APPENDIX K

Construction Emissions Mitigation Fee Matrix
and Air Quality and Emissions Reduction Plan

Construction Emissions Mitigation Fee (draft)

PART 1: PROJECT INFORMATION

Project Name:	Rio Del Oro PP - Phase 1				
Control/Application #:					
Single Family Dwelling Units:	1450				
Multi Family Dwelling Units:	1544	Total Residential Acreage:	435		
Non-residential Square Feet:	29,620,800	Total Non-residential Acreage:	680		

PART 2: EMISSIONS INFORMATION

	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated*	NOx over threshold (lbs/day)	duration (days)	Total significant NOx (lbs)
Year 1	Demolition	0.00	0.00	0	0	0.00
Year 1	Grading	728.56	582.85	497.85	117	58049.08
Year 1	Building Construction	530.19	424.15	339.15	264	89536.13
Year 2	Building Construction	505.46	404.37	319.37	264	84313.15
Year 3	Building Construction	480.64	384.51	299.51	264	79071.17
Year 4	Building Construction	455.06	364.05	279.05	264	73668.67
Year 5	Asphalt	54.63	43.70	0	46	0.00
Year 5	Building Construction	465.36	372.29	287.29	264	75844.03
Year 6	Building Construction	465.36	372.29	287.29	264	75844.03
Year 7	Building Construction	465.36	372.29	287.29	264	75844.03
Year 8	Building Construction	465.36	372.29	287.29	264	75844.03
Year 9	Building Construction	465.36	372.29	287.29	264	75844.03
Year 9	Asphalt	54.12	43.30	0	46	0.00
	Total project NOx over threshold (lbs)		*763858.36*			
	Total project NOx over threshold (tons)		*381.93*			

PART 3: MITIGATION FEE RESULTS

Total Mitigation fee ($14,300/ton)	***$5,461,587***

Mitigation Fee ($/acre)	**$4,898.28**

* assumes a construction mitigation plan which achieves a 20% reduction in NOx

Construction Emissions Mitigation Fee (draft)

PART 1: PROJECT INFORMATION

Project Name:	Rio Del Oro HD - Phase 1		
Control/Application #:			
Single Family Dwelling Units:	1450		
Multi Family Dwelling Units:	1558	Total Residential Acreage:	435
Non-residential Square Feet:	29,620,800	Total Non-residential Acreage:	676

PART 2: EMISSIONS INFORMATION

	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated*	NOx over threshold (lbs/day)	duration (days)	Total significant NOx (lbs)
Year 1	Demolition	0.00	0.00	0	0	0.00
Year 1	Grading	728.56	582.85	497.85	117	58049.08
Year 1	Building Construction	529.76	423.81	338.81	264	89445.31
Year 2	Building Construction	505.60	404.48	319.48	264	84342.72
Year 3	Building Construction	480.27	384.22	299.22	264	78993.02
Year 4	Building Construction	454.27	363.42	278.42	264	73501.82
Year 5	Asphalt	51.86	41.49	0	46	0.00
Year 5	Building Construction	464.13	371.30	286.30	264	75584.26
Year 6	Building Construction	464.13	371.30	286.30	264	75584.26
Year 7	Building Construction	464.13	371.30	286.30	264	75584.26
Year 8	Building Construction	464.13	371.30	286.30	264	75584.26
Year 9	Building Construction	464.13	371.30	286.30	264	75584.26
Year 9	Asphalt	51.38	41.10	0	46	0.00
	Total project NOx over threshold (lbs)		*762253.24*			
	Total project NOx over threshold (tons)		*381.13*			

PART 3: MITIGATION FEE RESULTS

Total Mitigation fee ($14,300/ton)	***$5,450,111***
Mitigation Fee ($/acre)	**$4,907.80**

* assumes a construction mitigation plan which achieves a 20% reduction in NOx

Construction Emissions Mitigation Fee (draft)

PART 1: PROJECT INFORMATION

Project Name:	Rio Del Oro IM - Phase 1		
Control/Application #:			
Single Family Dwelling Units:	480		
Multi Family Dwelling Units:	3232	Total Residential Acreage:	308
Non-residential Square Feet:	29,620,800	Total Non-residential Acreage:	760

PART 2: EMISSIONS INFORMATION

	Activity Phase	NOx (lbs/day) unmitigated	NOx (lbs/day) mitigated*	NOx over threshold (lbs/day)	duration (days)	Total significant NOx (lbs)
Year 1	Demolition	0.00	0.00	0	0	0.00
Year 1	Grading	619.74	495.79	410.79	117	47898.35
Year 1	Building Construction	452.34	361.87	276.87	264	73094.21
Year 2	Building Construction	431.23	344.98	259.98	264	68635.78
Year 3	Building Construction	410.03	328.02	243.02	264	64158.34
Year 4	Building Construction	388.18	310.54	225.54	264	59543.62
Year 5	Asphalt	51.86	41.49	0	46	0.00
Year 5	Building Construction	366.92	293.54	208.54	264	55053.50
Year 6	Building Construction	399.43	319.54	234.54	264	61919.62
Year 7	Building Construction	399.43	319.54	234.54	264	61919.62
Year 8	Building Construction	399.43	319.54	234.54	264	61919.62
Year 9	Building Construction	399.43	319.54	234.54	264	61919.62
Year 9	Asphalt	51.86	41.49	0	46	0.00
	Total project NOx over threshold (lbs)		*616062.25*			
	Total project NOx over threshold (tons)		*308.03*			

PART 3: MITIGATION FEE RESULTS

Total Mitigation fee ($14,300/ton)	***$4,404,845***

Mitigation Fee ($/acre)	**$4,124.39**

* assumes a construction mitigation plan which achieves a 20% reduction in NOx

AIR QUALITY AND EMISSIONS REDUCTION PLAN

RIO DEL ORO

CITY OF RANCHO CORDOVA

Submitted to:

City of Rancho Cordova &

Sacramento Metropolitan Air Quality Management District

November 2006

Updated January 2010

Elliott Homes, Inc. • 80 Iron Point Circle, Suite 110 • Folsom, CA 95630
GenCorp Real Estate • 620 Coolidge Drive, Suite 100 • Folsom, CA 95630

EXECUTIVE SUMMARY

This document presents the Air Quality and Emissions Reduction Plan for the proposed Rio del Oro project in the City of Rancho Cordova.

The City of Rancho Cordova General Plan Policy AQ.1.2.3 requires all new development projects that exceed the Sacramento Air Quality Management District's (SMAQMD) operational threshold of significance to incorporate design, construction and/or operational features that will result in a reduction in emissions when compared to an "unmitigated baseline" project. Under Policy AQ.1.2.3, emissions reductions measures should consider cost-effectiveness, maximum cost and the provision of credits for emissions reductions already in place.

The measures contained in this Plan are also consistent with County of Sacramento General Plan Policy AQ-15, which requires "a 15% reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current ITE Trip Generation Handbook."

Rio del Oro is a 3,828-acre mixed use project proposed in eastern Sacramento County, in the City of Rancho Cordova. The project site is located south of White Rock Road, north of Douglas Road, and east of Sunrise Boulevard. Rio del Oro features approximately 11,601 residential units at a range of density levels, and a mix of commercial, business park, industrial park, school, park and open space uses.

Numerous trip reduction and emission reduction measures are proposed for the project and are identified below. Collectively, these measures will reduce peak hour vehicle trips by employees and reduce emissions from both mobile and direct sources by 15.0%.

RIO DEL ORO

SUMMARY OF PROPOSED AIR QUALITY AND EMISSIONS REDUCTION PLAN

CATEGORY Measure	Description
BICYCLE/PEDESTRIAN/TRANSIT	
1. Bicycle Lockers and Racks	Non-residential projects provide bicycle lockers and/or racks
2. Additional Bicycle Parking Facilities	Provide an additional 20% or required Class I and Class II bicycle facilities within each commercial development in the project area.
3. Shower and Locker Facilities	Non-residential projects provide personal showers and lockers
4. Class I Bicycle Storage - Residential	Bicycle storage (Class I) at apartment complexes or condos without garages
5. Class I and Class II Bicycle Facilities	Entire project is located within 1/2 mile of an existing Class I or Class II bike lane and provides a comparable bikeway connection to that existing facility
6. Pedestrian Facilities	The project provides for pedestrian facilities and improvements
7. Uses Proximate to Planned Transit	Bus service provides headways of 15 minutes or less for stops within 1/4 mile; project provides essential bus stop improvements
8. Transportation Information Kiosk	Provide a display case or kiosk within each commercial development, displaying transportation information
PARKING	
17. Carpool/Vanpool Parking	Provide preferential parking for carpool//vanpools

RIO DEL ORO SUMMARY OF PROPOSED AIR QUALITY AND EMISSIONS REDUCTION PLAN	
21. Parking Lot Design	Provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances.
MIXED USE	
30. Mixed Use	Have at least 3 of the following on-site and/or within 1/4 mile: Residential Development, Retail Development, Personal Services, Open Space, Office
31. Neighborhood as Focal Point	Neighborhood serving as focal point with parks, school and civic uses within 1/4 mile
32. Bicycle and Pedestrian Paths	Separate, safe and convenient bicycle and pedestrian paths connecting residential, commercial and office uses.
33. Elimination of Barriers	The project provides a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential land uses that impede bicycle or pedestrian circulation.
BUILDING COMPONENTS	
41. Natural Gas Fireplace	Install lowest emitting commercially available fireplace in all residences where fireplaces installed.
42. Energy Star Roofs	Install Energy Star labeled roof materials
43. Exceed Title 24	Project exceeds Title 24 requirements by 20%.

