



PLANNING COMMISSION AGENDA

SEPTEMBER 20, 2012
CITY COUNCIL CHAMBERS
6:30 PM

1. Call to order
2. Roll Call
3. **Approval of Minutes for August 16, 2012**
4. **Director's Report:** This is an opportunity for the Community Development Department's Director or designee to provide the Commission with information on any items other than those listed on the Agenda.
5. **Public Comment:** This is an opportunity for the public to speak to the Commission on any item other than those listed on the Agenda. The Chairman may impose a time limit on any speaker.
6. **Communication - Commission Statements and Requests:** This is an opportunity for the Commission members to make comments and announcements to express concerns or to request Commission's consideration of any items a Commission member would like to have discussed at a future Commission meeting.
7. **Subcommittee Reports:**

PUBLIC HEARING:

8. **Velocity Island Cable Wakeboard Park Conditional Use Permit (CUP).** Request for a Conditional Use Permit to construct and operate a cable wakeboard park (a surface water sport park) within the City's 15-acre Dubach Detention Basin (also known as Dubach Park) at 755 North East Street (APNs 027-340-002 & 027-270-078). The requested entitlements include a Conditional Use Permit, review of the proposed Initial Study and Mitigated Negative Declaration and the proposed adoption of the Mitigation Monitoring and Reporting Plan, and a review of the Site Plan, Landscape Plans, and Design Review for the project.

Applicant:	Scott Hartmann of LoveRide Inc
Environmental Document:	Initial Study and Mitigated Negative Declaration with a Mitigation Monitoring Reporting Plan
Staff Contact:	Paul L Hanson, AICP, Senior Planner
Recommended Action:	Recommend to City Council Conditional Approval

NEW BUSINESS:

OLD BUSINESS:

9. Adjournment

The Planning Commission of the City of Woodland encourages all parties interested in a matter scheduled to be reviewed, discussed and acted on at a meeting, to participate in the public discourse, which may include the submission of written comments and materials. The Planning Commission notifies the public that those materials received less than 24 hours before a meeting date and time may not be able to be considered completely. Further, the Planning Commission encourages interested parties to attend the meeting to discuss any matter of concern and to explain their comments more fully.



PLANNING COMMISSION AGENDA

AUGUST 16, 2012

CITY COUNCIL CHAMBERS

6:30 PM

DRAFT MINUTES

1. Call to order
2. Roll Call
Commissioners Present: Lopez, Murray, Wurzel, Holt, Gonzalez, Murphy
Commissioners Absent: None

Staff: Nick Ponticello, Community Development Director; Cindy Norris, Principal Planner; ; Brent Meyer, Principal Engineer; Diana Ayón, Associate Civil Engineer
3. **Approval of Minutes for July 19, 2012**
Ayes: Lopez, Murray, Wurzel, Holt, Gonzalez
No 's:
Abstain: Murphy
4. **Director's Report:** This an opportunity for the Community Development Department's Director or designee to provide the Commission with information on any items other than those listed on the Agenda.
 - *Heritage Home Awards – Sept 5*
 - *Stroll through History – Sat Sept 8*
 - *Meeting Sept 20*
5. **Public Comment:** This is an opportunity for the public to speak to the Commission on any item other than those listed on the Agenda. The Chairman may impose a time limit on any speaker.
6. **Communication - Commission Statements and Requests:** This is an opportunity for the Commission members to make comments and announcements to express concerns or to request Commission's consideration of any items a Commission member would like to have discussed at a future Commission meeting.
7. **Subcommittee Reports:**
8. **Presentations:**
 - a. Certificate of Appreciation for David A. Sanders
 - b. Certificate of Appreciation for Steve A. Barzo

PUBLIC HEARING:

9. **Optimistic Partners, LLC – Tentative Parcel Map # 5003;** Request for a Tentative Parcel Map to subdivide a 19.97 acre parcel into two parcels for purposes of sale only, no development rights or improvements are associated. The two parcels will consist of one 8.9 acre site zoned for residential and one 11.07 acre site zoned for park and neighborhood commercial

Applicant:

Optimistic Partners, LLC; Bill Streng; 1949 Fifth Street, Suite 108,
Davis CA 95616

Environmental Document:

Prior EIR

Staff Contact:

Cindy A. Norris, Principal Planner

Recommended Action:

Conditional Approval

Motion: Commissioner **Murphy** made a motion to approve the Tentative Parcel Map #5003, which was seconded by Commissioner **Gonzalez**.

Ayes: Lopez, Murray, Wurzel, Gonzalez, Holt, Murphy

No's

Abstain:

Motion:

That the Planning Commission Approve the Optimistic Partners Tentative Parcel Map #5003 Dated June 18, 2012, Based On The Identified Findings Of Fact And Subject To The Identified Conditions Of Approval, By Taking The Following Actions:

- Confirmation of the finding that the proposed Tentative Parcel Map No. 5003 is in substantial compliance with previously Council certified the Turn of the Century Final EIR (State Clearing House Number 1199022069; Resolution No. 4215 adopted August 15, 2000) and Addendums.
- Determine that the project, as conditioned, is consistent with the General Plan.
- Determine that the project, as conditioned, is consistent with the Zoning Ordinance.
- Approve Tentative Parcel Map #5003 dated June 18, 2012 dividing APN 041-070-044 as identified by the attached Tentative Parcel Map.

NEW BUSINESS:

10. **Landscape Design for the I-5/CR 102 Interchange:** Planning Commission review and comment on the proposed I-5/CR-102 Landscaping preliminary concept plan

Applicant:

Staff Contact:

Recommended Action:

City of Woodland

Diana Ayón, Associate Civil Engineer

Review and comment

OLD BUSINESS:

10. Adjournment

The Planning Commission of the City of Woodland encourages all parties interested in a matter scheduled to be reviewed, discussed and acted on at a meeting, to participate in the public discourse, which may include the submission of written comments and materials. The Planning Commission notifies the public that those materials received less than 24 hours before a meeting date and time may not be able to be considered completely. Further, the Planning Commission encourages interested parties to attend the meeting to discuss any matter of concern and to explain their comments more fully.

PROJECT TITLE: **Velocity Island Cable Wakeboard Park Conditional Use Permit (CUP).** Request for a Conditional Use Permit to construct and operate a cable wakeboard park (a surface water sport park) within the City's 15-acre Dubach Detention Basin (also known as Dubach Park)

LOCATION: 755 North East Street immediately northwest of Interstate 5/Highway 113

APPLICANT/OWNER: Applicant: Scott Hartmann of LoveRide Inc
Owner: City of Woodland

ENVIRONMENTAL REPORT: Mitigated Negative Declaration

A.P.N. 027-340-002 & 027-270-078

PROJECT PLANNER: Paul L. Hanson, AICP, Senior Planner

STAFF RECOMMENDATION: Conditional Approval

REPORT FOR: Planning Commission Public Hearing - 9/20/12

GENERAL PLAN DESIGNATION: Open Space (OS)

CURRENT ZONING: Open Space (OS)

EXISTING LAND USES: Dubach Stormwater Detention Basin

FLOOD ZONE: AE Zone - Area of 100-Year Flooding, Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood Event (Base Flood Elevation Determined), FIRM Community Panel Number – 060426-0465H Revised May 16, 2012.

STREET ACCESS: Dubach Access Road and North East Street

**ADJACENT LAND USES
& ZONING / GENERAL PLAN:**

North	Farm land	County
South	Farm land	County
East	Valley Oak Inn & vacant lot	C-H
West	Farm land	County

PENDING / POTENTIAL ACTION

Staff recommends that the Planning Commission make the following recommendations:

1. That the City Council adopts the Mitigated Negative Declaration (**MND**) and approves the Mitigation Monitoring and Reporting Plan (**MMRP**). In accordance with the California Environmental Quality Act (CEQA) section 15074, the Planning Commission finds on the basis of the whole record before it (including the Initial Study and any comments received), that there is no substantial evidence that the project, with the implementation of the recommended mitigation measures, will have a significant effect on the environment, and that the Mitigated Negative Declaration reflects the lead agency's independent judgment and analysis;
2. That the City Council, approve the Conditional Use Permit for Velocity Island Park, application dated 11/03/11, Site Plan and, Landscape Plans dated 5/27/11, as based on the Findings of Fact and subject to the Conditions of Approval as provided in the Staff Report presented on September 20, 2012 (**See Attachment A - Application, Site, and Landscape Plans**).

PROJECT SITE DESCRIPTION

The site is located on 15 acres of City property known as the Dubach Stormwater Detention Basin (aka Dubach Park) (APN 027-340-002 & 027-270-078) located at 755 North East Street immediately northwest of Interstate 5 / Highway 113 in the City of Woodland, Yolo County, California. The project site has a City of Woodland General Plan and Zoning Designation of Open Space (OS). Uses appropriate to the area are allowed in the OS zone with approval of a Conditional Use Permit.

The project site is located in a largely agricultural area in a northern portion of the City. Land uses surrounding the project site consist of various agricultural, commercial, and industrial land uses. Existing agricultural operations are located immediately to the north and west. East Street/Highway 113 is located immediately to the east with various businesses on the opposite side, including Valley Oaks Inn and several warehouses. Interstate 5 is located directly to the south with a large trucking operation on the other side.

BACKGROUND

The project site has been used solely as a hydrologic detention basin since 2008 when the softball park was closed. Prior to 2008, the park was a dual-use facility for youth baseball and winter stormwater detention.

PROJECT PROPOSAL

The applicant, Scott Hartmann of Love Ride, Inc., is requesting a Conditional Use Permit (CUP) to allow the construction and operation of a cable wakeboard park within the City's 15-acre Dubach Detention Basin (aka Dubach Park) in the City of Woodland. Cable wakeboarding is a surface water sport, which involves riding a wakeboard over the surface of a body of water while being pulled by an overhead cable system. The cables are suspended in the air by a series of towers surrounding a small lake; an overhead cable rotates in a (usually) counterclockwise motion around the lake. Along the cable are a number of carriers from which towropes are attached, pulling riders around the lake.

The project, known as "Velocity Island Park," would create a 9-acre lake within the Dubach Detention Basin site and construct the overhead cable system and park amenities. The 9-acre lake

will be 7 to 8 feet deep with a minimum depth of 5 feet. The cable system will consist of the two (2) cable systems. The main cable system includes six truss-design stanchions with an electric motor pulling the overhead towline around the lake. The second cable system consists of two separate towlines for straight line pulling. Each system includes two truss-design stanchions with an electric motor pulling the overhead towline in a straight line. Within the watercourse, the project includes two sandy islands, one for wake dampening, and the other includes a spectator area and a launching ramp for participants.

The project will also include floating and stationary docks for launching participants, and a decomposed granitic path 4 to 5 feet wide around the perimeter of the lake. The parking lot will be landscaped with approximately 24 trees and the south and east perimeter of the park will be landscaped with 51 Valley Oak trees. A nine (9) foot tall chain link fence is proposed for the perimeter of the park. A green screen is proposed for portions of the chain-link fence in order to reduce dust and debris blowing into the lake from the neighboring properties.

The facility proposes 76 parking spaces, restrooms (624 sq. ft.), rental building (640 sq. ft.), a snack bar/office (1,200 sq. ft.), and an observation deck. The project would operate from 8 a.m. to ½ hour before dusk every day of the week and expects 10 to 100 persons per day with more on special event days (tournaments).

CITY SERVICES

The project site will be required to hookup to City water services. Water, sewage, electrical and telephone connections will be required as a part of this application. All services shall be shown on the improvements plans to be reviewed and approved by the Public Works Department prior to building permit issuance. The lease agreement for the use of the site to be reviewed and approved by the City Council.

PUBLIC NOTIFICATION

A Notice of Intent to Adopt a Mitigated Negative Declaration and Public Hearing was released August 7, 2012 (**See Attachment B -Notice of Intent to Adopt a Mitigated Negative Declaration and Public Hearing**). The Notice was prepared by the Community Development Department in accordance with notification procedures set forth by CEQA and State Planning Law.

- Legal notice was published in the Woodland Daily Democrat on Friday July 27, 2012,
- Notice was posted with the County of Yolo on July 24, 2012
- Notices were mailed to all property owners within 300 feet of the project site and to other listed interested persons and agencies on July 25, 2012.
- Notice and the environmental document was delivered to the State Clearing House on July 26, 2012

Public notice advertising for the public hearing on this project was prepared by the Community Development Department in accordance with notification procedures set forth in the City of Woodland's Municipal Code and State Planning Law. Two (2) methods of public notice were used:

- Legal notice was published in the Woodland Daily Democrat on Friday July 27, 2012,
- Notices were mailed to all property owners within 300 feet of the project site on September 4, 2012.

Copies of the factual staff report for the proposed project have been on file at City Hall since Friday, September 14, 2012.

Public comment was received from the following:

- California Department of Transportation, District 3
- Regional Water Quality Control Board, Central Valley
- Sacramento - Yolo Mosquito & Vector Control District
- Klein Farms L.P.

Those comments and the responses to those comments can be found in **Attachment C, the Response to Comments on the Mitigated Negative Declaration.**

APPLICABLE LAWS, CODES, AND ORDINANCES (See Attachment D)

The project is subject to several laws, codes, and ordinances:

- The City of Woodland General Plan
- The City of Woodland Zoning Ordinance
- Community Design Standards
- The California Environmental Quality Act (CEQA)
- State of California's Water Efficient Landscape Ordinance AB 1881
- National Flood Insurance Program (NFIP) Regulations (44 CFR Parts 59-78).

ENVIRONMENTAL ASSESSMENT STATUS

A draft Negative Declaration for the subject project was circulated on July 27, 2012 for a 30-day comment period extending from July 27, 2012 to August 27, 2012 (**See Attachment E - Mitigated Negative Declaration SCH# 2012072053**). A letter from Governor's Office of Planning and Research confirms the close of the comment period and compliance with the State requirements (**See Attachment F - Letter from the Governor's Office of Planning and Research dated August 28, 2012**).

Staff requests the Planning Commission make the recommendation to the City Council to determine that the subject project, as revised, as further defined and discussed in the attached Environmental Checklist / Initial Study, and with the implementation of the recommended mitigation measures from the Mitigation Monitoring and Reporting Program (MMRP), will not have any significant effects on the environment. As a result, the preparation of an environmental impact report pursuant to the California Environmental Quality Act (Division 13 of the Public Resources Code of the State of California) is not required.

Staff also requests that the Planning Commission make the recommendation that prior to taking an action on recommending approval of the project as recommended, that the City Council adopt the Mitigated Negative Declaration as a final document and make specified findings required under CEQA. Pursuant to Public Resources Code Section 21081.6 and Section 15097 of the CEQA Guidelines, a Mitigation Monitoring and Reporting Program (MMRP) has been prepared (**See Attachment G - Mitigation Monitoring and Reporting Program**) to ensure that during all phases of the project, the City and any other responsible parties implement the adopted mitigation

measures. In addition to adopting the Mitigated Negative Declaration, the City Council must review and approve the Mitigation Monitoring and Reporting Program. If this project is approved by the City Council, staff will file a Notice of Determination with the Yolo County Clerk's Office in conformance with Article 5 §15075(a) of the CEQA guidelines.

REVIEWING AGENCY COMMENTS

All reviewing city departments and responsible agencies comments have also been integrated into the conditions of approval. Pacific Bell, PG & E, Wave Broadband, and Waste Management did not response to the City's referral.

DISCUSSION

The proposed location for the Velocity Island Park Project is the Dubach Detention Basin and the former site of Dubach Softball Park. As previously mentioned, prior to 2008, the property was a dual-use facility for youth and adult softball and winter stormwater detention. The new proposal is also for a dual use facility, cable wakeboard park and as a detention basin. A detention basin is the primary purpose for this site.

Prior to closing, Dubach Park contained three (3) softball fields, batting cages, bleachers, equipment shed, snack bar, lights for evening play, play structure for children and a 76-space parking lot. Dubach Park was booked every weekend, when the fields were not flooded, for adult and youth softball tournaments and weeknights with adult softball leagues. All the equipment and structures have been removed.

The proposed cable wakeboard park would operate daily and anticipates 10 to 100 persons per day with more attendance for special events (tournaments) during the year. For these larger events, a separate review would be required from the City's Special Events Committee and the applicant will be required to obtain a Special Event Permit. The Special Event Permit must address special event parking, shuttle service, traffic control, noise control, sale of alcohol, security measures and advance notification to adjacent residences. **Staff is recommending a condition of approval requiring that the Park operators obtain a Special Event Permit from the City for tournaments and other special events held that the Park.**

Public safety is a concern at the proposed park. The current detention basin has steep slopes surrounding the detention basin, making it difficult to climb out of the water. The applicant proposes to design the lake with an approximately 1 to 5 slope (1 foot vertical to 5 feet of horizontal) to the shoreline, allowing persons in the water to walk safety out of the water. Staff has concerns that with the lake depths being will between 7 to 8 feet, the applicant has indicated that lifeguards are not needed for this type of activity. Similar to other cable wakeboard parks in Texas and Florida, relying on the implementation of other safety measures such as:

- ◆ A 9-foot chain-link fence around the entire lake
- ◆ Staff certified in CPR
- ◆ Coast-guard approved life jackets and safety helmets must be worn by all participants
- ◆ Participants must sign a Waiver of Liability
- ◆ Every participant required to watch a mandatory instructional video

- ◆ All beginners must take a beginner course
- ◆ Park rules posted upon entrance to the park
- ◆ Security cameras installed and staff certified in crowd control
- ◆ For special events private security will be hired

Staff is recommending a condition of approval requiring the park operators to implement all of the safety measures outlined in their cable wakeboard park proposal and to provide upon request at any time, an incident report tracking safety issues and accidents at the park.

As part of the approval process, the applicant will need to enter into a lease agreement with the City. This agreement is approved by the City Council and will set terms under which Velocity Island park will operate. The lease agreement will include safety and waiver requirements, and causes for termination. The Conditional Use Permit is incorporated into this lease agreement. An important component of this lease agreement is liability insurance required for the park operator. Staff has been working with the Yolo County Public Agency Risk Management Insurance Authority (YCPARMIA) to inform them of this project. YCPARMIA is requiring a 10 million dollar insurance policy.

As part of the lease agreement, the applicant has offered to provide the necessary maintenance for the detention basin. Other potential benefits of proposed cable wakeboard park along with paying a monthly rent for the property, is the prospect of increasing tourism for the City and increasing the recognition of Woodland as a recreational destination.

STAFF ANALYSIS

Staff supports this project subject to the attached conditions of approval and provides the following analysis:

GENERAL PLAN CONSISTENCY

The General Plan (GP) designation for the site is **Open Space (OS)**. This General Plan designation provides for agricultural uses, outdoor recreational and equestrian uses, habitat protection, irrigation canals, reservoirs, watershed management, public and quasi-public uses, and areas typically limited for human occupation due to public health and safety hazards such as earthquake faults, floodways, unstable soils, or areas containing wildlife habitat and other environmentally-sensitive features. The Open Space (OS) designation provides for outdoor recreational and similar uses as appropriate. **The project as conditioned is consistent with the General Plan.**

CONSISTENCY WITH OTHER PLANS

The project site is subject to the Community Design Standards. The proposed buildings for the project include one (1) 624 square-foot men's & women's bathroom (24 by 26 feet) and one (1) 1,200 square-foot operations building (24 by 50 feet). The bathroom will be constructed using split face concrete masonry unit (CMU) block and a metal standing seam roof. The operations building is a portable building that will be located on the floating dock. These buildings are single story and small considering the size of the property. Exterior colors were not provided for these building at this time. **Staff is recommending a condition of approval requiring that each building use earth tone colors and final approval from the Community Development Department.**

ZONING CONSISTENCY

Land Use

The zoning designation for the site is **Open Space (O-S)**. This zoning designation allows *Golf Courses, Driving Ranges, Public, Quasi Public, and Uses Appropriate To The Area* with a Conditional Use Permit. The cable wakeboard park is an appropriate use and is similar to the former Dubach softball park as a recreational use. **The proposed project as conditioned is consistent with the Zoning Ordinance.**

Staff is recommending a condition requiring the applicant to provide a quality assurance report, at any time upon request to the City, to verify that the water quality of the lake is safe for human occupancy and water sports use.

Setbacks

The proposed building(s) will comply with all the required setbacks of Section 25-6-20 of the Zoning Ordinance.

Height

The proposed building(s) will be within the maximum height limitation of 30 feet (Sec. 25-6-30 of the Zoning Ordinance).

Off-Street Parking

Article 23 of the Zoning Regulations commencing with Section 25-23-10 addresses off-street parking and loading requirements. The Zoning Ordinance does not have a parking requirement for this type of use, cable wakeboard park. Working with the City's Traffic Engineer and relying on past use of the subject site, staff believes the 76 parking spaces being provided is adequate for the typical week and weekend use of the site.

A key issue is traffic and safety along East Street and Churchill Downs. Parking is only allowed on-site or via a shuttle from an approved off-site location. The concern is that participants and spectators start parking in the area surrounding the Park, (on the Dubach Access Road, East Street, and Churchill Downs, etc.), there could be a safety issue because there are no pedestrian access facilities (sidewalks).

The applicant has requested the option to park vehicles along the Dubach Access Road leading into the park. It appears from the submitted site plans there may be sufficient space to park vehicles and still provide the required 20-foot fire access to the site. The applicant has indicated that using the access road for parking would only occur for special events and parking attendants would be parking the vehicles. This request will be reviewed at the time the applicant applies for a Special Event Permit from the City.

If additional parking is required, then the applicant will be required to provide additional parking and probably a shuttle service for any off-site parking because of the lack of pedestrian facilities in the surrounding area to access the park. In order to provide additional parking, the applicant will be required to secure off-site parking which will be subject to City review and approval.

Staff recommends a condition of approval requiring the applicant to provide additional parking and any necessary shuttle service to the site should, in the opinion of the City, parking become a problem. Event size and number of visitors and participants will be limited to that can be accommodated using available parking.

Special Events

When the Park holds tournament or others special event, **staff is recommending a condition of approval requiring the applicant to obtain a Special Events Permit from the City through the Police Department.** Applicant shall submit the request for such an event a minimum of 30 days prior to the scheduled event to the City's Special Event Committee. The Special Event Permit shall address special event parking, shuttle service, traffic control, noise control, sale of alcohol, security measures and advance notification to adjacent residences.

There shall be no sales or consumption of alcohol within the Park. Alcohol sales and consumption is only permitted with a City approved Special Event Permit. **Staff is recommending a condition of approval requiring the applicant to post the Park with adequate signage to the satisfaction of the City, that the sale and consumption of alcohol is prohibited on City Property and only allowed under a Special Event Permit.**

Staff is recommending that the applicant provide a written report detailing compliance with the approved Conditional Use Permit and Special Event Permits to the Community Development Department for review.

Landscaping

Article 22 of the Zoning Ordinance commencing with Section 25-22-10 addresses landscaping requirements. Zoning Ordinance requires that not less than six percent (6%) of the interior area of all auto parking lots shall be devoted to permanent landscaping. The Zoning Ordinance also requires that shade trees shall be planted and evenly distributed within the uncovered portions of the auto parking area so that at the trees maturity forty percent (40%) of the parking stalls and back up area will be in shade at high noon at such times as the trees have full foliage.

Applicant is required to comply with the State of California's new Water Efficient Landscape Ordinance AB 1881. The landscape architect shall document and attest to the compliance with the new State ordinance on the final landscape plans. Applicant shall submit and obtain from the Community Development Department approval for final landscape and irrigation plans.

The City's arborist is recommending three (3) varieties of trees be used in the parking lot. These trees come from the City's approved tree list and include the following trees:

- ❖ Horn beam (Carpinus betulus)
- ❖ Purple Robe(Robinia X ambigua 'Idahoensis')
- ❖ Chinese Pistache "Keith Davey"

The City's Arborist is also recommends replacing some of the Oak trees being planted on the south and east perimeter to include two (2) additional varieties along with proposed Valley Oaks.

- ❖ Little leaf Linden (Tillia cordatta)
- ❖ Frontier Elm (Ulmus X 'Frontier')

Staff is also recommending that a Tree Protection Plan be prepared to protect the health of the existing trees during construction. **Staff is recommending a condition of approval to requiring the landscape changes as recommended by the City Arborist. The project as conditioned is consistent with the City's Landscaping Ordinance.**

Signage

Article 22 of the Zoning Regulations commencing with Section 25-23-01 addresses signs. The applicant has not submitted an application for sign design review for signage at this time. The signage is required to comply with the City Sign Ordinance and Community Design Standards. In the Open Space zone wall signs can be approved by staff provided the signs comply with City Code, while ground signs require approval from the Zoning Administrator through a Zoning Administrator Use Permit (ZAP). The total amount of square footage allowed for permanent signs in the Open Space zone is 20 sq. ft. The Zoning Administrator may grant an increase in the sign area square footage over 20 square feet through a ZAP.

Staff believes that because the City property borders two roadways, Interstate 5 and State Route 113, attention getting devices and temporary signs should be regulated with City approval prior to installation and use. **Staff is recommending a condition requiring City approval for the use of temporary signs and any attention getting devices (flags, sails, fins, inflatable balloons, streamers, sponsor signs, etc.) prior to use.**

Security

The project proposes to operate from 8 a.m. to ½ hour before dusk every day of the week. Night lighting will only consist of security lighting around the building and in the parking lot. The Police Department has reviewed the project and has recommended security conditions.

Conditional Use Permit

Article 27 of the Zoning Regulations commencing with Section 25-27-01 addresses conditional use permits. The Planning Commission may approve, conditionally approve or deny an application for a conditional use permit; and in authorizing a conditional use, may impose such requirements and conditions with respect to location, construction, time period, maintenance, and operation, as deemed necessary for the protection of adjacent properties and the public interest, when reasonably related to the use of the property. Before granting any conditional use permit the Planning Commission shall be satisfied that, the proposed structure or use conforms to the requirements and the intent of this chapter and the General Plan. The zoning designation for the site is Open Space (OS). This zoning designation allows *Golf Courses, Driving Ranges, Public, Quasi Public, and Uses Appropriate To The Area* with a Conditional Use Permit.

APPEAL

The planning commission action on the conditional use permit shall be final unless, within **fourteen (14) calendar** days after the decision, the applicant, or any other person including the city council, any individual city council member, or the city manager, not satisfied with the decision of the planning commission, may appeal to the city council. No conflict of interest shall exist solely by reason of the filing of an appeal by the city council, an individual city council member, or the city manager. Any appeal shall be filed with the city clerk and, except an appeal by the city council, a council member, or the city manager, shall be accompanied by a filing fee as prescribed by city council resolution. The city clerk shall set a date for a public hearing and shall give notice to the appellant, the applicant, and neighboring property owners in the manner provided in Section 25-27-50.

SUMMARY

The applicant is requesting a Conditional Use Permit to allow the construction and operation of a cable wakeboard park within the City's 15-acre Dubach Detention Basin. Cable wakeboarding is a surface water sport, which involves riding a wakeboard over the surface of a body of water while being pulled by an overhead cable system. The project, known as "Velocity Island Park," would create a 9-acre lake within the Dubach Detention Basin site and construct the overhead cable system and park amenities.

RECOMMENDATION

Staff recommends approval of the project by making an affirmative motion as follows:

Motion #1 Move That The Planning Commission Make A Recommendation To The City Council To Approve The Conditional Use Permit (CUP), for Velocity Island Cable Wakeboard Park For The LoveRide, Inc Project Based On The Identified Findings Of Fact And Subject To The Identified Conditions Of Approval, By Taking The Following Actions:

- Adopt the Mitigated Negative Declaration;
- Approved the Mitigation Monitoring and Reporting Program;
- Determine that the project, as conditioned, is consistent with the General Plan;
- Determine that the project, as conditioned, is consistent with the Zoning Ordinance;
- Determine that the project, as conditioned, is consistent with the Community Design Standards;
- Approve the Conditional Use Permit to allow the construction and operation of a cable wakeboard park, Velocity Island Park, (a surface water sport) within the City's 15-acre Dubach Detention Basin located at 755 North East Street (APN 027-340-002 & 027-270-078);

-OR-

Should the Commission decide to recommend a denial of the project, the motion should be made as follows:

Motion #2 Move That The Planning Commission A Recommendation To The City Council To Deny The Conditional Use Permit (CUP), for Velocity Island Cable Wakeboard Park For The LoveRide, Inc Project, Based On The Identified Findings Of Fact (Specify Findings)

ATTACHMENTS:

- A. Application, dated Nov 3, 2011 & Letter Of Justification, dated Nov 15, 2011, Site & Conceptual Landscape Plans, dated May 27, 2011
- B. Notice of Intent to Adopt a Mitigated Negative Declaration and Public Hearing
- C. Response to Comments on the Mitigated Negation Declaration
- D. Applicable City Codes and Regulations
- E. Mitigated Negative Declaration, July 2012
- F. Letter from OPR dated August 29, 2012
- G. Mitigation Monitoring and Reporting Plan

FINDINGS FOR PROPOSED VELOCITY ISLAND PARK CONDITIONAL USE PERMIT
Prepared for recommendation by the Woodland Planning Commission on September 20, 2012

CEQA Findings

1. The Planning Commission has considered the proposed Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan before making a decision on the project.
2. The Planning Commission has considered comments received on the Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan during the public review process.
3. The Planning Commission finds that the Environmental Checklist/Initial study identified no potentially significant effects on the environment.
4. The Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan have been prepared in compliance with CEQA and the State CEQA Guidelines, and are determined to be complete and final.
5. The Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan reflects the independent judgment and analysis of the City of Woodland.
6. The Planning Commission hereby adopts the Velocity Island Park Project Mitigated Negative Declaration and Mitigation Monitoring Reporting Plan.
7. The custodian of the documents, and other materials, which constitute the record of proceedings is the Community Development Director. The location of these items is the office of the Community Development Department at City Hall Annex, 520 Court Street, Woodland, California 95695.

General Plan Consistency Findings

1. The proposed project, as conditioned, is consistent with the provisions outlined by the General Plan.

Zoning Consistency Findings

1. The proposed project, as conditioned, meets all regulatory requirements of the Zoning Ordinance.
2. Uses Appropriate to the Area are allowed in the Open Space zone with a Conditional Use permit

Conditional Use Permit Findings

1. Adjacent properties are protected and the public interest is protected.
2. The conditions of approval are reasonably related to the use of the property.
3. The City is satisfied that the proposed structures and uses conform to the requirements and the intent of the Zoning Ordinance and the General Plan.
4. The design of the project and improvements will not cause serious public health problems. Utilities are available to the site.
5. The project is consistent with Article 27 of the Zoning Ordinance in that the proposed use is permitted as a conditional use in the zone and that the use may be allowed subject to conditions with respect to location, construction, time period, maintenance, and operation, as deemed necessary for the protection of adjacent properties and the public interest, when reasonably related to the use of the property.

Community Design Standards Findings

1. The project substantially satisfies the design requirements of the Community Design Standards for development within the City of Woodland.

CONDITIONS OF APPROVAL

PLANNING – Conditional Use Permit

1. The project is as described in the staff report prepared for the September 20, 2012 Planning Commission meeting. The project shall be constructed as depicted on the Conceptual Site Plan, Landscape Plans, and building elevations dated 5/27/2011, included in the staff report, except as modified in these conditions of approval and with any changes necessary to meet city codes and specifications.
2. The applicant shall defend, indemnify, and hold harmless the City of Woodland, its agents, officers or employees from any claim, action or proceeding against the City or its agents, officers or employees to attack, set aside, void or annul an approval of the subject application by the City, its legislative body, advisory agencies or administrative officers. The City will promptly notify the applicant of any such claim, action or proceeding against the City and the applicant will either, at the City's discretion, undertake defense of the matter and pay the City's associated legal costs, or will advance funds to pay for defense of the matter by the City Attorney.
3. Final Plan Set: Prior to the issuance of building permits, the applicant shall include a Final plan set, with all conditions of approval incorporated or clearly listed on the plans. The conditions shall be printed on a full-size plan sheet(s).
4. The Applicant shall comply with the approved CEQA Mitigation Monitoring and Reporting Plan. Upon request, applicant shall provide a written report detailing compliance with MMRP to the Community Development Department for review.
5. The Conditional Use Permit shall not be issued until the appeal period has expired or final action on an appeal has been rendered.
6. The Conditional Use Permit must be exercised within **one year** of issuance, or it shall be null and void by act of law (Section 25-27-70).
7. At any time, upon request by the City, applicant shall provide a written report detailing compliance with Conditional Use Permit and Special Event Permits to the Community Development Department for review.
8. Applicant shall provide the Community Development Department with a check for the sum of **\$2,151.50** made out to Yolo County to record the environmental document with Yolo County.
9. Applicant to provide written verification that proper screening will block the visibility of roof mounted mechanical or utility equipment from the public.
10. Applicant shall comply with the State of California's new Water Efficient Landscape Ordinance AB 1881. The landscape architect shall document and attest to the compliance with the new State ordinance on the final landscape plans.
11. For landscaping on private property, a minimum of 15-gallon (or larger) trees is required. Landscaping on private property can also use shrubs from 1-gallon containers. All landscape stock shall be inspected by the project landscape architect prior to installation. No root bound plants shall be used, only healthy, well-formed, and vigorous plant material shall be used. Landscape architect to provide written verification as to plant health.

12. Enter into a landscape Maintenance Agreement with the City. The Agreement shall be recorded prior to issuance of a building permit to assure continuing maintenance of the landscaping.
13. Light poles shall not be located so as to conflict with the planting or future growth and shading of trees throughout the site. Parking and security lights shall not be taller than 20 feet above grade.
14. Applicant shall modify proposed landscape plan to use three (3) tree species in the parking lot as recommended by the City Arborist - Horn beam (*Carpinus betulus*), Purple Robe(*Robinia X ambigua* 'Idahoensis', and Chinese Pistache "Keith Davey". City Arborist may select an evergreen tree as a substitute for one of the three tree species.
15. Applicant shall modify proposed landscape plans by replacing two thirds of the proposed Valley Oaks on the south and east perimeter to include two (2) additional varieties as recommended by the City Arborist - Little leaf Linden (*Tillia cordatta*) and Frontier Elm (*Ulmus X 'Frontier'*). City Arborist may select an evergreen tree as a substitute for one of the two tree species.
16. Prior to City issuing any building permit applicant shall have a Tree Protection Plan prepared by a licensed Arborist and submitted for review by the Community Development Department. This Plan shall identify trees to be retained and specific measures to be taken to protect the trees during construction and the long-range care and preservation of the trees.
17. Landscape Plan shall indicate a 3-inches of top dressing (bark) be used in all planter beds.
18. The applicant shall be required to provide replacement trees for all healthy trees removed from the site. The replacement requirement is two trees for every 6 inches of trees removed measured at diameter breast height (DBH). The replacement trees are in addition to those trees required as part of project approval per the City's Landscaping Ordinance and Community Design Standards. Replacement trees may be planted on site or applicant can pay into the City's tree fund at \$215 per replacement tree.
19. Photometric data shall be provided, and indicate that the parking area will be equipped with one (1) foot-candle of minimum maintained illumination per square foot of parking surface to include the entire paved area. The parking area shall be illuminated from dusk until the termination of business every operating day. Photometric data must also confirm the absent of "Hot Spots" or areas of ten (10) foot-candle of illumination per square foot or more.
20. The bathroom building shall use earth tone integral color CMU split face block. An earth tone color shall also be used for the standing seam metal roof. Applicant shall submit colors to be used on the building(s) for review and approved by the Community Development Department.
21. Applicant shall construct a trash enclosure matching the bathroom design and materials. Trash enclosures are required to be cover (roof). The roof of the trash enclosure to match roof of bathroom.
22. Operations buildings on site shall use at least two earth tone colors. Applicant shall submit colors to be used on the building(s) for review and approval by the Community Development Department.
23. Should parking become a problem in the opinion of the City, the applicant shall provide additional parking and any necessary shuttle service to the site in order to ensure public safety to the satisfaction of the Community Development Department. Any off-site parking shall be reviewed and approved by the Community Development Department and may require the applicant to obtain a Condition Use Permit for the off-site parking site.

24. Applicant shall obtain a Special Event Permit prior to holding any special event or tournament. Applicant shall submit the request for such an event a minimum of 30 days prior to the scheduled event to the City's Special Event Committee. The Special Event Permit shall address special event parking, shuttle service, traffic control, noise control, sale of alcohol, security measures and advance notification to adjacent residences.
25. There shall be no sales or consumption of alcohol within the Park. Alcohol sales and consumption is only permitted with a City approved Special Event Permit. Applicant shall permanently post the Park with adequate signage to the satisfaction of the City.
26. Applicant to submit for review a geotechnical soils report with construction documents.
27. The use of temporary signs and attention getting devices (flags, sails, inflatable balloons, streamers, sponsor signs, etc.) shall require the applicant to submit plans for review and possible approval, a minimum of 30 days prior to use.
28. Applicant shall implement all of the safety measures outlines in their cable wakeboard park proposal. Applicant shall provide upon request at any time an incident report, tracking safety issues and accidents at the park to the Community Development Department for review.
29. The City shall require the applicant to implement additional safety measure at the park at any time should the City deem additional safety measure necessary.
30. Applicant shall provide a quality assurance report, at any time upon request from the City, to verify that the water quality of the lake is safe for human occupancy and water sports use.
31. Park operators shall provide proof of sufficient insurance for the operation of the park to the satisfaction of the City and YCPARMIA.

DEVELOPMENT ENGINEERING

FEES

1. Project shall pay all applicable development impact fees in effect at the time of building permit. Fees shall be based on the building s.f. of the bathroom and operations building and any other buildings added to the approved site plan, as well as, meter fees for surface water and Storm drain fees shall be based on the paved area of the parking lot. Fees shall be based on the service category.
2. Project shall pay plan check and inspection fees on public improvements and on civil improvements constructed on City property.
3. The conditions of approval set forth herein include certain fees, dedication requirements, reservation requirements and/or other exactions. Pursuant to Government Code, Section 66020(d), these conditions constitute written notice of the amount of such fees, and a description of the dedications, reservations and other exactions.

The applicant is hereby notified that the 90-day protest period, commencing from the date of project approval, has begun. If the applicant fails to file a timely protest regarding any of the fees, dedication requirements, reservation requirements and/or other exactions contained in this notice, complying with all the requirements of Government Code, Section 66020, the applicant will be legally barred from later challenging such fees, dedications requirements, reservation requirements and/or other such exactions. Notwithstanding the foregoing, the City does not

waive any rights it may have to enforce any settlement agreement, memorandum of understanding, or other agreement with the applicant which authorizes the City to impose certain fees, and which may waive the applicant's right to challenge the imposition of some or all of the fees, dedication requirements, reservation requirements, and/or other exactions set forth in these conditions of approval.

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REQUIRED SUBMITTALS:

1. Applicant shall prepare improvement plans for all work within the public right-of-way and civil improvement plans on City property and submit to the Development Engineering with an encroachment permit application for review and approval. The submittal shall include an engineer's estimate of cost for the public improvements and a plan check fee in the amount of 3% of the engineer's cost estimate. Prior to building permit issuance, applicant shall obtain permit and post security for the full cost of the public improvements and improvements on City land. This submittal is separate from the building permit submittal.

Prior to issuance of the encroachment permit the balance of plan check and inspection fees (total plan check and inspection fees less the deposit) based on the final cost estimate shall be paid in full based on the City's fee schedule these fees are (based on the construction cost of the improvements: 12% of the first \$50,000, plus 10% of the next \$50,000, plus 9% of the next \$100,000, plus 8% of the next \$100,000, plus 7% of the amount over \$300,000.

2. Unless otherwise determined by the City Engineer, construction of public improvements will require that the applicant enter into an improvement agreement, and provide bonds and insurance.
3. Prior to start of work applicant shall obtain a Caltrans encroachment permit for all work within the right of way of East Street/SR 113. (Caltrans will also need to approve design of the sewer and water connections).
4. Prior to start of work applicant shall obtain a Railroad permit for work within the Railroad Right of Way.

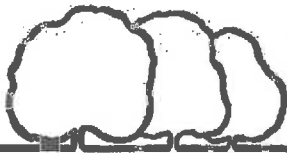
SITE PLAN AND REQUIRED PUBLIC IMPROVEMENTS:

1. The following public improvements are required as a condition of development of this site, and shall be completed under the encroachment permit prior to certificate of occupancy providing the above conditions (required submittals) are met prior to building permit issuance. The

- Encroachment permit shall apply to the sidewalk, driveway, all utility connections, and all civil improvements (on and off site), and any traffic control or traffic impacts on the public street.
2. The applicant shall install utility connections to City of Woodland Standards and Specifications. This may include but is not limited to installation of new meter boxes, backflow prevention, cleanouts and/or laterals in a location approved by the City.
 3. Backflow protection devices are required on the commercial and landscape irrigation water services for the project. Backflow devices shall be tested by a City-approved tester and results provided to the Public Works Department prior to occupancy.
 4. Project shall incorporate mitigations for construction traffic as detailed in the environmental document.
 5. The project is subject to the City's Storm Water Ordinance and must comply with the City of Woodland Technical Guidance Manual for Storm water Quality Control Measures. Site shall meet General Site Design Control Measures, Site Specific Control Measures, and Treatment Control Measures. The applicant may pay a Storm Water Quality in lieu fee if unable to meet treatment requirements. Site specific control measures will include entering into a maintenance agreement with the City.
 6. The site may irrigate landscaping either from potable water or from the onsite well but there shall be no connection between the two systems. A separate landscape irrigation service with meter and backflow will be required for an irrigation connection to the potable water connection.
 7. Should ground dewatering be necessary for construction, applicant shall obtain a groundwater discharge permit from the State.
 8. The Project is within the flood plain. Development shall comply with all applicable FEMA standards and regulations and all City requirements for development within a flood plain. Consult with the building officials.
 9. Overhead power lines shall not run through the middle of the project, electrical facilities shall be undergrounded, unless if necessary due to flood requirements, may be routed around the edge of the project subject to the approval of the building official and City Engineer.
 10. Improvement plans need to be revised to include the adjacent parcel access road.
 11. The project shall widen the paved access road to 20 feet in width.
 12. Project shall Relocate street light in the eye of the button hook at the intersection of SR 113 and site access road; or replace it with a breakaway pole.
 13. Access Road and parking lot design sections shall be based on a design by a licensed Geotechnical Engineer. The access road shall be designed to handle a minimum of a 20 ton vehicle in a 10 year storm.
 14. Applicant shall provide City Departments with access codes or keys for after hours emergency and storm drain maintenance.
 15. Sewer Force main shall be owned and maintained by the applicant up to the point of connection to the City's gravity system.
 16. Project improvements shall include repair and/or replacement of all access roadway lights.

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ATTACHMENT A



City of Woodland

520 Court St, Woodland CA 95695 (530) 661-5820 Fax (530) 406-0832

Community Development Department

Planning Division

GENERAL APPLICATION FORM

This application form is required as part of any request to process the planning actions listed below. In addition, the City of Woodland Zoning Code requires specific material to be submitted in conjunction with this form.

Other required items are indicated on the accompanying instruction packets and development brochures. It is the applicant's responsibility to insure that application packages are complete and accurate.

NOTE: AN INCOMPLETE APPLICATION CANNOT BE SCHEDULED FOR PUBLIC HEARING

1 Application Requested

Project No. <u>PLNG-12-00010</u>	☐ General Plan Amendment	☐ Lot Line Adjustment	☒ Site Plan Review
Amount Paid: \$ <u>15,000</u>	☐ Rezone	☐ Variance	☒ Design Review
Amount Due: <u>\$5,000</u>	☐ Tentative Subdivision Map	☒ Use Permit (CUP)	☐ Zoning Administrator Permit (ZAP)
	☐ Tentative Parcel Map	☐ Planned Development Permit	☐ Other
	☐ Vesting Tentative Map		

Is this request part of another application? Yes _____ No ☒ If so, what? _____

2 Project Description

Site address or location: DUBACH PARK
HIGHWAY 113 & INTERSTATE 5

Project Name: VELOCITY ISLAND PARK

Assessor's Parcel Number: 027-340-002/027078

Total Acres: 15

Is this project located in a Redevelopment Area? ☐ Yes ☒ No

Is Your Project Located in a Flood Zone? Yes ☒ No _____

Does this request include signage? ☒ Yes ☐ No

3 Justification for Request

☞ On a separate sheet, explain in detail your request and why you believe your request is justified.

