FINAL SUPPLEMENTAL

ENVIRONMENTAL IMPACT REPORT
on the
CHULA VISTA
TOWN CENTRE REDEVELOPMENT PLAN
RESIDENTIAL COMPONENT

prepared by Toups Corporation
for
CHULA VISTA REDEVELOPMENT AGENCY
276 Fourth Avenue
Chula Vista, Calif. 92010

the
environmental
studies
group

Certified by the Chula Vista
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PRC ✶ TOUPS CORPORATION
A PLANNING RESEARCH CORPORATION COMPANY
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INTRODUCTION
1.1 PURPOSE

This Environmental Impact Report is prepared as a supplement to the Master Environmental Impact Report for the Town Centre Redevelopment Plan. This Supplement EIR provides a detailed review and analysis of the potential environmental impacts that will result from the implementation of the residential component of the redevelopment plan. This report is informational in nature and is intended for the use by the Chula Vista Redevelopment Agency in evaluating the potential environmental impacts of the proposed project. The EIR contains an analysis of mitigation measures and alternatives to the project.

The Supplemental EIR has been prepared in accordance with the requirements of the City of Chula Vista Environmental Review Policy, and complies with all criteria standards and procedures of the California Environmental Quality Act of 1970 (PRC 21000 et.seq.) and State EIR Guidelines (Administrative Code 15000 et. seq.).

This report has been prepared by the Environmental Studies Group at PRC-TCUPS Corporation, La Jolla, in cooperation with the Environmental Review Coordinator of the City of Chula Vista.
1.2 EXECUTIVE SUMMARY

The Redevelopment Agency of the City of Chula Vista has established a Redevelopment Plan for its Town Centre, and a master Environmental Impact Report (EIR) has been prepared for that Redevelopment Plan. The redevelopment project has been designed to prevent the further deterioration of approximately 137 acres of Chula Vista's urban core and to re-establish the importance of the Central Business District within the community. To achieve this goal, a variety of land uses and development concepts have been established to develop a more desirable and compatible relationship between the physical and social environments of the Town Centre and adjacent areas. The Plan encourages new development, an intensification of existing land uses, and the construction of multi-family residential units and additional public facilities.

Within the boundaries of the Redevelopment Plan, an area of approximately 16½ acres has been identified as the Focus Area, and a development plan for this Focus Area has been approved by the Redevelopment Agency. This supplemental EIR addresses the residential portion of the development plan. The project will construct 130 two-, three- and four-story apartment units with parking for 260 automobiles. The average size of the units is 1,000 square feet with a market price range of between $50,000 and $80,000. Total estimate cost to construct these units, including financing, is $6 million.

The project will also construct a six-story structure containing 75 residential units with an underground parking structure that will accommodate 115 automobiles. Total cost to construct these units is $4.2 million. The total construction cost of this residential project is $10.2 million.

The environmental analysis indicates that the residential component of the Focus Area will generate approximately 1230 average daily trips. In 1985, the resident-generated trips on the major roads in the vicinity will be less than four percent of total traffic volumes on those roads. The impact of the project on major roads in the vicinity will be insignificant.
Projected noise levels for 1985 affecting the project site are expected to increase due to increased traffic volumes. A 10 foot wide strip paralleling Fourth Avenue will be impacted by noise exceeding 65 dBA CNEL. Noise levels exceeding 60 dBA will extend 80 feet onto the property. However, satisfaction of State noise insulation requirements will reduce interior noise levels to acceptable levels. Additionally, no outdoor activities or recreational facilities are proposed in areas subjected to noise greater than 60 dBA CNEL. The project, thus, would not create any significant noise impacts.

The project will increase the demand for utilities, energy resources, community services and facilities. All utilities and services are currently available to serve the project; the incremental increase in demand will not overburden existing urban support systems. No significant effects would occur if the project were implemented.

Portions of the project site are subject to inundation during a 50-year flood, and proposed underground parking structures and landscaped areas could be inundated if the project is implemented. Flooding of the site could be prevented by construction of a berm to an elevation of 69 feet MSL along the southern boundary of the property. Although this mitigation measure would decrease the area subject to inundation, it would not displace flood flows into other adjacent areas. Due to decreased permeability, the project would increase flood flows by only two to three cubic feet per second, an insignificant amount.

A variety of alternatives are addressed in the EIR. None appear to reduce the potential environmental effects while achieving the goals of the project.

In conclusion, implementation of the residential project would not have significantly adverse environmental effects if mitigation measures identified in the EIR are implemented.
PROJECT DESCRIPTION
Background

The City of Chula Vista, in cooperation with private interests, is seeking to renovate and revitalize the Third Avenue business district. With the development of a wide range of public, commercial and residential uses, the City intends to provide a focal point for the City and an identity with the original urban center.

Major objectives of the redevelopment project include:

- Eliminate blighting influences, including incompatible and noxious land uses, obsolete structures and inadequate parking facilities.

- Eliminate environmental deficiencies, including small irregular lot and block subdivisions, poorly planned streets and economic and social deficiencies.

- Strengthen the mercantile posture of Town Centre and improve retail trade therein.

- Renew the Town Centre's physical plant and improve land use patterns and spatial relationships.

- Retain and expand viable land uses, commercial enterprises and public facilities within the area.

- Attract capital and new business enterprises to the core area.

- Accommodate future local and regional mass transit and related facilities, including improvement of off-street parking areas and provision for a mini-transit intra-project system.

- Establish Town Centre as the South Bay's principal center for specialty goods and services.

- Achieve comprehensive beautification of the area, including its buildings, open space, streetscape and street furniture.

- Encourage multi-family, middle-income residential units in and near the core area.

The proposed project is a portion of the adopted Town Centre Redevelopment Plan. Figure 2.0-1 illustrates the extent of the redevelopment plan area and the designated land uses envisioned for the
redevelopment plan map

Town Centre Redevelopment - Residential Component
area. The project site is located within Subarea One, the largest of the plan's subareas. This portion of the redevelopment area is where private interests are being encouraged in the revitalization effort.

Residential Development

This project proposes the development of 205 multi-family residential units on approximately 6.3 acres. The location of the project complexes and the other proposed uses for the area are illustrated on the attached plot plan. A reduced copy of this plan is shown on Figure 2.0-2.

The gross density for the entire residential area is estimated at 32.7 dwelling units per acre. The actual densities within the project will vary, with the higher densities to be located nearest the Third Avenue business district.

A six-story apartment complex with 75 two- and three-bedroom units is located on the portion of the site closest to Third Avenue. The units will be located in four structures which will cover approximately 26 percent of the project area. Within this high-rise complex, one third of the area is for recreational use, including a swimming pool and two tennis courts. Parking for this development will be below the tennis courts and will accommodate 115 cars. The remainder of the site is designed for landscaped areas, open spaces and walkways.

The remaining 130 dwelling units will be located on approximately five acres in two-, three- and four-story apartment complexes. Structures will cover approximately 22 percent of the site, and parking will cover approximately 13 percent. Landscaped areas featuring large courtyards will cover the remaining 65 percent of the site.

The ultimate population of the proposed project is estimated at 513 persons, based on 2.5 persons per dwelling unit. Professional, business or retired people, with characteristically limited families, are the groups likely to be attracted to this development.

Circulation

Access to the six-story apartment complex will be provided by a private access way which leads from Third Avenue to a parking facility planned in
the development area (see the plot plan). Access to the larger portion of the residential development will be from Fourth Avenue via Center Street.

According to the proposed development design, a total of 375 parking spaces will be available to the 513 residents of the project. A majority of these parking spaces (307) will be in underground or sub-level parking facilities. The total available parking provided by the project exceeds the standard requirements of the City of Chula Vista for residential development.
IMPACT ANALYSIS
3.1 SOILS

A soils and engineering analysis of the project site was prepared by Inter-City Soils, Incorporated, dated February 6, 1976. This report is included in the Appendix and is abstracted below.

3.1.1 Project Setting

Four borings to depths varying from 40 to 59 feet were conducted on the western half of the project site. However, the consistency of the borings and lack of apparent irregularities is sufficient to conclude the testing was adequate for the entire property.

