CITY OF SANTA ROSA
FARMERS LANE EXTENSION
Inclusive of
THE KAWANA-RALPHINE WATER PIPELINE PROJECT
MITIGATION MONITORING AND REPORTING PROGRAM

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Introduction

Background

All public agencies are required to adopt mitigation monitoring or reporting programs when approving projects with Environmental Impact Reports (EIRs) or Negative Declarations that identify significant environmental impacts. The reporting and monitoring program must be adopted when a public agency makes its findings under the California Environmental Quality Act (CEQA) Chapter 2.6, Section 21081.6 of the California Public Resources Code so that the program can be made a condition of project approval. The program must be designed to ensure project compliance with mitigation measures during project implementation. If certain project impacts extend beyond the project implementation phase, long-term mitigation monitoring is to be provided in the monitoring program.

Purpose

This Mitigation Monitoring and Reporting Program for the Farmers Lane Extension project, to be constructed by the City of Santa Rosa (City), and the Kawana-Ralphine Water Pipeline project, to be constructed by the Sonoma County Water Agency (Agency), (the projects), is to ensure that all required mitigation measures are completed as part of implementing the projects, and that the required mitigation measures are maintained in a satisfactory manner during and after implementing the projects.

This Mitigation Monitoring and Reporting Program is designed in a checklist format for ease of use by the responsible parties. The checklist identifies the individual mitigation measures and the time frame for implementation, and assigns a party responsible to monitor and confirm the implementation of each mitigation measure. The checklist will be used by the City of Santa Rosa and Sonoma County Water Agency to verify that all required mitigation measures are incorporated into the projects and will provide a convenient tool to determine whether required mitigation measures have been fulfilled.
Mitigation Monitoring and Reporting Program

MANAGEMENT

The City of Santa Rosa will be responsible for overall implementation and administration of the Mitigation Monitoring and Reporting Program for the Farmers Lane Extension project while the Sonoma County Water Agency will be responsible for overall implementation and administration of the Mitigation Monitoring and Reporting Program for the Kawana-Ralphine Water Pipeline project. Duties would include the following:

- Conducting routine inspections, plan checking, and reporting activities.
- Serving as a liaison between the City/Agency and construction contractors regarding mitigation and/or mitigation monitoring issues.
- Coordinating activities of any consultants hired by the City and/or Agency when such expertise and qualifications are necessary to implement and monitor mitigation measures.
- Coordinating with agencies having jurisdiction over environmental resources and/or public service and utility facilities and mitigation monitoring responsibilities.
- Assuring follow-up and responding to any public complaints.
- Completing forms and checklists for reporting. Maintaining reports and other records and documents generated by the monitoring program.
- Coordinating and assuring corrective actions or enforcement measures are taken, if necessary.

BASELINE DATA

The baseline data for each of the environmental impact mitigation measures to be monitored is contained in the Subsequent Environmental Impact Report (SEIR) prepared for the Farmers Lane Extension project, inclusive of the Kawana-Ralphine Water Pipeline project (Draft SEIR, May 2003, and Final SEIR, September 2003).

ENFORCEMENT

The Mitigation Monitoring and Reporting Program will be incorporated as a condition of project approval, should the projects be approved for implementation. Therefore, all mitigation measures must be complied with in order to fulfill the requirements of the approval. In addition, a number of the mitigation measures will be incorporated into the design of the projects during the course of project design and City/Agency design review processes as the projects progress. These measures will be checked on plans, in construction specifications and technical reports, and in the field prior to and during construction. If compliance is not found, a stop work order and/or change order may be required. Some
mitigation measures will be implemented prior to project detailed design. Other mitigation measures will be implemented during project design and/or project construction and implementation phases.

Some mitigation measures will be monitored over time in order to ensure long-term compliance. These mitigation measures include the success of ornamental plantings, and water quality protection. Mitigation measures and monitoring actions are provided in the Checklist. In addition to identifying the monitoring and reporting actions, the Checklist provides specific penalties for non-compliance. Mitigation measure numbers (i.e., 3.4-1) are the same as documented in the SEIR. Any gaps in the numbering sequence result from mitigation measures that either call for implementing previously identified mitigation measures or no mitigation measure was specifically identified for a potential impact (i.e., the impact was less than significant and no mitigation measure was required).

**MONITORING AND REPORTING**

The monitoring and reporting program identifies each mitigation measure for a significant environmental impact and specifies the following:

- mitigation monitoring implementation action(s) required and the timing of mitigation action(s)
- the criteria or performance standard established for each mitigation measure
- responsible party or agency to conduct the monitoring and reporting
- the frequency of monitoring and reporting the outcome of monitoring activities, and
- sanctions to be imposed for noncompliance with required mitigation measures.

The project sponsor (City of Santa Rosa for Farmers Lane Extension and the Sonoma County Water Agency for the Kawana-Ralphine pipeline) is responsible for initiating and implementing the specified mitigation activities. Other agencies such as the Regional Water Quality Control Board or U.S. Fish and Wildlife service responsible for environmental resources and/or permitting will collaborate with the City and/or Sonoma County Water Agency as identified in this Mitigation Monitoring and Reporting Program.

The Mitigation Monitoring and Reporting Program applies to all alternative routes evaluated in the SEIR for Farmers Lane Extension and the Kawana-Ralphine Pipeline unless specifically noted otherwise. In certain cases, the specified mitigation measure applies only to the Farmers Lane Extension project and not the pipeline project, in which case the pipeline is not discussed under the mitigation measure.

**FUNDING**

The funding requirements for mitigation monitoring and reporting will be provided for by the City of Santa Rosa for the Farmers Lane Extension project and the Sonoma County Water Agency for the Kawana-Ralphine Water Pipeline project as necessary.
### 3.2 Land Use

#### Potential Community Disruption

Farmers Lane Extension

**Summary of Impact 3.2-1**

*Right-of-way would need to be acquired for Farmers Lane Extension along most of the parkway alignment, thus altering portions of the physical arrangement of the established community. However, there would be no substantial adverse disruption or reconfiguration of the overall established community or substantial, adverse change to the type or intensity of an existing land use of area-wide importance.*

**Mitigation Measure 3.2-1**

Any real property acquisition necessary for Farmers Lane Extension must be done in accordance with the Eminent Domain Law and the Uniform Relocation Assistance and Real Property Acquisition Policies Act. In accordance with Eminent Domain Law, the City would appraise the property to be acquired, make an offer to the property owner and make every reasonable effort to expeditiously acquire real property by negotiation. In addition, as necessary, the City shall relocate, adjust, and/or reconstruct any existing fences, mailboxes, driveway aprons or other residential front or side-yard minor site appurtenances encountered in the area of construction.

**Implementation**

Mitigation to be implemented after project approval by the Santa Rosa City Council

**Evaluation Criteria/Performance Standards**

Conformance with Mitigation Measure 3.2-1

**Agency/Party Responsible for Monitoring and Reporting**

City of Santa Rosa.

**Monitoring and Reporting Frequency**

Ongoing per City schedule and criteria.

**Noncompliance Sanction**
Not applicable for a City sponsored project.

3.3 TRAFFIC AND CIRCULATION

Levels of Service

Farmers Lane Extension

Summary of Impact 3.3-1
The construction and operation of any of the Farmers Lane Extension alternatives would not generate any significant existing level of service impacts, provided road improvements are made as indicated in the Santa Rosa General Plan and the Southeast Area Plan. With land development projected to occur through the year 2020 in both the City and surrounding areas, arterial roadways in the study area would operate at level of service D or better with and without Farmers Lane Extension. Some intersections would experience extended delays, but overall travel speeds would be within the City’s level of service standard.

Mitigation Measure 3.3-1
For Alternative #1 (Yolanda Avenue Alternative), the following intersections would warrant traffic signals:
- Kawana Springs Road/ Farmers Lane Extension
- Allen Way Extension/ Farmers Lane Extension

For Alternatives #2 (Bellevue Avenue Alternative) and #4 (Expanded Hybrid Alternative), all of the above signals would be warranted, and in addition:
- The intersection of the parkway segment approved for development (as part of the Kawana Meadows subdivision) and southerly extension to Bellevue Avenue.
- The intersection of the southerly extension to Bellevue Avenue and Petaluma Hill Road.

For Alternatives #3 (Hybrid Alternative) and #4 (Expanded Hybrid Alternative), the following intersections would require signalization:
- Unnamed Street (Hybrid Alternative)/ Kawana Springs Road
- Allen Way/ Brookwood Avenue

Implementation
Mitigation to be implemented per City criteria.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.3-1.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.
Monitoring and Reporting Frequency
Not applicable for a City sponsored project.

