ENVIRONMENTAL INITIAL STUDY

SCH #_____

INITIAL STUDY CHECKLIST
REFERENCES AND DOCUMENTATION

PLANNED DEVELOPMENT PLAN PD-6-05
SAINT JAMES LUTHERAN CHURCH

Prepared by
CITY OF REDDING
DEVELOPMENT SERVICES DEPARTMENT
777 Cypress Avenue
Redding, California 96001

ENVIRONMENTAL CHECKLIST FORM

This document has been prepared by the City of Redding acting as
Lead Agency in accordance with the California Environmental Quality Act, "CEQA"
(Public Resource Code, § 21000 *et seq.*).

1. **Project Title:** Planned Development Plan PD-6-05for Saint James Lutheran Church

2. **Lead Agency Name and Address:** City of Redding Development Services Department, 777 Cypress Avenue, Redding, CA 96001

3. **Contact Person and Phone Number:** Ron Adams, Associate Planner, 530-245-7112

4. **Project Location:** 3455 Knighton Road; AP Nos. 054-320-011 and 056-010-030

5. **Project Sponsor's Name and Address:** Saint James Lutheran Church, 2500 Shasta View Drive, Redding, CA 96002

6. **General Plan Designation:** "Residential, 3.5 to 6 units per acre" and "Greenway"

7. **Zoning:** "RS-3.5-PD" Residential Single Family District with Planned Development Overlay District

8. **Description of Project:** Saint James Lutheran Church is requesting approval to develop a new church complex on approximately 16 acres located along the south side of Knighton Road, just west of Clover Creek. In accordance with the property's Planned Development Overlay zoning, a master development plan has been submitted to the City for approval under a use permit process. The church complex would be developed in two phases, with primary uses to include a 32,600-square-foot worship center and a 95-unit senior housing development. Accessory features include a small outdoor amphitheater, sports field, playground, gazebos, maintenance building, and various pedestrian facilities.

   The first phase would include development of the church worship center, administrative office space, primary driveways, and related parking. The second phase would include the senior housing facility with additional parking. Accessory features would be added at the time of either phase or in between phases as funding and need allow. Additional project details are provided in Attachment "D."

9. **Surrounding Land Uses and Settings:** The project site is located in the Clover Creek plains area of southeast Redding; Clover Creek abuts the property's east boundary. Other than development along the Airport Road corridor to the east, the overall area exists as uninhabited rangeland. Topography is relatively flat, with a ground elevation around 490 feet. Vegetation consists primarily of an open blue/interior oak woodland and grassland. There are no streams or other jurisdictional waters on the site. Wetlands are known to exist nearby within the Clover Creek floodplain and on adjacent private property south of the proposed sports field.

10. **Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement).** The developer must obtain a Construction Activity Storm Water Permit and prepare a Storm Water Pollution Prevention Plan in accordance with the requirements of the California Regional Water Quality Board (RWQCB). A Section 1602 Streambed Alteration Agreement would be required from the California Department of Fish and Game for installation of waterline improvements across Clover Creek and possibly for storm-drain outfall improvements near the edge of the creek. The project may also be subject to a Nationwide 39 Permit (residential, commercial, and institutional developments) and/or other Section 404 permit approvals from the U.S. Army Corps of Engineers (ACOE) to address temporary impacts to jurisdictional waters. A State Water Quality Certification would be required as part of the 404 permit approval process.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

❑ Land Use and Planning	☒ **Biological Resources**	☒ **Aesthetics**
❑ Population and Housing	❑ Mineral Resources	❑ Cultural Resources
❑ Geology and Soils	☒ **Hazards (Fire)**	❑ Recreation
☒ **Hydrology and Water Quality**	☒ **Noise**	❑ Agricultural Resources
❑ Air Quality	❑ Public Services	❑ Mandatory Findings of Significance
❑ Transportation/Circulation	❑ Utilities and Service Systems	❑ None After Mitigation Measures Incorporated

DETERMINATION. (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ❑

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared. ☒

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ❑

I find that the proposed project MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ❑

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. ❑

(Signature)	May 18, 2006 (Date)
Ron Adams (Name)	Associate Planner (Title)

EVALUATION OF ENVIRONMENTAL IMPACTS

This section analyzes the potential environmental impacts associated with the proposed project. The issue areas evaluated in this Initial Study include:

- Land Use and Planning
- Population and Housing
- Geology and Soils
- Hydrology and Water Quality
- Air Quality
- Transportation/Circulation
- Biological Resources
- Mineral Resources
- Hazards and Hazardous Materials
- Noise
- Public Services
- Utilities & Service Systems
- Aesthetics
- Cultural Resources
- Recreation

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the CEQA Guidelines and used by the City of Redding in its environmental review process. For the preliminary environmental assessment undertaken as part of this Initial Study's preparation, a determination that there is a potential for significant effects indicates the need to more fully analyze the development's impacts and to identify mitigation.

For the evaluation of potential impacts, the questions in the Initial Study Checklist are stated and an answer is provided according to the analysis undertaken as part of the Initial Study. The analysis considers the long-term, direct, indirect, and cumulative impacts of the development. To each question, there are four possible responses:

- **No Impact.** The development will not have any measurable environmental impact on the environment.

- **Less Than Significant Impact.** The development will have the potential for impacting the environment, although this impact will be below established thresholds that are considered to be significant.

- **Potentially Significant Impact Unless Mitigation Incorporated.** The development will have the potential to generate impacts which may be considered as a significant effect on the environment, although mitigation measures or changes to the development's physical or operational characteristics can reduce these impacts to levels that are less than significant.

- **Potentially Significant Impact**. The development will have impacts which are considered significant, and additional analysis is required to identify mitigation measures that could reduce these impacts to less than significant levels.

Where potential impacts are anticipated to be significant, mitigation measures will be required, so that impacts may be avoided or reduced to insignificant levels.

