Letter 46

Review comments on DEIR for Mace Ranch IC project by Alan Hirsch 11-12-2015 1

To: maceranchinctr@cityofdavis.org
Katherine Hess, KHess@cityofdavis.org
Community Development Administrator
City of Davis, CA (530)757-5652

RE: Review comments on DEIR for Mace Ranch Innovation Center project (MRIC)

46-1 I am a resident of Davis. My past experience includes being the key organizer of SACTEN, the Sacramento Transportation Equity Network that advocated for adequate non-automobile mode infrastructure in Sacramento Region, and Executive director of Peninsula Rail 2000, where I worked to advocate for improve mass transit in the SF Bay area. I have also sat on the Board of TRAC. Train Riders Association of California. I have commented on many mass transit projects DEIR and alternatives analysis. I was empaneled on the Sacramento Light Rail to Airport Alternatives Analysis study and the Sacramento Air Quality/Land Use/Transportation Collaborative and SACOG MTP study committee. I am a retired CPA.

Thank you for considering these comments on the DEIR of the MRIC project.

Sincerely,

Alan Hirsch

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46-2 1. As with any model, the assumptions built into the input are key to accepting its output. The document does not clearly state its assumptions used in the transportation/travel model.

46-3 2. You say that there is sufficient hotel demand generated internally to support a hotel. Yet your forecast that 43% of all rooms used at this hotel will be for "leisure" use. Please reconcile these statements. What Leisure activities are planned for the Industrial park to attract these visitors?

46-4 3. Why did you not study a hybrid alternative to get the acre of industrial + R&D sq. ft. the city requires, a combination two alternatives. i.e. combining the "disperse/infill " alternative for office/R&D companies plus Reduced Site Alternative, i.e. entitling enough land at the Mace curve a few large industrial plants like the growth of Schilling robotics? This would meet the city spec and reduce the significant of Traffic on Mace at I-80.

46-5 4. There is uncertainty if the Nishi is built and its traffic impact on Richards and I80...and the all-important ability to travel between the University and this sight (vs sights in Dixon, West Sac)., These is also uncertain on setting a "base line" as it involves forecast of the yet unbuilt cannery—who marketing seems to be to identify commuter to the Bay Area and Sacramento. These uncertainties and their potential impacts on your forecast are not stated. A range of uncertainty should be stated for a clear presentation to the city and the community.

46-6 5. There should be a table showing LOS on the intersections under these conditions for comparison:
a) Existing conditions .
b) No project with Cannery fcst,
c) No project Cannery plus Nishi,
d) MRIC plus Cannery NISH,
e) MRIC with mitigation, NO Nishi plus Cannery
f) MRIC with mitigation, Nishi, plus cannery0
Such a presentation would outline the alternatives and relative traffic impacts on the community.

46-7 6. Given the range of traffic uncertainties the in base-case is built on, .and the inherent uncertainty of any forecast of human behavior 20 years, such as travel behavior into the future, a statement of risks and variable effecting the forecasts of traffic volume, LOS and VMT should be included—and the a range of uncertain estimated.

46-8 7. Data validating previous and current model comparing forecast vs actual need to be included as well as a range of uncertainty.

46-9 8. There is art as well as science in use of this model. The consultant should include a peer review of its previous transportation modeling efforts, is such exists.

46-10 9. The Effect of TDM efforts are not clearly indicated.

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46-11 10. It is rather shocking that even though over 1500 or 2000 new worker/commuters are expected to come to this business park, and 2/3 are from out of town, but you estimated no impact on Yolo bus ridership. You also state that the current bus from Sacto to Davis is standing room only. How is a TDM program to reduce Car Commuting consistent with projection of NO increase in bus commuting?

46-12 11. Why doesn't the project assume formation of a CSD district to fund improved Yolo bus and Unitrans service to run inside the Project: the walk from Covell Blvd bus stop to places of employment interior to the project approach ½ a mile and are too far for most bus commuters.

46-13 12. How will you assure that the proposed housing inside MRIC is only rented and/or owned by employees who work there-- both initially and over the long term? Please describe consistent with existing housing discrimination and other laws in effect in California—a legal opinion is probably required to provide assurance this mitigation effort is legally viable.
It seems to me if this housing is live din by other than employees, the trip generation by this development would be greater than if it is a workplace-only development therefore the city and community takes the risk, not the developer, if restrictive housing covenant are not enforceable.

46-14 13. If these residents are occupied by couples, one of them is most like work elsewhere, this will increase traffic? It seems to me this would undo any benefit for having employee-restricted housing internal to the project. Discuss.

46-15 14. Your traffic analysis is restricted to peak hours. There is a traffic impact at others times if housing is build internal the Innovation Park. Discuss.

46-16 15. The cumulative impact of NISHI causing congestion Richard Blvd connect from South to North Davis, and MRIC causing congestion on MACE overpass on I80 puts tremendous pressure on Pole Line Road—and Fifth and Eighth streets. Where are these cumulative impacts discussed, especially on parents and students at rush hour trying to get children from South Davis to the two High School, DaVinci Jr Hi and Chavez School??

46-17 16. The congestion on connector between South and North Davis across the Freeway discussed above has significant effect bus operating efficiencies of Unitrans as it slows down their schedule thus increases operating costs and reduces ridership. Where is this analyzed?

46-18 17. You do not discuss if there is sufficient capacity and width on Class 1 bike routes in E Davis. Some are very narrow and having both Ped and bike users is problematic. Discuss.

46-19 18. . How has AIRbnb room space been factored into the forecast for hotel demand for Davis? This new source of rooms does not seem to be not stated or factored into the forecast for demand.

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46-20

19. The General Plan amendment—to be approved by voters in a measure R vote-would seem to allow for that the area zoned for a Hotel could be converted by an action of the City Council to other types of retail. Given that retail space generates many more trips per square foot than a hotel or even industrial, and these incremental trips will be from customers off sight, should not the traffic forecast assume retail-traffic generation, not hotel travel generation to be on the conservative side?

46-21

20. The idea of Davis having an advantage in attracting companies to this space is said to be because University will be nearby and even have offices on sight at MRIC. On the economic forecast, how has the impact of University renting of industrial/Office space, and its defacto removal of this property of city and county tax rolls, been included?

46-22

21. The transportation "TDM" measure has the developer making a one-time payment if its TDM measures and to be determine mitigation's don't meet those promised in this plan. Should not a cost per trip not mitigated be negotiated up front (with inflation clause) to continually incent the developers to put in place an effect program to reduce automobile driving?

46-23

22. Why were HOV/Bus lanes on the Mace-I80 and Mace/2nd Street intersection NOT considered as mitigation to shift travel from Cars to buses and car pools? Giving car poolers and buses a way to queue jump has been provide effective in shifting demand away from single occupancy vehicles. Ignoring this option seems part of ignoring development of alternate commute modes to serve this development.

46-24

23. The VMT and carbon footprint of this annexation to Davis from this project is 76% generated from mobile sources, i.e. from people driving to work instead of biking, taking transit, etc. And your project does not include any significant plans to reduce driving vs conventional business parks- i.e. 10% comparing Table 4.7-3 and 4.7.4 on pg. 4.7-26. Given this, would it not be fair to state this project, if approved, means Davis has abandoned its stated goal of reducing Green House Gases as a city?

LETTER 46: ALAN HIRSCH, INDIVIDUAL

Response to Comment 46-1

Thank you for submitting comments on the MRIC Draft EIR.

Response to Comment 46-2

Pages 5-56 and 5-57 provide a description of the City of Davis travel demand model that was used to prepare cumulative forecasts for the Mace Ranch Innovation Center (MRIC) Draft EIR cumulative transportation assessment. The section also describes updates to the Davis travel demand model, which has been used to prepared cumulative forecasts for CEQA transportation studies in the City of Davis for more than a decade. Further information regarding the Davis travel demand model is provided in the Model Development Report included in Appendix I to the Final EIR.

The Davis travel demand model was updated for the MRIC EIR analysis, to reflect the 2035 horizon year forecasts developed by SACOG for the 2012 version of the Metropolitan Transportation Plan/Sustainable Communities Plan (MTP/SCS). The MRIC, Davis Innovation Center, and Nishi Gateway projects (e.g., which are not included in the MTP/SCS land use forecasts) were also incorporated into the Davis travel demand model for the CEQA Cumulative Plus Project scenario. The CEQA Cumulative No Project scenario includes the SACOG 2035 forecasts, the Davis Innovation Center, and the Nishi Gateway projects.

For the MRIC project, the Davis travel demand model was updated to reflect the trip generation identified in the Draft EIR and the distribution of MRIC employee trips as identified in the *Economic Evaluation of Innovation Park Proposals* (BAE, July 2015).

Response to Comment 46-3

It appears that the commenter may have misinterpreted the information presented on Table 12 of the BAE study. The upper part of the table indicates that 43.6% of current local area hotel demand is estimated to be associated with leisure travel, with the remainder estimated as business-related demand. The portion of existing demand associated with business demand is used to estimate the average number of hotel room nights associated with current local area employment, on a per job basis. The average room nights per job was applied to the projected employment increase, in order to estimate the number of hotel room nights that the proposed project(s) would generate. Thus, the demand projections are strictly based on business-related travel that is associated with the new business activity that would be expected in the proposed project(s).

Response to Comment 46-4

The legal standard for the CEQA alternatives analysis is a reasonable range of alternatives to the project that would achieve the basic project objectives and avoid or lessen the effects of the project. The Draft EIR studied a total of seven alternatives, including one (Mixed Use

Alternative) at a level of detail equivalent to the project analysis. This range of alternatives satisfies the CEQA analysis requirements and substantiation for this is provided in Chapter 7 of the Draft EIR. There are many alternatives and combinations of alternatives that could be analyzed for a given project but it is not feasible or required to analyze every one of them. The City Council could choose to pursue the Reduced Site Alternative and supplement that decision with an emphasis on infill development downtown, which would be similar to the "hybrid" alternative suggested by the commenter. There does not need to be a specific analysis of this combination of actions for the Council to pursue them if the Council determines they will best satisfy the City's needs and objectives.

Response to Comment 46-5

The Nishi Innovation Center and the Cannery projects are both included in the Cumulative analysis presented in Chapter 5. The impact analysis methodology is described in detail on pages 4.14-15 through 4.14-21. Additional details on the travel forecasting methodology, including the City of Davis travel demand model and growth forecasts, which are consistent with the regionally adopted Metropolitan Transportation Plan/Sustainable Communities Strategy document, are provided on pages 5-15 through 5-16.

Regarding the level of uncertainty in travel demand forecasts, it is generally understood that some level of uncertainty is a given for all forecasting efforts, and this is made clear in the methodology sections and throughout the presentation of the traffic impact analyses, with the use of the term "estimated".

Studies by the Federal Highway Administration (FHWA) Travel Model Improvement Program (TMIP) indicate that the three major sources of inaccuracy in traffic modeling are the model structure and data, analysis bias, and the inherent uncertainties about the future. While significant resources are applied to represent travel behavior and the transportation system in travel demand models, the data is not perfect. There is a risk associated with the possibility that SACOG MTP/SCS forecasts for the City of Davis and UC Davis may not occur as predicted. The Davis citywide travel model does not assume any major local infrastructure improvements. Although that is consistent with the MTP/SCS and historical trends, implementation of new infrastructure not accounted for in the model may impact future travel behavior. Data is not available to quantify the uncertainty of forecasts prepared using the Davis citywide travel model. Information compiled by Fehr & Peers from multiple studies, peer reviews, industry experts, and agency guidance indicate forecast uncertainty ranges of $\pm$20-35% for a traffic forecast horizon of 20 years.

Response to Comment 46-6

It is not feasible or required to analyze all possible permutations of future conditions. CEQA requires the presentation of a reasonable range of scenarios to describe the impacts of the project relative to "Existing" or "Baseline" conditions, and relative to future "Cumulative" conditions. The Draft EIR presents these scenarios, and includes an additional assessment of Phase 1 of the Project relative to Existing conditions, as well as two versions of Cumulative Conditions – one with build-out of the Nishi, Davis and Mace Ranch Innovation Centers (along with other local

and regional growth, including the Cannery project), and one with build-out of just the Nishi and Mace Ranch Innovation Centers (along with other local and regional growth, including the Cannery project).

Response to Comment 46-7

Please see Responses to Comments 47-5 and 47-8.

Response to Comment 46-8

The model used in the travel demand forecasting process was validated and calibrated as part of the model development process. Additionally, when the model was used for the Draft EIR forecasting, adjustments to correct for model error relative to existing conditions (based on actual traffic counts) at the analysis locations were made using standard best practices for travel demand forecasting.

Response to Comment 46-9

The consultant has used both models on numerous projects, for the City of Davis and other clients, and consultant modelling staff are trained in the use of both models. Providing a peer review of past work on unrelated projects by the consultant was not deemed necessary by the City of Davis for this EIR.

Response to Comment 46-10

Mitigation Measure 4.14-6(a) sets trip generation limit targets, in part (e)iii. Mitigation Measure 4.14-6(a) also states that the project applicant shall develop a TDM program that achieves two specific metrics.

- Reduce trips to achieve 1.5 Average Vehicle Ridership;
- Reduce daily and peak hour vehicle trips, as forecasts for the project in this traffic impact assessment, by 10 percent for every project phase.

The 10 percent reduction in vehicle trips was based on recommended VMT reduction levels identified in *Quantifying Greenhouse Gas Mitigation Measures: A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures (August 2010)*, as prepared for the California Air Pollution Control Officers Association (CAPCOA). This document identifies the level of VMT reduction that would occur with the implementation of a range of transportation strategies that are grouped into categories including Land Use/Location, Neighborhood/Site Enhancement, Parking Policy/Pricing, Transit System Improvements, Commute Trip Reduction, Road Pricing Management, and Vehicles.

Response to Comment 46-11

As noted in the discussion of Impact 4.14-10, the project would add regional transit trips largely in the off-peak direction (inbound to Davis in the AM and outbound from Davis in the PM), and

thus the peak direction capacity constraint would not be substantially affected by Project transit trips. Furthermore, the peak hour transit trips are assumed to be relatively small, as shown in Final EIR Chapter 2, Tables 5-12 and 5-13: 22 trips in the AM peak hour, and 21 trips in the PM peak hour (total for MRIC and Mace Triangle). These are the baseline assumptions for the cumulative case, and do not reflect additional transit trips that may be generated with full implementation of the TDM plan required by Mitigation Measure 4.14-6. However, even if more transit trips are generated than these baseline assumptions, they would be largely in the off-peak direction.

Response to Comment 46-12

Details regarding project funding for various infrastructure components have not yet been provided to the City by the applicant. As such the City is not able to provide a response about whether the applicant has considered the funding question asked by the commenter. Unitrans and Yolobus have indicated to the Draft EIR traffic consultant their concern that using the internal transit center, could add too much time to their existing routes.[41] However, in order to allow for a more unified transit center in the future, Mitigation Measure 4.14-10 has been modified to add that the bus stop will be moved to within the transit center once the center is operational and with the approval of Yolobus and Unitrans. In implementing the measure, this modification will allow for the City, the applicant, and bus service providers to work collaboratively to address Unitrans concerns.

Response to Comment 46-13

Please see Master Response #3, Mixed Use Alternative.

Response to Comment 46-14

Please see Master Response #3, Mixed-Use Alternative.

Response to Comment 46-15

The analysis focuses on the peak commute hours, as mitigation developed to address impacts during those hours would address the lesser impacts that would occur at other times of day. For the Mixed Use Alternative, the peak hour trip generation is also the highest hourly trip generation for the day.

Response to Comment 46-16

As described in Chapter 5, which presents the cumulative scenarios that include the Nishi Innovation Center, the analysis includes segments of Pole Line Road, Fifth Street and Eighth Street. The segment of Pole Line Road south of Fifth Street is found to have a cumulatively considerable impact under the CEQA Cumulative case, but not the Modified Cumulative case

[41] Personal communication between Heidi Tschudin, MRIC Project Manager, and Bob Grandy, Principal, Fehr & Peers, January 5, 2016.

(see Impact 5-22). No other impacts for these three roadways are identified. The CEQA Cumulative scenario includes both the Nishi and Davis Innovation Centers, along with the MRIC. Therefore, it considers a substantially higher-traffic condition than the Modified Cumulative scenario, which does not include the Davis Innovation Center.

Response to Comment 46-17

As noted in response to comment 46-16, one cumulatively considerable traffic impact was identified on Pole Line Road, on the segment south of Fifth Street, for the CEQA Cumulative case only. Impact 5-22 acknowledges the projected LOS F condition, and requires mitigation consisting of "monitoring and traffic management strategies…" rather than roadway widening (see further discussion in Mitigation Measure 5-22). This mitigation would address transit delays as part of the overall vehicle flow.

Response to Comment 46-18

The estimated number of bike and walk commute trips to the Project site is approximately 200 in both peak hours, with 97% of these being bicycle trips (refer to Final EIR Chapter 2, Tables 5-12 and 5-13). These trips would be distributed among many routes to the site, including Class I paths and on-street routes. To facilitate the new trips, Draft EIR Mitigation Measure 4.14-9(a) requires bicycle facility improvement projects, including construction of a new multi-use path on the west side of Mace Boulevard from just north of Alhambra Drive to the existing path along the frontage of Harper Junior High School, and construction of an improved crossing of County Road 32A southeast of the railroad crossing; and Mitigation Measure 4.14-9(b) requires the funding of a study to assess overall bicycle circulation in general in the annexed area and make recommendations for integrating project bicycle facilities with the rest of the City bicycle system, and to specifically examine a grade-separated bicycle/pedestrian crossing of Mace Boulevard to connect riders directly to the project site. The level of additional bicycle traffic on existing Class I paths was not deemed to warrant further path widening, given the distribution of trips to multiple facilities, noted above.

The commenter suggests that there are Class 1 bike routes in East Davis that may not have sufficient capacity and width, but does not provide any specific examples. All Class 1 bike facilities in East Davis are constructed to the minimum standard width required for Class 1 bike facilities in California, which is 8-10 feet for the bike path traveled way.

