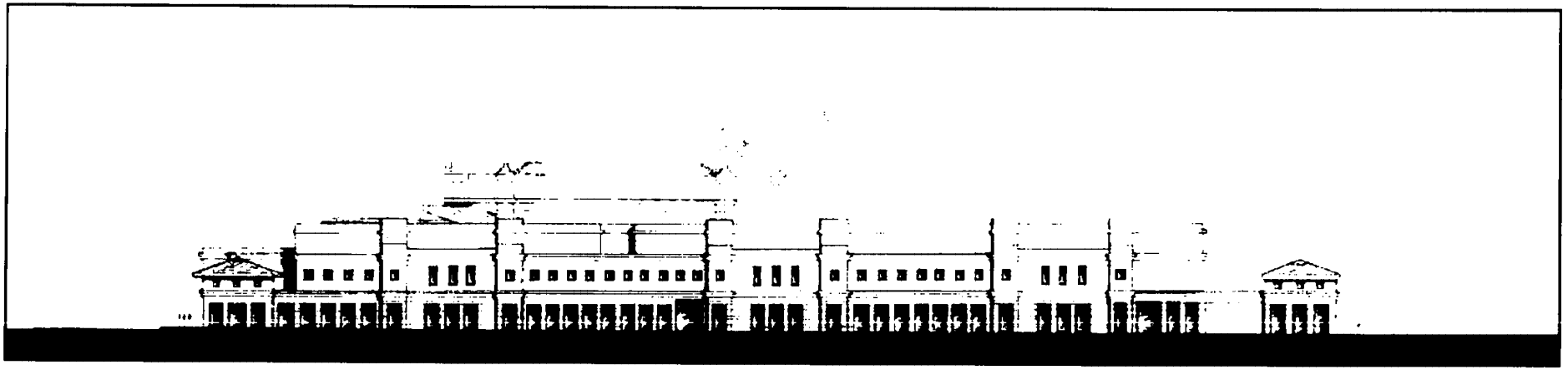

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Figure 14
Proposed Exhibition Hall and Ballroom Building
Elevation Along Marengo Avenue

Source: Fentress Bradburn Architects Ltd., 2004

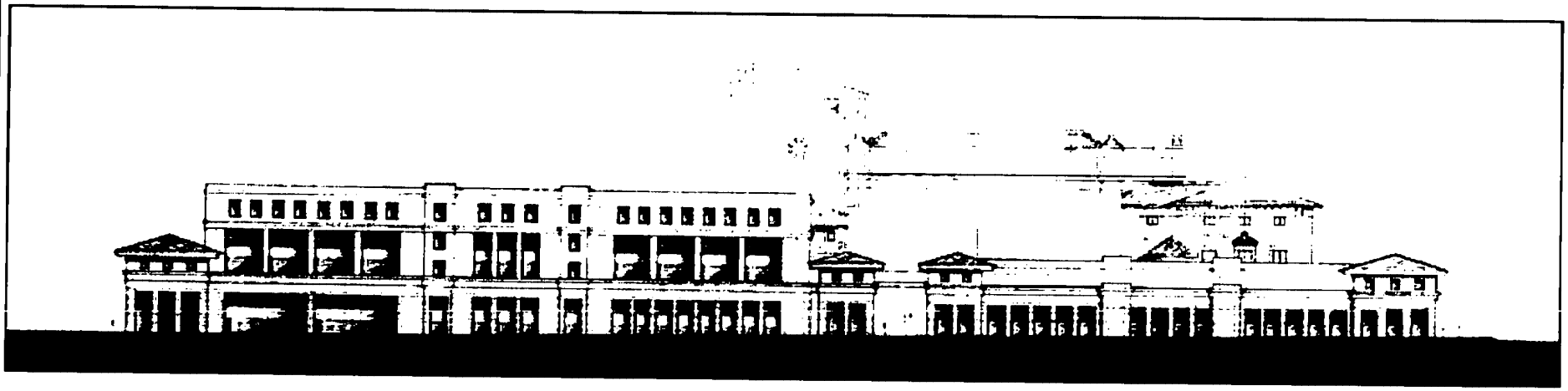
guideline of the Civic Center Specific Plan to not have buildings with uninterrupted façades. The loading dock would be provided along and accessed via Marengo Avenue. A wall parallel to the street would provide screening of the loading dock activities.

The west court or internal plaza façade of the proposed Exhibition Hall and Ballroom building, while a long and straight façade, would contain variation in architectural detailing to provide some rhythm and relief. Again, these features would serve to ensure compliance with the general guideline of the Civic Center Specific Plan regarding uninterrupted façades.

The existing Conference Center building would remain on site. The existing exterior elevations would be re-designed to be similar in appearance to those of the new Exhibition Hall and Ballroom building on the west side of the Civic Auditorium. Administrative offices would be added to the Conference Center building along Green Street and Euclid Avenue. The office space would fill in the sloped embankment that currently exists along Green Street and would \raise the entryway to plaza level. This would remove the existing awkward grade separation that is currently formed by the embankment at the street edge. The Green Street elevation would be articulated similar to the Exhibition Hall and Ballroom building. In addition, the northwest corner of the Conference Center building would have a greater setback, which would open up the view of the Civic Auditorium. The revised façade would have rhythmically spaced windows, which is in compliance with the guidelines in the Civic Center Specific Plan. The existing pyramidal skylights in the center of the roof would remain, though redesigned to be compatible with the new façade treatment. Under the proposed schematic design, the Euclid Avenue elevation would have architectural detailing and windows, which provide rhythm and visual interest, as shown in Figure 15 on page 156.

