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May 5, 2008

Rachel DuBose
Sacramento Metropolitan Air Quality Management District
777 12th Street
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Sacramento, CA 95814

Subject: North Highlands Town Center Development Code – Final Operational Air Quality Mitigation Plan

Dear Ms. DuBose:

Please find the enclosed Final Operational Air Quality Mitigation Plan (AQMP) for the North Highlands Town Center Development Code project, submitted on behalf of Sacramento County. This version incorporates the revisions requested by SMAQMD per your March 25, 2008 conditional endorsement of the March 18, 2008 submittal of the revised AQMP.

Thank you for your continued support and guidance throughout the plan preparation process. I look forward to working with you in the future.

Sincerely,



Heather N. Phillips
Air Quality Analyst/
Climate Change Specialist

North Highlands Town Center Development Code Operational Air Quality Mitigation Plan

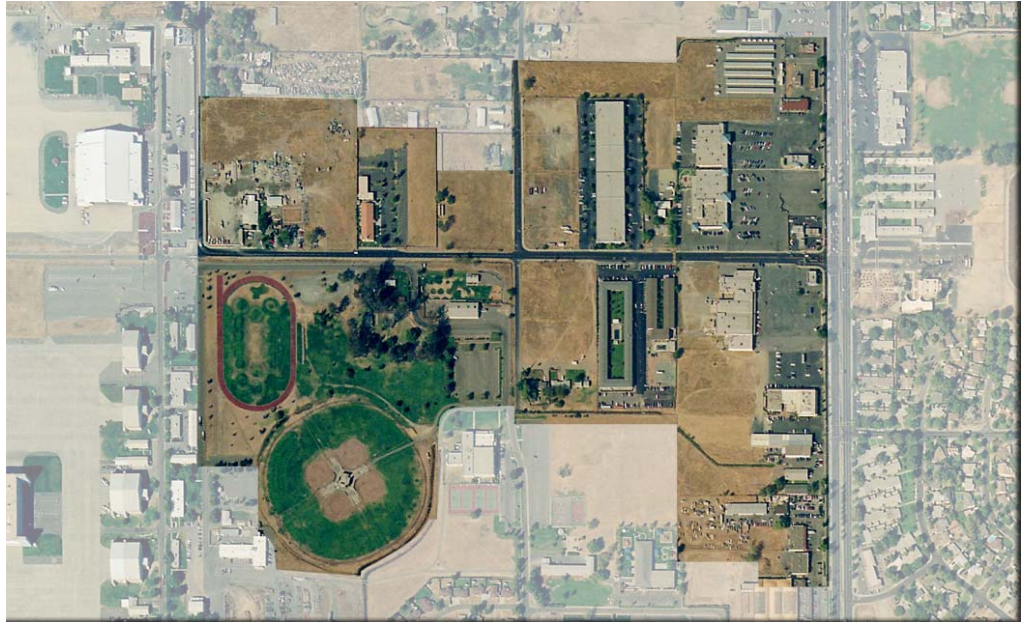


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North Highlands Town Center Development Code
Operational Air Quality Mitigation Plan



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A North Highlands Town Center Development Code	
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EXECUTIVE SUMMARY

The approximately 96-acre North Highlands Town Center (NHTC) area is located in western Sacramento County, west of Interstate 80 (I-80). The proposed project site is located at the intersection of Freedom Park Drive and Dudley Boulevard/34th Street. Implementation of the proposed project would result in a fine-grain mixture of commercial, residential, office, community support, park and open space land use types at the site.

This document describes mitigation measures that would be implemented to reduce project-generated operational emissions of the ozone precursors (reactive organic gases [ROG] and oxides of nitrogen [NO_x]) by 15% in accordance with policies of the Sacramento County General Plan Air Quality Element (General Plan) requiring “a 15 percent reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current Institute of Transportation Engineers (ITE) Trip Generation Handbook”(Sacramento County 1993) and as recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD). This plan also meets the requirements of the California Environmental Quality Act (CEQA) that mitigation be implemented to the extent feasible in order to reduce significant adverse environmental impacts. SMAQMD has determined that a 15% reduction in operational emissions of ozone precursors constitutes feasible mitigation.

Mitigation measures found in this document are from the SMAQMD “Recommended Guidance for Land Use Emission Reductions” (SMAQMD 2007). Mitigation measures along with point values being applied to the North Highlands Town Center Development Code can be found in Table ES-1. Not all measures found in the SMAQMD guidance document are applicable to the project. Only those measures which can be used are discussed in the following sections of the Operational Air Quality Mitigation Plan (AQMP).

Table ES-1 North Highlands Town Center Development Code Summary of Proposed Operational Air Quality Mitigation Plan		
Category/ Measure	Description	Point Value
Bicycle/Pedestrian/Transit Measures		
1. Bicycle parking	Non-residential projects provide plentiful short-term and long-term bicycle parking facilities to meet peak-season maximum demand.	0.29
3. Bicycle parking at multi-unit residential uses	Long-term bicycle parking is provided at apartment complexes or condominiums without garages.	0.24
4. Proximity to bike path/bike lanes	Entire project is located within ½ mile of an existing Class I or Class II bike lane and project design includes a comparable network that connects the project uses to the existing offsite facility.	0.63
5. Pedestrian network	The project provides a pedestrian access network that internally links all uses and connects to all existing or planned external streets and pedestrian facilities contiguous with the project site.	1.00
6. Pedestrian barriers minimized	Site design and building placement minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation are eliminated.	1.00
7. Bus shelter for existing transit service	Bus or streetcar service provides headways of one hour or less for stops within ¼ mile; project provides safe and convenient bicycle/pedestrian access to transit stop(s) and provides essential transit stop improvements (i.e., shelters, route information, benches, and lighting).	0.50

Table ES-1
North Highlands Town Center Development Code
Summary of Proposed Operational Air Quality Mitigation Plan

Category/ Measure	Description	Point Value
9. Traffic calming	Project design includes pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Roadways are designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips by featuring traffic calming features.	1.00
Parking Measures		
11. Minimum parking	Provide minimum amount of parking required. Special review of parking required.	3.25
13. Pedestrian pathway through parking	Provide a parking lot design that includes clearly marked and shaded pedestrian pathways between transit facilities and building entrances.	0.39
14. Off-street parking	Parking facilities are not adjacent to street frontage.	1.50
Site Design Measures		
16. Orientation to existing alternate transit	Project is oriented toward existing transit, bicycle, or pedestrian corridor. Setback distance is minimized.	0.50
18. Residential density	Project provides high-density residential development.	1.23
19. Street grid	Project has multiple and direct street routing (grid style).	1.00
23. Suburban mixed-use design	Have at least three of the following on-site and/or off-site within ¼ mile: Residential Development, Retail Development, Park, Open Space, or Office.	3.00
Total Credit		15.53
Emissions Reduction Target		15.00
Source: SMAQMD 2007. Data compiled by EDAW 2008.		

1 INTRODUCTION

The Sacramento County Planning and Community Development Department is proposing to adopt the North Highlands Town Center Development Code (Sacramento County 2008, and Attachment A to this report). The purpose of the North Highlands Town Center Development Code is to serve as an implementation tool to carry out the vision, goals, and policies embodied in the North Highlands Community and Economic Development Strategy. This strategy was created in 2004 to further develop the Town Center concept extending from Watt Avenue to 32nd Street.

The purpose of this document is to identify recommended measures to mitigate the operational air pollutant (ozone precursors ROG and NO_x) emissions by at least 15% associated with the proposed land uses that could occur in the North Highlands Town Center/Freedom Park area in accordance with the proposed North Highlands Town Center Development Code. This document has been prepared in accordance with SMAQMD's recommendations and with Policy AQ-15 of the Sacramento County General Plan Air Quality Element:

- ▶ AQ-15: All new major indirect sources of emissions shall be reviewed and modified or conditioned to achieve a reduction in emissions. This indirect source review program will be developed in coordination with SACOG and SMAQMD, and include the following features;
- ▶ A 15 percent 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.

Chapter 2 of this document describes the proposed project's, existing and planned transportation setting. Chapter 3 identifies the proposed Land Use Emission Reduction mitigation measures for the project as directed by the SMAQMD's Recommended Guidance for Land Use Emission Reductions (SMAQMD 2007). The emission reduction measures are organized into the following categories:

- ▶ Bicycle/Pedestrian/Transit Measures;
- ▶ Parking Measures;
- ▶ Site Design Measures; and
- ▶ Mixed-use Measures.

2 PROJECT DESCRIPTION AND TRANSPORTATION SETTING

The North Highlands Town Center area is located in the vicinity of the intersection of Freedom Park Drive and Dudley Boulevard/34th Street (Exhibit 2-1). The project site consists of five districts: Community Support, Gateway, Main Street, Office/Residential, and Parks/Open Space (see Table 2-1 for land use summaries). According to the Draft Environmental Impact Report (DEIR) for the development code (Sacramento County 2007a), the project proposes the creation of a town center in the North Highlands community area. The purpose of the development code is to carry out the vision, goals, and policies of the 1974 North Highlands – North Central Area Community Plan, the vision for the North Highlands area, and the North Highlands Community and Economic Development Strategy.

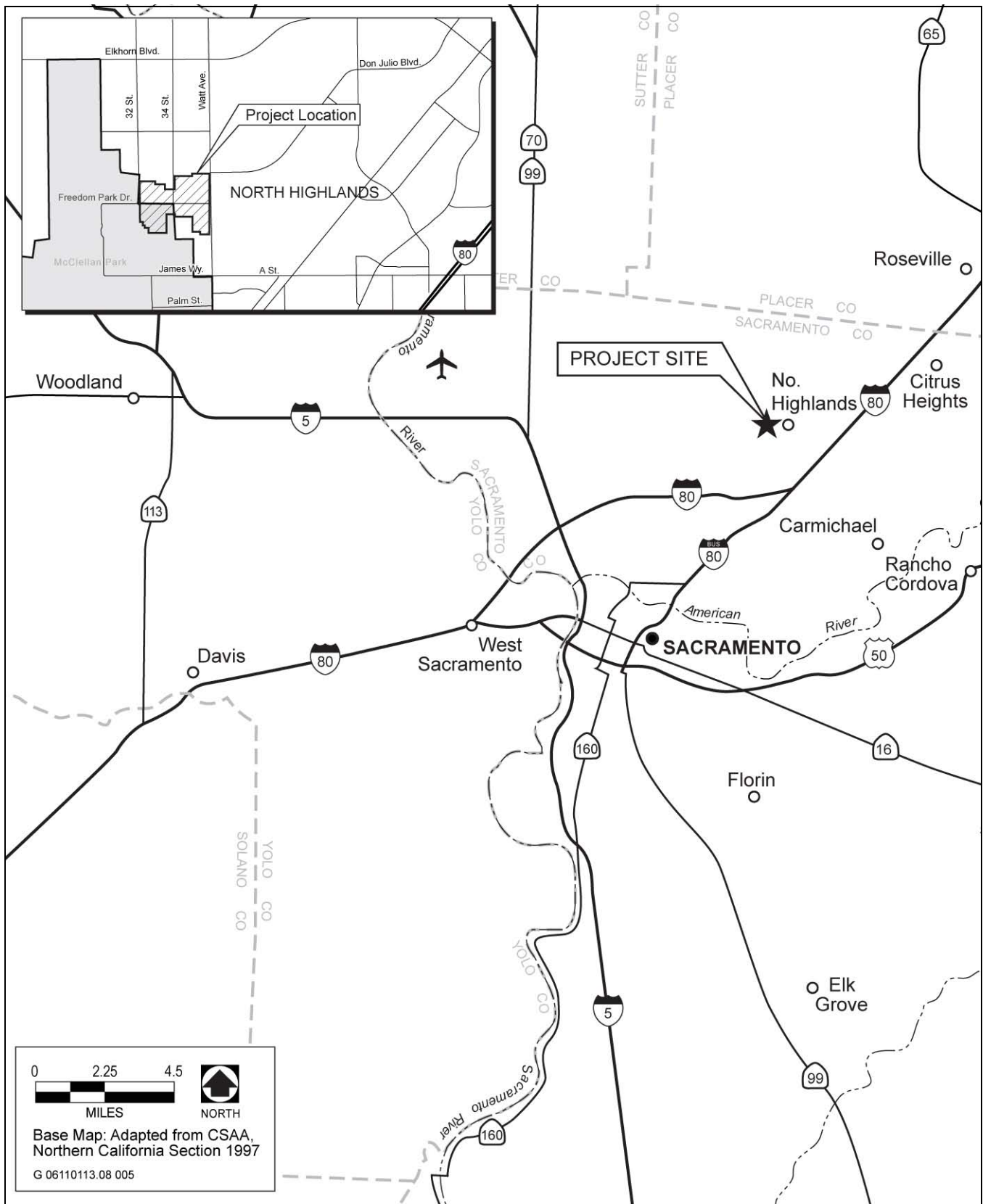
**Table 2-1
Land Use Summary and Scale Factors**