Noncompliance Sanction
Not applicable for a City sponsored project.

Effects on Local Streets

Farmers Lane Extension

Summary of Impact 3.3-2
During the PM peak, Farmers Lane Extension, inclusive of Alternatives #1 through #4, would draw traffic away from other surrounding streets that would be generated by future cumulative development in the study area. To the extent there would be reductions in traffic on local streets, this would be a beneficial impact. To the extent there would be increases in traffic on local streets used to access Farmers Lane Extension, this would be a potentially significant impact.

Mitigation Measure 3.3-2
Alternatives #3 and #4 and the alternative of no project would have a substantially greater traffic impact on local and collector/transitional streets than would Alternatives #1 and #2. To mitigate for this effect, the following techniques could be used on local streets to discourage traffic through residential areas:

• Increased speed enforcement, especially during peak hours.
• Avoiding long (>300 feet) tangent (straight) segments, which tend to encourage high speeds.
• The installation of traffic diverters, which tend to reduce cut-through traffic. Diverters are physical roadway features that require traffic to turn at an intersection, and therefore increase the circuitry of any trip attempting to cut through a neighborhood.
• Curb “bulb outs” at intersection corners to reduce vehicle speeds and shorten pedestrian crossing distances on streets.

Implementation
Mitigation to be implemented per City criteria.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.3-2.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Not applicable for a City sponsored project.

Noncompliance Sanction
Not applicable for a City sponsored project.
Public Transit

Farmers Lane Extension

**Summary of Impact 3.3-4**

*Construction of either of the Farmers Lane Extension alternatives would increase opportunities for new public transit services in southeast Santa Rosa. Bus pullouts could be constructed at key locations, after consulting with the City’s Department of Parking and Transit. Alternatives #1 and #2 would offer significant opportunities to provide new express-type services, whereas Alternatives #3 and #4 would provide opportunities to locate transit routes closer to residential areas and shopping facilities.*

**Mitigation Measure 3.3-4**

Further transit enhancements can be provided. For example, the project should include in its design the provision of bus pullouts at key locations. Intersections with traffic signals should be considered as prime bus stop locations, since they would allow pedestrians to more easily and safely cross streets.

The design of bus stop pullouts should conform to the City’s standard design specifications for bus pullouts.

- **Implementation**
  Mitigation to be implemented per City criteria.

- **Evaluation Criteria/Performance Standards**
  Conformance with Mitigation Measure 3.3-4.

- **Agency/Party Responsible for Monitoring and Reporting**
  City of Santa Rosa in collaboration with Department of Parking and Transit.

- **Monitoring and Reporting Frequency**
  Not applicable for a City sponsored project.

- **Noncompliance Sanction**
  Not applicable for a City sponsored project.

Construction Traffic

Farmers Lane Extension

**Summary of Impact 3.3-6**

*Project construction would require the use of heavy machinery for site clearing, grading, earth excavations and fills. In addition, construction would require the delivery of aggregate base materials, concrete, paving materials and construction workers on a daily basis throughout the project area to the construction site(s), potentially disrupting local traffic flow depending on the specific area of construction lasting throughout an estimated 12 to 18 month construction period.*
Mitigation Measure 3.3-6
Prior to project construction, the City should prepare a traffic management plan that would identify the timing and routing of all major construction equipment and trucking to avoid potential traffic congestion and delays on the local street network. It may be necessary to limit construction activities and materials delivery to off-peak hours, or determine access to particular areas of construction that would not conflict with local traffic circulation.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.3-6.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon City approval of plans and specifications prior to issuance for bid.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Kawana-Ralphine Pipeline
Impact and Mitigation Measure 3.3-6 would apply equally to the Kawana-Ralphine pipeline project north of the arterial approved for development as part of the Kawana Springs subdivision. Construction sequencing and coordination between the Santa Rosa Department of Public Works and Sonoma County Water Agency would be required in this effort. The Sonoma County Water Agency in collaboration with the City of Santa Rosa Department of Public Works would be responsible for implementing Mitigation Measure 3.3-6 as would apply to the pipeline project.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.3-6.

Agency/Party Responsible for Monitoring and Reporting
SCWA.

Monitoring and Reporting Frequency
Upon SCWA approval of plans and specifications prior to issuance for bid.
Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

3.4 VISUAL QUALITY AND COMMUNITY CHARACTER

Vegetation Removal

Farmers Lane Extension

Summary of Impact 3.4-1
Right-of-way acquisition and clearing and grading required to construct Farmers Lane Extension would require the removal of oak woodland and mixed riparian woodland. Additional existing ornamental trees at scattered locations would also be removed, thus eliminating a visual amenity.

Mitigation Measure 3.4-1
Farmers Lane Extension should be implemented and supported with a comprehensive landscape development program recognizing the approximate 18-foot wide median and eight to twelve-foot wide planter strips to be provided on each side of the roadway. The landscape development program should support and identify the Extension project as a parkway and scenic roadway as designated in the General Plan Transportation Element. Use of plant materials should reflect seasonal change in leaf color, bark and berries, and describe a hierarchy in visual interest in color and texture from overhead foliage reaching down to eye level and the ground surface. The introduction of approximately 6 acres of new plant materials (as determined by the length of the roadway and available median and side planting areas), as part of the Extension project (not including the southerly route to Bellevue Avenue), would compensate for the loss of approximately four acres of oak woodland, mixed riparian and various ornamental plantings.

In addition, an oak tree replacement program should be developed to compensate for the loss of existing oaks (for additional information on oak tree replacements and Heritage Tree replacement/preservation see Section 3.9, Biological Resources).

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.4-1.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.
Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Visual Change, Views

Farmers Lane Extension

Summary of Impact 3.4-2
Site grading, inclusive of cut and fill, coupled with construction of the roadway proper, would physically and visually alter the terrain and change the appearance of the semi-rural setting to a more urban condition.

Mitigation Measure 3.4-2
Site grading should be designed to the minimum acceptable, consistent with the need to provide road curvature and gradients conforming to the design speed of the roadway and in accordance with the geotechnical and soil recommendations (see Section 7, Soils, Geology and Seismicity). Grading concepts to provide gradual transitions between existing slopes and graded slopes to retain a natural (undisturbed) ground form appearance should be developed during plan preparation. A design objective would be to minimize grading and to achieve a visual fit between the constructed roadway and the existing terrain. Current plans call for maximum 2:1 horizontal to vertical graded slopes. This degree of slope should be considered a maximum with a more gradual slope recommended in specified areas if and as considered necessary by the project design team.

Graded slopes should be revegetated as soon as practicable after grading to restore a more natural appearance and prevent gullyling and erosion.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.4-2.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.
Construction Processes

Farmers Lane Extension

Summary of Impact 3.4-3

Building demolition, land clearing, earth cuts and fills, excavation and the import and placement of road subbase and paving operations would require the use of construction equipment and materials stockpiling and storage which would appear inconsistent with the setting.

Mitigation Measure 3.4-3

The stockpiling and storage of roadway construction materials and equipment prior to installation (gravel, drainage facilities, mechanical equipment) should be minimized to the extent practicable. Only materials required for approximately several week’s construction should be stockpiled at any given location at one time. Although construction staging areas have not been designated at this time, such staging areas should be located as close to or within the area of construction as possible, out of the way of community traffic and pedestrian use.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.4-3.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Kawana-Ralphine Pipeline

The discussion under Impact and Mitigation Measure 3.4-3 would apply equally to the Kawana-Ralphine Pipeline project. Pipeline construction would require trench excavations and the shipment, storage and installation of 30 to 36-inch diameter steel pipe throughout the project area.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.4-3.

Agency/Party Responsible for Monitoring and Reporting
SCWA.

Monitoring and Reporting Frequency
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and SCWA acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Light and Glare

Farmers Lane Extension

Summary of Impact 3.4-4
Project area street lighting could call attention to various portions of the roadway alignment from existing and future residents and homes situated at higher hillside elevations in the Holland Heights neighborhood. Of concern would be glare and point sources of light interfering with nighttime views in the project area.

