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RESOLUTION NO. 2024-_____

**A RESOLUTION OF THE CITY COUNCIL OF
THE CITY OF MERCED, CALIFORNIA,
APPROVING GENERAL PLAN AMENDMENT
#23-03 WHICH AMENDS CERTAIN TEXT AND
FIGURES WITHIN THE GENERAL PLAN AND
ADOPTING THE VST SPECIFIC PLAN WHICH
ESTABLISHES THE STANDARDS AND
GUIDELINES FOR THE DEVELOPMENT OF
APPROXIMATELY 654 ACRES OF LAND
GENERALLY LOCATED AT THE NORTHEAST
CORNER OF CARDELLA AND LAKE ROADS
(4600 LAKE ROAD)**

WHEREAS, the City of Merced is processed an application for a General Plan Amendment and the adoption of the VST Specific Plan for approximately 654 acres of land generally located at the northeast corner of Cardella and Lake Roads (4600 Lake Road) as described in Exhibit “A” and shown on the map at Exhibit “B”, both attached hereto and incorporated herein by this reference;

WHEREAS, the Planning Commission of the City of Merced held a noticed public hearing on December 20, 2024, at which time all those interested in the matter were provided the opportunity to speak or provide written or oral testimony regarding the application;

WHEREAS, after hearing all of the evidence and testimony, the Planning Commission adopted Resolution #4127, attached hereto as Exhibit “C” and incorporated herein by this reference, recommending the City Council approve the General Plan Amendment and adopt the Specific Plan; and,

WHEREAS, the City Council held a noticed public hearing on January 16, 2024, at which time all those interested in the matter were provided the opportunity to speak or provide written or oral testimony regarding the application.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MERCED DOES HEREBY RESOLVE, DETERMINE, FIND, AND ORDER AS FOLLOWS:

SECTION 1. The General Plan of the City of Merced is hereby amended by approving General Plan Amendment #23-04 which amends certain text and figures to incorporate the VST Specific Plan into the General Plan.

SECTION 2. The City Council of the City of Merced hereby adopts the VST Specific Plan provided at Exhibit "D" for the property described in Exhibit A and shown on the map at Exhibit B.

PASSED AND ADOPTED by the City Council of the City of Merced at a regular meeting held on the ____ day of _____ 2024, by the following vote:

AYES: Council Members:

NOES: Council Members:

ABSENT: Council Members:

ABSTAIN: Council Members:

APPROVED:
MATTHEW SERRATTO, MAYOR

Mayor

ATTEST:
D. SCOTT MCBRIDE, CITY CLERK

BY: _____
Assistant/Deputy City Clerk

(SEAL)

APPROVED AS TO FORM:
CRAIG J. CORNWELL, CITY ATTORNEY

 1/11/24
City Attorney Date

EXHIBIT "A"

ANNEXATION DESCRIPTION

Those portions of Sections 2, 3, 4, 9, and 10 of Township 7 South, Range 14 East, Mount Diablo Base and Meridian, in the County of Merced, State of California, described as follows:

COMMENCING at the corner common to Sections 3, 4, 9, and 10;

- 1) thence along the south line of said Section 3, North 89°24'31" East, 30.01 feet to the southwest corner of that certain parcel granted to Merced County by Deed recorded June 25, 1981 as Document No. 1981013067, in Volume 2288 of Official Records, at Page 783, being also the **POINT OF BEGINNING** of this description;
- 2) thence along a line parallel with and lying 30.00 feet easterly of the west line of said Section 10, South 01°02'14" West, 39.96 feet;
- 3) thence South 89°18'12" West, 77.04 feet to the northeast corner of Parcel 2 as shown on the map filed in Book 41 of Parcel Maps, at Page 6, Merced County Records;
- 4) thence North 01°02'14" East, 70.04 feet to the south line of the Remainder parcel as shown on the map filed in Book 112 of Parcel Maps, at Page 41, Merced County Records;
- 5) thence along said south line, North 89°18'12" East, 17.03 feet to the southeast corner of said Remainder;

thence along the westerly Lake Road right-of-way, the following nine (9) courses:

- 6) thence North 01°04'17" East, 323.14 feet to the northeast corner of said Remainder;
- 7) thence along the north line of said Remainder, South 89°19'35" West, 20.01 feet to the southeast corner of Parcel B as shown on the map filed in Book 69 of Parcel Maps, at Page 23, Merced County Records;
- 8) thence along the east line of said Parcel B and the east line of Parcel A of said map, North 01°04'17" East, 323.15 feet to the south line of Parcel 2 as shown on the map filed in Book 2 of Parcel Maps, at Page 18, Merced County Records;
- 9) thence along said south line, North 89°20'43" East, 20.01 feet to the southeast corner of said Parcel 2;
- 10) thence along the east line of said Parcel 2 and the east line of Lot 11 as shown on the map filed in Book 17 of Official Plats, at Page 42, Merced County Records, North 01°04'17" East, 615.81 feet to the northeast corner of said Lot 11;
- 11) thence along the north line of said Lot 11, South 89°22'36" West, 10.00 feet to the southeast corner of Lot 1 as shown on the map filed in Book 51 of Official Plats, at Page 50, Merced County Records;

EXHIBIT "A"

- 12) thence along the east line of said Lot 1 and the east line of Lot B of said map, North 01°04'17" East, 677.54 feet to the south line of the Remainder parcel as shown on the map filed in Book 79 of Parcel Maps, at Page 10, Merced County Records;
- 13) thence along the south line of said Remainder, North 89°21'41" East, 10.00 feet to the southeast corner of said Remainder;
- 14) thence along the east line of said Remainder, North 01°04'17" East, 651.84 feet to the southwesterly corner of Annexation No. 22-122, the UC Merced Annexation to the City of Merced;

thence to and along the northerly line of Adjusted Parcel 2 as described in Certificate of Compliance No. 16009 for Property Line Adjustment No. 16014, recorded October 19, 2016 as Document No. 2016035817, as well as along the southerly line of said Annexation No. 22-122 the following five (5) courses:

- 15) South 89°50'12" East, 5064.82 feet;
- 16) North 00°09'48" East, 129.31 feet;
- 17) North 89°22'42" East, 1764.31 feet;
- 18) North 60°37'40" East, 206.92 feet;
- 19) South 89°50'12" East, 3593.12 feet to the northeast corner of said Adjusted Parcel 2 and the southeasterly corner of said Annexation No. 22-122;
- 20) thence along the east line of said Adjusted Parcel 2, South 00°42'40" West, 2903.17 feet to the southeast corner of said Section 2 and said Adjusted Parcel 2;
- 21) thence along the south line of said Section 2 and said Adjusted Parcel 2, North 88°47'10" West, 5277.95 feet to the southeast corner of said Section 3;
- 22) thence along the south line of said Section 3 and said Adjusted Parcel 2, South 89°24'31" West, 5279.28 feet to the **POINT OF BEGINNING**.

Containing an area of approximately 659.36 acres.

The bearing of **North 01°11'12" East** between City of Merced GPS Control Points 35 and 36, as calculated using published coordinates per map filed in Book 58 of Records of Surveys, at Pages 38 through 41, Merced County Records, was taken as the **BASIS OF BEARINGS** of this description.

A PLAT OF THE ABOVE DESCRIBED PARCEL(S) OF LAND IS ATTACHED HERETO AS EXHIBIT "B" AND BY THIS REFERENCE MADE A PART HEREOF.

END DESCRIPTION

EXHIBIT "A"

This real property description has been prepared by me, or under my direction, in conformance with the requirements of the Professional Land Surveyors' Act.



Scott J. Roberts

Professional Land Surveyor

California No. 9235



November 10, 2023

Date

SEE SHEET 3

112PM41
REMAINDER

060-550-028

POR. ADJ. PCL. 2
DOC#2016035817

060-020-048

22880R783

N89°18'12"E

17.03'

POINT OF COMMENCEMENT
CORNER COMMON TO
SECTIONS 3, 4, 9, & 10

POINT OF BEGINNING

N89°24'31"E

30.01'

S89°24'31"W 5279.28'

S01°02'14"W
39.96'

060-050-032

CARDELLA
ROAD

S89°18'12"W 77.04'

060-560-054

41PM6
PARCEL 2

LAKE
ROAD

47'

30'

LEGEND

ABBREVIATIONS

ADJ.	ADJUSTED
DOC#	DOCUMENT NUMBER
OP	OFFICIAL PLATS
OR	OFFICIAL RECORDS
PM	PARCEL MAP
PCL.	PARCEL
POR.	PORTION OF

SEE SHEET 1

0 15 30
SCALE: 1" = 30'

O'DELL
ENGINEERING

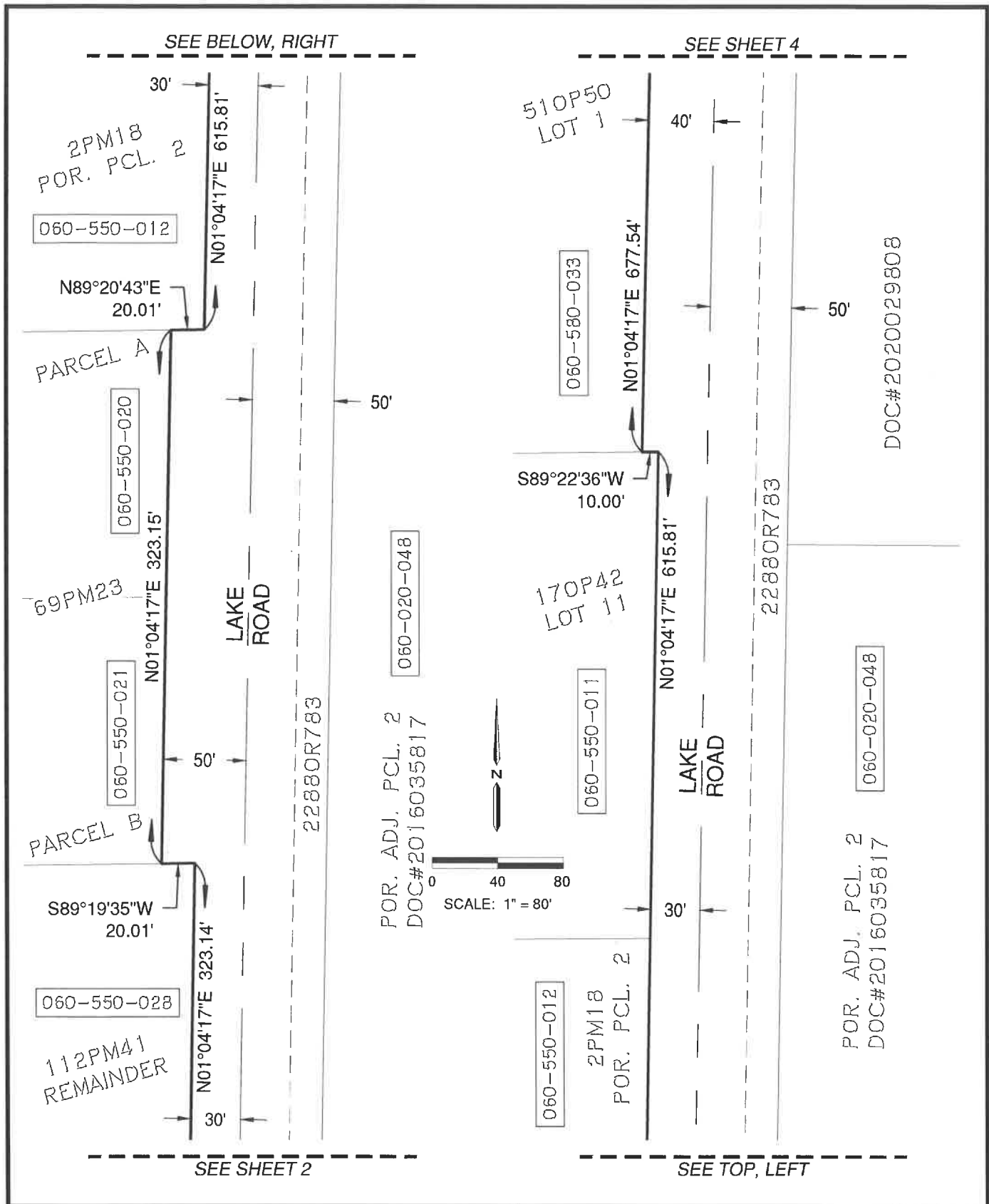
1165 Scenic Drive, Suite A
Modesto, CA 95350
odellengineering.com

EXHIBIT "B"

SCALE:	1"=30'	DATE:	2023-11-10
JOB NO.:	37771 VST ANNEXATION TO MERCED		
FILE:	37771-PLAT-ANNEX.DWG		

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of
4

EXHIBIT B



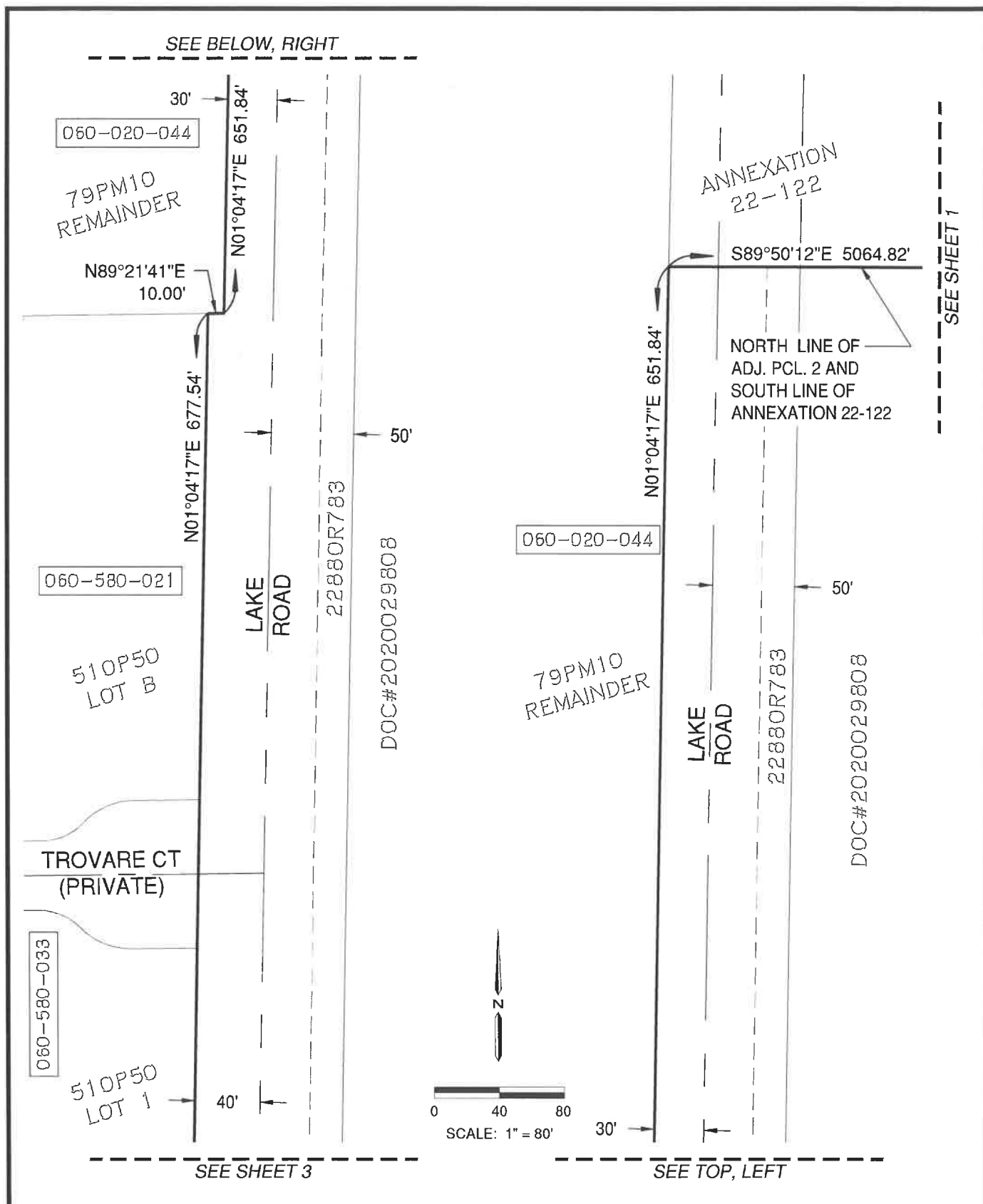
1165 Scenic Drive, Suite A
Modesto, CA 95350
odellengineering.com

EXHIBIT "B"

SCALE:	1"=80'	DATE:	2023-11-10
JOB NO.:	37771 VST ANNEXATION TO MERCED		
FILE:	37771-PLAT-ANNEX.DWG		

3
of
4

EXHIBIT B



1165 Scenic Drive, Suite A
Modesto, CA 95350
odellengineering.com

EXHIBIT "B"

SCALE:	1"=80'	DATE:	2023-11-10
JOB NO.:	37771 VST ANNEXATION TO MERCED		
FILE:	37771-PLAT-ANNEX.DWG		

4
of
4

EXHIBIT B

CITY OF MERCED
Planning Commission

Resolution #4127

WHEREAS, the Merced City Planning Commission at its regular meeting of December 20, 2023, held a public hearing and considered **Pending Annexation and Pre-zoning Application #23-03, General Plan Amendment #23-04, Adoption of the Virginia Smith Trust Specific Plan, and the Establishment of Planned Development (P-D) #80**, initiated by the Virginia Smith Trust, property owners. This application involves the annexation of approximately 654 acres of land to the City of Merced, the Rezoning of the property as Planned Development (P-D) #80, an amendment to the text of the General Plan, the adoption of the VST Specific Plan, and the establishment of Planned Development (P-D) #80. The property site is generally located at the northeast corner of Cardella and Lake Roads with an address of 4600 Lake Road, and is more particularly described as those portions of Section 2 and Section 3, Township 7 South, Range 14 East, Mount Diablo Base and Meridian in the County of Merced, State of California also known as Assessor's Parcel Numbers 060-010-004 and 060-020-048; and,

WHEREAS, the Merced City Planning Commission concurs with Findings/Considerations A through I of Staff Report #23-1114 (Exhibit B); and,

WHEREAS, after reviewing the City's Draft Environmental Determination, and fully discussing all the issues, the Merced City Planning Commission does resolve to hereby recommend to City Council adoption of the Focus Subsequent Environmental Impact Report SCH No. 2001021056 (certified 10/17/2023) and Mitigation Monitoring Program (Exhibit C), and approval of Pending Annexation and Pre-zoning Applications #23-03 and General Plan Amendment #23-04 and Establishment of Planned Development (P-D) #80 and Adoption of the Virginia Smith Trust Specific Plan, subject to the Conditions set forth in Exhibit A attached hereto.

PLANNING COMMISSION RESOLUTION # 4127

Page 2

December 20, 2023

Upon motion by Commissioner Gonzalez, seconded by Commissioner Delgadillo, and carried by the following vote:

AYES: Commissioner Gonzalez, Ochoa, Delgadillo, and Camper

NOES: None

ABSENT: Commissioner Thao, Smith, and Chairperson Harris

ABSTAIN: None

PLANNING COMMISSION RESOLUTION # 4127

Page 3

December 20, 2023

Adopted this 20th day of December 2023



Chairperson, Planning Commission of
the City of Merced, California

ATTEST:



Secretary

Attachment:

Exhibit A – Conditions of Approval

Exhibit B – Findings

Exhibit C – Mitigation Monitoring and Reporting Program

Findings
Planning Commission Resolution #4127
Pending Annexation and Pre-zoning Application #23-03, General Plan
Amendment #23-04, Establishment of Planned Development (P-D)
#80, Adoption of VST Specific Plan and Environmental Review #23-44

1. All new construction within the annexation area shall comply with all standard Municipal Code and Subdivision Map Act requirements as applied by the City Engineering, Building, Planning and Fire Departments.
2. All other applicable codes, ordinances, policies, etc. adopted by the State of California or City of Merced shall apply.
3. Approval of Annexation and Pre-zoning Application #23-03, General Plan Amendment #23-04, the Establishment of Planned Development (P-D) #80, VST Specific Plan, and the adoption of Environmental Review #23-44 is subject to the applicant's entering into a written (legislative action) agreement that they agree to all the conditions and shall pay all City and school district fees, taxes, public facilities fees, in lieu fees and/or assessments, in effect on the date of any subsequent subdivision and/or permit approval, any increase in those fees, taxes, or assessments, and any new fees, taxes, or assessments, which are in effect at the time the building permits are issued, which may include public facilities impact fees, a regional traffic impact fee, law, etc. Payment shall be made for each phase at the time of building permit issuance for such phase unless an Ordinance or other requirement of the City requires payment of such fees, taxes, and or assessments at an earlier or subsequent time. Said agreement to be approved by the City Council prior to the adoption of the ordinance, resolution, or minute action.
4. The developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, and any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof, from any and all claims, actions, suits, proceedings, or judgments against the City, or any agency or instrumentality thereof, and any officers, officials, employees, or agents thereof to attack, set aside, void, or annul, an approval of the City, or any agency or instrumentality thereof, advisory agency, appeal board, or legislative body, including actions approved by the

voters of the City, concerning the project and the approvals granted herein. Furthermore, developer/applicant shall indemnify, protect, defend (with counsel selected by the City), and hold harmless the City, or any agency or instrumentality thereof, against any and all claims, actions, suits, proceedings, or judgments against any governmental entity in which developer/applicant's project is subject to that other governmental entity's approval and a condition of such approval is that the City indemnify and defend such governmental entity. City shall promptly notify the developer/applicant of any claim, action, or proceeding. City shall further cooperate fully in the defense of the action. Should the City fail to either promptly notify or cooperate fully, the developer/applicant shall not thereafter be responsible to indemnify, defend, protect, or hold harmless the City, any agency or instrumentality thereof, or any of its officers, officials, employees, or agents.

5. The developer/applicant shall construct and operate all future projects within the annexation area in strict compliance with the approvals granted herein, City standards, laws, and ordinances, and in compliance with all State and Federal laws, regulations, and standards. In the event of a conflict between City laws and standards and a State or Federal law, regulation, or standard, the stricter or higher standard shall control.

The following conditions apply to new construction within the annexation area:

6. Community Facilities District (CFD) formation is required for annual operating costs for police and fire services as well as storm drainage, public landscaping, public landscaping within State rights-of-way, street trees, street lights, parks and open space. CFD procedures shall be initiated before final map or first building permit approval. Developer/Owner shall submit a request agreeing to such a procedure, waiving right to protest and post deposit as determined by the City Engineer or designee to be sufficient to cover procedure costs and maintenance costs expected prior to first assessments being received.

The following conditions apply to the future development at the property located at 4600 Lake Road:

7. All development shall be subject to the Mitigation Measures outlined in the *Mitigation Monitoring and Reporting Program for The*

University Community Plan update and VST Specific Plan Project under Environmental Review #23-44.

8. All development within the VST Specific Plan area shall comply with all requirements of the VST Specific plan.
9. Site Plan Review is required prior to construction of commercial, mixed use, office, or multi-family uses. At the time of project evaluation, if the Site Plan Review Committee deems that an increase in traffic or decrease in parking will create negative impacts, if necessary, the Committee may require additional documentation or studies to provide additional analysis to mitigate any issues.
10. Prior to the issuance of a building permit, the developer shall work with the Merced County Transit Authority (aka: The Bus) to determine if a bus stop is needed at this location. If a bus stop is required, the stop shall be in an area to allow the bus to move completely out of the travel lanes. The location of all bus stops shall be subject to approval by the City Engineer or designee.
11. The hours of construction activities that generate noise, when adjacent to housing and other “sensitive” uses shall be limited to the hours of 7:00 a.m. to 6:00 p.m.
12. At the time of construction, all required public improvements shall be installed along the property frontage. This includes, but is not limited to, sidewalk, curb, gutter, streetlights, and street trees.
13. The development shall contribute its fair share toward road improvements as described in the Mitigation Monitoring program.
14. All construction shall comply with construction standards in accordance with the requirement for the City’s Storm Water Quality permit and storm sewer system standards.
15. All new utilities serving the site shall be installed underground.
16. All City sewer, water, and storm drain lines serving the site shall be extended across the full frontage of the property unless it is determined by the Public Works Director that these lines are not likely to be extended to serve any other property (consistent with the Merced Municipal Code).
17. All storm water shall be contained onsite and metered out to the City’s storm water system in accordance with City Standards.

18. A minimum turning radius as required by the Fire Department for fire apparatus access must be provided throughout the project or as required.
19. The future commercial development shall provide pedestrian and bicycle access throughout per the VST Specific Plan. Safe connectivity throughout the site shall be provided by pedestrian pathways. Bicycle parking shall be provided as required by the City's Zoning Ordinance.
20. The developer shall use proper dust control procedures during site development in accordance with San Joaquin Valley Air Pollution Control District rules.
21. All landscaping shall comply with City Standards, the City's Zoning Ordinance Section – Landscaping, and the Merced Municipal Code, in addition to all state-mandated conservation and drought restrictions. This shall include the use of xeriscape landscaping as appropriate.
22. Irrigation for all onsite landscaping shall be provided by a low-volume system in accordance with the State's Emergency Regulation for Statewide Urban Water Conservation or any other state or city-mandated water regulations dealing with current drought conditions.
23. All landscaping in the public right-of-way shall comply with the most recently adopted water regulations by the State and City addressing water conservation measures.
24. All mechanical equipment shall be screened from public view.

Findings and Considerations
Planning Commission Resolution #4127
Pending Annexation and Pre-zoning Application #23-03, General Plan
Amendment #23-04, Establishment of Planned Development (P-D) #80,
and Adoption of the VST Specific Plan

FINDINGS/CONSIDERATIONS:

Changes to the text of the General Plan

- A) *Amend Policy UE-1.4b as follows (note underlined text is new text and ~~strikethrough~~ text is deleted text):*

The City accepts the University Community Plan adopted by Merced County on ~~December 21, 2004,~~ October 17, 2023, as a general conceptual framework for the planning of the University Community. The City also accepts the VST Specific Plan adopted by Merced County on October 17, 2023, as the design framework and program for the VST Property, including the development standards, land use diagram, circulation diagram, development plan, lot sizes and standards, and recreation, open space and park standards. These documents and plans were developed through a collaborative effort with UC Merced, the City, and the County, in conformance with the City's policies for the area, including annexation to the City.

- ~~That existing plan can be used as foundation work for further planning for the area, with the City as lead agency in the planning progress.~~
- ~~If a special planning process or framework is used for the development of the University Community, the costs of that planning process shall be borne by the applicants and developers, not by Merced residents.~~

The City should revise all of its various planning documents to accommodate the incorporation of the University Community into the City of Merced. These include not only the General Plan, but also plans for wastewater treatment, water, storm drainage, parks, fire protection, and other services.

Amend Figure 3.9 of Chapter 3 – Land Use to accurately reflect the modified boundaries of the University Community Plan

Figure 3.9 of the General Plan at Attachment D would be modified to match the boundary of the adopted University Community Plan as shown at Attachment E.

Add Policy L-3.8 as follows:

L-3.8 Implement the 2023 UCP and VST Specific Plan as adopted by the County of Merced.

Amend Section 3.73 University Community Plan by adding the following to the end of this section after “2009 Revisions” on page 3-71:

After the 2009 amendments the University Community Plan was further amended. The amendments included substantial revisions to the UCP policies text to reflect the current regulatory conditions, annexation the City of Merced as the preferred form of development, reduction of the planning area from 2,133 acres to 1,841 acres to include only those areas outside of the boundaries of the LRDP (and subject to local land use regulations), modification of the land use program to reduce the number for dwelling units from 11,616 to 9,680), a reduction of the amount of commercial development from 2,022,900 square feet to 1,246,150 square feet, and a modification of the circulation diagram. The modification of the circulation diagram included changes to the alignment of Campus Parkway. A revised land use diagram was also adopted and is included in Appendix 3.10.1. A Specific Plan was developed for the Virginia Smith Trust (VST) property concurrent with the update of the UCP.

Delete illustrations and figures for the UCP in Appendix 3.10.1 on pages 3-86 through 3-89 (Attachment F) and replace with Figures 3 and 4 of the VST Specific Plan (Attachment G).

General Plan Compliance and Policies Related to This Application

- B) The proposed annexation complies with the General Plan designation of University Community Plan (UCP) for the site. General Plan Policy UE-1.3 and Implementing Action 1.3.g requires that annexation requests be evaluated against certain criteria. Below is an evaluation of the proposed annexation against those criteria:

Criteria 1

Is the area contiguous to the Current City Limits and within the City's Specific Urban Development Plan (SUDP)/Sphere of Influence (SOI)? Do the annexed lands form a logical and efficient City limit and include older areas where appropriate to minimize the formation of unincorporated peninsulas?

Evaluation

After the UC Merced annexation is completed, and at the time the

application for annexation is submitted to LAFCO, this site will be contiguous to the existing City Limits to the north (see map at Attachment A). After the annexation of the University of California, Merced, campus, the annexation of the proposed project site would logically begin the physical connection of what will become a University Village to the south of the UC Merced Campus.

Criteria 2

Is the proposed development consistent with the land use classification on the General Plan Land Use Diagram (Figure 3.1)?

Evaluation

The proposed project site land use designations are consistent with the land use classification of the University Community Plan and with the proposed changes to the General Plan text and diagrams as described in Finding A above. The VST Specific Plan is a subset of the larger University Community Plan that provides support for the University campus, students, employees, and faculty by creating a university village to house, recreate and entertain those associated with the UC. This project will implement that objective of the plan.

Criteria 3

Can the proposed development be served by the City water, sewer, storm drainage, fire and police protection, parks, and street systems to meet acceptable standards and service levels without requiring improvements and additional costs to the City beyond which the developer will consent to provide or mitigate?

Evaluation

The University is being served by the City of Merced through a service agreement. Once the UC annexes followed by the VST annexation, those services can be extended without burden to the City's financial health. All new development within the annexation area would be required to annex into the City's Community Facilities District (CFD) for services which would cover the costs of Police and Fire protection. Public Facilities Impact Fees would also be paid that would help fund future police and fire stations, parks, and street improvements. Requirements to annex to the CFD and pay the PFFP impact fees are listed as conditions of approval in the Planning Commission Resolution at Attachment A.

Criteria 4

Will this annexation result in the premature conversion of prime agricultural land as defined in the Important Farmland Map of the State Mapping and Monitoring Program? If so, are there alternative locations where this development could take place without converting prime soils?

Evaluation

Though parts of the annexation area are listed as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, the proposed development is planned to provide higher density, which will minimize the encroachment overall into local prime farmlands. Converting these lands to support the UC will help minimize vehicle trips and provide opportunities for healthy activity with plans for open space and parks. The conversion of farmland was evaluated as part of the FSEIR at Attachment I

Criteria 5

Will a non-agricultural use create conflict with adjacent or nearby agricultural uses? If so, how can these conflicts be mitigated?

Evaluation

The proposed development would not create barriers to the use of nearby agricultural lands.

Criteria 6

Does the annexation area help the City reach one of the following goals?

Does annexation of the area bring the City closer to annexation of the UC Merced campus and University Community?

Does the area contain significant amounts of job-generating land uses, such as industrial, commercial, office, and business/research and development parks?

Does the project provide key infrastructure facilities or other desirable amenities such as the extension of major roads, utility trunk lines, parks, and recreational facilities, etc.?

Evaluation

The proposed annexation area is within the University Community Plan. This annexation will not be possible until the UC Merced campus is annexed. Although this annexation does not bring the City closer to annexing the UC Campus it does start the process of annexation of the University Community Plan.

The land uses proposed in this project area will contain land uses that support the University such as residential, commercial, office, and mixed use. Due to that, there will be many opportunities for economic growth and job generation. The project provides key infrastructure facilities or other desirable amenities such as the extension of major roads, utility trunk lines, parks, and recreational facilities. The VST Specific Plan provides linkages between the University Campus and this property to create opportunities for residents and staff to traverse between the school and the uses to the south eventually built on the VST site. The design also provides continued connections for roadways and utilities.

Community Benefits

- C) The VST annexation is the first step in the development of this area. Once the area begins development, there will be significant community benefits as a result of this development. These benefits include affordable housing, providing incentives to workers on the UC Campus, providing features that reduce environmental impacts, and providing ongoing funding for services and programs that further the Merced County Office of Education's (MCOE) mission. The document provided at Attachment H provides more details on these benefits.

Zoning Code Compliance for the Planned Development Establishment

- D) Per Merced Municipal Code Section 20.20.20 (J) Planned Development (P-D) Zoning Districts, approval of an application for Planned Development Establishment or Revision with accompanying Preliminary Site Utilization Plan only if the following findings can be made:
 - 1. *The proposed development is consistent with the goals, policies, and actions of the General Plan and any applicable specific plan and community plan.*

The proposed Planned Development Establishment would be consistent with the General Plan if General Plan Amendment #23-04 is approved.

2. *The site for the proposed development is adequate in size and shape to accommodate proposed land uses.*

The subject site is located at the northeast corner of Cardella and Lake Roads (Attachment B). The project proposes 654 acres of mixed-use development, including 4,000 dwelling units, approximately 800,000 square feet of commercial/office space, 76 acres of parks and 25 acres of open space and trails. The site for the proposed development is adequate in size and shape to accommodate the proposed land uses.

3. *The site for the proposed development has adequate access considering the limitations of existing and planned streets and highways.*

The proposal would have adequate access to existing and planned streets and highways.

4. *Adequate public services exist or will be provided to serve the proposed development.*

City utilities such as water and sewer main lines as well as storm drain lines would be extended to the project site with approval of the proposed annexation. These lines would be adequate to serve the project.

5. *The proposed development will not have a substantial adverse effect on surrounding property, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.*

There may be some temporary impacts such as vibration, noise, and dust during construction, but the proposed development would not have a substantial adverse effect on surrounding property, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.

6. *The proposed development carries out the intent of the Planned Development zoning district by providing a more efficient use of the land and an excellence of site design greater than that which could be achieved through the application of established zoning standards.*

EXHIBIT B

OF PLANNING COMMISSION RESOLUTION #4127

The proposed development provides efficient use of land. By creating the VST Specific Plan, the project proponents provided the vision and standards for optimizing the property, creating a sense of place, creating the foundation for mixed use and pedestrian scaled development and ultimately providing the village support needed for the existing university students and staff.

7. *Each individual unit of the proposed development, in each phase as well as the total development, can exist as an independent unit capable of creating a good environment in the locality and being in any stage as desirable and stable as the total development.*

The proposed development consists of a mixture of uses that mirror a similarity of design to the UC campus. Anything that is developed on this property, to the plan standards, can exist by itself and still benefit the community, especially the UC campus. Once anything is developed it could remain independent capable of creating a good environment in the locality and being in any stage as desirable and stable as the total development.

8. *Any deviation from the standard ordinance requirements is warranted by the design and additional amenities incorporated in the development plan, which offer certain unusual redeeming features to compensate for any deviations that may be permitted.*

As shown in VST Specific Plan at Attachment C of Planning Commission Staff Report #23-1114, the proposal includes walking and bike trails connecting the future development with the UC campus. There are also development standards that will create architectural interest not required in standard zoning. A mixed-use development, planned as part of the land use vision, will provide the extension of visual interest and optimal pedestrian and bike friendly environment as currently experienced on the campus to the north.

9. *The principles incorporated in the proposed development plan indicate certain unique or unusual features, which could not otherwise be achieved under the other zoning district.*

The proposed use would allow development of the entire parcel, in a way that is directly linked and supportive to the University of California, Merced campus. The design provides physical pedestrian and bicycle linkages that will promote healthy transportation options and get people out of their car. The mixed-use design and variety of

EXHIBIT B

OF PLANNING COMMISSION RESOLUTION #4127

housing types proposed throughout the development will provide direct support to the UC students, employees and faculty and create a village as is in the original plans for the site.

Specific Plan

- E) The proposal includes a specific plan as shown at Attachment C. The VST Specific Plan is an update of the University Community Plan previously adopted by the County of Merced. The original plan had a vision which supported the University of California campus with a village-like development of mixed-use, walking and bike trails and a variety of housing styles. The VST Specific Plan contains similar requirements. The goal is to support the University campus in the same way as originally planned.

The standards of the Specific Plan will be incorporated into the standards for Planned Development (P-D) #80. The “Regulatory and Design Framework” section of the VST Specific Plan defines the standards for development within the specific plan area. All projects within the area will be measured against these standards to ensure compliance with the Specific Plan. In order to ensure this compliance, Condition #8 was added which requires Site Plan Review for all commercial, mixed-use, multi-family, or office uses within the plan area. Single-family development would also be required to comply with all requirements for setbacks and design standards as outlined in the specific plan but would not be subject to Site Plan Review.

Traffic/Circulation

- F) An environmental study was conducted that assessed the projected traffic counts and traffic impacts to the area based on the proposed land uses. This traffic study can be found within Attachment D. The development shall contribute its fair share toward road improvements as described within the Mitigation Monitoring Program in Resolution #4127 Exhibit C.

Parking

- G) The annexation does not directly produce a need for parking. However, the subsequent development would require parking to serve the future uses on the site. Parking requirements would be evaluated at the Site

Plan Review and/or Building Permit phase of development. It could also be reviewed as each project within the plan area is specifically entitled.

Land Use

- H) The subject site is located at the northeast corner of Cardella and Lake Roads (Attachment B). The project proposes 654 acres of mixed-use development, including 4,000 dwelling units, approximately 800,000 square feet of commercial/office space, 76 acres of parks and 25 acres of open space and trails. The land use map for this development is shown as Attachment B or within the Specific Plan (Attachment C).

Site Plan

- I) As described in Finding E above, a condition has been added to require a Site Plan Review Permit for all commercial, mixed-use, office, and multi-family development within the plan area. Each development shall be evaluated to ensure compliance with the requirements of the VST Specific Plan. At the time of project evaluation, if the Site Plan Review Committee deems that an increase in traffic or decrease in parking will create negative impacts, the Committee may require additional documentation or studies to provide additional analysis to mitigate any issues.

Neighborhood Impact/Interface

- J) The proposed project does not include any uses that would be detrimental to the public health, safety, and welfare of the immediate area or the city as a whole. Implementation of the conditions of approval and adherence to all applicable Building Codes, Fire Codes, and City Standards would prevent the project from having any detrimental effect on the health, safety, and welfare of the neighboring properties as well as the City as a whole. There may be some temporary impacts such as vibration, noise, and dust during construction, but the proposed development would not have a substantial adverse effect on surrounding property long term, will be compatible with the existing and planned land use character of the surrounding area, and will enhance the desirability of the area and have a beneficial effect.

Pre-Annexation Development Agreement

- K) Section 20.86.150 of the Zoning Ordinance requires a property owner to enter into a Pre-Annexation Development Agreement prior to annexation. This agreement shall not become operative unless annexation proceedings are completed by the Local Agency Formation commission (LAFCO). There is no requirement for staff to bring it to the Planning Commission. However, a Draft Pre-Annexation Development Agreement will be provided to, reviewed by, and approved by the City Council prior to their decision. The Pre-annexation Development Agreement is only with the owner of the vacant land and binds the owner and their successors to certain conditions and requirements related to the development of the land.

