APPENDIX A

Proposed Merced Wal-Mart Distribution Center Mitigation Monitoring Plan

MERCED WAL-MART DISTRIBUTION CENTER ENVIRONMENTAL IMPACT REPORT CITY OF MERCED

Mitigation Monitoring Program

MITIGATION MONITORING CONTENTS

This mitigation monitoring program includes a brief discussion of the legal basis and purpose of the mitigation monitoring program, a key to understanding the mitigation monitoring table, a discussion of noncompliance complaints, and the mitigation monitoring table itself.

LEGAL BASIS AND PURPOSE OF THE MITIGATION MONITORING PROGRAM

Public Resource Code (PRC) 21081.6 requires public agencies to adopt mitigation monitoring or reporting programs whenever certifying an environmental impact report or mitigated negative declaration. This requirement facilitates implementation of all mitigation measures adopted through the California Environmental Quality Act (CEQA) process.

The City of Merced has adopted its own "Mitigation Monitoring and Reporting Program" (MMC 19.28). The City's program was developed in accordance with the advisory publication, *Tracking CEQA Mitigation Measures*, from the Governor's Office of Planning and Research.

As required by MMC 19.28.050, the following findings are made:

1) The requirements of the adopted mitigation monitoring program for the Merced Wal-Mart Distribution Center shall run with the real property that is the subject of a General Plan Amendment and site plan. Successive owners, heirs, and assigns of this real property are bound to comply with all of the requirements of the adopted program.

2) Prior to any lease, sale, transfer, or conveyance of any portion of the subject real property, the applicant shall provide a copy of the adopted program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

MITIGATION MONITORING PROCEDURES

In most cases, mitigation measures can be monitored through the City's construction plan approval/plan check process. When the approved project plans and specifications, with mitigation measures, are submitted to the City Development Services Department, a copy of the monitoring checklist will be attached to the submittal. The Merced Wal-Mart Distribution Center EIR Mitigation Monitoring Checklist will be filled out upon project approval with mitigation measures required. As project plans and specifications are checked, compliance with each mitigation measure can be reviewed.

In instances where mitigation requires on-going monitoring, the Mitigation Monitoring Checklist will be used until monitoring is no longer necessary. The Development Services Department will be required to file periodic

reports on how the implementation of various mitigation measures is progressing or is being maintained. Department staff may be required to conduct periodic inspections to assure compliance. In some instances, outside agencies and/or consultants may be required to conduct necessary periodic inspections as part of the mitigation monitoring program. Fees may be imposed per MMC 19.28.070 for the cost of implementing the monitoring program.

NONCOMPLIANCE COMPLAINTS

Any person or agency may file a complaint asserting noncompliance with the mitigation measures associated with the project. The complaint shall be directed to the Director of Development Services in written form providing specific information on the asserted violation. The Director of Development Services shall cause an investigation and determine the validity of the complaint. If noncompliance with a mitigation measure has occurred, the Director of Development Services shall cause appropriate actions to remedy any violation. The complainant shall receive written confirmation indicating the results of the investigation or the final action corresponding to the particular noncompliance issue. Merced Municipal Code (MMC) Sections 19.28.080 and 19.28.090 outline the criminal penalties and civil and administrative remedies which may be incurred in the event of noncompliance. MMC 19.28.100 spells out the appeals procedures.

MITIGATION MONITORING TABLE

Table 1 identifies the mitigation measures proposed specifically for the Merced Wal-Mart Distribution Center. The columns in the table are defined as follows:

- **Mitigation Number –** This column lists the mitigation measures by number as identified in the environmental impact report.
- **Mitigation Measure –** This column provides the text of the mitigation measures identified in the environmental impact report.
- **Timing/Schedule –** This column identifies the time frame in which the mitigation will take place.
- **Implementation Responsibility –** This column identifies the entity responsible for complying with the requirements of the mitigation measure.
- **Verification –**The "Action" column describes the type of action taken to verify implementation. The "Date Completed" column is to be dated and initialed by the project manager, or his/her designee, based on the documentation provided by qualified contractors, or through personal verification by City of Merced representatives.

MERCED WAL-MART DISTRIBUTION CENTER EIR
MITIGATION MONITORING CHECKLIST

Project Name: _____ **File Number:** _____

Approval Date: _____ **Project Location:** _____

Brief Project Description: _____

_____

The following environmental mitigation measures were incorporated into the Conditions of Approval for this project in order to mitigate identified environmental impacts to a level of insignificance. A completed and signed checklist for each mitigation measure indicates that this mitigation measure has been complied with and implemented, and fulfills the City of Merced's Mitigation Monitoring Requirements (MMC 19.28) with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6).

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
Air Quality					
4.2-1a	**Comply with SJVAPCD's Indirect Source Review Rule (Rule 9510).** Construction of the proposed project shall comply with SJVAPCD's ISR rule (Rule 9510), as required by law. The Applicant shall have an Air Impact Assessment (AIA) application approved by SJVAPCD prior to issuance of a building permit by the City of Merced. The AIA application shall be submitted on a form provided by the SJVAPCD and contain, but not be limited to, the applicant's name and address, detailed project description, on-site emission reduction checklist, monitoring and reporting schedule, and an AIA. The AIA shall quantify construction NO_X and PM_{10} emissions associated with the project. This assessment shall include: an estimate of construction emissions prior to the implementation of mitigation measures; a list of the mitigation measures to be applied to the project; an estimate of emissions for each applicable pollutant for the project, or each phase	Prior to issuance of building permits	Project applicant		

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Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

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	thereof, following the implementation of mitigation; and a calculation of the applicable off-site fee, if required by Rule 9510. The general mitigation requirements in the assessment, as contained in the ISR rule, shall include the following: ► Exhaust emissions for construction equipment greater than 50 horsepower used or associated with the development project shall be reduced by 20% of the total NO_X and by 45% of the total PM_{10} emissions from the statewide average as estimated by ARB. ► Methods employed by the applicant to reduce construction emissions to the degree noted above include using less polluting construction equipment, including the use of add-on controls, cleaner fuels, or newer lower emitting equipment. The emissions reduction targets listed above shall be met through any combination of on-site emission reduction measures or offset fees, including those required and additional measures listed in Mitigation Measure 4.2-1b below. The requirements listed above can be met through any combination of on-site emission reduction measures or offset fees, including those required and additional measures listed in Mitigation Measures 4.2-1b and 4.2-1c below; however, any on-site emission reductions must be both quantifiable and verifiable to be credited towards the requirements of the ISR Rule. Any off-site mitigation fees shall be paid by the applicant to SJVAPCD prior to issuance of a building permit by the City of Merced.				

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
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4.2-1b	**Implement Measures to Reduce Construction-Related Diesel Equipment Exhaust Emissions.** The following required mitigation measures shall be implemented by the project applicant to reduce construction-related diesel equipment exhaust emissions regardless of whether the emission reductions can be quantified and documented. However, any emissions reductions attained by these measures that can be quantified and documented can be credited to achieve the ISR reduction goals discussed in Mitigation Measure 4.2-1a. These required measures are listed below. Prior to construction a requirement to implement these required measures shall be included in the contract language between the applicant and the builders of the project. **Required Measures to Reduce Construction-Related Diesel Equipment Exhaust Emission** ► All off-road construction equipment used on the project site shall be powered by engines that meet, at a minimum, Tier II emission standards, as set forth in §2423 of title 13 of the California Code of Regulations and Part 89 of title 40 of the Code of Federal Regulations. The fleet of off-road construction equipment shall achieve a fleet average emissions factor equal to or less than the Tier II emissions standard of 4.8 grams per horsepower-hour for NOX. ► Cease construction activity on forecasted Spare the Air Days. ► Staging areas for heavy-duty construction equipment shall be located as far as possible from sensitive receptors. They shall be located on site and not be within 1,000 feet of any off-site receptors.	During grading and construction; prior to issuance of grading permit	Project applicant		

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
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	► Before construction contracts are issued, the project applicant shall perform a review of new technology in consultation with SJVAPCD, as it relates to heavy-duty diesel equipment, to determine what (if any) advances in emissions reductions are available for use and are economically feasible. Construction contract and bid specifications shall require contractors to utilize the available and economically feasible technology on a percentage of the equipment fleet, as determined by SJVAPCD. ► When not in use, idling of on-site equipment shall be minimized. Under no conditions shall on-site equipment be left idling for more than 5 minutes. ► Prohibit the use of trucks with off-road engines to haul materials on-site. Use trucks with on-road engines instead. In addition, measures implemented to achieve the ISR reduction goals required by Mitigation Measure 4.2-1a may include, but are not limited to the additional measures listed below. **Additional Operational Emission Reduction Measures** ► Use alternate fuels and emission controls to further reduce NOX and PM10 exhaust emissions above the minimum requirements set forth in the ISR rule. ► Replace/substitute fossil-fueled (e.g., diesel) equipment with electrically driven equivalents (provided they are not run via a portable generator set). ► Use ARB-certified alternative fueled engines in construction equipment. Alternative fueled equipment may be powered by compressed natural gas, liquid propane gas, electric motors, or other ARB-certified off-road technologies. (To find engines certified by ARB, see http://www.arb.ca.gov/msprog/offroad/cert/cert.php.)				