Please also see Master Response #2, Bicycle Connection Along County Road 32A.

Response to Comment 46-19

As stated in response to Comment 46-3, the hotel demand projections in the BAE report are based on current local hotel room night demand, and the average business-related hotel room nights per local area employee. These figures only include those visitor room nights that are captured in traditional lodging places. To the extent that visitors to the local area utilize services like AirBnB to secure non-traditional accommodations, this is reflected in the statistics regarding

the remaining portion of travelers who utilize traditional hotels, which is reflected in the calculations made on Table 12 of the BAE report.

Response to Comment 46-20

Please see Master Response #4, Guarantees of Developer Performance.

Response to Comment 46-21

The BAE report did not make explicit assumptions about the breakdown of occupancy within innovation parks between taxable entities, such as for-profit businesses, and tax-exempt entities, such as educational institutions and non-profit organizations.

However, the EPS analyses did explore the impact of potential UC Davis occupancy in MRIC. The fiscal impact assessment explores the potential that space occupied by UC Davis and/or other public and non-profit entities, assumed for analysis to be roughly 5% of the total MRIC project, will not generate property tax revenues, and if not otherwise mitigated, could slightly reduce MRIC's fiscal benefits to the City General Fund. It should be noted that university presence is a positive aspect of the MRIC project. Moreover, the City has the option of exploring through the development agreement applicant/project funding in-lieu of foregone property tax and potentially other affected revenue sources. University presence is critical to the success of the Innovation Center concept, as it provides opportunities for commercialization of emerging technologies (i.e., tech transfer) and can bolster lease rates by attracting innovative companies that value university proximity. The Executive Summary of the Economic and Fiscal Impact Analysis for the Nishi Project contains a longer discussion about a variety of measures that can be implemented to mitigate any negative fiscal impact of tax-exempt occupants

Response to Comment 46-22

Mitigation Measure 4.14-6, sub-item (e)(ii), require the Master Owner's Association (MOA) to pay TDM penalty fees if the annual TDM report determines that the TDM objectives set forth in MM 4.14-6 are not satisfied. This penalty fee is linked to the results of the annual TDM report; therefore, depending upon the results of each TDM report, the penalty fee may be required more than once. Using the anticipated buildout estimate of 18 years (see page 3-18 of the Draft EIR), it is anticipated that a total of 18 annual TDM reports will be required for the project.

Response to Comment 46-23

The proposal for HOV/bus lanes on Mace Boulevard would be viable in an urban context where the employment density and corresponding bus and carpool traffic levels would make full use of the lanes and thus reduce overall congestion relative to a no-HOV lane design. However, in the vicinity of the project on Mace Boulevard, within the planning horizon of the Draft EIR (2035), the level of carpooling and bus service/use would not support converting an existing lane to HOV/bus only or widening Mace Boulevard to provide a new dedicated HOV/bus only lane. That is, the lane would most likely be underutilized, and thus could increase overall congestion on the corridor.

Response to Comment 46-24

Please see Response to Comment 31-12. As noted on pages 4.7-28 through 4.7-34 of Section 4.7, Greenhouse Gas Emissions and Energy, of the Draft EIR, implementation of Mitigation Measures 4.7-2(a) and 4.7-2(b) would require the applicant to reduce emissions consistent with the City's GHG emissions reduction goals leading up to 2050 and the City's goal of carbon neutrality in 2050. The measure ensures meaningful progress towards the City's 2050 emission reduction goals.

The commenter is correct that the majority of GHG emissions related to the project are mobile emissions. The project, by itself, cannot feasibly eliminate mobile source emissions. The Draft EIR includes measures aimed at reducing GHG emissions and other mobile pollutants to the extent reasonably feasible. For example, Mitigation Measure 4.14-6 requires implementation of a Travel Demand Management (TDM) Program for the project, which will reduce vehicle trips by a minimum of 10 percent. In addition, Mitigation Measure 4.7-2 includes components that shall be selected by the developer in conjunction with the City that would be implemented if specified GHG reduction targets are not achieved during each project phase. Furthermore, Mitigation Measure 4.3-2 has been revised in this Final EIR to require electrical vehicle charging stations throughout each phase of development, which would help to reduce the project's mobile emissions (please see Response to Comment 25-8). Mitigation Measure 4.3-2 has also been revised in this Final EIR to require implementation of an off-site mitigation strategy for criteria pollutants, to the greatest extent feasible (please see Response to Comment 31-6). This off-site mitigation strategy for criteria pollutants also has the potential to reduce GHG emissions.

In addition, the project has been designed to promote walking, biking, and transit use. For example, as shown in revised Figure 3-15 on page 2-7 of Chapter 2, Revisions to the Draft EIR Text, of this Final EIR, the project includes Class I and Class II bike lanes and pedestrian pathways throughout the project site, as well as multi-modal corridors along the perimeter agricultural buffer. The project also includes a transit center which could be served by Yolobus and Unitrans based on revised Mitigation Measure 4.14-10.

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Burrowing Owl Preservation Society
A non profit organization dedicated to increasing the burrowing owl population through education and enhancement of grassland habitat
14841 CR 91 B, Woodland CA 95695
cportman@gamil.com **530-666-0882**
www.burrowingowlpreservation.org

November 30, 2015

MRIC Project Planner
City of Davis Department of Community Development and Sustainability
23 Russell Boulevard, Suite 2
Davis, CA 95616

47-1 We urge the City Davis to require the applicant for the Mace Ranch Innovation Center project to conduct another burrowing owl biological assessment before certifying the EIR. The burrowing owl assessment and mitigation measures are inaccurate and therefore the biological assessment is inadequate.

47-2 **Field surveys in October and December are not adequate to detect burrowing owls.** The biological assessment indicates that Sycamore did field surveys on October 7 and December 10 of 2014.

California Department of Fish and Wildlife's Staff Report Burrowing Owl Mitigation Guidelines 2012 provide that there be three burrowing owl surveys during breeding season when the owls are most detectable, April 15 to July 15. Please see the following excerpt from the Staff Report.

"Surveys

Burrowing owl surveys are the second step of the evaluation process and the best available scientific literature recommends that they be conducted whenever burrowing owl habitat or sign (see Appendix B) is encountered on or adjacent to (within 150 meters) a project site (Thomsen 1971, Martin 1973). Occupancy of burrowing owl habitat is confirmed at a site when at least one burrowing owl, or its sign at or near a burrow entrance, is observed within the last three years (Rich 1984). Burrowing owls are more

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detectable during the breeding season with detection probabilities being highest during the nestling stage (Conway et al.2008). In California, the burrowing owl breeding season extends from 1 February to 31 August (Haug et al. 1993, Thompsen 1971) with some variances by geographic location and climatic conditions. Several researchers suggest three or more survey visits during daylight hours (Haug and Diduik 1993, CBOC 1997, Conway and Simon 2003) and recommend each visit occur at least three weeks apart during the peak of the breeding season, commonly accepted in California as between 15 April and 15 July (CBOC 1997). Conway and Simon (2003) and Conway et al. (2008) recommended conducting surveys during the day when most burrowing owls in a local area are in the laying and incubation period (so as not to miss early breeding attempts), during the nesting period, and in the late nestling period when most owls are spending time above ground. Non-breeding season (1 September to 31 January) surveys may provide information on burrowing owl occupancy, but do not substitute for breeding season surveys because results are typically inconclusive. Burrowing owls are more difficult to detect during the non-breeding season and their seasonal residency status is difficult to ascertain."

47-3

MRIC project meets the significant impact standard because it would have a permanent substantial adverse effect directly on natal burrows within 150 meters of the project and through habitat modifications, i.e. the loss of foraging habitat. The following describes the significant impact standard from appendix G of the CEQA Guidelines.

The project would: "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 CDFW or USFWS"

47-4

Section 4.4-4 the statement "based on analysis and implementation of mitigation measures the impact to burrowing owl is less than significant." is inaccurate. The analysis is inaccurate because the field surveys were not conducted at the optimal time to detect burrowing owls, so that two breeding pair of burrowing owls within 150 meters of the study area were not detected.

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Excerpt from Staff Report:
"At a minimum, if burrowing owls have been documented to occupy burrows (see Definitions, Appendix B) at the project site in recent years, the current scientific literature supports the conclusion that the site should be considered occupied and mitigation should be required by the CEQA lead agency to address project-specific significant and cumulative impacts. Other site-specific and regionally significant and cumulative impacts may warrant mitigation."

47-5

Additionally, the analysis does not consider cumulative impacts. The following is excerpt from the Staff Report:

Cumulative effects. The cumulative effects assessment evaluates two consequences: 1) the project's proportional share of reasonably foreseeable impacts on burrowing owls and habitat caused by the project or in combination with other projects and local influences having impacts on burrowing owls and habitat, and 2) the effects on the regional owl population resulting from the project's impacts to burrowing owls and habitat. As set forth in more detail in Appendix A, the current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow

A Yolo County Burrowing Owl Breeding Pair Census conducted by Burrowing Owl Preservation Society and Institute for Bird Populations in 2014 revealed a 75% decline in the population. The loss of two breeding pair and significant foraging habitat will have a huge impact on the remaining Yolo County burrowing owl population.

47-6

Section 4.4-4 (b) absolutely no "stacking" of burrowing owl and Swainson's hawk mitigation acreage! Swainson's hawks are predators of burrowing owls. From the Staff Report:

"Select mitigation lands taking into account the potential human and wildlife conflicts or incompatibility, including but not limited to, human foot and vehicle traffic, and predation by cats, loose dogs and urban-adapted wildlife, and incompatible species management."

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Section 4.4-4 (d) Compensatory mitigation. Active dens are present and therefore mitigation acreage is required and mitigation goals need to be established. The following two excerpts from the Staff Report address mitigation:

"As set forth in more detail in Appendix A, the current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow."

47-6 Cont'd

And

"Mitigate for permanent impacts to nesting, occupied and satellite burrows and burrowing owl habitat with (a) permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and (b) sufficiently large acreage, and presence of fossorial mammals. The mitigation lands may require habitat enhancements including enhancement or expansion of burrows for breeding, shelter and dispersal opportunity, and removal or control of population stressors. If the mitigation lands are located adjacent to the impacted burrow site, ensure the nearest neighbor artificial or natural burrow clusters are at least within 210 meters (Fisher et al. 2007)."

47-7

The City, as the lead agency, needs to assure that a qualified burrowing owl biologist as defined in the Staff Report conducts a new burrowing owl assessment.

Thank you for your thoughtful consideration,

Catherine Portman, President

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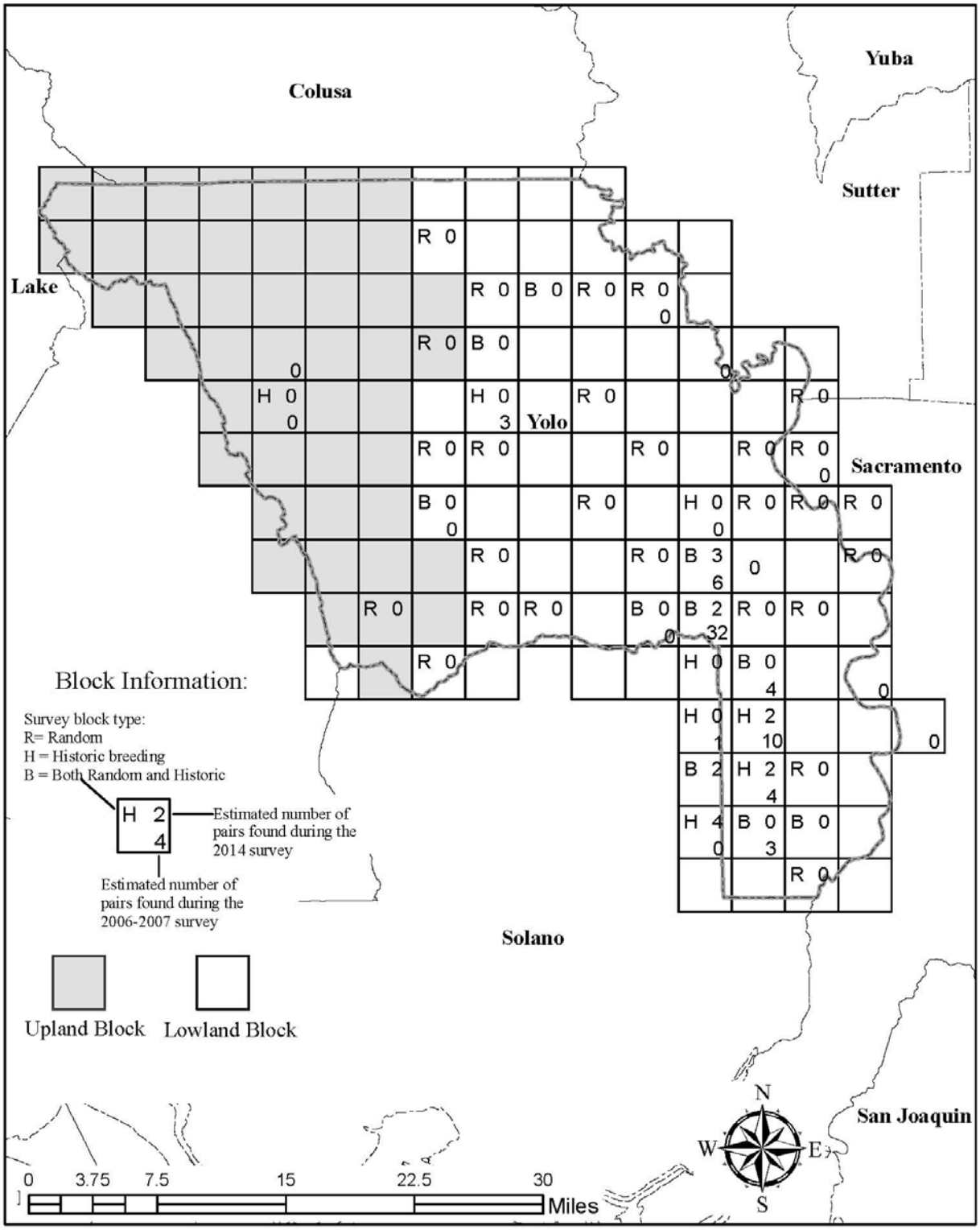

LETTER 47: CATHERINE PORTMAN, BURROWING OWL PRESERVATION SOCIETY

Response to Comment 47-1

Thank you for submitting comments on the MRIC Draft EIR. The commenters regarding the burrowing owl assessments are noted for the record. Specific responses to specific comments are provided below.

Response to Comment 47-2

Please see Master Response #7 and Responses to Comments 33-17 and 35-2 regarding the number and adequacy of site surveys, a discussion of known burrowing owl records and locations, as well as mitigation for potential impacts to burrowing owl.

Response to Comment 47-3

Chapter 5, Cumulative Impacts, of the Draft EIR discusses cumulative impacts to habitat and concludes that the project's incremental contribution to direct habitat impacts and indirect effect to special-status species would be cumulatively considerable. Even with the implementation of the project's mitigation measures, the cumulative impacts would not be reduced to a less-than-significant level.

Response to Comment 47-4

As discussed in Master Response #7 and Response to Comment 33-17, burrowing owls were not found during any of the on-site surveys performed by Sycamore Environmental, nor do any recent (e.g., less than six years old) California Natural Diversity Database (CNDDB) records of burrowing owls exist on-site. The Yolo County Burrowing Owl Breeding Pair Census (2014) referenced in the comment found two breeding pair of burrowing owls in a 5,000-meter by 5,000-meter block on the east side of the City of Davis. The report does not indicate where the two breeding owls were located. Please see Responses to Comments 33-17 and 35-2.

Response to Comment 47-5

The City of Davis does not have a policy against "stacking" of mitigation acreage. Mitigation Measures 4.4-4(b) and 4.4-4(d) require proof of approval by the California Department of Fish and Wildlife (CDFW) that the habitat is suitable and compatible for all species for which the lands are to provide compensatory mitigation.

Response to Comment 47-6

Please see Master Responses #7 and #8. Compensatory mitigation for burrowing owl dens impacted by development of the project is described in Mitigation Measures 4.4-4(b) and 4.4-4(d). The project is also required to provide compensatory mitigation for loss of Swainson's hawk foraging habitat (Mitigation Measure 4.4-5).

Response to Comment 47-7

The biologists who conducted the biological surveys meet the qualifications listed in the Staff Report. Thank you.

