaction within the drop line.		x	
	Limit turf areas to less than the area of the Building footprint.	x		

Sustainable Design Standard		Required	Recommended	Section
	Utilize a native seed mix that is drought tolerant.		x	5.5.4 Planting Concepts
	Avoid using turf in densely shaded areas	x		5.5.4 Planting Concepts
	Avoid using turf in areas with a slope of 4:1 or greater	x		5.5.4 Planting Concepts
	Utilize mulch at least 4 inches deep in planting areas to retain moisture and reduce erosion	x		5.5.4 Planting Concepts
5	Utilize indigenous or naturalized plant materials that are drought tolerant. (Refer to the Approved Plant List.)	x		5.5.4 Planting Concepts
6	Reduce Local Heat Island Effects			
	Locate trees and other planting to provide shading of sidewalks, patios and driveways.		x	5.5.4 Planting Concepts
	Plant trees and vegetation near structures to shade buildings and reduce energy requirements for heating/cooling.		x	5.5.4 Planting Concepts
7	Surface Water Management - Permeable Lot			
	Increased water flow from Lots is not permitted. All stormwater runoff is to be managed on-site and rainwater runoff from all impervious surfaces is to be treated using vegetated swales and rain gardens as feasible.	x		5.5.3 Grading/Drainage
	Allow for a distributed control of stormwater methods by using a network of smaller, simple solutions on the Lot. This includes infiltration (utilizing pervious surfaces) or containment on-site, depression storage, bioswale applications, rainwater gardens and vegetated swales that mimic the hydrologic functions of the site	x		5.5.9 Exterior Paving 5.4.1 Building Type
	Reduce impervious surface; utilize permeable paving, such as porous concrete, open-celled pavers or stabilized crushed rock for driveways and outdoor improvements		x	5.5.3 Grading/Drainage 5.5.9 Exterior Paving
	Gutters and downspouts are to direct drainage away from foundations and paved surfaces into rain barrel systems.	x		5.5.3 Grading/Drainage
8	Utilize terracing and retaining walls on steep slopes as needed in the Foothill Zone.		x	5.5.3 Grading/Drainage
9	Manage Runoff from Roof			
	Install permanent stormwater controls, such as vegetated swales, on-site rain garden, dry well, or rain-water cistern	x		5.5.3 Grading/Drainage
	Manage all runoff from home on-site (design by licensed landscape architect or engineer)			5.5.3 Grading/Drainage
	Design gutters and downspouts to direct captured water in a rainwater collection system	x		5.4.3 C Roofs

Sustainable Design Standard		Required	Recommended	Section
Water Efficiency				
10	Utilize captured rainwater for on-site non-potable uses			
	Install a rainwater collection system and utilize for landscape irrigation		x	5.5.3 Grading and Drainage
	Install a rainwater collection system and utilize for flushing toilets	x		5.5.3 Grading and Drainage
11	Irrigation System			
	Group plant materials according to water consumption needs		x	5.5.7 Irrigation
	All permanent irrigation systems are to be below ground and fully automatic. Use of water conserving systems, such as drip irrigation and moisture sensors, is required. An electric, solid state controller is required for all systems and shall be equipped with a master valve terminal and at least two fully independent programs.	x		5.5.7 Irrigation
	Utilize an electric, solid state controller for all systems that is equipped with a master valve terminal and at least two fully independent programs.	x		5.5.7 Irrigation
	Install a timer or controller that activates the valves for watering zones at best time of day to limit evaporative losses	x		5.5.7 Irrigation
	Utilize rain/moisture sensors that shut off irrigation during or after rainfall	x		5.5.7 Irrigation
12	Indoor Water Use -Utilize high-efficiency fixtures and fittings			
	Average flow rate for lav. Faucets - less than/equal to 2.0 gpm	x		5.4.2 K - Climate Change Initiatives
	Average flow rate for showers - less than/equal to 2.0 gpm	x		5.4.2 K - Climate Change Initiatives
	Average flow rate for lav. Faucets - less than/equal to 1.3 gpf	x		5.4.2 K - Climate Change Initiatives
Energy Efficiency				
13	Utilize an energy Consultant and/or Architect to establish the minimum level of energy efficiency that the building and its systems will attain.			5.4.2 K - Climate Change Initiatives
14	Exceed current Title 24 state energy-efficiency requirements by at least 20 percent	x		5.4.2 K - Climate Change Initiatives
15	Energy Star Performance			
	Meet guidelines for Energy Star for Homes	x		5.4.2 K - Climate Change Initiatives
	Exceed guidelines for the California Energy Start Homes Program	x		5.4.2 K - Climate Change Initiatives

Sustainable Design Standard		Required	Recommended	Section
16	Participate in the California Energy Commission’s New Solar Homes Partnership and construct LEED-certified units or meet equivalent performance standards - for residential development of more than 6 units.	x		<i>5.4.2 K - Climate Change Initiatives</i>
17	Insulation			
	Install insulation that meets/exceeds the R-value requirements listed in Chapter 4 of the 2004 International Energy Conservation Code.		x	<i>5.4.2 K - Climate Change Initiatives</i>
	Install insulation to meet the Grade II specifications set by the National Home Energy Rating Standards		x	<i>5.4.2 K - Climate Change Initiatives</i>
	Install insulation that exceeds the R-value requirements listed in Chapter 4 of the 2004 International Energy Conservation Code by 5%.	x		<i>5.4.2 K - Climate Change Initiatives</i>
	Install insulation to meet the Grade I specifications set by the National Home Energy Rating Standards	x		<i>5.4.2 K - Climate Change Initiatives</i>
18	Reduce Building Envelope Leakage		x	<i>5.4.2 K - Climate Change Initiatives</i>
19	Windows and Doors			
	Using double “super windows” with a high performance low emissivity (low-e) coating on one surface or between glazings; Options include: Krypton filled low-e window, Argon filled low-e window, Low-e coated window	x		<i>5.4.2 E - Openings</i>
	Design and install windows and glass doors that have NFRC ratings that meet/exceed the window requirements of the Energy Star for Homes national Builder Option Package.	x		<i>5.4.2 K - Climate Change Initiatives</i>
	Utilize operable windows where feasible to take advantage of ambient cooling effects		x	<i>5.4.2 E - Openings</i>
	Window placement design is to respond to the site setting to capture daylight, prevailing breezes and to limit heat gain	x		<i>5.4.2 E - Openings</i>
	Shade large areas of glass (typically for shopfront applications) with projecting roof overhangs, awnings, balconies or porches to minimize glare and decrease heat gain.	x		<i>5.4.2 E - Openings</i>
	Insulate (double-glazed minimum) and properly weather-strip doors.	x		<i>5.4.2 E - Openings</i>
	Exterior doors with significant amounts of glazing are to incorporate, at a minimum, a single low-e coating on one side or between glazing.	x		<i>5.4.2 E - Openings</i>
	Specify doors made with independently certified sustainably harvested solid or veneer wood and consider locating salvaged doors or reusing and refinishing existing doors.		x	<i>5.4.2 E - Openings</i>