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	► Provide commercial electric power to the project site in adequate capacity to avoid or minimize the use of portable electric generators and equipment. ► Limit the hours of operation of heavy duty diesel equipment and/or the amount of equipment in use at any one time.				
4.2-1c	**Implement an Emissions Reduction Agreement with SJVAPCD to Reduce Construction Emissions of ROG and NO_X.** The Applicant shall enter into an emissions reduction agreement with SJVAPCD to reduce net ROG and NO_x emissions to less than 10 TPY. This agreement includes an emission reduction program, whereby the Applicant funds projects in the SJVAB, such as replacement and destruction of old engines with new more efficient engines. The agreement requires the Applicant to identify and propose opportunities for the reduction of emissions to fully mitigate the project's construction emissions to less than significant, and includes opportunities for removal or retrofication of stationary, transportation, indirect, and/or mobile-source equipment. Each proposal requires SJVAPCD approval and verification of emission reduction prior to receiving final discretionary approval of the project from the City of Merced. The emissions reduction agreement must be implemented *in addition to* the Required Measures to Reduce Construction-Related Diesel Equipment Exhaust Emission listed in Mitigation Measure 4.2-1b. Development and implementation of the emissions reduction agreement shall be fully funded by the Applicant. To the extent feasible, preference shall be given to off-site emission reduction projects that are located in or in close proximity to the City of Merced. If approved by SJVAPCD, the Applicant may develop an emissions reduction agreement that also fulfills the compliance requirements of SJVAPCD's ISR Rule (Rule 9510). The Applicant shall demonstrate to the City that it has successfully entered into an emission reduction agreement with the San Joaquin Valley Air Pollution Control District before issuance of the first building permit by the City.	Prior to issuance of grading permits	Project applicant		

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
4.2-1d	**Comply with SJVAPCD's Regulation VIII-Fugitive Dust Prohibitions and Implement All Applicable Control Measures.** Construction of the proposed project shall comply with SJVAPCD's Regulation VIII-Fugitive Dust Prohibitions and implement all applicable control measures, as required by law. Regulation VIII contains, but is not limited to, the following required control measures: ► Prewater site sufficient to limit visible dust emissions (VDE) to 20% opacity. ► Phase work to reduce the amount of disturbed surface area at any one time. ► During active operations, apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity. ► During active operations, construct and maintain wind barriers sufficient to limit VDE to 20% opacity. ► During active operations, apply water or chemical/organic stabilizers/suppressants to unpaved haul/access roads and unpaved vehicle/equipment traffic areas sufficient to limit VDE to 20% opacity and meet the conditions of a stabilized unpaved road surface. ► An owner/operator shall limit the speed of vehicles traveling on uncontrolled unpaved access/haul roads within construction sites to a maximum of 15 miles per hour (mph). ► An owner/operator shall post speed limit signs that meet State and Federal Department of Transportation standards at each construction site's uncontrolled unpaved access/haul road entrance. At a minimum, speed limit signs shall also be posted at least every 500 feet and shall be readable in both directions of travel along uncontrolled unpaved access/haul roads.	Prior to and during site grading, preparation, and construction activities; prior to issuance of grading and building permits	Project applicant or designated agent		

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Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
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	► When handling bulk materials, apply water or chemical/organic stabilizers/suppressants sufficient to limit VDE to 20% opacity. ► When handling bulk material, construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. ► When storing bulk materials, comply with the conditions for a stabilized surface as listed above. ► When storing bulk materials, cover bulk materials stored outdoors with tarps, plastic, or other suitable material and anchor in such a manner that prevents the cover from being removed by wind action. ► When storing bulk materials construct and maintain wind barriers sufficient to limit VDE to 20% opacity and with less than 50% porosity. If utilizing fences or wind barriers, apply water or chemical/organic stabilizers/suppressants to limit VDE to 20% opacity or utilize a 3-sided structure with a height at least equal to the height of the storage pile and with less than 50% porosity. ► Limit vehicular speed while traveling on the work site sufficient to limit VDE to 20% opacity. ► Load all haul trucks such that the freeboard is not less than 6 inches when material is transported across any paved public access road sufficient to limit VDE to 20% opacity. ► Apply water to the top of the load sufficient to limit VDE to 20% opacity. ► Cover haul trucks with a tarp or other suitable cover. ► Clean the interior of the cargo compartment or cover the cargo compartment before the empty truck leaves the site; and prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate; and load all				

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	haul trucks such that the freeboard is not less than 6 inches when material is transported on any paved public access road, and apply water to the top of the load sufficient to limit VDE to 20% opacity; or cover haul trucks with a tarp or other suitable cover. ► Owners/operators shall remove all visible carryout and trackout at the end of each workday. ► An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall take actions for the prevention and mitigation of carryout and trackout. ► An owner/operator shall prevent carryout and trackout, or immediately remove carryout and trackout when it extends 50 feet or more from the nearest unpaved surface exit point of a site. ► For sites with paved interior roads, an owner/operator shall prevent and mitigate carryout and trackout. ► Cleanup of carryout and trackout shall be accomplished by manually sweeping and picking-up; or operating a rotary brush or broom accompanied or preceded by sufficient wetting to limit VDE to 20% opacity; or operating a PM_{10}-efficient street sweeper that has a pick-up efficiency of at least 80%; or flushing with water, if curbs or gutters are not present and where the use of water would not result as a source of trackout material or result in adverse impacts on storm water drainage systems or violate any National Pollutant Discharge Elimination System permit program. An owner/operator shall submit a Dust Control Plan to the Air Pollution Control Officer (APCO) before the start of any construction activity on any site that will include 10 acres or more of disturbed surface area for residential developments, or 5 acres or more of disturbed surface area for nonresidential development, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials on at least 3 days. Construction activities shall not commence until the APCO has				

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	approved or conditionally approved the Dust Control Plan. An owner/operator shall provide written notification to the APCO within 10 days before the commencement of earthmoving activities via fax or mail. The requirement to submit a dust control plan shall apply to all such activities conducted for residential and nonresidential (e.g., commercial, industrial, or institutional) purposes or conducted by any governmental entity. Prior to issuance of grading or building permits from the City of Merced, the applicant shall demonstrate to the satisfaction of the SJVAPCD that mitigation measures identified above will be met, and identify and an individual responsible for enforcing the measures.				
4.2-1e	**Mitigation Measure 4.2-1e: Implement SJVAPCD-Recommended Enhanced and Additional Dust Control Measures.** The following SJVAPCD-recommended enhanced and additional control measure shall be implemented to further reduce emissions of fugitive PM_{10} dust. ► Install sandbags or other erosion control measures to prevent silt runoff to public roadways from adjacent project areas with a slope greater than 1%. ► Suspend excavation and grading activity when winds exceed 20 mph. ► Limit area subject to excavation, grading, and other construction activity at any one time. ► Prior to issuance of grading or building permits from the City of Merced, the applicant shall demonstrate to the satisfaction of the SJVAPCD that mitigation measures identified above will be met, and identify and an individual responsible for enforcing the measures.	During site grading, preparation, and construction activities; prior to issuance of grading or building permits	Project applicant or designated agent		

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	Implementation of Mitigation Measures 4.2-1a and -1b would result in the required minimum 20% reduction in NO_X emissions and a 45% reduction in PM_{10} emissions from heavy-duty diesel equipment, as compared with statewide average emissions. Implementation of these measures would also result in a 5% reduction in ROG emissions from heavy-duty diesel equipment. All or part of the reductions may result from on-site equipment and fuel selection; the remainder would result from off-site reductions achieved through the payment of fees. Implementation of Mitigation Measure 4.2-1c would ensure the additional emissions reduction necessary to reduce construction-generated ROG and NO_x emissions to levels below 10 TPY. By prohibiting construction activity on forecasted Spare the Air days, Mitigation Measure 4.2-1b will also prevent construction-related emissions of ozone precursors from contributing substantially to an existing or projected air quality violation. As a result, this impact (generation of construction-related ROG and NO_X emissions) would be reduced to a ***less-than-significant*** **level**. With respect to fugitive PM_{10} dust emissions, implementation of Mitigation Measures 4.2-1d and 4.2-1e would ensure compliance with Regulation VIII, which is required by law, and include additional SJVAPCD-recommended control measures. These dust control measures typically reduce fugitive PM_{10} dust emissions by 75% to approximately 4.2 TPY, which is less than SJVAPCD's recommended threshold of 15 TPY. As a result, this impact (generation of construction-related fugitive PM_{10} dust emissions) would be reduced to a ***less-than-significant*** level.				
4.2-2a	**Comply with SJVAPCD's Indirect Source Review Rule (Rule 9510)** Similar to Mitigation Measure 4.2-1a, which addresses construction-related emissions, operation of the proposed project shall comply with SJVAPCD's ISR rule (Rule 9510), as required by law. The applicant shall have an AIA application approved by SJVAPCD prior to issuance of a building permit from the City of Merced. The AIA application shall be submitted on a form provided by the SJVAPCD and contain, but not be limited to, the applicant's name and address, detailed project	Prior to issuance of building permits; project operation	Project applicant		

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	description, on-site emission reduction checklist, monitoring and reporting schedule, and an AIA. The AIA shall quantify operational NO_X and PM_{10} emissions associated with the project. This shall include the estimated operational baseline emissions (i.e., before mitigation), and the mitigated emissions for each applicable pollutant for the project, or each phase thereof, and shall quantify the off-site fee, if applicable. General mitigation requirements, as contained in the ISR rule, include the following: ► Applicants shall reduce 33.3%, of the project's operational baseline NO_X emissions over a period of ten years as quantified in the approved AIA ► Applicants shall reduce 50% of the project's operational baseline PM_{10} emissions over a period of ten years as quantified in the approved AIA. The requirements listed above can be met through any combination of on-site emission reduction measures or offset fees, including those required and additional measures listed in Mitigation Measures 4.2-2b, 4.2-2c, 4.2-2d, and 4.2-2e for emissions of CAPs and ozone precursors; and Mitigation Measures 4.2-6b and 4.2-6d for emissions of GHGs below; however, any on-site reductions of CAP and ozone precursor emissions must be both quantifiable and verifiable to be credited towards the requirements of the ISR Rule. Any off-site mitigation fees shall be paid by the Applicant to SJVAPCD prior to issuance of a building permit by the City of Merced.				
4.2-2b	**Develop and Implement Design Features and Program Incentives to Reduce Employee Commute Trips.** The applicant shall implement design features and develop program incentives that discourage employees from commuting in single occupant vehicles (SOVs) in order to reduce associated mobile-source emissions. These measures shall be fully funded by the applicant. Measures that result in quantifiable trip reductions can also be counted as reductions in NO_X and PM_{10} emissions with respect to compliance with the ISR rule mentioned in Mitigation Measure 4.2-2a. The program	Prior to issuance of building permits; prior to and during project operation	Project applicant		