List of attachments/references:

A. Location map
B. Zoning map
C. Site plan (reduction)
D. Aerial photo
E. Project description - additional details
F. URBEMIS (vers 7.5.0) air quality computer model results (located in application file)
G. Hyrdology Report prepared for Saint James Lutheran Church Campus by Hydmet Inc., dated July 27, 2005 (located in application file)
H. Knighton Road Extension Natural Environmental Study, prepared by ENPLAN dated October 1999 (on file in the Planning Division)
I. Knighton Road Extension Biological Assessment, prepared by ENPLAN dated November 1999 (on file in the Planning Division)
J. Wetland Delineation Report for the Knighton Road Extension Project, prepared by ENPLAN dated November 1998 (on file in the Planning Division)
K. Letter dated September 28, 1999, to Kyle Merriam, U.S. Fish and Wildlife Service, from ENPLAN, documenting fairly shrimp and tadpole shrimp—testing results (on file in the Planning Division)
L. Letter dated August 30, 2004, to City of Redding from ENPLAN establishing recommended wetland buffer areas for remainder area (located in application file)
M. Noise Study for Knighton Road Extension Project by ENPLAN, August 1999 (on file in the Planning Division)
N. Archaeological Survey for the Airport Business Park Annex Subdivision, Peter M. Jensen & Associates, dated November 9, 2004 (on file in the Planning Division)
O. Shastina Ranch FEIR, SCH 2004032126 (on file in the Planning Division)

Prior Environmental Evaluations applicable to all or part of the project site:

1. City of Redding General Plan Final Environmental Impact Report, 2000, SCH#1998072103
2. Initial Study and Mitigated Negative Declaration for Tentative Map Application S-3-04, 2005, SCH#2005102039
3. Initial Study/Environmental Assessment for the Knighton Road Extension Project, Shasta County, 2000, SCH#2000032077
4. Environmental Impact Report EIR-1-82 for the Redding Municipal Airport Master Plan, 1982, SCH#81102121

SUMMARY OF MITIGATION MEASURES

Hydrology and Water Quality

Mitigation 1. Construction activities within the ordinary high-water area of Clover Creek shall be conducted between July 1 and September 31, when the potential to encounter flowing water in the stream channel is low. Construction earlier or later than this period may occur only upon written authorization of the Department of Fish and Game. The overall work area within the stream channel shall be kept to the minimum feasible, with snow fencing or other appropriate work-perimeter markers installed to detour construction activity from migrating beyond prescribed limits.

Mitigation 2. Appropriate civil engineering design and erosion/pollution control Best Management Practices (BMPs) shall be utilized to ensure that the stability of the bank along Clover Creek is not compromised with installation of project storm-drain facilities and that sediment and other pollutants do not enter the creek during construction of necessary utility crossings. These measures shall be established in the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project as reviewed by the Regional Water Quality Control Board (RWQCB) and be included in the final project improvement plans prior to issuance of a grading permit.

Biological Resources

Mitigation 3. Disturbance of nesting raptors shall be avoided through proper timing of heavy construction activities. If construction must occur during the prime nesting season, between April 1 and July 15, a nesting survey shall be conducted by a qualified wildlife biologist prior to the start of construction to determine the presence/absence of nesting raptors. If active nests are observed and impacts to raptors are likely, then construction in the area of the nests shall be delayed until young birds are fully fledged or appropriate spatial and temporal buffers are established in consultation with the Department of Fish and Game.

Hazards — Emergency Access & Fire

Mitigation 4. Fire sprinkler systems shall be installed and maintained in all habitable buildings that typically would not require provisions for fire sprinkler systems under the California Fire Code. This requirement may be waived by the Fire Marshal if at the time of building permit submittal a fire/emergency-response time of five minutes or less is available to the area.

Noise

Mitigation 5. Establishment of the outdoor amphitheater shall be subject to a site development permit process and related environmental clearance to better evaluate specific design and potential noise impacts on nearby residentially zoned properties in accordance with the policies of the Noise Element of the General Plan and Chapter 18.40.100 (Noise Standards) of the Zoning Code. This shall include preparation of a professional noise analysis. Appropriate noise-attenuation measures and operational limitations shall be incorporated into the final design of the amphitheater as necessary to ensure that community noise standards are not exceeded, including, but not limited to, reorientation of the facility, use of noise walls and/or berms, volume limitations for amplified speech and music, and limitations on hours of use.

Aesthetics—Lighting

Mitigation 6. Nighttime lighting of the sports field shall be strategically located, directed downward, and shielded as necessary to prevent objectionable light and glare from projecting off-site in accordance with the criteria specified under Chapter 18.40.090, *Lighting,* of the Redding Municipal Code. During the building permit process for any field lighting, a professionally prepared lighting plan shall be submitted to the Planning Division for approval with sufficient details that demonstrate that these lighting requirements are met.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
I. LAND USE AND PLANNING. Would the proposal:				
a. Physically divide an established community?	❑	❑	❑	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	❑	❑	☒	❑
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	❑	❑	❑	☒
d. Have social or economic impacts resulting in a physical deterioration of the environment (economic blight)?	❑	❑	❑	☒

Discussion

a. The project is located in an area that is largely uninhabited. Thus, the project has no potential to physically divide an established community.

b. The project site is designated by the General Plan as "Residential, 3.5 to 6 units per acre" and by zoning as "RS-3.5-PD" Residential Single Family District with Planned Development Overlay District. A very small area at the far east edge of the property is also designated "Greenway" under the General Plan, representing the floodplain area of Clover Creek. No permanent development is proposed in the floodplain area. Chapter 18.31 of the Zoning Code, *Residential Districts,* allows establishment of "Religious Facilities" with a site development permit or an equivalent discretionary planning approval process. Development of apartments intended exclusively for seniors who live independently is not directly supported in the "RS" District. However, in this case, the "PD" Planned Development Overlay District allows the flexibility to include multiple-family development, so long as findings of consistency with the General Plan are made (density and other relevant policies). General Plan Policy *CDD11D* supports mixing or clustering residential densities so long as the resulting development is compatible with the area/neighborhood and the density range established under the General Plan is not exceeded. With 95 units, the proposed senior housing development would be at the top end of the maximum 6-unit-per-acre General Plan density. The project site is also located within the Redding Municipal Airport Specific Plan Area. The proposed church building and senior housing are located outside the Traffic Pattern Zone, Outer Approach Zones, and other air-traffic safety areas that restrict assembly and higher-density residential uses. Based on these factors, the project would be consistent with the General Plan and zoning with approval of the project's master site plan under the planned development use permit process.

c. There are no local habitat conservation plans or natural community conservation plans applicable to the project.

d. The project would ultimately provide positive social and economic impacts by facilitating orderly development of natural lands and extension of public roads and utilities as is fully supported by the General Plan.

Documentation

City of Redding General Plan Community Development and Design, Housing, and Natural Resources Elements
City of Redding General Plan Final Environmental Impact Report
City of Redding Zoning Ordinance (RMC Title18)

Mitigation

No mitigation is required under this subject.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
II. POPULATION AND HOUSING. Would the proposal:				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	❑	❑	❑	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	❑	❑	❑	☒

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	❑	❑	❑	☒

Discussion

a, b, c. The project would create opportunity for development of senior housing units as supported under the General Plan. The project would not induce unplanned population growth and does not propose the extension of any new roads or utilities not anticipated by the General Plan. The project does not displace substantial numbers of people or substantial numbers of existing housing.

Documentation

City of Redding General Plan

City of Redding Zoning Ordinance (RMC Title18)

Mitigation

No mitigation is required under this subject.