4 Owner/Applicant

OWNER: <u>City of Woodland</u>	APPLICANT: <u>LOVERIDE INC./SCOTT HARTMAN</u>
ADDRESS: <u>300 First St</u>	ADDRESS: <u>1240 ALICE ST. SUITE C</u>
CITY STATE ZIP CODE: <u>Woodland CA 95695</u>	CITY STATE ZIP CODE: <u>WOODLAND, CA 95776</u>
PHONE: <u>530 661-5820</u>	PHONE: <u>(530) 908-2309</u>
E-MAIL ADDRESS:	E-MAIL ADDRESS: <u>SCOTT@VELOCITY ISLAND PARK.COM</u>

5 General Plan Amendment

Existing General Plan Designation	Gross Acres	Proposed General Plan Designation	Gross Acres

6 Rezoning Request

Existing Land Use Zone	Gross Acres	Proposed General Plan Designation	Gross Acres

7 Residential Development

How many residential units are being requested? ? _____ Single Family _____ Half-plex _____ Duplex _____ Apartments _____ Condominiums _____ Other _____ Townhomes _____ Total Units _____	How many lots will be created by this project? _____ Do you intend to market the units for sale? Yes _____ No _____ Do you intend to market the units for rent? Yes _____ No _____
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8 Commercial/Industrial Development

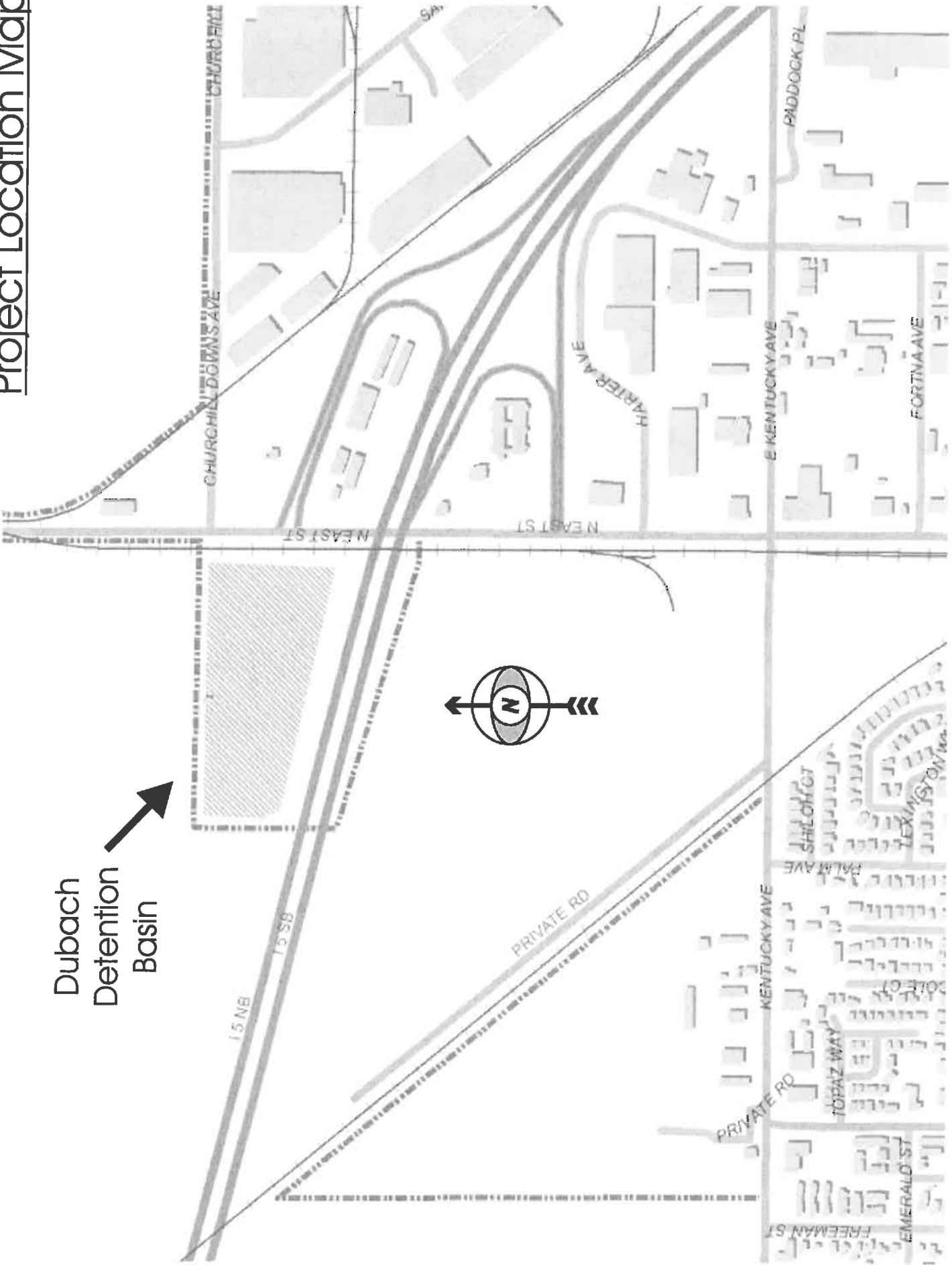
Indicate the type of commercial/industrial development proposed:	Indicate the gross and leasable square footage for each type of development:
WAKE BOARD CABLE PARK	027-340-002 (PARK)
	027-270-078 (DRIVEWAY)/ROAD

9 Authority to File Application

Check one: ☒ ☐ Ownership ☐ Power of Attorney* ☐ Contract to Purchase* ☐ Other (specify) _____ * Attach Evidence of Authority	I hereby certify that the above information and accompanying documents are true and accurate to the best of my knowledge and acknowledge that the processing of this application may require additional fees and expenses for the preparation of necessary environmental documentation and planning studies. I certify that I have reviewed the current Hazardous Waste and Substances Site List, developed pursuant to AB 3750, and found that my project is not on the list. APPLICATION WILL NOT BE ACCEPTED WITHOUT SIGNATURE OF LEGAL OWNER OR OFFICIAL AGENT Applicant: <u>[Signature]</u> Date: <u>Nov 13, 2011</u> Legal Owner: _____ Date: _____ Legal Owner: _____ Date: _____ Place Date Received Stamp Here
DEPARTMENT USE ONLY	
G.P. Designation: _____ Zoning Designation: _____ Applicable Zoning Code Sections: _____ Hearing Body: _____ Environmental Determination: _____	Request: _____ _____ _____ Logged by: _____ Date: _____ Planner: _____ Date: _____

Project Location Map

Dubach
Detention
Basin



#3 - JUSTIFICATION FOR REQUEST

We are requesting to build a wake board cable park.

The cable park will be called “Velocity Island Park” and offer affordable watersports to a larger demographic who previously had no access to the water and water sports. Cable parks, such as “Velocity Island Park” enable individuals of all ages and skill levels to have convenient/ low cost access to water sports in a safe, clean and professionally operated environment without the costs associated of owning a personal water craft. By being the first full-sized cable park in California, we will be poised to capture a substantial market share of one of the fastest growing recreational services in the country.

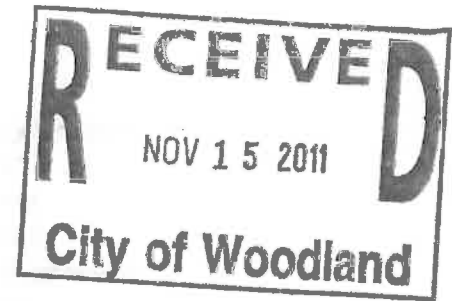
We believe the reasons below justify and support this request:

- Mr. Dubach deeded the land to the city for recreational use.
- It is also is a detention pond perfect for developing our wake board cable park.
- The City will receive financial benefit from the cable park because LoveRide will maintain the site (it is currently maintained by the Storm Detention Program) annual cost to the city of \$8000.00.
- Development of the cable park has the potential to produce significant fiscal benefits to the City of Woodland through rental lease agreement, TOT hotel, sales tax and other visitor benefits.
- The area will no longer be a public eye sore and prevents possible vandalism, fire hazard and a place for transits to stay.
- A wake park of this nature provides the opportunity to build and partner with local schools and water sport classes –offering childrens’ summer camps and fund raising events.
- Wakeboarding and Water-skiing can be used as a college credit (both UC Davis and Sacramento State have wake boarding and ski clubs).
- Family environment being spectator-friendly and providing a broad range of sponsorship opportunities.
- Great venue allowing groups of people of all ages to enjoy the water and easy for new entrants to participate.
- Ideal venue for events and competitions – increases tourism to the area and exposure to the local market.
- Provides an area enjoyable for large groups of people including group discount rates for non-profit associations.



Project Description

VELOCITY ISLAND PARK (VIP) A NEW WATER SPORTS CABLE PARK



Introduction:

Love Ride Inc. is a new parent company that will offer water sports and operate as a "Cable Park." The cable park will be called "Velocity Island Park" and offer affordable watersports to a larger demographic who previously had no access to the water and water sports. Cable parks, such as "Velocity Island Park" enable individuals of all ages and skill levels to have convenient access to water sports in a safe, clean and professionally operated environment without the costs associated of owning a personal water craft. By being the first full-sized cable park in California, Love Ride Inc. will be poised to capture a substantial market share of one of the fastest growing recreational services in the country

There are currently over 150 cable parks all over the world. Of these, over 60 are in Germany alone. There are 12 full-sized cable parks in the USA, but none on the west coast. This project proposes to be the first. We are an experienced enthusiastic management team working to bring this exciting and wholesome sport to the area. If you love athletics and want to see this area attract the kind of popularity and revenue that this recreation can bring, then we request your support towards this important, environmentally clean project.

What is Cable Wakeboarding/Ski-ing Cable System?

Cable wakeboarding is simply wakeboarding or water skiing whilst being pulled by an overhead cable system. Suspended in the air by a series of towers surrounding a small lake, an overhead cable rotates around the lake. Along the cable are a number of carriers from which ski ropes attach and allow people to be pulled around the lake. *Please view the attached schematic.*

How do people ride?

The riders wait their turn in line on the starting dock while holding onto a handle that is hanging down from a continuous circulating cable. This cable is suspended approx. 30 feet above the water. One operator controls each cable system and will provide instruction and assist individuals off the starting dock and onto the water. The sport is ideal for both beginners through to advanced riders. Unique, well-designed obstacles and floating ramps will be built on the lake similar to those found at ski resorts. This will enable, both intermediate and advanced riders, the opportunity to do air tricks

Environmental Issues offered by Velocity Island Park (VIP):

- Environmental benefits include being clean and efficient – virtually silent



- **Preserving the Landscape:**
 - The cable towers have a fine lattice construction that does not disrupt the view and the parallel running cables blend into the background allowing the landscape to be preserved
- **Ensuring Water Quality:**
 - Cableways insure a high oxygen supply is delivered into the water. Between riders swimming to shore - the intense water movement created by riders breaking the surface as they cruise around the lake – all this activity manufactures an estimated oxygen supply of five tons per year all delivered into the local water. This creates excellent water quality for fish and other wildlife.
 - Cable Systems emit no harmful emissions
- Per Sacramento/Yolo Mosquito and Vector Control District (SMVCD) they will provide Velocity Island Park with mosquito eating fish (*Gambusia affinis*). Also, the water movement from the cable system will also discourage mosquitos.
- We will seal our lake with ESS-13 treated and compact method, which forms a high - density soil liner. In return we will have very little or none water seepage. This method will also will stop water from coming up through the ground. More importantly, this is environmentally friendly and will not harm people or wildlife (Please see attachment)
- Velocity Island Park will be creating a need for less boat usage in the crowded surrounding rivers and lakes
- Lake water level - Since the top level of Dubach park is +/- 52 feet above sea level.. The lake level will be +/- 45 feet above sea level. This will allow us to have +/- holding capacity of 3,694,250 cubic feet of area for flooding. Woodland annual rainfall is 18".

Safety Issues & Cable Wake Park Safety Rules:

To ensure the safety of both participants and park personnel the following safety guidelines and rules will be strictly adhered to:

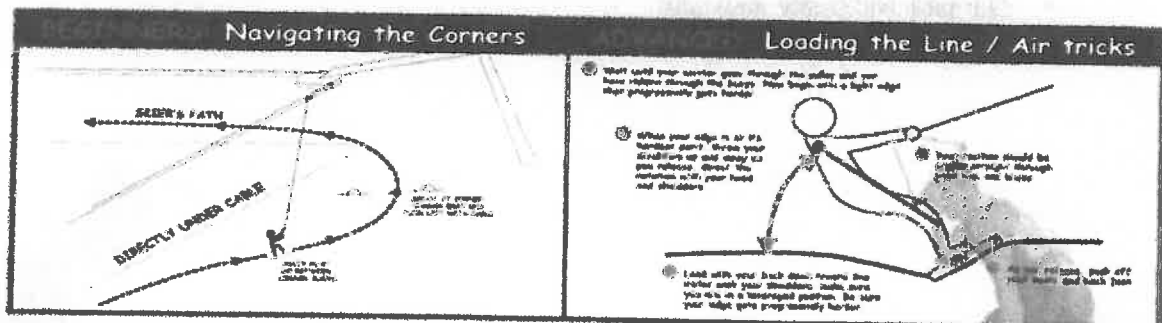
- The water park will have a security fence around the park
- Security cameras will be installed and our staff will be certified in crowd control
- All staff will be certified CPR
- Park Rules will be posted upon entrance to the park
- Completion and signage of Waiver of Liability is mandatory
- Every participant will be asked to watch a mandatory instructional video
- Coast-guard approved Life jackets and safety helmets will be worn by ALL participants
- All beginners – MUST take a beginner course
- Provides a safe accessible investment for enthusiasts to enjoy the outdoors and sport
- For events private security will be hired



Cable Wake Park Safety Rules:

If the rules are not followed, Velocity Island Park reserves the right to terminate any membership and remove anyone from the park premises for any reason without refund.

1. Persons may not participate in activities unless they have a signed liability waiver on file with Velocity Island Park. If a participant is under age 18, their parent or legal guardian must sign this document in the presence of an employee or a notary public (there are no exceptions to this rule).
2. Ride or ski in control and at your own risk.
3. Do not drink and ride- NO ALCOHOL or DRUGS on premises.
4. All Participants must use helmet and USCG approved life jacket at all times while in water.
5. If you fall, look back immediately and avoid riders and ropes. Exit course immediately.
6. Form one line unless otherwise instructed by staff.
7. It is your responsibility to avoid structures and fallen riders, if you cannot avoid them LET GO immediately.
8. Always ride between corner buoys, let go if you get slack in line.
9. Exit between the white buoys NOT by starting dock.
10. No deep water starts allowed. If cable stops, let go and swim to outside shore.
11. Hold handle with hands. Never put the handle between your legs or put your arm through the handle.
12. No power tricks at the corners. Allow your carrier to pass the pulley before you initiate the trick.
13. If you fall or lose your equipment, let go immediately.
14. No foul language.
15. You must be able to swim and be in good health to use the cable park.
16. Dock area is for riders only, you must have a band to be in starting area.
17. No MP3 players or audio devices that limit your ability to hear.
18. If it is your first time you must take a beginner course on the "easy start" system specially designed for beginners / younger rider (2 Tower.)
19. Fighting or other aggressive or disruptive behavior will result in ejection from premises.
20. In case of emergency dial 911



Benefits to the City of Woodland and Local Community:

Mr. Dubach deeded the land to the city for recreational use

The Dubach Detention Facility, previously known as "Dubach Park" was closed in late 2008 shortly after the Community Center Sports Park facility was completed. At this time the Parks & Recreation Department transferred ownership of the 15+ acres site to the Public Works Department to be maintained by the Storm Drain Enterprise Fund as a Detention Facility on the north side of town. It was proposed that this site would handle the periodic flooding of Volkl Pit and Dubach Park due to irrigation and rising ground water during the rainy season.

- Dubach Park is a storm-detention pond (as described above) and has periodic flooding from irrigation, rising ground water and heavy rains – This would be of benefit to the lake
- The City will receive financial benefit from the cable park because VIP will maintain the site (it is currently maintained by the Storm Detention Program) annual cost to the city of \$8000.00
- Development of the cable park has the potential to produce significant fiscal benefits to the City of Woodland through TOT hotel, sales tax and other visitor benefits
- The area will no longer be a public eye sore and prevents possible vandalism, fire hazard and a place for transits to stay
- A wake park of this nature provides the opportunity to build and partner with local schools and water sport classes –offering childrens' summer camps and fund raising events
- Wakeboarding and Water-skiing can be used as a college credit (both UC Davis and Sacramento State have wake boarding and ski clubs
- Family environment being spectator friendly and providing a broad range of sponsorship opportunities
- Great venue allowing groups of people of all ages to enjoy the water and easy for new entrants to participate
- Ideal venue for events and competitions – increases tourism to the area and exposure to the local market
- Provides an area enjoyable for large groups of people including group discount rates for non-profit associations
- Our park will create new jobs.



NORTHWEST CORNER OF HWY 113 & INTERSTATE 5
WOODLAND CA. 95776

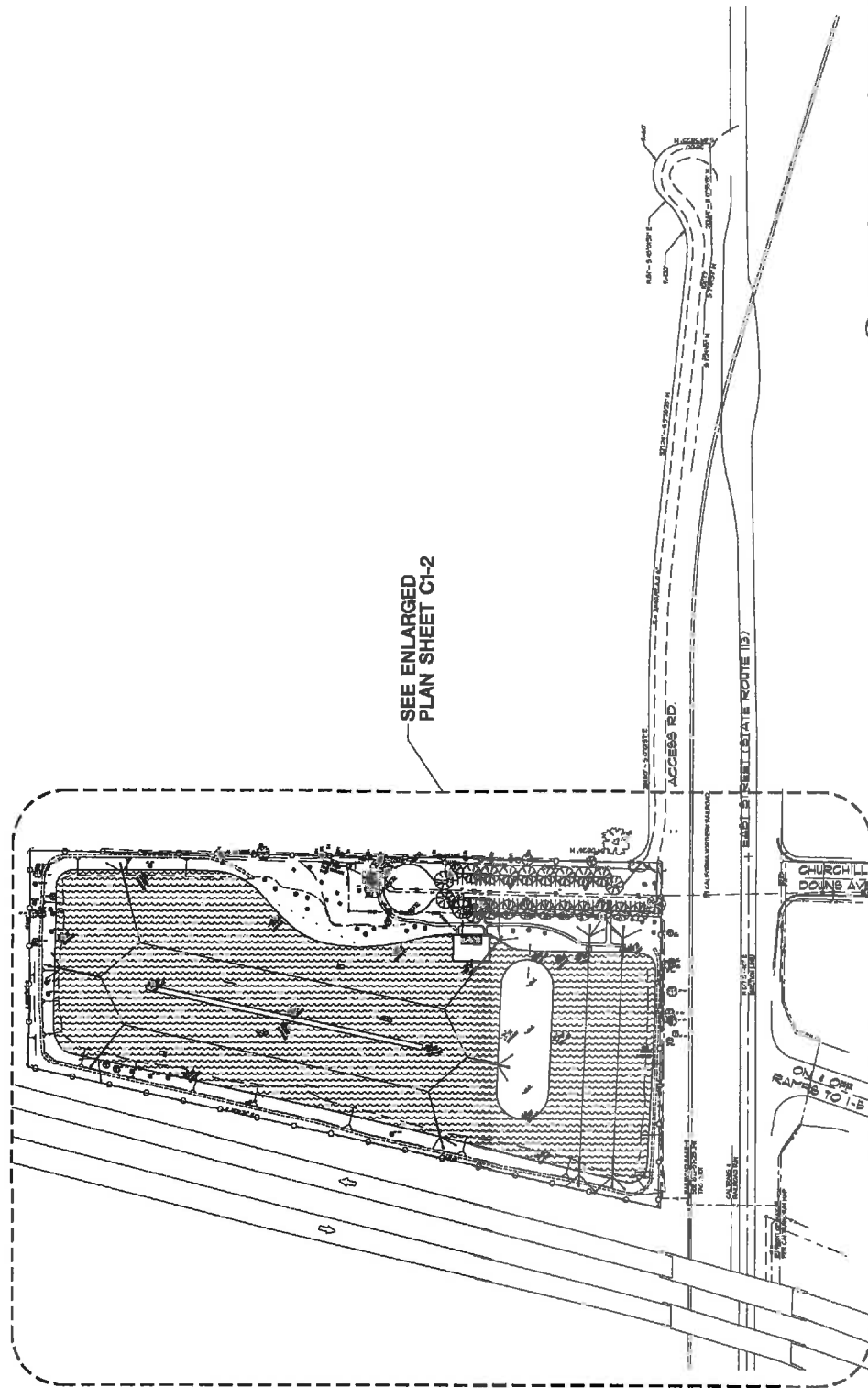
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	668,072.60	58	58	FT
TOTAL LOT AREA:				
TOTAL LAKE SURFACE AREA:	417,474.74	58	FT	
TOTAL A.C. AND CONCRETE PAVEMENT AREA:	30,113.45	58	FT	
TOTAL ON-SITE SIDEWALK AREA:	5,990.26	50	FT	
TOTAL TRAMPERS AREA:	151.22	50	FT	
TOTAL LANDSCAPE AREA (PARKING LOT ONLY):	5,110.00	58	FT	

COVER SHEET	T1-1	
EXISTING OVERALL SITE PLAN	G0-1	
PROPOSED OVERALL SITE PLAN	G0-2	
EXISTING ENLARGED SITE PLAN	G0-3A	
RTM AERIAL IMAGE		
PROPOSED OVERALL SITE PLAN	G1-1	
PROPOSED ENLARGED SITE PLAN	G1-2	
PRELIMINARY SITE GRADING PLAN	G2-1	
OVERALL LANDSCAPE PLAN	L1-1	
ENLARGED LANDSCAPE / SHADING	L1-2	
SCHEDULES AND NOTES		
FENCE AND KORNERS WESTWOOD, BED AND EXTERIOR ELEVATIONS	A1-1	
SITE ELEVATION SECTION	M0-1	

ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE FOLLOWING CODES FOR THIS PROJECT: 2010 CALIFORNIA BUILDING CODE (CBC) 2010 CALIFORNIA ELECTRICAL CODE (CEC) 2010 CALIFORNIA FIRE CODE (FC) 2010 CALIFORNIA MECHANICAL CODE (CMC) 2010 CALIFORNIA PLUMBING CODE (CPL) 2010 CALIFORNIA SOILS AND FOUNDATIONS CODE (CSF) 2010 CALIFORNIA TREE CARE CODE (CTCC) 2010 CALIFORNIA GREEN BUILDING CODE (CAL GREEN)	
2010 CALIFORNIA POWER CODE (CPC) 2010 CALIFORNIA PUBLIC WORKS CODE (CPCW) 2010 CALIFORNIA TRANSPORTATION CODE (CPTC) 2010 CALIFORNIA UTILITIES ACT (CAU) Approved for Building and Facilities	2010 CALIFORNIA FIRE CODE (FC) 2010 CALIFORNIA MECHANICAL CODE (CMC)

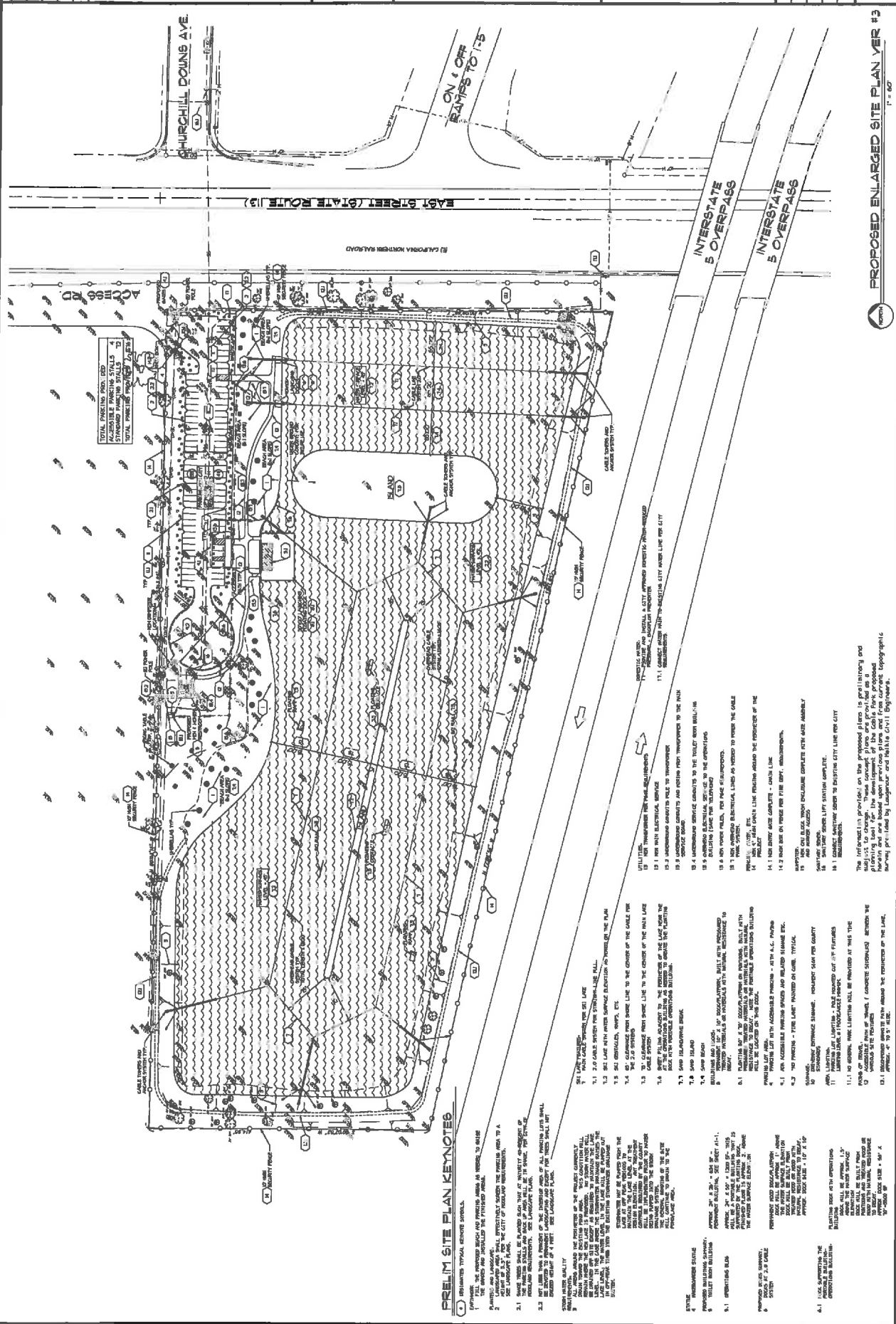
[illegible][illegible]



SEE ENLARGED
PLAN SHEET C1-2

PROPOSED OVERALL SITE PLAN VER #3

$$(\cdot = 100)$$



ESTRADA
ENGINEERING
PLANNING • DESIGN • ENGINEERING
7734 PLUMMER ST., YUMA CITY, CALIF. 95991
PH 505-47-9111 • FAX 505-47-9157 • E-MAIL: estrada@earthlink.net

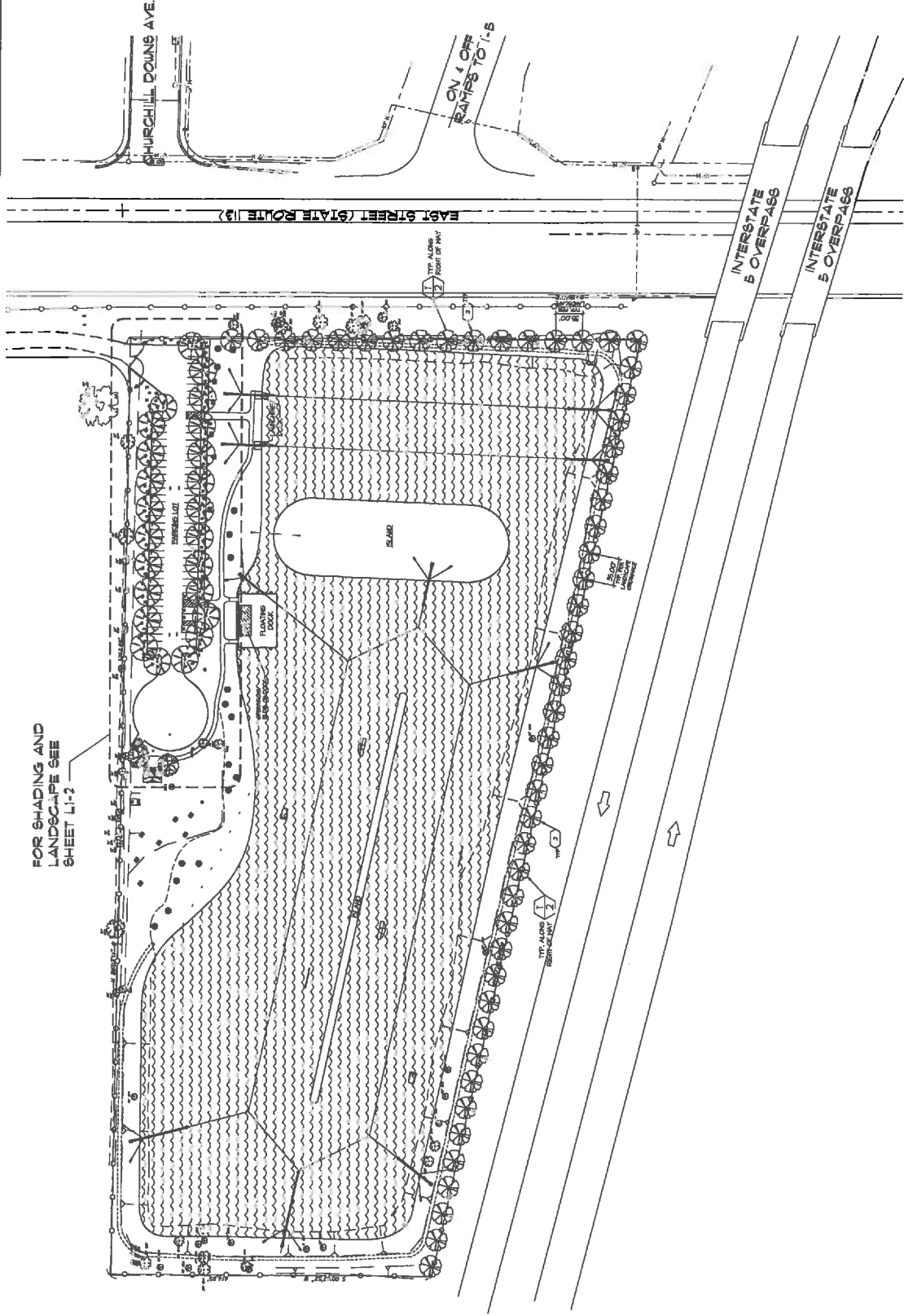
VELOCITY ISLAND PARK

NA

SCALE	1" = 10'
DATE	5-27-11
DRAWN	STAFF
JOB NO.	BI-044
FILE NAME	L-1 LANDSCAPE.DWG
SHEET	

三

SEE SHEET LI-2
FOR LANDSCAPE
SCHEDULE AND NOTES



FOR SHADING AND
LANDSCAPE SEE
SHEET L1-2

ENLARGED LANDSCAPE PLAN

REVISIONS				

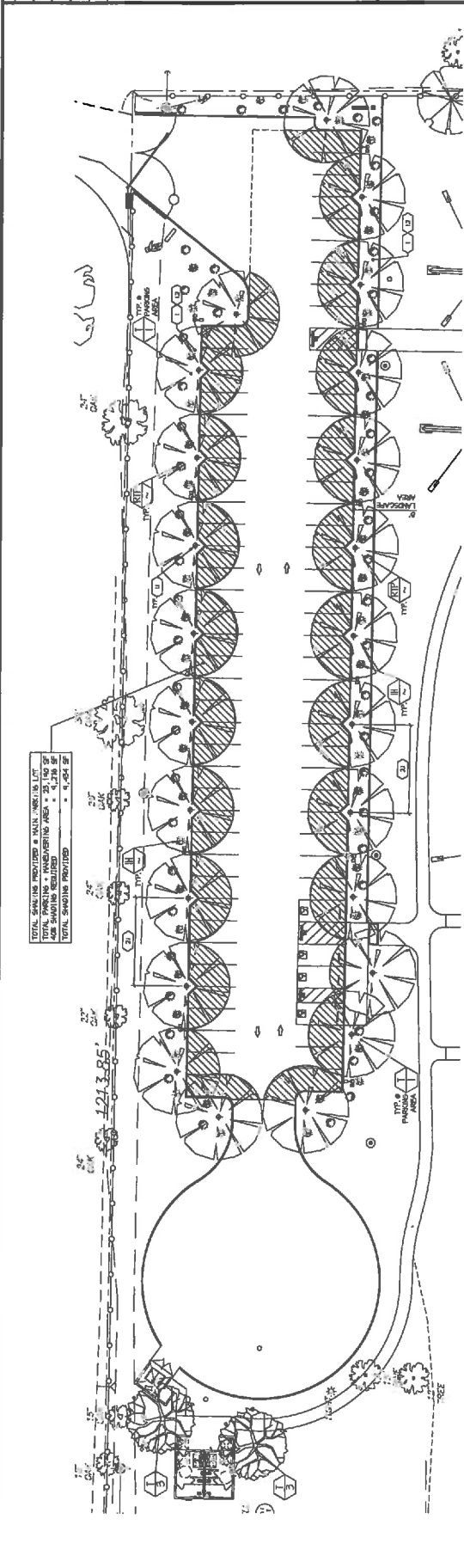
ESTRADA ENGINEERING
PLANNING • DESIGN • ENGINEERING
2244 PLUMAS AT, YUBA CITY, CALIF. 95901
916-221-1411 • FAX 916-221-0287 • E-MAIL: estrada@earthlink.net

VELOCITY ISLAND PARK

SHADING / LANDSCAPE PLAN

SCALE	1" = 20'
DATE	5-31-11
DRAWN	STAFF
JOB NO.	EE-044
FILE NAME	L-1 LANDSCAPE.DWG
SHEET	

L1-2



ENLARGED SHADING / LANDSCAPE PLAN

$\Gamma = \partial K^*$

PRELIM LANDSCAPE KEYNOTES

[illegible]

TREE LEGEND

SYMBOL	SIZE	QTY	NAME
	5 GAL.		PRINUS CALIFORNIANA "BRADFORD" BRADFORD FLOWERING PEAR
	5 GAL.		QUERCUS LUBATA - VALLEY OAK
	5 GAL.		PISTACHIA CHINENSIS - CHINESE PISTACHE

NOTE: ALL SPECIES SHALL BE EQUIVALENT TO FIVE GALLON CAN SIZE OR LARGER WITH PLANTED.

STRAIGHT LEGS

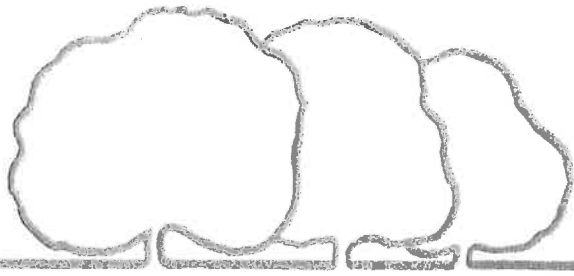
CODE	SIZE	QTY	NAME
ETP	16L.		PROTINIA FRASER - PROTINIA
1H	16L.		RAPHAELSTI INDICA - INDIAN HARTHOSE

NOTE: ALL SHRUBS SHALL BE EQUIVALENT TO ONE GALLON CAN SIZE OR LARGER WHEN PLANTED.

PROVIDE MIN. 2" BARK IN ALL PLANTER AREAS

ALL TREES, SHRUBS, GROUND COVER AND RELATED PLANTING SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF WOODLAND LANDSCAPE ORDINANCES AND THE APPROVED LANDSCAPE PLANTINGS LIST.

ATTACHMENT B



City of Woodland

COMMUNITY DEVELOPMENT DEPARTMENT
(530) 661-5820

520 COURT STREET
(530) 406-0832 FAX

WOODLAND, CA 95695
<http://www.cityofwoodland.org>

NOTICE OF INTENT AND NOTICE OF PUBLIC HEARING

TO: All Interested Parties

FROM: City of Woodland Community Development Department

DATE: July 27, 2012

SUBJECT: *Notice of Intent to Adopt a Mitigated Negative Declaration and Notice of Public Hearing to Take Action on the Proposed "Velocity Island" - Cable Wakeboard Park*

Applicant: Scott Hartmann, LoveRide Inc.
1240 Alice Street, Suite "C"
Woodland, CA 95776 (530) 908-2309

Description of Project: The proposed project is *Velocity Island Park*, a cable wakeboard park within the City's 15-acre Dubach Detention Basin (Formerly Dubach Park). Cable wakeboarding is a surface water sport, which involves riding a wakeboard over the surface of a body of water while being pulled by an overhead cable system. The cables are suspended in the air by a series of towers surrounding a small lake; an overhead cable rotates in a (usually) counterclockwise motion around the lake. Along the cable are a number of carriers from which towropes are attached pulling riders around the lake.

The project proposes to create a 9-acre lake within Dubach Detention Basin and construct the overhead cable system and park amenities. The cable system will consist of the two (2) cable systems. The main cable system includes six truss-design stanchions with an electric motor pulling the overhead towline around the lake. The second cable line system consists of two separate towlines for straight line pulling. Each system includes two truss-design stanchions with an electric motor pulling the overhead towline in a straight line. Within the watercourse, the project includes two sandy islands, one for wake dampening, and the other for launching participants and spectator area. The project will also include floating and stationary docks for launching participants, and a decomposed granitic path 4 to 5 feet wide around the perimeter of the lake.

The facility proposes 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck. The *Velocity Island Park* would operate from 8 a.m. to ½ hour before dusk every day of the week and expects 10 to 100 persons per day with more on special event days. (The need for additional spaces for overflow parking is anticipated).

Requested entitlements include:

- Adoption of a Mitigated Negative Declaration of Environmental Impacts
- Approval of Conditional Use Permit
- Approval of the Project's Site Plan and Design Review
- Approval of Lease Agreement with the City of Woodland

Project Location: 755 North East Street (APN 027-340-002 & 027-270-078). The site is the City's 15-acre Dubach Detention Basin (Formerly Dubach Park) located to the West of North East Street and North of Interstate 5 in the City of Woodland, Yolo County, California, 95695.

Environmental Determination: Mitigated Negative Declaration.

Comments on the Negative Declaration: The City requests your written comments on the Negative Declaration during a **30-day review period**, which begins Friday, July 27, 2012, and ends Monday, August 27, 2012. All comments must be received no later than 4:00 pm, Monday, August 27, 2012. Comments should be directed to Paul L. Hanson, AICP, Senior Planner, 520 Court Street, Woodland CA 95695.

Public Hearing: A public hearing will be held to consider adoption of the Mitigated Negative Declaration and take action on the project on Thursday, September 20, 2012, before the Planning Commission. This meeting will be held at 6:30 pm in the City Council Chambers located on the second floor of City Hall at 300 First Street, Woodland, California.

The City Council will hold one or more hearings to should the Planning Commission approved the Project (Conditional Use Permit and Mitigated Negative Declaration), to take final action on the Lease Agreement for the project.

In compliance with the Americans with Disabilities Act, if you are a disabled person and you need a disability-related modification or accommodation to participate in these hearings, please contact the Community Development Department at (530) 661-5820. Please make your request as early as possible and at least one-full business day before the start of the hearing.

The City does not transcribe its hearings. If you wish to obtain a verbatim record of the proceedings, you must arrange for attendance by a court reporter or for some other means of recordation. Such arrangements will be at your sole expense.

If you wish to challenge the action taken on this matter in court, the challenge may be limited to raising only those issues raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission prior to the public hearing.

Availability of Documents: The Mitigated Negative Declaration, Environmental Checklist/Initial Study, and supporting documentation are now available for public review at the Community Development Department, 520 Court Street, Woodland, CA 95695.

For more information regarding this project, please call Paul L. Hanson, AICP, Senior Planner at (530) 661-5814.

ATTACHMENT C

Memorandum

Date September 6, 2012

To Paul Hanson

From Brian Grattidge

Subject Velocity Island Park Project - Comments on the Mitigated Negative Declaration

In compliance with the California Environmental Quality Act (CEQA), the City of Woodland circulated a proposed Mitigated Negative Declaration (MND) on July 27, 2012, for a period of 30 days. Four written comment letters were received during that time. One additional comment letter was received after the 30-day period but is nevertheless addressed in this memorandum.

- Sacramento-Yolo Mosquito and Vector Control District
- Central Valley Regional Water Quality Control Board
- Klein Farms
- California Department of Transportation (Caltrans)

Consideration of Comments

CEQA requires that the decision-making body of the lead agency “consider” any comments received during the public review process (CEQA Guidelines Section 15074). Unlike an environmental impact report, formal written responses to the comments are not required. Nevertheless, in order for the decision-making body (in this case, the Planning Commission) to make an informed decision in considering the proposed project, a summary of the comments received and a response to each comment are provided below. The comment letters, in their entirety, are attached to this memorandum. In addition, clarifications and minor revisions made to the proposed negative declaration as a result of the comments are attached.

Sacramento-Yolo Mosquito and Vector Control District. August 20, 2012.

District states that land-owners and managers have an obligation to avoid creating public health threats related to mosquito and other vector breeding habitats (CA Health and Safety Code Sec. 2000 et seq.). District refers to their Best Management Practices (BMP) manual for design and maintenance guidelines to prevent or reduce the breeding of mosquitoes that may transmit diseases. As the owner/operator responsibility is already identified in the California Code of Regulations, they do not require additional mitigation measures to be added to the MND. However, the requirement will be reiterated in the Conditions of Approval for the project.

Central Valley Regional Water Quality Control Board. August 22, 2012.

The Board identifies permitting requirements, including Construction Storm Water General Permit, Municipal Separate Storm Sewer System (MS4) Permit, Industrial Storm Water General Permit, and Clean Water Act Section 404 Permit (and related Section 401 Water Quality Certification). Page 4 of the MND identifies the need to obtain a Construction Storm Water General Permit and to prepare a Storm Water Pollution Prevention Plan (SWPPP). No industrial discharge is proposed as part of the project, and no potentially jurisdictional waters have been identified on the site. Any changes in drainage (or discharge to City facilities subject to MS4) will be studied as part of Mitigation Measure HYD-1.

Klein Farms. August 23, 2012.

Klein Farms, LP, identifies several concerns with the proposed project, including conflicts with farming operations such as the use of large equipment, spray operations, and high levels of truck traffic during harvest season. Klein Farms also states concerns with parking overflow during peak operations (based on previous experience when the site was used for baseball), and access to their pump. Peak operations for the wakeboard facility are not anticipated to exceed the amount of on-site parking (76 spaces). No access will be allowed between the park and the adjacent property. Maintenance of adequate fencing around the Dubach site, maintenance of landscaping (vegetation), the posting of “No Parking” signs on the access road, and parking security/enforcement (e.g. towing) for special events will be incorporated into the Conditions of Approval for the project.

Caltrans. August 27, 2012.

Caltrans provides comments on three topics: hydraulics, encroachment permit, and transportation management plan (TMP). Caltrans notes that SR 113 is susceptible to flooding north of the project site and that the project should not create any additional runoff onto state right of way. Caltrans requests that a drainage report be submitted for their review. A drainage plan is required under Mitigation Measure HYD-1 (see page 45 of the MND). The drainage plan will include the requirement to avoid any additional runoff onto the state right of way. The plan shall be circulated to Caltrans District 3 as requested.

It is acknowledged that any work or traffic control onto the State ROW would require an encroachment permit. It should be noted that no alterations to SR 113 are proposed as part of the project. If traffic restrictions or detours are required as part of construction activity, Caltrans identifies the need for a Transportation Management Plan (TMP) prepared in accordance with Caltrans’ *Manual on Uniform Traffic Control Devices*. This requirement is consistent with Mitigation Measure TR-1, which requires preparation of a construction plan.

The requirements to coordinate with Caltrans on drainage and traffic controls will be incorporated into the Mitigation Monitoring and Reporting Plan (see below).

Mitigation Monitoring and Reporting Plan

When approving a mitigated negative declaration (MND), the lead agency must also adopt a Mitigation Monitoring and Reporting Plan (MMRP) to ensure the implementation of necessary mitigation measures. The MMRP for Velocity Island is attached to this memorandum.

Attachments:

1. Comment Letters
2. MMRP

SACRAMENTO-YOLO
MOSQUITO
& VECTOR
CONTROL
DISTRICT

MAILING ADDRESS
SACRAMENTO COUNTY
POST BOX ROAD
ELI EBENE, CA 95624

YOLO COUNTY
1234 FORTUNA AVENUE
WOODLAND, CA 95695

1.800.429.1022
FIGHTtheBITE.net

City of Woodland
Community Development Department
520 Court Street
Woodland, CA. 95695
ATTN: Paul Hanson

Re: Velocity Island Park

The Sacramento-Yolo Mosquito and Vector Control District (District) appreciates the opportunity to review and comment on the Mitigated Negative Declaration application for Velocity Island Park Project. The District is providing the following general comments and concerns relating to the proposed project.

Any policy or practice for aquatic sites must explicitly recognize the obligations imposed on land-owners and managers by the California Health and Safety Code (sec. 2000 et. seq.) to avoid creating public health threats through the establishment or maintenance of mosquito and other vector breeding habitats that can impact public health and welfare.

The District requires that any proposed project or mitigation must consider and use all reasonable and practical measures to avoid and minimize impacts to mosquito control activities in regards to public health and welfare. To the extent that the management of any private, state, or federal lands may produce mosquitoes, the responsible party must recognize and comply with its obligations under state law to not develop or keep mosquito breeding sources on its property.

The District has developed and adopted a Mosquito Reducing Best Management Practices (BMP) Manual which can be downloaded from the District's website at: http://www.fightthebite.net/download/ecomagement/SYMVCD_BMP_Manual.pdf. Please review and implement the District's BMPs for design and maintenance guidelines of all proposed projects to reduce or prevent the breeding of mosquitoes that can carry diseases such as West Nile virus (WNV), Malaria, Western Equine Encephalitis (WEE) and St. Louis Encephalitis (SLE) etc.

The District is facing new challenges with shrinking revenues, coupled with the costs of National Pollutant Discharge Elimination System (NPDES) permits, Endangered Species Act (ESA), and other environmental compliancy and regulatory issues.

If not properly constructed, managed or maintained, poorly designed and maintained facilities and systems may breed mosquitoes which can have an adverse effect on public health and welfare and may have a direct impact to local economies.

Failure to address these issues and potential mosquito breeding sources during the planning and construction process may result in enforcement actions to the landowner after the project has been completed. The District has the authority to abate a public nuisance as defined in the California Health and Safety Code (HSC) Section § 2010 and may pursue enforcement actions pursuant to Sections § 2060 of the (HSC) which can involve civil fines of up to \$1000/per day.

Should you have any questions or concerns please feel free to contact me at (916) 405-2093.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin B. Combo". The signature is written in a cursive, flowing style.

Kevin Combo
Ecological Management Department
Sacramento Yolo Mosquito and Vector Control District
kcombo@FightTheBite.net



Central Valley Regional Water Quality Control Board

22 August 2012

Paul L. Hanson
City of Woodland
520 Court Street
Woodland, CA 95695

CERTIFIED MAIL
7011 2970 0003 5615 6535

COMMENTS TO THE DRAFT MITIGATED NEGATIVE DECLARATION, VELOCITY ISLAND PARK PROJECT, SCH NO. 2012072053, YOLO COUNTY

Pursuant to the State Clearinghouse's 27 July 2012 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Draft Mitigated Negative Declaration* for the Velocity Island Park Project, located in Yolo County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml.

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits¹

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/.

Industrial Storm Water General Permit

Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 97-03-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml.

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACOE). If a Section 404 permit is required by the USACOE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACOE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACOE permit, or any other federal permit, is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

¹ Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Waste Discharge Requirements

If USACOE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project will require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Water Quality Certification and WDR processes, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/centralvalley/help/business_help/permit2.shtml.

If you have questions regarding these comments, please contact me at (916) 464-4684 or tcleak@waterboards.ca.gov.