The proposed Parking Structure would be located south of the Conference Center. Two towers 30 feet apart would flank the entryway to the plaza from Euclid Avenue; one tower would be located at the southern end of the Conference Center building and the other at the northern end of the Parking Structure. The towers would have tile roofs and would serve to demarcate the pedestrian access to the plaza. The towers would allow a view into the plaza of the Civic Auditorium from Euclid Avenue. In addition, because the towers and the Conference Center building would not exceed approximately 40 feet, a view of the upper portion of the Civic Auditorium from Euclid Avenue would be preserved.

The proposed buildings would be lower in height than the adjacent Civic Auditorium. Therefore, the Auditorium would remain the prominent structure within this block. The Project would, therefore, protect the monumentality of the Civic Auditorium, which is consistent with the Citywide Design Principles.



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Source: Fentress Bradburn Architects Ltd., 2004

Figure 15
Proposed Conference Center and Parking Structure/Administrative Office Building Elevations Along Euclid Avenue

The southern façades of the new Exhibition Hall and Ballroom building would be similar in design to the existing structures on site. While the Skating Rink would be converted to ballroom space, no exterior changes would be made to the façade of the structure. The southern façades would be visible to people passing through the plazas as well as guests at the Sheraton Hotel.

The Project would create a new building-street relationship. As discussed in Section III.A, Land Use, the Exhibition and Ballroom building would not be consistent with the maximum setback of five feet along Green Street and Marengo Avenue as specified in the Draft Central District Specific Plan. However, the Project achieves the objectives underlying the setback provision through other design principles. The Project would create a much greater degree of engagement with the sidewalk than under existing conditions. The Exhibition Hall and Ballroom building would be located so as to protect the existing street trees. With the addition of office space along Green Street and Euclid Avenue in the Conference Center building, the structure would be located at the property line. This would remove the existing sunken embankment between building and sidewalk and the Conference Center and Exhibition Hall and Ballroom buildings would be at grade, thereby creating a building-street relationship.

Furthermore, the Project focuses public access and ambiance toward the public plaza space wrapping around the Civic Auditorium. The setback of the northeast corner of the new Exhibition Hall and Ballroom building would create a more expansive open area in front of the entrance of the Exhibition Hall and Ballroom building and the Civic Auditorium. By means of this design feature, the existing Ficus street trees would be protected and ample pedestrian space would be offered along the approach to the Civic Auditorium, creating an active urban streetscape with high levels of visibility and pedestrian activity around the forecourt and plazas of the Civic Auditorium. This would also establish a synergy with the pedestrian portion of Garfield Avenue within the Paseo Colorado mixed-use development that is immediately north of Green Street. The Project design would also preserve sight lines to the Civic Auditorium, an important objective of the Central District Specific Plan. In this manner the intent of the Central District Specific Plan would be advanced without strictly adhering to the 5-foot maximum setback provision.

As previously indicated, the Project would result in the reconfiguration of the Mishima and Ludwigshafen Plazas. While the overall plaza space would be reduced, the new plazas would be better integrated into the overall design of the site. The existing plazas total approximately 120,000 square feet in area. The reconfigured plazas would total approximately 75,390 square feet. This decrease in plaza area would be offset by an increase in usability of the plaza areas. The elevated form of Ludwigshafen Plaza and Mishima Plaza currently creates a break between the streetscape and the plazas. The Project would result in the removal of Ludwigshafen Plaza and the majority of Mishima Plaza and the creation of a new comprehensive system of integrated public plazas that would extend from Green Street to the Sheraton Hotel

along both sides of the Civic Auditorium. While the Project would offer less public areas, the Project's enhanced design would facilitate greater pedestrian movement than occurs under current conditions.

Of the approximately ~~108~~ 152 trees identified on and around the Project site, ~~51~~ 77 of them, ~~mainly within Ludwigshafen Plaza and Mishima Plaza,~~ would be removed to accommodate the Project. Of these 77 trees, 72 are located on the site and 5 are street trees. The Project would result in the ~~planting of five trees~~replanting of eight of the trees ~~on the site~~, thus resulting in the net loss of ~~46~~ 69 trees. It is not feasible to protect these trees as part of the Project, as these trees occupy the portion of the site that would be occupied by the proposed Exhibition Hall and Ballroom building and by the Parking Structure/Administrative Offices building. Since the trees are considered public trees, all trees on the Project site are protected regardless of the size or species. PMC Section 8.52 (City Trees and Tree Protection Ordinance) requires review and approval for removal of these trees. The project would not result in the destruction of any landmark eligible trees, stand of trees, rock outcropping or natural feature recognized as having significant aesthetic value. More specifically, the Landmark Moreton Bay Fig tree located adjacent to the site, the existing palms on the Project site located to the east and west of the Civic Auditorium, and the majority of the existing Ficus street trees would be protected. Therefore, the Project would not result in a significant impact with regard to the removal of natural features.