Sustainable Design Standard		Required	Recommended	Section
20	Heating and Cooling Distribution System			
	Limit duct air leakage rate to outside the conditioned building envelope. Tested duct leakage rate must be less than 4.0 cfm at 25 Pascals per 100 s.f. of conditioned floor area (for each installed system), verified by the energy rater.		x	5.4.2 K - Climate Change Initiatives
	Do not install ducts in exterior walls unless extra insulation is added to maintain the overall UA for exterior wall without ducts. Ducts may be run inside the interior wall cavities but must be fully ducted.		x	5.4.2 K - Climate Change Initiatives
	Use at least R-6 insulation around ducts in unconditioned spaces.		x	5.4.2 K - Climate Change Initiatives
	Separate ventilation and plumbing systems for those rooms containing contaminants, such as artist studios, from those in the rest of the building		x	5.4.2 K - Climate Change Initiatives
	Locate the air-handler unit and all ductwork within the conditioned envelope and minimize envelope leakage.		x	5.4.2 K - Climate Change Initiatives
	Locate the air-handler unit and all ductwork visibly within the conditioned envelope (e.ee, no ductwork hidden in walls, chases, floors, or ceilings).		x	5.4.2 K - Climate Change Initiatives
	Utilize CFC-free HVAC & R base building systems and locate and design these systems to assure maximum levels of indoor air quality.	x		5.4.2 K - Climate Change Initiatives
	Utilize carbon dioxide monitoring sensors.		x	5.4.2 K - Climate Change Initiatives
21	Heating and Cooling Equipment			
	Design and size HVAC equipment properly using ACCA Manual J, the ASHRAE 2001 Handbook of Fundamentals or an equivalent computation procedure.		x	5.4.2 K - Climate Change Initiatives
	Install HVAC equipment that meets the requirements of the Energy Star for Homes national Builder Option Package.		x	5.4.2 K - Climate Change Initiatives
	Install Energy Star labeled programmable thermostat		x	5.4.2 K - Climate Change Initiatives
	Install a high level of individual occupant control for thermal, ventilation and lighting systems		x	5.4.2 K - Climate Change Initiatives
22	Water Heating			
	Install an efficient hot water distributions system		x	

Sustainable Design Standard		Required	Recommended	Section
	Utilize hot water piping with R-4 insulation and install properly with adequate insulation at 90-degree bends.		x	
23	Indoor Lighting			
	Specifying ENERGY STAR® light fixtures		x	5.4.2 K - Climate Change Initiatives
	Utilize compact fluorescent bulbs (CFLs) in high-use rooms		x	5.4.2 K - Climate Change Initiatives
	Utilize Energy Star labeled ceiling fans		x	5.4.2 K - Climate Change Initiatives
24	Exterior Lighting			
	Utilize motion sensor controls or integrated photovoltaic cells (except for emergency lighting, lighting required by code for health and safety purposed)		x	5.5.10 - Exterior Lighting
25	Appliances			
	Install Energy Star labeled refrigerator	x		5.4.2 K - Climate Change Initiatives
	Install Energy Star labeled ceiling fans	x		5.4.2 K - Climate Change Initiatives
	Install Energy Star labeled dishwasher that uses 6.0 gallons or less per cycle.	x		5.4.2 K - Climate Change Initiatives
	Install Energy Star labeled washing machine	x		5.4.2 K - Climate Change Initiatives
26	Renewable Energy			
	Incorporate on-site renewable energy production, including installation of photovoltaic cells or other solar options.		x	5.4.2 K - Climate Change Initiatives
	New construction or major renovation of commercial and industrial buildings over 10,000 square feet in size shall incorporate renewable energy generation to provide at least 50 percent of the project's needs.	x		5.4.2 K - Climate Change Initiatives
	All roofs shall incorporate 500 sf. minimum of solar panels to reduce the reliance on energy.	x		5.4.2 K - Climate Change Initiatives
27	Refrigerant Management			
	Provide proof of proper refrigerant charge of the air-conditioning system.		x	5.4.2 K - Climate Change Initiatives
	Do not use refrigerants	x		5.4.2 K - Climate Change Initiatives
	Install an HVAC system with non-HCFC refrigerant	x		5.4.2 K - Climate Change Initiatives
	Install and HVAC system with a refrigerant that complies with equation found in LEED for Homes, Credit EA 11		x	5.4.2 K - Climate Change Initiatives

Sustainable Design Standard		Required	Recommended	Section
28	Commissioning Agent			
	Retain a Commissioning Agent		x	5.4.2 K - Climate Change Initiatives
	Produce a recommissioning manual for the building to assure it continues to meet established standards such as energy conservation and indoor air quality		x	5.4.2 K - Climate Change Initiatives
Materials and Resources				
29	Environmentally Preferable Products			
	Use wood based materials certified in accordance with the Forest Stewardship Council Guidelines (FSC)		x	5.4.2 J - Bldg Materials Selection
	Use building materials that minimize the emission of Volatile Organic Compounds (VOC's) and other pollutants, including all interior paints, coatings and sealants	x		5.4.2 J - Bldg Materials Selection 5.4.2 I - Colors and Finishes
	Incorporate recycled content materials into the overall building materials selection		x	5.4.2 J - Bldg Materials Selection
	Use building materials that may be recycled at the end of their useful life		x	5.4.2 J - Bldg Materials Selection
	Incorporate salvaged materials into the building design (i.e. structural timbers, hardwood flooring, doors and frames, cabinetry, furniture, and brick and decorative detailing salvaged from older buildings that can be refinished and/or remilled).		x	5.4.2 J - Bldg Materials Selection
	Substitute Rapidly Renewable building materials (such as bamboo flooring, wool carpet, strawboard, cotton batt insulation, linoleum flooring, poplar OSB, and sunflower seed board) for finite raw and long cycle renewable materials.		x	5.4.2 J - Bldg Materials Selection
	Use products that were extracted, processed and manufactured within 500 miles of the site.		x	5.4.2 J - Bldg Materials Selection
30	Waste Management			
	Investigate and document local options for diversion and document the diversion rate.		x	
	Reduce or divert waste generated from new construction activities from landfills to a level below the industry norm by reducing overall construction waste and increasing waste diversion.		x	
	Require building projects within the Plan Area to recycle or reuse a minimum of 50 percent of unused or leftover building materials.	x		5.4.2 K - Climate Change Initiatives

C

APPENDIX C

GENERAL PLAN CONSISTENCY REFERENCE

GENERAL PLAN CONSISTENCY REFERENCE MATRIX

Middle Green Valley Special Study Area	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
Middle Green Valley Special Study Area- Goal			
SS.G-1: Protect and maintain the rural character of Middle Green Valley while allowing opportunities for compatible residential development to occur.	1.3A 3.1A	✓	See following SSA policies and sections.
Middle Green Valley Special Study Area- Policies			
SS.P-1: Maintain the rural character of Middle Green Valley while still allowing development to be guided into areas screened from Green Valley Road because of natural contours in the land, woodland vegetation, and/or riparian vegetation. Locate upland development in areas screened by landforms or vegetation.	1.3A 3.1A	✓	Section 2.4.3- Physical, Natural & Cultural Settings Section 3.3.2- Open Lands Overview Section 3.5- Land Use and Character Figure 2-5- Combined Constraints Figure 3-9- Open Lands Diagram
SS.P-2: Balance the protection of resources in Middle Green Valley (e.g. view sheds, oak woodlands, riparian habitat, sustainable agricultural use) while allowing development to occur.	1.3A 3.1A	✓	Section 2.4.3- Physical, Natural & Cultural Settings Section 3.3.2- Open Lands Overview Section 3.5- Land Use and Character Figure 2-5- Combined Constraints Figure 3-9- Open Lands Diagram
SS.P-3: Allow for the migration and movement of wildlife.	1.3A 3.3.1A	✓	Section 3.3.2C- Open Lands Framework Table 3-2- Open Lands Summary
SS.P-4: Provide a variety of incentives and techniques to encourage property owners to preserve natural and visual resources, in addition to the transfer of development rights.	1.3A 4.1A	✓	Section 3.3.4- Environmental Stewardship Section 4.2.2- Related County and State-wide Agricultural Preservation Programs Section 4.2.3- Transfer of Development Rights Program Figure 4-3 - Transfer of Development Rights Program- Sending and Receiving Areas
SS.P-5: Encourage cluster residential development through incentives to property owners in hillside and valley floor areas that can support residential uses with least affect on resources, steep slopes, or very high wildfire hazard areas.	1.3A 3.5.1A	✓	Section 3.5- Land Use and Character Section 4.2.3- Transfer of Development Rights Program Figure 2-5- Combined Constraints Figure 3-43- The Built Fabric- The Land Use Plan
SS.P-6: In accordance with balancing the protection of resources described in these policies, adopt a program that provides residential development credits to property owners who voluntarily forego or limit development on their lands. The transfer of development rights program should focus incentives on land in areas to be preserved.	1.3A 4.1A	✓	Section 3.3.4- Environmental Stewardship Section 4.2.3- Transfer of Development Rights Program
SS.P-7: Adopt a specific plan or master plan to implement these policies for Middle Green Valley.	1.3A	✓	