Land Use	Acres	Residential	Retail	Office	Open Space/ Community Support	Mixed-Use
Community Support	11	0%	0%	0%	100%	0%
Gateway	30	20%	32%	48%	0%	100%
Main Street	26	75%	25%	0%	0%	100%
Office/Residential	9	44%	8%	48%	0%	100%
Parks/Open Space	20	0%	0%	0%	100%	0%
Total Acreage	96	29.46	16.82	18.72	31	58.70
% of Project (Total)		31%	18%	20%	32%	77%
% of Project (Developed for Urban Purposes)	76	39%	22%	25%	14%	100% (Suburban)
Total Commercial Uses			47%			

Notes: The Recommended Guidance for Land Use Emissions Reductions document explains as a footnote on page 8 that undeveloped open space should be excluded from the project's total net lot area. The net lot area scaling methodology was applied in developing this AQMP. The Scale Factors utilized in determining mitigation measure values were computed assuming that only 76 acres are developed for urban purposes (netting out the open space portion of the project, which would have minimal associated trip generation and operational emissions; community support land uses are included in the area developed for urban purposes, but mitigation is not applied to this portion of the project. These land uses could include public uses such as police, fire, educational, etc, and do not fall into Residential or Commercial land use categories.)

Suburban Mixed Use is defined as the condition that at least three of the following land uses are within ¼ mile of one another: Residential, Commercial, Park, or Open Space.

Source: SMAQMD 2007; EDAW 2007



Source: EDAW 2007

Project Location Map

Exhibit 2-1

2.1 ACCESS CHARACTERISTICS

Under the 1974 North Highlands – North Central Area Community Plan, a special planning area located in the vicinity of McClellan Air Force Base was created in order to prohibit incompatible uses. The special planning area/project site is located in the North Highlands area of Sacramento County; off of Watt Avenue at Interstate 80 (I-80) at the intersection of Freedom Park Drive and Dudley Boulevard/34th Street. Listed below are the general location and access routes to the various districts found within the North Highlands Town Center Planning area:

- ▶ **Community Support District:** The Community Support District is located in the south west corner of the North Highlands Town Center and adjacent to the Office/Residential District. Access is centered along the 32nd Street/Freedom Park Drive and 34th Street/Freedom Park Drive intersections.
- ▶ **Gateway District:** The Gateway District is meant to provide an interface between the Town Center and the existing North Highlands community. Access to the Gateway District can be obtained on; Watt Avenue and Freedom Park Drive.
- ▶ **Main Street District:** The Main Street District would provide the community with a small-town feel. Access to the Main Street District is further back from Watt Avenue, centered along the intersection of Freedom Park Drive and Dudley Boulevard/34th Street.
- ▶ **Office/Residential District:** The Office/Residential District is located in the north west corner of the North Highlands Town Center, across from Freedom Park and adjacent to the U.S. Coast Guard facility. Access is centered along the intersection of 32nd Street and Freedom Park Drive.
- ▶ **Parks/Open Space District:** The Parks/Open Space District is located next to the eastern border of the Community Support District on the southern side of Freedom Park Drive. Access to the district is available along the Freedom Park Drive/32nd Street, Freedom Park Drive/Dudley Boulevard intersections.

2.2 BICYCLE FACILITIES

EXISTING BICYCLE AND PEDESTRIAN SYSTEM

Existing bicycle and pedestrian facilities are limited near the project site. A Class II off-street bike path parallels Watt Avenue and is intersected by Freedom Park Drive (Exhibit 2-2).

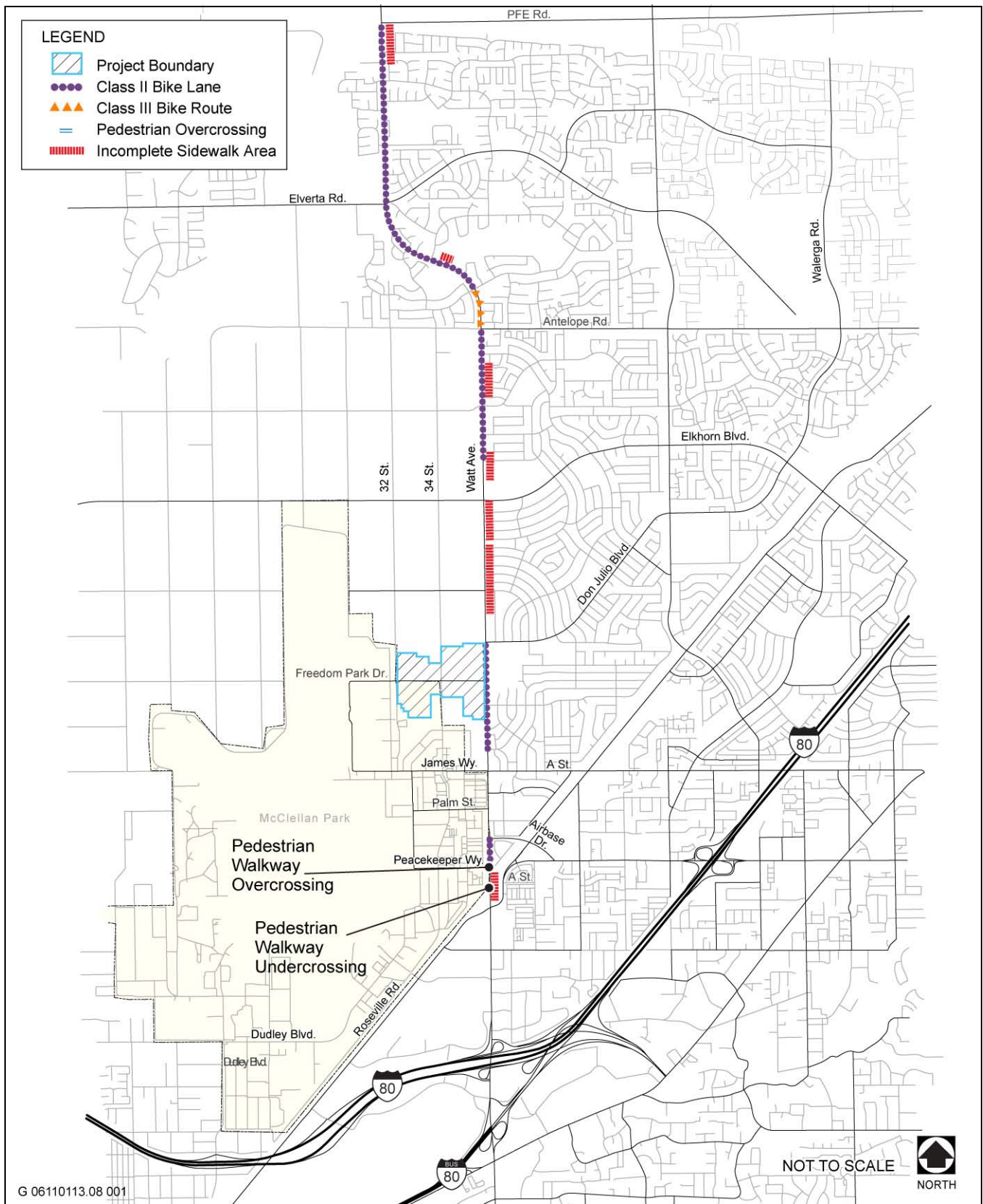
PROPOSED BICYCLE AND PEDESTRIAN SYSTEM

As stated in the North Highlands Town Center Development Code, the neighborhood streets connecting the neighborhoods and districts to one another would create easy and safe access to varying land uses such as transit. In addition, internal streets would cater to pedestrian/bicycle traffic, with occasional delivery vehicles and other slow-speed vehicles. See Measure 9, Traffic Calming, for more information.

2.3 TRANSIT SERVICE AND FACILITIES

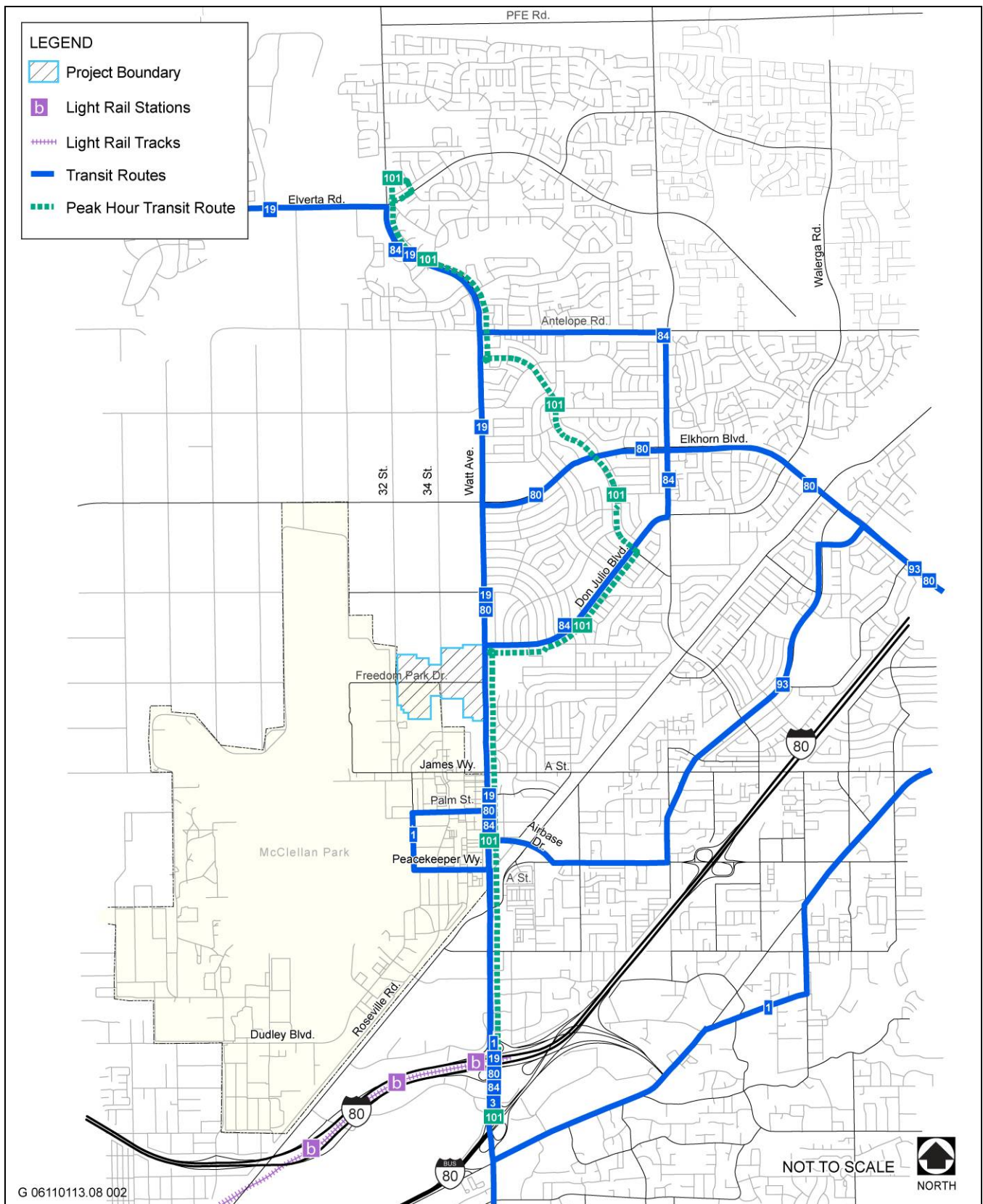
EXISTING TRANSIT SERVICE

Sacramento Regional Transit (RT) operates bus and light-rail transit (LRT) service in Sacramento County. The existing transit services in the vicinity of the project site are described below and are shown in Exhibit 2-3.