The Project would result in a number of changes to the physical environment, which would affect the aesthetic quality of the community. With regard to compliance with applicable City plans, policies and regulations, the Project would be generally consistent with the Citywide Design Principles in that the Project would respect the architectural design and monumentality of the Civic Auditorium by developing buildings that would be lower in height and overall scale compared with the Civic Auditorium thereby preserving the prominence of that structure on the Project site. The design of the new buildings would be architecturally compatible with the historic character of the Civic Auditorium's setting in terms of size, scale, massing, material, texture, and color. The materials and colors proposed for the Exhibition Hall and Ballroom building and Conference Center would complement the Civic Auditorium. The Project incorporates an open-air passage and block penetrations on the eastern portion of the site between the Conference Center and the Parking Structure, which serves to breakdown building mass and establish visual connections into the plaza and to the Civic Auditorium. While the Exhibition Hall and Ballroom building are not broken into separate structures, this building incorporates articulation, architectural detailing, varying heights, and setbacks, which serve to reduce the overall mass and bulk. The Project also provides a physical and visual connection between indoor and outdoor space through the use of openings onto the plaza areas.

The Project would be consistent with the policies of the Pasadena General Plan relevant to design. The Project would be consistent with Policy 5.7 of the Pasadena General Plan since

the Project would improve the environment for the public use and enjoyment. The Project would support the distinctiveness of the area, as well as the special characteristics of the existing fabric since the proposed buildings have been designed to respect the Civic Auditorium. In accordance with Policy 5.9 of the Pasadena General Plan, the Project is in scale with the surrounding development as the proposed heights of the building would be lower than that of the Civic Auditorium. The scale and mass of the structures has also been broken up through the use of articulation and architectural features. The Project would also improve the open space areas that currently exist in the public setting, as is stated in Policy 5.10, by improving the building-street interface along Green Street and Euclid Avenue and connecting the plazas around the new buildings.

The design of the Project would support the guidelines in the Civic Center Specific Plan. The Project would create usable, public spaces and would reconnect the plazas with the street level, which would improve physical access. With a new Exhibition Hall and Ballroom building, new façades for the Conference Center building and an enhanced streetscape along Green Street, the Project would embrace the existing connection between the Conference Center complex and the rest of the Civic Center and positively transform the site from what the Civic Center Specific Plan calls "unfortunately blank and crudely formed" and "a dead wall to the adjoining streets." The existing plazas, called "lifeless and bare" by the Civic Center Specific Plan, would be replaced by the new buildings and by the new plazas connecting the Civic Auditorium with the Exhibition Hall and Ballroom building, the Conference Center building, the Parking Structure, and adjoining sidewalks along Green Street, Marengo Avenue, and Euclid Avenue. The change in form, articulation, and interface of the structures and plazas would result in buildings that are more visually compatible with the Civic Auditorium, Paseo Colorado, and other uses along Green Street. In addition, the buildings would have varying setbacks and heights to result in building volumes in scale with the landmark buildings of the Civic Center. Furthermore, architectural features would highlight building entrances and windows would be rhythmically spaced with no reflective glass, as suggested in the guidelines of the Civic Center Specific Plan. The Project would also be consistent with the Draft Central District Specific Plan for the reasons discussed above.

The details of the Project, such as the screening of mechanical equipment and landscaping, have not yet fully been developed. However, it is anticipated that the Project would comply with applicable sections in the Zoning Ordinance. Thus, it is anticipated that the Project's mechanical equipment would be screened or located out-of-view from public rights-of-way. Rooftop equipment would be concealed behind a parapet. Furthermore, details regarding the screening of mechanical equipment and landscaping would be reviewed through the City's design review process to ensure compliance with the PMC.

The proposed Project's design as presented in this EIR is schematic in nature. It has been presumed that the Project's program, massing, height, setbacks, and pedestrian and vehicular

access are to be as presented in this EIR. Other aspects of the design, specifically building articulation, exterior colors, and materials, will be refined as part of the City's ongoing design review process. The Applicant is committed to a final building envelope that would be in substantial compliance with that presented in this EIR and a final design that would conform to all mitigation measures included in this EIR. As such, the final design of the Project would be consistent with the analyses presented in this EIR.

The Project would be generally consistent with applicable plans, policies, and regulations with regard to aesthetics. The Project would not have a demonstrable negative aesthetic effect. Rather, the Project would contribute positively to the visual character of the area as discussed above. Therefore, the Project would not result in significant impacts with regard to aesthetics.