Mitigation Measure 3.4-4
Lighting has not yet been designed for the Farmers Lane Extension project. However, for mitigation, night lighting along Farmers Lane Extension, bicycle lanes, pedestrian sidewalks and bus stops should be focused downward and/or shielded to avoid glare and point sources of light interfering with the vision of local residents, businesses and motorists. Lighting elements should be recessed within their fixtures to prevent glare. New lighting levels provided should be compatible with general urban illumination levels consistent with City of Santa Rosa standards to avoid a noticeable contrast in light emissions, recognizing the need to provide for safety and security. The overall objective would be to establish area lighting that would be adequate for safety but minimize the potential effects on nighttime views from locations within and around the project area.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.4-4.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

3.5 CULTURAL RESOURCES

Archaeological Resources

Farmers Lane Extension

Summary of Impact 3.5-1
*Based on what is known about the region, it is reasonable to conclude that prehistoric cultural deposits can be found anywhere in the project area and would be subject to adverse destructive impact if located within the road right-of-way.*

Mitigation Measure 3.5-1
Those portions of the selected roadway alignment that have not been previously subjected to archeological field investigations should undergo pre-construction archeological surveys. The specific area of investigation would depend on which alternative alignment is selected for construction. This would include Variations A and C extending south to (old) Kawana Springs Road and the southerly alignment extending from the parkway segment approved for development as part of the Kawana Meadows project to Bellevue Avenue. If surveys determine the existence of significant archeological resources, construction-related impacts to such resources should be mitigated by either of the following actions.

- Avoidance of an archaeological site through modification of the roadway plan line that would allow for the preservation of the resource. Incorporation of archaeological sites into protected open space or parklands would serve this purpose.
- Covering or “capping” sites with a protective layer of fill. This could be a very good way of mitigating potential impacts in situations where public access may be increased as a result of development. Archaeological monitoring during the filling process would be recommended.
- In circumstances where archaeological deposits cannot be preserved through avoidance or capping, data recovery through excavation would be the mitigation alternative. This measure would consist of excavating those portions of the sites that would be adversely impacted. The work should be accomplished within the context of detailed research and in accordance with current professional standards. The program should result in extraction of sufficient volumes of archaeological data so that important regional research considerations can be addressed. The excavation should be accomplished by qualified professionals and detailed technical reports should result.

In the event that unknown archaeological remains are discovered during subsurface construction, land alteration work in the vicinity of the find should be halted and a qualified archeologist consulted. Prompt evaluations could then be made regarding the find and a resource management plan that is consistent with
CEQA requirements could then be implemented. If prehistoric archeological deposits are discovered, local Native American organizations should be consulted and involved in making resource management decisions. All applicable State and local legal requirements concerning the treatment of cultural materials and Native American burials should be enforced.

If field reconnaissance results in the recording of prehistoric archeological sites that cannot be avoided and preserved, and the importance of the cultural deposits cannot be determined from surface evidence, then subsurface testing programs should take place to make such determinations. Testing procedures should be designed to specifically determine the boundaries of sites, the depositional integrity and the cultural importance of the resources, as per CEQA criteria. These investigations should be conducted by qualified professionals knowledgeable in regional prehistory. The testing programs should be conducted within the context of appropriate research considerations and should result in detailed technical reports that define the exact project impacts to important resources and present comprehensive mitigation programs for addressing those impacts. Measures similar to the ones described above for known archeological sites would also apply to unknown archeological sites.

In considering subsurface testing and excavations of prehistoric archaeological sites, consultation with the local Native American community is essential; all aspects of the programs, including the treatment of cultural materials and particularly the removal, study and reinternment of Native American burials should be addressed. All applicable State and local legal requirements concerning these issues should be strictly adhered to.

Historical archaeological resources may present in the project area as well. Historical maps show structures that were present on various properties in the past, but no longer exist. If field reconnaissance results in the recording of historic archaeological deposits and features, supplemental archival research and subsurface testing may be required to determine their importance under CEQA criteria. If important resources are threatened by construction then recommended mitigation alternatives would be similar to those presented above for prehistoric archaeological sites. Operators of site grading and excavation equipment should be instructed to be observant for unusual or suspect materials that may surface from below during site grading and excavation operations.

Implementation
Complete site inspection prior to construction also include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.5-1.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.
Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Kawana-Ralphine Pipeline

The discussion under Impact and Mitigation Measure 3.5-1 would apply equally to the Kawana-Ralphine pipeline. In this case, mitigation required for any archaeological sites discovered during trenching and installation of the pipeline would be the responsibility of the Sonoma County Water Agency.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.5-1.

Agency/Party Responsible for Monitoring and Reporting
SCWA.

Monitoring and Reporting Frequency
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and SCWA acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Historic Resources

Farmers Lane Extension

ALTERNATIVE #2 (BELLEVUE AVENUE ALTERNATIVE)

Farmers Lane Extension

Summary of Impact 3.5-3
There is the possibility of affecting an agricultural building that may be determined eligible for listing in the California Register.

Mitigation Measure 3.5-3
An historic resources survey of the agricultural structure within the Cunningham Dairy property adjacent to the Extension right-of-way should be conducted to determine eligibility for listing in the California Register. The survey should be prepared by a qualified architectural historian. If the structure is determined ineligible for the California Register, no additional investigation would be required. If,
however, the structure is determined eligible for the California Register, the following mitigation options would be available.

- Avoidance of historical properties through a modification of the plan line would allow for the preservation of the resource at its present location.
- Relocation to a location where the structure can be preserved.
- If other mitigation alternatives cannot be implemented and a historic property may be damaged or destroyed, it is recommended that an “Historic American Building Survey” be accomplished. Such a procedure involves the recording of the structure through measurements, drawings and photographs. The documentation would be completed on standardized forms and would be accurate in detail to such an extent that after demolition, the structure could be reconstructed from the survey data. Copies of the documents should be filed with the appropriate State and local repositories.

**Implementation**
Complete mitigation measure prior to construction.

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.5-3.

**Agency/Party Responsible for Monitoring and Reporting**
City of Santa Rosa.

**Monitoring and Reporting Frequency**
Prior to City approval of plans and specifications prior to issuance for bid.

**Noncompliance Sanction**
Not applicable.

**ALTERNATIVE #3 (HYBRID ALTERNATIVE)**

**Farmers Lane Extension**

**Summary of Impact 3.5-4**
*There is the possibility of affecting a residential structure that may be determined eligible for listing in the California Register.*

Mitigation Measure 3.5-4
Implement Mitigation Measure 3.5-3.

**ALTERNATIVE #4 (EXPANDED HYBRID ALTERNATIVE)**

**Farmers Lane Extension**

The discussion under Impact and Mitigation Measures 3.5-3 and 3.5-4 would apply equally to the Expanded Hybrid Alternative.
3.6 **HAZARDOUS MATERIALS**

Excavation and Construction

*ALTERNATIVE #1 (YOLANDA AVENUE ALTERNATIVE)*

Farmers Lane Extension

**Summary of Impact 3.6-1**

Construction activities (i.e., site grading and excavation) associated with project development could disturb any unknown contaminated areas remaining from identified hazardous materials sites adjacent to or within the project corridor and inadvertently expose construction workers or the environment to a health risk. There also exists the potential for exposure to soils containing residual agricultural chemicals.

**Mitigation Measure 3.6-1A**

A soil and groundwater sampling program should be implemented prior to construction activities. The sampling program should be reviewed and approved by the RWQCB. Soil and groundwater samples should be collected at representative locations adjacent to sites categorized with moderate or high potential of an environmental condition (site 33 as listed in Appendix C of the SEIR). The samples should be analyzed for total petroleum hydrocarbons (TPH) such as gasoline, diesel and waste oil, volatile organic compounds (VOCs) and lead content. The location of any impacted soil and/or groundwater that may be encountered during construction activities should be documented in a report summarizing the sampling program and submitted to RWQCB. This information should be used to aid in the management and disposal of any contaminated soil or groundwater.

**Mitigation Measure 3.6-1B**

In the event soil and/or groundwater contamination is discovered during construction activities, investigations should be completed along that portion of the Farmers Lane Extension project corridor to verify the extent of contaminated soils and if any necessary remediation actions would be required. Because the contaminated materials could pose a potential health hazard to construction workers, if contaminated soil is confirmed, a comprehensive Site Safety and Health Plan would be required to keep occupational exposure within prescribed limits and to prevent the migration of contaminants beyond the site boundaries (a Cal/OSHA requirement for work related with hazardous waste exposure).

The plan should be prepared by a consultant specializing in the handling of hazardous materials in accordance with regulatory requirements and the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities.\(^2\) It should identify potential hazards, material handling procedures, dust suppression measures, necessary personal protective clothing and devices, and appropriate equipment. In addition to measures that protect on-site workers, the plan should include measures to minimize public exposure to contaminated soil or groundwater. Such measures would include dust control, appropriate site security, restriction of public access, perimeter air monitoring, and posting of warning signs. These measures would apply from the time of surface disruption throughout the completion of earthwork construction.
If elevated levels of hazardous materials are detected, more effective dust control measures would need to be implemented including more frequent watering of excavated materials, or more frequent covering of material that is stockpiled at the point of excavation. If levels of detection at the construction site area do not exceed allowable levels of exposure for workmen at the site, it is unlikely that pedestrians or other members of the general public would be subject to harmful exposures.

