10.0 Environmental Mitigation Measures

10.0 ENVIRONMENTAL MITIGATION MEASURES

All mitigation measures identified in EIR 92-2 are included as conditions of approval for the Specific Plan.

10.1 CIRCULATION AND TRAFFIC

Regional Conditions

The following measures are included as part of the proposed project in order to identify and mitigate potential impacts on the regional and local circulation system:

1. The need for additional turning lanes on Philadelphia Street and Vineyard Avenue shall be determined subsequent to a City-approved traffic study and in conjunction with a traffic monitoring program approved by the City Engineer.

2. Street and highway rights-of-way and curb widths shown in the Specific Plan may be modified if warranted by a precise traffic lane striping configuration approved by the City Engineer. Dedication will be required prior to issuance of initial building permit.

3. The timing and location of traffic signals shall be based on a City-approved traffic study and traffic monitoring program. Traffic signals necessitated by project development will be constructed by Kaiser Permanente in conjunction with project roadway construction.

Project Conditions

4. Access to the project site shall be from two entrances off Philadelphia Street and one entrance off Vineyard Avenue. An internal circulation system will include drop-off points and parking structure access from an internal perimeter roadway.

5. The project shall provide a minimum of two entrance lanes and two exit lanes at the western access off Philadelphia Street, with a 20-foot-wide median and a minimum 150-foot-long reservoir. The Vineyard Avenue entrance shall provide a minimum of two entrance lanes and two exit lanes, with a 20-foot-wide median and a minimum 70-foot-long reservoir.

These designs will allow sufficient space for exiting vehicles to make the required turning movements as well as provide stacking space for exiting vehicles.

10.2 GEOLOGY AND SOILS

Geology

6. Although no significant geological impacts are anticipated, the applicant may be required to prepare a detailed geotechnical study that must be reviewed and approved by the City. The study shall identify potential geological, seismic, and soil constraints, and define mitigation measures in accordance with applicable City requirements.

Seismicity

7. The Kaiser Permanente Ontario Medical Center shall conform to all applicable City of Ontario building codes to minimize the probability of structural failure due to ground shaking and related earthquake impacts. Construction in compliance with all applicable State building codes for hospital facilities shall be utilized.

Soils

8. Prior to issuing grading permits, appropriate permits for construction dust control shall be obtained from the West End Resource Conservation District of the San Bernardino County Department of Agriculture.

9. Appropriate dust control measures shall be developed for all construction within the project site, subject to review and approval of the City prior to issuing building permits.

10. Erosion control measures to limit wind and water erosion shall consider the following:

    a. Minimizing the length of time that soils lie exposed;

    b. Regular watering of cleared areas in compliance with City requirements and South Coast Air Quality Management District (SCAQMD) Rule 403 (Fugitive Dust);

    c. Minimizing the extent of cleared areas at any given time;

    d. Establishing maximum vehicle speeds within construction areas;

e. Revegetating graded areas as soon as possible after grading (e.g., landscaping, hydroseeding);

f. Placing sandbags along the perimeter of the site prior to grading if grading is undertaken during the rainy season (November through April); and

g. Using soil stabilizers where feasible.

10.3 CLIMATE AND AIR QUALITY

11. Construction of the proposed project shall comply with SCAQMD Rule 403 (Fugitive Dust), which is intended to reduce incidents of fugitive dust. Implementation measures shall include:

    a. Regular watering of graded surfaces;

    b. Restricted travel of construction vehicles and equipment to regularly watered construction roadways;

    c. Suspension of grading during first-stage smog alerts;

    d. Use of low-sulfur fuel (0.05 percent by weight) for construction equipment; and

    e. The measures listed above in mitigation measure # 10.

12. Measures to reduce air quality impacts resulting directly and indirectly from the proposed project shall be required in conjunction with the County of San Bernardino and the South Coast Air Quality Management District (SCAQMD). The SCAQMD/Southern California Association of Governments (SCAG) Air Quality Management Plan (AQMP) shall be utilized as a guideline for these measures. Since the majority of air emissions under the proposed project will result from automobile trips, the most significant mitigation measures will involve programs to reduce vehicle miles traveled (VMT). SCAQMD Regulation XV (Trip Reduction/Indirect Source) is the primary program to be implemented under the proposed project.

    Other AQMP programs, such as the San Bernardino County 1991 AQMP, require the coordinated participation of local governments and regional planning agencies. Support of federal and state legislation aimed at reducing air emissions also will result in improved air quality.

13. General measures that shall be applied to the proposed project include the following:

    a. Encourage the use of alternative transportation modes by promoting the extension of public transit service to the project and providing secure bicycle facilities on site.

    b. If public transit is extended to the project site, provide transit accommodations such as bus stop turnout lanes and bus shelters. Currently, bus turnout lanes and bus shelters are not indicated in the project plans, but the site plan can accommodate these features. Potential bus stop turnouts have been identified at: (1) the south side of Philadelphia Street at the project site's western entrance, (2) the intersection of Vineyard Avenue and Philadelphia Street, and (3) the Vineyard Avenue entrance.

    c. Vehicular emissions in the South Coast Air Basin should continue to be reduced through legislative exhaust emission controls and provisions for increased public transit (e.g., light rail, commuter rail). Also, other air quality programs and regulations aimed at reducing mobile and stationary source emissions are under the authority of governmental agencies such as SCAQMD and the California Air Resources Board (CARB).