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

Discussion

a, c, d. There are no Alquist-Priolo Earthquake Faults designated in the Redding area of Shasta County. There are no other documented earthquake faults in the vicinity that pose a significant risk, and the site is located in an area designated in the Health and Safety Element of the General Plan as having a low ground-shaking potential. The project is not located on or near any documented landslide hazard areas, and there is no evidence of ground slippage or subsidence occurring naturally on the site. The soils and underlying geology on-site have low potential for liquefaction.

b. While the project site is relatively flat, minor excavation and fill work would be needed to construct building foundations, develop driveways and parking areas, extend utilities, and properly manage storm water. The project site contains soils consisting primarily of Red Bluff loam, 0 to 3 percent slopes (RbA). This soil class is well-drained and has very slow runoff potential with slight to none erosion potential. Since the primary soil type on-site is stable, application of special erosion- and sediment-control measures is not necessary. The project is subject to uniformly applied erosion- and sediment-control requirements mandated by existing regulations. These requirements include:

- City of Redding Grading Ordinance. This ordinance requires the application of BMPs in accordance with the City Erosion and Sediment Control Standards Design Manual (Redding Municipal Code Section 16.12.060, Subsections C, D, E). In practice, specific erosion-control measures are determined upon review of the final project improvement plans and are tailored to project-specific grading impacts.

- California Regional Water Quality Control Board "Construction Activity Storm Water Permit." This permit somewhat overlaps the City's Grading Ordinance provision by applying State standards for erosion-control measures during construction of the project.

- California Regional Water Quality Control Board "Project Storm Water Pollution Prevention Plan (SWPPP)." This plan emphasizes storm-water BMPs and is required as part of the Construction Activity Storm Water Permit. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of storm-water discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm-water discharges.

Actions for compliance with these regulations are addressed under standard conditions of approval, which are uniformly applied to land development projects, including the following:

Conditions incorporated into the project will include:

1. Prior to issuance of a grading permit, the developer must prepare a Storm Water Pollution Prevention Plan and secure a Construction Activity Storm Water Permit from the Regional Water Quality Control Board (RWQCB) as required by law. Additionally, all applicable provisions of the City of Redding Grading Ordinance (Redding Municipal Code Chapter 16.12) shall be met. This will require in part that an interim erosion- and sediment-control plan be prepared that establishes specific measures and best management practices to minimize soil erosion during and after construction activities. Approval and installation of interim erosion- and sediment-control measures shall be coordinated with the sequence of grading and development so as to be in place by September 1 of any year. The details of the interim erosion- and sediment-control plan and any applicable water quality mitigation requirements of RWQCB shall be incorporated into the final project improvement plans and be fully implemented by the developer as approved by the City Engineer.

2. Points of discharge from project drainage systems into a natural drainage shall include water-velocity attenuation improvements or any other measures necessary in accordance with the requirements of the City Engineer to prevent earth scouring, siltation of the stream channel, and erosion.

3. Prior to issuance of a grading permit, the developer must acquire all necessary letters of approval and/or permits from the U.S. Army Corps of Engineers and Department of Fish and Game for altering any natural drainage course or other jurisdictional waters related to the project.

Since the project is subject to uniformly applied ordinances and policies and the overall risk of erosion is very low, potential impacts related to soil erosion and sedimentation are less than significant. Potential impacts related to utility construction in or near Clover Creek are addressed under Item 4 (Hydrology and Water Quality) below.

e. The project does not involve the use of septic tanks or alternative wastewater disposal.

Documentation

City of Redding Health and Safety Element, Figures 4-1 (Ground Shaking Potential) and 4.2 (Liquefaction Potential)
City of Redding General Plan Final Environmental Impact Report
City of Redding General Plan Background Report
City of Redding Grading Ordinance (RMC Chapter 16.12)
City of Redding Standard Specifications, Grading Practices
City of Redding Standard Development Conditions for Discretionary Approvals (subdivisions, use permits, site development permits, etc.)
Soil Survey of Shasta County Area, United States Department of Agriculture, Soil Conservation Service and Forest Service, August 1974
Division of Mines and Geology Special Publication 42, Titled: Fault-Rupture Hazard Zones in California; Figure 4G, Official Maps of Earthquake Fault Zones
State Regional Water Quality Control Board, Central Valley Region, Regulations related to Construction Activity Storm Water Permits and Storm Water Pollution Prevention Plans

Mitigation

No mitigation is required under this subject.

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

Discussion

a. City sanitary sewer would be extended to serve the proposed uses. The project does not involve any permitted discharges of waste material into ground or surface waters.

b. City water service would be extended to serve the project for domestic use and fire protection. Therefore, area groundwater supplies would not be impacted.

c. Considering the site's stable soil and flat slope conditions, there is little risk that the project could contribute significant silt and sediment into area creeks. This issue is addressed under Section 3 (Geology and Soils) above.

d. The project site is located in the lower section of the Clover Creek watershed. The creek has a history of flooding in its lower reaches. While the City recently completed the Clover Creek Preserve, which functions as a regional detention basin for Clover Creek, City Council Policy 1806 and General Plan Policy HS2H, require that subdivisions and other new developments incorporate measures as needed to ensure that project-generated increases in storm-water runoff do not increase peak flooding off-site. To address this need, a drainage analysis was prepared for the project by Hydmet, Inc. The analysis confirmed that private detention storage was necessary to prevent peak-flow increases downstream. For this reason, the preliminary improvement plans for the project include a storm-water detention system which is sized based on the recommendation of the Hydmet study. By including appropriate storm-water detention into the project design, the risk of flooding off-site is considered to be less than significant.

e. The final improvement plans for the project must incorporate specific design measures intended to limit pollutant discharges in storm water from urban improvements as established under the State's National Pollutant Elimination System (NPDES) general permit, which the City is now obligated to follow in accordance with State Water Quality Control Order No. 2003-0005-DWQ. Feasible Best Management Practices (BMPs) would be incorporated in the final design of the project's storm-drain system, as approved by the City

Engineer, based on the BMPs listed in the latest edition of the California Storm Water Quality Association, Storm Water Best Management Practices Handbook.

f. Construction of a water main within Clover Creek and sewer lateral and storm-drain outfall improvements at the edges of Clover Creek have the potential to impact water quality. Mitigation measures are necessary in this case to limit the area of disturbance in and along the creek, to limit the duration of construction to the period the creek is dry or experiencing very low flows, and to stabilize and revegetate bank areas affected by the work. Mitigation under this topic also helps address potential impacts to sensitive aquatic resources as discussed under Item 7 (Biological Resources) below. With application of mitigation measures, potential impacts related to water quality would be less than significant.

g, h, i. The regulatory floodplain for Clover Creek occupies only a very small area on the far east side of the project site. No permanent improvements or fill is proposed in the floodplain area. Temporary construction activity in the floodplain is limited to the installation of underground utilities as noted above.

j. The threat of a tsunami wave is not applicable to inland, central valley communities, such as Redding. Seiches could potentially be generated in either Shasta or Whiskeytown Lakes during an earthquake. However, neither lake has been identified in the Health and Safety Element of the General Plan as having any risk to the city under such circumstances. There is no documented threat of mudflows affecting the project sites.