The Safety and Health Plan would need to be implemented through the direction of a certified Site Safety Officer.

**Implementation**

Approval of a remedial action plan (if required) by the Regional Water Quality Control Board (RWQCB) and implementation of the remedial action plan. Site safety and Health Plan to be developed and implemented by the construction contractor in accordance with Title 29 – Code of Federal Regulations (CFR), 1910 – Occupational Safety and Health Standards.

**Evaluation Criteria/Performance Standards**

Conformance with Mitigation Measure 3.6-1.

**Agency/Party Responsible for Monitoring and Reporting**

City of Santa Rosa.

**Monitoring and Reporting Frequency**

City of Santa Rosa and RWQCB.

**Noncompliance Sanction**

Stop work order and/or change order during construction period.

**Kawana-Ralphine Pipeline**

The discussion under Impact 3.6-1 and Mitigation Measure 3.6-1B above for the Farmers Lane Extension Project would apply to the Kawana-Ralphine Pipeline project. The pipeline would not be extended along Yolanda Avenue and therefore Mitigation Measure 3.6-1A would not apply to the pipeline. Mitigation Measure 3.6-1B should be recognized as an additional mitigation measure for the pipeline project because of the deeper trench excavations required for the pipeline beneath the roadway surface.

**Implementation**

Approval of a remedial action plan (if required) by the Regional Water Quality Control Board (RWQCB) and implementation of the remedial action plan. Site safety and Health Plan to be developed and implemented by the construction contractor in accordance with Title 29 – Code of Federal Regulations (CFR), 1910 – Occupational Safety and Health Standards.

**Evaluation Criteria/Performance Standards**

Conformance with Mitigation Measure 3.6-1.

**Agency/Party Responsible for Monitoring and Reporting**

Sonoma County Water Agency (SCWA).
Monitoring and Reporting Frequency
SCWA and RWQCB.

Noncompliance Sanction
Stop work order and/or change order during construction period.

Farmers Lane Extension

The discussion under Impact and Mitigation Measure 3.6-1 would apply equally to Farmers Lane Extension Alternatives #2, #3 and #4. As noted previously, while there are numerous hazardous materials sites within a half-mile of either side of the Farmers Lane Extension alternative rights-of-way examined in the SEIR, there are very few documented hazardous materials sites adjacent to the rights-of-way. For Alternatives #2 and #4 as listed in Appendix C of the SEIR, site 42 is located at the Cunningham Dairy.

Kawana-Ralphine Pipeline

The discussion under Impact 3.6-1 and Mitigation Measure 3.6-1B would apply to the Kawana-Ralphine pipeline project under Alternatives #3 and #4. The Kawana-Ralphine pipeline would not be constructed to extend south of the Kawana water tank site and the southerly route of Farmers Lane Extension connecting to Bellevue Avenue under Alternatives #2 and #4 would therefore not apply to the pipeline project.

Structure Demolition and Removal

Farmers Lane Extension

Summary of Impact 3.6-2
Structure demolition and removal could disturb hazardous materials in existing buildings and building components, resulting in increased risk of human or environmental exposure to hazardous materials.

Mitigation Measure 3.6-2
Prior to commencing the demolition or removal of any existing building or facility in the Farmers Lane Extension project area, the City of Santa Rosa should retain a qualified environmental specialist (e.g., a Registered Environmental Assessor) to inspect the building or facility. The specialist would identify any asbestos, PCBs, mercury, lead, or other hazardous materials present that would then be tested. If found at levels that would require special handling, these materials would need to be managed as required by law and according to federal and state regulations and guidelines, including those of the BAAQMD, Cal/OSHA, DTSC, and any other agency with jurisdiction over these hazardous materials.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.6-2.
Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

3.7 SOILS, GEOLOGY AND SEISMICITY

Fault-Line Surface Rupture

ALTERNATIVE #1 (YOLANDA AVENUE ALTERNATIVE)

Farmers Lane Extension

Summary of Impact 3.7-1
Farmers Lane Extension road surfaces and infrastructure would be subject to potentially damaging fault-line surface rupture during the life of the project. This could occur where Farmers Lane Extension would cross the Rodgers Creek fault zone immediately southwest of the intersection with Bennett Valley Road.

Mitigation Measure 3.7-1
Design of the roadway and associated improvements shall conform to the City of Santa Rosa, Design and Construction Standards.

For bridges or other concrete structures, structural design shall be in accordance with Caltrans’ Bridge Design Specifications, Bridge Memos to Designers, Bridge Design Practices Manual, and Bridge Design Aids Manual. Bridge design will be based on the “Load Factor Design” methodology with HS20-44 live loading. Seismic design will conform to the Bridge Design Specifications, and Section 20 of the Memos to Designers including “Caltrans Seismic Design Criteria”.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.7-1.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.
Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Kawana-Ralphine Pipeline
The Kawana-Ralphine Pipeline would be constructed beneath Farmers Lane Extension. Therefore, Impact and Mitigation Measure 3.7-1 would apply equally to the pipeline project. The Sonoma County Water Agency would be responsible for implementing mitigation relating to the physical design of the pipeline project and conformance with the California Building Code.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.7-1.

Agency/Party Responsible for Monitoring and Reporting
SCWA.

Monitoring and Reporting Frequency
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and SCWA acceptance of specified improvements by contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Slope and Soil Instability

Farmers Lane Extension

Summary of Impact 3.7-3
Farmers Lane Extension road surfaces and infrastructure would be subject to potentially damaging slope and soil instability during the life of the project.

Mitigation Measure 3.7-3
The design of all trenches, slopes, cuts, and fills for the roadway and utilities shall conform to the City of Santa Rosa Design and Construction Standards.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.7-3.

**Agency/Party Responsible for Monitoring and Reporting**
City of Santa Rosa.

**Monitoring and Reporting Frequency**
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

**Noncompliance Sanction**
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

**Kawana-Ralphine Pipeline**
The Kawana-Ralphine Pipeline would be constructed beneath Farmers Lane Extension. Therefore, Impact and Mitigation Measure 3.7-3 would apply equally to the pipeline project. The Sonoma County Water Agency would be responsible for implementing mitigation relating to the physical design of the pipeline project, including conformance with the California Building Code.

**Implementation**
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.7-3.

**Agency/Party Responsible for Monitoring and Reporting**
SCWA.

**Monitoring and Reporting Frequency**
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and SCWA acceptance of specified improvements by contractor.

**Noncompliance Sanction**
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.
3.8 HYDROLOGY AND WATER QUALITY

Runoff and Flooding Hazards

Farmers Lane Extension

Summary of Impact 3.8-1
The construction of Farmers Lane Extension would result in about a 14-acre increase in impervious surface area and an approximate doubling of the storm water runoff volume within from the project right-of-way. The increase in runoff could increase downstream flooding hazards.

Mitigation Measure 3.8-1
Focus project design review on the development and inclusion of explicit elements in the final roadway design to minimize impervious surfaces in the alignment and allow the improved management of stormwater flows generated from the alignment.

Incorporate measures in the project drainage plans that maximize permeability and infiltration.

Verify through consultation with the Sonoma County Water Agency that there is sufficient capacity within the existing and planned storm drain systems to ensure that stormwater generated from the project alignment would be adequately accommodated by the receiving infrastructure.

Detain a portion of the stormwater generated by the paved road surface so that the rate of stormwater leaving the alignment is equal to or less than existing conditions. All additional runoff that is generated should be stored or infiltrated on or near the alignment. Wherever feasible, the Bay Area Stormwater Management Agencies Design Guidance Manual should be used to modify roadway, landscaping and alignment drainage facilities to incorporate recommended design elements such as: sediment traps, gravel strips and/or trenches, concave planting areas (vegetated swales), permeable substrate (pavement), and stormwater infiltration basins.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.8-1.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

**Erosion Hazards**

**Farmers Lane Extension**

**Summary of Impact 3.8-3**

*Farmers Lane Extension construction activities could result in short- or long-term increases in erosion.*

Mitigation Measure 3.8-3

Implement Mitigation Measure 3.8-1.

Additionally, because Farmers Lane Extension would involve grading of an area that is greater than one acre it would be subject to compliance with the statewide General NPDES permit from the Regional Water Quality Control Board, as administered by the City of Santa Rosa Public Works Department. This permit requires that the applicant develop a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required to identify the sources of sediment and other pollutants on-site, and to ensure the reduction of sediment and other pollutants in stormwater discharged from the site. A monitoring program is required to aid the implementation of, and assure compliance with, the SWPPP. The permit requirements of the Regional Water Quality Control Board must be satisfied prior to project construction.