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	shall be managed by an on-site Employee Transportation Coordinator employed and appointed by the applicant. The design measures and development of program incentives and their effectiveness shall be evaluated annually and reported to the City of Merced. The City recognizes that, pursuant to California Health and Safety Code Section 40717.9, no city, air district, city, or congestion management agency can *require* an employer to implement an employee trip reduction program. However, the City can require feasible mitigation measures, including design features and program incentives, that strive to reduce the total number of employee commute trips. Mitigation Measure 4.2-2b consists of a list of measures that are required, as well as a list of additional measures that shall be implemented only if determined to be feasible by the applicant and the City. **Required Design Features to Reduce Employee Commute Trips and Associated Mobile-source Emissions** The following measures are considered feasible at the time of writing this EIR and shall be implemented within one year of opening the distribution center: ► Design and provide preferential parking for HOVs. Design features may include a separate parking lot for HOVs that is closer to the employee building entrance than the parking lot for SOVs and/or covered parking spaces for HOVs. Other potential design features include connecting the preferential parking lot for HOVs to the employee entrance of the building with shaded, landscaped walkways or with open-air, covered walkways. ► Provide an adequate number of showers, changing areas, and locker facilities to accommodate employees who bike to work (typically one shower and 3 lockers for every 25 employees of a shift). ► Provide a display case or kiosk that displays up-to-date information regarding area bus transit routes, bicycle routes, and other information concerning measures designed to reduce the number of employees commuting in SOVs, in a prominent area accessible to employees (e.g., break room, cafeteria, or entrance).				

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	► Provide on-site shops and services for employees including a cafeteria and a bank/ATM within 6 months of opening the facility. **Additional Measures to Reduce Employee Commute Trips and Associated Mobile-source Emissions** The following additional measures may be implemented, if feasible: ► Fund the design and installation of bikeways or bike lanes along local roads that provide access to the site. ► Operate free employee shuttle or vanpool system that serves employees according to their shift times and places of residence. Low-emissions shuttle or vanpool vehicles shall be used (e.g., hybrid, CGN, or electric). Provide a covered area for the on-site employee shuttle stop or vanpool parking lot and an open-air, covered walkway connection to the employee entrance of the building to provide summertime shade and protection from rain. ► Provide incentives for employees who take their children to child daycare centers to select nearby centers and designate these centers as official stops of the free employee shuttle or vanpool system. Incentives may include, but are not limited to, the subsidization of daycare rates or the negotiation of group discounts for children of employees at these childcare providers. An on-site child daycare center may be provided only if supported by the findings of a comprehensive HRA performed in consultation with SJVAPCD. ► Schedule employee work shifts according to the class times at nearby K–12 schools and/or have employee shuttles or vanpools make stops at nearby K–12 schools. ► Provide adequate bicycle parking/racks in a covered, secure area. ► Provide carpool ride matching assistance for employees. ► Provide a separate site entrance or access route exclusively for high-occupancy vehicles (HOVs) (e.g., employee shuttles,				

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	carpools, vanpools [if vanpools are used by employees, public transit [when available]) and cyclists that allows for more convenient and expedient access to and from the site during peak turnover periods (i.e., shift changes). ► If public transit service is expanded to serve the project site during times of the day that serve any of the employee shifts at the facility, subsidize public transit passes to all affected employees. ► Offer and implement compressed work schedules to employees (e.g., 4 shifts per week for full time employees). ► Implement parking fees for SOV commuters or a parking cash-out program for employees. A parking cash-out program consists of a financial contribution to employees who do not commute by SOV.				
4.2-2c	**Implement Recommended Mitigation Measures to Reduce Operational Emissions.** The following required mitigation measures shall be implemented by the project applicant to reduce operation-related emissions regardless of whether the emission reductions can be quantified and documented for compliance with the ISR rule required by Mitigation Measure 4.2-2a or whether they result in a quantifiable reduction of employee commute trips in single occupancy vehicles. However, any emissions reductions attained by these measures that can be quantified and documented can be credited to achieve the ISR reduction goals discussed in Mitigation Measure 4.2-2a.or employee trip reduction goals discussed in Mitigation Measure 4.2-2b. These required measures are listed below. ► The applicant's participation in EPA's SmartWay Transport Partnership (EPA 2007) shall include the portion of its haul truck fleet that is based at or serves the Merced distribution center and shall continue participation of this truck fleet in the Partnership for as long as the Partnership or a similar successor program exists. This measure would apply to the 40% of truck trips generated by the project that are operated by Wal-Mart trucks. Once each year	Prior to issuance of building permits; prior to and during project operation	Project applicant		

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	the applicant shall provide to the City of Merced a letter from EPA confirming the project's participation in the SmartWay Transport Partnership. ► The Applicant shall fully fund or contribute its fair share of funding for the development of a Class II Bike Lanes along Childs Avenue and Gerard Avenue from Parsons Avenue to the project's eastern boundary line that would connect the proposed project to nearby land uses, including the residential neighborhoods to the west along Childs Avenue and Gerard Avenue. Building bicycle lanes at these locations is consistent with the City of Merced Bicycle Plan, which was adopted on October 20, 2008 and meets requirements of the California Bicycle Transportation Act (1994) and qualifies the City of Merced to receive state funding for bicycle projects. The City shall determine the Applicant's fair share monetary contribution to the development of these bicycle lanes and the Applicant shall pay its fair share at the same time building permit fees are due to the City. ► As part of its landscaping plan to be prepared for the project (which is also mentioned in Mitigation Measure 4.13-2) the Applicant shall select plant species and landscaping coverage that require minimal maintenance with mechanically-powered equipment such as gasoline-powered lawn mowers. The Applicant and/or its contractors shall not use gasoline-powered leaf blowers on site. If this work is hired out to a landscaping company, then the contract shall prohibit the use of gasoline- or diesel-powered leaf blowers.				
	► Building and site design shall include electrical outlets around the exterior of the units to enable use of electric landscape maintenance equipment.				

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4.2-2d	**Implement Additional Operational On-Site Emission Reduction Measures.** Where feasible, additional measures shall be implemented to reduce operational emissions. Such measures shall include, but are not limited to the additional measures listed below. If, however, the additional measures listed below are technologically or economically infeasible, the Applicant shall submit a written report to the City of Merced Planning & Permitting demonstrating such infeasibility. The report shall be reviewed by a sustainability expert who is selected by the City and the review costs should be funded by the Applicant. Approval of this report shall be received by the Applicant prior to the City of Merced issuing a building permit for the project. ► Purchase and operate electric or hybrid-powered yard tractors (e.g., Volk-brand tractors) to serve as "yard trucks" that move trailers to and from the trailer yard and loading docks. ► Provide electric maintenance equipment, install solar, low-emission, or central water heaters, increase building insulation beyond Title 24 requirements, orient buildings to take advantage of solar heating and natural cooling and use passive solar designs, energy efficient windows (double pane and/or Low-E), highly reflective roofing materials, cool pavement, radiant heat barrier, install photovoltaic cells, programmable thermostats for all heating and cooling systems, awnings or other shading mechanisms for windows, patio, and walkway overhangs, ceiling fans, utilize passive solar cooling and heating designs, utilize day lighting systems such as skylights, light shelves, and interior transom windows. ► The project shall include as many clean alternative energy features as possible to promote energy self-sufficiency (e.g., photovoltaic cells, solar thermal electricity systems, small wind turbines).	Prior to issuance of building permits; prior to and during project operation	Project applicant		

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
4.2-2e	**Mitigation Measure 4.2-2e: Implement an Emissions Reduction Agreement with SJVAPCD to Reduce Operational Emissions of ROG, NO_X, and PM_{10}.** The Applicant shall enter into an emissions reduction agreement with SJVAPCD to reduce net ROG and NO_x emissions to less than 10 TPY and net PM_{10} emissions to less than 15 TPY. This agreement includes an emission reduction program, whereby the applicant funds projects in the SJVAB, such as replacement and destruction of old engines with new more efficient engines. The agreement requires the Applicant to identify and propose opportunities for the reduction of emissions to fully mitigate the project's operational emissions of ROG and NO_x to less than 10 TPY and PM_{10} emissions to less than 15 TPY, and includes opportunities for removal or retrofit of stationary, transportation, indirect, and/or mobile-source equipment. Each proposal requires SJVAPCD approval and verification of emission reduction prior to receiving final discretionary approval of the project from the City of Merced. The emissions reduction agreement shall be implemented *in addition to* the Employee Trip Reduction Program required by Mitigation Measure 4.2-2b, the set of Recommended Mitigation Measures to Reduce Operational Emissions required by Mitigation Measure 4.2-2c, and the set of Additional Operational On-Site Emission Reduction Measures required by Mitigation Measure 4.2-d. However, any emission reductions achieved through these measures that are quantifiable and verifiable could effectively reduce the amount of additional, off-site reductions that must be obtained through the emissions reduction agreement. (Furthermore, any quantifiable and verifiable emissions of CAPs and ozone precursors that would result as an added benefit from implementation of Mitigation Measures 4.2-6b and 4.2-6d, which are designed to achieve GHG reductions as discussed under Impact 4.2-6 below, could also effectively reduce the amount of additional, off-site reductions that must be obtained through the emissions reduction agreement.) To the extent feasible, the selection of programs for reducing operational emissions of CAPs and ozone precursors established in the agreement shall give preference to off-site emission reduction projects that are located in or in close proximity to the City of Merced. If approved by SJVAPCD the Applicant may develop an emissions reduction	Prior to issuance of building permits; prior to and during project operation	Project applicant		

