EWA

FINAL
~~DRAFT~~

ENVIRONMENTAL IMPACT REPORT

of

PROPOSED ANNEXATIONS AND PRE-ZONING

of

Swift Property	75-11
Jones Property	75-13
McGrath Property	75-16(A)
McGrath Property	75-16(B)
Chase Property	75-26
Borchard Property	75-30

Prepared for

CITY OF OXNARD, CALIFORNIA

September 12, 1975

VOLUME II

EUGENE D. WHEELER & ASSOCIATES, INC.
Planning · Economics · Architecture · Acoustical Engineering

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Prepared by
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Urban, Socio-Economic and Environmental Planners
1512 Anchors Way Drive, Ventura, CA. 93003

4.4 ANNEXATION OF PROJECT 75-11

4.4.1 DETAILED DESCRIPTION OF PROPOSED PROJECT

4.4.1.1 PROJECT DESCRIPTION

The proposed project entails the prezoning and annexation to the City of Oxnard of 67 acres of land at the northwest corner of Ventura Road and Carmen Way. It is proposed to construct 469 dwelling units with streets and services upon the property.

4.4.1.2 LOCATION

Project 75-11 has its eastern boundary along the west side of Ventura Road and its southern boundary along Carmen Way. It is located just south of the Santa Clara Sanitary Landfill area. (See Location Map, Figure 22.)

4.4.1.3 CURRENT USE

The project site is presently utilized as productive acreage for row crops. The present crop is beans. Close to the southeastern corner of the project lot there is a two-story residential structure with associated accessory dwellings.

4.4.1.4 POPULATION AND DENSITY

The proposed project will have a population of approximately 1,642 persons living in 469 dwellings on 67 acres of land. There will be an estimated 3.5 persons per dwelling unit and 7 dwelling units per acre (67 x 7 x 3.5 = 1,642).

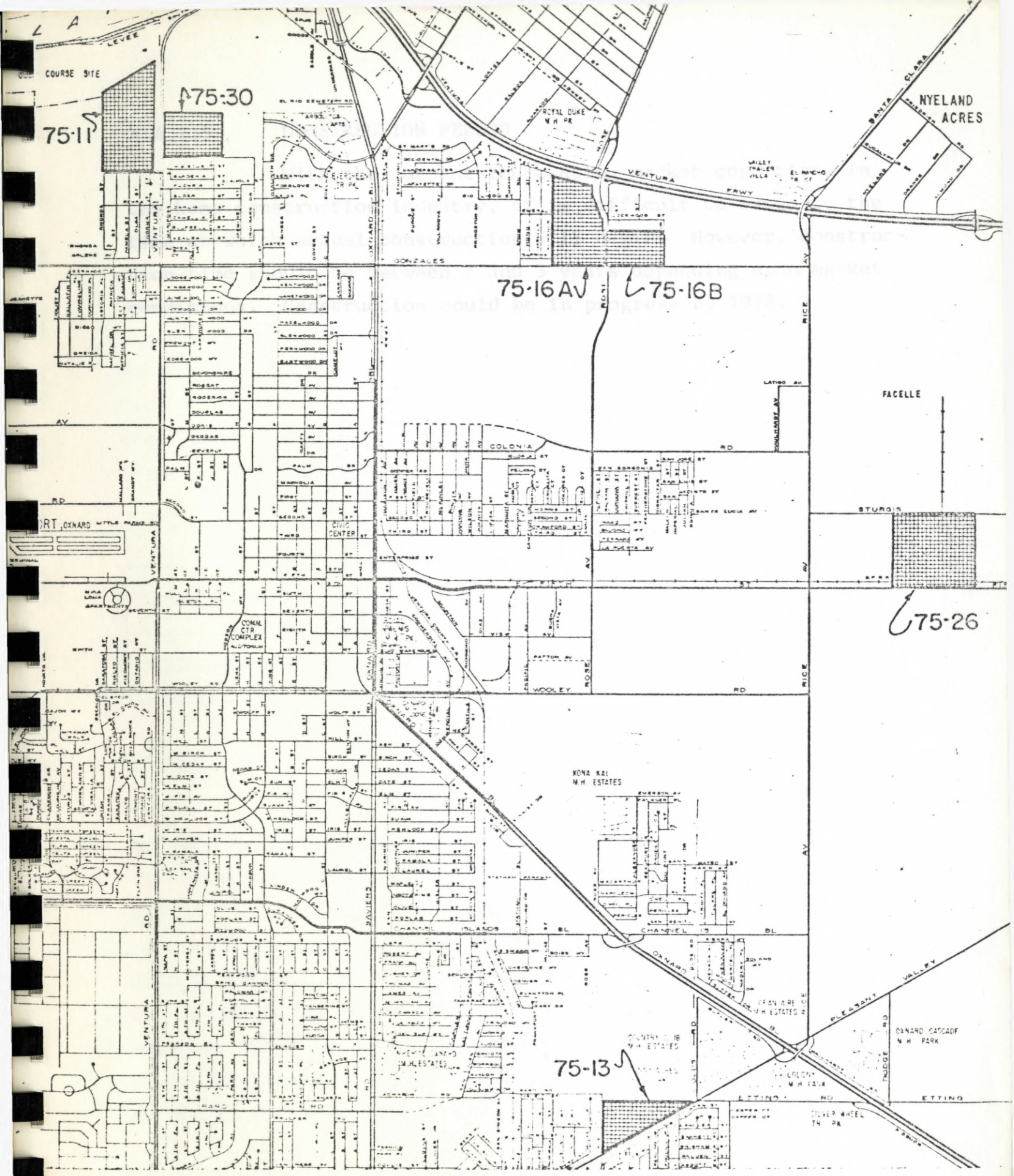

Figure 22. LOCATION MAP

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 3,000'

4.4.1.5 CONSTRUCTION PERIOD

With the current fluctuating market conditions in the home construction industry, it is difficult to estimate the time at which actual construction will begin. However, construction time should be between 2 and 3 years depending upon market conditions. Construction could be in progress by 1978.

4.4.1.6 ESTIMATED VALUE OF DEVELOPMENT PROPOSAL

The property proposed for development contains 67 acres and is currently in agricultural use. For the fiscal year 1974-75, the property had a total assessed valuation of $139,250 and an estimated market value of $557,000 (see Table 30). Based on the current, 1974-75, County tax rate of $9.9060, 42.1 percent or $5,806 will go to school districts and 57.9 percent or $7,988 will go to governmental services and special districts. At the present time, the agriculture field provides employment for some farm workers, income to the owners of the property and products for the use of the public.

Table 30. EXISTING PROPERTY VALUATION

Parcel No.	Assessed Value Per Acre	Assessed Value Project	Estimated Market Value Per Acre	Estimated Market Value Project
179-0-040-040	$2,078.36	$139,250	$8,313.43	$557,000

Impact

Assuming an average per dwelling unit value of $32,000 to $37,000 and 469 units, the estimated market value of the proposed residential project will be from $15,477,000 to $17,353,000. When the property is annexed it will have an estimated tax rate of $11.5960 ($9.9060 existing total tax rate plus $1.69 additional City of Oxnard property tax). The project will generate an estimated $448,678 to $503,063 per year in tax revenue. This is considerably more than the $13,794 the property presently generates in taxes. Table 31 summarizes the fiscal impact of the proposed project.

Table 31. FISCAL IMPACT OF PROJECT

	Tax Revenues Without Project	Tax Revenues With Project
Estimated Market Value	$557,000	$15,447,000-17,353,000
Assessed Value	139,250	3,869,250- 4,338,250
Total Tax Revenue	13,794	448,678- 503,063
School Districts	$5,806	$161,410-180,974
Governmental Services & Special Districts	7,988	287,268-322,089

Estimates for the number of employees during the construction period are unavailable. It is estimated that construction labor costs will amount to about 55 percent of the total project value. This will amount to approximately $8,512,350 to $9,544,150 ($15,477,000 to $17,353,000 x .55) which will be received by persons employed for the construction of the project, primarily local workers.

The present field demands little in public services and produces worthwhile products. The residential area once completed will demand many services--water, sewer, police, etc.--most of which will be paid for by taxes from the individual homeowners of the project, except for school costs.

As the project contains single family housing, which is fairly expensive, it is unlikely the residents will be on welfare or demanding subsidized health and medical services. The school costs will be covered only partially by the project's taxes. State and federal funding programs will cover the deficit.

Mitigation

None required.

4.4.2 THE ENVIRONMENTAL SETTING, PROJECT IMPACTS AND MITIGATING MEASURES

4.4.2.1 PHYSICAL

4.4.2.1.1 LAND USE

Project Site Vicinity

The land uses in the vicinity of the project site are principally residential and agricultural with the area in transition to urban residential (see Existing Land Use and Zoning Maps, Figures 23 and 24.) The Santa Clara Sanitary Landfill site is just north of the project site.

The land use directly to the south of the proposed project, across Carmen Way, is a residential neighborhood. The neighborhood is well established with single family homes and duplexes in the proximity of the project site and a mix of garden apartments and four-plexes further south near Gonzales Road. Adjacent to the southeastern corner of the lot across Ventura Road there is also a residential subdivision. Directly to the east, across Ventura Road, the land is in crop production with a residence on the southwest corner of the lot. The land north of that is also in row crop production. North of the project site is the sanitary landfill and north of that the Santa Clara River. The land to the west is in crop production.

Project Site

The project site is presently planted with beans. Near the southwest corner is a square piece of land raised above the cultured area and supporting a wooden residential structure and non commercial vegetation. An earth road leads to the residence from Ventura Road.

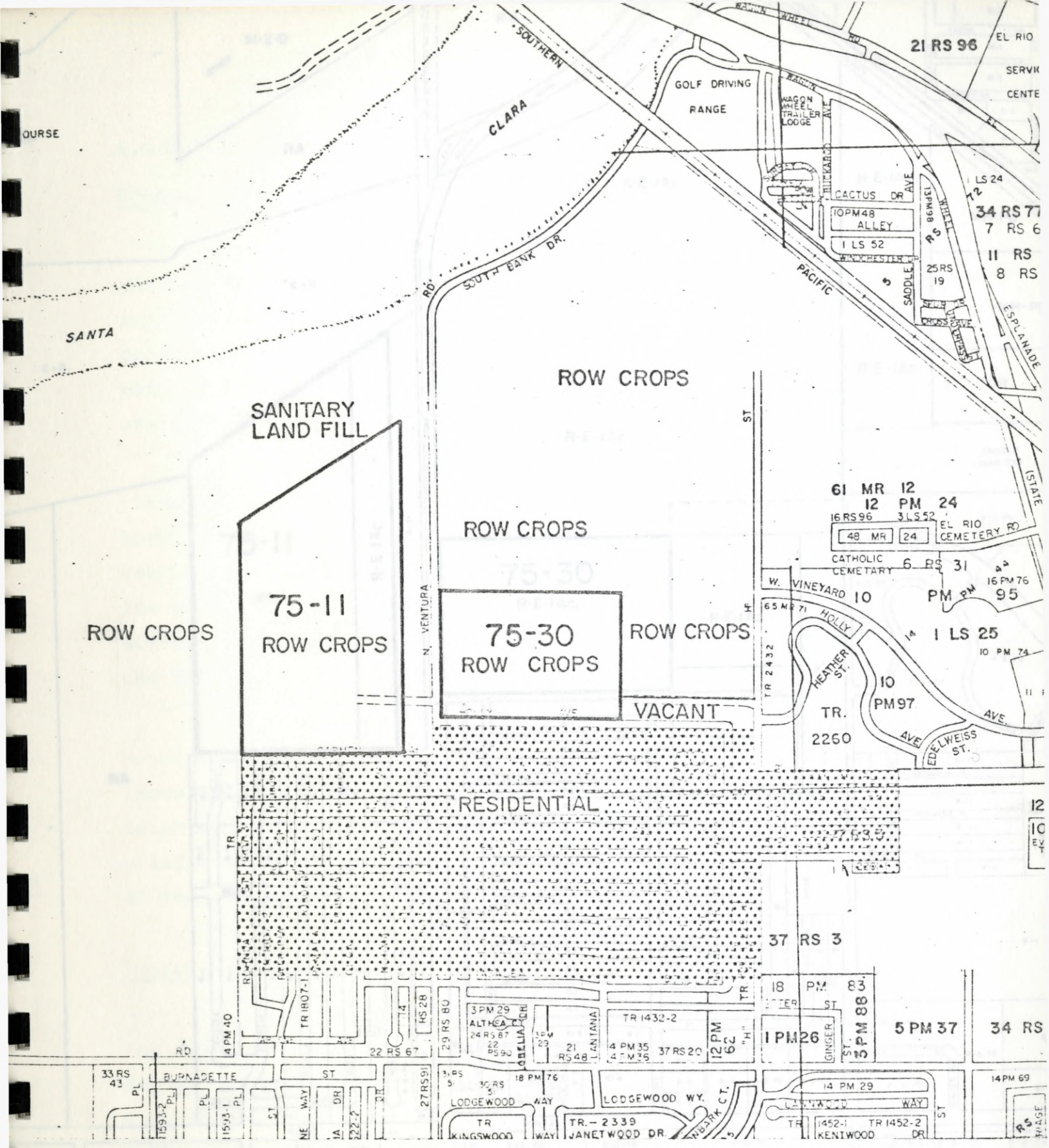

Figure 23. EXISTING LAND USE

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1000'

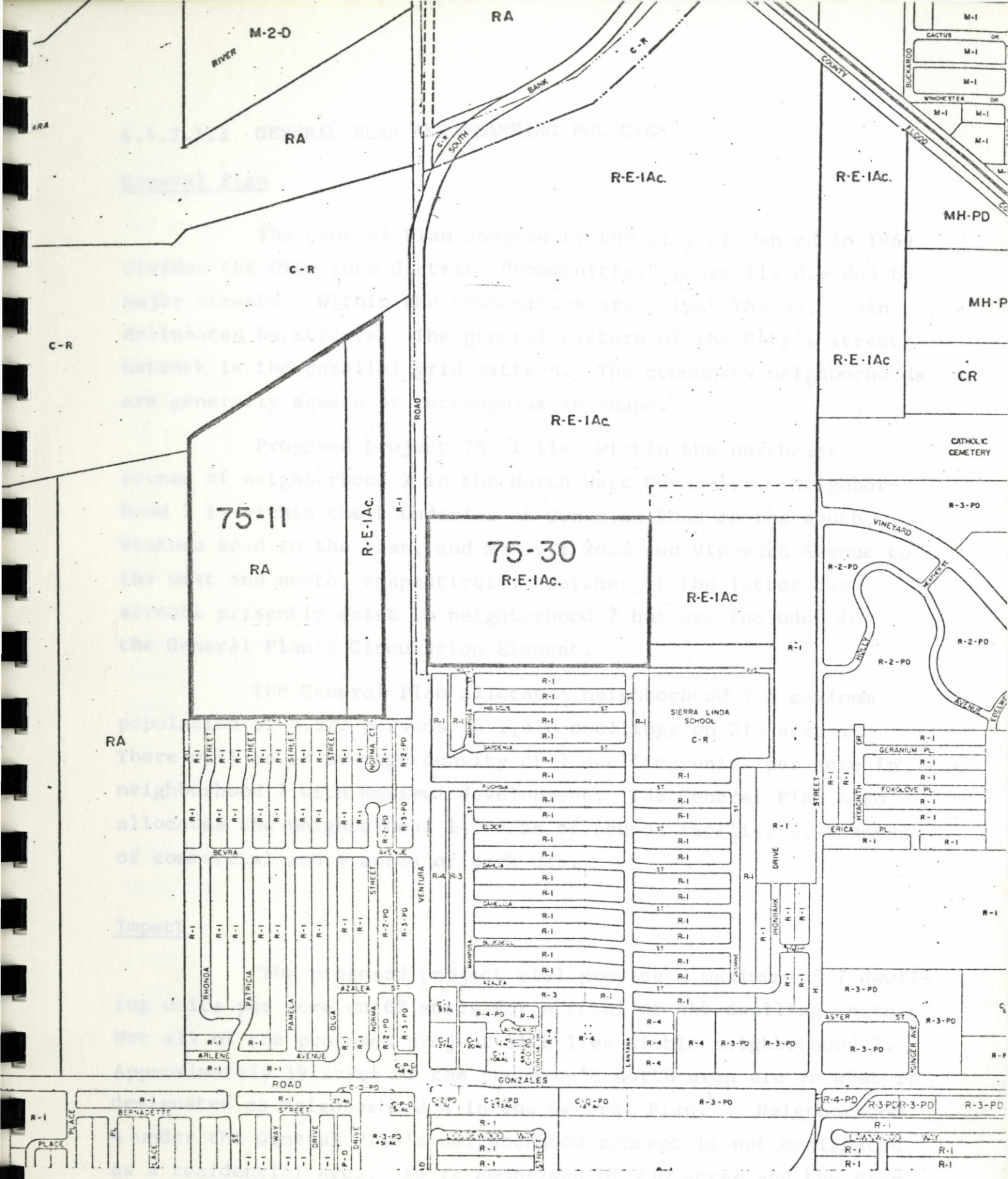

Figure 24. ZONING

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 800'

4.4.2.1.2 GENERAL PLAN AND PLANNING POLICIES

General Plan

The General Plan adopted by the City of Oxnard in 1969 divides the City into district "communities" generally divided by major streets. Within the communities are neighborhoods, again delineated by streets. The general pattern of the City's street network is the parallel grid pattern. The community neighborhoods are generally square or rectangular in shape.

Proposed project 75-11 lies within the northeast corner of neighborhood 7 in the North West Community. Neighborhood 7 is within the boundaries of Gonzales Road on the south, Ventura Road to the east, and Maxwell Road and Vineyard Avenue to the west and north, respectively. Neither of the latter two streets presently exist in neighborhood 7 but are included in the General Plan's Circulation Element.

The General Plan allocates neighborhood 7 a maximum population of 4,522 persons in 1,330 dwellings on 215 acres. There will be an average density of 7 dwelling units per acre in neighborhood 7 with maximum development. The General Plan also allocates the neighborhood 14 acres of school facilities, 5 acres of commercial and 6 acres of park use.

Impact

The proposed project will provide a maximum of 7 dwelling units per acre on 67 acres for a total of 469 dwelling units. Not all of the proposed project site lies within neighborhood 7. Approximately 19 acres of the property's north area are in what is designated as neighborhood 4 in the General Plan.[1] Neighborhood 4 under the General Plan's neighborhood concept is not designated as a residential area. It is comprised of 230 acres and the Plan designates the entire acreage as a City Park and Golf Course.

With the subtraction of the 18.7 acres of the project site that lie in neighborhood 4, the proposed project will add a maximum of 338 dwelling units to neighborhood 7 (67 - 18.7 = 48.3 acres x 7 DU = 338.1 DU).[2] Proposed project 75-11 complies with the density and dwelling unit type set forth for neighborhood 7 in the General Plan. The proposed project's impact on neighborhood 4 is not consistent with the land use designation in the General Plan for that neighborhood. Prezoning the entire property R-1 will place 18.7 acres of residentially zoned (R-1) property into neighborhood 4, a neighborhood planned as recreation area only. At 7 DU per acre, a maximum of 131 units of the proposed project would go into neighborhood 4.

Mitigation

As there is a recommendation within the specific plan of neighborhood 4 for a low density equestrian type development, consideration should be given for a use of this type rather than a typical single family detached project.

If the proposed annexation is approved, that portion of the property intruding into neighborhood 4 should be prezoned to a lower density outlined above. This would place the land use designation in closer conformance with the use intended for neighborhood 4 under the General Plan.

1990 Population and Employment Distribution Study

The Oxnard City Council has adopted a Population and Employment Distribution Map for 1990 and a Development Intensity Study to compliment the map. The Distribution Map establishes densities for the City slightly less dense than the General Plan designates for specific areas. The Intensity Study indicates the percentage of population development neighborhood areas will reach by the year 1990. Under the Distribution Map and Intensity Study neighborhood 7 will be developed at 6 dwelling units per acre to 50 percent of its capacity by 1990. This would allocate the neighborhood a maximum population of 3,876, with 50 percent of maximum 1990 population of 1,938. The project will raise the population of neighborhood 7 to 2,559. This exceeds the 1990 fifty percent level estimate by 32 percent.

As the neighborhood has been expanded in area by the project by 338 units or a population of 1,183, the neighborhood is still within the population guidelines.

Coastal Conservation Plan

The proposed project lies inland of the 1,000 yard Coastal Conservation Act boundary and does not presently come within the jurisdiction of Coastal Act policies. There is a proposed Coastal Act boundary which extends a considerable distance further inland than the present boundary. The proposed boundary will be acted upon by the State legislature when they consider the Coastal Plan for adoption in 1976.

4.4.2.1.3 NEIGHBORHOOD ANALYSIS

The impact of the proposed annexation on neighborhood NW-7 is shown in Table 32. The demands of the developed portions of the neighborhood are combined with demands of the vacant land when developed and the proposed project's demands to give the total demands of the neighborhood at full development.

The proposed project will have a significant impact upon the neighborhood. The population of the neighborhood will increase approximately 86 percent over the present population. An increase in dwelling units of approximately 72 percent will result. Approximately 25 percent of the present agriculture land will be developed. The residential area will be expanded approximately 37 percent. There will be no demands from industrial developments. An area of 0.48 acres is devoted to a commercial site. The proposed project's water demand of 177,600 gallons per day and the neighborhood's demand of 778,266 gallons per day at full development can be adequately served by the present system after an existing 12-inch line on Ventura Road is extended north. The sewage demands of the proposed project will be 118,400 gallons per day. The demand of the proposed project or any future development can not be met by the present system. An expandable sewer line will have to be constructed in order to provide the adequate capacity. It has an estimated cost of $400,000.

The proposed project will increase the present air emissions of the neighborhood approximately 83 percent. Air emissions from neighborhood NE-7 when totally developed will be 0.23 tons per day. An 88 percent increase in students will be generated in the neighborhood by the project. Presently the schools involved are at or near capacity. When the neighborhood is fully developed all three schools will be over capacity unless

they are expanded with the growth of the neighborhood. The proposed project will create a need of 3 acres of parkland. Presently there is no neighborhood parkland. The park acreage could be met by some of the presently undeveloped land. The specific neighborhood plan allocates 10.03 acres of parkland adjacent to the project site.

Table 32. NEIGHBORHOOD ANALYSIS NW-7: PROJECT 75-11

Item	Developed Demands	Vacant Demands	Project Demands	Total Demands	General Plan Projections
Population	1,376	2,615	1,184	5,175	4,522
Dwelling Units	472	747	338	1,557	1,330
Land Use-Total Acres	79.48	144.35	48.3	272.13	215
Residential	79	124.48	48.3	251.78	190
Commercial	0.48	-		.48	5
Industrial	-	-		-	-
Parks	-	10.03		10.03	6
Schools	-	9.84		9.84	14
Water (gal./day)	208,416	392,250	177,600	778,266	
Sewage (gal./day)	139,472	261,500	118,400	519,372	
Air Quality (Reactive Hydrocarbons-tons/day)	0.06	0.12	0.05	0.23	
Traffic Trips	4,438	6,947	3,143	14,520	
Students (K-12)	446	874	395	1,715	
Park Acreage-Total	10.4	19.6	8.9	38.9	
Neighborhood	(0)[a] 3.5	(10.03)[b] 6.5	3.0	13.0	
Community	6.9	13.1	5.9	25.9	

[a]Existing developed neighborhood parkland.

[b]Vacant neighborhood parkland.

4.4.2.1.4 TOPOGRAPHY

The terrain of the site is generally flat with the area supporting the residential structure and accessory buildings raised slightly above the surrounding crop area. The land has a slight down slope to the west and northwest.

Impact

Since the land form is flat, little modification of it would likely be necessary for the project as proposed.

Mitigation

None required.

4.4.2.1.5 GRADING

The land form on the property is relatively flat with a down gradient to the west facilitating drainage toward the Santa Clara River bed. The land form as it presently exists is suitable to residential construction and little modification should be necessary.

Impact

Compaction and loss of commercial food resource will result from development of the project.

Mitigation

None required.

4.4.2.2 SOCIAL

4.4.2.2.1 POPULATION

The average density of the project is 7 dwelling units per acre. At an approximate 3.5 persons per dwelling unit, it is estimated that the total population generated by the project will be 1,642 persons (7 DU/acre x 3.5 persons x 67 acres = 1,642).

According to the 1975 Special State Census, the City of Oxnard presently has a population of approximately 85,104. According to the 1974 "Development Intensity Study" approved by the City Council, the projected 1990 population within the City's planning area will be approximately 146,011 at a 74.8 percent level of development. Full development would allow a population of 195,149.

The proposed project is located in neighborhood northwest 7 as it is designated by the General Plan. In 1990 neighborhood 7 under the Development Intensity Study will have a population of 1,938 at 50 percent of planned development capacity; full development capacity is 3,876. As of 1975 the population in neighborhood 7 is 1,376.[3] In 1970 the population in neighborhood 7 was 259. If figured on an average annual basis, the growth rate per annum in neighborhood 7 from 1970 to 1975 is 20 percent (1,376 - 259 = 1,117 ÷ 5 years = 223.4 ÷ 1,117 = 20 percent).

Impact

Proposed project 75-11 will be an addition of 1,624 persons or 1.9 percent to the present city population of 85,104. Under the neighborhood 7 General Plan boundaries, only a portion of the 67 acres of the proposed project lies in neighborhood 7. Under a new but not yet adopted specific plan for neighborhood 7, only 48.3 acres of the proposed project are included in

neighborhood 7. The population for the 48.3 acres will represent an increase of 1,183 persons or 86 percent in the population of neighborhood 7 and bring its population to 2,559 or 66 percent of total capacity under the Development Intensity Study, and 132 percent of the 50 percent of capacity population level for 1990 under the Development Intensity Study. The General Plan total population figure for the year 2000 in neighborhood 7 is 4,213. The population after the project is completed would be 61 percent of that figure.

4.4.2.2.2 HOUSING

As of 1975 the total number of acres zoned for single family residential use but undeveloped in the City of Oxnard was 479. As of April 1975 there was a total of 28,672 housing units. The average vacancy rate was 9.11 percent with 2,613 vacant units. The single family unit vacancy rate was 4.80 percent of 16,031 units. Multiples averaged 17.08 percent and mobile homes 4.68 percent.[4] The absorption rate for single family houses was 44 acres per year from 1970 to 1975. It will take 10.8 years to utilize all existing zoning if it were available for development.