Existing Bicycle and Pedestrian System

Exhibit 2-2



Source: Fehr and Peers Transportation Consultants 2007

Existing Transit Service

Exhibit 2-3

Fixed-Route Bus Service

Fixed-route bus service is provided southeast of the project site. Route 80 provides service along Watt Avenue; peak hour transit route 101 provides service along Watt Avenue, Don Julio Boulevard and Elverta Road. The following describes these individual routes in greater detail.

- ▶ **Route 80** provides service between the Watt/Manlove station and the Greenback Auburn Station. Weekday service is provided between 5:56 a.m. and 10:41 p.m. on 60-minute headways. (A “headway” is the amount of time between buses. For example, if a bus on the same route arrives at a given stop every 60 minutes, it is operating on 60-minute headways.) Saturday service is provided between 7:08 a.m. and 8:30 p.m. on 60-minute headways. Sunday and holiday service is provided between 6:54 a.m. and 7:48 p.m. on 60 minute headways.
- ▶ **Route 101** provides peak-hour fixed-route service between the Elverta/Watt station and the Watt/I-80 light-rail station on weekdays. The route operates between 5:57 a.m. to 7:09a.m. and 5:12 p.m. to 6:11 p.m. on 40-minute headways. No Saturday, Sunday, or holiday service is provided.

Light-Rail Transit Service

LRT service is provided from downtown Sacramento along the I-80 corridor to the Watt/I-80 light-rail station, which has a 243-space park-and-ride lot. Access to the Watt/I-80 station can be obtained on bus route 80 and route 101 (route 101 during peak-hours only).

PROPOSED TRANSIT SERVICE

At this time there are no planned transit changes related to the project.

3 PROPOSED MEASURES

The following supporting text and exhibits detail mitigation measures that would reduce air pollutant emissions from development-related land uses. The text describes how the measures would be implemented in accordance with the information available at this time. Additional information may be available when redevelopment occurs.

3.1 BICYCLE/PEDESTRIAN/TRANSIT MEASURES

Measure 1: Bicycle parking

Unscaled SMAQMD emissions reduction = 0.625

Scale factor = 0.47 (commercial land uses)

Scaled mitigation value = 0.29

As stated in the North Highlands Town Center Development Code, “Site Design Standards” Chapter, Section J Bicycle parking and storage would be provided in an area that is convenient for the bicyclist and is under surveillance from the users of the building. The specific criteria for bicycle parking and storage under the North Highlands Town Center Development Code are as follows:

- ▶ By their shape and construction, bike racks shall allow the bicyclist to secure the bike frame to the device.
- ▶ Short-term bicycle parking should be located at building entrances with adequate surveillance from building occupants and visitors. Bicycle parking must be located in an illuminated area.
- ▶ Long-term bicycle parking, including bicycle lockers, should be located inside buildings or parking structures when possible. If it is necessary to locate bicycle lockers outside, they shall be securely fastened and designed in a manner that is integral to the building design.
- ▶ To minimize theft, bike racks should not be placed in a screened enclosure.

At this time, the quantity of bicycle parking spaces cannot be calculated, nor can a ratio of bicycle parking be identified at the plan level. The types of tenants that would occupy the proposed land uses are unknown, and bicycle parking needs are determined by the nature of the occupant.

Measure 3: Bicycle parking at multi-unit residential uses

Unscaled SMAQMD emissions reduction = 0.625

Scale factor = 0.39 (residential land uses)

Scaled mitigation value = 0.24

Criteria for bicycle parking at multi-unit residential uses in the North Highlands Town Center would be same as described in Measure 1 “Bicycle parking”.

Measure 4: Proximity to bike path/bike lanes

Unscaled SMAQMD emissions reduction = 0.625

Scale factor = 1 (entire project)

Scaled mitigation value = 0.63

The North Highlands Town Center project is located within 1/2 mile of existing Class II bike lanes (refer to Exhibit 2-2 for existing bike routes and facilities in the vicinity and off-site facilities to which the project’s facilities would connect. Also refer to Exhibits 3-1a and 3-1b for bike lane design standards). The project also

includes the use of “internal streets and lanes” whose main purpose is for bike and pedestrian traffic, although these internal streets would have to occasionally share with delivery vehicles or other slow-speed vehicles.

Designated bike lane dimensions along Freedom Park Drive, Dudley/34th Street, and 32nd Street (i.e., the main through streets serving the project site) would be five feet wide on both sides of the street.

Measure 5: Pedestrian network

Unscaled SMAQMD emissions reduction = 1.00

Scale factor = 1 (entire project)

Scaled mitigation value = 1.00

As stated in the North Highlands Town Center Development Code Section D, District Planning Areas, the Main Street District would be designed with a small-town feel, where the center of the district would be pedestrian friendly, convenient, safe, and useful.

All the districts would be tied together through existing and possible new/improved street networks. Each district (except Community Support and Parks/Open Space) would have a mix of uses including residential and commercial/retail, allowing easy access to pedestrians. Through the project’s use of internal streets, pedestrian access to all the districts would be safe, fast, and convenient.

Please see Exhibits 3-1a and 3-1b for design standards for sidewalks. These graphics show that sidewalks would be at least five feet wide (e.g., 6–10 feet wide depending on the location in the project site).

Measure 6: Pedestrian barriers minimized

Unscaled SMAQMD emissions reduction = 1.00

Scale factor = 1 (entire project)

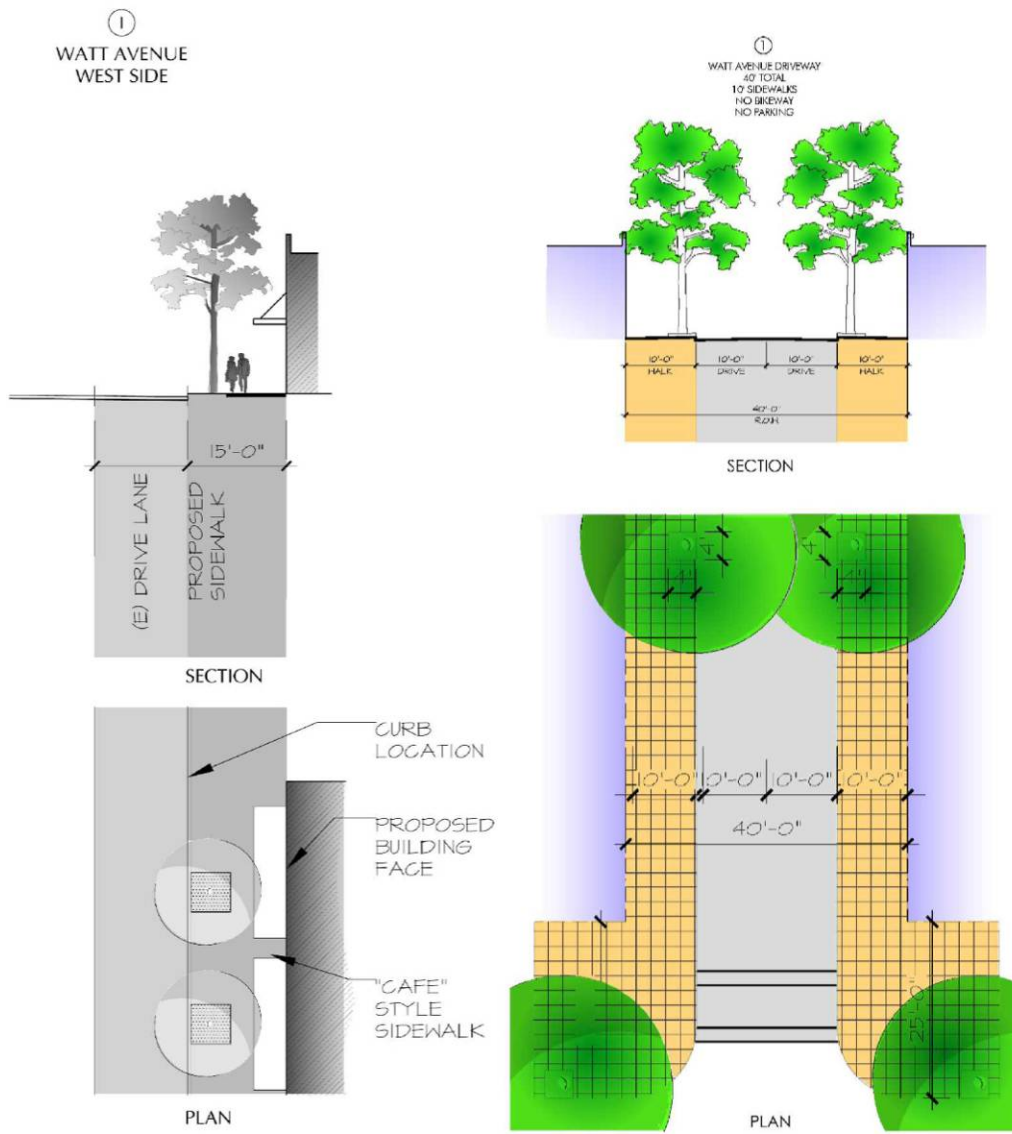
Scaled mitigation value = 1.00

The proposed project would not propose any barriers to pedestrian access, such as sound walls, berms, or large roadways (i.e., arterials with more than three lanes). As stated on page 25 of the North Highlands Town Center Development Code, “Pedestrian links between the development and shared parking areas shall be specifically designed to assure readily visible relationships between the use and available parking. Special attention shall be paid to sidewalk design, paving material, access across internal drives and streets and access within parking structures” (Sacramento County 2008). Exhibits 3-1a and b depict the proposed design guidelines for pedestrian access throughout the North Highlands Town Center community.