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	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
<p>SS.P-8: Create additional methods to assist landowners who choose to continue farming, such as, but not limited to:</p> <ul style="list-style-type: none"> » enforcing the right-to-farm act and educating residents on the act; and » investigating mechanisms for providing farmers with economic assistance to ensure agricultural viability. 	<p>1.3A 4.1A</p>	<p>✓</p>	<p>Section 4.2.1- The Green Valley Agricultural Conservancy Section 4.2.2- Related County and State-wide Agricultural Preservation Programs Section 4.2.3- Transfer of Development Rights Program</p>
<p>Middle Green Valley Special Study Area- Implementation Programs</p>			
<p>Regulations SS.I-1: Adopt a plan (either a specific plan or master plan) to implement these policies for Middle Green Valley.</p> <p>That plan should specify:</p> <ul style="list-style-type: none"> • the area covered by the plan; • techniques to ensure development is compatible with the rural character of Middle Green Valley and surrounding areas. Such techniques should include design guidelines and development standards; • guidelines for cluster development, including minimum and maximum lot sizes, development standards, and density bonus credits for clustered development; • the details of a transfer of development rights program (with an implementing ordinance), including: the designation of areas where development is preferred, creating appropriate and equitable re-zoning, clustering of housing, and determining the ratio of credits to property owners who voluntarily forego development; • the number of units and/or credits, with or without clustering, that will provide incentives for all landowners in the area to participate in a market driven transfer of development rights program, based on 400 units, subject to further study; • the location and dimensions of a wildlife corridor (“green corridor”); • the maximum number of units any property owner can develop, with or without clustering; • the techniques to be applied voluntarily by property owners that ensure permanent protection and maintenance of resources/views on lands to remain undeveloped; and • the details of how the development would be served with water and wastewater service. Attempt to secure public water and wastewater service through a cooperative effort of property owners, residents, the County, and the City of Fairfield. <p>Property owners shall receive a minimum development credit for the number of primary dwelling units that would be allowed under the land use designations under the 1980 General Plan.</p> <p>For land designated as Agriculture, the number of units/credits would be one per 20 acres and for land designated Rural Residential the number of units/credits would be one per 5 acres.</p>	<p>4.1A</p>	<p>✓</p>	<p>Section 2.4- Project Location and Context Section 3.3.2- Open Lands Overview Section 3.3.4- Environmental Stewardship Section 3.5.5- Neighborhood Land Use Overview Section 4.2.1- The Green Valley Agricultural Conservancy Section 4.2.3- Transfer of Development Rights Program Section 4.3- Public Utilities and Services Chapter 5- The Neighborhood Design Code</p>

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
General Plan- Land Use Element			
Land Use Goals			
LU.G-2: Encourage a development pattern that first seeks to maintain existing communities, second to develop vacant lands within existing communities presently served by public services, and third to develop lands immediately adjacent to existing communities where services can easily be provided	3.1A	✓	Chapter 2- Plan Purpose, Authority and Context Section 4.3- Public Utilities and Services
LU.G-3: Create sustainable communities with areas for employment, shopping, housing, public facilities and services, and recreation in close proximity to each other.	3.1A	✓	Chapter 3- The Neighborhood Plan- Patterns, Concepts and Character Figure 3-43- The Built Fabric- The Land Use Plan
LU.G-4: Encourage land use development patterns and circulation and transportation systems that promote health and wellness and minimize adverse effects on agriculture and natural resources, energy consumption, and air quality.	3.1A	✓	Section 3.3.3- Sustainable Stormwater Design Section 3.3.4- Environmental Stewardship Section 3.4- Circulation- The Gray Fabric Section 3.5- Land Use and Character- The Built Fabric Chapter 5- The Neighborhood Design Code Appendix B- Sustainability Index
General Plan- Residential Policies			
LU.P-14: Establish rural residential development in a manner that preserves rural character and scenic qualities and protects sensitive resources including agricultural lands, creeks, native trees, open spaces, and views.	3.5.1A	✓	Section 2.4.3- Physical, Natural and Cultural Setting Section 3.3- Open Lands- The Green Fabric Section 3.5- Land Use and Character- The Built Fabric
LU.P-17: Encourage clustering of residential development when necessary to preserve agricultural lands, natural resource areas and environmental quality, to provide for the efficient delivery of services and utilities, and to mitigate potential health and safety hazards.	3.5.1A	✓	Section 2.4.3- Physical, Natural and Cultural Setting Section 3.3- Open Lands- The Green Fabric Section 3.5- Land Use and Character- The Built Fabric Section 4.3- Public Utilities and Services
General Land Use Policies			
LU.P-34: Promote patterns of development that encourage physical activity to reduce obesity, cardiovascular disease, asthma, diabetes, or injury; and that contribute to a "sense of place" and emotional well-being.	3.1A	✓	Section 3.2- The Plan: Laying the Framework for a New Rural Community Section 3.4.3- Circulation Concept Chapter 5- The Neighborhood Design Code
LU.P-35: Promote land use and design standards that create cleaner air and water and safer streets.	4.1A	✓	Section 5.5- Landscape Patterns Section 5.6- Open Lands Patterns Section 5.7- Street and Circulation Standards Appendix B- Sustainability Index Appendix D- Approved Plant List
LU.P-36: Promote land use decisions that reduce injuries (pedestrian, bicycle, and motor vehicle crashes), and provide access to healthy food choices, including locally grown fresh fruits and vegetables throughout the county.	3.1A	✓	Section 3.3.4- Environmental Stewardship Section 3.4- Circulation- The Gray Fabric Section 4.2.1- The Green Valley Agricultural Conservancy

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	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
LU.P-37: Encourage land use patterns and development that will result in fewer and shorter motor vehicle trips, and make transportation choices like transit, biking, or walking more viable alternatives.	3.4.1A	✓	Section 3.4- Circulation- The Gray Fabric Section 5.7- Street and Circulation Standards
Agriculture			
Agriculture Goals			
AR.G-1: Recognize, value, and support the critical roles of all agricultural lands in the stability and economic well-being of the county.	3.1A	✓	Section 3.3.2- Open Lands Overview Section 3.3.4- Environmental Stewardship Section 4.2- Implementation Concept: The Conservancy Model
AR.G-2: Preserve and protect the county's agricultural lands as irreplaceable resources for present and future generations.	3.1A	✓	Section 4.2.2- Related County and State-wide Agricultural Preservation Programs
AR.G-3: Support the ability of farmers to earn sufficient income and expand the county's agricultural base by allowing for a wide range of economic activities that support local agriculture.	3.1A	✓	Section 3.3.2- Open Lands Overview Section 3.5.3- Land Use Designations Section 4.2- Implementation Concept: The Conservancy Model Figure 3-9- Open Lands Diagram
AR.G-4: Enable the development of housing opportunities for farm families and farmworkers to ensure the continued competitiveness of Solano County agriculture.	3.5.1A	✓	Section 3.5.3- Land Use Designations Section 3.5.4- Use Standards Section 3.5.5- Building Types Section 3.5.6- Workforce Housing Opportunities
AR.G-6: Recognize, support, and sustain agricultural water resources for farmlands.	4.1A	✓	Section 4.3- Public Utilities and Services
AR.G-8: Seek to increase the value-added component of the county's agricultural economy to a level that meets or exceeds the state average.	3.1A	✓	
Agriculture Policies			
AG.P-2: Ensure that residential development is compatible with surrounding agricultural activities.	3.5.1A	✓	Section 3.5.3 - Land Use Designations Section 3.5.5 - Building Types
AG.P-9: Promote efficient management and use of agricultural water resources.	4.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 3.3.4- Environmental Stewardship
AG.P-10: Support efforts by irrigation districts and others to expand the county's irrigated agricultural areas where appropriate.	4.1A	✓	
AG.P-11: Support agricultural production by enabling the development of adequate amounts of farmworker and farm family housing in agricultural areas that meet state housing quality standards.	3.5.1A	✓	Section 3.5.3- Land Use Designations Section 3.5.4- Use Standards Section 3.5.5- Building Types Section 3.5.6- Workforce Housing Opportunities
AG.P-12: Promote agriculture as a major county industry and support marketing efforts for Solano County-grown and value added products and agricultural services and compatible activities.	3.1A	✓	Section 3.3.2- Open Lands Overview Section 3.3.4- Environmental Stewardship Section 4.2- Implementation Concept: The Conservancy Model
AG.P-14: Support and promote streamlined permit processing procedures for agriculture-related buildings on Agriculture designated parcels (including barns, farm stands, and agricultural processing plants).	4.1A	✓	Section 5.9 - Design Review