Environmental Clearance

- L) Planning staff has conducted an environmental review of the project in accordance with the requirements of the California Environmental Quality Act (CEQA). A Focus Subsequent Environmental Impact Report SCH No. 2001021056 (certified 10/17/2023) was prepared, and a Statement of Overriding Consideration with a Mitigation Monitoring Program is being recommended. This environmental document is provided at Attachment I.

MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE

University Community Plan Update and VST Specific Plan Project

State Clearinghouse No. 2001021056

County of Merced
Planning Department
2222 M Street, 2nd Floor
Merced, California 95340

Contact:
Tiffany Ho
Merced County Planning Department

July 28, 2023

**EXHIBIT C
OF PLANNING COMMISSION RESOLUTION #4127**

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List of Abbreviations

AAQA	Ambient Air Quality Analysis
BESD	Banta Elementary School District
BMP	best management practice
CALGreen	State Building Energy Efficiency Standards
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
City	City of Merced
CNEL	community noise equivalent level
County	County of Merced
dBA	A-weighted decibel
ESA	federal Endangered Species Act
ghg	greenhouse gas
lb/day	pounds per day
L _{dn}	day-night average noise level
L _{eq}	energy-equivalent noise level
MMRP	mitigation monitoring and reporting program
MSDS	Material Safety Data Sheets
MTCO _{2e}	metric tons of carbon dioxide equivalent
NAHC	Native American Heritage Center
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Eliminate System

PCC	Public Contract Code
PRC	Public Resources Code
RWQCB	regional water quality control board
SJVAPCD	San Joaquin Valley Air Pollution Control District
SWPPP	storm water pollution prevention plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
Valley CAN	Valley Clean Air Now
VELB	valley elderberry longhorn beetle
VERA	Voluntary Emission Reduction Agreement
ZNE	zero net energy

1. Mitigation Monitoring and Reporting Program

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000 et seq.), the County of Merced (County) prepared a Focused Subsequent Environmental Impact Report (SEIR) for the UCP Update and VST Specific Plan Project (the Project). The Project is located in unincorporated Merced County, northeast of the City of Merced, south of UC Merced, and within the City's sphere of influence (SOI). The proposed UCP Update area encompasses 1,841 acres and includes two properties; the Hunt and VST properties. The VST Property consists of 654 acres immediately south of the UC Merced Campus and is bounded generally by Lake Road on the west, UC Merced to the north, Cardella Road on the south and the Orchard Drive alignment on the east. The Hunt property is referred to as UCP South in the Adopted UCP, and includes approximately 1,187 acres of land south of UC Merced and is bounded by Lake Road on the west, Cardella Road to the north, Fairfield Canal to the east and Yosemite Road to the south. The Project includes modifications to the University Community Plan as part of the UCP Update and a Specific Plan for the 654-acre VST Property.

The SEIR evaluates the program-level impacts of the proposed changes to the Adopted UCP, and the project specific impacts associated with the VST Specific Plan. The SEIR (State Clearinghouse No. 2001021056) identified significant impacts and mitigation measures that would reduce the identified impacts to less-than-significant levels, where feasible, and concluded that some environmental impacts would be significant and unavoidable. CEQA (PRC Section 21081.6) and the State CEQA Guidelines (Sections 15091[d] and 15097) require public agencies to "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." This mitigation monitoring and reporting program (MMRP) has been prepared for the Project because the SEIR identifies significant adverse impacts related to project implementation, and mitigation measures have been identified to reduce or eliminate most of those impacts. Adoption of this MMRP would occur in conjunction with approval of the Project.

1.1. Purpose of Mitigation Monitoring and Reporting Program

This MMRP has been prepared to ensure that all required mitigation measures are implemented and completed in a satisfactory manner before and during project construction and operation, as applicable.

The MMRP table provided below has been prepared to assist the responsible parties in implementing the mitigation measures applicable to the Project. The table identifies the impact; the individual mitigation measures; the specific actions required before, during, and after construction; the implementing party; and mitigation timing. The table also includes a column to confirm implementation of the mitigation measures after project approval. The numbering of mitigation measures follows the numbering sequence found in the project SEIR. Mitigation measures that are referenced more than once in the SEIR are not duplicated multiple times in the MMRP table.

1.2. 2001/2004 UCP EIR and relationship to the UCP Update and VST Specific Plan MMRP

In 2004, the County adopted the UCP, which covered a 2,133-acre area that included most of the VST property, just south of the UC Merced campus (Adopted UCP). A program EIR was certified with adoption of the UCP in 2001 and a supplemental EIR, which focused on hydrology and water quality, was certified on December 21, 2004 via Resolution No. 2004-238 (referred to collectively herein as the 2001/2004 UCP EIR; State Clearinghouse No. 2001021056). The 2001/2004 UCP EIR was identified as the appropriate document to base the subsequent CEQA analyses upon because it describes the potential environmental impacts of the planning documents that would be amended by the VST Specific Plan and was certified by the County.

The County adopted an MMRP as part of the 2001/2004 UCP EIR approvals and those mitigation measures are incorporated herein by this reference. This MMRP is focused specifically on the UCP Update and VST Specific Plan

Project. Where mitigation measures applicable to the Project remain the same as those adopted in the 2001/2004 UCP EIR, the title, "Adopted Mitigation Measure," is used as the mitigation measure was "adopted" as part of the 2001/2004 UCP EIR; where mitigation measures would be modified or eliminated from those identified in the 2001/2004 UCP EIR, the title, "Modified Mitigation Measure," is used; and where new mitigation measures were developed for the modified Phase 2 Project, the title, "New Mitigation Measure," is used.

This MMRP only applies to activities associated with implementation of the UCP Update and VST Specific Plan Project applicable to the portions of the Project detailed in each measure. In addition, if the UCP Update and VST Specific Plan Project does not proceed, and the Project as approved through the 2001/2004 UCP EIR is implemented across the UCP area, the 2001/2004 UCP EIR mitigation measures would be applied to those activities.

1.3. Roles and Responsibilities

The County is responsible for overall administration of the MMRP and for verifying that the applicant, builder, construction contractor, or other designated party has completed the necessary actions for each measure. The party responsible for implementing each item will identify the staff members responsible for coordinating with the County on the MMRP.

1.4. Mitigation Monitoring and Reporting Program Table

Table 1, which identifies the mitigation measures applicable to the UCP Update and VST Specific Plan Project, includes the table columns identified and described below:

- ▶ **Impact:** This column presents all the impacts disclosed in the SEIR for which mitigation was identified.
- ▶ **Mitigation Measure:** This column presents all the mitigation measures identified in the UCP Update and VST Specific Plan Project SEIR, each of which has been adopted and incorporated into the project.
- ▶ **Action(s):** For every mitigation measure, one or more actions are described. The actions delineate the means by which the mitigation measures will be implemented and, in some instances, the criteria for determining whether a measure has been successfully implemented. Where mitigation measures are particularly detailed, the action may refer back to the measure.
- ▶ **Implementing Party:** This column identifies the entity responsible for undertaking the required action.
- ▶ **Timing:** Implementation of the action must occur before or during some part of project approval, project design, or project construction or on an ongoing basis. This column identifies the timing for implementation of each mitigation measure.
- ▶ **Completion of Implementation:** The County is responsible for ensuring that mitigation measures are successfully implemented with respect to work implemented within the County's jurisdiction. The "Completion of Implementation" column is to be used by the County to indicate when implementation of a mitigation measure has been completed. The County, at its discretion, may delegate implementation responsibility or portions thereof to qualified consultants or contractors. Upon annexation, the County's responsibility to ensure that the mitigation measures are successfully implemented will be transferred to the City of Merced. The "Completion of Implementation" column is to be used by the City to indicate when implementation of a mitigation measure has been completed.

Table 1 UCP Update and VST Specific Plan Mitigation Monitoring and Reporting Program

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Air Quality Impact 3.1.1: Generation of Short-Term, Construction-Related Emissions of ROG, NO_x, PM₁₀, and PM_{2.5}	Adopted Mitigation Measure 4.3-1 Compliance with the following SJVAPCD mitigation measure listed in Table 6-3 of the GAAMAQD would further reduce dust created during construction activities: <ul style="list-style-type: none"> ▶ Limit traffic speeds on unpaved roads to 15 mph. 	Prepare an AAQA for all construction and operational emissions that exceed 100 lb/day.	Project applicant, construction contractor, SJVAPCD	During preparation of the EIR for UCP South	
	Adopted Mitigation Measure 4.3-2 Construction contracts shall include the following specifications: <ul style="list-style-type: none"> ▶ Minimize idling time to a maximum of ten minutes when construction equipment is not in use; ▶ Employ construction activity management techniques such as extending the construction period outside the ozone season of May through October, reducing the number of hours of construction and scheduling activities during off peak hours; ▶ Tuning engines to manufacturer's specifications; ▶ When feasible, schedule equipment usage to avoid simultaneous use of equipment. 	Confirm that construction equipment measures are implemented	County of Merced	Before grading	
	New Mitigation Measure 3.1-1a: Utilize the cleanest available off-road construction equipment, including the latest Tier diesel or electric equipment (e.g. scrapers, graders, trenchers, tractors, loaders, backhoes, etc.) (UCP South only) All construction specifications shall require use off-road construction equipment that meet EPA's Tier 4 emission standards as defined in 40 CFR 1039 and comply with the appropriate test procedures and provisions as contained in 40 CFR Parts 1065 and 1068. Tier 3 models can be used if a Tier 4 version of the equipment type is not yet produced by manufacturers. This measure can also be achieved by using battery-electric off-road equipment as it becomes available. Implementation of this measure shall be required in the				

¹ The County's obligation to implement or confirm that implementation has been satisfied will transfer to the City of Merced upon annexation.

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>contract the project applicant establishes with its construction contractors. The applicant shall demonstrate its plan to fulfill the requirements of this measure in a report or in project improvement plan details submitted to the discretionary land use authority (City of Merced or Merced County) prior to the use of any off-road, diesel-powered construction equipment.</p> <p>New Mitigation Measure 3.1-1b: Preparation of an Ambient Air Quality Analysis (UCP South only)</p> <p>SJVACPD recommends that construction and operational emissions that exceed 100 lb/day prepare an AAQA to assess whether a project would violate an AAQS. Prior to the approval of a Final Map, the project applicant shall prepare a project-level analysis of emissions for development in the UCP area that is subject to SJVAPCD oversight to confirm whether the particular land use development would result in emissions that exceed this 100 lb/day screening criterion. In cases where a project's construction activity would generate emissions above this screening criterion (i.e., 100 lb/day), the project applicant shall prepare an AAQA. If, following the preparation of an AAQA, emissions are found to contribute to an exceedance of an AAQS, the project applicant shall either implement additional emission reduction measures as part of the project or, once all feasible on-site reduction measures have been exhausted, engage in regional programs that serve to reduce air pollution in the San Joaquin Valley. An example of a potential program includes the Valley Clean Air Now (Valley CAN) organization, which improves public health through investments in vehicle repair and replacement programs. Emissions reduction programs must demonstrate a quantifiable reduction and must be located within the SJVAB so air pollution reductions are realized in the basin. Alternatively, if regional air pollution reduction programs are unavailable, the project applicant may enter into a Voluntary Emission Reduction Agreement (VERA) with SJVAPCD to reduce emissions to below 100 lb/day for any pollutant that exceeds the screening criteria. If conditions warrant participation in a VERA, the VERA shall demonstrate a pound-for-pound reduction in emissions</p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	that exceed 100 lb/day through a process that funds and implements emissions reduction projects within the SJVAB. The types of emission reduction projects that could be funded include electrification of stationary internal combustion engines (such as well pumps), replacing old heavy-duty trucks with cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors. If a VERA is found to be required to meet thresholds, and the applicant elects to enter into one, the project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level.				
Impact 3.1-2: Long-Term, Operational (Regional) Emissions of Criteria Air Pollutants and Precursors	Adopted Mitigation Measure 4.3-4 (a) Outdoor electrical outlets shall be installed in the front and backyards of all housing units. (b) Use solar or low emission water heaters. (c) Orient buildings to take advantage of solar heating and natural cooling and use passive solar design. (d) Increase wall and attic insulation. New Mitigation Measure 3.1-2a: Implement On-Site Project Design Features to Reduce Emissions of Criteria Air Pollutants (UCP South) Prior to the issuance of any development permits, the project applicant shall implement the following measures to reduce the project's emissions: ► Use low-VOC (50–100 grams per liter) paint for external residential applications on all construction drawings for review and approval by staff of the discretionary land use authority (City of Merced or Merced County). ► Incorporate traffic calming measures including marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts, and on-street parking	Implement construction design features to minimize impacts.	Project applicant, construction contractor	Before building permit issuance	
		Preparation of air quality assessment to determine whether any SJVAPCD annual mass emissions thresholds are exceeded.	Project applicant, SJVAPCD	Before building permit issuance	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>throughout the site plan. Specific calming measures and locations shall be identified by a qualified transportation specialist.</p> <ul style="list-style-type: none"> ▶ Electric water heaters in all residences (no gas storage tank heaters). ▶ Electric heating, ventilation, and air conditioning (HVAC) units in residences (no gas units). ▶ Meet Tier 2 electric vehicle charging standards of the most recent version of Part 11 of the Title 24 California Building Code (CalGreen Code) for all land use types. ▶ Restrict idling times for heavy heavy duty trucks accessing the project site to 3 minutes or less through the signage indicating that idling must be limited to this duration. ▶ Plant vegetation throughout the project site near areas of high pollution generation (e.g., heavily traveled roadways, sites of truck idling) to reduce the dispersion of air pollutants. ▶ Apply for grant funding through SJVAPCD's Bikeway Incentive Program, which offers funding for Class I, Class II, and Class III bicycle paths for projects within the SJVAB. <p>Mitigation Measure 3.1-2b: Engage in Regional Programs to Offset Project Emissions of ROG, NO_x, CO, and PM₁₀ (UCP South and VST Specific Plan)</p> <p>UCP South</p> <p>Once the on-site reduction measures listed above under Mitigation Measure 3.1-2a have been incorporated, an air quality assessment shall be prepared to determine whether any SJVAPCD annual mass emissions thresholds are exceeded. If no thresholds are exceeded, no further action is necessary. If one or more thresholds are exceeded, prior to the issuance of grading permits for the first phase of development, the project applicant shall enter into a VERA through coordination with SJVAPCD to reduce emissions to meet SJVAPCD's annual mass emissions thresholds for any pollutant that exceeds their respective threshold. The project applicant shall engage in a discussion with SJVAPCD prior to the adoption of the</p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>VERA to ensure that feasible mitigation has been identified to reduce emissions to a less-than-significant level consistent with the direction given in SJVAPCD's GAMAQI. As allowed by SJVAPCD, the project applicant shall be provided the opportunity to perform an additional quantification of the project's operational emissions following the implementation of the proposed measures listed above under Mitigation Measure 3.1-2a to estimate the TPY needed to reduce emissions to meet SJVAPCD's annual thresholds of significance.</p> <p>VST Specific Plan</p> <p>A project-level evaluation of potential emissions has been performed for the VST Specific Plan. Based on SJVAPCD's guidance, various project design features have been incorporated into the design of the VST Specific Plan to reduce emissions, such as transportation management strategies and the elimination of onsite natural gas infrastructure for residential land uses. Based on this data (see Table 3.1-13), the applicant shall enter into a VERA with SJVAPCD to fully compensate for ROG, NO_x, and CO emissions that exceed SJVAPCD's CEQA annual mass emissions thresholds of significance.</p>				

Biological Resources

Impact 3.2-1: Result in Disturbance to or Loss of Special- Status Plant Species	<p>Adopted Mitigation Measure 4.4-2: The County shall ensure that at least 551 acres of upland annual grassland is preserved in conjunction with and to support at least 612 acres of vernal pool fairy shrimp habitat (for a total of 612 acres).</p> <p>Adopted Mitigation Measure 4.4-6: Seed collection from the shining navarretia located within the UCP area shall be conducted prior to the loss of the populations in the UCP area. Seed collection shall be conducted by a qualified botanist or restoration biologist. Collected seeds shall be dispersed within suitable habitat (i.e., seasonally moist</p>	Preservation of upland annual grassland.	Project applicant, County of Merced	Before construction	This has been completed for VST.
		Collection of shining navarretia seeds within UCP area.	Project applicant, construction contractor	Before construction	
		Pre-construction surveys of special-status species.	Project applicant, construction contractor	Before construction	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>clay flats in grassland). Seeds shall be dispersed only within suitable habitats where shining navarretia does not currently occur to avoid impacts on the genetic composition of existing populations.</p> <p>Seed from shining navarretia shall be dispersed in suitable habitat within the annual grassland preserved in conjunction with loss of vernal pool habitat (Impact 4.4.1) and/or Swainson's hawk habitat (Impact 4.4.4) if feasible. However, if mitigation lands to serve both purposes cannot be found, the applicant will be responsible for negotiating a conservation easement with a land owner in the vicinity such that a minimum of seven populations of shining navarretia receive long-term protection.</p> <p>Mitigation Measure 3.2-1: Implement Avoidance Measure and Mitigation for Special-Status Plant Species Not Covered by the Existing CDFW Incidental Take Permit or USFWS Biological Opinion</p> <ul style="list-style-type: none"> ► During implementation of preconstruction surveys required under the CDFW ITP and USFWS Biological Opinion Conservation Measures, a qualified botanist will target additional special-status plant species not covered by these permits. Surveys will follow survey methods from CDFW's Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities (CDFW 2018) and will be conducted during the blooming period for these species (Table MM 3.2-1). ► If special-status plant species are not found, the botanist will document the findings in a report to the discretionary land use authority (City of Merced or Merced County), and no further mitigation will be required. <p>If special-status plant species are found, the area occupied by special-status plants will be avoided completely, if feasible (i.e., project objectives can still be met). This may include establishing a no-disturbance buffer around the occupied habitat and demarcation of this buffer by a qualified biologist or botanist using flagging or high-visibility construction fencing. The size of the buffer</p>	Establishment of buffer area if any special-status species are found.	Project applicant, construction contractor	Before construction	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>will be determined by the qualified biologist or botanist and will be large enough to avoid direct or indirect impacts on the plant.</p> <p>► If special-status plants are found during special-status plant surveys and cannot be avoided, the project applicant shall, in consultation with CDFW or USFWS as appropriate depending on species status, develop and implement a site-specific mitigation strategy to achieve no net loss of occupied habitat or individuals. It is likely that existing mitigation efforts for state and federally listed plant species required under the ITP and USFWS Biological Opinion would be sufficient to reduce impacts on non-listed special-status plant species to a less-than-significant level.</p> <p>Mitigation measures shall include, at a minimum, preserving and enhancing existing populations, establishing populations through seed collection or transplantation from the site that is to be affected, and/or restoring or creating habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Purchase of credits from an agency-mitigation bank that contains the affected species may also be used to offset loss of occupied habitat. Potential mitigation sites could include suitable locations within or outside of the UCP area or VST Specific Plan area. Habitat and individual plants lost shall be mitigated at a minimum 1:1 ratio, considering acreage as well as function and value. Success criteria for preserved and compensatory populations will include:</p> <ul style="list-style-type: none"> ■ The extent of occupied area and plant density (number of plants per unit area) in compensatory populations will be equal to or greater than the affected occupied habitat. ■ Compensatory and preserved populations will be self-producing. Populations will be considered self-producing when: <ul style="list-style-type: none"> • plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<ul style="list-style-type: none"> reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity. <p>If offsite mitigation includes dedication of conservation easements, purchase of mitigation credits, or other offsite conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.</p>				
Impact 3.2-2: Result in Disturbance to or Loss of Special- Status Wildlife Species and Habitat	<p>Adopted Mitigation Measure 4.4-2: The County shall ensure that at least 551 acres of upland annual grassland is preserved in conjunction with and to support at least 61.2 acres of vernal pool fairy shrimp habitat (for a total of 612 acres).</p> <p>Adopted Mitigation Measure 4.4-4(a): The County shall ensure that Swainson's hawk foraging habitat is preserved offsite in sufficient quality and quantity, as determined through consultation with the CDFW, to mitigate for the loss resulting from the proposed UCP.</p> <p>The preservation of annual grasslands (through Policy PA 2.3) that are suitable as foraging habitat for Swainson's hawk shall be located within 10 miles of a current or historic Swainson's hawk nest site (consistent with CDFG guidance).</p> <p>Adopted Mitigation Measure 4.4-4(b): The County shall require pre-construction surveys to identify active raptor nests prior to the onset of construction activities within 1,000 feet of any ground disturbing activities (i.e., construction site). The pre-construction surveys will be conducted in accordance with USFWS and/or CDFW guidelines. If</p>	Preservation of upland annual grassland.	Project applicant, County of Merced	Before construction	This has been completed for VST.
		Preservation of offsite foraging habitat for Swainson's hawk	Project applicant, construction contractor, CDFW	Before construction	
		Pre-construction surveys to identify active raptor nests. Consultation with CDFW and USFWS if any are located	Project applicant, construction contractor	Before construction	
		Pre-construction surveys to identify San Joaquin kit fox. If any are located, implementation of June 1999 Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance	Project applicant, construction contractor	Before construction	

<p>no active raptor nests are identified within 1,000 feet of the construction site, no further mitigation would be necessary. If active nests are found within 1,000 feet of the construction site, the CDFW shall be consulted to determine appropriate mitigation measures to minimize the effect. At a minimum, construction shall be delayed within an appropriate buffer zone, as determined by consultation with CDFW, until the young have fledged.</p> <p>Adopted Mitigation Measure 4.4-5: Project applicants shall conduct surveys for dens/burrows that could be occupied by vagrant San Joaquin kit fox prior to any ground-disturbing activities within the UCP area. The surveys shall be conducted within two weeks or less of any ground-disturbing activities. If dens/burrows meeting the criteria suitable for use by San Joaquin kit fox are found, the dens/burrows shall be cleared using the methodologies that are consistent with those described in the June 1999 Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance.</p> <p>New Mitigation Measure 3.2-2a: Conduct Preconstruction Surveys for Western Spadefoot, Implement Avoidance Measures, and Relocate Individuals</p> <ul style="list-style-type: none"> ▶ Within 7 days before commencement of project activities that would result in ground disturbance, vegetation removal, or use of vehicles, a qualified biologist familiar with the life history of western spadefoot and experienced in performing surveys for western spadefoot will conduct a focused preconstruction survey of habitat suitable for the species within the UCP area. The qualified biologist will inspect the project site in the UCP area for adult western spadefoot toads, eggs and tadpoles within aquatic breeding habitat, as well as suitable burrow habitat. ▶ If western spadefoot adults, tadpoles, or eggs are not detected during the focused survey, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and further mitigation will not be required. ▶ If western spadefoot adults, tadpoles, or eggs are detected, a qualified biologist with an appropriate CDFW Scientific Collecting 	<p>Pre-construction surveys to identify presence of Western spadefoot. Implementation of mitigation with CDFW permit if any are located.</p>	<p>Project applicant, construction contractor, CDFW</p>	<p>Before construction</p>
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Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>Permit that allows handling of amphibians will relocate individual adults, tadpoles, or eggs to nearby suitable habitat with prior approval of CDFW. The qualified biologist will also be present during initial ground disturbance activities and will inspect the project site in the UCP area before initiation of project activities. If additional western spadefoot are detected, the qualified biologist will relocate individuals into suitable habitat for western spadefoot (i.e., vernal pool grasslands) that will be preserved in perpetuity.</p> <p>New Mitigation Measure 3.2-2b: Conduct Preconstruction Surveys for Western Pond Turtle, Implement Avoidance Measures, and Relocate Individuals</p> <ul style="list-style-type: none"> ▶ Within 48 hours before commencement of project activities that would result in ground disturbance, vegetation removal, or use of vehicles, a qualified biologist familiar with the life history of western pond turtle and experienced in performing surveys for western pond turtle will conduct a focused survey of habitat suitable for the species within the UCP area. If aquatic habitat potentially suitable for the species is present within a project site in the UCP area (e.g., streams, ponds, drainages), upland habitat within approximately 1,600 feet of this aquatic habitat will also be surveyed. The qualified biologist will inspect the project site for western pond turtles as well as suitable burrow habitat. ▶ If western pond turtles are not detected during the focused survey, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and further mitigation will not be required. ▶ If western pond turtles are detected, a no-disturbance buffer of at least 100 feet will be established around any identified nest sites or overwintering sites. A qualified biologist with an appropriate CDFW Scientific Collecting Permit that allows 	<p>Pre-construction surveys to identify presence of Western pond turtle. Implementation of avoidance measures and relocation.</p>	<p>Project applicant, construction contractor</p>	<p>Before construction</p>	

<p>handling of reptiles will be present during initial ground disturbance activities and will inspect the project site before initiation of project activities. If western pond turtles are detected, the qualified biologist will move the turtles downstream and out of harm's way.</p> <p>New Mitigation Measure 3.2-2c: Conduct Focused American Badger Survey and Establish Protective Buffers</p> <ul style="list-style-type: none"> ▶ Within 30 days before commencement of project activities that would result in ground disturbance, vegetation removal, or use of vehicles, a qualified wildlife biologist with familiarity with American badger and experience using survey methods for the species will conduct focused surveys of habitat suitable for the species within the UCP area to identify any American badger dens. ▶ If occupied dens are not found, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and further mitigation will not be required. ▶ If occupied dens are found, impacts on active badger dens will be avoided by establishing exclusion zones around all active badger dens, the size of which will be determined by the qualified biologist. No project activities (e.g., vegetation removal, ground disturbance, staging) will occur within the exclusion zone until denning activities are complete or the den is abandoned, as confirmed by a qualified biologist. The qualified biologist will monitor each den once per week to track the status of the den and to determine when it is no longer occupied. When it is no longer occupied, project activities within the exclusion zone may occur. <p>New Mitigation Measure 3.2-2d: Conduct Focused Surveys for Crotch Bumble Bee and Implement Avoidance Measures if Listed under CESA</p> <p>Prior to implementation of project activities that could result in loss of crotch bumble bees (e.g., ground disturbance, vegetation removal), the following measures will be implemented.</p> <ul style="list-style-type: none"> ▶ The project applicant will retain a qualified biologist familiar with bumble bees in California, with experience using survey methods 	Pre-construction surveys to identify presence of American Badger. Establishment of protective buffers.	Project applicant, construction contractor	Before construction
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Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>for bumble bees, and with approval from CDFW to conduct focused surveys of suitable habitat within the project site in the UCP area. Because a survey protocol for this species has not been established, survey methods will be developed and approved in consultation with CDFW, and will generally include but not be limited to the following elements (included in survey protocols for other bumble bee species in the United States [USFWS 2018]):</p> <ul style="list-style-type: none"> ■ Surveys will be conducted during the active flight season (typically March through September). ■ Surveys will be conducted by walking transects through suitable habitat, or by surveying a minimum of one person-hour per 3 acres of suitable habitat without transects. ■ Bumble bees within the project site will be identified through passive, non-lethal methods (e.g., visual surveys using binoculars, photographic documentation), as approved by CDFW. ● If crotch bumble bees are detected during focused surveys, the survey results will be submitted to the discretionary land use authority (City of Merced or Merced County) and CDFW. The project applicant will consult with CDFW to determine whether there are additional avoidance measures available that would reduce the likelihood of injury or mortality of crotch bumble bee. The project applicant will consult with CDFW to determine whether authorization for take of crotch bumble bees would be required by obtaining an incidental take permit pursuant to California Fish and Game Code Section 2081. If required, the project applicant will implement measures required under the permit which may include compensatory mitigation to fully mitigate impacts on crotch bumble bee. 	<p>Pre-construction surveys to identify presence of Crotch Bumble Bee. Establishment of avoidance measures</p>	<p>Project applicant, construction contractor, CDFW</p>	<p>Before construction</p>	
		<p>Pre-construction surveys to identify presence of bats. Establishment of avoidance measures</p>	<p>Project applicant, construction contractor, County of Merced</p>	<p>Before construction</p>	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<ul style="list-style-type: none"> If no crotch bumble bees are detected during focused surveys, the survey results will be submitted to the discretionary land use authority (City of Merced or Merced County). The project applicant will consult with CDFW to determine whether the negative survey results are sufficient to conclude that crotch bumble bees (including underground overwintering and nesting colonies) are absent from the project site, and that authorization for take of crotch bumble bees would not be required. If CDFW concurs, then further mitigation would not be required. <p>New Mitigation Measure 3.2-2e: Conduct Focused Bat Surveys and Implement Avoidance Measures</p> <p>Within 30 days before commencement of project activities, a qualified biologist familiar with bats and bat ecology and experienced in conducting bat surveys will conduct surveys for bat roosts in suitable habitat (e.g., trees, crevices, cavities, exfoliating bark, bridges, unoccupied buildings) within and adjacent to the UCP area.</p> <ul style="list-style-type: none"> Surveys will consist of a daytime pedestrian survey looking for evidence of bat use (e.g., guano) and/or an evening emergence survey to note the presence or absence of bats within potential roosts. If no evidence of bat roosts is found, the qualified biologist will submit a report summarizing the results of the survey to the discretionary land use authority (City of Merced or Merced County), and no further study will be required. If evidence of bat roosts is observed, the species and number of bats using the roost will be determined. Bat detectors shall be used if deemed necessary to supplement survey efforts by the qualified biologist. If an active western red bat maternity roost is detected, a qualified biologist shall determine an appropriate avoidance buffer to be maintained from April 1 until young are capable of 	Pre-construction surveys to identify presence of burrowing owl. Establishment of avoidance measures and compensation for affected areas	Project applicant, construction contractor. CDFW	Before construction	
		If pile driving must occur within 55 feet of existing structures, use vibratory pile driving or augered piles.	Project applicant, construction contractor	During construction	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>flight (typically through August). Project activities will not occur within this buffer until the roosts are unoccupied.</p> <p>► If roosts of western red bat are determined to be present and must be removed, the bats will be excluded from the roosting site before the tree, building, or other roost structure is removed. A program addressing compensation, exclusion methods, and roost removal procedures will be developed in consultation with CDFW before implementation. Exclusion methods may include use of one-way doors at roost entrances (bats may leave but not reenter) or sealing roost entrances when the site can be confirmed to contain no bats. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) will be replaced in consultation with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during consultation with CDFW, replacement roosts will be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site by a qualified biologist, the roost tree, building, or roost other structure may be removed.</p> <p>New Mitigation Measure 3.2-2f: Conduct Protocol-Level Surveys for Burrowing Owl, Implement Avoidance Measures, and Compensate for Loss of Occupied Burrows</p> <p>This mitigation measure would remove the requirements of Adopted Mitigation Measure 4.4-4(b) and implement the following protocol-level survey requirements.</p> <p>A qualified biologist will conduct focused breeding and nonbreeding season surveys for burrowing owls in areas of habitat suitable for the species identified during the reconnaissance-level survey (e.g., grassland, agricultural land) on and within 1,640 feet (500 meters) of the UCP area. Surveys will be conducted before the start of project</p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>activities and in accordance with Appendix D of the CDFW Staff Report on <i>Burrowing Owl Mitigation</i> (CDFW 2012; CDFW Staff Report).</p> <ul style="list-style-type: none"> ▶ If no occupied burrows are found, the qualified biologist will submit a report documenting the survey methods and results to the discretionary land use authority (City of Merced or Merced County), and no further mitigation will be required. ▶ If an active burrow is found within 1,640 feet of pending construction activities that would occur during the nonbreeding season (September 1 through January 31), a minimum protection buffer of 164 feet (50 meters) shall be established and maintained around the occupied burrow throughout construction. The protection buffer may be adjusted if, in consultation with CDFW, a qualified biologist determines that an alternative buffer will not disturb burrowing owl use of the burrow because of particular site features or other buffering measures. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan will be developed, as described in Appendix E of the CDFW Staff Report. Burrowing owls will not be excluded from occupied burrows until the project burrowing owl exclusion plan is approved by CDFW. The exclusion plan will include a compensatory habitat mitigation plan (see below). ▶ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows will not be disturbed and will be provided with a protective buffer at a minimum of 164 feet unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer may be adjusted depending on the time of year and level of disturbance as outlined in the CDFW Staff Report. The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented so that burrowing owls are not adversely affected. Once the fledglings are capable of independent survival, 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>the owls can be evicted, and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW Staff Report.</p> <p>► If burrowing owls are evicted from burrows and the burrows are destroyed by implementation of project activities, the project applicant will mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW Staff Report, which states that permanent impacts on nesting, occupied and satellite burrows, and burrowing owl habitat (i.e., grassland habitat with suitable burrows) will be mitigated such that habitat acreage and number of burrows are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The project applicant will retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards:</p> <ul style="list-style-type: none"> ■ Mitigation lands will be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species throughout its range. ■ If feasible, mitigation lands will be provided adjacent or proximate to the project site so that displaced owls can relocate with reduced risk of injury or mortality. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient habitat to support displaced owls that may be preserved in perpetuity. ■ If habitat suitable for burrowing owl is not available for conservation adjacent or proximate to the project site, mitigation lands can be secured offsite and will aim to consolidate and enlarge conservation areas outside of planned development areas and within foraging distance of 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>other conservation lands. Mitigation may also be accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. Alternative mitigation sites and acreages may also be determined in consultation with CDFW.</p> <p>If burrowing owl habitat mitigation is completed through permittee-responsible conservation lands, the mitigation plan will include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success will be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the CDFW Staff Report, will include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors.</p>				
Greenhouse Gas Emissions and Climate Change					
Impact 3.4-1: Conflict with an Applicable Plan, Policy or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases	<p>New Mitigation Measure 3.4-1: Implement the Bay Area Air Quality Management District's On-Site Project Design Features to Demonstrate the Project's Fair Share in Meeting the State's Long-Term GHG Reduction Targets (UCP South only)</p> <p>The following mitigation measure shall be applied to the UCP South portion of the project site. Prior to the issuance of building permits, the project applicant shall include the following elements in all construction drawings.</p> <ul style="list-style-type: none"> ► Eliminate all on-site natural gas infrastructure for all land uses. ► Adherence to the most recent Tier 2 requirements of Part 11 of the Title 24 California Buildings Code's (CALGreen Code's) electric vehicle (EV) charging standards. 	Adherence to applicable state guidelines and standards with respect to GHG reduction strategies.	Project applicant	Before building permits are issued and/or before approval of improvement plans	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>► Demonstrate consistency with OPR's SB 743 regional VMT standards (i.e., residential projects meeting a 15 percent below the existing VMT per capita, office projects meeting a 15 percent below the existing VMT per employee, and retail projects attaining a no net increase in existing VMT)</p> <p>► If the aforementioned project design features cannot be incorporated into the project's design, the applicant shall include other relevant project characteristics such that any additional emissions generated from natural gas, insufficient EV charging, or excessive VMT can be fully offset. Examples of measures that could be applied to individual projects in UCP South include, but are not limited to, the following:</p> <ul style="list-style-type: none"> ■ Implementation of a solid waste diversion program. ■ Exceedance of the most recent version of Part 6 of the Title 24 California Building Code (California Energy Code). ■ Use of low-flow appliances. ■ Use of energy star appliances. <p>Implementation of ZNE buildings.</p>				
Impact 3.4-3: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency	<p>New Mitigation Measure 3.4-3: Implement On-Site Project Design Features that Address Building Carbonization and Energy Efficiency (UCP South)</p> <p>Implement the project design features in Mitigation Measure 3.4-1 that address building carbonization and energy efficiency.</p>	Implementation of design features during building construction	Project applicant	Before building permit is issued	
Hydrology and Water Quality					