3.4.2 Views

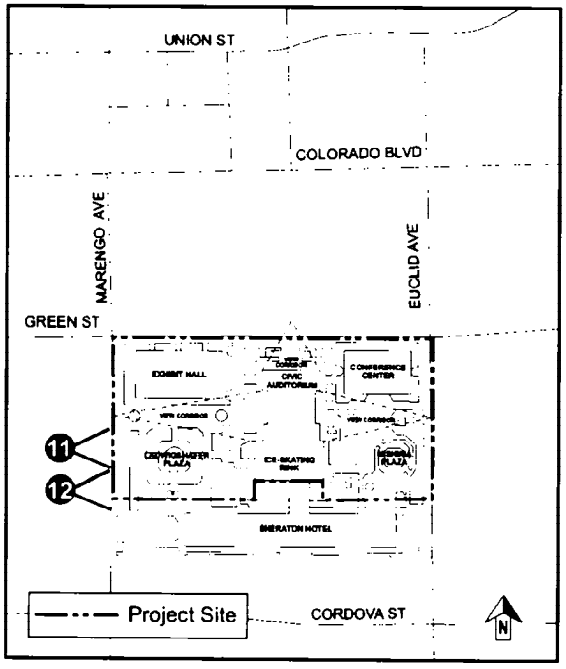
The Project would respect the important role of the Civic Auditorium as set forth in the Civic Center Specific Plan. The Project maintains the existing visual access to the Civic Auditorium along the axis established by the 1923 Civic Center Plan. However, the view of the Civic Auditorium for motorists and pedestrians traveling east along Green Street would be reduced from the existing view due to the increase in building height (from 19.5 feet to 40 feet along Green Street) of the proposed Exhibition Hall and Ballroom building compared with the existing building. While the Exhibition Hall and Ballroom building would be lower than the Civic Auditorium, the existing view would be diminished. The view of the Civic Auditorium for pedestrians walking west along Green Street would be increased as a result of the modifications to the front of the Conference Center building. With the step backs at the northeast corner of the Exhibition Hall and Ballroom building and at the northwest corner of the Conference Center building, the Project would provide a view corridor to the Auditorium for travelers along Green Street. Therefore, since the overall reduction in view would be limited, the Project would not result in a significant impact with regard to obstruction of valued views from public or private vantages along Green Street.

The Project proposes to develop the existing Ludwigshafen Plaza and a portion of Mishima Plaza with new buildings, altering the existing pedestrian and visual access to the Civic Auditorium from Marengo Avenue and Euclid Avenue. The view corridors are not identified in the 1923 Civic Center Plan. However, the Civic Center Specific Plan states that visual and pedestrian access through and into the block from Euclid Avenue and Marengo Avenue be maintained as part of reconnecting the Civic Auditorium to the rest of the Civic Center. The Civic Center Specific Plan specifically refers to the 130-foot-wide viewshed and pedestrian access from Marengo Avenue to the Auditorium. As such, the Project would not allow the extensive view of the Auditorium that currently exists from Marengo Avenue. In addition, the view of the Auditorium from Euclid Avenue would be reduced. However, a distance of 30 feet

would be provided between the columns at the southern end of the Conference Center and the northern end of the Parking Structure. This space opens up to a 70-foot distance, thus allowing an even greater view of the Civic Auditorium upon entering the plaza space. However, the Project would not conform to the Civic Center Specific Plan with regard to the view corridors. The purpose of this policy is to maintain pedestrian and visual access to the historic Civic Auditorium. However, only the less distinctive sides of the Auditorium are visible from Marengo Avenue or Euclid Avenue. In addition, the existing grade differential between the adjacent sidewalks and the interior of the Project site, coupled with the physical separations created by access to the subterranean parking levels, creates an awkward interface between the interior of the Project site and both Marengo and Euclid Avenues, and concrete walls around the perimeter of the plazas further impair visual access as shown in Figure 16 and Figure 17 on pages 162 and 163, respectively. For these reasons, visual access to the site along Marengo Avenue and Euclid Avenue is presently secondary compared to Green Street. Furthermore, this impact would be substantially reduced by the enhanced pedestrian and visual access along Green Street and enhanced open space around the auditorium, enabling improved pedestrian and visual access through the site from Green Street and from Garfield Avenue. With regard to the draft Central District Specific Plan, the Plan does not identify maintaining view corridors. Therefore, the Project would not conflict with the Central District Specific Plan with regard to view corridors if the Central District Plan is adopted as currently drafted. The Project would not result in a significant impact with regard to obstruction of valued views from public or private vantages from the east or west.

The rooms of the Sheraton Hotel also overlook the Project site, with views of the plazas and the rear of the Civic Auditorium where the Skating Rink is currently located. The Project would change the visual character of the Project site as viewed from the Sheraton Hotel. However, existing views of the Civic Auditorium, including the Ice Skating Center (which would be converted to ballroom space) would remain. As the Sheraton Hotel extends the entire length of the block from Marengo Avenue to Euclid Avenue, the Project would not alter the views from the neighborhood to the south, as these viewing opportunities are blocked by the Sheraton Hotel. Therefore, the Project would not result in a significant impact with regard to obstruction of valued views from public or private vantages from the south.

The Project would generally comply with the Sub-District Character Recommendation in the Citywide Design Principles since the Project would not impair sight lines of City Hall or the Central Library. In addition, the Project would not alter the dominance of City Hall's dome structure. However, as discussed above, the Project would alter the existing view of the Civic Auditorium from Marengo Avenue and Euclid Avenue, as well as for motorists and pedestrians traveling east along Green Street. However, the Project would contribute positively to the overall visual character of the area and would not considerably obstruct any significant views of the area.



Photograph 11: View of Ludwigshafen Plaza from mid-block of Marengo Avenue.

Photograph 12: View of Ludwigshafen Plaza from Marengo Avenue showing entrance to loading dock.