Impact

The proposed project includes plans for 469 single family detached units at an estimated value range of $32,000 to $37,000. This would be an increase of 2.9 percent to the existing single family unit stock of 16,031 units. Of the total units 338 will be built within the boundaries of neighborhood 7 (northwest community) as it is modified by the City Planning Department's specific but unadopted plan. These units are consistent with the housing types specified for neighborhood 7 in the adopted General Plan. However, the number of units and their projected family size will cause the population of neighborhood 7 to exceed the 1990 level of 1,938 suggested in the Development Intensity Study by 621 persons.

Mitigation

The density of the project could be reduced by constructing a development having less units in cluster configurations. This would reduce the "urban" appearance by providing more open space within the development and decrease the development's impact on the open character of the area as it now exists.

4.4.2.3 NATURAL ENVIRONMENT

4.4.2.3.1 FLORA AND FAUNA

With the exception of the eucalyptus trees planted on the west side of the residential structure, some grasses, decorative jumipers on the house front, and shrubs close to the building, the property is covered with bean plantings.

The viable fauna on the property is predominantly birds. A mockingbird (Mimum polyglottos), towhee (Pipilo fuscus), and hummingbird (Stellula calliope) were observed.

Impact

Construction of the proposed project will cause the removal of the existing residential structure on the property and some if not all of the vegetation and trees planted near it. The removal of this area will decrease the small avi-fauna habitat and the habitat of any rodents and reptiles living in the vicinity of the structure.

Mitigation

If any of the existing trees can be saved efforts should be made to do so. A search for the evidences of nesting activity should be conducted before any fauna habitat is destroyed. If such activity is present, provision should be made to insure the safety of the nesting species. The completed project should be planted with a variety of trees to provide avi-fauna habitat. The avi-fauna observed on the property are species tolerant of human residential activity. With the construction of the project, additional trees and shrubs on each lot will be planted providing an enlarged habitat for avi-fauna.

4.4.2.3.2 GEOLOGY

No faults lie beneath project site 75-11 according to the Geologic Map of Southern California prepared by the State Division of Mines and Geology (1972). The project site is about 1½ miles south of the McGrath Fault, 2 miles south of the Oakridge, 5½ miles west of the Springville and about 7½ miles west of the Camarillo Fault. (See Figure 4.) These faults are designated as concealed and are conjectural where queried.

This area is not in a zone which may contain active or potentially active faults. The potential amplification of ground shaking for this area is a long period with severe effects.[5]

A subsidence problem in Ventura County does exist, mainly in the Oxnard Plain.[6] Subsidence, or the sinking of the land surface has four possible causes in Ventura County: natural consolidation of alluvium, tectonic deformation, water extraction and/or oil extraction. It is probable that it will continue, possibly at an increasing rate if extraction of fluids from this area is increased. Measurements indicate that the project is in an area that has a subsidence of approximately 0.05 feet per year.

The area of project site 75-11 has the possibility of having a serious liquefaction problem.[7] This situation exists when an area has large deposits of unconsolidated alluvial material and a high water table potential. Should the water table be sufficiently high when an earth tremor occurred, the alluvial material and the water could be mixed, creating a "quicksand-like" situation. During such a situation structures on the surface have been known to sink. In a geology study conducted by the State Division of Highways for a proposed interchange at Route 101 east of the proposed project, liquefaction was considered a major problem. The design of the interchange was changed to compensate for the problem of liquefaction.

All of the coastal areas in Ventura County are susceptible to tsunamis. The Channel Islands do not provide adequate protection for the County coastal areas because tsunamis can move down the Santa Barbara Channel from the north, the south or be generated along the faults present in the Santa Barbara Channel. The effects of the waves are confined to the immediate beach area and up to one mile inland in flat areas. The project site, therefore, is not within a tsunami hazard zone.[8]

Geology Impact

With the moderate water table (15 feet to 40 feet from surface) and type of soil in the area (5 feet or more depth), there is a possible danger to the project from liquefaction if a tremor occurs. There is also a danger from seismic shaking which would be amplified due to the unconsolidated alluvial material in the project area. There is no known surface faulting within the project property.

Mitigation

Alluvial plains with high ground water tables in areas of seismic activity are subject to long duration, strong ground shaking and liquefaction. Residential structures of one and two stories with proper support and no excessive concentrations of weight are not as susceptible to differential settling due to liquefaction as other types of structures may be. A qualified engineering geologist should be consulted to establish foundations and structural requirements for developments in these areas.

4.4.2.3.3 SOIL

The soil on the proposed project site 75-11 has been identified by the Soil Conservation Service as being Pico-Metz-Anacapa association.[9] This consists of level to moderately sloping, very deep, well drained, sandy loams and very deep, somewhat excessively drained, loamy sands. Permeability is from moderately rapid to rapid. Surface runoff is very slow to slow and there is no erosion hazard.

Pico sandy loam comprises approximately 70 percent of the project site. This soil type is designated Class IIs-4 as to its suitability for farming.[10] This type of soil has moderate limitations, mainly because of a low water holding capacity, that reduce the choice of plants or that require moderate conservation practices. Pico loam comprises the other approximately 30 percent on the southeast section of the project site. This soil type is designated Class IIIs-0 which has severe limitations, mainly because of coarse textured material at a depth of 2 to 3 feet restricting the root zone and the amount of water available, that reduce the choice of plants and/or require special conservation practices.[11]

The Pico sandy loam (0-2 percent slope) occurring on the project site is described as having an inherent medium fertility and is suitable for vegetables, citrus fruits, field crops and walnuts. The Pico loam soil types have an inherent medium fertility which is suitable for vegetables, field crops, citrus crops, walnuts, range and urban development.[12]

The shrink-swell potential of these soils is classified as low.[13]

Soil Impact

The greatest impact on the soil if the proposal is approved will be the loss of approximately 67 acres of productive agricultural soil. Dividing and covering the area with roads and structures will effectively remove it from its agricultural use forever.

4.4.2.3.4 HYDROLOGY

The soil on the project site is predominantly of the Pico-Metz-Anacapa association. Its farming suitability is Class IIs-4. It is well drained with moderate to rapid permeability. Ground water recharge is prevented from the project site's surface, however, because the site rests on the clay cap that covers the major portion of the aquifers under the Oxnard plain south of U.S. 101. Overland and subsurface flow in this area drains towards the Santa Clara River.

Impact

Because of the clay cap underlying the project site, there will be little or no impact on the groundwater supply.

Mitigation

None required.

4.4.2.3.5 DRAINAGE AND FLOOD CONTROL

The pattern of drainage in the overall area is flat and poorly defined. The general flow is in a westerly direction, parallel with the Santa Clara River, eventually reaching the river downstream. Almost all of the area to be annexed lies in the river flood plain, but it is protected by a levee.

The construction of a levee westerly from the freeway after the 1969 flood has eliminated a flood threat having an average frequency of occurrence of once in 100 years, or greater. The land is now only subject to flooding from Standard Project Floods, which may be expected from the most severe combination of meteorological and hydrological conditions considered reasonably characteristic of the geographical area. An additional extension of the levee in connection with the proposed Victoria Avenue crossing will further minimize the flood threat.

Drainage from within the site presently consists of sheet flow which is intercepted in a ditch along the west boundary of the property where it is directed northward. This ditch also receives some water from Rhonda Street in the tract to the south of the site.

Drainage coming from the east runs north on Ventura Road in a concrete channel, to the north boundary of the site where it turns westerly and joins the ditch. The drainage runs northwesterly from the sanitary land fill area to the river in a swale. At the river, the flow is discharged through a large flapgate outlet structure.

When the river is high the flapgate will remain closed and water will pond in the sanitary land fill area. However, it will overflow the ponding area and flow westerly before it comes up to a high enough elevation to affect the project site.

Impact

The development of the site will increase runoff from the area. It is estimated that the present runoff from the site is 94 cfs for a ten year flood and it will increase to 105 cfs after the site is fully developed.

Mitigation

No mitigating measures are necessary other than those which are implemented in accordance with good engineering design and conformance with the City of Oxnard's standards.

Development of the site will include the construction of storm drains as required and probably include an underground system to conduct storm water. It should be noted that Vineyard Avenue will transverse this property and drainage facilities will have to be designed to accommodate this major street crossing.

It should be verified that the elevation of the high water that might occur when the river flow keeps the flapgates from operating is below floor elevations.

4.4.2.3.6 AIR QUALITY

Vehicular traffic generated by residents of the project will result in increased vehicular emissions. Table 33 contains estimates of daily vehicular emissions that would result from the project and compares them to the total county-wide daily vehicular emissions.

It is estimated that the residential project will contain about 938 cars for the 469 dwelling units (2 cars/DU). The number of vehicles generated by this project is 0.47 percent of the total of about 200,000 vehicles in the County.

Utilizing a vehicle use factors of 17.2 miles per person per day there will be a total of 28,225 VMT (vehicle miles traveled per day).

The emission grams per mile for three pollutants are shown below. The emission grams are based on 1980 data.[14] As any project on the property would probably be completed nearer 1980 than 1975, 1980 factors are more relevant than 1975 factors.

Table 33 . AIR POLLUTION EMISSION FACTORS
Average Old and New Cars (1980)

Pollutant	Emissions Grams/Mile
Carbon Monoxide (CO)	11.43
Hydrocarbons (HC)	2.75
Nitrogen Oxides (NO_x)	2.0

Based on the above air pollution emission factors, it is estimated the project will generate emissions as shown in Table 34 .

Table 34. ESTIMATED DAILY VEHICLE EMISSIONS

Pollutants	1980 Project Related Daily Emissions (tons)[a]	Total 1980 Countywide Vehicular RHC (tons)[b]	Percent of Countywide RHC	Total Oxnard Vehicular RHC (tons)[d]	Percent of Oxnard RHC
Carbon Monoxide (CO)	0.3556				
Hydrocarbons (HC)	0.0855				
Nitrogen Oxides (NO_x)	0.0622				
Reactive Hydrocarbons (RHC)[c]	0.0727	32.5	0.22	6.4	1.13

[a]The tons per day are determined by the following formula: EF x 17.2 miles/person x population (D.U. x A.D.) x .0022046 ÷ 2000 = tons/day.

[b]Ventura County Air Pollution Control District, August 7, 1975.

[c]Reactive hydrocarbons = Hydrocarbons x reactivity (85%).

[d]Oxnard emissions were determined by finding the percent of Ventura County's population (432,407 as of January 1, 1975) that is Oxnard's population (85,104 as of January 1, 1975) and using this percentage (19.7%) to find Oxnard's contribution of emissions in Ventura County (19.7% of 32.5 = 6.4).

Air Quality Impacts

The capacity of the Oxnard area to assimilate these emissions is satisfactory during the months from October to March. During the remaining months of the year the project emissions will be adding to an existing situation that frequently exceeds Federal or State standards.

The capacity of the Ventura air basin to assimilate these emissions is considered to be generally satisfactory during the months from October to March. During the remaining months of the year, the project-related emissions for NO_x and HC will be adding to an existing situation that frequently exceeds Federal or State standards. However, the project-related increase in emissions is exceedingly small and would be insignificant in relation to the total level of countywide emissions and is expected to decline further as new vehicle emission standards take effect.

The cumulative effect of this project along with the other projects will be analyzed in a later section.

4.4.2.4 RESOURCES

The rich sandy loam on the proposed project site is classified as IIs-4 relative to its suitability for farming. It has moderate limitations and is a valuable food resource. Crops that are suitable to the soil are vegetables, field crops, citrus crops, walnuts and range. The land is also an urban development resource.

Impact

The 67 acres of the project site represent 0.055 percent of the total productive agricultural acreage in Ventura County, and 0.12 percent of the land resource devoted to commercial vegetable and field crop production. This resource will be irreversibly lost.

Mitigation

None economically practical.

4.4.2.5 SENSORY

4.4.2.5.1 VISUAL AND AESTHETIC

The northern area of Ventura Road is typified by large open agricultural lands producing row crops. It is essentially a rural atmosphere framed by a mountain backdrop to the north and bordered by the trees, shrubs and grasses that grow along the Santa Clara River bed. The cultivated area of lot 75-11 adds to the open rural appearance of the land at the north end of Ventura Road.

Impact

The completion of the proposed project will impose a residential subdivision into the view west and northwest from the residential areas presently situated along Ventura Road south of Holly Avenue and Carmen Way. The open and rural character of the land will be eliminated and replaced by urban expansion.

Mitigation

If a clustered development concept with large open areas were constructed, the rural atmosphere of the area, though modified, would not be eliminated as would be the case if the standard single family subdivision were constructed. The land area directly to the north of the proposed project is designated as open space and recreational in the General Plan (golf course and park). It is also the south bank of the Santa Clara River. A standard subdivision will create a sharp and unattractive visual break between the two land uses. A clustered development could provide an open, pleasant transition zone.

4.3.2.5.2 NOISE IMPACT AND MITIGATION

In conducting the noise analysis for the proposed project, several assumptions were made: truck traffic is minimal under both existing and 1990 conditions; 1990 traffic projections, provided by the Ventura County Traffic Engineer, include traffic generated by this project; the existing 205 foot drainage right of way between the proposed project and Ventura Road will remain; and HUD Guidelines for Noise Assessment are used as criteria for acceptability/non-acceptability of noise levels.[15]

Aviation

Although this project is located under the Ventura County Airport/Oxnard Airport traffic area (5 miles in all directions from the center of the airport), relatively few aircraft would approach or depart the Airport in a flight pattern over the project. This is due mainly to the fact that the standard aircraft traffic pattern is to the south of the Airport. Of the few aircraft that might overfly the project, virtually all would be at an altitude of 2,000 to 3,000 feet or higher and at reduced power settings (low noise). Based on these considerations, it can be assumed that noise from aircraft would have minimal environmental impact on the proposed project.

Railway

Due to the fact that no railway lines exist within 3,000 feet from the project site, HUD guidelines suggest that the project will suffer no adverse impact from railway noise.

Industry

Assuming the closure of the sanitary landfill (just north of this project on Ventura Road) on schedule, no industrial

developments exist within a proximity that would be measurably detrimental to the proposed project.

Road Traffic

For the purposes of this noise impact assessment, it is assumed that feeder and distribution streets internal to the development will meet HUD guidelines in terms of noise generation and impact. Such an assumption is based on existing zoning standards relative to 7 dwelling units per acre density developments.

Carmen Way currently has a pavement width of 21 feet. It is assumed that width will be increased to a minimum of 30 feet as construction begins on the proposed project. Traffic flows from the project onto Carmen Way and other planned entrance/egress routes within the development, when coupled with existing and forecasted 1990 traffic flows on these streets, are not expected to create a traffic noise environment at other than that magnitude which is normally acceptable for residential use.

Ventura Road is currently a 4-lane road, 70 feet wide as it passes the project site. Existing traffic flows run 10,610 average daily vehicle trips. It is estimated that the proposed project will increase this figure by 1,091 vehicle trips heading north on Ventura Road and 1,527 heading south on Ventura Road. Assuming speeds of 50 m.p.h., adjusted peak hour traffic would be (according to HUD noise assessment methodology) 12,137 vehicle trips heading south and 11,701 vehicle trips heading north. Assuming continuance of the existing 205 foot flood drain easement and further assuming a building setback of 25 feet from the property line, the effective distance between the project and Ventura Road traffic lanes is 260 feet. Using this data, project dwelling units along Ventura Road would be exposed to

traffic noise levels (L_{50}) in the area of 54 to 56 dB(A), which is within the normally accepted range for residential use.

Under 1990 projected traffic levels (13,600 average daily vehicle trips) site traffic noise exposure approaches marginal levels; however, it still falls within HUD's classification of normally acceptable noise exposure.

4.4.2.6 ARCHAEOLOGICAL AND HISTORICAL

The proposed project site has been involved for at least 60 years in intensive agricultural production. According to Robert Lopez, the President of the Ventura County Archaeological Society, it is doubtful that the project site will yield valuable artifacts. (See letter in Appendix B.)

Impact

On the basis of the past history of the site and the present knowledge of the area relative to archaeological characteristics no impact is expected.

Mitigation

Mr. Lopez points out that the possibility of uncovering deeply buried archaeological resources exists and that should such materials be uncovered, "work should be halted in the immediate area of the discovery and a qualified archaeologist should be called in to evaluate and make recommendations concerning the find."

4.4.2.7 CIRCULATION

The principal roadway in the vicinity of the project site is Ventura Road. It is aligned north-south along the eastern boundary of the property. North of the property Ventura Road provides access to the Wagon Wheel Junction area and the freeway. South of the property it crosses Gonzales Road, Teal Road which serves the airport, and Fifth Street. Ventura Road is the major north-south arterial west of Oxnard Boulevard. Its average daily flow (ADF) at the north end near South Bank Road is 10,610. Just north of Gonzales Road the ADF is 14,060. The intersection of Gonzales and Ventura is 4 lane and signalized. (See Flow Map, Figure 25.)

Carmen Way is an east-west aligned street serving a single family residential area. The northern boundary of the residential area is Carmen Way, the southern boundary is Gonzales Avenue. There are both cul-de-sacs and through streets extending south from Carmen Way.

Vineyard Avenue lies to the east of the proposed project. It extends on an east-west curvilinear alignment from H Street, which parallels Ventura Road to Oxnard Boulevard, and continues in a north-east direction. West of Oxnard Boulevard the ADF on Vineyard is 7,230. At present there are lengthy delay times at the signalized intersection of Oxnard and Vineyard at peak hour periods. Under the General Plan's Circulation Element, Vineyard will eventually enter west from H Street to Victoria Avenue.

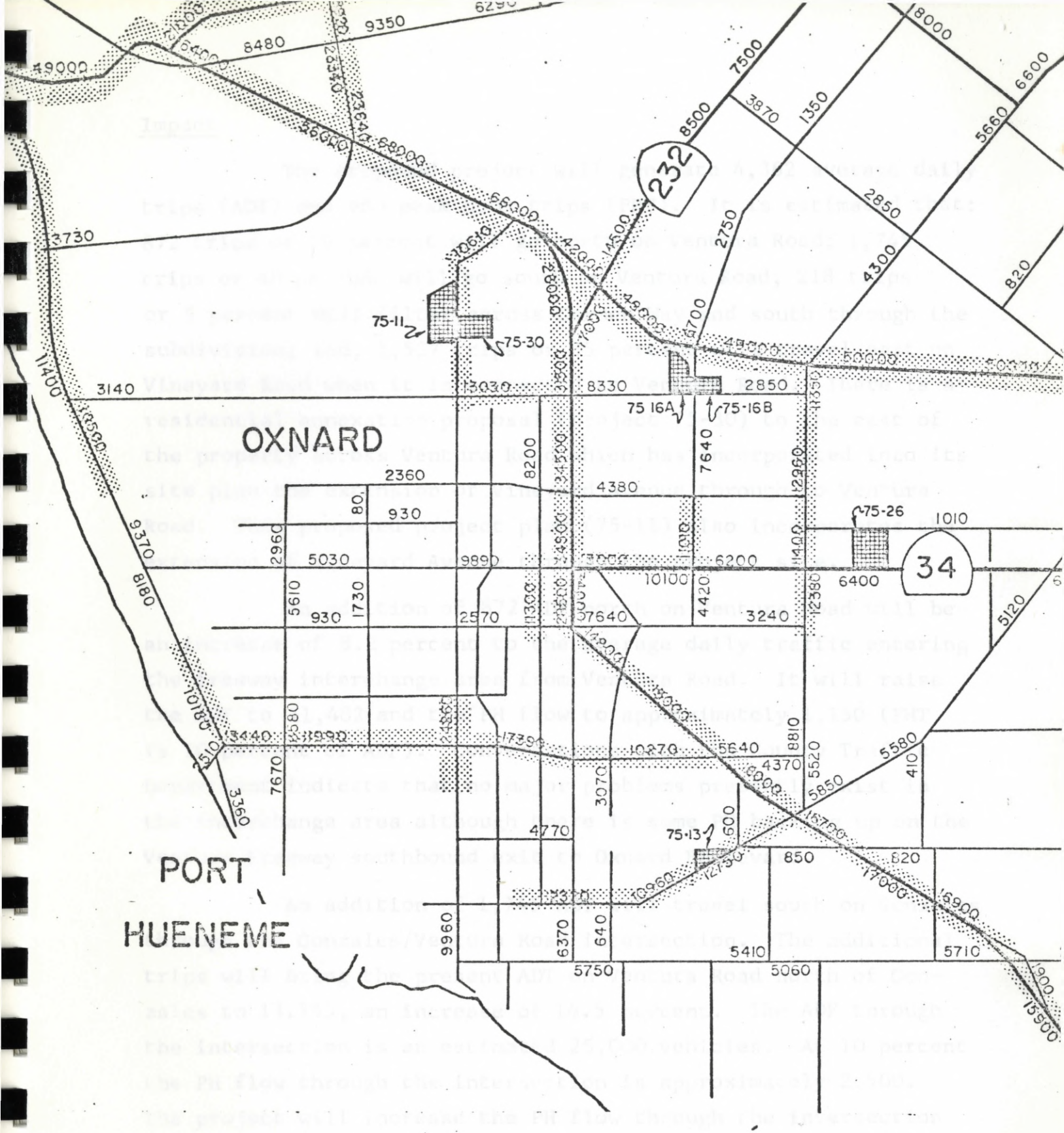

Figure 25. PRESENT AVERAGE DAILY TRAFFIC FLOW

. Annexation Projects

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1 mile

Impact

The proposed project will generate 4,362 average daily trips (ADT) and 480 peak hour trips (PHT). It is estimated that: 872 trips or 20 percent will go north on Ventura Road; 1,745 trips or 40 percent will go south on Ventura Road; 218 trips or 5 percent will filter across Carmen Way and south through the subdivision; and, 1,527 trips or 35 percent will travel east on Vineyard Road when it is connected to Ventura Road. There is a residential annexation proposal (project 75-30) to the east of the property across Ventura Road which has incorporated into its site plan the extension of Vineyard Avenue through to Ventura Road. This proposed project plan (75-11) also incorporates the extension of Vineyard Avenue through the project site.

An addition of 872 ADT north on Ventura Road will be an increase of 8.2 percent to the average daily traffic entering the freeway interchange area from Ventura Road. It will raise the ADT to 11,482 and the PH flow to approximately 1,150 (PHT is 10 percent of ADF). Conversations with the County Traffic Department indicate that no major problems presently exist in the interchange area although there is some PH backing up on the Ventura Freeway southbound exit to Oxnard Boulevard.

An addition of 1,745 ADT will travel south on Gonzales through the Gonzales/Ventura Road intersection. The additional trips will bring the present ADT on Ventura Road north of Gonzales to 13,765, an increase of 14.5 percent. The ADF through the intersection is an estimated 25,000 vehicles. At 10 percent the PH flow through the intersection is approximately 2,500. The project will increase the PH flow through the intersection by approximately 7 percent. A conversation with Leonard Hayes, Traffic Engineer at the City of Oxnard Department of Public Works, indicates no major PH problems at the intersection but a very heavy Ventura Road flow. The desirable capacity of Ventura Road is in excess of 20,000 ADF.

It is estimated that 218 project generated trips will cross Carmen Way and travel south through the existing subdivision. Present ADF on the subdivision streets is not known. Those vehicles travelling through the existing subdivision will use Patricia Street predominantly. This street directly connects Carmen Way to Gonzales Road. There is presently no or very little traffic using this street that is not directly related to the subdivision activity. The traffic generated by the proposed project along Patricia Street will change the status of the street to a thoroughfare serving a neighborhood not just a subdivision. There will be the attendant traffic related noise and activity that is found on such streets.

It is estimated that an additional 1,527 ADT will travel from the proposed project east to Oxnard Boulevard along Vineyard Avenue after it extends from Ventura Road to Oxnard Boulevard. The ADF presently on Vineyard west of Oxnard is 7,320. The project generated addition would be 21 percent. According to the County Transportation Department there are presently PH capacity problems at the intersection of Vineyard Avenue and Oxnard Boulevard. The project generated trips would be an additional aggravation to those problems. It is estimated that the PH flow through the Vineyard Avenue/Oxnard Boulevard intersection is 4,585. The project generated PHF of 153 would represent a 3 percent increase, an incremental but cumulative addition to the PH delay problems at the intersection.

4.4.2.8 UTILITIES

4.4.2.8.1 WATER

The water delivery system in the project area consists of an 8 inch line paralleling Carmen Way and connecting to a 12 inch line paralleling Ventura Road. The 12 inch Ventura Road line has its north end at Holly Avenue which intersects Ventura Road on its east side just north of Carmen Way. In 1976-1977 the City plans to extend the Ventura Road line from Holly Avenue north to South Bank Drive north of the project. With the inclusion of the Gonzales Road Blending Station into the City's water supply system there will be a total capacity of 77.1 million gallons per day (mgd).

Impact

At a per capita daily use of 150 gallons per day (g/d) the project will demand 246,150 gallons per day (67 acres x 7 DU/acre x 3.5 people/DU = 1,641 persons @ 150 g/d = 246,150). The proposed development would demand approximately 0.319 percent of the 77.1 mgd water supply capacity. The present average daily demand is 13,594,000 gallons. The unused capacity is 63,506,000 g/d. The project would consume 0.388 percent of the unused capacity.

Mitigation

Relative to present supply: none required. Relative to providing the project with water service, the 12-inch line on Ventura Road will have to be extended north.

4.4.2.8.2 SEWAGE

Collection

The area covered by this project slopes mainly to a low area approximately midway between the northerly and southerly boundary of the property. The development's sewer system would probably drain to this area and a sewage pumping station which exists at this point. The pump plant discharges to a 10 inch force main which runs southerly along Ventura Road to a 15 inch gravity sewer near the southerly boundary of the project. The pump plant has a capacity of 1,000 gallons per minute. The 15 inch line runs southerly on Ventura Road as described in the Regional Setting of this report.

Impact

The project will generate on an average of 164,100 gallons per day with a peak flow calculated to be 342 gallons per minute. The calculated peak flow for the proposed annexation 75-11 immediately to the east of the project site is 342 gallons per minute. The pump plant is adequate to serve the two new annexations together with the present developments which flow to the plant. The line on Ventura Road, however, is presently at or near capacity.

The City plans to relieve the Ventura Road line by connecting its south end to an unused 24 inch concrete line in Ventura Road. The improvement will also include a connecting link from the south end of the unused line to the City's wastewater treatment plant and lining the portion of the line to be used to seal and protect the interior of the concrete pipe. The estimated cost to refurbish the 24 inch line and tying it to the system is $400,000. It is planned for construction in 1976 if funding is available.