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Impact 3.5-3: Substantially Alter the Existing Drainage Pattern of Project Area	<p>Mitigation Measure 3.5-3: Implement Altered Channel Cross Section Subject to MID Approval (VST Specific Plan Only)</p> <p>Prior to initiation of infrastructure improvements for Phase 2 of the VST Specific Plan, the project applicant or subsequent developer shall submit evidence to the discretionary land use authority (City of Merced or Merced County) that:</p> <ul style="list-style-type: none"> ▶ the proposed modification of the Fairfield Canal is designed such that no change would occur in the hydraulic flow rates and velocities of the canal, and ▶ necessary permits have been obtained from MID. ▶ Specific features that can be incorporated into the design to effectively control flowrate and velocity include (but are not limited to) adjusting the channel cross section, use of construction material that has higher roughness coefficient (i.e., river rock, rip rap, gabions), incorporating roughness baffles, and energy dissipaters at the downstream end of the canal. 	Implementation of altered channel cross section of Fairfield Canal	Project applicant with oversight from MID, subject to approval from City of Merced or Merced County	Before infrastructure improvements	
Impact 3.5-5: Cumulative Impacts to Water Quality	<p>No new mitigation is required for this impact.</p> <p>In light of changes to the cumulative condition and current regulations, Adopted Mitigation Measure 4.8-12 is no longer applicable or required to address the cumulative impacts of the UCP Update. The mitigation requirement would be removed as follows: Adopted Mitigation Measure 4.8-12 The County shall develop Best Management Practices and prepare a Stormwater Pollution Prevention Plan and a stormwater monitoring program consistent with National Pollution Discharge System Phase 2 Permit Criteria.</p>	None	N/A	N/A	
Impact 3.5-6: Cumulative Impacts to	<p>No new mitigation is required for this impact.</p> <p>In light of changes to the cumulative condition and current regulations, Adopted Mitigation Measures 4.8-15 and 4.8-16 are no</p>	None	N/A	N/A	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Hydrology and Flooding	<p>longer applicable or required to address the cumulative impacts of the UCP Update. The mitigation requirement would be removed as follows:</p> <p>Adopted Mitigation Measure 4.8-15: The County shall work with the Merced County Flood Control District, MID, and the City of Merced to update the Merced County Critical Area Flooding and Drainage Plan to identify a strategy for managing storm drainage runoff associated with future development within the Merced area. The plan update shall include at a minimum: existing hydrologic and hydraulic conditions; identification of base flood elevations that meet FEMA 44 CFR part 60 requirements, if such data have not been developed; and a process to evaluate the one-foot cumulative increase criteria; estimates of future peak flows and volumes based on anticipated land uses; performance standards for new development that address both peak flows and volumes while downstream conditions are not worsened; strategies to coordinate the development of local storm drainage and flood protection improvements with Merced County Streams Group projects; and mechanisms to update or revise the plan as needed as new information becomes available.</p> <p>Adopted Mitigation Measure 4.8-16: MID and the County shall coordinate to ensure that additional stormwater drainage systems do not add flows into the Fairfield Canal that would exceed the canal's capacity restrictions, potentially creating levee failure or overtopping conditions downstream of the UCP area.</p>				
Noise and Vibration					
Impact 3.6-1: Short-Term Construction-	Adopted Mitigation Measure 4.10-4: Construction contractors shall comply with the following or an equivalent noise control program:	Construction equipment must comply with noise control program	Project applicant, construction contractor	Before ground disturbance	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Generated Noise Levels	<ul style="list-style-type: none"> ▶ All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers where appropriate, in good operating condition that meet or exceed original factory specification. ▶ Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment. ▶ All mobile or fixed noise producing equipment used on the project, that is regulated for noise output by local, state or federal agency, shall comply with such regulation while engaged in project-related activities. ▶ Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable. ▶ Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far as practicable from noise-sensitive receptors. ▶ The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use. <p>The erection of temporary noise barriers will be considered where project activity is unavoidably close to noise-sensitive receptors.</p> <p>New Mitigation Measure 3.6-1: Revise Policy N 2.6 for Managing Noise from Construction Activities of the Adopted UCP</p> <p>Revise Policy N 2.6 of the Adopted UCP as follows:</p> <p>Policy N 2.6</p> <p>Manage noise from construction activities by:</p> <ul style="list-style-type: none"> ▶ Limiting the hours of construction activities that generate noise, when adjacent to housing and other "sensitive" uses. Typically, Construction is limited to the hours of 7:00 a.m. to 6:00 p.m. 	Implementation of noise control features on certain equipment	Project applicant, construction contractor	Before ground disturbance	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>10:00 p.m., weekdays and Saturday, and prohibited on Saturdays, Sundays, and legal holidays, except for emergency work.</p> <ul style="list-style-type: none"> ▶ <u>Requiring that all construction vehicles or equipment, fixed or stationary, be equipped with properly operating and maintained mufflers.</u> ▶ <u>All construction equipment shall be properly maintained and equipped with noise-reduction intake and exhaust mufflers and engine shrouds, in accordance with manufacturers' recommendations. Equipment engine shrouds shall be closed during equipment operation.</u> ▶ <u>Requiring that construction vehicle staging areas be located as far as practical from existing residential uses</u> ▶ <u>Requiring that construction vehicle trips be routed as far as practical from existing residential uses</u> ▶ <u>Construction equipment with back-up alarms shall be equipped with either audible self-adjusting backup alarms or alarms that only sound when an object is detected. Self-adjusting backup alarms shall automatically adjust to 5 dB over the surrounding background levels. All non-self-adjusting backup alarms shall be set to the lowest setting required to be audible above the surrounding noise levels.</u> ▶ <u>Locate any trailers and materials used during construction capable of breaking the line of sight between the noise-sensitive receptors and construction-noise generating equipment such that they would serve as noise barriers in order to protect noise-sensitive receptors from noise generated by off-site construction activity.</u> ▶ <u>For construction occurring within 600 feet of an existing noise sensitive receptor, install temporary noise curtains as close as possible to the noise-generating activity such that the curtains obstruct the direct line of sight between the noise-generating construction activity and the nearby sensitive receptors. Temporary noise curtains shall consist of durable, flexible composite material featuring a noise barrier layer bounded to</u> 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>sound-absorptive material on one side. The noise barrier layer shall consist of rugged, impervious, material with a surface weight of at least one pound per square foot.</p> <p>► Noise-reducing enclosures and techniques shall be used around stationary noise-generating equipment (e.g., concrete mixers, generators, compressors).</p> <p>► Operate heavy-duty construction equipment at the lowest operating power possible.</p> <p>Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable.</p>				
Impact 3.6-2: Long-Term, Operational Noise (Stationary and Area Sources)	<p>Mitigation Measure 3.6-2: Amend the UCP to Include Provisions for Operational Stationary Source Noise Generating Activities</p> <p>The County of Merced shall revise the following policies in the UCP Update as follows:</p> <p>► Policy N 1.1 Design and construct new noise-generating land uses in a manner that does not cause excessive exterior or interior noise for noise-sensitive land uses on any location of nearby residential properties. The exterior noise standard for noise-sensitive land uses is 65 60 dBA L_{eq} and the interior noise standard for residential structures and other noise-sensitive land uses is 45 dB L_{dn}. provided, however, that residential uses within and immediate adjacent to the Town Center shall be considered commercial mixed uses for the purposes of determining noise compatibility. Additionally, exterior stationary source noise standards for noise-sensitive land uses are 55 dB L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. and 45 dB L_{eq} and 50 L_{dn} between the hours of 10:00 p.m. and 7:00 a.m. shall not be exceeded by stationary noise generating land uses at any existing or planned residential land use. Noise reduction features shall be included in the design of any land use that has noise sources affecting residential land uses. These noise reduction features shall include structure design and layout, site planning, and other measures: block walls and barriers</p>	Design of new land uses to prevent excessive noise near noise-sensitive receptors	Project applicant, County of Merced	Prior to Project approval	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>(including berms) shall only be used where such measures are deemed infeasible or ineffective.</p> <p>Policy N X.X Loading docks shall be located and designed such that noise generated by activity at the loading dock would not exceed the City's stationary noise source criteria (i.e., exterior noise levels of 55 dB L_{eq} between the hours of 7:00 a.m. and 10:00 p.m. and 45 dB L_{eq} and 50 L_{max} between the hours of 10:00 p.m. and 7:00 a.m.) at any existing noise sensitive receptor. As part of the design-build process for uses that include loading docks, a specialized noise study will be completed to evaluate the specific design and ensure compliance with City of Merced noise standards. Reduction of loading dock noise can be achieved by locating loading docks as far away as possible from noise sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study.</p>				
Impact 3.6-3: Long-Term, Operational Noise (Traffic)	<p>Adopted Mitigation Measure 4.10-3(a): The County shall construct barriers and/or retrofit affected homes with noise attenuation measures (e.g., sound-rated windows) necessary to achieve a 45 Ldn interior noise level.</p> <p>Adopted Mitigation Measure 4.10-3(b): For development within the UCP area, noise considerations should be taken into account during initial site planning, in order to maximize shielding by the planned structures or other on-site features.</p>	During planning, applicant shall design development with noise considerations in mind.	Project applicant	Prior to Project approval	
Impact 3.6-4: Generate Excessive Groundborne Vibration or Groundborne Noise Levels	Adopted Mitigation Measure 4.10-5: Limit groundborne vibration due to construction activities to 0.2 in/sec velocity (limit of potential for damage to structures) in the vertical direction at sensitive receptors. For construction adjacent to highly sensitive uses, apply additional measures as feasible, including advance notice to occupants of sensitive facilities to ensure precautions are taken in those facilities to protect ongoing activities from the effects of vibration.	Implementation of vibration reduction measures,	Project applicant, construction contractor.	During construction.	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>New Mitigation Measure 3.6-4: Amend the UCP to Include Provisions for Potential Vibration-Inducing Activities</p> <p>The County of Merced shall include the following policy in the UCP Update:</p> <ul style="list-style-type: none"> ▶ <u>Policy N.X: Construction Vibration.</u> All potential vibration-inducing activities shall comply with the following measures, setback distances, precautions, monitoring programs, and alternative methods to traditional construction activities: <ul style="list-style-type: none"> ■ <u>Ground vibration-producing activities, such as pile driving and blasting, shall be limited to the daytime hours between 7:00 a.m. to 6:00 p.m. on weekdays and shall not occur on weekends and holidays consistent with County of Merced Municipal Code Section 10.60.040.</u> ■ <u>If pile driving is used and would occur within 630 feet of existing residential receptors, pile holes shall be predrilled to the maximum feasible depth to reduce the number of blows required to seat a pile.</u> ■ <u>All construction equipment on construction sites shall be operated as far away from vibration-sensitive sites as reasonably possible.</u> ■ <u>Earthmoving and ground-impacting operations shall be phased so as not to occur simultaneously in areas close to sensitive receptors, to the extent feasible. The total vibration level produced could be significantly less when each vibration source is operated at separate times.</u> ■ <u>Minimum setback requirements for different types of ground vibration producing activities (e.g., pile driving and blasting) for the purpose of preventing negative human response shall be established based on the specific nature of the vibration producing activity (e.g., type and duration of pile driving), local soil conditions, and the type of sensitive receptor. Established setback requirements (i.e., 630 feet) can be breached only if a project-specific, site-specific, technically adequate ground vibration study indicates that the buildings</u> 				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>would not be exposed to ground vibration levels in excess of 70 VdB, and ground vibration measurements performed during the construction activity confirm that the buildings are not being exposed to levels in excess of 70 VdB.</p> <ul style="list-style-type: none"> All vibration-inducing activity within the distance parameters described above shall be monitored and documented for ground vibration noise and vibration noise levels at the nearest sensitive land use and associated recorded data submitted to the County of Merced so as not to exceed 70 Vdb. <p>Alternatives to traditional pile driving (e.g., sonic pile driving, jetting, cast-in-place or auger cast piles, nondisplacement piles, pile cushioning, torque or hydraulic piles) shall be considered and implemented where feasible to reduce vibration levels.</p>				

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Impact 3.6-5: Cumulative Noise Impacts	<p>Adopted Mitigation Measure 4.10-3(a): The County shall construct barriers and/or retrofit affected homes with noise attenuation measures (e.g., sound-rated windows) necessary to achieve a 45 L_{dn} interior noise level.</p> <p>Adopted Mitigation Measure 4.10-3(b): For development within the UCP area, noise considerations should be taken into account during initial site planning, in order to maximize shielding by the planned structures or other on-site features.</p> <p>Adopted Mitigation Measure 4.10-4: Construction contractors shall comply with the following or an equivalent noise control program:</p> <ul style="list-style-type: none"> ▶ All noise-producing project equipment and vehicles using internal combustion engines shall be equipped with exhaust mufflers and air-inlet silencers, where appropriate, in good operating condition that meet or exceed original factory specification. ▶ Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment. ▶ All mobile or fixed noise-producing equipment used on the project, that is regulated for output by local, state or federal 	County to retrofit affected homes.	County of Merced	Before construction.	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>agency, shall comply with such regulation while engaged with project-related activities.</p> <ul style="list-style-type: none"> ▶ Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where practicable. ▶ Material stockpiles and mobile equipment staging, parking and maintenance areas shall be located as far as practicable from noise-sensitive receptors. ▶ The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only. No project-related public address loudspeaker, two-way radio, or music system shall be audible at any adjacent noise-sensitive receptor except for emergency use. ▶ The erection of temporary noise barriers will be considered where project activity is unavoidably close to noise-sensitive receptors. <p>Adopted Mitigation Measure 4.10-5: Limit groundborne vibration due to construction activities to 0.2 in/sec velocity (limit of potential for damage to structures) in the vertical direction at sensitive receptors. For construction adjacent to highly sensitive uses, apply additional measures as feasible, including advance notice to occupants of sensitive facilities to ensure precautions are taken in those facilities to protect ongoing activities from the effects of vibration.</p>	Implementation of noise attenuation measures.	Project applicant, construction contractor	During construction	

Transportation

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Impact 3.7-1: Conflict with a Program, Plan, Ordinance, or Policy Addressing the Circulation System, Including Transit, Roadway, Bicycle and Pedestrian Facilities	Adopted Mitigation Measure 4.14-4: Merced County will, and the City of Merced should, ensure adequate maintenance of the existing path along Lake Road and other regional bicycle and pedestrian facilities that provide access to the proposed UCP.	Maintain of existing path and other bike and pedestrian facilities providing access to UCP.	Merced County and City of Merced	During Project operation	
Impact 3.7-3: Substantially Increase Hazards Due to a Geometric Design Feature (e.g., Sharp Curves or Dangerous Intersections) or Incompatible Uses (e.g., Farm Equipment)	Adopted Mitigation Measure 4.14-4: Merced County will, and the City of Merced should, ensure adequate maintenance of the existing path along Lake Road and other regional bicycle and pedestrian facilities that provide access to the proposed UCP.	Maintain of existing path and other bike and pedestrian facilities providing access to UCP.	Merced County and City of Merced	During Project operation	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
Impact 3.7-5: Cumulative Transportation Impacts	<p>Adopted Mitigation Measure 4.14-7(a): UCP development shall contribute its fair share toward the following Tier road improvements which are shown in Figure 4.14-3 [in the 2001/2004 UCP EIR]:</p> <ul style="list-style-type: none"> ▶ Highway 59, widen to 4 lanes, Yosemite Avenue to Bellevue Road ▶ Highway 59, new segment between Highway 99 and 140 ▶ Yosemite Avenue, extend from R Street to Highway 59 ▶ Yosemite Avenue, widen to 4 lanes, Campus Parkway to G Street ▶ Bellevue Road, widen to 6 lanes, Highway 59 to Campus Parkway ▶ R Street, extend from Yosemite Avenue to Bellevue Road ▶ Parsons Avenue/Gardner Avenue, extend and widen to 4 lanes, Childs Avenue to Bellevue Road ▶ Highway 59, new alignment along Mission Avenue ▶ Mission Avenue, widen to 4 lanes, Highway 99 to Highway 59 ▶ Childs Avenue, widen to 4 lanes, Campus Parkway to Highway 59 <p>Adopted Mitigation Measure 4.14-7(b): For development through year 2025, UCP development shall only contribute its fair share toward the following Tier road improvements, which are shown on Figure 4.14-4:</p> <ul style="list-style-type: none"> ▶ Yosemite Avenue, extend from R Street to Highway 59 ▶ Yosemite Avenue, widen to 4 lanes, Campus Parkway to G Street ▶ R Street, extend from Yosemite Avenue to Bellevue Avenue ▶ Parsons Avenue/Gardner Avenue, extend and widen to 4 lanes, Childs Avenue to Bellevue Road 	Contribution of fair share road improvements	Project applicant	Before construction	

Impact	Mitigation Measure	Action(s)	Implementing Party ¹	Timing	Completion of Implementation
	<p>► Bellevue Road, widen to 4 lanes, Highway 59 to Campus Parkway</p> <p>Adopted Mitigation Measure 4.14-7(c): For development through Year 2015, the County shall analyze the expected future operations of the Lake/Yosemite intersection at the following milestone points: (1) determination of conceptual alignment for Campus Parkway, (2) preparation of the Geometric Approval Drawings for Campus Parkway, and (3) each October, beginning in the opening year of the UC Merced Campus. If any of these analyses determine that the Lake/Yosemite intersection will operate at unacceptable LOS, the proposed UCP shall contribute its fair share toward the cost of any improvements deemed necessary at the intersection. Monitoring of the Lake/Yosemite intersection shall end upon completion of the Campus Park extension from Yosemite Avenue to Bellevue Road.</p> <p>Adopted Mitigation Measure 4.14-7(d): The County shall work with the City of Merced, Caltrans and MCAG to establish rights-of-way and access management requirements along the routes identified above.</p> <p>Adopted Mitigation Measure 4.14-8(a): Implement Mitigation Measure 4.14-7(a). In addition, UCP development shall contribute its fair share toward intersection improvement along G Street between Highway 99 and Childs Avenue.</p> <p>Adopted Mitigation Measure 4.14-8(b): Implement Mitigation Measure 4.14-7(c).</p>	Establishing proper rights of way and access for identified routes.	County of Merced, City of Merced	Before construction	

Adopted
Specific Plan
Virginia Smith Trust
UCP Village No.1 and UCP Village No. 2



Adopted:
October 17, 2023

County of Merced

Mark Hendrickson, Assistant County CEO
Steve Maxey, Director
Tiffany Ho, Deputy Director

City of Merced

Stephanie Dietz, City Manager
Scott McBride, Development Services
Kim Espinosa, Development Services
Michael Beltran, Engineering
Ken Elwin, Public Works

UC Merced

Phil Woods, Planning
Maggie Saunders, Real Estate

Virginia Smith Board of Trustees

Dr. Steve M. Tietjen, Superintendent
Geneva Brett, Trustee
Chris Chavez, Trustee
Dennis Hanks, Trustee
Fred Honore', Trustee
Frank Fagundes, Trustee
Tim Razarri, Trustee

VST Project Team

Project Developer	Virginia Smith Trust Merced, California
Planning and Management	Peck Planning and Development, LLC Morro Bay, California
Architecture	RRM Design Group San Luis Obispo, California
Engineering	RRM Design Group San Luis Obispo, California
Water and Wastewater Master Planning	MKN Associates Fresno, California
Cultural Resources	Natural Investigations Company Sacramento, California
Geology and Soils	Kleinfelder, Inc. Fresno, California
Biology	Live Oak Associates, Inc. Oakhurst, California
Noise and Acoustics	Ascent Environmental, Inc Sacramento, California
Finance and Economics	Peck Planning and Development, LLC Morro Bay, California
Air Quality	Ascent Environmental, Inc Sacramento, Cal
Traffic and VMT	VRPA Technologies, Inc. Fresno, California
Environmental/CEQA	Ascent Environmental, Inc. Sacramento, California
Phase 1/Hazards	Provost and Prichard Consulting Group Merced, California
Survey	Odell Engineering and Survey Modesto, California
Water and Hydrology	Water and Land Solutions Merced, California
Legal	Buchalter San Francisco, California

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Development Plan 11"x17"

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- C—Water Supply Assessment
- D—Water Master Plan
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Forward and Acknowledgements

The following project is named for Virginia Smith, the benefactor who provided a land grant to the Merced County Office of Education (MCOE) Board of Trustees to provide scholarships to the children of Merced County. Virginia Smith and her brother Cyril Smith bequeathed more than 9,000 acres to provide scholarships for students attending four-year universities. The gift was made in 1971 and by 1975 the first scholarships were issued. To date, more than \$4,000,000 in scholarships have been awarded to 4,000 students in Merced County. This land gift was used to attract UC Merced to the community, and was one of three elements that comprised the “Merced Promise” that was made to the UC Regents. Implementation of this Specific Plan and the development of the property will expand the scholarship endowment twenty-five-fold, and is the final element of that promise.

Several Merced County Superintendents of Schools and many Merced County Office of Education (MCOE) Board members have had a part in growing the dream of a more robust scholarship fund during the past 47 years. William Stockard, Ron Tiffie, Dr. Lee Andersen, Dr. Steve Gomes and Dr. Steve Tietjen have all been stewards of the land and advocates for the expansion of scholarships as they served as the elected Merced County Superintendent of Schools.

Key MCOE Board members and community members also have contributed many hours of their own time during the past 47 years as the Trust has flourished and successfully drawn the 10th UC Campus to Merced County. Merced County students owe a debt of gratitude to the following people who advocated at the local and state level to make the dream of the UC campus in Merced County a reality. The list of community leaders is not intended to be exhaustive, but to recognize the efforts of key community members who were strong advocates for the Virginia Smith Trust. They include: Tony Allegretti, Geneva Brett, Barron Brouillette, Jesse Brown, Judy Campbell, Christopher Chavez, Robert Carpenter, Kathleen Crookham, Jim Cunningham, Ben Duran, James Edmonson, Frank Fagundes, John Fowler, Dennis Hanks, Sarah Hanks, Fred Honere’, Betty George, Rodney La Salle, Jim Lindsey, Wayne Maynard, Stan Mollart, Larry Morse Jr., Don Ohlinger, Dwight Oliver, Tim O’Neill, Cathy Paskin, Jerri Randrup, Ken Riggs, Joe Rivero Jr., Kenneth Robbins, Grey Roberts, Larry Salinas, Craig Smith, Robert Smith, Ralph Temple, Steve Wainwright, Elizabeth Wallace, Hub Walsh, and Roger Wood.

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Dr. Steve M. Tietjen, Superintendent
Merced County Office of Education

and Virginia Smith Trust Executive Director



Introduction

Project Entitlements and Process

The Specific Plan for UCP Villages No. 1 and No. 2 was initiated by Merced County Board of Supervisors on March 2, 2021. The Specific Plan includes a description of the overall land use plan and site design to provide 3,860 residential land uses with varying densities, with supporting commercial uses.

Table 1 provides a summary of project's land uses. The Specific Plan is based on the Amended University Community Plan (UCP) and is intended to satisfy the UCP's requirement for a specific plan for each "village" within the UCP. Although City of Merced Urban Expansion policies have always encouraged development of the UCP properties as part of the City, when the UCP was formulated between 2005 and 2009, development of the VST site was contemplated to most likely occur in the County, and the UCP therefore provides for many features and conditions that would establish a "new town" for the UCP properties, including the UC campus, and the VST and Hunt properties. When the UCP was formulated the UCP properties were somewhat remote from the City of Merced and it was not considered possible that the properties could eventually annex to the City, or be effectively served by City infrastructure and services.

Since the original adoption of the UCP, many factors have changed, including substantial new development in North Merced, and planning and proposed development for the Bellevue Road corridor in the Bellevue Master Plan. As part of the North Merced Annexation Study, the City prioritized development in North Merced at Bellevue and G Streets, and properties immediately adjacent to the UC Merced campus, including VST. The City has recently reviewed development in North Merced and considers annexation of UC Merced as a priority, and the annexation and development of properties adjacent to UC Merced to be a priority, and the City Council approved proceeding with pre-annexation activities and tasks for the VST property on November 15, 2021. The City has approved the annexation of UC Merced; subsequent to that annexation, VST may annex to the City.

Although annexation to the City of Merced is contemplated for the VST in the near term, its basic entitlements are being conducted and completed in the County because of the extension community planning work conducted for the UCP, and the extensive environmental documentation that has been completed for that area, and the VST property in particular. The entitlement activities in the County include amendment of the UCP, development of this specific plan, coordination of transportation planning work, and other matters. In the interest of cooperation between the City, County, UC and LAFCo, the City and County have each adopted a Memorandum of Understanding (MOU) so that the City can have a substantive role in the development of the Specific Plan, the consideration of environmental factors, infrastructure financing techniques, and to ensure compatibility with the City General Plan. The County Board of Supervisors adopted this MOU on June 8, 2021, and the Merced City Council approved the MOU on June 7, 2021. The expectation and plan is for the project's environmental document and entitlements to adequately cover the annexation of the entire project site by the City immediately after annexation of UC Merced.

Because the planning and environmental components of the project are intended to apply to the entitlements established in the County and related City entitlements, the project demonstrates

compliance with the UCP, as amended, the County General Plan, as amended, and County development regulations; and, demonstrates compliance with the City General Plan (including special Urban Growth policies related to the development of UCP properties), development regulations, and housing regulations (including the City's Inclusionary Housing requirements).

Special Project Design Features

Following the guidance in the UCP, many "green" design features are included in the Plan:

1. Building energy efficiency standards that will enable the project to comply with the "net zero" energy requirements that will likely be in the 2025 building code, and the 2022 CalGreen Tier 1 and Tier 2 requirements. The Plan includes a requirement for onsite generation of 100 percent of the residential electrical demand through onsite photovoltaic solar generation ("Solar PV"). This standard applies to all residential buildings in the Plan area. Compliance would be through a combination of solar canopies, roof-top solar panels, and solar shingles, as provided in the Design Framework. Single family units must provide adequate roof area for the required area for the solar array (equivalent of 275-300 square feet per unit of tilted south-facing roof area). R-3, R-4 and Town Center use will have EV charging stations at a rate specified in the design guidelines. The Project also includes a requirement that all residential units be "electric-only", making it Merced County's first low carbon development.
2. Transit usage would be encouraged by designation of transit stops, plus information and/or incentive packages for transit ridership.
3. To comply with and exceed the 2022 building code, there are special energy-saving design requirements. Special design requirements include the use of Advanced Framing/Engineering (wider stud placement for decrease in transmission loss and reduction in required framing lumber), Quality Insulation Installation (QII) to minimize envelope and duct seal energy losses, Compact Plumbing to minimize plumbing runs and distance between hot water taps and water heaters, and usage of EPA WaterSense fixtures to reduce indoor water usage.
4. Enhanced pedestrian and bicycle connectivity. These features include narrower vehicle lanes and wider bike lanes on internal streets. Local road vehicle lanes have been narrowed to 11 feet in conformance with City General Plan requirements while bicycle lanes have been widened to a full 8-foot buffered bike lane standard. These buffered bike lanes occur on all internal collector, arterial and expressway streets. Special at-grade "speed tables", bulbouts and curb extensions, and textured pedestrian street crossings have also been included. These provide for the traffic calming and a continuous walking experience. Finally, pedestrian through connections have been specified along and between residential blocks. This results in a pedestrian intersection density of over 500 intersections per square mile, well in excess of the standard established by LEED and the Smart Growth Coalition.

Table 1: Specific Plan Development Summary

Item/Issue	Project Feature
Residential Uses	
Residential: Acreage	440 acres
Residential: Units	3,857 units
Mix of Units	1,277 R-1 units 480 R-2 units 504 R-3 units 1,484 R-4 units 108 Village Commercial Mixed Use
Commercial Uses	
Neighborhood	7.2 Acres (104,500 s.f.)
Community	12 Acres (175,000 s.f.)
Village Mixed Use	24.8 Acres (582,500 s.f.)
Potential Uses	Local uses
Open Space & Parks	
Open Space: Acreage	15.5 Acres
Parks: Acreage	97.8 Acres
Parks: Number	2 Community Parks 39 Pocket and Miniparks 1 Community Recreation Center 1 Regional Sports Park

Plan Format and Content

Format and Content

The Specific Plan was developed to guide the development of UCP Villages No. 1 and No. 2 (the Virginia Smith property) located in the University Community Plan Area in Merced County. The Specific Plan includes sections on the environmental setting, a description of the land use, circulation and regulatory requirements for the property, background information on the property and the project, Land Use, Design, Circulation, Infrastructure, Fiscal and Economic Issues, and Administration policies, regulations and strategies. The 2005 University Community Plan (UCP) provides for the development for the project, and the project complies with the requirements of the UCP as amended. A detailed UCP conformity analysis was prepared for the Specific Plan and is included in **Appendix A**. Actual development of properties subject to the UCP are to be authorized based on individual specific plans for each property or collection of properties, and this Specific Plan satisfies the requirements for the 654-acre VST property.

The Project includes a number of other entitlements related to this Specific Plan, including several General Plan elements, amendments to the UCP to update that document, a vesting tentative subdivision map, a large-lot “conveyance map”, a parcel map, a development agreement, and a pre-annexation development agreement. While the project will be entitled in the County, it is expected that the project will be annexed to the City after completion of the Specific Plan and EIR. The development regulations contained herein will pass through to and be implemented by the City after annexation.

This Specific Plan begins with a **Project Overview** followed by a **Land Use Plan and Framework** that includes the planned land use pattern, proposed development densities in each subarea on the project site and development phasing. Also incorporated into the Land Use Framework is a classification system that clearly identifies uses allowed in each subarea, and “performance standards” for each site and subarea. Other key elements of the Land Use Framework are general site planning and development standards that specify the requirements for all development and land uses regardless of the applicable land-use designation, including sensitive resources, site access requirements, energy efficiency, fences, walls, hedges, buffers, and other screening; noise regulations, outdoor lighting standards, related performance standards (e.g., air quality, glare, vibration, etc.) and undergrounding of utilities. The Land Use Framework also includes the planned housing mix within the area that is in keeping with the General Plan, UCP, the County Housing Element, the City’s Housing Element, and City RHNA Housing Production policies for the inclusion of various types of housing in larger development projects. The Land Use Framework includes a Development Plan which shows a precise development plan for the project site that represents implementation of the policies and regulations in the Specific Plan. The intent of the Development Plan is to provide guidance on the implementation of the policies and regulations in the UCP and the Specific Plan, and to demonstrate conformity of the various subdivision and parcel maps with the Specific Plan. It is conceivable that other precise plans may be consistent with the UCP and the Specific Plan, and the Plan Administration section of the Specific Plan provides for consideration of other development plans.

The Specific Plan includes a **Regulatory and Design Framework** that provides detailed design guidelines to be used as the Plan is implemented. The purpose of these guidelines is to establish the expected level of design quality within the area while still allowing project flexibility and innovation. The objective of this framework is not to dictate a specific design but to establish design expectations that can be implemented as various project components are planned for implementation. The Design Framework is intended to provide guidance on the integration of the site-specific features such as building architecture, with area-wide elements such as streetscape, recreation and open spaces, resources and architecture into the overall project design. The Design Framework also has standards that define the overall character of the streetscape. As individual projects are brought forward for implementation, they will be reviewed by the City staff, the VST Design Review Committee, and the City's design review advisory bodies for conformity with this plan.

The **Circulation Framework** of the Specific Plan includes the planned circulation system elements, design standards, and circulation system phasing. The Circulation Framework describes the location of major facilities in or adjacent to the Project including Campus Parkway, connector roads to UC Merced (as described in the university's Long Range Development Plan), special street widths and amenities. The Circulation Framework also addresses parking and loading standards, if different than standard City requirements, transit needs, and non-vehicular modes of circulation such as pedestrians and bicycles.

The Specific Plan includes an **Infrastructure/Public Facilities Framework** that covers water, sewer, storm drainage, electricity, natural gas, and communications). For infrastructure, the framework addresses the planned onsite and offsite trunk infrastructure system improvements and system phasing necessary to support implementation of the land-use plan and financing mechanisms to implement planned facilities.

The Specific Plan also includes a **Financing, Services and Governance Framework** that describes how the infrastructure and improvements in the development are to be financed and maintained, and by whom; a fiscal projection of the revenues from the project and the projected net fiscal impact of the project to the City; and, a description of any special financing mechanisms associated with the project including the Specific Plan Traffic Impact Fee, Specific Plan Parks and Recreation Fee, and the intended use of public facility reimbursement agreements for project infrastructure. This section also includes a plan for services as required by Merced County LAFCo for annexations.

Finally, the Specific Plan includes a **Plan Administration Framework** that describes the process for amending the specific plan, and the discretionary processes for each phase and type of development. This section of the Specific Plan describes what kinds of actions are administrative in nature and that can be made City or County management staff (City Manager, Public Works Director, City Engineer, Director of Development Services, etc.), those that are interpretive or quasi-judicial and require advisory body review (Planning Commission), and those that are major and/or legislative in nature and require approval of the legislative body (Board of Supervisors and/or City Council).

The UCP and General Plan set out special planning and development objectives for the property. This Plan includes features responsive to these UCP requirements. The project also addresses needed

modifications to the UCP to reflect and be consistent with the changes in the County General Plan and UC Merced's Long Range Development Plan (LRDP) that have occurred since the adoption of the original UCP. The LRDP has been changed substantially since the adoption of the UCP and there is a need to modify land uses on the project site to reflect current market conditions, revised growth conditions for the university, and the most current version of the UC Merced LRDP. The plan also includes special policies and development regulations that are recommended in the Draft EIR, and the plan should be considered a "mitigated plan". These policies are highlighted in **bold** and include a mitigation measure reference number. The actions associated with the approval and implementation of the Specific Plan for the project site include:

1. Amendment of the Land Use Diagram and tables for the UCP to eliminate properties that are contained in the LRDP (since that document takes regulatory precedence over the UCP), and to decrease the development assumed to occur in the LRDP area, to decrease the overall amount of development assumed for the UCP, and to increase the amount of development prescribed for the VST property. As originally approved, the UCP was to contain 11,616 dwelling units and 2.02 million square feet of commercial, office and industrial building area. As now proposed, the UCP Update have 9,680 dwelling units and 1.25 million square feet of commercial, office and industrial building area. While the total development in the UCP will decrease, there will be an increase in the amount of development allocated to the VST property. The number of dwelling units on the VST/UCP North property will increase from 2,417 to 3,857, and there will be an increase in the amount of commercial, office and industrial building area from 147,100 square feet to 862,000 square feet. The balance of the UCP will have the same development capacity and general arrangement of land uses as described in the 2005 UCP.
2. Modification of various portions of the Merced County General Plan, including amending Table LU-2 for consistency with densities and product types proposed for VST; amending the Merced City Planning Area map/graphic to correctly show the SOI and UCP boundary; amending the General Plan Urban Community—University Community map/graphic to correctly show the UCP boundary (with the LRDP properties deleted) and VST specific plan land uses; amending and modifying Circulation Element Table CIR-1 to provide for an "Urban Expressway" section of Campus Parkway north of Yosemite which provides for 100' to 110' of rights of way, intersection spacing no more frequently than ¼ mile, four (4) through lanes, limited direct access to major activity centers with auxiliary/frontage lanes, and vehicle speeds of 35 miles per hour and a minimum 500' centerline radius (as approved by the Board of Supervisors on June 8, 2021); amendment of General Plan Circulation Element Policy CIR-1.5 to specify an intersection operational standard of LOS of "D" in urban areas; amendment of Circulation Element Page CIR-13 to include a "Class IV" protected bike lane, as provided for in the VST Specific Plan and Caltrans Design Guidelines; and miscellaneous changes to maps and figures to correspond to the UCP Update.
3. Inclusion of an affordable housing strategy as required by the UCP and the City RHNA Production Plan. The project proposes 500 deed restricted units, approximately 13 percent of the total units. This is set forth in the Land Use Framework section of this Specific Plan.

4. Provision of a Development Agreement for the project that will describe the project, legally establish the specific design regulations for the project site, describe the infrastructure obligations of the project and the methods and timing of reimbursements for portions of the infrastructure that is above the project's fair share, legally establish the transportation impact fees for the project described in the Infrastructure/Public Facilities Framework section of this Specific Plan, and other matters.
5. Establishment of special design regulations and plans for internal and external pedestrian, bicycle, and transit connections to the City's circulation network, and to the university, in conformance with the City and County's Bicycle Transportation Plans.
6. Provision of water and wastewater infrastructure needs as detailed in the City's Water and Wastewater Master Plans. This may include funding and/or construction of a wastewater lift station and force main.
7. Inclusion of special energy and Greenhouse Gas reduction strategies and standards.
8. An architectural design that relates to the pastoral character of the area and preserves views of agrarian landscapes.
9. Provision of neighborhood parks, active recreation areas, and open spaces amenities that meet and exceed the requirements of the County and City Parks and Recreation Element of the General Plan.

There are several supporting documents associated with the Specific Plan. Those include the following:

1. Amended UCP and UCP Conformity Analysis. This document is provided in **Appendix A** and includes an analysis of each of the UCP and General Plan policies. This document includes the Amended UCP including goals, policies, objectives, standards and guidelines for conservation and open space, design, circulation, infrastructure, and financing associated with implementation of the project. The amended UCP is also included in **Appendix A**.
2. Storm Water Control Plan. This document is included in the submittal for the Vesting Tentative Map and demonstrates compliance of the Project with the County's grading and drainage regulations and the Regional Water Quality Control Board's ("Water Board") "MS4" Low Impact Development (LID) regulations. Wherever feasible the project uses decentralized storm water quality treatment facilities in conjunction with parks, open space and landscaping. The use of large storage basins and "deep dark" drainage basins has been avoided. A drainage report is also included which demonstrates that the hydrology for the project site complies with state and local regulations, including pre-development runoff and flooding, post-development runoff and flooding, and compliance with various City, State and Federal drainage regulations. This is included in **Appendix B**.
3. Water Supply Assessment. An SB610/AB211 Water Supply Assessment was prepared for the project to demonstrate the adequacy of water supplies for the project. This report demon-

strates that there is adequate water to serve the project. Contributing to this conclusion is a reduction in onsite water use from the current 2,950 Acre-Fee (AF) used by existing agricultural operations to approximately 1,250 AF per year once the site is converted to urban uses. The Water Supply Assessment is provided in **Appendix C**. An assessment of the adequacy of the hydraulics of water supply (fire flow, pressure, domestic flow) was also conducted and is provided in **Appendix D**.

4. Wastewater Master Plan and Sewer Service Assessment. The project conducted a comprehensive, multi-scenario study of the adequacy of the City's sewer collection system necessary to support the project. It considered the information from the City's draft Sewer Collection Plan, flow rates from UC Merced (which share collection path with the project), monitoring of sewage flow rates from the newer subdivisions in the City to establish a statistically valid baseline for new development projects in the City, and potential short term improvements to accommodate future flows. The wastewater master plan and sewer assessment are included in **Appendix E**.
5. Environmental Technical Studies. Various environmental technical studies (in addition to those above) have been prepared that have informed the Development Plan development of the plan. These documents have included:
 - a. Traffic Impact Analysis, VMT Report, and offsite improvements. (**Appendix F**)
 - b. Biological Reconnaissance Study (**Appendix G**)
 - c. Wetlands Study and Delineation (**Appendix H**)
 - d. Cultural Resources Evaluation and Inventory (**Appendix I**)
 - e. Phase 1 Environmental Site Assessment (**Appendix J**)
 - f. Geotechnical Report (**Appendix K**)
6. Additional Planning Documents
 - a. Parks Master Plan (**Appendix L**)
 - b. Subdivision Map (**Appendix M**)
 - c. Specific Plan traffic Fee, park Fee, traffic fair share and fiscal impact calculations (**Appendix N**)

Project Overview

Introduction and Project Features

The site is composed of approximately 654 contiguous acres at the northeast corner of Lake Road and Cardella Avenue. It is comprised of Assessor's Parcel No.: 60-020-47 and APN: 60-020-04 (See **Figures 1 and 2**). The site slopes from the northeast to southwest, although there are localized undulations. It is diagonally bisected by a drainage that is colloquially referred to as Merced Irrigation District's Fairfield Canal which conveys irrigation water from Lake Yosemite to agricultural users.

The land has a special and storied history. The land was first acquired by Cyril Smith as part of a 16,000-acre acquisition in the low foothills east of Merced to support his family's sheep herding business. The land was later inherited by Virginia Smith and her brother Cyril after the passing of their father, Elmer. Virginia and Cyril had led comfortable but not extravagant lives and were known to champion worthy causes. Their wills created parallel scholarship trusts to benefit graduates from high schools in the City of Merced. The will named the Merced County Board of Education as the administrator of the trust. In 2023 all high schools in Merced County were determined by the Probate Court to be eligible for Smith Trust scholarships.

The Virginia Smith Trust was formally established on September 9, 1975 and the Board of Education faithfully administered the trust's assets according to Virginia's intent. During the early 1980's the concept of a tenth campus of the University of California was being discussed by the Regents of the University of California. Leaders on the Board of Education, along with local leaders, began working to use the land bequeathed by Virginia Smith to attract the new UC to Merced. A citizens committee was formed that included MCOE Board members, the Mayor of Merced, two members of the county Board of Supervisors, members of the Chamber of Commerce and other community leaders. In June 1987, the trust board decided to sell 3,000 acres to a separate foundation that would in turn donate 2,000 acres to the university and develop the other 1,000 acres to offset the cost of the donation.

In July 1990 Merced became one of eight locations chosen by the UC Regents for further study for the tenth UC campus, and the field was eventually narrowed to three sites, one each in Merced, Madera and Fresno counties. When advocates from the several finalist communities made their final appeals to the UC Regents, the Merced contingent emphasized that they had presented the only signed agreement to donate land, had greater assurances of water supply, an assurance that the university would be part of a master planned community to complement the new campus, and a "promise" that the proceeds from the development of the remaining land by VST would increase the size and reach of the trust's scholarship program in support of California higher education. The Regents agreed and designated Merced and the Virginia Smith property as the site for the university. The final entitlement and sale of the remaining 654 acres of Virginia's original 3,000 acres that is the subject of this Specific Plan will complete the last piece of the "Merced Promise" made to the Regents and will expand the reach of the Smith Scholarship countywide.