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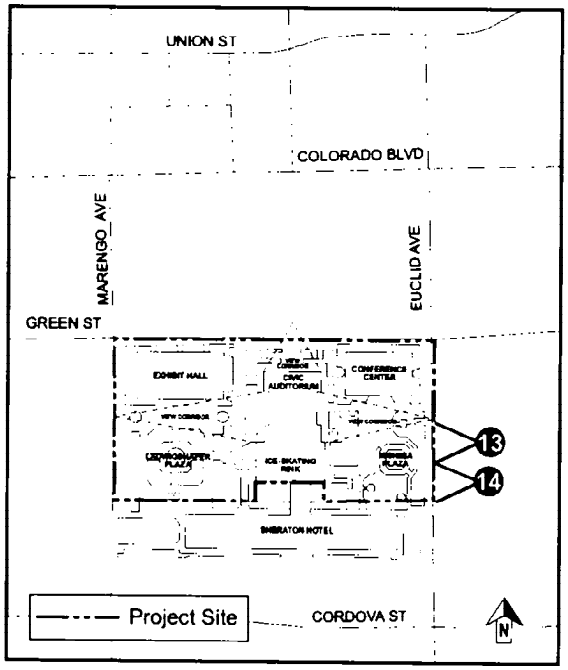
Figure 16
View of Ludwigshafen Plaza

Source: PCR Services Corporation, 2003

Photograph 13: View of Mishima Plaza from mid-block of Euclid Avenue.



Photograph 14: View of Mishima Plaza from Euclid Avenue showing existing entrance to parking levels.

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Figure 17
Views of Mishima Plaza

Source: PCR Services Corporation, 2003

The proposed Project's design as presented in this EIR is schematic in nature. The Applicant has indicated that it is committed that any redesign of the Project, should such a redesign occur, would incorporate a building envelope (e.g., development program, building height, setbacks, and building massing) and site access and loading dock plan that would be in substantial compliance with that set forth in this EIR.

3.4.3 Light and Glare

The Project could increase ambient light levels on the site and in the immediate vicinity due to the increase in building development, including the Parking Structure. Since the façades of both the Exhibition Hall and Ballroom building and the renovated Conference Center would be more visible from the street, the exterior lighting used to light the entrances, as well as the internal lighting, could increase the ambient lighting levels in the area. The closest sensitive uses are the residences located to the north across Green Street in the Paseo Colorado development, residences located to the east across Euclid Avenue, the Sheraton Hotel, and residential uses south of the hotel. All exterior lighting would be designed in accordance with Section 17.33.050 of the PMC to confine the emitted light to the property by visually screening the light source from surrounding properties and streets. Confinement of the emitted light would eliminate light pollution or intrusion onto adjacent or abutting properties or structures. While the Parking Structure has openings along the eastern façade, the partial, solid walls of the structure would serve to limit the vehicle headlights from shining onto adjacent properties across Euclid Avenue. Lighting along the southern elevations of the Project would primarily be security lighting as glass along the southern façades is limited. Lighting within the Parking Structure would be primarily security lighting and would be shielded so as to avoid spillover. Although the Project may result in an increase in ambient lighting level, the Project would not result in substantial impacts to adjacent sensitive uses because the site and surroundings feature existing nighttime light levels consistent with the location in an active urban center. Furthermore, the Project would comply with the PMC regarding lighting. Therefore, the Project would not result in significant impacts with regard to lighting.

The intensity of glare would depend primarily on the building materials and colors used in the new development. The Project would comply with Section 17.64.260 of the PMC, which limits the use of mirror or highly reflective glass to no more than 20 percent of a building surface visible to the street. No exterior changes would occur to the Civic Center and the Ice Skating Center. The new Exhibition Hall and Ballroom building, the Parking Structure, and the renovated Conference Center would not include the use of highly reflective glass and would not result in glare for motorists or pedestrians in the Project area. The majority of vehicles would be parked on levels that would provide solid, protective walls, and, therefore, there would be no reflection of sunlight from parked vehicles. Glare impacts on surrounding properties would not result from the vehicles parked on the rooftop level with either the 5-level or 7-level structure due to the angle of incidence (i.e., angle at which sunlight is reflected off the vehicles onto the

areas below). Therefore, the Project would not result in new development that would substantially produce glare onto adjacent sensitive uses that would substantially affect activities or uses in an adverse manner. As such, glare impacts would be less than significant.

The proposed Project's design as presented in this EIR is schematic in nature. It has been presumed that the Project's program, massing, height, setbacks, and pedestrian and vehicular access are to be as presented in this EIR. Other aspects of the design, specifically building articulation, exterior colors, and materials, will be refined as part of the City's ongoing design review process. The Applicant is committed to a final building envelope that would be in substantial compliance with that presented in this EIR and a final design that would conform to all mitigation measures included in this EIR. As such, the final design of the Project would be consistent with the analyses presented in this EIR.

3.4.4 Shade/Shadow

Shading is a common and expected quality in urban areas and it is often considered a beneficial feature of the environment when it provides cover from excess sunlight and heat. However, it can have adverse impact if the blockage of direct sunlight substantially affects adjacent properties or when it interferes with the performance of sun-related activities. While some incidental shading on sun-sensitive uses is commonly acceptable, shading impacts are typically considered substantial when they occur for large portions of the main daylight hours.