An Erosion and Sedimentation Control Plan must be prepared for the project prior to grading (this may be a portion or subset of the SWPPP). An erosion control professional, or landscape architect or civil engineer specializing in erosion control must design the Erosion and Sediment Transport Control Plan.

The Plan would be designed using concepts similar to those formulated by the Association of Bay Area Governments, as appropriate, based on the specific erosion and sediment transport control needs of each area in which grading, excavation, and construction is to occur. This plan would include, but is not necessarily limited to, the following types of erosion control methods.

- Confine grading and activities related to grading (demolition, excavation, construction, preparation and use of equipment and material storage), to the dry season (April through September) to the extent feasible.
- Keep the lengths and gradients of constructed slopes (cut or fill) as low as possible.
- Discharge grading and construction runoff into small drainages at frequent intervals to avoid the buildup of large potentially erosive flows.
- Prevent runoff from flowing over unprotected gradients.
- Keep disturbed areas (areas of grading and related activities), to the minimum necessary for construction of the project.
- Keep runoff away from disturbed areas during grading and related activities.
- Stabilize disturbed areas as quickly as possible, either by vegetative or mechanical methods.
• Direct runoff over vegetated areas prior to discharge into storm drainage systems, whenever possible.
• Trap sediment before it leaves the alignment with such techniques as check dams, sediment ponds, or siltation fences.
• Remove and disposal of any project-related sedimentation from off-site retention ponds.
• Control landscaping activities carefully with regard to the application of fertilizers, herbicides, pesticides or other hazardous substances. Provide proper instruction to all landscaping personnel on the construction team.

During the installation of the erosion and sediment transport control structures, the erosion control professional shall be on the alignment to supervise the implementation of the designs and the maintenance of facilities throughout the site clearing, grading and construction period.

**Implementation**
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.8-3.

**Agency/Party Responsible for Monitoring and Reporting**
City of Santa Rosa.

**Monitoring and Reporting Frequency**
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

**Noncompliance Sanction**
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

**Kawana-Ralphine Pipeline**

Because the pipeline would be constructed in a trench excavated within the Farmers Lane Extension right-of-way, increasing the potential for erosion, Impact and Mitigation Measure 3.8-3 would apply equally to the pipeline project.

**Implementation**
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.8-3.

**Agency/Party Responsible for Monitoring and Reporting**
SCWA.
Monitoring and Reporting Frequency
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and SCWA acceptance of specified improvements by contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.

Water Quality

Farmers Lane Extension

Summary of Impact 3.8-4
*Increased runoff from the construction of impermeable surfaces along the Farmers Lane Extension right-of-way could lower the quality of stormwater runoff and infiltrating groundwater.*

Mitigation Measure 3.8-4
Implement Mitigation Measures 3.8-1 and 3.8-3.

Install pollution control measures (as directed in the Standard Urban Storm Water Mitigation Plan) such as easily cleanable sediment catch basins and debris screens, or similar water quality protection devices in the drainage facilities serving the project (i.e., vegetated swales, buffer strips, detention pond areas). Label all storm drain inlets to educate the public about the water quality implications associated with dumping hazardous liquids and debris into receiving waters. Require cleaning and/or sweeping of the roadway on a regular and frequent basis.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.8-4.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.
Storm Water Runoff Diversions

Farmers Lane Extension

Summary of Impact 3.8-5

The construction of Farmers Lane Extension could disrupt the flow in seasonal drainage ways that would be filled and/or diverted into other channels, thus increasing peak flows, reducing the stability of stream banks and increasing the potential for stream erosion.

Mitigation Measure 3.8-5

Implement Mitigation Measures 3.8-1 and 3.8-3.

As an example, to avoid stream flow disruption, install cross-alignment culverts at frequent intervals to carry the flow of small seasonal drainage ways, thereby avoiding the buildup of large diverted flows in the up-gradient collector ditches and re-establishing connectivity between upland and lowland water regimes. Install diffuser aprons on the cross-alignment culverts as appropriate to re-introduce sheet flow on the down-gradient side of the alignment where appropriate, thereby encouraging groundwater infiltration in the area between the larger streams.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.8-5.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.
# 3.9 Biological Resources

## Loss of Oak Woodland, Riparian and Native Grassland Habitat

### Farmers Lane Extension

#### Summary of Impact 3.9-1

*The construction of Farmers Lane Extension would result in the loss of important habitats such as oak woodland, mixed riparian woodlands, and native grassland. Some of the native trees to be removed meet City of Santa Rosa requirements for designation as Heritage Trees or Protected Trees.*

#### Mitigation Measure 3.9-1

Mitigation Measure 3.9-1 should be implemented prior to the construction of Farmers Lane Extension to mitigate for the loss of oak woodland, riparian and native grassland habitats. Work required for Mitigation Measure 3.9-1 should be conducted by a restoration specialist experienced with the local species and habitats, implemented under the specialist’s supervision, and annually monitored to ensure success. Mitigation Measure 3.9-1 would reduce the magnitude of Impact 3.9-1 to a less than significant level. (LS)

#### Mitigation Measure 3.9-1-A Oak and Mixed Riparian Woodlands

Prior to site grading, prepare and secure approval on a tree replacement program based upon a species count and trunk diameter measurement at breast height (dbh) of all trees to be removed or otherwise affected as part of the construction of Farmers Lane Extension. The number of trees to be replaced should conform to the requirements of City Code Section 17-24.050.(C) (Tree Replacement Program). Oaks should be planted adjacent to existing oak woodlands in such a manner that connectivity between habitats is enhanced. The riparian species should be planted along a degraded creek channel within the project area in such a manner that fragmented riparian habitat is connected. Trees that are proposed to remain should be protected by fencing installed outside of their drip line during construction.

#### Mitigation Measure 3.9-1-B Heritage and Protected Trees

Once a final alignment has been selected, a map should be prepared by a qualified botanist or arborist showing the genus and species, trunk location, and outline of the drip line of all trees as defined by City Code Section 17-24.020. (P) six inches diameter at breast height (dbh) or greater that are proposed to be altered, removed, or relocated, and those trees proposed to be preserved. Trees that are proposed to remain should be protected by fencing installed outside of their drip line during construction. The number of trees to be replaced should conform to the requirements of City Code Section 17-24.050.(C) (Tree Replacement Program). Landscape materials should incorporate California native plants, including coast redwoods, western sycamore, and other native trees, shrubs, and groundcovers indigenous to the Santa Rosa area. Street tree replanting should comply with the City’s street tree list as specified by the City Parks Department. A qualified botanist should review the site landscape plan, monitor replacement trees during planting and the following spring, and monitor the growth and survival of the newly planted trees for at least five years.
**Mitigation Measure 3.9-1-C Native Grasslands**

Native grasslands are found only in one small area at the extreme northern end of the roadway alignment. To mitigate for the loss of this habitat, an area of annual grassland adjacent to the existing native grassland should be restored. This is best achieved by removing the non-native species from an area twice the size of native grassland to be removed (for a 2:1 ratio) followed by installation of the appropriate species in density and composition to match the adjacent native grasslands.

**Implementation**

Complete mitigation measure prior to construction.

**Evaluation Criteria/Performance Standards**

Conformance with Mitigation Measure 3.9-1.

**Agency/Party Responsible for Monitoring and Reporting**

City of Santa Rosa.

**Monitoring and Reporting Frequency**

Prior to issuance of contract documents for bid.

**Noncompliance Sanction**

Not applicable for a City sponsored project.

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**Loss of Wetland Habitat**

**Farmers Lane Extension**

**Summary of Impact 3.9-3**

The construction of Farmers Lane Extension would result in the loss of habitat known to be, or potentially considered, Waters of the United States under Section 404 of the Clean Water Act and subject to jurisdiction of the U.S. Army Corps of Engineers or the North Coast Regional Water Quality Control Board under the Porter-Cologne Water Quality Control Act, inclusive of potential wetlands, vernal pools, and creek crossings.