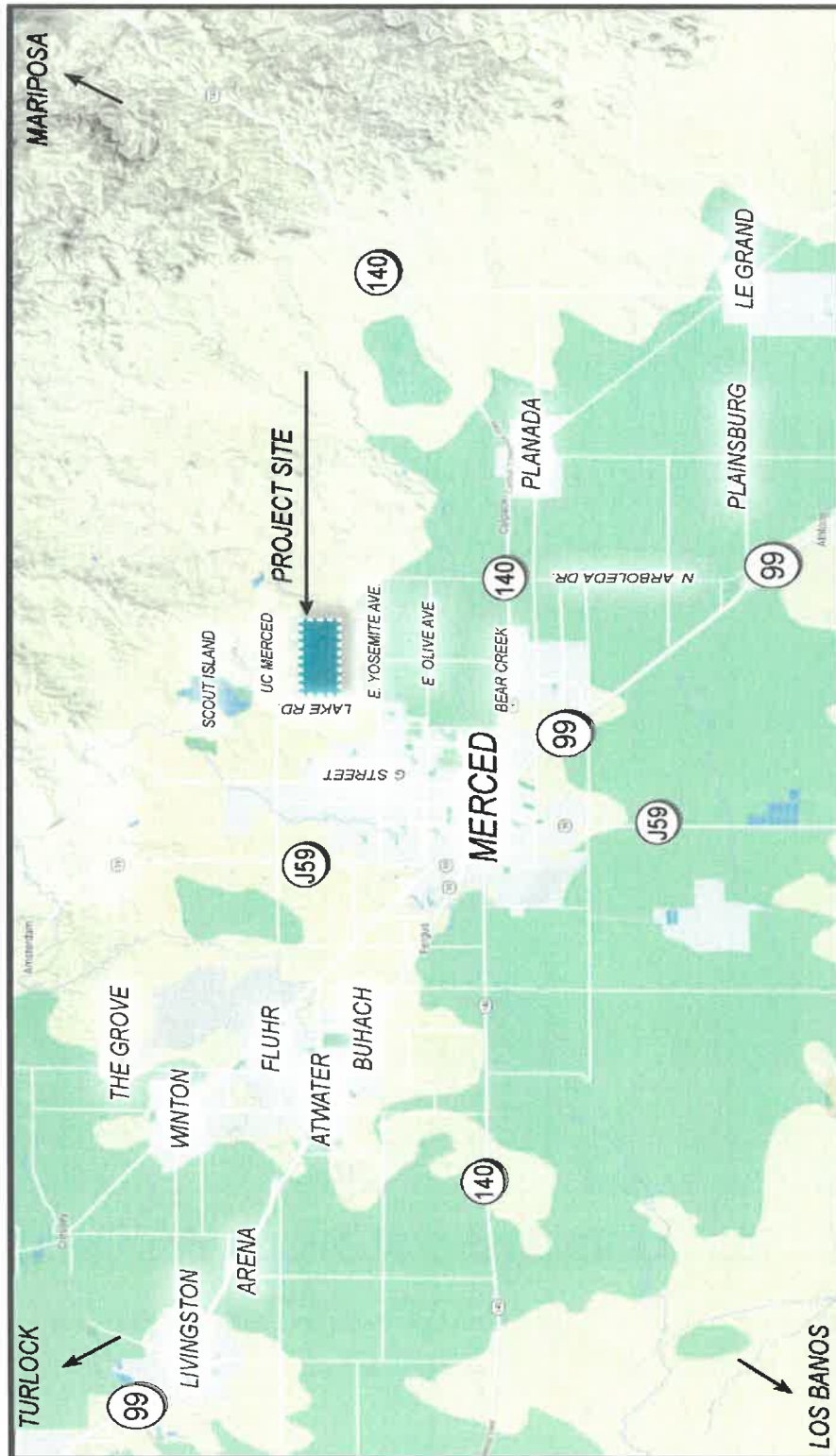


Figure 1: Project Location



Figure 2: Project Vicinity

Sustainable Energy Features

As envisioned by the 2004 Adopted UCP, the project was to be a model for sustainable development practices. Its design and the Specific Plan have been inspired by the U.S. Green Building Council's Leadership in Energy and Environmental Design for Neighborhood Development ("LEED-ND"), and the City and County Climate Action Plans. Just a few of the features include:



1. Compliance with the City's Climate Action Plan, CalGreen and other requirements for passive solar design for building orientation, south glazing and thermal mass.
2. Use of pervious paving and materials as an alternative to hardscape.
3. Compliance with GreenPoint rated- single family, GreenPoint-multifamily and CalGreen checklists.
4. High-efficiency Energy Star fixtures, appliances and features. All-electric appliances for residential uses in conformance with the State's "Zero Carbon" strategies, and the most recent CARP Scoping Plan.
5. Single family detached residential buildings that are more efficient than the 2022 California Energy Efficiency ("Title 24") standards, and multifamily residential and non-residential structures that are at least 10 percent more energy efficient than the 2022 Title 24 standards. Energy efficiency standards also apply to non-residential structures.
6. Alternative energy systems (photovoltaic solar, wind, etc.) capable of delivering 100 percent of the energy demand for the residential units in the project. The project will require that the project be "Net Zero" with all the units with rooftop or solar canopy PV systems that provide at least 100 percent of the unit's electrical energy demand or equivalent energy saving improvements.
7. Shared Mobility strategies are included to reduce the necessity for additional vehicles for each family, including participation in UC Merced's ZipCar car sharing program. Car sharing, sharing and/or transit will be provided in the development.
8. Building design standards intended to exceed the 2022 "Net Zero" building codes. To meet and exceed the current 2022 building code, there are design requirements for the usage of Advanced Framing and more energy efficient wall, floor and ceiling assemblies, Quality Insulation Installations, and Compact Plumbing. Advanced Framing/Engineering involves wider stud placement to decrease transmission loss and reduction in required framing lumber. Quality Insulation Installation (QII) will minimize heating and cooling losses, compact plumb-

ing to minimize plumbing runs and distance between hot water taps and water heaters, and usage of EPA WaterSense fixtures to reduce indoor water usage.

9. Compliance with the San Joaquin Valley Air Pollution Control District's (SJVAPCD) optional mitigation measures. These include such features as Walkable Streets and dense bike path network, transit improvements, traffic calming, dense pattern of pedestrian and bike circulation improvements, water conservation strategies, EV charging stations in common areas, affordable housing, mixed use developments, and car/ridesharing. Project features include Transit Enhancements (SJVAPCD Table 4), VMT reduction strategies (SJVPAPCD Table 5), Pedestrian Enhancements (SJVAPCD Table 6), Bicycle Enhancements (SVAPCD Table 7), Ridesharing (SJVAPCD Table 8), Shuttle Services and Transit (SJVAPCD Table 10), Parking Strategies (SJVAPCD Table 11), including reduced parking in mixed use locations, and placement of higher density units nearest the mixed use village center, Transit Access (SJVAPCD Table 12), and Passive Solar strategies (SJVAPCD Table 14),
10. Compliance with SJVAPCD's "Additional Mitigation Measures" as described in the Land Use Framework.
11. Compliance with the City's Climate Action Plan.
12. Project features and measures to reduce average daily potable water usage by at least 25 percent below the community's current residential water demand per unit. Existing residential water use in the City is reported by the State Department of Water Resources to be approximately 130 gallons per day per person (GPCD). Project residential water usage is estimated to be 100 GPCD because of water efficiency features, and more limited onsite landscaping.

Sustainable Open Space and Agriculture

The project will include improvements to the existing riparian corridors for habitat, drainage and pedestrian and bicycle paths. Onsite open space will be provided along the perimeter of the site (and contribute to the required buffers to adjacent ag land). The Fairfield Canal will have adjacent jogging paths that will be integrated with onsite bike and pedestrian paths, resulting in over five miles of total onsite bike and pedestrian trails. These trails will be connected to the UC trails, and to the Lake Yosemite Trail system, resulting in 25 miles of trails.

Progressive storm-water treatment and management improvements will also be used to further the community's Low Impact Development goals through the usage of bio-retention swales, runoff treatment and filtration, permeable paving and pavement systems, water retention gardens and other integrated treatment detention/retention systems. These facilities will also have the added benefit of providing open-space and aesthetic value. These improvements will also solve storm-water issues associ-



ated with upstream and adjacent properties.

A Complete “Linked” Community

The area surrounding the UC currently has few neighborhood services, facilities and resources. As a consequence, the project site will provide a comprehensive range of services such as day care, drug stores, restaurants, schools, an upscale convenience store, a bank, medical and/or dental services, personal-care services, and full-service supermarket within biking or walking distance of the University, and 3,860 onsite residential units. An integrated web of pedestrian and bicycle pathways will be developed along the public street system, dedicated pedestrian pathways, and riparian bike paths. As envisioned in the UCP, the university and UCP will be an integrated community that includes close-by employment and adequate commercial services to meet the needs of the residents and university community.

To establish these needed services and facilities, the VST project will include two small 3.5- to 4.0-acre convenience commercial centers, a 12.5-acre community shopping center, a mixed use Village Center for offices, personal services, and mixed use residential; pocket and neighborhood parks that are within no more than two blocks of any residential unit, and eight mini-parks within one-eighth mile of residential units, a community recreation center, and a sports park; a K-8 elementary school, and a Charter “Scholars” School. The Village Center will have plaza areas for public gatherings, parking to be shared between residential and Village Commercial uses, and areas for a trailhead that is connected by local, community and regional roadways, bike trails, pedestrian linkages and transit. More than just an area for daily shopping and convenience goods, the Village Center will serve as a community gathering place, a transit hub and a location for occasional community events and gatherings. Fully improved transit, trolley, school bus and van pool stops will also be included throughout the site.



The “links” in the Specific Plan community also include high speed broadband internet. The Specific Plan community will include fiber optic infrastructure, and high-speed community Wi-Fi. It is expected that over two-thirds of the community will be remote workers, hybrid workers, students and others who will rely on connectivity to the rest of the world. It will be a “Gigabit Community” that will support residents’ need for work, play, and connectivity.

A Diverse Range of Housing Opportunities

The project will include a wide range of housing across the economic and socio-economic spectrum. It will also be characterized by styles that have the detailing and architectural authenticity for which Merced is known, with a wide enough range in styles to create neighborhood identities and avoid monotony and repetition. There will be areas for traditional single-family units of varying sizes ranging from “es-



tate” custom home lots of 12,000 SF to 20,000 SF; 7,000-10,000 SF “move-up” sized lots; 4,500 Sf to 5,500 SF lots for entry level housing; and smaller lots (3,500 SF to 4,500 SF) for R-2 single family detached units in a pocket or cluster configuration. Attached single family cluster units will be provided adjacent to the Village Center. Higher density multifamily units will be provided for students and families.

In particular, the project will provide housing that will appeal to the community’s “workforce” housing needs with unit sizes, pricing and amenities for UC Merced staff and instructors, for small families, professionals, retirees, “empty nesters” and larger families. The project will provide a substantial number of housing units that are affordable to families with Extremely Low, Very Low, Low, Moderate and “workforce” incomes (80-160 percent of County median family income). The project includes smaller unit sizes (“Pocket Cottages” of 1,000 SF to 1,200 SF) in the R-2 area to widen the socio-economic base of that area and to offer a lower market rate price point. Within the R-2 area unit sizes range from approximately 1,000 SF to 2,100 SF. The R-3 area includes unit sizes ranging from 700 square foot studio units to 1,750 square foot family townhomes. The R-4 multifamily units will offer smaller studios ranging in size from 550 square foot rental units to 1,150 square foot two-bedroom, two-bathroom units for larger families. Through a combination of market rate housing and deed restricted housing, the project will provide 100 (2.6%) deed restricted units for Extremely Low Income Households, 125 (3.2%) deed restricted units for Very Low Income Households, 1,029 (25%) units for Lower Income Household (including 175 deed-restricted units for rental and homebuyer programs), 1,920 (50%) units for Moderate Income Households (including 100 deed restricted ownership program units), and 733 (20%) units for Above Moderate Income Households. Overall, the project will provide 500 (13% of total) deed restricted units in the development.

The project’s architectural styles will be respectful of local traditions and culture, while meeting present-day lifestyle needs. Anticipated architectural styles are expected to include highly detailed Agrarian/Ranch, Bungalow, Spanish Mission, Craftsman Bungalows, and Contemporary/Mid-Century Modern. Neighborhoods will be organized around the project’s open-space features with a neighborhood park, pocket park or open-space amenity within walking distance. Public buildings, park structures and structures in civic meeting places will use an agricultural theme, such as modern or contemporary barn architecture.



Environmental Setting and Background Information

Biological Resources

In conjunction with the development of UC Merced, the project was evaluated for biological resources. The property has completely mitigated onsite impacts to wetlands and fairy shrimp through offsite conservation easements, in compliance with its approved 401 and 404 permits.

Air Quality

Long-term air-quality impacts were found to be mitigable, and consistent with the local Climate Action Plans. According to the report on vehicle miles traveled (VMT), the project is expected to generate 4.9 vehicle miles per day per person from residential uses, compared to the 15.9 miles per capita per day in the County and the 9.9 vehicle miles per person per day average in the City of Merced. Similarly, the non-residential components are expected to generate 12.5 vehicle miles per day per employee compared to the 40.5 vehicle miles per employee per day in the County and the 37.9 vehicle miles per day per employee rate in the City. The principal feature contributing to this reduction is the project's location next to the university, but the project design and its features contribute to that as well. Features that attain and reduce those rates are described in the Specific Plan, including car sharing, bike sharing, enhanced transit, extensive bike and pedestrian connections and improvements, school bus service, and other features.

There are design requirements to increase the energy efficiency of single family residential units (R-1 and R-2) by at least 15 percent above 2022 Title 24 standards, and for non-residential and multi-family residential units (NC, R-3 and R-4) to exceed the 2022 standards by at least 10 percent. These improvements will be from the usage of Advanced Framing and more energy efficient wall, floor and ceiling assemblies, Quality Insulation Installations, and Compact Plumbing. Standards are also set for the minimum amount of Solar PV for each building type, for adequate roof area for the solar arrays, and for the placement of solar canopies in common parking lots of multifamily and non-residential areas. Based on these requirements and the other measures it is expected that Greenhouse Gas and ROG emissions associated with building energy use will be reduced between 50 and 75 percent. Combined with the 25 percent reduction in VMT, air quality impacts associated with the project will be reduced 35 percent to 40 percent.

Cultural Resources

Implementation of the project would entail ground disturbance associated with infrastructure development and construction of new structures, access roads and underground utilities could have an impact on known or unknown cultural resources. A survey of the site was conducted in 2021 by Natural Investigations, Inc. and concluded there were no potential cultural resources of concern.

Agricultural Resources and Preservation

Pending development, the site is under active agricultural production. The project has integrated a number of policies and strategies, including implementation of 200-foot ag buffers to any project habitable structure per the Merced County Zoning Code Update.

Groundwater

Development in the Central Valley will be subject to special restrictions to balance the sustainable yield of the groundwater basin with actual annual extractions. Since the project will be annexed to the City of Merced, it is expected that provisions of the requirements of the Merced Irrigation-Urban Groundwater Sustainability Agency sustainability plan will apply to the project. Although that plan has not been finalized, nor approved by the State Department of Water Resources, it is expected that groundwater extraction will be limited to approximately two-acre feet per year per acre over the entire project site, or an amount equal to two acre feet across the City of Merced's urbanized area. As identi-

fied in the Water Supply Assessment in **Appendix C** and elsewhere in this Specific Plan, the full development of the project would not be inconsistent with this requirement.

Land Use Plan and Framework

Land Use

The Project includes a land use plan which designates 410 acres of residential land uses, 113.3 acres of open space and parks (including 78 acres for parks), 19 acres for a K-8 elementary school, 44 acres for commercial development, and 79 acres for project roads and other improvements (see **Table 2** and **Figure 3**). This would allow for the development of approximately 3,857 residential units (not including allowed density bonus units) and 862,000 square feet (SF) of commercial buildings. Low, medium, medium-high, and high density residential developments would be constructed along planned collector and residential roadways. A community recreation center would be included, along with 39 mini-parks and pocket parks, two community parks (one for each development phase) and a 36-acre regional sports park. The Land Use Plan for the project is shown in **Figure 3**, and the Development Plan for the project is shown in **Figure 4**. As noted earlier, the Development Plan provides a precise plan level of detail representing how the policies and regulations relating to the physical design of the community would apply.

Residential Land Uses

Low Density Residential (R-1)

The **Low Density Residential (R-1)** designation for the project is for single family detached units. Densities include R-1 Low (Estate Residential, 12,500 SF minimum lot size); R-1 Low Medium (7,000 SF minimum lot size), R-1 Medium (4,500 SF minimum lot size), and R-1 Medium-Cluster (4,500 SF minimum lot size in a cluster configuration with shared drive-ways). At buildout, it is expected that there will be 148 R-1 Low Density Residential dwelling units on 59 acres; 357 R-1 Low Medium units on 84 acres; 693 R-1 Medium units on 116 acres; and 79 R-1 Medium Cluster units on 12.6 acres. All but the cluster units would be configured as units with front- or side-loaded garages. Average dwelling unit sizes are expected to range from 3,750 SF for the R-1 Low units to 1,900 SF for the R-1 Medium Cluster units. Potential unit sizes will range from 1,000 square feet to 4,500 square feet. The Development Plan shows the intended layout of each of the R-1 neighborhoods.



Medium Density Residential (R-2)

The **Medium Density Residential (R-2)** designation in the project will be primarily 4-pack and 6-pack cluster units that will accommodate small lot detached single-family units. Total R-2 development is projected to be approximately 480 units on 55 acres, with maximum potential development of 12 units per net acre. The R-2 units may be in several different



configurations, and development shall comply with the design standards in the Specific Plan. The R-2 small lot “Pocket Cottage” concept has been included to address the need for smaller unit sizes in a single family detached format, and these units are intended to range in size from 1,000 square feet to 2,100 square feet and include more limited parking. The R-2 portions of the project will be oriented to provide small-lot moderate income and “work force” housing with housing sizes and corresponding initial sales prices aimed at those families with incomes equal to 80 percent to 160 percent of Area Median Family income. These units will also be used for the project’s Sweat Equity Housing Program. These units also lend themselves well to a “Build to Rent” or “Build for Rent” program where single family detached units are first constructed with the intent to rent them. They are efficient and can be managed effectively as individual or multiple 4-pack, 6-pack or 8-pack units. Because of their special configuration, these units will be used as liners for major project streets, including Virginia Smith Parkway and Cardella Street, and as cluster units around parks. They can side or front on to these roads without the need for individual driveways from those roads, and can be configured to minimize any vehicle related noise impacts. They therefore provide a public street frontage that is not dominated by garages, and avoids the need for block walls or other solutions where units “back on” to local streets.



Medium High Density Residential (R-3)

The **Medium High Density Residential (R-3)** land use designation is for townhomes, lower density stacked flat apartments, and condominiums arranged around a central amenity or open space at a density between 15 and 20 dwelling units per net acre. The R-3 portion of the project is expected to yield approximately 504 dwelling units on 31 acres, and may include up to 20 units per acre. Unit sizes will range from a 900 square foot for-sale and for-rent studios up to 1,800 square foot 3-bedroom 3-bath units. These units are assumed to be divided equally between for-sale and for rent units. These units are located adjacent to the Village Center.



High Density Residential (R-4)

High Density Residential (R-4) residential land uses will include stacked flat apartments, arranged around or associated with a central amenity or open space. The R-4 portion of the project is expected to yield approximately 1,488 dwelling units on 53 acres, and are expected to be split 60% (894 units) for student rentals averaging 850 SF per 4 student beds, and 40% (594) for non-student units for university families,



staff and instructors. Unit sizes will range from 750 square feet to 1,250 square feet. These units are assumed to be rentals. These units are located along Meyers Gate Road to locate them as close to the university as possible and to reserve the area south of Virginia Smith Parkway principally for owner-occupied units. Sites for 325 of these units will be contributed to a local non-profit housing provider to provide deed restricted housing for Low, Very Low and Extremely Low Income families.

Town Center Mixed Use Residential (C-MUR)

The **Town Center Mixed Use Residential (C-MUR)** land use includes 108 stacked flat apartments, in second and third floors above the Village Center commercial district along Center Street. The density of these units is up to 35 units per net acre. Units will typically have access to roof-top gardens and patios with “green roofs” used to provide stormwater management and localized cooling for the warm Merced summers. The average size of these units is expected to be between 450 SF and 900 SF, and be principally for rent but with some ownership units through the usage of condominium or “three dimensional” subdivision maps. The architectural design of these buildings will be consistent with the “Contemporary Prairie” design vernacular for the Town Center buildings, retail commercial buildings, and public buildings. This vernacular blends the modern and contemporary elements of the UC Campus, newer downtown buildings, and the rich, natural material finishes and designs of buildings in Yosemite National Park. Parking for these units is at a reduced rate of 1 covered space per unit (shared with commercial uses during the daytime) because of their limited size and bedroom count, and location in a vertically mixed uses setting. This land use is most similar to the City’s Village Core Residential General Plan Land Use, and the Downtown Core zone.



Commercial Land Uses

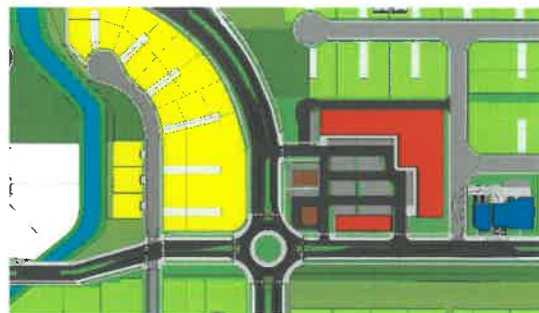
The project includes community and neighborhood scale commercial retail uses, a mixed use district and a mixed use area for services and office uses. The commercial, service and office uses have been scaled and distributed so that they only meet the needs of the population in the Specific Plan area, the university’s students, staff and instructors, and the northern half of the UCP South portion of the UC. In total, there is 862,000 square feet of commercial space which is expected to provide 50,000 square feet for a full line grocery store, plus two smaller neighborhood convenience grocery stores; 300,000 square feet of general retail; 50,000 square feet for personal services; 300,000 square feet of office space (including approximately 75,000 square feet for medical office uses); 75,000 square feet for eating and drinking places; and, 87,000 square feet of other non-residential uses such as hotels, research and development space, and other uses. These uses are intended to be



provided incrementally. There is a known demand for convenience commercial uses and Phase 1A of the project will include a small 3.5-acre to 5-acre commercial center that will include a gas station, smaller limited line grocery store, eating and drinking places and general retail. Longer term, the Community Commercial center will be provided Phase 1D, and the Village Center Mixed Use Commercial area will be developed in Phase 1C. Finally, a convenience commercial center will be developed east of the Fairfield Canal to service Phase 2 of the project. Because of its proximity to the university, it is expected that there will be limited demand for the research and development and business park uses that were originally contemplated for the UCP North portion UCP Plan Area.

Neighborhood Commercial (CR-Neighborhood)

Two **Neighborhood Commercial (CR-Neighborhood)** sites are planned, one in Phase 1A at the northeast corner of Campus Parkway and Virginia Smith Parkway, and a second in Phase 2 along Virginia Smith Parkway. These sites are intended to provide neighborhood and convenience level commercial goods and services within walking distance of any of the project's neighborhoods. Both are located along commuter routes to provide convenience and accessibility. This land use is comparable to the "retail" land use category in the UCP, but is smaller in scale and focused on meeting the needs of travelers along the adjacent streets and residents within a one-quarter mile radius. It is also comparable to the City of Merced's CN-Neighborhood Commercial General Plan land use category, with the exception that these uses are limited to five acres in size.



Community Commercial (CR-Community)

A **Community Commercial (CR-Community)** site is proposed on Cardella between Center Street and Golden Bobcat Road. This is a 12-15 acre site which is planned to be anchored by a 40,000 to 60,000 full line grocery store, a drug store, eating and drinking places, a gas station, fast food uses, and general retail. This land use is comparable to the "retail" land use category in the UCP, but focused in size, scale and location to serve the weekly shopping needs of the VST Specific Plan area and the northern portion of the UCP South. It is also comparable the City of Merced's C-SC-Shopping Center Commercial land use zone category, with the exception that the CR-Community zone provides for a broader range of uses since alternative shopping opportunities are limited in the vicinity. Regional scale uses similar to those intended for the city's Regional/Central land use zone are not encouraged in this zone so as not to compete with Downtown Merced, or the regional commercial uses planned for Gateways Regional Commercial Center at Campus Parkway and Highway 99.







Figure 4: Development Plan

Village Center Mixed Use

The plan includes several commercial zones in the Village Center along Center Street, including **Village Center-Mixed Use (VC-MU)** and **Village Center-Mixed Use/Offices (VC-MUS)**. The entire Village Center Mixed Use portion of the project is intended to have many of the following features of desirable urban and suburban central districts: 1) smaller retailers; 2) diversity of services; 3) eating and drinking areas, including outdoor eating and drinking areas in sidewalk cafes and parkettes; and, 4) adequate parking and circulation, but the buildings are set to the front property lines and the parking and support functions are from rear parking lots and service areas. The VC-MU use areas are similar to the City of Merced's Downtown Core Zone. The VC-MUS area is similar to the City of Merced's Downtown Office and Business Park land use zones. In the VC-MUS land use area, it is expected that there will primarily be employment generating uses such as professional offices, medical offices, hotels and lodging, limited research and development, and the proposed University Charter School.



Public and Institutional Land Uses

As required by the UCP, the project site includes an elementary (K-8) public school site, plus an MCOE "Scholars Academy" university prep school. Other schools to serve the project area and UCP south are provided in UCP South, including an additional elementary (K-8) school, a middle school and a high school. The project site's K-8 site is adequately sized for up to 950 students, and the MCOE Charter school that can accommodate 300 additional students. The project also includes a public safety site for a police substation and a fully staffed two-engine fire crew. The public safety site is located in Phase 1A. The K-8 school site is located in Phase 1E, and the University Prep charter school is located in Phase 1C.

Certain open space areas are designed for **Conservation/Open Space** including the Fairfield Canal and the Cottonwood Creek corridors. These areas will be used as open space amenities for the project and will include jogging trails, exercise locations, and public viewpoints.

Parks and Recreation

Parks and recreation are important functions and amenities for any master plan community. Within the VST Specific Plan there is a total of 73.2 acres of public and private park space, 20 acres of space for active recreation in the various Linear Parks, and 4.8 acres of active park areas in the various schools, for a total of 98 acres of parks. This provides parks at a rate of 8.8 acres per 1,000 residents, 75% higher than the 5.0 acres per 1,000 residents rate prescribed by the City of Merced and the UCP. These facilities are to be provided in a mix of linear parks, a sports park, neighborhood parks, mini-parks, and pocket parks and community gardens, with at least half of that provided neighborhood, community and sports park. These main facilities are to be located within one-half to one mile of the serviced population, and the mini-parks are to be located no more than 500 feet from any residential unit. **Figure 5** shows the overall distribution of parks in the project. **Appendix L** shows the detailed Parks Master Plan and park development matrix.

One of the key features of the project is a community recreation area that includes a 6.6-acre community facility that includes a 12,000 square foot clubhouse and recreation center, two community swimming pools, tot lots, areas for court games, and a structure for a farmers' market. It is centrally located next to the Village Center and will function as the community gathering place and social focal point. Community recreation and social programming will be provided through onsite staff. This facility will be limited to Specific Plan residents only and will be supported by a Master Homeowners Association. **Figure 5** shows an illustration of the features in the community recreation center.

The project has an extensive system of linear parks that total 19.8 acres. These linear parks connect the various major destinations in the project, and serve as locations for low impact development storm water management, recreation and trails, and visual relief and aesthetics along two-mile length of Virginia Smith Parkway and connect the sports park, Village Center, Community Park, shopping areas, and



project school sites. Combined with the linear park areas in the project there are over five miles of on-site trails and paths for active recreation.

There are thirty-nine mini-parks and pocket parks in the project totaling 17.2 acres. These parks are located in each residential neighborhood and development (including individual apartment projects) will also serve the neighborhoods. Each will be one-half to 2.5 acres in size and provide facilities such as community gardens, tot lots, passive play areas, BBQ and picnic areas, basketball courts, community gardens, dog park, and landscaping. These will serve residents within a two-block radius and fill the few “gaps” in the coverage for the neighborhood park facilities. The mini-parks will be phased with adjacent residential development to provide park facilities for future residents near their homes.

Finally, the project includes a 34-acre community sports park with soccer fields, court game areas, baseball fields adjacent to the Fairfield Canal. The community sports park will be developed in phases with 10 acres initially development in Phase 1 (Phase 1E portion of the project), and the balance in Phase 2. **Figure 6** shows an illustration of the planned sports park.

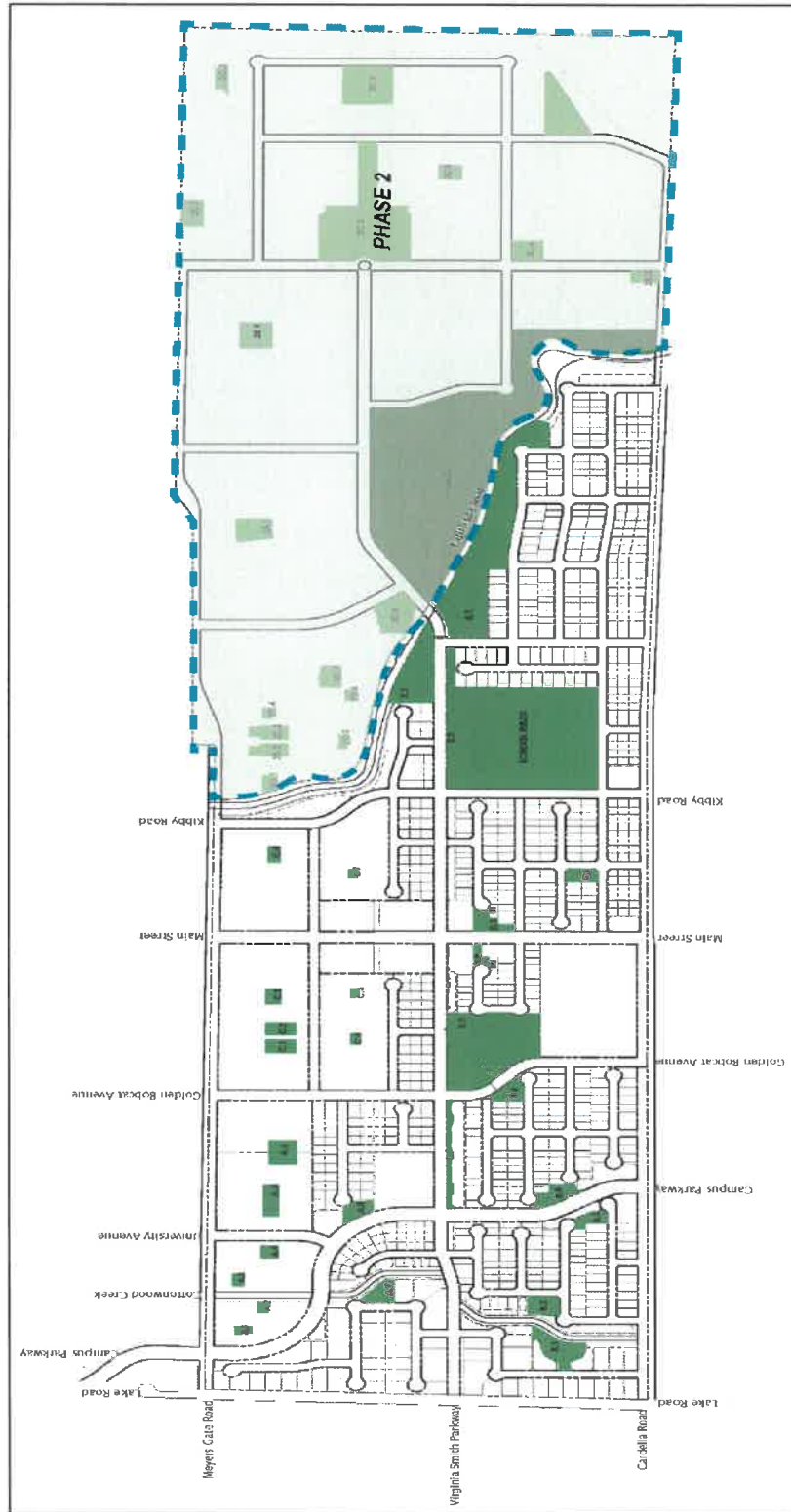


Figure 4: Location of Parks



Figure 5: Community Recreation Center



Figure 6: Sports Park

Housing Affordability

There is an intentional mix of residential densities in the project to address the housing needs of the UC staff, students and instructors, as well as the community at large. The planned housing includes a range of larger R-1 lot sizes, R-2 “four-packs”, “six-packs” and cluster units, and R-3 and R-4 multifamily dwellings, with an emphasis on smaller lot, higher density units. The project also includes mixed use/live-work units in the Village Center to address the needs of those who want a more “urban” residential setting. Because of the location next to the university, the High Density (R-4), Medium High Density (R-3) and Town Center Mixed Use Residential (C-MUR) represent over half of the residential units. These units are provided at densities ranging from 20 units to the acre to 35 units to the acre in a mix of student housing (900 units) and housing for university families and staff (1,200 units). These densities are important since the State Department of Housing and Community Development, (California Government Code Section 65583.2) and the City and County Housing Elements consider parcels and areas which allow at least 20 units per net acre to be suitable and available for Low and Very Low Income Housing by virtue of lower lot costs, lower improvement costs and economies of scale for development.



Medium Density R-2 and R-1-5 “Cluster” units provide 559 (15 percent) of the total units. These types of units provide opportunities for small-lot workforce housing at densities from 8 to 12 units per net acre on smaller lots, but with detached single family homes. The R-2 units are often referred to as “Pocket Cottage” units and meet the needs of young professionals, empty nesters and young families.



They are smaller in scale and have floor plans ranging from 1,000 to 2,100 square feet in 2BR/2B and 3BR/2B configurations with private patios and a shared front yard area. These units are also well suited for single family build to rent projects since they can be effectively managed as clustered units, rather than for scattered lots. The R-2 and R-1-5 Cluster units can provide a substantial contribution towards the need for market rate “workforce” housing and housing for moderate income (80-160 percent of local median family income) families. The R-2 single family units are located where there are streetscape benefits (functionally and aesthetically) resulting from few driveway cuts and orientation to open space. For example, houses could have front doors facing main public streets such as Virginia Smith Parkway and Cardella Road, but access points will be limited to intersecting public streets, or through rear or side common driveways. Other front access points may be on side streets or from the internal, shared front yards in the cluster.

R-1 Single-family units of densities ranging from 3.25 to 6.5 units per net acre comprise approximately one-third of the total units (1,280 units). Lot sizes for the R-1 single-family units are planned to range from a low of 5,000 SF to a high of 22,500 square feet. These units are intended to address the needs of the university staff and instructors and support housing housing sizes in the 1,800 square foot to the 5,000 square foot range. According to the recent salary survey for UC Merced there are 1,100 positions (staff and instructors) out of the 1,500 total positions whose projected household incomes would qualify them for R-1 Single Family units in the project.

In addition to providing a range of housing types that match up with the needs of UC Merced and the community in general, the project has developed several programs to encourage affordability. These programs are also intended to comply with the County Housing Element, the City Housing Element and the City of Merced's recently adopted RHNA Unit Production Policy. Programs include a Workforce Housing Incentive Program; a Self-Help Housing Program; a "UC Workers First" incentive program to encourage university staff and instructors to locate in the project (and possibly increase the share of staff residing in the City); an Affordable Multifamily Construction Program to provide sites for Low, Very Low and Extremely Low income families; and, an owner-occupancy requirement for the R-1 units and portions of the R-2 areas of the project. These programs are described briefly below:

Workforce Housing Incentive Program

This program will provide 150 units at initial prices affordable to low and moderate income (80%-120% of AMI) based on lender underwriting criteria for insurance, Federal National Mortgage Association ("Fannie Mae") interest rates, common area charges, etc. The program includes a \$5,000 down payment assistance through an equity sharing program where buyer will fully vest after 10 years, and progressively gain a greater share of the equity in years 1-9. This program applies to 7.5% of the R-1 and R-2 housing stock and results in 50 enforceably restricted Low Income units and 100 enforceably restricted Moderate Income housing units. In total, 152 Low and Moderate Income units would be enforceably restricted for affordability.

Self-Help Housing Program

This program would provide improved housing sites on R-2 cluster lots for self-build, sweat equity program. Buyers would build units according to standards and specs provided by VST builders. This would provide 25 units for Very Low and Low Income households that would have affordability covenants.

UC Workers First

Preference for purchasing and renting will be provided to UC staff, students and instructors to fulfill the commitment in the UCP that the specific plan be socially and economically integrated with the university. A preference list will be developed for each project and housing types for UC staff, students and instructors to encourage locating in the development to realize reduction in Vehicle Miles Traveled and synergy between UC and UC community. This program is expected to capture 50% of staff and 25% of students. For sale builders will provide a \$5,000 incentive toward price reductions, option allowances, or an allowance for closing costs, at the discretion of builder. This program is expected to benefit 50 Lower Income households, 550 Moderate Income households, and 200 Above Moderate Income households.

Multifamily Construction Program

The Multifamily Construction Program will provide 10.7 acres of improved R-4 sites that are adequate for up to 300 dwelling units, with sites for at least 200 units in Phases 1A through 1E and 100 units in Phase 2. These sites will be provided to affordable housing providers and will be developed with a combination of market rate units, and at least 100 units for Extremely Low Income households, 100 units for Very Low Income Households, 100 units for Low Income Households, and 75 units for Moderate Income households. This program would also include construction of 25 Very Low Income units in the Mixed Use Town Center area. In total this program will result in 400 units that will be enforceably restricted.

Project Phasing

Figure 7 shows the phasing of the project and the land uses. This phasing is primarily determined by the required location of sewer, water and circulation facilities, existing road improvements, and site topography, the need to balance the mix of land uses, and to ensure that the current agricultural areas in the project can be farmed for the longest time period. The project is comprised of the following major phases and sub-phases. **Table 2** shows the buildout of the project according to each phase and sub-phase.

Phase 1 includes the portion of the property between Lake Road, Meyers Gate Road, Cardella and the Fairfield Canal, and, in total, would include 2,541 dwelling units, 807,500 sq. ft. of commercial space, 49 acres for parks, a public elementary (K-8) school, and a MCOE Scholars Academy magnet school. This portion of the project is further divided into five subphases as shown in **Figure 7**.

Phase 1A of the project includes a mix of 841 residential units, including 43 low density/large lot units, 66 R-1-5 cluster units, 36 R-2 cluster units, and 696 multifamily units (comprised of 418 student apartments and 278 market rate/family apartment units). Phase 1A also includes a 50,000 square foot Village Commercial site at Campus Parkway and Virginia Smith Parkway, and the northerly portion of Campus Parkway. The infrastructure improvements for Phase 1A are anticipated to begin in early 2025 and be complete by the end of 2025 or early 2026. These improvements would include the offsite sewer and water connections, initial improvements to Lake Road along the Phase 1A frontage, and construction of in-tract improvements within Phase 1A. Construction of the residential units would begin in early 2026 and be completed in late 2028. This phase includes a range of housing types, but with a heavy focus on higher density (R-4) housing, including student housing to address the current shortage of multifamily housing in the community. The Village Commercial portion of Phase 1A would likely include a gas station, small grocer, retail shops, services and restaurants. Nearly 5.3 acres of public parks are included in Phase 1A (including a mix of linear parks, private parks in apartment complexes and public parks). Phase 1A would also include a site for a combined fire station and police substation on Virginia Smith Parkway just east of Campus Parkway; actual construction and staffing will be determined by the City of Merced based on service needs. Phase 1A will also include a water well on the project site that will be located in the Community Recreation Center in Phase 1D, as well as connection of the onsite water system to the water main at Bellevue and Lake Road (and the intertie to City Well No. 17 at UC Merced). Phase 1A will also include construction of the onsite sewer collection and pump station at the corner of Cardella and Lake Road, and the offsite force main to the Bellevue Road sewer trunk line.