The proposed Project would increase the amount of shading on site and off site by replacing the Exhibition Hall with a larger, taller building, extending further south along Marengo Avenue, and with the addition of the Parking Structure that would be located to the south of the existing Conference Center along Euclid Avenue.[37] The impacts of shading from the additional building mass would not adversely affect any off-site locations. Uses to the south of the proposed Project include the Sheraton Hotel (with an outdoor swimming pool) and tennis courts that might be a sun-sensitive uses. Project shading would not occur on these uses during the main daylight hours, due to the site orientation and sun movements that limit the occurrence of shadows toward the south. In addition, the shade/shadow from the Civic Auditorium and the portion of the building formerly used for the Ice Skating Center would not be altered, since no exterior changes would be made to this structure. The most extensive shading toward the east would occur at 9:00 A.M. on the winter solstice. Such shading would fall within Marengo Avenue. The most extensive shading to the north would occur at the winter solstice with shading falling mostly within Green Street. From about 9:00 A.M. to about 9:30 A.M. the shadows could extend to the sidewalk on the north side of Green Street. The greatest shading to the east would

[37] *The shadow analysis contained in Appendix C is for the 7-level structure. The length of shadow cast by a 5-level structure would be less than that cast by a 7-level structure.*

occur at 3:00 P.M. on the winter solstice and would extend on to the sidewalk on the eastern side of Euclid Avenue. Shadow analysis diagrams are shown in Appendix C of this EIR.

The Civic Auditorium and Pasadena Ice Skating Center (to be converted to ballroom space) are on-site uses that contain indoor activities that would not be adversely affected by shading. Otherwise, on-site shading would fall on pedestrian areas: Ludwigshafen Plaza and Mishima Plaza as well as sidewalks along Marengo Avenue, Green Street, and Euclid Avenue. Activities within these areas are of short duration and do not require sunlight. Since, the Project would not result in substantial shading effects on sun-sensitive uses, shading impacts would be less than significant.

The proposed Project's design as presented in this EIR is schematic in nature. The Applicant has indicated that it is committed that any redesign of the Project, should such a redesign occur, would incorporate a building envelope (e.g., development program, building height, setbacks, and building massing) and site access and loading dock plan that would be in substantial compliance with that set forth in this EIR. However other aspects of the design, specifically building articulation, exterior colors, and materials, are likely to be refined as part of the City's ongoing design review process. Refinement of the building articulation could result in minor changes to the shadow profile of the Project. However, as the massing and height of the Project would be unchanged, the extent of shade and shadow would be as described in the EIR. With compliance with the mitigation measures included in this EIR, Project impacts will not be greater than those described herein.

4.0 MITIGATION MEASURES

As described above, the Project would generally be consistent with applicable plans, policies or regulations. Notwithstanding, the Project would conflict with the Civic Center Specific Plan in that the Project would result in the obstruction of the pedestrian access view corridor to the Civic Auditorium from Marengo Avenue. However, the purpose of the Project is to create a Conference Center that provides space that is flexible so as to create greater utility and thus a benefit to the City at the local and regional levels. The Project would utilize the entire site, which would serve to increase the overall pedestrian activity and would, therefore, contribute to the overall vitality of the area. Therefore, since the Project would be generally consistent with the Civic Center Plan as discussed above, this is not considered a significant environmental impact. As such, Project development would result in less-than-significant aesthetic impacts and no mitigation measures are necessary.

5.0. NET UNAVOIDABLE IMPACTS

The Project would be generally consistent with applicable City plans, policies, and regulations, including the Citywide Design Principles, and has been designed to defer to and complement the historic Civic Auditorium. The Project also would improve visual interest, draw pedestrians into the site from the surrounding area, and provide a substantial change from the monotonous form of the existing building façade. The view corridor that the existing plaza provides from Marengo Avenue to the Civic Auditorium would be obstructed by the Project. However, based on the proposed building's schematic building design and articulation, as well as compliance with all mitigation measures, obstruction of this view constitutes a less-than-significant impact. Removal of existing trees would be offset by landscaping in the new and improved plaza areas and along the street edges. The Project would result in ambient lighting and glare characteristics that are compatible with its location in an active urban center and would be consistent with existing regulations. The Project is also subject to design review by the City of Pasadena Design Commission. This process will further ensure that the aesthetic impacts of the Project are not significant. Therefore, the Project would not result in a net unavoidable impact with regard to aesthetics.

6.0 CUMULATIVE IMPACTS

While several projects are proposed in the general vicinity of the Project site, due to the ~~relatively flat topography and the~~ urbanized nature of the area, these projects would not be visible from the Project site or the immediately surrounding area. The closest development on the related projects list would be the Urban Village, which is a proposed residential senior housing and retail project, located on North Oak Knoll Avenue, to the west of the Project site. Due to the nature of this project, it would not substantially contribute to cumulative aesthetic, view, light, glare, or shade/shadow impacts. In addition, each of the related projects would be subject to the City's project and permit approval process and may be required to undergo design review. As such, no significant cumulative impact to aesthetics, views, light and glare, or shade/shadow would occur.