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	agreement that also fulfills the compliance requirements of SJVAPCD's ISR Rule (Rule 9510) discussed in Mitigation Measure 4.2-2a. Development and implementation of the emissions reduction agreement shall be fully funded by the Applicant. The Applicant shall demonstrate to the City that it has successfully entered into an emission reduction agreement with the San Joaquin Valley Air Pollution Control District be achieved before issuance of the first building permit by the City. Implementation of Mitigation Measure 4.2-2a would result in at least the required minimum 33.3% reduction in NO_X emissions and a 50% reduction in PM_{10}. If these reductions are not attained by the on-site measures described above, they would occur through off-site reductions as a result of payment of fees collected by SJVAPCD. Implementation of Mitigation Measure 4.2-2b would result in emissions generated by employee commute trips. (Implementation of Mitigation Measure 4.2-2b may also have the added benefit of lessening traffic congestion and traffic noise levels on area roads.) According to the *Recommended Guidance for Land Use Emission Reductions* (SMAQMD 2007), the measures listed under Mitigation Measure 4.2-2b result in quantifiable reductions in mobile-source emissions associated with industrial land uses and these reductions have been substantiated by research. Implementation of these measures as well as Mitigation Measures 4.2-2c and 4.2-2d would reduce project-generated, operational emissions of ROG, NO_X and PM_{10}. Implementation of Mitigation Measure 4.2-2e would ensure the additional emissions reduction necessary to reduce operational emissions of ROG and NO_x to levels below 10 TPY and operational emissions of PM_{10} to levels below 15 TPY. As a result, this impact would be reduced to a ***less-than-significant*** level.				
4.2-6a	**Implement Mitigation Measures 4.2-1a and 4.2-1b.** The applicant shall implement Mitigation Measures 4.2-1a and 4.2-1b, which will have the added benefit of reducing construction-related emissions of CO_2.	Prior to issuance of building permits; during grading and construction; prior to issuance of construction contracts	Project applicant		

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4.2-6b	**Ensure On-Site Yard Trucks are Maintained and Meet On-Road Truck Emissions Standards.** The applicant shall ensure that all on-site "yard trucks" have ARB-approved on-road truck engines that meet on-road truck emissions standards and are maintained in proper working condition according to manufacturer specifications. The applicant shall provide an inventory list of all on-site yard trucks to SJVAPCD prior to operating the facility and the applicant shall grant SJVAPCD permission to verify the inventory at the project site if desired by SJVAPCD.	During project operation	Project applicant		
4.2-6c	**Implement Mitigation Measures 4.2-2a, 4.2-2b, 4.2-2c, and 4.2-2d.** The applicant shall implement Mitigation Measures 4.2-2a, 4.2-2b, 4.2-2c, and 4.2-2d, which will have the added benefit of reducing project-generated, operation-related emissions of CO_2.	Prior to issuance of building permits; prior to and during project operation	Project applicant		
4.2-6d	**Implement Effective Mitigation Measures.** The following measures, as well as any other effective mitigation measures, shall be implemented by the project applicant to further reduce operation-related emissions of CO_2. ► Install solar panels or other types of alternative energy sources (e.g., wind turbines) in all available areas of the project site, including the roof of the warehouse building, the buffer areas surrounding the paved truck yards and employee parking lot, and covered parking areas, walkways and outdoor areas, to supply electricity for on-site use. This measure would be consistent with the Merced Vision 2015 General Plan Policy SD-3.1, which is to promote the use of solar energy technology (City of Merced 1995). Wal-Mart shall submit a plan to achieve this measure prior to the first day of project operations and this measure shall be achieved within one year after the first day of project operations.	Prior to issuance of building permits	Project applicant		

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	► If the applicant purchases electricity and/or natural gas from PG&E for operation of the proposed project then it shall participate in PG&E's ClimateSmart® program for the purchase of any and all electricity and natural gas consumed on-site by the proposed facility. Participation in PG&E's ClimateSmart® program shall commence prior to receiving its first monthly energy bill from PG&E. Participation in the ClimateSmart® program shall continue for as long as the program, or similar program offered by PG&E, is in existence. ► Retain the portion of the existing almond orchard located between the proposed truck gate and future Campus Parkway. For all almond trees that are subject to removal, participate in an urban and community forestry program (such as the UrbanWood program managed by the Urban Forest Ecosystems Institute [Urban Forest Ecosystems Institute 2007]) in which tree wood is harvested for an end-use that would retain its carbon sequestration (e.g., furniture building, cabinet making). For all nonharvestable almond trees that are subject to removal, develop an off-site tree program that includes a level of tree planting that, at a minimum, increases carbon sequestration by an amount equivalent to what would have been sequestered by the almond orchard during its lifetime. This program shall be funded by the applicant and reviewed for comment by an independent Certified Arborist unaffiliated with the Applicant. Final approval of the program shall be provided by the City prior to tree removal. Components of the program may include, but not be limited to, providing urban tree canopy in the City of Merced, or reforestation in suitable areas outside the City. Upon its completion, the California Urban Forestry Greenhouse Gas Reporting Protocol shall be used to assess this mitigation program. At the time of writing this document, the Center for Urban Forest Research expects to complete the California Urban Forestry Greenhouse Gas Reporting Protocol with the California Climate Action Registry sometime in 2008 (Center for Urban Forest Research 2007). All unused vegetation and tree material shall be shipped to the nearest composting facility, or landfill that is equipped with a methane collection system, or biomass power plant. Tree and vegetative				

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	material should not be burned on or off-site unless used as fuel in a biomass power plant. ► The applicant shall inventory all emissions of GHGs associated with operation of the project according to the most recently established methodologies of the CCAR, the Climate Registry, or ARB. The inventory shall be verified by a verifier who is accredited by the applicable registry within one year of opening the facility and the inventory and verification shall be shared with the City of Merced. This inventory shall include mobile-source GHG emissions associated with trips by Wal-mart trucks traveling to and from the distribution center, and on-site vehicles that are part of Wal-mart's vehicle fleet. At the time of writing this report the most recently established methodology is the California Climate Action Registry's General Reporting Protocol, Version 2.2 (CCAR 2007). Implementation of the Mitigation Measures 4.2-6a through 4.2-6d above would result in reductions of emissions of CO_2 and offsets; however, at the time of writing this EIR these reductions cannot be fully quantified. In addition, implementation of Mitigation Measure 4.2-1c and Mitigation Measure 4.2-2e, which require the Applicant to implement an emissions reduction agreement with SJVAPCD to reduce construction and operational emissions of ROG and NO_X to less than the SJVAPCD-established threshold for ROG and NO_X 10 TYP, will have the added benefit of reducing construction and operational GHG emissions. However, the size of the associated GHG reduction cannot be quantified at the time of writing this EIR and, more significantly, there is not established methodology for verifying the associated GHG reductions from emission reduction agreements. Moreover, the net increase in GHG emissions would still be of an amount that would be considered substantial. Because the project would potentially still result in a net increase in CO_2 emission levels and conflict with the state's AB 32 goals, this impact would be remain ***significant and unavoidable***.				

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
Biological Resources					
4.3-2	**Implement Measures to Minimize Potential Project Effects on Swainson's Hawk and Burrowing Owl.** To minimize potential project effects on Swainson's hawk and burrowing owl, the planning director shall ensure that project applicant shall do the following prior to issuance of grading permits and during construction, as applicable: **Swainson's Hawk** ► Loss of Swainson's hawk foraging habitat shall be compensated for by preservation and management of foraging habitat of at least a similar quality at an appropriate off-site location. Specific measures to offset the loss of foraging habitat shall be developed in consultation with DFG pursuant to DFG's "Draft Non-regulatory Guidelines for Determining Appropriate Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni)." Compensatory mitigation shall be provided for any loss of suitable foraging habitat, including fallow or active agricultural fields (not orchards), before any grading on the site begins. ► Mitigation lands shall be either grassland or croplands (i.e., row crops or alfalfa) that provide suitable Swainson's hawk foraging habitat and shall be located within 10 miles of a known active nest site. In accordance with DFG mitigation guidelines (DFG 1994), habitat shall be provided at a ratio of 0.75 acre of mitigation land for each acre of foraging habitat that would be lost within 5 miles of, but greater than 1 mile from, the nearest active nest. ► Long-term protection of mitigation lands shall be ensured through fee title acquisition, conservation easement, or other suitable mechanisms. Long-term management of mitigation lands shall be ensured by establishing a management endowment or other suitable funding source.	Prior to issuance of the first grading permit and during project construction	Project applicant		

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
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	Burrowing Owl ► The project applicant shall hire a qualified biologist to conduct preconstruction surveys for burrowing owl to determine whether burrowing owls occupy the site during the breeding and/or nesting season. The timing and methodology for the surveys shall be consistent with DFG and Burrowing Owl Consortium survey guidelines. Winter surveys shall be conducted on four separate days between December 1 and January 31. Nesting season surveys shall be conducted on four separate days between February 1 and August 31, with at least two of the survey days during the peak nesting season (April 15–July 15). ► If no burrowing owls are documented during the surveys, the site shall be regularly maintained in a manner that ensures owls do not occupy the site in the future (e.g., regular discing of open areas). No further mitigation shall be necessary. ► If burrowing owls are discovered on the project site, the project applicant shall immediately notify and coordinate with DFG regarding implementation of passive relocation methods to exclude the owls from the site prior to initiating construction activities. Exclusion shall be conducted through installation of one-way doors at the burrow entrances and subsequent destruction of the burrows to preclude re-occupation. Passive relocation may only be conducted during the non-nesting season (September 31–January 31). After relocation, the site shall be regularly monitored to confirm that burrowing owls have not re-occupied the site. If the site is re-occupied, exclusion measures shall be repeated, in coordination with DFG.				