Trevor Cleak
Environmental Scientist

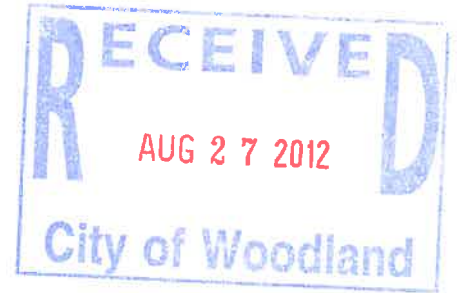
cc: State Clearinghouse Unit, Governor's Office of Planning and Research, Sacramento

August 23, 2012

Klein Farms L.P
913 Ridgeview Dr.
Woodland Ca. 95695

Negative Declaration Velocity Island Park Project

Attention: Paul L. Hanson, AICP, Senior Planner
520 Court St.
Woodland, CA



Dear Mr. Hanson,

I am with Klein Farms L.P., who owns and farms the surrounding ground of the proposed Velocity Park project located at 755 North East Street (Formerly Dubach Park). This project will greatly affect our everyday farming practices, which include:

1. Large equipment moving, creating dust and noise, at times 24hrs/day 7 days a week
2. Spray operations that could affect health, if posted signs are not followed and someone enters field illegally
3. High Level of semi-truck and trailers traffic (approx. 450 in a week during Harvest)

These operations are protected under "The Right To Farm" act and should be shared with the Velocity Island Park Project. Farming is a dangerous operation and the City of Woodland, by allowing this project to go forward, creates a more dangerous situation. We have had problems in the past when Dubach Park was run as a ballpark. People were constantly trespassing and parking in our field, which endanger themselves and others. The ball park had the whole facility to handle its participant. According to the proposed project, Velocity Island Park is trying to operate on 30% of what the baseball park operated with.

After doing an internet research of this type of business, it does not appear this facility will be able to handle this operation on "special event" days. There is no room for expansion for cars or people without greatly affecting us. Just people and cars trying to get in and out of the park will block the right to our irrigation pump on the south end of our field. I know we have the right to call the police for trespassing and things of that nature, but this will take away resources from the city for them to respond all the way out there. In the past they have not even responded.

At a minimum we would require:

1. Survey property line and put a 6' cyclone fence around the property
2. A gate to our access road to our pump (south side of our field)

3. No Parking signs on the East side of the paved road (that read "No Parking on Both sides of Road")
4. Security to enforce the Trespassing and illegal parking violations
5. Limit the number of people into the park and enforce it.
6. Keep the weeds down (they harbor detrimental insects and disease to our crops)

My Family has been farming this ground for over 40 years (and have owned it most of this time) and have contributed to Yolo Counties agriculture for 4 generations. We request your help in keeping agriculture alive and safe by taking these things into consideration when issuing this Conditional Use Permit and Lease Agreement for the Velocity Island Park Project. If you have any other questions on the impact this project will have on us, please give Mark or Chris Ochoa a call.

Thank You,



Mark Ochoa
530-681-6893



Chris Ochoa
530-681-5607

DEPARTMENT OF TRANSPORTATION

2379 GATEWAY OAKS DRIVE, SUITE 150

SACRAMENTO, CA 95833

PHONE (916) 274-0635

FAX (916) 274-0602

TTY 711

*Flex your power!
Be energy efficient!*

August 27, 2012

0312YOL0022
03-YOL-113 PM 11.54
SCH# 2012072053Mr. Paul L. Hanson
City of Woodland
520 Court Street
Woodland, CA 95695**Velocity Island Park – Mitigated Negative Declaration (MND)**

Dear Mr. Hanson:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The project is a proposed wakeboard park within the City of Woodland's 15-acre detention basin, formerly known as Dubach Park. The basin is located in the northwest quadrant of the intersection of Interstate 5 and State Route (SR) 113. The following comments are based on the MND.

Hydraulics

The proposed project is located in close vicinity to SR 113. Although rail runs north-south between SR 113 and the project site and provides protection, SR 113 is still susceptible to flooding north of the project site. No additional runoff from the proposed project should be directed toward the State's Right of Way (ROW).

Please submit a drainage report with calculations to:

Gurdeep Bhattal, TE, Hydraulics Branch
California Department of Transportation District 3
703 B Street
Marysville, CA95901

The drainage report should include provisions for replacing the existing basin along with accommodating additional net increase in runoff from the proposed project. Drainage plans in the drainage report must incorporate onsite detention for a 100-year flood event.

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State ROW requires an encroachment permit that is issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five sets of plans clearly indicating State ROW must be submitted to the address below:

Bruce Capaul, Chief, Office of Permits
California Department of Transportation District 3
703 B Street
Marysville, CA 95901

Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See the website linked below for more information.

<http://www.dot.ca.gov/hq/traffops/developserv/permits/>

Transportation Management Plan (TMP)

If it is determined that traffic restrictions and detours are needed on or affecting State highways, a TMP or construction Traffic Impact Study may be required for approval by Caltrans prior to construction. TMPs must be prepared in accordance with Caltrans' *Manual on Uniform Traffic Control Devices*. Further information is available for download at the following web address:

<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/pdf/camutcd2012/Part6.pdf>

Further information is available on the following website:

http://www.dot.ca.gov/hq/tpp/offices/ocp/igr_ceqa.html.

For any questions regarding this letter, please contact Arthur Murray of my staff at 916-274-0616 or by email at: arthur_murray@dot.ca.gov.

Sincerely,



ERIC FREDERICKS, Chief
Office of Transportation Planning – South

c: Scott Morgan, State Clearinghouse

MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Timing
Air Quality Construction activities may result in cumulative air quality impacts.	AIR-1: During active construction, the City shall require construction contractors to implement applicable YSAMD construction dust control measures, including: 1. Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure. 2. Haul trucks shall maintain at least 2 feet of freeboard; or cover all trucks hauling dirt, sand, or loose materials. 3. Plant vegetative ground cover in disturbed areas as soon as possible. 4. Cover inactive storage piles. 5. Sweep access road if visible soil material is carried out from the construction site.	Incorporate into condition of approval. City Inspectors to confirm implementation.	During construction.
Biological Resources Project construction may impact nesting raptors during the breeding season.	BIO-1: Potential Swainson's hawk or other raptor nests shall be protected as follows: a) The applicant shall make every effort to conduct any tree and shrub removal activities that are required for project construction outside of the migratory bird and raptor breeding season (February 15 through August 31). In addition, all trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree. b) If construction-related activities are to occur prior to tree removal during the nesting bird season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey of all potential nesting habitats within 15 days prior to the start of activities (grubbing, dirt-moving, mobilization, or other construction-related activities) and within 500 feet of construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The results of these surveys shall be documented in a technical memorandum that shall be submitted to the California Department of Fish and Game (DFG) (if nesting birds are documented) and the City of Woodland. A qualified biologist is one that has been approved by DFG as having the appropriate education background and experience to conduct nesting bird surveys.	City shall confirm necessary pre-construction surveys prior to any construction activities on the site. Monitor shall be selected with the approval of the City, and paid for by the applicant.	Prior to any construction activities from February 15 through August 31.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

- c) If an active nest is found during the preconstruction survey, a no-work buffer of 500 feet will be established unless otherwise approved by the DFG. The qualified biologist will coordinate with DFG to determine the appropriate nest avoidance, monitoring, and protective measures appropriate for the species and site conditions. In addition to establishment of a no-work buffer, these measures may include daily or spot-check monitoring of the nesting activity as deemed appropriate by DFG.
- d) If the preconstruction survey indicates that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by birds or that are located more than 500 feet from active nests may be removed (500 feet is the distance regularly recommended by DFG to prevent impacts to active avian nests).

The project would involve the removal of several trees.

BIO-2: Loss of tree resources on the project site will be mitigated as follows:

- a) The City of Woodland (City) shall ensure that the project applicant will comply with the City of Woodland's Municipal Code, Chapter 20A. Prior to construction, the applicant shall have a Certified Arborist conduct a tree survey of the trees located within the project boundaries and submit a Tree Plan to the Community Development Department.
- b) Removed trees will be replaced at a ratio of 2:1. Replacement trees shall be planted on the project site. All trees planted shall be purchased from a locally adapted genetic stock obtained within 50 miles and 1,000 feet in elevation of a project site. If the site does not have adequate room for replanting trees, the City may require payment to a tree replacement fund. Replacement trees shall be guaranteed for a period of one year from the date of final acceptance of the development project by the City. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year.

Applicant shall prepare a tree plan identifying proposed removals, protection measures for sensitive trees during construction, and mitigation plantings.

Prior to issuance of a grading or building permit for any phase of the project.

BIO-3: Tree resources on the project site will be protected as follows:

Sensitive tree resources adjacent to construction activities may require additional protection. Buffer zones should include a minimum one-foot-wide buffer zone outside the drip line. The locations of these resources would be clearly identified on the construction drawings and marked in the field. Fencing or other barriers would remain in place until all construction and restoration work that involves heavy equipment is complete. Construction vehicles, equipment, or materials would not be parked or stored within the fenced area. No signs, ropes, cables, or other items would be attached to the protected trees. Grading, filling, trenching, paving, irrigation, and landscaping within the drip lines of oak trees would be limited. Grading within the drip lines of oak trees would not be permitted unless specifically authorized by a Certified Arborist.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Cultural Resources

Project may result in accidental discovery of archaeological resources.

CUL-1: If cultural resources are encountered, all activity in the vicinity of the find shall cease until it can be evaluated by a qualified archaeologist and a Native American representative. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the archaeologist and Native American representative determine that the resources may be significant, they will notify the City of Woodland. An appropriate treatment plan for the resources should be developed. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources.

In considering any suggested mitigation proposed by the archaeologist and Native American representative, the City will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being carried out.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

Project may result in accidental discovery of human remains.

CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

Hazards and Hazardous Materials

Project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

HAZ-1: If soil contaminated by potentially hazardous materials is exposed during construction, the local responsible agency shall be notified. A work plan to characterize and possibly remove contaminated soil may be required by the local responsible agency or other regulatory agency.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Project may be the site of previously unidentified contamination.	HAZ-2: The applicant shall ensure all contractors and employees immediately control the source of any leak and contain any spill using appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the RWQCB for the NPDES construction activity storm water permits would be taken to ensure that no hazardous materials enter any nearby waterways.	Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.	Ongoing during any ground-disturbing construction activities in any phase of the project.
Hydrology and Water Quality Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream.	HAZ-3: A Phase I Environmental Assessment must be completed by a qualified professional for the project before any ground disturbing activity begins. Mitigation Measure HYD-1: Prior to the initiation of Project construction, a comprehensive drainage plan shall be prepared by the Applicant, reviewed by the City engineer, and implemented for the installation of all proposed facilities that would require or result in grading or installation of new facilities on site. The drainage plan shall include measures to retain on site, infiltrate, or otherwise channel runoff away from areas of open soil and other features subject to erosion or flooding. As relevant, stormwater from the project site shall be channeled into receiving drainage ditches or canals that are sized appropriately to contain anticipated stormwater flows. Runoff waters shall be discharged in a manner to prevent downstream or offsite erosion, sedimentation, or flooding.	Submit prior to issuance of grading or building permit. Plan shall be submitted to the City for approval prior to issuance of grading or building permits. Plan shall be circulated by the City to Caltrans District 3 for review.	Prior to approval of grading or building permit. Prior to issuance of grading or building permit.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)**Noise**

Construction noise could affect sensitive land uses in the vicinity of the project.

NOI-1: The project sponsor shall require construction contractors to implement the following mitigation measures:

- Consistent with the City of Woodland Municipal Code, all noise generating construction activities shall be limited to Monday through Saturday from 7:00 AM to 6:00 PM, and Sundays from 9:00 AM to 6:00 PM.
- All construction vehicles and equipment, fixed and mobile, shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- Construction staging areas shall be located as far as practicable from dwellings and the Inn so as to cause minimal disruption to these activities.
- Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.
- Prohibit unnecessary idling of internal combustion engines.
- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Transportation and Traffic

Project construction may affect traffic in the project vicinity. .

TR-1: The City will require its construction contractor(s) to develop a construction management plan for review and approval. The plan will include at least the following items and requirements to reduce, to the maximum extent feasible, traffic congestion during construction:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, signs, cones for drivers, and designated construction access routes;
- Identification of haul routes for movement of construction vehicles that would minimize impacts on motor vehicular, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area;
- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur; and
- Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the City.

Applicant shall submit traffic plan to Public Works Department prior to start of construction.

Ongoing during construction.

ATTACHMENT D

Applicable City Codes & Regulations

This list is not an exhaustive list of all City code requirements for this project. It serves to inform the applicant of common standards.

PLANNING

1. Prior to issuing Certificate of Occupancy, secure approval and satisfy requirements of all agencies that have jurisdiction.
2. Development of the property shall comply with the City's Community Design Standards and Zoning Ordinance.
3. Prior to issuance of building permits, the parking lot plans shall meet the dimension requirements of the Zoning Ordinance. The full size spaces are 9 x 19 (2-foot overhangs are permitted). The compact spaces are 8 x 16 (1 foot overhangs are permitted). The drive aisle width is 24-feet minimum.
4. Lighting shall be confined to the site boundaries and provide safety and security. All building entrances and pedestrian ways shall be adequately lighted pursuant to the City Code and the requirements of the Police Department.
5. Lighting shall be shielded from neighboring properties and Interstate 5 and directed at a specific task or target. Exposed bulbs are prohibited. Exterior light design shall be approved by the Community Development Department.
6. All mechanical equipment (which includes air conditioning units), whether roof-mounted or on the ground, shall be fully screened from view.
7. All public utility structures, including transformers shall be underground or located behind buildings where possible. If not possible, adequate screening shall be provided on three sides via a wall or vegetated trellis subject to Community Development Department approval.
8. Applicant shall comply with the State of California's new Water Efficient Landscape Ordinance AB 1881. The landscape architect shall document and attest to the compliance with the new State ordinance on the final landscape plans.
9. Prior to issuing any building permit, applicant shall submit and obtain from the Community Development Department approval for a final landscape and irrigation plan.
10. Prior to issuing Certificate of Occupancy any existing or proposed exterior trash receptacles shall be fully enclosed with masonry materials that are architecturally compatible with the design of the buildings. Landscaping shall surround the trash enclosure on three sides.
15. Prior to issuing any building permit applicant shall submit and obtain from the Community Development Department approval for a final landscape and irrigation plan.

Applicable City Codes & Regulations

16. Landscaping at driveway entrances and on corners of drive aisles interior to the site shall be protected by rocks, bollards, or other suitable means, satisfactory to the Community Development Department. The intent of this measure is to protect landscaping from vehicular activity.
17. Landscape plan staking diagram shall indicate direction of stake placement.
18. Vegetative matter shall cover 75 percent (75%) of the landscape area. The landscape architect shall document the calculations and attest to this on the final landscape plan.
19. Shade trees shall be planted and evenly distributed within the uncovered portions of the auto parking area so that at the trees maturity forty percent (40%) of the parking stalls and back up area will be in shade at high noon at such times as the trees have full foliage. The landscape architect shall document the calculations and attest to this on the final landscape plan. A shade calculation diagram shall be provided for review and approval.
20. Landscaping design, materials, installation, and maintenance shall be consistent with applicable City requirements.
21. Applicant shall submit and receive final approval from the Community Development Department for a landscape and irrigation plan prepared in accordance with Article 22 of the Zoning Ordinance and Community Design Standards.
22. Obtain a building permit for any signs prior to installation. All signs shall be in accordance with Sign Ordinance and Community Design Standards and approved by Community Development Department prior to installation.
23. FEMA NFIP Development Requirements: Under the currently applicable Flood Insurance Rate Map (FIRM) (City of Woodland, California, Yolo County, Map Number 060426-0465H , FIRM Map Revised May 16, 2012) the property is shown in Flood Zone AE which is identified as "Special Flood Hazard Areas Subject to Inundation by the 1% Annual Chance Flood Event". The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year.

BUILDING

1. This project must meet all criteria and mandates for these City adopted codes:
 - A. 2010 California Building Code (Including the Green Building Code)
 - B. 2010 California Plumbing Code
 - C. 2010 California Mechanical Code
 - D. 2010 California Electrical Code
 - E. 2008 Building Energy Efficiency Standards

Applicable City Codes & Regulations

F. The Code of the City of Woodland

2. Other City and County Agencies (Health, Fire, Public Works, and Planning) may be required to approve the project prior to a building permit being issued.
3. Any deferred submittals that are not a part of the initial permit application must be listed on the cover sheet of the plan at the time of application for the project.
4. All plans, computations and specifications to be prepared and designed by an architect or engineer licensed by the state of California.
5. A licensed architect or licensed engineer shall be responsible for reviewing and coordinating all submittal documents prepared by others, including deferred submittal items, for compatibility with the design of the building.
6. A soils investigation report shall be provide as specified in section 1803.2 of the 2010 CBC.
7. Entire area of development and path of travel from sidewalk and parking shall comply with the California Building Code for Accessibility. When conflicts exist between the ADA and the California building Code the standard that provides the greatest degree of accessibility shall comply.
8. Accessibility Compliance: Any unauthorized deviations from such regulations or building standards shall be rectified by full compliance within 90 days after discovery of the deviation.

DEVELOPMENT SERVICES ENGINEERING

24. Owner/applicant shall be required to obtain an encroachment permit from Development Services Engineering and pay plan check and inspection fees to cover any work within the public right-of-way and connection to City utility services.
25. All improvements within the public right-of-way and utility connections shall be designed and constructed in accordance with the City of Woodland Standard Specifications and Details and any approved addendums or revisions.
26. The project shall install backflow prevention assemblies consistent with the design requirements of the City of Woodland Standard Specifications. Only backflow prevention assemblies shown on the State of California Department of Public Health list shall be allowed. Backflow prevention assemblies shall be shown on the utility site plan and located on the customer side of the meter.
62. All domestic and landscape water services for the site shall be metered. Meters shall meet the requirements of the City of Woodland Standard Specifications and any approved amendments. Meters shall be furnished and installed by owner in locations approved by Development Services Engineering or the Engineering Inspector for the project. Data Units for the meters shall be installed by the City (included in permit fees).

Applicable City Codes & Regulations

27. The site is required to comply with the City's stormwater ordinance and the *Technical Guidance Manual for Stormwater Quality Control Measures*. Specifically, the site shall incorporate general site design control measures (e.g. minimize impervious surfaces) and site-specific control measures (e.g. storm drain message and signage on drain inlets, covered trash enclosures, etc). The project shall pay an in-lieu fee for treatment control measures as specified in the City's Comprehensive Fee Schedule.
28. The project will be required to conform to all requirements of Chapter 19 of the Municipal Code, *Wastewater Treatment and Discharge*.
29. Construction of projects disturbing more than one acre of soil shall require a National Pollution Discharge Elimination System (NPDES) construction permit. Applications/projects disturbing less than one acre of soil shall implement BMP's to prevent and minimize erosion. The improvement plans for construction of less than 1 acre shall include a BMP to be approved by the City Engineer.
30. Prior to approval of improvement plans, the Owner shall pay all fees for plan check and inspection of offsite infrastructure improvements, as approved by City Council and defined in the City Fee Schedule. If Owner pays a deposit only at improvement plan submittal, the balance shall be paid prior to improvement plan approval by the City Engineer.
31. This project is subject to the City's Storm Water Quality Control Ordinance. All parcels, regardless of size shall incorporate General Site Design Measures, Site Specific Measures, and Treatment Measures

POLICE

1. External lighting requirements shall be a general lighting level of one foot-candle minimum maintained at ground level for medium use facilities, utilizing High Intensity Discharge fixtures with vandal-resistant covers.
2. **Natural Access Control**
 - Use signs to direct patrons to parking and entrances.
 - Prevent easy access to the roof from the ground.
3. **Natural Surveillance**
 - Fully illuminate the exterior of the building and grounds at night.
 - Place all entrances under visual surveillance (monitored electronically if necessary).
 - Place any pay telephones within clear view of employees.
4. **Territorial Reinforcement**

Applicable City Codes & Regulations

- Make private areas distinguishable from public areas.
- Position parking areas to be clearly visible from the building or street with neatly marked spaces.
- Post Private Property Signs to aid in the removal of unwanted vehicles. (Contact PD with assistance with this).

5. Maintenance

- Keep buildings and walks clean and repaired.
- Maintain parking areas to a high standard without pot-holes or trash.
- Keep plantings in good condition.

FIRE DEPARTMENT

71. The existing roadway from the entrance off of East Ave to the entrance to the actual facility is in poor shape. The Fire Department will require that a minimum 20 wide all weather surface roadway be installed. There is also a requirement for a 13 feet 6 inch vertical clearance for Fire Department apparatus. There is an existing tree overhang that does not meet this requirement
72. The Cul-De-Sac at the end of the project shall meet the minimum radius of the City Of Woodland Standards for cul-de-sac's.
73. The proposed gates at the entrance of this project do not indicated if they are electrically operated. If the gates are to be electrically operated they shall be installed with a Knox System override for Fire Department access. If they gates are not electrically operated a Knox box shall be installed per Fire Department requirements.

PUBLIC WORKS INDUSTRIAL PRETREATMENT DIVISION

Stormwater

74. As a new development project, the Velocity Island Park Project is required to implement the General Site Design Control Measures detailed in the City of Woodland's Stormwater Quality Control Measures Technical Guidance Manual. These General Site Design

Control Measures include:

- G-1: Conserve natural areas;
- G-2: Protect slopes and channels;
- G-3: Control peak stormwater runoff discharge rates;
- G-4: Minimize impervious areas; and

Applicable City Codes & Regulations

G-S: Minimize effective imperviousness.

75. Additionally, the following Specific Source Control Measure detailed in the City of Woodland's Stormwater Quality Control Measures Technical Guidance Manual is to be required.

S-I: Storm Drain Message and Signage - for all storm drains on the property.

ATTACHMENT E

VELOCITY ISLAND PARK PROJECT

Initial Study / Mitigated Negative Declaration

Prepared for
City of Woodland

July 2012



VELOCITY ISLAND PARK PROJECT

Initial Study / Mitigated Negative Declaration

Prepared for
City of Woodland

July 2012



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ENVIRONMENTAL CHECKLIST

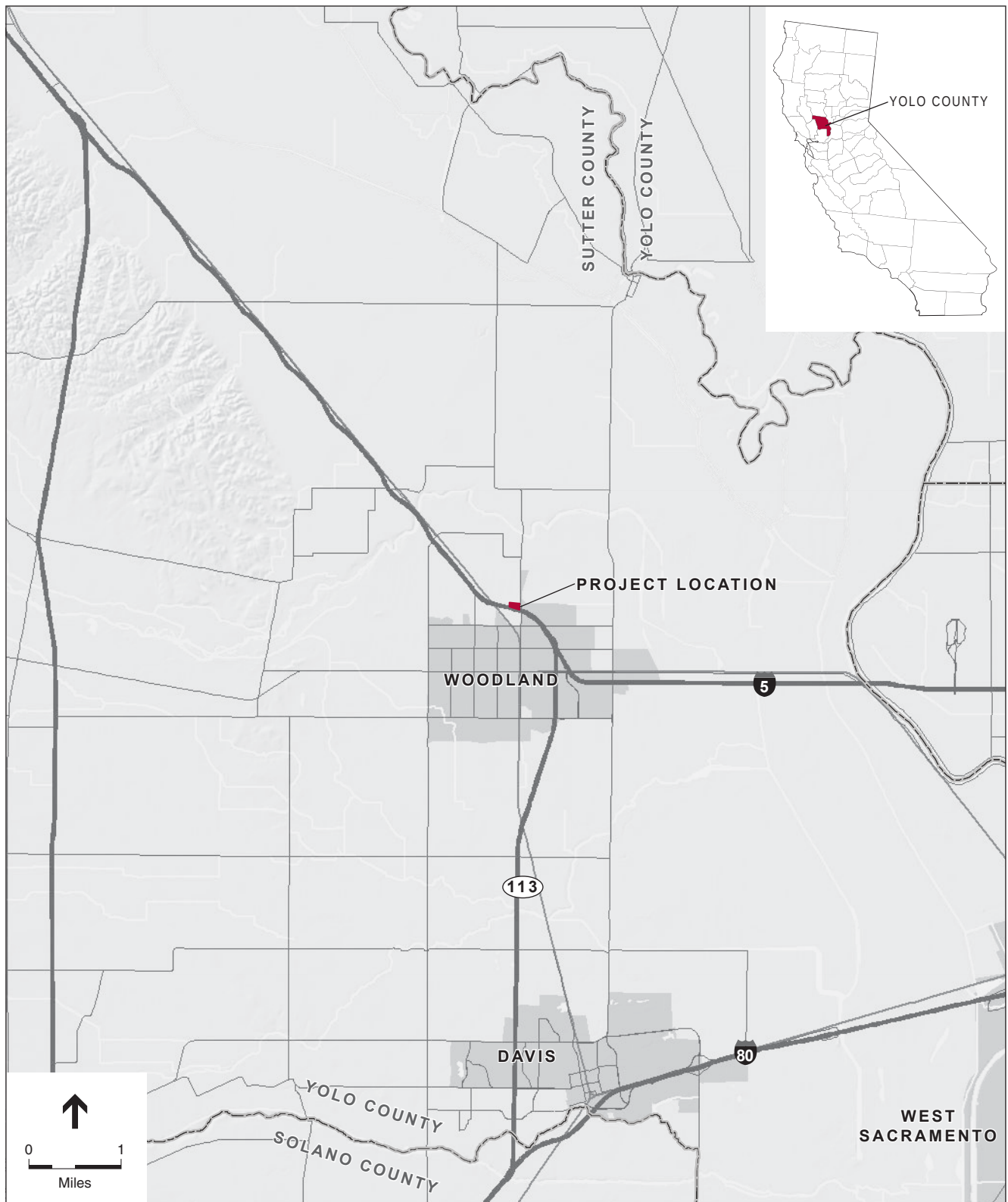
Initial Study/Mitigated Negative Declaration

1. **Project Title:** Velocity Island Park Project
2. **Lead Agency Name and Address:** City of Woodland
300 First Street
Woodland, CA 95695
3. **Contact Person and Phone Number:** Paul Hanson, AICP
Senior Planner
(530) 661-5820
4. **Project Location:** Dubach Detention Basin
755 North East Street
Woodland, CA 95776
5. **Project Sponsor's Name and Address:** Love Ride, Inc.
Scott Hartmann
1240 Alice Street, Suite C
Woodland, CA 95776
6. **General Plan Designation(s):** Open Space (OS)
7. **Zoning Designation(s):** Open Space (OS)

8. Description of Project:

Love Ride, Inc. (Love Ride) is proposing to develop a cable wakeboard park within the 15-acre Dubach Detention Basin (formerly Dubach Park) in the City of Woodland (APN# 027-340-002 & 027-270-078). The project site is located at 755 North East Street immediately northwest of Interstate 5/Highway 113 (see **Figure 1** and **Figure 2**). The project site, which is owned by the City, has been used as a hydrologic detention basin since 2008 when the park was closed. Prior to 2008, the park was a dual-use facility for youth baseball and winter stormwater detention.

Cable wakeboarding is a surface water sport, which involves riding a wakeboard over the surface of a body of water while being pulled by an overhead cable system. The cables are suspended in the air by a series of towers surrounding a small lake; an overhead cable rotates in a (usually) counterclockwise motion around the lake. Along the cable are a number of carriers from which towropes are attached pulling riders around the lake. See **Figures 3, 4, and 5** for visual simulations of the proposed project.



SOURCE: ESRI, 2006; and ESA, 2012

Velocity Island Park Project . 120269

Figure 1
Regional Location



SOURCE: Bing Maps, 2009; ESRI, 2009; and ESA, 2012

Velocity Island Park Project . 120269

Figure 2
Project Site

The project, known as “Velocity Island Park,” would create a 9-acre lake within the Dubach Detention Basin site and construct the overhead cable system and park amenities. The cable system will consist of the two (2) cable systems. The main cable system includes six truss-design stanchions with an electric motor pulling the overhead towline around the lake. The second cable line system consists of two separate towlines for straight line pulling. Each system includes two truss-design stanchions with an electric motor pulling the overhead towline in a straight line. Within the watercourse, the project includes two sandy islands, one for wake dampening, and the other for launching participants and spectator area. The project will also include floating and stationary docks for launching participants, and a decomposed granitic path 4 to 5 feet wide around the perimeter of the lake.

The facility proposes 76 parking spaces, restrooms (624 sq. ft.), rental building (640 sq. ft.), a snack bar/office (1,400 – 2,100 sq. ft.), and an observation deck. The project would operate from 8 a.m. to ½ hour before dusk every day of the week and expects 10 to 100 persons per day with more on special event days.

The City of Woodland is serving as the lead agency under the California Environmental Quality Act (CEQA). The required project entitlements include a Lease Agreement with the City, a conditional use permit (CUP), site plan review, and design review. The Planning Commission will consider approval of the proposed Mitigated Negative Declaration (MND) and then act on the CUP, site plan review, and design review. The Lease Agreement must be approved by the City Council.

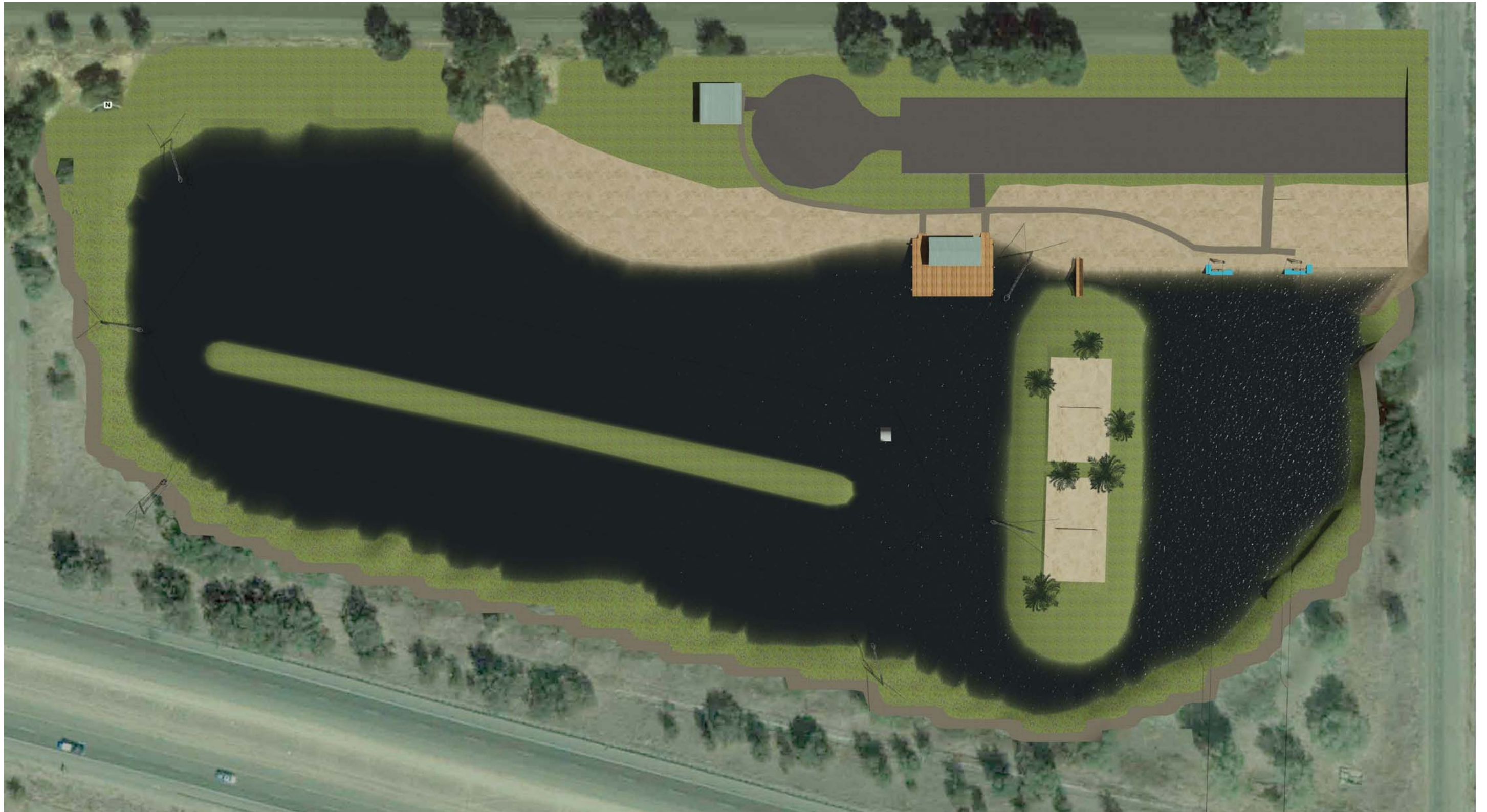
9. Surrounding Land Uses and Setting:

The project site is located in a largely agricultural area in a northern portion of the City of Woodland, CA (see Figure 1 and Figure 2). The project site has a City of Woodland General Plan and Zoning Designation of Open Space (OS). Uses appropriate to the area are allowed in the OS zone with approval of a conditional use permit, site plan review and design review.

Land uses surrounding the project site consist of various agricultural, commercial and industrial land uses. Existing agricultural operations are located immediately to the north and west. North East Street/Highway 113 is located immediately to the east with various businesses on the opposite side, including Valley Oaks Inn and several warehouses. Interstate 5 is located directly to the south with a large trucking operation on the other side.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement. Indicate whether another agency is a responsible or trustee agency):

The proposed project would disturb an area over one acre. Therefore, an NPDES Permit from the Regional Water Quality Control Board and preparation of a Storm Water Pollution Prevention Plan (SWPPP) will be required.



SOURCE: Bill Eral Design, 2012; and ESA, 2012

Velocity Island Park Project . 120269

Figure 3
Visual Simulation



SOURCE: Bill Eral Design, 2012; and ESA, 2012

Velocity Island Park Project . 120269

Figure 4
Visual Simulation



SOURCE: Bill Eral Design, 2012; and ESA, 2012

Velocity Island Park Project . 120269

Figure 5
Visual Simulation

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Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

- | | | |
|--|---|---|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☒ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Geology, Soils and Seismicity |
| ☒ Greenhouse Gas Emissions | ☒ Hazards and Hazardous Materials | ☒ Hydrology and Water Quality |
| ☐ Land Use and Land Use Planning | ☐ Mineral Resources | ☐ Noise |
| ☐ Population and Housing | ☐ Public Services | ☐ Recreation |
| ☒ Transportation and Traffic | ☐ Utilities and Service Systems | ☐ Mandatory Findings of Significance |

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.


Signature

Brian J. Grattidge
Printed Name

July 26, 2012
Date

Paul L. Hanson, Senior Planner
For

Environmental Checklist

Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS — Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

- a) As described above, land uses surrounding the project site consist of various agricultural, commercial and industrial land uses. This visual context of the project area consists of existing agricultural operations located immediately to the north and west. North East Street/Highway 113 (Hwy 113) is located immediately to the east with various businesses on the opposite side. Interstate 5 (I-5) is located directly to the south with a large trucking operation on the other side. There are no scenic vistas within the vicinity of the project site. Because the project site is in a developed area and because there are no scenic vistas in the vicinity of the project site, the proposed project would not have an adverse effect on a scenic vista; therefore there would be **no impact**.
- b) A review of the current Caltrans Map of Designated State Scenic Highways indicates that there are no officially designated state scenic highways in Yolo County. A portion of State Route 16 in the northwest part of the County is an eligible state scenic highway, however it has not been designated as such at this time (and is not within the same view shed as the project site). Furthermore, there are no designated county scenic highways currently listed. Therefore, the proposed project would have **no impact** on scenic resources associated with a scenic highway or roadway, and no mitigation is required.
- c) As described above, the project site is located immediately adjacent to existing agricultural land uses as well as I-5 and Hwy 113. Existing developed industrial and commercial land uses are located on other sides of I-5 and Hwy 113. However, the site itself is currently an undeveloped detention basin. The project site is visible to several types of viewing groups including workers of the various businesses in the area and motorists traveling along I-5 and Hwy 113. The viewers are considered to have low to moderate sensitivity, and low (vehicle traffic) to moderate (employees) exposure. Development of the proposed project would result in a permanent change in local visual conditions (see Figures 4 and 5).

- The project site is surrounded by existing agricultural uses, I-5, and Hwy 113 with developed industrial and commercial land uses in the area. The visual character of the site would experience moderate change—the detention basin would be re-graded, filled with water, and two artificial islands created. A small amount (2,000 to 3,000 sq. ft.) of ancillary structures would be built and the parking lot enlarged. Additional landscaping would be added. The visual quality would not be substantially degraded. Therefore this impact is considered **less than significant**.
- d) The project site is located adjacent to existing developed land uses where lighting currently exists and is characteristic of typical nighttime city views. Automobile traffic on I-5 and Hwy 113, as well as existing industrial and commercial land uses in the area contribute to existing urbanized nighttime light sources and daytime glare in the vicinity of the project. The proposed project would not conflict with existing land uses in the area. Although the project would create new sources of light and glare, it would not adversely affect day or nighttime views as lighting associated with existing development surrounding the project site is prevalent in the project area. There are no adjacent residential uses that would be affected (nearest residences are located ½ mile away). Furthermore, all proposed outdoor lighting will be required to meet all city standards regulating outdoor lighting in order to minimize any impacts resulting from outdoor lighting on adjacent properties; therefore this impact is **less than significant**.

References

- California Department of Transportation (Caltrans), 2012. California Scenic Highway Program, available at: http://www.dot.ca.gov/hq/LandArch/scenic_highways/scenic_hwy.htm; accessed May 15, 2012.
- City of Woodland, 2002. General Plan Policy Document; December 17, 2002.
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Agricultural and Forest Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
2. AGRICULTURAL AND FOREST RESOURCES —				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion

- a) According to the Department of Conservation's Farmland Mapping and Monitoring Program (DOC, 2010), the project site consists of Urban and Built-Up Land. No Prime Farmland, Unique Farmland, or Farmland of Statewide Importance would be converted as a result of the proposed project; therefore this impact is considered **less than significant**.
- b) The project site is designated as open space by the City of Woodland General Plan and Zoning Ordinance. The project site is not enrolled in a Williamson Act contract. Properties to the south and east are zoned and used for non-agricultural (commercial and industrial) development, however, properties to the north and west are zoned for agricultural uses. Although land used for agricultural purposes is located adjacent to the project site, the project would not negatively impact or otherwise interfere with these operations. Therefore, this impact is considered **less than significant**.
- c,d) As previously discussed, because the project site is located on a parcel currently used as a detention basin immediately adjacent to I-5 and Hwy 113 with developed industrial and commercial in the area, there would be no conflict with existing zoning for, or cause rezoning

of, forestland, timberland, or timberland zoned Timberland Production. No forestland would be lost or converted as a result of the proposed project. For these reasons, there would be **no impact** on forestland.

- e) The project is recreational in nature, and of a relatively low intensity. No sensitive residential uses would be introduced that could generate complaints or otherwise limit agricultural activity. Therefore, **no impact** related to direct or indirect conversion of farmland/forestland would result from the proposed project.

References

DOC, 2010. California Department of Conservation, Farmland Mapping and Monitoring Program, 2010.

City of Woodland, 2002. General Plan Policy Document; December 17, 2002.

Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
3. AIR QUALITY —				
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☒	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Discussion

- a) The project site is within the Sacramento Valley Air Basin (SVAB), specifically in the City of Woodland, Yolo County, which is currently designated as a nonattainment area for state and national ozone standards, state particulate matter (PM10) standard, and federal PM2.5 (24-hour) standard. The Yolo-Solano Air Quality Management District (YSAQMD) *Triennial Assessment and Plan Update* (YSAQMD, May 2010) is the applicable Air Quality Management Plan (AQMP) that has been prepared to address ozone nonattainment issues.

If a City's General Plan is consistent with the most recently adopted AQMP, a project that is consistent with the General Plan's land use designation is considered consistent with applicable air quality plans and policies.

As stated in Section 10, Land Use and Planning, the proposed project would be consistent with the General Plan land use designations and zoning for the project site. In addition, the City's General Plan is consistent with the AQMP because data and projections from the General Plan are incorporated into the AQMP. Development of the project would not interfere with population and vehicle-miles-traveled (VMT) projections used to develop the 2010 *Triennial Assessment and Plan Update* planning projections as it would not increase the population of the area and VMT traveled would be negligible. Therefore, the proposed project would result in a less-than-significant impact because it would not substantially conflict with the region's Air Quality Management Plan.

- b) The project would result in short-term and long-term emissions of criteria air pollutants from construction and operations, respectively. These activities are described below.

Construction

The SVAB experiences occasional violations of ozone and particulate matter (PM10 and PM2.5) standards. Thus, during the construction phase of any given project basin wide violations can occur. Construction would involve use of equipment and materials that would emit ozone precursor emissions (i.e., reactive organic gases or ROG, and nitrogen oxides, or NOx). Construction activities would also result in the emission of other criteria pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. Emission levels for these activities would vary depending on the number and type of equipment, duration of use, operation schedules, and the number of construction workers. Criteria pollutant emissions of ROG and NOx from these emission sources would incrementally add to the regional atmospheric loading of ozone precursors during project development. Emissions were estimated using CalEEMod and are depicted below in **Table 1**. These emissions are also compared to the YSAQMD thresholds described in the *Handbook for Assessing and Mitigating Air Quality Impacts* (YSAQMD, 2007). Construction activities are assumed to occur over a six month period. Additional assumptions and information are included in **Appendix A**.

TABLE 1
UNMITIGATED EMISSIONS FROM CONSTRUCTION^{a, b}

Project Phase	ROG ^c	NOx ^c	CO ^d	PM10 ^d	PM2.5 ^d
Year 2012	0.3	2.3	49.9	32.0	14.2
Year 2013	0.5	0.4	25.2	3.2	3.0
YSAQMD Thresholds of Significance	10	10	NA	80	NA
Significant (Yes or No)?	No	No	No	No	No

a. Project construction emissions estimates were made using CalEEMod. See Appendix A for more information.
b. Values in **bold** are in excess of the applicable significance threshold. NA = Not Available.
c. Tons Per Year
d. Pounds Per Day

Although the project would not generate emissions during construction that would exceed the YSAQMD thresholds, the YSAQMD recommends that projects implement a set of best management practices during construction regardless of the significance determination to reduce dust emissions and avoid localized health impacts. Implementation **Mitigation Measures AIR-1** would reduce impacts to a less-than-significant level.

Operations

In regards to operations, the proposed project would increase the use at the project site by adding recreational facilities. The proposed project would generate approximately 100 daily vehicle trips (50 inbound and 50 outbound), and approximately 10 peak-hour trips (5 inbound and 5 outbound) during both the a.m. and p.m. peak hours. Operational emissions, including mobile, energy, and area (i.e., architectural coating, consumer

products, landscape equipment) sources were estimated using CalEEMod and are depicted below in **Table 2**. Additional assumptions and information are included in **Appendix A**.

As shown in Table 2, long-term operational emissions of the project would be less than significant.

TABLE 2
UNMITIGATED EMISSIONS FROM OPERATIONS ^{a, b}

Project Phase	ROG ^c	NOx ^c	CO ^d	PM10 ^d	PM2.5 ^d
Project Buildout	0.3	0.3	5.5	0.9	0.09
YSAQMD Thresholds of Significance	10	10	NA	80	NA
Significant (Yes or No)?	No	No	No	No	No

a. Project operational emissions estimates were made CalEEMod. See Appendix A for more information.
b. Values in **bold** are in excess of the applicable significance threshold. NA = Not Available.
c. Tons Per Year
d. Pounds Per Day

While CO emissions do not have a single daily or yearly threshold, the potential impact of CO concentrations is analyzed in item (d), below.

- c) According to the YSAQMD, no single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Alternatively, if a project does not exceed the identified significance thresholds, then the project would not be considered cumulatively considerable and would result in less-than-significant air quality impacts. As discussed for criteria "b" above, the project would result in less than significant construction emissions with mitigation incorporation, and less than significant operational emissions.

Mitigation Measure: Implement Mitigation Measures AIR-1.

- d) Some receptors are considered more sensitive than others to air pollutants. Reasons for greater sensitivity include pre-existing health problems, proximity to emissions source, or duration of exposure to air pollutants. Schools, hospitals and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people and the infirm are more susceptible to respiratory infections and other air quality-related health problems than the general public. Residential areas are also sensitive to poor air quality because people usually stay home for extended periods of time. The project would not be constructed adjacent to existing sensitive uses. Thus, toxic air contaminants (such as diesel particulate matter) from construction activities are not anticipated to result in the exposure of sensitive receptors to levels that exceed applicable standards.

The long-term operation of the project would not result in any sources of toxic air emissions. However, since the project would be located adjacent to I-5 and Highway 113, visitors would potentially be exposed to toxic air contaminants and criteria air pollutants from the

highways. However, this exposure would be for the short-term duration of park visitation. In addition, The YSAQMD's *Handbook for Assessing and Mitigating Air Quality Impacts* includes screening criteria for carbon monoxide hotspots. If either of the following criteria is true of any intersection affected by the project traffic, then the project can be said to have the potential to create a violation of the CO standard:

- A traffic study for the project indicates that the peak-hour Level of Service (LOS) on one or more streets or at one or more intersections in the project vicinity will be reduced to an unacceptable LOS (typically LOS E or F); or
- A traffic study indicates that the project will substantially worsen an already existing peak-hour LOS F on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where delay would increase by 10 seconds or more when project-generated traffic is included."

Since the project would result in minimal traffic (10 peak-hour trips) during both the a.m. and p.m. peak hours, these criteria would not be met.

In summary, the project would not expose sensitive receptors to substantial pollutant concentrations during construction or operations and this impact would be less than significant.

- e) As a general matter, the types of land use development that pose potential odor problems include wastewater treatment plants, refineries, landfills, composting facilities and transfer stations. No such uses would occupy the project site. Therefore the project would not create objectionable odors that would affect a substantial number of people and this impact would be less than significant.

Mitigation Measures

Mitigation Measure AIR-1: During active construction, the City shall require construction contractors to implement applicable YSAMD construction dust control measures, including:

1. Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
2. Haul trucks shall maintain at least 2 feet of freeboard; or cover all trucks hauling dirt, sand, or loose materials.
3. Plant vegetative ground cover in disturbed areas as soon as possible.
4. Cover inactive storage piles.
5. Sweep access road if visible soil material is carried out from the construction site.

References

- Yolo-Solano Air Quality Management District (YSAQMD), 2007. *Handbook for Assessing and Mitigating Air Quality Impacts*, adopted July 11, 2007.
- Yolo-Solano Air Quality Management District (YSAQMD), 2010. *Triennial Assessment and Plan Update*, adopted May 2010.

Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. BIOLOGICAL RESOURCES — Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Data Sources / Methodology

Biological resources within the project site were identified by ESA biologist Chariss Tweedy through a field reconnaissance conducted on May 9, 2012, and by a field visit by ESA biologist Bob L. Jones on July 6, 2012. Prior to the reconnaissance survey, a review of pertinent literature and database queries were conducted for the project site and surrounding area. The reconnaissance survey consisted of a pedestrian survey of the project site in its entirety. The primary sources of data referenced for this study include the following:

- Federal Endangered and Threatened Species that may be Affected by Projects in the Woodland, California USGS 7.5-minute Topographic Quadrangle (USFWS, 2012);
- California Natural Diversity Database (CNDDDB), Rarefind 4 computer program (CDFG, 2012);
- California Native Plant Society's Inventory of Rare and Endangered Plants (v8-01a) (CNPS, 2012).

A list of special-status species with potential to occur on or near the project site was compiled from these sources and from information collected during the field reconnaissance. **Appendix B** includes the special-status species lists for the project region.

Regional Ecology

The project area is located in the central portion of the southern Sacramento Valley. Historically, this region supported extensive marshes, riparian woodlands intermixed with oak woodland, vernal pools, and grasslands. Intensive agricultural and urban development has resulted in substantial changes and conversions of these habitats. Present terrestrial habitats are characterized by agricultural lands, annual grassland, and riparian woodland/riparian scrub. There are several major water features that support emergent wetland vegetation. Because most native habitats have been altered by changes in land use, native plant communities are typically limited to areas along water courses and drainages, within designated reserves, or on untilled pasture lands.

Regionally, the study area is located in the Sacramento Valley which is located in the Great Valley Section. Typical elevations within this ecological subsection range from 20-feet above sea level up to 200-feet. Climate is typically hot and sub-humid. Mean annual precipitation is approximately 15 to 18-inches and mean annual temperature ranges from 59 to 60 degrees Fahrenheit. (Miles and Goudey, 1997)

Site Description

The project site is located in the City of Woodland (City) on Highway 113 North (N. East Street) immediately north of Interstate 5 (I-5). The project site is bounded by industrial uses to the south and east; and agriculture (tomatoes) to the north, west, and north east. The majority of the site is characterized as ruderal, occupied by weedy vegetation which was tall and thick in patches and sparse in other areas. During the time of the reconnaissance-level survey in May 2012, the majority of the interior of the project site was highly disturbed and appeared to be disked on a routine basis. Some planted trees are present within the interior such as redwood (*Sequoia sempervirens*), Western sycamore (*Platanus racemosa*), and Bradford pear. There are large trees present such as valley oak (*Quercus lobata*), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), and Goodding's black willow (*Salix gooddingii*) along the perimeter of the project site.

Plant Communities and Wildlife Habitats

Biological communities are assemblages of plant species that commonly occur together in the same area. Wildlife habitats generally correspond to plant communities. The biological communities described in this section generally follow the classification systems provided in the California Department of Fish and Game's (DFG) *A Guide to Wildlife Habitats of California* (Mayer and Laudenslayer, 1988), which is integrated with the California Wildlife Habitat Relationships (CWHR) System. Wildlife habitats generally correspond to plant communities. Plant communities are assemblages of plant species that occur together in the same area and are repeated across landscapes. Both species composition and relative abundance define them. Plant communities within the study area were identified using field reconnaissance and aerial photography. The CWHR habitat classification scheme has been developed to support the CWHR System, a wildlife information system and predictive model for California's regularly occurring birds, mammals, reptiles and

amphibians. The plant communities described below generally correlate with wildlife habitat types and are those found within the project site.

Disturbed / Ruderal

Disturbed/ruderal habitats are subjected to ongoing or past disturbances (e.g., vehicle activities, mowing). Disturbed/ruderal is the only habitat present within the project site and it supports a diverse weedy flora, primarily composed of non-native invasive species. Vegetation observed during the May 2012 site visit includes weedy grasses such as wild oats (*Avena* sp.), ryegrass (*Lolium multiflorum*), blessed milkthistle (*Silybum marianum*), yellow starthistle (*Centaurea solstitialis*), soft brome (*Bromus hordeaceus*), and ripgut brome (*B. diandrus*). The site is maintained by the City of Woodland and is periodically disked during the growing season to reduce fire danger. The site was not occupied by wetlands, ditches, or other watercourses.

Regulatory Setting

Federal

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (USFWS) administers the Federal Endangered Species Act (FESA) (16 United States Code [USC] 153 et seq.), the Migratory Bird Treaty Act (16 USC 703–711), and the Bald Eagle Protection Act (16 USC 668), among other programs discussed below.

Federal Endangered Species Act – Under the Federal Endangered Species Act (FESA) the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC 1533[c]). Two federal agencies oversee FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, and the National Marine Fisheries Service (NMFS) has jurisdiction over anadromous and marine fish as well as mammals. Section 7 of FESA mandates that all federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. FESA prohibits the “take”¹ of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery.

Section 10 of FESA requires the issuance of an incidental take permit before any public or private action may be taken that could harm, harass, injure, kill, capture, collect, or otherwise hurt any individual of an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan that provides specific measures to offset project impacts on endangered or threatened species.

The USFWS also publishes a list of candidate species. Species on this list receive “special attention” from federal agencies during environmental review, although they are not protected otherwise under the FESA. The candidate species are those for which the USFWS has sufficient biological information to support a proposal to list as endangered or threatened. Project impacts on such species would be considered significant in this Initial Study. Species of Concern is an

¹ “Take” is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

informal term, not defined in the federal Endangered Species Act. The Sacramento Office of the United States Fish and Wildlife Service no longer maintains a Federal Species of Concern list.

Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally listed threatened or endangered species could be present in the project area and whether the project action would have a potentially significant impact on such species. In addition, the agency is required to determine whether the project action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC 1536[3], [4]).

Similarly, the permitting responsibilities of the USACE include consultation with the USFWS and NMFS when federally listed species (i.e., listed under the FESA) are at risk. At both the state and federal levels, the process requires that a Biological Assessment be prepared to determine the effects on listed species. Under both USFWS and California Department of Fish and Game (CDFG) policy, species of concern are not subject to the same consultation requirements as listed endangered, rare, or threatened species, but the agencies encourage informal consultation for species of concern that may become officially listed before completion of the CEQA process.

Migratory Bird Treaty Act – The Migratory Bird Treaty Act (16 USC 703, Supp. I, 1989) prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except in accordance with regulations prescribed by the Secretary of the Interior.

State

California Department of Fish and Game

CDFG administers a number of laws and programs, discussed below, designed to protect fish and wildlife resources.

California Endangered Species Act – The California Endangered Species Act of 1984 (CESA) – Fish and Game Code Section 2050 et seq – regulates the listing and “take” of endangered and threatened species. A “take” of such a species may be permitted by CDFG through issuance of permits pursuant to Fish and Game Code section 2081, except for designed “fully protected” species (see subsection below).

Fully Protected Species – Prior to enactment of CESA, the designation of “Fully Protected” was used by CDFG to identify species that had been given special protection by the California Legislature by a series of statutes in the California Fish and Game Code. (See §§ 3503.5, 3505, 3511, 3513, 4700, 4800, 5050, 5515). Many fully protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations; however, the original statutes have not been repealed, and the legal protection they give the species identified within them remains in place. Fully Protected species may not be taken or possessed at any time; and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock. Because endangered or threatened species can be “taken” for development purposes with the issuance of a

permit by CDFG, “fully protected species” actually enjoy a greater level of legal protection than “listed” species.

Protection of Nesting Birds – Section 3503.5 of the California Fish and Game Code states that it is “unlawful to take, possess, or destroy the nests or eggs of any such bird of prey (i.e., species in the orders Falconiformes and Strigiformes) except otherwise provided by this code or any other regulation adopted hereto.” Active nests of all other birds (except English sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*)) are similarly protected under Section 3503 of the California Fish and Game Code, as well as birds designated in the International Migratory Bird Treaty Action under Section 3513 of the California Fish and Game Code. Disturbance that causes nest abandonment and/or loss of reproductive failure is considered a take by the CDFG. This statute does not provide for the issuance of an incidental take permit.

Species of Special Concern – CDFG also designates California Species of Special Concern (CSC) which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species but may be added to official lists in the future. The SSC list is intended by CDFG as a management tool for consideration in future land use decisions. Under CDFG policy, CSC are not subject to the same consultation requirements as listed endangered, rare, or threatened species, but the agency encourages informal consultation for Species of Special Concern that may become officially listed before completion of the CEQA process.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a “candidate species” that has not yet been listed by either the USFWS or CDFG. Thus, CEQA provides an agency with the ability to protect a species from a project’s potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted. Examples of species that may be considered under CEQA Section 15380 include some vascular plants.

Local

City of Woodland General Plan

The 2002 City of Woodland General Plan (City of Woodland, 2002) includes conservation and enhancement goals and policies that strive to balance the need for growth with the need for protection of the City’s environmental resources, which contribute to the City’s economy and are important elements of the quality of life of City’s residents. These resources include water resources, fish and wildlife habitat, vegetation, open space, and air quality. The following conservation policies taken from the General Plan are designed to protect, restore, and enhance

habitats that support fish and wildlife and plant species so as to maintain populations at viable levels. The following goals and policies are relevant to the proposed project:

Goal 7.B: To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 7.B.1: The City shall participate in the countywide Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and A Joint Powers Agency to mitigate the impacts of growth projected under the General Plan on wildlife habitats in the Woodland Area.

Policy 7.B.2: Until the countywide Habitat Conservation Plan/Natural Community Conservation Plan is adopted, prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the City shall require, as part of the environmental review process, a biotic resources evaluation of the site by a wildlife biologist. The evaluation shall be based upon field reconnaissance performed at the appropriate time of year to determine the presence or absence of federally- or state-listed rare, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the City shall determine the feasibility of the identified mitigation measures.

Significant ecological resource areas shall, at a minimum, include the following:

- a. Any habitat for federally- or state-listed rare, threatened or endangered animals or plants.
- b. Large areas of non-fragmented natural habitat.
- c. Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.

Goal 7.C: To preserve and protect the valuable vegetation resources of the Woodland area.

Policy 7.C.2: The City shall encourage landowners and developers to preserve natural vegetation in visually-sensitive areas and along important transportation corridors.

Policy 7.C.3: The City shall require developers to use native and compatible non-native species, especially drought-resistant species, to the extent possible in fulfilling landscaping requirements imposed as conditions of permits or for project mitigation,

Policy 7.C.9: The City shall encourage the planting of native trees, shrubs, and grasslands in order to preserve the visual integrity of the landscape, provide habitat conditions suitable for native wildlife, and ensure that a maximum number and variety of well-adapted plants are maintained.

City of Woodland Tree Ordinance

The City of Woodland Municipal Code (City of Woodland, 2008) includes a section on trees. Chapter 20A governs the planting, removal, and preservation of street trees, heritage trees, specimen trees, and landmark trees on public property and private property within the city. The following Sections are applicable to the proposed project:

Section 20A-1-90. Development Projects - Tree Plan.

An application for a development project shall be accompanied by a tree plan containing the following information:

- 1) Contour map showing the location, size, species and condition of all existing trees which are located upon the property proposed for development;
- 2) Identification of those trees which the applicant proposes to preserve and those which are proposed to be removed and the reason for such removal;
- 3) A program for the preservation of street trees, heritage, specimen, landmark trees and trees with aesthetic value (trees with a nine-inch diameter or larger, measured fifty-four inches above the ground, in healthy condition) during and after completion of the development project, as required in the City standard specifications, engineering design standards, Section 8, grading and erosion control;
- 4) A program for the replacement of any trees proposed to be removed, as required by Section 20A-1-100
- 5) Any change in the trees to be saved and/or removed as designated on the approved development plan shall only be permitted upon the written approval of the director. (Ord. No. 1230, §4 (part); Ord. No. 1300 §4 (part).)

Section 20A-1-100. Tree Replacement Program.

A person owning or controlling a development project shall be required to replace street trees other than heritage, specimen or landmark trees, approved for removal as part of the approval of the project in accordance with subsection (1). Each heritage, specimen and/or landmark tree approved for removal shall be replaced in accordance with subsection (2).

- 1) For each six inches or fraction thereof of the diameter of a tree which was approved for removal, two trees of an approved species, each of a minimum fifteen-gallon container size shall be planted on the project site. However, an increased number of smaller size trees may be planted if approved by the director, or a fewer number of such trees of a larger size if approved by the director.
- 2) For each six inches or fraction thereof of the diameter of a tree which was approved for removal, four trees of an approved species, each of a minimum fifteen-gallon container size, shall be planted on the project site. However, an increased number of smaller size trees may be planted if approved by the director, or a fewer number of such trees of a larger size if approved by the director.
- 3) If the development site is inadequate in size to accommodate the replacement trees, the trees shall be planted on public property with the approval of the director. Upon the request of the developer and the approval of the director, the city may accept an in-lieu

payment of the current retail price per fifteen-gallon replacement tree on condition that all such payments shall be used for tree-related educational projects and/or planting programs of the city.

- 4) All trees planted under the provisions of this section shall be guaranteed for a period of one year from the date of final acceptance of the development project by the city. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year. (Ord. No. 1230, § 4 (part); Ord. No. 1300 § 4 (part).)

Yolo County Joint Powers Agency

The Yolo County Natural Communities Conservation Plan/Habitat Conservation Plan (NCCP/HCP) Joint Powers Agency (JPA) was formed in August 2002 to serve two purposes. The first was for the purpose of acquiring Swainson's hawk habitat conservation easements. The second purpose was to serve as the lead agency for the preparation of a county-wide NCCP/HCP, which is now known as the Yolo Natural Heritage Program. The JPA also manages the Swainson's Hawk Interim Mitigation Fee Program. This program utilizes mitigation fees to acquire conservation easements to protect Swainson's hawk habitat (Yolo County, 2012).

The Yolo County NCCP/HCP is currently undergoing development and review by participating parties, including CDFG, USFW, and Yolo County. The finalized Plan will describe biological conservation and other measures that local agencies will perform, and will include a series of studies and surveys outlined by the Report of Independent Science Advisors. This report stipulates that the NCCP/HCP should include, for Yolo County, the biological goals, geographic area, plan duration, species to be addressed, and actions to be permitted. Biological goals will include specific goals that address: (1) sustaining and restoring species and habitats that are necessary to maintain continued viability of biological communities impacted by human changes to the landscape, and (2) conserving, restoring, protecting, and enhancing natural communities.

Special-Status Species

Definitions of Special-Status Species

Special-status species are those plants and animals that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as "sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. These species are referred to collectively as "special status species" in this study following a convention that has developed in practice but has no official sanction. For the purposes of this assessment, the term "special-status" includes the following:

- Federally listed or proposed under the Federal Endangered Species Act (50 Code of Federal Regulations [CFR] 17.11-17.12). They are the only species that are specifically regulated by the U.S. Fish and Wildlife Service on tribal lands.
- Candidates for listing under the Federal Endangered Species Act (61 FR 7596-7613)

- State listed or proposed under the California Endangered Species Act (14 California Code of Regulations [CCR] 670.5)
- Species listed by the by CDFG as a species of special concern
- Fully protected animals, as defined by the State of California (CDFG Code Section 3511, 4700, and 5050)
- Species that meet the definition of threatened, endangered, or rare under the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15380)
- Plants listed as rare or endangered under the California Native Plant Protection Act (CDFG Code Section 1900 et seq.)

Potentially Affected Listed and Proposed Species

A list of special-status plant and animal species that have the potential to occur within the vicinity of the study area was compiled based on data in the California Natural Diversity Database (CNDDB) (CDFG, 2012), CNPS Inventory of Rare and Endangered Plants (CNPS, 2012), and the USFWS List of Federal Endangered and Threatened Species that may be Affected by Projects in the Woodland Quad (USFWS, 2012). Conclusions regarding habitat suitability and species occurrence are based on a reconnaissance-level area assessment conducted by ESA biologists, as well as existing literature and databases described previously.

Appendix B lists special-status plants and animals with the potential to occur within the project site. The “Potential for Occurrence” category is defined as follows:

- Unlikely: The project site and/or immediate area do not support suitable habitat for a particular species. Project site is outside of the species known range.
- Low Potential: Project site and/or immediate area only provide limited habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- Medium Potential: The project site and/or immediate area provide suitable habitat for a particular species, and habitat for the species may be impacted.
- High Potential: The project site and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in immediate area and within the potential area of impact.

Discussion

- a) The following sub-sections provide a discussion of potential effects to special-status plant and animal species that may result from implementation of the project.

Special-Status Plants

The project site does not provide habitat for any special-status plant species. No special-status plant species are likely to occur within the site itself due to the high degree of disturbance. The majority of the site is dominated by ruderal vegetation. Therefore, implementation of the project will have **no impact** on special-status plants.

Special-Status Wildlife

Potential nesting habitat for Swainson's hawk and other raptors occurs within and along the immediate perimeter of the project site and on adjacent parcels within 0.25-mile of the project site. There are more than 30 CNDDDB Swainson's hawk records within 5-miles of the project site (CDFG, 2012). Project construction may impact nesting raptors during the breeding season. This is a potentially significant effect. **Mitigation Measure BIO-1** would reduce potential impacts on nesting raptors to a **less-than-significant** level. Because the site is routinely disked and maintained during the growing season, the property is not considered appropriate foraging habitat for Swainson's hawk.

- b) There is no riparian habitat or other sensitive natural community located within or adjacent to the project site. Therefore, there is **no impact** on riparian habitat or other sensitive natural communities.
- c) There are no wetlands or waters of the U.S. within or adjacent to the Project site. Therefore, there is **no impact** on federally protected wetlands.
- d) The proposed project would not *substantially* interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The project site is not located within an established native resident or migratory wildlife corridor or wildlife nursery site. Therefore, there is **no impact** to migratory wildlife corridors or nursery sites.
- e) Per the engineering drawings, construction of the proposed project would involve the removal of several trees. This is a potentially significant effect. **Mitigation Measure BIO-2** and **BIO-3** would reduce potential impacts on trees to a **less-than-significant** level.
- f) The General Plan conservation and enhancement goals are consistent with the draft NCCP/HCP and will be carried out through implementation of **Mitigation Measure BIO-1**. As the NCCP/HCP is still under development and has not yet been finalized or adopted, the proposed project would not conflict with conservation or other policies outlined therein. Furthermore, the project would not conflict with other conservation-based policies contained in adopted local plans. Therefore, no conflict would occur and there would be **no impact**.

Mitigation Measures

Mitigation Measure BIO-1: Potential Swainson's hawk or other raptor nests shall be protected as follows:

- a) The applicant shall make every effort to conduct any tree and shrub removal activities that are required for project construction outside of the migratory bird and raptor breeding season (February 15 through August 31). In addition, all trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree.
- b) If construction-related activities are to occur prior to tree removal during the nesting bird season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey of all potential nesting habitats within 15 days prior to the start of activities (grubbing, dirt-moving, mobilization, or other construction-related activities) and within 500 feet of

construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The results of these surveys shall be documented in a technical memorandum that shall be submitted to the California Department of Fish and Game (DFG) (if nesting birds are documented) and the City of Woodland. A qualified biologist is one that has been approved by DFG as having the appropriate education background and experience to conduct nesting bird surveys.

- c) If an active nest is found during the preconstruction survey, a no-work buffer of 500 feet will be established unless otherwise approved by the DFG. The qualified biologist will coordinate with DFG to determine the appropriate nest avoidance, monitoring, and protective measures appropriate for the species and site conditions. In addition to establishment of a no-work buffer, these measures may include daily or spot-check monitoring of the nesting activity as deemed appropriate by DFG.
- d) If the preconstruction survey indicates that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by birds or that are located more than 500 feet from active nests may be removed (500 feet is the distance regularly recommended by DFG to prevent impacts to active avian nests).

Mitigation Measure BIO-2: Loss of tree resources on the project site will be mitigated as follows:

- a) The City of Woodland (City) shall ensure that the project applicant will comply with the City of Woodland's Municipal Code, Chapter 20A. Prior to construction, the applicant shall have a Certified Arborist conduct a tree survey of the trees located within the project boundaries and submit a Tree Plan to the Community Development Department.
- b) Removed trees will be replaced at a ratio of 2:1. Replacement trees shall be planted on the project site. All trees planted shall be purchased from a locally adapted genetic stock obtained within 50 miles and 1,000 feet in elevation of a project site. If the site does not have adequate room for replanting trees, the City may require payment to a tree replacement fund. Replacement trees shall be guaranteed for a period of one year from the date of final acceptance of the development project by the City. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year.

Mitigation Measure BIO-3: Tree resources on the project site will be protected as follows:

Sensitive tree resources adjacent to construction activities may require additional protection. Buffer zones should include a minimum one-foot-wide buffer zone outside the drip line. The locations of these resources would be clearly identified on the construction drawings and marked in the field. Fencing or other barriers would remain in place until all construction and restoration work that involves heavy equipment is complete. Construction vehicles, equipment, or materials would not be parked or stored within the fenced area. No signs, ropes, cables, or other items would be attached to the protected trees. Grading, filling, trenching, paving, irrigation, and landscaping within the drip lines of oak trees would be limited. Grading within the drip lines of oak trees would not be permitted unless specifically authorized by a Certified Arborist.

Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES — Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Discussion

- a) CEQA Guidelines Section 15064.5 requires the lead agency (the City of Woodland) to consider the effects of a project on historical resources. A historical resource is defined as any building, structure, site, or object listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR), or determined by the lead agency (City) to be significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, or cultural annals of California. The project site is undeveloped; there are no buildings or structures on the site. Therefore, the proposed project would have **no impact** on historical resources under CEQA.
- b) CEQA requires the lead agency to consider the effects of a project on archaeological resources and to determine whether any identified archaeological resource is a historical resource. CEQA Guidelines Section 15064.5 also requires consideration of potential project impacts on “unique” archaeological resources that do not qualify as historical resources. Public Resources Code (PRC) Section 21083.2 defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria. The resource:
- contains information needed to answer important scientific research questions, and there is a demonstrable public interest in that information;
 - has a special and particular quality, such as being the oldest of its type or the best available example of its type; and/or
 - is directly associated with a scientifically recognized important prehistoric or historic event or person.

PRC Section 15064.5(c) (4) provides that, if an archaeological resource is neither a unique archaeological resource nor a historical resource, the effects of a project on the resource are not considered significant.

Archival review completed at the Northwest Information Center (NWIC) of the California Historic Resources Information System documented all previous cultural resources investigations and cultural resources located within the ¼ mile records search study area. The records search indicated that one previous cultural resources investigation occurred within the records search study area by Far Western Anthropological Group in 2008 (Survey Number 35042) along Hwy 113. This survey occurred within 60 feet of the project area and yielded negative results within the record search study area. While there are no previously recorded cultural resources in the study area, the nearest historic-period resource is an unrecorded segment of the Southern Pacific Railroad (P-57-000400) just outside the Project area to the east, and a grove of historic oak trees (P-57-000132) is ¼ mile to the north of the Project area. The nearest recorded prehistoric archaeological resources are more than three miles away to the north-northeast. These resources are two rises containing burnt material (YOL-40 and YOL-41) near Grays Bend, an abandoned segment of the Sacramento River.

ESA archaeologist, Brian S. Marks, Ph.D., performed a cultural resources survey of the APE on May 9, 2012. Dr. Marks did not observe any cultural material more than 50 years old. While no evidence exists to indicate the presence of archaeological resources within the project area, the project area is located in an area that may have been attractive to prehistoric inhabitants (see **Appendix C**). The accidental discovery of archaeological materials during ground-disturbing activities cannot be entirely discounted. In the unlikely event that archaeological materials are unearthed, with implementation **Mitigation Measure CUL-1**, project impacts to archaeological resources would be **less than significant**.

- c) Paleontology is a multidisciplinary science that combines elements of geology, biology, chemistry, and physics in an effort to understand the history of life on earth. Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. In general, older sedimentary rocks (more than 10,000 years old) are considered most likely to yield vertebrate fossils of scientific interest.

The project site is located in Holocene-age (10,000 years Before Present [BP] to Present Day) fan alluvial deposits. No known paleontological resources or unique geologic features exist within the project area. Therefore, the proposed project is not likely to destroy, either directly or indirectly, a unique paleontological resource or site, or geological feature. Due to the nature of the proposed project, any proposed earth moving or excavation will occur in previous backfills or foundation soils. The project area therefore has a very low potential for the unanticipated discovery of fossils. Therefore, the proposed project would result in a **less than significant** impact on paleontological resources or unique geologic features.

- d) Results of the archival review discussed above indicate that the project area has a low potential to contain buried cultural materials including human remains. However, the possibility of uncovering human remains cannot be entirely discounted. In the unlikely event that human remains are uncovered during ground-disturbing activity, with implementation **Mitigation Measure CUL-2**, project impacts to human remains would be **less than significant**.

Mitigation Measures

Mitigation Measure CUL-1: If cultural resources are encountered, all activity in the vicinity of the find shall cease until it can be evaluated by a qualified archaeologist and a Native American representative. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil (“midden”) containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the archaeologist and Native American representative determine that the resources may be significant, they will notify the City of Woodland. An appropriate treatment plan for the resources should be developed. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources.

In considering any suggested mitigation proposed by the archaeologist and Native American representative, the City will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being carried out.

Mitigation Measure CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent, who will help determine what course of action should be taken in dealing with the remains.

References

ESA, 2012. Velocity Island Project, Woodland, Yolo County, California: Phase I Cultural Resources Study. Prepared for the City of Woodland, May 2012.

Geology, Soils, and Seismicity

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
6. GEOLOGY, SOILS, AND SEISMICITY — Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Discussion

- a) The proposed project area is relatively flat and is located in an area of low surface disturbance. According to the Department of Conservation, Division of Mines and Geology Special Publication 42, the proposed project site is not located within a delineated Alquist-Priolo Earthquake Fault Zone.

The seismic hazard most likely to impact the project site is ground shaking due to a large earthquake on one of the major active regional faults. Liquefaction is a process whereby water is unconsolidated sand and other granular materials is subjected to pressure usually caused by ground motion. Since fluids are not compressible and granular materials are, especially when shaken, the water seeks release. As water moves out of materials such as sand it causes the granular material to flow and lose strength. Such materials, in effect, behave as quicksand. The ground literally flows out from under the building. Earthquake shaking is a major cause of liquefaction and has resulted in severe damage areas of California. As noted above, the project site's topography is relatively flat and is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Additionally, the

- probability of soil liquefaction actually taking place on the project site is considered to be a low to moderate hazard. Additionally, the project would comply with City of Woodland building regulations and the International Building Code; therefore, this impact would be **less than significant**.
- b) The proposed land use would include structures and landscaping that would minimize bare soil subject to erosion. Compliance with all applicable best management practices related to soil erosion outlined in the City of Woodland Code would minimize construction impacts relating to top soil erosion. This impact would be **less than significant**.
 - c) As discussed above, the proposed project site's topography is relatively flat and is not located within a delineated Alquist-Priolo Earthquake Fault Zone. Additionally, the probability of soil liquefaction actually taking place on the project site is considered to be a low to moderate hazard. With adherence to all applicable codes and regulations, including the International Building Code, geologic hazard impacts associated with on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse would be minimized. The impact would be **less than significant**.
 - d) Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when dry) or swelling (when wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, including the extent of wet and dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls. In most developed areas, the existing layer of clay has been blended into more granular soils as a part of general site excavation, which helps to reduce the soil's expansiveness.

According to the NRCS Soil Survey, a majority of the project site is Yolo silt loam (Ya). The Yolo series consists of well-drained silt loams and silty clay loams on alluvial fans. Surface runoff is very slow and the soil is moderately permeable. This soil has a moderate shrink-swell potential, which is indicative of expansive soil conditions. A small portion of the project site consists of Sycamore silty clay loam, drained (St). The Sycamore series consists of somewhat poorly drained silty clay loams on alluvial fans. Surface runoff is very slow and permeability is moderately slow. This soil also has a moderate shrink-swell potential.

Although expansive soil conditions are present on the project site, compliance with all City building standards and practices, as well as application of the existing regulations identified in the International Building Code would minimize the risk associated with development of the proposed project, therefore this impact would be **less than significant**.

- e) The proposed project will connect to existing sewer systems; septic tanks would not be used as part of the proposed project, therefore there would be **no impact**.

References

California Department of Conservation, 2007. Division of Mines and Geology, Fault-Rupture Hazard Zones in California, Special Publication 42 Interim Revision 2007.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/> accessed May 15, 2012.

Greenhouse Gas Emissions

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
7. GREENHOUSE GAS EMISSIONS — Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Discussion

- a-b) Greenhouse gas (GHG) impacts are considered to be cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA, 2008). Since YSAQMD has not established a quantitative significance threshold for GHG impacts, for construction and operation, projects which would generate 900 metric tons per year (MT/yr) or less of CO₂e emissions are considered to have a less-than-significant impact. 900 MT/yr is used as it is considered to be a *de minimus* level which would capture approximately 90% of all GHG emissions (CAPCOA, 2008). If the project exceeds this threshold, a 29 percent reduction versus business-as-usual would be assessed pursuant to AB 32. This methodology is consistent with approaches described by CAPCOA, thresholds used by other air districts (such as SJVAPCD), and previous City of Woodland CEQA documents.

The project-related change in GHG emissions was calculated using the CalEEMod emissions model. CalEEMod is a land use emissions computer model designed to provide a platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model quantifies direct emissions from construction and operation (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use.

GHGs associated with construction would be generated by construction equipment, haul trucks, and worker vehicles. As shown in Appendix B, maximum annual GHGs of 232 metric tons of CO₂ would be emitted during the year 2012. This amount is less than the 900 MT/yr *de minimis* threshold value described above. Therefore, the construction-related impacts of the project on global climate change are considered less-than significant.

In regards to long-term operations, GHGs from on-road vehicles, area sources, energy, waste, and water/wastewater conveyance would be the primary sources of GHGs associated with project operations. Emissions are summarized below in **Table 3**.

TABLE 3
UNMITIGATED GHGS FROM OPERATIONS ^{a, b}

Project Source	CO ₂ e (MT/yr)
Area	0
Energy ^c	32
Mobile	129
Waste	1
Water	12
Total GHGs	174
Screening Threshold of Significance	900
Significant (Yes or No)?	No

a. Project operational emissions estimates were made CalEEMod, as well as a manual calculation of grid-electricity and GHGs associated with the motor to operate the ziplines. See Appendix B for more information.

b. Values in **bold** are in excess of the applicable significance threshold. NA = Not Available.

c. The "Energy" source category includes facility (from CalEEMod) and motor energy requirements.

As shown in Table 3, GHG emissions generated by these sources would equate to 174 metric tons of CO₂ per year. This amount is less than the 900 MT/yr *de minimis* threshold value described above. Therefore, the construction-related impacts of the project on global climate change would be **less than significant**.

The City of Woodland has not established a GHG reduction plan. The analysis described above indicates the project would not interfere with the State's implementation of AB 32 or the AB 32 Scoping Plan. The project would not conflict with any applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be **less than significant**.

References

California Air Pollution Control Officers Association (CAPCOA), 2008. *CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*.

Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
8. HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

Discussion

- a) Construction and operation of the proposed project would potentially require the use of various types and quantities of hazardous materials (i.e. gasoline, solvents, oils, etc.). Furthermore, construction of the project could result in the exposure of workers or residents to hazardous wastes or materials, posing potential threats to their health, including the excavation of a previously unknown contaminated site. Implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce potential impacts to less than significant levels, therefore this impact would be **less than significant**.
- b) During construction of the proposed project, it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc. would be brought onto the site. In addition, proposed project operations may include the limited use of fuels and other hazardous materials such as those typically

- associated with equipment use and servicing. Although, these materials would be stored, handled, and transported per federal, state, and local regulatory requirements, as with any liquid or solid, during handling and transfer from one container to another, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose both a hazard to workers and residents, as well as the environment. Implementation of **Mitigation Measure HAZ-2** would reduce potential impacts to less than significant levels, therefore this impact would be **less than significant**.
- c) There are no existing or proposed schools within one-quarter mile of the project site. Furthermore, any hazardous materials used during demolition or construction would be stored, handled, and transported per federal, state and local regulatory requirements. Furthermore, implementation of **Mitigation Measures HAZ-1** and **HAZ-2** would reduce potential impacts to less than significant levels; therefore, this impact would be **less than significant**.
- d) A Department of Toxic Substances Control (DTSC) Envirostor database records search was conducted for the entire project site. The database search concluded that the proposed project site and adjacent sites were not identified as being contaminated or as being a clean-up site, and, thus, did not identify any of the environmental conditions that may result in a significant hazard to the public. There are no identified hazardous environmental conditions on the project site. However, the project has not been the subject of a Phase 1 Environmental Site Assessment, the preparation of such an assessment is required prior to the construction of the project. With implementation of **Mitigation Measure HAZ-3**, this impact would be **less than significant**.
- e) The Watts Woodland Airport is located 5 ½ miles south-southwest, on County Road 94. The Sacramento International Airport is located at 6900 Airport Blvd., approximately 8 miles east of the project site. The project site is not located within an airport land use plan map, nor is it within two miles of a public use airport (SACOG, 2003). The proposed project would not result in a safety hazard for people residing or working in the project area; therefore, this impact would be **less than significant**.
- f) The proposed project site is not located within the vicinity of a private airstrip. The nearest private airstrip, Medlock Field, is located 5 ½ miles to the south of the project site. Therefore, there would be **no impact**.
- g) The proposed project will not interfere with an emergency response plan or emergency evacuation plan. Prior to approval, the applicant will be required to demonstrate compliance with all emergency access requirements and other emergency standards in place in the City of Woodland. This impact would be **less than significant**.
- h) As previously discussed, the project site is located on a parcel currently used as a detention basin immediately adjacent to agricultural uses, I-5 and Hwy 113 with developed industrial and commercial in the area and is not within or adjacent to a wildlands area, consequently,

the proposed project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires; consequently, there would be **no impact**.

Mitigation Measures

Mitigation Measure HAZ-1: If soil contaminated by potentially hazardous materials is exposed during construction, the local responsible agency shall be notified. A work plan to characterize and possibly remove contaminated soil may be required by the local responsible agency or other regulatory agency.

Mitigation Measure HAZ-2: The applicant shall ensure all contractors and employees immediately control the source of any leak and contain any spill using appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the RWQCB for the NPDES construction activity storm water permits would be taken to ensure that no hazardous materials enter any nearby waterways.

Mitigation Measure HAZ-3: A Phase I Environmental Assessment must be completed by a qualified professional for the project before any ground disturbing activity begins.

References

Department of Toxic Substances Control (DTSC), 2012. Envirostor Database Search available at: <http://www.envirostor.dtsc.ca.gov/public/>; accessed May 16, 2012.

SACOG, 2003. Sacramento Area Council of Governments Airport Land Use Commission, Sacramento International Airport Comprehensive Land Use Plan; September 2003.

Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
9. HYDROLOGY AND WATER QUALITY — Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☐	☒	☐
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	☐	☐	☒	☐
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	☐	☐	☒	☐

Environmental Setting

The project site is located to the north of the City of Woodland, and currently serves as a hydrologic detention basin used by the City. Cache Creek is the nearest water body to the project site, and flows west to east approximately 1.5 miles to the north of the project site. Cache Creek eventually discharges into the Cache Creek Settling Basin, which is located northeast of the City, and approximately 2.5 miles east of the project site. During high flows, Cache Creek discharges into the Yolo Bypass, which eventually empties into the Sacramento-San Joaquin Delta, the San Francisco Bay, and the Pacific Ocean. Although Cache Creek is the nearest water body to the project site, drainage from the project site does not drain into Cache Creek. Under existing

conditions, the site is graded as a basin, and most stormwater occurring on site is retained on site. In the event of release from the project site, stormwater is carried via agricultural and City-maintained drainages, eventually discharging into the Yolo Bypass via the City's stormwater pump station.

The Federal Emergency Management Agency (FEMA) is responsible for delineating flood zones within the project area. FEMA's Flood Insurance Rate Maps (FIRMs) show the extent of anticipated 100-year flooding within the Project area, where 100-year flooding is defined as that occurring with a 1% annual chance of recurrence. The project site is located entirely within a 100-year flood zone. Flooding in this area is anticipated to occur as a result of flooding along Cache Creek.

With respect to water quality, the State Water Resources Control Board's Clean Water Act Section 303(d) List of Impaired Water Bodies provides a summary of pertinent water quality issues along waterways in the vicinity of the project. Cache Creek is included on the 303(d) list for the following constituents: boron (unknown source), mercury (resource extraction), and unknown toxicity (unknown source) (SWRCB, 2012).

Regulatory Setting

Federal Executive Order 11988

Under Executive Order 11988, FEMA is responsible for managing floodplain areas, which are defined as the lowland and relatively flat areas adjoining inland and coastal waters subject to a 1 percent or greater chance of flooding in any given year (the 100-year floodplain). FEMA requires that local governments covered by federal flood insurance (including Contra Costa County) pass and enforce a floodplain management ordinance that specifies minimum requirements for any construction within the 100-year floodplain.

National Pollutant Discharge Elimination System Permit Program

The NPDES permit program was established by the Federal Clean Water Act to regulate municipal and industrial discharges to surface waters of the United States. Federal NPDES permit regulations have been established for broad categories of discharges, including point-source municipal waste discharges and nonpoint-source stormwater runoff. NPDES permits generally identify the following:

- Effluent and receiving-water limits on allowable concentrations and/or mass emissions of pollutants contained in the discharge;
- Prohibitions on discharges not specifically allowed under the permit; and
- Provisions that describe required actions by the discharger, including industrial pre-treatment, pollution prevention, self-monitoring, and other activities.
- In November 1990, the USEPA published regulations establishing NPDES permit requirements for municipal and industrial stormwater discharges. Phase 1 of the permitting program applied to municipal discharges of stormwater in urban areas where the population exceeded 100,000 persons. Phase 1 also applied to stormwater discharges from a large variety of industrial activities, including general construction activity, if the project would disturb more than 5 acres. Phase 2 of the NPDES stormwater permit regulations, which became effective in March 2003, required that NPDES permits be issued for construction

activity for projects that disturb between 1 and 5 acres. The USEPA has delegated its NPDES permitting function relevant to the Project area to the SWRCB, and the RWQCBs. Within this framework, the SWRCB provides coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity, as described below.

NPDES General Permit for Discharges of Stormwater Associated with Construction Activities

Construction activities disturbing 1-acre or more of land are subject to the permitting requirements of the NPDES General Construction Activity Permit for Discharges of Storm Water Runoff Associated with Construction Activity (General Construction NPDES Permit). A project applicant must submit a Notice of Intent to the CVRWQCB to be covered by the General Construction Permit prior to the beginning of construction.

On September 2, 2009, the SWRCB adopted a new General Construction Permit for Discharges of Storm Water Associated with Construction Activities, effective on July 1, 2010, replacing the existing permit. The new permit requires a risk-based permitting approach, dependent upon the likely level of risk imparted by a project. The new permit also contains several additional compliance items, including (1) additional mandatory Best Management Practices (BMPs) to reduce erosion and sedimentation, which may include incorporation of vegetated swales, setbacks and buffers, rooftop and impervious surface disconnection, bioretention cells, rain gardens, rain cisterns, implementation of pollution/sediment/spill control plans, training, and other structural and non-structural actions; (2) sampling and monitoring for non-visible pollutants; (3) effluent monitoring and annual compliance reports; (4) development and adherence to a Rain Event Action Plan; (5) requirements for permanent BMPs to match predevelopment hydrology in the post-construction period (for projects in areas with no approved Hydrograph Modification Management Plan); (6) numeric action levels and effluent limits for pH and turbidity; (7) monitoring of soil characteristics on site; and (8) mandatory training under a specific curriculum. Under the revised permit, BMPs are incorporated into the action and monitoring requirements for each Project area, including implementation of a Stormwater Pollution Prevention Plan (SWPPP). Under the updated permit, additional and more stringent monitoring, reporting, and training requirements for management of stormwater pollutants are implemented.

Discussion

- a,f) Construction of the Project would include the use of heavy machinery, including but not limited to transport trucks, bulldozers, graders, backhoes, earth movers, and other construction equipment. Use of these and similar types of heavy machinery would cause disturbance to surface sediments, loosen soils, remove existing vegetation, and potentially result in increased erosion on site. During large storm events, eroded soils could become entrained in stormwater, and could cause sedimentation on site or downstream, including along Project area waterways. During storm events, the use of heavy equipment during construction could also result in the accidental release of fuels, oils, lubricants, antifreeze, and other construction-related fluids into the environment.

These pollutants could become entrained in stormwater flows, and result in degradation of receiving water quality along downstream areas, potentially including Cache Creek.

These potential impacts could occur as a result of the installation of the proposed facilities. These potential increases in water quality pollution could result in an increase in pollutant levels in receiving waters, such that applicable water quality standards could be exceeded. However, the Project would be required to acquire coverage under the General Construction NPDES Permit. The conditions of that permit would include implementation of a SWPPP, as well as various additional measures intended to minimize potential construction period water quality degradation to the maximum extent practicable. Therefore, with adherence to permitting conditions of the General Construction NPDES Permit, construction related water quality degradation would be minimized, and this impact would be **less than significant**.

- b) Implementation of the proposed project would involve the use of groundwater both during construction and operation. Construction related groundwater use would be provided by an existing on-site well, and would be used in support of dust suppression and other construction related activities on site. Use of groundwater in support of project construction would be limited in extent and in time, and therefore is not anticipated to result in a long term reduction groundwater levels, or an associated impact to groundwater resources.

During project operation, groundwater would be utilized in order to provide water for the proposed onsite lake. Potable water would be provided by the City of Woodland water system. As discussed in the project description, water needed in support of project operation would be pumped from the existing on-site well for use on site. This well would be repaired from its existing condition, in order to support project-related pumping. This volume of water could result in some minor degree of reduction in groundwater levels, especially in the immediate vicinity of the existing well. However, the anticipated volume of groundwater pumping is not anticipated to be sufficient to result in drawdown of the underlying aquifer, such that groundwater levels would be regionally affected, or such that other municipal or private water supply wells within the vicinity of the project would be noticeably affected. Additionally, the proposed project does not meet state requirements for completion of a separate SB 610 water supply assessment (WSA), pursuant to California Water Code §10190. Therefore, this impact would be **less than significant**.

- c,d) During Project operations, changes in grading and installed facilities could result in changes in localized storm runoff, and the conveyance of that runoff into stormwater drainage facilities. Additionally, project construction would result in the installation of up to approximately 1 acre of new impervious surfaces. New impervious surfaces would be primarily associated with the proposed parking lot, but also with proposed shelters/buildings and paths on site that include non-pervious surfaces. In addition to these facilities, the project would include installation of a liner in the proposed pond area. Depending upon the final construction materials utilized, this liner could be considered impervious with respect to stormwater flows.

Due to the nature of the project, which is located in an existing topographic depression, stormwater from the site is anticipated to drain primarily internally into the project area.

However, during large storm events, discharge from the area could potentially occur. Therefore, unless properly designed, the proposed facilities that would be installed or modified under the Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream. Potential increases in flows, erosion, or sedimentation could have deleterious effects on site and downstream. Therefore, with implementation of **Mitigation Measure HYD-1**, the impact would be **less than significant**.

- e) As discussed previously, project implementation would result in the creation of about one acre of new impervious surface area. Drainage from the proposed parking lot and other proposed impervious surfaces on site are anticipated to be maintained primarily on site. In the event that discharges from the site do occur, improper handling of discharges, such as discharges to under-sized infrastructure, could result in potential downstream drainage related impacts. Therefore, this impact is considered potentially significant without mitigation. With implementation of **Mitigation Measure HYD-1**, the impact would be **less than significant**.
- g) The Project would not involve the construction of any housing. Therefore, **no impact** would occur.
- h) The Federal Emergency Management Agency (FEMA) is responsible for evaluating 100-year flood potential. The project is located within a 100-year flood zone. Project implementation would result in the construction of limited structures on site. However, the floodplain in the vicinity of the project site is large, and extends for several miles to the east and west. Therefore, while the proposed structures could result in some degree of interference with flood flows, the extent of that interference would be minimal, and is not anticipated to noticeably affect flood flows or flood heights in the vicinity of the proposed project, or within or adjacent to the City of Woodland or other nearby areas. Therefore, this impact would be **less than significant**.
- i) The project site is located in an area that is protected from flooding by existing levees. However, the Project would not involve construction along or other disturbance to an existing or proposed flood control levee, dam, or other flood control structure. Therefore, project implementation is not expected to affect the structural integrity or effectiveness of any dams or levees, such that a potential increase in flooding on site could occur. The project would involve the construction of small, non-residential structures. These structures must comply with the City's floodplain ordinance. Therefore, this impact would be **less than significant**.
- j) The Project site is located at an elevation of approximately 55 feet above sea level, and is located over 80 miles from the Pacific Ocean. Therefore, a tsunami is not anticipated to occur on site. Mudflows typically occur when erodible surficial sediments become entrained in major stormwater or other water flows. Mudflows typically occur in areas with high to moderate topographical relief having erodible soils, especially in areas where vegetation

has been or could become denuded. Mudflow can also occur as a result of volcanic activity. These conditions do not occur on site, and mudflows are not anticipated to occur on site.

Seiche refers to a standing wave that can occur within an enclosed waterbody. Within small lakes as proposed in support of the Project, seiche may occur as a result of seismic activity. Seiche may also be induced in enclosed harbors that are located on larger water bodies as a result of incoming waves or boat wakes. However, these conditions would not occur on site. In the event of seismic activity on site, minor seiche could conceivably occur. However, due to the relatively small surface area and relatively shallow depth of the proposed lake, generation of large waves is not anticipated. This impact would be **less than significant**.

Mitigation Measures

Mitigation Measure HYD-1: Prior to the initiation of Project construction, a comprehensive drainage plan shall be prepared by the Applicant, reviewed by the City engineer, and implemented for the installation of all proposed facilities that would require or result in grading or installation of new facilities on site. The drainage plan shall include measures to retain on site, infiltrate, or otherwise channel runoff away from areas of open soil and other features subject to erosion or flooding. As relevant, stormwater from the project site shall be channeled into receiving drainage ditches or canals that are sized appropriately to contain anticipated stormwater flows. Runoff waters shall be discharged in a manner to prevent downstream or offsite erosion, sedimentation, or flooding.

References

State Water Resources Control Board (SWRCB), 2012. 2010 Integrated Clean Water Act Section 303(d)/305(b) Report – Statewide. Available at:
http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml
Accessed July 5, 2012.