RIO DEL ORO SUMMARY OF PROPOSED AIR QUALITY AND EMISSIONS REDUCTION PLAN	
45. High Speed Data Connection	Install a connection for high speed data transmission to each residential unit through the installation of fiber optic cable, T-1 wiring or other comparable technology.
TRANSPORTATION DEMAND MANAGEMENT & MISC.	
51. TMA Membership	Include permanent TMA membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other non-revocable funding mechanism
65. Lawnmowers	Provide a complimentary cordless electric lawnmower to each residential buyer

1.0 INTRODUCTION

The City of Rancho Cordova General Plan Policy AQ.1.2.3 requires large development projects to incorporate design, construction and/or operational features that will result in a reduction in emissions when compared to an "unmitigated baseline" project. The purpose of this document is to describe the design features and other mechanisms that will achieve the required reduction in emissions to comply with this policy. The Rio del Oro project will reduce impacts to traffic and air quality through the following means:

- Reduce total vehicle emissions in the City of Rancho Cordova by reducing the number of vehicle trips that might otherwise be generated by residents and visitors to the project area and by utilizing building materials and machinery that will reduce emissions;
- Reduce peak hour traffic congestion by reducing both the number of vehicle trips and vehicular miles to travel that might otherwise be generated by residents and visitors; and

- Increase the efficiency of the existing transportation network and achieve the highest possible level or service at existing critical intersections

The Sacramento Metropolitan Air Quality Management District (SMAQMD) *Guide to Air Quality Assessment* (July 2004) and *Indirect Source Review Program Implementation Guidelines* (February 1995) provide guidance to local land use agencies in implementing an indirect source review program. The SMAQMD has prepared a list of measures and corresponding reduction credits that can be applied to meet the targeted 15% reduction in emissions. Each emission reduction measure is assigned a point value, which is approximately equivalent to the percentage reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current ITE Trip Generation Handbook. See County of Sacramento General Plan Policy AQ-15. The emission reduction measures are organized into the following categories:

- Bicycle, Pedestrian and Transit
- Parking
- Mixed Use
- Building Components
- Transportation Demand Management and Miscellaneous

Section 2 of this document describes the proposed project and the current transportation setting. Section 3 describes each measure that will be implemented in the project to reduce both emissions and employee-generated, single-occupant vehicle trips during peak hours. Section 4 summarizes the proposed measures and identifies credits for each measure toward the emissions reduction requirements.

Implementation of the measures identified in this report will be required as a condition of approval of the Rio del Oro project and enforceable by the City as lead agency under the requirements of the California Environmental Quality Act (CEQA) and applicable provisions of the Municipal Code.

2.0 PROJECT DESCRIPTION AND TRANSPORTATION SETTING

Rio del Oro is a 3,828-acre mixed use project proposed in eastern Sacramento County, in the City of Rancho Cordova. The project site is located south of White Rock Road, north of Douglas Road, and east of Sunrise Boulevard, as shown on **Figure 1**. Rio del Oro features approximately 11,601 residential units at a range of density levels, and a mix of commercial, business park, industrial park, school, park and open space uses, as described in Table 1.

Table 1 - Land Use Summary

LAND USE	ACRES	DENSITY	FIXED COUNT	UNIT COUNT
Single Family Residential	1,518.5	2.1 to 6.0	5 du/acre	7,593
Medium Density Residential	256	6.1 to 18.0	8 du/ac	2,048
High Density Residential	98	18.1 to 40.0	20 du/acre	1,960
Village Commercial	20			
Local Town Center	20			
Regional Town Center	113			
Business Park	86			
Industrial Park	283			
Public/Quasi-Public	7.5			
School Campus	78			
Middle School	20			
Elementary School	54			
Community Park	107			

LAND USE	ACRES	DENSITY	FIXED COUNT	UNIT COUNT
Neighborhood Parks	67.5			
Storm Water Detention	39			
Wetland Preserve	510			
Drainage Parkway	138			
Private Recreation	54			
Open Space	12			
Open Space Preserve	22			
Landscape Corridors	82			
Greenbelts	51			
Major Roads	192			
TOTAL	3,828.5			11,601

An illustrative site plan of the Rio del Oro project is shown as **Figure 2**.

The concept plan for Rio del Oro is intended to encourage internal pedestrian circulation and ease of access through the following design and land use features: a network of pathways, greenbelts and landscaped boulevards that will provide a pleasant pedestrian experience; the location of compatible and complementary land uses is close proximity; and many linkages between the internal pedestrian/bicycle network to new paths and trails or existing and planned regional serving facilities on the periphery of the project site. Design standards and guidelines will ensure that such pedestrian-friendly features such as a street tree planting program, open space corridors, pedestrian and vehicular linkages and connections between

parking lots and development sites as well as between residential and commercial development, will be liberally incorporated into the project.

2.1 Access Characteristics

Vehicular access to the project site will be primarily from White Rock Road, Sunrise Boulevard, and Douglas Road. Primary access to U.S. 50 would be from the existing Zinfandel Drive and Sunrise Boulevard interchanges, and under long-range conditions, from a new "Sunrise Reliever" interchange located to the east of the existing Sunrise Boulevard interchange.

2.2 Bicycle Facilities

Bicycle facilities are currently limited near the project site. A Class I off-street bike path parallels Sunrise Boulevard from White Rock Road south to Grant Line Road along the Folsom South Canal. However, the City of Rancho Cordova's Bikeway and Trails Plan (incorporated into the General Plan Circulation Element) includes on-street bicycle lanes on Sunrise Boulevard, Grant Line Road, Jackson Road (past Grant Line Road), Kiefer Road, Douglas Road, Eagles Nest Road, and White Rock Road. See **Figure 3.**

2.3 Transit Service and Facilities

Sacramento Regional Transit (RT) operates bus and light rail transit (LRT) service in Sacramento County. The existing and planned fixed-route bus service in the vicinity of the project site are described below and shown on **Figure 4**.

Fixed-Route Bus Service

Fixed-route bus service is provided northwest of the project site. Routes 73 and 74 provide service along White Rock Road, terminating at Sunrise Boulevard. Route 109 is operated during weekday peak period only along U.S. 50. The following describes these individual routes in greater detail.

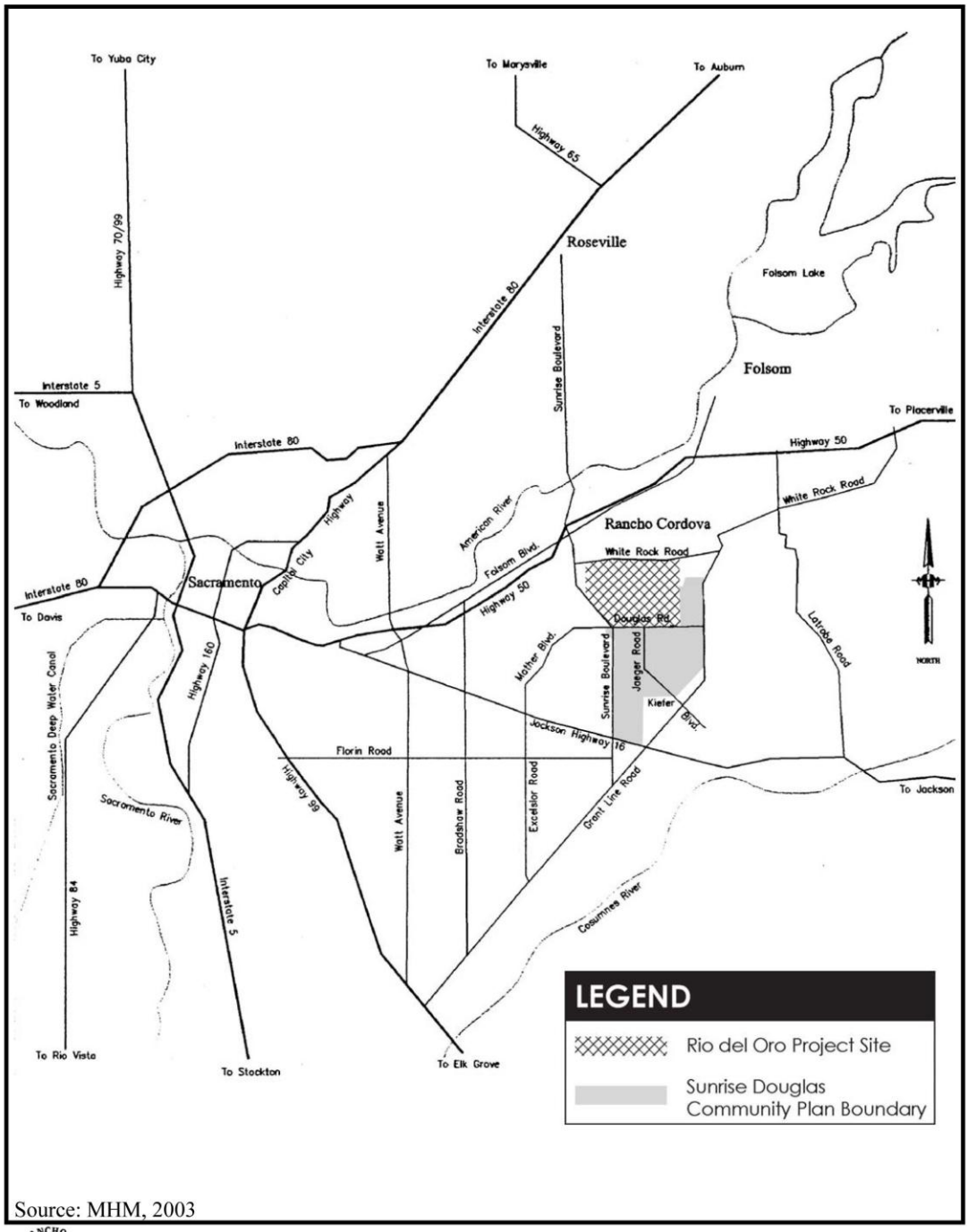
Route 73 provides service between the Mather Field/Mills light rail station and Kilgore Road near the U.S. 50/Sunrise Boulevard interchange. Weekday service is provided between 6:20 A.M. and 6:45 P.M. on 15- to 60-minute headways. Saturday service is provided between provided between 8:00 A.M. and 6:20 P.M. on 60-minute headways. No Sunday or holiday service is provided.