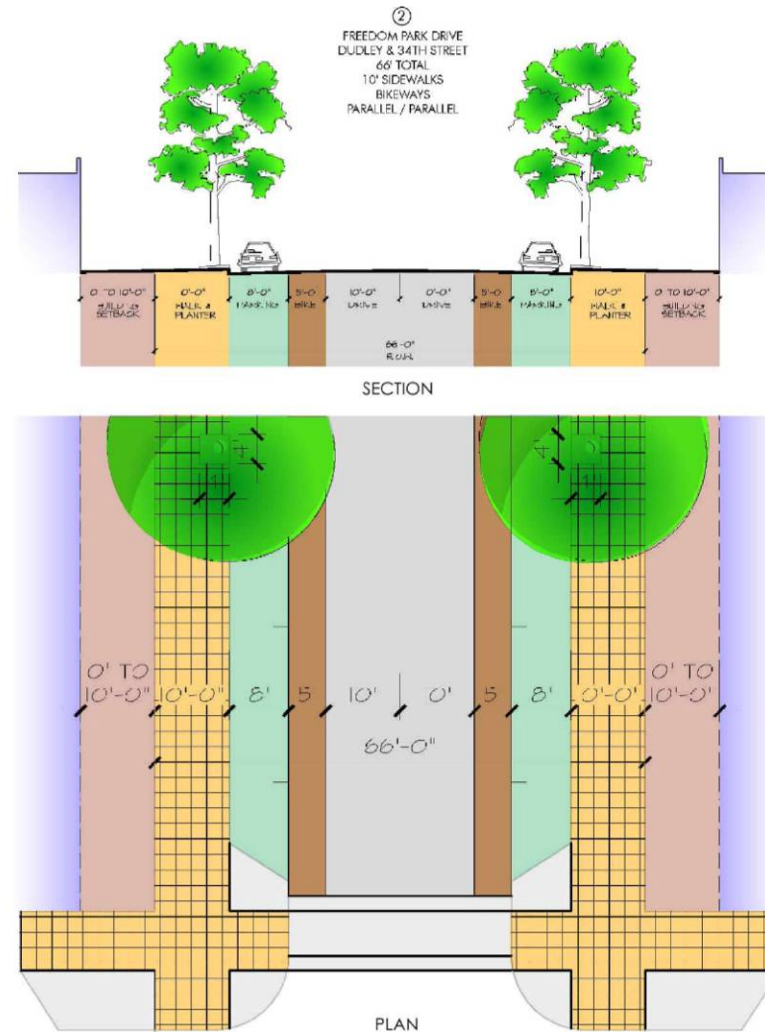
With respect to street furniture, page 42 of the Code states: “Great care should be taken to select furniture that will not overpower the area it is intended to occupy”. Page 43 states: “Fences, landscaping, elevation changes, portals, porches, community rooms, and doors which face the street should be used to provide transition between varying levels of public accessibility and privacy. They should delineate the use and ownership of public, semi-public, and private spaces, but should not be visual barriers.”

The design standards for wide sidewalks, bicycle lanes, signal or stop controlled street crossings, designated pathways through parking, traffic calming, attention to placement of street furniture, streetscape, landscaping, safety (through passive surveillance [i.e., “eyes on the street”]), and lighting are a few methods to ensure that pedestrians would encounter minimal physical and psychological barriers in NHTC.

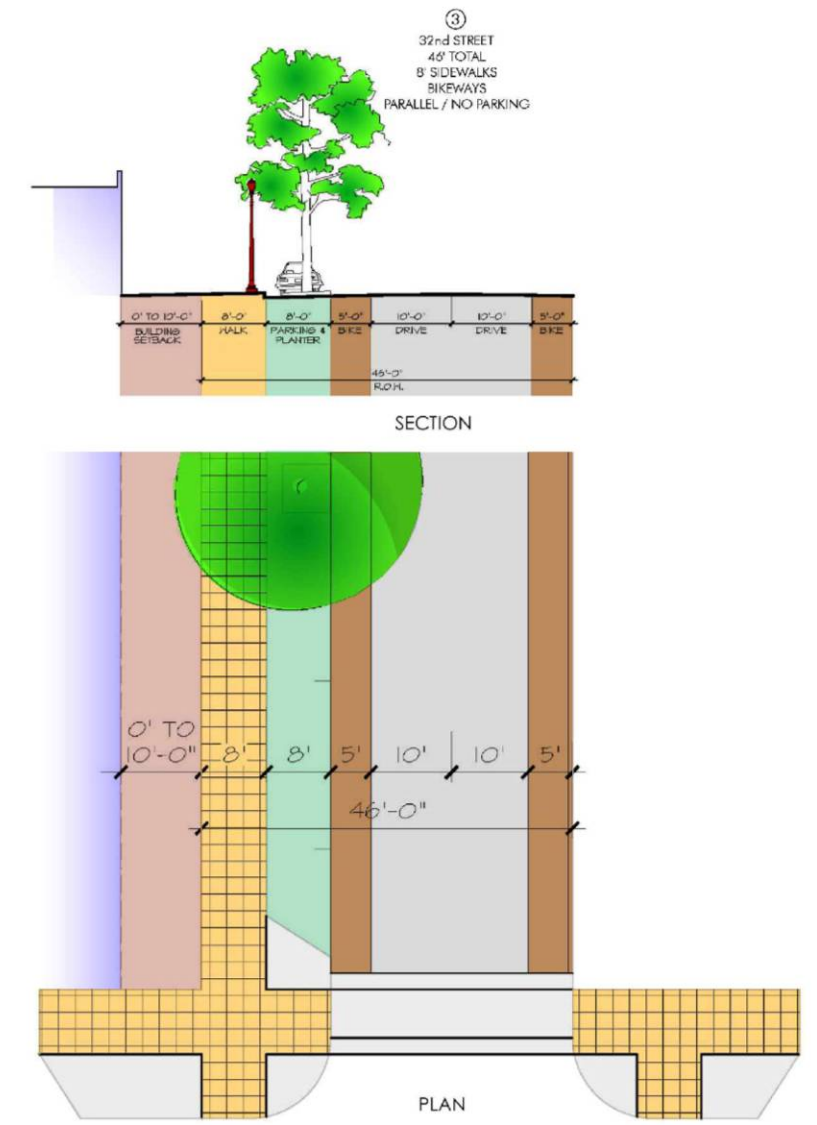
The Code would also enhance pedestrian access by providing shorter block distances than currently exist (300 to 400 feet compared to over 1,000 feet at present). Enhanced pedestrian links along Dudley Street would improve pedestrian access to major employment centers within McClellan Business Park immediately to the south of the site.



Design Standards for Watt Avenue West Side and Watt Avenue Driveway



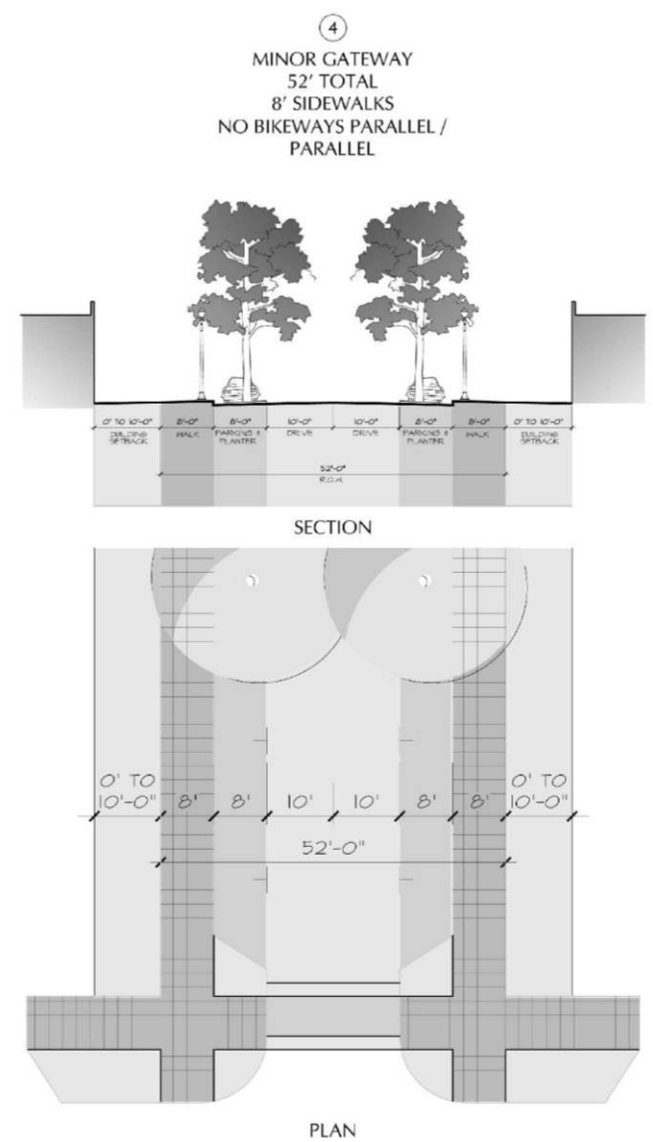
Design Standards for Freedom Park Drive and Dudley Street/34th St.



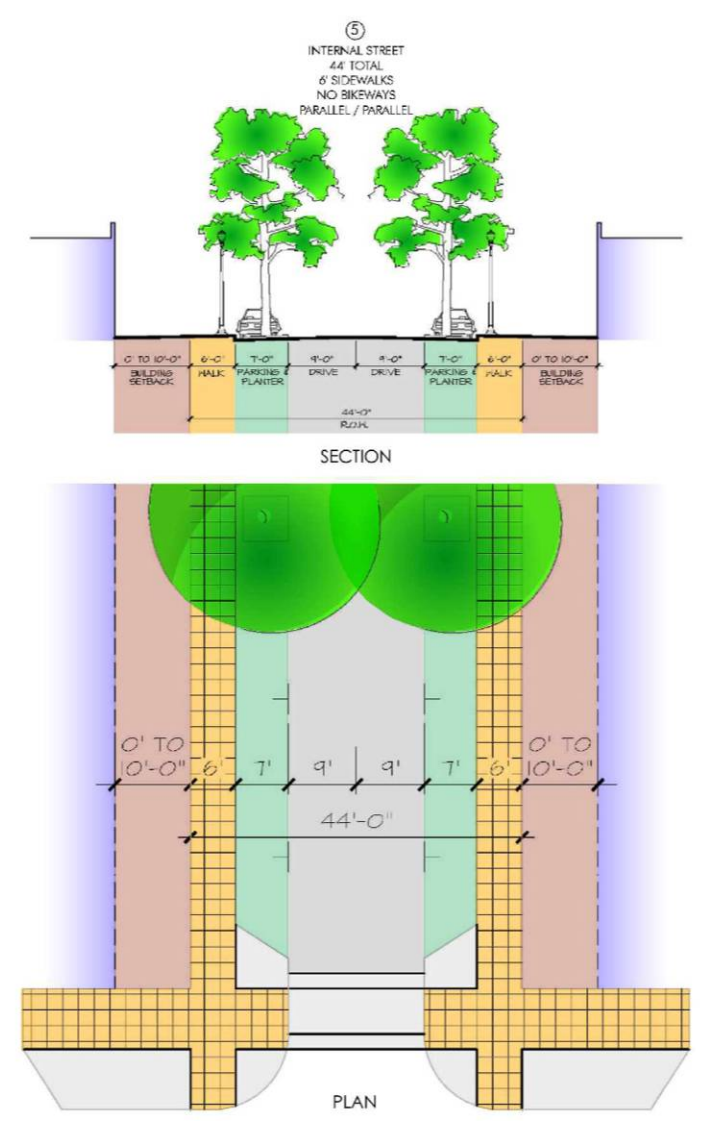
Design Standards for 32th St.