**Mitigation Measure 3.9-3**

Mitigation for Impact 3.9-3 should occur through the following steps as defined further below: conduct a wetland delineation, obtain the appropriate permits, and develop a restoration plan. The implementation of these steps in the order presented below would reduce the magnitude of impact 3.9-3 to a level considered less than significant. (LS)

**Mitigation Measure 3.9-3-A Wetland Delineation**

Once a final alignment has been selected, a qualified wetland specialist should conduct a wetland delineation in accordance with Corps methodology of all wetlands, seeps and stream channels within the alignment. The wetland specialist should prepare and submit a request for a jurisdictional determination to the Corps. Those waters not subject to the Corps jurisdiction could fall under the regulatory control of the NCRWQCB. The wetland specialist should submit the delineation documents along with the Corps jurisdictional determination to the NCRWQCB and request an assessment of jurisdiction.
Mitigation Measure 3.9-3-B Permitting
The wetland specialist should prepare an application for fill of waters subject to the Corps jurisdiction as determined in Mitigation Measure 3.9-3-A. This specialist should also submit a request for a streambed alteration agreement from CDFG because CDFG also has jurisdiction over lakes and streams under Section 1601 of the Fish and Game Code. For wetlands that are not subject to the Corps jurisdiction within the project area, an application for a Waste Discharge Requirement or Waiver of Waste Discharge Requirement should be submitted to the NCRWQCB.

Mitigation Measure 3.9-3-C Restoration Plan
Once an approved wetland delineation is in place, the wetland specialist should develop a comprehensive wetland restoration plan to offset impacts to these resources. Restoration could include on or off-site construction of wetlands, contribution of funds to a local mitigation bank, or restoration of existing yet relatively poor quality wetlands. The Corps goal is to permit no net loss of functions and values of wetland habitat. The replacement ratio of wetland acreage required to achieve this goal is a minimum of 1(new):1(old) but could be higher.

Implementation
Complete mitigation measure prior to construction.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.9-3.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Prior to issuance of contract documents for bid.

Noncompliance Sanction
Not applicable for a City sponsored project.

Kawana-Ralphine Pipeline
The Kawana-Ralphine pipeline would be hung on the bridges over Rodgers and Colgan creeks. Where the road crosses a seasonal drainage and a culvert is installed, the pipeline would likely be installed below the streambed. This would require trenching and work in the stream itself. However, all of this work would be expected to occur within the footprint of the Farmers Lane Extension project and not result in work in any additional wetland habitat. Therefore, Impact and Mitigation Measure 3.9-3 would also apply to the Kawana-Ralphine pipeline project under Alternative #1 and collaboration between the Sonoma County Water Agency and City of Santa Rosa would be required in implementing Mitigation Measure 3.9-3.

Implementation
Complete mitigation measure prior to construction.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.9-3.

**Agency/Party Responsible for Monitoring and Reporting**
Sonoma County Water Agency.

**Monitoring and Reporting Frequency**
Prior to issuance of contract documents for bid.

**Noncompliance Sanction**
Not applicable for a Sonoma County Water Agency sponsored project.

## Loss of Bird Nesting Habitat

### Farmers Lane Extension

**Summary of Impact 3.9-4**

*Vegetation removal and ground-clearing activities for Farmers Lane Extension could result in the direct mortality of adult birds or their young, nest destruction, or disturbance of nesting native bird species resulting in nest abandonment and/or the loss of reproductive effort. Disturbance and loss of breeding habitat for sensitive species (oak titmouse, white-tailed kite, grasshopper sparrow, and loggerhead shrike) could occur and would be considered a potentially significant impact. Additionally, the disturbance of nests would be a violation of State Fish and Game Code.*

**Mitigation Measure 3.9-4**

Unless the project affects a sensitive species there is no impact according to CEQA even though the destruction of nests or nestlings is a violation of the Fish and Game Code and potentially the Migratory Bird Treaty Act. Mitigation Measure 3.9-4 would reduce Impact 3.9-4 to sensitive species and would serve to ensure compliance with state and federal laws related to the protection of nesting birds.

The removal of trees, shrubs, or weedy vegetation should avoid the February 1 through August 31 bird nesting period to the extent possible. If no vegetation or tree removal is proposed during the nesting period, no surveys are required. If it is not feasible to avoid the nesting period, a survey for nesting birds should be conducted by a qualified wildlife biologist between 30 and 14 days prior to the removal of trees, shrubs, grassland vegetation, buildings, grading, or other construction activity. The area surveyed should include all construction sites, access roads, and staging areas, as well as areas within 150 feet outside the boundaries of the areas to be cleared or as otherwise determined by the biologist.

In the event that an active nest is discovered in the areas to be cleared, or in other habitats within 150 feet of construction areas, clearing and construction within 150 feet of the nest should be postponed for at least two weeks or until a wildlife biologist has determined that the young have fledged (left the nest), the nest is vacated, and there is no evidence of second nesting attempts.

**Implementation**

Complete mitigation measure prior to construction.

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.9-4.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Prior to issuance of contract documents for bid.

Noncompliance Sanction
Not applicable for a City sponsored project.

Obstruction of Resident Wildlife Movement

Farmers Lane Extension

Summary of Impact 3.9-5
The construction of Farmers Lane Extension through grasslands would result in the fragmentation of habitat and would interfere with the movement of resident wildlife including sensitive species such as the California tiger salamander.

Mitigation Measure 3.9-5
This SEIR presumes California tiger salamanders are present based on the available aestivation and breeding habitat and an anecdotal report of salamander sightings within the project area that may or may not have been tiger salamanders as noted previously. The following mitigation measures are intended to determine the precise population location and size (Mitigation 3.9-5-A) and reduce the magnitude of Impact 3.9-5 (Mitigation Measure 3.9-5-B though E). Following mitigation, the habitat would remain fragmented but animal passage would be improved as compared to an unmitigated roadway. However, Farmers Lane Extension would continue to affect and potentially delay the movement of sensitive species. Because of this, the impact cannot be reduced to a less than significant level.

Mitigation Measure 3.9-5-A Evaluate Presence
Once a final alignment for the roadway has been selected, survey work as required by the USFWS should be conducted to determine if California tiger salamanders are present in the project area.

Mitigation Measure 3.9-5-B Determine Migration Routes
To determine the most effective mitigation for the California tiger salamander, it would be necessary for the City to coordinate with the USFWS in documenting California tiger salamander migration routes to and from breeding areas in relation to the roadway location.

Mitigation Measure 3.9-5-C Salamander Tunnels
Working with the USFWS, determine the precise design and placement of salamander tunnels beneath the roadway surface. Specially designed tunnels have been shown to be successful in allowing the passage of amphibians below roads that would otherwise constitute a barrier. Depending on the migration routes, tunnel and drift fence design could be different at different locations. Elements important in the design may include the placement of tunnels in such a fashion that they would not become flooded and impassable, and the installation of bars at the tunnel ends that would preclude their use by species such as...
raccoons and skunks that could either live in the tunnels or prey on migrating amphibians. If tunnels are installed, they should be monitored to ensure that they are functioning as designed and any necessary modifications should be made.

**Mitigation Measure 3.9-5-D Replacement Habitat**

Working with the USFWS, create suitable breeding habitat on the same side of the roadway as the aestivation areas. This would eliminate the need for California tiger salamanders to cross Farmers Lane Extension. Suitable replacement habitat should be designed by a qualified restoration specialist with the assistance of a wildlife biologist (see also Mitigation Measure 3.9-3 regarding wetland impacts and restoration).

**Mitigation Measure 3.9-5-E Migration Barrier**

Working with the USFWS, install a barrier along the roadway edge in the area potentially used by amphibians would prevent movement across the road. Such a barrier can be created by using guardrail installed along the road with earth fill placed on the road side of the rail that slopes up to the rail. This would create a vertical wall that is impassable to amphibians approaching the roadway. Additionally the sloping design on the road side would allow for the passage of animals that find themselves on the road as approached from the opposite direction. At intersections where the barrier is broken a channel trap should be installed. A channel trap is essentially a concrete box with a grate opening that is installed flush with the road surface. When amphibians attempt to cross the grate, they drop into the bottom of the box. Both ends are open to the adjacent habitat and the animals simply move out of the trap. Because the ends of the trap overlap the barrier, amphibians are prevented from entering the roadway. The implementation of this sort of barrier when combined with channel traps at intersections has been shown to significantly reduce the number of amphibians entering the roadway.

**Implementation**

Conduct USFWS survey prior to construction. Include constructed items in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

**Evaluation Criteria/Performance Standards**

Conformance with Mitigation Measure 3.9-5.

**Agency/Party Responsible for Monitoring and Reporting**

City of Santa Rosa.

**Monitoring and Reporting Frequency**

Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

**Noncompliance Sanction**

No sanctions imposed for plans and specifications (bid documents). Stop work order and/or change order during construction period.
Loss of Subterranean Habitat

Farmers Lane Extension

Summary of Impact 3.9-7
The construction of Farmers Lane Extension could result in the direct loss of sensitive species that use subterranean habitats as they are disturbed or buried during construction activities.