Soils on the site are dense and composed of sandy clay and clayey sand with upper strata inter-bedded with layers of gravel. The soils at depths below three feet were very firm and exhibited high load bearing capabilities. Moderate amounts of moisture were found in the soils at upper levels but this condition does not pose a substantial hazard regarding shrink-swell behavior or differential settlement.

3.1.2 Impact

The firm and stiff natural soils on the site will provide adequate support for the proposed buildings if footings are designed for soil bearing pressures as indicated in the attached report. Further settlement studies may be necessary for the location of the six-story complex. Footing excavations should be inspected by a qualified soils engineer during construction to verify that the footings are founded in adequately bearing strata.

Grading of the above soils during project development will present no substantial problem due to the sandy clay nature of the soils and the absence of large amounts of rock.

3.1.3 Mitigation

No additional measures beyond those precautions mentioned above are proposed nor are any deemed necessary.
3.1.4 Analysis of Significance

No substantially adverse effects with regard to the capabilities of soils are envisioned with implementation of the proposed project.
3.2 DRAINAGE PATTERN

A drainage analysis of the proposed project site was prepared for the Park West Complex (EIR 75-3), by Inter-City Engineers. That portion of the report is included in the Appendix and is abstracted below.

3.2.1 Project Setting

Most of the project site presently drains in a southerly direction toward a drainage channel at the northern boundary of Memorial Park. The flow across the property under worst case conditions is not substantial and is not guided by any predominate channels. Areas around the site generally drain away from the property primarily along streets during heavy rains. The direction of water flows for the property and surrounding areas is depicted in Figure 3.2.1-1. Currently, the upstream reach functions as a series of small retention basins. These upstream areas must be cleaned to allow the 50-year flood flows to reach Memorial Park downstream.

Drainage from Memorial Park is a significant concern. Drainage is conveyed through the open landscaped area of the park to a concrete storm drain at the northwest corner of the park (approximately 410 feet east of Fourth Avenue). This culvert has two 54 inch concrete pipes shielded by steel-barred access gates. The open channel receives flows from a large area to the southeast; during flood periods of 50-year frequency, that portion of the Park just south of the residential site is inundated at a rate of 772 cubic feet of water per second. The carrying capacity of the storm drains has been estimated at 446 cubic feet per second. Therefore, during the 50-year flood, flows will be conveyed through the park at a rate of 446 cubic feet per second and the remaining flows will inundate the area at a rate of 326 cubic feet per second.

The City of Chula Vista has estimated that under existing conditions Memorial Park could pond to an elevation of 66 feet (M.S.L.) (Attachment D). Inundation above this level would cross Fourth Avenue unrestricted. The area of inundation would cover approximately the western half of the residential site, with the higher elevations at the eastern end remaining above water.

3.2.2 Impact

Under present conditions, much of the southwestern portion of the residential site would be inundated during a 50-year flood when water levels reach an elevation of 66 feet above sea level. Flooding of dwelling units will be avoided by placing the low-
est level apartments at least one foot above this level.

Under present design conditions, the underground parking structures and landscaped areas could be inundated. As the water ponds in the Memorial Park area, it would eventually be expected to spill into and fill the below-grade parking areas.

The project's impact on the local hydrologic conditions is expected to be insignificant. Due to decreased permeability caused by structures and paved areas, the project is estimated to increase existing flows by only two or three cubic feet per second. The project may restrict the ponding area that occurs during major flood periods if a protective berm is installed to prevent inundation of the residential site and parking structures. This will not displace flood-flows onto adjacent areas or substantially alter that area off-site that would normally be inundated. However, those areas subject to inundation would be expected to flood sooner if the ponding area is reduced in extent by the proposed project.

3.2.3 Mitigation

Inundation of the project site may be mitigated or prevented entirely by constructing a berm to an elevation in excess of 69 feet along the southern boundary of the property. Such a barrier would prevent any flooding of dwelling units and underground parking structures. Although this mitigative measure would substantially decrease the area subject to inundation, it would not displace flood flows into other areas in Memorial Park. The berm could be extended southward parallel to Fourth Avenue to prevent flooding of this roadway. This mitigation measure would not subject other areas to flooding, but would simply form the western boundary of the Memorial Park retention basin. Mitigation of the flooding situation can also be accomplished by building an additional culvert under Fourth Street where the other two are presently located. This measure could substantially reduce the amount of ponding throughout the Memorial Park area, but would be costly and may not be economically feasible. Additionally, this would increase flood hazards downstream during a 50-year storm by increasing flood flows conveyed under Fourth Avenue.
3.2.4 **Analysis of Significance**

The project would not significantly increase flood flows within the drainage basin. If a protective berm is installed as part of the project, such a constriction of the inundation area would not significantly impact the subject property or Memorial Park.
3.3 AIR QUALITY

3.3.1 Project Setting

The project site lies within the San Diego Air Pollution Control District (SDAPCD) which maintains eight monitoring stations throughout the County. The station nearest the site is at 100 East J Street, between one and two miles southeast of the area. The data collected at this station reasonably reflects the ambient air quality conditions on the property for the last five years.

### Table 3.3.1-1

**Number of days per year that exceeded State standards**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Oxidant</td>
<td>42</td>
<td>39</td>
<td>42</td>
<td>48</td>
<td>52</td>
<td>1 Hr. = 8 pphm+</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1 hr. = 35 pphm†</td>
</tr>
<tr>
<td>Sulphur Oxides</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1 hr. = 50 pphm+</td>
</tr>
<tr>
<td>Non-methane Hydrocarbons</td>
<td>-</td>
<td>-</td>
<td>138</td>
<td>294</td>
<td>311</td>
<td>3 hr. = 24 pphm+</td>
</tr>
<tr>
<td>Nitrogen Oxide</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1 hr. = 25 pphm+</td>
</tr>
<tr>
<td>Suspended Particulates</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>10</td>
<td>2</td>
<td>24 hr. = 100g/km³+</td>
</tr>
</tbody>
</table>

Prior to 1974, the air quality in the County had been progressively improving. However, since 1974 the data indicates a slight but continuous deterioration in the regional air cell. This is best depicted by the increase in the number of days violating the standard for ozone or oxidant, the main product of photochemical smog. The deterioration in air quality is attributable to several factors, including the increase in population in San Diego County in general, and Chula Vista in particular. Although the emission rates of automobiles and other major sources are being reduced, the number of automobiles in the area continues to increase.

The major sources of air pollutants affecting downtown Chula Vista are the residential areas west of
the site, the Interstate 5 transportation corridor, and the South Bay Electric Power Generating Plant. Other major sources of pollutants are Los Angeles and Orange Counties, from which pollutants are transported south to the San Diego Air Basin. During summer months, particularly during intermittent Santa Ana weather conditions, pollutants are transported south off the coast and are then blown inland by daily westerly sea breezes. The occasional periods when this phenomenon occurs have the highest levels of smog for the coastal communities in San Diego.

Generally, however, Chula Vista enjoys better air quality than many other areas of the County. This is due primarily to the proximity of the City to the cleaner coastal air mass, the lack of upwind pollution sources and the greater distance of the City from areas most frequently inundated by smog transported south from Los Angeles. As a rule, the more northerly coastal cities and inland areas show a higher number of days per year violating State and Federal Standards for oxidants. However, Chula Vista was measured as having the second highest level of hydrocarbons in 1976 and the highest level in 1977. Hydrocarbons are one of the major precursors to creating photochemical smog downwind.

The Regional Air Quality Strategy is now being reformulated to effectively meet Federal air quality standards for the region by 1985. At this time, it is not certain whether these goals can be reached.

3.3.2 Impact

On a long-term basis, the proposed project is expected to cause an incremental increase in the amount of pollution and contribute to the continued gradual deterioration in the regional air cell and San Diego Air Basin. These effects will result primarily from exhaust emissions from automobiles used by the residents of the project. A considerably smaller amount of pollution will be created as a result of electrical use.

The proposed project is expected to generate an estimated 1,230 trips per day (based upon six average daily trips per dwelling unit). The average trip length is estimated at seven miles which creates a total of 8,610 vehicle miles travelled per day. The projected automobile emissions for 1975, 1980 and 1985
from the proposed apartments, are listed below. As older cars are replaced by newer vehicles with lower emissions, the projected emissions will be subsequently reduced in the future.