Documentation

City of Redding Health and Safety Element
Federal Emergency Management Agency Floodplain Regulations, FIRM map 060360-0030D, dated 3/02/98
City of Redding Storm Drain Master Plan, Montgomery-Watson Engineers 1993
State Water Quality Control Order No. 2003-0005-DWQ; National Pollutant Elimination System (NPDES) General Permit; Waste Discharge Requirements for Storm Water Discharges From Small Municipal Separate Storm Sewer Systems (MS4s) General Permit
California Storm Water Quality Association, Storm Water Best Management Practices Handbook
Hydrology Report prepared for Saint James Lutheran Church Campus by Hydmet Inc., dated July 27, 2005.

Mitigation

Mitigation 1. Construction activities within the ordinary high-water area of Clover Creek shall be conducted between July 1 and September 31, when the potential to encounter flowing water in the stream channel is low. Construction earlier or later than this period may occur only upon written authorization of the Department of Fish and Game. The overall work area within the stream channel shall be kept to the minimum feasible, with snow fencing or other appropriate work-perimeter markers installed to detour construction activity from migrating beyond prescribed limits.

Mitigation 2. Appropriate civil engineering design and erosion/pollution control Best Management Practices (BMPs) shall be utilized to ensure that the stability of the bank along Clover Creek is not compromised with installation of project storm-drain facilities, and that sediment and other pollutants do not enter the creek during construction of necessary utility crossings. These measures shall be established in the Storm Water Pollution Prevention Plan (SWPPP) prepared for the project as reviewed by the Regional Water Quality Control Board (RWQCB) and be included in the final project improvement plans prior to issuance of a grading permit.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
V. AIR QUALITY. Would the proposal:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	❑	❑	❑	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	❑	❑	☒	❑
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	❑	❑	☒	❑
d. Expose sensitive receptors to substantial pollutant concentrations?	❑	❑	❑	☒
e. Create objectionable odors affecting a substantial number of people?	❑	❑	❑	☒

Discussion

a, b, c. Shasta County currently exceeds the State's ambient standards for ozone (smog) and particulates (fine, airborne particles). Consequently, these pollutants are the focus of local air quality policy, especially when related to land use and transportation planning. Even with application of measures to reduce emissions for individual projects, cumulative impacts are unavoidable when ozone and/or particulate emissions are involved. For example, the primary source of emissions contributing to ozone is from vehicles. Any project that generates vehicle trips has the potential of contributing incrementally to the problem. The Environmental Impact Report for the General Plan acknowledged this dilemma; and as a result, Findings and a Statement of Overriding Considerations were adopted by the City Council for impacts to air quality resulting from growth supported under the General Plan.

Emission-reduction goals of 20 to 25 percent are established depending on the projected level of unmitigated emissions for a project. Mitigation thresholds are established for the important regional/local pollutants, including: Reactive Organic Gases (ROG) and Oxides of Nitrogen (NOx), which are ozone precursors, and Inhalable Particulate Matter, 10 Micron (PM_{10}). The mitigation thresholds for these pollutants are tiered at two levels as follows:

Level "A"	**Level "B"**
25 pounds per day of NOx	137 pounds per day of NOx
25 pounds per day of ROG	137 pounds per day of ROG
80 pounds per day of PM_{10}	137 pounds per day of PM_{10}

If a project has unmitigated emissions less than the Level "A" threshold, then it is viewed as a minor project (from an air quality perspective) and only application of Standard Mitigation Measures (SMMs) is required to try to achieve at least a 20 percent reduction in emissions, or the best reduction feasible otherwise. Land uses that generate unmitigated emissions above Level "A" require application of appropriate Best Available Mitigation Measures (BAMMs), in addition to the SMM, in order to achieve a net emission reduction of 20 percent or more. If, after applying SMMs and BAMMs, a use still exceeds the Level "B" threshold, then a minimum of 25 percent of the unmitigated emissions exceeding 137 pounds per day must be offset by reducing emissions from existing sources of pollution; otherwise, an Environmental Impact Report is required.

Under policy of the Air Quality Element, the proposed church complex has the potential to impact air quality primarily in two ways: (1) The church worship center and senior housing phases would ultimately generate vehicle trip emissions (with NOx, ROG, and PM_{10}), which would contribute cumulatively to local and regional air quality conditions. (2) Fugitive dust (particulate/PM_{10}) emissions could occur from construction activities. In order to calculate the unmitigated emissions related to these development factors, the current URBEMIS air quality computer model was used as prescribed in the Air Quality Element. The project was modeled assuming total buildout of both phases by year 2009. The results are as follows:

	ROG	**NOx**	**PM_{10}**
Total Emissions (lbs./day)	7.32	7.25	8.79

These results indicate that the project would result in ROG, N_{ox}, and PM_{10} emissions that are well below the Level "A" threshold. Hence, application of SMMs is required in order to strive toward the General Plan policy of a net reduction objective of 20 percent to address small-scale cumulative effects. SMMs applicable to this project address primarily short-term impacts related to construction. For the most part, these requirements are standard development regulations in the City, promulgated in the City Grading Ordinance and California Building Codes. Application of special mitigation to achieve a level of less than significant is not necessary, since actions for compliance are already included in existing uniformly applied regulations and construction standards. The following City standard regulations applied during grading and construction activities to control dust and PM_{10} emissions apply to the project.

1. Nontoxic soil stabilizers shall be applied according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for ten days or more).
2. All grading operations shall be suspended when winds (as instantaneous gusts) exceed 20 miles per hour.
3. Temporary traffic control shall be provided as appropriate during all phases of construction to improve traffic flow (e.g., flag person).
4. Construction activities that could affect traffic flow shall be scheduled in off-peak hours.
5. Active construction areas, haul roads, etc., shall be watered at least twice daily or more as needed to limit dust.
6. Exposed stockpiles of soil and other backfill material shall either be covered, watered, or have soil binders added to inhibit dust and wind erosion.
7. All trucks hauling soil and other loose material shall be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the trailer) in accordance with the requirements of CVC Section 23114. This provision is enforced by local law enforcement agencies.
8. All public roadways used by the project contractor shall be maintained free from dust, dirt, and debris caused by construction activities. Streets shall be swept at the end of the day if visible soil materials are carried onto adjacent public paved roads. Wheel washers shall be used where vehicles enter and exit unpaved roads onto paved roads, or trucks and any equipment shall be washed off leaving the site with each trip.

9. Alternatives to open burning of cleared vegetative material on the project site shall be used unless otherwise deemed infeasible by the City Planning Division. Suitable alternatives include, but are not limited to, on-site chipping and mulching and/or hauling to a biomass fuel site.

d. Potential impacts from fugitive dust caused during construction are mitigated by application of the SMMs discussed above.

e. The project does not involve land use that could generate objectionable odors affecting a substantial number of people.