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
AG.P-17: Minimize potential conflicts between automobile and bicycle traffic and agricultural operations through transportation planning and capital improvement efforts.	3.4.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 3.4.3 - Circulation Concept
AG.P-19: Require agricultural practices to be conducted in a manner that minimizes harmful effects on soils, air and water quality, and marsh and wildlife habitat.	3.3.1A	✓	Section 4.2.1 - The Green Valley Agricultural Conservancy Section 5.5 - Landscape Patterns Section 5.6 - Open Lands Patterns
AG.P-20: Protect, encourage, and provide incentives to agricultural processors that serve local/regional markets.	4.1A	✓	Section 4.2 - The Implementation Concept: The Conservancy Model
AG.P-21: Promote natural carbon sequestration to offset carbon emissions by supporting sustainable farming methods (such as no-till farming, crop rotation, cover cropping, and residue farming), encouraging the use of appropriate vegetation within urban-agricultural buffer areas, and protecting grasslands from conversion to non-agricultural uses.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 4.2 - The Implementation Concept: The Conservancy Model
AG.P-23: Support recreation and open space activities that are complementary and secondary to the primary agricultural activities on the land.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 5.6 - Open Lands Patterns
AG.P-24: Continue to support nursery crop industries at locations with favorable growing conditions and transportation access.	3.5.1A	✓	Section 3.3.2 - Open Lands Overview Section 4.2.1 - The Green Valley Agricultural Conservancy Section 5.5 - Landscape Patterns Section 5.6 - Open Lands Patterns
AG.P-25: Facilitate partnerships between agricultural operations and habitat conservation efforts to create mutually beneficial outcomes.	3.3.1A	✓	Section 4.2.1 - The Green Valley Agricultural Conservancy
Resources			
Goals			
RS.G-3: Repair environmental degradation that has occurred, and seek an optimum balance between the economic and social benefits of the county's natural resources.	3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.3 - Sustainable Design Section 3.3.4 - Environmental Stewardship Section 4.2 - The Implementation Concept
RS.G-4: Preserve, conserve, and enhance valuable open space lands that provide wildlife habitat; conserve natural and visual resources; convey cultural identity; and improve public safety.	3.3.1A	✓	Section 3.2 - The Plan - Laying the Framework for a New Rural Community Section 3.3 - Open Lands - The Green Fabric
RS.G-5: Availability of affordable energy supplies and require efficiency and conservation measures to minimize energy consumption.	3.1A	✓	Section 5.4 - Architectural Patterns Section 5.5 - Landscape Patterns Section 5.7 - Street and Circulation Standards
RS.G-10: Foster sound management of the land and water resources in Solano County's watersheds to minimize erosion and protect water quality using best management practices and protect downstream waterways and wetlands.	3.3.1A	✓	Section 3.3.3 - Sustainable Design Section 3.3.4 - Environmental Stewardship Section 5.5 - Landscape Standards

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	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
Biological Resources Policies			
RS.P-1: Protect and enhance the county's natural habitats and diverse plant and animal communities, particularly occurrences of special-status species, wetlands, sensitive natural communities, and habitat connections.	3.1A	✓	Section 3.2 - The Plan - Laying the Framework for a New Rural Community Section 3.3 - Open Lands - The Green Fabric Section 3.3.4 - Environmental Stewardship
RS.P-2: Manage the habitat found in natural areas and ensure its ecological health and ability to sustain diverse flora and fauna.	4.1A	✓	Section 4.2 - The Implementation Concept
RS.P-4: Together with property owners and federal and state agencies, identify feasible and economically viable methods of protecting and enhancing natural habitats and biological resources.	4.1A	✓	Section 4.2 - The Implementation Concept
RS.P-5: Protect and enhance wildlife movement corridors to ensure the health and long-term survival of local animal and plant populations. Preserve contiguous habitat areas to increase habitat value and to lower land management costs.	3.3.1A	✓	Section 3.2 - The Plan - Laying the Framework for a New Rural Community Section 3.3 - Open Lands - The Green Fabric Section 3.3.4 - Environmental Stewardship Section 4.2.3 - Transfer of Development Rights Program
RS.P-6: Protect oak woodlands and heritage trees and encourage the planting of native tree species in new developments and along road rights-of-way.	3.3.1A	✓	Section 3.3 - Open Lands - The Green Fabric Section 5.5 - Landscape Patterns Appendix D - Approved Plant List
Scenic Resources Policies			
RS.P-35: Protect the unique scenic features of Solano County, particularly hills, ridgelines, wetlands, and water bodies.	3.3.1A	✓	Section 3.2 - The Plan - Laying the Framework for a New Rural Community Section 3.3 - Open Lands - The Green Fabric Section 5.4 - Architectural Patterns - Building Types, Form and Character
RS.P-36: Support and encourage practices that reduce light pollution and preserve views of the night sky.	3.1A	✓	Section 5.5.10 - Exterior Lighting
RS.P-37: Protect the visual character of designated scenic roadways.	3.4.1A	✓	Section 3.2 - The Plan - Laying the Framework for a New Rural Community Section 3.3 - Open Lands - The Green Fabric
Recreational Resources Policies			
RS.P-41: Provide trail links and an integrated trail system to connect people to accessible open spaces and to regional trail routes.	3.4.1A	✓	Section 3.4 - Circulation - The Grey Fabric Section 5.7 - Street and Circulation Standards
RS.P-44: Support the provision of public lands for use in a trail network and where private land is necessary for creating connections for bike path or trail alignments. Work collaboratively with property owners to secure easements across private lands.	3.3.1A	✓	Section 3.4.3 - Circulation Concept
RS.P-45: Support the completion of regional trails that link destinations within Solano County and beyond, including the San Francisco Bay Trail, the Bay Area Ridge Trail...	3.3.1A	✓	Section 3.4.3 - Circulation Concept