14. Energy conservation practices, as required by the Subdivision Map Act, shall be incorporated into project design in order to limit stationary source pollution both on (natural gas use) and off (electricity) site. The applicant shall consider additional energy conservation measures in cooperation with the Southern California Gas Company and the Southern California Edison Company.

15. All phases of project development shall comply fully with SCAQMD rules and regulations.

10.4 HYDROLOGY

16. Drainage and flood control for the project site shall be provided by an on-site storm drain system coordinated with existing off-site drainage facilities, in accordance with the technical master plan to be provided. Any facilities that may need to be developed will be constructed by Kaiser Permanente in phases, as reviewed and approved by the City Engineer.

17. The San Bernardino Transportation/Flood Control Department has undertaken a hydrological study of West Cucamonga Creek in order to determine capacities and necessary improvements. Flows and capacities are being recalculated for the creek's course through the City of Upland.

The study includes West Cucamonga Creek both upstream and downstream of Ely Basin in the project vicinity. The feasibility of berms along Philadelphia Street to mitigate potential overflow from Ely Basin is being investigated. Improvements to portions of West Cucamonga Creek upstream of the Union Pacific Railroad crossing, which currently experiences a flow constriction, are under design. Based on the hydrological study, West Cucamonga Creek and Ely Basin may be expanded. Hydrological improvements to the Kaiser Permanente Ontario Medical Center site shall be undertaken in accordance with the final results of the San Bernardino Transportation/Flood Control Department's study.

10.5 NOISE

18. Project construction activities shall comply with all applicable City ordinance restrictions.

19. All state and local standards for exterior and interior noise exposure shall be met.

20. Prior to being issued building permits, the applicant shall submit evidence to the satisfaction of the City that all project land uses will meet applicable exterior and interior noise standards. The applicant shall be required to prepare a detailed acoustical assessment indicating the mitigation measures necessary to achieve acceptable exterior and interior noise levels on site.

10.6 LAND USE/AESTHETICS

21. The additional facilities and services needed to support the project shall be reviewed by the appropriate departments and agencies, and provided concurrently as development progresses.

22. Noise and dust control measures will reduce short-term construction impacts on nearby areas. Long-term traffic and associated air quality and noise impacts will be mitigated by measures discussed in Specific Plan Sections 5.1 (Circulation Access) and 5.6 (Landscape Concept), as well as by the other mitigation measures described in this section.

23. The project proposes an integrated medical facility and administrative center. Land uses designed for the site include hospital, medical office, administrative office, parking, and ancillary uses. The project is consistent with the zoning classification of "SP Specific Plan District" and the General Plan land use designation of "Planned Commercial". The Planned

Commercial permits mixed use projects including retail, service, office commercial, light industrial, and residential uses. The Kaiser Permanente Ontario Medical Center project proposes uses, all associated with the primary use of medical care, which are compatible with this land use designation.

24. The Specific Plan shall include architectural and landscape design guidelines, development standards, a phasing plan, and infrastructure plans to the satisfaction of the City.

25. Measures to mitigate short-term construction impacts shall be implemented by the applicant as required by the City and shall include:

    a. Limiting the hours during which trucks may travel to and from the project site; and

    b. Providing temporary fencing to screen on-site construction activities, materials, and equipment from adjacent properties.

26. The proposed project shall be subject to design review to ensure compatibility and consistency with the visual image of the community. These guidelines will include recommendations for buffering, berming, landscaping, setbacks, and other related variables, and shall be defined in the Specific Plan.

27. During the required site plan review of all development, the City will ensure that site improvements, including but not limited to lighting and signage, adhere to the provisions of the Specific Plan and do not adversely affect adjacent land uses or roadways. The use of reflective glass or other reflective materials shall be minimized without jeopardizing energy conservation.

28. Lighting in parking areas shall maintain an average illumination of one footcandle and shall be directed away from adjacent areas. Pedestrian lighting shall maintain an average illumination of 0.60 footcandle.

Electricity

Although no significant impacts on electrical service are anticipated, project planners, architects, and engineers should use energy efficient architecture and landscape design concepts to reduce long-term demand for electricity and fossil fuel consumption. Such measures shall include:

29. As required by the Subdivision Map Act, architectural planning and design, to the extent feasible, shall take full advantage of such concepts as natural heating and cooling through sun and wind exposure and solar energy opportunities. If active solar heating systems are incorporated into building designs, site planning must ensure that incoming solar heat is unobstructed.

30. Landscaping shall be designed in accordance with the requirements of individual buildings with the intent to minimize heat gain in summer, maximize heat gain in winter, and promote air circulation for heating and cooling purposes. This measure is not intended to compromise the overall landscape concept of the project.

31. Hot water systems, to the extent feasible, shall be designed to utilize alternative energy sources such as solar energy.