1.0 ENVIRONMENTAL SETTING

1.1. Regulatory Setting

In response to longstanding concerns regarding air quality, federal, State, and local authorities have adopted rules and regulations that require an evaluation of a project's potential impacts to air quality. The following discussion focuses on current air quality planning efforts and the responsibilities of the agencies involved in these efforts. A discussion of ambient air quality standards is also provided.

1.1.1 Federal Clean Air Act

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes Federal health-based air quality standards, known as National Ambient Air Quality Standards (NAAQS), for the following criteria pollutants: (1) Ozone (O_3); (2) Nitrogen Dioxide (NO_2); (3) Sulfur Dioxide (SO_2); (4) Particulate Matter (PM_{10}); (5) Carbon Monoxide (CO); and (6) Lead (Pb). Table 11 on pages 169 and 170 shows the NAAQS currently in effect for criteria pollutants. The NAAQS were amended in July 1997 to include an additional standard for ozone and to adopt a NAAQS for fine particulates ($PM_{2.5}$).

The CAA also specifies future dates for achieving compliance with the NAAQS and mandates that states submit and implement a State Implementation Plan (SIP) for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones.

The City of Pasadena is included in the South Coast Air Basin (Basin), which has been designated as a non-attainment area for certain pollutants that are regulated under the CAA. The Basin fails to meet the National standards for O_3 (1-hour and 8-hour) and PM_{10} and therefore is considered a Federal non-attainment area for these pollutants. Within the non-attainment

Table 11

AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standard [a]	National Primary Standard [a]	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone (O_3)	1 hour	0.09 ppm	0.12 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Motor vehicles.
	8 hour	—	0.08 ppm		
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Classified as a chemical asphyxiant, CO interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hour	9.0 ppm	9 ppm		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	—	0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.25 ppm	—		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	0.03 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	—		
	24 hour	0.04 ppm	0.14 ppm		
Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 $\mu g/m^3$	—	May irritate eyes and respiratory tract. Absorbs sunlight, reducing amount of solar energy reaching the earth. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Geometric Mean	—	50 $\mu g/m^3$		
	24 hour	50 $\mu g/m^3$	150 $\mu g/m^3$		
Particulate Matter ($PM_{2.5}$) [b]	Annual Geometric Mean	12 $\mu g/m^3$	15 $\mu g/m^3$	Increases respiratory disease, lung damage, cancer, premature death; reduced visibility; surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).
	24 Hour	—	65 $\mu g/m^3$		

Table 11 (Continued)

AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standard [a]	National Primary Standard [a]	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Lead	Monthly	1.5 ug/m^3	—	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurologic dysfunction (in severe cases).	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	—	1.5 ug/m^3		
Sulfates (SO_4)	24 hour	25 ug/m^3	—	Decrease in ventilatory functions; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; property damage.	Industrial processes.

[a] *ppm=parts per million and µg/m^3 = micrograms per cubic meter.*

[b] *A National air quality standard for $PM_{2.5}$ was adopted in 1997. Presently, no methodologies for determining impacts relating to $PM_{2.5}$ have been developed. In addition, no strategies or mitigation programs for this pollutant have been developed or adopted by federal, State, or regional agencies.*

Source: California Air Resources Board, Ambient Air Quality Standards, *2003 and the USEPA, 2003.*

designation, there are seven categories that are based on projected attainment date and level of concentration above the standard. The seven categories are as follows: basic, marginal, moderate, serious, severe-15, severe-17, and extreme. The CAA sets certain deadlines for meeting the NAAQS within the Basin including: (1) 1-hour ozone by the year 2010; 8-hour ozone by the year 2021; and (2) PM_{10} by the year 2006. No official determination has been made regarding the attainment status for the new $PM_{2.5}$ standard. However, selected monitoring stations have already begun analyzing air samples for $PM_{2.5}$. Deadlines for meeting this standard will be set for 10 years after the region is designated as being in non-attainment by the United States Environmental Protection Agency (USEPA). Table 11 lists the criteria pollutants, along with their respective standards, health and atmospheric effects, and major sources. The Basin's attainment status with regard to each criteria pollutant is shown in Table 12 on page 171.

1.1.2 California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS incorporate additional standards for most of the criteria

Table 12

SOUTH COAST AIR BASIN ATTAINMENT STATUS

Pollutant	National Status	California Status
Ozone (O_3) (1-hour standard)	Extreme	Non-attainment
Ozone (O_3) (8-hour standard)	Severe-17	Non-attainment
Carbon Monoxide (CO)	Serious [a]	Non-attainment
Sulfur Dioxide (SO_2)	Attainment [b]	Attainment [b]
Nitrogen Dioxide (NO_2) [b]	Attainment [b]	Attainment
PM_{10}	Serious	Non-attainment
$PM_{2.5}$	Pending [c]	N/A
Lead (Pb)	Attainment [b]	Attainment [b]

N/A = not applicable

[a] *The Basin has technically met the CO standards for attainment since 2002, but the official status has not been reclassified by the USEPA.*

[b] *An air basin is designated as being in attainment for a pollutant if the standard for that pollutant was not violated at any site in that air basin during a three year period.*

[c] *Attainment status with the $PM_{2.5}$ standard will not be determined until 2004.*

Source: USEPA Region 9 and California Air Resources Board, 2004.

pollutants and has set standards for other pollutants recognized by the State, such as $PM_{2.5}$, sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. In general, the California standards are more health protective than NAAQS. The Basin currently meets the California standard for sulfates, hydrogen sulfide and vinyl chloride, but does not meet the California standard for visibility and is not expected to fully meet the visibility standard until 2010.