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
RS.P-46: Encourage local farmers and ranchers to incorporate recreational and educational activities that provide visitor oriented opportunities into agricultural land, in areas deemed appropriate for such opportunities.	3.1A	✓	Section 3.5.3 - Land Use Designations
RS.P-47: Require recreational uses to be established in a manner compatible with agricultural activities or that minimizes an adverse impact on agriculture.	3.5.1A	✓	Section 3.3 - Open Lands - The Green Fabric Section 5.5 - Landscape Patterns Section 5.6 - Open Lands Patterns
Energy Resources			
RS.P-49: Ensure energy conservation and reduced energy demand in the county through required use of energy-efficient technology and practices.	3.1A	✓	Section 5.4 - Architectural Patterns - Building Types, Form and Character
RS.P-50: Provide incentives for city and county residents and businesses to produce and use renewable sources of energy.	4.1A	✓	
RS.P-51: Promote Solano County as a model for energy efficiency and green building.	3.1A	✓	Section 3.5 - Land Use and Character - The Built Fabric Section 5.4 - Architectural Patterns - Building Types, Form and Character Section 5.5 - Landscape Patterns Section 5.7 - Street and Circulation Standards
RS.P-52: Ensure adequate and affordable supplies of energy to meet the energy needs of the county.	4.1A	✓	
RS.P-53: Enable renewable energy sources to be produced from resources available in Solano County, such as solar, water, wind, and biofuels to reduce the reliance on energy resources from outside the county.	3.1A	✓	Section 5.4 - Architectural Patterns - Building Types, Form and Character
RS.P-54: Reduce Solano County's reliance on fossil fuels for transportation and other energy-consuming activities.	3.1A	✓	Section 3.4 - Circulation - The Grey Fabric Section 5.4 - Architectural Patterns - Building Types, Form and Character Section 5.7 - Street and Circulation Standards
RS.P-59: Encourage on-site renewable energy production and use and energy conservation measures.	3.1A	✓	Section 3.4 - Circulation - The Grey Fabric Section 5.4 - Architectural Patterns - Building Types, Form and Character Section 5.7 - Street and Circulation Standards
Water Resources and Quality Policies			
RS.P-65: Require the protection of natural water courses.	3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.4 - Environmental Stewardship
RS.P-67: Encourage new groundwater recharge opportunities.	3.3.1A	✓	Section 3.3.3 - Sustainable Design Section 5.4 - Architectural Patterns - Building Types, Form and Character Section 5.5 - Landscape Patterns Section 5.7 - Street and Circulation Standards
RS.P-68: Protect existing open spaces, natural habitat, floodplains, and wetland areas that serve as groundwater recharge areas.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.3 - Sustainable Design Section 5.5 - Landscape Patterns

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	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
RS.P-69: Preserve and maintain watershed areas characterized by slope instability, undevelopable steep slopes, high soil erosion potential, and extreme fire hazards in agricultural use. Watershed areas lacking water and public services should also be kept in agricultural use.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.4 - Environmental Stewardship Section 3.5.3 - Land Use Designations
RS.P-70: Protect land surrounding valuable water sources, evaluate watersheds, and preserve open space lands to protect and improve groundwater quality, reduce polluted surface runoff, and minimize erosion.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.3 - Sustainable Design Section 3.3.4 - Environmental Stewardship
RS.P-71: Ensure that land use activities and development occur in a manner that minimizes the impact of earth disturbance, erosion, and surface runoff pollutants on water quality.	4.1A	✓	Section 3.4 - Circulation - The Grey Fabric Section 3.5 - Land Use and Character - The Built Fabric Section 5.5 - Landscape Patterns
RS.P-72: Preserve riparian vegetation along county waterways to maintain water quality.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.3 - Sustainable Design
RS.P-73: Use watershed planning approaches to resolve water quality problems. Use a comprehensive stormwater management program to limit the quantity and increase the water quality of runoff flowing to the county's streams and rivers.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.3 - Sustainable Design Section 5.5 - Landscape Patterns
RS.P-75: Require and provide incentives for site plan elements (such as permeable pavement, swales, and filter strips) that limit runoff and increase infiltration and groundwater recharge.	3.3.1A	✓	Section 3.5 - Land Use and Character - The Built Fabric Section 5.4 - Architectural Patterns - Building Types, Form and Character Section 5.5 - Landscape Patterns Section 5.7 - Street and Circulation Standards
RS.P-76: Promote sustainable management and efficient use of agricultural water resources.	4.1A	✓	Section 4.2 - The Conservancy Model
Public Health and Safety			
HS.G-5: Recognize the multiple functions of the natural environment for safety, recreation, protection from climate changes, and economic uses.	3.3.1A	✓	Section 3.1 - An Overview - Neighborhood Planning Policies Section 3.2 - The Plan: Laying the Framework for a New Rural Community Section 3.3.2 - Open Lands Overview
HS.G-6: Increase awareness of the effect humans have on the environment and encourage individuals and organizations to modify habits and operations that cause degradation to the environment and contribute to climate change.	3.3.1A	✓	Section 3.1 - An Overview - Neighborhood Planning Policies Section 3.2 - The Plan: Laying the Framework for a New Rural Community Section 5.0 - Neighborhood Design Code
HS.G-7: Prepare for and adapt to the effects of climate change.	3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.4 - Environmental Stewardship
Flood Control			
HS.P-1: Prevent or correct upstream land use practices that contribute to increased rates of surface water runoff.	3.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.3.4 - Environmental Stewardship
HS.P-2: Restore and maintain the natural functions of riparian corridors and water channels throughout the county to reduce flooding, convey stormwater flows, and improve water quality.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Figure 3-9 - Open Lands Diagram
HS.P-3: Require new developments to incorporate devices capable of detaining the stormwater runoff caused by a 100-year storm event or to contribute to regional solutions to improve flood control, drainage, and water recharge.	3.3.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 3.3.4 - Environmental Stewardship

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
HS.P-5: Appropriately elevate and flood proof developments for human occupancy within the 100-year floodplain for the profile of a 100-year flood event.	3.3.1A	✓	Section 3.3.4 - Environmental Stewardship Figure 2-5 - Combined Constraints Map
HS.P-9: Preserve open space and agricultural areas that are subject to natural flooding and are not designated for future urban growth; prohibit permanent structures in a designated floodway where such structures could increase risks to human life or restrict the carrying capacity of the floodway.	3.3.1A	✓	Section 3.3.4 - Environmental Stewardship Figure 2-5 - Combined Constraints Map
Seismic Safety and Land Stability			
HS.P-12: Require new development proposals in moderate or high seismic hazard areas to consider risks caused by seismic activity and to include project features that minimize these risks.	3.1A	✓	Section 3.3.2 - Open Lands Overview Figure 2-5 - Combined Constraints Map Figure 3-3 - Illustrative Plan
HS.P-13: Review and limit the location and intensity of development and placement of infrastructure in identified earthquake fault zones.	3.1A	✓	Section 3.3.2 - Open Lands Overview Figure 2-5 - Combined Constraints
HS.P-16: Require minimum setbacks for construction along creeks between the creek bank and structure, except for farm structures that are not dwellings or places of work, based on the susceptibility of the bank to lurching caused by seismic shaking.	3.5.1A	✓	Section 3.3.2 - Open Lands Overview Section 3.5.3 - Land Use Designations Section 4.3 - Public Figure 2-5 - Combined Constraints
HS.P-17: Restrict the crossing of ground failure areas by new public and private transmission facilities, including power and water distribution lines, sewer lines, and gas and oil transmission lines.	4.1A	✓	Section 3.3.2 - Open Lands Overview Section 4.3 - Public Service Figure 2-5 - Combined Constraints
Fire Safety			
HS.P-22: Require new developments in areas of high and very high wildfire risk to incorporate fire-safe building methods and site planning techniques into the development.	3.5.1A	✓	Section 5.4 Architectural Patterns: Building Types, Form and Character Section 5.5 - Landscape Standards
HS.P-24: Seek an appropriate balance between preventing and fighting fires and retaining the County's valuable visual and natural resources.	3.3.1A	✓	Section 3.3.2 Open Lands Overview
Public Health			
HS.P-38: Integrate public health concerns into land use planning and decision making.	3.5.1A	✓	Section 3.5.2 - Establishing Small Town Character
HS.P-40: Increase access to healthy foods throughout the County.	3.1A	✓	Section 3.2 - The Plan: Laying the Framework for a New Rural Community Section 3.3.2 - Open Lands Overview
Air Quality			
HS.P-43: Support land use, transportation management, infrastructure and environmental planning programs that reduce vehicle emissions and improve air quality.	3.1A	✓	Section 3.2 - The Plan: Laying the Framework for a New Rural Community Section 3.3.4 - Environmental Steward Section 3.3.2 - Open Lands Overview Section 3.4.3 - Circulation Concept Section 3.5.2 - Establishing Small Town Character - The Concepts