APPENDIX A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Aesthetics and Visual Resources			
4.1-1 Have a substantial adverse effect on a scenic vista.	LS	*None required.*	N/A
4.1-2 Substantially degrade the existing visual character or quality of the project site and its surroundings.	S	*None feasible.*	SU
4.1-3 Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	PS	*MRIC and Mace Triangle* *4.1-3 In conjunction with submittal of improvement plans for the Mace Triangle and each phase of development for the MRIC, the applicant shall submit a lighting plan to the Community Development and Sustainability Department for review and approval. The lighting plan shall be designed to limit light trespass and glare onto off-site properties to a reasonable level through the use of shielding, and directional lighting methods, including, but not limited to, fixture location and height. The Plan shall comply with Chapter 6 of the Davis Municipal Code - Article 8: Outdoor Lighting Control.*	LS
4.1-4 Conflict, or create inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to aesthetics and	PS	*MRIC and Mace Triangle* *4.1-4 At or prior to final planned development, or tentative map submittal, whichever occurs first, the applicant shall submit landscape and architectural details to the Department of Community Development and Sustainability showing the following:*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
visual resources.		*Landscaping* • *Research/office/R&D and manufacturing areas shall have access connections at regular intervals along the perimeter of the project area to adjacent bike and pedestrian pathways and easily-accessible, landscaped pedestrian and bicycle access between various areas.* • *Arterial and collection streets shall have planted medians, but with widths sized to accommodate tree and shrub plantings. Medians on collector streets shall be limited to locations where the median contributes to a specific purpose or solves a specific problem, such as enhancing an entry, calming traffic, or providing a needed pedestrian refuge at intersections. Removal of street trees to accommodate an increase in vehicular traffic shall occur only as a last resort, after review by appropriate boards and commissions.* • *Trees that are planted in the future shall have wide canopies, sufficient to eventually provide, at maturity, at least 50 percent shade coverage of the pavement area of local streets and 30 percent shade coverage of the pavement area of collector and arterial streets.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Architecture • *A scale transition between intensified land uses and adjoining lower intensity land uses shall be provided, as applicable.* • *Taller buildings shall be stepped back at upper levels in areas with a relatively smaller-scale character.* • *Buildings shall be varied in size, density and design.* • *Stored materials, goods, parts or equipment shall be screened from adjacent public streets or highways.* • *Loading facilities shall be designed as an integral part of the building(s) which they serve and shall be located in an inconspicuous manner.* • *Roof mounted equipment shall be screened from view of any ground level area accessible to the general public.* • *Trash enclosures, noise generating equipment, and other nuisances shall be adequately screened or located away from any adjacent residential use.*	
4.2 Agricultural and Forest Resources			
4.2-1 Impacts related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important	S	*MRIC Site* *4.2-1(a)* *Prior to initiation of grading activities for each phase of development of the MRIC, the project applicant for the MRIC Site shall set aside in perpetuity, at a minimum*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
Farmlands) to non-agricultural use, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.		*ratio of 2:1 of active agricultural acreage, an amount equal to the current phase. The applicant may choose to set aside in perpetuity an amount equal to the remainder of the project site instead of at each phase. The agricultural land shall be elsewhere in unincorporated Yolo County, through the purchase of development rights and execution of an irreversible conservation or agricultural easement, consistent with Section 40A.03.025 of the Davis Municipal Code. The location and amount of active agricultural acreage for the proposed project is subject to the review and approval by the City Council. The amount of agricultural acreage set aside shall account for farmland lost due to the conversion of the project site, as well as any off-site improvements, including but not necessarily limited to the off-site sewer pipe. The amount of agricultural acreage that needs to be set aside for off-site improvements shall be verified for each phase of the MRIC during improvement plan review. Pursuant to Davis Code Section 40A.03.040, the agricultural mitigation land shall be comparable in soil quality with the agricultural land being changed to nonagricultural use. The easement land must conform with the policies and requirements of LAFCO including a LESA score no more than 10 percent below that of the project site. The easement instrument used to satisfy this measure shall conform to the conservation easement template of the Yolo Habitat Conservancy.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		4.2-1(b) *The MRIC Master Owners' Association (MOA) shall encourage, and exercise control over, interim agricultural operations on-site through specific terms of agricultural leases. Terms shall specify duration of leases and require each new leasee to coordinate with the Yolo County Agricultural Commissioner to determine appropriate types of agricultural crops and uses for urban/ag interface areas. The MOA shall work cooperatively with the farmer(s) to minimize incompatibilities between ongoing agricultural operations on-site and MRIC businesses, such that the project site can continue to be farmed successfully until the project is fully built out. Minimization measures should include the appropriate timing of on-site agricultural operations (i.e., use of equipment) to avoid early morning or nighttime noise generation; prohibiting disking operations during periods of high winds; minimization of pesticide applications; etc.* *Mace Triangle – none*	
4.2-2 Impacts related to conflicting with existing zoning for agricultural use.	LS	*None required.*	N/A
4.2-3 Result in the loss of forest or agricultural land or conversion of forest or agricultural land to non-forest or non-agricultural	S	*MRIC Site* *4.2-3(a)* *Implement Mitigation Measures 4.2-1(a) and (b).*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
use.		*Mace Triangle Site* *4.2-3(b) Prior to initiation of grading activities for APN 033-630-012 or APN 033-630-011 within the Mace Triangle site, the future project applicant(s) shall set aside in perpetuity, at a minimum ratio of 2:1 of active agricultural acreage, the following approximate acreages of protected farmland for agricultural purposes:* • *APN 033-630-011 (Ikedas):* *Mitigate conversion of approx. 2.5 acres at a 2:1 ratio = 5 acres* • *APN 033-630-012 (Easternmost Parcel):* *Mitigate conversion of approx. 8.4 acres at a 2:1 ratio = 16.8 acres* *The agricultural land shall be elsewhere in unincorporated Yolo County, through the purchase of development rights and execution of an irreversible conservation or agricultural easement, consistent with Section 40A.03.025 of the Davis Municipal Code. The location and amount of active agricultural acreage for the proposed project is subject to the review and approval by the City Council. The amount of*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		agricultural acreage set aside shall account for farmland lost due to the conversion of the project site as well as any off-site improvements. Pursuant to Davis Code Section 40A.03.040, the agricultural mitigation land shall be comparable in soil quality with the agricultural land whose use is being changed to nonagricultural use. The easement land must conform with the policies and requirements of LAFCO including a LESA score no more than 10 percent below that of the project site. The easement instrument used to satisfy this measure shall conform to the conservation easement template of the Yolo Habitat Conservancy.	
4.2-4 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.	S	*MRIC* *4.2-4 Prior to recording the first final map, the applicant shall attempt to purchase a "no aerial spray" easement from the adjacent property owner. It is anticipated that the easement will need to be 400 feet wide along the MRIC Site's northwestern, northern and eastern boundaries. The applicant shall submit the written proof of the easement to the Department of Community Development and Sustainability.* *Mace Triangle – none*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.2-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to agricultural resources.	LS	*None required.*	N/A
4.3 Air Quality			
4.3-1 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during construction.	LS	*None required.*	N/A
4.3-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation during operations, and a conflict with or obstruction of implementation of applicable air quality plans.	S	*MRIC and Mace Triangle* *4.3-2 Prior to issuance of any entitlement or permit, the project applicant shall work with the City of Davis, the YSAQMD, and/or other air districts within the region (as appropriate) to develop and implement a strategy to mitigate ROG and NOx, and PM_{10}. The strategy must reduce emissions from project operation to levels at or below the applicable YSAQMD thresholds of significance to the maximum extent feasible. Feasible on-site actions to reduce emissions shall receive highest priority for implementation. Emissions that cannot be reduced through on-site actions shall be mitigated*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		through off-site action. The strategy and all actions shall be subject to review and approval by the City in consultation with the YSAQMD, and, if applicable, the air quality management district or air pollution control district within which the mitigation project is located. On-site actions may include, but shall not be limited to the following: • *Reducing on-site parking lot area;* • *Using concrete or other non-emitting materials for parking lots instead of asphalt;* • *Limiting on-site parking supply;* • *Using passive heating and cooling systems for buildings;* • *Using natural lighting in buildings to the extent practical;* • *Installing mechanical air conditioners and refrigeration units that use non-ozone depleting chemicals;* • *Providing electric outlets outside of buildings, sufficient to allow for use of electric landscaping equipment;* • *Hiring landscaping companies that use primarily electric landscaping equipment;* • *Use of zero-VOC paints, finishes, adhesives, and cleaning supplies on all buildings on the project site.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		• *Hiring janitorial companies that use only low-VOC cleaning supplies;* • *Employing vehicle fleets that use only cleaner-burning fuels;* • *Providing electrical vehicle charging stations in each phase of the project.* *Off-site actions may include, but shall not be limited to, the following:* • *Retrofitting stationary sources such as back-up generators or boilers with new technologies that reduce emissions;* • *Replacing diesel agriculture water pumps with alternative fuels;* • *Funding projects within an adopted bicycle/pedestrian plan;* • *Replacing non-USEPA wood-burning devices with natural gas or USEPA-approved fireplaces;* • *Providing energy efficiency upgrades at government buildings;* • *Installing alternative energy supply on buildings;* • *Replacing older landscape maintenance equipment with newer, lower-emission equipment;*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		• *Payment of mitigation fees into an established air district emissions offset program.* *The Reduction Strategy shall include requirements to ensure it is enforceable and measurable. A mechanism for oversight, monitoring and reporting through the project Master Owners Association (MOA) to the City shall be included as a part of the strategy. Because ROG, NOx, and PM10 are pollutants of regional concern, the emissions reductions for these pollutants may occur anywhere within the lower Sacramento Valley Air Basin (e.g., within YSAQMD, the Sacramento Metropolitan Air Quality Management District, or the Placer County Air Pollution Control District). Emissions reductions should occur within the YSAQMD, if reasonably available.*	
4.3-3 Expose sensitive receptors to substantial pollutant concentrations.	LS	*None required.*	N/A
4.3-4 Create objectionable odors affecting a substantial number of people.	LS	*None required.*	N/A
4.3-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
mitigating environmental effects related to air quality.			
4.4 Biological Resources			
4.4-1 Impacts to Special-status plant species.	PS	*MRIC and Mace Triangle* *4.4-1 To ensure avoidance and minimization of potential impacts to special-status plant species, the following measures shall be implemented:* • *Prior to initiation of any ground disturbance activities for the Mace Triangle and for each phase of the MRIC, the applicant shall retain a qualified botanist to conduct a botanical survey during spring (April to May) and fall (July to September), during the evident and identifiable periods for special-status plants with potential to occur on the site. The botanical survey must also cover all potential utility line alignments and any other off-site work required for any phase of development. The survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review.* • *Any special-status plants that are within the limits of grading for on- or off-site improvements shall be propagated to suitable habitat in designated open space areas, or for the Mace Triangle, another pre-approved location. The propagation shall be*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		overseen by a qualified botanist, approved by the City of Davis Department of Community Development and Sustainability and CDFW. The botanist shall identify the location to receive the plants, identify the methods of propagation, and oversee the work.	
4.4-2 Impacts to Valley elderberry longhorn beetle (VELB).	PS	*MRIC* *4.4-2(a) To ensure avoidance and minimization of impacts to VELB, the project applicant for the MRIC shall implement the following measures prior to initiation of any ground disturbance activities within the Phase 3 portion of the MRIC along Mace Boulevard:* • *The project applicant for the MRIC shall avoid the single elderberry shrub along Mace Boulevard by restricting all construction and ground-disturbance during Phase 3 of development within 20 feet from the dripline of the shrub, subject to inspection by the City of Davis Department of Community Development and Sustainability. Restriction would include installing temporary orange fencing around the dripline so the area is clearly visible to workers; or* • *If the shrub cannot be avoided during Phase 3 through re-design as determined by the City of Davis Public Works Department in conjunction with*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		the project applicant, the project applicant shall mitigate for potential impacts to the shrub by either (1) purchasing VELB conservation credits from a USFWS-approved conservation bank, or (2) transplanting the individual shrub that is not avoided to a suitable mitigation site in a manner consistent with the USFWS' 1999 Conservation Guidelines for the VELB. The mitigation shall be overseen by a qualified biologist, approved by the City of Davis Department of Community Development and Sustainability and USFWS. *4.4-2(b)* *To ensure avoidance and minimization of impacts to VELB, the project applicant for the MRIC shall implement the following measures, prior to initiation of ground disturbance activities, if the northerly off-site sewer alignment is selected by the project applicant:* • *The project applicant for the MRIC shall avoid the elderberry shrubs along County Road 104 by restricting all construction and ground-disturbance within 20 feet from the dripline of the shrubs, subject to inspection by the City of Davis Department of Community Development and Sustainability. Restriction would include installing temporary orange fencing around the dripline so the area is clearly visible to workers; or* • *If the shrubs cannot be avoided in such a fashion,*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		the project applicant shall mitigate for potential impacts to the shrubs by either (1) purchasing VELB conservation credits from a USFWS-approved conservation bank, or (2) transplanting the individual shrubs that are not avoided to a suitable mitigation site in a manner consistent with the USFWS' 1999 Conservation Guidelines for the VELB. The mitigation shall be overseen by a qualified biologist, approved by the City of Davis Department of Community Development and Sustainability and USFWS. *Mace Triangle site - none*	
4.4-3 Impacts to Giant garter snake (GGS).	PS	*MRIC* *4.4-3(a) To ensure avoidance and minimization of impacts to GGS, the project applicant for the MRIC shall implement the following measures:* *Mace Drainage Channel – Preconstruction Surveys* • *Within 15 days prior to conducting any work in the Mace Drainage Channel or existing on-site detention basin, the project applicant shall retain a qualified biologist to conduct a preconstruction survey to verify that no water is present in the channel within the project limits. The preconstruction survey shall be submitted to the City*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		of Davis Department of Community Development and Sustainability for review. • *The qualified biologist shall document whether aquatic habitat is present in the Mace Drainage Channel downstream of the MRIC site. If aquatic habitat is not present in the Channel between the MRIC site and CR 105 (a distance of 0.5 miles), then aquatic habitat connectivity is not present in the Mace Drainage Channel and further preconstruction surveys or construction monitoring is not required.* • *If water is present within the on- and off-site project limits, the Mace Drainage Channel shall be dewatered for a minimum of two weeks prior to construction activities in the Channel.* • *If the first preconstruction survey reveals that aquatic habitat is present in the Channel between the project site and CR 105, a second preconstruction survey shall be conducted within 24 hours prior to construction. The second preconstruction survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review. The second preconstruction survey shall cover the portion of the Mace Drainage Channel located on the MRIC site, and areas within 200 feet of the channel. If, based on the preconstruction surveys, it is determined that*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		potentially occupied GGS aquatic habitat occurs within 200 feet of the MRIC site, MM 4.4-3(b) shall be implemented. *If GGS are encountered during preconstruction surveys, the City, USFWS and CDFW shall be notified and construction shall not commence until appropriate avoidance measures approved by USFWS, CDFW and the City are implemented. The measures may include, but are not limited to, the following:* o *Unless authorized by USFWS, site disturbance or construction activity within 200 feet of suitable aquatic habitat for the GGS shall not commence before May 1, with initial ground disturbance expected to correspond with the snake's active season. Initial ground disturbance should be completed by October 1.* o *To the extent possible, site disturbance or construction activity shall be avoided within 200 feet from the banks of GGS aquatic habitat for any phase of development. Movement of heavy equipment in these areas shall be confined to existing roadways, where feasible, to minimize habitat disturbance.* o *Construction personnel shall receive USFWS-approved worker environmental awareness*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		training to instruct workers to recognize giant garter snake and their habitats. o *Within 24 hours before site disturbance or construction activity, the project area shall be surveyed for GGS. The survey shall be repeated if a lapse in construction activity of two weeks or greater has occurred. If a GGS is encountered during construction, activities shall cease until appropriate corrective measures have been completed or it is determined by the qualified biologist and City staff, in coordination with USFWS and CDFW, that the GGS will not be harmed. Any sightings or incidental take shall be reported to USFWS and CDFW immediately.* o *Any aquatic habitat for the snake that is dewatered shall remain dry for at least 15 consecutive days after April 15 and before excavating or filling of the dewatered habitat. If complete dewatering is not possible, potential snake prey (e.g., fish and tadpoles) shall be removed so that snakes and other wildlife are not attracted to the construction area.* o *GGS habitat to be avoided within or adjacent to construction areas shall be fenced and designated as environmentally sensitive areas. These areas shall be avoided by all construction personnel throughout construction for any*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		phase of development. *Off-Site Volume Storage Pond (if approved)* • *During the inactive season (October 2 to April 30), no work shall be conducted in areas within 200 feet of potential aquatic habitat for GGS, unless authorized by USFWS.* • *Temporary stockpiling of soil shall not occur within 200 feet of potential aquatic habitat for GGS.* • *During the active season (May 1 to October 1), the construction monitoring provision of MM 4.4-3(b) shall be implemented and a biological monitor shall be present during work within 200 feet of aquatic habitat for GGS.* *4.4-3(b)* *Construction Monitoring* • *If any work is to occur within 200 feet of GGS aquatic habitat, then a biological monitor trained in GGS identification shall be on-site during any work within or immediately adjacent to the Mace Drainage Channel. The monitor shall provide environmental training to construction personnel working in or near the Mace Drainage Channel, subject to inspection by the City of Davis Department of Community Development and*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Sustainability. The training shall include instruction on GGS identification, behavior, and habitat. Work shall be stopped and USFWS and CDFW contacted should any GGS be encountered. *Mace Triangle – none*	
4.4-4 Impacts to Burrowing owl.	PS	*MRIC* *4.4-4(a)* <u>*Preconstruction Surveys:*</u> *The project applicant proposing development on the MRIC site shall implement the following measure to avoid or minimize impacts to western burrowing owl:* • *Within 14 days prior to any ground disturbing activities for each phase of development at the MRIC Site, the project applicant shall retain a qualified biologist to conduct a preconstruction survey of the MRIC site, any off-site improvement areas, and all publicly accessible potential burrowing owl habitat within 500 feet of the project construction footprint. The survey shall be performed in accordance with the applicable sections of the March 7, 2012 (or subsequent applicable), CDFW Staff Report on Burrowing Owl Mitigation. The qualified biologist shall be familiar with burrowing owl identification, behavior, and biology, and shall meet the minimum qualifications*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		described in the 2012 CDFW Staff Report. If the survey does not identify any nesting burrowing owls on the MRIC site, further mitigation is not required for that phase unless activity ceases for a period in excess of 14 days in which case the survey requirements and obligations shall be repeated. The results of the preconstruction survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review and approval prior to any site disturbance. • *If active burrowing owl dens are found within the survey area in an area where disturbance would occur, the project applicant shall implement measures at least equal to the 2012 (or subsequent applicable) CDFW Staff Report, subject to review and approval by the City of Davis Department of Community Development and Sustainability.* • *During the breeding season (February 1 through August 31), the following measures will be implemented:* o *Disturbance-free buffers will be established around the active burrow. During the peak of the breeding season between April 1 to August 15, a minimum of a 500-ft buffer will be maintained. Between August 16 and March 31,*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		a minimum of a 150-ft buffer will be maintained. The qualified biologist (as defined above) will determine, in consultation with the City and CDFW, if the buffer should be increased or decreased based on site conditions, breeding status, and non-project related disturbance at the time of construction. o *Monitoring of the active burrow will be conducted by the qualified biologist during construction on a weekly basis to verify that no disturbance is occurring.* o *After the qualified biologist determines that the young have fledged and are foraging independently, or that breeding attempts were not successful, the owls may be excluded in accordance with the non-breeding season measures below. Daily monitoring will be conducted for one week prior to exclusion to verify the status of owls at the burrow.* • *During the non-breeding season (September 1 to January 31), owls occupying burrows that cannot be avoided will be passively excluded consistent with Appendix E of the 2012 CDFW Staff Report:* o *Within 24 hours prior to installation of one-way doors, a survey will be conducted to verify the status of burrowing owls on the site.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		o *Passive exclusion will be conducted using one-way doors on all burrows suitable for burrowing owl occupation.* o *One-way doors shall be left in place a minimum of 48 hours to ensure burrowing owls have left the burrow before excavation.* o *While the one-way doors are in place, the qualified biologist will visit the site twice daily to monitor for evidence that owls are inside and are unable to escape. If owls are trapped, the device shall be reset and another 48-hour period shall begin.* o *After a minimum of 48 hours, the one-way doors will be removed and the burrows will be excavated using hand tools to prevent reoccupation. The use of a pipe is recommended to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow.* o *After the owls have been excluded, the excavated burrow locations will be surveyed a minimum of three times over two weeks to detect burrowing owls if they return. The site will be managed to prevent reoccupation of burrowing owls (e.g., disking, grading, manually collapsing burrows) until development is complete.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		o *If burrowing owls are found outside the project site during preconstruction surveys, the qualified biologist shall evaluate the potential for disturbance. Passive exclusion of burrowing owls shall be avoided to the maximum extent feasible where no ground disturbance will occur. In cases where ground disturbance occurs within the no-disturbance buffer of an occupied burrow, the qualified biologist shall determine in consultation with the City and CDFW whether reduced buffers, additional monitoring, or passive exclusion is appropriate.* *4.4-4(b)* *<u>Compensatory Mitigation, if Active Owl Dens are Present:</u> If active burrowing owl dens are present and the project would impact active dens, the project applicant shall implement the following, subject to review and approval by the City of Davis Department of Community Development and Sustainability:* • *If active owl burrows are present and the project would impact active burrows, the project applicant shall provide compensatory mitigation for the permanent loss of burrowing owl habitat at least equal to the 2012 (or subsequent applicable), CDFW Staff Report. Such mitigation shall include the permanent protection of land, which is deemed to be*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		suitable burrowing owl habitat through a conservation easement deeded to a non-profit conservation organization or public agency with a conservation mission, or the purchase of burrowing owl conservation bank credits from a CDFW-approved burrowing owl conservation bank. In determining the location and amount of acreage required for permanent protection, the applicant and City shall seek lands that include the same types of vegetation communities and fossorial mammal populations found in the lost foraging habitat, with a preference given to lands that are adjacent to, or reasonably proximate to, the lost foraging lands. Such lands shall provide for nesting, foraging, and dispersal comparable to, or better than, the lost foraging land. The minimum amount of acreage for preservation shall be 6.5 acres per nesting pair or unpaired resident bird. Additional lands may be required as determined pursuant to the then current standards/best practices for mitigation acreage as determined by the City in consultation with CDFW. *If the same mitigation acreage is proposed to be utilized for multiple species (i.e. burrowing owl habitat and Swainson's hawk foraging habitat), the City, in consultation with CDFW, must approve the mitigation lands and long-term management practices for the mitigation lands as suitable and*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		compatible for all species for which the lands are to provide compensatory mitigation. The City may reject proposed "shared" mitigations lands if the conservation goals and associated management practices for the species are not compatible. *Mace Triangle Site* *4.4-4(c)* *<u>Preconstruction Surveys:</u> The project applicant proposing development on the Mace Triangle site shall implement the following measures to avoid or minimize impacts to western burrowing owl:* • *Within 14 days prior to any ground disturbing activities for each phase of development at the Mace Triangle site, the project applicant shall retain a qualified biologist to conduct a preconstruction survey of the Mace Triangle site, any off-site improvement areas, and all publicly accessible potential burrowing owl habitat within 500 feet of the project construction footprint. The survey shall be performed in accordance with the applicable sections of the March 7, 2012 (or subsequent applicable), CDFW's Staff Report on Burrowing Owl Mitigation. The qualified biologist shall be familiar with burrowing owl identification, behavior, and biology, and shall meet the minimum qualifications described in the 2012 CDFW Staff*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Report. If the survey does not identify any nesting burrowing owls on the Mace Triangle site, further mitigation is not required for that phase unless activity ceases for a period in excess of 14 days in which case the survey requirements and obligations shall be repeated. The results of the preconstruction survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review and approval prior to any site disturbance. • *If active burrowing owl dens are found within the survey area in an area where disturbance would occur, the project applicant shall implement measures at least equal to the 2012 (or subsequent applicable) CDFW Staff Report, subject to review and approval by the City of Davis Department of Community Development and Sustainability.