Route 74 provides fixed-route service between the Mather Field/Mills Light Rail station and Kilgore Road on weekdays only. The route operates between 6:00 A.M. and 6:20 P.M. on 60-minute headways. No Saturday, Sunday or holiday service is provided.

Route 109 (Hazel Express) is an express bus route between Orangevale and Downtown Sacramento. During the morning commute period, the bus operates from 6:30 A.M. to 8:00 A.M. on approximately 30-minute headways in the westbound direction only. During the evening commute period, the route operates from 4:35 P.M. to 6:20 P.M. on 45- to 50-minute headways in the eastbound direction only.

LRT Service

Light Rail Transit (LRT) is provided from Downtown Sacramento along the U.S. 50 corridor to the Sunrise Boulevard Station. A LRT extension eastward to the City of Folsom was completed in 2005. The Sunrise Boulevard Station is the nearest to the project site and has a 489-space park and ride lot.



Source: MHM, 2003

FIGURE 1
RIO DEL ORO
PROJECT LOCATION MAP

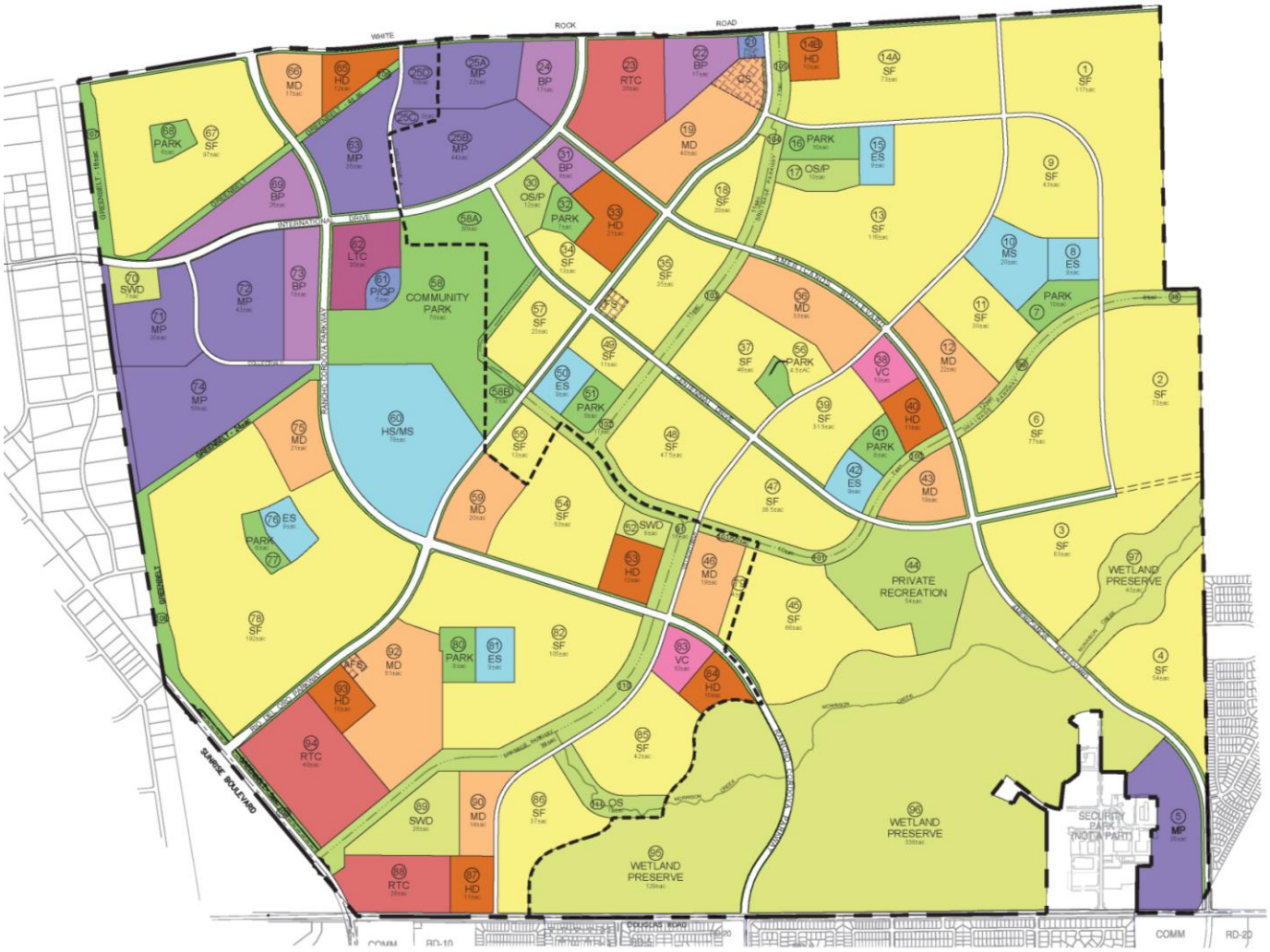
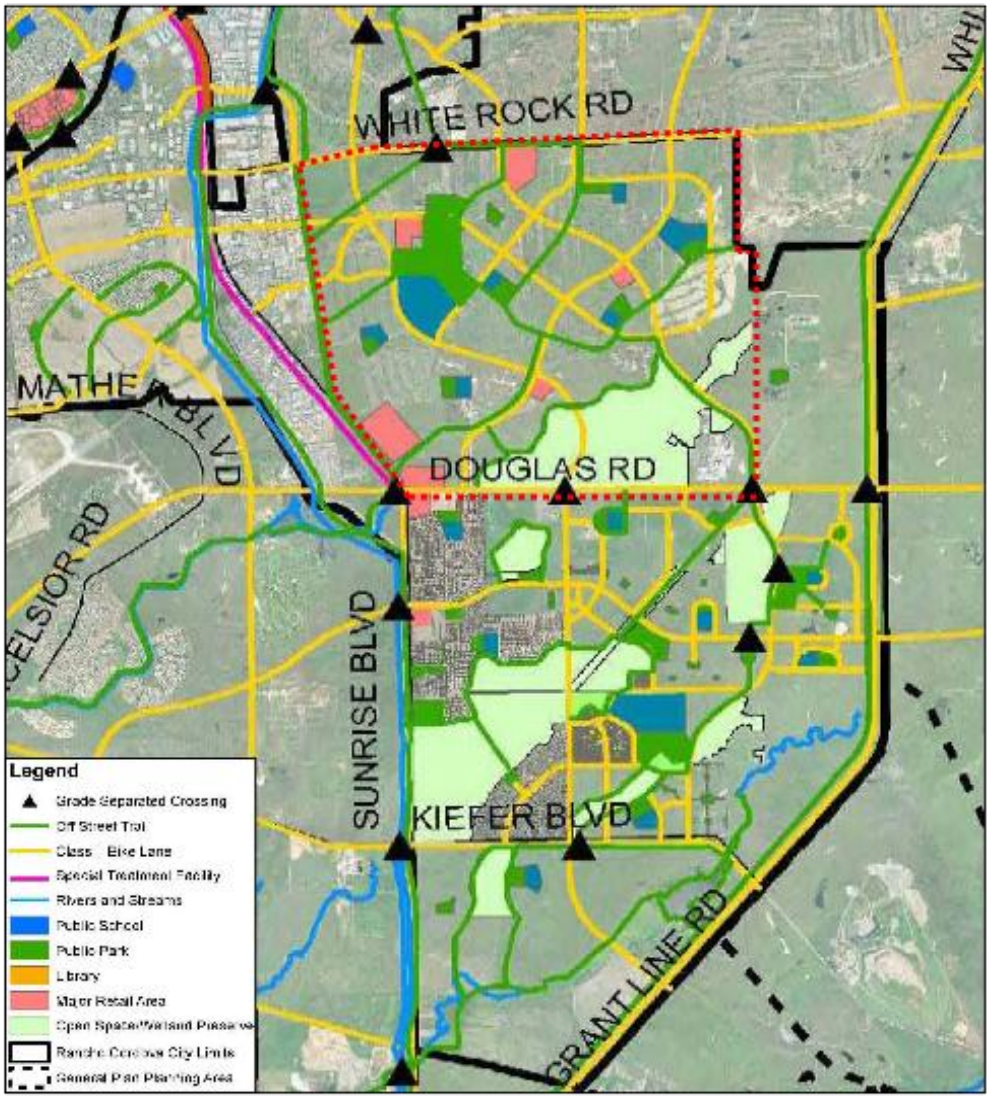
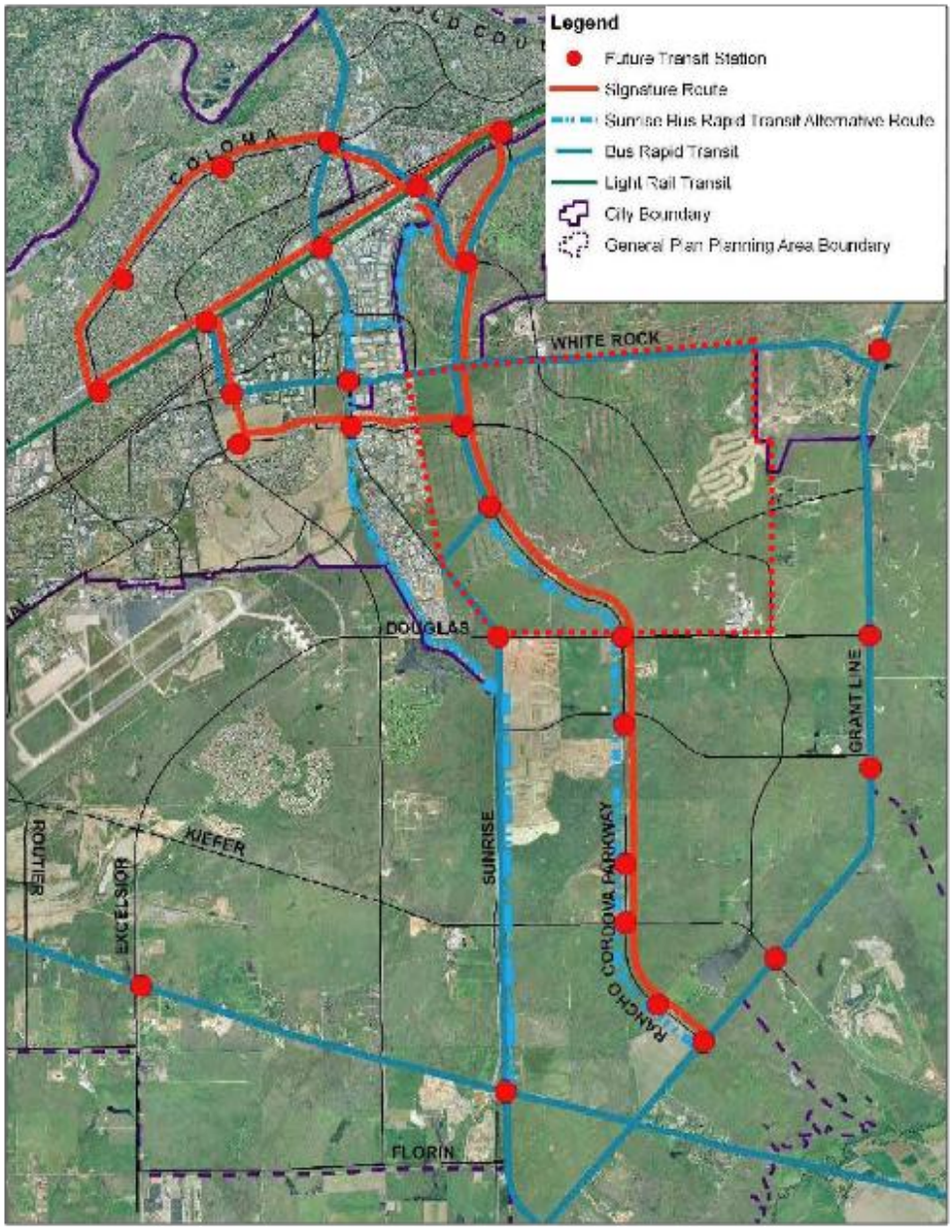