**Table 3.3.2-1**

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons</td>
<td>25.49 tons/year</td>
<td>16.63 tons/year</td>
<td>8.63 tons/year</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>185.91 tons/year</td>
<td>127.01 tons/year</td>
<td>83.27 tons/year</td>
</tr>
<tr>
<td>Nitrogen Oxide</td>
<td>16.14 tons/year</td>
<td>11.26 tons/year</td>
<td>8.28 tons/year</td>
</tr>
</tbody>
</table>

(Based on 6 ADT's per D.U.; 7 miles per trip)

Stationary source emissions generated by the project will be from power plant emissions attributable to electrical consumption by the residents. Assuming a monthly electrical consumption of 378 Kwh per dwelling, the following table lists the emissions attributable to the project. The estimate for this consumption rate is derived from the City of Chula Vista's Environmental Review Policy.
Table 3.3.2-2

Stationary Source Emissions Attributable to Electrical Consumption

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>1974 Emissions Tons/Year</th>
<th>Percent Increase S.D. Co. Ch. Vis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulates</td>
<td>214 lbs/year</td>
<td></td>
</tr>
<tr>
<td>SO2</td>
<td>11.41 lbs/year</td>
<td></td>
</tr>
<tr>
<td>CO</td>
<td>107 lbs/year</td>
<td></td>
</tr>
<tr>
<td>NO</td>
<td>763 lbs/year</td>
<td></td>
</tr>
</tbody>
</table>

(Calculations upon which stationary and mobile source emissions are based are listed in Attachment C.)

As is indicated above, the emissions attributable to the project will come primarily from vehicles travelling to and from the project. Table 4 reflects the percent increase in 1974 emissions for the entire Air Basin and that portion contributed by Chula Vista that the proposed project is expected to generate.

(Calculations upon which the above emission rates are based are located in the Appendix.)

Table 3.3.2-3

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons</td>
<td>25.49</td>
<td>110,104.2</td>
<td>5,285.20</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>185.96</td>
<td>375,397.0</td>
<td>18,969.05</td>
</tr>
<tr>
<td>Nitrogen Oxide</td>
<td>16.52</td>
<td>65,806.2</td>
<td>3,412.75</td>
</tr>
<tr>
<td>Sulfur Oxides</td>
<td>.01</td>
<td>13,797.8</td>
<td>740.95</td>
</tr>
<tr>
<td>Susp. Particulates</td>
<td>.11</td>
<td>16,897.1</td>
<td>8,854.90</td>
</tr>
</tbody>
</table>

As indicated above, the project will create an insignificant increase in the emissions polluting the air basin. However, it will mean an incremental degradation in the regional air cell.
3.3.3 Mitigation

Mitigative measures can be effective by decreasing the use of automobiles and encouraging the use of more efficient, less polluting automobiles. The development's relatively high density and central location partially mitigate the project's effects on air quality. Bus service is readily available in the project vicinity, reducing the dependence on private automobiles for transportation.

Mitigative measures with respect to regional air quality are largely the responsibility of governmental agencies. The regulation and enforcement to achieve clean air standards by the SDAPCD and the implementation of mass transit by state and local agencies must be relied upon to meaningfully combat air pollution.

3.3.4 Analysis of Significance

The project will generate an incremental increase in mobile source emissions in the region. To determine the significance of the project's impact on air quality, it is more important to inspect how its design and location serve to minimize automobile transportation. Being a portion of the Third Avenue redevelopment, most community shopping and service facilities are within easy walking distance. Park facilities and other amenities such as the playing courts, public library, etc. are all within five minutes walking distance. The higher density development design also contributes greatly to the promotion and efficient utilization of mass transportation systems. Car pooling among the residents is also considered quite feasible, because of expected similarity in life styles and places of work. For these reasons, a lower number of trips by future residents is expected which, in turn, decreases the amount of pollution generated.
3.4 WATER QUALITY

3.4.1 Project Setting

Drainage from the site flows into the City's flood control system which is immediately south of the project site. The water collected in this system eventually flows into the central drainage basin and San Diego Bay.

3.4.2 Impact

The project will increase the volume of runoff during a 50-year flood between two and three cubic feet per second. This is an insignificant increase in the volume of water entering the drainage system. Considering the infrequency of heavy rains and the distance from major water bodies, the impact of the project on water quality on-site and downstream is considered insignificant.

3.4.3 Mitigation

No mitigation is proposed nor is any deemed necessary.

3.4.4 Analysis of Significance

The projected impacts are considered insignificant.
3.5 MOBILE NOISE SOURCE

An analysis of noise impacts regarding the project was conducted by San Diego Acoustics. The noise analysis is included in the Appendix and is abstracted below.

3.5.1 Project Setting

Noise presently affecting the site comes from traffic on Fourth Avenue, Center Street, Landis Avenue and Madrona Street. Noise levels were measured at dispersed locations on the property. Calculations based on the empirical data were used to divise a series of noise level contours for Community Noise Equivalent Levels (CNEL). These normalized noise determinations are commonly used in determining planning and development constraints. Current CNEL levels on the property do not exceed 65 dBA, a threshold considered to be acceptable for residential development. Noise levels between 60 and 65 dBA (CNEL) are expected for a strip of land extending 60 feet east of Fourth Avenue and 60 feet south of Center Street into the property. A strip of land paralleling these two streets and extending 160 feet onto the property is expected to experience CNEL noise levels of 55 dBA or higher.

Projected noise levels for 1985 are expected to increase due to increased traffic volumes on Fourth Avenue. It is estimated that a ten foot wide strip paralleling Fourth Avenue will be impacted by levels in excess of 65 dBA (CNEL). Noise contours for 60+ dBA extend 80 feet onto the property along Fourth Avenue and 55+ dBA contours extend 190 feet onto the property. Noise levels along Center Street will be reduced by 1985; this roadway will be an access road to Phase I and will no longer be a through street.

3.5.2 Impact

No residential units will be located in areas exceeding 65 dBA CNEL. However, several of the two- and four-story residential units on the perimeter of the development facing Fourth Avenue and Center Street, will be located in areas where noise is greater than 60 dBA CNEL. This level is considered substantial; building designs for these must conform to State requirements for noise insulation. The consultant estimates that conventional construction techniques, with proper window sizing, will be
adequate to meet the State standards and reduce interior noise to acceptable levels. Exterior noise levels will be compatible with residential development; no outdoor activities or recreational facilities are proposed in areas subjected to noise greater than 60 dBA CNEL.

On a short-term basis, construction of the project is expected to impact surrounding areas. These impacts will primarily affect people using Memorial Park. The impact will temporarily degrade the park's ambiance and may limit use of the park during construction.

3.5.3 Mitigation

Satisfaction of State noise insulation requirements is expected to fully mitigate the impact that traffic noise will have on the future residences. The consultant recommends further analysis when more precise development designs become available to fully assess what insulation systems are needed. This is a standard requirement of the building permit process, and mitigation of noise impacts will be accomplished.

Mitigation of temporary noise impacts resulting from construction of the project can be accomplished by limiting activities to normal daytime working hours.

3.5.4 Analysis of Significance

Future residents of the project will be subject to noise exceeding 60 dBA CNEL. Satisfaction of State noise insulation requirements and construction of the project during normal working hours will fully mitigate noise impacts to a level of insignificance.
3.6 STATIONARY NOISE SOURCE

3.6.1 Project Setting

Two stationary noise sources are located in the vicinity of the project site. Air conditioning systems in the supermarket immediately north of the site and park and recreation activities in Memorial Park to the south could generate noise affecting future residents of the project.

Noise from trucking activity, involving delivering and unloading, will also be generated at the supermarket north of the site. These noise levels are an integrated component of the noise levels measured on the site by San Diego Acoustics and projected for the future.

3.6.2 Impact

The noise analysis prepared by San Diego Acoustics indicates that the site will primarily be affected by noise from mobile sources which will mask noise from stationary sources. Although occasional annoyance-level noise from Memorial Park may be encountered, stationary sources will not create any significant noise impacts for future residents of the project.