The City contemplates making a sewage collection system analysis which will identify sections of the system that are subject to reaching or exceeding their capacity. As this information is not available at the present time pending completion of the study, it is uncertain whether the increased capacity of the Ventura Road line will be sufficient to accommodate the sewage demands of the proposed project and others that are planned in the area serviced by the Ventura Road line.

Mitigation

The overloading of the Ventura Road line can be mitigated by the construction of the relief line in Ventura Road. The exact extent of the mitigation measures will be more accurately determined after the completion of the City's collection system analysis.

Treatment

The project will be served by the City of Oxnard's wastewater treatment plant. The plant is presently processing an average of 11 million gallons per day (mgd) with a high of 13 mgd. Its average daily capacity is 22.1 mgd with a peak capacity of 35 mgd. Shortly, Point Mugu and the Port Hueneme Naval Base will be allotted 5.6 mgd of the average daily capacity. This will leave the average daily capacity for the City of Oxnard at 16.5 mgd. Based on Ventura County Sewerage Manual, Plate 10, the peak flow from Point Mugu, Port Hueneme will be 11 mgd. This will leave the peaking capacity for the City of Oxnard at 24 mgd. With present use at the plant averaging 11 mgd, and peaking at 13 mgd, and with available future average capacity at 16.5 mgd, and the peaking capacity at 24 mgd, the average daily capacity reserve will be 5.5 mgd and the peaking reserve will be 11 mgd.

Impact

Average daily per capita sewage discharge is 100 gallons; the peak flow of sewage will be 105 gallons per minute for this project. The project will generate 50,400 gallons of sewage per day (504 persons x 100 = 50,400). This is 0.22 percent of the average daily capacity of the wastewater treatment plant or 0.45 percent of the average daily reserve. After the Point Mugu allotment, the project sewage will be 0.91 percent of the average daily reserve (5.5 mgd). The Oxnard Wastewater Treatment Plant (WWTP) has adequate capacity for the proposed project.

Mitigation

None required. The WWTP at present has adequate capacity for the proposed project and others pending.

4.4.2.8.3 ENERGY USE

The type of fuel--gas or electricity--to be used for appliances and heating in the residential units of the proposed development is not known at this time. Therefore, estimated consumption figures for both fuels are calculated for residential units and commercial uses when possible.

Electricity - Project Demand

Single family units vary greatly in the amount of electricity they consume, but on the average they range from 5,458 KWH (kilowatt hours) to 15,171 KWH annually.[16] The 469 dwelling units of the project will consume from 2,559,802 KWH to 7,115,199 KWH annually.

Gas - Project Demand

An average consumption figure for single family houses is 95,000 cubic feet per dwelling unit per year.[17] The proposed development will have 469 single family homes for a total gas consumption of 44,508,100 cubic feet per year.

Additional fuel and power will be used in the construction of the site, but it is difficult to estimate the amount.

Energy Use Impact

The Edison Company and the Southern California Gas Company have indicated their systems have the capacity to serve the electricity and gas demands of the project.

4.4.2.9 SERVICES

4.4.2.9.1 COMMUNITY SAFETY

The project site will receive police and fire protection from the City of Oxnard. The nearest fire station is located 1½ miles away at 230 West Vineyard Avenue. Police service is provided by the Oxnard Police Department.

Impact

There is nearly one fireman per 1,000 persons at the present time.[18] This project will demand nearly two additional firemen to serve the area. Fire services cost about $19 per capita per year in the City of Oxnard.[19] The cost of fire services for the project will be $31,179.

There is about 1.24 policemen per 1,000 persons at the present time in Oxnard.[20] This project will demand approximately two additional policemen around the clock to serve the area. Police services cost about $35 per capita per year in the City of Oxnard.[21] The cost of police services for the project will be $57,435. City taxes on the project would be paid toward the costs of the servoce/

No unusual demands will be placed upon the police and fire departments by the proposed project.

4.4.2.9.2 HEALTH

St. John's Hospital and Oxnard Community Hospital in the City of Oxnard, and Ventura County General Hospital in Ventura could serve the residents of the proposed development. The Ventura County General Hospital is located approximately 5 miles from the property. The hospital is licensed for 278 beds, although approximately 223 beds were staffed in 1975. The occupancy rate figure as of June 30, 1975, using the actual number of available beds, was 58 percent.[22]

St. John's Hospital is located at 333 North F Street, approximately 1½ miles from the property, and is licensed for 316 beds; 268 beds are staffed at this time. Occupancy rate for 1975 was 65 percent. The hospital has plans to expand its emergency room and auxillary care services in the next two to four years.[23]

Oxnard Community Hospital is located at 540 South H Street, approximately 2 miles from the property, and is licensed for 48 beds. All 48 beds are staffed at this time. Occupancy rate for 1975 is 65 to 75 percent.[24]

Health Impact

Previous studies done in California have recommended a range of from 1 to 3 hospital beds per 1,000 population. Based on an estimated ratio of 1.7 hospital beds per 1,000 population, and an estimated population of 1,642 for the proposed development, an estimated 3 hospital beds would be desirable.[25] Based on the occupancy rates of the Ventura County General Hospital at 58 percent, St. John's at 65 percent and Oxnard Community Hospital at 65 to 75 percent, it is estimated that these 3 hospitals can easily absorb this estimated need for 3 additional hospital beds.

4.4.2.9.2 SCHOOLS

The proposed project site is located within the Oxnard Unified High School and Oxnard Elementary School District. Pupils will attend Sierra Ramona (kindergarten through third grade), Sierra Linda (kindergarten and fourth through sixth grade), Fremont Junior High (seventh and eighth), and Oxnard High School. Presently only Sierra Ramona is overcrowded. The enrollment and capacity of the schools are shown in Table 35. There is an excess capacity of 101 students.

For determining the number of students generated from the project, 0.56 students per dwelling for elementary, 0.21 students per dwelling for junior high, and 0.4 students per dwelling for high school were used.[26]

Table 35. SCHOOL ENROLLMENT AND CAPACITY

School	Enrollment	Present Capacity	Existing Excess Capacity	Students over Capacity with Project
Sierra Ramona	616[a]	615	0	133
Sierra Linda	606[a]	653	47	84
Fremont Jr. High	1,095[a]	1,100	5	93
Oxnard High	2,251[c]	2,300	49	139
Totals	4,568	4,668	101	449

[a]Projected 1975-76 enrollment; Mrs. Bryan, Attendance Coordinator, Oxnard Elementary School District, August 21, 1975.

[b]No new schools at least for the next two years--new schools will depend upon passage of school bonds; Norm Braekke, Superintendent for Oxnard Elementary School District, August 21, 1975.

[c]As of October 1974, according to Frances Perry, Secretary to the Assistant Superintendent of the Oxnard Unified High School District, August 21, 1975.

School System Impact

The proposed project will generate about 263 elementary, 98 junior high, and 188 high school students, for a total of 549 students. The 263 elementary students generated by the project will put the two elementary schools over capacity by 216 students. The 98 junior high students generated will put the junior high school over capacity by 93 students. The 188 high school students generated will put the high school 139 students over capacity.

School Costs

The 263 elementary students will cost about $318,230 per year (263 x $1,210 = $318,230), the junior high students will cost about $118,580 per year (98 x $1,210 = $118,580), and the high school students will cost about $250,416 per year (188 x $1,332 = $250,416) to educate, for a total of $687,226 per year for the project.[27]

The residential area will generate tax revenue from property tax and sales tax that will contribute toward the cost of education of the project's students. State and Federal funds will supplement the deficit under the same formula used within the Oxnard Union High School and Rio School Districts and other districts of the County.

Mitigation

Either the class sizes, number of classes, or school facilities should be expanded to accommodate the student enrollment from the proposed project.

4.4.2.9.4 RECREATION

In the Parks and Recreation Element of the adopted Oxnard-2000 General Plan, a standard of ten acres of space per 1,000 population is recommended. Of this ten, 7.5 acres is specifically designated as city, community, and neighborhood parks. As of April 1975, the population of the incorporated area of Oxnard was estimated at 85,104.[28] Using the recommended standard, the City of Oxnard should have approximately 638 acres of developed city, community and neighborhood parkland. At present the City has a total park acreage of approximately 350 acres; however, only 78 acres are developed park sites.[29] Based on 1975 population figures, Oxnard has 12.2 percent of its recommended open space in developed parks. If all presently owned but undeveloped park property were improved, approximately 54.8 percent of the recommended open space would be developed parkland.

There are no existing parks in the project area. A regional park is being considered along the Santa Clara River of approximately 545 acres.

One way the City of Oxnard attempts to meet its recreational needs is by requiring developers under provisions of the Quimby Act to contribute 2.5 acres of neighborhood parkland for each 1,000 persons and/or fees for park acquisition. In addition, the City also collects $150 per dwelling unit for park acquisition. This money does not have to be spent for the direct benefit of the residents of the development from which the funds are derived.

Impact

In addition to dedication of parkland and/or fees required of developers, the City of Oxnard also collects $150 per unit for park acquisition. Based on a total of 469 units, $70,350 would be collected from this development for park acquisition and development.

It is estimated that the population of the completed project will be 1,641. Based on the present goal of 7.5 acres of city, community and neighborhood park space per 1,000 population, the total recommended acreage for the project (1,641) will be 10 acres. Under the provisions of the Quimby Act, the developer will be required to donate 4 acres, which reduces the total desired additional parkland to 6 acres.

Mitigation

None required.

4.4.2.9.5 SOLID WASTE DISPOSAL

The City of Oxnard is currently disposing of approximately 80,000 to 90,000 tons of solid waste a year[30] at the sanitary landfill operated by the Ventura Regional County Sanitation District off Ventura Road along the Santa Clara River. This site will probably reach capacity within the next two to four years. Alternative sites to handle the City's solid waste will be met by the Ventura Regional County Sanitation District.[31]

Impact

The total estimated population of the project is 1,641. Solid waste generation figures were calculated based on averages for residential uses of 2.5 lbs. per person per day for single family units.[32] Based on a population of 1,641 for single family at 2.5 lbs. per person per day, a total figure of approximately 4,102 lbs. of solid waste a day, or approximately 749 tons of solid waste a year, will be generated by this project when completed.

Mitigation

Disposal of solid waste in Ventura County is an increasing problem because of the current practice of disposing of solid waste at sanitary landfills, causing a demand for land that is not readily available. Resource recovery is in dire need of implementation. Reducing the output per capita is one aspect of solid waste reduction along with viable practices that create a valuable resource from the solid waste.

4.4.3 ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

Geology

The site of the proposed project is located in a region of historic seismic activity. No faults are known to exist at the site and the primary seismic danger is from ground shaking and liquefaction. The danger to the proposed project is slight because of its planned conventional residential structures and the danger will be further minimized through required structural design features.

Agriculture

The proposed project will replace 51.5 acres of prime agricultural land with residential construction. In the foreseeable future it would not be economically practical to reestablish the lot's present use once residential use has occurred.

Air Quality

Associated with the project generated traffic are the increased vehicular emissions, which are summarized in Table 34. The airshed presently has the capacity to assimilate increased emissions for carbon monoxide and sulfur dioxide, but a problem exists in Ventura County during the summer months from particulate matter and ozone to which the project-generated emissions for particulates, hydrocarbons and nitrogen oxides will contribute. However, the estimated project-related emissions of these pollutants are insignificant in relation to the total problem and are expected to decline as stricter vehicle emission factors take effect. The cumulative effects of this project along with the other projects will be analyzed in a later section of this report.

Traffic

It is estimated that the proposed facility will generate approximately 4,362 trips per day that will be added to the circulation system. Some of these trips will be generated at an intersection (Vineyard and Oxnard Boulevard) that is presently over capacity at peak traffic hours. The project generated traffic will increase the average daily flow at the intersection by 3 percent.

4.4.4 ALTERNATIVES TO THE PROPOSED PROJECT

No Project

If no residential project occurs on the site, the property will likely remain as 67 acres of productive agriculture. This use would have no further impact on the road and sewer systems but it would continue the present demand on the City's water supply. According to Mr. Brendler of the Ventura County Agricultural Extension,[33] row crops demand between 2 and 2.5 acre feet of irrigation water per year. Using a 2.25 acre foot per year figure, the 67 acres would continue to demand 49,129,425 gallons of irrigation water per year. The proposed project would demand 89,844,750 gallons per year (67 acres x 7 DU/acre x 3.5 persons per DU x 150 gallons per person x 365 days). The row crops presently require 54.6 percent of the proposed project's water demand.

Other Urban Uses

Other residential use combinations having higher or lower densities, such as town houses and apartments are possibilities. The land use proposed for the project area is consistent with the General Plan and the 1990 projections. Although higher densities are feasible on the property, the possible inadequacy of the sewer line in the area necessitates the least density possible.

Alternative Pre-zoning

The proposed project has 18.7 acres that protrude into neighborhood 4 to the north. Under the General Plan neighborhood 4 is designated entirely for park and recreational use and the proposed development is inconsistent with the General Plan neighborhood 4 designated land use. The unadopted specific

plan proposed for this area by the City Planning Department proposes either keeping all of neighborhood 4 consistent with its General Plan use designation, or modifying the 18 acres of the project site in neighborhood 4 to larger lots with horse stables or some other low density use. If the land use in neighborhood 4 is to remain as designated by the General Plan, consideration should be given to annexing the proposed project site with a dual zoning designation; single family residential for that portion of the site which lies within neighborhood 7 and recreation or park for that acreage extending into neighborhood 4.

Alternative Locations

As of 1975 there were 464.44 acres of undeveloped incorporated R-1 zoned land in Oxnard. A portion of the acreage was in available parcels in neighborhoods NW-9,C-4, and S-1. Below is a list of these parcels and their acreage sizes:

Neighborhood North West 9	1 parcel 40 acres
Neighborhood Central 4	1 parcel 30 acres
Neighborhood South 1	1 parcel 30 acres

In addition to the above there are six R-1 parcels of from 16 to 26 acres available, and the balance of the R-1 zoning is mixed with other residential zonings in various 205 foot wide annexation corridors.

No single available parcel is large enough to accommodate proposed project 75-11. However, it could be constructed on 2 or more of the available parcels

4.4.5 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Construction of the proposed facility will irreversibly alter the physical and biological characteristics of the land and prevent it from being used as agriculture. As a consequence, the 67 acre site will be irretrievably committed to an urban use and eliminated as a food resource.

The rural character presently part of the neighborhoods at the north end of Ventura Road will be greatly diminished.

4.4.6 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

As the site presently is used, it is productive of food goods and its product can be changed over time as the economics and demands of agriculture change. Also, as long as it is in agriculture it would be possible to change to another, more productive use, whatever it may be, at any time. Relative to noise, air pollution, drainage costs, ground water recharge, and traffic circulation, agricultural use has fewer external costs than residential use.

The residential use will provide living space for 1,642 people for its life span. In the short run it will provide increased employment to the home construction industry in a time of relatively high unemployment.

The location of the project is well suited relative to roadway access and retail services. It conforms to the development plans of neighborhood 7 as they are set out in the City's General Plan.

4.4.7 GROWTH INDUCING IMPACT OF THE PROJECT

Sewer Collection System

The proposed project may require expansion of the sewer line capacity downstream on Ventura Road. The increased capacity after the expansion is completed will be an inducement for other developments to come on line and use the excess capacity. The proposed project and the measures necessary to provide it with adequate sewage capacity will have a growth inducing impact.

Schools

Student enrollments generated by the project will place all the schools receiving student applications from the project over capacity. This will require either increased class sizes, expanded curriculums, or expansion of facilities.

Residential Development

The availability of housing is generally considered a secondary factor in determining an area's rate of growth. Other factors such as employment opportunities, environment, physical appearance, accessibility, etc. are usually of greater importance in a household's locational decision.

Vacancy rates are good current indicators of the relationship of housing supply to demand. A certain vacancy rate is considered both normal and desirable to provide persons entering the housing market an adequate choice in terms of unit type, location, price, size, etc. to meet their particular needs. For owner-occupied (generally single family detached) units, a normal vacancy rate would be roughly 4 to 5 percent, while for rental units a normal rate would be in the range of 7 to 8 percent.

Recent surveys indicate the current vacancy rate in single family units is 4.5 percent, and 17 percent for multiples. Based on historical absorption of residential land, Oxnard currently has a 11.1 years inventory of undeveloped land for single family development, and a 4.3 year inventory of land for multiple development. These two factors suggest that there will be a need for additional units for low density residential development by 1980, and additional land for multiple once the vacancy rate is reduced. Even under these circumstances, however, it is possible that there could be strong demand for higher density residential uses within a given section of the City even while there is an over-supply in the City as a whole.

As the present vacancy rate is below 5 percent for single family housing, this project is not anticipated to be significantly growth inducing.

4.4.8 REFERENCES

1. Under the unadopted specific site plan for neighborhood 7 proposed by the City Planning Department, the proposed project will have 48.3 of its 67 acres within neighborhood 7 south of Vineyard Avenue. Vineyard Avenue will eventually be the north boundary of the neighborhood.

2. These computations are made with gross acres. The 48.3 acres include street areas. If 18 percent of the 48.3 acres are subtracted from residential streets, the dwelling density is 8.5 DU/acre (48.3 - 18% = 39.7 acres, then 338 DU ÷ 39.7 acres = 8.5 DU/acre).

3. Merle Betz, City of Oxnard, Planning Department.

4. 1975 State Special Census.

5. Seismic and Safety Element of the Resources Plan and Program, Ventura County Planning Department, October 1974.

6. Ibid.

7. Ibid.

8. Ibid.

9. Soil Survey, Ventura Area, CA. USDA, Soil Conservation Service in cooperation with the University of California, April 1970.

10. Ibid.

11. Ibid.

12. Ibid.

13. Ibid.

14. Emission factors for the average gasoline powered automobile in Ventura County, Air Pollution Control District, County of Ventura, 7-31-75.

15. HUD Noise Assessment Guidelines, August 1971.

16. Telephone conversation with Gary Nasalroad, Energy Services Representative, Southern California Edison Company, August 21, 1975.

17. Oscar Johnson, District Manager, Oxnard Office, Southern California Gas Company, February 1974.

18. Telephone conversation with Mrs. Colby, Secretary, Oxnard Fire Department, August 27, 1975.

19. Ibid.

20. Telephone conversation with Officer Larry Fyrar, Crime Prevention Officer, Oxnard Police Department, August 21, 1975.

21. Telephone conversation with Secretary of Chief Owens of the Oxnard Police Department, August 27, 1975

22. Telephone conversation, August 22, 1975 with Eila Hendrickson, Accredited Record Technician, Ventura County General Hospital.

23. Telephone conversation, August 20, 1975, with Don Worsely, Assistant Administrator for Fiscal Affairs, St. John's Hospital.

24. Telephone conversation, August 22, 1975, with Mrs. White, Executive Secreatary, Oxnard Community Hospital.

25. California City Health and Medical Plan for Great Western Cities, Inc. Eugene Wheeler and Associates, 1969.

26. 1975 Special Census, Special Cross Tabulations, State Department of Finance.

27. Telephone conversation with Charles Turk, Rio School District Assistant Superintendent, August 21, 1975.

28. 1975 State Special Census conducted in January and early February, 1975 by the State Department of Finance.

29. Telephone conversation with Fletcher Friedman, Director of Parks and Recreation, City of Oxnard, September 3, 1975.

30. Telephone conversation of August 21, 1975 with William Shaw, Refuse Superintendent, Oxnard.

31. Ibid.

32. Bureau of Sanitation Report, Los Angeles City.

33. Telephone conversation, 8-27-75.

4.5 ANNEXATION OF PROJECT 75-30

4.5.1 DETAILED DESCRIPTION OF PROPOSED PROJECT

4.5.1.1 OBJECTIVES

The proposed project entails the pre-zoning and annexation to the City of Oxnard of 31.5 acres of land at the north corner of Ventura Road and Holly Avenue, and the construction on that land of 144 single family, detached dwelling units, with services.

4.5.1.2 LOCATION

The west boundary of proposed project site 75-30 is located on the east side of Ventura Road beginning at the corner of Ventura Road and Holly Street and extending 952 feet due north and parallel to Ventura Road. The southern boundary of the project site extends east along Holly from the corner of Ventura Road to the intersection of Holly and Lantana Streets. At present both Holly and Lantana end at this point. (See Location Map, Figure 26.)

4.5.1.3 CURRENT USE

The project site is presently being used for row crop agricultural production. A small portion of it contains a residence with associated structures and an equipment storage and maintenance yard.

4.5.1.4 POPULATION AND DENSITY

The proposed project will provide housing for approximately 504 persons based on the adopted specific plan and proposed tentative map. There will be 144 dwelling units at 4.57 units per acre; each unit will house an average 3.5 persons.

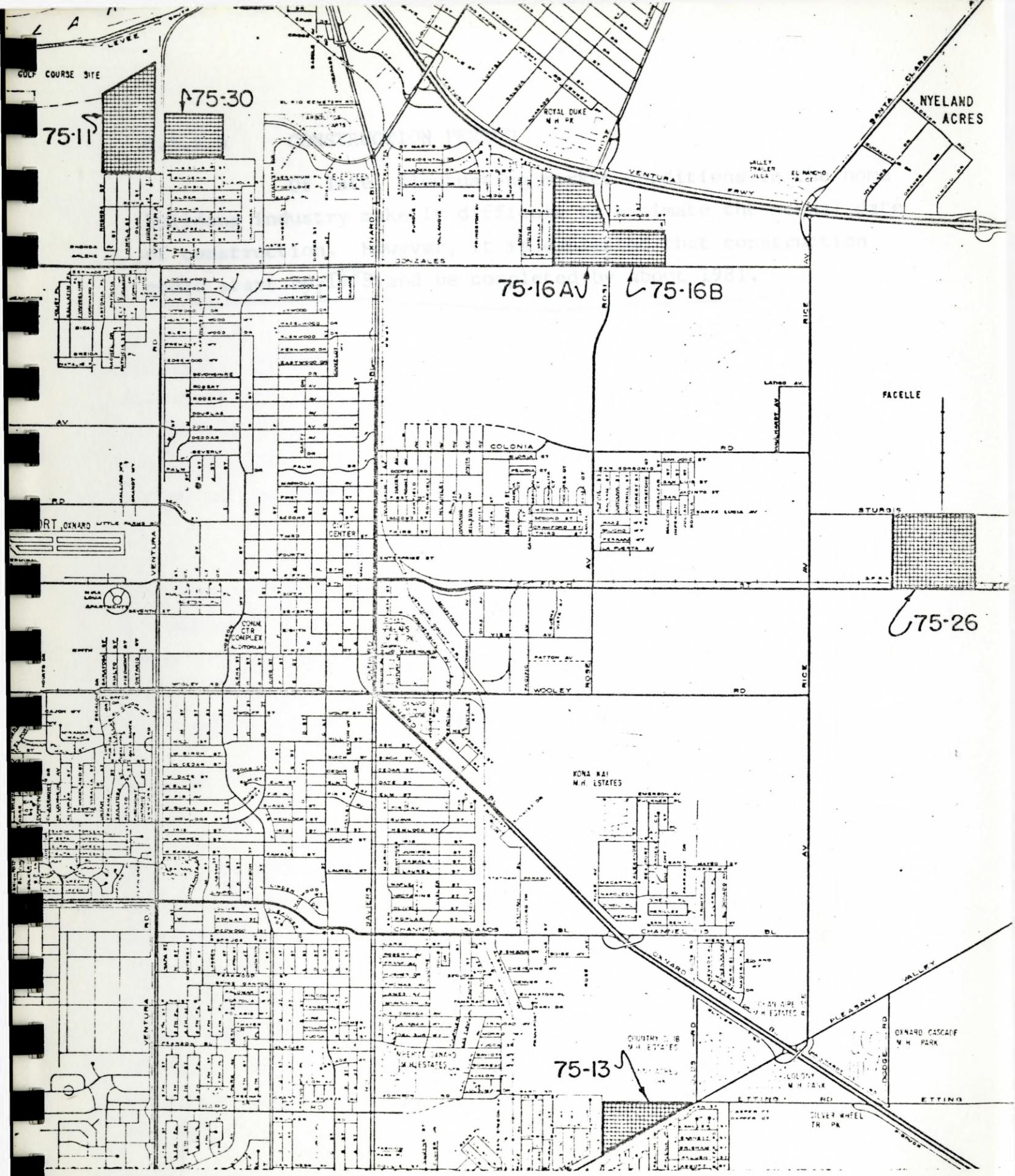

Figure 26 . LOCATION MAP

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 3,000'

4.5.1.5 CONSTRUCTION PERIOD

Of late, fluctuating market conditions in the home building industry make it difficult to estimate the actual date of construction. However, it is estimated that construction could start by 1978 and be completed by about 1981.

4.5.1.6 ESTIMATED VALUE OF DEVELOPMENT PROPOSAL

The property proposed for development contains 31.5 acres and is currently in agricultural use. For the fiscal year 1974-75, the property had a total assessed valuation of $76,684 and an estimated market value of $306,736 (see Table 36). The property currently generates a property tax revenue of $8,033 per year. This is based on the current, 1974-75, County tax rate of $10.4759. Of this total 45.5 percent, or $3,655, goes to school districts and 54.5 percent, or $4,378, goes to governmental services and special districts. At the present, the agriculture field provides employment for some farm workers, income to the owners of the property, and products for the use of the public.

Table 36. EXISTING PROPERTY VALUATION

Parcel No.	Assessed Value		Estimated Market Value	
	Per Acre	Project	Per Acre	Project
139-0-010-375	$2,434.41	$76,684	$9,737.65	$306,736

Impact

Assuming an average per dwelling unit value of $32,000 to $37,000 and 144 units, the estimated market value of the proposed residential project will be within the range of $4,608,000 to $5,328,000. The property will have an estimated tax rate of $12.1659 ($10.4759 existing tax rate plus $1.69 additional City of Oxnard property tax after annexation). The project will generate an estimated $140,150 to $162,058 per year in tax revenue. This is considerably more than the $8,033 the property presently generates in taxes. Table 37 summarizes the fiscal impact of the proposed project.

Table 37. FISCAL IMPACT OF PROJECT

	Tax Revenues Without Project	Tax Revenues With Project
Estimated Market Value	$306,736	$ $4,608,000-5,328,000
Assessed Value	76,684	1,152,000-1,332,000
Total Tax Revenue	8,033	140,151- 162,058
School Districts	$3,655	$54,890-63,467
Governmental Services & Special Districts	4,378	85,261-98,591

Estimates for the number of employees during the construction period are unavailable. It is estimated that construction labor costs will amount to about 55 percent of the total project value. This will amount to approximately $2,534,400 to $2,930,400 ($4,608,000 to $5,328,000 x .55) which will be received by persons employed for the construction of the project, primarily local workers.