Documentation

Shasta County APCD Air Quality Maintenance Plan and Implementing Measures
City of Redding General Plan Air Quality Element
City of Redding General Plan Final Environmental Impact Report, Chapter 8.6, Air Quality
CEQA Findings of Fact and Statement of Overriding Considerations for the City of Redding General Plan Final Environmental Impact Report, as adopted by the Redding City Council on October 3, 2000, by Resolution 2000-166
City of Redding General Plan Background Report, Chapter 9.7, Natural Resources and Air Quality
URBEMIS (2002,v8.7) air quality computer model results

Mitigation

No mitigation is required under this subject.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. TRANSPORTATION/CIRCULATION. Would the proposal:				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	❑	❑	☒	❑
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	❑	❑	☒	❑
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	❑	❑	☒	❑
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	❑	❑	❑	☒
e. Result in inadequate emergency access?	❑	❑	❑	☒
f. Result in inadequate parking capacity?	❑	❑	❑	☒
g. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	❑	❑	❑	☒

Discussion

a, b, d. Public access to the project site is from Knighton Road, which is a two-lane arterial route that was recently extended by Shasta County as part of a much awaited regional transportation improvement project. The Knighton Road extension provides a direct connection between Interstate 5 to the west and the Redding Municipal Airport/Airport Road to the east. The proposed site plan has one primary driveway connection to Knighton Road, which would serve as the main entrance to the Phase 1 worship center. The proposed driveway is aligned with the centerline of a future public street that is planned to connect across the street, on the north side of Knighton Road. A second connection to Knighton Road is provided via another future local road that would be constructed with either the first phase of the church project or by an adjacent subdivision, whichever comes first. There are no documented safety-design problems with the new Knighton Road.

Traffic generation for this project is estimated as follows* :

Phase	*Weekday ADT* **	*Weekday peak hour*	*Sunday ADT*	*Sunday Peak hour*
Phase-1 Worship Center, 32,600sf (ITE#560)	297	46	1194	383
Phase-2 Senior Housing, 95 units (ITE#252)	330	11	257	52
Totals at buildout:	627	57	1451	435

* Based on Institute of Transportation Engineers Trip Generation Manual, 7th Addition ** Average Daily Trips

The table demonstrates that peak project traffic conditions with project buildout occur on Sundays, outside the typical weekday peak conditions when potential for congestion is greatest. This is customary for a church use. The combined average daily weekday trips is roughly equivalent to a 62-unit single-family subdivision.

The Transportation Element of the General Plan establishes acceptable peak-hour Level of Service (LOS) criteria for roadway and intersections for use in transportation and land development planning. For most of the City, LOS "C" or "acceptable delay" is identified as the maximum allowable threshold before more congested traffic conditions occur. An explanation of LOS methodology is provided in the Transportation Element and the Transportation and Circulation Section of the General Plan FEIR.

As a two-lane arterial, LOS "C" capacity on Knighton Road is approximately 12,640 ADT. Current weekday traffic on Knighton Road is approximately 5,080 ADT, well under LOS "C" volume. The recently adopted Final Environmental Impact Report for the Shastina Ranch (SREIR) residential development provides a thorough overview of Knighton Road and other road segments and intersections in the area of the church project. Table 4.11-3 (Existing Conditions) and Table 4.11-8 (Existing Plus Approved/Pending/Projects Plus Project Conditions) in the SREIR all show LOS "C" or better conditions during the peak weekday hour on nearby major intersections along Knighton Road such as Airport Road, Churn Creek Road, and the ramps on Interstate 5. Since the peak-project traffic conditions are on Sunday, impacts to peak weekday LOS are marginal. The cumulative contribution to traffic impacts citywide is mitigated by payment of the City's traffic impact fee in accordance with Chapter 16.20 of the Redding Municipal Code, which is collected at the time of issuance of a building permit. Under the circumstances, the project would not result in significant adverse effects related to traffic capacity, congestion, or road-design features.

c. The Redding Municipal Airport is located approximately 2,500 feet east of the project. While the entire site is located within the Redding Municipal Airport Specific Plan Area, the proposed worship center and senior housing buildings are outside the Traffic Pattern Zone, Outer Approach Zones, and other air-traffic safety areas that restrict assembly and higher-density residential uses. Thus, the project has no potential to affect airport operations or capacity.

e. The proposed site plan offers adequate emergency access to both phases from Knighton Road by way of proposed roads and driveways.

f. The proposed site plan provides on-site parking spaces for both phases in accordance with Chapter 18.41.040 of the Zoning Code.

g. The proposed site plan includes a 10-foot-wide bicycle and pedestrian trail that addresses the need for a bike lane along Knighton Road as is promoted in the Redding Parks, Trails, and Open Space Master Plan, and as required under Condition 14 of Tentative Map S-3-04. The Redding Area Bus Authority (RABA) currently does not operate a fixed route in the vicinity of the project.

Documentation

City of Redding General Plan Transportation and Health and Safety Elements
City of Redding General Plan Final Environmental Impact Report, Chapter 4, Transportation and Circulation
City of Redding Parks, Trails, and Open Space Master Plan 2004
City of Redding Capital Improvement Plan, September 2004
Redding Municipal Airport Specific Plan Area
City of Redding Zoning Ordinance (RMC Title18)
Chapter 16.20 of the Redding Municipal Code (Development Impact Fee Ordinance)
Redding Area Bus Authority System Map and Route Guide
Institute of Transportation Engineers Trip Generation Manual, 7th Addition
Shastina Ranch FEIR, SCH 2004032126
Initial Study/Environmental Assessment, Knighton Road Extension Project, Shasta County, 2000

Mitigation

No mitigation is required under this subject.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. BIOLOGICAL RESOURCES. Would the proposal:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	❑	❑	☒	❑

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

Discussion

a, b, c, d. The General Plan identifies four habitat types as potentially sensitive and requiring special consideration or protection. These include: riparian, vernal pools, aquatic, and wetlands. Most special status species common to the area are associated with these habitat types. Biological studies and wetland delineations were prepared for the Knighton Road Extension project that cover all of the project site. These include a wetland delineation, biological assessment, and natural environment study by ENPLAN, which is a local environmental planning firm. Overall, the studies provide a complete picture of the existing biological conditions of the site, which are summarized as follows:

- The studies determined that there are no jurisdictional waters or special-status species present within the main church project area.