FIGURE 2
RIO DEL ORO
LAND USE PLAN



Portion of Bikeway & Trails Plan
(Figure C-2)
Rancho Cordova General Plan

FIGURE 3
CITY OF RANCHO CORDOVA BIKEWAY AND TRAIL PLAN



Portion of Transit System Map
(Figure C-3)
Rancho Cordova General Plan

FIGURE 4
CITY OF RANCHO CORDOVA TRANSIT SYSTEM PLAN

3.0 PROPOSED MEASURES

This section presents measures to reduce emissions as required by General Plan Policy AQ.1.2.3. Each measure is consistent (in scope and numbering) with the menu of creditable measures for emissions reduction developed by the SMAQMD. Measures are applicable to Residential (R), Commercial (C) and Mixed-Use (M) projects as identified by SMAQMD criteria.

3.1 Bicycle/Pedestrian/Transit Measures

Measure 1 - Bicycle Lockers and Racks (C)

Commercial uses within the project will install bicycle lockers and/or racks, which will provide employees with safe and convenient bicycle storage. The Rio del Oro Development Standards and Design Guidelines (Section 3.4.2) provide that "on-site amenities for bicycle parking shall be provided in a convenient location within each center and designed as an integral part of the site. The City Zoning Code requires one Class I or Class II bicycle storage space for every 25 vehicle parking spaces, and one Class II bicycle storage space for every 33 patron vehicle spaces. This measure is intended to reduce vehicle trips and associated emissions by encouraging employees to ride bicycles to work and for services. Locations of bicycle racks and storage will be clearly identified prior to City approval of commercial, business park and industrial park site plans. This measure applies to parcels within the plan area designated as Village Commercial (VC), Local Town Center (LTC), Regional Town Center (RTC), Business Park (BP) and Industrial Park (MP) on **Figure 5**.

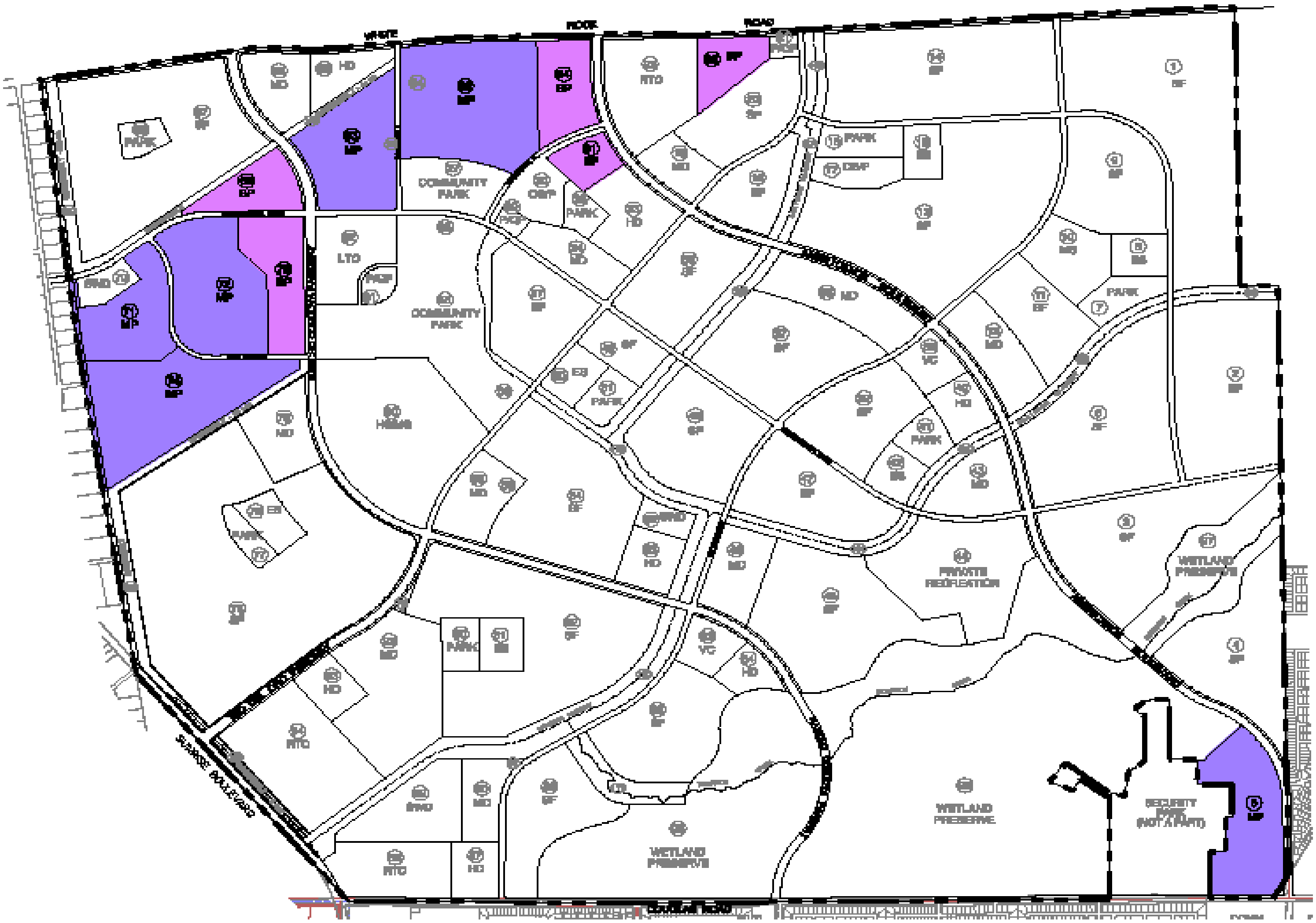


Figure 5
Commercial and Employment Land Uses

Measure 2 - Additional Bicycle Parking Facilities (C)

As described above with respect to Measure 1, the City Zoning Code requires one Class I or Class II bicycle storage space for every 25 vehicle parking spaces, and one Class II bicycle storage space for every 33 patron vehicle spaces. The project will provide an additional 20% of required Class I and Class II bicycle facilities within each commercial, office and industrial development in the plan area. This measure is intended to reduce vehicle trips and associated emissions by encouraging employees to ride bicycles to work and for services. Locations of bicycle racks and storage will be clearly identified prior to City approval of commercial, business park and industrial park site plans. This measure applies to areas within the project site designated as Village Commercial (VC), Local Town Center (LTC), Regional Town Center (RTC), Business Park (BP) and Industrial Park (MP) on **Figure 5**.