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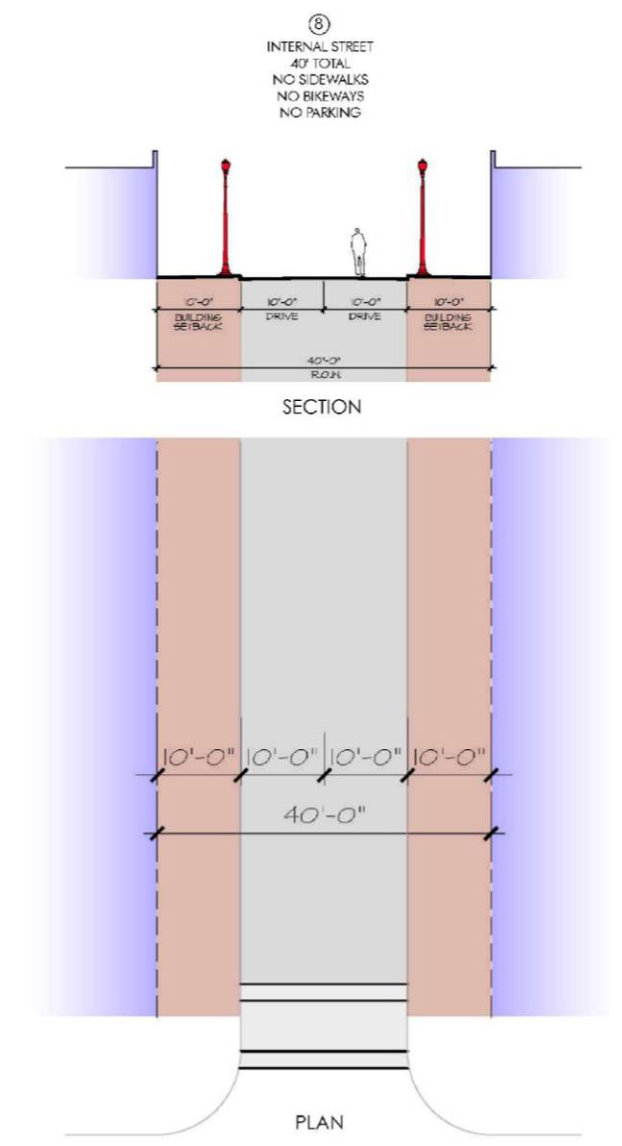
Source: Sacramento County 2007b



Design Standards for Minor Gateway Internal Street



Design Standards for Internal Streets



Design Standards for Internal Lanes

G 06110113.08 004b

Source: Sacramento County 2007b

Measure 7: Bus shelter for existing transit service

Unscaled SMAQMD emissions reduction = 0.50

Scale factor = 1 (entire project)

Scaled mitigation value = 0.50

As stated on page 24 of the North Highlands Town Center Development Code, “Public Transit Design Standards,” “Comfortable waiting areas, appropriate for year-round weather conditions, must be provided at all transit stops. Transit stops shall feature shelters that are designed with passenger safety and comfort in mind.” (See Exhibit 3-2 for existing sheltered transit stops). The shelters would be easily recognizable while at the same time blending in with the surrounding architecture. The loading zones would be located as close as possible to the stop, but would not interfere with the stop’s operations. Street networks adjacent to the stop would be configured for easy, safe, and fast pedestrian access to the transit stops. This would be achieved by providing sufficient automobile and pedestrian visibility distances, stop signs, manually operated traffic signals where necessary, and clearly marked pedestrian crossings (Sacramento County 2007b).

Measure 9: Traffic calming

Unscaled SMAQMD emissions reduction = 1.00

Scale factor = 1 (entire project)

Scaled mitigation value = 1.00

Traffic calming measures for the North Highlands Town Center Development Code are outlined below, and would apply to the entire roadway network:

- ▶ **Watt Avenue:** Wide sidewalks should line the section of Watt Avenue in the Town Center area to give shoppers a comfortable walking Town Center away from traffic. Street trees and shrubbery should further shield pedestrians from traffic and make drivers feel as if they are on a narrower street (encouraging slower driving).
- ▶ **Main Streets:** These streets should contain two lanes, wide sidewalks, plentiful street trees and benches, frequent crosswalks, and parallel parking. Main streets should have a traditional small-town “Main Street” atmosphere with slow traffic.
- ▶ **Internal Streets:** These streets, as mentioned in measures 4, 5, and 6; will provide pedestrians and drivers with ways to connect between points within the town center and provide extra parking. Sidewalks should be provided on both sides of the street (except 32nd Street), but the street itself should still be pedestrian and bicycle friendly, with material and traffic speeds that foster driver caution and provide an atmosphere of pedestrian and bicycle freedom and safety.

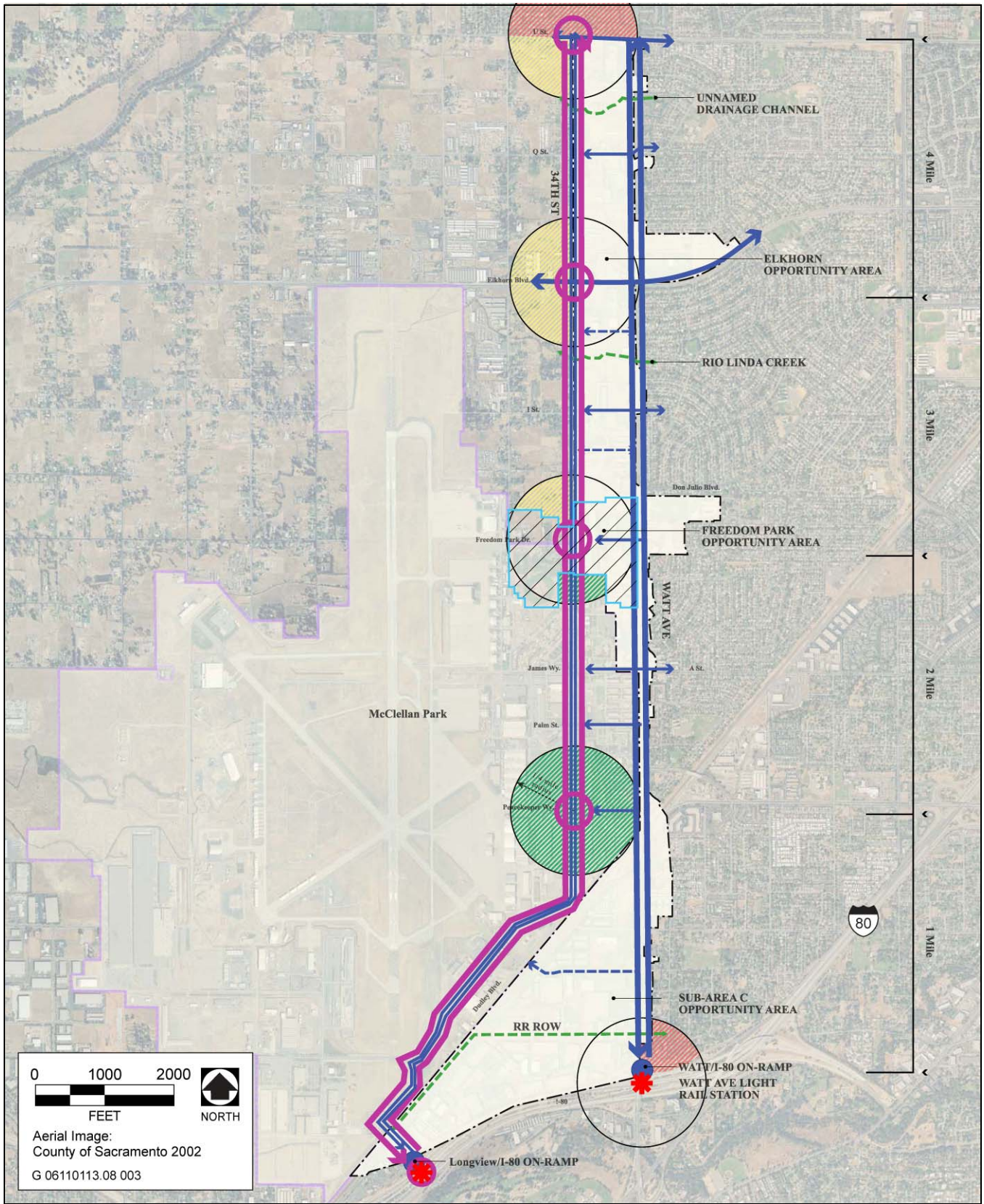
See Exhibits 3-1a and b above for street design standards, which show that sidewalks would be at least five feet wide, streets will have vertical curbs, on-street parking, marked cross walks, and signalized intersections would have pedestrian signals (as required by County improvement standards).

3.2 PARKING MEASURES

Measure 11: Minimum parking

See Table 3-1 for calculations by land use.

At present, residential uses (which make up 45% of the total project site; 39% of urban [trip-generating] land uses) would provide 1 space/du. This parking provision is below the peak-parking demand as outlined in the ITE peak parking generation manual for suburban low/mid-rise apartments (1.2 spaces/du).



Source: EDAW 2007

North Watt Avenue Corridor Plan

Exhibit 3-2

Table 3-1 Parking Reductions and Associated Emissions Reductions							
Land Use Type	Scale Factor	Required	Provided	Reduction	ITE Peak Demand	Mitigation Credit	Scaled Reduction
Residential ¹	0.39	2/unit	1/unit	1 Space/Unit Resident	1.2 Spaces/Unit	8.33	3.25
Commercial/ Mixed Use	0.22	unknown	Minimum required	unknown	unknown	0	0
Office ²	0.25	4.5/ 1,000 sq ft	3.3/1,000 sq ft	1.167 Space/ 1,000 sq feet	2.8 Spaces/ 1,000 sq ft	0	0
Total Urban Land Uses ³	0.86						3.25

¹ Sacramento County Zoning Code, Title 3, Chapter 30, Section 330-69. Apartments, Condominiums, Townhouses, Rowhouses, and Cluster Development.

² Sacramento County Zoning Code, Title 3, Chapter 30, Section 330-22. Offices.

³ Urban Land Uses comprises the total project minus the parks/open space district, as open space is a non trip-generating land use and thus, mitigation would not apply. This total does, however, include public land uses.
See Table 2-1 for detailed calculations of scale factors.
Source: Sacramento County 2007c, ITE 2004, EDAW 2007.

However, since the commercial tenants for the project have yet to be defined at this time, the project applicant has committed to provide no more than the minimum amount of parking required by code. Once commercial tenants are identified, and a shared-parking strategy can be implemented, it would be possible for parking requirements to go below what is required by code. The Development Code also contains implementation and enforcement mechanisms for facilitating shared parking strategies among the various land uses and tenants, on page 22, Chapter 5, Section 3-11 Parking Standards.

Office-type land uses would provide 1 parking space/300 square feet gross floor area (3.3 spaces/1,000 square feet; see Table 3-1 of the Development Code: Parking Standards). This provision is approximately 1.2 spaces/1,000 square feet less than the minimum code requirement. However, this provision is greater than the ITE peak demand. Thus, no emission reduction can be attributed to parking provisions for office uses.

Residential Calculation:

$$\begin{aligned} \% \text{ Reduction} &= 50 * ([\text{Parking Provided} - \text{ITE Peak Demand}] / \text{ITE Peak Demand}) \\ &= 50 * ([1-1.2]/1.2) \\ &= -8.33 \end{aligned}$$

Office Calculation:

$$\begin{aligned} \% \text{ Reduction} &= 50 * ([\text{Parking Provided} - \text{ITE Peak Demand}] / \text{ITE Peak Demand}) \\ &= 50 * ([3.3-2.8]/2.8) \\ &= 0 \end{aligned}$$

Measure 13: Pedestrian pathway through parking

Unscaled SMAQMD emissions reduction = 0.50

Scale factor = 0.77 (mixed-use areas)

Scaled mitigation value = 0.39

The pedestrian pathways through off-street parking would connect to sidewalks and internal lanes throughout the project, which would connect to transit stops. Page 40 of the Code states: “Parking lots shall include pedestrian bulb-outs between stalls, sidewalks, and clear pedestrian paths to enhance pedestrian access and safety.”

As stated in the North Highlands Town Center Development Code, “Pedestrian links between the development and shared parking areas shall be specifically designed to assure readily visible relationships between the use and available parking. Special attention shall be paid to sidewalk design, paving material, access across internal drives and streets and access within parking structures” (Sacramento County 2007b). This feature would be present in all districts within the North Highlands Town Center. Mitigation value is applied to mixed-use areas of the project that would include off-street parking areas.