1.1.3 South Coast Air Quality Management District (SCAQMD)

The SCAQMD has jurisdiction over an area of 10,743 square miles consisting of all of Orange County, all of Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Basin is a sub-region of the SCAQMD's jurisdiction and covers an area of 6,745 square miles. The Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. While air quality in this area has improved, the Basin requires continued diligence to meet air quality standards.

The SCAQMD has adopted a series of Air Quality Management Plans (AQMP) to meet the CAAQS and NAAQS. These plans require, among other emissions-reducing activities, control technology for existing sources; control programs for area sources and indirect sources; a SCAQMD permitting system designed to allow no net increase in emissions from any new or

modified permitted sources of emissions; transportation control measures; sufficient control strategies to achieve a five percent or more annual reduction in emissions (or 15 percent or more in a three-year period) for Reactive Organic Compounds (ROC), Nitrogen Oxides (NO_X),[38] CO, and PM_{10}; and demonstration of compliance with the California Air Resources Board's established reporting periods for compliance with air quality goals.

The SCAQMD adopted a comprehensive AQMP update, the 2003 Air Quality Management Plan for the South Coast Air Basin, on August 1, 2003.[39] The 2003 AQMP outlines the air pollution control measures needed to meet federal health-based standards for O_3 (1-hour standard) by 2010, and for PM_{10} by 2006. It also demonstrates how the federal standard for CO, achieved for the first time at the end of 2002, will be maintained.[40] This revision to the AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes and new air quality modeling tools. The 2003 AQMP is consistent with and builds upon the approaches taken in the 1997 AQMP and the 1999 Amendments to the Ozone SIP for the South Coast Air Basin for the attainment of the federal ozone air quality standard.[41] Lastly, the plan takes a preliminary look at what will be needed to achieve new and more stringent health standards for ozone and $PM_{2.5}$.

In adopting the AQMP, the SCAQMD: (1) committed to analyzing 12 additional long-term control measures, such as requiring the electrification of all cranes at ports; (2) set a target for distributing needed long-term emission reductions between AQMD, CARB and EPA; (3) assigned emission reductions to the EPA (i.e., in the event that EPA rejects the plan, this provision would be eliminated); and (4) forwarded to CARB and EPA a list of more than 30 specific measures for consideration to further reduce emissions from on- and off-road mobile sources and consumer products. The AQMP identifies 26 air pollution control measures to be adopted by the SCAQMD to further reduce emissions from businesses, industry and paints. It also identifies 22 measures to be adopted by CARB and the U.S. Environmental Protection Agency to further reduce pollution from cars, trucks, construction equipment, aircraft, ships and consumer products.

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[38] *NO_X is a collective term that includes all forms of nitrogen oxides (NO, NO_2, NO_3) emitted as by-products of the combustion process. However, since most of these chemicals eventually convert to NO_2 in the atmosphere, all NO_X emissions are conservatively reported as the criteria pollutant NO_2.*

[39] *South Coast Air Quality Management District, AQMD Website, www.aqmd.gov/news1/aqmp_adopt.htm.*

[40] *The Basin has technically met the CO standards since 2002, but the official attainment status has not been reclassified by the USEPA.*

[41] *Until the 2003 AQMP is officially approved by the USEPA, the 1997 AQMP and the 1999 Amendments to the Ozone SIP will remain in effect.*

The SCAQMD also adopts rules to implement portions of the AQMP. Several of these rules may apply to construction or operation of the Project. Rule 403 requires the implementation of best available fugitive dust control measures during active operations capable of generating fugitive dust emissions from onsite earth-moving activities, construction/ demolition activities, and construction equipment travel on paved and unpaved roads. Specific control requirements are included in Appendix D of this EIR.

Certain stationary sources of air pollution (i.e., boilers, heaters and generators) may require permits from the SCAQMD pursuant to Rules 201, 202 and 203. Emission increases related to those sources may be subject to SCAQMD Regulation XIII or Regulation XXX which, among other things, requires that Best Available Control Technology (BACT) be utilized to reduce pollutants and that any increases of criteria air pollutants be offset by achieving equivalent emission reductions at a facility within the Basin. Emergency equipment, however, is exempt from modeling and offset requirements (Rule 1304) and does not require a health risk assessment (Rule 1401).

In addition to the AQMP and its rules and regulations, the SCAQMD has published a handbook (*CEQA Air Quality Handbook*, November 1993) that is intended to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts. This handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis.

1.1.4 Regional Comprehensive Plan and Guide

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated metropolitan planning organization (MPO) for the majority of the southern California region and is the largest MPO in the nation. With respect to air quality planning, SCAG has prepared the *Regional Comprehensive Plan and Guide* (*RCPG*) for the SCAG region, which includes Growth Management and Regional Mobility chapters. These chapters form the basis for the land use and transportation components of the AQMP and are utilized in the preparation of air quality forecasts and the consistency analysis that is included in the AQMP.