Measure 3 - Shower and Locker Facilities (C)

Showers for both men and women as well as lockers will be located in accordance with the City Zoning Code, at all commercial development sites with more than 200 employees, as support for bicycle use and walking. See City Zoning Code Section 330-145. Under Section 330-142 of the City Zoning Code, square-footage equivalents are defined as follows:

TYPE OF USE	MINIMUM DEVELOPMENT SIZE (IN SQUARE FEET) EQUIVALENT TO 200 EMPLOYEES
Office (excluding medical)	50,000
Industrial Office Park (MP)	60,000
Hospital and Medical Offices	80,000
Commercial	100,000
Light Industrial (M-1)	95,000
Heavy Industrial (M-2)	130,000
Mixed or Multiple Uses	(a)

One (1) shower and eight (8) lockers with minimum dimensions of 12 inches X 18 inches X 36 inches shall be provided for each two hundred (200) employees or fraction thereof, based on the equivalent development size data in Section 330-142 shown above. The design and/or management of the shower and locker facilities shall provide for access by both male and female employees. The shower and locker facilities must be located convenient to one another and located within 200 feet of the employee bicycle parking facilities. This measure applies to areas within the plan area designated as Village Commercial (VC), Local Town Center (LTC), Regional Town Center (RTC), Business Park (BP) and Industrial Park (MP) on **Figure 5**.

Measure 4 - Bicycle Storage for Residential Projects (R)

Any multi-family development within the plan area that does not provide a private garage for each unit, Class I bicycle storage will be provided, including bicycle lockers and racks. Bicycle storage facilities shall be provided in accordance with Zoning Code Section 330-131 standards for multi-family development as follows:

- 1 bicycle space for every 3 units for complexes of 30 units or less
- 1 bicycle space for every 4 units for complexes of 31 to 100 units
- 1 bicycle space for every 5 units for complexes of 101 or more units

Locations of bicycle storage facilities will be clearly identified on multi-family residential site plans prior to City approval. This measure applies to areas within the plan area designated as Medium Density Residential (MD) and High Density Residential (HD) on **Figure 6**.

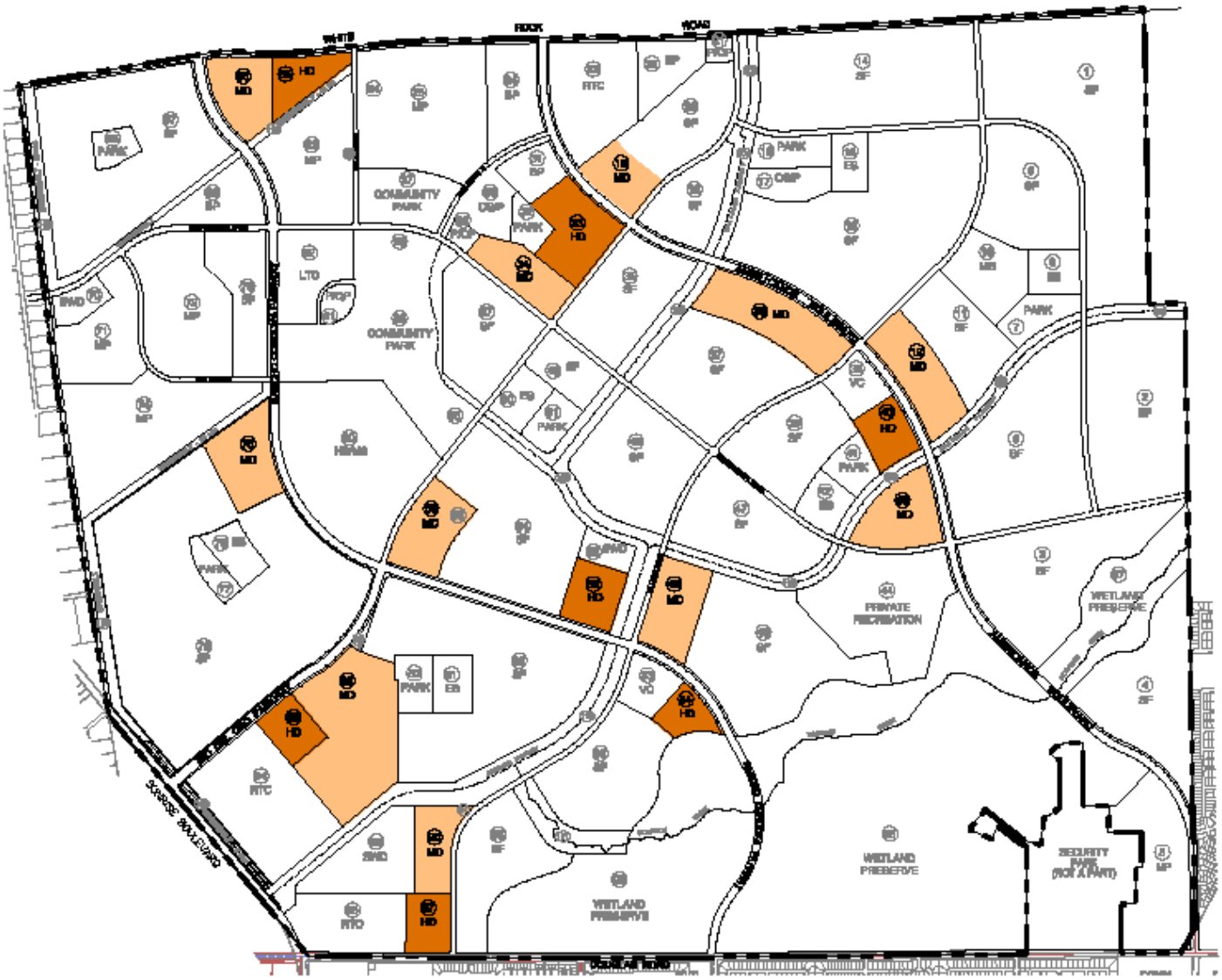


FIGURE 6
MEDIUM AND HIGH DENSITY RESIDENTIAL LAND USES

Measure 5 - Class I and Class II Bicycle Facilities (R,C,M)

The Rio del Oro project include Class II bicycle facilities as part of roadway improvements on Rio del Oro Parkway, Jaeger Road, Americanos Boulevard, Villagio Parkway and White Rock Road. These facilities will be constructed to City standards, and will include all appropriate signage and striping. Bicycle facilities will be constructed concurrently with parallel roadways through the plan area, connecting with adjacent facilities to become part of the overall bicycle circulation network within the City. Bicycle facilities within the plan area are shown in **Figure 7.1**. As described above, a Class I off-street bike path parallels Sunrise Boulevard from White Rock Road south to Grant Line Road along the Folsom South Canal. In addition, Class II bike lanes currently exist along the north side of White Rock Road immediately to the west of the Plan Area, providing for eventual connection to the Folsom South Canal bicycle trail. Class II bike lanes presently exist (or are under construction) along Sunrise Boulevard between White Rock Road and Douglas Road as well as along Douglas Road and a connection to the Folsom South Canal bike trail at Douglas Road. See **Figure 7.2.** The City of Rancho Cordova's Bikeway and Trails Plan (incorporated into the General Plan Circulation Element) includes on-street bicycle lanes on Sunrise Boulevard, Grant Line Road, Jackson Road (past Grant Line Road), Kiefer Road, Douglas Road, Eagles Nest Road, and White Rock Road. See **Figure 3**. The Plan would provide for Class 1 off-street trails in six separate but connecting networks through the Plan area. See **Figure 7.1**.

Consistent with General Plan policies C.2.5, C.2.6, C.2.7 and associated actions, the City will require that Rio del Oro Specific Plan planned Class I and II bikeway improvements and connections be provided concurrent with associated project and roadway development to the satisfaction of the City as part of conditions of approval for tentative map applications.