The present field demands little in public services and produces a worthwhile product. The residential area, once completed, will demand many services--water, sewers, police, etc.--most of which will be paid for by taxes from the individual homeowners of the project, except for school costs.

As the project contains single family housing, which is fairly expensive, it is unlikely the residents will be on welfare or demanding subsidized health and medical services. The school costs will be covered only partially by the project's taxes. State and federal funding programs will cover the deficit.

Mitigation

None required.

4.5.2 THE ENVIRONMENTAL SETTING, PROJECT IMPACTS AND MITIGATING MEASURES

4.5.2.1 PHYSICAL

4.5.2.1.1 LAND USE

Project Site

The project site is presently subject to three uses: the land is principally used for the production of row crops, cucumbers being the latest; there is a rectangular section approximately 70 by 100 meters at the southwestern corner which contains a 2-story wooden residential structure; there is also a barn and an area used for mechanical equipment storage and repair. (See Land Use and Zoning Maps, Figures 27 and 28.)

Vicinity

The land adjacent to the southern half of the eastern boundary of the project site is presently vacant and unused. The land adjacent to the northern portion of the eastern boundary is in row crop agriculture and, close to the project site boundary, there is a small equipment storage structure surrounded by an old fig tree, a mimosa and a pittosporum. The land directly to the north of the site is in tomato production. The land to the west across Ventura Road is in row crops. The area south of Holly Street is a residential neighborhood extending south to Gonzales Road. It is generally a single family residential area with multiple dwellings and commercial activity occurring near Gonzales Road. Directly adjacent to the southeastern corner of the property is the northwestern corner of the playgrounds for Sierra Linda Elementary School which serves the residential area between Ventura Road on the west, Oxnard Boulevard on the east and Gonzales Road to the south.

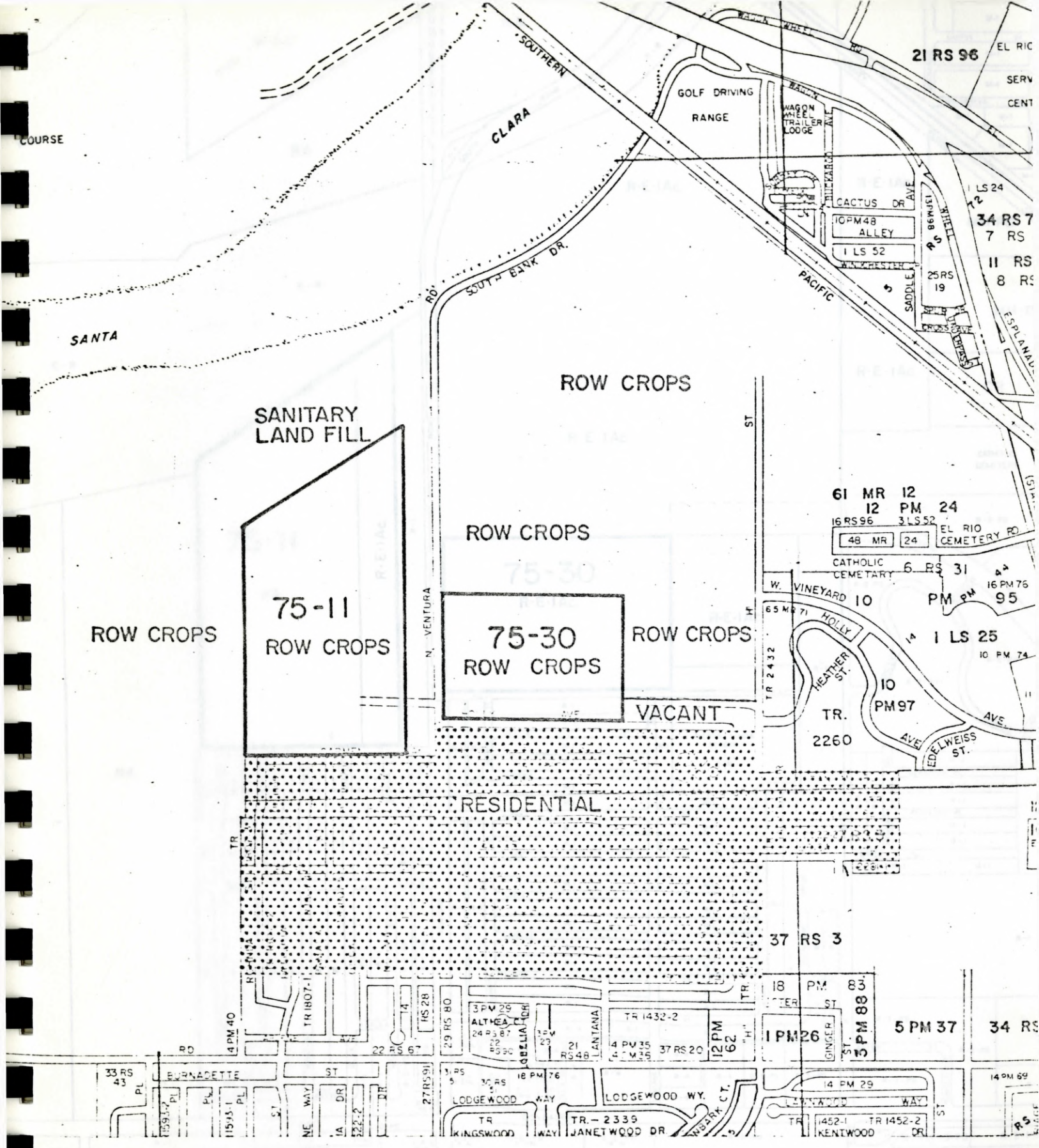

Figure 27. EXISTING LAND USE

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1000'

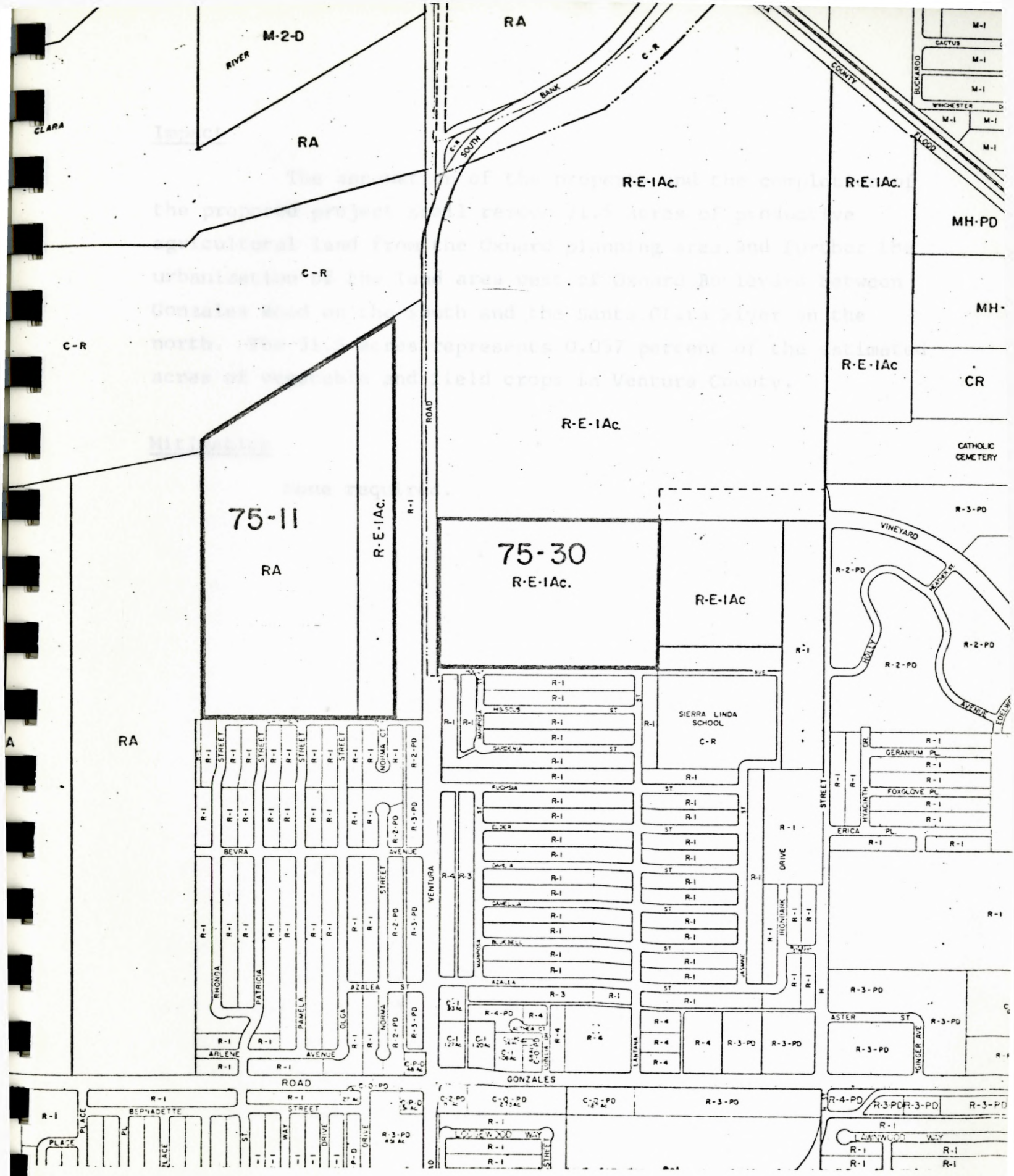

Figure 28. ZONING

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 800'

Impact

The annexation of the property and the completion of the proposed project shall remove 31.5 acres of productive agricultural land from the Oxnard planning area and further the urbanization of the land area west of Oxnard Boulevard between Gonzales Road on the south and the Santa Clara River on the north. The 31.5 acres represents 0.057 percent of the estimated acres of vegetable and field crops in Ventura County.

Mitigation

None required.

4.5.2.1.2 GENERAL PLAN AND PLANNING POLICIES

General Plan

The General Plan adopted by the City of Oxnard in 1969 divides the City into district "communities" generally divided by major streets. Within the communities are neighborhoods, again delineated by streets. The general pattern of the City's street network is the parallel grid pattern. The community neighborhoods are generally square or rectangular in shape.

Proposed project 75-30 lies within neighborhood 3 in the Central Community. Neighborhood 3 is within the boundaries of Gonzales Road on the south, Ventura Road to the west, and H street and Vineyard Avenue to the east and north, respectively. The latter street does not presently exist in neighborhood 3 but under the General Plan's Circulation Element it will be extended west to form the neighborhood's northern boundary.

The General Plan allocates neighborhood 3 a maximum population of 4,213 persons in 1,239 dwellings on 200 acres. These maximum figures allocate an average density of 7.1 dwelling units per acre of residential zoning in neighborhood 3 at maximum development. The General Plan also allocates the neighborhood 12 acres of school facilities, 5 acres of commercial zoning and 6 acres of park space. Neighborhood 3 presently has a population of 2,928.

Impact

The proposed project will provide 4.6 dwelling units per acre on 31.5 acres for a total of 144 dwelling units. The residential development will increase the neighborhood population of 2,928 by 504 persons to 3,432. The proposed project is in conformance with the adopted specific plan and the adopted General Plan.

Mitigation

None required.

Population and Employment Distribution Study

The Oxnard City Council has adopted a Population and Employment Distribution Map for 1990. The Distribution Map recommends densities for the City slightly less dense than the General Plan. The study establishes the percentage of anticipated development that areas will reach by the year 1990. Under the Distribution study, neighborhood 3 will be developed at 6 dwelling units per acre to 75 percent of maximum 1990 population of 2,708. The project will raise the population of neighborhood 3 from the present 2,928 to 3,432. This exceeds the 1990 seventy-five percent population level of 2,708 by 26.7 percent.

Mitigation

If a cluster housing concept with more common open space were placed on the property the total number of persons could be maintained but a less dense and imposing residential area could be built. This would provide a more visually pleasing development and help maintain a more open character in the northern portions of Ventura Road.

Coastal Conservation Plan

The proposed project lies inland of the 1,000 yard Coastal Conservation Act boundary and does not presently come within the jurisdiction of Coastal Act policies. There is a proposed Coastal Act boundary which extends a considerable distance further inland than the present boundary. The proposed boundary will be acted upon by the State legislature when they consider the Coastal Plan for adoption in 1976.

4.5.2.1.3 NEIGHBORHOOD ANALYSIS

The impact of the proposed annexation on neighborhood C-3 is shown in Table 38. The demands of the developed portions of the neighborhood are combined with demands of the vacant land when developed and the proposed project's demands to give the total demands of the neighborhood at full development.

The proposed project will have a definite impact upon the neighborhood. The population of the neighborhood will increase approximately 17 percent over the present population. An increase in dwelling units of approximately 12 percent will result. Approximately 48 percent of the present agriculture land will be developed. The residential area will be expanded approximately 26 percent. There will be no demands from industrial developments. An area of 4.5 acres is presently developed as a commercial site. The proposed project's water demand of 75,600 gallons per day and the neighborhood's demand of 619,350 gallons per day at full development can be adequately served by the present system after a 12-inch line on Ventura Road is extended north. The sewage demands of the proposed project will be 50,400 gallons per day. The demand of the proposed project or any future development can not be met by the present system. An expanded sewer line will have to be constructed in order to provide the adequate capacity. It has an estimated cost of $400,000.

The proposed project will increase the present air emissions of the neighborhood approximately 15 percent. Air emissions from neighborhod C-3 when totally developed will be 0.18 tons per day. A 17 percent increase in students will be generated in the neighborhood by the project. Presently, Rio Mesa High School is over capacity and the elementary and junior high school students will have to be transported to available schools in the Rio School District. When the neighborhood is

Table 38. NEIGHBORHOOD ANALYSIS C-3: PROJECT 75-30

Item	Developed Demands	Vacant Demands	Project Demands	Total Demands	General Plan Projections
Population	2,928	571	504	4,003	4,213
Dwelling Units	1,152	200	144	1,496	1,239
Land Use-Total Acres	134.89	33.61	31.5	200	200
Residential	120.39	29.19	31.5	181.08	177
Commercial	4.5	-	-	4.5	5
Industrial	-	-	-	-	-
Parks	-	4.42	-	4.42	6
Schools	10	-	-	10	12
Water (gal./day)	458,100	85,650	75,600	619,350	
Sewage (gal./day)	310,350	57,100	50,400	417,850	
Air Quality (Reactive Hydrocarbons tons/day)	0.13	0.03	0.02	0.18	
Traffic Trips	11,164	1,860	1,339	14,680	
Students (K-12)	991	157	169	1,317	
Park Acreage-Total	21.9	4.3	3.8	30.0	
Neighborhood	(0)[a] 7.3	(4.42)[b] 1.4	1.3	10.0	
Community	14.6	2.9	2.5	20.0	

[a]Existing developed neighborhood parkland.

[b]Vacant neighborhood parkland.

fully developed all three schools will be over capacity unless they are expanded with the growth of the neighborhood. The proposed project will create no additional need for parkland. Presently, there is no neighborhood parkland. The park acreage could be met by some of the presently undeveloped land. The specific neighborhood plan allocates 4.42 acres of parkland adjacent to the project site.

The General Plan's projected population and land use for this neighborhood has been included in the following table for comparison with the estimated total development of the neighborhood. The estimated total capacity of the neighborhood in terms of population, dwelling units and land use, conform to the General Plan's projected development.

4.5.2.1.4 TOPOGRAPHY

The topography of the proposed project is relatively flat, except in an area just north of the residential structure where the gradual slope to the north increases briefly then reestablishes itself.

Impact

The land is generally flat. The south boundary line is the highest point; it is above the level of Holly Street and may be modified.

Mitigation

None required.

4.5.2.1.5 GRADING

It is difficult to determine grading impacts without a specific site and grading plan. The high south line of the property may be graded somewhat with the widening of Holly to reduce it to street level. The earth displaced could be used to lessen the degree of slope in the area just north of the existing residence. The pronounced slope area and the high south boundary line could be retained to enhance landscaping designs and provide a visual separation from the south.

4.5.2.2 SOCIAL

4.5.2.2.1 POPULATION

The average density of the project is 4.57 dwelling units per acre. At an approximate 3.5 persons per dwelling unit, it is estimated that total population generated by the project will be 504 persons (144 DUs x 3.5 = 504).

According to the 1975 Special State Census, the City of Oxnard presently has a population of approximately 85,104. According to the 1974 "Development Intensity Study" approved by the City Council, the projected 1990 population within the City's planning area will be approximately 146,011 at a 74.8 percent level of development. Full development would contain a population of 195,149.

Neighborhood 3 under the Development Intensity Study will have a population of 2,708 at 75 percent of planned development capacity; full development capacity is 3,611. As of 1975 the population in neighborhood 3 is 2,928.[1]

Impact

Proposed project 75-30 will add 504 persons or 0.59 percent to the present city population of 85,104. It will represent an increase of 17.2 percent in the population of neighborhood 3 and bring its population to 3,432 or 81 percent of the General Plan capacity and 126 percent of the 1990 Population Study.

4.5.2.2.2 HOUSING

As of 1975 the total number of acres zoned for single family residential use but undeveloped in the City of Oxnard was 492. As of April 1975 there was a total of 28,672 housing units. The average vacancy rate was 9.11 percent with 2,613 vacant units. The single family unit vacancy rate was 4.80 percent for 16,031 units. Multiples averaged 17.08 percent and mobile homes 4.68 percent.[2]

Based on the single family absorption rate of 44 acres per year or 299 units per year, there is about a 11.1 years supply of land zoned and vacant remaining. Not all of this land could be utilized by the project due to its size. There are about 3 parcels of over 30 acres that are zoned R-1 available. There are a few other parcels ranging from 16 to 24 acres that could absorb a smaller part of the project.

Impact

The proposed project includes plans for 144 single family detached units at an estimated value range of $32,000 to $37,000. This would be an increase of one percent to the existing single family unit stock of 16,031 units in the City and an increase of 12.5 percent in the neighborhood 3 single family housing stock.

4.5.2.3 NATURAL ENVIRONMENT

4.5.2.3.1 FLORA AND FAUNA

With the exception of the rectangular section subject to residential and maintenance use, the land area is entirely given to row crop production.

Along the west and north sides of the residence and shielding it from Ventura Road noise and windblown dust is a line of mature apparently ungrafted avocado trees. Interspersed among and under the avocado trees on the north side are one fig tree and some small peach trees. There is some indigenous groundcover around the structure, notably Hortium sp. and Avena sp.

Only avi-fauna were observed on the property. Rodents and reptiles should be assumed to exist on the area not under cultivation.

Impact

Construction of the proposed project will cause the elimination of the commercial row crop vegetation now characteristic of the property.

The avocado trees on the north and west sides of the residential structure will be partially or totally removed.

During the construction period habitat for animals presently existing on the property will be eliminated as will the animals. After construction is complete and landscaping has reached a degree of maturity there should be more fauna on the site than at present.

Mitigation

Trees that do not have to be removed because of major conflicts with the development plans should receive special attention with the intent to preserve them. New trees should be planted wherever practical and desirable.

Before removing the trees or structures on the property, a careful check should be made for fauna and avi-fauna nesting activities. If these activities are present the safety and well-being of the fauna should be provided for. This can be accomplished by working around the nesting area until the young are reared.

4.5.2.3.2 GEOLOGY

No faults occur on project site 75-30 according to the Geologic Map of Southern California prepared by the State Division of Mines and Geology (1972). The project site is about 1½ miles south of the McGrath Fault, 2½ miles south of the Oakridge, 5½ miles west of the Springville and about 7 miles west of the Camarillo Fault. (See Figure 4.) These faults are designated as concealed and are conjectural where queried.

This area is not in a zone which may contain active or potentially active faults. The potential amplification of ground shaking for this area is a long period with severe effects.[3]

A subsidence problem in Ventura County does exist, mainly in the Oxnard Plain.[4] Subsidence, or the sinking of the land surface has four possible causes in Ventura County: natural consolidation of alluvium, tectonic deformation, water extraction and/or oil extraction. It is probable that it will continue, possibly at an increasing rate if extraction of fluids from this area is increased. Measurements indicate that the project is in an area that has a subsidence of approximately 0.05 feet per year.

The area of project site 75-30 has the possibility of having a serious liquefaction problem.[5] This situation exists when an area has large deposits of unconsolidated alluvial material and a high water table potential. Should the water table be sufficiently high when an earth tremor occurred, the alluvial material and the water could be mixed, creating a "quicksand-like" situation. During such a situation, structures on the surface have been known to sink. In a geology study conducted by the State Division of Highways for a proposed interchange at Route 101 east of the proposed project, liquefaction

was considered a major problem. The design of the interchange was changed to compensate for the problem of liquefaction.

All of the coastal areas in Ventura County are susceptible to tsunamis. The Channel Islands do not provide adequate protection for the County coastal areas because tsunamis can move down the Santa Barbara Channel from the north, the south or be generated along the faults present in the Santa Barbara Channel. The effects of the waves are confined to the immediate beach area and up to one mile inland in flat areas. The project site, therefore, is not within a tsunami hazard zone.[6]

Geology Impact

With the moderate water table (15 feet to 40 feet from surface) and type of soil in the area (5 feet or more depth), there is a possible danger to the project from liquefaction if a tremor occurs. There is also a danger from seismic shaking which would be amplified due to the unconsolidated alluvial material in the project area. There is no known surface faulting within the project property.

Mitigation

Alluvial plains with high ground water tables in areas of seismic activity are subject to long duration, strong ground shaking and liquefaction. Residential structures of one and two stories with proper support and no excessive concentrations of weight are not as susceptible to differential settling due to liquefaction as other types of structures may be. A qualified engineering geologist should be consulted to establish foundations and structural requirements for developments in these areas.

4.5.2.3.3 SOIL

The soil on the proposed project site 75-30 has been identified by the Soil Conservation Service as being Pico-Metz-Anacapa association. This consists of level to moderately level, very deep, well drained, sandy loams and very deep, somewhat excessively drained, loamy sands.[7] Permeability is from moderately rapid to rapid. Surface runoff is from very slow to slow and the erosion hazard is none to slight.

Pico loam, sandy substratum, comprises approximately 60 percent of the project site. This soil type is designated Class IIIs-O which has severe limitations, mainly because of coarse-textured material at a depth of 2 to 3 feet restricting the root zone and the amount of water available, that reduce the choice of plants and/or require special conservation practices. The remainder of the soil is designated Class II as to its suitability for farming. This type of soil has moderate limitations, mainly because of a low water holding capacity, that reduce the choice of plants or that require moderate conservation practices.[8]

Pico loam is described as having an inherent medium fertility and is suitable for vegetables, field crops, citrus fruits, and as a range. Other soils on the property are different types of sandy loam of medium fertility, suitable for vegetables, citrus fruits, field crops, walnuts and urban development.

The shrink-swell potential of these soils is classified as low.[9]

Soil Impact

The greatest impact on the soil if the proposal is approved will be the loss of approximately 31.5 acres of productive agricultural soil. Dividing and covering the area with roads and structures will effectively remove it from its agricultural use forever.

The suitability of the soil for building purposes is compatible since the area has a low shrink-swell potential.

4.5.2.3.4 HYDROLOGY

The project site has soil covering consisting predominantly of excessively drained sandy loams. However, water infiltration to the ground table in this area is largely prevented by the impermeable clay cap which lies over the aquifers on most of the Oxnard coastal plain south of U.S. 101. The majority of the water precipitated and applied in this area drains north and west into the Santa Clara River bed.

Impact

Since the area is not a ground water recharge area, little change in ground water conditions will occur as a result of the project. The Santa Clara River channel is capable of receiving runoff from the project without suffering any adverse impact.

Mitigation

None required.

4.5.2.3.5 DRAINAGE AND FLOOD CONTROL

Drainage from the property consists of sheet flow in a northwesterly direction to a roadside ditch on the east side of Ventura Road. The ditch carries the water north and crosses to the west side to a concrete channel. The channel turns westerly north of the site, and the drainage is carried through the sanitary land fill area in a large swale to the Santa Clara River. At the river the flow is discharged through a large flapgate outlet structure.

Most of the area to be annexed lies within the river flood plain, but is protected by a levee. Construction of the levee westerly from the freeway after the 1969 flood has eliminated a flood threat having an average frequency of occurrence of once in 100 years, or greater. The land is now only subject to flooding from Standard Project Floods, which may be expected from the most severe combination of meteorological and hydrological conditions considered reasonably characteristic of the geographical area. An additional extension of the levee in connection with the proposed Victoria Avenue crossing will further reduce the flood threat.

Impact

The development of the site will increase runoff from the area. It is estimated that the present runoff from the site is 143 cfs for a ten year flood and it will increase to 155 cfs after the site is fully developed.

Mitigation

No mitigating measures are necessary other than those which are implemented in accordance with good engineering design and in conformance with City of Oxnard standards. Development of the area would logically require continuation of the present drainage system, but it probably will be required that storm drain conduit replace open ditches.

4.5.2.3.6 AIR QUALITY

Vehicular traffic generated by residents of the project will result in increased vehicular emissions. Table 10 contains estimates of daily vehicular emissions that would result from the project and compares them to the total county-wide daily vehicular emissions.

It is estimated that the residential project will contain about 288 cars for the 144 dwelling units (2 cars/DU). The number of vehicles generated by this project is .14 percent of the total of about 200,000 vehicles in the County.

Utilizing a vehicle use factor of 17.2 miles per person per day there will be a total of 8,669 VMT (vehicle miles traveled per day).

The emission grams per mile for three pollutants are shown below. The emission grams are based on 1980 data.[10] As any project on the property would probably be completed nearer 1980 than 1975, 1980 factors are more relevant than 1975 factors.

Table 39. AIR POLLUTION EMISSION FACTORS
Average Old and New Cars (1980)

Pollutant	Emissions Grams/Mile
Carbon Monoxide (CO)	11.43
Hydrocarbons (HC)	2.75
Nitrogen Oxides (NO_x)	2.0

Based on the above air pollution emission factors, it is estimated the project will generate emissions as shown in Table 40.