Land Use and Land Use Planning

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. LAND USE AND LAND USE PLANNING — Would the project:				
a) Physically divide an established community?	☐	☐	☒	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion

- a) As described above, the project site is located on a parcel currently used as a detention basin immediately adjacent to agricultural uses, I-5 and Hwy 113 with developed industrial and commercial in the area. Although the project site is currently undeveloped, the project will be located in a developed non-residential area and will therefore not divide and established community. This impact would be **less than significant**.
- b) The *City of Woodland General Plan Land Use Map* designates the project site as Open Space (OS). The intention of this designation is to preserve and enhance open space lands to maintain the natural resources of the Woodland area. The City's zoning map also identifies the project site as Open Space (OS). The purpose of the OS zone is to preserve open space recreation areas, areas of historical and cultural value, and is devoted to the enjoyment of scenic beauty, conservation of natural resources and landscaped areas. Uses appropriate to the area are allowed in the OS zone with approval of a conditional use permit, site plan review and design review; therefore, this impact would be **less than significant**.
- c) As discussed under Biological Resources, the project site is not under the jurisdiction of a habitat conservation plan or natural community conservation plan (HCP/NCCP). The project is, however, subject to the Swainson's Hawk Interim Mitigation Fee Program. The proposed project would comply with this program, as described in Mitigation Measure BIO-2. Therefore, there would be **no impact**.

References

City of Woodland, 2002. General Plan Policy Document; December 17, 2002.

City of Woodland, 2003. Zoning Ordinance; adopted February 1, 1983; amended October 10, 2003.

Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
11. MINERAL RESOURCES — Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion

- a,b) The project site has no significant mining resources or mining operations and no mineral resource zones have been identified; therefore there will be **no impact** to mineral resources.

References

City of Woodland, 2002. General Plan Policy Document; December 17, 2002.

Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
12. NOISE — Would the project:				
a) Result in Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Result in Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) Result in A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐
d) Result in A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	☐	☐	☐	☒
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion

- a) The City of Woodland Municipal Code states that it is unlawful to make any loud, unnecessary, or unusual noise, which disturbs the peace within the city limits. The City includes the nighttime hours of 10:00 PM and 7:00 AM where no loud tools or noise creating blowers are to be used. The City also limits construction activities Monday through Saturday to 7:00 AM and 6:00 PM, and Sundays to 9:00 AM and 6:00 PM (unless a permit is granted). The City's General Plan states that new non-transportation noise sources shall not exceed 50 dBA hourly Leq or 70 dBA Lmax during the daytime hours of 7:00 AM and 10:00 PM or exceed 45 dBA hourly Leq or 65 dBA Lmax during the nighttime hours of 10:00 PM and 7:00 AM at the property line of lands designated for noise-sensitive uses.

Construction

Land uses surrounding the project site consist of various agricultural, commercial and industrial land uses. Existing agricultural operations are located immediately to the north and west. North East Street/Highway 113 is located immediately to the east with various businesses on the opposite side, including an Inn approximately 250 feet from the project boundary. Interstate 5 is located directly to the south with a large trucking operation on the other side. There are also several rural residences northwest of the project site, the closest of which is approximately 2,000 feet away.

The noise sensitive land uses in the vicinity of the project would be the residences to the northwest and the Inn to the east, which would be exposed to noise from the short-term construction of the proposed project. Noise from construction activities generally attenuates at a rate of 6 to 7.5 dBA per doubling distance. Based on the proposed project site layout and terrain, an attenuation of 7.5 dBA will be assumed. **Table 4** shows typical noise levels during different construction stages. **Table 5** shows typical noise levels produced by various types of construction equipment. Excavation noise levels are 89 dBA at 50 feet, which when attenuated to 2,000 feet, would expose the nearest residence to noise levels of up to 49 dBA Leq during the loudest of construction activities that would occur. The Inn would be exposed to noise levels of up to 72 dBA. With the existing traffic noise from I-5 and Highway 113 dominating the ambient noise environment, in conjunction with compliance with the City of Woodland nighttime and weekend construction limits, temporary construction noise would be **less than significant** with implementation of **Mitigation Measure NOI-1**.

**TABLE 4
TYPICAL CONSTRUCTION NOISE LEVELS**

Construction Phase	Noise Level ^a (dBA, Leq)
Ground clearing	84
Excavation	89
Foundations	78
Erection	85
Finishing	89

a Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: Bolt, Beranek, and Newman, 1971; Cunniff, 1977.

**TABLE 5
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

Construction Equipment	Noise Level ^a (dBA, Leq at 50 Feet)
Dump truck	88
Portable air compressor	81
Concrete mixer (truck)	85
Scraper	88
Jackhammer	88
Dozer	87
Paver	89
Generator	76
Backhoe	85

a Average noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given phase of construction and 200 feet from the rest of the equipment associated with that phase.

SOURCE: Bolt, Beranek, and Newman, 1971; Cunniff, 1977.

Operations

The project proposes 76 parking spaces, restrooms, operations building, and an observation deck. The project would operate from 8:00 a.m. to half-an-hour before dusk every day of the week. The recreational use is expected to generate up to 100 persons per day. Assuming an average of two passengers per vehicle and ten percent peak hour use, the project would generate up to 100 daily vehicle trips (50 inbound and 50 outbound), and approximately 10 peak-hour trips (5 inbound and 5 outbound) during both the a.m. and p.m. peak hours. In addition to traffic noise, the project would result in noise associated with the zipline operation and recreational user noise, such as cheering or shouting. These minimal sources of operational noise would result in an inaudible increase in noise due to existing traffic noise on the adjacent I-5 and Highway 113.

- b) Vibration and ground-borne noise issues tend to occur when physically forceful or ground-penetrating equipment is utilized, such as pile drivers or where blasting is necessary. No such equipment or activities are required during construction or operations of the proposed project. Thus, the proposed project would not generate significant groundborne vibration or groundborne noise impacts. Therefore, this impact would be **less than significant**.
- c) See the discussion regarding operation related noise for criterion “a” above. This would be a **less-than-significant** impact.
- d) As discussed in the “Construction” sub-section of criterion “a” above, the resulting impact would be **less than significant** with implementation of **Mitigation Measure NOI-1**.
- e) The project is not located within two miles of a public airport; therefore, the project would not expose people working in the area to excessive noise levels. **No impact** would occur.
- f) The project is not located within two miles of a private airstrip; therefore, the project would not expose people working in the area to excessive noise levels. **No impact** would occur.

Mitigation Measures

Mitigation Measure NOI-1: The project sponsor shall require construction contractors to implement the following mitigation measures:

- Consistent with the City of Woodland Municipal Code, all noise generating construction activities shall be limited to Monday through Saturday from 7:00 AM to 6:00 PM, and Sundays from 9:00 AM to 6:00 PM.
- All construction vehicles and equipment, fixed and mobile, shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- Construction staging areas shall be located as far as practicable from dwellings and the Inn so as to cause minimal disruption to these activities.
- Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.
- Prohibit unnecessary idling of internal combustion engines.

- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.

References

Bolt, Beranek, and Newman, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, 1971.

City of Woodland, Municipal Code, Current through Ordinance 1500, adopted October 21, 2008.

Cunniff, Patrick. 1977. *Environmental Noise Pollution*.

Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
13. POPULATION AND HOUSING — Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

- a,b,c) The proposed project will not result in the construction of new homes or the displacement of existing homes. As the project is a recreational facility that will draw on the local labor pool for employees, it will thus not induce substantial growth within the area; therefore there is **no impact**.

Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
14. PUBLIC SERVICES — Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☒	☐
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Discussion

- a.i) The project site will be served by the Woodland Fire Department (WFD). The WFD provides fire protection, fire prevention services, and paramedic emergency medical services to all areas of the Woodland. Specific services provided by the Fire Department include fire fighting, fire prevention, fire hydrant maintenance, training, fire dispatch, hazardous materials intervention, and weed abatement services. The WFD has three permanent fire stations, each of which is staffed by firefighters 24 hours a day, 7 days a week. The nearest WFD station is Fire Station 1 located at 101 Court Street approximately 1 ½ miles from the project site. The proposed project will pay required development impact fees in order to ensure adequate fire protection facilities within the City; therefore, this impact would be **less than significant**.
- a.ii) Law enforcement services will be the responsibility of the Woodland Police Department. The Woodland Police Department is located at 1000 Lincoln Avenue approximately 1½ miles from the project site. The proposed project will pay required development impact fees in order to ensure adequate law enforcement services within the City; therefore, this impact would be **less than significant**.
- a.iii) As previously described, the project site is located on a parcel currently used as a detention basin immediately adjacent to agricultural uses, I-5 and Hwy 113 with developed industrial and commercial in the area; no schools are located in the vicinity of the project site. In addition, the proposed project will not generate any additional residential population that will increase the demand for additional schools in the project area or the City as a whole; therefore, this impact would be **less than significant**.
- a.iv) See the recreation discussion below.
- a.v) The proposed project will not result in an adverse physical impact to any other public facilities; therefore there would be **no impact**.

Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15. RECREATION — Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

- a,b) The proposed project consists of constructing a cable wakeboard park; it would not contribute to an increase in the local population, and no additional demand on existing neighborhood and regional parks would be created. The Project site was previously a dual use facility – providing storm water detention during the wet season and a baseball field. However, the site does not currently function as a usable park site. The proposed project would provide additional recreational opportunities to City residents, and re-use a previous seasonal recreational facility. Therefore, the proposed project would have **no impact** on the use of existing neighborhood and regional parks.

Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
16. TRANSPORTATION AND TRAFFIC — Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☒	☐

Discussion

- a,b) Regional access to the project site is provided by Interstate 5 (I-5) located south of the project site, and State Route 113 (SR 113, also known as North East Street north of I-5), which provides direct access to the project site along the eastern boundary (see Figure 1 in the *Project Description*). I-5 is a freeway generally running north-south as it traverses California, but is aligned east-west in the project vicinity. There are three travel lanes in each direction near the study area. The most recent data published by California Department of Transportation (Caltrans) indicates that the Annual Average Daily Traffic (AADT) on the freeway in proximity to the project site is about 32,000 vehicles (Caltrans, 2011). Ramps to and from I-5 for the project site are located at the SR 113 interchange.

SR 113 is a north-south highway with one travel lane in each direction in the project vicinity. The route connects with I-80 near Davis, travels north through Woodland, and ends at SR 99 near Yuba City. In the project vicinity SR 113 transitions from overlapping with I-5 to a local road (North East Street) north of the I-5/SR 113 interchange. North East Street has four lanes south of Churchill Downs Avenue and one travel lane in each direction at the project site access. The AADT along the highway in proximity to the project site is about 6,600 vehicles (Caltrans, 2011).

The pavement width of North East Street at the project site driveway is roughly 30 feet. The posted speed limit is 55 miles per hour (mph). There is a slight vertical incline in the road south of the project site driveway, which crests where the at-grade railroad tracks cross the roadway diagonally. (See Figure 2 in the *Project Description*)

Existing Transit Facilities. Yolobus, operated by the Yolo County Transportation District (YCTD), provides both local and intercity service throughout Yolo County, including the City of Woodland. Although there are several local and express routes that operate in the City, there is no transit service in the project vicinity (YCTD, 2010).

Existing Bicycle Facilities. As described in the City of Woodland *Bicycle Transportation Plan* (2002), bicycle facilities are comprised of bike paths (Class I facilities), bike lanes (Class II facilities), and bike routes (Class III facilities). Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use with signs, with bicycles and vehicles sharing the road width. North East Street is a Class III facility in the four-lane segment between East Beamer Street and Churchill Downs Avenue, but does not extend to the project site access.

Existing Pedestrian Facilities. Pedestrian facilities are comprised of sidewalks, pedestrian paths, crosswalks, pedestrian signals and other pedestrian amenities. Sidewalks are not provided on North East Street in the project area due to the lack of pedestrian destinations and existing rural land use patterns.

Existing Traffic Conditions. Traffic level of service (LOS) conditions were assessed at the following two signalized intersections for the morning (a.m.) and afternoon (p.m.) peak hour under existing, existing plus project, cumulative, and cumulative plus project conditions:

1. North East Street (SR 113) / I-5 Northbound Ramps
2. North East Street (SR 113) / I-5 Southbound Ramps

Level of Service Calculation Methodology. Manual turning movement counts were conducted at the two study intersections during the a.m. and p.m. peak periods (7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., respectively) in March 2012. Intersection operations were evaluated for the one hour during each peak period when the highest traffic volumes were measured. The existing lane configurations and peak-hour traffic volumes at the study intersections are presented in **Appendix D**.

The LOS concept is a qualitative characterization of traffic conditions associated with varying levels of traffic, based on quantitative measures of delay and congestion. Descriptions of conditions range from LOS A (free-flow condition) to LOS F (jammed/forced-flow condition), as described in the 2000 *Highway Capacity Manual* (HCM) (Transportation Research Board, 2000). The average delay for signalized intersections is calculated using the TRAFFIX analysis software and is correlated to a LOS designation as shown in **Table**

6. The operation analysis uses various intersection characteristics (e.g., traffic volumes, lane geometry, and intersection controls) to estimate the average control delay experienced by motorists traveling through an intersection. Detailed LOS output sheets are located in Appendix D. As shown in **Table 7**, both of the study intersections currently operate at acceptable levels of service, with each operating at LOS B during both peak hours.

TABLE 6
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Average Control Delay Per Vehicle (Seconds)	Description
A	≤ 10.0	Operations with very low delay occurring with favorable progression and/or short cycle length.
B	10.1 to 20.0	Operations with low delay occurring with good progression and/or short cycle lengths.
C	20.1 to 35.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D	35.1 to 55.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E	55.1 to 80.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.
F	> 80.0	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.

SOURCE: Transportation Research Board, 2000 *Highway Capacity Manual*.

TABLE 7
EXISTING INTERSECTION LEVELS OF SERVICE (LOS)^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	18.9	B	18.9	B
North East Street at Southbound I-5 Ramps	Signalized	11.9	B	11.8	B

a. LOS calculations performed using TRAFFIX and the 2000 *Highway Capacity Manual* operations analysis methodology.

SOURCE: ESA, 2012.

Project Trip Generation and Distribution. The recreation facility proposes 76 parking spaces, restrooms, operations building, and an observation deck. The project would operate from 8:00 a.m. to half-an-hour before dusk every day of the week. The recreational use is expected to generate up to 100 persons per day. Assuming an average of two passengers per vehicle and ten percent peak hour use, the project would generate up to 100 daily vehicle trips (50 inbound and 50 outbound), and approximately 10 peak-hour trips (5 inbound and 5 outbound) during both the a.m. and p.m. peak hours.²

² Due to the unique proposed use of the site as a wakeboarding park, there are no known published trip generation data. General assumptions based on expected use were used to develop vehicle trip rates.

The vehicle trip distribution and assignment patterns for the project were estimated based in part on the expected travel patterns of regional and local users, and locations of complementary land uses, primarily residential land uses. It was therefore assumed that approximately 25 percent of project-related traffic would originate south of the project site from Woodland and beyond (SR 113), 60 percent from Northbound I-5 (Sacramento area), 10 percent from Southbound I-5, and 5 percent from north of the project site on North East Street.

As shown in **Table 8**, with the project traffic added to the roadway network, the average delay would increase marginally; however, both study intersections would continue to operate at acceptable levels of service, with each continuing to operate at LOS B during both peak hours. This is a **less than significant** impact.

TABLE 8
EXISTING PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS) ^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	18.9	B	18.9	B
North East Street at Southbound I-5 Ramps	Signalized	12.2	B	12.1	B

a. LOS calculations performed using TRAFFIX and the 2000 *Highway Capacity Manual* operations analysis methodology.

SOURCE: ESA, 2012.

Cumulative Conditions and Cumulative plus Project Conditions. Cumulative condition traffic volumes were forecasted using a standard cumulative growth rate to represent regional background traffic volumes. It was estimated that regional traffic would grow by two percent per year from 2012 to 2030. Existing traffic volumes at each of the study intersections were increased using that growth factor to derive the cumulative conditions traffic volumes at the study intersection.

The results of the LOS analysis for the Cumulative conditions are summarized in **Table 9**, and both study intersections would operate at an acceptable LOS B. Under Cumulative plus Project conditions, the average delay would increase marginally; however, both study intersections are projected to continue to operate at acceptable levels of service, LOS B, as shown in **Table 10**. This is a **less than significant** impact.

TABLE 9
CUMULATIVE INTERSECTION LEVELS OF SERVICE (LOS) ^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	19.6	B	19.6	B
North East Street at Southbound I-5 Ramps	Signalized	12.3	B	12.5	B

a. LOS calculations performed using TRAFFIX and the 2000 Highway Capacity Manual operations analysis methodology.

SOURCE: ESA, 2012.

TABLE 10
CUMULATIVE PLUS PROJECT INTERSECTION LEVELS OF SERVICE (LOS) ^a

Intersection	Control Type	A.M. Peak		P.M. Peak	
		Delay	LOS	Delay	LOS
North East Street at Northbound I-5 Ramps	Signalized	19.6	B	19.6	B
North East Street at Southbound I-5 Ramps	Signalized	12.6	B	12.8	B

a. LOS calculations performed using TRAFFIX and the 2000 Highway Capacity Manual operations analysis methodology.

SOURCE: ESA, 2012.

Transit Impacts. The project is located in a rural area that is not served by transit. It would not conflict with adopted plans or policies supporting alternative transportation nor would the project impede the performance of existing transit facilities. Given the proposed land use and location, the project would not be expected to generate a demand for transit service. This is a **less than significant** impact.

Bicycle and Pedestrian Impacts. The proposed project would not alter the configuration or characteristics of the road network in the project area. Given the character of the project and the surrounding area (i.e., lack of pedestrian facilities and destinations), the project would not generate pedestrian trips. Likewise, the existing Class III bike route on North East Street could accommodate any bicycle trips, though the location and specific use aren't expected to generate a substantial number of bicycle trips. Therefore, the project would not increase the potential for conflicts between vehicles, pedestrians and bicycles, nor would the project constrain access for users of these facilities. This is a **less than significant** impact.

Construction Impacts. Project construction activities would generate off-site traffic that would include the initial delivery of construction vehicles and equipment to the project site, the daily arrival and departure of construction workers, and the delivery of materials throughout the construction period and removal of construction debris. Deliveries would generally include shipments of concrete, lumber, and other building materials for onsite structures, utilities (e.g., plumbing equipment and electrical supplies) and paving and landscaping materials. Construction activity would occur Monday through Friday between 8:00 a.m. and 5:00 p.m. in accordance with all applicable municipal codes and City ordinances. No weekend construction would occur.

Traffic generated from construction activities would be temporary (approximately six months), and therefore would not result in any long-term degradation in operating conditions on roadways in the project locale. The impact of construction-related traffic would be a temporary and intermittent lessening of the capacities of streets in the project site vicinity (including North East Street with a speed limit of 55 mph) because of the slower movements and larger turning radii of construction trucks compared to passenger vehicles. However, given the proximity of the project site to regional roadways (i.e., I-5 and SR 113), construction trucks would have relatively direct routes. Implementation of **Mitigation Measure TR-1** would ensure that these temporary construction traffic impacts would be **less than significant**.

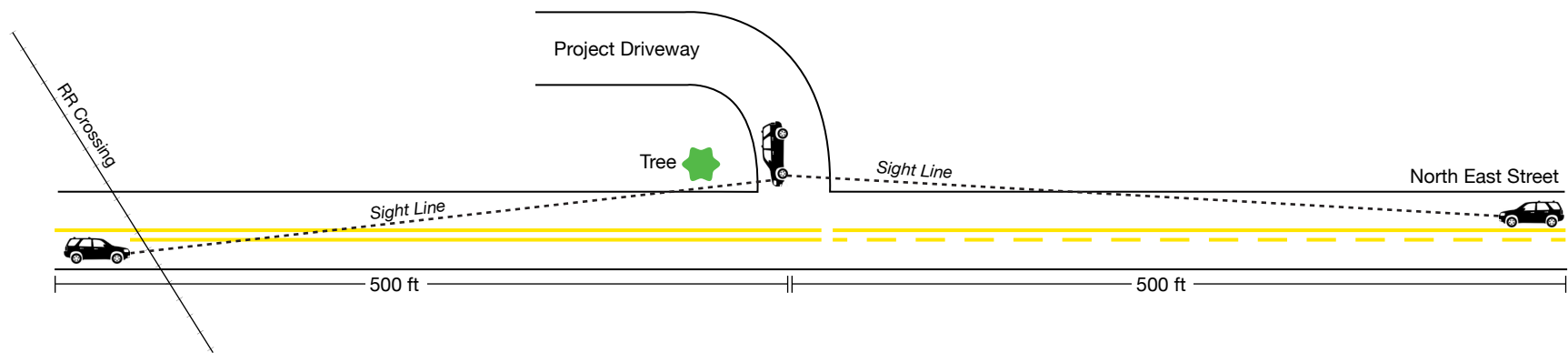
- c) The proposed recreation facility would not change air traffic patterns, increase air traffic levels or result in a change in location that would result in substantial safety risks. The project would have **no impact**.
- d) The proposed project would not increase traffic hazards due to design features of the recreational use. The project would not be expected to generate pedestrian activity given the existing land uses in the project vicinity (i.e., lack of pedestrian facilities and destinations). Points where conflicts could occur, such as the site driveway, would be designed to City standards, consistent with Caltrans standards (Caltrans, 2010).

Site access to the proposed project would be via the existing driveway on North East Street. Because the two-lane road does not include a queue pocket for vehicles approaching from the south (making a left-turn into the project site), available sight distance was investigated to determine if vehicles waiting to turn left into the site driveway would be visible to drivers of vehicles traveling northbound on North East Street. Sight distance is the continuous length of roadway ahead visible to a driver. Stopping sight distance is the minimum sight distance to be provided on a two-lane road for intersections and private road connections (Caltrans, 2012). The visibility for drivers exiting and approaching the project site was evaluated using standards outlined in Caltrans' *Highway Design Manual*.

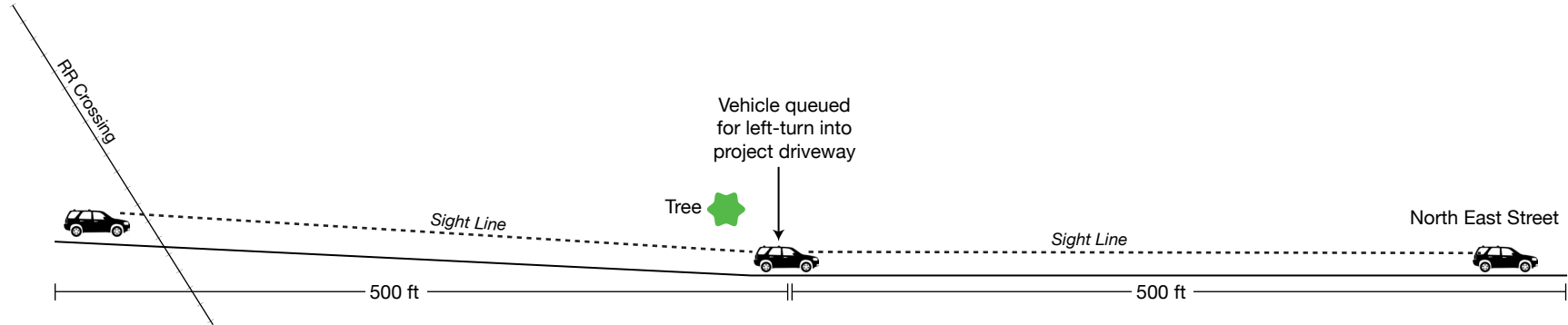
Field observations and measurements were conducted to determine the sight distance from two viewpoints: 1) for a driver wishing to exit from the driveway onto North East Street, and 2) for a driver approaching the driveway (ESA, 2012). Refer to **Figure 6**. A driver's view stopped at the driveway intersection with North East Street is unconstrained, looking north, and drivers have a sight distance of approximately 500 feet, looking south (to the second set of railroad crossing warning fixtures at the crest of the vertical curve). Likewise, drivers in vehicles traveling northbound on North East Street would have a view of a vehicle waiting for a gap in traffic to make a left-hand turn into the project site from approximately 500 feet (at the crest of the vertical curve just beyond the railroad crossing).

With a posted speed limit of 55 miles per hour (mph), North East Street needs to have a minimum sight distance of 500 feet for decision making, per the Caltrans *Highway Design Manual*. Therefore, the sight distance from the driveway is sufficient for both approaching vehicles and exiting vehicles.

A. Sight Distance of Existing Driver



B. Sight Distance of Approaching Driver



Based on these findings, there are no apparent circulation design features that would create a traffic safety hazard or significantly increase the potential for conflicts between vehicles, pedestrians and bicycles; therefore, impacts to traffic safety hazards would be **less than significant**.

- e) The proposed project is located on North East Street, a rural two-lane roadway near the project site driveway (four lanes south of Churchill Downs Avenue). The driveway location would not result in inadequate emergency access. There would be no blockage of access or traffic pattern disturbance that would significantly affect emergency access. Signs prohibiting parking would be posted along the access driveway to maintain clearance that would provide sufficient response time for emergency vehicles. In addition, the existing driveway location and width is sufficient to accommodate both ingress/egress traffic flows. The existing driveway would accommodate both emergency and general (public) vehicles. The proposed project would have a **less-than-significant** impact on emergency access.
- f) The project is located in rural area and the planned development would not conflict with adopted policies, plans, or programs supporting alternative transportation. The proposed project would not be expected to generate a demand for transit service, nor would it be expected to generate additional pedestrian trips, given the proposed location. The recreational project could, however, generate bicycle trips, which would be accommodated by the existing Class III bike route. Further, an exclusive bikeway/pedestrian path is outlined in the Bicycle Plan (2002), from the South City Limits to the project site. This project would require dedication of right-of-way by the railroad, but once complete would improve both pedestrian and bicycle access to the park.

The proposed project would not result in the obstruction or restriction of access to existing alternative modes of transportation or facilities therein; nor would the project result in the decrease in performance of such facilities and users of these modes. Based on these findings, the project would not conflict with policies, plans, or programs related to transit, bicycle, or pedestrian travel. This impact would be **less than significant**.

Mitigation Measures

Mitigation Measure TR-1: The City will require its construction contractor(s) to develop a construction management plan for review and approval. The plan will include at least the following items and requirements to reduce, to the maximum extent feasible, traffic congestion during construction:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, signs, cones for drivers, and designated construction access routes;
- Identification of haul routes for movement of construction vehicles that would minimize impacts on motor vehicular, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area;

- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur; and
- Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the City.

References

California Department of Transportation (Caltrans), 2010. *California Manual on Uniform Traffic Control Devices for Streets and Highways*, amended January 21, 2010.

California Department of Transportation (Caltrans), 2011. *2010 Traffic Volumes on California State Highways*, available online at <http://traffic-counts.dot.ca.gov/index.htm>.

California Department of Transportation (Caltrans), 2012. *Highway Design Manual*, Chapter 200, Geometric Design and Structure Standards, amended May 7, 2012.

City of Woodland, *Bicycle Transportation Plan*, 2002

ESA, Field Reconnaissance Survey, May 1, 2012.

Transportation Research Board, *Highway Capacity Manual – Chapter 2: Capacity and Level of Service Concepts*, December 2000.

Yolo County Transportation District (YCTD), *Yolobus System Map*, July 2010

Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
17. UTILITIES AND SERVICE SYSTEMS — Would the project:				
a) Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
c) Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Discussion

- a) The proposed project will connect to the existing City of Woodland wastewater system, likely through a private force main. Additionally, the proposed project will comply with all the wastewater requirements of the RWQCB; therefore, this impact would be **less than significant**.
- b,e) The proposed project would use an existing on-site well in order to fill the lake for the wakeboard park, however, the proposed project site would connect to the Woodland potable water system for potable water. The City anticipates that existing water supplies are sufficient to meet future water demand in the City. The project site will also connect to the municipal wastewater collection and treatment system. The City of Woodland owns and operates a Water Pollution Control Facility (WPCF) which treats wastewater from throughout the City's residential, commercial, and industrial users. A two-year project to upgrade and expand the WPCF was completed in 2007. The facility expanded from 7.8 million gallons per day (MGD) to its current 10.4 MGD. It also upgraded into a tertiary (advanced) treatment system. The tertiary system requirements were implemented in order to maintain strict water quality standards as WPCF treated effluent is discharged into the Tule Canal. The expansion, along with the higher water quality standards, resulted in a Class V designation for the WPCF

facility, the highest treatment rating in California. For the reasons discussed above, impacts on water supply and wastewater collection and treatment would be **less than significant**.

- c) See the Hydrology and Water Quality section above for a discussion of stormwater management. As previously discussed, the project site is located on a parcel currently used as a detention basin during the wet season. The project will not require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, thus this impact would be **less than significant**.
- d) As discussed above, groundwater is the sole source of water supply for the City of Woodland. The City's water supply is pumped from 16 operational groundwater wells located throughout the City into its distribution pipe system. The City anticipates that existing and planned water supplies are sufficient to meet future water demand in the City. The proposed project would not require new or expanded water supply resources or entitlements; therefore, this impact would be **less than significant**.
- f) The City of Woodland contracts with Waste Management Inc. for all solid waste collection services within City limits. This includes scheduled and unscheduled service for residential, commercial, and industrial customers. Solid waste collected within the City, including the project site, is disposed of at the Yolo County Central Landfill located at 44090 County Road 28H in Davis, CA. The Central Landfill, a 722-acre facility, is a Class III solid waste landfill, which provides comprehensive solid waste and recycling services, including municipal solid waste, recycling, salvaging, household hazardous waste, and business hazardous waste. Permitted maximum disposal at the Central Landfill is 1,800 tons per day. At the current waste disposal rate the landfill's closure date is estimated to be January 1, 2081, therefore there are approximately 69 years of active disposal life left at the landfill (Per. Comm., 2012). The landfill has sufficient permitted capacity to meet the solid waste disposal needs of planned growth within the City, including this project; therefore, this impact would be **less than significant**.

Furthermore, the City will comply with all state laws for proper waste disposal and waste diversion from landfills including the California Solid Waste Management Act (AB 939), which requires local governments (cities and counties) within the state to divert at least 50% of their waste from landfills.
- g) The proposed project will comply with all federal, state, and local statutes and regulations related to solid waste; therefore, there would be **no impact**.

References

- California Integrated Waste Management Board (CIWMB), 2012. Solid Waste Information System (SWIS), Facility/Site Summary Details: Yolo County Central Landfill (57-AA-0001). Available at: <http://www.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/>. Accessed February 13, 2012.
- Per. Comm., 2012. Personnel Communication, Linda Sinderson, Deputy Director, Yolo County Planning and Public Works, Division of Integrated Waste Management; February 13, 2012.

Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
18. MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

- a) Per the impact discussions above, the project does not have the potential to substantially degrade the environment. Biological and cultural impacts, while potentially significant, would not substantially reduce a wildlife population, or eliminate an important historical resource. All effects related to biological and cultural resources would be reduced to less than significant with feasible mitigation. This impact would be **less than significant**.
- b) The proposed project would not result in cumulatively considerable negative impacts. No other significant projects are proposed in the project vicinity. In addition, cumulative effects of a more regional nature, including air, water, biology, and traffic, are described above, and would be **less-than-significant**.
- c) The proposed project would not cause substantial adverse effects on human beings. Effects related to human health and welfare, such as air quality, flooding, hazards and hazardous materials, and noise are discussed above, and would not result in any significant and unavoidable impacts; this impact would be **less than significant**.

Appendix A

Air Quality

Velocity Island
Yolo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	1.82	1000sqft
Parking Lot	76	Space
City Park	9	Acre

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company	Pacific Gas & Electric Company
Climate Zone	2	Precipitation Freq (Days)	54		

1.3 User Entered Comments

Project Characteristics -

Land Use - 9-acre lake modeled as city park; operations and restroom buildings modeled as general office building

Construction Phase - Reduced building construction duration based on minimal building space proposed

Grading - Assumes 14,520 cubic yards cut (~1 foot over the 9-acre lake), with half of the material to be used on site

Vehicle Trips - All trips assumed to be for the park, 100 daily one-way trips

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.31	2.28	1.42	0.00	0.34	0.13	0.47	0.09	0.13	0.22	0.00	231.87	231.87	0.02	0.00	232.38
2013	0.45	0.44	0.29	0.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00	39.25	39.25	0.01	0.00	39.38
Total	0.76	2.72	1.71	0.00	0.34	0.17	0.51	0.09	0.17	0.26	0.00	271.12	271.12	0.03	0.00	271.76

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2012	0.31	2.28	1.42	0.00	0.16	0.13	0.29	0.09	0.13	0.22	0.00	231.87	231.87	0.02	0.00	232.38
2013	0.45	0.44	0.29	0.00	0.00	0.04	0.04	0.00	0.04	0.04	0.00	39.25	39.25	0.01	0.00	39.38
Total	0.76	2.72	1.71	0.00	0.16	0.17	0.33	0.09	0.17	0.26	0.00	271.12	271.12	0.03	0.00	271.76

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	7.61	7.61	0.00	0.00	7.66
Mobile	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Waste						0.00	0.00		0.00	0.00	0.50	0.00	0.50	0.03	0.00	1.12
Water						0.00	0.00		0.00	0.00	0.00	11.63	11.63	0.01	0.00	11.99
Total	0.26	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.50	148.30	148.80	0.05	0.00	149.95

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	7.61	7.61	0.00	0.00	7.66
Mobile	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Waste						0.00	0.00		0.00	0.00	0.50	0.00	0.50	0.03	0.00	1.12
Water						0.00	0.00		0.00	0.00	0.00	11.63	11.63	0.01	0.00	11.99
Total	0.26	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.50	148.30	148.80	0.05	0.00	149.95

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.42	0.24	0.00		0.02	0.02		0.02	0.02	0.00	36.27	36.27	0.00	0.00	36.36
Total	0.05	0.42	0.24	0.00	0.09	0.02	0.11	0.05	0.02	0.07	0.00	36.27	36.27	0.00	0.00	36.36

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20

3.2 Site Preparation - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.09	0.00	0.09	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.05	0.42	0.24	0.00		0.02	0.02		0.02	0.02	0.00	36.27	36.27	0.00	0.00	36.36
Total	0.05	0.42	0.24	0.00	0.09	0.02	0.11	0.05	0.02	0.07	0.00	36.27	36.27	0.00	0.00	36.36

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	1.20	0.00	0.00	1.20

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.52	0.32	0.00		0.03	0.03		0.03	0.03	0.00	47.52	47.52	0.01	0.00	47.64
Total	0.07	0.52	0.32	0.00	0.07	0.03	0.10	0.03	0.03	0.06	0.00	47.52	47.52	0.01	0.00	47.64

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.02	0.27	0.12	0.00	0.17	0.01	0.18	0.00	0.01	0.01	0.00	34.22	34.22	0.00	0.00	34.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00
Total	0.02	0.27	0.14	0.00	0.17	0.01	0.18	0.00	0.01	0.01	0.00	36.22	36.22	0.00	0.00	36.24

3.3 Grading - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.07	0.00	0.07	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.07	0.52	0.32	0.00		0.03	0.03		0.03	0.03	0.00	47.52	47.52	0.01	0.00	47.64
Total	0.07	0.52	0.32	0.00	0.07	0.03	0.10	0.03	0.03	0.06	0.00	47.52	47.52	0.01	0.00	47.64

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.02	0.27	0.12	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	34.22	34.22	0.00	0.00	34.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00	2.00
Total	0.02	0.27	0.14	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	36.22	36.22	0.00	0.00	36.24

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88
Total	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20	0.00	0.00	3.20
Worker	0.00	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	4.85	4.85	0.00	0.00	4.86
Total	0.00	0.02	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	8.05	8.05	0.00	0.00	8.06

3.4 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88
Total	0.16	1.05	0.66	0.00		0.07	0.07		0.07	0.07	0.00	102.61	102.61	0.01	0.00	102.88

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.20	3.20	0.00	0.00	3.20
Worker	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.85	4.85	0.00	0.00	4.86
Total	0.00	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.05	8.05	0.00	0.00	8.06

3.4 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35
Total	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.34
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.57

3.4 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35
Total	0.01	0.07	0.05	0.00		0.00	0.00		0.00	0.00	0.00	7.33	7.33	0.00	0.00	7.35

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.23
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.34	0.00	0.00	0.34
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57	0.57	0.00	0.00	0.57

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56
Paving	0.00					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.06	0.34	0.21	0.00		0.03	0.03		0.03	0.03	0.00	26.46	26.46	0.00	0.00	26.56

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96
Total	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.95	1.95	0.00	0.00	1.96

3.6 Architectural Coating - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56
Total	0.37	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39

3.6 Architectural Coating - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.37					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Off-Road	0.00	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56
Total	0.37	0.03	0.02	0.00		0.00	0.00		0.00	0.00	0.00	2.55	2.55	0.00	0.00	2.56

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.00	0.39

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Unmitigated	0.10	0.32	0.99	0.00	0.12	0.01	0.13	0.01	0.01	0.02	0.00	129.06	129.06	0.01	0.00	129.18
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	99.99	99.99	99.99	246,596	246,596
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	99.99	99.99	99.99	246,596	246,596

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	14.70	6.60	6.60	33.00	48.00	19.00
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.00	0.00		0.00	0.00	0.00	5.93	5.93	0.00	0.00	5.96
Electricity Unmitigated						0.00	0.00		0.00	0.00	0.00	5.93	5.93	0.00	0.00	5.96
NaturalGas Mitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
NaturalGas Unmitigated	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	31555.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	tons/yr										MT/yr					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	31555.2	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total		0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	1.68	1.68	0.00	0.00	1.69

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
General Office Building	20374.1					5.93	0.00	0.00	5.96
Parking Lot	0					0.00	0.00	0.00	0.00
Total						5.93	0.00	0.00	5.96

Mitigated

	Electricity Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	kWh	tons/yr				MT/yr			
City Park	0					0.00	0.00	0.00	0.00
General Office Building	20374.1					5.93	0.00	0.00	5.96
Parking Lot	0					0.00	0.00	0.00	0.00
Total						5.93	0.00	0.00	5.96

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unmitigated	0.16	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.17	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.04					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.13					0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.17	0.00	0.00	0.00		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

7.0 Water Detail

7.1 Mitigation Measures Water

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr				MT/yr			
Mitigated					11.63	0.01	0.00	11.99
Unmitigated					11.63	0.01	0.00	11.99
Total	NA	NA	NA	NA	NA	NA	NA	NA

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 10.7233					10.92	0.00	0.00	10.99
General Office Building	0.323475 / 0.198259					0.71	0.01	0.00	1.00
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Total						11.63	0.01	0.00	11.99

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	tons/yr				MT/yr			
City Park	0 / 10.7233					10.92	0.00	0.00	10.99
General Office Building	0.323475 / 0.198259					0.71	0.01	0.00	1.00
Parking Lot	0 / 0					0.00	0.00	0.00	0.00
Total						11.63	0.01	0.00	11.99

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
	tons/yr				MT/yr			
Mitigated					0.50	0.03	0.00	1.12
Unmitigated					0.50	0.03	0.00	1.12
Total	NA	NA	NA	NA	NA	NA	NA	NA

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.77					0.16	0.01	0.00	0.35
General Office Building	1.69					0.34	0.02	0.00	0.77
Parking Lot	0					0.00	0.00	0.00	0.00
Total						0.50	0.03	0.00	1.12

8.2 Waste by Land Use

Mitigated

	Waste Disposed	ROG	NOx	CO	SO2	Total CO2	CH4	N2O	CO2e
Land Use	tons	tons/yr				MT/yr			
City Park	0.77					0.16	0.01	0.00	0.35
General Office Building	1.69					0.34	0.02	0.00	0.77
Parking Lot	0					0.00	0.00	0.00	0.00
Total						0.50	0.03	0.00	1.12

9.0 Vegetation

Velocity Island
Yolo County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	1.82	1000sqft
Parking Lot	76	Space
City Park	9	Acre

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company	Pacific Gas & Electric Company
Climate Zone	2	Precipitation Freq (Days)	54		

1.3 User Entered Comments

Project Characteristics -

Land Use - 9-acre lake modeled as city park; operations and restroom buildings modeled as general office building

Construction Phase - Reduced building construction duration based on minimal building space proposed

Grading - Assumes 14,520 cubic yards cut (~1 foot over the 9-acre lake), with half of the material to be used on site

Vehicle Trips - All trips assumed to be for the park, 100 daily one-way trips

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.61	84.92	49.87	0.09	28.11	4.28	32.02	9.94	4.28	14.22	0.00	9,266.55	0.00	0.95	0.00	9,286.52
2013	37.82	35.53	25.17	0.05	0.31	2.94	3.24	0.01	2.94	2.95	0.00	4,373.37	0.00	0.51	0.00	4,384.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.61	84.92	49.87	0.09	18.08	4.28	22.36	9.94	4.28	14.22	0.00	9,266.55	0.00	0.95	0.00	9,286.52
2013	37.82	35.53	25.17	0.05	0.01	2.94	2.95	0.01	2.94	2.95	0.00	4,373.37	0.00	0.51	0.00	4,384.07
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Total	1.51	1.75	5.53	0.01	0.82	0.06	0.87	0.03	0.06	0.09		847.99		0.03	0.00	848.74

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Total	1.51	1.75	5.53	0.01	0.82	0.06	0.87	0.03	0.06	0.09		847.99		0.03	0.00	848.74

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27		7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20		7,997.69		0.93		8,017.28

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.18	0.20	2.05	0.00	0.37	0.01	0.38	0.01	0.01	0.02		292.11		0.02		292.49
Total	0.18	0.20	2.05	0.00	0.37	0.01	0.38	0.01	0.01	0.02		292.11		0.02		292.49

3.2 Site Preparation - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27	0.00	7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20	0.00	7,997.69		0.93		8,017.28

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.18	0.20	2.05	0.00	0.01	0.01	0.02	0.01	0.01	0.02		292.11		0.02		292.49
Total	0.18	0.20	2.05	0.00	0.01	0.01	0.02	0.01	0.01	0.02		292.11		0.02		292.49

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00		5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32		5,240.07		0.60		5,252.76

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.19	26.37	11.56	0.04	21.21	0.91	22.12	0.13	0.91	1.04		3,783.06		0.10		3,785.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.16	1.71	0.00	0.30	0.01	0.31	0.01	0.01	0.02		243.43		0.02		243.74
Total	2.34	26.53	13.27	0.04	21.51	0.92	22.43	0.14	0.92	1.06		4,026.49		0.12		4,029.00

3.3 Grading - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00	0.00	5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32	0.00	5,240.07		0.60		5,252.76

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.19	26.37	11.56	0.04	0.13	0.91	1.04	0.13	0.91	1.04		3,783.06		0.10		3,785.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.16	1.71	0.00	0.01	0.01	0.02	0.01	0.01	0.02		243.43		0.02		243.74
Total	2.34	26.53	13.27	0.04	0.14	0.92	1.06	0.14	0.92	1.06		4,026.49		0.12		4,029.00

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.80	0.42	0.00	0.04	0.02	0.07	0.00	0.02	0.03		126.52		0.00		126.59
Worker	0.13	0.14	1.48	0.00	0.26	0.01	0.27	0.01	0.01	0.02		210.97		0.01		211.24
Total	0.20	0.94	1.90	0.00	0.30	0.03	0.34	0.01	0.03	0.05		337.49		0.01		337.83

3.4 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.80	0.42	0.00	0.00	0.02	0.03	0.00	0.02	0.03		126.52		0.00		126.59
Worker	0.13	0.14	1.48	0.00	0.01	0.01	0.02	0.01	0.01	0.02		210.97		0.01		211.24
Total	0.20	0.94	1.90	0.00	0.01	0.03	0.05	0.01	0.03	0.05		337.49		0.01		337.83

3.4 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.74	0.39	0.00	0.04	0.02	0.06	0.00	0.02	0.03		126.49		0.00		126.55
Worker	0.12	0.13	1.33	0.00	0.26	0.01	0.27	0.01	0.01	0.02		206.27		0.01		206.52
Total	0.18	0.87	1.72	0.00	0.30	0.03	0.33	0.01	0.03	0.05		332.76		0.01		333.07

3.4 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.06	0.74	0.39	0.00	0.00	0.02	0.03	0.00	0.02	0.03		126.49		0.00		126.55
Worker	0.12	0.13	1.33	0.00	0.01	0.01	0.02	0.01	0.01	0.02		206.27		0.01		206.52
Total	0.18	0.87	1.72	0.00	0.01	0.03	0.05	0.01	0.03	0.05		332.76		0.01		333.07

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.15	1.54	0.00	0.30	0.01	0.31	0.01	0.01	0.02		238.00		0.01		238.29
Total	0.14	0.15	1.54	0.00	0.30	0.01	0.31	0.01	0.01	0.02		238.00		0.01		238.29

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.15	1.54	0.00	0.01	0.01	0.02	0.01	0.01	0.02		238.00		0.01		238.29
Total	0.14	0.15	1.54	0.00	0.01	0.01	0.02	0.01	0.01	0.02		238.00		0.01		238.29

3.6 Architectural Coating - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.31	0.00	0.06	0.00	0.06	0.00	0.00	0.00		47.60		0.00		47.66
Total	0.03	0.03	0.31	0.00	0.06	0.00	0.06	0.00	0.00	0.00		47.60		0.00		47.66

3.6 Architectural Coating - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00		47.60		0.00		47.66
Total	0.03	0.03	0.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00		47.60		0.00		47.66

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Unmitigated	0.62	1.74	5.52	0.01	0.82	0.06	0.87	0.03	0.06	0.09		837.82		0.03		838.51
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	99.99	99.99	99.99	246,596	246,596
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	99.99	99.99	99.99	246,596	246,596

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	14.70	6.60	6.60	33.00	48.00	19.00
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
NaturalGas Unmitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	86.4526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	0.0864526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Velocity Island
Yolo County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric
General Office Building	1.82	1000sqft
Parking Lot	76	Space
City Park	9	Acre

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Utility Company	Pacific Gas & Electric Company
Climate Zone	2	Precipitation Freq (Days)	54		

1.3 User Entered Comments

Project Characteristics -

Land Use - 9-acre lake modeled as city park; operations and restroom buildings modeled as general office building

Construction Phase - Reduced building construction duration based on minimal building space proposed

Grading - Assumes 14,520 cubic yards cut (~1 foot over the 9-acre lake), with half of the material to be used on site