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	► In addition to exclusion of the owls from the site, the project applicant shall consult with DFG to provide appropriate compensation for loss of burrowing owl habitat. To offset the loss of foraging and burrow habitat on the project site, DFG recommends, in their 1995 Staff Report on Burrowing Owl Mitigation, a minimum of 6.5 acres of foraging habitat (calculated on a 100 meter {approximately 300 ft.} foraging radius around the burrow) per pair or unpaired resident bird, should be acquired and permanently protected. The protected lands should be adjacent to occupied burrowing owl habitat and at a location acceptable to the Department. Mitigation for loss of Swainson's hawk foraging habitat could, upon approval by DFG, be used concurrently to mitigate for the loss of burrowing owl habitat. ► Long-term protection of mitigation lands shall be ensured through fee title acquisition, conservation easement, or other suitable mechanisms. Long-term management of mitigation lands shall be ensured by establishing a management endowment or other suitable funding source.				
4.3-5	**Implement Measures to Minimize Conflict with the City's General Plan.** Implementation of Mitigation Measure 4.3-2 would reduce the impact on consistency with the City's General Plan to a less-than-significant level.	Prior to issuance of the first grading permit	Project applicant		
Cultural Resources					
4.4-1	**Contact Cultural Resources Specialist for Potential Cultural Finds during Project-Related Ground-Disturbing Activities.** If unrecorded cultural resources are encountered during project-related ground-disturbing activities, the contractor and/or the project proponent shall contact a qualified professional cultural resources specialist to assess the potential significance of the find. If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) is made during project-related construction activities, ground	During site grading, preparation, and construction	Project applicant or designated agent		

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	disturbances in the area of the find will be halted and a qualified professional archaeologist will be notified regarding the discovery. The archaeologist shall determine whether the resource is potentially significant per the CRHR and develop appropriate mitigation. The preferred mitigation would be preservation in place. If that is not feasible, a mitigation plan would be prepared and implemented and could include, but not necessarily be limited to documentary research; subsurface testing; data recovery; the analysis of excavated materials; preparation of a technical report; and curation of the collection and supporting documentation at a qualified institution.				
4.4-2	**Stop Potentially Damaging Work if Human Remains Are Uncovered during Construction, Assess the Significance of the Find, and Pursue Appropriate Management.** In accordance with the California Health and Safety Code, if human remains are uncovered during ground-disturbing activities, the contractor and/or the project proponent shall immediately halt potentially damaging excavation in the area of the burial and notify the Merced County Coroner and a professional archaeologist to determine the nature of the remains. The coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she must contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). Following the coroner's findings, the property owner, contractor or project proponent, an archaeologist, and the NAHC-designated Most Likely Descendent (MLD) shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments are not disturbed. The responsibilities for acting on notification of a discovery of Native American human remains are identified in California PRC Section 5097.9.	During site grading, preparation, and construction	Project applicant or designated agent		

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
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	Implementation of Assembly Bill (AB) 2641 requires that the following procedures be implemented: Upon the discovery of Native American remains, the procedures above regarding involvement of the County Coroner, notification of the NAHC, and identification of a MLD shall be followed. The landowner shall ensure that the immediate vicinity (according to generally accepted cultural or archaeological standards and practices) is not damaged or disturbed by further development activity until consultation with the MLD has taken place. The MLD shall have 48 hours to complete a site inspection and make recommendations after being granted access to the site. A range of possible treatments for the remains, including nondestructive removal and analysis, preservation in place, relinquishment of the remains and associated items to the descendents, or other culturally appropriate treatment may be discussed. AB 2641 suggests that the concerned parties may extend discussions beyond the initial 48 hours to allow for the discovery of additional remains. AB 2641(e) includes a list of site protection measures and states that the landowner shall comply with one or more of the following: (1) Record the site with the NAHC or the appropriate Information Center (2) Utilize an open-space or conservation zoning designation or easement (3) Record a document with the county in which the property is located				
Geology, Minerals, Soils, and Paleontological Resources					
4.5-1	**Implement Construction Personnel Training and Recover Paleontological Resources if Encountered.** To minimize potential adverse impacts on unique, scientifically important paleontological resources, the project applicant shall do the following:	During site grading, preparation, and construction	Project applicant or designated agent		

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	► Before the start of grading or excavation activities, construction personnel involved with earth-moving activities shall be informed of the possibility of encountering fossils, the appearance and types of fossils likely to be seen during construction activities, and proper notification procedures should fossils be encountered. This worker training shall be prepared and presented by a qualified paleontologist or archaeologist. ► If paleontological resources are discovered during earth-moving activities, the construction crew shall immediately cease work in the vicinity of the find and shall notify the City planning department. The project applicant shall retain a qualified paleontologist to evaluate the resource and prepare a proposed mitigation plan in accordance with SVP guidelines (1995). The proposed mitigation plan may include a field survey, construction monitoring, sampling and data recovery procedures, museum storage coordination for any specimen recovered, and a report of findings. Recommendations determined by the lead agency to be necessary and feasible shall be implemented before construction activities can resume at the site where the paleontological resources were discovered.				
4.5-3a	**Prepare a Final Geotechnical Design Report and Implement All Applicable Recommendations.** Before the approval of grading plans for all project phases, a final geotechnical subsurface investigation report shall be prepared by the project applicant(s) for the proposed development and shall be submitted to the City. The final geotechnical engineering report shall address and make recommendations on the following: ► site preparation; ► appropriate sources and types of fill; ► potential need for soil amendments; ► road, pavement, and parking areas;	Prior to issuance of grading permit	Project applicant		

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	► structural foundations, including retaining wall design; ► grading practices; ► erosion/winterization; ► expansive/unstable soils; and ► liquefaction. The geotechnical investigation shall include subsurface testing of soil and groundwater conditions and determine appropriate foundation designs that are consistent with the CBC. Recommendations contained in the geotechnical engineering report shall be noted on the grading plans and implemented as appropriate before the issuance of building permits. Design and construction of all new development in all phases of the project shall be in accordance with the CBC. It is the responsibility of the project applicant(s) to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.				
4.5-3b	**Provide On-Site Construction Monitoring by a Geotechnical Engineer.** All earthwork shall be monitored by a geotechnical engineer retained by the project applicant(s). The geotechnical engineer shall provide oversight during all excavation, placement of fill, and disposal of materials removed from and deposited on the subject site and other sites. Before export/import of any soil to/from an off-site location, the project applicant(s) shall obtain a grading permit from the City Inspection Services Division.	During construction (including excavation, placement of fill, and materials disposal activities)	Project applicant		
4.5-4	**Prepare and Implement a Grading and Erosion Control Plan.** A grading and erosion control plan shall be prepared by a California Registered Civil Engineer retained by the project applicant(s) for all project phases. The grading and erosion control plan shall be submitted to the City Inspection Services Division before issuance of grading permits for all new development within the project site. The plan shall	Prior to issuance of grading permits	Project applicant or designated agent		

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	be consistent with Appendix Chapter A33 of the CBC as well as the City's National Pollutant Discharge Elimination System (NPDES) permit and shall include the site-specific grading associated with development for all project phases. The plan shall include the location, implementation schedule, and maintenance schedule of all erosion and sediment control measures, a description of measures designed to control dust and stabilize the construction-site road and entrance, and a description of the location and methods of storage and disposal of construction materials. Erosion and sediment control measures could include the use of detention basins, berms, swales, wattles, and silt fencing. Stabilization of construction entrances to minimize trackout (control dust) is commonly achieved by installing filter fabric and crushed rock to a depth of approximately 1 foot. The project applicant(s) shall ensure that the construction contractor is responsible for securing a source of transportation and deposition of excavated materials. **Implement Mitigation Measures 4.5-4 and 4.6-1a.**				
4.5-5	**Implement Mitigation Measures 4.5-3a and 4.5-3b.**	Prior to issuance of grading permit; during construction (including excavation, placement of fill, and materials disposal activities)	Project applicant		
Hydrology and Water Quality					
4.6-1a	**Acquire Appropriate Regulatory Permits and Implement SWPPP and BMPs.** Before the approval of grading permits and improvement plans, the project applicant for all project phases shall consult with the City of Merced, the SWRCB, and the Central Valley RWQCB to acquire the appropriate regulatory approvals that may be necessary to obtain a SWRCB statewide NPDES stormwater permit for general construction activity, and any other necessary site-specific Waste Discharge Requirements WDRs or waivers under the Porter-Cologne Act. The project applicant shall prepare and submit the appropriate Notice of	Prior to issuance to grading permit, and approval of improvement plans; approval of final site plan; during all project-related construction activities	Project applicant or designated agent		

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	Intent (NOIs) and prepare the SWPPP and any other necessary engineering plans and specifications for pollution prevention and control. After completion of construction and issuance of a Notice of Completion by the City of Merced, the project applicant shall prepare and submit the appropriate Notice of Termination (NOT) of the NOI. The SWPPP and best management practices (BMPs) therein shall identify and specify: ► the use of erosion and sediment-control BMPs, including construction techniques that will reduce the potential for runoff as well as other measures to be implemented during construction. These may include but not be limited to sedimentation ponds, inlet protection, perforated riser pipes, check dams and silt fences; ► the means of waste disposal; ► the implementation of approved local plans, nonstormwater-management controls, permanent postconstruction BMPs, and inspection and maintenance responsibilities; ► the pollutants that are likely to be used during construction that could be present in stormwater drainage and nonstormwater discharges, and other types of materials used for equipment operation; ► spill prevention and contingency measures, including measures to prevent or clean up spills of hazardous waste and of hazardous materials used for equipment operation, and emergency procedures for responding to spills; ► personnel training requirements and procedures that will be used to ensure that workers are aware of permit requirements and proper installation methods for BMPs specified in the SWPPP; and ► the appropriate personnel responsible for supervisory duties related to implementation of the SWPPP.				