3.6.3 Mitigation

The project will create no significant stationary noise impacts. Insulation will be installed in all residential units in accordance with State Building Code requirements. No further mitigation is required.

3.6.4 Analysis of Significance

Noise generated by stationary sources will be masked by mobile sources; no mitigation of stationary noise sources is required.
3.7 HISTORICAL RESOURCES

3.7.1 Project Setting

There are no known archaeological or paleontological resources within the project. Several sites located within the area have been proposed for historical site designation by the City of Chula Vista Historical Site Board. However, none of these sites are located within the residential project site.

3.7.2 Impact

None.

3.7.3 Mitigation

None necessary.

3.7.4 Analysis of Significance

The proposed project will not have an impact on historical resources in the area.
3.8 LAND USES

3.8.1 Project Setting

Existing Land Use

The site of the proposed residential development is adjacent to the long established Third Avenue business district in the City of Chula Vista, and is bounded on the west and east by Fourth and Third Avenues, respectively. The property is bounded on the north by Center Street and a community shopping center, and on the south by Memorial Park. The area contains a variety of uses, from storefront shops along Third Avenue to some of the oldest residential neighborhoods in the City.

The western end of Memorial Park is occupied by a gymnasium, a community swimming pool, a recreation hall and an outdoor amphitheater. The eastern end, closer to the business district, is the more spacious portion of the park and is dedicated to more passive recreational uses. North and east of the project area, a variety of retail businesses are located on Third Avenue and "F" Street. West of the site, across Fourth Avenue, the area is occupied by single-family and multi-family residential units and professional office buildings.

The majority of the project site (90 percent) is vacant. An abandoned construction yard on the corner of Center Street and Garret covers approximately 12,000 square feet of the property. Public streets cover approximately five percent of the 6.3 acres. The remaining fraction of the property is covered by a portion of a 18,500 square foot vacant retail store. Existing land uses on and surrounding the site are illustrated in Figure 3.8.1-1.

General Plan

The adopted Town Centre Redevelopment Plan governs the land uses on the proposed project site (Figure 3.8.1-2). The designated land uses for the subject property and surrounding areas are illustrated on the General Plan Map. Those uses illustrated for the area west of Fourth Avenue are derived from the Land Use Element of the General Plan.

Residential development is designated for approximately 75 percent of the site. No specific density limitations are stipulated in the Redevelopment Plan.
existing land use map

Town Centre Redevelopment - Residential Component
general plan map

Town Centre Redevelopment - Residential Component
which indicates that the area should be developed as moderate-to-high-density multi-family residential housing. The small "pan-handle" of open space on the property is designated for use as a small corridor connecting the business area with the park. "Central Commercial" is designated for the area to be occupied by the six-story apartment complex. Residential development is allowed in the commercially designated area if a special request is approved by the Community Redevelopment Agency. The Town Centre Redevelopment Plan (on file at the Chula Vista Planning Department) states:

600.2 "All of the areas designated "central commercial" on the plan may be used as a mixture of commercial uses, including but not limited to retail, office, hotel, service, entertainment, educational and auxiliary uses. The Agency, upon special request, may allow residential development in the "central commercial" area, provided that the proposed residential development is compatible with surrounding areas and manifests adequate internal residential order and amenity."

Considerable flexibility has been built in the General Plan to allow sound development while meeting the needs and concerns of the community. The Chula Vista Redevelopment Agency is given considerable discretion in project design to assure consistent design quality while accommodating the various private interests involved in the redevelopment process.

Zoning

Presently, three zones apply to the project area: R-3-H-P, High-rise Apartment Zone (P pertains to special planning area); C-O-D, Administrative and Professional Office Zone (D pertains to special planning area); and C-B, Central Business. The location of these three zones are illustrated on the Zoning Map.

The R-3-H zone permits high-rise multi-family residential development. Principal structures in this zone must not be greater than two stories in height. The R-3-H zone allows for up to 54 dwelling units per acre based upon a minimum 800 square feet of lot area required for each dwelling unit. A minimum of 200 square feet of open space is required per dwelling unit.
zoning map

Town Centre Redevelopment - Residential Component
C-B zone permits retail commercial uses, restaurants and other similar uses. Setbacks and height limitations are instituted to improve and protect the commercial pedestrian characteristics of the central business district. Structures cannot be constructed in this zone any higher than 45 feet or 3.5 stories unless a conditional use permit is granted. R-3 uses are also allowed in this zone with a conditional use permit.

The C-O zone permits office development and seeks to promote these uses in a professional environment. Building structures are limited to a height of 45 feet or 3.5 stories. R-3 uses again are allowed in this zone with a conditional use permit.

3.8.2 Impact

The proposed multi-family residential development would construct 205 units on approximately 6.3 acres. The gross density of the project is approximately 33 dwelling units per acre. The Town Centre Redevelopment Plan does not place any specific density limitations on residential development.

The proposed development is in full conformance with the community plan for approximately three quarters of the site. The residential area from Fourth Avenue to Garrett Avenue is consistent with the Residential designation of the Redevelopment Plan. A minimum 50-foot wide corridor between the low-rise and high-rise apartments conforms to the open space requirement designated on the property. The only portion of the site that is not in full conformance with the intent of the plan is the six-story apartment complex in the area designated for "central commercial". However, as explained above, such multi-family residential dwellings are allowed in this area.

The City of Chula Vista Planning Department has indicated that the design of the project manifests a strong responsiveness to the Town Centre Manual. Furthermore, the Planning Department found that the proposed plan "... is substantially consistent with the Chula Vista Town Centre Redevelopment Plan, the Town Centre Design Manual and the Master Environmental Impact Report of the subject redevelopment..."
area." (see Appendix G). On this basis, it can be concluded that the project is consistent with the City's land use planning efforts.

The proposed project will eliminate a construction yard, a neighboring vacant retail store and dilapidated residential units just north of the site. (A more precise description of these structures and their location is found in Appendix A).

This initial redevelopment project may contrast with the variety of existing land uses in the area. However, the residential redevelopment is expected to stimulate the further redevelopment and renovation of the neighboring areas. The Planning Department has stated that "... the land use and mixture proposed under the master plan should create a viable, urban, residential-commercial complex on the subject 17 acres, as well as a stimulus for the redevelopment area." (Appendix G).

3.8.3 Mitigation

No mitigation measures are proposed nor are any deemed necessary.

3.8.4 Analysis of Significance

The proposed project is considered consistent with all applicable plans and proposed land uses. Therefore, the project is not expected to adversely impact land use in the area.
3.9 AESTHETICS

3.9.1 Project Setting

The human environment in the vicinity of the project site is quite varied. Conditions range from vacant lots and dilapidated structures to a quite well-manicured park environment. Existing land uses in the area (Figure 3.8.1-1) include abandoned structures, run-down housing and a series of narrow store-front shops.

Much of the business area along Third Avenue and "F" Street exhibits a lack of continuity and form. The collection of businesses has grown in an indiscriminate fashion and has created an array of buildings that are not aesthetically pleasing. Buildings in the area are generally older and are in various stages of disrepair.

Memorial Park is a well-maintained open space that includes dense groves of eucalyptus trees, rolling knolls and rambling walkways. The park also contains a wide variety of active uses, including a swimming pool, gym and outdoor theater. The park thus provides areas for a wide variety of passive and active recreational pursuits.

Structures in the project area range in height from an estimated 12 to 30 feet with the exception of the Congregational Tower, a 16-story, senior citizen apartment complex, located approximately two blocks northeast of the site. This is the tallest in the City of Chula Vista.

3.9.2 Impact

In conjunction with the proposed master plan (attached Plot Plan), the project will institute the initial stages of the Town Centre's redevelopment. The implementation of the master plan is expected to greatly stimulate the continued renovation of the Third Avenue business district. In time, most, if not all, of the blighting influences will be eliminated. The community assets will be integrated into an attractive and viable business-civic focus for the community.

The development design closely integrates the proposed uses with the neighboring Memorial Park. Open space corridors will link the park with many of the areas in the apartment complexes and adjacent parking
and business facilities. However, the residential project may have an indirect adverse impact on the park. The multi-story structures proposed at the park's northern boundary will be taller than other buildings in the area. These buildings may visually encroach on the park and may displace some individuals who presently use the park. The park is to the rear of many of the proposed units, and most of the park will be easily viewed from the rear balconies of these units. This may discourage some residents of the community from using the park, and they may be displaced by the residents of the proposed development.