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	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
HS.P-45: Promote consistency and cooperation in air quality planning efforts.	3.3.1A	✓	Section 3.2 - The Plan: Laying the Framework for a New Rural Community
HS.P-47: Promote GHG emission reductions by supporting carbon efficient farming methods (e.g., methane capture systems, no-till farming, crop rotation, cover cropping, residue farming); installation of renewable energy technologies; protection of grasslands, open space, and farmlands from conversion to other uses; and encouraging development of energy-efficient structures.	4.1A	✓	Section 3.3.2 - Open Lands Overview Section 4.2 - The Conservancy Model Section 5.4 - Architectural Patterns: Building Types, Forms and Character
Economic Development			
Economic Growth Strategies			
ED.G-6: Preserve and expand the county's agricultural base by allowing for a wide range of economic activities that support local agriculture.	3.1A	✓	Section 3.3.2 - Open Lands Overview Section 4.2 - The Conservancy Model
Transportation and Circulation			
Transportation and Circulation			
TC.G-3: Encourage land use patterns that maximize access and mobility options for commuting and other types of trips, and minimize traffic congestion, vehicle miles traveled (VMT), and greenhouse gas emissions.	3.4.1A	✓	Section 3.4.3 - Circulation Concept Section 3.5.2 - Establishing Small Town Character - The Concepts Section 5.3 - Regulating Plan
TC.G-4: Encourage the use of alternative forms of transportation such as transit, walking and bicycling to alleviate congestion and promote recreation	3.4.1A	✓	Section 3.4.3 - Circulation Concept Section 3.5.2 - Establishing Small Town Character - The Concepts Section 5.3 - Regulating Plan
TC.G-5: Encourage and maintain the safe, convenient transfer of goods and services from agricultural lands and industrial locations to regional and interregional transportation facilities.	3.4.1A	✓	Section 3.4.3 - Circulation Concept
General Transportation			
TC.P-3: Establish land use patterns that facilitate shorter travel distances and non-auto modes of travel, and limit the extent of additional transportation improvements and maintenance that may be needed with a more dispersed land use pattern.	3.4.1A	✓	Section 3.4.3 - Circulation Concept Section 3.5.2 - Establishing Small Town Character - The Concepts Section 5.3 - Regulating Plan Section 5.7 - Street and Circulation Standards
TC.P-10: Anticipate increases in vehicular traffic on rural roads that serve agricultural-tourist centers, value-added agricultural uses in the interior valleys, and other unique land uses; complete related roadway improvements that support the viability of such uses.	3.4.1A	✓	Section 3.4.3 - Circulation Concept Section 5.3 - Regulating Plan Section 5.7 - Street and Circulation Standards
Non-motorized Facilities			
TC.P-24: In collaboration with other agencies and cities, continue to plan, design, and create additional bikeways and bikeway connections to provide intercity and intercounty access and incorporate system needs when approving adjacent developments.	3.4.1A	✓	Section 5.7.4 - Trail Network - Hiking, Biking and Pedestrian Connectivity
TC.P-25: Encourage access to open space and recreation through the development of safe, convenient, and connected walking paths, trails, bikeways, and neighborhood-based parks and recreation options.	3.4.1A	✓	Section 3.4.3 - Circulation Concept Section 5.6 - Open Lands Patterns Section 5.7.4 - Trail Network - Hiking, Biking and Pedestrian Connectivity

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
Public Facilities and Services			
General Facilities and Services			
PF.P-3: Increase efficiency of water, wastewater, stormwater, and energy use through integrated and cost-effective design and technology standards for new development and redevelopment.	4.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 5.3 - Regulating Plan Section 5.4 - Architectural Patterns: Building Types, Form and Character
PF.P-6: Guide development requiring urban services to locations within and adjacent to cities.	4.1A	✓	Section 3.2 - The Plan: Laying the Framework for a New Rural Community
PF.P-7: Coordinate with the cities to strongly encourage compact urban development within city urban growth areas to avoid unnecessary extension or reconstruction of roads, water mains, and services and to reduce the need for increased school, police, fire, and other public facilities and services.	4.1A	✓	Section 3.2 - The Plan: Laying the Framework for a New Rural Community Section 4.3 - Public Utilities and Services
Water Facilities and Service			
PF.P-11: Promote and model practices to improve the efficiency of water use, including the use of water-efficient landscaping, beneficial reuse of treated wastewater, rainwater harvesting, and water-conserving appliances and plumbing fixtures.	4.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 3.3.4 - Environmental Stewardship Section 5.4 - Architectural Patterns: Building Types, Form and Character
PF.P-13: Support efforts by irrigation districts and others to expand Solano County's irrigated agricultural areas.	3.3.1A, 4.1A	✓	Section 3.3.2 - Open Lands Overview
PF.P-15: Domestic water for rural development shall be provided through the use of on-site individual wells or through public water service.	4.1A	✓	Section 4.3 - Public Utilities and Services
PF.P-16: Provide and manage public water service through public water agencies.	4.1A	✓	Section 4.3 - Public Utilities and Services
PF.P-20: Minimize the consumption of water in all new development.	3.1A	✓	Section 3.2 - The Plan: Laying the Framework for a New Rural Community Section 5.4 - Architectural Patterns: Building Types, Form and Character Section 5.5 - Landscape Standards
Sewer and Wastewater			
PF.P-21: Sewer services for development within the unincorporated area may be provided through private individual on-site sewage disposal systems, or centralized community treatment systems managed by a public agency utilizing the best systems available that meet tertiary treatment or higher standards. Use of such centralized sewage treatment systems shall be limited to: (1) existing developed areas, (2) areas designated for commercial or industrial uses, or (3) areas designated for rural residential development when part of a specific plan or policy plan overlay.	4.1A	✓	Section 4.3 - Public Utilities and Services
PF.P-22: Ensure that new and existing septic systems and sewage treatment systems do not negatively affect groundwater quality.	4.1A	✓	Section 4.3 - Public Utilities and Services
Solid Waste			
PF.P-26: Implement and participate in local and regional programs that encourage source reduction and recycling of solid and hazardous wastes in Solano County.	4.1A	✓	Section 4.3.6 - Disposal of Solid Waste

C [GENERAL PLAN CONSISTENCY]

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
Drainage			
PF.P-33: Require development projects to minimize pollution of stormwater, water bodies receiving runoff, and groundwater, and to maximize groundwater recharge potential by: » implementing planning and engineering design standards that use low-impact development techniques and approaches to maintain and mimic the natural hydrologic regime; » using "infiltration" style low-impact development technologies; and » following stormwater best management practices during and after construction, in accordance with relevant state-required stormwater permits.	3.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 3.3.4 - Environmental Stewardship Section 5.5 - Landscape Standards
PF.P-34: Control the rate and dispersal of runoff from developments through use of detention and retention basins, appropriate landscaping, minimal use of impervious surfaces, and other stormwater facilities.	3.3.1A	✓	Section 3.3.3 - Sustainable Stormwater Design Section 5.4.1 - Building Types Section 5.5 - Landscape Standards Section 3.5.3 - Land Use Designations
PF.P-43: Locate educational facilities appropriately to make efficient use of existing and planned facilities, including park and recreational facilities.	3.5.1A	✓	
Utilities			
PF.P-50: Locate, design, and construct transmission lines in a manner that minimizes disruption of natural vegetation, agricultural activities, scenic areas, and avoids unnecessary scarring of hill areas.	4.1A	✓	Section 3.3.2 - Open Lands Overview Section 5.4.2 - Building Character, Massing, Proportions and Materials Section 5.5 - Landscape Standards
Housing Element			
Programs			
...The County allows companion living units in Limited Agricultural, Rural Residential, Residential Estate and Single-Family (RS) zoning districts. The County allows accessory dwelling units in Exclusive Agricultural zones and secondary dwelling units in Rural Residential, Residential Estate, and Single-Family Residence zoning districts.	3.5.1A	✓	Section 3.5.2 - Establishing Small Town Character - The Built Fabric Section 3.5.6 - Building Types Section 5.4 - Architectural Patterns: Building Types, Form and Character
B.5 The County shall actively encourage and facilitate the development of companion dwelling units, accessory dwelling units, and secondary dwelling units as a means to expand the overall supply of housing, especially as a means of providing relatively affordable housing for people employed in the agricultural areas, or for the elderly or disabled, who may need to receive assistance from a relative or caregiver residing on the same property.	3.5.1A	✓	Section 3.5.6 - Building Types Section 5.4.1 - Building Types
B.2 Companion, Accessory, and Secondary Dwelling Unit Program. To maximize the potential for housing development . . . the County will continue to implement streamlined permitting processes for these types of units. The County will recommend that the Board of Supervisors County amend the Rural Residential zoning designation to be similar to the Agricultural zoning districts by allowing accessory dwelling units, by right, but subject to size restrictions. In addition, the County will actively promote the opportunities provided to develop these types of units, by distributing information to advocates and service providers for the elderly and disabled populations and farmworkers as well as distributing this information within the agricultural community in general.	3.5.1A	✓	Section 3.5.6 - Building Types Section 5.4.1 - Building Types