Measure 14: Off-street parking

Unscaled SMAQMD emissions reduction = 1.50

Scale factor = 1 (entire project)

Scaled mitigation value = 1.50

As stated in the North Highlands Town Center Development Code, parking would be either in parking structures or behind buildings to allow for a more pedestrian-friendly atmosphere. Locations of parking lots, services, and utilities should be carefully evaluated in terms of visual prominence as well as functional requirements. The specific criteria for parking structure design and parking services and utilities are as follows:

- ▶ A parking design professional must be used to provide the functional and structural design of the facility.
- ▶ A traffic analysis is required to determine the ingress/egress design.
- ▶ The architectural design must be secured and maintenance friendly. Passive security design must be considered wherever possible. The design must avoid creating hiding places. The use of glass as a design element is recommended to promote security.
- ▶ The design of parking structures should be sensitive to scale and form to avoid not detracting from the Town Center image. Large blank walls and continuous sloped strip openings should be avoided. Louvers or screens should be used to animate façade surfaces and to create an articulated structure that fits in with neighboring structures. Lighting within the parking structure should be designed to minimize glare toward the exterior. The interior should be uniformly illuminated.
- ▶ Ramped levels should be located facing mid-block or service areas rather than the street or public spaces.
- ▶ Vertical pedestrian circulation elements and entry/exit areas should be clearly articulated and visible from adjacent public spaces and nearby circulation routes.
- ▶ Where possible, the first-floor level of parking garages should be used for human occupancy uses such as retail, office, or service functions that will maintain activity at the ground level.
- ▶ Buildings should be placed as close to the street as possible, diverting on-site parking to the interior of the site and, where appropriate, placed at the rear of lots.
 - Surface parking lots are not to be located on a site’s public street frontages to allow for improved pedestrian access and cohesive urban fabric.
 - No new parking lots shall occupy the corner location at the intersection of any two streets. Existing corner parking lots are encouraged to be developed to eliminate the

- corner parking area (lane corners are not included in this requirement).
 - Vehicle access should be carefully considered for a clear and uniform traffic pattern through the lot.
 - Parking lots should include pedestrian bulb-outs between stalls, sidewalks, and clear pedestrian paths to enhance pedestrian access and safety.
- ▶ Where surface parking lots are located adjacent to lanes on abutting properties they should, to the extent feasible, be designed as a single lot to increase security and efficiency.
 - ▶ Parking lot perimeters that have street frontage should provide an aesthetically pleasing visual buffer and follow the same general guidelines as proposed for the rest of the Town Center. Plants should be chosen that are easily maintained, resilient to excess pedestrian traffic, and tolerant of excessive heat gain from asphalt parking areas. Parking lot landscaping shall not prevent a clear view for emergency services such as the fire and police department. Plant heights within parking lot islands and perimeter buffers shall not exceed 36 inches in height and shall be evergreen in nature. Accent color is encouraged. Deciduous trees shall be selected to provide a minimum of 70% shade coverage of total parking area, not including drive aisles. Minimum planter islands in parking fields shall be 6 feet by 6 feet.
 - ▶ Sideyard parking lots should not be located within 40 feet of the corner streets and should not take up more than 30% of the lot's street frontage. Parking that does front on streets shall be screened with an attractive wall, fence, or bushes that are a minimum of 30 inches high and a maximum of 48 inches high, and in a planter with a minimum width of 3 feet.

The quantity, size, or locations of planned parking structures is not known at this time. There are no existing parking structures on the project site.

3.3 SITE DESIGN MEASURES

Measure 16: Orientation to existing alternate transit

Unscaled SMAQMD emissions reduction = 0.50

Scale factor = 1 (entire project)

Scaled mitigation value = 0.50

Because the North Highlands Town Center districts are already in developed areas, orientation of project access to existing alternate transit is already in place. The development code would only contribute to safer, faster and more convenient access to existing and planned alternate transit, as seen in measures 4–7 above (Exhibits 2-2, 2-3 and 3-2).

The proposed standards for setback distances for each district are provided in the following table (Table 3-2), along with general setback requirements from the Sacramento County Zoning Code (Chapters 5 and 15), for comparison purposes.

In general, the project requires no minimum setback from the front of the building to the public right-of-way. Storefronts can be located up to the sidewalk, and no more than 5 or 10 feet from the sidewalk in the Gateway and Main Street districts, respectively. Sacramento County Code generally requires a 20-25 foot setback.

**Table 3-2
Setback Distances**

	Community Support	Office/ Residential	Main Street	Gateway	Sacramento County Zoning Code	
					Commercial	Residential
Front	0 ft. min. 25 ft. max.	0 ft. min. 15 ft. max.	0 ft. min. 10 ft. max.	0 ft. min. 5 ft. max.	25 ft. min.	20 ft. min.
Side	5 ft. min. 30 ft. max.	0 ft. min. 30 ft. max.	0 ft. min. 10 ft. max.	0 ft. min. 10 ft. max.	20 ft. min.	5–25 ft. min.
Rear (applies to lots not served by internal lanes)	20 ft. min. to principal building 5 ft. to out building	20 ft. min. to principal building 5 ft. to out building	5 ft. min. to principal building 5 ft. to out building	0 ft. min. to principal building 5 ft. to out building	25 ft. min.	10–25 ft. min.
Internal Lane (measured from centerline of lane)	10 ft. min.	10 ft. min.	10 ft. min.	10 ft. min.	N/A	N/A

Notes: ft. = feet, min. = minimum, max. = maximum, N/A = not available
Source: Sacramento County 2008

Measure 18: Residential density

Unscaled SMAQMD emissions reduction = conditional; see Table 3-3.

Scale factor = 0.39 (residential uses)

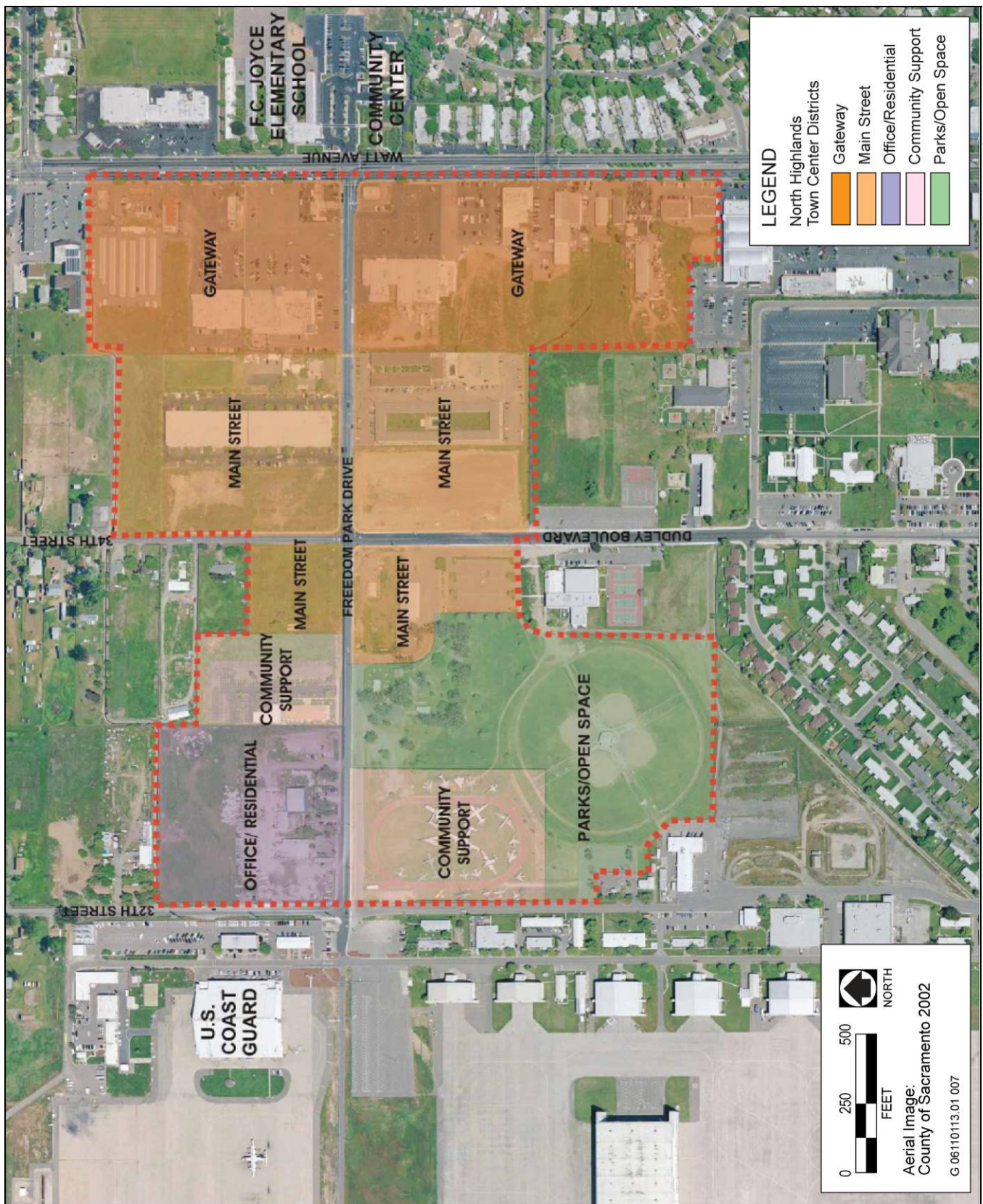
Scaled mitigation value = 1.23

Project would provide high-density residential development. See measures 4–7 for more detailed information regarding access to existing and planned transit (Exhibit 3-3). The specific densities of residential land uses to be developed in the redevelopment area are unknown at the time of this plan’s preparation. A reasonably conservative residential density for townhouse land uses is approximately 16 dwelling units/acre. Some portions of the residential development may be slightly less dense, while some portions, such as in the Main Street and Gateway Districts, would more dense. Although, by definition, Bus Rapid Transit (BRT) would most likely be more frequent than 1 hour headways, 1 hour headways were conservatively assumed at this time since more detailed schedule information is not available. In addition, transit already serves the project site under existing conditions, however, planned BRT would better-serve the sight than the existing bus service.

**Table 3-3
Residential Density and Emissions Reductions Calculations**

Parcel size (acres)	Dwelling units/Acre	Base Mitigation Value	Planned BRT Frequency	Additional Mitigation Points	Total Mitigation for Residential Density	Scale Factor by Acreage of Residential Land Use Type	Scaled Mitigation Value
29.5	16	3	1 hour	0.15	3.15	0.39	1.23

Source: EDAW 2007.



Source: Sacramento County 2007b

Suburban Mixed Use

Exhibit 3-3

Measure 19: Street grid

Unscaled SMAQMD emissions reduction = 1.00

Scale factor = 1 (entire project)

Scaled mitigation value = 1.00

As mentioned in Measures 4-7, one of the goals of the North Highlands Town Center Development Code is to allow for safe, convenient, and fast bicycle/pedestrian access through the use of internal streets. While these internal streets would have occasional slow vehicle traffic, the internal streets would be designed in a way that makes them more user friendly for the bicycle/pedestrian and encourages slow vehicle speeds. The internal streets would connect to the more heavily traveled streets of the Town Center area.

The internal street network of the project has not been planned at this time; however, there would be no incomplete streets and no cul-de-sacs in the project. Thus, it is anticipated that the internal connectivity factor would be close to or equal to 1, and at least 0.80 as required for credit.

Proposed block perimeters for each district are given in the following table (Table 3-4):

Table 3-4 Proposed Block Perimeter Standards				
	Community Support	Office/ Residential	Main Street	Gateway
Block Perimeter (in linear feet)	2,000 LF max.	1,200 LF max. 1,600 LF max. for blocks with internal structured parking	1,200 LF max. 1,600 LF max. for blocks with internal structured parking	1,200 LF max. 1,600 LF max. for blocks with internal structured parking
Notes: LF = linear feet, max. = maximum Source: Sacramento County 2008				

No block would exceed 400 feet on any side and 300- to 400-foot block lengths are widely considered walkable block lengths.