3.9.3 Mitigation

The Town Centre Design Manual has established criteria to assure aesthetic harmony of developments in the area. The proposed project conforms with these criteria (see Appendix G) and is not expected to have a substantially adverse visual impact. The proposed buildings will be staggered to avoid the effect of "walling in" the park environment and allow for a more open feeling at this park boundary. The Town Centre Design Manual also establishes a minimum setback of 15 feet from the park, and all buildings will conform with this requirement. Additionally the existing densely vegetated groves in the northern portion of the park will act as a buffer between the proposed residential structures and the larger, open areas of the park.

3.9.4 Analysis of Significance

Overall, the project would not have a significant adverse effect on the aesthetic environment of the area.
3.10 COMMUNITY SOCIAL FACTORS

3.10.1 Project Setting

The 1975 Special Census indicates that the project area contains twice the County-wide average of low-income families and 50 percent more retired heads of households found throughout the County. Only ten percent of the population in the area earned an income of $10,000 in 1975, which was below County-wide averages by 45 percentage points.

Housing in the area is generally more dense than in other locations in the County. Only 31 percent of the occupied dwelling units are single-family homes, which is half the proportion found County-wide. The number of dwellings in complexes of four or more was more than twice that found County-wide. The above information is based on data from the 1975 Special Census (CFO, 1977) and the Master EIR on the Third Avenue Redevelopment Plan.

Residential development in the vicinity of the Third Avenue business district varies from single-family to high-rise residential. Single-family housing in the area is in some of the older, better established neighborhoods in the City. Multi-family housing, from duplexes to higher densities, is found in various areas near the main thoroughfares, such as Third Avenue and "E" Streets. Two blocks northeast of the property is the Congregational Tower, a 16-story residential complex accommodating senior citizens.

3.10.2 Impact

The proposed project will remove an abandoned construction yard, five delapidated residences and one vacant retail store.

The proposed residential development, in combination with other redevelopment activity in the area, is expected to contribute to an increase in land values in the area.

The residential project is designed to attract middle-income families and individuals. The project would thus be expected to raise the median income of residents in the project area.
3.10.3 Mitigation

Relocation assistance for any businesses or residents will be provided by the Redevelopment Agency of the City of Chula Vista. This assistance is expected to mitigate any impacts on the businesses and residents in the area.

3.10.4 Analysis of Significance

The project will not create any significantly adverse effects on the social characteristics of the area. Relocation assistance will be available from the City of Chula Vista for any businesses or residents displaced by the project.
3.11 COMMUNITY TAX STRUCTURE

3.11.1 Project Setting

The land to be used for construction of the proposed project is partially owned by the City of Chula Vista and the developer, or is in the process of being acquired. Under law governing urban redevelopment and tax increment financing, the taxes to the taxing agencies are frozen at the base year level until such a time as the indebtedness is relieved through redevelopment. When the value of the property and improvements increases with development, the taxes earned on the difference between the current assessed value and the base year assessed value will be dedicated to paying the Redevelopment Agency's incurred indebtedness.

3.11.2 Impact

The proposed project will increase the assessed value of the property and will contribute to relieving the indebtedness presently being born by the City of Chula Vista. Since Proposition 13, the period necessary to repay the indebtedness has been elongated due to reduced tax assessments.

3.11.3 Mitigation

The project will reduce the City's indebtedness by increasing the value of the land and making additional funds from assessment available for redevelopment. This beneficial impact does not require any mitigation measures.

3.11.4 Analysis of Significance

The project will reduce the City's indebtedness by increasing the value of the property and the tax assessments available for redevelopment. Therefore, the project is not considered to be adverse to the community tax structure.
3.12 SCHOOLS

3.12.1 Project Setting

The proposed project site is within the Chula Vista Elementary School District and the Sweetwater Union High School District and students are expected to attend one of the following schools:

<table>
<thead>
<tr>
<th>School</th>
<th>Grades</th>
<th>Projected Enrollment</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vista Square</td>
<td>K-6</td>
<td>394</td>
<td>364</td>
</tr>
<tr>
<td>540 &quot;G&quot; Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feaster School</td>
<td>K-6</td>
<td>395</td>
<td>392</td>
</tr>
<tr>
<td>670 Flower Street</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chula Vista Junior High</td>
<td>7-9</td>
<td>1,233</td>
<td>1,200</td>
</tr>
<tr>
<td>High School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>415 5th Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chula Vista</td>
<td>10-12</td>
<td>1,337</td>
<td>1,624</td>
</tr>
<tr>
<td>High School</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>820 4th Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Vista Square School is on a year-round program, while students at Mueller School attend ten months a year. Students from the project could attend either school depending on student populations and attendance programs that are preferred.

Within the Sweetwater District, new developments are not assigned to specific schools. This is done to maintain the greatest amount of flexibility in dealing with problems resulting from crowding, population fluctuations and integration programs (see Appendix).

3.12.2 Impact

The Chula Vista City Elementary School District estimates that the project would generate at most 82 new students (based upon 0.4 students per dwelling unit) and believes it can accommodate this increase in student population. The project is also expected to generate 82 new students for grades 7-12 (based upon 0.4 students per multi-family dwelling unit). Sweetwater Union High School District likewise believes it is capable of handling the additional students from the project.
3.12.3 Mitigation

To offset the costs of temporary facilities that are needed to accommodate these increases, new developments are assessed by the two Districts. Presently, each new apartment with two bedrooms is assessed $200.00, and those with three or more bedrooms are assessed $400.00 per unit. The money is split between the school districts. This assessment procedure will mitigate any effects resulting from project implementation.

3.12.4 Analysis of Significance

The proposed project is expected to increase the demand for school services in the area. However, with the help of assessment fees, the Districts will be able to adequately accommodate students generated by the proposal developments. Therefore, no substantial adverse impact on schools is envisioned.
3.13 PARKS, RECREATION AND OPEN SPACE

3.13.1 Project Setting

The project site is located within the City Park Service District No. 3 which contains 8.6 acres of parkland. This acreage is below the 22.4 acres required to meet City standards.

Memorial Park, which borders the project site on the south, contains 7.1 of the Park District's 8.6 acres. Facilities located at the park include a gymnasium, an estimated 6,600 square foot swimming pool, a recreation hall and outdoor amphitheatre. Picnic tables, lawns and a tot's playground are also provided at the park. Pool hours extend from 9:00 a.m. to 9:00 p.m., with a number of activities scheduled throughout the day. Hours for the gymnasium extend from 8:00 a.m. to 10:00 p.m. Numerous recreation activities are planned at the Municipal Recreation Center for all groups and ages of people. Currently, the facilities are sufficient to meet the demand for park and recreational opportunities in the surrounding community.

The City of Chula Vista intends to demolish and rebuild the Memorial Park Neighborhood Center building at Memorial Park. This new facility is scheduled for completion by October, 1979.

3.13.2 Impact

Implementation of the proposed project is expected to increase the demand for additional park and recreation activities. In the absence of suitable mitigation, the project could generate demands for recreational opportunities that exceed the capacity of the facilities at Memorial Park. Based on the City of Chula Vista standard of two acres of parkland per 1000 residents, the projected 513 residents would create a demand for an additional one acre of parkland in Park Service District No. 3.

3.13.3 Mitigation

Demolition and reconstruction of the Memorial Park Neighborhood Center building will mitigate the increased demand for recreational facilities generated by the proposed project. The reconstruction is scheduled for completion prior to occupancy of the residential units. Additionally, park fees will be assessed in accordance with Ordinance No. 1667, as revised by the adopted Master Fee Schedule.
3.13.3

Residential units will be assessed at a rate of $375/unit, plus an additional $25 for each bedroom beyond the first bedroom.