Table 40. ESTIMATED DAILY VEHICLE EMISSIONS

Pollutants	1980 Project Related Daily Emissions (tons)[a]	Total 1980 Countywide Vehicular RHC (tons)[b]	Percent of Countywide RHC	Total Oxnard Vehicular RHC (tons)[d]	Percent of Oxnard RHC
Carbon Monoxide (CO)	0.1092				
Hydrocarbons (HC)	0.0263				
Nitrogen Oxides (NO_x)	0.0191				
Reactive Hydrocarbons (RHC)[c]	0.0223	32.5	.07	6.4	.35

[a]The tons per day are determined by the following formula: EF x 17.2 miles/person x population (D.U. x A.D.) x .0022046 ÷ 2000 = tons/day.

[b]Ventura County Air Pollution Control District, August 7, 1975.

[c]Reactive hydrocarbons = Hydrocarbons x reactivity (85%).

[d]Oxnard emissions were determined by calculating Oxnard's population compared to Ventura County's and using the percent to find Oxnard's contribution of emissions in Ventura County.

Air Quality Impacts

The capacity of the Oxnard area to assimilate these emissions is satisfactory during the months from October to March. During the remaining months of the year the project emissions will be adding to an existing situation that frequently exceeds Federal or State standards.

The capacity of the Ventura air basin to assimilate these emissions is considered to be generally satisfactory during the months from October to March. During the remaining months of the year, the project-related emissions for NO_x and HC will be adding to an existing situation that frequently exceeds Federal or State standards. However, the project-related increase in emissions is exceedingly small and would be insignificant in relation to the total level of countywide emissions and is expected to decline further as new vehicle emission standards take effect.

The cumulative effect of this project along with the other projects will be analyzed in a later section.

4.5.2.4 RESOURCES

The rich sandy loam on the proposed project site is classified as IIs-4 relative to its suitability for farming. It has moderate limitations and is a valuable food resource. Crops that are suitable to the soil are vegetables, field crops, citrus crops, walnuts and range. The land is also an urban development resource.

Impact

The 31.5 acres of the project site represent 0.025 percent of the total productive agricultural acreage in Ventura County, and .057percent of the land resource devoted to commercial vegetable and field crop production. This resource will be irreversibly lost.

Mitigation

None economically practical.

4.1.2.5 SENSORY

4.1.2.5.1 VISUAL AND AESTHETIC

The existing row crop agriculture and other nearby cultivated property create an open rural atmosphere in the area. The elimination of the property as a cultivated land area and the construction of 144 dwelling units will expand the urban environment at the expense of the open rural character now prevalent at the north end of Ventura Road.

If the avocado trees around the present residence are destroyed, the aesthetic impact will be a greater awareness of the flatness of the land surface and increased sensory intrusion by road and other activities disturbing to the senses.

Mitigation

If some of the large avocado trees surrounding the present structure do not directly conflict with the project site plot plan an effort should be made to save them from destruction as they will provide visual relief for the new subdivision. A clustered housing concept would modify the proposed project's visual impact on the general area's rural character.

4.5.2.5.2 NOISE IMPACT AND MITIGATION

In conducting the noise analysis for the proposed project, several assumptions were made: truck traffic is minimal under both existing and 1990 conditions; 1990 traffic projections, provided by the Ventura County Traffic Engineer, include traffic generated by this project; Vineyard Avenue will be continued through from H Street to Ventura Road; and HUD Guidelines for Noise Assessment are used as criteria for acceptability/non-acceptability of noise levels.[11]

Aviation

Although this project is located under the Ventura County Airport/Oxnard airport traffic area (5 miles in all directions from the center of the airport), relatively few aircraft would approach or depart the Airport in a flight pattern over the project. This is due mainly to the fact that the standard aircraft traffic pattern is to the south of the Airport. Of the few aircraft that might overfly the project, virtually all would be at an altitude of 2,000 to 3,000 feet or higher and at reduced power settings (low noise). Based on these considerations, it can be assumed that noise from aircraft would have minimal environmental impact on the proposed project.

Railway

Due to the fact that existing railway lines (paralleling Highway 1) are nearly 3,000 feet from the project site, HUD guidelines suggest that the project will suffer little or no adverse impact from railway noise.

Industry

Assuming the closure of the sanitary landfill (just north of this project on Ventura Road) on schedule, no industrial developments exist within a proximity that would be measurably detrimental to the proposed project.

Road Traffic

For the purposes of this noise impact assessment, it is assumed that feeder and distribution streets internal to the development will meet HUD guidelines in terms of noise generation impact. Such an assumption is based on existing zoning standards relative to 7 dwelling units per acre density developments.

Lantana Street, transversing the eastern portion of the property, is assumed to have little noise generating impact in that only 5 percent of the project's daily vehicle trip volume (66 trips) is expected to take that route.

Holly Street and Vineyard Avenue are expected to assume 502 and 469 daily project generated vehicle trips, respectively. Traffic flows of these degrees coupled with existing and forecasted 1990 traffic flows on these streets, are not expected to create a traffic noise environment at other than a magnitude which is normally acceptable for residential use.

Ventura Road is currently a 4-lane road, 70 feet wide as it passes the project site. Existing traffic flows run 10,610 average daily vehicle trips. It is estimated that the proposed project will increase this figure by 469 daily vehicle trips heading south on Ventura Road and by 335 heading north on Ventura Road. Assuming speeds of 50 m.p.h., adjusted peak hour traffic would be (according to HUD noise assessment methodology)

698 vehicle trips heading south and 690 vehicle trips heading north. At an effective lane distance of 63 feet, assuming a building setback of 25 feet, project dwelling units along Ventura Road would be exposed to traffic noise levels (L_{50}) of greater than 60 dB(A), considered normally unacceptable according to HUD guidelines. Under 1990 projected traffic levels (13,600 average daily vehicle trips), levels would be even more unacceptable.

Assuming that the proposed project included a 6 foot fence (similar to existing fences found bordering multiple dwelling unit development immediately south of the project on the west side of Ventura Road) of solid construction which would buffer noise along the property line abutting Ventura Road, noise exposure under existing and 1990 traffic levels would fall into the normally acceptable range (approaching an L_{50} of 45 dB(A)) for residential use.

4.5.2.6 ARCHAEOLOGICAL AND HISTORICAL

The proposed project site has been involved for at least 60 years in intensive agricultural production. According to Robert Lopez, the President of the Ventura County Archaeological Society, it is doubtful that the project site will yield valuable artifacts. (See letter in Appendix B.)

Impact

On the basis of the past history of the site and the present knowledge of the area relative to archaeological characteristics no impact is expected.

Mitigation

Mr. Lopez points out that the possibility of uncovering deeply buried archaeological resources exists and that should such materials be uncovered, "work should be halted in the immediate area of the discovery and a qualified archaeologist should be called in to evaluate and make recommendations concerning the find."

4.5.2.7 CIRCULATION

The principal roadway in the vicinity of the project site is Ventura Road. It is aligned north-south along the eastern boundary of the property. North of the property Ventura Road provides access to the Wagon Wheel Junction area and the freeway. South of the property it crosses Gonzales Road, Teal Road which serves the airport, and Fifth Street. Ventura Road is the major north-south arterial west of Oxnard Boulevard. Its average daily flow (ADF) at the north end near South Bank Road is 10,610. Just north of Gonzales Road the ADF is 14,060. The intersection of Gonzales and Ventura is 4 lane and signalized. Its peak hour (PH) flow is approximately 4,565. (See Flow Map, Figure 29.)

Holly Avenue is an east-west aligned street serving a single family residential area. The northern boundary of the residential area is Holly Avenue, the southern boundary is Gonzales Avenue.

Vineyard Avenue lies to the east of the proposed project. It extends on an east-west curvilinear alignment from H Street, which parallels Ventura Road to Oxnard Boulevard, and continues in a north-east direction. West of Oxnard Boulevard the ADF on Vineyard is 7,230. At present there are lengthy delay times at the signalized intersection of Oxnard and Vineyard at peak hour periods. Under the General Plan's Circulation Element, Vineyard will eventually enter west from H Street to Victoria Avenue. The PH flow at the intersection is approximately 4,585.

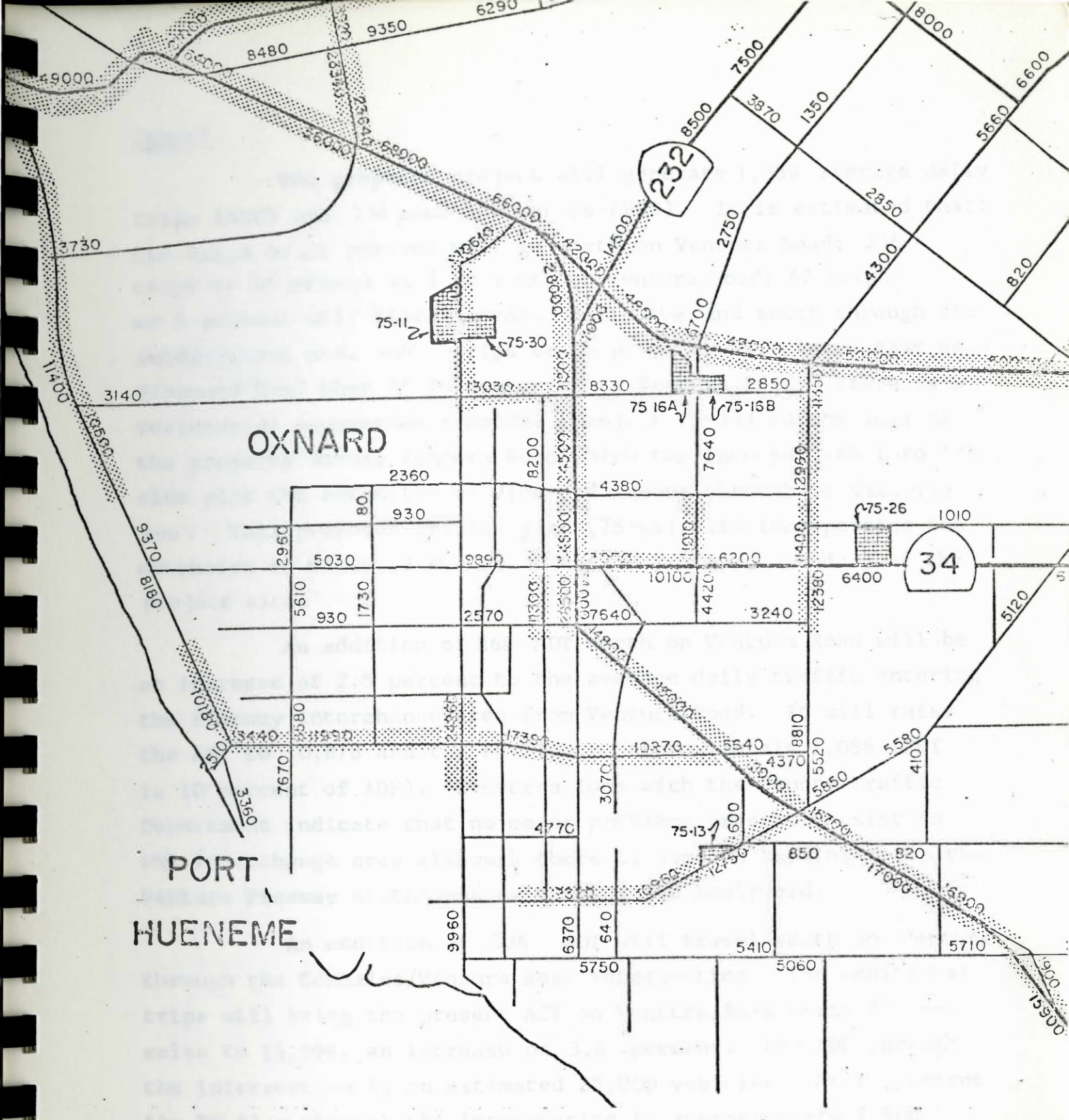

Figure 29. PRESENT AVERAGE DAILY TRAFFIC FLOW

Annexation Projects

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1 mile

Impact

The proposed project will generate 1,339 average daily trips (ADT) and 134 peak hour trips (PHT). It is estimated that: 268 trips or 20 percent will go north on Ventura Road; 536 trips or 40 percent will go south on Ventura Road; 67 trips or 5 percent will filter across Holly Ave and south through the subdivision; and, 469 trips or 35 percent will travel east on Vineyard Road when it is connected to Ventura Road. There is a residential annexation proposal (project 75-11) to the west of the property across Ventura Road which has incorporated into its site plan the extension of Vineyard Avenue through to Victoria Ave. This proposed project plan (75-30) also incorporates the extension of Vineyard Avenue along the northern boundary of the project site.

An addition of 268 ADT north on Ventura Road will be an increase of 2.5 percent to the average daily traffic entering the freeway interchange area from Ventura Road. It will raise the ADT to 10,878 and the PH flow to approximately 1,088 (PHT is 10 percent of ADF). Conversations with the County Traffic Department indicate that no major problems presently exist in the interchange area although there is some PH backing up on the Ventura Freeway southbound exit to Oxnard Boulevard.

An addition of 536 ADT will travel south on Ventura through the Gonzales/Ventura Road intersection. The additional trips will bring the present ADT on Ventura Road north of Gonzales to 14,596, an increase of 3.8 percent. The ADF through the intersection is an estimated 25,000 vehicles. At 10 percent the PH flow through the intersection is approximately 2,500. The project will increase the PH flow through the intersection by approximately 2.1 percent. A conversation with Leonard Hayes, Traffic Engineer at the City of Oxnard Department of Public Works, indicates no major PH problems at the intersection but a

very heavy Ventura Road flow. The desirable capacity of Ventura Road is in excess of 20,000 ADF.

It is estimated that 67 project generated trips will cross Holly Ave. and travel south through the existing subdivision. Present ADF on the subdivision streets is not known. Those vehicles travelling through the existing subdivision will use Lantana Street predominantly. This street directly connects Holly Ave to Gonzales Road. There is presently no or very little traffic using this street that is not directly related to the subdivision activity. The traffic generated by the proposed project along Patricia Street will change the status of the street to a thoroughfare serving a neighborhood not just a subdivision. There will be the attendant traffic related noise and activity that is found on such streets.

It is estimated that an additional 469 ADT will travel from the proposed project east to Oxnard Boulevard along Vineyard Avenue after it extends from Ventura Road to Oxnard Boulevard. The ADF presently on Vineyard west of Oxnard is 7,230. The project generated addition would be 6.5 percent. According to the County Transportation Department there are presently PH capacity problems at the intersection of Vineyard Avenue and Oxnard Boulevard. The project generated trips would be an additional aggravation to those problems. It is estimated that the PH flow through the Vineyard Avenue/Oxnard Boulevard intersection is 4,585. The project generated PHF of 47 (10 percent of 469) would represent a 1.02 percent increase, an insignificant by itself, but cumulative addition to the PH delay problems at the intersection.

Mitigation

The project generated trips add an insignificant amount of vehicular traffic to the road system in the area of the project. No mitigations are required.

4.5.2.8 UTILITIES

4.5.2.8.1 WATER

The water delivery system in the project vicinity consists of a 10 inch line aligned east-west on Holly Avenue; this line connects to the end of a 12 inch line aligned north-south on Ventura Road. The north end of the 12 inch line is located approximately where the Holly Avenue line connects to it. In 1967-1977 the City plans to extend the Ventura Road line north to South Bank Drive. With the inclusion into the City's water supply system of the Gonzales Road Blending Station now being constructed, the total water supply capacity will be 77.1 million gallons per day (mg/d).

Impact

At a per capita use of 150 gallons per day the project will demand 75,600 gallons per day (144 DU x 3.5 persons/DU x 150 g/d = 75,600). The project will demand approximately 0.098 percent of the City's present daily water capacity. The present average daily demand is 13,594,000 gallons. The unused capacity is 63,506,000 gallons per day. The project will consume 0.119 percent of the present unused daily capacity.

Mitigation

Relative to the local system, the 10 inch line on Holly Avenue should be adequate to supply the proposed project. If difficulties should arise with the use of this line, the 12 inch Ventura Road line ends just north of the corner of Holly Avenue and Ventura Road. The scheduled extension of the Ventura Road line north along the west boundary of the property will place that line in a favorable position for project connection to it. No mitigations are needed.

4.5.2.8.2 SEWAGE

Collection

The area covered by this project slopes mainly to a low area approximately at the southerly boundary of the property. The development's sewer system would probably drain to this area and a sewage pumping station which exists at this point. The pump plant discharges to a 10 inch force main which runs southerly along Ventura Road to a 15 inch gravity sewer near the southerly boundary of the project. The pump plant has a capacity of 1,000 gallons per minute. The 15 inch line runs southerly on Ventura Road as described in the Regional Setting of this report.

Impact

The project will generate on an average of 50,400 gallons per day with a peak flow calculated to be 105 gallons per minute. The calculated peak flow for the proposed annexation 75-30 immediately to the east of the project site is 100 gallons per minute. The pump plant is adequate to serve the two new annexations together with the present developments which flow to the plant. The line on Ventura Road, however, is presently at or near capacity.

The City plans to relieve the Ventura Road line by connecting its south end to an unused 24 inch concrete line in Ventura Road. The improvement will also include a connecting link from the south end of the unused line to the City's wastewater treatment plant and lining the portion of the line to be used to seal and protect the interior of the concrete pipe. The estimated cost to refurbish the 24 inch line and tying it to the system is $400,000. It is planned for construction in 1976 if funding is available.

The City contemplates making a sewage collection system analysis which will identify sections of the system that are subject to reaching or exceeding their capacity. As this information is not available at the present time pending completion of the study, it is uncertain whether the increased capacity of the Ventura Road line will be sufficient to accommodate the sewage demands of the proposed project and others that are planned in the area serviced by the Ventura Road line.

Mitigation

The overloading of the Ventura Road line can be mitigated by the construction of the relief line in Ventura Road. The exact extent of the mitigation measures will be more accurately determined after the completion of the City's collection system analysis.

Treatment

The project will be served by the City of Oxnard's wastewater treatment plant. The plant is presently processing an average of 11 million gallons per day (mgd) with a high of 13 mgd. Its average daily capacity is 22.1 mgd with a peak capacity of 35 mgd. Shortly, Point Mugu and the Port Hueneme Naval Base will be allotted 5.6 mgd of the average daily capacity. This will leave the average daily capacity for the City of Oxnard at 16.5 mgd. Based on Ventura County Sewerage Manual, Plate 10, the peak flow from Point Mugu, Port Hueneme will be 11 mgd. This will leave the peaking capacity for the City of Oxnard at 24 mgd. With present use at the plant averaging 11 mgd, and peaking at 13 mgd, and with available future average capacity at 16.5 mgd, and the peaking capacity at 24 mgd, the average daily capacity reserve will be 5.5 mgd and the peaking reserve will be 11 mgd.

Impact

Average daily per capita sewage discharge is 100 gallons; the peak flow of sewage will be 105 gallons per minute for this project. The project will generate 50,400 gallons of sewage per day (504 persons x 100 = 50,400). This is 0.22 percent of the average daily capacity of the wastewater treatment plant or 0.45 percent of the average daily reserve. After the Point Mugu allotment, the project sewage will be 0.91 percent of the average daily reserve (5.5 mgd). The Oxnard Wastewater Treatment Plant (WWTP) has adequate capacity for the proposed project.

Mitigation

None required. The WWTP at present has adequate capacity for the proposed project and others pending.

4.5.2.8.3 ENERGY USE

The type of fuel--gas or electricity--to be used for appliances and heating in the residential units of the proposed development is not known at this time. Therefore, estimated consumption figures for both fuels are calculated for residential units and commercial uses when possible.

Electricity - Project Demand

Single family units vary greatly in the amount of electricity they consume, but on the average they range from 5,458 KWH (kilowatt hours) to 15,171 KWH annually.[12] The 144 dwelling units of the project will consume from 785,952 KWH to 2,184,624 KWH annually.

Gas - Project Demand

An average consumption figure for single family houses is 95,000 cubic feet per dwelling unit per year.[13] The proposed development will have 144 single family homes for a total gas consumption of 13,665,600 cubic feet per year.

Additional fuel and power will be used in the construction of the site, but it is difficult to estimate the amount.

Energy Use Impact

The Edison Company and the Southern California Gas Company have indicated their systems have the capacity to serve the electricity and gas demands of the project.

4.5.2.9.2 HEALTH

St. John's Hospital and Oxnard Community Hospital in the City of Oxnard, and Ventura County General Hospital in Ventura could serve the residents of the proposed development. The Ventura County General Hospital is located approximately 5 miles from the property. The hospital is licensed for 278 beds, although approximately 223 beds were staffed in 1975. The occupancy rate figure as of June 30, 1975, using the actual number of available beds, was 58 percent.[19]

St. John's Hospital is located at 333 North F Street approximately 1½ miles from the property, and is licensed for 316 beds; 268 beds are staffed at this time. Occupancy rate for 1975 is 65 percent. The hospital has plans to expand its emergency room and auxillary care services in the next two to four years.[20]

Oxnard Community Hospital is located at 540 South H Street, approximately 2 miles from the property, and is licensed for 48 beds. All 48 beds are staffed at this time. Occupancy rate for 1975 is 65 to 75 percent.[21]

Health Impact

Previous studies done in California have recommended a range of from 1 to 3 hospital beds per 1,000 population. Based on an estimated ratio of 1.7 hospital beds per 1,000 population, and an estimated population of 504 for the proposed development, an estimated 1 hospital bed would be desirable.[22] Based on the occupancy rates of the Ventura County General Hospital at 58 percent, St. John's at 65 percent and Oxnard Community Hospital at 65 to 75 percent, it is estimated that these 3 hospitals can easily absorb this estimated need for one additonal hospital bed.

4.5.2.9.3 SCHOOLS

The proposed project site is located within the Oxnard Unified High School and Rio Elementary School Districts. Pupils will be bussed to available elementary and junior high schools. The schools have not been determined for this area.[23] The high school students will attend Rio Mesa High School. Presently Rio Mesa is overcrowded. As to whether the elementary and junior high schools are overcrowded, this cannot be determined at present since the schools have not been determined.

For determining the number of students generated from the project, 0.56 students per dwelling for elementary, 0.21 students per dwelling for junior high, and 0.4 students per dwelling for high school were used.[24]

Table 41. SCHOOL ENROLLMENT AND CAPACITY

School	Enrollment	Present Capacity	Existing Excess Capacity	Students over Capacity with Project
Rio School Dist.	-	-	-	-
Rio Mesa High	1,524[a]	1,400	0	182

[a]As of October 1974, according to Frances Perry, Secretary to the Assistant Superintendent of the Oxnard Unified High School District, August 21, 1975.

School System Impact

The proposed project will generate about 81 elementary, 30 junior high and 58 high school students, for a total of 169 students. The elementary and junior high students will be bussed to available schools which Charles Turk, Assistant Superintendent of the Rio School District, says will have the capacity to absorb these students. The 58 high school students generated will be

added to an already overcrowded situation. The high school will be 182 students over capacity.

School Costs

The 81 elementary students will cost about $89,829 per year (81 x $1,109 = $89,829), the 30 junior high students will cost about $33,270 per year (30 x $1,109 - $33,270), and the 58 high school students will cost about $77,256 per year (58 x $1,332 - $77,256) to educate, for a total of $200,355.

The residential area will generate tax revenue from property tax and sales tax that will contribute toward the cost of education of the project's students. State and Federal funds will supplement the deficit under the same formula used within the Oxnard Unified High School and Rio School Districts and other districts of the County.

Mitigation

Expand either the educational facilities, the number of classes or the size of the classes to accommodate the increased enrollment.

4.5.2.9.4 RECREATION

In the Parks and Recreation Element of the adopted Oxnard-2000 General Plan, a standard of ten acres of space per 1,000 population is recommended. Of this ten, 7.5 acres is specifically designated as city, community, and neighborhood parks. As of April 1975, the population of the incorporated area of Oxnard was estimated at 85,104.[25] Using the recommended standard, the City of Oxnard should have approximately 638 acres of developed city, community and neighborhood parkland. At present the City has a total park acreage of approximately 350 acres; however, only 78 acres are developed park sites.[26] Based on 1975 population figures, Oxnard has 12.2 percent of its recommended open space in developed parks. If all presently owned but undeveloped park property were improved, approximately 54.8 percent of the recommended open space would be developed parkland.

There are no existing parks in the project area. A regional park is being considered along the Santa Clara River of approximately 545 acres.

One way the City of Oxnard attempts to meet its recreational needs is by requiring developers under provisions of the Quimby Act to contribute 2.5 acres of neighborhood parkland for each 1,000 persons and/or fees for park development. In addition, the City also collects $150 per dwelling unit for park development. This money does not have to be spent for the direct benefit of the residents of the development from which the funds are derived.

In addition to dedication of parkland and/or fees required of developers, the City of Oxnard also collects $150 per unit for park acquisition. Based on a total of 144 units, $21,600 would be collected from this development for park acquisition and development.

It is estimated that the population of the completed project will have a population of 504. Based on the present goal of 7.5 acres of city, community and neighborhood park space per 1,000 population, the total recommended acreage for the project (504 people) will be 4 acres. Under the provisions of the Quimby Act, the developer will be required to donate one acre, which reduces the total desired parkland to 3 acres.

Mitigation

None required.

4.5.2.9.5 SOLID WASTE DISPOSAL

The City of Oxnard is currently disposing of approximately 80,000 to 90,000 tons of solid waste a year[27] at the sanitary landfill operated by the Ventura Regional County Sanitation District off Ventura Road along the Santa Clara River. This site will probably reach capacity within the next two to four years. Alternative sites to handle the City's solid waste will be met by the Ventura Regional County Sanitation District.[28]

Impact

The total estimated population of the project is 504. Solid waste generation figures were calculated based on averages for residential uses of 2.5 lbs. per person per day for single family units.[29] Based on a population of 504 for single family at 2.5 lbs. per person per day, a total figure of approximately 1,260 lbs. of solid waste a day, or approximately 230 tons of solid waste a year, will be generated by this project when completed.

Mitigation

Disposal of solid waste in Ventura County is an increasing problem because of the current practice of disposing solid waste at sanitary landfills, creating a demand for land that is not readily available. Resource recovery is in dire need of implementation. Reducing the output per capita is one aspect of solid waste reduction along with viable practices that create a valuable resource from the solid waste.

4.5.3 ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

Geology

The site of the proposed project is located in a region of historic seismic activity. No faults are known to exist at the site and the primary seismic danger is from ground shaking and liquefaction. The danger to the proposed project is slight because of its planned conventional residential structures and the danger will be further minimized through required structural design features.

Air Quality

Associated with the project generated traffic are the increased vehicular emissions, which are summarized in Table 40. The airshed presently has the capacity to assimilate increased emissions for carbon monoxide and sulfur dioxide, but a problem exists in Ventura County during the summer months from particulate matter and ozone to which the project-generated emissions for particulates, hydrocarbons and nitrogen oxides will contribute. However, the estimated project-related emissions of these pollutants are insignificant in relation to the total problem and are expected to decline as stricter vehicle emission factors take effect. The cumulative effects of this project along with the other projects will be analyzed in a later section of this report.