Vehicle Trips - All trips assumed to be for the park, 100 daily one-way trips

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.62	84.94	49.65	0.09	28.11	4.28	32.04	9.94	4.28	14.22	0.00	9,211.80	0.00	0.95	0.00	9,231.73
2013	37.82	35.56	25.13	0.05	0.31	2.94	3.24	0.01	2.94	2.95	0.00	4,344.65	0.00	0.51	0.00	4,355.32
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2012	10.62	84.94	49.65	0.09	18.08	4.28	22.36	9.94	4.28	14.22	0.00	9,211.80	0.00	0.95	0.00	9,231.73
2013	37.82	35.56	25.13	0.05	0.01	2.94	2.95	0.01	2.94	2.95	0.00	4,344.65	0.00	0.51	0.00	4,355.32
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Total	1.50	1.83	5.69	0.01	0.82	0.06	0.88	0.03	0.06	0.09		768.65		0.04	0.00	769.46

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Energy	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Mobile	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Total	1.50	1.83	5.69	0.01	0.82	0.06	0.88	0.03	0.06	0.09		768.65		0.04	0.00	769.46

3.0 Construction Detail

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27		7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20		7,997.69		0.93		8,017.28

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.19	0.22	1.83	0.00	0.37	0.01	0.38	0.01	0.01	0.02		253.36		0.02		253.71
Total	0.19	0.22	1.83	0.00	0.37	0.01	0.38	0.01	0.01	0.02		253.36		0.02		253.71

3.2 Site Preparation - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.07	0.00	18.07	9.93	0.00	9.93						0.00
Off-Road	10.43	84.72	47.82	0.07		4.27	4.27		4.27	4.27	0.00	7,997.69		0.93		8,017.28
Total	10.43	84.72	47.82	0.07	18.07	4.27	22.34	9.93	4.27	14.20	0.00	7,997.69		0.93		8,017.28

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.19	0.22	1.83	0.00	0.01	0.01	0.02	0.01	0.01	0.02		253.36		0.02		253.71
Total	0.19	0.22	1.83	0.00	0.01	0.01	0.02	0.01	0.01	0.02		253.36		0.02		253.71

3.3 Grading - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00		5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32		5,240.07		0.60		5,252.76

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.30	27.14	13.21	0.04	21.21	0.92	22.13	0.13	0.92	1.05		3,760.60		0.11		3,762.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.19	1.53	0.00	0.30	0.01	0.31	0.01	0.01	0.02		211.13		0.01		211.42
Total	2.45	27.33	14.74	0.04	21.51	0.93	22.44	0.14	0.93	1.07		3,971.73		0.12		3,974.35

3.3 Grading - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.59	0.00	6.59	3.32	0.00	3.32						0.00
Off-Road	6.76	51.98	31.88	0.05		3.00	3.00		3.00	3.00	0.00	5,240.07		0.60		5,252.76
Total	6.76	51.98	31.88	0.05	6.59	3.00	9.59	3.32	3.00	6.32	0.00	5,240.07		0.60		5,252.76

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.30	27.14	13.21	0.04	0.13	0.92	1.05	0.13	0.92	1.05		3,760.60		0.11		3,762.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.15	0.19	1.53	0.00	0.01	0.01	0.02	0.01	0.01	0.02		211.13		0.01		211.42
Total	2.45	27.33	14.74	0.04	0.14	0.93	1.07	0.14	0.93	1.07		3,971.73		0.12		3,974.35

3.4 Building Construction - 2012

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54		4,040.62		0.51		4,051.23

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.82	0.52	0.00	0.04	0.03	0.07	0.00	0.03	0.03		125.28		0.00		125.36
Worker	0.13	0.16	1.32	0.00	0.26	0.01	0.27	0.01	0.01	0.02		182.98		0.01		183.23
Total	0.20	0.98	1.84	0.00	0.30	0.04	0.34	0.01	0.04	0.05		308.26		0.01		308.59

3.4 Building Construction - 2012

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23
Total	5.63	37.37	23.73	0.04		2.54	2.54		2.54	2.54	0.00	4,040.62		0.51		4,051.23

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.82	0.52	0.00	0.00	0.03	0.03	0.00	0.03	0.03		125.28		0.00		125.36
Worker	0.13	0.16	1.32	0.00	0.01	0.01	0.02	0.01	0.01	0.02		182.98		0.01		183.23
Total	0.20	0.98	1.84	0.00	0.01	0.04	0.05	0.01	0.04	0.05		308.26		0.01		308.59

3.4 Building Construction - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28		4,040.62		0.46		4,050.31

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.75	0.49	0.00	0.04	0.02	0.06	0.00	0.02	0.03		125.24		0.00		125.31
Worker	0.12	0.14	1.19	0.00	0.26	0.01	0.27	0.01	0.01	0.02		178.79		0.01		179.02
Total	0.19	0.89	1.68	0.00	0.30	0.03	0.33	0.01	0.03	0.05		304.03		0.01		304.33

3.4 Building Construction - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31
Total	5.17	34.66	23.45	0.04		2.28	2.28		2.28	2.28	0.00	4,040.62		0.46		4,050.31

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.07	0.75	0.49	0.00	0.00	0.02	0.03	0.00	0.02	0.03		125.24		0.00		125.31
Worker	0.12	0.14	1.19	0.00	0.01	0.01	0.02	0.01	0.01	0.02		178.79		0.01		179.02
Total	0.19	0.89	1.68	0.00	0.01	0.03	0.05	0.01	0.03	0.05		304.03		0.01		304.33

3.5 Paving - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93		2,917.64		0.50		2,928.05

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.17	1.37	0.00	0.30	0.01	0.31	0.01	0.01	0.02		206.30		0.01		206.57
Total	0.14	0.17	1.37	0.00	0.30	0.01	0.31	0.01	0.01	0.02		206.30		0.01		206.57

3.5 Paving - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.53	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05
Paving	0.09					0.00	0.00		0.00	0.00						0.00
Total	5.62	33.81	20.89	0.03		2.93	2.93		2.93	2.93	0.00	2,917.64		0.50		2,928.05

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.14	0.17	1.37	0.00	0.01	0.01	0.02	0.01	0.01	0.02		206.30		0.01		206.57
Total	0.14	0.17	1.37	0.00	0.01	0.01	0.02	0.01	0.01	0.02		206.30		0.01		206.57

3.6 Architectural Coating - 2013

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27		281.19		0.04		282.10

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.27	0.00	0.06	0.00	0.06	0.00	0.00	0.00		41.26		0.00		41.31
Total	0.03	0.03	0.27	0.00	0.06	0.00	0.06	0.00	0.00	0.00		41.26		0.00		41.31

3.6 Architectural Coating - 2013

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	37.31					0.00	0.00		0.00	0.00						0.00
Off-Road	0.49	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10
Total	37.80	2.96	1.94	0.00		0.27	0.27		0.27	0.27	0.00	281.19		0.04		282.10

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00		0.00		0.00
Worker	0.03	0.03	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00		41.26		0.00		41.31
Total	0.03	0.03	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00		41.26		0.00		41.31

4.0 Mobile Detail

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Unmitigated	0.61	1.82	5.68	0.01	0.82	0.06	0.88	0.03	0.06	0.09		758.48		0.04		759.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	99.99	99.99	99.99	246,596	246,596
General Office Building	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	99.99	99.99	99.99	246,596	246,596

4.3 Trip Type Information

Land Use	Miles			Trip %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
City Park	14.70	6.60	6.60	33.00	48.00	19.00
General Office Building	14.70	6.60	6.60	0.00	0.00	0.00

	Miles			Trip %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00

5.0 Energy Detail

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
NaturalGas Unmitigated	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	86.4526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU	lb/day										lb/day					
City Park	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
General Office Building	0.0864526	0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23
Parking Lot	0	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00	0.00	0.00
Total		0.00	0.01	0.01	0.00		0.00	0.00		0.00	0.00		10.17		0.00	0.00	10.23

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Unmitigated	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.20					0.00	0.00		0.00	0.00						0.00
Consumer Products	0.69					0.00	0.00		0.00	0.00						0.00
Landscaping	0.00	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00
Total	0.89	0.00	0.00	0.00		0.00	0.00		0.00	0.00		0.00		0.00		0.00

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Vegetation

Grid Electricity Associated with Motor

1 hp motor running for an hour = .745 kwh

1x50 hp motors, 6 hrs per day, 360 days/yr

80460 kwh/year

Project Annual Electrical Use:

80,460 kWh (kilowatt hours)/year

80 MWh (megawatt hours)/year

Indirect GHG gases	Emission Factor lb/mWh	Annual		CO2	Annual
		Project Electricity mWh	GHGs metric tons	Equivalent Factor	CO2 Equivalent Emissions (metric tons)
Carbon Dioxide (CO2)	641.35	80	23	1	23
Nitrous Oxide (N2O)	0.011	80	0.0	296	0
Methane (CH4)	0.029	80	0.0	23	0

Total Indirect GHG Emissions from Project Electricity Use=

24

Ref: Emission Factors from CalEEMod

Appendix B

Bio Resources

CNPS *California Native Plant* Inventory of Rare and Endangered Plants

Plant List

13 matches found. *Click on scientific name for details*

Search Criteria

Found in 9 Quads around 38121F7

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
<u>Astragalus pauperculus</u>	depauperate milk-vetch	Fabaceae	annual herb	4.3	S3.3	G3
<u>Astragalus tener</u> var. <u>tener</u>	alkali milk-vetch	Fabaceae	annual herb	1B.2	S2	G2T2
<u>Atriplex cordulata</u>	heartscale	Chenopodiaceae	annual herb	1B.2	S2.2?	G2?
<u>Atriplex depressa</u>	brittlescale	Chenopodiaceae	annual herb	1B.2	S2.2	G2Q
<u>Atriplex joaquiniana</u>	San Joaquin spearscale	Chenopodiaceae	annual herb	1B.2	S2	G2
<u>California macrophylla</u>	round-leaved filaree	Geraniaceae	annual herb	1B.1	S2	G2
<u>Centromadia parryi</u> ssp. <u>rudis</u>	Parry's rough tarplant	Asteraceae	annual herb	4.2	S3.2	G4T3
<u>Chloropyron palmatum</u>	palmate-bracted bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.1	S1	G1
<u>Hibiscus lasiocarpus</u> var. <u>occidentalis</u>	woolly rose-mallow	Malvaceae	perennial rhizomatous herb	1B.2	S2.2	G4
<u>Lepidium latipes</u> var. <u>heckardii</u>	Heckard's pepper-grass	Brassicaceae	annual herb	1B.2	S1.2	G4T1
<u>Lessingia hololeuca</u>	woolly-headed lessingia	Asteraceae	annual herb	3	S3	G3
<u>Navarretia leucocephala</u> ssp. <u>bakeri</u>	Baker's navarretia	Polemoniaceae	annual herb	1B.1	S2	G4T2
<u>Trifolium hydrophilum</u>	saline clover	Fabaceae	annual herb	1B.2	S2	G2

Suggested Citation

California Native Plant Society (CNPS). 2012. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Sacramento, CA. Accessed on Thursday, April 26, 2012.

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Bilisoly Bequest Grant

[California Natural Diversity Database](#)

[The Calflora Database](#)

[Studio Simple](#)

[TRC](#)



Selected Elements by Element Code

California Department of Fish and Game

California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
AAAAA01180	<i>Ambystoma californiense</i> California tiger salamander	Threatened	Threatened	G2G3	S2S3	SSC
ABNGA11010	<i>Nycticorax nycticorax</i> black-crowned night heron	None	None	G5	S3	
ABNGE02020	<i>Plegadis chihi</i> white-faced ibis	None	None	G5	S1	WL
ABNKC06010	<i>Elanus leucurus</i> white-tailed kite	None	None	G5	S3	FP
ABNKC19070	<i>Buteo swainsoni</i> Swainson's hawk	None	Threatened	G5	S2	
ABNKD06030	<i>Falco columbarius</i> merlin	None	None	G5	S3	WL
ABNNB03031	<i>Charadrius alexandrinus nivosus</i> western snowy plover	Threatened	None	G4T3	S2	SSC
ABNNB03100	<i>Charadrius montanus</i> mountain plover	Proposed Threatened	None	G2	S2?	SSC
ABNSB10010	<i>Athene cunicularia</i> burrowing owl	None	None	G4	S2	SSC
ABPAU08010	<i>Riparia riparia</i> bank swallow	None	Threatened	G5	S2S3	
ABPBXB0020	<i>Agelaius tricolor</i> tricolored blackbird	None	None	G2G3	S2	SSC
AFCJB34020	<i>Pogonichthys macrolepidotus</i> Sacramento splittail	None	None	G2	S2	SSC
AMACC02010	<i>Lasionycteris noctivagans</i> silver-haired bat	None	None	G5	S3S4	
AMACC05030	<i>Lasiurus cinereus</i> hoary bat	None	None	G5	S4?	
AMACC05060	<i>Lasiurus blossevillii</i> western red bat	None	None	G5	S3?	SSC
AMACC10010	<i>Antrozous pallidus</i> pallid bat	None	None	G5	S3	SSC
AMAJF04010	<i>Taxidea taxus</i> American badger	None	None	G5	S4	SSC
ARAAD02030	<i>Emys marmorata</i> western pond turtle	None	None	G3G4	S3	SSC
ARADB36150	<i>Thamnophis gigas</i> giant garter snake	Threatened	Threatened	G2G3	S2S3	
CTT61420CA	Great Valley Mixed Riparian Forest Great Valley Mixed Riparian Forest	None	None	G2	S2.2	
CTT71130CA	Valley Oak Woodland Valley Oak Woodland	None	None	G3	S2.1	



Selected Elements by Element Code
California Department of Fish and Game
California Natural Diversity Database



Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
ICBRA03030	<i>Branchinecta lynchi</i> vernal pool fairy shrimp	Threatened	None	G3	S2S3	
ICBRA06010	<i>Linderiella occidentalis</i> California linderiella	None	None	G3	S2S3	
ICBRA10010	<i>Lepidurus packardi</i> vernal pool tadpole shrimp	Endangered	None	G3	S2S3	
IICOL02106	<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	None	None	G5TH	SH	
IICOL48011	<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	Threatened	None	G3T2	S2	
IIHYM15010	<i>Myrmosula pacifica</i> Antioch multilid wasp	None	None	GH	SH	
PDBRA1M0K1	<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	None	None	G4T1	S1.2	1B.2
PDCHE040B0	<i>Atriplex cordulata</i> heartscale	None	None	G2?	S2.2?	1B.2
PDCHE041F3	<i>Atriplex joaquiniana</i> San Joaquin spearscale	None	None	G2	S2	1B.2
PDCHE042L0	<i>Atriplex depressa</i> brittlescale	None	None	G2Q	S2.2	1B.2
PDFAB0F8R1	<i>Astragalus tener var. tener</i> alkali milk-vetch	None	None	G2T2	S2	1B.2
PDFAB400R5	<i>Trifolium hydrophilum</i> saline clover	None	None	G2	S2	1B.2
PDGER01070	<i>California macrophylla</i> round-leaved filaree	None	None	G2	S2	1B.1
PDMAL0H0R3	<i>Hibiscus lasiocarpus var. occidentalis</i> woolly rose-mallow	None	None	G4	S2.2	1B.2
PDPLM0C0E1	<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	None	None	G4T2	S2	1B.1
PDSCR0J0J0	<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	Endangered	Endangered	G1	S1	1B.1

Record Count: 37



Selected Elements by Scientific Name

California Department of Fish and Game

California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Agelaius tricolor</i> tricolored blackbird	ABPBXB0020	None	None	G2G3	S2	SSC
<i>Ambystoma californiense</i> California tiger salamander	AAAAA01180	Threatened	Threatened	G2G3	S2S3	SSC
<i>Antrozous pallidus</i> pallid bat	AMACC10010	None	None	G5	S3	SSC
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	PDFAB0F8R1	None	None	G2T2	S2	1B.2
<i>Athene cunicularia</i> burrowing owl	ABNSB10010	None	None	G4	S2	SSC
<i>Atriplex cordulata</i> heartscale	PDCHE040B0	None	None	G2?	S2.2?	1B.2
<i>Atriplex depressa</i> brittlescale	PDCHE042L0	None	None	G2Q	S2.2	1B.2
<i>Atriplex joaquiniana</i> San Joaquin spearscale	PDCHE041F3	None	None	G2	S2	1B.2
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	ICBRA03030	Threatened	None	G3	S2S3	
<i>Buteo swainsoni</i> Swainson's hawk	ABNKC19070	None	Threatened	G5	S2	
<i>California macrophylla</i> round-leaved filaree	PDGER01070	None	None	G2	S2	1B.1
<i>Charadrius alexandrinus nivosus</i> western snowy plover	ABNNB03031	Threatened	None	G4T3	S2	SSC
<i>Charadrius montanus</i> mountain plover	ABNNB03100	Proposed Threatened	None	G2	S2?	SSC
<i>Chloropyron palmatum</i> palmate-bracted bird's-beak	PDSCR0J0J0	Endangered	Endangered	G1	S1	1B.1
<i>Cicindela hirticollis abrupta</i> Sacramento Valley tiger beetle	IICOL02106	None	None	G5TH	SH	
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	IICOL48011	Threatened	None	G3T2	S2	
<i>Elanus leucurus</i> white-tailed kite	ABNKC06010	None	None	G5	S3	FP
<i>Emys marmorata</i> western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
<i>Falco columbarius</i> merlin	ABNKD06030	None	None	G5	S3	WL
<i>Great Valley Mixed Riparian Forest</i> Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
<i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i> woolly rose-mallow	PDMAL0H0R3	None	None	G4	S2.2	1B.2



Selected Elements by Scientific Name
California Department of Fish and Game
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFG SSC or FP
<i>Lasionycteris noctivagans</i> silver-haired bat	AMACC02010	None	None	G5	S3S4	
<i>Lasiurus blossevillii</i> western red bat	AMACC05060	None	None	G5	S3?	SSC
<i>Lasiurus cinereus</i> hoary bat	AMACC05030	None	None	G5	S4?	
<i>Lepidium latipes var. heckardii</i> Heckard's pepper-grass	PDBRA1M0K1	None	None	G4T1	S1.2	1B.2
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	ICBRA10010	Endangered	None	G3	S2S3	
<i>Linderiella occidentalis</i> California linderiella	ICBRA06010	None	None	G3	S2S3	
<i>Myrmosula pacifica</i> Antioch multilid wasp	IIHYM15010	None	None	GH	SH	
<i>Navarretia leucocephala ssp. bakeri</i> Baker's navarretia	PDPLM0C0E1	None	None	G4T2	S2	1B.1
<i>Nycticorax nycticorax</i> black-crowned night heron	ABNGA11010	None	None	G5	S3	
<i>Plegadis chihi</i> white-faced ibis	ABNGE02020	None	None	G5	S1	WL
<i>Pogonichthys macrolepidotus</i> Sacramento splittail	AFCJB34020	None	None	G2	S2	SSC
<i>Riparia riparia</i> bank swallow	ABPAU08010	None	Threatened	G5	S2S3	
<i>Taxidea taxus</i> American badger	AMAJF04010	None	None	G5	S4	SSC
<i>Thamnophis gigas</i> giant garter snake	ARADB36150	Threatened	Threatened	G2G3	S2S3	
<i>Trifolium hydrophilum</i> saline clover	PDFAB400R5	None	None	G2	S2	1B.2
Valley Oak Woodland Valley Oak Woodland	CTT71130CA	None	None	G3	S2.1	

Record Count: 37

These buttons will not appear on your list.

Revise Selection

Print this page

Print species list before going on to letter.

Make Official Letter

U.S. Fish & Wildlife Service

Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in
or may be Affected by Projects in the Counties and/or
U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 120426030702

Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates

- *Branchinecta lynchi*
 - vernal pool fairy shrimp (T)
- *Desmocerus californicus dimorphus*
 - valley elderberry longhorn beetle (T)
- *Lepidurus packardii*
 - vernal pool tadpole shrimp (E)

Fish

- *Hypomesus transpacificus*
 - delta smelt (T)
- *Oncorhynchus mykiss*
 - Central Valley steelhead (T) (NMFS)
- *Oncorhynchus tshawytscha*
 - Central Valley spring-run chinook salmon (T) (NMFS)
 - winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

- *Ambystoma californiense*
 - California tiger salamander, central population (T)
- *Rana draytonii*
 - California red-legged frog (T)

Reptiles

- *Thamnophis gigas*
 - giant garter snake (T)

Quads Containing Listed, Proposed or Candidate Species:

WOODLAND (514A)

County Lists

No county species lists requested.

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List**How We Make Species Lists**

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, or may be affected by projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online [Inventory of Rare and Endangered Plants](#).

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

See our [Protocol](#) and [Recovery Permits](#) pages.

For plant surveys, we recommend using the [Guidelines for Conducting and Reporting Botanical Inventories](#). The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal [consultation](#) with the Service.
- During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.
- Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our [Map Room](#) page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. [More info](#)

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 25, 2012.

Appendix C

Cultural Resources

VELOCITY ISLAND PARK PROJECT

Phase I Cultural Resources Study

Prepared for:

City of Woodland
300 First Street
Woodland, CA 95695

May 2012

Prepared by:

ESA
2600 Capitol Ave, Suite 200
Sacramento, CA 95816



Author:

Brian S. Marks, Ph.D., R.P.A.

Project Site Location:

U.S.G.S. Quadrangle: Grays Bend
Township 10 North, Range 2 East, Section 26
Acres: Approx. 15
Keywords: Woodland, Dubach Park,

VELOCITY ISLAND PROJECT, WOODLAND, YOLO COUNTY, CALIFORNIA

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Brian S. Marks, Ph.D., R.P.A.



Project Site Location:

U.S.G.S. Quadrangle: Woodland
Township 10 North, Range 2 East, Section 20
Acres: Approx. 15
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Los Angeles

Oakland

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Palm Springs

Petaluma

Portland

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120269

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VELOCITY ISLAND PARK PROJECT

Phase I, Cultural Resources Study

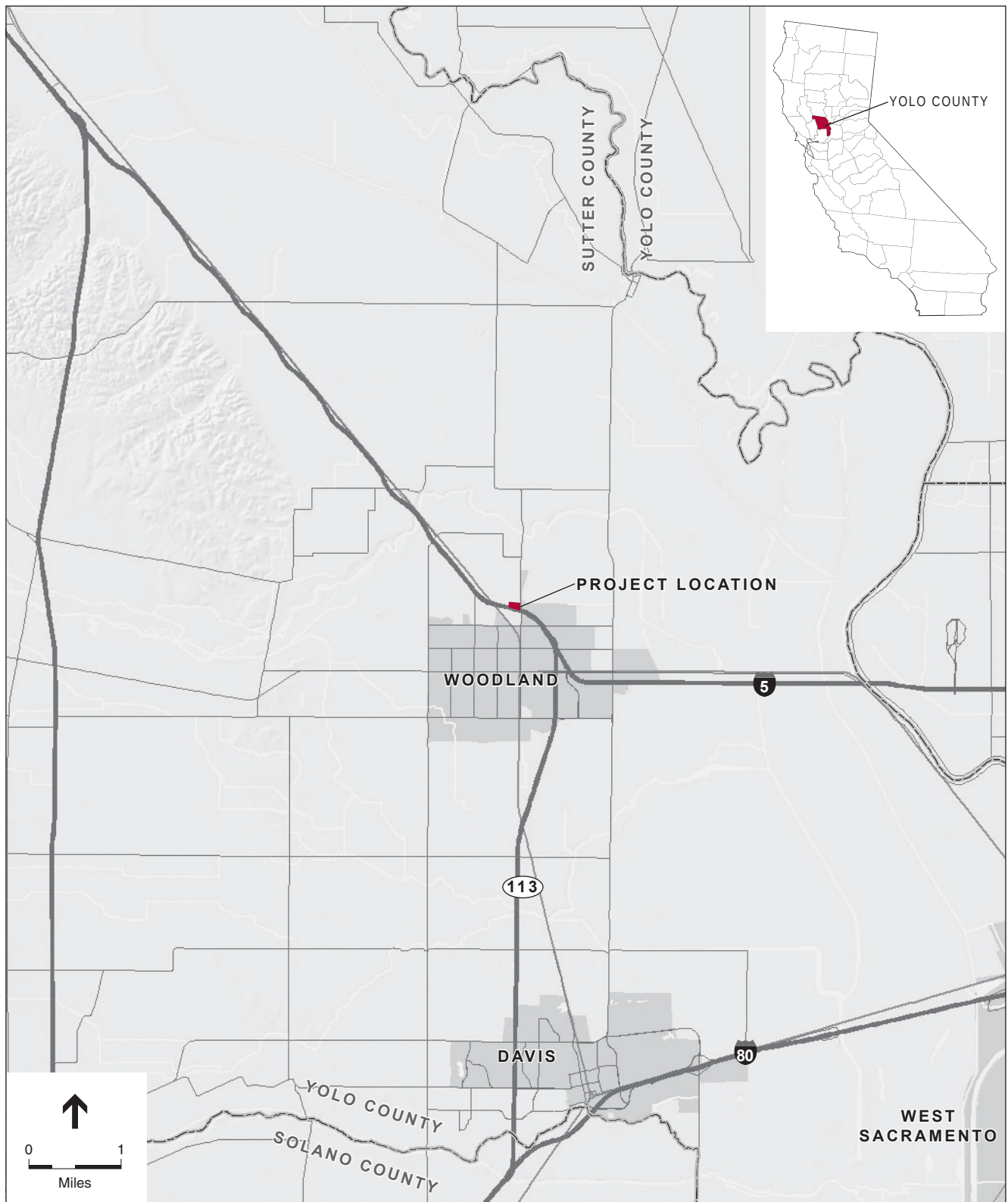
Introduction

ESA is preparing an Initial Study/Mitigated Negative Declaration (IS/MND) for the Velocity Island Project (Project). The City of Woodland (City), as the Lead Agency pursuant to the California Environmental Quality Act (CEQA), is proposing to convert the approximately 15-acre former sports complex into a cable wakeboarding park.

The Project parcel is in the eastern portion of the City in Yolo County, California in the southwest quarter of the southeast quarter of Section 20 in Township 10 North, Range 2 East on the USGS Woodland 7.5 minute topographic quadrangle (**Figure 1**). The Project area is an approximately 15-acre abandoned former sports complex named Dubach Park located in the northwest corner of the intersection of Highway 113 (Hwy 113) and Interstate 5 (I-5) (**Figure 2**). The Project will convert the former sports complex into a cable wakeboarding park. The Project plans included ground disturbing activity in the form of the creation of a pond, a 4-5 foot granitic path around the pond, parking lots, and several buildings.

ESA contacted the Native American Heritage Commission (NAHC) and requested they provide information from their Sacred Land File (SLF) and a list of Native Americans that to contact. the search failed to indicate the presence of any known sacred Native American sites within the vicinity of the Project. ESA sent letters to Native American organizations included on the NAHC list. To date, no responses have been received.

Based on results of archival review including local environmental information and archaeological, historical, and ethnographic data, it was anticipated that on site field investigation of the Project area had a low likelihood of encountering cultural items, features, or sites. The field survey found the Project area to be 10 to 20 feet lower than the surrounding ground surface, and did not find any cultural resources within the area.



SOURCE: ESRI, 2006; and ESA, 2012

Velocity Island Park Project . 120269

Figure 1
Regional Location



SOURCE: Bing Maps, 2009; ESRI, 2009; and ESA, 2012

Velocity Island Park Project . 120269

Figure 2
Project Site

Regulatory Framework

Several laws and regulations require federal, state, and local agencies to consider the effects a Project may have on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g., State Historic Preservation Office [SHPO] and the Advisory Council on Historic Preservation). CEQA; and the California Register of Historical Resources (CRHR), Public Resources Code (PRC) 5024, are the primary State laws governing and implementing preservation of cultural resources of national, State, regional, and local significance.

State

California Environmental Quality Act

CEQA (codified at Public Resources Code sec 21000 et seq.) is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a project would have a significant effect on historical or unique archaeological resources. The Guidelines recognize that a historical resource includes: (1) a resource in the CRHR; (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of Section 21084.1 of CEQA and Section 15064.5 of the *CEQA Guidelines* apply. If an archaeological site does not meet the criteria for a historical resource contained in the *CEQA Guidelines*, then the site may be treated in accordance with the provisions of CEQA Section 21083, which is a unique archaeological resource. As defined in Section 21083.2 of CEQA a "unique" archaeological resource is an archaeological artifact, object, or site, about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

CEQA Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the Project on those resources shall not be considered a significant effect on the environment (*CEQA Guidelines* Section 15064.5(c)(4)).

The State implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The SHPO is an appointed official who implements historic preservation programs within the State's jurisdictions.

California Register of Historical Resources

The CRHR is "an authoritative listing and guide to be used by State and local agencies, private groups, and citizens in identifying the existing historical resources of the State and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change" (PRC § 5024.1[a]). The criteria for eligibility for the CRHR are based upon NRHP criteria (PRC § 5024.1[b]). Certain resources are determined by the statute to be automatically included in the CRHR, including California properties formally determined eligible for, or listed in, the NRHP.

To be eligible for the CRHR, a prehistoric or historic-period property must be significant at the local, State, and/or federal level under one or more of the following four criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the CRHR must meet one of the criteria of significance described above, and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the NRHP, but it may still be eligible for listing in the CRHR.

Additionally, the CRHR consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The CRHR automatically includes the following:

1. California properties listed on the NRHP and those formally Determined Eligible for the NRHP;
2. California Registered Historical Landmarks from No. 770 onward; and,
3. Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the CRHR.

Other resources that may be nominated to the CRHR include:

1. Historic resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the NRHP, the CRHR, and/or a local jurisdiction register);
2. Individual historic resources;
3. Historic resources contributing to historic districts; and,
4. Historic resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

Local

Yolo County General Plan

The Yolo County General Plan identifies goals, policies, and implementation measures related to the protection and preservation of cultural resources (Yolo County, 2009). These goals and policies focus on the preservation and protection of cultural resources (Goal CO-4) by encouraging continuity of historic use and/or architectural authenticity (Policy CO-4.4), avoidance and/or mitigation of effects on Native American archaeological and cultural resources (Policy CO-4.13), acknowledgement of local tribal heritage (Policy CO-4.11), and coordination with tribes that have cultural affiliation to the area (Policy CO-4.12).

City of Woodland General Plan

The City of Woodland General Plan identifies goals, policies, and implementation measures related to the protection and preservation of cultural resources (City of Woodland, 2002). Chapter 6 of their General Plan includes policies and implementation programs to achieve the goals below (From City of Woodland General Plan, 2002: Chap. 6:1-11)

- GOAL 6.A:** To preserve and maintain sites, structures, and landscapes that serve as significant, visible reminders of the city's social, architectural, and agricultural history.
- GOAL 6.B:** To combine historic preservation and economic development so as to encourage owners of historic properties to upgrade and preserve their properties in a manner that will conserve the integrity of such properties in the best possible condition.
- GOAL 6.C:** To preserve the character and livability of Woodland's neighborhoods and strengthen civic pride through neighborhood conservation.
- GOAL 6.D:** To integrate historic preservation more fully into Woodland's comprehensive planning process.
- GOAL 6.E:** To promote community awareness and appreciation of Woodland's history and architecture.
- GOAL 6.F:** To protect Woodland's Native American heritage.

Archival Research

Native American Contact

ESA contacted the Native American Heritage Commission (NAHC) on April 25, 2012 and requested they provide information on locations of importance to Native Americans from their Sacred Land File (SLF) and a list of Native Americans that to contact. The NAHC responded on May 3, 2012 with the SLF search results and contact list. The results of the search failed to indicate the presence of any known sacred Native American sites within the vicinity of the Project. The NAHC provided a list of seven Native American organizations to contact concerning locations of importance to Native Americans in the Project area. ESA sent a letter on May 3, 2012 to each organization on the NAHC list, providing information about the proposed Project and requesting information on locations of importance to Native Americans (Appendix A). To date, no responses have been received.

Previous Studies

ESA staff conducted a records search for this Project on April 30, 2012 at the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) (NWIC File # 11-1192) at Sonoma State University. Staff consulted records of previous cultural resources investigations and previously recorded cultural resources.

They accessed records by utilizing the Woodland USGS 7.5-minute quadrangle map. The study included a ¼ mile buffer around the Project area. The archival research results presented below include cultural resources and investigations located within ¼ mile of the Project area. In addition to Information Center maps and site record forms, other sources that were reviewed included historic maps, the Directory of Properties in the Historic Property Data File for Yolo County, the National Register of Historic Places, the California Register of Historic Resources, the *California Inventory of Historic Resources* (1976), the *California Historical Landmarks* (1996), and the *California Points of Historical Interest* (1992).

Previous Cultural Resources Investigations

The records search documented all previous cultural resources investigations and cultural resources located within the ¼ mile records search study area. The records search indicated that one previous cultural resources investigation occurred within the records search study area by Far Western Anthropological Group in 2008 (Survey Number 35042) along Hwy 113. This survey occurred within 60 feet of the project area and yielded negative results within the record search study area.

Previously Recorded Cultural Resources

While there are no previously recorded cultural resources in the study area, the nearest historic-period resource is an unrecorded segment of the Southern Pacific Railroad (P-57-000400) just outside the Project area to the east, and a grove of historic oak trees (P-57-000132) is ¼ mile to

the north of the Project area. The nearest recorded prehistoric archaeological resources are more than three miles away to the north-northeast. These resources are two rises containing burnt material (YOL-40 and YOL-41) near Grays Bend, an abandoned segment of the Sacramento River.

Additional Archival Research

ESA Staff reviewed aerial photographs for multiple years between 1993 and 2010; topographic maps from 1907 to the most current (USGS Woodland 7.5 and 15-minute topographic maps); and General Land Office maps from 1858 and determined that the Project area was agricultural fields at least until the construction of I-5 in the late 1960s. By 1993, the Project area had become a borrow pit, turning the area into a large bowl and the City had converted the area into Dubach Park, a baseball/softball park. It is likely that the construction of I-5 used material from the Project area to construct the Hwy 113 overpass, changing the Project area into a borrow pit. The park operated three fields until 2008, when the City demolished the fields and related structures, except for the one storage shed in the northern portion of the property.

Setting

Natural Setting

The Project area is within flat bottomland of the Sacramento Valley. Elevations in this area are generally less than 100 feet above mean sea level (amsl), though no portion of the Project area is more than 56 feet amsl, with the majority being approximately 40 feet amsl. There is little resemblance between today's environmental context and that of 150 years ago as a large proportion of the land has either been leveled and intensively farmed, dredged and channelized (creeks and sloughs), or developed (e.g. Cities of Woodland and Davis, farm complexes, excavated drainage areas, and other features). As a result, most of the native vegetation, riparian plant and animal associations, and well as avian and land fauna have been displaced. Prior to Euro-American settlement, natural resources of this area were abundant and supported stable and very substantial Native American populations. These populations were concentrated along waterways and in association with natural levees and other elevated lands. While some occupations occurred on the flood plain, these were likely seasonal habitation sites or used sporadically during resource gathering (Bennyhoff 1977)

The geology within the Project area consists of Holocene Alluvium. Soil within the Project area consists of Holocene Great Valley delta fan deposits and basin deposits, transported via the Sacramento River, Putah Creek, and other unnamed (and rerouted) drainages. According to Meyer and Rosenthal (2008) the Project area is in an area with a high potential for containing buried Holocene deposits, including archaeological deposits.

The climate of the Sacramento Valley is Mediterranean, with hot, dry summers and cool, moist winters. Summer daytime temperatures often exceed 100 degrees F, with low humidity and cooler nights. Winter temperatures infrequently fall below freezing. Yearly rainfall is between 15 and 25 inches, with the majority of rain falling during the winter months. The valley receives ample water supply due to high mountains which trap moisture that finds its way down to the valley through numerous creeks and streams. The Sacramento River is the major river running north/south through

the valley. The Sacramento gathers the snow melt out of the Sierras via tributaries, such as the Yuba, Feather, and American rivers, and flows to the Sacramento/San Joaquin Delta and eventually into Sacramento Bay. Other tributaries include the east/west trending Cache and Putah creeks.

Prior to flood control projects the area east of the Sacramento River was an alluvial plain that consisted of frequently flooded wetlands. The last 100 years of agriculture has all but eradicated the native vegetation within the Project area. Fauna associated with this area typically includes coyote, bobcat, deer, ground squirrel, red-tailed hawk, peregrine falcon, ducks, jackrabbit, cottontail rabbit, gopher, and various rodents. Additionally, Yolo County is along the Pacific Flyway, a route utilized by migratory birds from Alaska to Patagonia.

Prehistoric Setting

Archaeologists initially developed a three-part cultural chronological sequence, called the Central California Taxonomic System (CCTS), to explain local and regional cultural change in prehistoric central California from about 4,500 years ago to the time of European contact (Beardsley, 1948, 1954). In 1969, several researchers who met at U.C. Davis worked out several substantive taxonomic problems that had developed with the CCTS.

The Windmill Pattern was the earliest comprehensive view of the region, at around the terminal-Paleoindian Period to Lower Archaic (~6000 B.C. to ~3000 B.C.) (Beardsley, 1954; Heizer & Fenenga, 1939). This cultural horizon reflected a people well adapted to riverine and marshland environments. Scholars have maintained that these Penutian speakers came from the Columbia Plateau or western Great Basin and settled in the bountiful Delta region where they gave rise to many of the Bay Area cultures that survived up to historic times, such as the Costanoan, Miwok, Yokut, and Wintun (Fagan, 1995).

The Windmill economy was diffuse in breadth, a common trait among peoples during this time, whereby the people would make use of a wide range of resources so as to reduce risk in times of resource shortfall, such as those caused by climatic shifts. The artifactual evidence of the Windmill tradition suggests a wide range of specialized technology suited to the diffuse nature of their diet. These artifacts included large projectile points (spear or dart tips), baked-clay net sinkers, bone fish hooks, and spears. Mortars and milling slabs are predominant during this time period, as well as charmstones and abalone shell and olive snail ornaments and beads (Beardsley 1948; Heizer, 1949; Heizer and Fenenga 1939).

The subsequent Berkeley Pattern or Cosumnes culture (~2000 B.C. to A.D. 300), comparable to the emerging Archaic Period in California prehistory (3000 B.C. to A.D. 1000), reflects a change in socioeconomic complexity and settlement patterns. Many of the settlements of this period, given their size and intensity of use, demonstrated that populations were denser and more sedentary, yet continued to exploit a diverse resource base—from woodland to grassland and marshland, to bayshore resources throughout the San Francisco Bay Area (Bickel, 1978; King, 1974). Moreover, the Archaic Period was indicative of increasing sociopolitical complexity and the radiation of peoples into new ecological niches (Chartkoff & Chartkoff, 1984).

Out of the Cosumnes Tradition came the Hotchkiss Tradition (or “Late Horizon”) by the Emergent Period, or about 500 A.D. The peoples of the Hotchkiss Tradition were likely flourishing in the Stockton and Delta region up to contact with Europeans. Indeed, the materials recovered related to the Hotchkiss Tradition—mortars and pestles, bone awls, bow and arrow—were in many ways similar to those identified at Buena Vista Lake—further indicating the trade relationships that were maintained between the Delta inhabitants and the southern San Joaquin Valley peoples (Rosenthal, et. al 2008).

Ethnographic Setting

Patwin Indians historically inhabited the Project area. Patwin territory was an extensive region within north-central California and included the lower portion of the west side of the Sacramento Valley west of the Sacramento River from about the location of the town of Princeton in the north to Benicia in the south (Kroeber, 1925). The Patwin were bounded to the north, northeast, and east by other Penutian-speaking peoples (the Nomlaki, Wintu, and Maidu, respectively), and to the west by the Pomo and other coastal groups. Within this large territory, there are three Patwin groups: the River, Hill, and Southern Patwin groups. Although in actuality a more complex set of linguistic and cultural differences existed than indicated by these three geographic divisions. Near the Project area, the Patwin are believed to have reached the Carquinez/Suisun area by about 1,500 BP (Whistler, 1977; McCarthy, 1985).

As with most of the hunting-gathering groups of California, the “tribelet” represented the basic social and political unit. Typically, a triblet chief would reside in a major village where ceremonial events were also typically held. The status of such individuals was patrilineally inherited among the Patwin, although village elders had considerable power in determining who actually succeeded to particular positions. The chief’s main responsibilities involved administration of ceremonial and economic activities. Such individuals decided when and where various fishing, hunting or gathering expeditions would occur, and similarly made critical decisions concerning the more elaborate ceremonial activities. He also played a central role in resolving conflicts within the community or during wars which occasionally broke out with neighboring groups. Apparently, a Patwin chief had more authority than his counterparts among many of the other central California groups (McKern, 1922; Kroeber, 1925).

The onslaught of Euro-American culture negatively impacted Patwin culture and peoples. By 1871–72, when Stephen Powers surveyed the state gathering ethnographic information, the Patwin culture appeared to him to be virtually extinct.

Euro-American influences within Patwin territory increased dramatically as ranching and farming became popular in the area. Euro-American settlers, especially within the Sacramento Valley, quickly made inroads into lands occupied by Native Americans. Conflicts grew in number, and Patwin populations continued to decline from military skirmishes, vigilante raids, and other causes. In 1972, the Bureau of Indian Affairs listed only 11 remaining Patwin descendants (Johnson, 1978:352). Despite the massive decline in population, the Patwin still reside in Solano County and many intermarried with the Wintu (Johnson, 1978:352).

Historical Setting

Regional

Although the Spanish had made forays into the Central Valley since about 1769, it was not until 1808 that Capitán Gabriel Moraga explored, and named, the Sacramento area. Other than gathering Indians for the missions, or chasing down those that had taken horses and cattle, the Spanish took little interest in the area. Occasional trappers, such as Jedediah Smith, made infrequent forays through the area.

In 1839, John A. Sutter arrived at the confluence of the American and Sacramento rivers, with the expectation of a land grant from the Mexican government. He built a fort, originally called New Helvetia, later known as Sutter's Fort. In 1841, Sutter received his 97 square mile land grant. He developed fisheries, a flourmill, and a lumber mill, and soon attracted other businesses. In 1848, gold appeared in a flume at Sutter's lumber mill near the Nisenan village of "Culloma" (later known as Coloma). Soon the Sacramento Valley was teeming with miners on their way to the gold fields.

Aside from John Sutter, the Mexican government made several other land grants in the Sacramento Area during the 1830s and 1840s. Cattle ranching was the mainstay of California's economy during Mexican rule, specifically the hide and tallow trade. During this time the Mexican government issued several land grants in this portion of the Central Valley. Mexico issued these grants to both Mexican citizens as well as some non-citizens. Mexico used the grants to encourage settlement in the largely unsettled lands of Alta California, hoping to secure their hold on land occupied by Russia, Great Britain, and the United States.

During the American Period, land use diversified during this time, and while mining became an important activity along the American River, ranching remained the primary land use away from the river. In general, the Sacramento Valley provided cattle ranchers with prime ranch land that contained wide open grasslands and abundant water.

Settlers soon began occupying these lands, acquiring land through several means. The earliest settlers used the Land Law of 1820, which allowed them to purchase up to 80 acres of land from the federal government at the price of \$1.25 an acre. The Homestead Act of 1862 enabled anyone to enter a homestead claim for a quarter-section of land (160 acres). Once the applicant built a dwelling on the land, dug a well, plowed a minimum of 10 acres, fenced a portion of the land, and lived there for five years, the claimant received a patent (federal deed). As an alternative to plowing 10 acres, the applicant could complete the homestead requirements by planting and successfully cultivating 10 acres of timber. As Congress had decided that the disposition of public land would not generate revenue for the federal government, the only costs borne by the applicant were those associated with establishing a homestead, plus a \$14 patent filing fee (Sandoz 1963:47).

The lenient terms of the Homestead Act meant that the landless poor, such as recent immigrants and day laborers, could be elevated to the status of landowner. These terms, including the absence of any criteria for qualification, also meant that people who were not knowledgeable about farming practices could get 160 acres of land just as easily as someone with extensive farming experience. This was often problematic with regard to the success of a homestead, especially when coupled

with arid conditions. Despite these basic problems, during the years 1863 to 1900, more than 600,000 farmers received clear title under the act to lands totaling 80 million acres (Hibbard 1965).

The Stock Raising Homestead Act of 1916 was another Federal program used for the transfer of Federal land into private hands. This allowed for the acquisition of land deemed unfit for any other purpose than stock grazing and the growing of forage. Private individuals received more than 70 million acres of land this way (Earthworks 2007).

Early homestead laws steered settlers towards farming rather than ranching. Partly as a consequence of this, and due to market demands, many began to turn from open-range cattle ranching to farming. The Sacramento Valley, a natural grassland, lent itself well to dry-land grain farming, specifically wheat. Farmers were soon producing more wheat than California markets could absorb. The completion of the trans-continental railroad in 1869, which opened markets across the country, saved them from ruin. Wheat production soared, so that by 1889, 3.5 million acres of land in California were growing wheat. Subsequently, wheat production declined rapidly as a result of market saturation and poor management practices. By 1900, wheat production had dropped by 65%. Much of the land was depleted and left fallow (California Department of Transportation 2007:50).

Local History

Yolo County was one of the original counties when California entered the United States in 1850. During the Gold Rush, the migration influx did not enter Yolo County, as the Sacramento River was a difficult barrier to cross and there was little reason to cross the river. The Sacramento Valley remained relatively isolated and sparsely populated until the advent of the Gold Rush period. Sacramento's proximity to mining areas, and its accessibility to maritime traffic, quickly made the area quickly a trading and economic center. Commerce along the Sacramento River encouraged continued population growth, with many of the miners and farmers settling along the natural levees of the Sacramento River. The settlements recognized that the active flood plain deposited fertile soils in the lands nearest to the river, which supported bountiful crops and provided easy access to transportation corridors along the river itself (Hoover, et. al., 2002).

In 1851, John Morris built a store at the modern day corner of First and Clover streets in Woodland. Six years later, Frank S. Freeman purchased the store, along with 160 acres of land with the intent to establish a town that would be a large trading center for the local rich agricultural land. In 1861, Freeman became the Postmaster of the Woodland Post Office.

Following flooding in Washington (California-present day West Sacramento), Woodland became the county seat of Yolo County. By the end of the 1860s, railroads connected Woodland to Davisville (Davis) and Marysville. Woodland's population continued to grow and nearly tripled in the post-war era between 1950 and 1980. The economics of Woodland focused on the processing of agriculture products such as rice, sugar beets, and tomatoes. By 1970, I-5 and State Route 113 replaced the railroad lines as the main transportation arteries

Field Survey

Survey Methodology

ESA archaeologist, Brian S. Marks, Ph.D., performed a cultural resources survey of the Project area on May 9, 2012. The goal of the survey was to identify surface evidence of archaeological materials and historic built features. While the current ground surface is 10 to 20 feet below the surrounding area, Meyer and Rosenthal (2008) suggest the area has a high potential for buried cultural deposits. As such, Dr. Marks surveyed the property to determine if the removal of the upper ground could have revealed these deposits or removed them altogether.