3.13.4 Analysis of Significance

The increased use of Memorial Park by residents of the proposed project will be adequately mitigated by reconstruction of the Memorial Park Neighborhood Center building and the assessment of park fees for each residential unit.
3.14 FIRE AND POLICE

3.14.1 Project Setting

Fire Protection

The project would be served by the Chula Vista Fire Department. The closest station to the project is Station #1, at 276 "F" Street, approximately 300 yards from the site. In the event of a fire, both Station #1 and Station #2 on East "J" Street would respond to the site. The response time of Station #1 to the site is estimated at less than one minute, which is excellent.

Station #1 maintains one ladder truck with a 100 foot height capability and one 1,500 gallon per minute pumper, and has a staff of between six and eight men on duty at all times. Station #2 maintains a 1,250 gallon per minute pumper and is staffed by four men at all times. Therefore, in the event of a fire, the project would be attended by 10 fire fighters, a battalion chief, two pumpers and a ladder truck.

The adequacy of water service in the project vicinity has not yet been determined, but is expected to be sufficient. Considering the development of a six-story residential unit, required water flows should be 4,000 gallons per minute. (see Attachment J).

Police Protection

The project site is within the reporting district #33 which encompasses the Third Avenue business district, Memorial Park and Norman Parks and portions of the "H" Street business and professional district. Data provided by the Chula Vista Police Department tabulated from crime reports for the last six months (February through July), indicate that the rate of crime is moderate to high. Comparatively the area is somewhat higher than predominately residential areas, but considerably lower than areas with more business activity.

Officer Dale Powers of the Report Review Office, indicated that the area is not considered to be a problem area. He stated that the data is influenced primarily by the amount of business in an area which will generate more activity and will
also tend to report a higher number of petty thefts. Therefore, this district and other districts with large amounts of business will have a high rate of reported crimes but the threat to public safety is not appreciably greater.

Police service within the City is good, with response times consistently below two minutes.

3.14.2 Impact

The project is not expected to have an adverse impact on fire service in the area. However, the proposed six-story structure may tax the service capability of the Department. Therefore, additional fire protection measures, such as internal sprinkler systems, may be necessary to assure the safety of future residents. The project would not create any substantially adverse impacts relating to police protection in the area.

3.14.3 Mitigation

No mitigation beyond assuring the adequacy of water flows and internal fire protection systems are proposed nor are any deemed necessary.

3.14.4 Analysis of Significance

The impact of the project on fire protection and police protection services is expected to be insignificant.
3.15 WASTE DISPOSAL

3.15.1 Project Setting

Refuse in Chula Vista, both residential and commercial, is gathered by the Chula Vista Sanitary Service. Waste is disposed of at the County's Otay Sanitary Landfill which has a life expectancy in excess of 20 years (based on conversation with Eric Lewis, County Department of Sanitation and Flood Control).

3.15.2 Impact

The proposed project is expected to generate 3,280 pounds of solid waste per day (based on five lbs./person/day).

3.15.3 Mitigation

None are deemed necessary.

3.15.4 Analysis of Significance

The impacts will be insignificant.
3.16 UTILITIES/ENERGY

3.16.1 Project Setting

Gas and Electricity

San Diego Gas and Electric Company presently delivers natural gas and electricity to the project vicinity. Facilities are available in the area to adequately serve the project.

Water Service

Water service is provided by the Sweetwater Authority. Facilities in the area are considered adequate to support the proposed project. However, existing facilities will have to be extended to meet expected fire flow requirements (Attachment K).

Sewage Service

Sewage service is provided by the City of Chula Vista, which is a participant in the Metropolitan Sewage System. The City of Chula Vista has a sewage allotment of 22.2 million gallons per day (mgd). Presently, the City is using six to 6.5 mgd and therefore, has considerable additional capacity for new development. The Point Loma Wastewater Treatment Plant currently provides primary treatment of sewage, and flows currently approach or exceed the 120 MGD design capacity. The City of San Diego is currently pursuing a waiver from Federal requirements for secondary treatment of sewage, and the rated capacity of the Point Loma plant is being studied.

Facilities in the project vicinity are adequate to handle the proposed project. One eight inch main lies in Fourth Avenue along the western boundary and a ten inch line lies in Center Street north of the project site.

(The above information is based on conversations with Roger Doust, City of Chula Vista Public Works Department.)

3.16.2 Impact

Gas and Electricity

Units in the proposed development will be all electric. Based on a consumption rate of 378 KWh/month/dwelling unit, the project is expected to use 77,490 KWh per month. Natural gas may be consumed for heating of the pool in the high-rise complex.
Legislation that has recently gone into effect (July 1, 1978), has required substantial changes in insulation, solar heating and energy planning systems for new development. The effect of this legislation will be to reduce the level of consumption from that estimated above.

The proposed project is not expected to significantly impact the availability of energy resources. However, there will be an incremental increase in local and regional energy use, adding to the need to conserve resources and to development new supplies.

**Water**

Based on a consumption rate of 130 gallons per person per day, the proposed project is expected to ultimately consume an estimated 66,625 gallons or 8,883 cubic feet of water each day. The proposed swimming pool will have a capacity of 4800 cubic feet of water (36,000 gallons). The pool will be cleaned and filled twice yearly (72,000 gallons) and will lose 30,000 gallons yearly to evaporation. The swimming pool will thus consume 102,000 gallons of water per year, or 280 gallons per day. Presently there is no shortage of water in the City. However, this incremental increase in demand for water will contribute to the need for more water resource planning in the region and the state.

**Sewage**

The City of Chula Vista estimates that single family residents generate 80 gallons of liquid waste per person per day. Based on this estimate, the project is expected to ultimately generate 41,000 gallons of sewage per day. The City has enough available capacity to serve the project without being substantially effected.

**Mitigation**

Recent legislation requiring more energy efficient construction in residential buildings will serve to greatly mitigate the amount of energy consumed by the project. Additionally, solar collectors could be installed for pool heating, further reducing the amount of energy consumed by the project.
Low flow water devices installed in the project will serve to reduce the amount of water consumed.

3.16.4 Analysis of Significance

No substantially adverse effects on water, utility and sewage consumption are envisioned through implementation of the project.
3.17 TRANSPORTATION/ACCESS

3.17.1 Project Setting

Road System in the Vicinity of Townsite Focus Area

The Townsite Focus Area is located between Fourth Avenue on the west and Third Avenue on the east, and between "F" Street on the north and "G" Street on the south (see map, Figure 3.17.2-1). All three roads surrounding the project site besides "G" Street are four-lane major roads with restricted parking and left turn pockets at the intersections. "G" Street is a two-lane collector. Third and Fourth Avenues provide the access for much of the north-south through traffic in this area of the City. With the computerized timed signalization of these major roads (60 to 70 second cycles), their Service Level "A" capacities are approximately 16,000 average daily trips.

Center and Madrona Streets presently provide east-west access across the project site between Third and Fourth Avenues. They are paved, two-lane roads with parallel parking on both sides. Landis Avenue intersects with Center and Madrona Street and leads north to "F" Street. Garrett Avenue runs north from Center to "F" Street between Landis and Fourth Avenue. There are stop signs on Center at Fourth, Garrett at Center, Center at Landis, and Madrona at Third.

The Redevelopment Plan calls for several road improvements. Third Avenue will undergo minor changes, including the upgrading of pedestrian walkways and the implementation of left turn pockets at "F" Street. The existing Madrona Street will be eliminated and a new private access way built for access to Third Avenue (see Plan Map, Figure 2.0-2). Garrett Avenue will be closed to vehicular traffic to enable the construction of a pedestrian mall. Landis Avenue between "F" and the private access way will be eliminated completely.

FN Park Way borders Memorial Park to the south, but currently serves only local, and not through, traffic. The Townsite project is not expected to impact this local road. East-west traffic from the project is expected to use "G" Street; therefore, this analysis considers "G" Street and not Park Way as the southern boundary road.
EXISTING TRAFFIC COUNTS
CHULA VISTA TRAFFIC ENGINEERING DEPARTMENT
MONTH - YEAR

1977-78
existing traffic volumes

Town Centre Redevelopment -
Residential Component
Trip Generation and Distribution

In determining the number of trips which the residential development in the Townsite Focus Area will generate, several assumptions were made:

- Completion of all residential portions of the Townsite Focus Area by 1985.

- Planned construction of pedestrian malls on Garrett will eliminate vehicular through traffic on Center and the private access way from Third Avenue.