Phase 1B includes three R-1 housing types and infrastructure improvements would be expected to start in early to mid-2026 and be completed by late 2026. This phase is comprised of 20 Low Density/Large Lot units, 49 R-1-7 units, and 157 R-1-5 units. Construction of the 226 R-1 residential units would begin in late 2026 and be complete in early 2029, although it is conceivable that Phase 1B could be developed concurrent with Phase 1A since the residential product types are complementary. This phase does not include commercial development or multifamily units. Phase 1B includes 7.6 acres of public parks. Phase 1B would include the completion of the onsite portion of Campus Parkway and completion of the northerly two-thirds of Cardella Road between Lake Road and Golden Bobcat Drive.

Phase 1C includes the bulk of the Village Center Mixed Use portion of the project, the multifamily area surrounding it (R-3 townhomes and condominiums and the R-4 apartments), and the MCOE Scholar's Academy. Building construction would likely be completed by 2031. Residential development projected for this phase includes 992 units of primarily higher-density development including 64 R-2 Cluster units along the Virginia Smith Parkway frontage, 364 R-3 townhomes and condominiums, 456 R-4 apartment units (including 274 student apartments and 182 family and market apartments), and 108 Town Center Mixed Use residential units on the second and third floors above ground floor retail and office space. This phase includes approximately 550,000 sq. ft. of commercial development, primarily associated with the Center Street/Village Center area, including retail/mixed use and hotel/office. It is possible that Phase 1C and Phase 1D could be developed concurrently because of the different product types in each subphase. No public parks are included in this phase, although 5.8 acres of private park are included to be located in the multifamily developments. Necessary infrastructure to support development in Phase 1C includes backbone roadway network and utility improvements within the subphase. This subphase would also include the construction of the offsite traffic signals at Lake Road/Virginia Smith Parkway and Lake Road/Meyers Gate Road.

Phase 1D includes the development of 141 R-1-5 and 24 R-2 cluster dwelling units, the community recreation center, and the community shopping center. It is anticipated that the infrastructure improvements could begin as soon as 2027 and are projected to be complete by 2028. Construction of the residential and commercial buildings could start in early 2029 and be completed by early 2032. It is possible that Phase 1C and Phase 1D could be developed concurrently because of the different product types in each subphase. The Community Commercial site is located at the northwest corner of Cardell Road and Center Street and is planned to include 175,000 sq. ft. of commercial development including a major grocery store, general merchandise stores, restaurants, a drug store and retail mixed use. Phase 1D also includes 32,500 sq. ft. of additional Village Center Commercial space that would complete the development of all four corners of Virginia Smith Parkway and Center Street with Village Commercial uses. Phase 1D includes 7.3 acres of public park and 1.4 acres of linear park. A traffic signal is also projected to be constructed at Lake Road/Cardella Road to support the Community Commercial center.

Phase 1E includes an elementary school and the portion of the community sports park east of the Fairfield Canal, and 186 R-1 units and 131 R-2 cluster residential units. The elementary school would be constructed by Weaver Union School District, and the precise timing is unknown. The infrastructure improvements for Phase 1E would be started in early 2030 with completion expected in early 2031. Construction of the residential and commercial building is projected to start in 2031 and be completed in early 2034. No commercial development is identified in Phase 1E. Over 4.5 acres of linear parks and

15.5 acres of public parks are included in this phase. The elementary school would also add 4.8 acres of park facilities.

Phase 2 of the project has been conceptually planned to ensure connectivity to Phase 1 and to provide land uses that complement uses in Phase 1. Overall, Phase 2 is planned to include 1,316 dwelling units, including 615 R-1 units of various densities, 225 R-2 Cluster units, 140 R-3 units and 336 R-4 units. Phase 2 would include approximately 45.6 acres for parks, including the bulk of the regional sports park on the east side of the Fairfield Canal, and a small 54,500 sq. ft. neighborhood shopping center.

Table 2: Project Buildout by Phase

Development Per Phase Land Use Type	Phase 1						Phase 2	Total
	Phase 1A	Phase 1B	Phase 1C	Phase 1D	Phase 1E	Total Phase 1		
Residential (Units)								
R-1	109	226	--	141	186	662	615	1,277
R-2	36	--	64	24	131	255	225	480
R-3	--	--	364	--	--	364	140	504
R-4	696	--	456	--	--	1,152	336	1,488
Mixed Use	--	--	108	--	--	108	--	108
Total Residential (Units)	841	226	992	165	317	2,541	1,316	3,857
Commercial (SF)								
Retail Mixed/Town Center)	--	--	275,000	32,500	--	307,500	--	307,500
Hotel/Office	--	--	275,000	--	--	275,000	--	275,000
Neighborhood Commercial	50,000	--	--	--	--	50,000	54,500	104,500
Community Commercial	--	--	--	175,000	--	175,000	--	175,000
Total Commercial (SF)	50,000	--	550,000	207,500	--	807,500	54,500	862,000
Parks (Acres)								
Linear Parks	1.23	4.16		1.40	4.50	11.29	8.47	19.76
Public Parks	2.14	3.48		7.30	15.50	28.42	34.79	63.21
School Parks					4.82	4.82		4.82
Private Parks	1.88		5.79			7.67	2.36	10.03
Total Parks (Acres)	5.25	7.64	5.79	8.70	24.82	52.20	45.62	97.82
Public Facilities (Acres)								
Backbone Roads	10.58	6.52	12.92	6.17	6.17	42.36	27.46	69.82
Water	1.50	4.20				5.70	9.84	15.54
Other	7.50					7.5	7.5	15.0
Schools			4.40		14.89	19.29		19.29
Total Public Facilities (Acres)	19.58	10.72	17.32	6.17	21.06	74.85	44.80	119.65
Affordable Housing								
Workforce Housing Program	25		25		25	75	75	150
Self Help Housing Program		13			12	25		25
Multifamily New Construction	100		125			225	100	325
Total Affordable Housing Units	125	13	175		37	325	175	500
(Units counts do not include permitted density bonuses for qualified projects.)								



Figure 7: Project Phasing

Regulatory and Design Framework

This section includes design standards and guidelines for the project. These standards are intended to implement the policies and regulations in the Amended University Community Plan. They are also intended to replace and supersede equivalent regulations the County Zoning Ordinance and the City of Merced Zoning Ordinance, and to implement the goals and policies of the Merced County General Plan, the Amended University Community Plan, and the goals and policies in the City of Merced General Plan applicable to the UCP area in general and the VST specific plan area in particular. Where specific design standards and guidelines are set forth within these guidelines, they shall be used; where there are design requirements and regulations in the City Zoning Ordinance and/or the County Zoning Ordinance that are not in this document, those provisions shall apply.

As used herein, *Standards* define actions or requirements that must be fulfilled by new development. Alternatively, *Guidelines* refer to methods or approaches that may be used to achieve a stated goal but to provide some flexibility and allow for interpretation depending upon specific conditions as to how they are satisfied. Collectively, the standards and guidelines incorporated herein are meant to guide implementation of the vision intended for the project.

Site Planning and Organization

1.0 Building Orientation and Setbacks

Pedestrian interaction for the project is encouraged through the thoughtful placement and orientation of residential and commercial structures. Porches will be incorporated on street-facing residential units to provide opportunities for everyday neighborhood interaction. Residential units fronting onto east-west Collector and Arterial streets such as Virginia Smith Parkway, Cardella Road and Meyers Gate Road will have limited or no direct vehicle access points to preserve the residential streetscape without having the interruption of driveways and vehicle maneuvering. Where R-2 Cluster, R-1-5 Cluster, R-3 and R-4 units are adjacent to these roads (front on, side-on or back on), designs shall avoid the usage of block walls or fences as transitions or barriers. R-1 units that are adjacent to collectors or arterials may use fences or walls, but the wall treatments and landscaping should de-emphasize the walls or fences.

- 1.1 Residential building setbacks shall conform to the development standards set forth in **Figures 8 through 10**. Along the Residential Collectors at least 75 percent of the units shall be two stories in height.
- 1.3 Buildings located within the Village Commercial Town Center shall have street yard setbacks of zero feet and be developed in accordance with the development standards in **Table 3**.

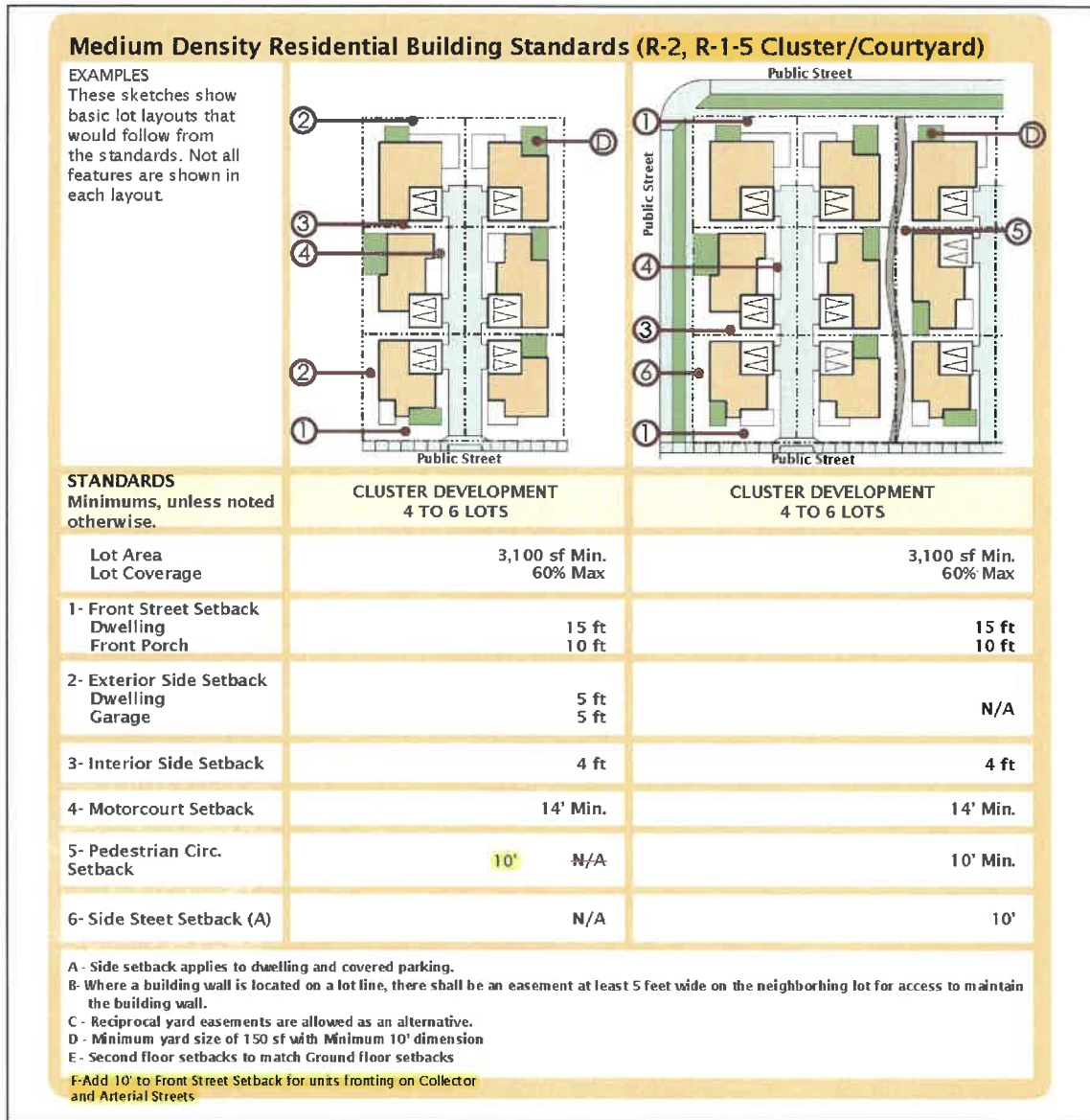


Figure 8: R-2 and R-1-5 Cluster Unit Development Standards

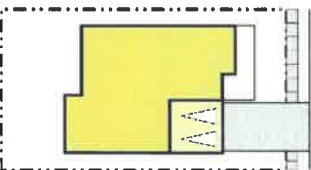
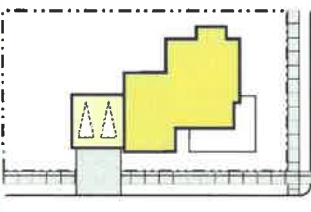
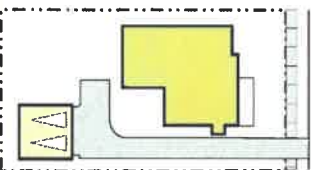
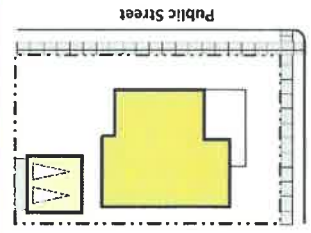
Avila Ranch Specific Plan		Development Standards			
Low Density Residential Lot and Building Standards (R-1)					
EXAMPLES These sketches show basic lot layouts that would follow from the standards listed in the text, and in this table below. Not all features shown in the sketches are standards (for example, 2-car garages are not required).					
	STREET ACCESS (Alley Not Available)				ALLEY ACCESS (Parking access from alley only)
	PARKING AT FRONT OF LOT	PARKING AT FRONT OF LOT	PARKING AT REAR OF LOT		
	5,000 sf 50 ft 55 ft 90 ft 40% Max.	5,000 sf 50 ft 55 ft 90 ft 40% Max.	5,000 sf 50 ft 55 ft 90 ft 45% Max.		
	15 ft 20 ft 10 ft	15 ft 15 ft 10 ft	15 ft Does not Apply 10 ft		
STANDARDS (minimums)					
Lot Area	5,000 sf	5,000 sf	5,000 sf	4,500 sf	
Lot Width	50 ft	50 ft	50 ft	45 ft	
Corner Lot Width	55 ft	55 ft	55 ft	50 ft	
Lot Depth	90 ft	90 ft	90 ft	80 ft	
Lot Coverage	40% Max.	40% Max.	45% Max.	50% Max.	
Front Setback House Garage, carport (A) Front Porch	15 ft 20 ft 10 ft	15 ft 15 ft 10 ft	15 ft Does not Apply 10 ft	15 ft Does not Apply 10 ft	
Rear Setback House Garage, carport	15 ft 5 ft	15 ft 5 ft	20 ft 5 ft	(from alley) 15 ft 3 ft	
Side Setback House Street (corner lot) Garage, carport	5 ft 10 ft 5 ft	5 ft 10 ft 5 ft	driveway side 12 ft 5 ft 10 ft 5 ft	5 ft 10 ft 5 ft	

Figure 9: R-1 Development Standards

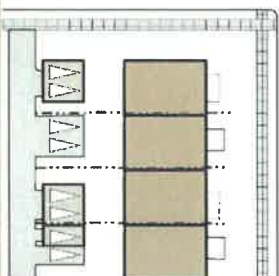
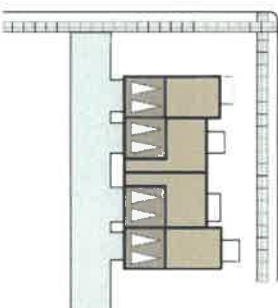
Avila Ranch Specific Plan		Development Standards	
High Density Residential Lot and Building Standards (R-3/R-4)			
EXAMPLES These sketches shows a site layouts that would follow from the standards. Not all features shown in the sketch are standards.			
STANDARDS (minimums)			
Lot Area	1,000 ft		N/A
Lot Width	20 ft		N/A
Lot Depth	40 ft		N/A
Front Setback Dwelling	15 ft		15 ft
Front Porch	10 ft		10 ft
Rear Setback Dwelling	10 ft		10 ft
Parking	0 ft		0 ft
Side Setback (A) (applies to any structure, including covered parking)		as provided in R-2 zone	as provided in R-2 zone
Street (corner lot)		15 ft	15 ft

Figure 10: R-3/R-4 Development Standards

Table 3: Commercial Design Standards

	Neighborhood Commercial	Community Commercial	Village Center/ Mixed Use	Village Center Mixed Use/Offices
	CR- Neighborhood	CR-Community	VC/MU	VC/MUS
<u>Building Setback</u>				
Front (minimum)				
Public Street				
1st Floor	10'	20'	0'	10'
2nd Floor	10'	20'	0'	10'
3rd Floor	NA	NA	7.5'	15'
Front (maximum) ¹				
Public Street				
1st Floor	NA	NA	5'	NA
2nd Floor	NA	NA	5'	NA
3rd Floor	NA	NA	12.5	NA
Rear				
Residential	35'	40'	35'	25'
Non-Residential	10'	10'	10'	5'
Side				
Public Street	15'	15'	5'	10'
Residential	10	10	5'	5'
Non-Residential	5'	5'	5'	5'
<u>Landscaping</u>				
Public Street				
Minimum	10'	15'	7.5'	10'
Minimum Average	15'	20'	10'	15'
Residential	10'	15'	5'	10'
Non-Residential	5'	10'	5'	5'
<u>Adjacent Sidewalk</u>				
Main Street	NA	5'	15'	15'
Other Streets	5'	5'	7.5	5'
Parkway Landscaping	7'	7'	7'	7'
Building Height	35'	35'	45'	45'
¹ Maximum setback permitted for no more than 25% of street frontage.				

- 1.4 Neighborhood Commercial and Community Commercial buildings shall be sited to address adjacent streets with the main building facades oriented primarily towards Cardella Road (for Community Commercial buildings) and to Virginia Smith Parkway for Neighborhood Commercial buildings and be developed in accordance with the development standards in **Table 3**. Commercial buildings may be oriented to adjacent major streets (Campus Parkway and Center Street) and a manner consistent with the Development Plan.
- 1.5 Neighborhood Commercial buildings facing streets shall incorporate horizontal and vertical building wall articulation through the use of wall plane offsets and other features which articulate walls such as recessed windows and entries, second floor setbacks, and awnings and canopies. There shall also be regular pedestrian and bicycle access points along the public street frontage no less frequently than every 100 feet, with access points every 75 feet preferred.
- 1.6 Residential buildings along Meyers Gate Road, Virginia Smith Parkway, and Cardella shall be oriented to the street with front doors or porches fronting on the street. Dwellings along those streets and the principal north-side streets in the project (including, but not limited to Campus Parkway, Golden Bobcat, Center Street and Kibby Road) shall only have access from the side or rear and there shall be no direct individual driveway access to these roadways. Pedestrian and bicycle access to those roads should be provided through side-on cul de sacs and/or pedestrian walk throughs or other means.
- 1.7 Residential buildings on lots adjacent to greenbelt areas, e.g., Fairfield Canal and Cottonwood Creek, open spaces, neighborhood parks, and linear parks, shall be oriented with front doors and porches, or secondary patios and yards fronting on the greenbelt area. Such units shall have vehicular access from the side or rear and there shall be no direct individual driveway access to and from the open space.
- 1.8 Within R-3 and R-4 residential zones, parking shall be utilized as a buffer to more intense land uses, and buildings shall be set back no less than 75 feet, with the intervening area comprised of parking areas with solar canopies for energy generation and sound attenuation. To ensure noise compatibility with adjoining uses, sleeping and living areas should be oriented away from any existing or future noise sources.
- 1.9 Buildings and improvements adjacent to the Fairfield Canal and Cottonwood Creek shall have adequate setbacks to ensure adequate fill and cut slopes, and transition area as shown in **Figure 11**. Within the structural influence area of the Fairfield Canal, the set-



backs shall include a 25-foot canal service and access area from the top of bank, plus an additional area to ensure that there is no structural bearing from the project's improvements, as illustrated in Figure 21 of the UCP. There shall be a 10-foot setback to the nearest improvement with intervening planting to discourage access and vandalism, and a 20 setback to the nearest structure. A Wood Frame Hog Wire fence or a Metal Rail Horse Panel fence, as illustrated in **Figure 34** with a wildlife passage, shall be provided along these corridors to discourage pedestrians and trespassing.

- 1.10 Buildings and improvements adjacent to Cottonwood Creek shall provide for a 50-foot wide flow area, a 25' transitional and planting area, plus a 20 foot setback to any buildings, as illustrated in Figure 20 of the UCP.
- 1.11 In order to improve the visual quality of the streetscape in the R-1 and R-2 zones, every third house should include a variation to the front yard setback of at least five feet.
- 1.12 Front yard setback variations for houses in the R-1 and R-2 zones should not be less than two to five feet, with a minimum street yard of ten (10) feet.
- 1.13 Buildings should be sited, and rooflines designed to take advantage of solar access for each unit to the greatest extent possible.
- 1.14 Where applicable, residential units should be oriented to front or side onto parks and open spaces to provide safety and maximize visibility of the park, where appropriate. Fencing types and landscaping palettes shall be used to reinforce the connectivity of the dwelling units to the open space and park areas.
- 1.15 Attached residential units should be designed and detailed to correlate to neighboring single-family detached and/or attached homes. The architecture should incorporate the best features of the neighboring units.
- 1.16 Pedestrian linkages to nearby neighborhoods and commercial services should be provided within all zones.
- 1.17 Setbacks are required to permanent agricultural uses per County Zoning Ordinance 18.10.040, **including UC Merced Experimental Farm**. These areas exist along the north-eastern, eastern and southeastern edges of the project site. **Figure 12** demonstrates how these areas shall be developed to comply with this standard.
- 1.18 **Buildings and noise generating appliances and activities shall be set back, designed and constructed so that new noise-generating land uses in a manner that does not cause excessive exterior or interior noise for noise-sensitive land uses on any location of nearby residential properties. The exterior noise standard for noise-sensitive land uses is of 60 dBA Ldn and the interior noise standard for residential structures and other noise-sensitive land uses is 45 dB Ldn; provided, however, that residential uses within and immediate adjacent to the Village Center shall be considered commercial mixed uses for the purposes of determining noise compatibility. Additionally, exterior**

stationary source noise standards for noise-sensitive land uses are 60 dB Leq between the hours of 7:00 a.m. and 10:00p.m. and 45 dB Leq and 50 Lmax between the hours of 10:00 p.m. and 7:00 a.m. shall not be exceeded by stationary noise generating land uses at any existing or planned residential land use. Noise reduction features shall be included in the design of any land use that has noise sources affecting residential land uses. These noise reduction features shall include structure design including sealed load docks and layout, site planning, and other measures; block walls and barriers (including berms) shall only be used where such measures are deemed infeasible or ineffective. (MM 3.6-2).

- 1.19 Loading docks shall be located and designed such that noise generated by activity at the loading dock would not exceed the City's stationary noise source criteria (i.e., exterior noise levels of 55 dB Leq between the hours of 7:00 a.m. and 10:00p.m. and 45 dB Leq and 50 Lmax between the hours of 10:00 p.m. and 7:00 a.m.) at any existing noise sensitive receptor. As part of the design-build process for uses that include loading docks, a specialized noise study will be completed to evaluate the specific design and ensure compliance with City of Merced noise standards. Reduction of loading dock noise can be achieved by locating loading docks as far away as possible from noise sensitive land uses, constructing noise barriers between loading docks and noise-sensitive land uses, or using buildings and topographic features to provide acoustic shielding for noise-sensitive land uses. Final design, location, and orientation shall be dictated by findings in the noise study. (MM 3.6-2).

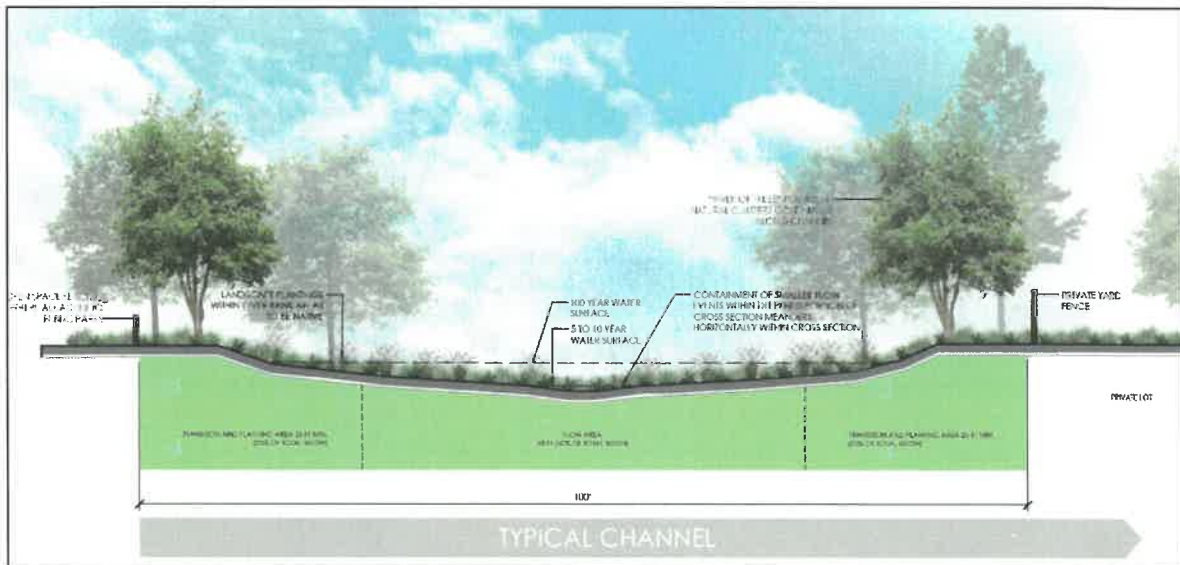


Figure 11: Riparian Channel Setbacks and Fencing

2.0 Pedestrian Activity Areas

Neighborhood parks, open space trails, linear parks, and plazas in the Village Center comprise the primary pedestrian activity areas within the project. These areas are envisioned to encourage healthy, active lifestyles within individual neighborhoods while also providing a location for ongoing neighborhood social events.

2.1 Reserved.

2.2 The Village Commercial plazas shall be a minimum size of 5,750 sq. ft. each. These plazas shall provide for outdoor seating and eating places, public gathers and enhanced landscaping.

2.3 Mini Parks and Pocket Parks shall be provided within or adjacent to each individual neighborhood as delineated in the development plan and parks master plan. These parks shall be provided in accordance with the approved master plan, and programmed in accordance with the amenities shown in the parks matrix in **Appendix L**. These park facilities are provided in excess of the City of Merced's requirements for neighborhood and community parks. Neighborhood and community parks shall be provided at a rate no less than five acres per thousand population.

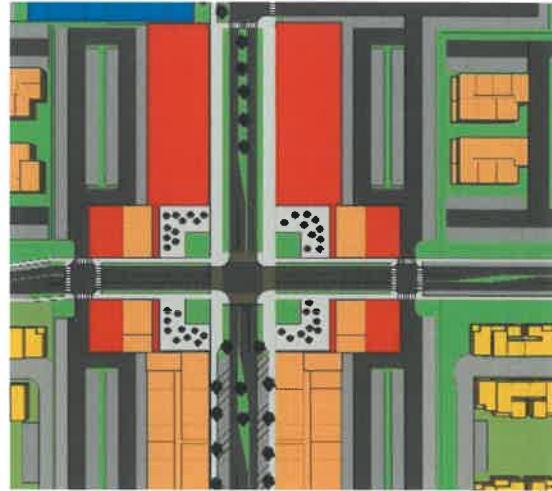




Figure 12: Ag Buffer Setbacks

- 2.4 Each neighborhood adjacent to open space areas should provide convenient access to the Cottonwood Creek corridor, Linear Park along Virginia Smith Parkway and the Fair-field Canal open space.
- 2.5 The character of Center Street in the Village Commercial area should provide a pedestrian-friendly environment with accessible sidewalks, bulbouts, parkway landscaping, street trees, limited driveway access points, and reduced front building setbacks.
- 2.6 Roundabouts, bulbouts, and decorative paving should be incorporated at primary intersections locations and within subdivisions to enhance pedestrian access and provide traffic calming. Roundabouts shall provide decorative landscaping, including trees that provide for monumentation and reference points within the project, as shown on **Figure 13**. The Campus Parkway roundabouts at University and Campus Parkway will provide a transition from the project to UC Merced and shall provide thematic improvements such as those illustrated on **Figure 14**. At-grade crossing, curb extensions and bulbouts shall be used on local and minor streets no less frequently than one every 500 feet to ensure that traffic speeds along longer stretches of local streets are limited to 25 miles per hour or less. **Figure 15** shows examples of the use of these features.
- 2.7 Each park and park facility shall have amenities as provided in the Parks Matrix provided in **Appendix L**. The parks should be designed to provide neighborhood recreation needs including a mix of passive and active areas that foster social interaction and healthy lifestyles. These include a skate park, dog park, court games, jogging track, community meeting pavilion and other uses illustrated in the Park Master Plan in **Appendix L**.
- 2.8 Neighborhood Park facilities may include informal turf areas, bocce ball courts, children's play areas, group barbeque areas, group picnic facilities and shade structures, clubhouse, pool, pedestrian and bicycle trails, and community gardens.
- 2.9 Programming of the Neighborhood Park may include shared facilities or related uses with on-site agricultural production such as outdoor learning areas, picnic, farming and cooking demonstrations, and a farm stand.
- 2.10 The plaza located within the Village Center should incorporate ample seating, trash receptacles, bicycle racks, a central organizing feature, unique landscaping, and pervious hardscape.



Figure 13: Roundabout Design



Figure 14: UC Merced Entry Roundabout

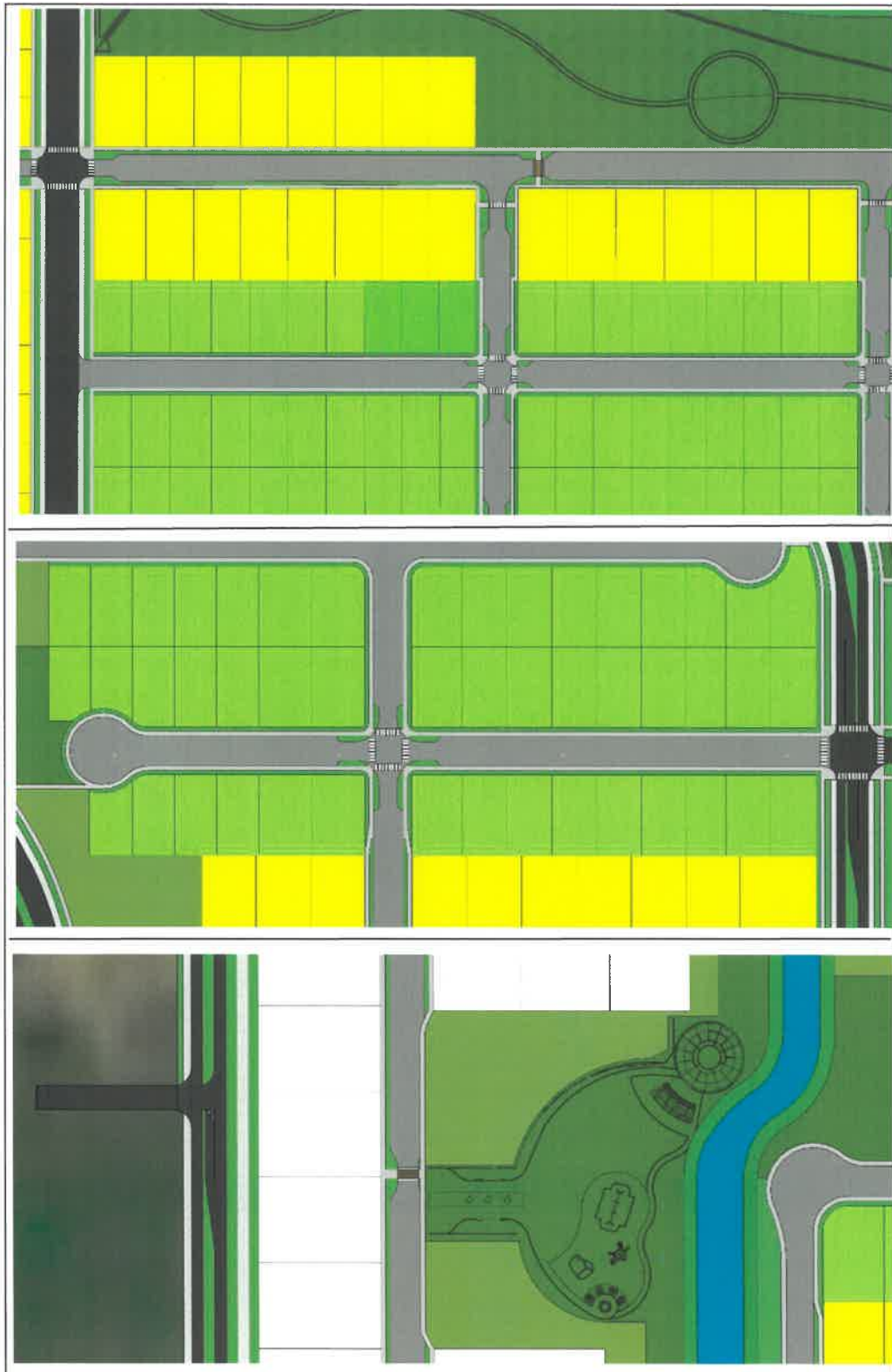


Figure 15: Parklettes, Bulbouts and Curb Extensions

3.0 Parking

Parking is an economically essential component of all planned land uses within the project. Parking can also provide a buffer between abutting land uses, public streets, and commercial parking areas to ensure the promotion of the high-quality environment envisioned for the development. Parking requirements for specific land uses shall be in conformance with the City of Merced Parking standards found within Chapter 17.16.060 of the City of Merced Municipal Code, except for those situations described below.

- 3.1 In the R-1-5 Cluster and the R-2 Cluster portions, parking shall be provided with at least one covered space per unit, with on street or onsite parking for at least two guest parking spaces per 6-pack or 4-pack cluster.
- 3.2 Parking in the Village Center shall recognize the pedestrian oriented nature of the zone district, the necessity for adequate parking for commercial uses, and adequate parking for Village Center Mixed Use Residential uses. Parking is to be provided at a rate of at least one space per 500 square feet of commercial floor area, plus one space per residential unit. Parking will be provided in a combination of on street diagonal and parallel parking spaces as illustrated on the Development Plan (estimated to be 100 spaces), and 1,175 onsite parking spaces located behind the structures.
- 3.3 Parking for the project's neighborhood and pocket parks shall be provided through on-street parking on the adjacent local street, and shared parking with adjacent commercial and residential uses. the Town Center commercial area. The Community Recreation Center and the Regional Sports Park are intended to draw from the entire project area and beyond and shall provide onsite, off-street parking at a rate of 10 spaces per acre of park area. These parking lots shall provide for bicycle storage, staging areas, and special event parking.
- 3.3 Reserved.
- 3.4 Parking shall be designed and sited to minimize and buffer noise from adjacent commercial land uses.
- 3.5 A ten-foot minimum landscape buffer shall be provided on the Neighborhood Commercial properties adjacent to the R-1 Residential zone and the Neighborhood Commercial Town Center.
- 3.6 Parking around the perimeter of the R-4 units shall be carports for added noise mitigation and visual screening.
- 3.7 All common parking lots shall have solar canopies to produce energy and to provide shade and noise attenuation.
- 3.9 All parking lots in the R-3, R-4 and NC zones and in public parks shall provide EV charging receptacles and stations at the rate specified for CalGreen Tier 1.

4.0 Outdoor Use Areas

The primary outdoor use areas in the project are the linear park and the water way corridors. These areas shall be integrated into the overall design and be accessible to adjacent residential neighborhoods. The intent of the Linear Park is to provide for passive low impact drainage, and to provide a pedestrian corridor that links Cottonwood Creek, the Fairfield Canal, open space and setback corridors along the eastern portions of the project, and offsite trails planned for UC Merced.

5.0 Screening

Service, storage areas, trash and recycling collection areas, and utilities associated with planned project land uses will be properly screened to minimize visual impact and promote the natural, unobstructed open space views.

6.0 Preservation of Views and Scenic Resources

6.1 Views from the Road. There are no designated scenic corridors in the vicinity of the project, but the site topography, rising from west to east provides the opportunity for opens spaces and homesites and roadways with long vistas. Permanent open spaces to the east also provide visual relief. In order to preserve and enhance these vistas, the project is laid out in an east-west pattern with Virginia Smith Parkway providing a scenic landscaped corridor. To enhance vistas and open space views, north-streets adjacent to open spaces such as Cottonwood Creek and Fairfield Canal provide occasional views of these areas.

6.2 Gateways. The site is a gateway to UC Merced. Special landscape treatments are provided along Meyers Gate Road to emphasize this transition, and the roadways that continue between the two properties Campus Parkway, University, Golden Bobcat and Center street have been designed to have the same street crosse section or a compatible street cross section with that contained in the UC Merced Long Range Development Plan. A special gateway roundabout is also provided at Campus Parkway and Meyers Gate Road and University and Meyers Gate Road. **Figure 16** shows the location of the themed roundabouts.



6.3 Entry monuments and treatments shall be provided at key intersections to identify project neighborhoods and facilities such as the Sports Park, Community Recreation Center, Village Community Center, and other destinations in the project. Entry monumentation should reflect the design themes



represented in the Village Community Center, including signage background composed of weathered and decorative one-quarter inch Corten metal panels with rough-edged quarried (locally if possible) natural stone for monuments with warm brown/tan tones (as approved) to complement the metal components of the monument. The outline of the stone monument shall be organic with roughened edges that conform around the metalwork, as illustrated in **Figure 17**. **Figure 16** shows the location of the entry monuments.

- 6.4 Signage. In addition to the gateway treatments prescribed above, the project will also have entry monumentation at the project entries at Meyers Gate Road, Virginia Smith Parkway and Cardella Road on Lake Road, and at the entries to the various neighborhoods, apartment complexes and communities in the project. Project and neighborhood entry signage, and monument signs for commercial developments shall be consistent with that of the roundabout signs and entry monuments, as illustrated in **Figure 17**, and as described above in 6.2.