32. Utility companies will utilize the same trenches as much as possible when relocating or upgrading their facilities in order to avoid unnecessary equipment fuel consumption during utility work.

33. Medical office buildings shall comply with the energy conservation standards set forth in Title 24 of the California Code of Regulations. These standards address insulation requirements and the use of caulking, double-glazed windows, and weather stripping, among other measures. Office of Statewide Health Planning and Design (OSHPD) codes for other medical facilities shall be applied.

34. The following mitigation measures are recommended:

    a. Walls, ceilings, and hot water heaters shall be insulated to prevent heat loss/gain.

    b. Energy efficient exterior and interior lighting (e.g., high-pressure sodium outdoors and fluorescent indoors) shall be used rather than less-efficient lighting, where feasible.

    c. Nonessential, ornamental lighting shall be avoided.

d. The Southern California Edison Company and Southern California Gas Company have devised energy management programs to assist developers in selecting the most effective energy conservation techniques to incorporate into project design. These energy-saving measures are readily available, easier to install during initial construction, and will not necessarily raise long-term costs. It is recommended that the applicant consult these companies and incorporate their recommendations where feasible.

Natural Gas

No significant impacts on natural gas service are anticipated. Project planners, architects, and engineers should apply the most energy efficient use of natural gas in accordance with energy management programs established by the Southern California Gas Company (see mitigation measures for "Electricity").

Water Service

35. A technical master plan for water service will be prepared to identify how water facilities will be extended to the project site. Facilities shall be developed as needed, as approved by the City Engineer.

36. The following state laws require water efficient plumbing fixtures in structures:

    a. Low-flush toilets and urinals are required in virtually all buildings (Health and Safety Code Section 17921.3).

    b. Efficiency standards shall be met which give the maximum flow rate of all new showerheads, lavatory faucets, and sink faucets, as specified in the standards approved by the American National Standards Institute [November 16, 1979, pursuant to Title 20, California Code of Regulations Section 1604(f) - Appliance Efficiency Standards].

    c. Before installation, all fixtures shall be certified by the manufacturer to the California Energy Commission to comply with the flow-rate standards [Title 24, California Code of Regulations Section 2-5307(b)].

    d. Water heating systems and hot water pipes shall be insulated [Title 24, California Code of Regulations Section 2-5353(i) and (j)].

    e. Public lavatories shall be equipped with self-closing faucets that limit the flow of water (Government Code Section 7800).

37. Measures to be implemented where applicable include:

Interior:

a. Water pressure greater than 50 pounds per square inch (psi) shall be reduced to 50 psi or less by means of pressure-reducing valves.

b. Drinking fountains shall be equipped with self-closing valves.

c. Food service activities shall use water-conserving dishwashers or dish sprayers that have been retrofitted for reduced flow.

Exterior:

f. Native or drought-tolerant plants shall be used in landscaping where feasible in order to minimize water consumption.

g. Warm-season grasses shall be used on lawn areas.

h. Mulch shall be used extensively in all landscaped areas. Mulch applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.

i. Efficient irrigation systems shall be installed which minimize runoff and evaporation, and maximize the amount of water that will reach plant roots. Drip irrigation, soil moisture sensors, and automatic irrigation systems are some methods for increasing irrigation efficiency.

j. Semi-permeable paving materials shall be used whenever feasible to reduce surface water runoff and to aid in groundwater recharge.

k. The potential for using reclaimed wastewater, stored rainwater, or gray water for landscape irrigation shall be examined. Decorative water facilities shall recycle their water.

38. If required due to project-related street improvements, the relocation of poles carrying electrical cable on Vineyard Avenue along the project site shall be paid for by Kaiser Permanente.

All of the above energy conservation measures will be subject to review, approval, and monitoring by the appropriate City of Ontario departments, the Southern California Edison Company, and the Southern California Gas Company.

Wastewater

39. Wastewater discharge limits established by the City of Ontario and the Chino Basin Municipal Water District shall be adhered to.

Solid Waste

40. The design and location of all solid waste collection areas shall conform to all applicable City standards, as administered by the Solid Waste Superintendent, including adequate vehicular access, site-specific collection areas, and City standards regarding solid waste generation. Compaction and recycling shall be required. Storage and collection of recyclable materials (including compostable waste) shall be undertaken in coordination with the Ontario Public Services Department and Assembly Bill 939.

Police Protection

41. All development within the project site shall meet the requirements of the City of Ontario Police Department. The City's Development Advisory Board (DAB) has developed building security requirements, including criteria for security lighting, hardware, shrubbery, fencing, and building numbering. These crime prevention measures are required at the building permit phase.

Fire Protection

42. All development within the project site shall meet the requirements of the City of Ontario Fire Department, including but not limited to emergency vehicle access and the provision of fire suppression systems.

Schools

43. Pursuant to California Government Sections 53080, 66000 et seq., the Ontario Montclair School District, within whose boundaries the project site is located, will levy school impact fees for development within the project site. Square footages are calculated according to enclosed areas except for garages and patios.

    Impact fees are set by the State of California and may change periodically.