Agriculture

The loss of 31.5 acres of productive agricultural land has an adverse impact on food resource supply and what remains of the rural character of the surrounding vicinity. The land use that will replace the agricultural resource will apply demands to the natural and manmade environment that will have to be absorbed or met.

Traffic Circulation

It is estimated that the proposed facility will generate approximately 1,339 trips per day that will be added to the circulation system. Some of these trips will be generated at an intersection (Vineyard and Oxnard) that is presently over capacity at the peak traffic hours during weekdays. The project generated traffic will increase the average daily flow at the Oxnard-Vineyard Avenue intersection by approximately one percent.

4.5.4 ALTERNATIVES TO THE PROPOSED PROJECT

No Project

If no residential project occurs on the site, the property will likely remain as 31.5 acres of productive agriculture. This use would have no further impact on the road and sewer systems but it would continue the present demand on the City's water supply. According to Mr. Brendler of the Ventura County Agricultural Extension,[30] row crops demand between 2 and 2.5 acre feet of irrigation water per year. Using a 2.25 acre foot per year figure, the 31.5 acres would continue to demand 23,098,162 gallons of irrigation water per year. The proposed project would demand 27,594,000 gallons per year (144 dwelling units x 3.5 persons per DU x 150 gallons per person x 365 days). The row crops presently require 84 percent of the proposed project's water demand.

Other Urban Uses

Other residential use combinations having higher or lower densities, such as town houses and apartments are possibilities. The land use proposed for the project area is consistent with the General Plan and the 1990 projections. Although higher densities are feasible on the property, the possible inadequacy of the sewer line in the area necessitates the least density possible.

Alternative Locations

As of 1975 there were 464.44 acres of undeveloped incorporated R-1 zoned land in Oxnard. A portion of the acreage was in available parcels in neighborhoods NW-9,C-4, and S-1. Below is a list of these parcels and their acreage sizes:

Neighborhood North West 9	1 parcel 40 acres
Neighborhood Central 4	1 parcel 30 acres
Neighborhood South 1	1 parcel 30 acres

In addition to the above there are six R-1 parcels of from 16 to 26 acres available, and the balance of the R-1 zoning is mixed with other residential zonings in various 205 foot wide annexation corridors.

The 40 acre parcel in neighborhood NW-9 is the only available parcel large enough to accommodate the proposed project.

4.5.5 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Construction of the proposed facility will irreversibly alter the physical and biological characteristics of the land and prevent it from being used as agriculture. As a consequence, the 31.5 acre site will be irretrievably committed to an urban use and lost as a food resource.

4.5.6 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

As the site presently is used, it is productive of food goods and its product can be changed over time as the economics and demands of agriculture change. Also, as long as it is in agriculture it would be possible to change to another, more productive use, whatever it may be, at any time. Relative to noise, air pollution, drainage costs, ground water recharge, and traffic circulation, agricultural use has fewer external costs than residential use.

The residential use will provide living space for approximately 504 people for its life span. In the short run it will provide increased employment to the home construction industry in a time of relatively high unemployment.

The location of the project is well suited relative to freeway access and retail services. It conforms to the development plans of neighborhood 3 as they are set out in the City's General Plan.

4.5.7 THE GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECT

Sewer System

A collection system is available but downstream flow problems could render it inadequate to serve the proposed project. The City is presently undertaking studies to determine the adequacy of the sewer system and produce a sewer master plan. Should studies indicate downstream capacity to be inadequate for the proposed and other pending projects, then an expansion of the system will be necessary. Once excess sewage capacity is available it will represent an inducement to utilize it by adding more development.

Schools

The project will generate 81 elementary students, 30 junior high students and 58 high school students. The 58 high school students would bring the Rio Mesa High School enrollment to 182 over capacity. The additional over capacity enrollment generated by the project could be the margin that induces either facilities or curriculum expansion. Class sizes will grow or perhaps more classes would be necessary to absorb the enrollment impact.

Commercial Services

With the completion of the project there will be an expanded demand for commercial services. The commercial facilities in the Wagon Wheel Junction area should supply the demand without having to expand.

Residential Development

The availability of housing is generally considered a secondary factor in determining an area's rate of growth. Other factors such as employment opportunities, environment, physical appearance, accessibility, etc. are usually of greater importance in a household's locational decision.

Vacancy rates are good current indicators of the relationship of housing supply to demand. A certain vacancy rate is considered both normal and desirable to provide persons entering the housing market an adequate choice in terms of unit type, location, price, size, etc. to meet their particular needs. For owner-occupied (generally single family detached) units, a normal vacancy rate would be roughly 4 to 5 percent, while for rental units a normal rate would be in the range of 7 to 8 percent.

Recent surveys indicate the current vacancy rate in single family units is 4.5 percent, and 17 percent for multiples. Based on historical absorption of residential land, Oxnard currently has an 11.1 years inventory of undeveloped land for single family development, and a 4.3 year inventory of land for multiples development. These two factors suggest that there will be a need for additional units for low density residential development by 1980, and additional land for multiples once the vacancy rate is reduced. Even under these circumstances, however, it is possible that there could be strong demand for higher density residential uses within a given section of the City even while there is an over-supply in the City as a whole.

As the present vacancy rate is below 5 percent for single family housing, this project is not anticipated to be significantly growth inducing.

4.5.8 REFERENCES

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2. Ibid.
3. Seismic and Safety Element of the Resources Plan and Program, Ventura County Planning Department, October 1974.
4. Ibid.
5. Ibid.
6. Ibid.
7. Soil Survey, Ventura Area, CA. USDA, Soil Conservation Service in cooperation with the University of California, April 1970.
8. Ibid.
9. Ibid.
10. Emission factors for the average gasoline-powered automobile in Ventura County: Air Pollution Control District, County of Ventura, 7-31-75.
11. HUD Noise Assessment Guidelines, August 1971.
12. Telephone conversation with Gary Nasalroad, Energy Services Representative, Southern California Edison Company, August 21, 1975.
13. Oscar Johnson, District Manager, Oxnard Office, Southern California Gas Company, February 1974.
14. Telephone conversation with Mrs. Colby, Secretary, Oxnard Fire Department, August 27, 1975.
15. Ibid.
16. Telephone conversation with Officer Larry Fyrar, Crime Prevention Officer, Oxnard Police Department, August 21, 1975.
17. Telephone conversation with Secretary of Chief Owens of the Oxnard Police Department, August 27, 1975
18. Telephone conversation with Officer Larry Fyrar, Crime Prevention Officer, Oxnard Police Department, August 21, 1975.

19. Telephone conversation, August 22, 1975 with Eila Hendrickson, Accredited Record Technician, Ventura County General Hospital.

20. Telephone conversation, August 20, 1975, with Don Worsely, Assistant Administrator for Fiscal Affairs, St. John's Hospital.

21. Telephone conversation, August 22, 1975, with Mrs. White, Executive Secreatary, Oxnard Community Hospital.

22. California City Health and Medical Plan for Great Western Cities, Inc. Eugene Wheeler and Associates, 1969.

23. Telephone conversation with Charles Turk, Rio School District Assistant Superintendent, August 21, 1975.

24. 1975 Special Census, Special Cross Tabulations, State Department of Finance.

25. 1975 State Special Census conducted in January and early February, 1975 by the State Department of Finance.

26. Telephone conversation with Fletcher Friedman, Director of Parks and Recreation, City of Oxnard, September 3, 1975.

27. Telephone conversation of August 21, 1975 with William Shaw, Refuse Superintendent, Oxnard.

28. Ibid.

29. Bureau of Sanitation Report, Los Angeles City.

30. Telephone conversation, 8-27-75.

4.6 ANNEXATION OF PROJECT 75-26

4.6.1 DETAILED DESCRIPTION OF PROPOSED PROJECT

4.6.1.1 PROJECT OBJECTIVES

The objectives of the proposed project are to pre-zone and annex 89.72 gross acres of agricultural land and construct manufacturing facilities conforming to M-2 zoning regulations on that land.

4.6.1.2 LOCATION

Project site 75-26 lies east of Rice Avenue and west of Del Norte Drive. Its northern boundary is Sturgis Road and its southern boundary is East Fifth Street. Its eastern boundary is Del Norte and the western boundary is 2100 feet west of Del Norte. The lot is nearly rectangular in shape with its long boundaries to the north and south. Del Norte exists only between Fifth and Sturgis and connects the two streets. (See Location Map, Figure 30.)

4.6.1.3 CURRENT OPERATION

Uses presently on the property are agricultural production (row crops), oil production, and rail freight movement over a main line and spur of the Southern Pacific Railroad.

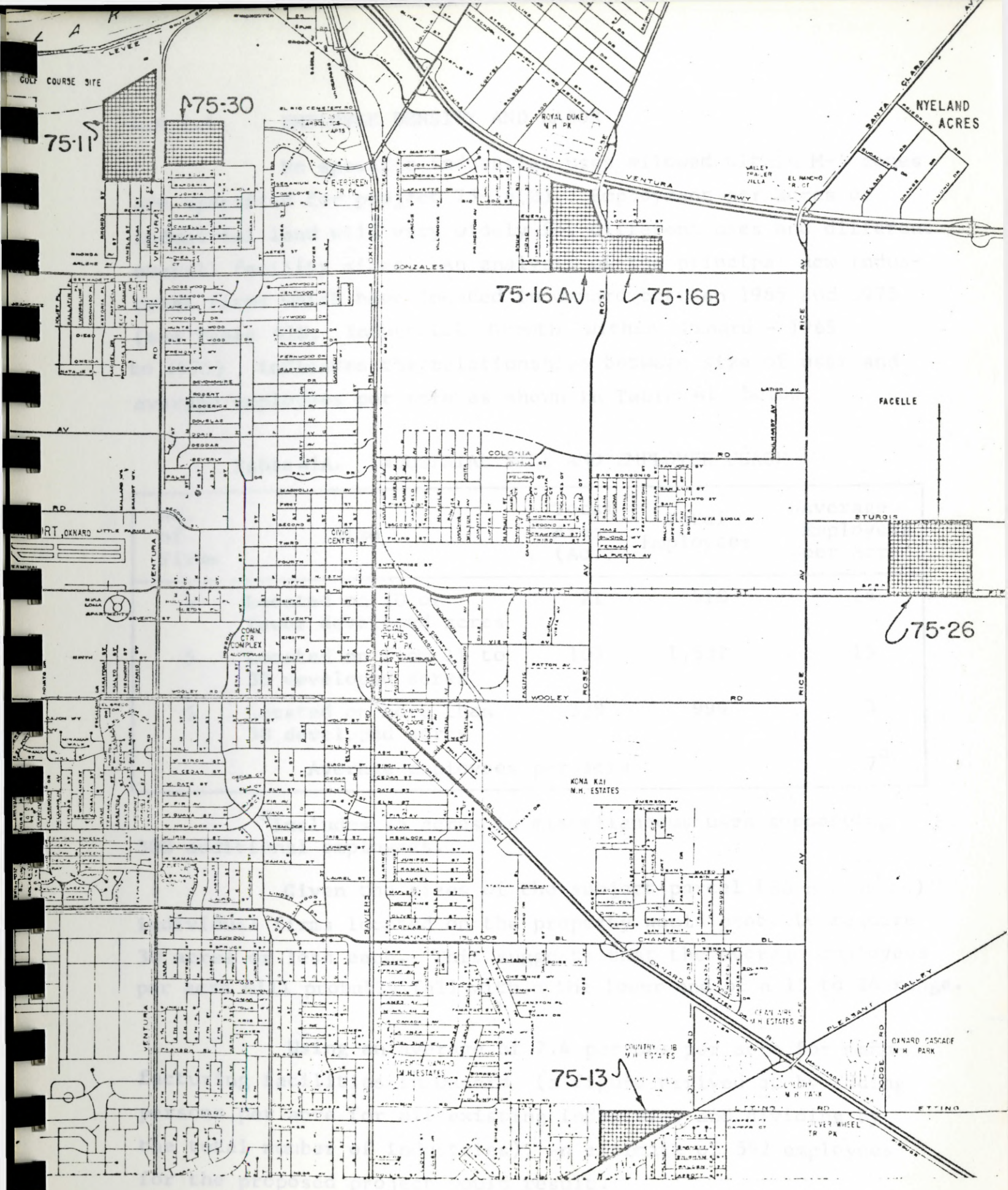

Figure 30. LOCATION MAP

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 3,000'

4.6.1.4 EMPLOYEE DENSITY AND LABOR

No specific industrial uses allowed within M-1 zones are specified for project 75-16(B). Employment per acres of industrial land will vary widely for different uses and different overall facility sizes. An analysis of the principal new industrial firms which have located in Oxnard between 1965 and 1975 (see Table 41B, Industrial Growth Within Oxnard - 1965 to 1975) indicates the relationships between size of user and average employees per acre as shown in Table 41 below.

Table 41A. INDUSTRIAL SIZE AND EMPLOYEE USAGE

No. of Firms	Size	Total Area (Ac.)	Total Employees	Average Employees per Acre
4	Located on 10 or fewer developed acres	21	510	24
5	Located on from 11 to 30 developed acres	105	1,531	15
5	Located on more than 30 developed acres	329	999	3
	Average employees per acre			7[a]

[a]Includes 75 acres in miscellaneous uses supporting 300 additional employees.

Given the sizes of the subject parcel (80 net acres) individual firms located on the property would probably require 30 acres or less each. This suggests that the average employees per acre will probably fall within the lower end of a 15 to 24 range.

Using an average of 7.4 persons per acre for manufacturing facilities in Oxnard (a figure arrived at by adding persons per acre for all existing industries and dividing by the total number of industries), an estimate of 592 employees for the proposed project would result.

Table 41B. INDUSTRIAL GROWTH WITHIN OXNARD - 1965 TO 1975[a]

Industrial Firm	Acres Developed or In Use	Total Acres Owned but Not Dev.	Employees on Dev. Land	Estimated Future Employees	Employees/acre of Developed Land
Falcon-BioQuest	15		691[b]		46.1
Charmin	89	111	400	600	4.5
Mullhardt	15		100		6.6
Statham	20		500		25.0
Lockheed Building	3		60		20.0
Randal-Walsh	5		150		30.0
Heublein	30[c]		200		6.6
Central Industrial	40		100		2.5
Kaiser	50		110		2.2
Diamond Shamrock	50		30		0.6
Tanaka	5		150		30.0
Ocean Labs	8		150		18.75
Southern California Edison	100	900	68		0.68
Halaco	25		40		1.6
Miscellaneous	75		300		4.0
	545 ac.	1,011 ac.	4,049	600	7.4 av.

Industrial Absorption Rate = 54.5 acres per year
Number of New Industrial Employees per Year = 40.5 employees per year

[a]Source: Oxnard Economic Development Office and several of the firms (Sept. 1975)

[b]First year.

[c]Under construction.

Note: There is fluctuations in the number of employees due to expansion and contractions of firm activities.

Using the highest employee per acre ratio in the City (Falcon-Bioquest) which is 46.1 employees per acre, an estimated 3,688 employees could be considered possible.

Based on the number of employees per size of industrial project (11 to 30 developed acres, Table 41A), the average employees per acre for the project will be 15 to 24, or 1,200 to 1,920 employees.

The proposed facility or facilities to be built on the property could employ between 1,200 and 1,920 persons. A survey of firms who have located in Oxnard over the past 10 years indicates that roughly 90 percent or 1,080 to 1,728 of these new jobs would be filled by present Ventura County residents. The Special State Census (1975) indicates that nearly 80 percent (79.7 percent) of the primary wage earners resident in Oxnard are employed in the Oxnard/Port Hueneme area. It therefore can be estimated that nearly 80 percent of the new jobs filled by County residents will be filled by Oxnard/Port Hueneme residents (using the low figure: 1,200 - 10% or 120 jobs = 1,080 x 79.7% = 860 jobs acquired by Oxnard/Port Hueneme residents).

4.6.1.5 CONSTRUCTION PERIOD

With the present fluctuating economic conditions, it is difficult to estimate the date of construction. However, it is estimated that construction could start by 1980 and be completed by 1985.

4.6.1.6 ESTIMATED VALUE OF DEVELOPMENT PROPOSAL

The property proposed for development contains 89.72 total acres with 80 usable acres for buildings (the remaining 9.72 acres are in use by the railroad track and existing roads). The project site is currently in agricultural use. For the fiscal year 1974-75, the property had a total assessed valuation of $144,750 and an estimated market value of $579,000 (see Table 42). The property currently generates a property tax revenue of $14,687 per year. This is based on the current, 1974-75, County tax rate of $10.1466. Of this total, 41.1 percent, or $6,038, goes to school districts and 58.9 percent, or $8,649, goes to governmental services and special districts. At the present time, the agriculture field provides employment for some farm workers, income to the owners of the property and products for the use of the public.

Table . EXISTING PROPERTY VALUATION

Parcel No.	Assessed Value Per Acre	Assessed Value Project	Estimated Market Value Per Acre	Estimated Market Value Project
216-0-160-135 216-0-160-145	$1,809.37	$144,750	$7,237.50	$579,000

Impact

The average value of the industrial project was determined by averaging the estimated market values of eight existing light industrial firms in Oxnard. This was done to obtain an estimate of the market value of this industrial project. As the average market values of the eight firms was $281,112 per acre, the estimated market value of the proposed project will be $22,488,960. The property will have an estimated tax rate of $11.8366 ($10.1466 existing tax rate plus $1.69 additional City

of Oxnard property tax after annexation). The property will generate an estimated $665,482 per year in tax revenue. This is considerably more than the $14,687 the property presently generates in taxes. Table 43 summarizes the fiscal impact of the proposed project.

Table 43. FISCAL IMPACT OF PROJECT

	Tax Revenues Without Project	Tax Revenues With Project
Estimated Market Value	$579,000	$22,488,960
Assessed Value	144,750	5,622,240
Total Tax Revenue	14,687	665,482
School Districts	$6,038	$234,537
Governmental Services & Special Districts	8,649	430,945

The project will have a beneficial economic impact due to the number of new jobs that will be generated as a result of development of the industrial site.

Of the construction costs which a project generates, usually about 55 percent is allocated to the construction personnel payroll. This will amount to approximately $12,368,928 ($22,488,960 x .55 = $12,368,928) which will go directly to persons employed for the construction of the project.

The present agriculture field demands little in public services and produces a worthwhile product. The industrial project will displace some farm workers, but more jobs will be created by the project during and after construction. The agriculture land is a valuable resource that will be lost and replaced by an industry that will contribute more local tax revenues and sales tax revenues from the products sold by the industry. The public services demanded of the industry in general will be paid for by the industry.

Presently there is no sewer line to serve the project, so a new sewer line will have to be constructed. The City of Oxnard's Public Works staff have a tentative plan providing sewer facilities that will serve the area. There are no cost estimates available at the present time for this plan.

Mitigation

None required.

4.6.2 THE ENVIRONMENTAL SETTING, PROJECT IMPACTS AND MITIGATING MEASURES

4.6.2.1 PHYSICAL

4.6.2.1.1 LAND USE

Project Site

The project site is comprised of 89.7 gross acres. The property is engaged in row crop production, oil production, and the facilitation of rail freight transport. There is a Southern Pacific Railroad line on the property. It is a segment of the line that passes through the City aligned north-south along Oxnard Boulevard until it turns east along the northern side of East Fifth Street and passes out of the City. A rail line spur leaves the main line on the property and trends due north across Sturgis Road. Del Norte Boulevard on the east side of the property is a narrow paved road raised above the surrounding land to escape flood damage and control runoff. The rail line along the southern boundary and the spur are also raised above the level of the cultivated acreage. There is an active oil pump near the northern boundary of the property east of the rail spur and another in the north west corner of the property west of the spur. (See Land Use and Zoning Map, Figures 31 and 32.)

Impact

The proposed project will eventually eliminate the commercial agriculture activitity on the property.

Vicinity

Directly to the south of the proposed site the land is in row crop production. Just to the southeast of Del Norte Boulevard is oil production and storage facility surrounded by agricultural uses; southeast of the oil facility is a livestock feeding area and the Chase Dairy. South and west is row crop production. The land area across Sturgis Road to the north is in row crop production with a small amount of oil pumping activity. The land between the western boundary and Rice Avenue is in row crop production and has two residences, a manufacturing facility, and an oil pump on it. One of the residences and the manufacturing facility front on Sturgis Road. The other residence fronts on Rice Avenue. The land to the east across Del Norte Boulevard has row crops, oil production and storage, and a batching facility on it. A southern Pacific Railroad line exists along the southern boundary on the property approximately 30 feet from East Fifth Street. A spur leaves the main line within the boundaries of the project site and travels due north across Sturgis and through the property to the north. (See Land Use and Zoning Maps, Figures 31 and 32.)

Impact

The land uses in the general vicinity are predominantly agriculture with a transition to manufacturing west of the property. The completion of the proposed project would extend manufacturing use east to Del Norte Boulevard and deminish the rural nature of the area.

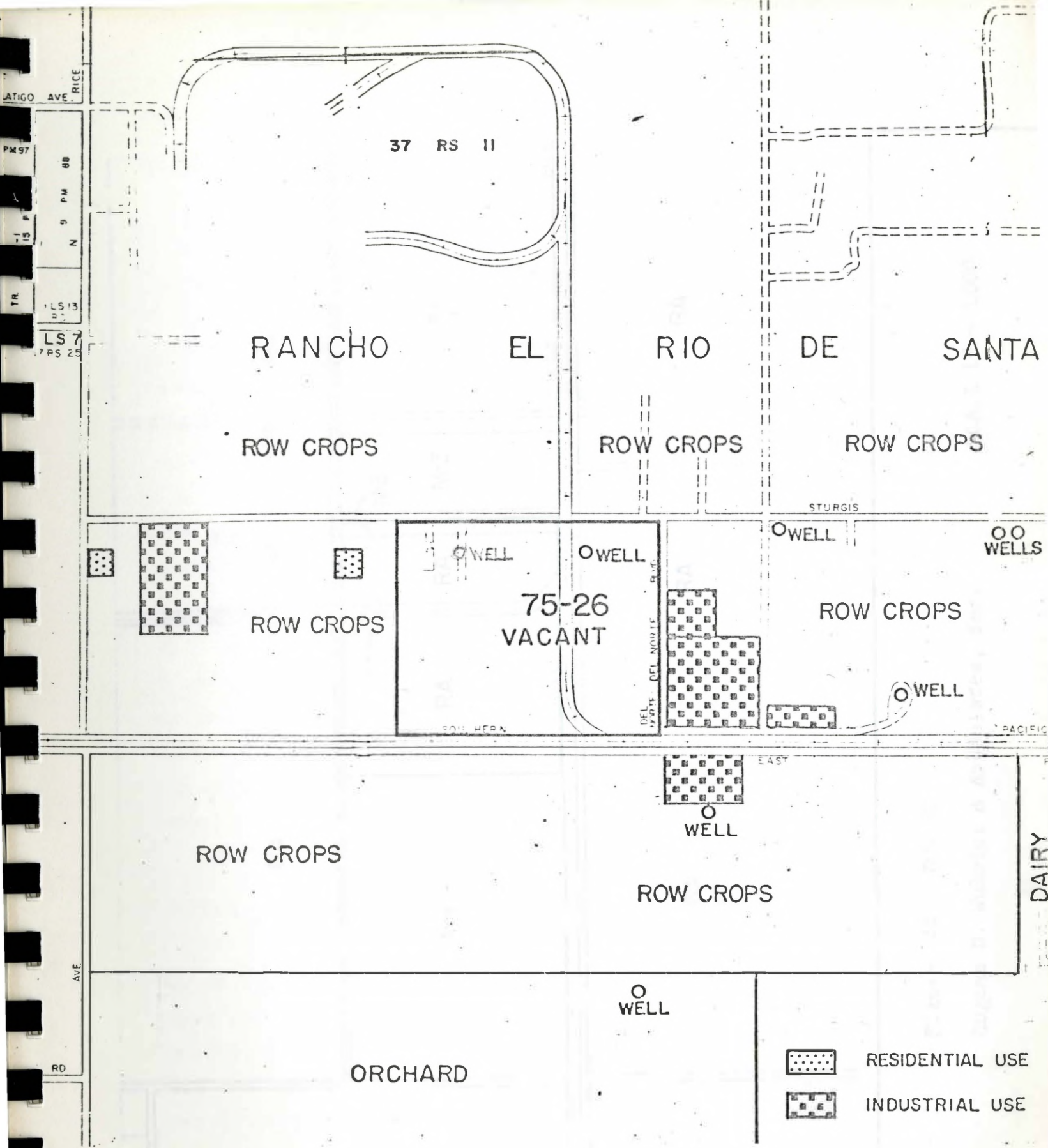

Figure 31 . EXISTING LAND USE

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1000'

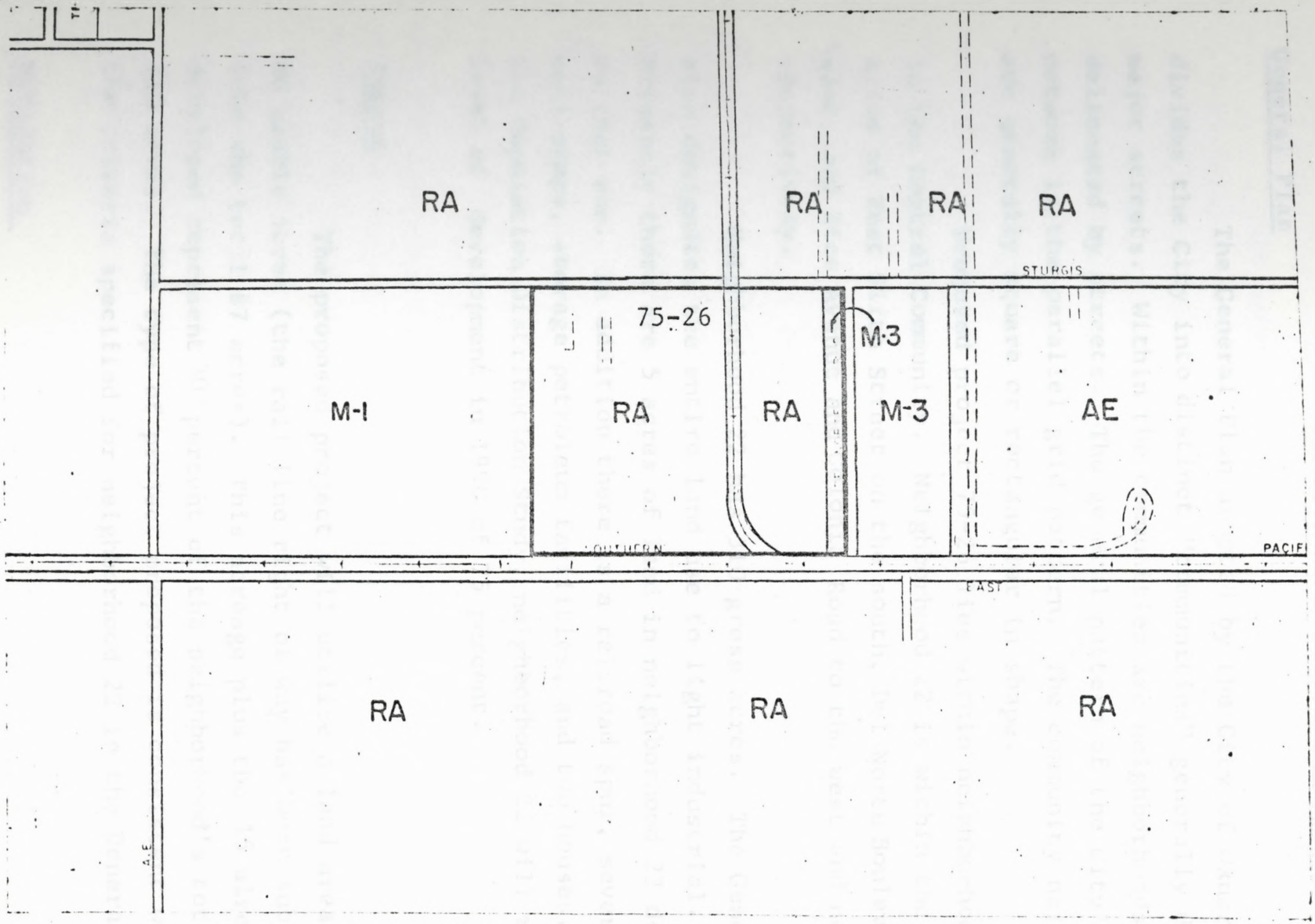

Figure 32. ZONING

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1000'

4.6.2.1.2 GENERAL PLAN AND PLANNING POLICIES

General Plan

The General Plan adopted by the City of Oxnard in 1969 divides the City into distinct "communities" generally divided by major streets. Within the communities are neighborhoods, again delineated by streets. The general pattern of the City's street network is the parallel grid pattern. The community neighborhoods are generally square or rectangular in shape.