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	Where applicable, BMPs identified in the SWPPP shall be in place throughout all site work and construction and shall be used in all subsequent site development activities. BMPs shall include the following measures: ► Implementing temporary erosion-control measures in disturbed areas to minimize discharge of sediment into nearby drainage conveyances. These measures may include silt fences, staked straw bales or wattles, sediment/silt basins and traps, geofabric, sandbag dikes, and temporary vegetation. ► Establishing permanent vegetative cover to reduce erosion in areas disturbed by construction by slowing runoff velocities, trapping sediment, and enhancing filtration and transpiration. ► Using drainage swales, ditches, and earth dikes to control erosion and runoff by conveying surface runoff down sloping land, intercepting and diverting runoff to a watercourse or channel, preventing sheet flow over sloped surfaces, preventing runoff accumulation at the base of a grade, and avoiding flood damage along roadways and facility infrastructure. All construction contractors shall retain a copy of the approved SWPPP on the construction site. Implementation of Mitigation Measure 4.6-1a would reduce the potentially significant impact of water quality degradation from project-related construction activities to a less-than-significant level because the project applicant would conform to applicable local and state regulations regulating construction discharges and successfully implement the SWPPP. However, Mitigation Measure 4.6-1b, discussed below, is necessary to assure that the measures put in place by Mitigation Measure 4.6-1a are properly maintained during the life of the project.				

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4.6-1b	**Establish a Maintenance Entity for BMPs.** The project applicant shall establish a maintenance district, Community Facilities District (CFD), or other maintenance entity acceptable to the City of Merced and the MID, prior to recordation of any Final Maps, to provide funding for the operation, maintenance, and replacement costs of the stormwater BMPs. The maintenance entity shall insure that stormwater runoff shall meet all state and local water quality requirements, through modification of BMPs or stormwater pretreatment measures if required.	Prior to recordation of Final Maps	Project applicant		
4.6-2	**Develop and Implement a BMP and Water Quality Maintenance and Monitoring Plan.** Design standards for water quality treatment are being formulated that would meet or exceed City of Merced Storm Drain Master Plan and Standard Design requirements. The applicant shall submit the completed design standards to the City's Development Services Department. Prior to issuance of grading permits, the City Engineer shall ensure that the design standards incorporate the adopted City of Merced Master Storm Drain Plan and Design guidance (City of Merced 2002): ► Excavated Open Channels – 60-foot right-of-way open channels would convey runoff through areas where the estimated peak flow rates from a watershed exceed the capacity of a 66-foot storm drain. These open channels would include landscaping and bike paths for recreational opportunities. They shall be turfed or otherwise protected to prevent erosion. A minimum of 1 foot of freeboard shall be maintained above the design 10-year water surface elevation to the top of the banks. One side of the channel shall provide for all weather maintenance unless the channel is adjacent to a public road. ► Storm Drains – Underground storm drain pipelines would be utilized. Storm drain trunk lines would be sized to convey the 10-year discharges operating under uniform flow conditions, and shall be located in public streets.	Prior to approval of final site plan	Project applicant or designated agent		

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- Stormwater Detention Facilities – The two stormwater detention basins, one draining the north portion of the proposed project site and the other draining the south portion, have been designed to accommodate runoff generated during a 50-year 24-hour storm event under General Plan buildout conditions, with the rate of outflow being limited to the discharge generated by the watershed during a 2-year storm event under existing conditions. Detention basins have been conceptually designed with a maximum depth of 5 feet below ground surface due to the relatively shallow depth to groundwater in some of the areas surrounding the proposed Project. One foot of freeboard from the 50-year 24-hour storm to the top of the basin has also been included in the conceptual design.

- Pump Stations – Due to the relative flatness of the proposed Project terrain, pump stations would be used to augment the gravity flow draining of the detention basins. The pumps have been conceptually designed to handle the 2-year discharge flow from the basins. Facilities would consist of a low flow pump, a high flow pump, and a backup pump.

The stormwater treatment system would reduce the increased amount of stormwater runoff and associated erosion created by the proposed project site. The runoff would be collected by overland flow and an underground storm sewer system into detention ponds to control the quantity of runoff exiting the site. The quality of runoff would be controlled by sedimentation ponds, biological treatment of the water by vegetation, infiltration of the water into the ground and a skimmer plate to skim floatable objects from the water surface. Implementation of these mitigation measures would reduce impacts to a less-than-significant level.

Design Criteria and Methodology

To design a treatment system that meets or exceeds the City and MID guidelines and standards for stormwater quantity and quality that must be met or exceeded, the site was analyzed to determine the peak discharge rates for the predeveloped and developed conditions under various storm event scenarios (Carter-Burgess 2007). The City requires the detention ponds to be designed (1) to store water deposited on site

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Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
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	by the so-called 50-year storm and (2) to control the allowable discharge from developed conditions so as not to exceed the 2-year predeveloped discharge (City of Merced 2002). The City also has a requirement that the ponds be dry in 48 hours, if the maximum discharge rate will allow it. The MID requires that the allowable discharge from developed conditions not exceed the 10-year storm. However, the MID requested that the maximum allowable discharge be 2,200 gpm (gallons per minute), which is less than both the 10-year storm and the 2-year predeveloped discharge rates. The MID maximum allowable rate of 2,200 gpm, lower than the City's discharge rate of 8,960 gpm, was agreed on by the City and MID (Carter-Burgess 2007). The 24-hour rainfall values were selected from NMFS Atlas 14, Volume I by the National Oceanic and Atmosphere Administration. Time of concentration values were computed based on the methods in the Soil Conservation Service Technical Report Manual SCS TR-55, widely used for calculating stormwater runoff in small urban watersheds (USDA 1986). The detention ponds were size based on volume required to hold the stormwater runoff from a 100-year storm event. The computer program Interconnected Pond Routing by Streamline Technologies, Inc., a FEMA approved stormwater modeling system, was utilized to rout the various storms through the detention ponds and the pump station. The 2-year, 10-year, 25-year, 50-year and 100-year 24-Hour Storms were used in the analysis to size the stormwater conveyances such that they would handle the water volumes of all of those stormwater volumes. **Pre- and Postdevelopment Conditions** The site is currently used as farmland, with cultivation of alfalfa and almonds being the primary crops. Site topography indicates that the site slopes from northeast to southwest, with elevations ranging from approximately 195 feet msl near the northeast corner to approximately 187 feet msl at the southwest corner. Stormwater runoff from the site currently ponds in a low lying area near the southwest corner of the site and eventually spills over to a roadside ditch running to the west along the north side of Gerard Avenue.				

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	The development of the approximately 235 acre site would create approximately 110 acres of impervious surface area. To offset the additional impervious area, a series of detention ponds would be constructed around the perimeter of the site area to store stormwater runoff (Exhibit 4.6-2). The detention ponds would be utilized to control the quantity and quality of runoff. The retention time of the stormwater in the ponds would allow additional stormwater infiltration into the soil (Infiltration rates are described in Mitigation measure 4.6-4).As determined by MID based on their review of the proposed Project Preliminary Site Drainage Analysis (Carter-Burgess 2007), stormwater would be pumped from the detention ponds into a connection to an existing irrigation canal. The preferred pump location is shown on Exhibit 4.6-2. The preferred project canal to receive the stormwater runoff would be MID Fairfield Canal (Exhibit 4.6-3). This is the canal preferred by the MID as well based on their review of the proposed Project Preliminary Site Drainage Analysis (Carter-Burgess, 2007). To discharge in to this canal, a pump station would be located near the northeast corner of the development. Stormwater would be pumped in a closed system within the property owned by Wal-Mart, City right-of-way and MID easement/property to Fairfield Canal. In the event the Fairfield Canal could not be utilized, the alternative canal to receive the flow would be the Farmdale Lateral (Exhibit 4.6-4). To reach the Farmdale Lateral, a pump station would be located near the southwest corner of the development (Exhibit 4.6-5). Stormwater would be pumped in a closed system within the property owned by Wal-Mart, City right-of-way or easement and MID easement/property to the Farmdale Lateral. The detention ponds and the drainage channels would be grassed-lined to help filter stormwater runoff. In addition all of the ponds would be interconnected to each other and a discharge pipe would connect the detention ponds to the wet well basin of the pump station. The inlet side of this discharge pipe would have a skimmer plate on it to prevent floating contaminants from entering the wet well basin and leaving the site.				

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	Using the maximum discharge rate of 2,200 gpm as required by the MID, the ponds could not be drained within 48 hours for the 10-year storm, as required by the City. Therefore the City would agree to allow longer drawdown duration time for the system. The drawdown durations for the 10-year, 25-year, 50-year and 100-year would be approximately 72 hours, 88 hours, 95 hours and 108 hours, respectively. These drawdown times assume that once the pumps start pumping they would operate continuously; however, the pumps would be controlled by MID. If MID determined that downstream conditions warranted the discharge from the proposed project site be discontinued, then MID would have the ability to shut the pumps down to discontinue the discharge. This would then increase the duration stormwater would remain in the ponds and the additional volume that could infiltrate into the soil. The 10-year, 24-Hour storm runoff volume for the entire 235 acre site for predeveloped conditions is 10.7 af and for developed conditions is 26.2 af. Permanent water quality improvement BMPs may include but not be limited to unlined detention ponds for filtration, biological treatment of runoff over vegetation, skimmer plates on discharge structures and sedimentation basins. The expected pollutant removal success rates listed in Table 4.6-1 suggest that multiple BMPs, when properly installed and maintained, can achieve nearly 100% sediment removal. Multiple temporary construction and permanent BMPs would therefore be used in combination to achieve this result. Although 100% contaminant removal is often infeasible, BMPs would be selected and designed with the objective of achieving maximum contaminant removal, using the best available technology that is economically feasible, and explicitly identifying the expected level of BMP effectiveness in removing contaminants. In summary, the stormwater management design for the proposed project would consist of the following measures to safely convey on-site and off-site flows through the project site, and prevent increased flood hazard on downstream areas by limiting peak discharges to below pre-project levels.				