	Specific Plan Section Reference	Complete	Supporting Reference Sections and Figures
Through provisions of the zoning code, manufactured housing units and second dwelling units including “companion living units,” “secondary dwelling units,” and “accessory dwelling units” incidental to agricultural uses can be utilized to provide opportunities for low cost housing.	3.5.1A	✓	Section 3.5.6 - Building Types Section 5.4.1 - Building Types
Park & Recreation Element			
1. Preserve and manage a diverse system of regional parks and natural resources for the enjoyment of present and future County residents and park visitors.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 5.6 - Open Lands Patterns
2. Promote, develop and manage diversified recreational facilities to meet the regional recreation needs of the County.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 5.6 - Open Lands Patterns
Countywide Planning and Coordination			
Objective 2: Ensure that there are at least ten (10) acres of regional and local parkland per each 1,000 persons.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 5.6 - Open Lands Patterns
Land Use			
Objective 3: Identify, preserve and manage significant regional recreation and natural areas.	3.3.1A	✓	Section 3.3.2 - Open Lands Overview Section 5.6 - Open Lands Patterns
Facilities Development			
Objective 7: Provide for the regional recreation needs of the County.	3.3.1A	✓	
<ul style="list-style-type: none"> • B. The County shall encourage development of linkages (such as riding, hiking and biking trails) between population centers and regional recreation facilities. Any trail system which links parklands cannot conflict with agriculture and other land uses. 	3.3.1A	✓	
<ul style="list-style-type: none"> • C. Recreational needs of rural residents shall be considered in the design and development of rural residential subdivisions and parklands. Appropriate buffers will be provided to protect agriculture. 	3.3.1A	✓	
Objective 9: Encourage the development of private recreational areas within the unincorporated area, which complement public recreation facilities within the County. This may include privately developed campgrounds, golf courses, fishing lakes, etc.	3.3.1A	✓	
<ul style="list-style-type: none"> • B. Private recreation facilities should be located and designed in a manner that minimizes adverse impacts on surrounding residential, agricultural and open space uses. 	3.3.1A	✓	

D

APPENDIX D
APPROVED PLANT LIST

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
Trees									
	Chitalpa x tashkentensis	Chitalpa	Type: Deciduous Growth: Fast, 20' to 30" tall and wide Form: Rounded		X				
	Fraxinus velutina 'Fan-TeX'	Fan-TeX Ash	Type: Deciduous Growth: Fast, 40'-50' tall; 30' wide Form: Rounded		X				
	Juglans californica hindsii	Hinds' Black Walnut	Type: Deciduous Growth: Moderate, 30'-60' tall and wide Form: Rounded oval	X	X	X	X		
	Lagerstroemia x 'Natchez'	Natchez Crape Myrtle	Type: Deciduous Growth: Moderate to 15' tall and 12' wide Form: Vase, umbrella		X				
	Malus 'Snowdrift	Flowering Crabapple	Type: Deciduous Growth: Medium to 25' height and width Form: Small umbrella		X				
	Olea europea 'Swan Hill'	Fruitless Olive	Type: Evergreen Growth: Fast to 30' to 35' height and width Form: Rounded or vase		X				
	Pistacia chinensis	Chinese Pistache	Type: Deciduous Growth: Slow/moderate, 30' to 60' height and width Form: Oval		X				
	Platanus x acerifolia 'Columbia'	London Plane Tree	Type: Growth: Form:		X				
	Platanus racemosa	California Sycamore	Type: Deciduous Growth: Fast, 30'-80' tall; 20'-50' wide Form: Rounded vase, umbrella	X		X		X	X
	Populus fremontii	Western Cottonwood	Type: Deciduous Growth: Fast, 30'-60' tall; 30' wide Form: Oval	X				X	
	Prunus 'Akebono'	Akebono Flowering Cherry	Type: Deciduous Growth: Medium to 25' and width Form: Vase		X				

D [PLANT LIST]

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
	<i>Pyrus calleryana</i> 'Autumn Blaze'	Flowering Ornamental Pear	Type: Deciduous Growth: Fast, to 50' height, 30' width Form: Oval to rounded		X				
	<i>Quercus agrifolia</i>	Coast Live Oak	Type: Evergreen Growth: to 20' to 60' height, 20' to 35' width Form: Irregular umbrella	X		X	X		
	<i>Quercus douglasii</i>	Blue Oak	Type: Deciduous Growth: 30' to 50' height, 40' to 60' width Form: Irregular wide umbrella	X		X	X		
	<i>Quercus lobata</i>	Valley Oak, Water Oak	Type: Deciduous Growth: Fast to 70' height, 30 to 50' width Form: Irregular umbrella	X	X	X	X	X	X
	<i>Quercus wislizenii</i>	Interior Live Oak	Type: Evergreen Growth: to 30' to 75' height, width Form: Wide irregular umbrella	X		X	X		
	<i>Robinia x ambigua</i> 'Purple Robe'	Purple Robe Locust	Type: Deciduous Growth: Medium to 40' tall and 30' wide Form: Oval		X				
	<i>Schinus molle</i>	California Pepper Tree	Type: Evergreen Growth: Fast to 25' to 40' tall and wide Form: Rounded				X		
	<i>Ulmus parvifolia</i> 'Dynasty'	Chinese Elm	Type: Semi-deciduous Growth: Fast to 40' to 60' wide, 60' wide Form: Vase		X				X
Understory Trees and Shrubs									
	<i>Acer campestre</i>	Hedge Maple			X		X	X	
	<i>Aesculus californica</i>	California Buckeye		X		X	X		
	<i>Amelanchier alnifolia</i>	Saskatoon	Protected areas (not extreme heat)	X		X		X	X
	<i>Arbutus unedo</i>	Strawberry Tree			X				
	<i>Arctostaphylos densiflora</i> 'Howard McMinn'	Manzanita		X	X	X			
	<i>Arctostaphylos densiflora</i> 'John Dourley'	Manzanita		X	X				

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
	Baccharis pilularis	Coyote Brush		X		X	X		
	Calyucanthus occidentalis	Western Spicebush		X	X			X	X
	Carpenteria californica	Bush Anemone		X	X	X			
	Ceanothus spp.	Ceanothus	Light blue flowers, spring	X	X	X	X		
	Cercis occidentalis	Western Redbud		X	X	X	X		X
	Cistus spp.	Cistus							
	Cistus x purpurea	Cistus	Solid purple flowers		X				
	Cistus x skanbergii	Cistus	Solid pink flowers		X				
	Corylus cornuta var. californica	California Hazelnut		X	X			X	X
	Cotoneaster spp.	Cotoneaster			X				
	Eleagnus angustifolia	Russian Olive							
	Fremontodendron californicum	Flannel Bush		X		X	X		
	Garrya fremontii	Fremont Silktassel		X		X	X		
	Heteromeles arbutifolia	Toyon		X	X	X	X		
	Philadelphus lewisii	Mock Orange		X	X	X	X	X	
	Prunus caroliniana 'Compacta'	Carolina Laurel Cherry		X	X	X	X		
	Punica granatum 'Nana'	Dwarf Pomegranate			X	X	X		
	Rhamnus californica 'Eve Case'	Coffeeberry		X	X	X	X		
	Rhamnus californica 'Mound San Bruno'	Coffeeberry		X	X	X	X		
	Ribes sanguineum	Red-flowering Currant		X	X	X	X	X	
	Rosmarinus 'Tuscan Blue'	Rosemary			X	X	X		
	Rubus ursinus	California Blackberry		X		X	X	X	X
	Salix lucida ssp. Lasiandra	Yellow Tree Willow		X	X	X	X	X	X
	Salvia clevelandii	Cleveland Sage	Blue flowers		X	X	X		
	Salvia apiana	White Sage	White flowers		X	X	X		
	Symphoricarpos alba	Snowberry		X		X	X		
	Teucrium fruticans 'Compacta'	Dwarf Bush Germander			X				