- Six trips per dwelling unit would be generated daily:
  - one auto commuter/family = two work trips/day
  - one round trip shopping errand/day = two trips/day
  - one round trip miscellaneous errand/day

- Average trip length is seven miles

- Two autos/family

- AM and PM peaks for residential work trips will occur earlier and later in the day, respectively, than the average peak periods existing for the area today.\(FN\)

The number of residential trips generated in a 24-hour period by Townsite Focus Area residents is shown in Table 3.17.1-1. Those residents in the 3-4 story apartments will generate 780 trips per day, with the AM peak occurring between the hours of 7:00-9:00 am and the PM peak occurring between 4:00-6:00 pm. Those residents in the 6 story tower will generate 450 trips per day, with the AM and PM peaks occurring between those same hours.

\(FN\) Including visitors attracted by auto to project residences.

\(FN\) The AM and PM peaks in the Townsite area today are just before and just after noon. This is due to the fact that the area is primarily retail/commercial and that most local shopping occurs during the late morning-early afternoon hours. The 1985 peak periods for the major roads are expected to remain around noon.
Trip Distribution by Direction

Trips generated by the residential project will be distributed directly onto Center and the private access way. Since these two streets will be closed to through traffic, it is expected that they will only be used by residents leaving and entering the residential development and by visitors to the Townsite Focus Area who use the Center Street entrance to the existing retail parking lot in the northwest corner of the Townsite Focus Area. Referring to the Plan Map, Figure 2.0-2, that portion of Center Street between Fourth Avenue and the entrance to the parking area will need to accommodate an additional 2,000 externally generated trips per day. An hourly profile of these trips is shown in Table 3.17.1-2.

Referring again to Figure 2.0-2, the plan shows the private access way as a secondary access to the commercial/retail parking structure, with the primary access located on "F" Street. As the plans for implementing the commercial/retail portion are finalized, it will be possible to analyze the impacts on the access road of traffic destined for the large parking structure.

Inbound/Outbound Split to Development During Peak Hours

Because this stage of development is strictly residential, it is assumed that all AM peak hour trips will be outbound, destined for work places, and all PM peak hour trips will be inbound, returning from those work places. Again, this pattern will change as future phases of the Redevelopment Plan are implemented and traffic destined for the parking structure in the commercial/retail portion of the Area will reach its peak volumes around noon.
### 3-4 Story Apartments

<table>
<thead>
<tr>
<th>Time</th>
<th># Trips</th>
<th># Hours</th>
<th># Trips/Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7 am</td>
<td>40</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>7-9 am</td>
<td>90</td>
<td>2</td>
<td>45</td>
</tr>
<tr>
<td>9-4 pm</td>
<td>260</td>
<td>7</td>
<td>37</td>
</tr>
<tr>
<td>4-6 pm</td>
<td>130</td>
<td>2</td>
<td>65</td>
</tr>
<tr>
<td>6-12 pm</td>
<td>230</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>12-5 am</td>
<td>30</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>780</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 6 Story Tower Apartments

<table>
<thead>
<tr>
<th>Time</th>
<th># Trips</th>
<th># Hours</th>
<th># Trips/Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-7 am</td>
<td>23</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>7-9 am</td>
<td>54</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>9-4 pm</td>
<td>149</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>4-6 pm</td>
<td>77</td>
<td>2</td>
<td>39</td>
</tr>
<tr>
<td>6-12 pm</td>
<td>131</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>12-5 am</td>
<td>18</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>450</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 3.17.1-1**

1Peak hours
1985 Average Hourly Traffic with Townsite Focus Area Residential Development

TABLE 3.17.1-2

<table>
<thead>
<tr>
<th>PERIOD OF DAY</th>
<th>&quot;F&quot; Street</th>
<th>&quot;G&quot; Street</th>
<th>Third Avenue</th>
<th>Fourth Avenue</th>
<th>Center Street</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-8 am</td>
<td>446</td>
<td>268</td>
<td>643</td>
<td>688</td>
<td>66</td>
</tr>
<tr>
<td>8-6 pm</td>
<td>989</td>
<td>569</td>
<td>1,364</td>
<td>1,455</td>
<td>139</td>
</tr>
<tr>
<td>6-11 pm</td>
<td>424</td>
<td>244</td>
<td>584</td>
<td>623</td>
<td>59</td>
</tr>
<tr>
<td>11-5 am</td>
<td>113</td>
<td>65</td>
<td>156</td>
<td>166</td>
<td>16</td>
</tr>
</tbody>
</table>

TOTAL TRIPS/DAY:* 14,115  8,115  19,450  20,780  1,980

*1985 projections by CPO

3.17.2 Impact

Existing Traffic Volumes

The existing traffic volumes on the adjacent streets according to the City of Chula Vista Traffic Engineering Department are illustrated in Figure 3.17.2-1. Third and Fourth Avenues carry approximately 15,000 - 16,000 ADT while "F" and "G" Streets carry approximately 10,000 and 6,000 ADT. These counts were made between July 1977 and January 1978. The counts do not distinguish between direction of traffic flow, but it is assumed that the flows in each direction are approximately equal.

Capacity Analysis of Streets

The residential portion of the Townsite Focus Area will generate a total of 1,230 trips per day. The impact of these trips added to the projected 1985 ADT for "F" and "G" Streets and Third and Fourth Avenues will be negligible. The projected traffic volumes which load onto Third and Fourth Avenues comprise less than four percent of the CPO-projected ADT for each of those streets, certainly less than a reasonable margin of
error in the projections themselves. See Figure 3.17.2-2. The residential portion of the Townsite Focus Area developments will thus have no significant impact on the street system.

Because the plan calls for the construction of pedestrian walkways on Garrett and Center which will eliminate vehicular through traffic on Center and the 6-story tower apartments access road to Third Avenue, these streets at their existing widths will be able to adequately serve the residents of the Area.

As the remaining portion of the Townsite Focus Area is completed, however, externally generated traffic destined for the parking areas immediately east and north of the 6-story tower apartments will be routed onto Center and the private access way. At full development of the entire Townsite Focus Area, several thousand cars will enter and leave the Townsite parking areas every day. Although the main entrance to the parking facilities will be on "F" Street, significant levels of traffic may occur on Center Street and the private access way at that time.

As plans for the future implementation of the commercial/retail portion are completed, it will be possible to analyze in greater depth the impacts of traffic, particularly on the private access way destined for the parking structure in the commercial/retail portion of the Townsite Focus Area.

Level of Service of Existing Streets

Upon completion of "F" Street and Third Avenue construction, both major roads will offer "A" Levels of Service.

Fourth Avenue and "C" Street are currently operating at "A" Level of Service.

Center, Garrett, Landis and Madrona currently carry very little traffic and therefore are considered to be operating at "A" Level of Service.

Level of Service of Streets Using Future Traffic Data

The three major roads and one collector road which border the Townsite Focus Area are expected to offer "A" Levels of Service in 1985, except during peak shopping periods, at which time "B" Levels of Service will be anticipated.

3.17.3 Mitigation

There are no significant traffic impacts caused by the project. No mitigation measures are required.
1985 projected traffic volumes

Town Centre Redevelopment - Residential Component
3.17.4 Analysis of Significance

The residential portion of the Townsite Focus Area contained in the Third Avenue Redevelopment Plan will generate a total of 1,230 trips per day. In 1985, the resulting resident-generated trips on the major roads in the vicinity, "F" Street, Third and Fourth Avenues, and the collector "G" Street, will be less than four percent of CPO - projected total volumes on those roads. Thus, the impact on the roads in the Townsite vicinity will be insignificant.

The impact of trips contributed by the residential development onto the Center Street and the private access way will also be insignificant. Implementation of future phases of the Third Avenue Redevelopment Plan, particularly of the parking structure in the commercial/retail portion of the Townsite Area, are likely to alter the traffic patterns in the area and perhaps result in congestion in some areas. These impacts should be analyzed in a subsequent BIR for the future phases of the Third Avenue Redevelopment Plan.
4.0 UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

Section

3.2 Drainage Pattern

Implementation of the proposed project could substantially reduce the ponding area that would occur in Memorial Park and thus cause a more rapid inundation of the park. This effect will not increase the area off-site that would be inundated and is therefore, not considered significant. Mitigation of this impact is discussed in Section 3.2.3 of this report.