Measure 23: Suburban mixed-use development

Unscaled SMAQMD emissions reduction = 3.00

Scale factor = 1 (entire project)

Scaled mitigation value = 3.00

The North Highlands Town Center development, as mentioned earlier, would be divided into five districts. Below is a breakdown of the districts and their land uses (Exhibit 3-3). See Table 3-5 for land use mix goals.

- ▶ **Gateway:** This district would have the heaviest in percentages of commercial density in relation to residential density, with a goal of 20% residential, 32% retail, and 48% office uses.
- ▶ **Main Street:** Centered along Freedom Park Drive and Dudley Boulevard/34th Street, this district would provide the North Highlands Town Center area with a small town feel, with 75% residential, and 25% retail uses.
- ▶ **Office/Residential District:** This district is located in the north west corner of the North Highlands Town Center area; this district would be tailored to convey a less commercial atmosphere while still allowing a

mixed-use land use pattern. The district is intended to be evenly divided between residential and office uses, with 44% residential, 8% retail, and 48% office uses.

- ▶ **Community Support:** This district would be used entirely for public/quasi-public uses; types of uses would include public agency offices, religious institutions, civic clubs, education and skills training facilities, museums, or other civic and nonprofit activities. If this development does not occur, it is recommended that this site be included in the Parks/Open Space District.
- ▶ **Parks/Open Space:** This district consists of the existing Freedom Park, and its purpose is to preserve and enhance Freedom Park as public recreation and open space amenities serving the Town Center, with 100% park/open space uses.

**Table 3-5
North Highlands Town Center District Land Use Mix Goals**

District	Percentage Residential	Percentage Retail	Percentage Park, Open Space	Percentage Office
Gateway	20%	32%	0	48%
Main Street	75%	25%	0	0
Office/Residential	44%	8%	0	48%
Community Support			100% ¹	
Parks/Open Space			100%	

Source: Sacramento County 2007b

¹ If this development does not occur, it is recommended that this district be included in the Parks/Open Space District.

The Gateway and Main Street districts would be mixed-use throughout, with both horizontal and vertical mix of uses. The scale on Exhibit 3-3 is 500 feet. Thus, the entire western extent of the project, which comprises the Office/Residential, Community Support, and Parks and Open Space districts are all within 1,000 feet of at least two other districts. If one were to draw a circle with a ¼ mile radius (1/4 mile = 1,320 feet) from the southeast corner of the Office/Residential district, this would enclose all districts in the western portion of the project site (and at least four different land use types). The entire project is mixed-use in nature, as defined by SMAQMD’s Guidance for Land Use Emissions Reductions standard for suburban mixed-use (SMAQMD 2007).

4 REFERENCES

Institute of Transportation Engineers. 2004. Parking Generation Manual, 3rd Edition. ISBN-13: 978-0-935403-92-3. Washington, DC.

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Sacramento County. 1993. Sacramento County General Plan.

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<http://www.planning.saccounty.net/zc/index.html>. Accessed September 2007.

Sacramento County. 2008. Revised North Highlands Town Center Development Code.

Sacramento Metropolitan Air Quality Management District. 2007 (August). Recommended Guidance for Land Use Emissions Reductions Version 2.4. Sacramento, CA.

SMAQMD. *See* Sacramento Metropolitan Air Quality Management District.



Municipal Services Agency

Department of Environmental
Review and Assessment

Joyce Horizumi, Director

Terry Schutten, County Executive
Paul J. Hahn, Agency Administrator

County of Sacramento

Date: 11-12-08

To: Planning and Community Development Department, Project Manager

Judy Robinson

From: Catherine Hack, Mitigation Monitoring and Reporting Division

Subject: THE ADOPTED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP) FOR: North Highlands Town Center Development Code (Control Number:05-GPB-
CZB-ZOB-0938)

The Mitigation Monitoring and Reporting Program (MMRP) for the subject project has been adopted by the Sacramento County Board of Supervisors, as required by Section 20.02.050(b) of the Sacramento County Code. Attached is a copy of the MMRP for your use. DERA will use the MMRP to monitor compliance with the Mitigation Measures, adopted for the project by your Board. Upon full compliance with the Program, this Department will issue a Program Completion Certificate.

In order to ensure that Board-adopted MMRP requirements are met in the most efficient manner possible, we request advance notification of any and all pre-construction meetings as well as copies of all preliminary plans for DERA review prior to final plan approval. The MMRP staff will endeavor to attend pre-construction meetings, and to review and comment on the preliminary plans so that process delays do not occur. We are also requesting that appropriate MMRP measures be included on project plans in addition to the construction specifications. Additionally, staff working on project implementation should be provided (by your Department) copies of adopted MMRP documents. Compliance with these requests will enable our Departments to work together to effectively complete all conditions of approval.

If you have any questions regarding this matter, please contact DERA MMRP staff at 874-7914.

cc: MMRP File

Reading File

RECEIVED

NOV 13 2008

**PLANNING DEPT.
County of Sacramento**

SACRAMENTO COUNTY
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT
MITIGATION MONITORING AND REPORTING PROGRAM

CONTROL NUMBER: 05-GPB-CZB-ZOB-0938

NAME: North Highlands Town Center Development Code

LOCATION: The project is centered around the intersection of Freedom Park Drive and Dudley Boulevard/34th Street; approximately 900 feet to the north and 1,300 feet to the south of Freedom Park Drive, between Watt Avenue and 32nd Street, in the North Highlands Community.

ASSESSOR'S PARCEL NUMBER: 215-0072-(7, 17, 19, 20, 24, 25, 30-32), 215-0080-(1, 2, 4, 5), 215-0092-(1, 2, 8-10), 215-0182-(1-4, 10-14, 16-19, 22, 27, 28, 31, 32), 215-300-(30, 55, 64)

APPLICANT:

County of Sacramento Planning and Community Development Department
827 7th Street, Room 230
Sacramento, CA 95814

PROJECT DESCRIPTION: The North Highlands Town Center Development Code project proposes the creation of a town center in North Highlands through the implementation of a Development Code to carry out the vision, goals, and policies embodied in the Community Plan, the vision for North Highlands and the North Highlands Community and Economic Development Strategy. The following are the requested entitlements:

1. A **General Plan Amendment** to expand the Urban Policy Area by approximately 24.77 acres.
2. A **General Plan Amendment** to change the General Plan designation from Commercial and Offices (70.19 acres), Agricultural-Residential (10.39 acres) and Intensive Industrial (14.96 acres) **to** Urban Transit Oriented Development (Urban TOD).
3. A **Community Plan Amendment** and **Corresponding Rezone** from Light Industrial (M-1), General Commercial (GC), Auto Commercial (AC), Shopping Center (SC), Limited Commercial (LC), Residential Density 30 (RD-30) and Special Planning Area to Special Planning Area for 95.54± acres .

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Sacramento

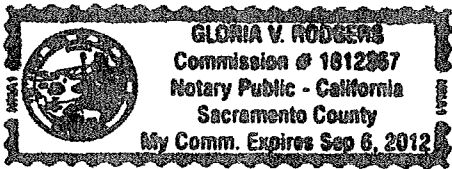
On November 6, 2008 before me, Gloria V. Rodgers,
Date Here Insert Name and Title of the Officer

personally appeared Cyndi Lee
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Place Notary Seal Above

Signature Gloria V. Rodgers
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

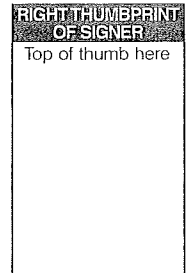
- Individual
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer Is Representing: _____

Signer's Name: _____

- Individual
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer Is Representing: _____

4. A **Zoning Ordinance Amendment** to create the North Highlands Town Center Development Code.
5. A **Zoning Ordinance Amendment** to remove 29.9 acres from the McClellan Park Special Planning Area (SPA - 511-10).
6. A **Zoning Ordinance Amendment** to remove 1.3 acres from the Watt Avenue Special Planning Area (SPA – 504-10).

TYPE OF ENVIRONMENTAL DOCUMENT:

- | | |
|---|--|
| <input type="checkbox"/> Negative Declaration | <input type="checkbox"/> Prior Negative Declaration |
| <input checked="" type="checkbox"/> Environmental Impact Report | <input type="checkbox"/> Prior Environmental Impact Report |
| <input type="checkbox"/> Supplemental Environmental Impact Report | |

PREPARED BY: Sacramento County Department of
Environmental Review and Assessment
827 7th Street, Room 220
Sacramento, CA 95814

PHONE: (916) 874-7914

MITIGATION MONITORING AND REPORTING PROGRAM

ADOPTED BY: BOARD OF SUPERVISORS

DATE: APRIL 23, 2008

ATTEST: _____

Cydia Lee
CLERK

TABLE OF MEASURES

<input type="checkbox"/>	MITIGATION MEASURE PS-1: WATER SUPPLY	6
<input type="checkbox"/>	MITIGATION MEASURE PS-2: SEWER SERVICE	8
<input type="checkbox"/>	MITIGATION MEASURE TC-1: REQUIRED TRAFFIC IMPROVEMENTS	10
<input type="checkbox"/>	MITIGATION MEASURE AQ-1 PM10/DUST	13
<input type="checkbox"/>	MITIGATION MEASURE AQ-2 OPERATIONAL EMISSION IMPACT – AQ-15 PLAN	15
<input type="checkbox"/>	MITIGATION MEASURE NO-1 NOISE IMPACT AT RESIDENTIAL RECEPTORS:	17
<input type="checkbox"/>	MITIGATION MEASURE NO-2 LOADING DOCK NOISE IMPACT AT RESIDENTIAL RECEPTORS:.....	19
<input type="checkbox"/>	MITIGATION MEASURE BR-1 NATIVE OAK TREE COMPENSATION:.....	21
<input type="checkbox"/>	MITIGATION MEASURE BR-2 NATIVE OAK TREE PROTECTION	24
<input type="checkbox"/>	MITIGATION MEASURE CR-1: CULTURAL RESOURCE PROTECTION	27

PURPOSE AND PROCEDURES

Pursuant to Section 21081.6 of the Public Resources Code and Chapter 20.02 of the Sacramento County Code, a Mitigation Monitoring and Reporting Program has been established for the project entitled North Highlands Town Center Development Code (**Control Number: 05-GPB-CZB-ZOB-0938**).

PURPOSE

The purpose of this program is to assure diligent and good faith compliance with the Mitigation Measures which have been recommended in the environmental document, and adopted as part of the project or made conditions of project approval, in order to avoid or mitigate potentially significant effects on the environment.

NOTIFICATION AND COMPLIANCE

It shall be the responsibility of the project applicant to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The Department of Environmental Review and Assessment (DERA) will verify that the project is in compliance. Any non-compliance will be reported to the project applicant, and it shall be the project applicant's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator.

PAYMENT

It shall be the responsibility of the project applicant to reimburse DERA for all expenses incurred in the implementation of the Mitigation Monitoring and Reporting Program (MMRP), including any necessary enforcement actions.

COMPLETION

Pursuant to Section 20.02.060 of the Sacramento County Code, upon the determination of the Environmental Coordinator that compliance with the terms of the approved Mitigation Monitoring and Reporting Program has been achieved, and that there has been full payment of all fees for the project, the Environmental Coordinator shall record and issue a Program Completion Certificate for the project.

STANDARD PROVISIONS

The project applicant shall submit one copy of all Project Plans and Construction Specifications and/or revisions to the Department of Environmental Review and Assessment prior to board approval to advertise Plans and Specifications. If the Department of Environmental Review and Assessment determines that the Plans are not in full compliance with the adopted MMRP, the Plans shall be returned to the project applicant with a letter specifying the items of non-compliance, and instructing the applicant to revise the Plans, and then resubmit one copy of the revised Plans to the Department of Environmental Review and Assessment prior to board approval to advertise.