- Jurisdictional waters, consisting of intermittent stream channel, vernal swale, vernal pool, and wet meadow, exist on adjacent properties located along Clover Creek and just south of the Senior Housing phase. The project would not result in permanent loss to these adjacent wetlands. However, temporary impacts would occur with the necessary utility line crossing of Clover Creek. There is also the potential for indirect impacts to the wet meadow area located south of the senior housing phase. Indirect impacts are avoided in this case by redirecting project storm drainage and associated pollutants away from the wetland area per design recommendation from ENPLAN. The adjacent wet meadow is located in the top end of its drainage area and would not be substantially de-watered by the project, since sufficient watering would continue from direct rainfall.

- The vernal swale features along Clover Creek have the potential to hold fairy shrimp and/or tadpole shrimp, which are Federally listed as *threatened* and *endangered,* respectively. The vernal swale was surveyed for the presence of the sensitive shrimp species during both wet-season and dry-season testing. The testing did not produce any evidence of fairy and/or tadpole shrimp.

- Elderberry plant clusters, which the Federally listed Valley elderberry longhorn beetle depends on for feeding and reproduction, were identified well off-site along Churn Creek in the vicinity of the Knighton Road Bridge. However, no elderberry plant clusters were identified on the project site or along Clover Creek.

- Nests potentially used by red-tailed hawks or other protected migratory birds species were observed in trees in the area. Potential direct impacts to raptors or other protected birds could occur if occupied nests are destroyed from tree removal or if other major construction causes nesting birds to abandon active nests.

- No other State or Federally listed plant species, candidates for listing, or other species tracked by the California Natural Diversity Database were discovered on-site.

Based on these factors, mitigation measures are necessary to limit temporary construction-related impacts to Clover Creek, water quality impacts to Clover Creek, and impacts to nesting birds. Mitigation Measures 1 and 2 under Item 4 (Hydrology and Water Quality) directly address these needs. In addition, a mitigation measure limiting time of construction around the prime bird nesting

period is provided below. The City's grading permit process, the Section 1602 Steam Bed Alteration Agreement administered by the Department of Fish and Game, and the Storm Water Pollution Prevention Plan required by the Regional Water Quality Control Board will also function in refining and regulating construction measures for the project within and near Clover Creek. With mitigation measures and compliance with the uniformly applied environmental permitting processes noted here, potential impacts to special status species and related sensitive habitats would be less than significant.

e. The City's Tree Preservation Ordinance (Chapter 18.45 of the Redding Municipal Code) promotes the conservation of mature, healthy trees in the design of new development. However, the ordinance also recognizes that the preservation of trees will often conflict with normal land-development requirements and offers flexibility with the discretionary permit process to determine how best to achieve meaningful tree preservation. The General Plan FEIR also acknowledges that tree loss is expected under the normal course of urban/suburban development promoted under the General Plan. For these reasons, loss of natural woodlands from development within the City is not viewed as a potentially significant impact, where the proposed development is consistent with the General Plan and reasonable efforts are made in the project's final design to comply with the intent of the Tree Preservation Ordinance.

In this case, the project site contains many mature oak trees that have qualities worthy of preservation. However, the trees are randomly distributed in a way that makes efforts for any large-scale preservation unrealistic. To help identify the best opportunities for tree preservation, a detailed tree inventory was prepared that identified approximately 145 oak trees over the 16-acre site. Groupings of trees and specific larger/healthy oaks were identified and targeted for preservation. The site plan and preliminary grading plan were adjusted to save as many of these trees as reasonably possible. As a result, 48 trees are proposed for preservation.

As a standard condition of approval, final improvement plans must be refined to protect preserved trees subject to specific criteria listed in Sections 18.45.070(B) and (D) and 18.45.090 of the Tree Preservation Ordinance. Trees to be retained or areas of trees to be retained must then be delineated with snow fencing prior to grading and protected during development. Under the circumstances, the project complies with the requirements of the Tree Preservation Ordinance without need of special measures.

f. There are no habitat conservation plans adopted in this area.

Documentation

City of Redding General Plan Natural Resources Element
City of Redding General Plan Final Environmental Impact Report, Chapter 7.3 (Wildlife Habitat)
City of Redding General Plan Background Report, Chapter 9.5 (Biological Resources)
City of Redding Tree Preservation Ordinance (RMC Chapter 18.45)
Initial Study/Environmental Assessment, Knighton Road Extension Project, Shasta County, 2000
Knighton Road Extension Natural Environmental Study, prepared by ENPLAN dated October 1999
Knighton Road Extension Biological Assessment, prepared by ENPLAN dated November 1999
Wetland Delineation Report for the Knighton Road Extension Project, prepared by ENPLAN dated November 1998
Letter dated September 28, 1999, to Kyle Merriam, US Fish and Wildlife Service, from ENPLAN, documenting fairy shrimp and tadpole shrimp testing results
Letter dated August 30, 2004, to City of Redding from ENPLAN, establishing recommended wetland buffer areas

Mitigation

Mitigation 3. Disturbance of nesting raptors shall be avoided through proper timing of heavy construction activities. If construction must occur during the prime nesting season, between April 1 and July 15, a nesting survey shall be conducted by a qualified wildlife biologist prior to the start of construction to determine the presence/absence of nesting raptors. If active nests are observed and impacts to raptors are likely, then construction in the area of the nests shall be delayed until young birds are fully fledged or appropriate spatial and temporal buffers are established in consultation with the Department of Fish and Game.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. MINERAL RESOURCES. Would the proposal:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	❑	❑	❑	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	❑	❑	❑	☒

Discussion

a, b. The project site is not identified in the General Plan as having significant mineral resource value or as being located within any "Critical Mineral Resource Overlay" area.

Documentation

City of Redding Natural Resources Element
City of Redding General Plan EIR

Mitigation

No mitigation is required under this subject.

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

Discussion

a, b, c. The proposed land uses do not present a risk for hazardous materials or emissions.

d. There are no documented or otherwise known hazardous conditions existing on the site from past activity.

e, f. The project's relation to established safety areas of the Redding Municipal Airport is discussed under Item 6.c (Transportation) above. There are no private airstrips in the vicinity of the project.

g, **h.** Recent Fire Department staffing reassignments affecting the Airport Fire Station have increased response times to over 5 minutes in far southeast Redding, including the project site. Fire and emergency response for the area outside the Airport now comes from Station 5 at Hartnell Avenue and Churn Creek Road. For these reasons, the Fire Marshal requires that all habitable buildings in the area be equipped with an appropriate fire sprinkler system. Under the California Fire Code, the proposed worship center and senior housing units would be required to have fire sprinklers anyway, but smaller accessory buildings may not. For this reason, mitigation is provided below that requires all habitable buildings to include fire sprinklers until such time that a response time of five minutes or less is available to the area.

Documentation

City of Redding General Plan Health and Safety Element
City of Redding General Plan Final Environmental Impact Report, Chapter 8 (Health and Safety)
City of Redding General Plan Background Report, Chapter 10 (Health and Safety)

Mitigation

Mitigation 4. Fire sprinkler systems shall installed and maintained in all habitable buildings that typically would not require provisions for fire sprinkler systems under the California Fire Code. This requirement may be waived by the Fire Marshal if at the time of building permit submittal a fire/emergency- response time of five minutes or less is available to the area.