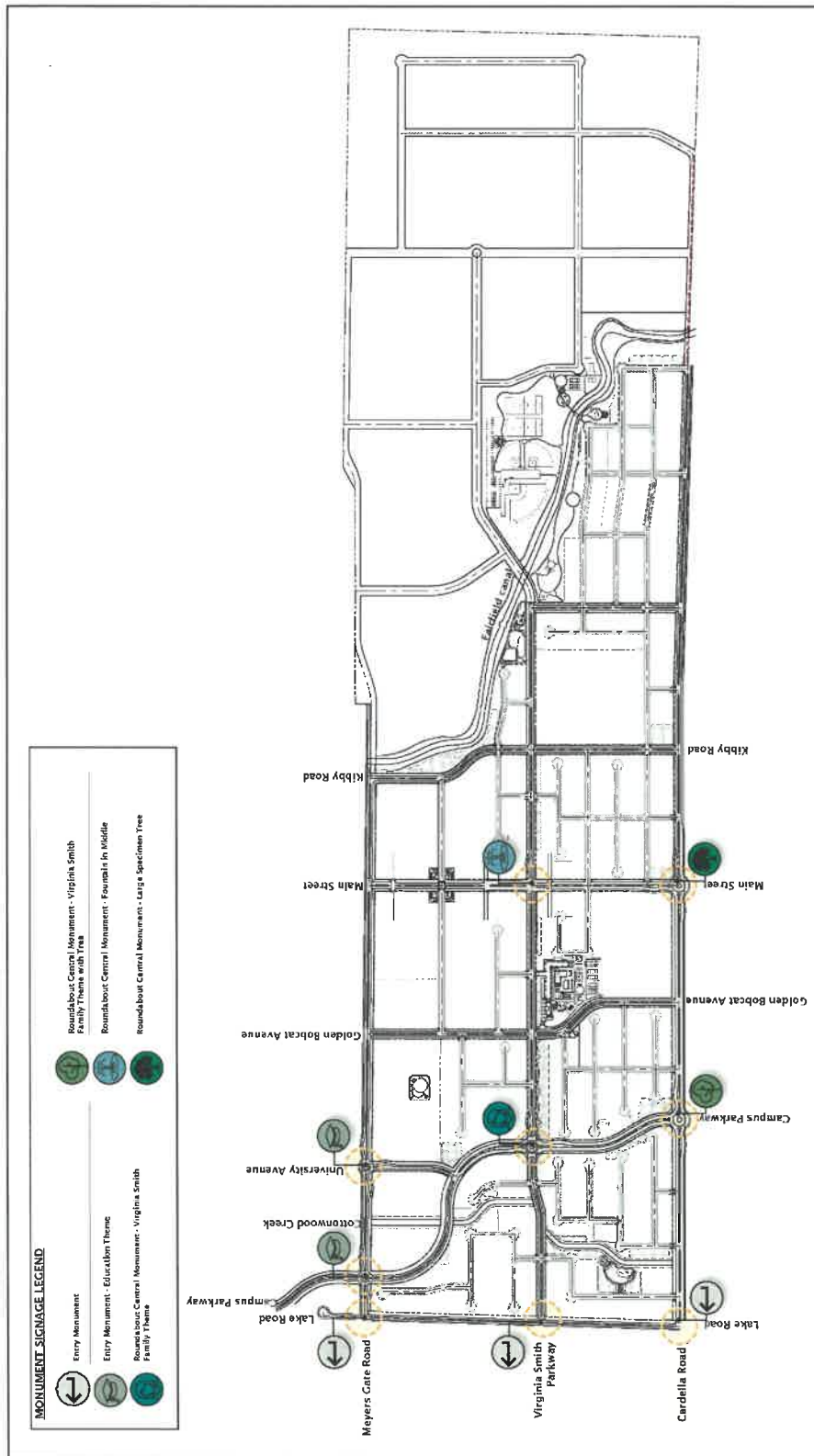


Figure 16: Location of Entry Monuments and Themed Roundabouts

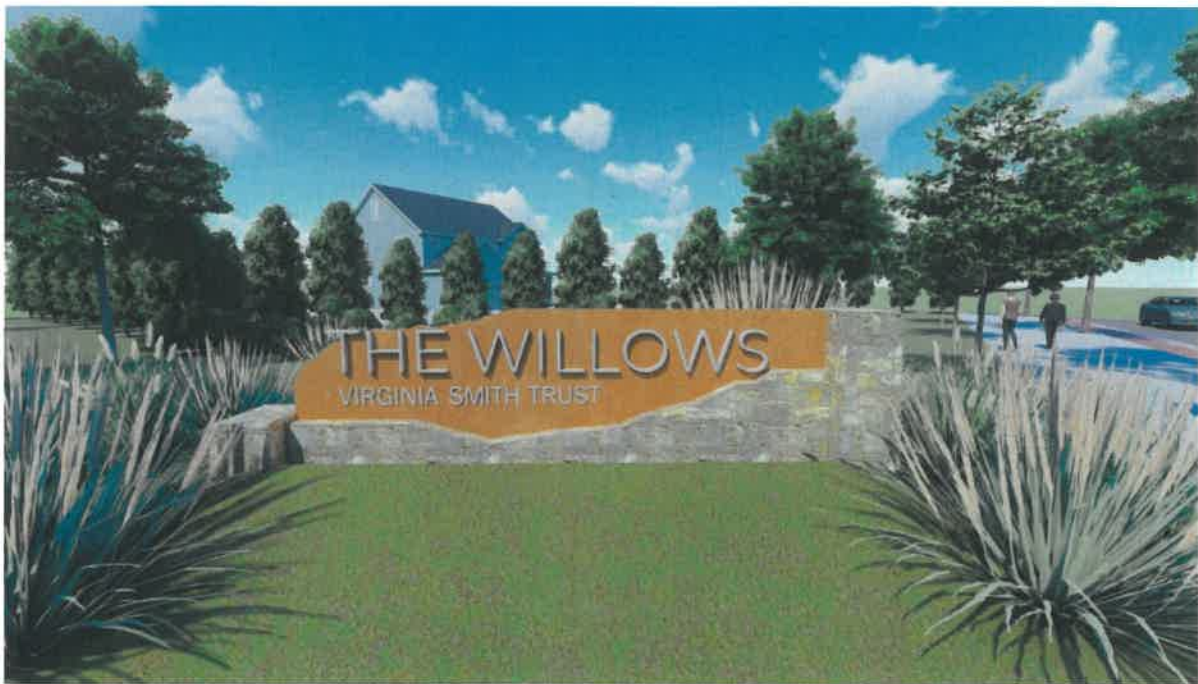


Figure 17: Neighborhood and Commercial Signage

7.0 Architecture

Architectural Character

- 7.1 The architectural character of the project is to be representative of the heritage associated with the area, and architectural styles typically found within the city. A contextually appropriate selection of architectural styles aids in defining the context of the site from the rural character along the eastern property line to the more modern and contemporary character of the university to the north. A list of permitted architectural styles appropriate for each land use within the project has been provided to ensure consistency with the overall project vision.
- 7.1.1 There is no specific uniform architectural style for the residential portions of the project and each project should include a blend of at least three of the five architectural styles illustrated in **Figures 19 through 23**. The Craftsman style is considered a foundational style for the R-1-5, R-1-7 and R-2 single family residential neighborhoods because of its significance for local iconic architecture like the Ahwahnee Hotel, the style of neighborhoods in and around Downtown Merced, and because of its simplicity and economy. This style should be used in each neighborhood. The R-1-12.5 larger lot portion of the project is considered to be a custom home or semi-custom home area, and no specific architectural style is prescribed; however, houses in that area should match the detailing, finishes, and authenticity illustrated in **Figures 18 through 23** below. Authenticity and execution are most important, and excessive detailing, and limited execution (one sided architecture) should be avoided. Because of the strong contemporary and modern architectural elements on the UC Merced campus, the multifamily units and commercial structures that front on Meyers Gate Road should be based on contemporary, modern or prairie architectural styles.
- 7.1.2 The architectural style for the Village Commercial, Community Commercial, Neighborhood Commercial and public buildings shall be a Contemporary Prairie style as illustrated in **Figure 24**.



Figure 18: R-1 and R-2 Neighborhood Streetscape



Figure 19: Agrarian Architectural Style

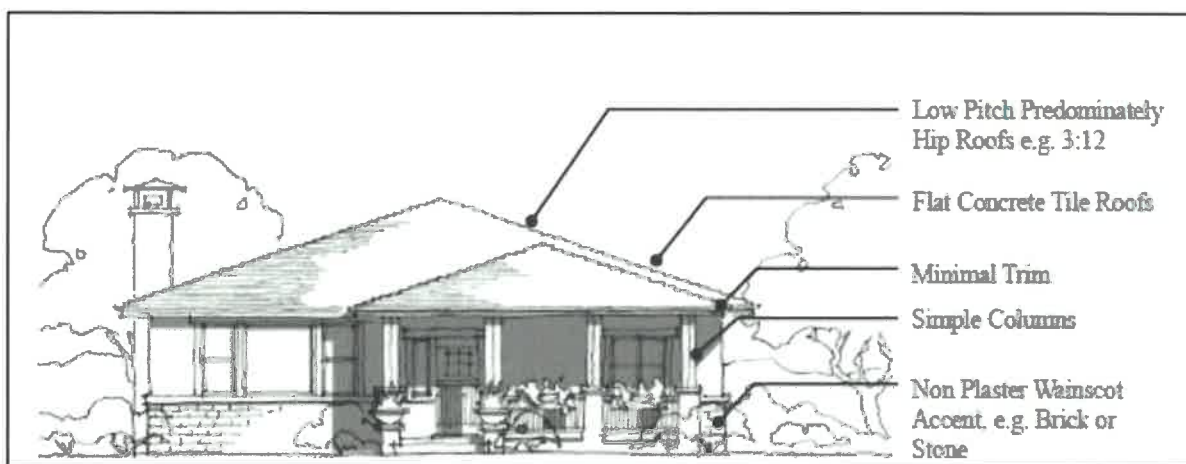


Figure 20: Bungalow Architectural Style



Figure 21: Craftsman Architectural Style

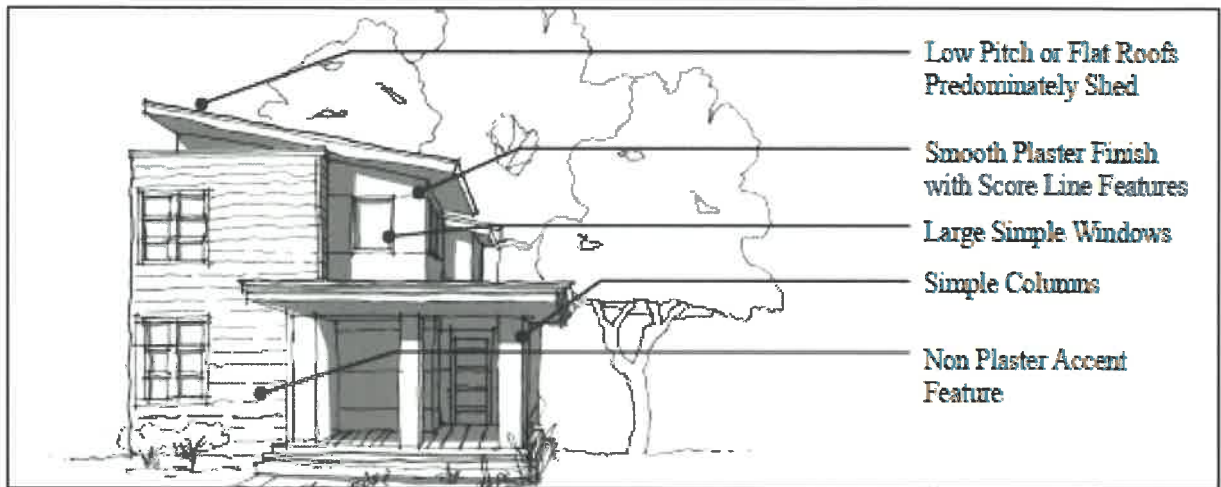


Figure 22: Contemporary/Mid-Century Modern Architectural Style



Figure 23: Spanish Mission Architectural Style



Figure 24: Contemporary Prairie Architectural Style

7.1.3 In order to create some individualism and interest, the project is broken down in neighborhoods shown on **Figure 25**. Within each neighborhood or enclave, there shall be a dominant and subordinate architectural style. The percentage proportions of architectural styles within an R-2 zone adjacent to an adjacent single family neighborhood may be the same as the single family neighborhood, and the R-2 units facing the single family neighborhood shall have similar and compatible architectural styles to those of the single family neighborhood. Otherwise, interior R-2 units are encouraged to be of the same architectural style.

- a. **Neighborhood Area 1--Multifamily:** This neighborhood is comprised of the R-3 and R-4 areas between Meyers Gate Road and Virginia Smith Parkway. Because of the strong contemporary and modern architectural elements on the UC Merced campus, each R-3 and R-4 project should be either contemporary style, modern architectural style or Contemporary Prairie architectural style.
- b. **Neighborhood Area 2—Village Center:** The Village Center is located along Center Street between Meyers Gate Road and Virginia Smith Parkway. The architectural style for these buildings shall be Contemporary Prairie as illustrated on **Figure 24**. The upper floor offices (where present) shall have balconies and usable second floor outdoor spaces. Upper floor residential units shall have outdoor patios, and the roof shall have covered decks and “green roofs” for storm water management.
- c. **Neighborhood Area 3—Neighborhood and Community Commercial:** The architecture for the anchor tenants and in-line shop buildings shall be Contemporary Prairie as illustrated on **Figure 24**. The execution of this shall allow for trade dress and architectural details that are associated with major and junior anchor tenants. Pad uses and out parcels shall not have a specific architectural theme and may use standard plans and trade dress, subject to faithful execution of the details.
- d. **Neighborhood 4—R-2 Cluster and R-1-5 Cluster.** The architectural style within an R-2 or R-1-5 Cluster zone shall be compatible with that of the adjacent single family neighborhood, and the R-2 units facing the single family neighborhood shall be similar and compatible with the dominant architectural style for the single family neighborhood. Otherwise, interior R-2 units are encouraged to be of the same architectural style, preferably craftsman or bungalow.
- e. **Neighborhood 5—R-1-12.5.** The R-1-12.5 larger lot portions of the project are considered to be a custom home or semi-custom home area, and no

specific architectural style is prescribed; however, houses in that area should match the detailing, finishes, and authenticity illustrated in **Figures 18 through 24**. Authenticity and execution is most important, and excessive detailing, and limited execution (one sided architecture) should be avoided.

- f. **Neighborhood 6—Phase 1B Single Family.** This area is comprised of the R-1-5 and R-1-7 portions of the project between Virginia Smith Parkway, Cardella Road, Lake Road and Golden Bobcat Road. Within this area, 60% of units shall be designed with Agrarian style architecture. The remaining 40% of units shall be divided into 10% increments between the other allowed residential architectural styles. Any fraction of a number over a half shall be rounded up to the nearest whole number with any remaining balance placed in an architecture style of choice.
- g. **Neighborhood 7—Phase 1D Single Family.** This area is comprised of the R-1-5 and R-7 portions of the project in Phase 1D. Because of their adjacency to the Village Center Commercial area, 60% of all units shall be designed with Contemporary style architecture. The remaining 40% of units shall be divided into 10% increments between the other allowed residential architectural styles. Any fraction of a number over a half shall be rounded up to the nearest whole number with any remaining balance placed in an architecture style of choice.
- h. **Neighborhood 8—Phase 1E Single Family.** This neighborhood is located in Phase 1E south of Virginia Smith Parkway between the elementary school west of Kibby Road and the Fairfield Canal. Within this area, 60% of all units shall be designed with the California Bungalow or the Craftsman style architecture. The remaining 40% of units shall be divided into 10% increments between the other allowed residential architectural styles. Any fraction of a number over a half shall be rounded up to the nearest whole number with any remaining balance placed in an architecture style of choice. This area also has direct access to the Fairfield Canal corridor and the parks along the corridor. Dwelling units and their outdoor activity areas should be oriented towards the open space amenities and units should not back on to these spaces unless a lower horizontal fence is utilized.
- i. **Neighborhood 9—Phase 2A Single Family.** This area is located east of the Fairfield Canal, north and south of the Virginia Smith Parkway alignment, and west of the most westerly north street. This area is located adjacent to permanent agricultural areas and open space and the most appropriate mix of styles is agrarian. Within this area 60% of units shall be designed with Agrarian style architecture. The remaining 40% of units shall be divided between Bungalow and Craftsman.

- j. **Neighborhood 10—Phase 2B Single Family.** This area is located east of Neighborhood 9 and west of the R-1-12.5 area on the eastern property line. This area has a high concentration of R-2 units surrounding a neighborhood park. Many of the local streets are continuation of streets in Neighborhood 9 and the dominant architecture style should be consistent and compatible with the guidelines and requirements for that area. Within this area 60% of units shall be designed with Agrarian style architecture, with the remaining units shall be divided between the other architectural styles.
 - k. **Neighborhood 11—Phase 2C Single Family.** This single family area is located adjacent to an R-1-12.5 enclave, and an R-3 development. Owing to the contemporary and modern architectural styles for the R-3 areas, this neighborhood should have an emphasis on Contemporary and Agrarian styles. Within this area, 40% of all units shall be designed with the Contemporary style, 20 percent shall be Agrarian, and the balance shall be comprised of the remaining architectural styles.
- 7.1.4 Reserved.
 - 7.1.5 Buildings in the R-1 zone shall be designed with a proportional yet mixed use of at least three of the allowed residential architectural styles, in accordance with 7.1.3.
 - 7.1.6 Porches shall have a minimum depth of six (6) feet.
 - 7.1.9 Residences shall have entries that front onto the street except for residences configured in a parking court within R-2 zones. Where possible, these interior R-2 units shall have frontage treatments onto adjacent parks or open spaces. Units that are adjacent to the parkway commons in Neighborhood Area 2 shall have frontage treatments along that parkway and the interior motor court/common driveway.
 - 7.1.10 Buildings within R-3 and R-4 zones shall have covered porches, entries, or walkways that front onto the street.
 - 7.1.11 Residential elevations within the R-1 and R-2 zones should not be repeated more frequently than every fourth house. This variation may be achieved by not repeating both a color scheme and an elevation style. Setbacks should have minor variances (3-5 feet) to ensure a variety in the streetscape and elevation pattern.
 - 7.1.12 Residences within the R-1 zones should incorporate a covered front porch.
 - 7.1.13 Residences within the R-2 zone that front collector or local residential roads should include a porch.



Figure 25: Architectural Style Neighborhoods

Scale and Massing

- 7.2 The pedestrian character of the project will be reflected through appropriately scaled buildings and landscaping.
- 7.2.1 To avoid garage-dominated streets, a portion of the house or porch within the front and street-side R-1 Residential Zone shall be at least five (5) feet in front of the garage.
- 7.2.2 Variation in front yard setbacks, lot widths, and one and two-story homes should be used to create a diversity of architectural massing.
- 7.2.3 In order to ensure that the building height and setbacks are appropriate to the street context, building heights along the street frontage shall be one foot in height for each 1.5 feet in distance from the building setback to the street centerline.
- 7.2.4 Massing design should include variation in the wall plane (projection and recess), variation in wall height, and rooflines at different levels.
- 7.2.5. Portions of the upper story of a two-story home should be stepped back in order to reduce the scale of the façade that faces the street and to break up the overall massing. This can be achieved with a porch covering a minimum of 40% of the front facade.
- 7.2.6 Architectural elements that add visual interest, scale, and character to the neighborhood, such as recessed or projecting balconies, verandas, or porches should be included within building designs.
- 7.2.7. A variety of roof planes and pitches, porches, overhangs, and accent details should be incorporated into residential designs to increase the visual quality and character of a building, while reducing the bulk and size of the structure.
- 7.2.8. Garages should be recessed behind the home's main façade to minimize the visual impact of the garage door and parking apron from the street.
- 7.2.9. Garages located in parking court configurations should be recessed in order to increase the prominence of the main entry.
- 7.2.10 Building lengths should not exceed 40' in one direction without a change in direction, roof alignment, wall off set or elevation change. Building design shall incorporate varied projections and recesses, such as bay windows, dormers, porches, etc. Elements such as these will create visual interest and should respond to existing site conditions on each particular home site.
- 7.2.11 "Four-sided" architecture is required where all building faces have some form of public visibility, especially on corner lots. All structures are to be designed and built with the same material palette on all sides that are visible from the street.

Abrupt changes in material from one elevation or building face to another is not permitted, giving equal attention to the sides and rear elevations as is given to the street side elevation.

- 7.2.12 The use of porches, patios, terraces and decks in building design is encouraged to create a strong relationship between indoor and outdoor areas as well as creating a sense of community. Porches, verandas, colonnades, terraces and patios for climate control and outdoor living and circulation shall be designed as integral elements of the building and site. Houses on corner lots (including those with side elevations adjacent to alleys) shall incorporate front and side elements in the building design. The minimum depth of porches shall be six feet. Materials of these elements shall match or compliment those of the main structure.

Building Heights

- 7.3 Building heights for R-1 and R-2 residential structures are expected to be up to two stories. Multifamily units are expected to range from two to five stories, subject to setback requirements. Commercial structures in the Neighborhood and Community Commercial areas are to be two stories, with buildings in the Village Center expected to be up to three stories to accommodate second story office uses, and/or second and third story residential uses as shown in the Development Plan. Village Commercial uses along Meyers Gate Road may be up to four stories to match the probable scale of the adjacent R-4 units. Building heights for each zoning category are shown in **Figures 8 through 11** and **Table 3**.

Architectural Façade and Treatment

- 7.4 Facades and architectural treatments of buildings within the project are designed as a collection of high quality, individual neighborhoods comprised of individually articulated and highly detailed structures. To meet this high standard of quality, full articulation of building facades and use of architecturally compatible treatments will be utilized consistently throughout the development. Entries should be enhanced to reflect the architectural style and details of the building.

Materials and Colors

- 7.5 Materials considered appropriate for the project are those that have generally stood the test of time such as stone, brick, wood, glass, plaster, and metal. Each development may choose to express its unique identity through material and color selection, as long as they are compatible with the overall character of the area.
- 7.5.1 Exterior walls and finishes should reflect a logical and appropriate combination of colors, textures and forms to complement the surrounding landscape and architecture. Exterior walls of all buildings shall use a maximum of four materials with one being dominant over the others in a logical structural relationship. When a change in materials occurs, a clear break in the surface plane should be seen. Materials should be consistently applied to all elevations of the structure. Materials should wrap around entire rooms, volumes, or whatever is a visual

break, not merely a few feet, when visible to the street. Wall to window proportions must comply with appropriate styles to avoid large areas of blank wall when visible from the street. All building facades must include a significant degree of texture such as that provided by the use of shingles, shiplap, board and batten, stone and brick. The VST Architectural Review Board shall approve all materials. Stucco may be used as appropriate to the chosen style, and must be done in conjunction with another material. Frequent control joints, significant textural qualities and color variations are required.

- 7.5.2 Roof tiles and colors consistent with the architectural style of the house should be incorporated. Roofing colors should be soft earth tones. Where solar shingles are used to comply with solar energy requirements in this plan, they shall be integrated so that they are part of the architectural character.

8.0 Landscape

Planting Concept

- 8.1 Landscaping for the project is to reflect both the natural and agricultural landscapes of the area. Natural landscape patterns have been integrated within the Cottonwood Creek and Fairfield Canal corridors and within Conservation/Open Space areas. Agricultural landscape patterns have been incorporated along Virginia Smith Parkway.
 - 8.1.1 Trees and the overall planting scheme for public streets shall be consistent with those shown in **Figures 36 through Figure 45**, respectively. Residential Collectors and local streets shall have a single street tree species for continuity. A different street tree species unique to each neighborhood should be utilized to provide a layer of consistency and individuality for that neighborhood.
 - 8.1.2 Within the Village Commercial Center along Center Street, there shall be a consistent planting of trees in sidewalk tree wells no less frequently than one tree per 50 feet, and in medians in no less frequently than one tree per 40 feet. Along 225 feet of the eastern and western approaches and within 100 feet of the southern approach to the intersection of Virginia Smith Parkway and Center Street (the entry to the Village Commercial District), there shall be 10-foot parkway strips on each side of the approach road and a 13-foot landscape median. Within these areas, trees shall be planted at one tree per 30 feet, as shown in the Development Plan.
 - 8.1.3 Shrubs, perennials, and ground cover planted outside of residential zones within the project shall be in conformance with the Development Plan.
 - 8.1.4 Trees, shrubs, perennials, and ground cover planted within the residential portions of the project and shall be chosen from the City's approved Street Tree Master List.
 - 8.1.5 Trees, shrubs, and plants chosen to be planted along the Cottonwood Creek and Fairfield Canal corridors shall utilize native, locally procured varieties.

- 8.1.6 Plants and shrubs shall be low water using and shall comply with City water efficient landscape requirements.
- 8.1.7 Turf shall not be located within front yards of residential zones, except for use as a color or texture accent. **Figures 26 through 30** provide illustrations of acceptable forms of landscaping to comply with water conservation requirements and this landscaping requirement.
- 8.1.8 To reduce the potential for noise, dust and pesticide drift, the project shall include dense hedgerows of trees and landscaping in between any offsite noise source, or any permanent agriculture uses.

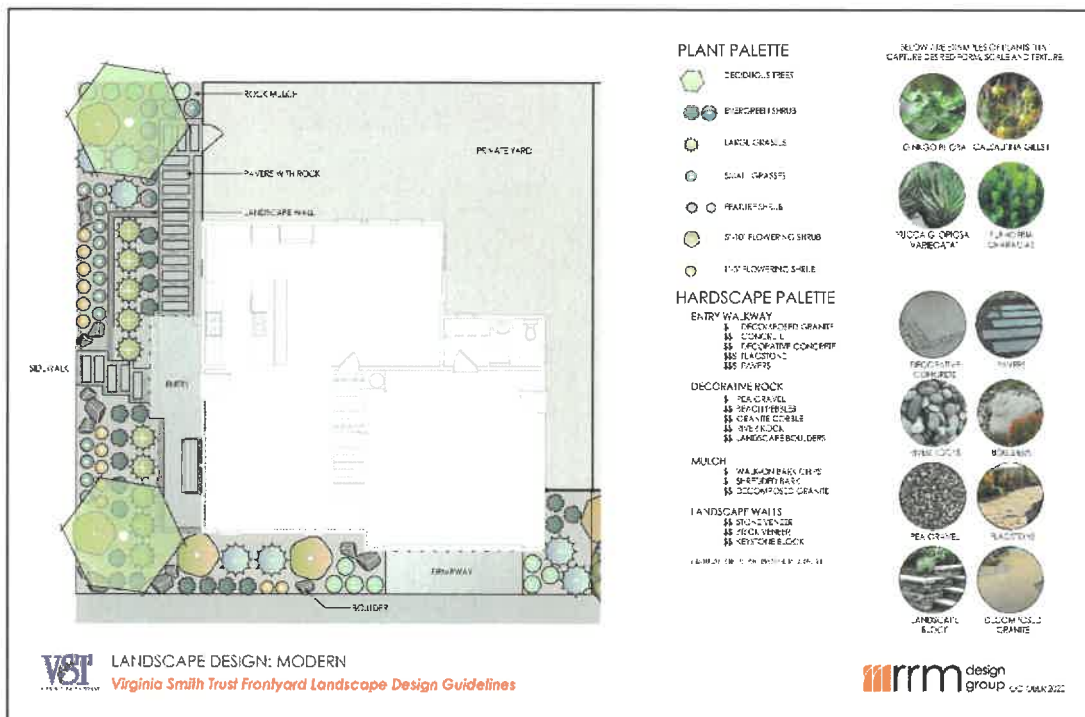


Figure 26: Front Yard Landscaping Option 1

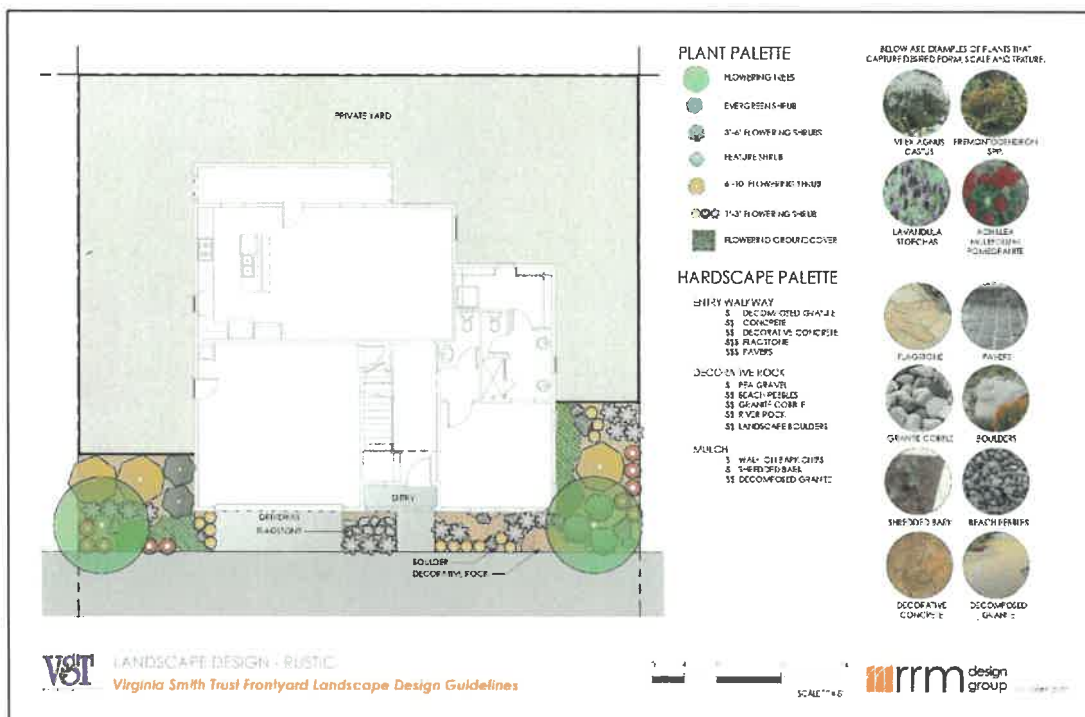


Figure 27: Front Yard Landscaping Option 2

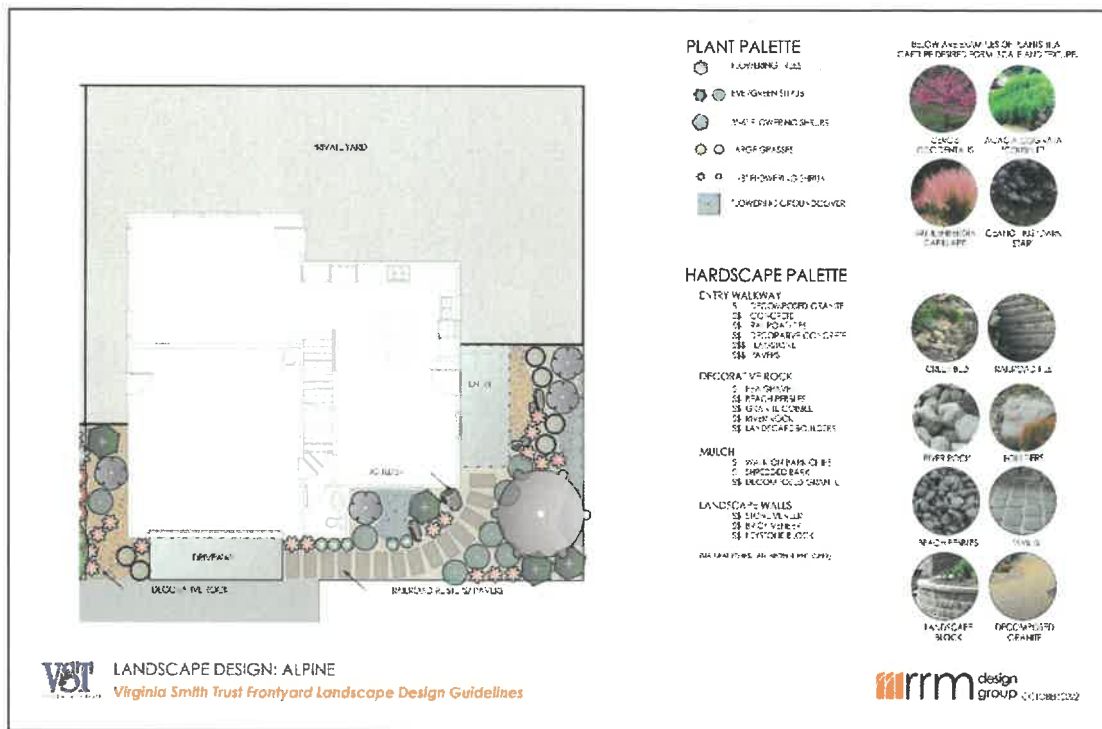


Figure 28: Front Yard Landscaping Option 3

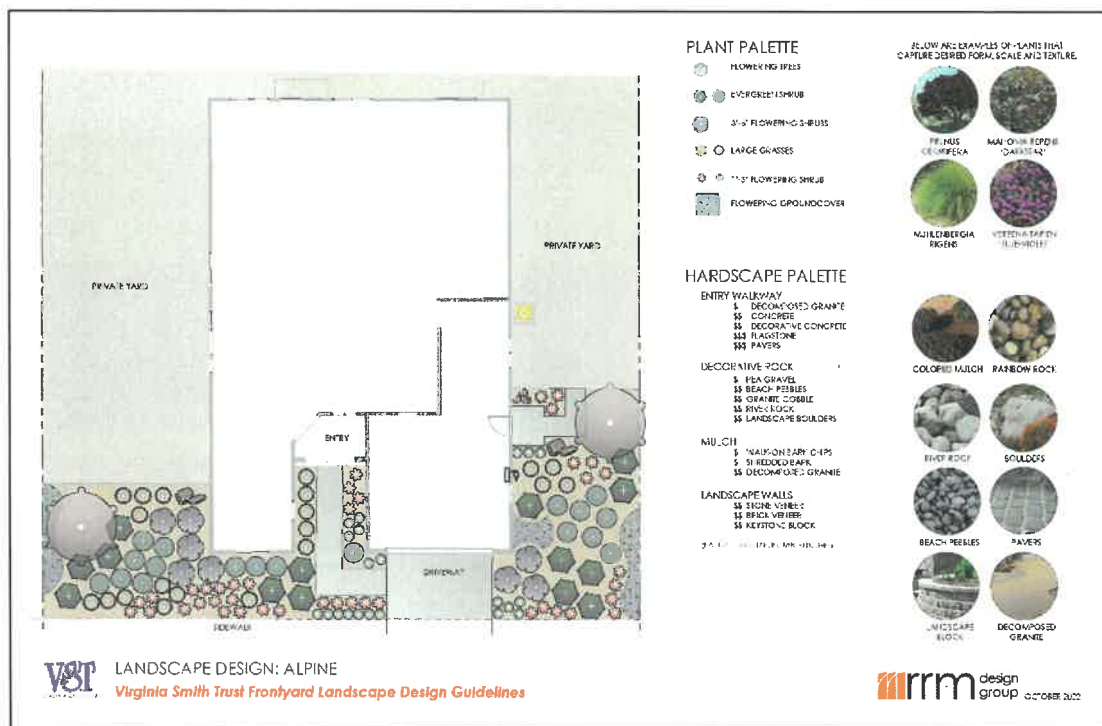


Figure 29: Front Yard Landscaping Option 4

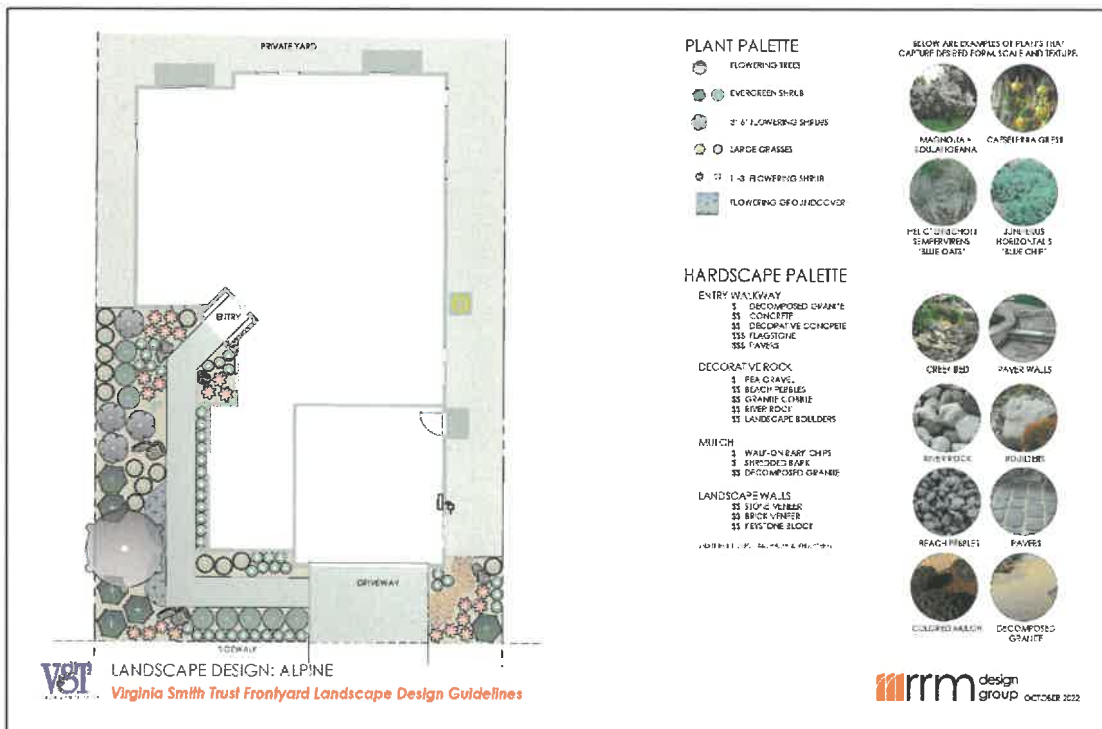


Figure 30: Front Yard Landscaping Option 5

9.0 Buildings, Signs and Lighting

Buildings

- 9.1 Buildings placed throughout the project will be rooted in the surrounding landscape and natural open spaces through the incorporation of contextual landscaping. Landscaping will soften building edges at the ground plane and provide attractive plantings to support the planned environment of the project.

Signs

- 9.2
- 9.2.1 Gateway and entry signs shall be installed and consistent with Section 6.3 of these guidelines above.
- 9.2.2 All signage within the project shall comply with the City of Merced standards for building signs contained in its Sign Regulations for applicable Residential, Neighborhood Commercial, and Conservation/Open Space land uses. Such regulations shall comply unless regulations and standards in this specific plan provide otherwise, in which case, the Specific Plan standards shall apply.

Lighting

- 9.3 Lighting for residential, commercial, and open space uses shall provide adequate illumination levels to aid in the transitioning of urban to rural uses while also providing an ap-

appropriate illumination level to address public safety concerns. Lighting shall comply with standards from the International Dark Sky Association, as described below. Planned lighting is intended to maintain the current low lighting levels that distinctly differentiate between existing urban and rural land uses within the area.

9.3.1 Reserved.

9.3.2 Reserved.

9.3.3 All exterior lighting within the project shall be compatible with and complement the architectural styles and landscape designs proposed.

9.3.4 Exterior lighting fixtures shall be properly shielded to minimize light overflow and glare onto adjacent properties.

9.3.5 Trail and walking pathway lighting shall be appropriately scaled to the pedestrian. Additional overhead park lighting may be utilized in areas where pedestrian safety is a concern.

9.3.6 Lighting fixtures shall be energy efficient in accordance with the latest version of the California Energy Standards (Title 24).

9.3.7 All project lighting shall comply with the International Dark Sky Associations guidelines as follows:

- a. Outdoor lighting shall be directed downward and away from adjacent properties and public rights-of-way.
- b. No lighting on private property shall produce an illumination level greater than two maintained horizontal foot-candles at grade on any property within a residential zoning district except on the site of the light source.
- c. The maximum light intensity on a residential site shall not exceed a maintained value of 10 foot-candles, when measured at finished grade.
- d. The maximum light intensity on a nonresidential site, except auto sales lots and sports fields, shall not exceed a maintained value of 10 foot-candles, when measured at finished grade.
- e. The maximum light intensity on an auto sales lot shall not exceed a maintained value of 40 foot-candles, when measured at finished grade.
- f. The maximum light intensity on a sports field shall not exceed a maintained value of 50 foot-candles, when measured three feet above grade. Baseball field lighting and lighting for other recreational uses may be increased to a maintained value of 100 foot-candles with approval of the Director of Development Services.