Based on results of archival review including local environmental information and archaeological, historical, ethnographic data, and the history of disturbance within the Project area, it was anticipated that on-site field investigation of the Project area had a low likelihood of encountering cultural items, features, or sites. Dr. Marks surveyed the former sports complex using systematic survey transects spaced approximately 15 meters apart. He examined the surface for constituents of archaeological sites, such as artifacts, features, or culturally modified soil horizons.

Survey Findings

At the time of the survey, the Project area contained thistle, mustard weed, wild oat, fox tail, and other weeds for vegetation with trees along the periphery. The Project area is a large bowl, approximately 10-20 feet below the surrounding ground surface. A paved road from the northeast corner provides access into the bowl, and a fenced area containing a former maintenance shed is 5-10 feet higher than the rest of the bowl (**Figure 3**). The northern portion of the Project area contained many rocks, likely used as the base for parking lots and access roads. The infield areas and other dirt areas now contain foxtails and wild oat weeds, while the former grass (outfield) areas contain thistle and mustard weed (**Figure 4**).

Electrical conduit pipes for stadium lighting are still in the ground as are the lamp posts along the entrance way. The surface visibility within the bowl ranges from 10 to 100 percent, with the better visibility in the former infield and parking lot areas than in the former outfield areas. The slopes of the embankments had almost no visibility, while the access road around the top of the embankment ranged from 50 to 100 percent depending on the vegetation thickness. Dr. Marks did not observe any cultural material more than 50 years old. Furrows remain in the soil from the removal of parking lot, and disking activities.



Figure 3
The Project Area, Facing East



Figure 4
The Project Area, Facing Southwest

Conclusions and Recommendations

ESA contacted the Native American Heritage Commission (NAHC) and requested they provide information from their Sacred Land File (SLF) and a list of Native Americans that to contact. The search failed to indicate the presence of any known sacred Native American sites within the vicinity of the Project. ESA sent letters to Native American organizations included on the NAHC list. To date, no responses have been received.

Archival research, Native American scoping, and field survey for the Project did not identify any archaeological resources within the Project area. The nearest historic period - resource is the Southern Pacific Railroad, just outside the Project area to the east. While the area has a high potential for buried resources (Meyer and Rosenthal 2008), the removal of material from the bowl likely removed any archaeological material as well.

Although no prehistoric archaeological sites are within ½-mile of the Project area, the nature of the Project nonetheless would involve ground-disturbing activities that could extend into undisturbed soil. It is possible that such actions could unearth, expose, or disturb subsurface archaeological, historical, or Native American resources that were not observable on the surface. In the event that previously unidentified archaeological or Native American resources are uncovered during Project implementation, all work should cease in the vicinity of the find until a qualified archaeologist evaluates the find. If construction activity unexpectedly encounters human remains, workers should follow Health and Safety Code Section 7050.5. Aside from implementing “cease work” measures in the event archaeological resources or human remains are encountered during Project construction, no further cultural resources work is recommended.

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APPENDIX A

Personnel Qualifications



BRIAN MARKS, PHD, RPA

Senior Associate I

Dr. Marks has worked on terrestrial and underwater archaeology projects in California, Nevada, Washington, Florida, and Georgia since 1997. His duties include the identification and determination of National Register of Historic Places (NRHP) eligibility of archaeological sites based type, age, composition, source of artifacts recovered at all levels of field investigation from reconnaissance to Phase III mitigation and data recovery for terrestrial and underwater projects in California, Nevada, Washington, Florida and Georgia. He has surveyed, mapped, excavated, interpreted and analyzed artifacts, as well as published reports on a variety of diverse archaeological sites. Dr. Marks has experience assessing and evaluating sites, gathering and interpreting remote sensing data, working within GIS, and has overseen numerous terrestrial and underwater projects and tasks. He has an understanding of the pertinent laws and procedures necessary for compliance with various Federal and State regulatory agencies.

Education

Ph.D., Anthropology, Florida State University

M.S., Anthropology, Florida State University

B.S., Underwater Archaeology, University of California at Davis

15 Years Experience

Registrations

Register of Professional Archaeologists (#15173)

Professional Affiliations

Society for American Archaeology

Society for California Archaeology

Register of Professional Archaeologists since 2004

Merit Badge Counselor for Boy Scouts - Archaeology, Oceanography, and Astronomy

Certifications

Commercial Class B drivers license with passenger and air brake endorsements

Boat US certification in small boat operation

OSHA Construction Site Safety Certified

AAUS Science Diver rated to 90 feet

NAUI Master Scuba Diver

Relevant Experience

D209081.00 DWR North Bay Aqueduct Alternate Intake Project EIR Lead

Archaeologist. Dr. Marks lead a crew of archaeologists in the survey along a proposed pipeline easement from the Sacramento River to Fairfield, CA. Dr. Marks insured the project meets Section 106 guidelines as well as CEQA regulations; wrote the technical report; and prepared the EIR

D211229.00 Comstock Mining BLM Baseline Studies and Permitting

Archaeologist. Dr. Marks assisted in the field survey of mining related activities in western Nevada, assisted with report writing, and handled all data management and GIS mapping for the project.

D211146.00 Patterson Fish Screen Project Archaeological Services.

Archaeologist. Dr. Marks assisted in mitigation measures outlined in the IS/MND/EA following the discovery of sensitive cultural resources during the construction of a fish screen along the San Joaquin River. Dr. Marks also assisted with GIS mapping and report writing.

D207221.00 Sacramento County Airport System On-Call Natural Resources Advisory & Consulting Services. Lead Archaeologist.

Dr. Marks performed monitoring/surveying of field maintenance disking activities at the Sacramento International Airport, and completed surveys for expansion plans.

D205142.00 South Bay Aqueduct Maintenance and Rehabilitation Project

Archaeologist. The excavation for a temporary fiber optics trench impacted a historic-period trash deposit. Dr. Marks assisted in monitoring the excavation of the trench, and backfill. Dr. Marks also lead the examination of the material within the spoil pile. In the technical report prepared by Dr. Marks, he determined that the refuse pile was an early-mid-20th century and was not significant.

D211480.00 Turlock Irrigation District Tunnel #2 Open Cut Project - Cultural Resources Report. *Lead Archaeologist.* The Turlock Irrigation District proposed to open cut the #2 tunnel along the Turlock Canal due to weakening within the tunnel's ceiling. Dr. Marks surveyed the excavation corridor and spoil pile areas; utilized GIS mapping, and wrote the technical report.

D207511.10 La Grange Rd & Dry Creek Bridge Replacement, Merced County. *Lead Archaeologist.* The County of Merced seeks to replace the La Grange Road Bridge over Dry Creek. Dr. Marks conducted the field survey and found several groups of bedrock mortars directly beneath the bridge. Dr. Marks prepared a Caltrans Archaeological Survey Report and recommended monitoring during the removal of the bridge.

D120029.00 El Dorado UHSD Bio/Cultural Res Study. *Lead Archaeologist.* El Dorado Union High School District proposes a sixth high school south of El Dorado Hills. Dr. Marks surveyed the project area and prepared a technical report update to a 2001 EIR. Dr. Marks relocated the two previously recorded sites and located two more sites and two isolated finds. Dr. Marks recommended avoiding all resources until they can undergo evaluation.

D210540.00 On-Call Environmental Support Services - San Joaquin County Public Works-Mormon Slough. *Lead Archaeologist.* The San Joaquin County Public Works Department proposes to widen the channel downstream of the Bellota Fish Weir. Dr. Marks found lithic debris in a gravel bar within the river channel and in the report written in support of the USACOE 404 permit, recommended that the material came from a washed out site up stream.

D211607.00 Sunnydale Sewer Tunnel Project Archaeological Investigations. *Technical Analyst.* Excavation of a sewer tunnel revealed a shipwreck. Dr. Marks utilized GIS and historic maps to recreate the coastline south of Candlestick Point to get a better understanding of when the cove was filled in.

D210676.00 RD2035 Intake/ Woodland-Davis Water Supply Project EIR, Water Right Acquisition Support and Permitting, Davis and Woodland, Yolo County CA. *Lead Archaeologist.* Dr. Marks conducted a cultural resources survey of the proposed Davis & Woodland Water Supply and was responsible for insuring the project meets Section 106 guidelines as well as CEQA regulations. As no resources were encountered during the survey, there will be no negative effect from this project.

D210586.00 VA Outpatient Clinic and Community Living Center Environmental Consulting Services, Stockton, CA. *Archaeologist.* Dr. Marks conducted a cultural resources study on two potential sites for a VA outpatient clinic and community living center. He surveyed the proposed sites and wrote the technical reports.

D210541.00 Union Pacific Railroad Modernization Project, San Joaquin County, CA *Lead Archaeologist.* Dr. Marks conducted a cultural resources study of the proposed expansion of the UP Intermodal Facility in Lathrop. and was responsible for insuring the project meets CEQA guidelines, surveying the project area, and he wrote the cultural resources section of the EIR.

D210324 Cadiz Groundwater Project, San Bernardino County, CA.

Archaeologist. Dr. Marks prepared the DPR forms and associated maps using GIS for the 28 newly recorded archaeological sites and eight updated archaeological sites.

D209259.00 Mather Specific Plan EIS, Sacramento, CA. Lead Archaeologist.

Dr. Marks conducted a cultural resources study of the former Mather Air Force Base and was responsible for insuring the project meets Section 106 guidelines, surveying the project area, and writing the cultural resources section of the EIS. The survey included the airport, an aircraft hanger, a former tarmac, a radar station, and two munitions storage areas. As most of the changes in land use will occur away from the actual airport used for training in WWI and WWII and as a staging point during all wars in the Pacific Theater, there will be no negative effect on the airport.

Prior to Joining ESA...

Eureka Lock Training Site, Department of Military Affairs, Florida Army National Guard, Eureka, FL. *Project Supervisor and Co-Principal Investigator.*

Dr. Marks served as the project supervisor and co-principal investigator to survey an area around and including the Eureka Lock and Dam in Eureka, Florida along the Oklawaha River. The lock and dam complex was part of the ill-fated Cross-Florida Barge Canal and marks the terminus of that system in Eastern Florida. Dr. Marks lead a team that performed background research of the project area and conducted a Phase I Cultural Resources Assessment Survey which included pedestrian inspection and shovel tests placed at regular intervals. During consultation with the State Historic Preservation Officer (SHPO), it was determined that the structures surrounding the lock gates and the complex as a whole, while not 50 years old, would be eligible for the NRHP and were recorded with Florida Master Site File. Dr. Marks recorded these elements and prepared a report for the SHPO as part of National Environmental Policy Act (NEPA) Section 106 compliance.

Little Hazel Creek Mitigation Creek, Restoration Systems, LLC, Habersham County, GA. *Cultural Resource Task Leader.* Dr. Marks was a member of a multi-disciplinary team involved with the restoration of a portion of Little Hazel Creek with Habersham County, Georgia. He was responsible for the cultural resources survey and conducted background research at the Georgia Master Site File (GMSF) lead the field crew that performed regular interval shovel testing along the proposed alignment and pedestrian inspection of the Area of Potential Effect. Dr. Marks prepared a cultural resources survey report for the United States Army Corps of Engineers' Office in Savannah, Georgia as part of NEPA Section 106 compliance.

Bear Creek Mitigation Bank, Mitigation Resources, Bay and Calhoun Counties, FL. *Project Supervisor and Co-Principal Investigator.* Dr. Marks served as project supervisor and co-principal investigator for the Bear Creek Mitigation Bank in the Panhandle area of Florida. The project was proposing to restore the natural drainage of the property and create wetlands within an area of silviculture. Dr. Marks performed the background research of the area at the Florida Master Site File (FMSF) and lead a field crew in the cultural resources survey. Shovel tests were placed within areas of proposed impact and areas exhibiting a high probability or containing cultural resources, and the area was subjected to pedestrian inspection. Dr. Marks prepared a cultural resources survey report for the Florida SHPO as part of Section 273 of the Florida Statutes and NEPA Section 106.

Heather Island Mitigation Bank, Mitigation Resources, Marion County, FL. *Project Supervisor and Co-Principal Investigator.* Dr. Marks served as project supervisor and co-principal investigator for the Heather Island Mitigation Bank in Central Florida. The project was proposing to restore the natural drainage of the property and create wetlands within an area of silviculture. Dr. Marks performed the background research of the area at the FMSF and led a field crew in the cultural resources survey. Shovel tests were placed within areas of proposed impact and areas exhibiting a high probability or containing cultural resources, and the area was subjected to pedestrian inspection. The survey revealed several resources including a section of the Marjorie Carr Cross Florida Greenway, (originally the proposed route

of the Cross Florida Barge Canal), several lithic scatters and a historic roadway. Dr. Marks documented these resources for the FMSF and prepared a cultural resources survey report for the Florida SHPO as part of Section 273 of the Florida Statutes and NEPA Section 106.

Natural Bridge Battlefield, Florida State Parks, Leon County, FL. *Project Supervisor and Lead Archaeologist.* Dr. Marks was project supervisor and lead archaeologist for the cultural resources investigation of the Natural Bridge Battlefield Historic State Park in southern Leon County. The State of Florida purchased 50+ acres of land to expand the existing Natural Bridge Battlefield State Park, and required a cultural resources inventory of the property that contained a large portion of the original battlefield. In addition to background research, Dr. Marks lead a field crew in regular interval shovel testing, pedestrian inspection, and metal detection of the entire park. In addition, Dr. Marks assisted the park rangers in utilizing and organizing a force of over two hundred volunteers to assist archaeological investigation over a two day period. Following the survey, Dr. Marks assisted in lab analysis, artifact identification, and the preparation of the report for SHPO as part of Section 273 of the Florida Statutes and NEPA Section 106.

AIRPORTS

Eagle Aviation Hangers at Craig Municipal Airfield, Jacksonville, FL. *Lead Archaeologist.* Dr. Marks served as lead archaeologist for a survey within the airport grounds for a new industrial warehouse to comply with state and county permitting requirements. While the airport was a historic resource, as this former WWII training field was the home of the Blue Angels first airshow in 1946, the Area of Potential Effects for the warehouse would not impact any significant portions of the airport, nor would it detract from the overall setting or function of the airport.

Shoremaster at Kay Larkin Airport, Palatka, FL. *Lead Archaeologist.* Dr. Marks conducted a survey within the airport grounds for a new commercial building to comply with local and state permitting requirements. While the building was constructed along a former runway utilized in WWII for training, that runway had been decommissioned and now supported several commercial buildings. The new building would be part of this complex and would not detract further from the airport's setting.

T-Hanger and Apron Lighting at New Smyrna Beach Airport. New Smyrna Beach, FL. *Lead Archaeologist.* Dr. Marks conducted two separate surveys within the grounds of the New Smyrna Beach Airport. Both projects involved construction and/or expansion of existing airport buildings (T-Hanger) or facilities (Apron Lighting), which would not detract from the setting or feeling of this WWII Naval Aviation training facility. No resources were found during testing and there would be no impacts to the nearby Nationally Registered Turnbull Canal.

Cell Towers at St. Augustine, Lake City, and Flagler County Airports, FL. *Lead Archaeologist.* As lead archaeologist, Dr. Marks conducted three separate surveys involving the placement of cell/communication towers within the airport property of the three airports. Both the St. Augustine and Lake City Airports were used as WWII training facilities, while the Flagler County Airport was built after the war. The

towers were built outside the fence of the main airport, but on airport property. The towers would not affect air space and would not detract from the setting of the airports.

Descriptions of Prior Responsibilities

Environmental Services, Inc., St. Augustine, Florida, Archaeologist. Dr. Marks' responsibilities have included the identification and determination of NRHP eligibility of archaeological sites based type, age, composition, source of artifacts recovered at all levels of field investigation from reconnaissance to Phase III mitigation and data recovery for terrestrial and underwater projects in Florida and Georgia. Functioning as a Principal Investigator, he was in frequent contact with the offices of the SHPO, DHR, and BAR, as well as Tribal Historic Preservation Officers, Florida Master Site File, Georgia Division of Natural Resources, and various county, city, and municipalities. In the lab, Dr. Marks analyzed artifacts and faunal remains to determine their place within the archaeological record, as well as perform cursory conservation when needed. Dr. Marks was also responsible for the GIS data management for most of the Florida and Georgia archaeology work for ESI. Additionally, he directed, coordinated and prepared time and cost estimates for cultural resources contracts, and compile information and standards for proposal requests.

National Park Service, Southeastern Archeological Center (SEAC) Tallahassee, Florida, Document Curator and Museum Technician. Dr. Marks handled the curation of documents, maps, and photographs from archaeological projects within the National Park Service, Southeast Section. His duties involved inventorying, cataloging, creating databases, and preparing documents for preservation. Additionally, documents that were deteriorating were copied on acid free paper for curation. Other duties included analyzing and cataloging artifacts recovered from archaeological excavation that occurred within the National Park System and entering artifact information into a database.

APPENDIX B

Native American Correspondence



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 **phone**
916.564.4501 **fax**

www.esassoc.com

May 3, 2012

Kesner Flores
PO Box 1047
Wheatland, CA 95692

Subject: Velocity Island Project

Dear Mr. Flores:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

In an effort to address any potential impact to archaeological or ethnographic resources, we are seeking comments from Native American representatives; the Native American Heritage Commission supplied your name as a contact for this area. We would appreciate your comments identifying any concerns or issues pertinent to this project.

Thank you for your time and cooperation regarding this matter. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian S. Marks". The signature is fluid and cursive, with a large, stylized initial "B".

Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 [phone](tel:916.564.4500)
916.564.4501 [fax](tel:916.564.4501)

www.esassoc.com

May 3, 2012

Cortina Band of Indians
Charlie Wright, Chairperson
PO Box 1630
Williams, CA 95987

Subject: Velocity Island Project

Dear Chairperson Wright:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Sincerely,

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
916.564.4500 **phone**
916.564.4501 **fax**

www.esassoc.com

May 3, 2012

Cortina Wintun Environmental Protection Agency
PO Box 1630
Williams, CA 95987

Subject: Velocity Island Project

To Whom it May Concern:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



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Sacramento, CA 95816
916.564.4500 [phone](tel:916.564.4500)
916.564.4501 [fax](tel:916.564.4501)

www.esassoc.com

May 3, 2012

Yocha Dehe Wintun Nation
Marshal McKay, Chairperson
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Mr. McKay:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Sincerely,

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



2600 Capitol Ave
Suite 200
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May 3, 2012

Yocha Dehe Wintun Nation
Cynthia Clarke, Native Cultural Renewal Committee
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Ms. Clarke:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



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www.esassoc.com

May 3, 2012

Yocha Dehe Wintun Nation
Leland Kinter, Native Cultural Renewal Committee
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Mr. Kinter:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

In an effort to address any potential impact to archaeological or ethnographic resources, we are seeking comments from Native American representatives; the Native American Heritage Commission supplied your name as a contact for this area. We would appreciate your comments identifying any concerns or issues pertinent to this project.

Thank you for your time and cooperation regarding this matter. If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian S. Marks". The signature is fluid and cursive, with a large, stylized "B" and "M".

Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments



2600 Capitol Ave
Suite 200
Sacramento, CA 95816
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www.esassoc.com

May 3, 2012

Yocha Dehe Wintun Nation
Reno Franklin, Native Cultural Renewal Committee
PO Box 18
Brooks, CA 95606

Subject: Velocity Island Project

Dear Mr. Franklin:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

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Sincerely,

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Brian S. Marks, Ph.D.
Senior Cultural Resources Associate

Attachments

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5380



May 3, 2012

Katherine Anderson
ESA
2600 Capitol Avenue, Suite 200
Sacramento, CA 95816

Sent by Fax: 916-564-4501
Number of Pages: 2

Re: Velocity Island Project, Yolo County.

Dear Ms. Anderson:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pitas-Treadway
Environmental Specialist III

**Native American Contacts
Yolo County
May 2, 2012**

Kesner Flores
PO Box 1047
Wheatland, CA 95692
calnagpra@hotmail.com
925-586-8919

Wintun / Patwin

Yocha Dehe Wintun Nation
Cynthia Clarke, Native Cultural Renewal Committee
P.O. Box 18
Brooks, CA 95606
(530) 796-3400 - office
(530) 796-2143 Fax

Wintun (Patwin)

Cortina Band of Indians
Charlie Wright, Chairperson
PO Box 1630
Williams, CA 95987
(530) 473-3274 - Voice
(530) 473-3190 - Voice
(530) 473-3301 - Fax

Wintun / Patwin

Yocha Dehe Wintun Nation
Reno Franklin, Cultural Resources Director
P.O. Box 18
Brooks, CA 95606
rfranklin@yochadehe-nsn.gov
(530) 979-6346
(530) 796-3400 - office
(530) 796-2143 Fax

Wintun (Patwin)

Cortina Wintun Environmental Protection Agency
P.O. Box 1630
Williams, CA 95987
corwepa@yahoo.com
(530) 473-3318
(530) 473-3319
(530) 473-3301 - Fax

Wintun (Patwin)

Yocha Dehe Wintun Nation
Marshall McKay, Chairperson
P.O. Box 18
Brooks, CA 95606
(530) 796-3400
(530) 796-2143 Fax

Wintun (Patwin)

Yocha Dehe Wintun Nation
Leland Kinter, Native Cultural Renewal Committee
P.O. Box 18
Brooks, CA 95606
lkinter@yochadehe-nsn.gov
(530) 979-6346
(530) 796-3400 - office
(530) 796-2143 Fax

Wintun (Patwin)

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Velocity Island project, Yolo County

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-6251
Fax (916) 657-5390



May 3, 2012

Brian S. Marks
ESA
2600 Capitol Avenue, Suite 200
Sacramento, CA 95816

Sent by Fax: 916-564-4501
Number of Pages: 3

Re: Pristine Solar Array, Shasta County.

Dear Mr. Marks:

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pilas-Treadway
Environmental Specialist III

**Native American Contacts
Shasta County
May 2, 2012**

Matthew Root
16117 North St.
Keswick, CA 96001
530-247-7351

Wintu

Redding Rancheria
Tracy Edwards, Chief Executive Officer
2000 Redding Rancheria Road
Redding, CA 96001
traceye@redding-rancheria.
(530) 225-8979
Fax: (530) 241-1879

Loretta Root
5620 Kofford Lane
Redding, CA 96001

Wintu

Redding Rancheria
Jason Hart, Chairperson
2000 Redding Rancheria Road
Redding, CA 96001
(530) 225-8979
(530) 241-1879 - Fax

Pit River Tribe Environmental Office
Cultural Information Officer

36970 Park Ave
Burney, CA 96013
ajumawi@frontier.net
(530) 335-5062, Ext. 2

Pit River
Wintun

Redding Rancheria Cultural Resources
James Hayward Sr., Cultural Resources Program
2000 Redding Rancheria Road
Redding, CA 96001
jamesh@redding-rancheria.com
530-242-4543
530-410-2873 - cell
Fax: (530) 241-1879

Pit River Tribe of California
Juan Venegas, Chairperson
36970 Park Ave
Burney, CA 96013
(530) 335-5421
(530) 335-3140 Fax

Pit River
Achumawi -
Wintun

United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon
Gloria Gomes, Chairperson
20059 Parocast
Redding, CA 96003
shastapinenut@yahoo.com
(530) 275-1915

Pit River Tribe of California
Alexis Barry, Tribal Administrator
36970 Park Ave
Burney, CA 96013
(530) 335-5421
(530) 335-3140 Fax

Pit River
Achomawi -
Wintun

United Tribe of Northern Calif., Inc., Wintu, Wintun, Wintoon
John Castro, Cultural Liaison
20059 Parocast
Redding, CA 96003
shastapinenut@yahoo.com
(530) 275-1915

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed Pristine Solar Array @ 2113 Panther Road, Shasta County

**Native American Contacts
Shasta County
May 2, 2012**

Winnemem Wintu Tribe
Caleen Sisk-Franco, Tribal Chair
14840 Bear Mountain Road Wintu
Redding , CA 96003
winnemem@hotmail.com

(530) 275-2737
(530) 275-4193 FAX

Wintu Educational and Cultural Council
Robert Burns
PO Box 483 Wintu
Hayfork , CA 96041
(530) 628-5930

Wintu Tribe of Northern California
Kelli Hayward
PO Box 995 Wintu
Shasta Lake , CA 96019
wintu_tribe@hotmail.com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code

**This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed
Pristine Solar Array @ 2113 Panther Road, Shasta County**

April 25, 2012

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

SUBJECT: Request for Search of Sacred Lands Files and Native American Contact List

Dear Ms. Treadway:

ESA is conducting environmental studies for the Velocity Island Project, Woodland, Yolo County. The project is located on the Woodland USGS 7.5' Quad; T/R: 10 N, 2E and Rio Jesus Maria land grant (See attached map). The City of Woodland is proposing the creation of a 9-acre cable wakeboarding park and construction of an overhead cable system and park amenities. Amenities would include 76 parking spaces, restrooms (624 sq. ft.), operations building (1,200 sq. ft.), and an observation deck.

In an effort to provide an adequate appraisal of all potential impacts that may result from the proposed project, ESA is requesting that a search be conducted of the sacred lands files and records of traditional cultural properties that may exist within or adjacent to the project area. I would also like to request a list of Native American individuals and organizations that should be contacted about potential sites and resources of importance to Native Americans.

Thank you for your time and cooperation regarding this matter. Please contact me at 916-564-4500 if you have any questions.

Sincerely,

Katherine Anderson
Cultural Resource Associate

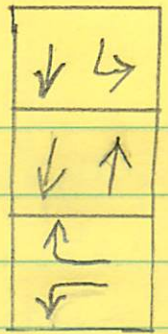
Appendix D

Traffic

12-7112-001

WOODLAND, CA

N ↑



N. EAST ST.



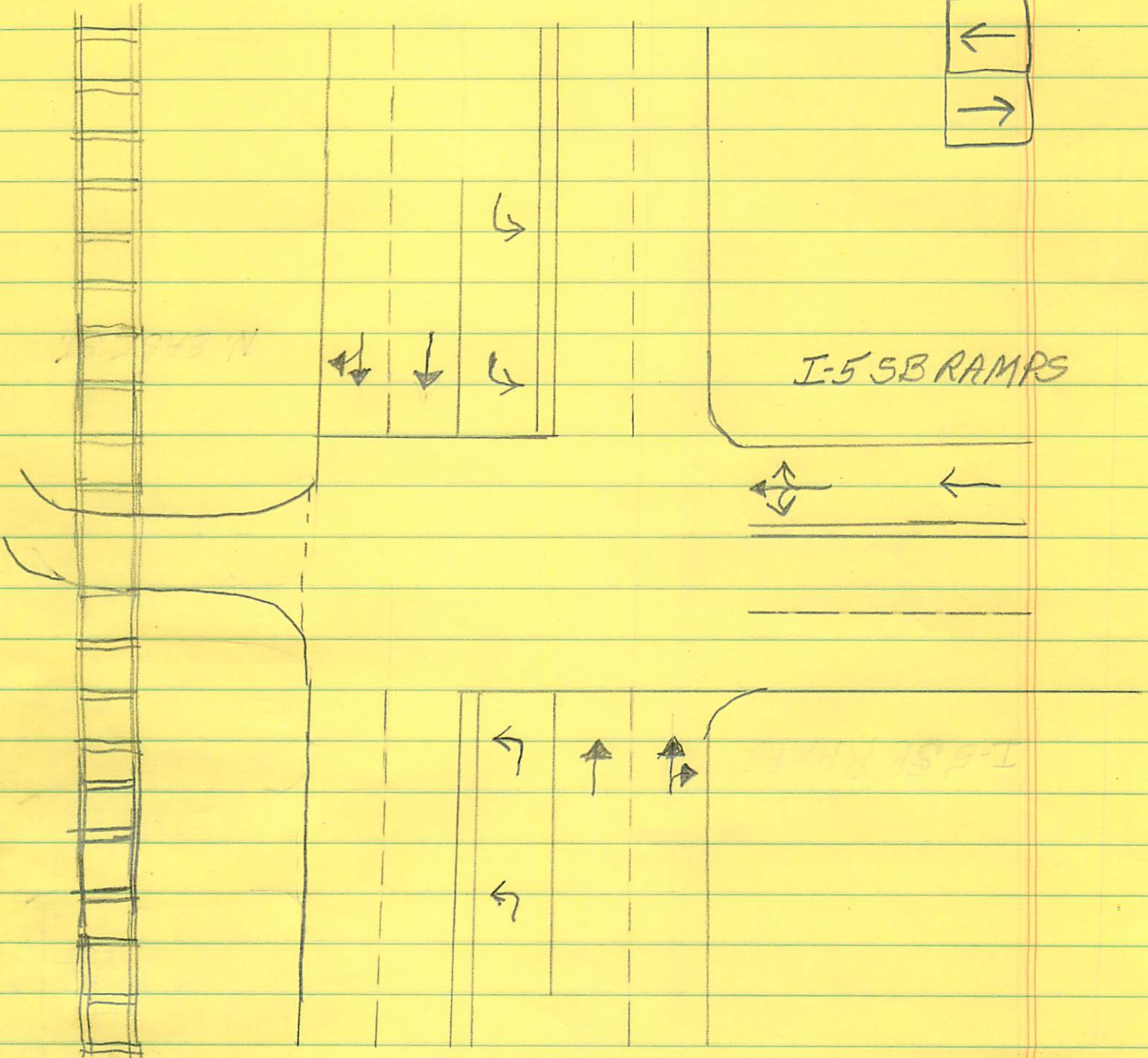
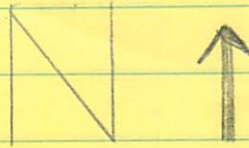
I-5 NB RAMP



Li's ROBERTSON

12-7112-002

WOODLAND, CA



I-5 SB RAMPS

his ROBERTSON

All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 1

Groups Printed- Unshifted

	N. East Street Southbound				I-5 Northbound Ramps Westbound				N. East Street Northbound				I-5 Northbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00	0	29	0	29	28	0	24	52	0	32	5	37	0	0	0	0	118
07:15	1	34	0	35	32	0	15	47	0	17	8	25	0	0	0	0	107
07:30	2	44	0	46	39	0	12	51	0	28	3	31	0	0	0	0	128
07:45	2	51	0	53	62	0	27	89	0	35	5	40	0	0	0	0	182
Total	5	158	0	163	161	0	78	239	0	112	21	133	0	0	0	0	535
08:00	2	38	0	40	37	0	13	50	0	40	6	46	0	0	0	0	136
08:15	1	36	0	37	41	0	19	60	0	22	7	29	0	0	0	0	126
08:30	0	36	0	36	34	0	16	50	0	31	11	42	0	0	0	0	128
08:45	2	33	0	35	33	0	15	48	0	39	6	45	0	0	0	0	128
Total	5	143	0	148	145	0	63	208	0	132	30	162	0	0	0	0	518
16:00	1	55	0	56	41	0	17	58	0	18	8	26	0	0	0	0	140
16:15	2	52	0	54	36	0	17	53	0	40	7	47	0	0	0	0	154
16:30	2	92	0	94	39	0	20	59	0	27	8	35	0	0	0	0	188
16:45	2	40	0	42	37	0	21	58	0	39	5	44	0	0	0	0	144
Total	7	239	0	246	153	0	75	228	0	124	28	152	0	0	0	0	626
17:00	2	52	0	54	32	0	9	41	0	44	11	55	0	0	0	0	150
17:15	0	43	0	43	30	0	10	40	0	43	6	49	0	0	0	0	132
17:30	2	54	0	56	35	0	15	50	0	36	5	41	0	0	0	0	147
17:45	0	33	0	33	26	0	13	39	0	35	4	39	0	0	0	0	111
Total	4	182	0	186	123	0	47	170	0	158	26	184	0	0	0	0	540
Grand Total	21	722	0	743	582	0	263	845	0	526	105	631	0	0	0	0	2219
Apprch %	2.8	97.2	0		68.9	0	31.1		0	83.4	16.6		0	0	0		
Total %	0.9	32.5	0	33.5	26.2	0	11.9	38.1	0	23.7	4.7	28.4	0	0	0	0	

All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 2

	N. East Street Southbound				I-5 Northbound Ramps Westbound				N. East Street Northbound				I-5 Northbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	2	44	0	46	39	0	12	51	0	28	3	31	0	0	0	0	128
07:45	2	51	0	53	62	0	27	89	0	35	5	40	0	0	0	0	182
08:00	2	38	0	40	37	0	13	50	0	40	6	46	0	0	0	0	136
08:15	1	36	0	37	41	0	19	60	0	22	7	29	0	0	0	0	126
Total Volume	7	169	0	176	179	0	71	250	0	125	21	146	0	0	0	0	572
% App. Total	4	96	0		71.6	0	28.4		0	85.6	14.4		0	0	0		
PHF	.875	.828	.000	.830	.722	.000	.657	.702	.000	.781	.750	.793	.000	.000	.000	.000	.786

All Traffic Data

(916) 771-8700

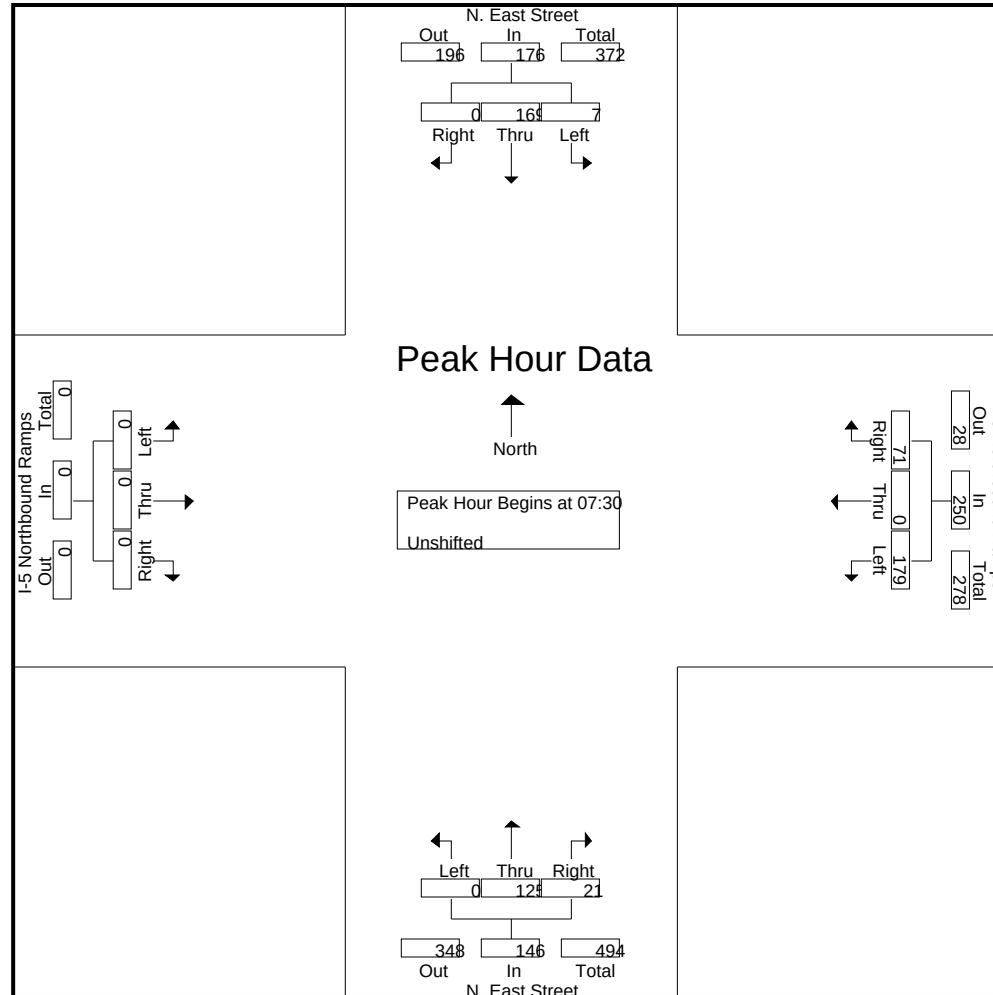
City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 3



All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 4

	N. East Street Southbound				I-5 Northbound Ramps Westbound				N. East Street Northbound				I-5 Northbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	2	52	0	54	36	0	17	53	0	40	7	47	0	0	0	0	154
16:30	2	92	0	94	39	0	20	59	0	27	8	35	0	0	0	0	188
16:45	2	40	0	42	37	0	21	58	0	39	5	44	0	0	0	0	144
17:00	2	52	0	54	32	0	9	41	0	44	11	55	0	0	0	0	150
Total Volume	8	236	0	244	144	0	67	211	0	150	31	181	0	0	0	0	636
% App. Total	3.3	96.7	0		68.2	0	31.8		0	82.9	17.1		0	0	0		
PHF	1.000	.641	.000	.649	.923	.000	.798	.894	.000	.852	.705	.823	.000	.000	.000	.000	.846

All Traffic Data

(916) 771-8700

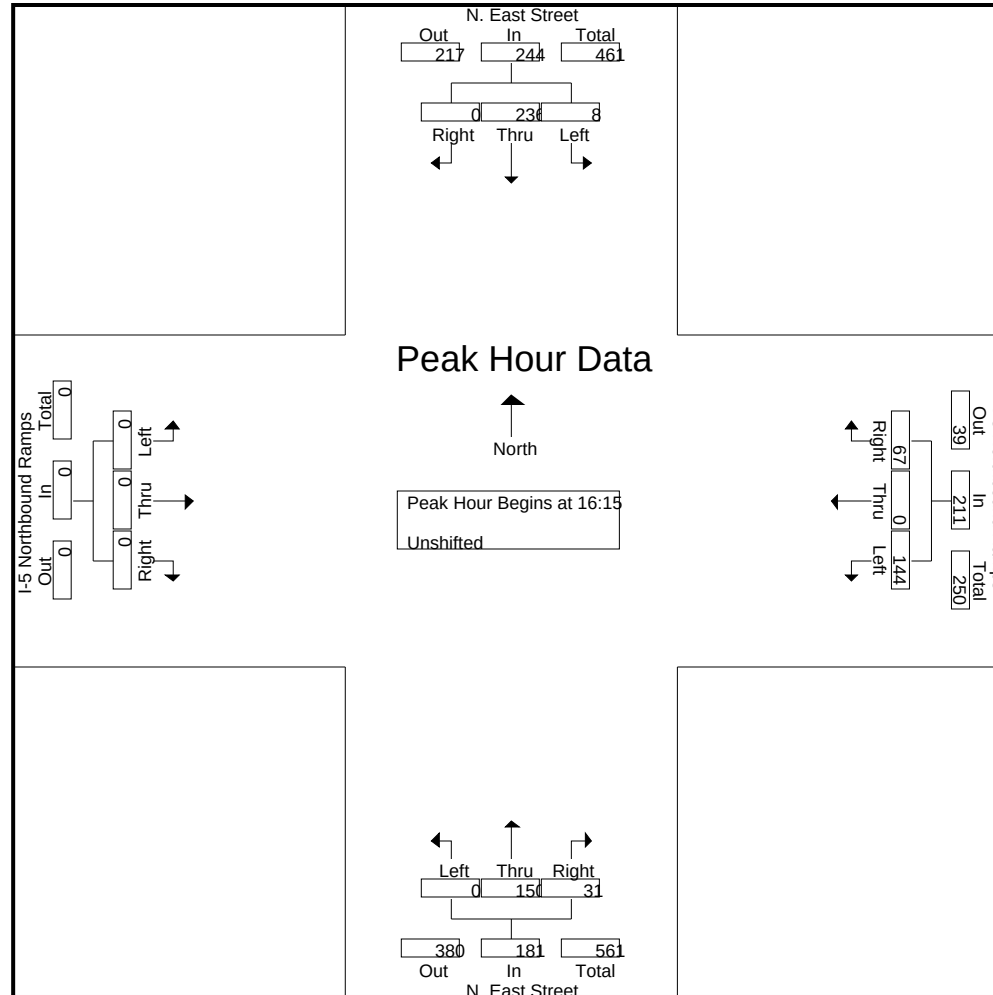
City of Woodland

File Name : 12-7116-001 N East-I5 NB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 5



All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 1

Groups Printed- Unshifted

	N. East Street Southbound				I-5 Southbound Ramps Westbound				N. East Street Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00	16	39	1	56	3	0	3	6	0	32	21	53	0	0	0	0	115
07:15	24	49	0	73	6	0	4	10	0	28	25	53	0	0	0	0	136
07:30	23	64	0	87	9	0	5	14	0	32	53	85	0	0	0	0	186
07:45	15	106	0	121	4	0	7	11	0	48	50	98	0	0	0	0	230
Total	78	258	1	337	22	0	19	41	0	140	149	289	0	0	0	0	667
08:00	22	69	0	91	6	0	5	11	0	52	37	89	0	0	0	0	191
08:15	25	73	0	98	4	0	6	10	0	40	39	79	0	0	0	0	187
08:30	17	71	0	88	11	0	5	16	0	44	37	81	0	0	0	0	185
08:45	14	51	0	65	7	0	3	10	0	41	24	65	0	0	0	0	140
Total	78	264	0	342	28	0	19	47	0	177	137	314	0	0	0	0	703
16:00	33	78	0	111	11	0	4	15	1	36	45	82	0	0	1	1	209
16:15	29	65	0	94	4	0	3	7	0	46	36	82	1	0	0	1	184
16:30	40	94	0	134	4	0	5	9	0	50	58	108	0	0	0	0	251
16:45	24	67	0	91	6	0	5	11	0	47	38	85	0	0	0	0	187
Total	126	304	0	430	25	0	17	42	1	179	177	357	1	0	1	2	831
17:00	20	77	0	97	6	0	3	9	0	63	60	123	0	0	0	0	229
17:15	15	63	0	78	6	0	2	8	0	50	44	94	0	0	0	0	180
17:30	19	71	0	90	2	0	7	9	0	47	21	68	0	0	0	0	167
17:45	15	51	0	66	3	0	2	5	0	47	31	78	0	0	0	0	149
Total	69	262	0	331	17	0	14	31	0	207	156	363	0	0	0	0	725
Grand Total	351	1088	1	1440	92	0	69	161	1	703	619	1323	1	0	1	2	2926
Apprch %	24.4	75.6	0.1		57.1	0	42.9		0.1	53.1	46.8		50	0	50		
Total %	12	37.2	0	49.2	3.1	0	2.4	5.5	0	24	21.2	45.2	0	0	0	0.1	

All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 2

	N. East Street Southbound				I-5 Southbound Ramps Westbound				N. East Street Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30																	
07:30	23	64	0	87	9	0	5	14	0	32	53	85	0	0	0	0	186
07:45	15	106	0	121	4	0	7	11	0	48	50	98	0	0	0	0	230
08:00	22	69	0	91	6	0	5	11	0	52	37	89	0	0	0	0	191
08:15	25	73	0	98	4	0	6	10	0	40	39	79	0	0	0	0	187
Total Volume	85	312	0	397	23	0	23	46	0	172	179	351	0	0	0	0	794
% App. Total	21.4	78.6	0		50	0	50		0	49	51		0	0	0		
PHF	.850	.736	.000	.820	.639	.000	.821	.821	.000	.827	.844	.895	.000	.000	.000	.000	.863

All Traffic Data

(916) 771-8700

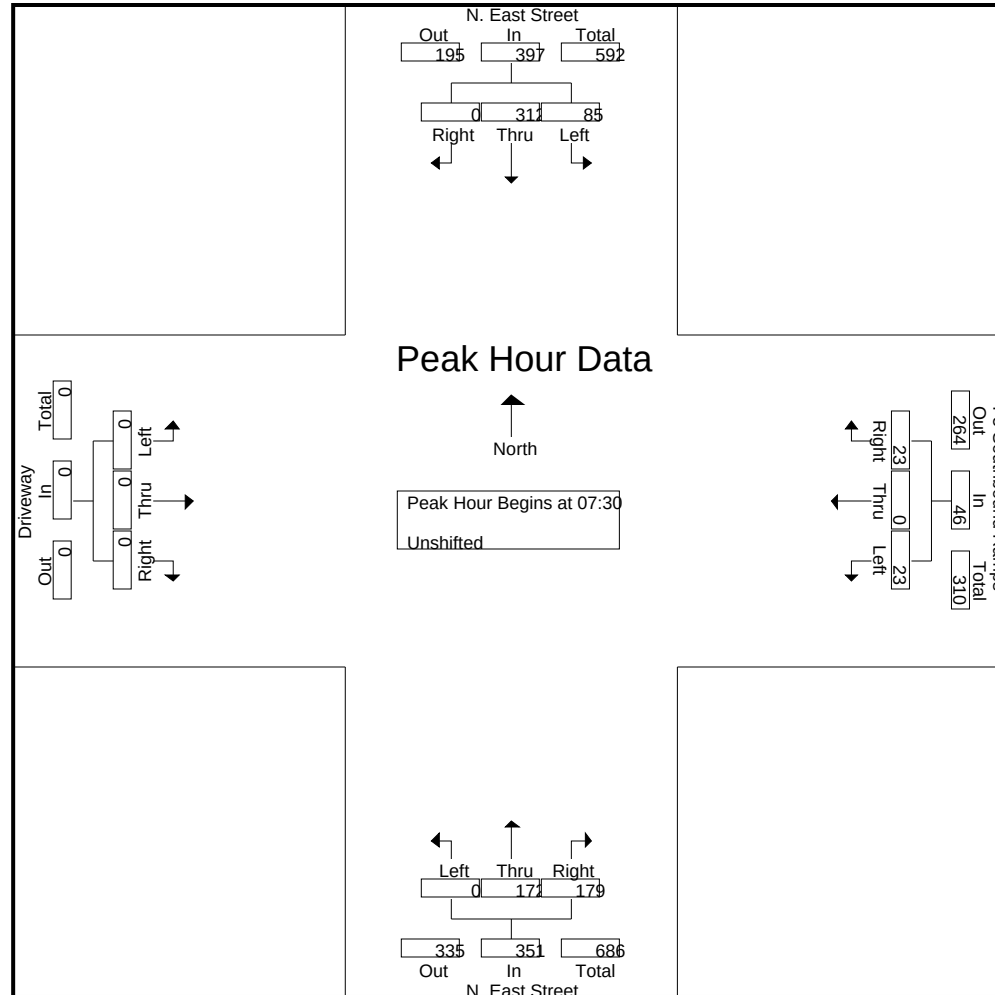
City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 3