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

Discussion

a, b, c, e. There are two nosie-related issues affecting the project, including (1) noise from traffic on Knighton Road and (2) potential noise related to the proposed outdoor amphitheater. Ambient sound levels in the vicinity of the project are generated primarily by two transportation-related factors, including traffic on Knighton Road and aircraft activity at the Redding Municipal Airport. The entire project site is located well outside the 55 CNEL dB noise contour for the Airport. Thus, noise from airport operations is not a significant factor.

Table 5-4 of the Noise Element of the General Plan establishes transportation-noise thresholds for residential uses of 60 Ldn/CNEL dB for outdoor activity areas (patios, common areas, etc.) and 45 Ldn/CNEL dB for interior spaces. This would apply to the proposed senior housing project. For churches, the 60 Ldn/CNEL dB also applies to any related outdoor activity areas and 40 Leq dB for interior spaces. A noise study prepared for the Knighton Road Extension determined that based on year 2020 traffic projections, near the edge of the right-of-way, approximately 80 feet from road centerline, that the expected sound levels would be 59 Ldn dB. This applies to the section of roadway located east of Churn Creek and west of Lockheed Drive, and shows that expected road-noise exposure to both phases (church and senior housing) would be below the General Plan threshold for outdoor activity areas. Under these circumstances, use of modern construction and energy-efficient design mandated by the California Building Codes would result in interior noise levels well below General Plan criteria. Thus, the project would not result in exposure of persons to transportation-noise levels in excess of established standards.

The proposed outdoor amphitheater presents a different noise issue. The properties located south of the project site are zoned for residential use. While the abutting land currently is undeveloped, it is inevitable that homes will be built there. The proposed amphitheater is shown on the master site plan just west of the worship center, with a southeasterly stage orientation. The stage is located approximately 500 feet north of the abutting residential properties. The church proposes to use the amphitheater for special occasions and productions that could include amplified speech and music. Seating would be around 200. No specific design has been provided for review with the master site plan.

Table 5-5 of the Noise Element of the General Plan and Chapter 18.40.100 (Noise Standards) of the Zoning Code provide criteria for hourly noise exposure to residential uses from fixed noise sources such as an amphitheater. The daytime (7AM to 10PM) hourly standard is 55 Leq dB, while the nighttime (10PM to 7AM) standard is 45 Leq dB. The basic information provided for amphitheater is insufficient to determine with certainty that use of the facility as generically proposed would not result in noise over the established thresholds. For this reason, final design of the amphitheater should be subject to a subsequent review to refine its design and operation in accordance with General Plan and Zoning Code noise criteria. Mitigation is therefore provided below to address this need.

d. During the construction of project improvements, there could be a temporary increase in noise in the project vicinity above existing ambient noise levels. The most noticeable construction noise would be related to grading, utility excavation, and land-clearing activity. The City's Grading Ordinance (RMC Chapter 16.12.120.H) limits grading-permit-authorized activities to between the hours of 7 a.m. and 7 p.m., Monday through Saturday. No operations are allowed on Sunday. The City's Zoning Code contains additional restrictions (RMC Chapter 18.40.100.F.2) on the times of construction in close proximity to existing residential uses. Since the heavy construction work associated with the project is limited in scope and by existing regulation, the potential temporary noise impact is considered less than significant.

f. There are no private airstrips in the vicinity of the project.

Documentation

City of Redding General Plan Noise Element
City of Redding General Plan Final Environmental Impact Report, Chapter 8.7 (Noise)& Appendix C (Noise)
City of Redding General Plan Background Report, Chapter 11 (Noise)
Redding Municipal Code Chapter 18.40.100 (Noise Standards)
Redding Municipal Code Chapter 16.12.120.H (Grading Construction Standards)
Noise Study for Knighton Road Extension Project by ENPLAN, August 1999

Mitigation

Mitigation 5. Establishment of the outdoor amphitheater shall be subject to a site development permit process and related environmental clearance to better evaluate specific design and potential noise impacts on nearby residentially zoned properties in accordance with the policies of the Noise Element of the General Plan and Chapter 18.40.100 (Noise Standards) of the Zoning Code. This shall include preparation of a professional noise analysis. Appropriate noise-attenuation measures and operational limitations shall be incorporated into the final design of the amphitheater as necessary to ensure that community noise standards are not exceeded, including, but not limited to, reorientation of the facility, use of noise walls and/or berms, volume limitations for amplified speech and music, and limitations on hours of use.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. PUBLIC SERVICES.				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
(1) Fire protection?	❑	❑	☒	❑
(2) Police protection?	❑	❑	☒	❑
(3) Schools?	❑	❑	❑	☒
(4) Parks?	❑	❑	❑	☒
(5) Other public facilities?	❑	❑	❑	☒

Discussion

a(1), a(2), **a(5).** The City would provide police and fire protection to the project from existing facilities. Long-term supplemental funding for public services was arranged at the time of annexation of the project site and neighboring properties by the formation of a Mello-Roos Community Facilities District (CFD) in accordance with Annexation 90-9. Special assessments required under the CFD would apply with development of each phase.

a(3). The project site is located in the Pacheco School District and the Anderson High School District. Only senior residential units would result from buildout of the project. Thus, the project would not contribute to the total student enrollment in area schools.

a(4). This topic is addressed below under Section 15 (Recreation).

Documentation

City of Redding General Plan Public Facilities and Recreation Elements
City of Redding General Plan Final Environmental Impact Report, Chapter 6. (Other Public Facilities and Services)
City of Redding General Plan Background Report, Chapter 7 (Public Facilities and Services)

Chapter 16.20 of the Redding Municipal Code (Development Impact Fee Ordinance)
Community Facilities District Annexation 90-9

Mitigation

No mitigation is required under this subject.

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

Discussion

a. Wastewater generated by the project would be limited to that associated with domestic uses discharged into the City sanitary sewer system, and has no potential to exceed treatment requirements of the Regional Water Quality Control Board.

b. Adequate domestic water and sanitary sewer system capacity is available from existing facilities to accommodate the project.

c. Potential impacts associated with the construction, operation, and maintenance of storm drains are related to hydrology, soil erosion and sedimentation, and biological resources. Potential impacts are discussed under Items 3, 4, and 7 above.

d. Potable water is available from the City to serve the project. The demands of the project can be accommodated within existing water allotments.

e. As noted, the project would utilize the City's sanitary sewer system to dispose of wastewater. Adequate sewer capacity is available to accommodate the project.

f, g. The City provides solid waste disposal (curbside pick-up) service, which is available to serve the project. Adequate capacity is available without need of special accommodations. The City also regulates and operates programs that promote the proper disposal of toxic and hazardous materials.