3.3 Air Quality

Implementation of the proposed project will result in an incremental addition of air pollutants to the regional air cell. This increase is not considered substantial.

3.5 Mobile Noise Source

Construction of the proposed project will create a substantial but temporary increase in the noise levels in the project vicinity. Mitigation of this impact is discussed in Section 3.5.3 of this report. An insignificant increase in noise attributable to an increase in traffic generated by the project is also expected.

3.8 Land Uses

The project will convert the presently vacant and blighted property to multi-family residential use. The project when implemented will provide the community with housing for 205 families. The ultimate population of the project site is estimated at 513 persons. This irreversible alteration of land use patterns is in conformance with applicable land use plans and policies and therefore, will not have a significant impact on land use.

3.16 Utilities/Energy

Habitation of the project will increase the demand for water, energy, fire and police protection and other public services. These impacts although unavoidable, can be mitigated by the payment of school fees, sewer and water connection charges, as well as, other taxes and assessments.
5.0  EFFECTS FOUND NOT TO BE SIGNIFICANT

In establishing the requirements for environmental review of the proposed project, the City of Chula Vista determined that the following factors would not result in significant environmental effects.

Due to substantial previous disturbance of the subject property, no biological, archaeological or paleontological resources currently exist on the subject property. The project would not have any significant effects in these areas.
6.0 ALTERNATIVES TO THE PROPOSED ACTION

A wide variety of alternative development designs are possible for the subject site. The diversity of existing and planned land uses for the area is such that different types of projects could be accommodated. The Town Centre Redevelopment Plan, which governs land use in the area, is flexible enough to allow different uses on the site. In the plan, the site is designated for multi-family residential and commercial developments, but other uses can be considered and approved by the Redevelopment Agency.

The thrust of the redevelopment plan, with its balanced combination of residential, commercial, public and open space uses, is to renovate and revitalize the Third Avenue business district. The success of the plan depends upon the balance of the interdependent uses and functions within the redevelopment area. Renovation of the retail commercial component is designed to attract people into the area from outlying communities and to create a sense of "townness" for the City center. Residential development is needed to create a sense of community and to provide economic support for the retail sector. Economic viability and quality of the human environment are the central issues to the success of the Town Centre Redevelopment Plan. Therefore, discussions of alternative density and use considerations should reflect how each would contribute to the vitality and viability of the Redevelopment Plan.

The following analysis of alternatives addresses potential environmental effects, consistency with surrounding land uses and compliance with the adopted land use plan.

No Project

No development of the site would continue the existing blighted conditions that detract from the quality of the human environment. For this reason, such a use is inconsistent with the Redevelopment Plan. In comparison to the proposed project's impacts, the existing blighted conditions would remain. No development would also require public acquisition of the entire site, although some portions of the Master Plan area have been acquired by the Redevelopment Agency. If no commercial, residential or other private use is allowed, then some public use would be necessary to justify acquisition.
Park Development

Development of the site as an extension of Memorial Park would be expected to have lesser impacts than that generated by the project. It is estimated (based upon Chula Vista EIR standards) that traffic volumes would be reduced by 80 percent, and water consumption would be reduced by a third. Public service in the area would not be impacted by a park development, and the expansion would help relieve the shortage of park land in the community. However, a park would also reduce tax revenues that would be generated by a private project and may detract from the viability of the Redevelopment Plan. Although such a feature would enlarge an attractive amenity in the area, the absence of high density residential development would result in a loss of economic support for the Third Avenue business district. The elimination of the consistent presence of people who live in the area would also diminish the cultural vitality and sense of community that is being sought for the area. To mitigate these effects, it would be necessary to provide multi-family residences elsewhere in the area and possibly expand that area being aided by the Redevelopment Agency.

Lower Density Residential

A reduction in the density of the residential project would result in a proportionate reduction in most impacts expected from the proposed project (i.e. traffic generated, water and utilities consumed, air emissions, etc.). However, reduction in residential densities at this site would displace development to another portion of the community where the impacts are expected to be equivalent or greater. Only traffic generated by the lower density development would have a reduced environmental effect at the proposed site. Traffic levels being generated by the project are of such a small proportion of existing and projected levels, that a lower density project is not expected to substantially alter the effect. Lower density developments would be consistent with the Redevelopment Plan; however, higher density developments, such as the proposed project, are encouraged to better satisfy the intent and objectives of the plan. The proposed density is better able to provide economic support and contribute to the vitality of the redevelopment area.
Higher Density Residential

Higher density residential development than that proposed would increase most environmental effects in proportion to the increase in density. The increase in density would further aggravate the potential for traffic congestion in the area. A higher density development may have greater aesthetic impacts on Memorial Park and may not be compatible with the various uses planned for the area. Higher density residential development could be expected to provide greater tax revenues, greater economic support for the area and possibly contribute more to the vitality of the community.

Professional - Office

Professional - office development is expected to have equivalent environmental effects on water, energy, air quality and most services except schools. Traffic generation rates would be approximately twice those expected from the proposed project. Although such a use may be compatible with existing and planned land uses, this alternative would not be fully consistent with the residential portion of the Redevelopment Plan. Development with offices would displace residential uses and require their construction elsewhere in the area to maintain balance in the community.

Commercial

An alternative commercial development of the site would also displace residential uses. Impacts from commercial use of the site are expected to be considerably higher than the proposed project. Assuming the development of 125,000 square feet of retail space, traffic generated would be more than four times greater than the proposed project, and energy and water consumption would be three to four times greater. The use of the site for commercial purposes would be compatible with existing and proposed uses, but would not be consistent with the residential portion of the adopted Redevelopment Plan.
7.0 ORGANIZATIONS AND INDIVIDUALS CONSULTED

Roger Daoust  - Chula Vista Department of Public Works
Daniel Pass  - Chula Vista Planning Department
Doug Reid  - Chula Vista Planning Department
Doug Boyd  - Chula Vista Redevelopment Agency
Emerson Hall  - Chula Vista Parks and Recreation Department
James Tollefson  - Chula Vista Parks and Recreation Department
Gary Hanson  - Chula Vista Department of Public Works
Ted Monsell  - Chula Vista Fire Department
Dale Powers  - Chula Vista Police Department
Don Norton  - Sweetwater Authority
Delores Wells  - Chula Vista City Elementary School District
Phillip Jollif  - Sweetwater Union High School District
Eric Lewis  - San Diego County Department of Sanitation and Flood Control
BIBLIOGRAPHY


Chula Vista Planning Department, Third Avenue Redevelopment Plan: Master Environmental Impact Report, City of Chula Vista. 1976.

Chula Vista Planning Department, Environmental Review Policy, City of Chula Vista. 1978.


Inter-City Engineers, Final Environmental Impact Report for Park West Apartments - Restaurant; EIR 75-3; City of Chula Vista. 1976.

APPENDICES

A. Master Plan
B. Soils Report
C. Hydrology Report
D. Communiqué from Roger Daoust
E. Air Quality Calculations
F. Noise Report
G. Communiqué from Daniel Pass
H. Elementary School Service Letter
I. High School Service Letter
J. Fire Service Letter
K. Water Service Letter
October 26, 1978

Environmental Review Coordinator
Chula Vista Civic Center
P. O. Box 1087
Chula Vista, California 92012

Gentlemen:

Re: Draft Supplemental EIR on the Chula Vista Town Centre
Redevelopment Plan Residential Component

WE HAVE REVIEWED THE SUBJECT MATERIAL AND OFFER THE FOLLOWING COMMENTS:

These projects will discharge its sewage to the Metropolitan Sewerage System. The Point Loma Treatment Plant of the Metropolitan Sewerage System is approaching its design capacity. The City of San Diego has plans to upgrade the treatment capacity; however, this additional capacity won't be available for several years. The potential impact of increased flows should be carefully considered before approval.

Thank you for the opportunity to comment on this report.

Very truly yours,

For: ARTHUR L. COE
SENIOR WRC ENGINEER

RECEIVED
by

OCT 27 1978
PLANNING DEPARTMENT
CHULA VISTA, CALIFORNIA