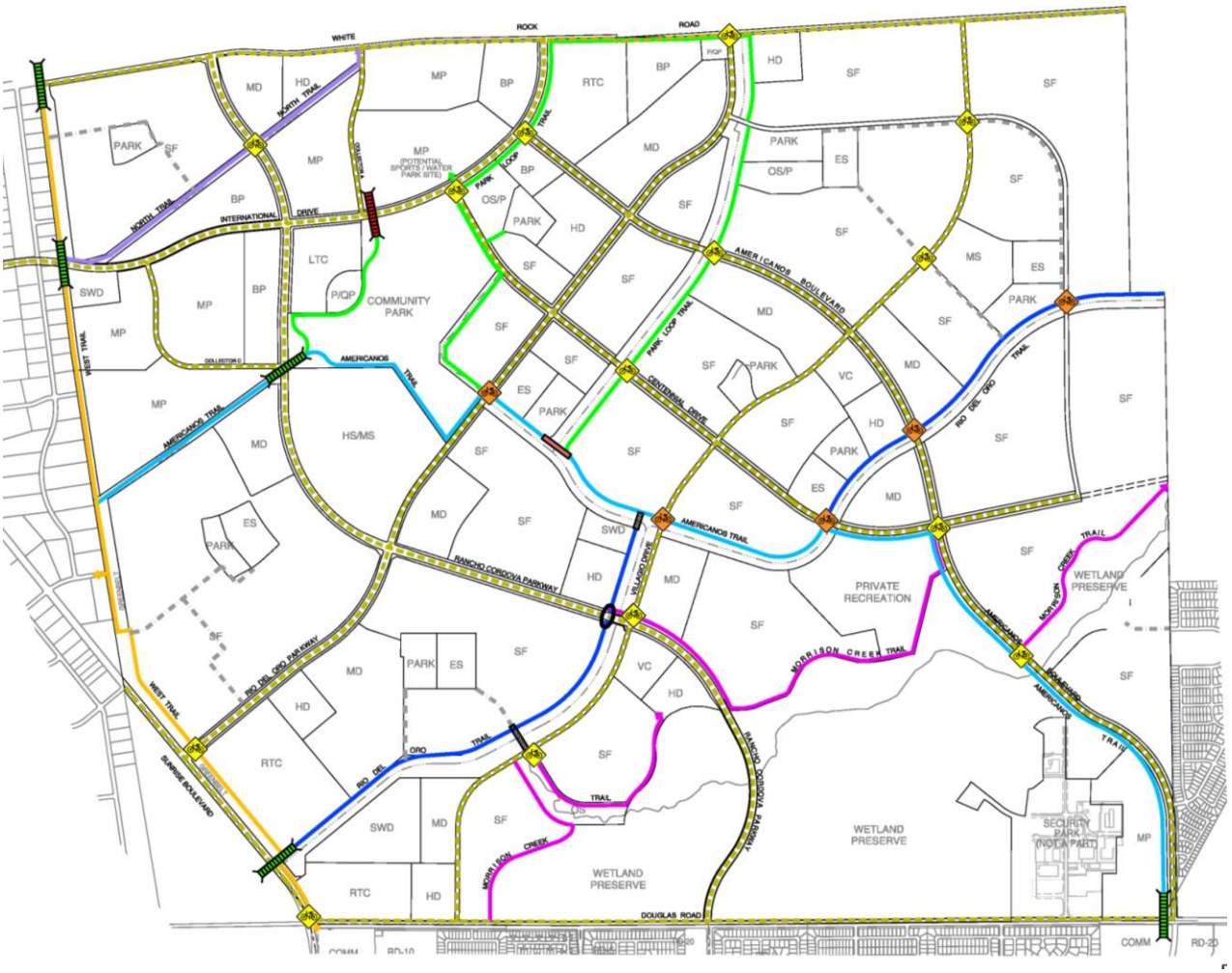


FIGURE 7.1
RIO DEL ORO BIKEWAYS PLAN

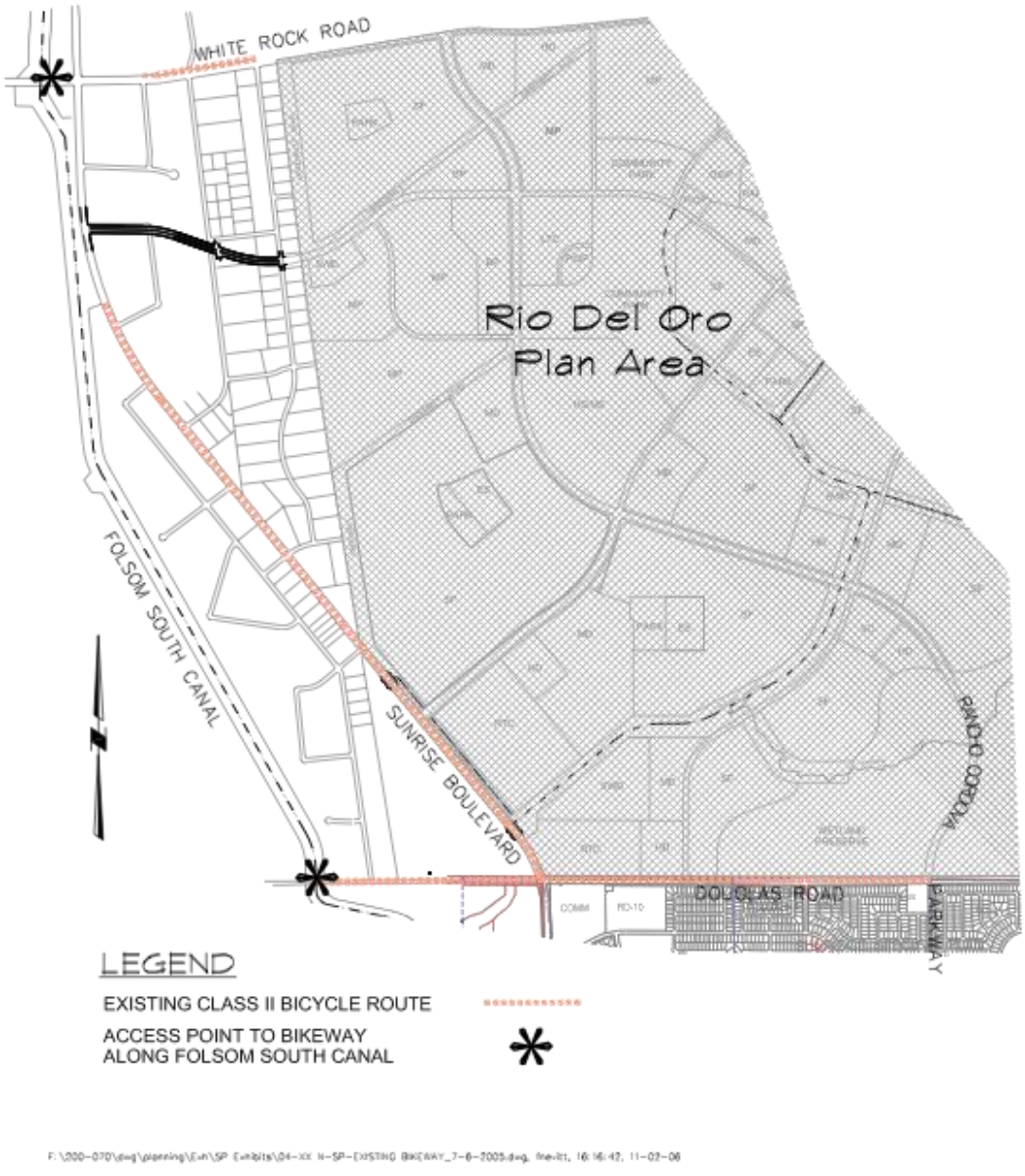


FIGURE 7.2

EXISTING CLASS II BIKEWAY FACILITIES

Measure 6 - Pedestrian Facilities (R,C,M)

The design of the Rio del Oro project features pathways and connections between land uses and buildings as well as to and from bus stops that are direct, shaded and lighted. All pathways will meet ADA requirements for width, slope, grade and access. Per the City Design Guidelines, sidewalks will be designed and maintained at the following minimum width:

- 5 feet where the sidewalk is separated from the roadway
- 7 feet where the sidewalk is not separated from the roadway
- 8 feet in front of schools and commercial uses
- Sidewalks internal to the site (and not part of a public right-of-way) shall be a minimum of 6 feet in width.

As described in the Rio del Oro Design Guidelines (Section 3.2.4), highly visible crosswalks will be constructed at each intersection, incorporating changes in paving materials to safety, visibility and aesthetics. Pedestrian pathways will be shown on improvement plans for each use, and will connect adjacent land uses and provide connections to sidewalks and other pedestrian features within the plan area. Consistent with General Plan Policy C.2.3 and associated actions, the City will require that Rio del Oro Specific Plan sidewalks, high visible crosswalks, trails and other associated planned pedestrian facilities and connections be provided concurrent with associated project and roadway development to the satisfaction of the City as part of conditions of approval for tentative map applications.

Measure 7 - Commercial Uses Proximate (1/4 Mile) to Planned Transit (7)

Sacramento Regional Transit currently provides bus service in the vicinity of the plan area, Monday through Friday, on Routes 73, 74 and 109. Saturday service is provided by Route 73. The Rio del Oro project includes plans for bus stop improvements, bus turnouts and bus shelters to accommodate future extension of bus service to the project site. The exact location of these facilities will be determined in consultation with City staff and transit district staff. Bus stops will be designed in consultation with the transit service provider and are expected to include transit route information, benches, shelter and lighting, electrical connections, easements and pads. Planned transit stops within the plan area would be located nearby (within 1/4 mile) to high density residential and employment-generating land uses along arterial roadways, and these planned uses will be able to easily access transit services when extended to the site. This planning approach is intended to achieve a nucleus of ridership sufficient to warrant transit service at 15-minute headways. As shown on **Figure 4** above, transit service is proposed along White Rock Road, Douglas Road, and International Drive through the Plan Area.

In addition, Bus Rapid Transit (BRT) service is planned along Rancho Cordova Parkway, which is designated as an Enhanced Transit Corridor, all connecting the Plan Area to existing and proposed transit throughout the City. This measure applies to parcels within the plan area designated as High Density

Residential (HD)Village Commercial (VC), Local Town Center (LTC), Regional Town Center (RTC), Business Park (BP) and Industrial Park (MP) on **Figure 8**.