Proposed project 75-26 lies within neighborhood 22 in the Central Community. Neighborhood 22 is within the boundaries of East Fifth Street on the south, Del Norte Boulevard to the east, and Rice Avenue and Colonia Road to the west and north, respectively.

Neighborhood 22 has 310 gross acres. The General Plan designates the entire land use to light industrial. Presently there are 5 acres of land in neighborhood 22 devoted to that use. In addition there is a railroad spur, several oil well pumps, storage petroleum facilities, and two houses. Under the Population Distribution Study, neighborhood 22 will reach a level of development in 1990 of 75 percent.

Impact

The proposed project will utilize a land area of 80 usable acres (the rail line right of way has been subtracted from the total 87 acres). This acreage plus the 15 already developed represent 30 percent of the neighborhood's total 310 acres. The type of project proposed is consistent with the criteria specified for neighborhood 22 in the General Plan.

Mitigation

None required.

Population and Employment Distribution Study

The Oxnard City Council has adopted a Population and Employment Distribution Map for 1990. The Distribution Map recommends densities for the City slightly less dense than the General Plan. The study allocates a percentage of maximum development that areas will reach by the year 1990. Under the Distribution Study, a portion of neighborhood 22 will accommodate limited and light industrial uses and the remainder will be left in parks and open space. The proposed project is in the area allocated to parks and open space.

Impact

Though the proposed project is in agreement with the land uses designated for neighborhood 22 in the General Plan, it is not in agreement with the land use designated for the property in the Projected Population and Employment Distribution Study.

Coastal Conservation Plan

The proposed project lies inland of the 1,000 yard Coastal Conservation Act boundary and does not presently come within the jurisdiction of Coastal Act policies. There is a proposed Coastal Act boundary which extends a considerable distance further inland than the present boundary. The proposed boundary will be acted upon by the State legislature when they consider the Coastal Plan for adoption in 1976.

4.6.2.1.3 NEIGHBORHOOD ANALYSIS

The impact of the proposed annexation 75-26 on neighborhood C-22 is shown in Table 44 . The demands of the developed portions of the neighborhood are combined with demands of the vacant land when developed and the proposed project's demands to give the total demands of the neighborhood at full development.

The proposed project will have a significant impact upon the neighborhood. The proposed project will add 85.72 additional acres of industry, a six-fold increase over the present acreage devoted to industry. Approximately 29 percent of the present agriculture land will be developed. The neighborhood when fully developed will be comprised of 309 acres of industry. The proposed project's water demand of 440,000 gallons per day and the neighborhood's demand of 1,669,240 gallons per day at full development can be adequately served by the present system after the extension east of an existing 12-inch line on Sturges Road. The sewage demands of the proposed project will be 416,000 gallons per day. Presently there is no sewage collection system in the area. A new sewer line will have to be added to meet the demands of the project. There are no estimated costs at this time.

The proposed project will increase the present air emissions of the neighborhood six-fold. Air emissions from neighborhood C-22 when totally developed will be 0.95 tons per day.

The General Plan's projected population and land use for this neighborhood has been included in the following table for comparison with the estimated total development of the neighborhood.

Table 44. NEIGHBORHOOD ANALYSIS C-22: PROJECT 75-26

Item	Developed Demands	Vacant Demands	Project Demands	Total Demands	General Plan Projections
Population	8			8	
Dwelling Units	2			2	
Land Use-Total Acres	15	209.28	85.72	310	310
Residential	1			1	-
Commercial	-	-	-	-	-
Industrial	14	209.28	85.72	309	310
Water (gal./day)	78,200	1,151,040	440,000	1,669,240	
Sewage (gal./day)	73,600	1,088,256	416,000	1,577,856	
Air Quality (Reactive Hydrocarbons tons/day)	0.04	0.68	0.23	0.95	
Traffic Trips	1,419	20,928	8,000	30,347	
Students (K-12)	2	-	-	2	
Park Acreage	-	-	-	-	

4.6.2.1.4 TOPOGRAPHY

The topography of the property is flat with a slight downslope to the south and east. The railroad and Del Norte Boulevard are raised above the cultivated land to escape flood waters. Along the northern boundary of the property next to Sturgis Road is a deep drainage ditch approximately 2 feet below the peak height of the road surface. The southern side of the ditch is a high earthern levee to prevent the drainage ditch overflow from entering the property. The drainage channel passes under the northern end of Del Norte via a pipe culvert. There is a similar but smaller drainage ditch along East Fifth Street and a drainage course on the north side of the railroad line.

Impact

If construction of structures is to occur here, they will have to be raised above the flood level, high enough so that plumbing and electrical systems in the foundation are not damaged. This will require some filling, grading and compacting to create land forms similar to those that presently support Del Norte and the rail line.

Mitigation

Low areas created around and between the raised structure supporting material should be adequately drained.

4.6.2.1.5 GRADING

To raise the structures above flood level some land form modifications subject to design standards will be necessary.

Mitigation

None required.

4.6.2.2 NATURAL ENVIRONMENT

4.6.2.2.1 FLORA AND FAUNA

Except for commercial agricultural vegetation on the property, there is no significant vegetation.

One California ground squirrel was the only animal observed on the property. It should be assumed that common reptiles, other rodents and some avi-fauna are inhabitants or visitors.

Impact

As the land on the property is developed commercial vegetation will be eliminated. Fauna habitat will also be disturbed and the present animals displaced or eliminated.

Mitigation

Depending on the type of industry that is constructed on the property and the care that is taken with the provision of landscaping and grounds, there may or may not be an increased amount of flora and fauna than is now present under the existing intensive use.

4.6.2.2.2 GEOLOGY

No faults occur on project site 75-26 according to the Geologic Map of Southern California prepared by the State Division of Mines and Geology (1972). The project site is about 2½ miles southwest of the Springville Fault, 5 miles southeast of the McGrath, 5½ miles southeast of the Oakridge, 3½ miles west of the Camarillo and about 4½ miles northwest of the Bailey Fault in the Calleguas Creek area. (See Figure 4.) These faults are designated as concealed and are conjectural where queried.

This area is not in a zone which may contain active or potentially active faults.[1] The potential amplification of ground shaking for this area is a long period with severe effects.[2]

A subsidence problem in Ventura County does exist, mainly in the Oxnard Plain.[3] Subsidence, or the sinking of the land surface has four possible causes in Ventura County: natural consolidation of alluvium, tectonic deformation, water extraction and/or oil extraction. It is probable that it will continue, possibly at an increasing rate if extraction of fluids from this area is increased. Measurements indicate that the project is in an area that has a subsidence of approximately 0.05 feet per year.

The area of project site 75-26 has the possibility of having a serious liquefaction problem.[4] This situation exists when an area has large deposits of unconsolidated alluvial material and a high water table potential. Should the water table be sufficiently high when an earth tremor occurred, the alluvial material and the water could be mixed, creating a "quicksand-like" situation. During such a situation structures on the surface have been known to sink. In a geology study con-

ducted by the State Division of Highways for a proposed interchange at Route 101 east of the proposed project, liquefaction was considered a major problem. The design of the interchange was changed to compensate for the problem of liquefaction.

All of the coastal areas in Ventura County are susceptible to tsunamis. The Channel Islands do not provide adequate protection for the County coastal areas because tsunamis can move down the Santa Barbara Channel from the north, the south or be generated along the faults present in the Santa Barbara Channel. The effects of the waves are confined to the immediate beach area and up to one mile inland in flat areas. The project site, therefore, is not within a tsunami hazard zone.[5]

Impact

With the high water table (2 to 3 feet below surface) and the type of soil in the area (5 feet or more depth), there is a possible danger to the project from liquefaction if a tremor occurs. There is also a danger from seismic shaking which would be amplified due to the unconsolidated alluvial material in the project area. There is no known surface faulting within the project property.

Mitigation

Alluvial plains with high ground water tables in areas of seismic activity are subject to long duration, strong ground shaking and liquefaction. Industrial structures of one and two stories with proper support and no excessive concentrations of weight are not as susceptible to differential settling due to liquefaction as other types of structures may be. A qualified engineering geologist should be consulted to establish foundations and structural requirements for developments in these areas.

4.6.2.2.3 SOIL

The soil on the proposed project site 75-26 has been identified by the Soil Conservation Service as being Camarillo-Hueneme-Pacheco association. This consists of level and nearly level, very deep, poorly drained loamy sands to silty clay loams. These soils were formed on alluvial plains and fans, in alluvium derived predominantly from sedimentary rocks. Permeability is from moderate to moderately rapid. Surface runoff is very slow to ponded and there is no erosion hazard.[6]

The Soil Conservation Service of the United States Department of Agriculture generally classifies soils by capability, for agriculture use, rating soils from a high capability of Class I to a low of Class VIII. Soils on the proposed project site are designated Class IIw-2 which have moderate limitations, mainly because of a seasonal high water table within a depth of 2 to 3 feet causing wetness and limiting the area to shallow-rooted crops unless artificially drained.

The predominant soil type occurring on approximately 60 percent of the project site, Camarillo loam, sandy substratum, is described as having an inherent high fertility and is suitable for vegetables and lemons. Camarillo loam occurs on about 35 percent of the property and it is described as having an inherent high fertility and is suitable for vegetables, lemons and urban development.

The shrink-swell potential of these soils is classified as moderate.[7]

Impact

The greatest impact on the soil if the proposal is approved will be the loss of approximately 80 acres of

productive agricultural soil. Dividing and covering the area with roads and structures will effectively remove it from its agricultural use forever.

The suitability of the soil for building purposes is compatible since the area has a moderate shrink-swell potential.

The soil has a poor natural drainage so that conservation methods will have to be implemented to alleviate this problem.

4.6.2.2.4 HYDROLOGY

The Camarillo loam and Hueneme sandy loam found on the project site is level to nearly level soil of the alluvial plain. The available water holding capacity is about 7 to 10 inches with 60 inches of effective rooting depth.

According to John Turner, Hydrologist, Ventura County Public Works Department, a perched water table lies above the Oxnard clay cap underlying the property. Its level is approximately 10 feet below the surface during the summer mounts and occasionally rises to as much as 2 to 3 feet below the surface during the winter months.

The soil has a Group C hydrologic classification according to the U.S. Soil Conservation Service. Soils of this type have a slow infiltration rate when thoroughly wetted. The project site has the potential of having a serious liquefaction problem because of the high seasonal water table and the unconsolidated alluvial material the soil is composed of. The high water table could pose a problem for structural foundation construction.

Mitigation

The high perched water table and liquefaction potential can severely affect larger buildings if they are not designed properly. Liquefaction may severely affect large buildings even if they are anchored down forty to fifty feet below the surface. The weight of the buildings must be equally distributed to minimize major damage. A qualified engineering hydrologist should be consulted to establish foundations and structural requirements for developments in this area.

4.6.2.2.5 DRAINAGE AND FLOOD CONTROL

The property to be annexed was partially inundated during a storm which occurred in February, 1962, the largest major storm to occur since 1962 in this particular area, including the 1969 storms. The intensity of the storm was taken from actual measurements in this field. (See Ten Year Storm, February 19, 1962. Figure 32B.) The intensity of the storm had a ten percent frequency (once in ten years on a long term average). In the past 30 years more than ten storms have caused serious flooding in the Revolon Watershed. The flood problem has been caused by a poorly defined drainage system with some areas requiring overland sheet flow as the only outlet for flood waters.

Although the proposed project is within the Revolon Watershed area (see Figure 32A) which has had inundation problems, the property itself is now well protected from flooding. Sturgis Road, Del Norte Road and the railroad are at a higher elevation than the surrounding land and act as a dike to the flooding that has occurred from the Revolon Watershed. Del Norte Boulevard was constructed and drainage ditches improved along Sturgis Road since the 1962 flood. County Flood Control studies indicate the property would not be within a 10 year or 50 year flood plain presently but would fall within an area inundated by flood waters once in 100 years on a long term average.

The drainage from the property is tributary to the Revolon Channel. The channel is unimproved along the portion in which the drainage from the site discharges. The present estimated capacity of this section of channel is 3,000 cfs and the planned capacity is 7,000 cfs. Downstream the Revolon Channel is improved and in 1976 improvements will extend as far north as the Wood Road crossing, two miles to the east and downstream from the point of discharge at Fifth Street.

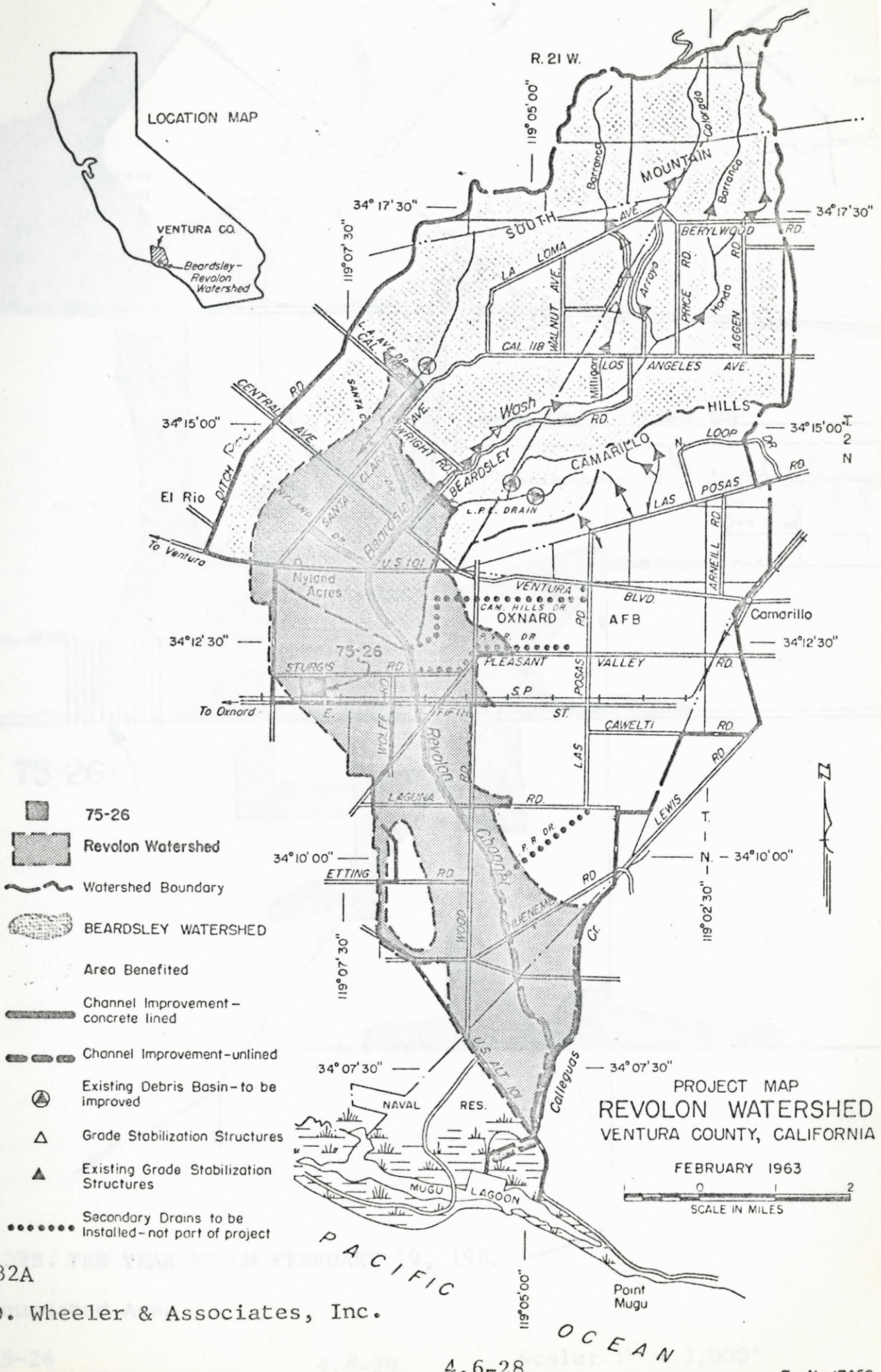

Figure 32A

Eugene D. Wheeler & Associates, Inc.

U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE PORTLAND, OREG. 1958 M-3873

7-N-17452

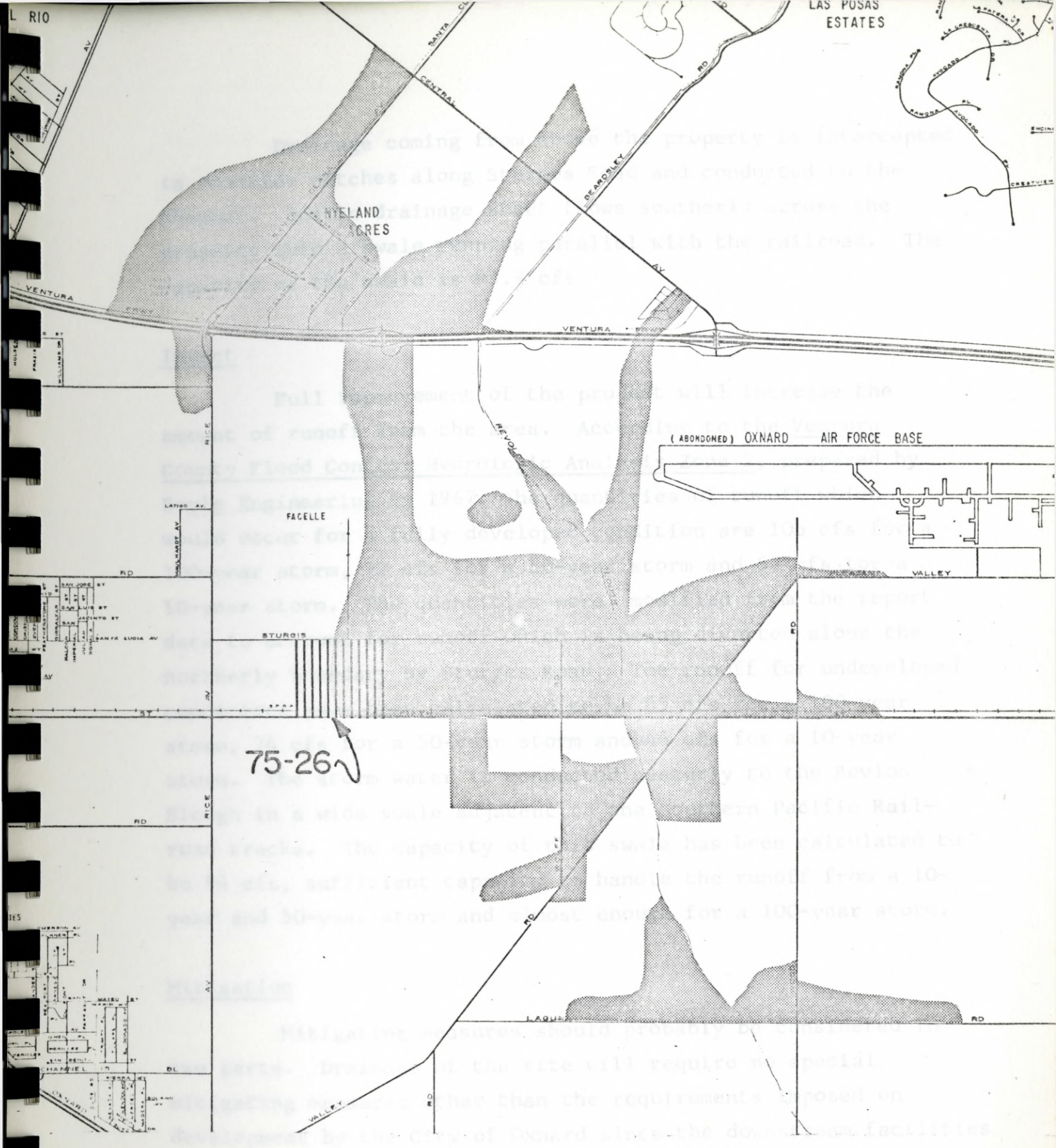

Figure 32B. TEN YEAR STORM FEBRUARY 19, 1962

Inundated Area

75-26

Scale: 1" = 3,000'

Drainage coming from above the property is intercepted in roadside ditches along Sturges Road and conducted to the channel. Onsite drainage sheet flows southerly across the property into a swale running parallel with the railroad. The capacity of the swale is 93.9 cfs.

Impact

Full improvement of the project will increase the amount of runoff from the area. According to the Ventura County Flood Control Hydrologic Analysis Zone 2, prepared by Boyle Engineering in 1967, the quantities of runoff which would occur for a fully developed condition are 106 cfs for a 100-year storm, 92 cfs for a 50-year storm and 57 cfs for a 10-year storm. The quantities were modified from the report data to account for runoff which is being diverted along the northerly boundary by Sturges Road. The runoff for undeveloped conditions have been calculated to be 85 cfs for a 100-year storm, 74 cfs for a 50-year storm and 46 cfs for a 10-year storm. The storm water is conducted easterly to the Revlon Slough in a wide swale adjacent to the Southern Pacific Railroad tracks. The capacity of this swale has been calculated to be 94 cfs, sufficient capacity to handle the runoff from a 10-year and 50-year storm and almost enough for a 100-year storm.

Mitigation

Mitigating measures should probably be considered in two parts. Drainage of the site will require no special mitigating measures other than the requirements imposed on development by the City of Oxnard since the downstream facilities have capacity to carry the flow in conformance with the standards of development. The 100-year flood, however, will probably be a sheet flow over the site. This problem can be mitigated by

requiring that the floor elevations of all buildings be raised above the water surface elevation for the 100-year flood. A qualified engineer and geologist should be involved in any construction plans in order to compensate for height of the 100-year storm and the high ground water table.

4.6.2.2.6 AIR QUALITY

Vehicular traffic generated by employees and service vehicles of the project will result in increased vehicular emissions. Table 45 contains estimates of daily vehicular emissions that would result from the project and compares them to the total countywide daily vehicular emissions.

As the exact type of industrial area of the project is not yet determined, a high estimate of 24 employees per acre was used for the proposed light industry. Using this estimate, there will be about 1920 employees on the site. On the average, there are about 1.6 employees per car; therefore, about 1200 cars will be driven. About 80 percent of the cars are expected to commute from Oxnard, while the other 20 percent will be commuting from surrounding communities. The average will be about 10 miles per day for a car from Oxnard, while the average will be about 18 miles per day for a car from outside of Oxnard. The employees will therefore generate about 12,960 miles per day.

It is estimated there will be 100 trips per acre for the industrial site.[8] Of this, 10 percent, or 10 trips per acre, are heavy duty vehicles (service vehicles). For this project site, there will be 800 trips, or 400 roundtrips. With the average roundtrip 35 miles, based on estimating a service vehicles roundtrip to the Ventura-Los Angeles County line, the heavy duty vehicle will generate about 14,000 miles per day.

The emission grams per mile for three polluntants are shown below. The emission grams are based on 1980 data.[9] As any project on the property would probably be completed nearer 1980 than 1975, 1980 factors are more relevant than 1975 factors.

Table 45. AIR POLLUTION EMISSION FACTORS
Average Old and New Cars (1990)

Pollutant	Emissions Grams/Mile for Autos	Emissions Grams/Mile Heavy Duty Vehicles
Carbon Monoxide (CO)	11.43	123.0
Hydrocarbons (HC)	2.75	15.1
Nitrogen Oxides (NO_x)	2.00	13.1

Based on the above air pollution emission factors, it is estimated the project will generate emissions as shown in Table 46 .

Air Quality Impacts

The capacity of the Oxnard area to assimilate these emissions is satisfactory during the months from October to March. During the remaining months of the year the project emissions will be adding to an existing situation that frequently exceeds Federal or State standards. The amount of reactive hydrocarbons that will be generated by the project is a significant addition to the Oxnard area.

The capacity of the Ventura air basin to assimilate these emissions is considered to be generally satisfactory during the months from October to March. During the remaining months of the year, the project related emissions for NO_x and HC will be adding to an existing situation that frequently exceeds Federal or State standards. However, the project-related increase in emissions is small in relation to the total level of countywide emissions and is expected to decline further as new vehicle emission standards take effect.