* • *During the breeding season (February 1 through August 31), the following measures will be implemented:* o *Disturbance-free buffers will be established around the active burrow. During the peak of the breeding season between April 1 to August 15, a minimum of a 500-ft buffer will be maintained. Between August 16 and March 31,*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		a minimum of a 150-ft buffer will be maintained. The qualified biologist (as defined above) will determine, in consultation with the City and CDFW, if the buffer should be increased or decreased based on site conditions, breeding status, and non-project related disturbance at the time of construction. o *Monitoring of the active burrow will be conducted by the qualified biologist during construction on a weekly basis to verify that no disturbance is occurring.* o *After the qualified biologist determines that the young have fledged and are foraging independently, or that breeding attempts were not successful, the owls may be excluded in accordance with the non-breeding season measures below. Daily monitoring will be conducted for one week prior to exclusion to verify the status of owls at the burrow.* • *During the non-breeding season (September 1 to January 31), owls occupying burrows that cannot be avoided will be passively excluded consistent with Appendix E of the 2012 CDFW Staff Report:* o *Within 24 hours prior to installation of one-way doors, a survey will be conducted to verify the status of burrowing owls on the site.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		o *Passive exclusion will be conducted using one-way doors on all burrows suitable for burrowing owl occupation.* o *One-way doors shall be left in place a minimum of 48 hours to ensure burrowing owls have left the burrow before excavation.* o *While the one-way doors are in place, the qualified biologist will visit the site twice daily to monitor for evidence that owls are inside and are unable to escape. If owls are trapped, the device shall be reset and another 48-hour period shall begin.* o *After a minimum of 48 hours, the one-way doors will be removed and the burrows will be excavated using hand tools to prevent reoccupation. The use of a pipe is recommended to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that no owls reside inside the burrow.* o *After the owls have been excluded, the excavated burrow locations will be surveyed a minimum of three times over two weeks to detect burrowing owls if they return. The site will be managed to prevent reoccupation of burrowing owls (e.g., disking, grading, manually collapsing burrows) until development is complete.* o *If burrowing owls are found outside the project*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		site during preconstruction surveys, the qualified biologist shall evaluate the potential for disturbance. Passive exclusion of burrowing owls shall be avoided to the maximum extent feasible where no ground disturbance will occur. In cases where ground disturbance occurs within the no-disturbance buffer of an occupied burrow, the qualified biologist shall determine in consultation with the City and CDFW whether reduced buffers, additional monitoring, or passive exclusion is appropriate. *4.4-4(d)* <u>*Compensatory Mitigation, if Active Owl Dens are Present:*</u> *If active burrowing owl dens are present and the project would impact active dens, the project applicant shall implement the following, subject to review and approval by the City of Davis Department of Community Development and Sustainability:* • *If active owl burrows are present and the project would impact active burrows, the project applicant shall provide compensatory mitigation for the permanent loss of burrowing owl habitat at least equal to the 2012 (or subsequent applicable), CDFW Staff Report. Such mitigation shall include the permanent protection of land, which is deemed to be suitable burrowing owl habitat through a conservation easement deeded to a non-profit*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		conservation organization or public agency with a conservation mission, or the purchase of burrowing owl conservation bank credits from a CDFW-approved burrowing owl conservation bank. In determining the location and amount of acreage required for permanent protection, the applicant and City shall seek lands that include the same types of vegetation communities and fossorial mammal populations found in the lost foraging habitat, with a preference given to lands that are adjacent to, or reasonably proximate to, the lost foraging lands. Such lands shall provide for nesting, foraging, and dispersal comparable to, or better than, the lost foraging land. The minimum amount of acreage for preservation shall be 6.5 acres per nesting pair or unpaired resident bird. Additional lands may be required as determined pursuant to the then current standards/best practices for mitigation acreage as determined by the City in consultation with CDFW. *If the same mitigation acreage is proposed to be utilized for multiple species (i.e. burrowing owl habitat and Swainson's hawk foraging habitat), the City, in consultation with CDFW, must approve the mitigation lands and long-term management practices for the mitigation lands as suitable and compatible for all species for which the lands are to provide compensatory mitigation. The City may*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		reject proposed "shared" mitigations lands if the conservation goals and associated management practices for the species are not compatible.	
4.4-5 Impacts to Swainson's hawk.	PS	*MRIC* *4.4-5(a)* <u>*Preconstruction Nesting Surveys:*</u> *To ensure avoidance and minimization of impacts to Swainson's hawk nesting, the project applicant shall implement the following measures:* • *If site disturbance or construction activity for any phase of development is proposed during the nesting season for Swainson's hawk (March 1 through September 15), a qualified biologist shall conduct a preconstruction survey for Swainson's hawk in accordance with the May 2000 Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley prepared by the Swainson's Hawk Technical Advisory Committee (TAC) as applicable. In accordance with the TAC guidelines, to meet the minimum level of protection for Swainson's hawk, three surveys shall be completed in each of the two survey periods immediately prior to project initiation (with the exception that surveys shall not be initiated in period IV). The preconstruction survey shall be submitted to the City of Davis Department of Community Development and*	LTS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Sustainability for review. • *The preconstruction survey shall include the project construction footprint and publicly accessible areas within 0.25-mile. Inaccessible areas shall be surveyed with binoculars from publicly accessible areas. If active Swainson's hawk nests are not found, further action is not necessary.* • *If an active Swainson's hawk nest is found within 0.25-mile of the MRIC site but is effectively shielded from view of the site by structures and/ or vegetation, then with approval from CDFW, construction may commence.* • *If an active nest located within 0.25-mile of the MRIC site is within line-of-sight of the MRIC site, then in consultation with CDFW, a biologist experienced with raptor behavior shall monitor the nest for signs of disturbance. Work may be allowed to proceed if the Swainson's hawks are not exhibiting agitated behavior. The biologist shall be on-site daily while construction related activities are taking place and shall have the authority to stop work if the Swainson's hawks are exhibiting agitated behavior. In coordination with CDFW, monitoring may be reduced if the on-site biologist determines that construction is not disturbing the Swainson's hawks or determines that they have become acclimated to construction activities.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		• *If the Swainson's hawk is showing agitated behavior, then construction shall cease or be reduced to a point that does not disturb the hawks. Construction may resume after the nesting season, or in coordination with CDFW, later in the nesting season when Swainson's hawks are less prone to disturbance.* *4.4-5(b)* *<u>Foraging Habitat:</u> The project applicant shall permanently protect Swainson's hawk foraging habitat converted by the proposed project at a 1:1 ratio by either (1) purchasing a DFW-approved conservation easement of like acreage or (2) paying the requisite mitigation fee to the Yolo Habitat JPA pursuant to the Swainson's Hawk Interim Mitigation Fee Program or purchasing mitigation credits from an approved mitigation credit holder. Purchase of a conservation easement of like acreage or payment of the mitigation fee shall be made to the Yolo Habitat JPA and shall be confirmed by the City prior to the initiation of ground disturbing activities.* *Mace Triangle* *4.4-5(c)* *<u>Foraging Habitat:</u> The project applicant shall permanently protect Swainson's hawk foraging habitat converted by the proposed project at a 1:1 ratio by*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		either (1) purchasing a DFW-approved conservation easement of like acreage or (2) paying the requisite mitigation fee to the Yolo Habitat JPA pursuant to the Swainson's Hawk Interim Mitigation Fee Program or purchasing mitigation credits from an approved mitigation credit holder. Purchase of a conservation easement of like acreage or payment of the mitigation fee shall be made to the Yolo Habitat JPA and shall be confirmed by the City prior to the initiation of ground disturbing activities.	
4.4-6 Impacts to raptors, nesting birds, or other birds protected under the MBTA.	PS	*MRIC* *4.4-6* *The project applicant for the MRIC shall implement the following measures to avoid or minimize impacts to Migratory Birds and other protected bird species:* • *If any site disturbance or construction activity for any phase of development begins outside the February 1 to August 31 breeding season, a preconstruction survey for active nests shall not be needed.* • *If any site disturbance or construction activity for any phase of development is scheduled to begin between February 1 and August 31, a qualified biologist shall conduct a preconstruction survey for active nests from publicly accessible areas within 14 days prior site disturbance or construction activity*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		for any phase of development. The survey area shall cover the construction site and the area surrounding the construction site, including a 100-foot radius for MBTA birds, and a 250-foot radius for birds of prey. If an active nest of a bird of prey, MBTA bird, or other CDFW-protected bird is not found, then no further mitigation measures are necessary. The preconstruction survey shall be submitted to the City of Davis Department of Community Development and Sustainability for review. • *If an active nest of a bird of prey, MBTA bird, or other CDFW-protected bird is discovered that may be adversely affected by any site disturbance or construction or an injured or killed bird is found, the project applicant shall immediately:* o *Stop all work within a 100-foot radius of the discovery.* o *Notify the City of Davis Department of Community Development and Sustainability.* o *Do not resume work within the 100-foot radius until authorized by the biologist.* o *The biologist shall establish a minimum 250-foot Environmentally Sensitive Area (ESA) around the nest if the nest is of a bird of prey, and a minimum 100-foot ESA around the nest if the nest is of an MBTA bird other than a bird of prey. The ESA may be reduced if the biologist*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		determines that a smaller ESA would still adequately protect the active nest. No work may occur within the ESA until the biologist determines that the nest is no longer active. *Mace Triangle – none*	
4.4-7 Have a substantial effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.	PS	*MRIC* *4.4-7 The project applicant for the MRIC shall implement the following measure to avoid or minimize impacts to the Mace Drainage Channel:* • *Prior to conducting work within the bed and banks in the Mace Drainage Channel for any phase of development, as applicable, the project applicant for the MRIC shall notify CDFW pursuant to Section 1602 of the Fish and Wildlife Code. If CDFW determines that a Streambed Alteration Agreement (SAA) is necessary, the applicant shall obtain a SAA and comply with all conditions of that Agreement. Compliance with the SAA shall be ensured by the City of Davis Department of Community Development and Sustainability. This does not apply to City maintenance work within the Mace Drainage Channel, for which the City already has an agreement with CDFW.* *Mace Triangle – none.*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.4-8 Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	LS	*None required.*	N/A
4.4-9 Interfere substantially with the movement of native, resident, or migratory fish or wildlife species or established native resident or migratory wildlife corridors.	LS	*None required.*	N/A
4.4-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	LS	*None required.*	N/A
4.4-11 Conflict with an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.	PS	*MRIC Site and Mace Triangle Site* *4.4-11 Should the Yolo Natural Heritage Program (YNHP) be adopted prior to initiation of any ground disturbing activities for any phase of development associated with the MRIC or Mace Triangle, the project applicant shall comply with the mitigation/conservation requirements of the YNHP, as applicable. The project applicant, the City*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		of Davis Department of Community Development and Sustainability, and a representative from the YNHP JPA shall ensure that all mitigation/conservation requirements of the YNHP are adhered to prior to and during construction. To the extent there is duplication in mitigation for a given species, the requirements of the HCP/NCCP shall supersede.	
4.4-12 Conflict, or create an inconsistency, with any applicable biological resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	PS	*MRIC* *4.4-12 At or prior to final planned development, or tentative map submittal, whichever occurs first, the applicant shall submit a design plan for the proposed on-site buffer/drainage features to the Department of Community Development and Sustainability for review and approval. The design plan shall demonstrate how the buffer/drainage features will be wildlife friendly natural spaces, with respect to details such as plant types, detention slopes, etc. In addition, should staff determine that in order to meet the City's stated objectives for urban agricultural transition areas (UATA), as well as drainage and safety, the proposed buffer design shall be modified to concentrate the proposed buffer and drainage areas to the northern and eastern boundaries of the project site, in order to establish wider UATA segments.* *Mace Triangle – none*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.5 Cultural Resources			
4.5-1 Cause a substantial adverse change in the significance of a historical resource.	PS	*MRIC* *4.5-1 If the northerly off-site sewer alignment is selected for the MRIC, then prior to approval of design-level improvement plans for the off-site sewer pipe, the applicant shall retain a qualified archaeologist to design and implement a cultural study, the intent of which shall be to identify and investigate any subsurface historic remains within the northerly portion of the sewer pipe construction limits. Because of the potential for fragile prehistoric remains within this area, the evaluation shall include only metal detection and hand excavation. Metal detection should include a complete sweep of the APE adjacent to the farm structures, to test for subsurface features. Hand excavation should include testing of the metal detection finds. If no subsurface features are uncovered, no additional cultural investigations will necessary. If, on the other hand, structural remains are found, the investigation shall continue as formal evaluation to determine their eligibility for the California Register of Historical Resources. This shall include, at a minimum, additional exposure of the feature(s), and photo-documentation and recordation. If the evaluation determines that the features do not have sufficient data potential to be eligible for the California Register, no additional work should be required.*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		However, if data potential exists – e.g., there is an intact feature – it will be necessary to mitigate any project impacts. The evaluation shall be submitted to the City of Davis Department of Community Development and Sustainability for review. *If it is determined that standing structures associated with the William Seward Wright house and farm are within, or immediately adjacent to, the off-site sewer APE, a qualified architectural historian shall conduct an evaluation of those structures for their potential eligibility for the California Register of Historical Resources. The evaluation should include a full assessment of the structures, archival research to confirm the age, occupants, and historic uses of the structures, and the dates and extent of any renovations that might impact the structures' historic integrity. Should the structures be determined to be eligible for the California Register, pursuant to Public Resources Code Section 5024.1, Title 14 CCR, Section 4852, any mitigation measures provided in the architectural historian's report shall be followed. Should the structures be determined ineligible for the California Register, no further consideration shall be required. The evaluation shall be submitted to the City of Davis Department of Community Development and Sustainability for review.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Mitigation of impacts might include avoidance of further disturbance to the resources through project redesign. If avoidance is determined to be infeasible, additional data recovery excavations shall be conducted for the resources, to collect enough information to exhaust the data potential of those resources. Impacts to the standing structures shall be mitigated through recordation to the standards of the National Park Service's Historic American Buildings Survey (HABS), as determined by the qualified architectural historian. *Mace Triangle – none*	
4.5-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	PS	*MRIC* *4.5-2(a) Prior to approval of any improvement plans for development within the northwestern corner of the MRIC site (i.e., the area designated as having "high" sensitivity for buried sites per Figure 7 of the "Archaeological Survey Report for the Proposed Davis Innovation Center: Mace Ranch Location", prepared by Far Western Anthropological Research Group), the applicant shall retain a qualified archaeologist to design and implement an archeological study, the intent of which shall be to identify and investigate any subsurface archaeological remains within the northwestern portion of the MRIC site. The subsurface sampling methodology outlined in the study shall be sufficient to enable the qualified archaeologist to define the physical extent and*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		nature of any artifact-bearing deposits should they be discovered. Because of the potential for fragile prehistoric remains, the evaluation should include only hand excavation. Hand excavation should include placement of a series of small shovel probes across the site to look for prehistoric artifacts and features. If artifact-bearing deposits are not uncovered, additional cultural investigations are not required. If artifact-bearing features are found, the investigation shall continue as formal evaluation to determine their eligibility for the California Register of Historical Resources. This shall include, at a minimum, hand excavation of larger control units and analysis of the artifact assemblage(s). If the evaluation determines that the artifacts do not have sufficient data potential to be eligible for the California Register, additional work shall not be required. However, if data potential exists – e.g., there is an intact feature with a large and varied artifact assemblage – necessary mitigation measures shall be implemented to alleviate any project impacts. The evaluation shall be submitted to the City of Davis Department of Community Development and Sustainability for review. *Mitigation of impacts might include avoidance of further disturbance to the resources through project redesign. If redesign is not feasible, additional data recovery excavations shall be conducted for the archaeological*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		resources, to collect enough information to exhaust the data potential of those resources.	
		4.5-2(b) *If the northerly off-site sewer alignment is selected for the MRIC, then prior to approval of design-level improvement plans for the off-site sewer pipe, the applicant shall retain a qualified archaeologist to design and implement an archeological study, the intent of which shall be to identify and investigate any subsurface archaeological remains within the northerly portion of the sewer pipe construction limits. The subsurface sampling methodology outlined in the study shall be sufficient to enable the qualified archaeologist to define the physical extent and nature of any artifact-bearing deposits should they be discovered. Because of the potential for fragile prehistoric remains, the evaluation should include only hand excavation. Hand excavation should include placement of a series of small shovel probes across the site to look for prehistoric artifacts and features. If artifact-bearing deposits are not uncovered, additional archaeological investigations are not required. If artifact-bearing features are found, the investigation shall continue as formal evaluation to determine their eligibility for the California Register of Historical Resources. This shall include, at a minimum, hand excavation of larger control units and analysis of the artifact assemblage(s). If the evaluation determines that the artifacts do not have sufficient data potential to*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		be eligible for the California Register, additional work shall not be required. However, if data potential exists – e.g., there is an intact feature with a large and varied artifact assemblage – necessary mitigation measures shall be implemented to alleviate any project impacts. The evaluation shall be submitted to the City of Davis Department of Community Development and Sustainability for review. *Mitigation of impacts might include avoidance of further disturbance to the resources through project redesign. If redesign is not feasible, additional data recovery excavations shall be conducted for the archaeological resources, to collect enough information to exhaust the data potential of those resources.* *MRIC and Mace Triangle* *4.5-2(c)* *If any prehistoric or historic artifacts, or other indications of archaeological resources are found during grading and construction activities, all work within the vicinity of the find shall cease and the applicant shall retain an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards in prehistoric or historical archaeology, as appropriate, to evaluate the finds. If the resource is determined to be eligible for inclusion in the California Register of Historical Resources and project impacts*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		cannot be avoided, data recovery shall be undertaken. Data recovery efforts can range from rapid photographic documentation to extensive excavation depending upon the physical nature of the resource. The degree of effort shall be determined at the discretion of a qualified archaeologist and should be sufficient to recover data considered important to the area's history and/or prehistory. This language of this mitigation measure shall be included on any future grading plans, utility plans, and subdivision improvement drawings approved by the City for the 212-acre MRIC site and/or 16.49-acre Mace Triangle site.	
4.5-3 Directly or indirectly destroy a unique paleontological resource or unique geologic feature on the project site.	PS	*MRIC and Mace Triangle* *4.5-3 If any vertebrate bones or teeth are found by the construction crew, the contractor shall cease all work in the immediate vicinity of the discovery until an on-site archaeological monitor, if present, inspects the discovery; if none is present, or if recommended by the monitor, a professional paleontologist shall evaluate the find. If deemed significant with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., UCMP), where it will be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and subdivision*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		improvement drawings approved by the City for the 212-acre MRIC site and/or 16.49-acre Mace Triangle site, where excavation work will be required.	
4.5-4 Disturb any human remains, including those interred outside of formal cemeteries.	PS	*MRIC and Mace Triangle* *4.5-4 During construction, if bone is uncovered that may be human, the California Native American Heritage Commission, located in Sacramento, and the Yolo County Coroner shall be notified. Should human remains be found, all work shall be halted until final disposition by the Coroner. Should the remains be determined to be of Native American descent, the Native American Heritage Commission shall be consulted to determine the appropriate disposition of such remains.*	LS
4.5-5 Conflict, or create an inconsistency, with any applicable cultural resources plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	LS	*None required.*	N/A
4.6 Geology, Soils, and Mineral Resources			
4.6-1 Risks to people and structures associated with seismic activity, including ground shaking and ground failure.	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.6-2 Result in substantial soil erosion or loss of topsoil.	PS	*MRIC and Mace Triangle* *4.6-2 Prior to initiation of any grading activities for each phase of development of the MRIC or Mace Triangle, the project proponent shall submit a Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) to the RWQCB in accordance with the NPDES General Construction Permit requirements. The SWPPP shall be designed to control pollutant discharges utilizing Best Management Practices (BMPs) and technology to reduce erosion and sediments. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater runoff from the project site. Measures shall include temporary erosion control measures (such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation or other groundcover) that will be employed to control erosion from disturbed areas. Final selection of BMPs will be subject to approval by the City of Davis and the RWQCB. The SWPPP will be kept on site during construction activity and will be made available upon request to representatives of the RWQCB.*	LS
4.6-3 Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and	PS	*MRIC* *4.6-3(a) Prior to final design approval and issuance of building permits for each phase of the MRIC, the project*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
potentially result in lateral spreading, subsidence, liquefaction, or collapse.		*applicant shall submit to the City of Davis Building Inspection Division, for review and approval, a design-level geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer. The report shall include the recommendations in the report entitled Preliminary Geotechnical Engineering Report, Mace Ranch Innovation Center, dated January 20, 2015 unless it is determined in the design-level report that one or more recommendations need to be revised. The design-level report shall address, at a minimum, the following:* • *Compaction specifications and subgrade preparation for on-site soils;* • *Structural foundations, including retaining wall design (if applicable);* • *Grading practices; and* • *Expansive/unstable soils, including fill.* *Design-level recommendations shall be included in the foundation and improvement plans and approved by the Davis Public Works Department prior to issuance of any building permits.* *Mace Triangle* *4.6-3(b) Prior to final design approval and issuance of building*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		permits for future on-site development, the future project applicant for the Mace Triangle site shall submit a site-specific, design-level geotechnical report produced by a California Registered Geotechnical Engineer to the City of Davis Building Inspection Division for review and approval. The geotechnical report shall include, but would not be limited to, an analysis of the on-site geologic and seismic conditions, including soil sampling and testing. Recommendations shall be included regarding project design measures to avoid risks to people and structures, including compliance with the latest CBC regulations, structural foundations, and grading practices.	
4.6-4 Be located on expansive soil, as defined in Table 118-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.	PS	*MRIC* *4.6-4(a) Implement Mitigation Measure 4.6-3(a).* *Mace Triangle* *4.6-4(b) Implement Mitigation Measure 4.6-3(b).*	LS
4.6-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to geology, soils, and mineral resources.	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.7 Greenhouse Gas Emissions and Energy			
4.7-1 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	S	*None feasible.*	SU
4.7-2 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	S	*MRIC and Mace Triangle* *4.7-2(a) Each individual development of the proposed project, shall demonstrate consistency with the City's Climate Action and Adaptation Plan by achieving a downward trajectory in GHG emissions, towards the City goal of zero net GHG emissions by the year 2050. The project must achieve the target in place for the year in which the application is filed.* *At the City's discretion, compliance with this mitigation measure for different development activities associated with the same approval may occur at different stages in the development process depending on the nature of the project and may be based on the year that physical improvements are anticipated. At the time of or before building permits are issued, the applicant must demonstrate reduction of GHG emissions consistent with this measure. Mitigation for buildings shall occur at the time the building permit is issued, and the amount of mitigation shall be based on the year the building permit is issued. Mitigation for other*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		emissions from a project may occur at an earlier approval but no later than issuance of entitlements. The applicant may file and City may consider and approve a GHG mitigation plan that lays out the mitigation for different stages of development within the same subsequent project approval. *Prior to issuance of any subsequent entitlement or permit in the MRIC, or alternatively prior to any approval taking effect, the applicant shall implement the following steps unless these steps have already been undertaken for the project through a prior approval or action:* *1) Using CalEEMod or another model accepted for this purpose by the City, calculate total expected GHG emissions (all sectors) for the proposed project under two scenarios: a) 1990 emissions rates; and, b) emission rates applicable at the time of the application, taking into account applicable building standards and other adopted regulatory requirements, as well as building design, use of renewable energy, etc.* *2) Calculate the difference between these two scenarios in step 1 as a percentage of the 1990 project emissions.* *3) Compare the difference in emissions from step 2 to the required minimum emissions reduction*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation

schedule provided below:

Applications Filed On or Before	***Minimum Required Reduction percentage in GHG Emissions from Calculated 1990 Emissions***
12/31/16	*22.5*
12/31/17	*25.0*
12/31/18	*27.5*
12/31/19	*30.0*
12/31/20	*32.5*
12/31/21	*35.0*
12/31/22	*37.5*
12/31/23	*40.0*
12/31/24	*42.5*
12/31/25	*45.0*
12/31/26	*47.5*
12/31/27	*50.0*
12/31/28	*52.5*
12/31/29	*55.0*
12/31/30	*57.5 (2.5% increased reduction per year)*
12/31/35	*70.0 (2.5% increased reduction per year)*
12/31/40	*82.5 (2.5% increased reduction per year)*
12/31/45	*95.0 (2.5% increased reduction per year)*

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		12/31/50 | *100.0* *If the difference calculated in Step 2 is greater than the required reduction in Step 3, the MRIC may "bank" this as a credit to use with later projects.* *4) If the difference calculated in step 2 does not demonstrate the required reduction in step 3, applicant shall identify feasible actions to achieve the required reductions using the following priority:* • *First priority – building specific actions* • *Second priority – onsite (within MRIC) actions* • *Third priority – community based (within Davis) actions* • *Fourth priority – pay GHG reduction fees (carbon offsets) into a qualified existing local program, if one is in place* • *Fifth priority – other demonstrated method of reducing emissions* *5) Calculate, using acceptable methods, the measurable GHG reduction value of each proposed action.* *6) Provide a Technical Memorandum of Compliance (TMC) documenting the following minimum items: modeling (step 1); emissions calculations (step 2); applicable reduction (step 3); chosen feasible*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		actions to achieve required reduction (step 4); and measurable GHG reduction value of each action (step 5). The TMC and all steps of the process are subject to review and authorization by the City of Davis Department of Community Development and Sustainability. *7) Implement the authorized actions and provide evidence of this to the City of Davis Department of Community Development and Sustainability. The City upon review and acceptance of implementation, shall issue the subject entitlement, permit, or approval.* *MRIC* *4.7-2(b) Every five years, the MRIC Master Owners' Association (MOA) shall submit a GHG Emissions Reduction Accounting and Program Effectiveness Report for the entire innovation center. The report shall be submitted by 12/31 of each fifth year starting in 2020. First report due by 12/31/20, second report due by 12/31/25, etc., through 2050 or until the center is built out.* *The report shall identify the following minimum items. Other documentation requirements may be added by the City if found to be necessary to satisfy this mitigation measure.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		1) Projected annual GHG emissions for MRIC, total and by sector, from the project EIR. *2) GHG emissions from all uses collectively operating at the MRIC, total and by sector, at the time of reporting.* *3) GHG emissions from each occupied building within the MRIC, total and by sector.* *4) Summary of prior TMCs and 5-year reports.* *5) Running total of MRIC emissions reductions and reduction credits, in total and by building.* *6) Comprehensive data base and summary of implemented reduction actions.*	
4.7-3 Impacts related to energy associated with construction.	LS	*None required.*	N/A
4.7-4 Impacts related to energy associated with operations	PS	*MRIC* *4.7-4 Prior to approval of construction drawings for innovation center buildings that include data centers, the applicant shall submit an Energy Management Plan to the City of Davis Department of Community Development and Sustainability demonstrating compliance with principles for energy management for data centers, which could include, but not be limited to the following:* • *IT Systems;*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		• *Air Management;* • *Centralized Air Handling;* • *Cooling Plant Optimization;* • *On-Site Generation;* • *Uninterruptible Power Supply Systems.* *Other energy efficient technologies and best practices that are available at the time construction drawings are submitted could be included in the Energy Management Plan as well, such as any measures described by US Department of Energy Center of Expertise for Energy Efficiency in Data Centers.* *Mace Triangle – none*	
4.7-5 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to GHG emissions and energy conservation.	LS	*None required.*	N/A
4.8 Hazards and Hazardous Materials			
4.8-1 Create a significant hazard to the public or the environment	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	through the routine transport, use, or disposal of hazardous materials.			
4.8-2	**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 associated with the existing on-site wells, canals, nearby uses, or soil contamination.**	PS	*MRIC* *4.8-2(a)* *Prior to any ground disturbance activities within 50 feet of a well on the project site, the applicant shall hire a licensed well contractor to obtain a well abandonment permit for any wells not anticipated to be used from the Yolo County Environmental Health Services Department, and properly abandon the on-site wells, pursuant to review and approval by the City Engineer and the Yolo County Environmental Health Services Department.* *4.8-2(b)* *If any debris is encountered within the former canal on APN 033-630-009 during construction activities, as shown on the construction plans for the MRIC site, the contractor shall contact the project applicant, who shall retain the services of a qualified environmental hazard firm, to evaluate the debris to determine whether it poses any environmental contamination risks. A written evaluation shall be submitted to the City of Davis Department of Community Development and Sustainability. If the debris is trash or other non-hazardous material, then the contractor shall dispose of the debris and no further mitigation shall be required. If the debris is associated with signs of soil staining or*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		odors indicative of hazardous materials, the environmental hazard firm shall conduct additional evaluation, including but not necessarily limited to soil sampling. If soil samples detect concentrations of hazardous materials above applicable Regional Screening Levels (RSL), then the soils shall be remediated and disposed of at a landfill licensed to accept hazardous waste. If constituent concentrations are below RSLs, then no further mitigation shall be necessary. *Mace Triangle* *4.8-2(c) In conjunction with submittal of a final planned development and/or tentative map for any parcel in the Mace Triangle, the applicant shall submit a Phase I Environmental Site Assessment for that parcel, which shall evaluate on-site conditions, including but not limited to the presence of any wells, evidence of soil staining, or odors indicative of hazardous substances.* *In addition, due to the past agricultural operations on the easternmost parcel, a soil sampling program shall be implemented to assess potential agrichemical impacts to surface soil within the easternmost parcel, as follows:* *A soil sampling and analysis workplan shall be submitted for approval to Yolo County Environmental*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Health Department. The sampling and analysis plan will meet the requirements of the Department of Toxic Substances Control Interim Guidance for Sampling Agricultural Properties (2008). *If the sampling results indicate the presence of agrichemicals that exceed commercial screening levels, a removal action workplan shall be prepared in coordination with Yolo County Environmental Health Department. The removal action workplan shall include a detailed engineering plan for conducting the removal action, a description of the onsite contamination, the goals to be achieved by the removal action, and any alternative removal options that were considered and rejected and the basis for that rejection. A no further action letter will be issued by County Health for the proposed commercial development upon completion of the removal action. The removal action shall be deemed complete when the confirmation samples exhibit concentrations below the commercial screening levels, which will be established by the agencies.* *If any stained soil or odor-impacted areas are encountered during the Phase I ESA, then soil sampling of these areas shall be included in the above soil sampling workplan, and depending upon the sampling results, included in the removal action workplan as well.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact		Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.8-3	**Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**	LS	*None required.*	N/A
4.8-4	**Expose people or structures to a significant risk of loss, injury, or death involving widland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.**	LS	*None required.*	N/A
4.8-5	**Conflict, or create an inconsistency, with applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hazards and hazardous materials.**	LS	*None required.*	N/A
4.9 Hydrology and Water Quality				
4.9-1	**Substantially alter the existing drainage pattern of the site or area, or create or contribute runoff water which would**	PS	*MRIC* *4.9-1(a)* *In conjunction with submittal of the first final planned development for the MRIC, a design-level drainage*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
exceed the capacity of existing or planned stormwater drainage systems, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.		*report shall be submitted to the City of Davis Public Works Department for review and approval. The drainage report shall identify specific storm drainage design features to control the 100-year, 24-day increased runoff from the project site to ensure that the rate of runoff leaving the developed MRIC site does not exceed the original Mace Ranch Channel design capacity of 260 cfs. This may be achieved through: on-site conveyance and detention facilities, off-site detention or retention facilities, channel modification, or equally effective measures to control the rate and volume of runoff.* *The design-level drainage report shall include off-site drainage facilities sufficient to detain and control the increased runoff volume when the flow from the Mace Drainage Channel into the Yolo Bypass is blocked by high water levels in the Bypass. Preliminary estimates of increased runoff volumes are as much as 63 acre-feet. The final amount of runoff volume to be detained would be determined with the design-level drainage report. This could result in detaining run-off volume for an extended time period. During this time period, additional large storms could occur; thus, the proposed detention storage facilities shall also be able to manage (detain with a controlled release) the 100-year, 24-hour storm event.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		The design-level drainage report shall also include design for detaining and controlling the increased run-off volume from the Mace Triangle site. Preliminary estimates of increased runoff volumes are as much as 7 acre-feet. The final amount of runoff volume to be detained would be determined with the design-level drainage report prepare for the MRIC. *Design-level recommendations provided in the drainage report shall be included in the improvements plans prior to their approval by the Davis Public Works Department.* *4.9-1(b) Prior to approval of the phase 1 improvement plans for the MRIC, the Public Works Department shall ensure that the plans include the development of the Phase 2 MDC improvements. The Phase 2 improvements shall consist of removal of the two 24-inch corrugated metal pipes in order to provide a continuous channel between the Phase 1 and Phase 2 improvements.* *Mace Triangle* *4.9-1(c) In conjunction with submittal of each final planned development for the Mace Triangle, a design-level drainage report for the development shall be completed and submitted to the City of Davis Public Works Department for review and approval. The drainage*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		report shall identify specific storm drainage design features to control the 100-year, 24-hour increased runoff from the project site. This may be achieved through: onsite conveyance and detention facilities, offsite detention or retention facilities, channel modification, or equally effective measures to control the rate and volume of runoff. *The design-level drainage report shall include off-site drainage facilities sufficient to detain and control the increased run-off volume when the flow from the Mace Drainage Channel into the Yolo Bypass is blocked by high water levels in the Bypass. Preliminary estimates of increased runoff volumes for the Mace Triangle site are as much as 7 acre-feet. The final amount of runoff volume to be detained for each proposed development would be determined with the design-level drainage report. This could result in detaining run-off volume for an extended time period. During this time period, additional large storms could occur; thus, the proposed detention storage facilities shall also be able to manage (detain with a controlled release) the 100-year, 24-hour storm event.* *Design-level recommendations provided in the drainage report shall be included in the improvement plans prior to their approval by the Davis Public Works Department.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.9-2 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality through erosion during construction.	PS	*MRIC and Mace Triangle* *4.9-2 Prior to initiation of any ground disturbing activities, the project applicant(s) for each discretionary development application shall prepare a Stormwater Pollution Prevention Plan (SWPPP), and implement Best Management Practices (BMPs) that comply with the General Construction Stormwater Permit from the Central Valley RWQCB, to reduce water quality effects during construction. Such BMPs may include: temporary erosion control measures such as silt fences, staked straw bales/wattles, silt/sediment basins and traps, check dams, geofabric, sandbag dikes, and temporary revegetation. The SWPPP shall be kept on-site and implemented during construction activities and shall be made available upon request to representatives of the City of Davis and/or RWQCB.*	LS
4.9-3 Violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality during operations.	LS	*None required.*	N/A
4.9-4 Substantially deplete groundwater supplies or interfere substantially with	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	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 or preexisting nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted).			
4.9-5	**Place structure within a 100-year flood hazard as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or flood hazard delineation map; or place within a 100-year floodplain structures which would impede or redirect flood flows; or expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.**	LS	*None required.*	N/A
4.9-6	**Impacts related to conflicts, or creation of an inconsistency,**	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to hydrology and water quality.			
4.10 Land Use and Urban Decay			
4.10-1 Physical division of an established community.	LS	*None required.*	N/A
4.10-2 Economic and social changes and/or effects that result in urban decay.	PS	*MRIC* *4.10-2(a) Prior to building permit issuance for ancillary retail space, the applicant shall demonstrate to the City's satisfaction that there is sufficient unmet demand from a combination of retail demand from MRIC employees and businesses and/or retail demand from elsewhere within the Davis marketplace to support the retail space for which the building permit is requested. The demonstration to the City may be premised upon the number of employees (and/or residents) on-site, the commercial (and/or residential) square footage developed, or other factors relevant to the generation of on-site demand. The objective of this requirement is to ensure that retail space developed within the MRIC will not re-allocate demand from existing Davis retailers, but will instead help the City to increase its net retail capture rate and provide new retail offerings*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		that will satisfy currently unmet demand. *4.10-2(b) Prior to building permit issuance for the proposed hotel, the applicant shall demonstrate to the City's satisfaction that there is sufficient unmet demand from a combination of hotel demand from MRIC employees and businesses and/or hotel demand from elsewhere within the Davis marketplace to support the hotel space for which the building permit is requested. The objective of this requirement is to ensure that the hotel developed within the MRIC will not re-allocate demand from existing Davis hotels, but will instead help the City to provide new hotel offerings that will satisfy currently unmet demand.* *Mace Triangle – none*	
4.10-3 Conflict, or create an inconsistency, with any applicable land use and urban decay plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	LS	*None required.*	N/A
4.11 Noise and Vibration			
4.11-1 A substantial temporary or periodic increase in ambient	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
noise levels in the project vicinity above levels existing without project.			
4.11-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.	LS	*None required.*	N/A
4.11-3 Transportation noise impacts to existing sensitive receptors in the project vicinity.	LS	*None required.*	N/A
4.11-4 Transportation noise impacts to new sensitive receptors in the project vicinity.	PS	*MRIC – none* *Mace Triangle* *4.11-4 In conjunction with the submittal of a final planned development and/or tentative map for the Mace Triangle, the applicant shall submit an acoustical analysis to the Department of Community Development and Sustainability. The acoustical analysis shall measure existing noise levels in the vicinity of the Mace Triangle site, as well as model the predicted noise levels for the scenarios determined to be appropriate by the certified noise consultant and the City of Davis Department of Community Development and Sustainability. The existing and predicted future exterior and interior noise levels shall account for any noise sources in the area, potentially including roadway, railway, and nearby outdoor uses. The acoustical*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		analysis shall identify and classify the proposed uses in order to determine the appropriate noise level standards. If any uses identified in Table 19 of the General Plan Noise Chapter are proposed on-site, the acoustical analysis shall evaluate whether predicted transportation noise levels (traffic and train) would exceed the City of Davis' exterior and interior noise level criteria at such use areas. If the City's noise level criteria would be exceeded, the acoustical analysis shall include a detailed list of any noise attenuation measures needed for the proposed uses to comply with the City's exterior and interior noise level standards, for review and approval by the Department of Community Development and Sustainability. Noise attenuation measures could include but not be limited to: increased building setbacks, sound walls and/or berms, acoustically-rated windows, etc.	
4.11-5 Operational noise.	LS	*None required.*	N/A
4.11-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to noise.	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.12 Population and Housing			
4.12-1 Induce substantial population growth.	S	*None feasible.*	SU
4.12-2 Conflict, or create an inconsistency, with any applicable population and housing plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	LS	*None required.*	N/A
4.13 Public Services and Recreation			
4.13-1 Result in substantial adverse physical impacts associated with the provisions of new or physically altered fire protection facilities, and/or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	facilities.			
4.13-2	**Result in substantial adverse physical impacts associated with the provisions of new or physically altered police protection facilities, and/or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection facilities.**	LS	*None required.*	N/A
4.13-3	**Result in substantial adverse physical impacts associated with the provisions of new or physically altered school facilities, and/or the need for new or physically altered school facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times,**	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	or other performance objectives for school facilities.			
4.13-4	**Result in substantial adverse physical impacts associated with the provisions of new or physically altered park facilities, and/or the need for new or physically altered park facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for park facilities.**	PS	*MRIC* *4.13-4* *In conjunction with submittal of the first Final Planned Development Guidelines, or Tentative Map, whichever occurs first, the applicant for the MRIC shall submit a design level Greenspace Exhibit illustrating how the proposed project would meet the following requirements:* • ***Parklands:*** *29.4 acres* • ***Greenways/open space:*** *21.2 acres* • ***Agricultural buffer:*** *20.1 acres (one-third of that total, or 6.7 acres, can be applied to the greenways/open space total above)* *The parkland and greenspace shall be open to/available for public use in the same manner and standards as other City parks and greenspace (whether privately or publicly owned). The Greenspace exhibit shall be reviewed by the Department of Community Development and Sustainability and the Parks and Community Services Department. The final Greenspace Exhibit shall be incorporated into the Final Planned Development Guidelines.*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Mace Triangle – none.	
4.13-5 Result in substantial adverse physical impacts associated with the provisions of new and/or physically altered other public facilities, and/or the need for new or physically altered other public facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for other public facilities.	LS	*None required.*	N/A
4.13-6 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to public services and recreation.	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.14 Transportation and Circulation			
4.14-1 Impacts to Intersections Outside Freeway Interchange Areas.	PS	*MRIC and Mace Triangle* *4.14-1 As directed by the City, based on either a focused development phase traffic study as described in Mitigation Measure 4.14-2, or the monitoring carried out by the Master Owners' Association (MOA) as part of the Project Travel Demand Management Program described in Mitigation Measure 4.14-6, the project applicant shall fund, and the City shall supervise, the design and construction of a traffic signal at the intersection of Monarch Lane/Covell Boulevard. The signal design, timing plans, and coordination plan for adjacent Covell Boulevard signals shall be reviewed and approved by the Davis Public Works Department prior to issuance of a building permit for the traffic signal. Funding for the signal will be deposited prior to the issuance of a building permit for any building in Phase 2. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. Based on analysis already performed, this improvement is not triggered by phase one MRIC development; however, all MRIC development shall have a fair share funding obligation.*	LS