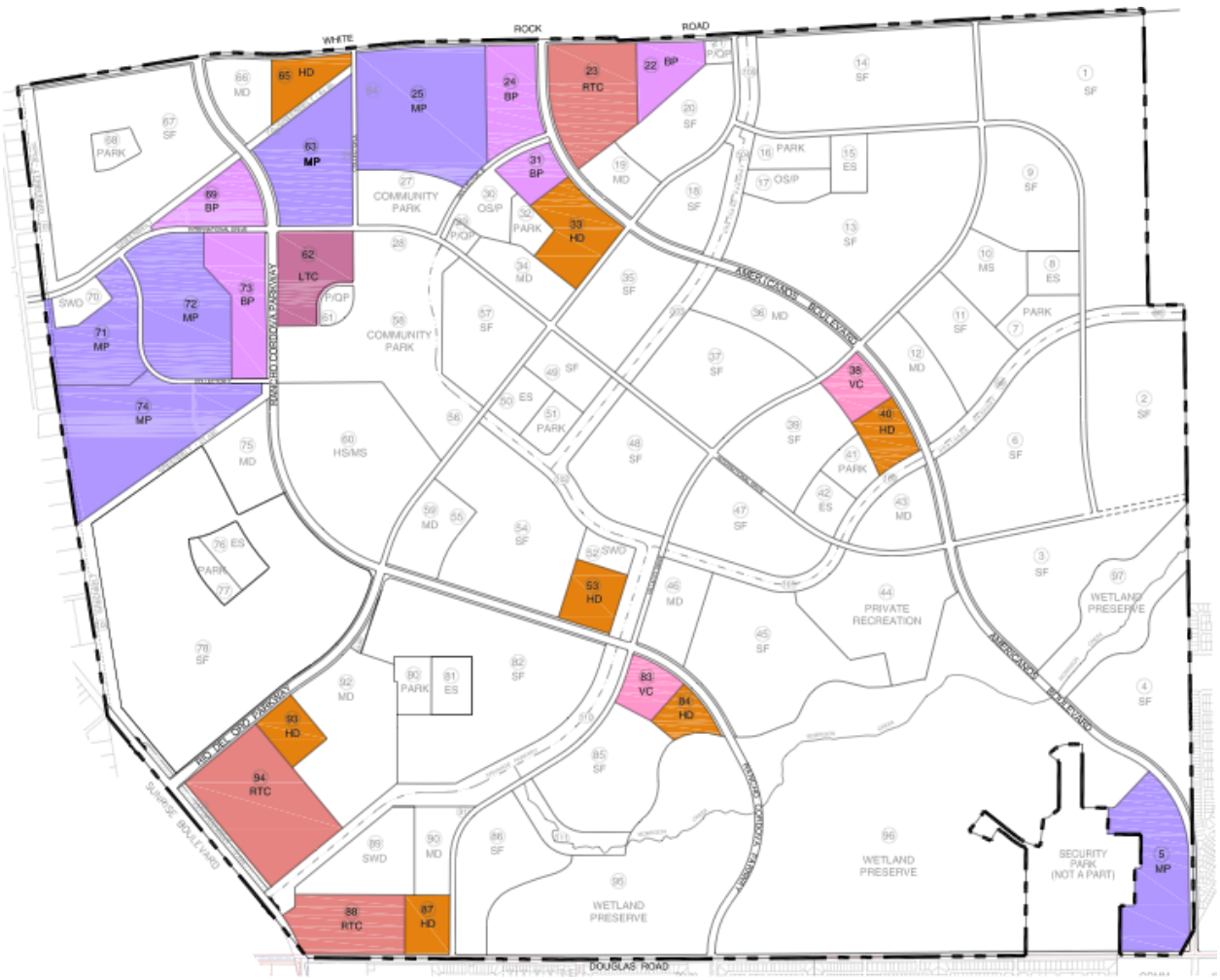


FIGURE 8
COMMERCIAL, EMPLOYMENT AND HIGH DENSITY RESIDENTIAL LAND USES

Measure 8 - Transportation Information Kiosk (R,C,M)

The project will provide a display case or kiosk within each commercial development, displaying transportation information in a prominent area accessible to employees and residents. The following is a brief list of the potential information that could be available at the kiosk:

- Carpool and Vanpool Matching
- Telecommuting Information
- Transit Schedules
- Emergency Ride Home Programs
- Park and Ride Information
- Air Quality Information
- Bicycle Discount Program
- TMA Meeting Schedule
- Newsletters

Materials within each transportation information kiosk shall be replenished and/or updated by management personnel for commercial, employment and high-density residential uses as appropriate to maintain currency. This measure applies to parcels within the plan area designated as High Density Residential (HD),Village Commercial (VC), Local Town Center (LTC), Regional Town Center (RTC), Business Park (BP) and Industrial Park (MP) on **Figure 8**.

3.2 Parking Measures

Measure 17 - Preferred Carpool/Vanpool Parking (C)

The City Zoning Code, Section 330-144, states that at least 10 percent of employee spaces will be for carpool/vanpool purposes. Under this Section, requirements for employee parking are determined as follows:

TYPE OF USE	PERCENT OF TOTAL PARKING DEVOTED TO EMPLOYEE PARKING
Office (excluding medical)	70%
Hospital and Medical Office	50%
Commercial	30%
Industrial	70%

The Rio del Oro project will comply with the City Zoning Code requirement for employee parking spaces, as well as carpool/vanpool spaces. Designated carpool/vanpool spaces will be located as close to employee entrances as possible. The location of carpool/vanpool spaces shall be identified on improvement plans, to the satisfaction of City staff, and shall be clearly marked when built. All carpool/vanpool spaces shall be covered, shaded, or in some other obvious way be designated as preferential. This measure applies to parcels within the plan area designated as Business Park (BP) and Industrial Park (MP) on **Figure 9**.

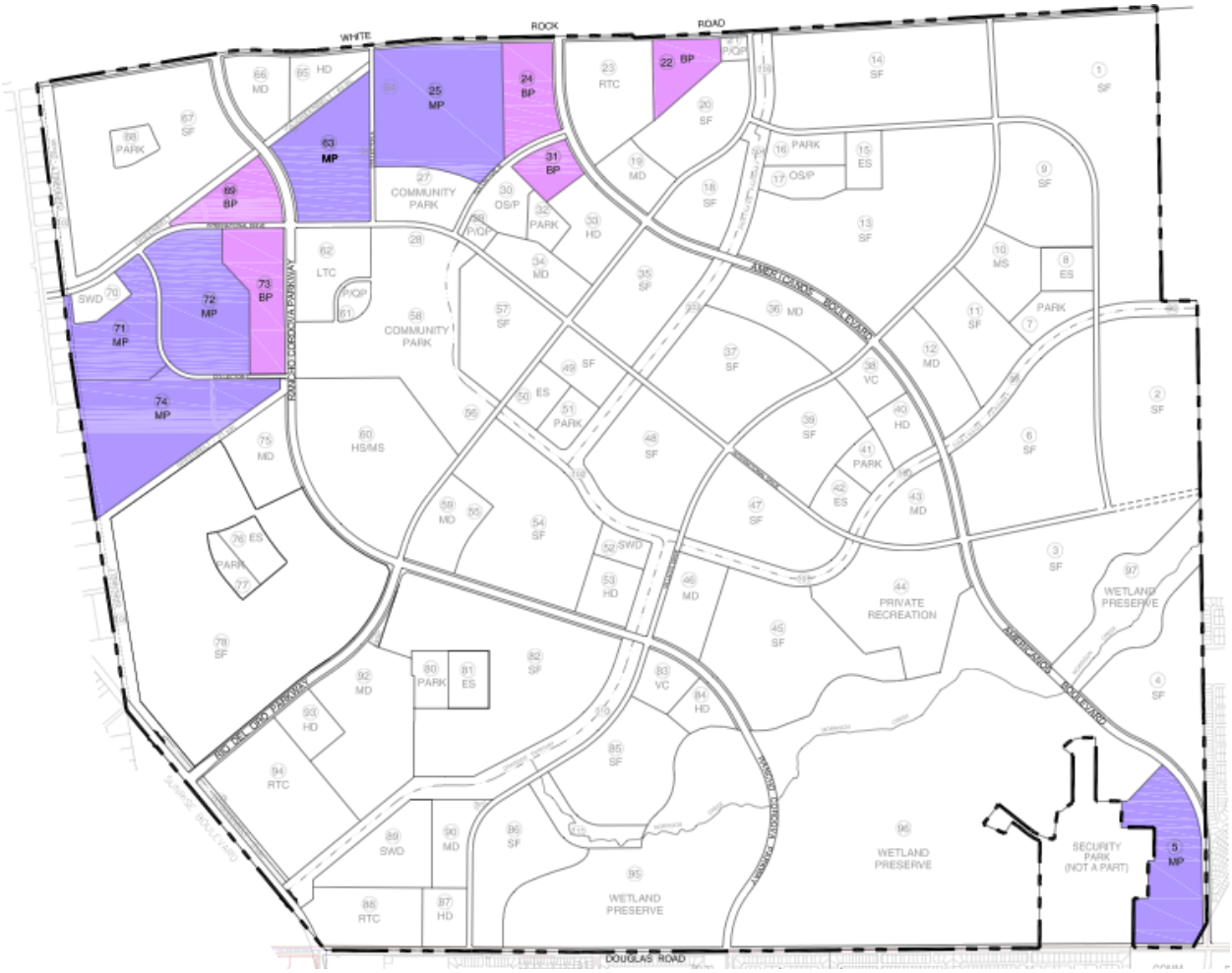


FIGURE 9
EMPLOYMENT LAND USES

Measure 21 - Parking Lot Design (C)

Surface parking lots utilized by non-residential development within the project will include clearly marked and shaded pedestrian pathways between transit facilities and business entrances. The Rio del Oro Design Guidelines Section 3.4.2.8 provide that surface parking lots shall be designed with clear visible access ways to major building entries, and shall contain landscaped areas with large shade trees to provide coverage. The Design Guidelines further require a green landscape buffer between parking areas and pedestrian ways. Pedestrian pathways shall be designed to minimize conflicts with vehicular traffic through the use of measures such as changes in paving and lighting to delineate a pedestrian path. Pathways may utilize tree cover or structures for shading purposes, as appropriate. Pedestrian pathways will be shown on improvement plans for each commercial use prior to City approval. This measure applies to parcels within the plan area designated as Village Commercial (VC), Local Town Center (LTC), Regional Town Center (RTC), Business Park (BP) and Industrial Park (MP) on **Figure 5**.

3.3 Mixed Use Development Measures

Measure 30 - Mixed Use within a Single Site (R,C,M)

The Rio del Oro project includes a mix of land zoned for commercial uses and multi-family land uses within close proximity, providing at least 3 of the following on-site and/or within 1/4 mile: Residential Development, Retail Development, Personal Services, Open Space, Office. Approximately 76% of the plan area is within a 1/4 mile walking distance from parks, open space, commercial and office/light industrial employment areas. See **Figure 10**.

FIGURE 10

PROXIMITY OF USES

Measure 31 - Neighborhood Serving as Focal Point (R,M)

The Rio del Oro project features neighborhoods in close proximity to parks, schools and civic uses within 1/4 mile. The relationship between residential communities and focal point land uses (including parks, schools and civic uses) is shown on **Figure 10**. Approximately 77 percent of all land uses within the Plan area are within 1/4 mile of parks, schools or public/quasi-public facilities.

Measure 32 - Bicycle and Pedestrian Paths (R,C,M).