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	► Stormwater would be captured and conveyed in a closed system within the property owned by Wal-Mart, City right-of-way and MID easement/property ► Detention ponds in the system would be sized based on volume required to hold the stormwater runoff from a 100-year storm event ► Stormwater would be conveyed to Fairfield Canal (preferred) or Farmdale Lateral (alternative) ► Discharge would be limited to 2,200 gpm for all storm events. The finish floor elevation of each structure on the site would be at least 2 feet above the existing ground elevation at the location of the structure, pursuant to City requirements for development within Zone A. The proposed project would meet or exceed City requirements for development within Zone A, and the stormwater management system would safely convey runoff from the 100-year storm.				
4.6-6	**Comply with SB 5 Criteria Establishing 200-Year Urban Flood Protection.** Prior to submittal to the City of development agreements, tentative maps or rezones after 2015, but potentially sooner depending on when the Central Valley Flood Protection Plan takes effect, the project applicant would be required to show that one of three conditions would be met: ► flood management facilities provide level of protection necessary to withstand 200-year flood event; ► the development agreement or other entitlements include conditions that provide protections necessary to withstand 200-year flood event; or ► the local flood management agency has made adequate progress on construction of a flood protection system that will result in protections necessary to withstand 200-year flood event by 2025.	Prior to submittal of development agreements and approval of final site plan	Project applicant		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
Noise					
4.8-1	**Regulate Short-Term Construction Noise.** The City shall require the applicant to regulate construction noise by implementing the measures listed below. These measures shall be clearly indicated on all grading and improvement plans, and the project contractor shall be responsible for ensuring implementation of all measures. ► Construction shall occur only in the daytime hours between 7 a.m. to 6 p.m., daily. ► Construction staging areas shall be set back from nearby off-site sensitive receptors, as much as possible, including the new Crossing at River Oaks/Sandcastle housing development located west of the site, the existing farmhouse located across Gerard Avenue near the southwest corner of the site, and the existing farmhouse located east of the site across Tower Road. ► Construction equipment mufflers shall be well tuned and maintained according to the manufacturer's specifications, and the equipment's standard noise reduction devices shall be maintained in good working order. ► Construction equipment noise shall be minimized during project construction by muffling and shielding intakes and exhaust on construction equipment (according to the manufacturers' specifications) and by shrouding or shielding impact tools. All equipment shall have sound-control devices no less effective than those provided by the manufacturer. ► To further address the nuisance impact of project construction, construction contractors shall implement the following: • Signs shall be posted at the construction site that include permitted construction days and hours, a day and evening contact number for the job site, and a day and evening contact number for the City in the event of problems.	Prior to issuance of grading permits and during all project-related construction activities.	Project applicant or designated agent		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	• An on-site complaint and enforcement manager shall be posted to respond to and track complaints and questions related to noise. ► The transportation management plan that is required by Mitigation Measure 4.11-2a and 2b in Section 4.11, "Traffic and Transportation," shall route construction-related traffic away from Weaver Elementary School, Pioneer Elementary School, and residences in the area.				
4.8-3	**Implement Measures to Reduce Exposure to Traffic Noise from Project.** Prior to initiating site preparation, the project applicant shall implement the following measures to reduce the exposure of existing sensitive receptors to project-generated traffic noise levels: ► The applicant shall offer the owners of the two affected residences on the east side of Tower Road between SR 140 and Gerard Avenue and the single residence located on the south side of Gerard Avenue between Campus Parkway and the project site entrances the installation of a sound barrier along the property line of their affected residential properties. The sound barriers must be constructed of solid material (e.g., wood, brick, adobe, an earthen berm, or combination thereof). All barriers shall blend into the overall landscape and have an aesthetically pleasing appearance that agrees with the color and rural character of the houses and the general area, and not become the dominant visual element of the community. Relocation of the driveway at each residence may be necessary in order to preclude having gaps in the sound barrier. Relocation of landscaping may also be necessary to achieve an aesthetically pleasing appearance. The owners of the affected properties may choose to refuse this offer; however, the offer shall not be made available to subsequent owners of the property. If an existing owner refuses these measures a deed notice must be included with any future sale of the property to comply with California state real estate law, which requires that sellers of real property disclose "any fact materially affecting the value and desirability of the property" (California Civil Code, Section 1102.1[a]). The applicant shall be responsible for all costs incurred by the implementation of this mitigation measure.	Prior to initiating site preparation; during project operation and construction	Project applicant		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	► To ensure compliance with applicable noise standards, a site-specific noise study shall be conducted by the City or its approved consultant to determine specific noise barrier design. The study shall contain noise levels prior to and after noise barrier installation at all affected sensitive receptors and shall require the full disclosure of the effectiveness of the sound barrier. The applicant shall be responsible for all costs incurred by the implementation of this mitigation measure. ► The cost to fully implement this mitigation measure, including related studies, and design and installation shall be completely funded by the applicant. ► The applicant shall maintain its truck fleet in proper working condition, including truck mufflers and exhaust systems, according to manufacturers' specifications.				
Public Health and Hazards					
4.10-1	**Remediate Unknown or Previously Undiscovered On-Site Hazardous Materials.** If, during site preparation and construction activities, previously undiscovered or unknown evidence of hazardous materials contamination is observed or suspected through either obvious or implied indicators (i.e., stained or odorous soil), construction activities shall immediately cease in the area of the find. MCDEH and the City of Merced Environmental Health Division staff shall be immediately consulted, and the project applicant shall contract with a qualified consultant registered in DTSC's Registered Environmental Assessor Program to assess the extent to which soil and/or groundwater has been adversely affected by past activities. This investigation shall follow DTSC guidelines and shall include, as necessary, analysis of soil and/or groundwater samples taken at or near the potential contamination sites. If necessary, risk assessments shall include a DTSC Preliminary Endangerment Assessment or no further action determination, or equivalent. Any required remediation shall	During site grading, preparation, and construction activities	Project applicant or designated agent		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	include a DTSC Remedial Action Work Plan or equivalent. The site shall be remediated in accordance with recommendations made by a qualified environmental consultant registered in DTSC's Registered Environmental Assessor Program; MCDEH; the City of Merced Environmental Health Division staff; Central Valley RWQCB; DTSC; or other appropriate federal, state, or local regulatory agencies as generally described above. The agencies involved would be dependent on the type and extent of contamination. Site preparation and construction activities shall not proceed until remediation is completed to the satisfaction of MCDEH and the City of Merced Environmental Health Division.				
Traffic and Circulation					
4.11-2a	**Accommodate All Delivery Truck Parking On-Site.** Prior to issuance of building permits, the Chief Building Official shall verify that the final site plan clearly identifies a designated on-site waiting area within the site between Gerard Road and the truck gate that is located further within the site. This area shall be large enough to accommodate at least 20 inbound delivery trucks. It is recommended that the access roadway be designed to have a temporary parking area located between Gerard Avenue and the truck entrance gate. The parking area shall be paved and marked as a designated waiting area for delivery trucks, and shall not impede access to the site. The holding area(s) shall be located in the interior of the project site and be more than 1,000 feet from all off-site residences, which is a distance threshold identified in the Noise Analysis of this EIR. If the waiting area(s) are located closer than 1,000 feet to off-site residences then sound barrier(s) shall be implemented into the design to ensure that on-site truck idling would not result in an exceedence of the nighttime standard of 45 A-weighted decibels energy-equivalent noise level established by the Merced General Plan (Table N-5). Wal-Mart shall instruct all delivery truck drivers not to park, stand, wait, or stay overnight along local roadways. In order to minimize noise and vehicle emissions, idling in the waiting area shall be limited by Wal-Mart to 5 minutes, as required by 13 CCR Chapter 10, Section 2485.	Prior to issuance of building permits; project operation	Project applicant		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
4.11-2b	**Manage Truck Traffic on Local Streets.** To reduce hazards on local roadways associated with truck traffic during *construction operations*, Wal-Mart Stores East LP shall ensure that its primary construction contractor implements the following measures: a. Develop and implement a construction truck traffic safety plan in coordination with the City of Merced, County of Merced, and Caltrans. The construction contractor shall develop a plan for traffic safety assurance for the County roadways in the project vicinity. The contractor shall submit the plan to the City Development Services Department for approval before the initiation of construction-related activity that could adversely affect traffic on City, County, and State roadways. The plan(s) may call for the following elements, based on the requirements of each agency: ► posting warnings about the potential presence of slow-moving construction vehicles; ► using traffic control personnel when appropriate; ► scheduling truck trips outside of peak morning and evening traffic periods to the extent feasible; ► placing and maintaining barriers and installing traffic control devices necessary for safety, as specified in Caltrans's *Manual of Traffic Controls for Construction and Maintenance Works Zones* and in accordance with City and County requirements; and ► maintaining routes for passage of emergency response vehicles through roadways affected by construction activities. The contractor shall train construction personnel in appropriate safety measures as described in the plan(s), and shall implement the adopted plan(s). b. *Minimize the accumulation of mud and dirt on local roadways*. All operations shall limit or expeditiously remove the accumulation of	Prior to issuance of grading permits; during project construction activities	Project applicant or designated agent		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	project-generated mud or dirt from adjacent public streets at least once every 24 hours when operations are occurring. The construction contractor shall sweep the paved roadways (water sweeper with reclaimed water recommended) at the end of each day if substantial volumes of soil material have been carried onto adjacent paved, public roads from the project sites. To reduce hazards on local roadways associated with truck traffic during *ongoing operations*, Wal-Mart Stores East LP shall ensure implement the following measures: c. *Develop and implement a truck route plan*. Tractor trailers approaching and departing from the distribution center shall be limited to the following roadways from SR 99 and SR 140: Campus Parkway, Mission Avenue west of Campus Parkway, Gerard Avenue east of Campus Parkway, and Tower Road. Wal-Mart shall regularly and routinely instruct its employees, contract truck drivers, and vendors of these roadway limitations.				
4.11-3	**Provide Emergency Access Gate and Driveway.** Prior to approval of the final site plan, the project applicant shall modify the site plan to show a third point of ingress and egress on Childs Avenue that is gated and available only for emergency purposes. The emergency access driveway on-site shall be indicated on the final site plan at a width and design acceptable to the City Engineer and shall provide unimpeded access to all structures on the site.	Prior to approval of final site plan	Project applicant		
4.11-4	**Update Safe Routes to School Plan.** Prior to issuance of certificates of occupancy, the City Engineer shall ensure that the Safe Routes to School Plans are appropriately updated such that school bus and pedestrian routes in the vicinity of the Wal-Mart are revised as appropriate to avoid potential conflicts taking into account the project's potential increase in truck traffic and potential truck routes.	Prior to issuance of certificates of occupancy	City of Merced		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
6-9	**Mission Avenue at SR 99 Northbound Off-Ramp.** Restriping the northbound and westbound approaches would mitigate the impact at this intersection. It is proposed to restripe the northbound approach from a left-through turning movement and a right-only turning movement to a left-through-right turning movement and a right-only turning movement. The westbound approach would be restriped from two through lanes and one right-turn only lane to one through lane, one through-right lane, and one right-turn only lane. Restriping could be accomplished within the existing right-of-way. Prior to issuance of occupancy permits, the applicant shall pay the project's fair share (9.0%) contribution for the restriping.	Prior to issuance of occupancy permits.	Project applicant		
6-10	**SR 140 between Santa Fe Avenue and Kibby Road.** The addition of project traffic would cause the segment of SR 140 between Santa Fe Avenue and Kibby Road to deteriorate from LOS D under the 2030 Cumulative No Project Condition to LOS E during the p.m. peak hour. All other study roadway segments would operate at an acceptable LOS (LOS D or better). The level of service on SR 140 between Santa Fe Avenue and Kibby Road is a significant cumulative impact. The project's contribution to this significant impact is cumulatively considerable; therefore, the project's cumulative impact would be ***significant***. By adding one lane in each direction in this segment, the roadway would be improved to operate at an acceptable LOS A. The widening of the roadway, however, may require right of way acquisition, the need for utility relocation and, approval by Caltrans. Prior to issuance of occupancy permits, the applicant shall pay the project's fair share contribution for the additional lanes. The project's fair share contribution for AM peak hour would be 1.5% and the contribution for PM peak hour would be 2.1%. With implementation of this mitigation measure, the cumulative impact would be reduced to a ***less-than-significant*** level.	Prior to issuance of occupancy permits	Project applicant		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
6-11	**Tower Road between SR 140 and Gerard Avenue.** It is recommended that the roadway segment between SR 140 and Gerard Avenue be improved to address these issues of poor pavement conditions and faded pavement markings. In addition, the Tower Road approaches to the intersection at Gerard Avenue (and the approaches along Gerard Avenue to Tower Road) should be improved to provide proper turning radii for standard trucks as classified under the Surface Transportation Assistance Act (STAA). Prior to issuance of occupancy permits, the applicant shall pay the project's fair share contribution for the roadway improvements. The project's fair share contribution would be 74% (average of 76% and 71%) for peak hour impacts. With implementation of the mitigation measure, the impact would be reduced to a ***less-than-significant*** level.	Prior to issuance of occupancy permits	Project applicant		
Utilities and Public Services					
4.12-4	**Incorporate Energy Efficiency Features into Project Designs** Prior to the issuance of building permits, the project applicant shall prepare and submit a sustainability plan, for review and approval of the City's Planning Director, which shall incorporate the following energy efficiency features in project designs: ► providing electric maintenance equipment; ► using solar, low-emissions, or central water heaters; ► increasing building insulation beyond Title 24 requirements; ► orienting buildings to take advantage of solar heating and natural cooling; ► limiting the amount of glass on the south and west facades and providing solar protection for south-facing walls through landscaping or earth sheltering; ► installing thermal insulation, double-paned windows, high-tech window glazing, vapor barriers, and controlled air filtration to reduce energy consumption;	Prior to the issuance of building permits	Project applicant		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	► installing skylights, light pipes, light shelves, exterior shade panels, and reflectors to transfer light to the interior of the building; and ► using clean alternative energy features, such as photovoltaic cells, solar panels, small wind turbines, and/or fuel cells, to generate power and reduce power consumption.				
4.12-5	**Implement Mitigation Measures 4.12-4.** The applicant shall implement Mitigation Measure 4.12-4 above to reduce potentially significant impacts associated with increased demands for energy to a less-than-significant level by ensuring the proposed project includes energy efficiency measures in project designs.	Prior to approval of final construction drawings	Project applicant		
Visual Resources					
4.13-2	**Prepare and Submit a Landscaping Plan.** Prior to the issuance of building permits, the applicant shall prepare and submit a landscaping plan to the satisfaction of the Planning Manager in consultation with the Public Works Director that includes the following features and accomplishes the following objectives on the site: ► The developer shall plant trees (minimum 15 gallon) no further than 30 feet apart, on site along the perimeter roads surrounding the project site, including Childs Avenue, Gerard Avenue, and Tower Road. These trees are in addition to the street trees required every 40 feet per City Standards. Shrubs and turf shall be combined with the trees in a minimum 15-foot wide landscape strip along the entire project perimeter which abut public streets. Irrigation shall be provided to all landscape areas. A detailed landscape and irrigation plan per MMC 17.60 shall be approved by City staff at the building permit stage. ► Parking lot trees at a minimum of one for each six spaces (per MMC 20.58.385) shall be required in all employee and visitor parking areas on site. Parking lot trees, however, shall not be required in truck or trailer parking areas.	Prior to issuance of building permits	Project applicant		