Additionally, the project applicant shall notify the Department of Environmental Review and Assessment **no later than 48 hours** prior to the start of construction and no later than 24 hours after its completion. The applicant shall notify the Department of Environmental Review and Assessment no later than 48 hours prior to any/all Final Inspection(s) by the County of Sacramento.

The project applicant shall notify the Department of Environmental Review and Assessment (DERA) of any pre-construction meetings. Upon notification, a determination will be made as to whether or not DERA will need to attend the meeting.

Comply with the Mitigation Monitoring and Reporting Program for this project, including the payment of 100% of the Sacramento County Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of that Program.

☐ MITIGATION MEASURE PS-1: WATER SUPPLY

The applicant for any development project within the jurisdiction of the North Highlands Town Center Development Code shall provide a water supply analysis to the satisfaction of the Sacramento County Water Supply Division and the Sacramento Suburban Water District. The analysis shall show that adequate water system infrastructure will be available to serve the proposed development or if upon review of the analysis, Sacramento County and the Water District determine that the existing water system infrastructure is not adequate, the project developer shall through the water supply analysis identify the facilities necessary to supply the proposed development. The project developer shall construct the necessary facilities to the satisfaction of the Water District and Sacramento County prior to the issuance of occupancy permits.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

MITIGATION MEASURE PS-2: SEWER SERVICE

Prior to individual development within the jurisdiction of the North Highlands Town Center Development Code, prepare a comprehensive sewer study, to be reviewed and approved by Sacramento County and CSD-1, that identifies the required sewer infrastructure necessary to handle the growth expected throughout the North Highlands Town Center Development Code area and establishes a financing plan to assure that any necessary improvements are made on a fair-share basis as individual development projects are filed. Required improvements must be made prior to the issuance of sewer connection permits.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure and ensure that required improvements are made prior to issuance of sewer connection permits for individual projects.
2. Provide DERA a copy of the approved sewer study and financing plan with endorsement from CSD-1 (SASD).

Verification (Action by the Department of Environmental Review and Assessment):

1. Coordinate with CSD-1 (SASD) to verify completion of, and compliance with, a satisfactory sewer study and financing plan prior to approval of the first building permits for any new development or major rehabilitation within the jurisdiction of the North Highlands Town Center Development Code.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

MITIGATION MEASURE TC-1: REQUIRED TRAFFIC IMPROVEMENTS

Provide a mechanism to ensure the funding and installation of the following improvements:

1. Impact at the Intersection of Watt Avenue and Antelope Road-U Street

The project proponent shall be 100% responsible to add a westbound left-turn lane and a southbound left-turn lane to this intersection. Additionally, modify the traffic signal to allow lane additions.

2. Impact at the Intersection of Watt Avenue and Don Julio Boulevard

The project proponent shall be 100% responsible to add a northbound through lane and 71% responsible to add a northbound right-turn lane. Additionally, modify the traffic signal to allow lane additions.

3. Impact at the Intersection of 34th Street and Elkhorn Boulevard

The project proponent shall be 100% responsible for signalization of this intersection.

4. Impact at Watt Avenue Between Antelope Road and Elkhorn Boulevard

The project proponent shall be 100% responsible to widen the section of Watt Avenue between Antelope Road and Elkhorn Boulevard from four lanes to six lanes.

5. Impact at Watt Avenue Between Elkhorn Boulevard and Don Julio Boulevard

The project proponent shall be 100% responsible to widen the section of Watt Avenue between Elkhorn Boulevard and Don Julio Boulevard from four lanes to six lanes.

6. Impact at the Intersection of Watt Avenue and Freedom Park Drive

The project proponent shall be responsible for their proportionate share of 75% to add a southbound right-turn lane. Additionally, modify traffic signal to allow lane addition.

7. Impact at the Intersection of Watt Avenue and Elkhorn Boulevard

The project proponent shall be responsible for their proportionate share of 29% to add a westbound through lane, an eastbound through lane, and a southbound right-turn lane. Additionally, modify traffic signal to allow lane addition.

8. Impact at the Intersection of Watt Avenue and Roseville Road

The project proponent shall be responsible for their proportionate share of 48% to add a southbound right-turn lane and westbound left-turn lane. Additionally, modify traffic signal to allow lane additions.

9. Impact at Elkhorn Boulevard Between Watt Avenue and 24th Street

The project proponent shall be responsible for their proportionate share of 12% to widen the section of Elkhorn Boulevard between Watt Avenue and 24th Street from two lanes to three lanes in each direction.

Implementation and Notification (Action by Project Applicant):

1. Prior to approval of any new development within the jurisdiction of the North Highlands Town Center Development Code, establish a Traffic Improvement Plan in consultation with SACDOT that sets development triggers for each of the above improvements and provides that no new development occur once a trigger has been met until the required improvements are installed as described in the Traffic Improvement Plan. The plan shall be subject to the approval of DERA and SACDOT.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review and, if determined adequate by both DERA and SACDOT, approve the required Traffic Improvement Plan.
2. Prior to approval of building permits for new development or major rehabilitation within the North Highlands Town Center Development Code jurisdiction, coordinate with SACDOT as needed to verify compliance with the approved Traffic Improvement Plan.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ Date: _____

MITIGATION MEASURE AQ-1 PM10/DUST

In order to reduce PM10/dust emissions to less than significant levels, implement level three mitigation as defined by the Sacramento Metropolitan Air Quality Management District, which includes the following measures:

- a. Keep soil moist at all times
- b. Maintain two feet of freeboard space on haul trucks
- c. Use diesel catalyts on applicable heavy-duty diesel construction equipment.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code.
2. Add language to the Development Code to require the above measure verbatim as a Construction Note and require incorporation of it into all Plans and Specifications for any construction within the North Highlands Development Code jurisdiction.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure and additional language into the Code.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

**MITIGATION MEASURE AQ-2 OPERATIONAL EMISSION IMPACT – AQ-15
PLAN**

In order to reduce operational emissions, prepare an SMAQMD approved Air Quality Management Plan that achieves a 15% reduction in emissions and incorporate the plan into the North Highlands Town Center Development Code.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Complete the refinements to the Air Quality Management Plan requested by the SMAQMD in their March 25, 2008 letter of conditional endorsement and obtain a full, non-conditional endorsement of the Plan from SMAQMD.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code and verify final non-conditional endorsement of the Plan by SMAQMD.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

MITIGATION MEASURE NO-1 NOISE IMPACT AT RESIDENTIAL

RECEPTORS:

To ensure compliance with General Plan Noise Element standards of 65 dB L_{dn} or less for residential outdoor activity areas and 45 dB L_{dn} or less for residential interiors, the following measures shall apply:

1. Any/all common outdoor activity areas shall be located at or beyond the 65 dB noise contour, as shown in Plate NS-1 of the EIR.
2. Any/all new residential construction shall be located at or beyond the 70 dB noise contour, as shown in Plate NS-1 of the EIR.

Any departure or deviation from the above measures must be accompanied by an acoustical analysis, prepared by a qualified acoustical consultant and verified by the Department of Environmental Review and Assessment, substantiating that the General Plan Noise Element standards cited above will be met.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code and provide a provision for the collection of a time-and-materials-based fee to cover DERA review of any acoustical analyses submitted as a result of this requirement.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code.
2. Review acoustical studies as needed.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

**MITIGATION MEASURE NO-2 LOADING DOCK NOISE IMPACT AT
RESIDENTIAL RECEPTORS:**

To ensure impacts from loading dock noise are less than significant, if a loading dock is located within 100 feet of a residential area, an acoustical analysis shall be completed by a qualified acoustical consultant which recommends measures to minimize loading dock noise impacts on the residential uses and that those measures be included in the project design.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code and provide a provision for the collection of a time-and-materials-based fee to cover DERA review of any acoustical analyses submitted as a result of this requirement.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ Date: _____

☐ MITIGATION MEASURE BR-1 NATIVE OAK TREE COMPENSATION:

To the maximum extent possible, all on-site oak trees shall be protected, retained and encroachment kept below 20% of the protected dripline area. If it is demonstrated, to the satisfaction of the Environmental Coordinator, that preservation of a particular oak tree can not be achieved, then the removal or partial encroachment of the native oak tree shall be compensated by planting native oak trees (valley oak/*Quercus lobata*, interior live oak/*Quercus wislizenii*, and blue oak/*Quercus douglasii*) equivalent to the dbh inches lost, based on the ratios listed below, at locations that are authorized by the Department of Environmental Review and Assessment. Note: When encroachment is between 20% and 50% of the dripline area, partial compensation is required based on the total dbh of the tree multiplied by the encroachment percentage. Tree removal and encroachments over 50% require full mitigation of the total dbh inches.

Equivalent compensation based on the following ratio is required:

- one deepot seedling (40 cubic inches or larger) = 1 inch dbh
- one 15-gallon tree = 1 inch dbh
- one 24-inch box tree = 2 inches dbh
- one 36-inch box tree = 3 inches dbh

Prior to the approval of Improvement Plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:

1. Species, size and locations of all replacement plantings;
2. Method of irrigation;
3. The Sacramento County Standard Tree Planting Detail L-1, including the 10-foot deep boring hole to provide for adequate drainage;
4. Planting, irrigation, and maintenance schedules;
5. Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement oak trees which do not survive during that period.

No replacement tree shall be planted within 15 feet of the driplines of existing oak trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement oak trees shall be 20 feet on-center. Examples of acceptable planting locations are publicly owned lands, common areas, and landscaped frontages (with adequate spacing). Generally unacceptable locations are utility easements (PUE, sewer, storm drains), under overhead utility lines, private yards of single family lots (including front yards), and roadway medians.

If oak tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation shall be through payment into the County Tree Preservation Fund. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code and provide a provision for the collection of a time-and-materials-based fee to cover DERA review of any Tree Planting Plan(s) submitted as a result of this requirement.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code.
2. Review plans for proposed tree encroachment/removal and approve only plans which preserve native oak trees to the maximum extent practical and which are accompanied by acceptable replacement oak tree planning plans or fee payments.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ Date: _____

□ MITIGATION MEASURE BR-2 NATIVE OAK TREE PROTECTION

With the exception of the trees removed and/or compensated for through Mitigation Measure BR-1 above, all native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.
2. Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines."
3. Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100-feet of construction related activities, in order to avoid damage to the tree canopies and root systems.
4. Any removal of paving or structures (i.e. demolition) that occurs within the dripline of a protected oak tree shall be done under the direct supervision of a certified arborist. To the maximum extent feasible, demolition work within the dripline protection area of the oak tree shall be performed by hand. If the certified arborist determines that it is not feasible to perform some portion(s) of this work by hand, then the smallest/lightest weight equipment that will adequately perform the demolition work shall be used.
5. No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.
6. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.
7. No grading (grade cuts or fills) shall be allowed within the driplines of protected trees.

8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.
9. No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.
10. The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist.
11. All portions of any masonry wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts set no closer than 10 feet on center. Any wrought iron fencing shall be similarly installed, with posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.
12. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of the required masonry wall and wrought iron fence, occurs within 10 feet of the trunk of a tree.
13. No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended.
14. Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available at the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code.

Comments

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ **Date:** _____

MITIGATION MEASURE CR-1: CULTURAL RESOURCE PROTECTION

To ensure protection of cultural resources, the following measure applies.

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

Implementation and Notification (Action by Project Applicant):

1. Incorporate the above measure into the Development Code with a requirement that the above measure shall be included verbatim as a Construction Note on all Plans and Specifications for development within the North Highlands Town Center Development Code jurisdiction.

Verification (Action by the Department of Environmental Review and Assessment):

1. Review the final Development Code and verify the incorporation of the above measure into the Code.

Comments:

Completion of Mitigation Verified:

Department of Environmental Review and Assessment

Signature: _____ Date: _____