The design of the Rio del Oro project features pathways and connections between land uses and buildings as well as to and from bus stops that are direct, shaded and lighted as appropriate. All pathways will meet ADA requirements for width, slope, grade and access, and shall be designed in accordance with City Design Guidelines 2:20 to 2:21, which provide for a linked system of bicycle paths through the plan area by:

- Direct connections to regional bicycle systems (streets with bike lanes, open spaces with bike paths, etc.)
- Bicycle routes shall continue to the property boundary to connect to existing systems on adjacent development or to allow future connections when adjacent properties develop
- Provide bicycle facilities and part of roadways/driveways with painted lanes and signage or provide a separate bicycle system

The Rio del Oro project include Class II bicycle facilities as part of roadway improvements on Rio del Oro Parkway, Jaeger Road, Americanos Boulevard, Villagio Parkway and White Rock Road. These facilities will be constructed to City standards, and will include all appropriate signage and striping. Bicycle facilities will be constructed concurrently with parallel roadways through the plan area, connecting with adjacent facilities to become part of the overall bicycle circulation network within the City. Bicycle facilities within the Plan area are shown on **Figure 7**. As described above, a Class I off-street bike path parallels Sunrise Boulevard from White Rock Road south to Grant Line Road along the Folsom South Canal. However, the City of Rancho Cordova's Bikeway and Trails Plan (incorporated into the General Plan Circulation Element) includes on-street bicycle lanes on Sunrise Boulevard, Grant Line Road, Jackson Road (past Grant Line Road), Kiefer Road, Douglas Road, Eagles Nest Road, and White Rock Road. See **Figure 3**. In addition, Class II bike lanes currently exist along the north side of White Rock Road immediately to the west of the Plan Area, providing for eventual connection to the Folsom South Canal bicycle trail. Class II bike lanes presently exist (or are under construction) along Sunrise Boulevard between White Rock Road and Douglas Road as well as along Douglas Road and a connection to the Folsom South Canal bike trail at Douglas Road. See **Figure 7.2** Pedestrian and bicycle pathways will be shown on improvement plans for each use, and will connect adjacent land uses and provide connections to sidewalks and other features within the plan area.

Measure 33 - Elimination of Barriers (C,M)

The complete elimination of barriers is not practical in a large mixed use project such as Rio Del Oro, due to the wide variety of land uses. However, in providing a mix of uses within close proximity, greater opportunities are created to promote non- vehicular use. It is understood that barriers such as walls, fences and berms will be necessary in some areas to provide for security, noise attenuation, to maintain compatibility between uses and for aesthetic enhancements.

The key is to ensure that the development pattern facilitates easy access between uses. The following design techniques shall be incorporated into the layout of residential and non-residential sites.

- Placement of physical barriers between compatible land uses, such as walls and fences, shall be limited.
- Residential subdivisions or housing site layouts shall provide a pedestrian/ bicycle access connection to any adjacent non-residential or public/quasi public use.
- The site design for all parcels shall incorporate a direct on-site connection to an adjacent pedestrian or bicycle facility.

As identified in the Rio Del Oro Design Guidelines and as required by the Rancho Cordova Open Space Standards, extensive pedestrian access to open space, parks and neighboring residential and non-residential uses is required, and the use of walls or other barriers that preclude connection between uses is limited. Project design will create meaningful public spaces and buildings that form a dialogue between uses and promote interactions. The intent of this design feature is to allow pedestrian and bicycle circulation to occur away from public streets as appropriate, and to increase direct internal connectivity. This is contrast to typical suburban site designs where each building or development is sealed off by curbs, walls, fences or other barriers from its neighbors.

The City will condition (consistent with the policy provisions of the General Plan Urban Design Element) subsequent non-residential development that no parcel perimeter walls (except for noise attenuation) or building orientation shall be included in site design without the provision of pedestrian and bicycle access for adjoining residential uses.

3.4 Building Component Measures

Measure 41 - Low Emissions Fireplaces (R)

The project will install lowest emitting commercially available natural gas fireplaces in all residential units where fireplaces are installed.

Measure 42 - Energy Star Roofs (R,C,M)

The project will install Energy Star labeled roof materials that meet an ASTM emissivity rating of 0.75 or higher. Compliance with this measure will require documentation confirming that the products installed are Energy Star certified and shall be verified by a site review and/or consultation with the lead agency.

Measure 43 -Exceed Title 24 (R, C, M)

The project will exceed Title 24 requirements by 20%. Implementation of this measure shall be verified by review and approval of a Title 24 compliance sheet by the lead agency.

Measure 45 - High Speed Data Connection (R)

The project will install a connection for high speed data transmission to each residential unit through the installation of fiber optic cable, T-1 wiring or other comparable technology. Connection jacks will be installed as a standard feature within each residential unit.

3.5 Transportation Demand Management and Miscellaneous Measures

Measure 51 - TMA Membership (R,C,M)

Transportation Management Associations (TMA) are private, non-profit organizations run by a voluntary Board of Directors and a small staff. TMAs assist businesses, developers, building owners, local government representatives and others to work together to collectively establish policies, programs and services to address local transportation problems and issues. The key to a successful TMA lies in the synergism of multiple businesses banding together to address and accomplish more than any employer, building operator or developer could do alone. TMAs typically provide a number of services, including:

- Carpool and Vanpool Matching
- Advocacy
- Telecommuting Information
- Transit Schedules
- Emergency Ride Home Program
- Park and Ride Information
- Air Quality Information
- Transportation Roundtable
- Bicycle Discount Program
- Newsletters

The Rio del Oro project intends to join together with an existing TMA already operating in the area, known as the Folsom/El Dorado /Cordova TMA. Project area funding contributions for TMA activities would be from annual assessments pursuant to the establishment of a new Benefit Zone within the existing County Service Area 10. Currently, Benefit Zones within County Service Area 10 have been

established for Villages of Zinfandel (Benefit Zone 1), SunRidge (Benefit Zone 2) and North Vineyard Station (Benefit Zone 3).

Measure 65 - Complimentary Cordless Electric Lawnmower (R)

The project will provide a complimentary cordless electric lawnmower to purchasers of single-family residential homes.

4.0 Credits Toward Emission Reduction Requirements

Table 2 identifies credits for each measure toward General Plan Policy AQ.1.2.3 emission reduction requirements. For each measure, points are derived from Appendix E of SMAQMD's *Guide to Air Quality Assessment*. As shown in Table 2, the Rio del Oro project achieves a reduction of 15.25 points based upon SMAQMD criteria.

REVISED TABLE 2 - RIO DEL ORO CREDIT TOWARD EMISSIONS REDUCTION REQUIREMENTS			
CATEGORY Measure	Description	Point Value	Reduction Credit by SMAQMD
BICYCLE/PEDESTRIAN/TRANSIT			
1. Bicycle Lockers and Racks	Non-residential projects provide bicycle lockers and/or racks	0.5	0.25
2. Additional Bicycle Parking Facilities	Provide an additional 20% or required Class I and Class II bicycle facilities within each commercial development in the project area.	0.5	0.25
3. Shower and Locker Facilities	Non-residential projects provide personal showers and lockers	0.5	0.25
4. Class I Bicycle Storage - Residential	Bicycle storage (Class I) at apartment complexes or condos without garages	0.5	0.25
5. Class I and Class II Bicycle Facilities	Entire project is located within 1/2 mile of an existing Class I or Class II bike lane and provides a comparable bikeway connection to that existing facility	1.0	1.0
6. Pedestrian Facilities	The project provides for pedestrian facilities and improvements	1.0	1.0

REVISED TABLE 2 - RIO DEL ORO CREDIT TOWARD EMISSIONS REDUCTION REQUIREMENTS			
7. Uses Proximate to Planned Transit	Bus service provides headways of 15 minutes or less for stops within 1/4 mile; project provides essential bus stop improvements	1.0	0.5
8. Transportation Information Kiosk	Provide a display case or kiosk within each commercial development, displaying transportation information	0.5	0.5
PARKING			
17. Carpool//Vanpool Parking	Provide preferential parking for carpools/vanpools	0.5	0.25
21. Parking Lot Design	Provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances.	0.5	0.5
MIXED USE			
30. Mixed Use	Have at least 3 of the following on-site and/or within 1/4 mile: Residential Development, Retail Development, Personal Services, Open Space, Office	1.0	0.75
31. Neighborhood as Focal Point	Neighborhood serving as focal point with parks, school and civic uses within 1/4 mile	0.5	0.25
32. Pedestrian and Bicycle Paths	Separate, safe and convenient bicycle and pedestrian paths connecting residential, commercial and office uses	2.0	2.0

REVISED TABLE 2 - RIO DEL ORO CREDIT TOWARD EMISSIONS REDUCTION REQUIREMENTS			
33. Elimination of Barriers	The project provides a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential land uses that impede bicycle or pedestrian circulation.	1.0	1.0
BUILDING COMPONENTS			
41. Natural Gas Fireplace	Install lowest emitting commercially available fireplace in all residences where fireplaces installed.	1.0	1.0
42. Energy Star Roof (new #27)	.Install Energy Star labeled roof materials	1.0	1.0
43. Exceed Title 24 (new #29)	Project exceeds Title 24 requirements by 20%.	1.0	1.0
45. High Speed Data Connection	Install a connection for high speed data transmission to each residential unit through the installation of fiber optic cable, T-1 wiring or other comparable technology.	0.5	0.5
TRANSPORTATION DEMAND MANAGEMENT & MISC.			
51. TMA Membership	Include permanent TMA membership and funding requirement. Funding to be provided by Community Facilities District or County Service Area or other non-revocable funding mechanism	2.5	1.0
65. Lawnmowers	Provide a complimentary cordless electric lawnmower to each residential buyer	2.0	2.0

REVISED TABLE 2 - RIO DEL ORO CREDIT TOWARD EMISSIONS REDUCTION REQUIREMENTS			
	TOTAL CREDIT	**19.00**	**15.25**
	Emissions Reduction Target		**15**