Documentation

City of Redding General Plan Public Facilities Element
City of Redding General Plan Final Environmental Impact Report, Chapter 5, Public Facilities and Services
City of Redding General Plan Background Report, Chapter 7, Public Facilities and Services, 1998

Mitigation

No mitigation is required under this subject.

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

Discussion

a, c. While the project site exists in a natural condition, it is designated in the General Plan and by zoning primarily for residential uses. There are no unique physical or historic land features present on the site or in the vicinity which the General Plan has designated as having significant public value. A physical change would be noticeable at first, upon the start and duration of construction, but this would be an expected result of normal land development supported under the General Plan.

b. The project site is not located adjacent to a State-designated scenic highway.

d. The primary phases of development would result in new sources of lighting for security, parking lots, domestic activities, and streetlights, which are typical. Lighting design is subject to the lighting/glare reduction standards established under Chapter 18.40.090 (Lighting) of the Zoning Code. However, the proposed recreation field may eventually have lighting, which, if not carefully designed, has a much greater potential to produce undesirable light and glare. Thus, mitigation is provided below to address this issue.

Documentation

City of Redding General Plan Community Development and Design Element and Natural Resources Element
City of Redding General Plan Final Environmental Impact Report
City of Redding Zoning Ordinance, Chapter 18.40.090 *(Lighting)*

Mitigation

Mitigation 6. Nighttime lighting of the sports field shall be strategically located, directed downward, and shielded as necessary to prevent objectionable light and glare from projecting off-site in accordance with the criteria specified under Chapter 18.40.090, *Lighting,* of the Redding Municipal Code. During the building permit process for any field lighting, a professionally prepared lighting plan shall be submitted to the Planning Division for approval with sufficient details that demonstrate that these lighting requirements are met.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. CULTURAL RESOURCES. Would the proposal:				
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	❑	❑	❑	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	❑	❑	❑	☒
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	❑	❑	❑	☒
d. Disturb any human remains, including those interred outside of formal cemeteries?	❑	❑	❑	☒

Discussion

a, b, d. The project site is generally considered to have a high potential for the presence of historic or prehistoric cultural resources due to its location just upland of Churn Creek and Clover Creek. Archaeological studies have been completed that sufficiently cover the project site, including one in 2004 for Tentative Subdivision Map S-3-04 and others in 1998 and 1999 for the Knighton Road Extension project. These studies did not reveal any evidence of prehistoric activity or occupation. Additionally, no evidence of significant historic-period occupation, refuse disposal, or homesteading was observed.

The City's standard subdivision and development conditions include a requirement that if any cultural materials are discovered by chance during construction, all work must stop in the area of the find, and the City must be notified. A qualified archaeological professional must then be retained by the developer to review the discovered item(s) and to determine its significance and any appropriate measures. No mitigation is required under the circumstances.

c. No unique geologic features, fossil-bearing strata, or paleontological sites are known to exist on the project site.

Documentation

Archaeological Survey for Tentative Subdivision Map S-3-04, Peter M. Jensen & Associates, dated November 9, 2004
Initial Study/Environmental Assessment, Knighton Road Extension Project, Shasta County, 2000
City of Redding General Plan Natural Resources Element
City of Redding General Plan Final Environmental Impact Report, Chapter 7.5 Historic and Cultural Resources

Mitigation

No mitigation is required under this subject.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. RECREATION. Would the proposal:				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	❑	❑	☒	❑
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	❑	❑	❑	☒

Discussion

a. The proposed church facility has no potential to impact park facilities. While the senior housing facility would produce new residential units, the project alone would not cause substantial increased park use that could overburden existing park facilities. The closest established public park in the vicinity of the project is Enterprise Community Park, located approximately 3 miles north. While the southeast area of Redding currently is underserved for neighborhood parks, new parks are planned, as supported in the Redding Parks, Trails, and Open Space Master Plan. The closest planned neighborhood park site is within the recently approved Shastina Ranch development, approximately one mile north, which should be constructed within the next few years. As part of the City's development impact fee program, each unit in the senior housing facility is subject to paying a park impact fee which is collected at the time of issuance of a building permit. Payment of the fee addresses cumulative impacts from growth on the need for additional public park facilities. Under the existing park impact fee systems, there would not be any significant impacts related to recreation from the project.

b. The project includes as potential accessory features an athletic field, outdoor amphitheater, sports field, playground, gazebos, and various pedestrian facilities. There are no sensitive biological features or habitats that would be affected by construction of these improvements. Potential lighting impacts related to the sports field are addressed under Item 8, *Aesthetics*; potential noise impacts related to the outdoor amphitheater are addressed under Item 10, *Noise*.

Documentation

City of Redding General Plan Natural Resources, Recreation, and Public Facilities Elements
City of Redding General Plan Final Environmental Impact Report, Chapter 6.4, Parks and Recreation
Chapter 16.20 of the Redding Municipal Code (Development Impact Fee Ordinance)
Shastina Ranch FEIR, SCH 2004032126

Mitigation

No mitigation is required under this subject.

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. AGRICULTURAL RESOURCES. Would the proposal:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	❑	❑	☒	❑

Issues (and Supporting Information Sources):	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b. Conflict with existing zoning for agricultural use, or a Williamson act contract?	❑	❑	❑	☒
c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	❑	❑	❑	☒

Discussion

a, b, c. The project site has been used historically as rangeland for grazing and contains soils that are suitable for certain types of agricultural production. However, the project site is not designated by the General Plan or by zoning for agricultural use and is not located in a prime farmland-designated area. The conversion of agricultural lands to support urban development within Redding was anticipated in the General Plan, with related special findings and statement of overriding consideration adopted with the General Plan EIR.

Documentation

City of Redding General Plan Natural Resources Element; Figure 3-4 Prime Farmland

City of Redding General Plan Final Environmental Impact Report, Chapter 7.2, Agricultural Resources

CEQA Findings of Fact and Statement of Overriding Considerations for the City of Redding General Plan Final Environmental Impact Report, as adopted by the Redding City Council on October 3, 2000, by Resolution 2000-166

Soil Survey of Shasta County Area, United States Department of Agriculture, Soil Conservation Service and Forest Service, August 1974

Mitigation

No mitigation is required under this subject.

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

Discussion

a. The project has the potential to directly impact sensitive wetland and aquatic habitats. However, specific mitigation measures as identified under Item 4 (Hydrology and Water Quality) and Item 7 (Biological Resources) have been established to reduce potential impacts to a level less than significant.

b. The project would contribute to regionwide cumulative air quality impacts. However, under policy of the General Plan, application of Standard Mitigation Measures (SMMs) will reduce potential impacts to a level less than significant as explained under Item 5 (Air Quality).

c. As discussed herein, the project does not have characteristics which could cause substantial adverse effects on human beings, either directly or indirectly.