4.14-2 Impacts to Intersections within the Mace Boulevard Interchange Area.	S	*MRIC* *4.14-2(a) In conjunction with submittal of a final planned*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		development, or tentative map, whichever occurs first, for Phase 2 of development, as well as all subsequent phases, the Master Owners' Association (MOA) for the Project shall submit a focused traffic impact study to determine if any of the intersection, roadway, interchange, external roadway, or freeway mitigations are required based on the additional traffic generated by the development phase. The focused traffic study shall address the impact of adding the individual phase of development to existing plus other approved/pending development projects. The traffic study shall use the current version of the SACOG travel demand forecasting model available at the time of the study, and the traffic operations analysis methods utilized in this EIR. If operations are found to have declined to unacceptable levels based on the relevant criteria under Standard of Significance #1, above, the project applicant shall construct physical improvements or pay its fair share as described prior to the issuance of the first certificate of occupancy for the first building in that phase. *Mace Triangle – none* *Mitigation Options for Mace Boulevard/I-80 Westbound Ramps; Mace Boulevard/2nd Street/County Road 32A; and Mace Boulevard/Alhambra Drive*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Four potential mitigation options are available for the mitigation of the impact to the three interchange area intersections. Each measure is described below, followed by an evaluation of its effectiveness: 1. ***Option 1 (Roadway and Intersection Widening Alternative):*** *Widen the roadways and intersections in the impacted area to provide LOS E or better operation;* 2. ***Option 2 (Widening Plus Project Access Change Alternative):*** *Modify the proposed new project access on Mace Boulevard, north of Alhambra Drive, to provide a traffic signal with full access (i.e., all movements allowed), as well as widen adjacent roadways and intersections to provide LOS E or better operation as needed, lessening the turning movement demand at the Project access driveway at the Alhambra Drive intersection;* 3. ***Option 3 (Interchange Alternative):*** *Construct capacity improvements at the County Road 32A/32B interchange and on County Road 32A to accommodate more Project traffic to use this interchange, lessening the traffic on the Mace Boulevard interchange; or* 4. ***Option 4 (Eliminate High Speed Right Turn Movements on Mace Boulevard)****: Eliminate high speed right turn movements along Mace Boulevard including a reconfiguration of the on-ramps to eastbound I-80.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MRIC and Mace Triangle *4.14-2(b)* ***Roadway and Intersection Widening Alternative (Option 1):*** *Construct improvements to Mace Boulevard to provide sufficient capacity to serve the Existing Plus Project traffic. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis (see Appendix J for a detailed sketch of the improvements):* • *Southbound Mace Boulevard: Add a third southbound lane from the westbound ramps intersection to the eastbound loop on-ramp, with two lanes feeding the on-ramp* • *Northbound Mace Boulevard: Extend the third northbound lane from the westbound ramps to the 2nd Street intersection* • *Westbound Ramps intersection: eliminate the westbound free right lane and build two right turn lanes* • *Mace Boulevard/2nd Street/County Road 32A intersection: Widen approaches to add a new westbound left turn lane, and lengthen the westbound left turn lanes to 400 feet in length. Remove the eastbound free right turn channelizing*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		island and replace with a non-channelized right turn lane. • *Mace Boulevard/Alhambra Drive/Central Project Driveway intersection: Widen the Project access driveway to provide three outbound lanes with two westbound left-turn lanes and one westbound through/right lane. Add a southbound left turn lane 400 feet in length. Provide a northbound through-right lane and an exclusive northbound right turn lane.* *MRIC and Mace Triangle* *4.14-2(c)* ***Widening Plus Project Access Change Alternative (Option 2):*** *Modify the proposed new project access on Mace Boulevard, north of Alhambra Drive, to provide a traffic signal with full access (i.e., all movements allowed), and widen adjacent roadways and intersections to provide LOS E or better operation, as described in Option 4.14-2(b). Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.* *MRIC and Mace Triangle* *4.14-2(d)* ***Interchange Alternative (Option 3):*** *Construct capacity*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		improvements at the County Road 32 interchange and along County Road 32A to allow this interchange to serve more project traffic and reduce project traffic using the Mace Boulevard interchange. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. The improvements include: • *Reconstruction, widening, and potential relocation to the west, of the eastbound and westbound on- and off-ramps to provide more storage capacity, and to provide traffic signals or roundabouts at the ramp terminal intersections. Provision of an auxiliary lane between the relocated eastbound on-ramp merge and the causeway structure.* • *Provision of a grade separation of County Road 32A and the UPRR tracks. Two interim near-term improvements that could be constructed prior to triggering the provision of the grade separation would consist of: a) relocating the CR 32A/CR 105 intersection about 200 feet to the north; and b) installing double gates on the south approach to the grade crossing in order to improve safety and traffic functionality at the grade crossing.* • *Re-configuration of the County Road 32A/County Road 105 intersection to provide uninterrupted County Road 32A flow with County Road 105 under*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		stop control. *With these improvements and the associated project traffic shift (estimated to be about 600 trips in each peak hour), the Mace Boulevard mitigations would be reduced to the following:* • *Westbound Ramps intersection: eliminate the westbound free right lane and build two right turn lanes; eliminate dedicated westbound left turn lane and serve left turns and through movements from the single shared left-through lane.* • *Mace Boulevard/2nd Street/County Road 32A intersection: Add a second westbound left-turn lane and lengthen left turn lanes to 325 feet. Remove the eastbound free right turn channelizing island and replace with a non-channelized right turn lane.* • *Mace Boulevard/Alhambra Drive/Central Project Driveway intersection: Provide a northbound left turn, through, and right-turn lane.* *The addition of 600 peak hour vehicle trips to County Road 32A has the potential to negatively impact bicycle flow along CR 32A between CR 105 and the access to the causeway bicycle path. The following mitigation*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		measure would reduce this potential impact to a less-than-significant level. • *County Road 32A – from County Road 105 to Causeway Bicycle Path Access: widen CR 32A to provide 7-foot bike lanes, 12-foot maximum auto travel lanes, and a 3-foot buffer between the travel lane and the bicycle lane. If the County does not allow this cross-section, then at a minimum improve the roadway to meet the Yolo County standard for a two-lane arterial (14-foot travel lanes and 6 foot shoulder/on-street bike lanes).* *MRIC and Mace Triangle* *4.14-2(e)* ***Eliminate High Speed Right Turn Movements on Mace Boulevard (Option 4)***: *Construct improvements to Mace Boulevard to eliminate high speed right turn movements and provide sufficient capacity to serve Existing Plus Project traffic. Responsibility for implementation of this mitigation measure shall be assigned to MRIC and Mace Triangle on a fair share basis. Prior to commencement of any construction activities or development subsequent to Phase One, a design-level traffic analysis shall be completed and submitted to the Public Works Department to determine design-level improvements along the Mace Boulevard corridor from Alhambra Drive to Chiles Road, needed to eliminate high speed*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		right turn movements and still provide sufficient vehicle capacity to maintain LOS E. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.	
4.14-3 Impacts to Regional Roadways.	LS	*None required.*	N/A
4.14-4 Impacts to Freeways.	LS	*None required.*	N/A
4.14-5 Impacts to Local Neighborhood Street Traffic.	S	*MRIC* *4.14-5 Prior to final map approval, the project applicant shall fund the development of a neighborhood traffic calming plan, the City shall adopt the plan, and the applicant shall fund implementation of the plan. The traffic calming plan will address Alhambra Drive, Loyola Drive, Fifth Street, and Monarch Lane. Existing weekday daily traffic counts and 85th percentile speeds shall be collected on the above neighborhood streets as part of the traffic calming plan development process. The purpose of the plan will be to maintain both the volume and speed of vehicle traffic on these streets, through the use measures proven in other neighborhoods and jurisdictions to achieve these goals, such as narrow points, neighborhood traffic circles, speed humps, stop signs (where warranted), narrow lane striping, and others. Implementation of a comprehensive traffic calming plan will incentivize traffic to use major routes such as I-80, East Covell*	SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Boulevard, Mace Boulevard, and 2nd Street, and avoiding using residential streets as cut-through routes. *Mace Triangle – none*	
4.14-6 Increase in Vehicle Miles Traveled.	PS	*MRIC* *4.14-6(a) Prior to issuance of the first building permit in the first phase of development, the applicant shall develop a TDM program for the entire proposed project, including any anticipated phasing, and shall submit the TDM program to the City Department of Public Works for review and approval. The TDM program must be designed to achieve the following:* *1. Reduce trips to achieve one and five-tenths (1.5) Average Vehicle Ridership (AVR) in accordance with Davis Municipal Code Section 22.15.060; and* *2. Reduce daily and peak hour vehicle trips, as forecast for the project in this transportation impact assessment, by 10 percent for every project phase.* *The Master Owners' Association (MOA) shall be responsible for implementing the TDM Program.* *(a) The MOA shall be responsible for funding and overseeing the delivery of trip reduction/TDM proposed programs and strategies to achieve the AVR objectives, which may include, but are not*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		limited to, the following: *(1) Establishment of carpool, buspool, or vanpool programs;* *(2) Vanpool purchase incentives;* *(3) Cash allowances, passes or other public transit subsidies and purchase incentives;* *(4) Low emission vehicle purchase incentives/subsidies;* *(5) Parking fees set at levels sufficient to incentivize alternative modes;* *(6) Full or partial parking subsidies for ridesharing vehicles;* *(7) Preferential parking locations for ridesharing vehicles;* *(8) Computerized commuter rideshare matching service;* *(9) Guaranteed ride-home program for ridesharing;* *(10) Alternative workweek and flex-time schedules;* *(11) Telecommuting or work-at-home programs;* *(12) On-site lunch rooms/cafeterias;* *(13) On-site commercial services such as banks, restaurants and small retail;* *(14) On-site day care facilities;* *(15) Bicycle programs including bike purchase incentives, storage, maintenance programs, and on-site education program;*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		(16) On-site car share and bike share service; *(17) Enhancements to Unitrans or Yolobus bus service;* *(18) Enhancements to Capitol Corridor or future Regional Rail service;* *(19) Enhancements to the citywide bicycle network;* *(20) Dedicated employee housing located either on-site or elsewhere in the City of Davis;* *(21) Designation of an on-site transportation coordinator for the project.* *(b) Single-phase development projects shall achieve TDM AVR objectives within five (5) years of issuance of any certificate of occupancy. Multi-phased projects shall achieve the objectives for each phase within three (3) years of the issuance of any certificate of occupancy.* *(c) In conjunction with final map approval, recorded codes, covenants and restrictions (CC&Rs) shall include provisions to guarantee adherence to the TDM objectives and perpetual operation of the TDM program regardless of property ownership, inform all subsequent property owners of the requirements imposed herein, and identify potential consequences of nonperformance.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Each space use agreement (i.e., lease document) shall also include TDM provisions for the site as a means to inform and commit tenants to, and participate in, helping specific applicable developments meet TDM performance requirements. *(d) The MOA shall allow Mace Triangle businesses to participate within the MRIC TDM.* *(e) Ongoing reporting:* *(1) **Annual TDM Report.** The MOA for the Project shall submit an annual status report on the TDM program to the City Department of Public Works beginning a year after the issuance of any certificate of occupancy and continuing until full project buildout. Data shall be collected in October of each year and the Annual Report submitted by December 31st of each year. The report shall be prepared in the form and format designated by the City, which must either approve or disapprove the program within sixty (60) days.* *i. The TDM performance reports shall focus on the trip reduction incentives offered by the project, their effectiveness, the estimated greenhouse gas (GHG)*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		emissions generated by the project, and the methods by which a continued trajectory towards carbon neutrality in 2050 can be achieved consistent with Mitigation Measure 4.7-2. The report shall: • *Report the AVR levels attained;* • *Verify the TDM plan incentives that have been offered;* • *Describe the use of those incentives offered by employers;* • *Evaluate why the plan did or did not work to achieve the AVR targets and explain why the revised plan is more likely to achieve the AVR target levels;* • *List additional incentives which can be reasonably expected to correct deficiencies;* • *Evaluate the feasibility and effectiveness of trip reduction/TDM program and strategies, as implemented;* • *Estimate the greenhouse gas emissions generated by Project transportation operations; and*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		• *Identify off-setting GHG credits to be secured by the Project to achieve carbon neutrality.* *ii. The MOA shall conduct employee travel surveys annually to determine TDM program participation, AVR levels, and estimated mode shares, and monitor weekday AM and PM peak hour traffic operations every three years at all impact locations identified in this EIR, comparing the operating LOS with the relevant standards in this EIR. The survey instrument and LOS monitoring plan will be reviewed and approved by the City prior to implementation.* *iii. The MOA shall also develop and implement a program to monitor daily and peak hour traffic volumes entering and exiting the site, to be conducted annually. The monitoring shall demonstrate that the external vehicle trip generation remains below the EIR projection of 2,453 AM peak hour trips and 2,262 PM peak hour trips. The monitoring program may include statistical considerations to ensure that non-statistically significant increases do not constitute violation of the trip ceiling.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		iv. If the trip ceiling is exceeded for any two consecutive years, the applicant or current owner of the site will contribute funding to be determined in a separate study toward the provision of additional or more intensive travel demand management programs, such as enhanced regional transit service to the site, employee shuttles, and other potential measures. *v. In the event that other TDM objectives are not met as documented in the Annual Monitoring Report submitted by December 31st of each year, the MOA shall:* • *Submit to the City within thirty (30) days of submittal of the annual report, a list of TDM measures that will be implemented to meet the TDM objectives within one hundred eighty (180) days of submittal of annual report. At the end of the one-hundred-eighty-day period, the MOA shall submit a revised performance report to determine compliance with TDM objectives. No further measures will be necessary if the*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		TDM objectives are met. *Should the TDM objectives not be satisfied by the end of the one-hundred-eighty-day period, the MOA shall pay a TDM penalty fee to the City in an amount determined by resolution of the City Council. Said penalty fee may be used to provide new transit service and/or subsidize existing transit service, construct bicycle facilities, and/or improve street capacity through construction of physical improvements to be selected by the City of Davis from the list of area-wide improvements identified in the City's CIP.* *Mace Triangle* *4.14-6(b) Prior to issuance of a building permit for development within the Mace Triangle site, each applicant shall develop a TDM program coordinated with, and compliant with, the requirements of the MRIC TDM program and any pre-existing TDM programs on the Mace Triangle site. The program shall be submitted to the City Department of Public Works for review and approval. This includes achievement of the same trip reduction requirements, GHG-reducing transportation strategies, and monitoring and reporting requirements as the MRIC. This may be satisfied by joining the MRIC TDM program as a participating member.*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.14-7 Impacts to Emergency Vehicle Access.	LS	*None required.*	N/A
4.14-8 Impacts associated with Construction Vehicle Traffic.	PS	*MRIC and Mace Triangle* *4.14-8 Prior to any construction activities for the proposed project, the applicant shall prepare a detailed Construction Traffic Control Plan and submit it for review and approval by the City Department of Public Works. The applicant and the City shall consult with Yolo County, Caltrans, Unitrans, Yolobus, and local emergency service providers for their input prior to approving the Plan. The plan shall ensure that acceptable operating conditions on local roadways and freeway facilities are maintained during construction. At a minimum, the plan shall include:* • *The number of truck trips, time, and day of street closures* • *Time of day of arrival and departure of trucks* • *Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting* • *Provision of a truck circulation pattern that minimizes impacts to existing vehicle traffic during peak traffic flows and maintains safe bicycle circulation* • *Minimize use of CR 32A by construction truck*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		traffic • *Resurface and/or repair any damage to roadways that occurs as a result of construction traffic* • *Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas)* • *Maintain safe and efficient access routes for emergency vehicles* • *Manual traffic control when necessary* • *Proper advance warning and posted signage concerning street closures* • *Provisions for pedestrian safety* *A copy of the construction traffic control plan shall be submitted to local emergency response agencies and these agencies shall be notified at least 14 days before the commencement of construction that would partially or fully obstruct roadways.*	
4.14-9 Impacts to Pedestrian and Bicycle Facilities.	PS	*MRIC and Mace Triangle* *4.14-9(a) The project applicant shall fund and construct the following bicycle and pedestrian improvements.* • *Prior to issuance of the first certificate of occupancy*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		in Phase 1 of the MRIC, the applicant shall construct the multi-use path on west side of Mace Boulevard from just north of Alhambra Drive to existing path along frontage of Harper Junior High School, as shown on the Project site plan. • *Prior to the issuance of the first certificate of occupancy in Phase 1 of the MRIC, the applicant shall construct a crossing for westbound cyclists on County Road 32A, southeast of the existing at-grade railroad crossing at County Road 32A and County Road 105. The crossing shall be a marked crossing, with advanced warning devices for vehicle traffic, for westbound cyclists on CR 32A that are continuing west onto the off-street path located between the Union Pacific Railroad and I-80 (e.g., to the west of County Road 105). As noted earlier, Union Pacific has discussed the potential closure of the at-grade rail crossing. If that occurs, this mitigation measure will not be required.* • *Prior to issuance of the first certificate of occupancy in Phase 1, the applicant shall construct a crossing for eastbound cyclists on County Road 32A for eastbound left turns to the causeway bicycle path. This shall include installation of a marked crossing on the east leg of the CR 32A/I-80 WB off-ramp intersection and construction of a two-way path on the north side of CR 32A between the CR 32A/I-80 WB off-ramp intersection and the entrance to the*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		causeway path, or an equivalent alternate improvement. • *Prior to the issuance of the first certificate of occupancy in Phase 1 of the MRIC, the access road from the Park-and-Ride Lot to County Road 32A shall be improved with sidewalks, per the project description.* • *Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.* *4.14-9(b)* *Prior to the issuance of the first certificate of occupancy in Phase 1 of the MRIC, the project applicant shall fund a study for a bicycle/pedestrian grade-separated crossing of Mace Boulevard to supplement the City of Davis' Bicycle Action Plan/Bike Plan.* • *The study shall assess overall bicycle circulation in general in the annexed area and make appropriate recommendations for integrating project bicycle facilities with the rest of the City.* • *The study shall evaluate the preferred location, design, funding, and construction timing of the crossing. Identification of a preferred location shall take into consideration several factors, including but not limited to, connectivity to other existing and planned bicycle facilities, environmental*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		constraints, and construction costs. • *At or prior to commencement of construction of any building in Phase 2, the project applicant shall: 1) submit design-level drawings of the grade-separated crossing to the City for review and approval; and 2) provide the project's fair share funding to the City for this improvement (or alternatively construct the improvement) subject to agreement with the City. The grade-separated crossing shall be operational prior to construction of any building in Phase 2.* • *Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.*	
4.14-10 Impacts to Transit Services.	PS	*MRIC and Mace Triangle* *4.14-10 Prior to the issuance of the first certificate of occupancy of the first MRIC project phase, the project applicant shall fund and construct new bus stops with turnouts on both sides of Mace Boulevard at the new primary project access point at Alhambra Drive. The project applicant shall prepare design plans, to be reviewed and approved by the City Public Works Department, and construct bus stops with shelters, paved pedestrian waiting areas, lighting, real time transit information signage, and pedestrian connections between the new bus stops and all buildings on the project site.*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. Upon completion of the MRIC transit center, in consultation with Unitrans and Yolobus, the bus stops shall be moved to the MRIC transit center at the expense of the MRIC.	
4.14-11 Conflict, or create an inconsistency, with any applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigating environmental effects related to transportation/traffic.	LS	*None required.*	N/A
4.15 Utilities			
4.15-1 Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.	LS	*None required.*	N/A
4.15-2 Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.15-3 Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.	PS	*MRIC* *4.15-3(a)* *The applicant shall provide for annual wet-weather monitoring of the existing off-site 42-inch or 21-inch sanitary sewer line, depending upon which off-site sewer alignment is chosen for the project, over the course of project buildout to confirm that there is capacity within the line to serve the MRIC, in combination with existing and future projected General Plan buildout. If the wet weather monitoring fails to confirm capacity within the chosen existing sanitary sewer line, the applicant shall either upsize the existing sewer line, subject to reimbursement, or install a parallel line, subject to review and approval by the City Engineer.* *4.15-3(b)* *If the applicant pursues a connection to the existing 8-inch sewer line in Mace Boulevard to serve Phase 1 of the MRIC, then prior to approval of Improvement Plans for Phase 1, the applicant shall prepare and submit to the Davis Public Works Department, a sewer study, which shall determine the available capacity in the 8-inch sewer pipe in Mace Boulevard. If the 8-inch line has adequate capacity for Phase 1 of the MRIC Project, then no further mitigation is needed. If the sewer study determines that the 8-inch line does not have adequate capacity to serve Phase 1, then the applicant shall upsize the sewer pipe within Mace Boulevard, or pursue construction of the northerly or easterly off-site sewer*	LS