Mitigation Measure 3.9-7–A: Tiger Salamanders
The following Mitigation Measure would prevent direct impacts to California tiger salamanders by the placement of exclusion fencing and pitfall trapping. Fencing would prevent California tiger salamanders from entering the construction area and trapping would remove those individuals present within the construction area.

The City of Santa Rosa should develop an appropriate relocation plan that is acceptable to the USFWS and CDFG for sensitive species (tiger salamander, red-legged frog, yellow-legged frog, or pond turtle) that are discovered during the implementation of Mitigation Measure 3.9-5. If these species are not encountered then no further mitigation is required. Prior to the start of construction, burrows that could support aestivating amphibians within the construction area should be flagged by a qualified wildlife biologist. Following flagging crews should carefully hand excavate each suspected burrow under the guidance of a qualified wildlife biologist. Should any sensitive species be discovered they should be handled according to the agreed upon relocation plan.

The construction areas should be surrounded by an impassable barrier to California tiger salamanders. The most typical method is to use silt fencing securely staked into the ground with the bottom buried a minimum of 6 inches below existing grade. This fence should be inspected daily to ensure that it is in good repair an impermeable to amphibians. Along this barrier, pit-fall traps should be installed within the work area. The installation and monitoring of these traps should be done only by an agency approved wildlife biologist following approval of a relocation program. Any species caught within the work area should be moved according to the relocation program.

This mitigation measure would reduce Impact 3.9-7-A respecting the tiger salamander to a less than significant level. (LS)

Mitigation Measure 3.9-7–B: Burrowing Owls
To mitigate for the potential loss of burrowing owl foraging and breeding habitat and/or individuals, the City should be responsible for conducting burrowing owl surveys using qualified biologists no more than 30 days prior to the start of construction, in accordance with CDFG survey protocol and mitigation guidelines. If burrowing owls are not found in the construction area or a 150-meter buffer zone around the construction area during those surveys, there would be no impact and no further action would be required. If burrowing owls are found to occupy the site or buffer zone, the following measures should be required in consultation with CDFG.

1. When possible, all occupied burrows should be avoided by not allowing disturbance within 50 meters (160 feet) during the non-breeding season (September 1 through January 31) or within 75 meters (250 feet) during the breeding season (February 1 through August 31).
If it is not possible to avoid occupied burrows the following measures should be taken:

2. Occupied burrows should not be disturbed during the nesting season (from February 1 through August 31) unless CDFG verifies that the owls have not yet begun egg-laying and incubation or that the juveniles are foraging independently and are capable of independent survival.

Passive relocation should be undertaken during the non-breeding season for occupied burrows that must be destroyed for project development. A qualified biologist should undertake the following activities only after consultation with CDFG. Passive relocation involves the exclusion of owls from burrows in the impact area and buffer zone by installing one-way doors in all burrows. After the door has been in place for 48-hours, burrows may be excavated. Two natural or artificial burrows must be available nearby for each burrow excavated. Excavation should be done by hand. A 4-inch diameter flexible pipe should be temporarily installed in each burrow during excavation to maintain an escape route for any animals in the burrow.

Performance criteria for success should include monitoring and measures to ensure that no owls are killed or injured, no nests nor eggs are destroyed, taken, nor possessed, nor that any disturbance occurs which results in nest abandonment and/or loss of reproductive effort (killing or abandonment of eggs or young). Any of these circumstances are defined as an illegal “take” under both Federal and State migratory bird treaty laws.

**Implementation**

Conduct USFWS relocation plan prior to construction. Include constructed items in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

**Evaluation Criteria/Performance Standards**

Conformance with Mitigation Measure 3.9-7.

**Agency/Party Responsible for Monitoring and Reporting**

City of Santa Rosa.

**Monitoring and Reporting Frequency**

Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

**Noncompliance Sanction**

Not applicable for a City sponsored project.

**Loss of Aquatic Breeding Habitat**

**Farmers Lane Extension**

**Summary of Impact 3.9-8**

The construction of Farmers Lane Extension could result in the loss of aquatic breeding habitats used by sensitive species as the aquatic habitats are drained and/or filled during project construction.

**Mitigation Measure 3.9-8-A**
Implement Mitigation Measure 3.9-3, 3.9-5-A, and 3.9-5-B.

Mitigation Measure 3.9-8-B
Ricksecker’s water scavenger beetle: Prior to construction, a qualified entomologist should conduct a survey of any water bodies within the selected roadway alignment. If this species is not found then there would be no impact and no further mitigation would be required. If surveys result in the discovery of Ricksecker’s water scavenger beetle, Mitigation Measure 3.9-8-E should be implemented to replace aquatic habitat.

Mitigation Measure 3.9-8-C
The pond south of the east-west alignment of Linwood Avenue could be used by California tiger salamanders as breeding habitat and therefore may support adult and larval forms of this species. To avoid impacts from filling of this pond, the following steps should be taken under the supervision of an agency-approved wildlife biologist:

Dewater the water body slowly with an appropriately screened pump to ensure that no animals are entrained in the pump or impinge on the screen.

The wildlife biologist then should collect all native larval salamanders and relocate them as agreed on in the relocation program (Mitigation Measure 3.9-7-A).

All non-native species (bullfrogs, non-native turtles, and fish), should be destroyed and properly disposed of.

Mitigation Measure 3.9-8-D
Seasonal Creeks: To minimize effects on larval forms of amphibians that could be within the creeks, a 50-foot setback should be established on either side of the creek. Prior to construction, this limit of work should be delimited by the installation of silt fencing securely staked down and the bottom of which is buried a minimum of 6 inches in the ground (see Mitigation Measure 3.9-7 for other details related to the silt fence barrier). The silt fence will trap sediments and prevent silt-laden runoff from entering the creeks and impairing water quality. It also creates a barrier that prevents small vertebrates from entering the work area. Once the stream has completely dried, the silt fence should be removed and construction within the channel can occur.

Mitigation Measure 3.9-8-E
Aquatic Breeding Habitat: Any pond within the selected road alignment found to be supporting sensitive species should be replaced by the construction of a pond of similar dimension in the vicinity of the pond that is removed. A qualified biologist or entomologist should assist a restoration specialist with the design of the pond to ensure that it meets the needs of the species within the area.

Implementation
Conducted surveys prior to construction. Include construction items in plans and specifications (bid documents) as determined appropriate by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.9-8.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) upon completion of construction and City acceptance of specified improvements by City contractor.

Noncompliance Sanction
Not applicable for a City sponsored project.

Loss of Sensitive Plant Species

**ALTERNATIVE #2 (BELLEVUE AVENUE ALTERNATIVE)**

**ALTERNATIVE #3 (HYBRID ALTERNATIVE)**

**ALTERNATIVE #4 (EXPANDED HYBRID ALTERNATIVE)**

Farmers Lane Extension

**Summary of Impact 3.9-11**

Draining, including disruption of the water supply, or the fill of vernal pools could result in the loss of sensitive plant species.

Alternatives #2 and #4 would result in the fill of vernal pools (0.16 acres) located just east of the connection to Bellevue Avenue in a grassy cattle pasture.

**Mitigation Measure 3.9-11**

Prior to construction, to ensure that no sensitive plants would be affected by the project, the City should conduct plant surveys of the area in accordance with protocols that have been developed by the Corps and USFWS. Protocols require that site visits be conducted within the project area following a visit to a nearby reference site. Protocol requires three visits during the growing season for two consecutive years during which no sensitive species are observed before the USFWS will accept a finding that the species are not present.

Therefore, surveys for sensitive vernal pool plants should be conducted in March, April, and May by a botanist familiar with the species. It may be feasible to adjust this schedule slightly into February or June depending on flowering conditions during the year. Each visit should be preceded by a visit to the local reference site or contact with knowledgeable local individuals made regarding the flowering status of sensitive species. Without meeting survey protocols, the seasonal wetlands will be considered suitable habitat by the USFWS, and mitigation will be required.

A qualified botanist should develop a species-specific replacement plan to be incorporated into the wetland restoration plan. The botanist should work closely with the wetland specialist in creating the
restoration plan (Mitigation Measure 3.9-3-C) to ensure that conditions at any newly created wetlands site meet the needs of the sensitive plant species. This plan should be in accordance with USFWS guidelines for species replacement ratios (1:1 new wetland: impacted wetland) depending on the quality of the wetland, location of mitigation (offsite vs. onsite), and presence of listed plants. This plan should include elements to limit project impacts such as the relocation of individual specimens, the collection of seeds and replanting, or the preservation and movement of vernal pool topsoil that contains the seed bank.