D [PLANT LIST]

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
	Vaccinium ovatum	Evergreen Huckleberry		✓	X	X		X	X
Perennials									
	Agastache hybrids	Hummingbird Mint			X				
	Aloysia triphylla	Lemon Verbena			X		X		
	Artemesia spp.	Artemesia		X					
	Campanula spp.	Campanula							
	Coreopsisspp.	Coreopsis							
	Echinacea purpurea	Purple Coneflower							
	Erigeron	Santa Barbara Daisy							
	Erysimum	Wallflower							
	Eschscholzia californica	California Poppy		X	X	X	X		
	Epilobium canum	California Fuschia		X		X	X		
	Gaillardia grandiflora	Blanket Flower		X	X	X	X		
	Geranium spp.	Geranium							
	Hemerocallis spp.	Daylily			X				
	Lavandula spp.	Lavender			X	X	X		
	Leonotis leonurus	Lion's Tail			X	X			
	Linum lewisii	Western Blue Flax		X	X	X	X		
	Mimulus aurantiacus	Sticky Monkey Flower		X	X	X	X		
	Mondarda spp.	Bee Balm							
	Mondardella villosa	Coyote Mint		X	X	X	X		
	Narcissus	Daffodil							
	Nepeta x faassenii	Catmint			X				
	Origanum spp.	Oregano							
	Penstemon spp.	Penstemon		X	X				X
	Perovskia 'Blue Spires'	Russian Sage			X				
	Romneya coulteri	Matilija Poppy		X	X	X			
	Rosmarinus vulgaris	Rosemary			X	X	X		

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
	Rudbeckia spp.	Coneflower		X	X	X	X		X
	Salvia spp.	Salvia		X	X		X		
	Santolina chamaecyparissus	Santolina							
	Solidago californica	California Goldenrod		X	X	X	X		
	Verbena spp.	Verbena			X				
	Westringia fruticosa	Westringia			X				
Ground Covers									
	Arctostaphylos 'Emerald Carpet'			X					
	Ceanothus 'Centennial'	Groundcover ceanothus		X	X	X			
	Cotoneaster dammeri 'Lowfast'	Cotoneaster			X				
	Helianthemum nummularium	Sunrose			X				
	Iris x douglasiana	Douglas Iris		X	X	X	X	X	
	Rosa (groundcover species)	Groundcover Roses			X				
	Rosmarinus 'Irene'				X				
	Thymus vulgaris	Thyme			X		X		
	Trachelospermum jasminoides	Asian Jasmine			X				
Grasses									
	Carex barbarae	White Root Sedge	Little or no summer water; vigorous in waterways	X	X	X	X	X	X
	Agrostis exarata		Riparian					X	X
	Chondropetalum tectorum	Small Cape Rush		X				X	X
	Elymus glaucus	Blue Wildrye		X	X	X	X		
	Festuca Mairei	Atlas Fescue		X					X
	Festuca rubra			X	X	X	X	X	
	Juncus patens	California Gray Rush	Grows in dry areas	X	X	X	X	X	X
	Leymus condensatus	Giant Wildrye	Tall; good for screening, dust barrier	X	X	X	X		
	Muhlenbergia rigens	Deergrass		X	X	X	X		
	Nassella pulchra	Purple Needlegrass		X	X	X	X		

D [PLANT LIST]

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
Wildflowers (seeded)									
	Achillea millefolia	Achillea		x					x
	Eschscholzia californica	California Poppy		x					
	Gaillardia x grandiflora	Blanketflower		x					x
	Lupinus nanus	Lupine		x					
Vines									
	Aristolochia californica	California Dutchman's Pipe	Regular water; some shade; any soil	x			x	x	x
	Clematis lasianthus	Pipestem Clematis					x		
	Clematis ligusticifolia	Virgin's Bower					x		
	Vitis californica 'Roger's Red'	California Grape		x			x		
Native Grass Seed Mixes									
	Foothills Mix		PLS # / Acre (46 lbs. per Acre)	x		x			
	Bromus carinatus	California Brome	12						
	Elymus glaucus	Blue Wild Rye	9						
	Nassella cernua	Nodding Needlegrass	6						
	Melica californica	California Oniongrass	4						
	Poa secunda	Native Pine Bluegrass	2						
	Lupinus nanus	Sky Lupine	4						
	Eschscholzia californica	California Poppy	1.5						
	Clarkia purpurea	Wine Cup Clarkia	1.5						
	Sisyrinchium bellum	Blue Eyed Grass	1						
	Lasthenia californica	Dwarf Goldfields	1						
	Valley Meadow Mix		PLS # / Acre (46 lbs. per Acre)	x	x				
	Hordeum californicum	California Barley	12						
	Nassella pulchra	Purple Needlegrass	9						
	Nasella cernua	Nodding Needlegrass	9						
	Melica californica	California Oniongrass	6						

CATEGORY	BOTANICAL NAME	COMMON NAME	Attributes	Native	Valley Areas	Foothill Areas	Hedgerows	Riparian Areas	Rain Garden Vegetation
	<i>Poa secunda</i>	Native Pine Bluegrass	4						
	<i>Layia glandulosa</i>	Valley Tidy Tips	1						
	<i>Eschscholzia californica</i>	California Poppy	2.5						
	<i>Achillea millifolium</i>	White Yarrow	0.5						
	<i>Sisyrinchium bellum</i>	Blue Eyed Grass	1						
	<i>Lasthenia californica</i>	Dwarf Goldfields	1						
Prohibited Species									
Trees									
	<i>Cupressus sempervirens</i>	Italian Cypress							
	<i>Populus nigra</i> 'Italica'	Lombardy Poplar							
	<i>Salix babylonica</i>	Weeping Willow							

E

APPENDIX D
ACRONYMS

ACRONYMS**ABP:** Agriculture Business Plan**CAC:** Citizens Advisory Committee**CEQA:** California Environmental Quality Act**CFPD:** Cordelia Fire Protection District**CDF:** California Department of Forestry and Fire Protection**CFD:** Community Facilities District**CRC:** Conservancy Design Review Committee**CSA:** County Service Area**DEIR:** Draft Environmental Impact Report**DWR:** California Department of Water Resources**EIR:** Environmental Impact Report**FEIR:** Final Environmental Impact Report**FMMP:** Farmland Mapping Monitoring Program**FSC:** Forest Stewardship Council**GVLA:** Green Valley Landowners Association**HCP:** Habitat Conservation Plan**LEED:** Leadership in Energy and Environmental Design**LID:** Low Impact Design**LRV:** Light Reflective Value**FSSD:** Fairfield Suisun Sewer District**LAFCo:** Local Area Formation Commission**NPDES:** National Pollutant Discharge Elimination System**MBR:** Membrane Bioreactor**PAR:** Property Assessment Record**RFP:** Request for Proposal**RMP:** Resource Management Plan**SCWA:** Solano County Water Agency**SID:** Solano Irrigation District**SSA:** Special Study Area**SWPP:** Stormwater Pollution Prevention Plan**TDR:** Transfer of Development Rights**VOC:** Volatile Organic Compound**WDR:** Waste Discharge Requirements