- g. Outdoor lighting shall be completely turned off or significantly dimmed at the close of business hours unless lighting is essential for security or safety (e.g., illumination of parking areas and plazas).
 - h. Outdoor lighting shall not blink, flash, or rotate.
 - i. Outdoor flood light projection above the horizontal plane is prohibited, unless deemed necessary for public safety purposes.
 - j. Outdoor sports fields shall not be illuminated after 11:00 p.m. except to conclude a scheduled recreational or sporting event in progress prior to 11:00 p.m.
 - k. Outdoor lighting fixtures, including lighting for outdoor recreational facilities, shall be cutoff fixtures designed and installed so that no emitted light will break a horizontal plane passing through the lowest point of the fixture. Cutoff fixtures must be installed using a horizontal lamp position. Lighting fixtures should be of a design that complements building design and landscaping, and may require architectural review.
 - l. Outdoor lighting shall be fully shielded or recessed.
 - m. Lighting fixtures shall be appropriate in height, intensity, and scale to the use they are serving. Parking lot lights shall not exceed a height of 21 feet, and wall-mounted lights shall not exceed a height of 15 feet, from the adjacent grade to the bottom of the fixture. The VST Architectural Review Committee can approve an exception to these height standards based on specific extenuating circumstances.
 - n. All luminaries mounted on the under surface of service station canopies shall be fully shielded and utilize flush-mounted canopy fixtures with flat lenses.
 - o. Search lights, laser source lights, or any similar high-intensity light shall be prohibited, except, in emergencies, by police and/or fire personnel, or at their direction, or for purposes of gathering meteorological data. Exceptions may be granted in conjunction with approved temporary lighting.
- 9.3.8 All exterior building lights facing Cottonwood Creek and the Fairfield Canal shall be hooded to prevent light spillover into those corridors. All residential street lights over 10 feet in height shall be setback a minimum of 100 feet from the top of the creek bank and hooded and/or directed away from the creek. Any night lighting adjacent to the creek (e.g., walkway lights) shall be of low voltage and hooded downward. Artificial light levels within 20 feet of the top of the creek bank shall not exceed 1-foot candle or the lowest level of illumination found to be feasible by the City.

10. Public Art

In order to provide enrichment, historical context, and to honor the efforts of important citizens of the community who managed the Virginia Smith Trust, various forms of public art are intended to be incorporated as a central organizing element within the project. Installations will reflect the agrarian history and context of the area as a sheep grazing area by Cyril Smith Sr., unique agricultural features of the area, installations that honor the citizens and community leaders who facilitated the location of UC Merced in the community, and the educational support legacy.

MID History

- 10.1 In order to provide historical context an interpretative trail shall be provided along a path comprised of the Virginia Smith Parkway, the west side of the Fairfield Canal, and a perimeter loop around the Phase 2 portion of the project site that abuts the adjacent agricultural area. Within this loop there shall be interpretative stations that identify the history of the Merced Irrigation District, sources of water and mechanical means of conveyance, and the role of MID in the settlement of Merced County. The Developer shall work with the Merced County Historical Society and Merced Irrigation District to ensure an appropriate and accurate representation.

Virginia Smith Memorial

- 10.2 In order to honor and acknowledge the endowment provided by Virginia Smith and Cyril Smith, an historical display shall be provided in the Community Recreation Center Park of their lives and contributions. A “scholar’s wall” shall be provided nearby that identifies those who have received scholarships. The roundabout at Virginia Smith Parkway and Campus Parkway shall also contain monumentation and public art associated with the Smith family. A themed fountain or light sculpture shall also be provided in the roundabout at Virginia Smith Parkway and Center Street which shall recognize the results of the ongoing gift of scholarships from the trust; in some artistic way the artwork shall represent the number of scholarships awarded from the trust and have the ability to be update from year to year. The Developer shall work with the Merced County Office of Education and the Virginia Smith Trust to ensure an appropriate representation.

VST Trust Founders

- 10.3 In order to honor and acknowledge the efforts of significant community members who have administered the Virginia Smith Trust, public parks shall be named in their honor and historical information provided about their lives, their public service and their contribution to the trust. The initial list of such parks is below. Additional parks namings may be made in consultation with the Merced County Office of Education and the Virginia Smith Trust.
 - a. Park A4 (Phase 1A Pocket Park)
 - b. Park A7 (Phase 1A Pocket Park)
 - c. Park B1 (Phase 1B Cottonwood Creek Park)
 - d. Park B2 (Phase 1B Pocket Park)

- e. Park B3 (Phase 1B Pocket Park)
- f. Park B4 (Phase 1B Pocket Park)
- g. Park B6 (Phase 1B Pocket Park)
- h. Park D1 (Community Recreation Center)
- i. Park D3 (Phase 1D Pocket Park)
- j. Park D4 (Phase 1D Pocket Park)
- k. Park E1 (Phase 1E Fairfield Canal Park)
- l. Park E3 (Phase 1E Outdoor Activity Park with Amphitheater)
- m. Park A2 (Community Sports Park)
- n. Park C3 (Phase 2C Neighborhood Park)

UC Merced

- 10.4 In order to provide a thematic connection to UC Merced, there shall be public art at intersections and roundabouts that provide access to the UC Merced at Meyers Gate Road. These intersections, as identified on **Figure 16**, include Meyers Gate Road at Campus Parkway and University.

Cultural History-Native Americans

- 10.5 In order to honor and acknowledge the previous occupation of the region by the North Valley Yokut, Ohlone and Mi-Wuk tribes, and the importance of the Native American community in the San Joaquin Valley and Sierra Nevada, a commemorative installation shall be placed in one of the project parks or open space. The Developer shall work with the California Indian Education Association, UC Merced, and local tribal representatives to determine an appropriate location for and content in the installation.

11.0 Drainage

Drainage features of the Project are intended to meet the City, County and Regional Water Control Board's Low Impact Development Post Construction Requirements. The performance of designed detention basins and permeable surfaces integrated throughout the project ensure on-site detention of the project's share of stormwater runoff while ensuring the safety of adjacent property.

- 11.1 Each commercial development is required to use pervious material such as pavers or pervious concrete on at least 10 percent of its paved area in areas that will intercept flows from onsite hard-scape to reduce runoff.
- 11.2 Landscaped drainage swales shall be included along Virginia Smith Parkway and along the frontage of commercial properties to facilitate drainage from adjacent property.



- 11.3 Commercial parcels outside of the Village Center shall have onsite landscape setback areas (“bioswales”) for stormwater collection disposal and treatment, with adequate capacity to accommodate a 2-year design storm. This will normally accommodate 90 percent of the average annual runoff. To supplement this system, the project will be serviced by a system of linear parks, storm water treatment basins, and storm water detention basins fed by overflows from the bioswales, and direct street drainage.

- 11.4 Small surface treatment basins are preferred along with underground detention basins shall be used in conjunction with community parks to the maximum extent feasible. Usage of large drainage basins is prohibited. Open surface storage is permitted in bioswales along project arterials or collectors.



- 11.5 The storm drainage system shall be designed to the City or Merced standards.
- 11.6 To ensure re-use of stormwater and groundwater recharge, storm water basins shall be developed adjacent to the Fairfield Canal and Cottonwood Creek. Stormwater shall be discharged to the canal as permitted by MID, and all discharges shall conform with City MS4 standards.
- 11.7 Rainwater and stormwater management shall be in conformance with the Regional Water Quality Control Board’s Low Impact Development standards. Such standards call for the detention/retention and treatment of the 95th percentile storm event. Treatment will be in decentralized filtration basins, bioswales, underground artificial or natural cisterns, and other approved strategies. The tentative subdivision map in **Appendix M** and shows the locations and extent of these basins.

- 11.8 Greenroofs shall be used on the roofs of the Village Commercial center to manage storm water and to provide rooftop landscaping and cooling for the Village Commercial Mixed Use residences.



- 11.9 **The altered alignment and cross section of the MID Fairfield Canal shall be subject to approval by the Merced Irrigation District. Prior to initiation of infrastructure improvements for Phase 2 of the VST Specific Plan, the project applicant or subsequent developer shall submit evidence to the discretionary land use authority (City of Merced or Merced County) that: 1) the proposed modification of the Fairfield**

Canal is designed such that no change would occur in the hydraulic flow rates and velocities of the canal, and, 2) necessary permits have been obtained from MID.

Specific features that can be incorporated into the design to effectively control flowrate and velocity include (but are not limited to) adjusting the channel cross section, use of construction material that has higher roughness coefficient (i.e., river rock, rip rap, gabions), incorporating roughness baffles, and energy dissipaters at the downstream end of the canal. (MM 3.5-3)

12.0 Fencing

Fencing planned for the project will add to visual quality and character of the overall development, while providing security and privacy. In addition to the existing City fencing requirements, the following standards and guidelines apply to all residential lots within the project in order to maintain and emphasis views of Tank Farm Creek.

- 12.1 Residential lots adjacent to Cottonwood Creek, the Fairfield Canal, parks, open spaces, or walking pathway shall use open fencing types like those illustrated in **Figure 31** and **Figure 34**.
- 12.2 Where front yard privacy fences are used, they shall conform to the City's height limitations and shall be designed in accordance with the Front Yard fence options shown in **Figure 32**.
- 12.3 Rear and side full height privacy fences shall be in accordance with the Privacy fencing options shown in **Figure 33**.
- 12.4 For security and wildlife migration purposes, fences shall be constructed along the edges of Cottonwood Creek and the Fairfield Canal and shall be the Wood Frame Hog Wire, Metal Rail Horse Panel or the Wood Frame Hog Wire style (or equal) illustrated in **Figure 34**.



Figure 31: Fencing at Open Space



Figure 32: Front Yard Fence Options



Figure 33: Privacy Fence Options



OPEN SPACE: Wood Frame Hog Wire



OPEN SPACE: Metal Rail Horse Panel



OPEN SPACE: Wood Frame Hog Wire



OPEN SPACE: Split Rail



OPEN SPACE: Split Rail



OPEN SPACE: Metal

Figure 34: Creek Corridor Fence Options

13.0 Energy Conservation, Energy Production and Water Conservation

Energy Conservation

- 13.1 In order to reduce greenhouse gas emissions, provide savings for project residents, and reduce the need for offsite energy sources, the project will integrate special energy conservation and production features. All residential units shall be all-electric, with natural gas infrastructure extended only to non-residential uses. The cumulative effect of these code modifications will be the reduction of greenhouse emissions from building sources (non-mobile or indirect sources) by 50 percent, and annual energy cost savings to homeowners of \$1,000 to \$1,500. The additional features and mitigations described here are estimated to reduce total vehicle miles travelled by 25 percent, and shift an additional 25 percent of trips from fueled vehicle trips to EV trips, bikes and pedestrians. A total of 50 percent reduction on gasoline and diesel fueled vehicles miles is conservatively estimated resulting in a 35-45 percent overall reduction in GHG emissions. The energy sources for the project are estimated to be 95% carbon free, in conformance with California Air Resources Board's (CARB) 2022 Scoping Plan and "High Electrification" strategy. If necessary, the City shall adopt the necessary amendments to the City's building code to implement the inclusion of CalGreen Non-Mandatory Energy Code features and Tier 1 and Tier requirements specified herein.

The overall intent of the recommendations, standards and guidelines below is to implement CalGreen Tier 1 and Tier 2 requirements in the project. These changes anticipate likely California energy code changes in 2025. When combined with the requirements for Solar PV in Section 13.2 below, it is expected that the structures will meet the California Energy Commission's Energy Design Rating criteria for Time Dependent Value ("TDV") Zero Net Energy. The energy conservation measures described below are those which have a demonstrable positive benefit to cost ratio.

- 13.1.1 All buildings and structures shall meet the 2022 "Net Zero" energy conservation standards adopted by the State of California, and CalGreen Tier 1 and Tier 2 requirements.
- 13.1.2 Energy conservation measures should give priority to the thoughtful design of structures to take advantage of passive cooling and heating, including cross ventilation, solar exposure, solar thermal massing strategies.
- 13.1.3 Building and structures shall use high-performance Advance Framing (AF) and/or Structurally Insulated Panel (SIP) techniques, where technically feasible, to reduce the amount of framing lumber and the heating and cooling loss associated with frequent framing intervals. Advanced framing techniques qualify as Reduced Thermal Bridging under section 4.4.5 of the Energy Star Thermal Enclosure System Rater Checklist (ver. 3, rev. 5). Advance Framing techniques may include, but are not limited to the following:

- a. Increased framing member spacing, typically to 24 inches on center, effectively trimming the number of required studs by about one-third. Perimeter walls may be built with 2x6 wood framing spaced 24 inches on center have deeper, wider insulation cavities than conventional 2x4 framing spaced 16 inches on center, thereby increasing the amount of insulation inside the wall to at least R-20 and improving the whole-wall R-value.
 - b. Use of insulated corners to eliminate the isolated cavity found in conventional three- or four-stud corners, making it easier to install insulation and providing for more cavity insulation space. Advanced framing wall corners can include insulated three-stud corners or two-stud corner junctions with ladder blocking, drywall clips, or an alternative means of supporting interior or exterior finish.
 - c. Advanced framing ladder junctions should be used at wall intersections with 2x blocking at 24-inch on center vertical spacing. This method requires less than 6 feet of blocking material in a typical 8-foot tall wall. In conventional walls, interior wall intersections include a stud at each side of the intersecting wall, which can require as much as 16 feet of stud lumber plus additional blocking material.
 - d. Advanced framing headers offer increased energy efficiency by replacing framing materials with space for cavity insulation inside the header. Advanced framing headers are sized for the loads they carry. Wood structural panel box headers are another option to consider that maximize the insulatable cavity while providing the structural support via the wood structural panels that are already used on the exterior of the building.
- 13.1.4 Quality Insulation Installation (“QII”) shall be used per California Energy Commission standards and Insulation Stage Checklists to ensure high performing insulation systems. QII ensures that insulation is installed properly in floors, walls, and roofs/ceilings to maximize the thermal benefit of insulation. Depending on the type of insulation used, QII can be simple to implement for only the additional cost of HERS verification. Batt insulation may require an increase in installation time over standard practice because batts may need to be cut to fit around penetrations and special joists.
- 13.1.5 Compact Plumbing (“CP”) strategies shall be used to reduce water and water heating waste. These will include reducing the total run from the water heating unit to the hot water dispensing appliances, “demand” recirculating hot water systems, back-to-back and stacked plumbing fixtures, and other techniques.

- 13.1.6 The buildings and structures in the project shall provide for indoor water use that is at least 25 percent below current citywide average, and outdoor water use that is 30 percent below the City of Merced average, to achieve a targeted average usage of 100 gallons per day per capita. WaterSense fixtures, or their equivalent, shall be used for all appliances, and all appliances shall comply with CalGreen standards for water use efficiency.
- 13.1.7 Passive solar strategies shall be used in all buildings to the greatest degree practicable. At least 75 percent of the structures in a neighborhood should have the longer roof line axis within 15 degrees of east-west. Buildings should be designed to include roof overhangs that are sufficient to block the high summer sun, but not the lower winter sun, from penetrating south facing windows (passive solar design). Roofing materials shall be used which have a solar reflectance value meeting the EPA/DOE Energy Star® rating to reduce summer cooling needs.
- 13.1.8 City infrastructure should utilize strategies and improvements to conserve energy. These include: 1) usage of roundabouts where possible to avoid the usage of electrically powered traffic signals; 2) usage of high-efficiency LED street lights; 3) usage of high-efficiency LED traffic signals. Where traffic signals are modified as part of this project, signal heads with low-efficiency incandescent fixtures shall be modified to have high efficiency LED fixtures, where possible; 4) bus stops shall include PV systems to support the power requirements; and, 5) street lighting, park lighting and area lighting shall be designed to limit errant light.
- 13.1.9 Design plans for units shall provide for the use of battery powered or electric landscape maintenance equipment for new development. At least one exterior convenience outlet shall be provided for each yard area that requires regular maintenance. Two outdoor outlets shall also be provided for any private outdoor activity/patio areas.
- 13.1.10 Each dwelling unit shall be designed to provide a convenient storage area for bicycles that is easily accessible. This may include storage space in garage for bicycle and bicycle trailers, or covered racks / lockers to service the residential units, or front porch bike lockers.
- 13.1.11 Residences shall use all-electric appliances.
- 13.1.12 To encourage the use of electric vehicles, private residential garages shall be equipped with a dedicated 240V/40A circuit or outlet for electrical vehicle charging in conformance with the California Green Building Code and the National Electrical Code. Residences with common parking areas such as the R-3,

R-4 and Neighborhood Commercial areas shall be equipped with electric vehicle charging receptacles and stations in conformance with CalGreen Tier 1 and Tier 2 standards.

Onsite Energy Production

13.2 Solar PV systems shall be included on all residential structures and buildings sufficient to produce 100 percent of the projected electrical demand for the type of building unit (but not including electrical demand for EV charging stations). This may be provided through a combination of solar canopies for R-3, R-4, Neighborhood Commercial/Town Center and public park uses, rooftop solar panels, solar shingles and other methods. Guidelines for specific unit types and land uses are as follows:

- 13.2.1 R-1 Single Family. These uses should provide between 350 and 400 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 10,000 kWh per year, or as may be calculated in the energy analysis for the structure.
- 13.2.2 R-2 Cluster Single Family. These uses should provide between 325 and 375 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit (to generate at least 7,800 kWh per year, or as may be calculated in the energy analysis for the structure. Because of the orientation of these uses from a common driveway from an east-west street, care should be taken to orient the longer roof along the east-west axis where possible. There are limited opportunities for solar canopies in guest parking areas, except where these spaces are used for car sharing stations.
- 13.2.3 R-3 Units. These uses should provide 275 and 325 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 7,500 kWh per year, or as may be calculated in the energy analysis for the structure. Solar canopies in guest parking spaces may provide the predominant share of the total requirement of 7,500-8,000 square feet of total solar array area, and the solar canopies are the preferred method of achieving this objective because of the required orientation of these uses, and the sensitive architectural setting. Where possible, units should provide rooftop solar water heating units. Surface material and finish shall be non-glare for airport compatibility.
- 13.2.4 R-4 Apartment Units. To the extent feasible, these uses should provide 175 to 225 square feet of equivalent south-facing tilted total solar panel surface area per dwelling unit to generate at least 5,000 kWh per year, or as may be calculated in the energy analysis for the structure. Solar canopies in guest parking spaces may provide all or the predominant share of the total requirement of 17,750 square feet of total solar array area, and the solar canopies are the preferred method of achieving this objective because of the required orientation of these

uses, and the sensitive architectural setting. Where possible, these units should provide solar water heating units or pre-heating units. These solar canopies are to be located around the perimeter of the site along the west and north boundaries so that they function as noise attenuation barriers as well.

13.2.5 If necessary, the City shall adopt the necessary amendments to the City's building code to implement the inclusion of Non-Mandatory Energy Code features and Tier 1 and Tier requirements specified herein

13.2.6 For commercial buildings larger than 5,000 SF, solar PV shall be installed to provide a minimum of 25 percent of the electrical requirement for the structure, if feasible based on roof area and building constraints.

Water Conservation

13.3 Water is a valuable resource. It provides irrigation water for Merced County's farms and potable water for its residents. The state has provided various mandates for conservation by water efficient landscaping, requirements for efficient plumbing fixtures, and the requirement for projects to not use groundwater in excess of the safe yield of the local groundwater aquifer. The buildings, structures and public improvements in the project are intended to comply with the draft groundwater sustainability plan for the Merced Irrigation-Urban Groundwater Sustainability Agency requirement that municipal and agricultural properties not use more groundwater than their pro rata share of the safe yield, which is projected to be 1,300 acre-feet per year. The project will result in water use that is at least 25 percent below the current citywide average, with resulting water use equal to approximately 100 gallons per capita per day compared the City's overall usage of 127.5 gallons per capita per day. Overall, total project water use will be 1,550 acre-feet (AF) per year equivalent of approximately 2.37 feet per acre. Considering water that is returned to the groundwater aquifer from the wastewater treatment plant, the net impact of the project on groundwater (assuming no city surface water supplies) would be less than 1,000 AF/Year and approximately 1.3 feet per acre. The project shall conform to the following:

13.3.1 WaterSense fixtures, or their equivalent, shall be used for all appliances, and all appliances shall comply with CalGreen standards for water use efficiency.

13.3.2 Project shall comply with California CalGreen Code.

13.3.3 Compact Plumbing strategies shall be used to reduce water and water heating waste. These will include reducing the total run from the water heating unit to the hot water dispensing appliances, "demand" recirculating hot water systems, back-to-back and stacked plumbing fixtures, and other techniques.

- 13.3.4 Turf shall not be permitted for individual yard landscaping in large uniform areas, but it may be used as an accent to an otherwise low water using landscape theme. Landscape plans shall be developed which require lower water usage, and which require lower maintenance. Landscape plans shall reflect the local climate zones and local plant material. **Figures 26 through 30** show examples of acceptable usage of turf in yard landscaping. Turf may be used where it is associated with a common open space, parkways, sports field or other common area, especially where an alternative material is not available or appropriate. Where feasible, these areas will be irrigated with recycled water supplies.
- 13.3.5 Landscape and irrigation plans should use drip irrigation systems to the extent feasible, and general broadcast irrigation is discouraged. Individual irrigation system shall also use moisture sensors and rain sensors to eliminate unnecessary irrigation.
- 13.3.6 If necessary, the City shall adopt the necessary amendments to the City's building code to implement the inclusion of CalGreen Non-Mandatory Energy Code features and Tier 1 and Tier 2 requirements specified herein.

Circulation Framework

Project Circulation Features

There are five principal circulation features for the site: 1) the construction of Campus Parkway through the site as part of “Phase 3” of Campus Parkway from Yosemite Avenue to Bellevue Road; 2) constructing Class I and Class IV “buffered” bike lanes through the project site and the Class I Bike Path along Lake Road; 3) the extension of Meyers Gate Road, Virginia Smith Parkway and Cardella Road easterly from Lake Road as the principal circulation spines; 4) development of a continuous off-street recreational bike and pedestrian path along the Virginia Smith linear park, the Fairfield Canal riparian corridor, the perimeter of Phase 2, and connections to the planned UC Merced trail system; and, 5) development of north-south streets that support the development of the balance of the University Community Plan (UCP) plan area, and that connect to the north-south circulation elements designated in the UC Merced Long Range Development Plan.



Overall Circulation Plan and Street Sections

Figure 35 shows the overall circulation system, location of various bikeways, and a key map for the illustrated street sections. **Figures 36** through **45** show the street sections that are to be used for the project. **Table 4** shows the dimensions of the roadways and **Table 5** shows the roadway features.

The project’s proximity to UC Merced provides an opportunity to encourage greater usage of pedestrian and bicycle modes of transportation. Pedestrian circulation will be accommodated by street design standards that include sidewalks on both sides of the street for most classifications of streets within developed areas, and off-street, multi-use paths along streets adjacent to open space areas, and network of multi-use, and Class IV buffered and protected bicycle facilities that will connect to the street system within the UCP and LRDP areas. The specific plan proposes a comprehensive system of on-street and off-street bicycle facilities in and around the project site. The circulation plan illustrates off-street Class I multi-use paths that parallel creeks and riparian corridors such as Cottonwood Creek and the Fairfield Canal, and off-street paths adjacent to streets and on-street bicycle lanes.

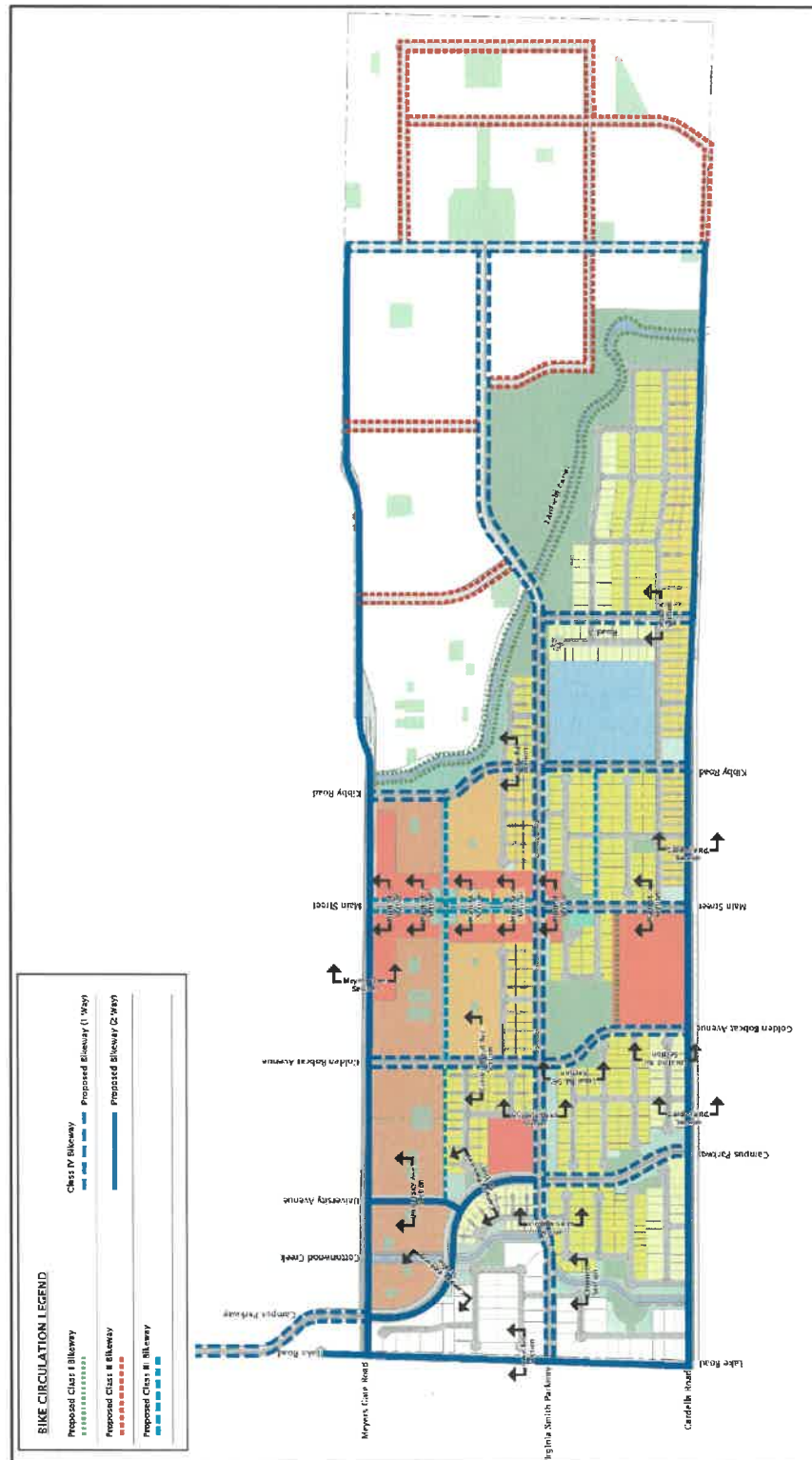


Figure 35: Overall Circulation Plan and Key Map

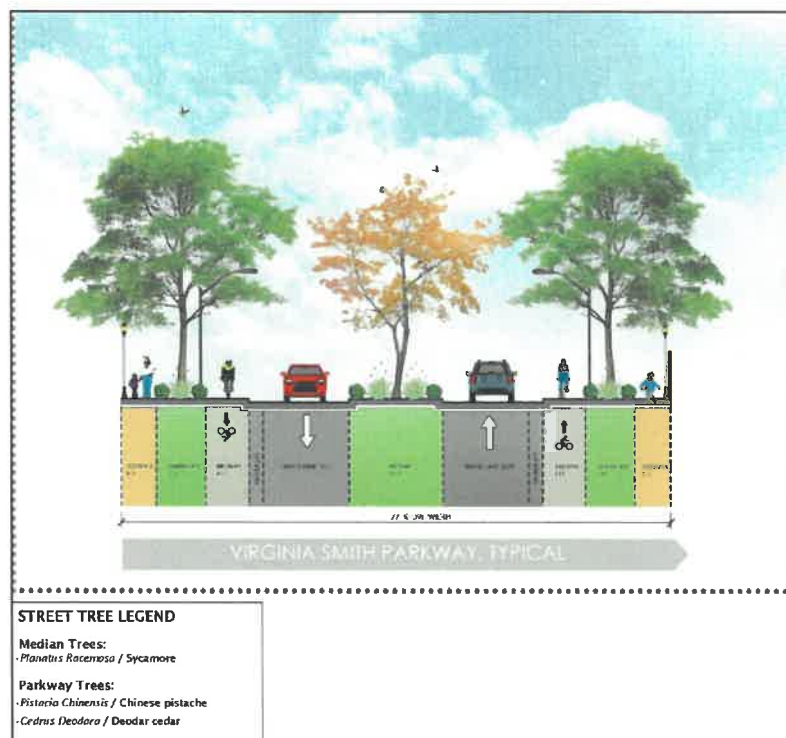
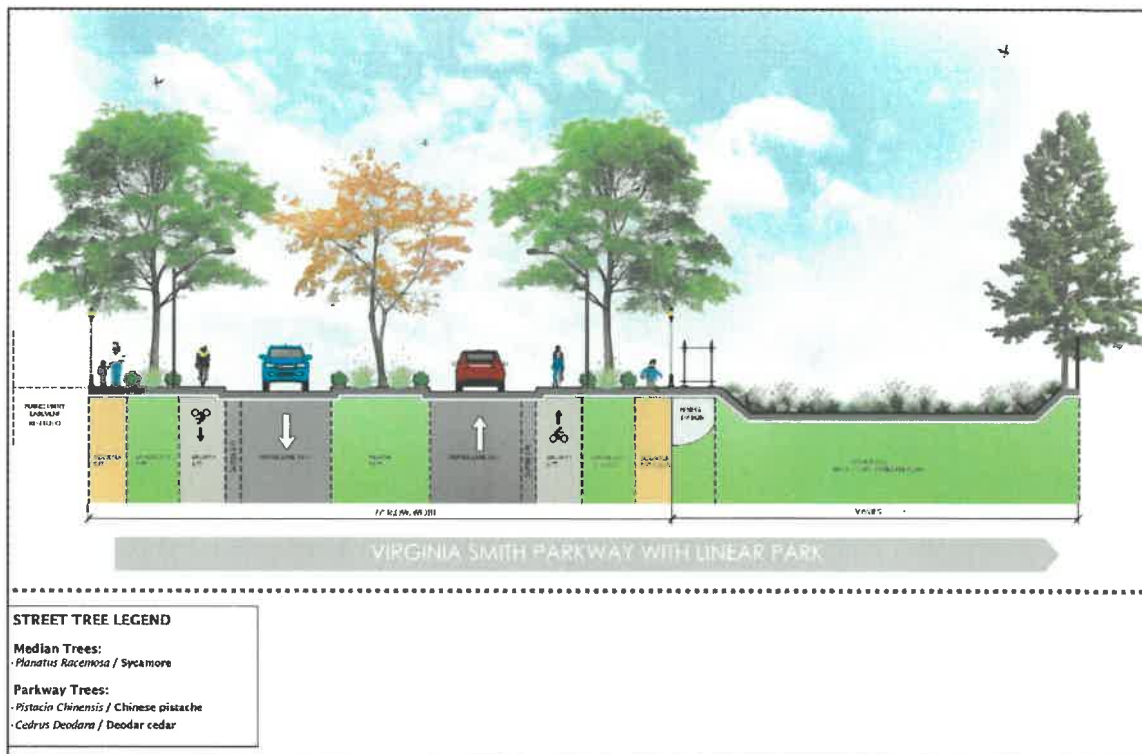


Figure 36: Virginia Smith Parkway

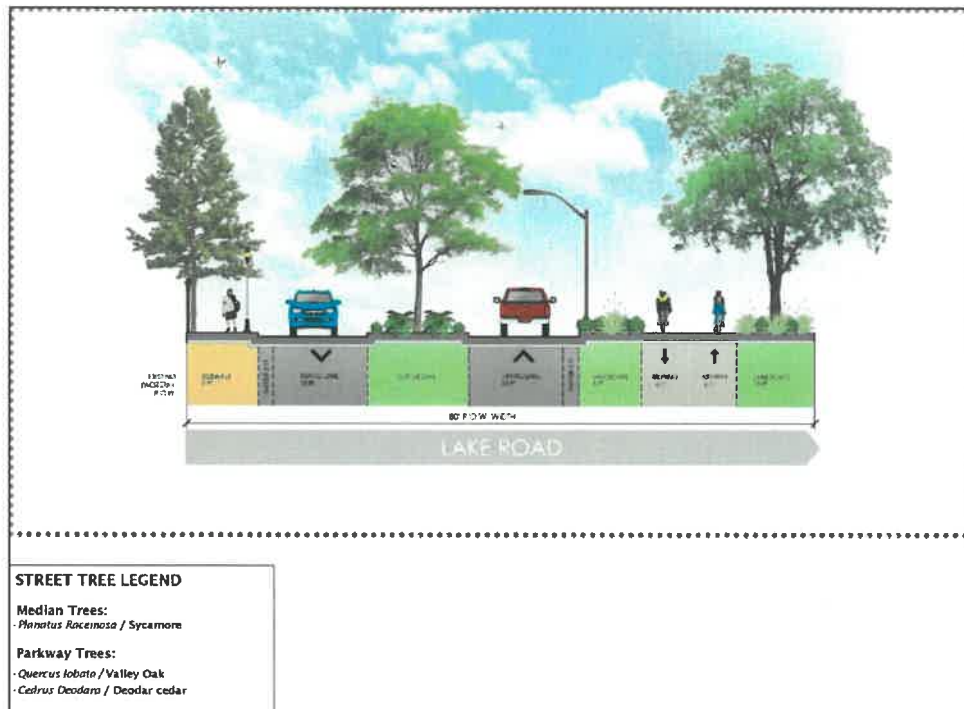


Figure 37: Lake Road



Figure 38: Campus Parkway ("Urban Expressway")