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		pipe connection alternative. The design of the sewer pipe improvements shall be reviewed and approved by the City Engineer prior to approval of Phase 1 Improvement Plans. *Mace Triangle – none*	
4.15-4 Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs or fail to comply with federal, State, and local statutes and regulations related to solid waste.	LS	*None required.*	N/A
4.15-5 Gas and electric facilities.	LS	*None required.*	N/A
4.15-6 Adequate telecommunications facilities.	PS	*MRIC* *4.15-5 Prior to approval of construction drawings for each phase of the project, the drawings shall include "dark" fiber routes within the MRIC site and connection points to the existing intercity fiber routes, subject to review and approval by the City Engineer.* *Mace Triangle – none*	LS
4.15-7 Conflict, or create an inconsistency, with any	LS	*None required.*	N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	applicable plan, policy, or regulation adopted for the purpose of avoiding or mitigation environmental effects related to utilities.			
	5 Cumulative (MRIC and Mace Triangle)			
5-1	**Cumulative impacts related to long-term changes in visual character of the region.**	CEQA CC	CEQA *None available.*	CEQA SU
		Modified CC	Modified *None available.*	Modified SU
5-2	**Cumulative impacts related to the creation of new sources of light or glare associated with development of the proposed project in combination with future buildout in the City of Davis.**	CEQA PCC	CEQA *MRIC and Mace Triangle* *5-2 Implement Mitigation Measure 4.1-3.*	CEQA LCC
		Modified PCC	Modified *MRIC and Mace Triangle* *5-2 Implement Mitigation Measure 4.1-3.*	Modified LCC
5-3	**Impacts related to cumulative loss of agricultural land.**	CEQA CC	CEQA *MRIC and Mace Triangle* *5-3 Implement Mitigation Measures 4.2-1(a) and (b) and 4.2-3(b).*	CEQA SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Modified CC	Modified *MRIC and Mace Triangle* *5-3 Implement Mitigation Measures 4.2-1(a) and (b).*	Modified SU
5-4	**A cumulatively considerable net increase of any criteria pollutant.**	CEQA CC	CEQA *MRIC and Mace Triangle* *5-4 Implement Mitigation Measure 4.3-2.*	CEQA SU
		Modified CC	Modified *MRIC and Mace Triangle* *5-4 Implement Mitigation Measure 4.3-2.*	Modified SU
5-5	**Cumulative loss of habitat in the City of Davis area for special-status species.**	CEQA CC	CEQA *MRIC* *5-5(a) Implement Mitigation Measures 4.4-2, 4.4-3, 4.4-6, 4.4-7, and 4.4-12.* *MRIC and Mace Triangle* *5-5(b) Implement Mitigation Measures 4.4-1, 4.4-4, 4.4-5, and 4.4-11.*	CEQA SU
		Modified CC	Modified	Modified SU

CC = *Cumulatively Considerable;* LS = *Less-than-Significant;* LCC = *Less-than-Cumulatively-Considerable;* PS = *Potentially Significant;* PCC = *Potentially Cumulatively Considerable;* N/A = *Not Applicable;* S = *Significant;* SU = *Significant and Unavoidable*

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MRIC *5-5(a) Implement Mitigation Measures 4.4-2, 4.4-3, 4.4-6, 4.4-7, and 4.4-12.* *MRIC and Mace Triangle* *5-5(b) Implement Mitigation Measures 4.4-1, 4.4-4, 4.4-5, and 4.4-11.*	
5-6 Cumulative impacts to movement corridors in the City of Davis area.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
5-7 Cumulative loss of cultural resources.	CEQA PCC	CEQA *MRIC* *5-7(a) Implement Mitigation Measure 4.5-1.* *MRIC and Mace Triangle* *5-7(b) Implement Mitigation Measure 4.5-2.*	CEQA LCC
	Modified PCC	Modified *MRIC* *5-7(a) Implement Mitigation Measure 4.5-1.*	Modified LCC

CC = *Cumulatively Considerable;* LS = *Less-than-Significant;* LCC = *Less-than-Cumulatively-Considerable;* PS = *Potentially Significant;* PCC = *Potentially Cumulatively Considerable;* N/A = *Not Applicable;* S = *Significant;* SU = *Significant and Unavoidable*

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MRIC and Mace Triangle *5-7(b) Implement Mitigation Measure 4.5-2.*	
5-8 Cumulative increase in the potential for geological related impacts and hazards.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
5-9 Cumulative impacts related to greenhouse gas (GHG) emissions and global climate change.	CEQA CC	CEQA *MRIC* *5-9(a) Implement Mitigation Measure 4.7-2(b).* *MRIC and Mace Triangle* *5-9(b) Implement Mitigation Measure 4.7-2(a).*	CEQA SU
	Modified CC	Modified *MRIC* *5-9(a) Implement Mitigation Measure 4.7-2(b).* *MRIC and Mace Triangle* *5-9(b) Implement Mitigation Measure 4.7-2(a).*	Modified SU
5-10 Cumulative impacts related to energy.	CEQA LCC	CEQA *None required.*	CEQA N/A