All Traffic Data

(916) 771-8700

City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 4

	N. East Street Southbound				I-5 Southbound Ramps Westbound				N. East Street Northbound				Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:15																	
16:15	29	65	0	94	4	0	3	7	0	46	36	82	1	0	0	1	184
16:30	40	94	0	134	4	0	5	9	0	50	58	108	0	0	0	0	251
16:45	24	67	0	91	6	0	5	11	0	47	38	85	0	0	0	0	187
17:00	20	77	0	97	6	0	3	9	0	63	60	123	0	0	0	0	229
Total Volume	113	303	0	416	20	0	16	36	0	206	192	398	1	0	0	1	851
% App. Total	27.2	72.8	0		55.6	0	44.4		0	51.8	48.2		100	0	0		
PHF	.706	.806	.000	.776	.833	.000	.800	.818	.000	.817	.800	.809	.250	.000	.000	.250	.848

All Traffic Data

(916) 771-8700

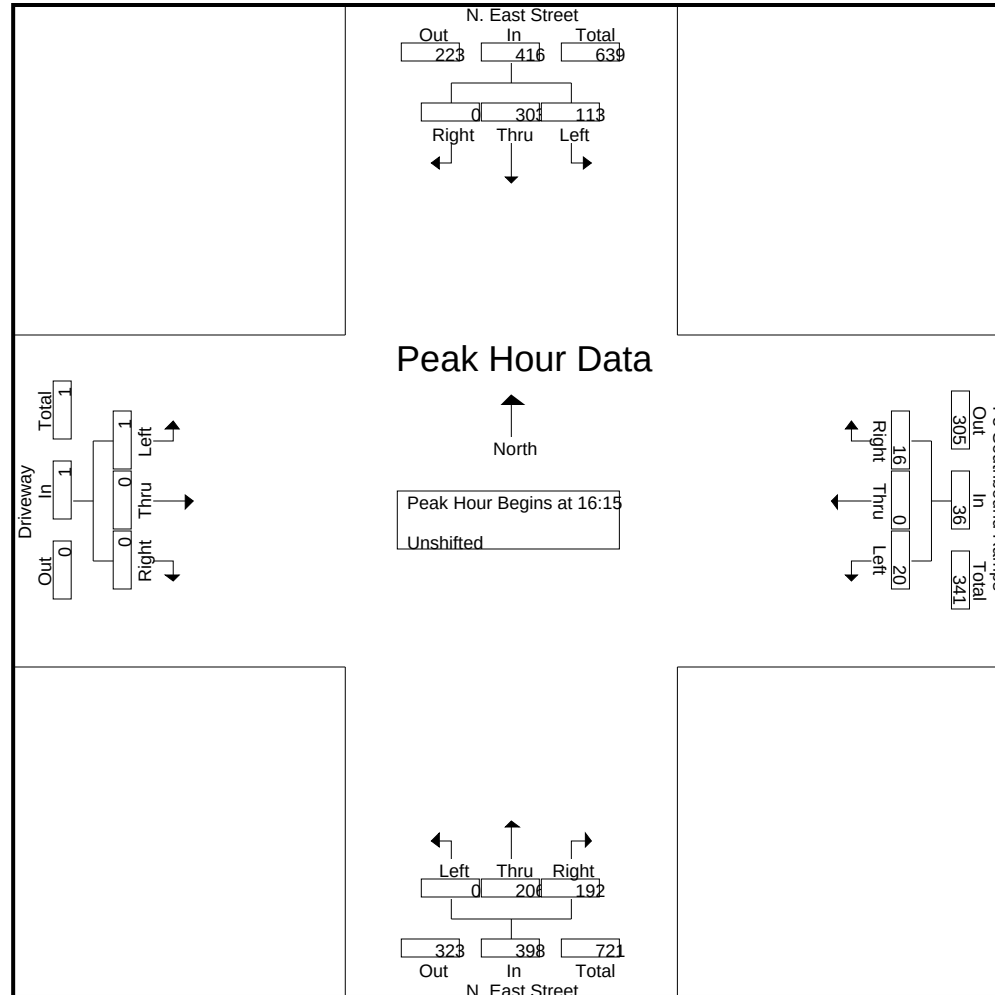
City of Woodland

File Name : 12-7116-002 N East-I5 SB Ramps

Site Code : 00000000

Start Date : 3/29/2012

Page No : 5



Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.250
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 31 Level Of Service: B

N East St				I-5 NB Ramps											
Approach: North Bound				Approach: South Bound				Approach: East Bound				Approach: West Bound			
Movement: L - T - R				Movement: L - T - R				Movement: L - T - R				Movement: L - T - R			
Control: Protected				Control: Protected				Control: Protected				Control: Protected			
Rights: Include				Rights: Include				Rights: Include				Rights: Include			
Min. Green:	0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	0	1 1 0	1	0	2 0 0	0	0	0 0 0	0	0	1! 0 1			

Volume Module: >> Count Date: 29 Mar 2012 <<												
Base Vol:	0	125	21	7	169	0	0	0	0	179	0	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	125	21	7	169	0	0	0	0	179	0	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	158	27	9	214	0	0	0	0	227	0	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	158	27	9	214	0	0	0	0	227	0	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	158	27	9	214	0	0	0	0	227	0	90

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.71	0.29	1.00	2.00	0.00	0.00	0.00	0.00	0.83	0.00	1.17
Final Sat.:	0	3023	508	1805	3610	0	0	0	0	1464	0	2045

Capacity Analysis Module:												
Vol/Sat:	0.00	0.05	0.05	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.26	0.26	0.08	0.23	0.00	0.00	0.00	0.00	0.26	0.00	0.07
Uniform Del:	0.0	28.8	28.8	37.8	24.9	0.0	0.0	0.0	0.0	8.5	0.0	7.5
IncrementDel:	0.0	0.2	0.2	0.3	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	29.0	29.0	38.2	25.0	0.0	0.0	0.0	0.0	8.6	0.0	7.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.0	29.0	38.2	25.0	0.0	0.0	0.0	0.0	8.6	0.0	7.5
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	2	2	0	2	0	0	0	0	3	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.243
 Loss Time (sec): 13 Average Delay (sec/veh): 11.9
 Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R

Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	1	0	0	0	0	0	1

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	172	179	85	312	0	0	0	0	23	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	172	179	85	312	0	0	0	0	23	0	23
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	0	200	208	99	363	0	0	0	0	27	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	200	208	99	363	0	0	0	0	27	0	27
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	200	208	99	363	0	0	0	0	27	0	27

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50
Final Sat.:	1900	1668	1668	1805	3610	0	0	0	0	865	0	865

Capacity Analysis Module:

Vol/Sat:	0.00	0.12	0.12	0.05	0.10	0.00	0.00	0.00	0.00	0.03	0.00	0.03
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.49	0.49	0.23	0.72	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Volume/Cap:	0.00	0.24	0.25	0.24	0.14	0.00	0.00	0.00	0.00	0.24	0.00	0.24
Uniform Del:	0.0	12.4	12.4	27.0	3.7	0.0	0.0	0.0	0.0	33.4	0.0	33.4
IncrementDel:	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	12.4	12.5	27.3	3.7	0.0	0.0	0.0	0.0	34.0	0.0	34.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.4	12.5	27.3	3.7	0.0	0.0	0.0	0.0	34.0	0.0	34.0
LOS by Move:	A	B	B	C	A	A	A	A	A	C	A	C
HCM2kAvgQ:	0	3	3	2	2	0	0	0	0	1	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.219
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 30 Level Of Service: B

N East St				I-5 NB Ramps											
Approach: North Bound				South Bound				East Bound				West Bound			
Movement: L - T - R				L - T - R				L - T - R				L - T - R			
Control: Protected				Protected				Protected				Protected			
Rights: Include				Include				Include				Include			
Min. Green:	0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	0	1 1 0	1	0	2 0 0	0	0	0 0 0	0	0	1! 0 1			

Volume Module: >> Count Date: 29 Mar 2012 <<												
Base Vol:	0	150	31	8	236	0	0	0	0	144	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	150	31	8	236	0	0	0	0	144	0	67
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	176	36	9	278	0	0	0	0	169	0	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	176	36	9	278	0	0	0	0	169	0	79
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	176	36	9	278	0	0	0	0	169	0	79

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	0.81	0.00	1.19
Final Sat.:	0	2914	602	1805	3610	0	0	0	0	1419	0	2079

Capacity Analysis Module:												
Vol/Sat:	0.00	0.06	0.06	0.01	0.08	0.00	0.00	0.00	0.00	0.12	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.27	0.27	0.06	0.32	0.00	0.00	0.00	0.00	0.52	0.00	0.52
Volume/Cap:	0.00	0.23	0.23	0.09	0.24	0.00	0.00	0.00	0.00	0.23	0.00	0.07
Uniform Del:	0.0	24.4	24.4	37.8	21.0	0.0	0.0	0.0	0.0	11.0	0.0	10.1
IncrementDel:	0.0	0.1	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	24.5	24.5	38.2	21.1	0.0	0.0	0.0	0.0	11.1	0.0	10.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	24.5	24.5	38.2	21.1	0.0	0.0	0.0	0.0	11.1	0.0	10.1
LOS by Move:	A	C	C	D	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	2	2	0	3	0	0	0	0	3	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.281
 Loss Time (sec): 13 Average Delay (sec/veh): 11.8
 Optimal Cycle: 39 Level Of Service: B

Street Name:		N East St						I-5 SB Ramps					
Approach:		North Bound			South Bound			East Bound			West Bound		
Movement:		L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include		
Min. Green:		3	4	0	15	4	0	0	0	0	7	0	7
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		1	0	1	1	0	1	0	0	0	0	0	1

Volume Module: >> Count Date: 29 Mar 2012 <<												
Base Vol:	0	206	192	113	303	0	0	0	0	20	0	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	192	113	303	0	0	0	0	20	0	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	242	226	133	356	0	0	0	0	24	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	242	226	133	356	0	0	0	0	24	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	0	242	226	133	356	0	0	0	0	24	0	19

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.56	0.00	0.44
Final Sat.:	1900	1734	1616	1805	3610	0	0	0	0	965	0	772

Capacity Analysis Module:												
Vol/Sat:	0.00	0.14	0.14	0.07	0.10	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.50	0.50	0.26	0.76	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.28	0.28	0.28	0.13	0.00	0.00	0.00	0.00	0.28	0.00	0.28
Uniform Del:	0.0	12.5	12.5	25.0	2.7	0.0	0.0	0.0	0.0	36.3	0.0	36.3
IncrementDel:	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	12.5	12.5	25.3	2.7	0.0	0.0	0.0	0.0	37.3	0.0	37.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.5	12.5	25.3	2.7	0.0	0.0	0.0	0.0	37.3	0.0	37.3
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	4	4	3	1	0	0	0	0	1	0	1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.253
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 31 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps													
Approach:		North Bound			South Bound			East Bound			West Bound										
Movement:		L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:		Protected						Protected						Protected							
Rights:		Include						Include						Include							
Min. Green:		0		8		8	5		4		0	0		0		0	3		3		3
Y+R:		4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	1	0	1

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	125	21	7	169	0	0	0	0	179	0	71
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	125	21	7	169	0	0	0	0	179	0	71
Added Vol:	0	4	0	1	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	129	21	8	173	0	0	0	0	179	0	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	163	27	10	219	0	0	0	0	227	0	91
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	163	27	10	219	0	0	0	0	227	0	91
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	163	27	10	219	0	0	0	0	227	0	91

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.72	0.28	1.00	2.00	0.00	0.00	0.00	0.00	0.83	0.00	1.17
Final Sat.:	0	3039	495	1805	3610	0	0	0	0	1462	0	2051

Capacity Analysis Module:

Vol/Sat:	0.00	0.05	0.05	0.01	0.06	0.00	0.00	0.00	0.00	0.15	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.26	0.26	0.10	0.23	0.00	0.00	0.00	0.00	0.26	0.00	0.08
Uniform Del:	0.0	28.5	28.5	37.9	24.7	0.0	0.0	0.0	0.0	8.6	0.0	7.6
IncrementDel:	0.0	0.2	0.2	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	28.7	28.7	38.3	24.8	0.0	0.0	0.0	0.0	8.8	0.0	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	28.7	28.7	38.3	24.8	0.0	0.0	0.0	0.0	8.8	0.0	7.7
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	2	2	0	2	0	0	0	0	4	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.248
 Loss Time (sec): 13 Average Delay (sec/veh): 12.2
 Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 3 4 0 15 4 0 0 0 0 7 0 7
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 1! 0 0
 -----|-----|-----|-----|

Volume Module: >> Count Date: 29 Mar 2012 <<
 Base Vol: 0 172 179 85 312 0 0 0 0 23 0 23
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 172 179 85 312 0 0 0 0 23 0 23
 Added Vol: 0 1 0 3 1 0 0 0 0 0 0 3
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 173 179 88 313 0 0 0 0 23 0 26
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86 0.86
 PHF Volume: 0 201 208 102 364 0 0 0 0 27 0 30
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 201 208 102 364 0 0 0 0 27 0 30
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 201 208 102 364 0 0 0 0 27 0 30
 -----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.88 0.88 0.95 0.95 0.95 1.00 1.00 1.00 0.91 1.00 0.91
 Lanes: 1.00 1.00 1.00 1.00 2.00 0.00 0.00 0.00 0.00 0.47 0.00 0.53
 Final Sat.: 1900 1668 1668 1805 3610 0 0 0 0 809 0 914
 -----|-----|-----|-----|

Capacity Analysis Module:
 Vol/Sat: 0.00 0.12 0.12 0.06 0.10 0.00 0.00 0.00 0.00 0.03 0.00 0.03
 Crit Moves: **** **** ****
 Green/Cycle: 0.00 0.49 0.49 0.23 0.71 0.00 0.00 0.00 0.00 0.13 0.00 0.13
 Volume/Cap: 0.00 0.25 0.26 0.25 0.14 0.00 0.00 0.00 0.00 0.25 0.00 0.25
 Uniform Del: 0.0 12.8 12.8 26.8 3.9 0.0 0.0 0.0 0.0 33.0 0.0 33.0
 IncremntDel: 0.0 0.1 0.1 0.3 0.0 0.0 0.0 0.0 0.0 0.6 0.0 0.6
 InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
 Delay/Veh: 0.0 12.9 12.9 27.2 3.9 0.0 0.0 0.0 0.0 33.6 0.0 33.6
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 12.9 12.9 27.2 3.9 0.0 0.0 0.0 0.0 33.6 0.0 33.6
 LOS by Move: A B B C A A A A A C A C
 HCM2kAvgQ: 0 3 3 2 2 0 0 0 0 2 0 2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.221
 Loss Time (sec): 13 Average Delay (sec/veh): 18.9
 Optimal Cycle: 30 Level Of Service: B

N East St				I-5 NB Ramps											
Approach: North Bound				Approach: South Bound				Approach: East Bound				Approach: West Bound			
Movement: L - T - R				Movement: L - T - R				Movement: L - T - R				Movement: L - T - R			
Control: Protected				Control: Protected				Control: Protected				Control: Protected			
Rights: Include				Rights: Include				Rights: Include				Rights: Include			
Min. Green:	0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	0	1 1 0	1	0	2 0 0	0	0	0 0 0	0	0	1! 0 1			

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	150	31	8	236	0	0	0	0	144	0	67
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	150	31	8	236	0	0	0	0	144	0	67
Added Vol:	0	4	0	1	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	154	31	9	240	0	0	0	0	144	0	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	181	36	11	282	0	0	0	0	169	0	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	181	36	11	282	0	0	0	0	169	0	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	181	36	11	282	0	0	0	0	169	0	80

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	0.81	0.00	1.19
Final Sat.:	0	2930	590	1805	3610	0	0	0	0	1415	0	2083

Capacity Analysis Module:

Vol/Sat:	0.00	0.06	0.06	0.01	0.08	0.00	0.00	0.00	0.00	0.12	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.27	0.27	0.06	0.33	0.00	0.00	0.00	0.00	0.52	0.00	0.52
Volume/Cap:	0.00	0.23	0.23	0.10	0.24	0.00	0.00	0.00	0.00	0.23	0.00	0.07
Uniform Del:	0.0	24.2	24.2	37.9	20.9	0.0	0.0	0.0	0.0	11.1	0.0	10.2
IncrementDel:	0.0	0.1	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	24.4	24.4	38.3	21.0	0.0	0.0	0.0	0.0	11.2	0.0	10.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	24.4	24.4	38.3	21.0	0.0	0.0	0.0	0.0	11.2	0.0	10.2
LOS by Move:	A	C	C	D	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	2	2	0	3	0	0	0	0	3	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.286
 Loss Time (sec): 13 Average Delay (sec/veh): 12.1
 Optimal Cycle: 39 Level Of Service: B

N East St				I-5 SB Ramps											
Approach: North Bound				South Bound				East Bound				West Bound			
Movement: L - T - R				L - T - R				L - T - R				L - T - R			
Control: Protected				Protected				Protected				Protected			
Rights: Include				Include				Include				Include			
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	1	0	1	1	0	1	1	0	0	0	0	0			

Volume Module: >> Count Date: 29 Mar 2012 <<

Base Vol:	0	206	192	113	303	0	0	0	0	20	0	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	192	113	303	0	0	0	0	20	0	16
Added Vol:	0	1	0	3	1	0	0	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	207	192	116	304	0	0	0	0	20	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	244	226	136	358	0	0	0	0	24	0	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	244	226	136	358	0	0	0	0	24	0	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	244	226	136	358	0	0	0	0	24	0	22

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.51	0.00	0.49
Final Sat.:	1900	1738	1612	1805	3610	0	0	0	0	887	0	843

Capacity Analysis Module:

Vol/Sat:	0.00	0.14	0.14	0.08	0.10	0.00	0.00	0.00	0.00	0.03	0.00	0.03
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.49	0.49	0.26	0.75	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.29	0.29	0.29	0.13	0.00	0.00	0.00	0.00	0.29	0.00	0.29
Uniform Del:	0.0	12.9	12.9	24.9	2.8	0.0	0.0	0.0	0.0	35.9	0.0	35.9
IncrementDel:	0.0	0.1	0.1	0.3	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	13.0	13.0	25.2	2.9	0.0	0.0	0.0	0.0	36.9	0.0	36.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.0	13.0	25.2	2.9	0.0	0.0	0.0	0.0	36.9	0.0	36.9
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	4	4	3	1	0	0	0	0	1	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.358
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 35 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps													
Approach:		North Bound			South Bound			East Bound			West Bound										
Movement:		L	-	T	-	R	L	-	T	-	R	L	-	T	-	R					
Control:		Protected						Protected						Protected							
Rights:		Include						Include						Include							
Min. Green:		0		8		8	5		4		0	0		0		0	3		3		3
Y+R:		4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0	4.0		4.0		4.0
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	1!	0	1

Volume Module:

Base Vol:	0	179	30	10	241	0	0	0	0	256	0	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	179	30	10	241	0	0	0	0	256	0	101
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	179	30	10	241	0	0	0	0	256	0	101
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	227	38	13	305	0	0	0	0	324	0	128
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	227	38	13	305	0	0	0	0	324	0	128
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	227	38	13	305	0	0	0	0	324	0	128

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.71	0.29	1.00	2.00	0.00	0.00	0.00	0.00	0.84	0.00	1.16
Final Sat.:	0	3024	507	1805	3610	0	0	0	0	1467	0	2046

Capacity Analysis Module:

Vol/Sat:	0.00	0.07	0.07	0.01	0.08	0.00	0.00	0.00	0.00	0.22	0.00	0.06
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.38	0.38	0.12	0.33	0.00	0.00	0.00	0.00	0.38	0.00	0.11
Uniform Del:	0.0	29.4	29.4	37.9	25.5	0.0	0.0	0.0	0.0	9.2	0.0	7.7
IncrementDel:	0.0	0.3	0.3	0.5	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	29.8	29.8	38.4	25.7	0.0	0.0	0.0	0.0	9.4	0.0	7.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.8	29.8	38.4	25.7	0.0	0.0	0.0	0.0	9.4	0.0	7.7
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.355
 Loss Time (sec): 13 Average Delay (sec/veh): 12.3
 Optimal Cycle: 39 Level Of Service: B

N East St						I-5 SB Ramps						
North Bound			South Bound			East Bound			West Bound			
Approach:												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	0	0	0	0	0	1	0

Volume Module:												
Base Vol:	0	246	256	121	446	0	0	0	0	33	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	246	256	121	446	0	0	0	0	33	0	33
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	246	256	121	446	0	0	0	0	33	0	33
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	0	286	298	141	519	0	0	0	0	38	0	38
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	286	298	141	519	0	0	0	0	38	0	38
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	286	298	141	519	0	0	0	0	38	0	38

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	0.50	0.00	0.50
Final Sat.:	1900	1668	1668	1805	3610	0	0	0	0	865	0	865

Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.18	0.08	0.14	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.50	0.50	0.22	0.72	0.00	0.00	0.00	0.00	0.12	0.00	0.12
Volume/Cap:	0.00	0.34	0.36	0.36	0.20	0.00	0.00	0.00	0.00	0.36	0.00	0.36
Uniform Del:	0.0	12.7	12.8	28.1	3.8	0.0	0.0	0.0	0.0	34.1	0.0	34.1
IncrementDel:	0.0	0.1	0.1	0.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	12.8	12.9	28.6	3.9	0.0	0.0	0.0	0.0	35.1	0.0	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	12.8	12.9	28.6	3.9	0.0	0.0	0.0	0.0	35.1	0.0	35.1
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	5	5	3	2	0	0	0	0	2	0	2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.312
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 33 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps								
Approach:		North Bound			South Bound			East Bound			West Bound					
Movement:		L	T	R	L	T	R	L	T	R	L	T	R			
Control:		Protected			Protected			Protected			Protected					
Rights:		Include			Include			Include			Include					
Min. Green:		0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	1	0	1

Volume Module:												
Base Vol:	0	214	44	11	337	0	0	0	0	206	0	96
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	214	44	11	337	0	0	0	0	206	0	96
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	214	44	11	337	0	0	0	0	206	0	96
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	252	52	13	396	0	0	0	0	242	0	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	252	52	13	396	0	0	0	0	242	0	113
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	252	52	13	396	0	0	0	0	242	0	113

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.66	0.34	1.00	2.00	0.00	0.00	0.00	0.00	0.81	0.00	1.19
Final Sat.:	0	2916	600	1805	3610	0	0	0	0	1419	0	2080

Capacity Analysis Module:												
Vol/Sat:	0.00	0.09	0.09	0.01	0.11	0.00	0.00	0.00	0.00	0.17	0.00	0.05
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.26	0.26	0.06	0.32	0.00	0.00	0.00	0.00	0.52	0.00	0.52
Volume/Cap:	0.00	0.33	0.33	0.12	0.34	0.00	0.00	0.00	0.00	0.33	0.00	0.10
Uniform Del:	0.0	25.2	25.2	37.9	21.9	0.0	0.0	0.0	0.0	11.6	0.0	10.2
IncrementDel:	0.0	0.2	0.2	0.5	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	25.4	25.4	38.4	22.0	0.0	0.0	0.0	0.0	11.8	0.0	10.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	25.4	25.4	38.4	22.0	0.0	0.0	0.0	0.0	11.8	0.0	10.2
LOS by Move:	A	C	C	D	C	A	A	A	A	B	A	B
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.401
 Loss Time (sec): 13 Average Delay (sec/veh): 12.5
 Optimal Cycle: 39 Level Of Service: B

Street Name: N East St I-5 SB Ramps
 Approach: North Bound South Bound East Bound West Bound
 Movement: L - T - R L - T - R L - T - R L - T - R
 -----|-----|-----|-----|
 Control: Protected Protected Protected Protected
 Rights: Include Include Include Include
 Min. Green: 3 4 0 15 4 0 0 0 0 7 0 7
 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
 Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 0 0 0 0 0 0 1! 0 0
 -----|-----|-----|-----|

Volume Module:
 Base Vol: 0 294 274 161 433 0 0 0 0 29 0 23
 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 Initial Bse: 0 294 274 161 433 0 0 0 0 29 0 23
 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0
 Initial Fut: 0 294 274 161 433 0 0 0 0 29 0 23
 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85
 PHF Volume: 0 346 322 189 509 0 0 0 0 34 0 27
 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
 Reduced Vol: 0 346 322 189 509 0 0 0 0 34 0 27
 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 FinalVolume: 0 346 322 189 509 0 0 0 0 34 0 27
 -----|-----|-----|-----|

Saturation Flow Module:
 Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
 Adjustment: 1.00 0.88 0.88 0.95 0.95 0.95 1.00 1.00 1.00 0.91 1.00 0.91
 Lanes: 1.00 1.04 0.96 1.00 2.00 0.00 0.00 0.00 0.00 0.56 0.00 0.44
 Final Sat.: 1900 1734 1616 1805 3610 0 0 0 0 969 0 769
 -----|-----|-----|-----|

Capacity Analysis Module:
 Vol/Sat: 0.00 0.20 0.20 0.10 0.14 0.00 0.00 0.00 0.00 0.04 0.00 0.04
 Crit Moves: **** **** ****
 Green/Cycle: 0.00 0.50 0.50 0.26 0.76 0.00 0.00 0.00 0.00 0.09 0.00 0.09
 Volume/Cap: 0.00 0.40 0.40 0.40 0.19 0.00 0.00 0.00 0.00 0.40 0.00 0.40
 Uniform Del: 0.0 13.4 13.4 25.9 2.9 0.0 0.0 0.0 0.0 36.7 0.0 36.7
 IncremntDel: 0.0 0.2 0.2 0.6 0.0 0.0 0.0 0.0 0.0 1.7 0.0 1.7
 InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
 Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00
 Delay/Veh: 0.0 13.6 13.6 26.4 2.9 0.0 0.0 0.0 0.0 38.4 0.0 38.4
 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
 AdjDel/Veh: 0.0 13.6 13.6 26.4 2.9 0.0 0.0 0.0 0.0 38.4 0.0 38.4
 LOS by Move: A B B C A A A A A D A D
 HCM2kAvgQ: 0 6 6 4 2 0 0 0 0 2 0 2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.361
 Loss Time (sec): 13 Average Delay (sec/veh): 19.6
 Optimal Cycle: 35 Level Of Service: B

Street Name:		N East St						I-5 NB Ramps								
Approach:		North Bound			South Bound			East Bound			West Bound					
Movement:		L	T	R	L	T	R	L	T	R	L	T	R			
Control:		Protected			Protected			Protected			Protected					
Rights:		Include			Include			Include			Include					
Min. Green:		0	8	8	5	4	0	0	0	0	3	3	3			
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:		0	0	1	1	0	1	0	2	0	0	0	0	1	0	1

Volume Module:

Base Vol:	0	179	30	10	241	0	0	0	0	256	0	101
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	179	30	10	241	0	0	0	0	256	0	101
Added Vol:	0	4	0	1	4	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	183	30	11	245	0	0	0	0	256	0	102
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
PHF Volume:	0	232	38	14	310	0	0	0	0	324	0	129
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	232	38	14	310	0	0	0	0	324	0	129
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	232	38	14	310	0	0	0	0	324	0	129

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.93	0.95	0.95	1.00	1.00	1.00	1.00	0.92	1.00	0.92
Lanes:	0.00	1.72	0.28	1.00	2.00	0.00	0.00	0.00	0.00	0.83	0.00	1.17
Final Sat.:	0	3036	498	1805	3610	0	0	0	0	1463	0	2046

Capacity Analysis Module:

Vol/Sat:	0.00	0.08	0.08	0.01	0.09	0.00	0.00	0.00	0.00	0.22	0.00	0.06
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.20	0.20	0.06	0.26	0.00	0.00	0.00	0.00	0.59	0.00	0.59
Volume/Cap:	0.00	0.38	0.38	0.13	0.33	0.00	0.00	0.00	0.00	0.38	0.00	0.11
Uniform Del:	0.0	29.3	29.3	37.9	25.4	0.0	0.0	0.0	0.0	9.3	0.0	7.8
IncrementDel:	0.0	0.3	0.3	0.6	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	29.6	29.6	38.5	25.6	0.0	0.0	0.0	0.0	9.5	0.0	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	29.6	29.6	38.5	25.6	0.0	0.0	0.0	0.0	9.5	0.0	7.8
LOS by Move:	A	C	C	D	C	A	A	A	A	A	A	A
HCM2kAvgQ:	0	3	3	0	4	0	0	0	0	5	0	1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.360
 Loss Time (sec): 13 Average Delay (sec/veh): 12.6
 Optimal Cycle: 39 Level Of Service: B

N East St						I-5 SB Ramps						
North Bound			South Bound			East Bound			West Bound			
Approach:												
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	3	4	0	15	4	0	0	0	0	7	0	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0	1	1	0	0	0	0	0	0	1	0

Volume Module:												
Base Vol:	0	246	256	121	446	0	0	0	0	33	0	33
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	246	256	121	446	0	0	0	0	33	0	33
Added Vol:	0	1	0	3	1	0	0	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	247	256	124	447	0	0	0	0	33	0	36
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
PHF Volume:	0	287	298	144	520	0	0	0	0	38	0	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	287	298	144	520	0	0	0	0	38	0	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	287	298	144	520	0	0	0	0	38	0	42

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.00	1.00	1.00	2.00	0.00	0.00	0.00	0.00	0.48	0.00	0.52
Final Sat.:	1900	1668	1668	1805	3610	0	0	0	0	826	0	901

Capacity Analysis Module:												
Vol/Sat:	0.00	0.17	0.18	0.08	0.14	0.00	0.00	0.00	0.00	0.05	0.00	0.05
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.50	0.50	0.22	0.72	0.00	0.00	0.00	0.00	0.13	0.00	0.13
Volume/Cap:	0.00	0.35	0.36	0.36	0.20	0.00	0.00	0.00	0.00	0.36	0.00	0.36
Uniform Del:	0.0	13.0	13.1	28.0	4.0	0.0	0.0	0.0	0.0	33.8	0.0	33.8
IncrementDel:	0.0	0.1	0.1	0.6	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	13.2	13.3	28.5	4.0	0.0	0.0	0.0	0.0	34.8	0.0	34.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.2	13.3	28.5	4.0	0.0	0.0	0.0	0.0	34.8	0.0	34.8
LOS by Move:	A	B	B	C	A	A	A	A	A	C	A	C
HCM2kAvgQ:	0	5	5	3	2	0	0	0	0	2	0	2

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 N East St / I-5 NB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.315

Loss Time (sec): 13 Average Delay (sec/veh): 19.6

Optimal Cycle: 33 Level Of Service: B

Street Name: N East St I-5 NB Ramps

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

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Control: Protected Protected Protected Protected

Rights: Include Include Include Include

Min. Green: 0 8 8 5 4 0 0 0 0 3 3 3

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Lanes: 0 0 1 1 0 1 0 2 0 0 0 0 0 0 0 0 0 0 0 0 1 1

-----|-----|-----|-----|

Volume Module:

Base Vol: 0 214 44 11 337 0 0 0 0 206 0 96

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 214 44 11 337 0 0 0 0 206 0 96

Added Vol: 0 4 0 1 4 0 0 0 0 0 0 1

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 218 44 12 341 0 0 0 0 206 0 97

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85 0.85

PHF Volume: 0 256 52 14 401 0 0 0 0 242 0 114

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 256 52 14 401 0 0 0 0 242 0 114

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 0 256 52 14 401 0 0 0 0 242 0 114

-----|-----|-----|-----|

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 1.00 0.93 0.93 0.95 0.95 1.00 1.00 1.00 1.00 0.92 1.00 0.92

Lanes: 0.00 1.66 0.34 1.00 2.00 0.00 0.00 0.00 0.00 0.81 0.00 1.19

Final Sat.: 0 2929 591 1805 3610 0 0 0 0 1416 0 2082

-----|-----|-----|-----|

Capacity Analysis Module:

Vol/Sat: 0.00 0.09 0.09 0.01 0.11 0.00 0.00 0.00 0.00 0.17 0.00 0.05

Crit Moves: **** **** ****

Green/Cycle: 0.00 0.27 0.27 0.06 0.33 0.00 0.00 0.00 0.00 0.52 0.00 0.52

Volume/Cap: 0.00 0.33 0.33 0.13 0.34 0.00 0.00 0.00 0.00 0.33 0.00 0.11

Uniform Del: 0.0 25.0 25.0 37.9 21.7 0.0 0.0 0.0 0.0 11.7 0.0 10.3

IncrementDel: 0.0 0.2 0.2 0.6 0.2 0.0 0.0 0.0 0.0 0.2 0.0 0.0

InitQueueDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

Delay Adj: 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 1.00 0.00 1.00

Delay/Veh: 0.0 25.2 25.2 38.5 21.9 0.0 0.0 0.0 0.0 11.9 0.0 10.3

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 25.2 25.2 38.5 21.9 0.0 0.0 0.0 0.0 11.9 0.0 10.3

LOS by Move: A C C D C A A A A B A B

HCM2kAvgQ: 0 3 3 0 4 0 0 0 0 5 0 1

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 N East St / I-5 SB Ramps

Cycle (sec): 85 Critical Vol./Cap.(X): 0.406
 Loss Time (sec): 13 Average Delay (sec/veh): 12.8
 Optimal Cycle: 39 Level Of Service: B

Street Name:		N East St						I-5 SB Ramps					
Approach:		North Bound			South Bound			East Bound			West Bound		
Movement:		L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Protected			Protected		
Rights:		Include			Include			Include			Include		
Min. Green:		3	4	0	15	4	0	0	0	0	7	0	7
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		1	0	1	1	0	1	0	0	0	0	0	1

Volume Module:												
Base Vol:	0	294	274	161	433	0	0	0	0	29	0	23
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	294	274	161	433	0	0	0	0	29	0	23
Added Vol:	0	1	0	3	1	0	0	0	0	0	0	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	295	274	164	434	0	0	0	0	29	0	26
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
PHF Volume:	0	347	322	193	511	0	0	0	0	34	0	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	347	322	193	511	0	0	0	0	34	0	31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	347	322	193	511	0	0	0	0	34	0	31

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.88	0.88	0.95	0.95	0.95	1.00	1.00	1.00	0.91	1.00	0.91
Lanes:	1.00	1.04	0.96	1.00	2.00	0.00	0.00	0.00	0.00	0.53	0.00	0.47
Final Sat.:	1900	1737	1613	1805	3610	0	0	0	0	913	0	819

Capacity Analysis Module:												
Vol/Sat:	0.00	0.20	0.20	0.11	0.14	0.00	0.00	0.00	0.00	0.04	0.00	0.04
Crit Moves:	****			****						****		
Green/Cycle:	0.00	0.49	0.49	0.26	0.76	0.00	0.00	0.00	0.00	0.09	0.00	0.09
Volume/Cap:	0.00	0.41	0.41	0.41	0.19	0.00	0.00	0.00	0.00	0.41	0.00	0.41
Uniform Del:	0.0	13.7	13.7	25.8	3.0	0.0	0.0	0.0	0.0	36.4	0.0	36.4
IncrementDel:	0.0	0.2	0.2	0.6	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7
InitQueueDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Delay/Veh:	0.0	13.9	13.9	26.4	3.0	0.0	0.0	0.0	0.0	38.1	0.0	38.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	13.9	13.9	26.4	3.0	0.0	0.0	0.0	0.0	38.1	0.0	38.1
LOS by Move:	A	B	B	C	A	A	A	A	A	D	A	D
HCM2kAvgQ:	0	6	6	4	2	0	0	0	0	2	0	2

ATTACHMENT F



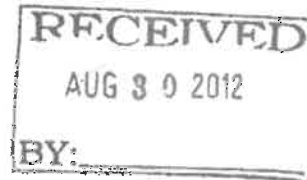
EDMUND G. BROWN JR.
GOVERNOR

STATE OF CALIFORNIA
GOVERNOR'S OFFICE of PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

August 28, 2012



Paul L. Hanson
City of Woodland
520 Court Street
Woodland, CA 95695

Subject: Velocity Island Park
SCH#: 2012072053

Dear Paul L. Hanson:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 27, 2012, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

**Document Details Report -
State Clearinghouse Data Base**

SCH# 2012072053
Project Title Velocity Island Park
Lead Agency Woodland, City of

Type MND Mitigated Negative Declaration

Description Velocity Island Park is a proposed cable wakeboard park within the City's 15-acre Detention Basin (formerly Dubach Park). Cable wakeboarding is a water sport which involves riding a wakeboard over the surface of a body of water while being pulled by an overhead cable system. The cable system is powered by an electric motor. The project would include a 9-acre lake within the project site, on overhead cable system, and park amenities. The project would include floating and stationary docks, a decomposed granite path (4 to 5 feet wide) around the lake perimeter, 75 parking spaces, restrooms (624 sf), operations building (1200 sf), and an observation deck. Proposed hours are 8 a.m. to 30 minutes before dusk, 7 days per week.

Lead Agency Contact

Name Paul L. Hanson
Agency City of Woodland
Phone 530 661 5814 **Fax**
email
Address 520 Court Street
City Woodland **State** CA **Zip** 95695

Project Location

County Yolo
City Woodland
Region
Lat / Long 38° 41' 53" N / 121° 46' 3" W
Cross Streets SR 113 (N. East St.) / I-5
Parcel No. 027-340-002

Township	Range	Section	Base
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Proximity to:

Highways SR 113, I-5
Airports
Railways UPRR
Waterways Cache Creek
Schools
Land Use Detention Basin / Open Space / Open Space

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Public Services; Recreation/Parks; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water Quality; Water Supply; Wildlife; Landuse; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Game, Region 2; Department of Parks and Recreation; Central Valley Flood Protection Board; Department of Water Resources; California Highway Patrol; Caltrans, District 3 N; Regional Water Quality Control Bd., Region 5 (Sacramento); Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 07/26/2012 **Start of Review** 07/27/2012 **End of Review** 08/27/2012

ATTACHMENT G

MITIGATION MONITORING AND REPORTING PROGRAM

Impact	Mitigation Measure	Monitoring / Reporting Action	Timing
Air Quality Construction activities may result in cumulative air quality impacts.	AIR-1: During active construction, the City shall require construction contractors to implement applicable YSAMD construction dust control measures, including: 1. Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure. 2. Haul trucks shall maintain at least 2 feet of freeboard; or cover all trucks hauling dirt, sand, or loose materials. 3. Plant vegetative ground cover in disturbed areas as soon as possible. 4. Cover inactive storage piles. 5. Sweep access road if visible soil material is carried out from the construction site.	Incorporate into condition of approval. City Inspectors to confirm implementation.	During construction.
Biological Resources Project construction may impact nesting raptors during the breeding season.	BIO-1: Potential Swainson's hawk or other raptor nests shall be protected as follows: a) The applicant shall make every effort to conduct any tree and shrub removal activities that are required for project construction outside of the migratory bird and raptor breeding season (February 15 through August 31). In addition, all trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree. b) If construction-related activities are to occur prior to tree removal during the nesting bird season (February 15 through August 31), a qualified biologist shall conduct a preconstruction survey of all potential nesting habitats within 15 days prior to the start of activities (grubbing, dirt-moving, mobilization, or other construction-related activities) and within 500 feet of construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the pre-construction survey, the site shall be resurveyed. The results of these surveys shall be documented in a technical memorandum that shall be submitted to the California Department of Fish and Game (DFG) (if nesting birds are documented) and the City of Woodland. A qualified biologist is one that has been approved by DFG as having the appropriate education background and experience to conduct nesting bird surveys.	City shall confirm necessary pre-construction surveys prior to any construction activities on the site. Monitor shall be selected with the approval of the City, and paid for by the applicant. Prior to any construction activities from February 15 through August 31.	

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

- c) If an active nest is found during the preconstruction survey, a no-work buffer of 500 feet will be established unless otherwise approved by the DFG. The qualified biologist will coordinate with DFG to determine the appropriate nest avoidance, monitoring, and protective measures appropriate for the species and site conditions. In addition to establishment of a no-work buffer, these measures may include daily or spot-check monitoring of the nesting activity as deemed appropriate by DFG.
- d) If the preconstruction survey indicates that nests are inactive or potential habitat is unoccupied during the construction period, no further mitigation is required. Trees and shrubs that have been determined to be unoccupied by birds or that are located more than 500 feet from active nests may be removed (500 feet is the distance regularly recommended by DFG to prevent impacts to active avian nests).

The project would involve the removal of several trees.

BIO-2: Loss of tree resources on the project site will be mitigated as follows:

- a) The City of Woodland (City) shall ensure that the project applicant will comply with the City of Woodland's Municipal Code, Chapter 20A. Prior to construction, the applicant shall have a Certified Arborist conduct a tree survey of the trees located within the project boundaries and submit a Tree Plan to the Community Development Department.
- b) Removed trees will be replaced at a ratio of 2:1. Replacement trees shall be planted on the project site. All trees planted shall be purchased from a locally adapted genetic stock obtained within 50 miles and 1,000 feet in elevation of a project site. If the site does not have adequate room for replanting trees, the City may require payment to a tree replacement fund. Replacement trees shall be guaranteed for a period of one year from the date of final acceptance of the development project by the City. Any tree which does not survive for one year from that date shall be replaced by the developer and the replacement tree shall be guaranteed for one year.

Prior to issuance of a grading or building permit for any phase of the project.

Applicant shall prepare a tree plan identifying proposed removals, protection measures for sensitive trees during construction, and mitigation plantings.

BIO-3: Tree resources on the project site will be protected as follows:

Sensitive tree resources adjacent to construction activities may require additional protection. Buffer zones should include a minimum one-foot-wide buffer zone outside the drip line. The locations of these resources would be clearly identified on the construction drawings and marked in the field. Fencing or other barriers would remain in place until all construction and restoration work that involves heavy equipment is complete. Construction vehicles, equipment, or materials would not be parked or stored within the fenced area. No signs, ropes, cables, or other items would be attached to the protected trees. Grading, filling, trenching, paving, irrigation, and landscaping within the drip lines of oak trees would be limited. Grading within the drip lines of oak trees would not be permitted unless specifically authorized by a Certified Arborist.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Cultural Resources

Project may result in accidental discovery of archaeological resources.

CUL-1: If cultural resources are encountered, all activity in the vicinity of the find shall cease until it can be evaluated by a qualified archaeologist and a Native American representative. Prehistoric archaeological materials might include obsidian and chert flaked-stone tools (e.g., projectile points, knives, scrapers) or tool making debris; culturally darkened soil ("midden") containing heat-affected rocks, artifacts, or shellfish remains; and stone milling equipment (e.g., mortars, pestles, handstones, or milling slabs); and battered stone tools, such as hammerstones and pitted stones. Historic-period materials might include stone, concrete, or adobe footings and walls; filled wells or privies; and deposits of metal, glass, and/or ceramic refuse. If the archaeologist and Native American representative determine that the resources may be significant, they will notify the City of Woodland. An appropriate treatment plan for the resources should be developed. The archaeologist shall consult with Native American representatives in determining appropriate treatment for prehistoric or Native American cultural resources.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

In considering any suggested mitigation proposed by the archaeologist and Native American representative, the City will determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) will be instituted. Work may proceed in other parts of the project area while mitigation for cultural resources is being carried out.

Project may result in accidental discovery of human remains.

CUL-2: If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendant, who will help determine what course of action should be taken in dealing with the remains.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

Hazards and Hazardous Materials

Project may create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

HAZ-1: If soil contaminated by potentially hazardous materials is exposed during construction, the local responsible agency shall be notified. A work plan to characterize and possibly remove contaminated soil may be required by the local responsible agency or other regulatory agency.

Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.

Ongoing during any ground-disturbing construction activities in any phase of the project.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Project may be the site of previously unidentified contamination.	HAZ-2: The applicant shall ensure all contractors and employees immediately control the source of any leak and contain any spill using appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an offsite facility approved to accept such media. In addition, all precautions required by the RWQCB for the NPDES construction activity storm water permits would be taken to ensure that no hazardous materials enter any nearby waterways.	Applicant shall include this measure in any construction contracts with developer/contractor. City of Woodland shall enforce through the regular inspection process.	Ongoing during any ground-disturbing construction activities in any phase of the project.
Hydrology and Water Quality Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream.	HAZ-3: A Phase I Environmental Assessment must be completed by a qualified professional for the project before any ground disturbing activity begins.	Submit prior to issuance of grading or building permit.	Prior to approval of grading or building permit.
Project could result in unintended changes in discharge or runoff patterns, such that increases in flows, erosion, or sedimentation could occur on site or downstream.	Mitigation Measure HYD-1: Prior to the initiation of Project construction, a comprehensive drainage plan shall be prepared by the Applicant, reviewed by the City engineer, and implemented for the installation of all proposed facilities that would require or result in grading or installation of new facilities on site. The drainage plan shall include measures to retain on site, infiltrate, or otherwise channel runoff away from areas of open soil and other features subject to erosion or flooding. As relevant, stormwater from the project site shall be channeled into receiving drainage ditches or canals that are sized appropriately to contain anticipated stormwater flows. Runoff waters shall be discharged in a manner to prevent downstream or offsite erosion, sedimentation, or flooding.	Plan shall be submitted to the City for approval prior to issuance of grading or building permits. Plan shall be circulated by the City to Caltrans District 3 for review.	Prior to issuance of grading or building permit.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Noise

Construction noise could affect sensitive land uses in the vicinity of the project.

NOI-1: The project sponsor shall require construction contractors to implement the following mitigation measures:

- Consistent with the City of Woodland Municipal Code, all noise generating construction activities shall be limited to Monday through Saturday from 7:00 AM to 6:00 PM, and Sundays from 9:00 AM to 6:00 PM.
- All construction vehicles and equipment, fixed and mobile, shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).
- Construction staging areas shall be located as far as practicable from dwellings and the Inn so as to cause minimal disruption to these activities.
- Route all construction traffic to and from the project site via designated truck routes where possible. Prohibit construction related heavy truck traffic in residential areas where feasible.
- Prohibit unnecessary idling of internal combustion engines.
- Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.

MITIGATION MONITORING AND REPORTING PROGRAM (continued)

Transportation and Traffic

Project construction may affect traffic in the project vicinity.

TR-1: The City will require its construction contractor(s) to develop a construction management plan for review and approval. The plan will include at least the following items and requirements to reduce, to the maximum extent feasible, traffic congestion during construction:

- A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, signs, cones for drivers, and designated construction access routes;
- Identification of haul routes for movement of construction vehicles that would minimize impacts on motor vehicular, bicycle and pedestrian traffic, circulation and safety, and specifically to minimize impacts to the greatest extent possible on streets in the project area;
- Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures would occur; and
- Provisions for monitoring surface streets used for haul routes so that any damage and debris attributable to the haul trucks can be identified and corrected by the City.

Applicant shall submit traffic plan to Public Works Department prior to start of construction.

Ongoing during construction.