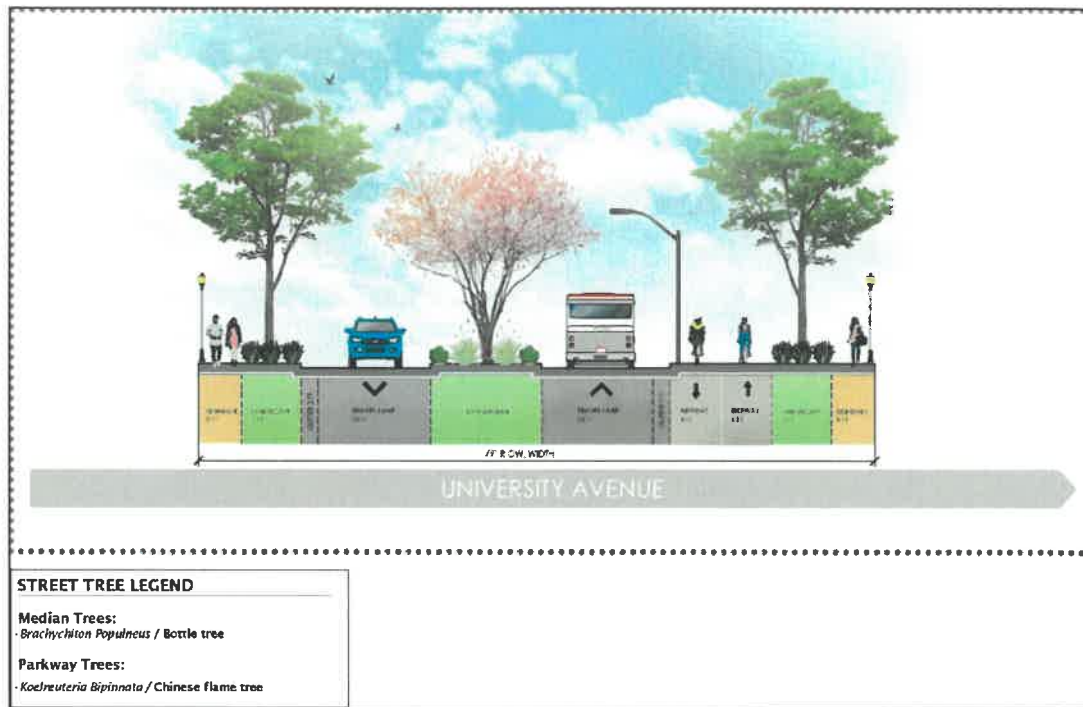


Figure 39: University Avenue

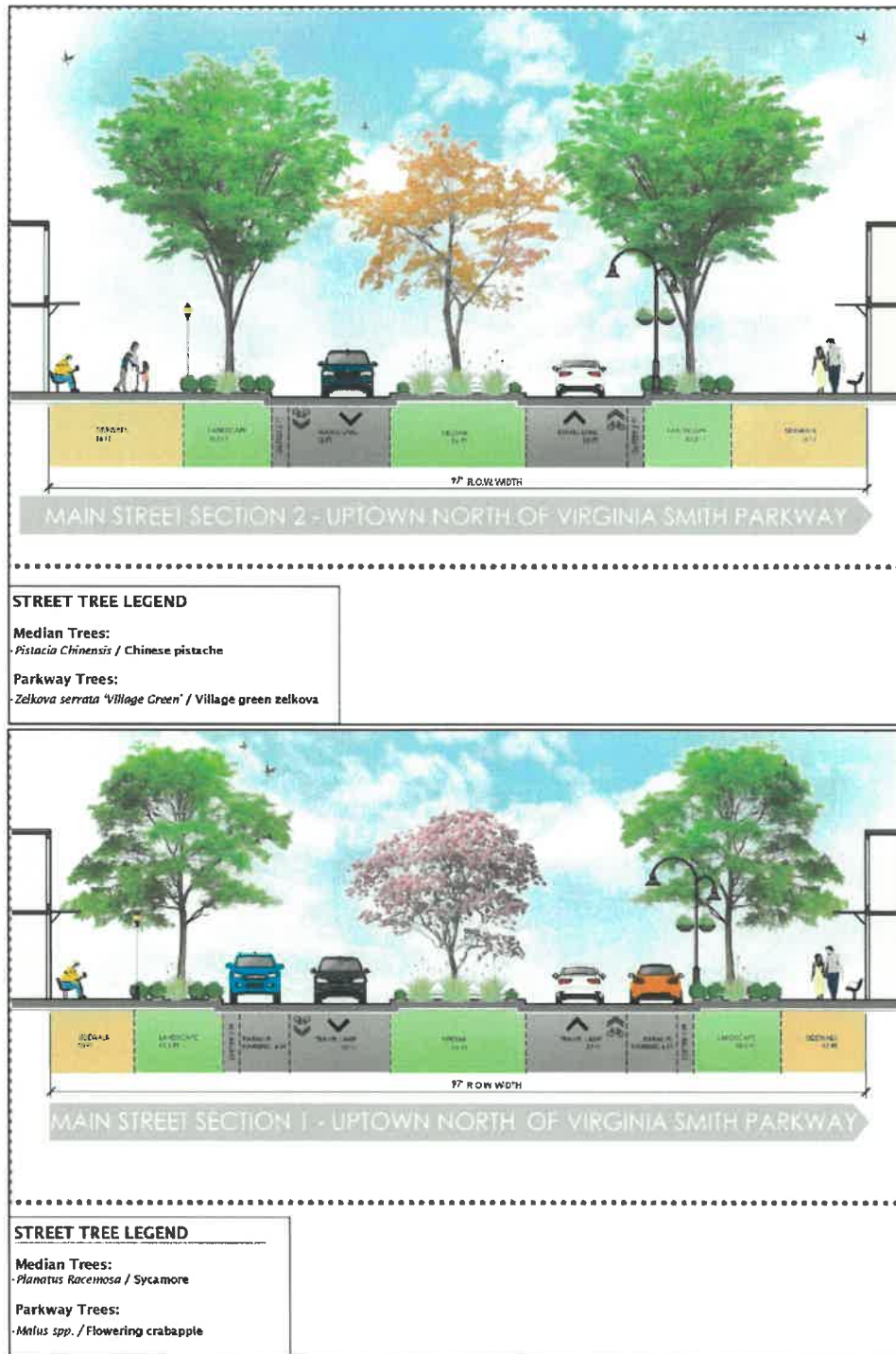


Figure 40: Section 1 and 2 of Main/Center Street

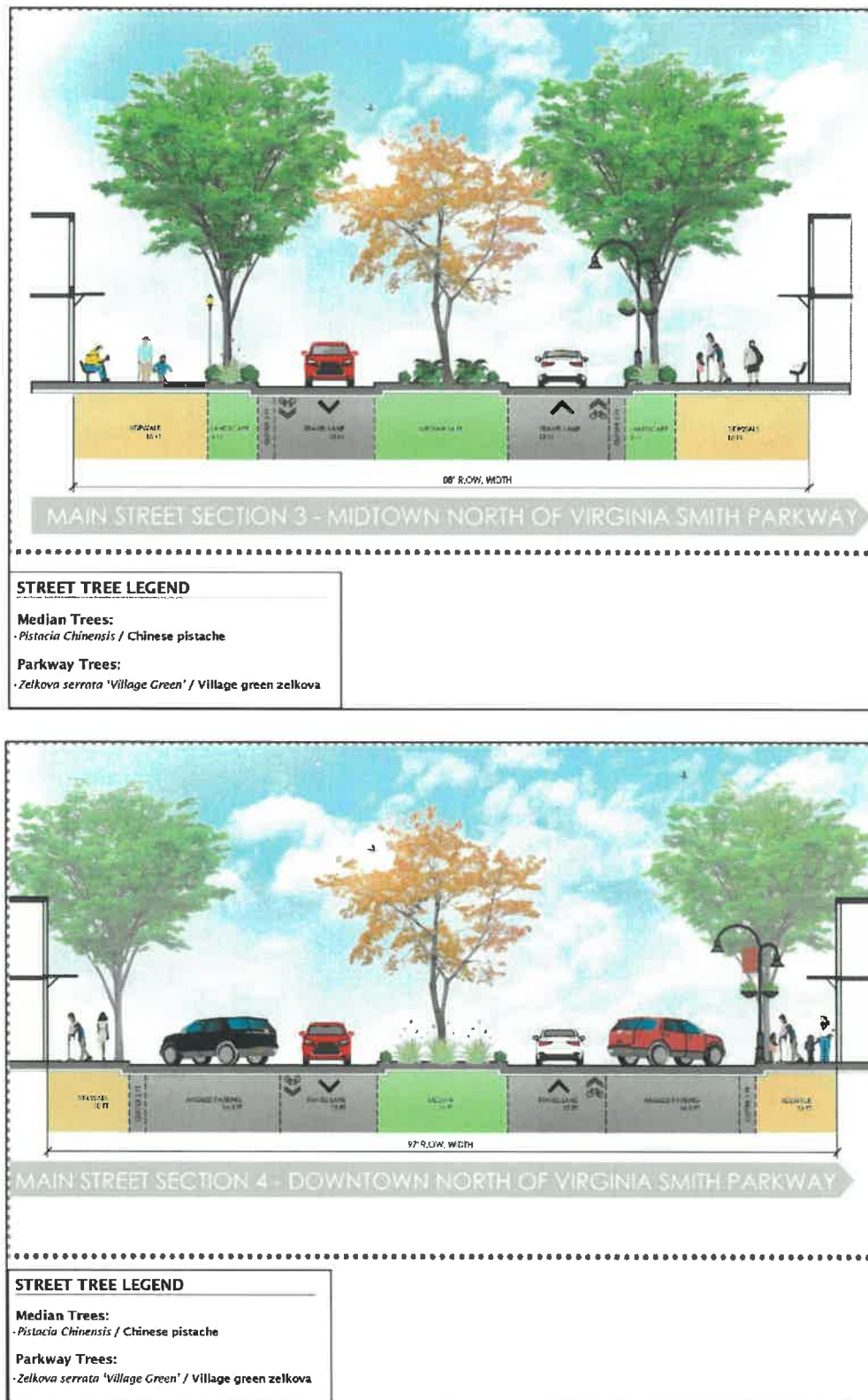


Figure 41: Sections 3 and 4 of Main/Center Street

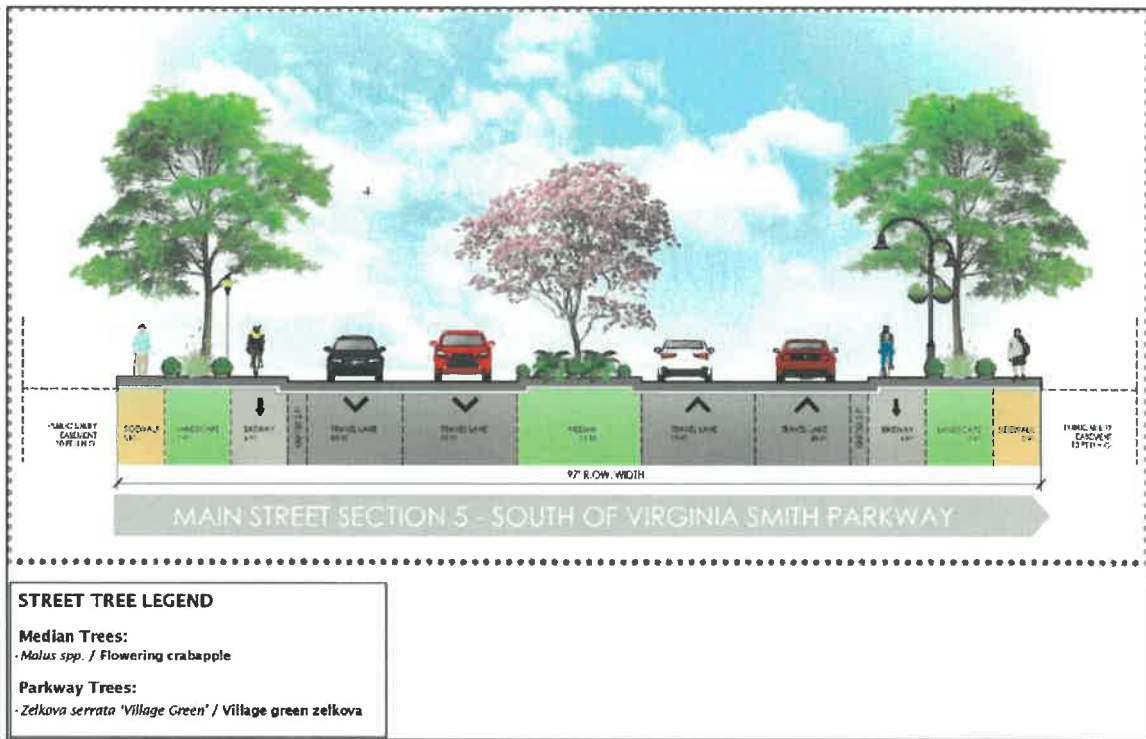


Figure 42: Main/Center South of Virginia Smith Parkway

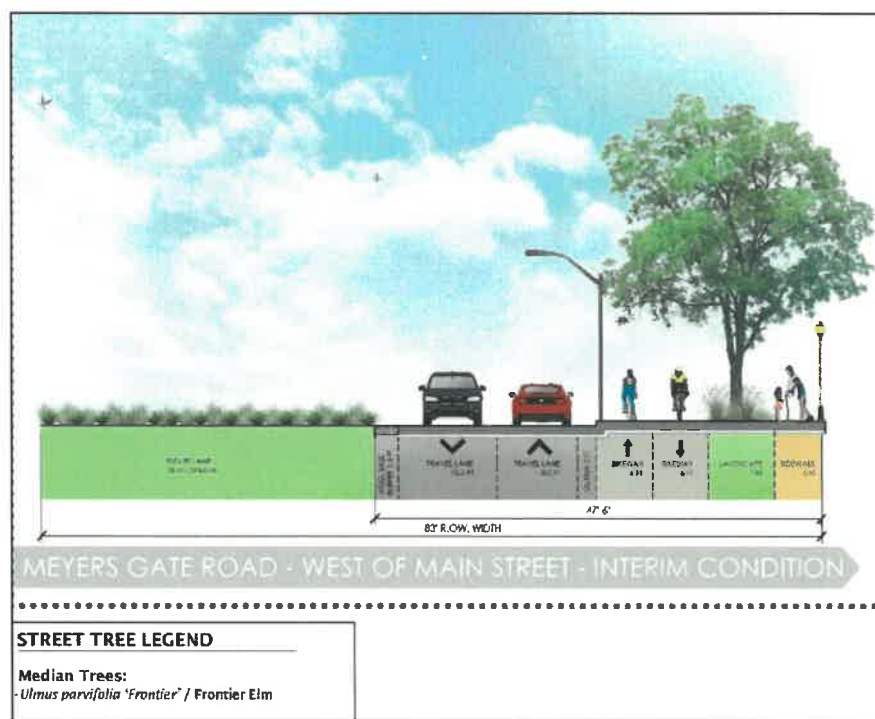
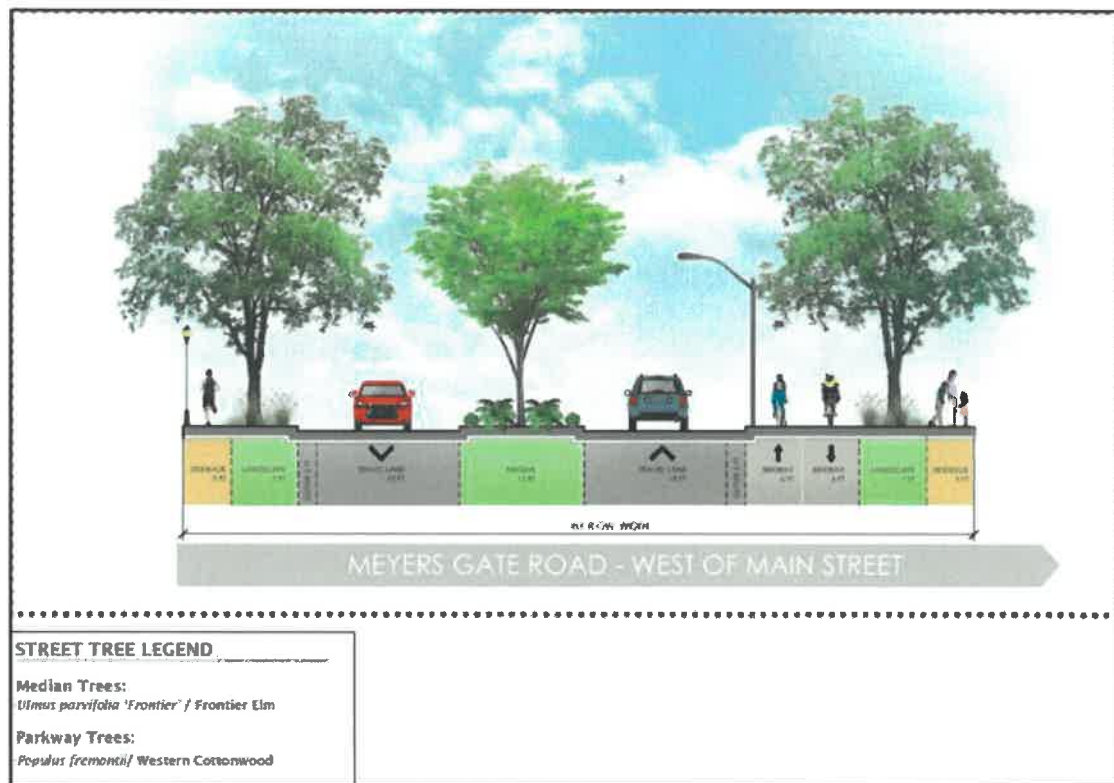


Figure 43: Meyers Gate Road

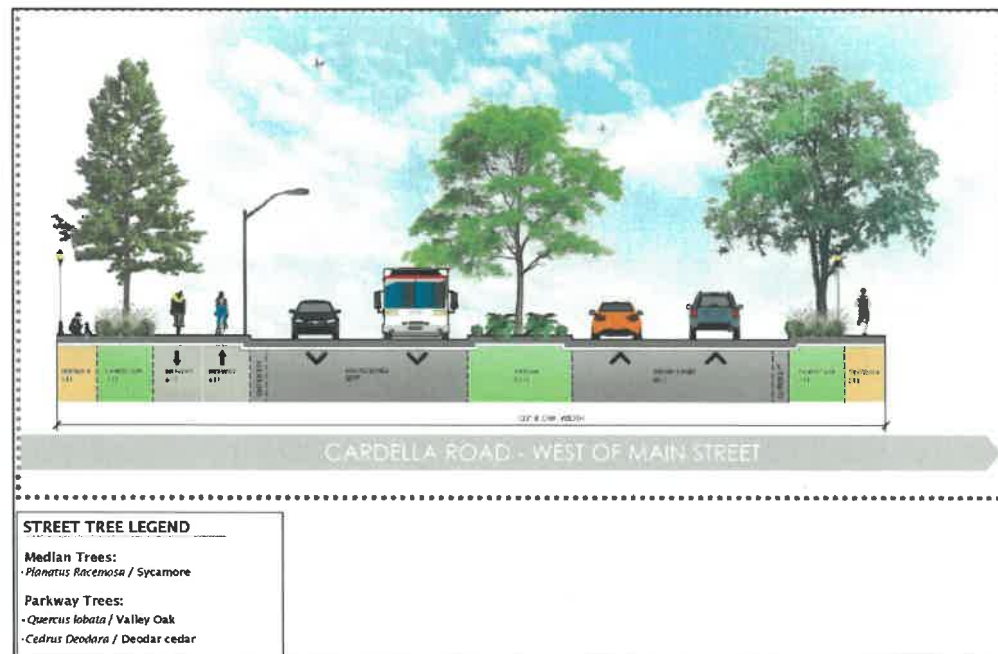
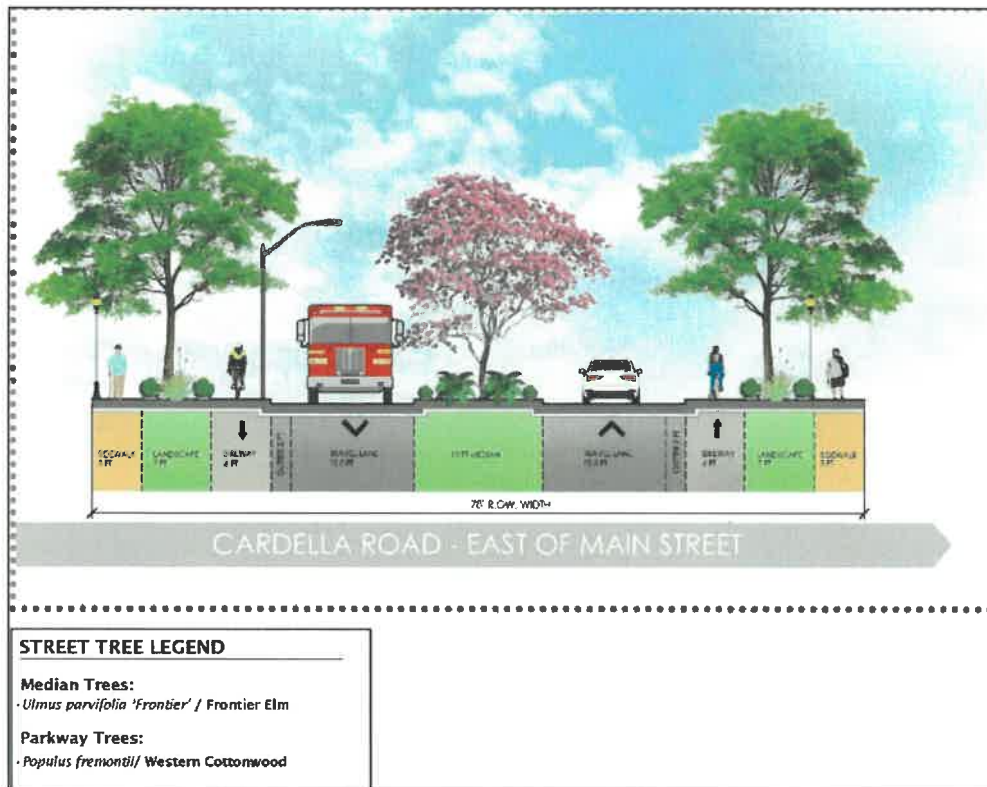


Figure 44: Cardella Road

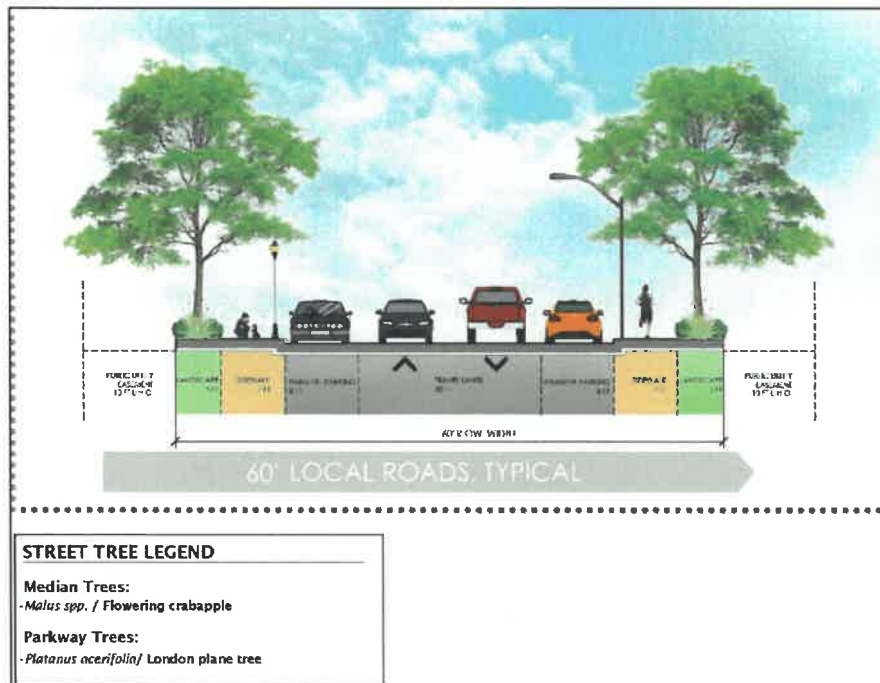
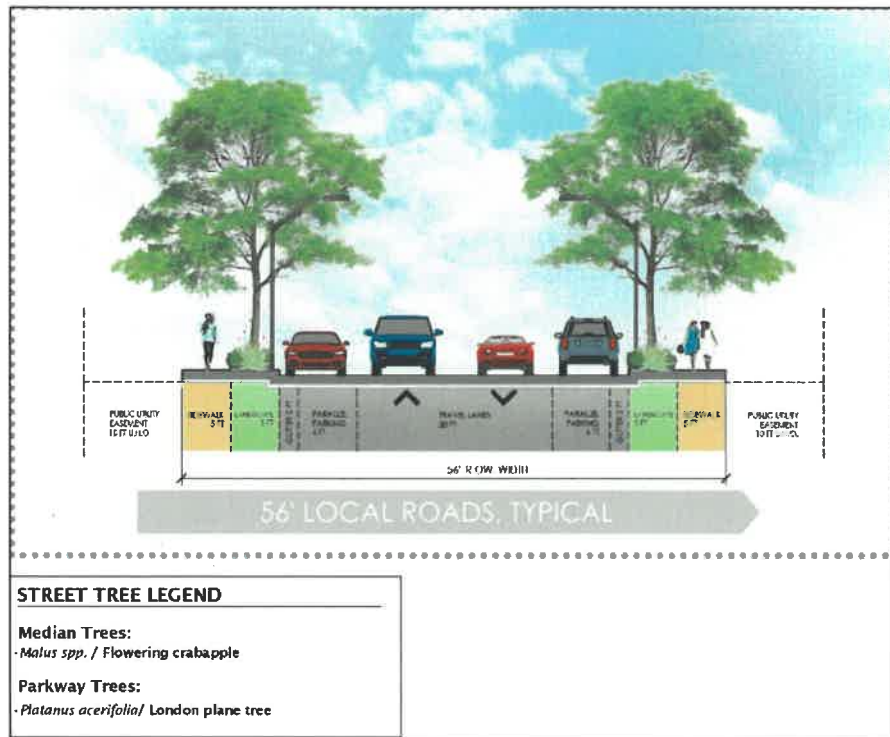


Figure 45: Local Roads

Table 4: Specific Plan Street Design Dimensions

Roadway	Location	Classification	Proposed Direct Access Limits	Right of Way	Lane Widths	Landscape Parkway	Curb and Gutter	On-Street Parking	Median	Bike Lanes	Sidewalk
Campus Parkway		Limited Access Expressway-4 Lane	Yes	107	13	7	2		15	12	5
University Avenue	North of Campus Parkway	Collector	Yes	79	13	7	2		13	12	5
Kibby Road		Parkway Collector		77	12	7	2		13	6	5
Golden Bobcat		Parkway Collector		77	12	7	2		13	6	5
Dunn Road	West of Main Street	Arterial		103	13	7	2		13	6	5
Dunn Road	East of Main Street	Collector		79	13	7	2		13	6	5
Virginia Smith Parkway	East of Lake Road	Parkway Collector	Yes	77	11	6	2		13	6	5
Local Streets	R-1-12.5/R-1-7	Local	No	60	11	6	2	8			6
Local Streets	R-1-5/R-2	Local	No	56	10	0	2	9			6
Lake Road	Project Limits	Limited Access Collector	Yes	80	12	8	2		13	6	
Center Street	North of VS Parkway (C-MUR Zone)	Collector	No	97	12		2	16.5	16		10
Center Street	North of VS Parkway (C-MU Zone)	Collector	No	97	12	10.5	2	6	16		16
Center Street	VS Parkway to Dunn Road	Arterial		97	12	7	2		13	6	5
Center Street	South of Dunn Road	Parkway Collector		77	12	7	2		13	6	5
Cardella	West of Main Street	Arterial		103	12.5	7	2		13	12	5
Cardella	East of Main Street	Collector	Yes	78	12.5	7	2		13	6	5
Meyers Gate Road	East of Lake Road	Collector	Yes	83	15	7	2		13	6	5

Table 5: Specific Plan Street Design Features

Roadway	Location	Classification	2 Lanes	4 Lanes	On-Street Parking	Class I	Class II	Class III	Class IV
Campus Parkway		Limited Access Expressway-4 Lane		X					X
University Avenue	North of Campus Parkway	Collector	X						X
Kibby Road		Parkway Collector					X		
Golden Bobcat		Parkway Collector					X		
Dunn Road	West of Main Street	Arterial							
Dunn Road	East of Main Street	Collector							
Virginia Smith Parkway	East of Lake Road	Parkway Collector	X			X			X
Local Streets	R-1-12.5/R-1-7	Local	X		X			X	
Local Streets	R-1-5/R-2	Local	X		X			X	
Lake Road	Project Limits	Limited Access Collector	X			X	X		
Center Street	North of VS Parkway (C-MUR Zone)	Collector	X		X				X
Center Street	North of VS Parkway (C-MU Zone)	Collector							
Center Street	VS Parkway to Dunn Road	Arterial							
Center Street	South of Dunn Road	Parkway Collector							
Cardella	West of Main Street	Arterial		X					X
Cardella	East of Main Street	Collector	X						X
Meyers Gate Road	East of Lake Road	Collector	X						X

Bicycle Plan

Class I bicycle paths and Class IV bicycle lanes within the specific plan will be constructed, signed and marked to meet or exceed the minimum standards established by the California Department of Transportation Highway Design Manual and City design standards. Class I paths are to be a minimum of 12 feet in width with two-foot shoulders, except in hillside areas where grading would cause visual impacts or along creeks where space is limited. Class II, where used, are to be at least to be 8-foot “buffered” lanes. The project also makes extensive usage of “Class IV” protected bike lanes.

Campus Parkway

An important linkage in the regional transportation system is Campus Parkway. Phases 1 and 2 of Campus Parkway have been completed between State Highway 99 and Yosemite Avenue, and the remaining Phase will extend it north to Bellevue. The County, City and UC Merced have reviewed alternatives for the alignment of this roadway and have adopted the alignment and details represented in **Figure 46** (Overview and Yosemite to Cardella), **Figure 47** (Cardella to Bellevue) and **Figure 48** (Lake Road detail south of Meyers Gate Road). County Circulation Element Table CIR-1 currently does not provide for an “urban” section of Campus Parkway. The Circulation Element is proposed to be amended so that Phase 3 of Campus Parkway in the UCP and in the Specific Plan would have 100’ to 125’ feet of rights of way, intersection spacing no more frequently than ¼ mile, four (4) through lanes, direct access limited to major activity centers with auxiliary/frontage lanes, and a maximum vehicle design speeds of 35 miles per hour with a 500’ centerline radius. A special cross section (**Figure 38**) has been adopted for Campus Parkway through the UCP to recognize that it is an “Urban Expressway” that needs to perform the function of efficiently conveying traffic from Highway 99 to UC Merced, and be sensitive to the urban context and development in the UCP. To achieve both objectives, access is limited to Campus Parkway from intervening east-west public roads, and from and to major activity areas such as shopping centers. Direct access from residential subdivisions is not permitted. The traffic study conducted for the project indicated that four way stops, or traffic signals were warranted at the Campus Parkway intersections of Meyers Gate Road, Virginia Smith Parkway and Cardella Road. Roundabouts are proposed as the most appropriate and safest form of such control to facilitate smooth flow of traffic, moderate speeds through the project, and to provide opportunities for landscaping and public art.

Arterial, Collector and Local streets planned for the project are shown in **Figure 35** and are described in **Table 4** and **Table 5**. These roadways function to collect traffic from local streets and fronting property and then channel the traffic to arterial streets. Collector streets have fewer limitations on intersections and driveways than higher order streets. These roads are to have design speeds that do not exceed 30 miles per hour, the maximum centerline radius of 350 feet. Where the traffic study indicated a need for a four way stop or traffic signal, roundabouts are proposed as the most appropriate and safest form of such control to facilitate smooth flow of traffic, moderate speeds through the project, and to provide opportunities for landscaping and public art.

Lake Road

Lake Road was given special consideration in the planning process. Currently, it acts as the primary north-south collector access road to UC Merced and northeast Merced in general. During the planning for Campus Parkway, it was acknowledged that there would need to be a plan for some form of “traffic calming” to shift the existing and future through traffic from Lake Road to Campus Parkway, while preserving access to residential properties along Lake Road. **Figure 48** shows a potential location for such traffic calming or access limitations. The precise form and timing of these improvements has not been determined, and would most likely occur concurrent with the planning and development of UCP South property. Lake Road will also serve as the principal access point for the project in the conceivable future until Phase 3 of Campus Parkway is completed. Based on the assumption that Campus Parkway would be completed prior to Phase 2 of the project, but not prior to Phase 1 of the project, the traffic study has recommended traffic signals at Meyers Gate Road, Virginia Smith Parkway and Cardella Road. Development of the project will also require the reconfiguration of the 80 feet of Lake Road right of way as shown in **Figure 37** so that there are two through lanes of traffic, a landscaped median (for protected left turn movements and a visual and noise buffer to residences to the west), and relocation of the Lake Road Class I bike path. **Figure 47** and **Figure 47** show potential roundabouts along Lake Road/Campus Parkway at Mandeville Road and Bellevue Road. The precise form of this intersection control has not been determined and is subject to further study, and implementation by others and they are not part of the VST Specific Plan.

Offsite Circulation Impacts

According to the traffic Study in **Appendix F**, certain onsite and offsite improvements are needed to accommodate project traffic. Chapters 3 and 4, respectively, of the traffic study identify the improvements that are needed in the Near Term to support Phase 1 of the project, and those that are required at full buildout. **Appendix F** shows the offsite improvements that are needed at full buildout. The project will complete the onsite improvements and those along its Lake Road frontage, and pay a special traffic impact fee to fund its fair share of offsite improvements. **Appendix F** includes the traffic study and the improvements recommended for each phase of development. **Tables 9 and 10** of this Specific Plan shows the proposed VST traffic impact fee, with **Table 9** showing the supporting information for the derivation of that fee, including the allocation of funding responsibilities indicated in the various agreements between UC Merced and the City of Merced, and UC Merced and the County of Merced.

Transit

Transit is also an important element of the transportation system. UC Merced, the City of Merced and Merced County Transit operate bus service to and from the university. Bus stops have been planned as part of the circulation system and those locations are shown on **Figure 49**.

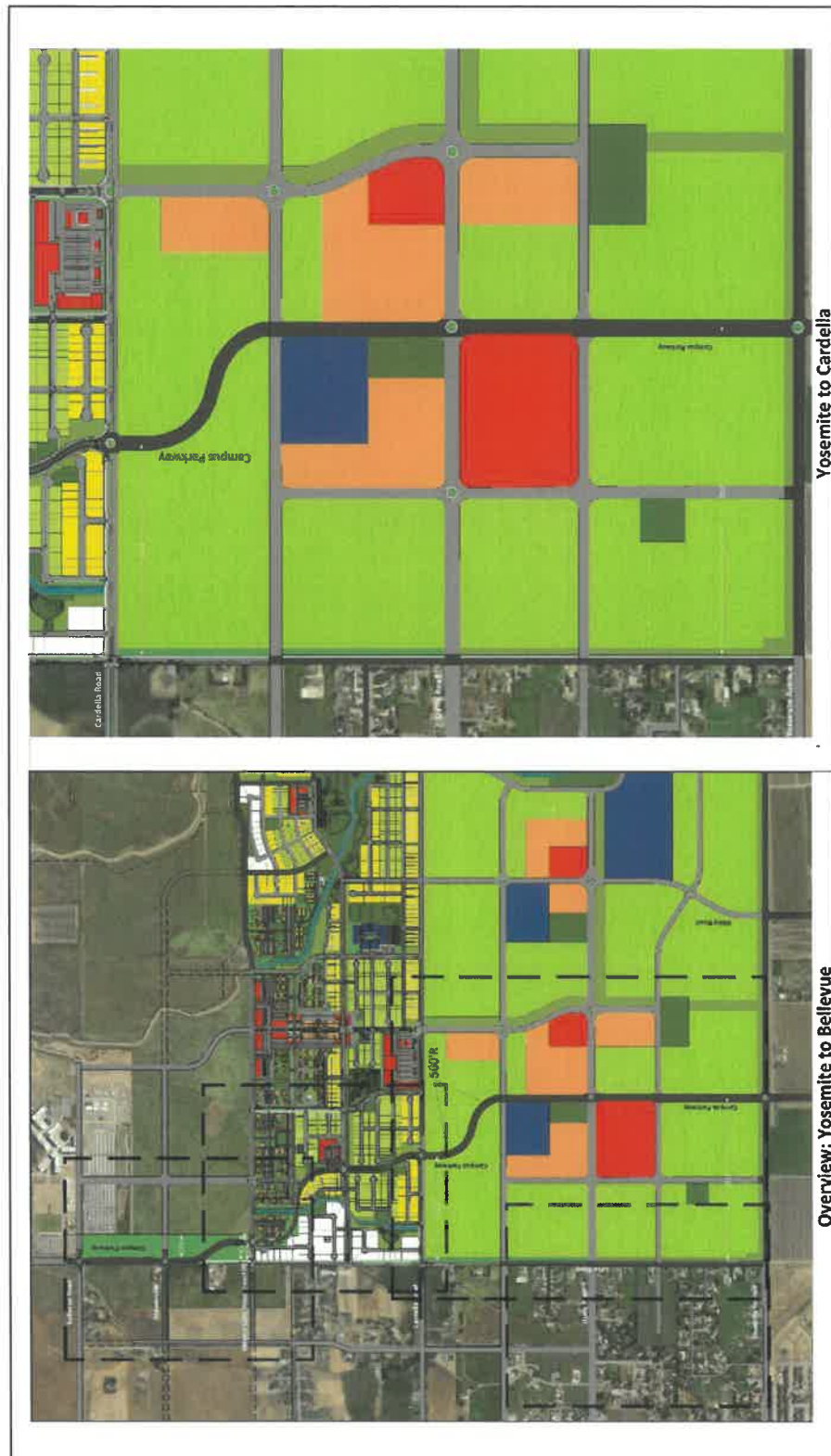


Figure 46: Campus Parkway Overview and Yosemite to Cardella



Figure 47: Campus Parkway Cardella to Bellevue

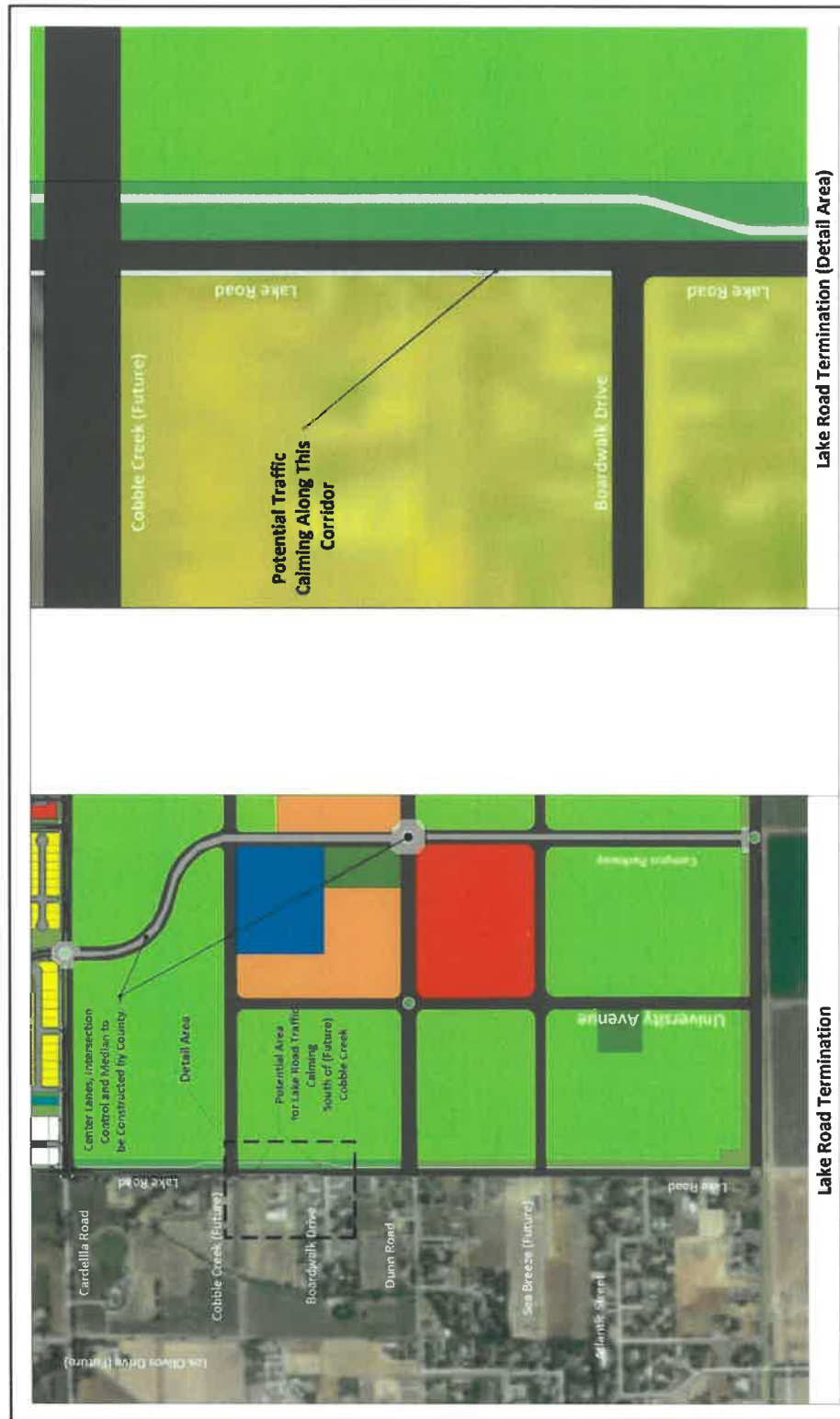


Figure 48: Campus Parkway Lake Road South of Meyers Gate Detail

Infrastructure/Public Facilities Framework

Domestic Water

The main water facilities slated to serve the site consist of the existing City municipal well located on the UC Merced campus, an 16-inch main in Lake Road to be extended by the project from the Bellevue/Lake Road intersection to the project, an onsite municipal well to be developed in Phase 1A of the project (and to be located in the Community Recreation Center in Phase 1D), and looped water mains on the site ranging in size from 8" to 12". The system was sized and planned based on the City of Merced's Water Master Plan criteria to ensure adequate domestic and fire flows. The water master plan study prepared for the project determined that a pressure sustaining valve is necessary to create a separate pressure zone for the UC Merced and UCP area because of local topography. The water master plan study for the project is contained in **Appendix D**. Main lines within the project will be looped through the individual phases to provide required flows and redundancy. **Figure 50** shows the planned onsite and offsite water system improvements.

The project proposes several features that meet and exceed the current State and City water conservation and management regulations. Development in the Project area is to be designed so that the projected annual residential water consumption for the project is 25 percent less than the city's current average daily residential per-person water consumption (estimated by the State Department of Water Resources to be 127.5 gallons per day per person), to achieve an average water consumption rate of 100 gallons per day per capita. To meet this goal, Section 13.3 of the specific plan sets forth design requirements including the limited usage of turf for individual yard landscaping, which require lower water usage, usage of drip irrigation systems with rain and moisture sensors, plumbing fixtures that comply with EPA "WaterSense" standards and to CalGreen flow standards, and the usage of "Compact Plumbing" strategies.

The site currently uses approximately 2,950 acre-feet of ground water per year from local irrigation wells. The Water Supply Assessment prepared for the project (**Appendix C**) estimated that the water usage on the site is approximately 100 gallons per day per person (including commercial demand and public park demand) compared to the current average citywide usage of 127.5 gallons per capita per day (gpcd). Total estimated water usage for the project at full buildout is 1,550 AF/Year; with the return of 300 AF of water to groundwater basin at the treatment plant, the net water usage is 1,250 AF. The Water Supply Assessment determined that there are adequate water supplies in the City; the onsite well is needed for higher fire flows associated with the elementary school, and to provide redundancy for the UC Merced well.