CC = *Cumulatively Considerable*; LS = *Less-than-Significant*; LCC = *Less-than-Cumulatively-Considerable*; PS = *Potentially Significant*; PCC = *Potentially Cumulatively Considerable;* N/A = *Not Applicable*; S = *Significant*; SU = *Significant and Unavoidable*

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Modified LCC	Modified *None required.*	Modified N/A
5-11	**Increase in the number of people who could be exposed to potential hazards or hazardous materials and an increase in the transport, storage, and use of hazardous materials due to development of the proposed project in combination with future buildout in the City of Davis.**	CEQA LCC	CEQA *None required.*	CEQA N/A
		Modified LCC	Modified *None required.*	Modified N/A
5-12	**Cumulative impacts associated with increases in volume runoff and effects to on- and off-site flooding within the City of Davis planning area.**	CEQA PCC	CEQA *MRIC and Mace Triangle* *5-12 Implement Mitigation Measures 4.9-1(a) through 4.9-1(c).*	CEQA LCC
		Modified PCC	Modified *MRIC and Mace Triangle* *5-12 Implement Mitigation Measures 4.9-1(a) through 4.9-1(c).*	Modified LCC
5-13	**Cumulative impacts to water quality within the City of Davis.**	CEQA LCC	CEQA *None required.*	CEQA N/A
		Modified	Modified	Modified

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	LCC	*None required.*	N/A
5-14 Cumulative land use incompatibilities.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
5-15 Cumulative urban decay.	CEQA PCC	CEQA *MRIC* *5-15 Implement Mitigation Measure 4.10-3.* *Mace Triangle – none*	CEQA LCC
	Modified PCC	Modified *MRIC* *5-15 Implement Mitigation Measure 4.10-3.* *Mace Triangle – none*	Modified LCC
5-16 Cumulative impacts on noise-sensitive receptors.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
5-17 Cumulative traffic noise effects on proposed uses.	CEQA PCC	CEQA *MRIC – none*	CEQA LCC

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Mace Triangle *5-17 Implement Mitigation Measure 4.11-4.*	
	Modified PCC	Modified *MRIC – none* *MRIC Triangle* *5-17 Implement Mitigation Measure 4.11-4.*	Modified LCC
5-18 Cumulative population and housing impacts.	CEQA CC	CEQA *None feasible.*	CEQA SU
	Modified CC	Modified *None feasible.*	Modified SU
5-19 Cumulative impacts to fire protection services from the proposed project in combination with future developments in the City of Davis.	CEQA CC	CEQA *MRIC and Mace Triangle* *5-19 Prior to issuance of building permits for each phase of development, the project applicant shall contribute the project's fair share funding towards one of the following mitigation options, as determined by the City of Davis Department of Community Development and Sustainability and Davis Fire Department:* *1. Construct a fourth fire station within the City of Davis.* *2. Modify of existing Davis fire facilities, which may*	CEQA SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		include renovation of existing fire stations. *3. Complete a Fire Facilities Master Plan (FFMP), and Community Risk and Standards of Cover Study to identify the various alternatives that could be implemented to enable the City of Davis Fire Department to reach all areas of the City, including the Davis Mace Ranch Innovation Center project site, within a five-minute emergency response time, 90 percent of the time, consistent with Davis General Plan Policy POLFIRE 1.2.* *Once the mitigation option is selected, the identified improvement project(s) shall be included in the City's Capital Improvement Program and the City's Fire Impact Fee updated accordingly. In addition, each improvement project shall be subject to its own environmental review process, unless the improvement can be determined by the City to be exempt from CEQA.*	
	<u>Modified</u> CC	<u>Modified</u> *MRIC and Mace Triangle* *5-19 Prior to issuance of building permits for each phase of development, the project applicant shall contribute the project's fair share funding towards one of the following mitigation options, as determined by the City of Davis Department of Community Development and Sustainability and Davis Fire Department:*	<u>Modified</u> SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

	Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
			1. Construct a fourth fire station within the City of Davis. *2. Modify of existing Davis fire facilities, which may include renovation of existing fire stations.* *3. Complete a Fire Facilities Master Plan (FFMP), and Community Risk and Standards of Cover Study to identify the various alternatives that could be implemented to enable the City of Davis Fire Department to reach all areas of the City, including the Davis Mace Ranch Innovation Center project site, within a five-minute emergency response time, 90 percent of the time, consistent with Davis General Plan Policy POLFIRE 1.2.* *Once the mitigation option is selected, the identified improvement project(s) shall be included in the City's Capital Improvement Program and the City's Fire Impact Fee updated accordingly. In addition, each improvement project shall be subject to its own environmental review process, unless the improvement can be determined by the City to be exempt from CEQA.*	
5-20	**Cumulative impacts to public services and recreation from the proposed project in combination with future developments in the City of Davis.**	CEQA LCC	CEQA *None required.*	CEQA N/A
		Modified LCC	Modified *None required.*	Modified N/A

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
5-21 Cumulative Impacts to Intersections Within the Freeway Interchange Area.	CEQA CC	CEQA *Focused Traffic Study Requirement to Verify Timing for Improvements* *MRIC* *5-21(a) Implement Mitigation Measure 4.14-2(a)* *Mace Triangle – none* *Mitigation Options for Mace Boulevard/I-80 Westbound Ramps and Mace Boulevard/2nd Street/County Road 32A* *Four potential mitigation options are available for the mitigation of the impact to the interchange area intersections. Each measure is described below, followed by an evaluation of its effectiveness:* *1. **Option 1 (Roadway and Intersection Widening Alternative):** Widen the roadways and intersections in the impacted area to provide LOS E or better operation;* *2. **Option 2 (Widening Plus Project Access Change Alternative):** Modify the proposed new project access on Mace Boulevard, north of Alhambra Drive, to provide a traffic signal with full access (i.e., all movements allowed), as well as widen adjacent roadways and intersections to provide LOS E or better operation, lessening the turning movement demand at the project*	CEQA SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		access driveway at the Alhambra Drive intersection; *3.* ***Option 3 (Interchange Alternative):*** *Construct capacity improvements at the County Road 32A/32B interchange and on County Road 32A to allow more Project traffic to use this interchange, lessening the traffic on the Mace Boulevard interchange; or* *4.* ***Option 4 (Eliminate High Speed Right Turn Movements on Mace Boulevard)****: Eliminate high speed right turn movements along Mace Boulevard including a reconfiguration of the on-ramps to eastbound I-80.* *MRIC and Mace Triangle* *5-21(b)* ***Roadway and Intersection Widening Alternative (Option 1)*** *Construct the improvements to Mace Boulevard to provide sufficient capacity to serve the Cumulative Plus Project traffic Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis:* *In addition to the widenings identified in Mitigation Measure 4.14-2(b), the following improvements shall be implemented:* • *<u>Southbound Mace Boulevard</u>: Extend the third*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		southbound lane back from the Westbound Ramps to the 2nd Street/County Road 32A intersection; • *Northbound Mace Boulevard: Add a third northbound lane between 2nd Street/County Road 32A and Alhambra Avenue/Project Central Driveway, and extend a second northbound through lane from Alhambra Drive to the project northern driveway;* • *2nd Street/County Road 32A intersection: Widen eastbound approach to add a second left turn lane;* • *I-80 Westbound Ramps intersection: lengthen westbound right-turn lane* *MRIC and Mace Triangle* *5-21(c)* ***Widening Plus Project Access Change Alternative (Option 2):*** *Modify the proposed new project access on Mace Boulevard, north of Alhambra Drive, to provide a traffic signal with full access (i.e., all movements allowed), and widen adjacent roadways and intersections to provide LOS E or better operation as described in Option 5-21(b). Responsibility for implementation of this*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. *MRIC and Mace Triangle* *5-21(d)* ***Interchange Alternative (Option 3)****:* *Construct capacity improvements at the County Road 32 interchange and along County Road 32A to allow this interchange to serve more project traffic and reduce project traffic using the Mace Boulevard interchange. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. The improvements include:* • *Reconstruction, widening, and potential relocation to the west, of the eastbound and westbound on- and off-ramps to provide more storage capacity, and to provide traffic signals or roundabouts at the ramp terminal intersections. Provision of an auxiliary lane between the relocated eastbound on-ramp merge and the causeway structure.* • *Provision of a grade separation of County Road 32A and the UPRR tracks;* • *Re-configuration of the County Road 32A/County Road 105 intersection to provide uninterrupted*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		County Road 32A flow with County Road 105 under stop control. *With these improvements and the associated project traffic shift (estimated to be about 600 trips in each peak hour), the Mace Boulevard mitigations would be reduced to the following:* • *Mace Boulevard/Chiles Road intersection: Add a northbound through lane, lengthen the westbound right-turn pocket to 300 feet, and re-stripe the westbound through lane to a shared through-right lane;* • *Mace Boulevard/I-80 Eastbound Ramps: Add a southbound right-turn lane, re-stripe the second southbound dedicated through lane as a shared through-right, add a receiving lane on the I-80 eastbound loop on-ramps, re-stripe the second northbound dedicated through lane as a shared through-right, and add a receiving lane on the I-80 eastbound straight on-ramp;* • *Mace Boulevard/I-80 Westbound Ramps: Re-stripe the southbound dedicated right-turn lane as a shared through-right, and add a southbound receiving lane on the south leg;* • *Mace Boulevard/2nd Street/County Road 32A intersection: Add a northbound left-turn lane, and*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		add an eastbound right-turn lane (450 feet long); • *Mace Boulevard/Alhambra Drive/Central Project Driveway intersection: Add an eastbound left-turn lane, re-stripe the eastbound shared through-left lane to a shared through-right lane; and re-strips the dedicated northbound right-turn lane to a shared through-right.* *The addition of 600 peak hour vehicle trips to County Road 32A has the potential to negatively impact bicycle flow along CR 32A between CR 105 and the access to the causeway bicycle path. The following mitigation measure would reduce this potential impact to a less-than-significant level.* • *County Road 32A – from County Road 105 to Causeway Bicycle Path Access: widen CR 32A to provide 7-foot bike lanes, 12-foot maximum auto travel lanes, and a 3-foot buffer between the travel lane and the bicycle lane. If the County does not allow this cross-section, then at a minimum improve the roadway to meet the Yolo County standard for a two-lane arterial (14-foot travel lanes and 6 foot shoulder/on-street bike lanes).* *5-21(e)* ***Eliminate High Speed Right Turn Movements on Mace Boulevard (Option 4)****: Construct improvements*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		to Mace Boulevard to eliminate high speed right turn movements and provide sufficient capacity to serve Modified Cumulative Plus Project traffic. Responsibility for implementation of this mitigation measure shall be assigned to MRIC and Mace Triangle on a fair share basis. Prior to approval of improvement plans for the first phase of the project, a design-level traffic analysis shall be completed and submitted to the Public Works Department to determine design-level improvements along the Mace Boulevard corridor from Alhambra Drive to Chiles Road, needed to eliminate high speed right turn movements and still provide sufficient vehicle capacity to maintain LOS E. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.	
	Modified CC	Modified *Focused Traffic Study Requirement to Verify Timing for Improvements* *MRIC* *5-21(a) Implement Mitigation Measure 4.14-2(a)* *Mace Triangle – none*	Modified SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Mitigation Options for Mace Boulevard/I-80 Westbound Ramps; Mace Boulevard/2nd Street/County Road 32A; and Chiles Road/I-80 Eastbound Off-Ramp *MRIC and Mace Triangle* *5-21(b)* ***Roadway and Intersection Widening Alternative (Option 1)*** *Construct the improvements to Mace Boulevard to provide sufficient capacity to serve the Cumulative Plus Project traffic. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.* *In addition to the widenings identified in Mitigation Measure 4.14-2(b), the following improvements shall be implemented:* • *Southbound Mace Boulevard: Extend the third southbound lane back from the Westbound Ramps to the 2nd Street/County Road 32A intersection;* • *Northbound Mace Boulevard: Add a second northbound lane between 2nd Street/County Road 32A and Alhambra Avenue/Project Central Driveway;* • *Mace Boulevard/Alhambra Drive: Add a second*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		southbound left-turn lane; • *Second Street/County Road 32A intersection: no additions;* • *I-80 eastbound straight on-ramp: no additions.* *MRIC and Mace Triangle* *5-21(c)* ***Widening Plus Project Access Change Alternative (Option 2):*** *Modify the proposed new project access on Mace Boulevard, north of Alhambra Drive, to provide a traffic signal with full access (i.e., all movements allowed), and widen adjacent roadways and intersections to provide LOS E or better operation as described in Mitigation Measure 5-21(b). Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.* *MRIC and Mace Triangle* *5-21(d)* ***Interchange Alternative (Option 3)****:* *Construct capacity improvements at the County Road 32 interchange and along County Road 32A to allow this interchange to serve more project traffic and reduce*	

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		project traffic using the Mace Boulevard interchange. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. The improvements include: • *Reconstruction, widening, and potential relocation to the west, of the eastbound and westbound on- and off-ramps to provide more storage capacity, and to provide traffic signals or roundabouts at the ramp terminal intersections. Provision of an auxiliary lane between the relocated eastbound on-ramp merge and the causeway structure.* • *Provision of a grade separation of County Road 32A and the UPRR tracks;* • *Re-configuration of the County Road 32A/County Road 105 intersection to provide uninterrupted County Road 32A flow with County Road 105 under stop control.*	
5-22 Cumulative Impacts to Roadway Segments.	CEQA CC	CEQA *MRIC and Mace Triangle* *5-22 The MRIC Master Owners' Association shall coordinate with the City of Davis to implement travel route management strategies, including changeable message signs with route delay information and downtown*	CEQA SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		parking capacity information, signal coordination and timing plans, and other roadway network management strategies, as appropriate, to efficiently manage the capacities of the various major roadways (i.e., Richards Boulevard, Cowell Boulevard, Pole Line Road, Fifth Street, Old Davis Road, etc.) serving as the primary travel corridors in Davis. Annual monitoring shall be conducted by the Master Owners' Association, and submitted to the City, to verify effectiveness of the route management strategies. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.	
	Modified CC	Modified *MRIC and Mace Triangle* *5-22(a)* *The MRIC Master Owners' Association shall coordinate with the City of Davis to implement travel route management strategies, including changeable message signs with route delay information and downtown parking capacity information, signal coordination and timing plans, and other roadway network management strategies, as appropriate, to efficiently manage the capacities of the various major roadways (i.e., Richards Boulevard, Cowell Boulevard, Pole Line Road, Fifth Street, Old Davis Road, etc.) serving as the primary travel corridors in Davis. Annual monitoring shall be*	Modified SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		conducted by the Master Owners' Association, and submitted to the City, to verify effectiveness of the route management strategies. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis. *MRIC and Mace Triangle* *5-22(b) Project applicant shall widen Covell Boulevard from two lanes to four lanes from the Harper Junior High School access to Alhambra Boulevard. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.*	
5-23 Cumulative Impacts to Local Area Freeway Segments.	CEQA CC	CEQA *MRIC and Mace Triangle* *5-23 The applicant shall contribute a proportional share to the local contribution portion of freeway improvement projects to construct carpool lanes on I-80 between Highway 50/Jefferson Boulevard and Richards Boulevard, as well as to the construction of auxiliary lanes between Chiles Road and Richards Boulevard. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle on a fair share basis.*	CEQA SU

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
	Modified CC	Modified *MRIC and Mace Triangle* *5-23 The applicant shall contribute a proportional share to the local contribution portion of freeway improvement projects to construct carpool lanes on I-80 between Richards Boulevard and the causeway structure, as well as to the construction of auxiliary lanes between Chiles Road and Mace Boulevard. Responsibility for implementation of this mitigation measure shall be assigned to the MRIC and Mace Triangle site on a fair share basis.*	Modified SU
5-24 Cumulative Impacts to Regional Facilities.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
5-25 Cumulative water system impacts.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
5-26 Cumulative wastewater treatment and collection system impacts.	CEQA PCC	CEQA *MRIC* *5-26(a) Prior to approval of improvement plans for each phase of development, the applicant shall provide funding for*	CEQA LCC

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		the City to perform a WWTP analysis to identify the then-current City of Davis WWTP BOD loading capacity. If the WWTP analysis determines that adequate BOD loading capacity exists at the WWTP to serve the MRIC Project phase under review, further action is not required for the phase under review. If the analysis finds that the WWTP BOD loading capacity is not sufficient to serve the particular development phase under review, that phase of development shall not be approved until a plan, for financing and constructing additional BOD loading capacity improvements has been prepared and approved; the additional BOD loading capacity improvements have been constructed; and the City Engineer has verified that sufficient capacity exists to serve said phase. *5-26(b) Implement Mitigation Measures 4.15-3(a) and (b).* *Mace Triangle – none*	
	<u>Modified</u> PCC	<u>Modified</u> *MRIC Site* *5-26(a) Prior to approval of improvement plans for each phase of development, the applicant shall provide funding for the City to perform a WWTP analysis to identify the then-current City of Davis WWTP BOD loading capacity. If the WWTP analysis determines that adequate BOD loading capacity exists at the WWTP to*	<u>Modified</u> LCC

TABLE 2-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance prior to Mitigation	Mitigation Measures	Level of Significance after Mitigation
		serve the MRIC Project phase under review, further action is not required for the phase under review. If the analysis finds that the WWTP BOD loading capacity is not sufficient to serve the particular development phase under review, that phase of development shall not be approved until a plan, for financing and constructing additional BOD loading capacity improvements has been prepared and approved; the additional BOD loading capacity improvements have been constructed; and the City Engineer has verified that sufficient capacity exists to serve said phase. *5-26(b) Implement Mitigation Measures 4.15-3(a) and (b).* *Mace Triangle – none*	
5-27 The project may contribute to cumulative impacts on utilities, including solid waste, natural gas, electric, and telecommunications systems.	CEQA LCC	CEQA *None required.*	CEQA N/A
	Modified LCC	Modified *None required.*	Modified N/A
6 Other CEQA Sections (MRIC and Mace Triangle)			
6.2.1 Foster population and economic growth and construction of housing.	S	*None feasible.*	SU