Table 1
Mitigation Monitoring Checklist for the Merced Wal-Mart Distribution Center

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
	► Existing almond trees shall be preserved in any areas of the site that are to be left undeveloped by buildings, parking areas, driveways, drainage basins, etc. The developer shall submit a plan showing the location of existing trees and the proposed development and the City shall approve a plan at the building permit stage for preserving as many trees as feasible. ► All vegetation shall be maintained by an automatic irrigation system. The landscaping and irrigation plans and details shall be subject to review and approval by the City. The City shall create and adopt a mechanism that will ensure that Wal-Mart Stores East, LP maintains the landscaping in accordance with the adopted plan.				
4.13-3	**Prepare and Submit a Lighting Plan.** Prior to the issuance of building permits, the applicant shall prepare a lighting plan for review and approval by the Planning Director. The lighting plan shall identify the design and placement, orientation, and illumination level (in watts) of all light fixtures. The lighting plan shall be designed so that illumination is focused downward upon targeted horizontal surfaces. Illumination of vertical surfaces shall be minimized. The lighting plan shall specify that no illumination source (including light bulb and reflector) shall be visible at a point 100 feet or greater from the outside of the property line. The exception to this performance standard is at driveway intersections with public streets.	Prior to issuance of building permits	Project applicant		

Copies of This Form Distributed To:

____	City Council	____	City Manager	____	Dev Serv Director	____	Public Works Director	____	City Engineer
____	Police Chief	____	Leisure Serv. Dir.	____	County of Merced (Dept. ____)	____	Other (List ____)		
____	Responsible Agency: (List ____)								

I hereby certify that I have inspected the project site and that the above information is true to the best of my knowledge.

Name: (Print) ____ Representing: (Agency/Firm) ____

Signature: ____ Date: ____

APPLICABLE MITIGATION MEASURES OF THE GENERAL PLAN EIR — WAL-MART DISTRIBUTION CENTER

Mit. No.	Mitigation Measure	Timing/Schedule	Implementation Responsibility	Verification	
				Action	Date Completed
XX					
XX					
XX					

MERCED VISION 2015 GENERAL PLAN
ENVIRONMENTAL MITIGATION CHECKLIST FORM A

Project Name: _____ **File Number:** _____

Approval Date: _____ **EIR:** _____ **Conditional Neg. Dec.** _____

The following environmental mitigation measures were incorporated into the Conditions of Approval for this project in order to mitigate identified environmental impacts to a level of insignificance. A completed and signed checklist for each mitigation measure indicates that this mitigation measure has been complied with and implemented, and fulfills the City of Merced's Mitigation Monitoring requirements with respect to Assembly Bill 3180 (Public Resources Code Section 21081.6)

Mitigation Measure	Type	Dept	Monitoring Plans	Shown on Implementation	Verified Remarks

(Add additional Measures as Necessary)

Explanation of Headings:

Type:	Project, ongoing, cumulative.
Monitoring Dept.:	Department or Agency responsible for monitoring a particular mitigation measure.
Shown on Plans:	When mitigation measure is shown on plans, this column will be initialed and dated.
Verified Implementation:	When a mitigation measure has been implemented, this column will be initialed and dated.
Remarks:	Area for describing status of ongoing mitigation measure, or for other information.

MERCED VISION 2015 GENERAL PLAN
MITIGATION MEASURE MONITORING CHECKLIST – FORM B

Monitoring Phase: _____ _____ **Pre-Construction** _____ **Construction**

Project File Number: _____

Project Name: _____

Brief Project Description: _____

Project Location: _____

Requirement Met:

Date	Yes	No	Description of Mitigation Measures
			1.
			2.
			3.
			4.
			5.

Requirement On-Going:

Date	Yes	No	Description of Mitigation Measures
			1.
			2.
			3.
			4.
			5.

Trustee Agency	Date	Yes	No
1.			
2.			
3.			
4.			
5.			

Copies of This Form Distributed To:

_____ City Council _____ City Manager _____ Dev Serv Dir. _____ Public Works Dir.
_____ City Engineer _____ Fire Chief _____ Police Chief _____ Leisure Services Dir.
_____ County of Merced (Dept _____) Other (List _____)
_____ Responsible Agency: (List _____)

I hereby certify that I have inspected the project site and that the above information is true to the best of my knowledge.

Name: (Print) _____ Representing: (Agency/Firm) _____

Signature: _____ Date: _____