**Implementation**
Complete mitigation measure prior to construction.

**Evaluation Criteria/Performance Standards**
Conformance with Mitigation Measure 3.9-11.

**Agency/Party Responsible for Monitoring and Reporting**
City of Santa Rosa.

**Monitoring and Reporting Frequency**
Prior to City approval of plans and specifications.

**Noncompliance Sanction**
Not applicable for a City sponsored project.

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### 3.10 AIR QUALITY

**Construction Equipment Exhaust**

**Farmers Lane Extension**

**Summary of Impact 3.10-1**
*Farmers Lane Extension construction activities could cause emissions of dust or contaminants from equipment exhaust that could contribute to existing air quality violations or expose sensitive receptors to pollutant concentrations.*

**Mitigation Measure 3.10-1(a)**
Implement recommended dust control measures. To reduce particulate matter emissions during project demolition and construction phases, the contractor should comply with the dust control strategies developed by the BAAQMD or the Caltrans Dust Control standard specifications. The City should include in construction contracts the following requirements or measures shown to be effective. (LS)

**Basic Control Measures:**
- Cover all truck hauling construction and demolition debris from the site;
- Water all exposed or disturbed soil surfaces at least twice daily;
- Use watering to control dust generation during demolition of structures or break-up of pavement;
• Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved parking areas and staging areas;
• Sweep daily (with water sweepers) all paved parking areas and staging areas during the earthwork phases of construction;
• Provide daily clean-up of mud and dirt carried onto paved streets from the site;

Enhanced Control Measures:
• Enclose, cover, water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);
• Limit traffic speeds on unpaved roads to 15 mph;
• Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
• Replant vegetation in disturbed areas as quickly as possible.

Mitigation Measure 3.10-1(b)
Designate a dust control coordinator. To facilitate control of dust during demolition and construction phases, the City should include a dust control coordinator in construction contracts. Construction sites should have posted in a conspicuous location the name and phone number of a designated construction dust control coordinator who can respond to complaints by suspending dust-producing activities or providing additional personnel or equipment for dust control.

Implementation

Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.10-1.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) periodically during the construction period as determined necessary.

Noncompliance Sanction
Not applicable for a City sponsored project.

Kawana-Ralphine Pipeline

The discussion under Impact and Mitigation Measure 3.10 -1 would apply equally to the pipeline project. The responsibility for implementing Mitigation Measure 3.10-1 would rest with the Sonoma County Water Agency.
Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.10-1.

Agency/Party Responsible for Monitoring and Reporting
SCWA.

Monitoring and Reporting Frequency
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) periodically during the construction period as determined necessary.

Noncompliance Sanction
Not applicable for a SCWA sponsored project.

3.11 NOISE

Construction Noise

Farmers Lane Extension

Summary of Impact 3.11-1
Demolition and construction activities associated with the building Farmers Lane Extension would cause temporary noise increases in the vicinity of the construction area that may exceed ambient noise levels established for residential areas by 3 dBA or more.

Mitigation Measure 3.11-1
To minimize construction noise impacts of nearby residents and businesses, limit construction hours to between 7:00 a.m. and 7:00 p.m. on non-holiday weekdays or as allowed by City Code. Any work outside of these hours by the construction contractors should require a special permit from the City Engineer. There should be compelling reasons for permitting construction outside of these designated hours.

- Construction equipment should be properly muffled and maintained with noise reduction devices to minimize construction-generated noise.
- The contractor should locate stationary noise sources away from residents and developed areas, and require the use of acoustic shielding with such equipment when feasible and appropriate.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the City of Santa Rosa.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.11-1.
Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa.

Monitoring and Reporting Frequency
Upon (1) City approval of plans and specifications prior to issuance for bid and (2) periodically during the construction period as determined necessary.

Noncompliance Sanction
Not applicable for a City sponsored project.

Kawana-Ralphine Pipeline

The discussion under Impact and Mitigation Measure 3.11-1 would apply equally to the pipeline project. The responsibility for implementing Mitigation Measure 3.11-1 would rest with the Sonoma County Water Agency.

Implementation
Include mitigation measure in plans and specifications (bid documents) as required/approved by the Sonoma County Water Agency (SCWA).

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.11-1.

Agency/Party Responsible for Monitoring and Reporting
SCWA.

Monitoring and Reporting Frequency
Upon (1) SCWA approval of plans and specifications prior to issuance for bid and (2) periodically during the construction period as determined necessary.

Noncompliance Sanction
Not applicable for a SCWA sponsored project.

Traffic Noise

Farmers Lane Extension

Summary of Impact 3.11-3
Farmers Lane Extension would carry traffic levels generating in excess of 60 dBA Ldn within 50-feet of the roadway which would exceed normally acceptable noise levels for residential development as specified in the Santa Rosa General Plan Noise and Safety Element.

Mitigation Measure 3.11-3
Residential developers should provide adequate setbacks between the new roadway and new residential units located near the roadway to maintain non-intrusive sound levels in residential outdoor and indoor spaces. Setbacks, and in other cases sound walls and/or earth berms in lieu of setbacks acceptable to the
City of Santa Rosa should be investigated and implemented on a case-by-case basis by developers as the Southeast Plan area develops. The exact configuration and height of the noise wall or berm would depend on the characteristics of the terrain with reference to the proposed development, the height of the residences (if they would have one or two stories), and the distance of building setback as determined during plan development. Depending on the alignment selected for Farmers Lane Extension, any existing residences to remain in close proximity to the roadway would be expected to require noise or earth berm attenuation so that interior noise levels do not exceed 45 dBA as determined by an acoustical survey.

Implementation
Mitigation measure to be completed in collaboration with area developers during the subdivision review and approval process.

Evaluation Criteria/Performance Standards
Conformance with Mitigation Measure 3.11-3.

Agency/Party Responsible for Monitoring and Reporting
City of Santa Rosa in collaboration with subdivision developers.

Monitoring and Reporting Frequency
On-going, prior to completion and City approval of plans and specifications for Farmers Lane Extension prior to issuance for bid.

Noncompliance Sanction
Not applicable for a City sponsored project.
PROCEDURE

The suggested forms on the following pages are provided to establish a system of mitigation monitoring and reporting. The forms are developed for the following purposes:

1. To allow for transferring mitigation measures as established in the Program in recognition of subsequent stages of project planning and construction activities.

2. To track each mitigation measure throughout the construction process to insure implementation.

3. To document each mitigation measure conformance with Program objectives upon the completion of construction.

4. To tailor the Mitigation Monitoring Program to the requirements of the project. To avoid oversimplifying or over-complicating the monitoring effort.

5. To evaluate the effectiveness of in-place mitigation measures and implement revisions as appropriate to insure the ongoing effectiveness of each mitigation measure.

6. To develop remedial actions as required to insure mitigation effectiveness.

7. To maintain complete records where substantiation of mitigation monitoring is warranted.

MITIGATION MONITORING REPORT

The Mitigation Monitoring Report form serves as a cover sheet for a project mitigation report. This form identifies the project, project sponsor and provides a checklist of the subject areas where mitigation monitoring and reporting is required for the project. This form provides an overview of the general aspects of the monitoring program.

MITIGATION MONITORING COMPLIANCE

The Mitigation Monitoring Compliance Report form identifies whether the mitigation is derived from an EIR or Negative Declaration. This form also provides space for the statement of a mitigation measure, the performance standards for mitigation compliance, details about site inspections and whether the mitigation measure when implemented is acceptable or unacceptable. The form also allows for specifying who is responsible for determining compliance and the timing (scheduling) for compliance determination.
A separate form is used for each mitigation measure. If the implemented mitigation measure is not achieving its intended purpose, or was not successfully implemented, the specific actions required for compliance may be noted on the form.

**MITIGATION MONITORING VERIFICATION**

The Mitigation Monitoring Verification form provides for a statement of findings that a previously unacceptable mitigation attempt when modified through further action, is in fact, acceptable as modified or altered. This form is filled out after the specific actions for mitigation compliance have been completed and are found acceptable. The completed package with a memorandum may then be entered into the project files at the conclusion of the mitigation monitoring and reporting program.

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**Notes:**

1. Groundwater samples should be collected if grading or excavation activities are anticipated to reach depths of the local groundwater table.


3. Brian Hunter, Regional Manager, Central Coast Region, California Department of Fish and Game, Letter to Mr. Hugh Graham, Principal Planner, Development and Review Office, County of San Jose, May 7, 1999.


6. USFWS, 1998. Appendix A of the programmatic formal consultation for the U.S. Army Corps of Engineers 404 permitted projects that may affect four endangered plant species on the Santa Rosa Plain. File Number 22342N.

7. USFWS, 1998. Programmatic formal consultation for the U.S. Army Corps of Engineers 404 permitted projects that may affect four endangered plant species on the Santa Rosa Plain. File Number 22342N.