The cumulative effect of this project along with the other projects will be analyzed in a later section.

Table 46 . ESTIMATED DAILY VEHICLE EMISSIONS

Pollutants	1980 Project Related Daily Emissions (tons)[a]	Total 1980 Countywide Vehicular RHC (tons)[b]	Percent of Countywide RHC	Total Oxnard Vehicular RHC (tons)[d]	Percent of Oxnard RHC
Carbon Monoxide (CO)	2.059				
Hydrocarbons (HC)	0.2714				
Nitrogen Oxides (NO_x)	0.2287				
Reactive Hydrocarbons (RHC)[c]	0.2306	32.5	0.71	6.4	3.6

[a]The tons per day are determined by the following formula:
Vehicle miles x EF x .0022046 ÷ 2000 = tons/day

[b]Ventura County Air Pollution Control District, August 7, 1975.

[c]Reactive hydrocarbons = Hydrocarbons x reactivity (85%).

[d]Oxnard emissions were determined by finding the percent of Ventura County's population (432,407 as of January 1, 1975) that is Oxnard's population (85,104 as of January 1, 1975) and using this percentage (19.7%) to find Oxnard's contribution of emissions in Ventura County (19.7% of 32.5 = 6.4).

4.6.2.3 RESOURCES

Approximately 80 acres (net) of the property is currently used as a productive food resource (vegetable crops). The property also has two producing oil wells, and a main railroad line and spur of the Southern Pacific Railroad for freight transportation.

Impact

The proposed project will remove 80 acres of productive agricultural land from Ventura County's total crop acreage (121,219 acres). The 80 acres represent 0.06 percent of the total County agricultural acreage and 0.3 percent of the total of approximately 27,000 acres presently devoted to vegetable crops in Ventura County.

Mitigation

There is little that can be done, given present food production practices and industrial development economics, that would allow the complete industrialization of the property to coexist with vegetable crops.

The property presently provides a petroleum resource. It is unlikely that this resource will be eliminated by the proposed project; the two uses are compatible. The rail line provides a freight transportation resource. It is unlikely that the spur will be eliminated. It could be a compliment to industrial uses to occur on the property.

4.6.2.4 SENSORY

4.6.2.4.1 VISUAL AND AESTHETIC

The proposed project site is within an area of rural agriculture. Agriculture is the predominant land use, but the oil production and processing facilities are strongly imposed on the landscape. The rail line along East Fifth Street is extremely visible as are the power poles that line both the south and north boundaries of the property. The flatness of the land form is visually incompatible with the vertical power lines and tends to emphasize the existence of the oil processing facilities.

Impact

If the manufacturing facilities to be constructed on the property are designed with some attention to visual appreciation as well as functionability, the impact may be an improvement in the present appearance. Well designed single level structures would be compatible with the land form and would be imposed between the oil processing facilities and viewers.

Mitigation

Attention to the aesthetics of structural and landscape design.

4.6.2.4.2 NOISE

Project 75-26 is a proposed industrial development (M2) of 80 acres immediately west of Del Norte Boulevard between Sturgis Road and East Fifth Street. Noise impact analysis is based on methodology and standards set forth by the U.S. Department of Housing and Urban Development in their 1971 document (2300-1194) HUD Noise Assessment Guidelines. Traffic flows, both existing and 1990 projected, were provided by the County of Ventura Traffic Engineer.

Because of construction standards associated with M2 zoning, the relatively noise insensitive uses equated with light-medium industry, and due to industrial noise exposure standards for workers promulgated and enforced by the U.S. Department of Labor (OSHA), this noise assessment will deal with noise exterior to the project site but which is a by-product of operations conducted on the site.

The proposed development is bounded on the north by agriculture, on the east by industry (petroleum production/storage), on the south by agriculture and industry, and on the west by agriculture which is zoned industrial. These uses are compatible with noise levels that could be generated by the array of possible uses under the M2 zoning of the project.

Other than noise impact to areas contiguous to the proposed development (addressed above), the only other noise assessment of significance is that which relates to vehicular traffic generated by the project.

It has been calculated, based on acreage and proposed use, that the project will generate 15,280 daily vehicle trips. Of this total, it is estimated that 10 percent will be truck traffic, using Rice Avenue for freeway access to and from Los Angeles.

Impact on Existing and Future Traffic Noise Levels

Existing traffic volumes on East Fifth Street between Pleasant Valley Road and Rose Avenue range from 6,000 to 6,400 average daily trips. It is estimated that 30 percent of the traffic generated by the project would travel on East Fifth west of the project (4,584 trips) and 10 percent (1,528 trips) would travel on East Fifth Street east of the project. Existing uses from Highway 1 to Highway 101 are industrial, commercial, or agricultural, therefore traffic noise from traffic of this magnitude would not present a problem. The closest residential use exists at the northwest corner of Rose Avenue and East Fifth Street. Based on HUD methodology, traffic noise impact on this area approaches ambient noise levels, below the L_{50} of 45 dB(A) required to be "clearly acceptable." Traffic forecasts for this portion of East Fifth Street (the only potential problem area on East Fifth Street) reach 12,000 daily vehicle trips by 1990. The 1990 population distribution plan used by the City of Oxnard shows low-medium residential use bordering East Fifth Street by Rose Avenue for 1990. Assuming an absolute minimum housing setback of 100 feet from East Fifth Street (due to railroad tracks and utility easements) and assuming the 12,000 daily vehicle trips by 1990, traffic noise as perceived outdoors by the closest residences will be in the neighborhood of L_{50} 45 dBA, clearly acceptable for residential use under HUD guidelines.

Sturgis Road and Del Norte Blvd. (Del Norte programmed to be widened to four lanes, 100 foot right of way by 1990 with traffic volumes reaching 6,000 vehicle trips per day by 1990) because of the relatively low use factors and the void of noise sensitive uses along these roads, will create no noise problems from the project's induced traffic either now or by 1990.

Rice Road is the primary means of access to Highways 1 and 101 for the proposed development. As such, it is assumed that truck traffic generated by the project (10 percent of total, or 1,528 vehicle trips per day) will mainly use this road. It is estimated that 30 percent (4,584 daily vehicle trips) of the total project induced traffic will use Rice Avenue to the south, and 28 percent (4,284 daily vehicle trips) will use Rice Avenue to the north. Existing Rice Avenue traffic from East Fifth Street to Highway 101 varies from 11,400 to 12,960 daily vehicle trips. This volume, added to that volume which is created by the project (4,284 daily trips, 428 of which are trucks) will pose no unacceptable noise impacts to the existing uses bordering Rice Road to the north (agriculture and industry). Volumes in 1990 in this direction will total 15,000 average daily vehicle trips, still posing no problems, mainly due to continued agricultural and industrial uses programmed for those areas abutting Rice Road between East Fifth Street and Highway 101. Rice Road heading south between East Fifth Street and Highway 1 is four lanes, with existing volumes between 5,500 (near Highway 1) and 12,380 daily vehicle trips (near East Fifth Street). It is estimated that 30 percent of the project induced travel, or 4,584 (458 of which are trucks) average daily trips, will use Rice Avenue between East Fifth Street and Highway 1. This volume, added to existing volumes will pose no problems to existing land uses along this portion of Rice Avenue (agricultural). Traffic volumes in 1990 along this portion of Rice Avenue are expected to reach 16,000 average daily vehicle trips just south of East Fifth Street, and 12,000 trips south of the East Wooley Road intersection. Land use plans in 1990 call for light-medium density residential use abutting Rice Avenue at the northwest and southwest corners of Rice Avenue and Channel Islands Boulevard. Taking into consideration signalization, average speeds,

truck traffic, and assuming a housing setback of 25 feet, Rice Road residential developments would be exposed to traffic noise (L_{50}) of approximately 50 dB(A) which is normally acceptable according to HUD guidelines.

4.6.2.5 ARCHAEOLOGICAL AND HISTORICAL

The proposed project site has been involved for at least 60 years in intensive agricultural production. According to Robert Lopez, the President of the Ventura County Archaeological Society, it is doubtful that the project site will yield valuable artifacts.[10]

Impact

On the basis of the past history of the site and the present knowledge of the area relative to archaeological characteristics no impact is expected.

Mitigation

Mr. Lopez points out that the possibility of uncovering deeply buried archaeological resources exists and that should such materials be uncovered, "work should be halted in the immediate area of the discovery and a qualified archaeologist should be called in to evaluate and make recommendations concerning the find."

4.6.2.6 CIRCULATION

The western boundary of the project lies approximately 2,100 feet east of Rice Avenue and is bounded on the north and south by Sturgis Road and East Fifth Street, respectively. Del Norte Boulevard, which connects East Fifth Street to Sturgis Road, is the western boundary of the proposed project. The major road serving the project is Rice Avenue. It provides a direct route from U.S. 101 in the north to the State Highway 1/Pleasant Valley Road interchange southeast of the central core. From its south end north to East Fifth Street it is 4 lanes with a meridian and has a desired capacity in excess of 24,000. From East Fifth Street north to just above Colonia Road it is 2 lanes north to U.S. 101 and has a desired capacity of 9,000 to 10,000. At present Rice Avenue serves as the central district east by-pass route for U.S. 101, State Highway 1 travellers (see Circulation Flow Map, Figure 33).

The General Plan circulation plan provides for a major by-pass route with its south end at the present Rice Avenue/ Pleasant Valley Road and Highway 1 interchange; however, construction is not scheduled until 1983 if funding is available. The completed by-pass would interchange with U.S. 101 about mid point between Rice Avenue and Rose Avenue which parallels Rice to the west.

Rice Avenue is intersected by east-west aligned streets at several points along its north-south alignment. The major east-west aligned streets that connect to Rice Avenue and are pertinent to market, employment, or traffic circulation in the area are, from north to south: Gonzales Road just south of U.S. 101 which trends due west through the City to Harbor Boulevard; East Fifth Street which is contiguous to the southern boundary of the property and also connects to Harbor Boulevard; Wooley Road which passes through the City at the Highway 1/ Saviers Road intersection; Channel Islands Boulevard which

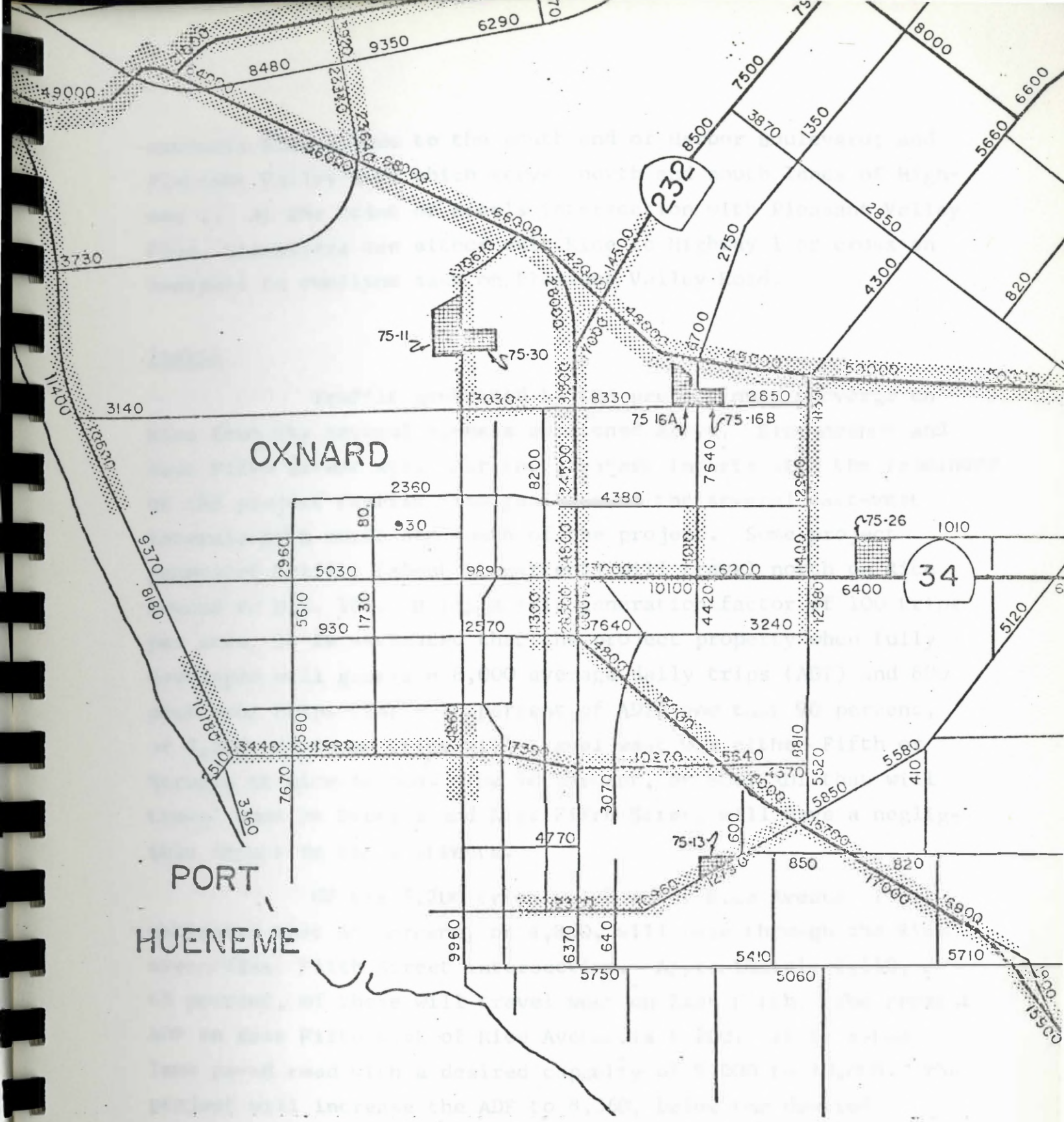

Figure 33. PRESENT AVERAGE DAILY TRAFFIC FLOW

. Annexation Projects

Eugene D. Wheeler & Associates, Inc. SCALE 1" = 1 mile

connects Rice Avenue to the south end of Harbor Boulevard; and Pleasant Valley Road which serves north and south lanes of Highway 1. At the point of Rice's intersection with Pleasant Valley Road, travellers can either exit Rice to Highway 1 or cross an overpass to continue east on Pleasant Valley Road.

Impact

Traffic generated by the project must converge on Rice from the several streets mentioned above. Rice Avenue and East Fifth Street will bear the greatest impacts with the remainder of the project traffic dissipating over the several east-west laterals both north and south of the project. Some project generated traffic (about 20 percent) will travel north on Rice Avenue to U.S. 101. Using a trip generation factor of 100 trips per acre, it is estimated that the project property when fully developed will generate 8,000 average daily trips (ADT) and 800 peak hour trips (PHT = 10 percent of ADT) and that 90 percent, or 7,200, of those trips will travel west via either Fifth or Strugis to Rice Avenue. The 10 percent, or 800, ADT that will travel east on Sturgis and East Fifth Street will have a negligible impact on those streets.

Of the 7,200 trips which enter Rice Avenue, it is estimated that 65 percent, or 4,800, will pass through the Rice Avenue/East Fifth Street intersection. Approximately 2,160, or 45 percent, of these will travel west on East Fifth. The present ADF on East Fifth west of Rice Avenue is 6,200. It is a two-lane paved road with a desired capacity of 9,000 to 10,000. The project will increase the ADF to 8,360, below the desired capacity. The project generated increase on Fifth Street west of Rice Avenue will not be significantly adverse in terms of ADF or PHT. The PHT increase from the project will be approximately

200 vehicles. Though East Fifth Street is only two lanes both east and west of Rice Avenue, its width at the signalized intersection is 4 lanes with left turn pockets on both sides of Rice. The peak hour generation of 200 trips west through the intersection will not significantly alter the efficiency of the intersection.

Of the 4,800 project generated trips through the intersection of Rice and Fifth Street, an estimated 2,640 will travel south on Rice Avenue to exit west on Wooley Road, Channel Islands Boulevard and Pleasant Valley Road. Rice Avenue south of East Fifth Street and north of Wooley Road has a present ADF of 12,380. It is a 4-lane divided arterial with a desired capacity of approximately 24,000 average daily trips. The 2,640 trips generated on Rice between Fifth and Wooley will raise the ADF to 15,020, well below its desired capacity.

The intersection of Rice Avenue and Wooley Road is a three way intersection (Wooley does not cross to the east). Wooley west of Rice is a 2-lane road with a desired capacity of 9,000 to 10,000. There are left turn pockets on both Rice and Wooley at the signalized intersection (Wooley is widened at the signals). If 50 percent, or 1,320, of the southbound ADT exit Rice west on Wooley, the ADT on Wooley will be raised from 3,240 to 4,560, well under the 9,000 to 10,000 desired capacity. The project generated peak trips (132) on Wooley will not significantly affect the flow efficiency. The intersection should handle the turning traffic without difficulty.

Rice Avenue south of Wooley has a present ADT of 8,810. It is a 4-lane divided road with a desired capacity of 24,000. The remaining estimated 1,320 project generated vehicles travelling Rice north of Channel Islands Boulevard and south of Wooley Road would bring the ADT to 10,130, well below the desired capacity. The PH increase would be 132 vehciles, an insignificant

increase. The project generated increased traffic on Rice Avenue below Wooley Road will have been dissipated to a level low enough so as not to significantly adversely impact the road system below that point.

An estimated 2,520 vehicles will be generated north on Rice Avenue from the project. It is assumed that the majority of those vehicles travelling north on Rice will use Sturgis Road to obtain access to Rice Avenue and thus the northbound impact on the intersection of East Fifth and Rice Avenue will be negligible.

The present ADF on Rice Avenue north of Sturgis is 11,400 up to the Gonzales Road intersection where it increases to 12,960. From the East Fifth Street intersection north to just below the Charmin Paper Company, Rice is only two lanes with a desired capacity of 9,000 to 10,000. The present ADF along this short stretch of Rice is 11,400 and already exceeds the desired capacity by 1,400 ADT. The additional 2,520 ADT generated over this stretch of Rice Avenue will increase the ADF to 13,920, 22 percent over the desired ADF capacity. North of the narrow 2-lane stretch and adjacent to the Charmin Paper Co., the road widens to 4 lanes with a median. The large capacity here serves the industrial firms that are clustered on either side of the road. The project generated traffic here will not significantly impact the road capacity, and will in fact have been decreased in volume by approximately 5 percent, or 252 ADT, that will turn west on Colonia. Rice narrows again, however, just north of Charmin and continues as a two-lane road all the way to U.S. 101. The average daily flow above Charmin Paper Company is 12,960. The desired capacity is 9,000 to 10,000 ADT. The estimated 2,268 ADT generated on this stretch of Rice Road will increase the ADT to approximately 15,228, 52 percent over the desired capacity.

East-west aligned Gonzales Road intersects Rice Avenue just south of the U.S. 101 interchange. It is a three-way intersection (Gonzales does not continue east) with a stop sign on Gonzales. It is estimated that 650 project generated ADT will turn west on Gonzales Road. The westbound side of Gonzales from Rice to Rose Avenue is 2 lanes, with left and right turn lanes at the Rose-Gonzales intersection. Due to the two westbound lanes Gonzales has a desired capacity in excess of 15,000 to Rose Avenue and the 650 ADT will increase the present ADT to 3,500 from 2,850, well below the desired capacity. Since it is assumed that those vehicles turning west on Gonzales will not be using U.S. 101 (if they were they would gain entry at the Rice Avenue interchange), the large majority of them will continue through the intersection and west on Gonzales. The project generated traffic here may cause significant adverse impacts for the intersection at Rose and Gonzales; it is presently over capacity at peak hours and the 65 PHT generated by the project through the intersection, though having only a very incremental impact by themselves, will represent a cumulative impact. In addition, Gonzales Road west of Rose Avenue is approaching its ADT desired capacity. It is presently 8,330. The 650 project generated trips would increase it to 8,980. This increase in addition to that of projects 75-16(A) and 75-16(B) will seriously impact both Gonzales Road west of the intersection and the intersection itself.

It is estimated that approximately 20 percent, or 1,600, of the project generated ADT will travel on Rice Avenue to or from U.S. 101. The ADF on 101 is presently 48,000. Its desired capacity is 70,000. The 1,600 trips from the project will have little impact on U.S. 101. The Rice Avenue overpass and southbound interchange with U.S. 101, however, is a complicated road configuration relying on stop signs to facilitate

traffic flow. At peak periods the project generated traffic (160 PHT) at the south end of the interchange will have a significant effect on the flow efficiency. The present ADF and PHF here are 11,350 and 1,135, respectively. The project generated PHT would represent an increase in the present PHT of 14 percent.

Mitigation

The 8,000 ADTs generated by the project represent a significant volume of traffic to be generated over the area circulation system. Rice Avenue will be the road that carries and disperses the volume at different points; from Pleasant Valley Road north to East Fifth Street, it is 4 lanes wide with a meridian; a section of it north of East Fifth Street has also been widened. The remaining 2 lane portions should be similarly widened to provide adequate capacity for the industrial development occurring along it. East Fifth Street should be widened west beyond the widening that has been accomplished at the intersection. The intersection of Rose and Gonzales, already over capacity at peak periods will need widening as a result of the cumulative impacts of projects 75-16(A), 75-16(B) and 75-26. Sturgis Road and East Fifth Street east of Rice Avenue where they are contiguous with the north and south boundaries of project 75-26 and the property west of 75-26 should be widened to 4 lanes with turning pockets at the industrial site entries. The intersection of Rice Avenue and Sturgis Road may need to be signalized. If the east by-pass freeway is built, it should absorb much of the flow that presently occurs on Rice Avenue, and consequently the major portion of the traffic flow generated by the industries along Rice would move west along East Fifth and Doris Avenue (see Circulation Plan, General Plan). The road improvement for this area that is designated in the General Plan, when accomplished, should adequately provide for the project's and other similar projects' traffic volume.

how much

4.6.2.7 UTILITIES

4.6.2.7.1 WATER

The water delivery system in the project area is comprised of: a 36-inch line on east Fifth Street west of Rice Avenue, the line does not extend east through the intersection of Rice and east Fifth; a 36-inch line on Rice Avenue north of east Fifth Street; and a 12-inch line on Rice paralleling the 36-inch line north to Sturgis Road where it turns on Sturgis and extends approximately 1,800 feet east. In 1977 to 1978 a 12-inch line will be constructed on east Fifth Street from Rose Avenue to Rice Avenue.

With the inclusion of the newest blending station on Gonzales Road to the City's water supply system, the total capacity will be approximately 77.1 million gallons per day (mg/d).

Impact

At a per capita daily use of 150 gallons per day (g/d) the project will demand 440,000 g/d (80 acres x 5,500 g/acre/day = 440,000 g/d). The present average daily City demand is 13,594,000 gallons.[11] The unused capacity is 63,506,000 (77,100,000 minus 13,594,000 = 63,506,000 gallons). The project will demand 0.69 percent of the unused capacity. There is ample water capacity to serve the project, however the 12-inch line on Sturgis Road will have to be extended east along the northern boundary of the project in order that the proposed facilities receive water service.

Mitigation

None required.

4.6.2.7.2 SEWAGE

Sewage Treatment

The project will be served by the City of Oxnard's wastewater treatment plant (WWTP). The plant is presently processing an average of 11 million gallons per day (mg/d) with a high of 13 mg/d. Its average daily capacity is 22.1 mg/d with a peak capacity of 35 mg/d. Shortly, Point Mugu and the Port Hueneme Naval Base will be allotted 5.6 mg/d of the average daily capacity. This will leave the average daily capacity for the City of Oxnard at 16.5 mg/d. Based on Ventura County Sewerage Manual, Plate 10, the peak flow from Point Mugu, Port Hueneme will be 11 mg/d. This will leave the peaking capacity for the City of Oxnard at 24 mg/d. With present use at the plant averaging 11 mg/d, and peaking at 13 mg/d, and with available future average capacity at 16.5 mg/d, and the peaking capacity at 24 mg/d, the average daily capacity reserve will be 5.5 mg/d and the peaking reserve will be 11 mg/d.

Impact

Average daily sewage discharge is estimated to be 5,200 gallons per day per acre. The peak flow of sewage will be 867 gallons per minute for this project. The project will generate 416,000 gallons of sewage per day (80 acres x 5,200 = 416,000). This is 1.88 of the average daily capacity of the wastewater treatment plant or 3.75 percent of the average daily reserve. After the Point Mugu allotment, the project sewage will be 7.56 percent of the average daily reserve (5.5 mg/d). The Oxnard wastewater treatment plant has adequate capacity for the proposed project.

Mitigation

None required. The wastewater treatment plant at present has adequate capacity for the proposed project and others pending.

Collection

The area covered by this project slopes southeasterly. The sewage collection system for the entire project would drain to this location. The property is very flat and some sewers could be run at adverse grade. No sewers presently exist in the vicinity of the project, the closest one being in Rose Avenue approximately 8,000 feet to the west. The Public Works staff of the City has proposed an 18 inch line in Rice Avenue approximately 2,000 feet to the west which, according to the plan, would flow southerly to Wooley Road where a sewage pumping plant would be installed and a force main run to connect to an 18 inch line at Pacific Street and Wooley Road.

This would probably necessitate a pumping plant on the project site and a force main to Rice Avenue since a gravity sewer would have to be on the order of 20 feet deep in Rice Avenue to serve the project by gravity.

Impact

If the entire project were to be developed this would generate on an average 416,000 gallons per day, with the peak flow calculated to be 867 gallons per minute. These flows would have to be accommodated by the proposed plant and force main as well as the collection system downstream.

The City contemplates a sewage collection system analysis which will identify sections of the system which are subject to reaching or exceeding their capacities. Since this information is not available at the present time pending completion of the study, it is uncertain whether downstream capacity of the system is sufficient to accommodate this sewage demand of the proposed project and others that are planned in the area that are served by this portion of the collection system.

Mitigation

The present project area is not served by a sewer. It can be mitigated only by the construction of a sewer system to serve the area. There are no cost figures available for the proposed sewer line.

4.6.2.7.3 ENERGY

The consumption of electricity will vary greatly depending on what type of industry is proposed. Since the type of industry has not been determined at this time, a range of electrical demands was used. The energy consumed should average between 6,000 KWH (kilowatt hours) to 120,000 KWH monthly. If a large industry is constructed on the property then the energy demand could be 400,000 KWH or more a month.[12] The project will consume 72,000 KWH to 1,440,000 KWH annually, assuming a large industry is not constructed on the property.

Impact

The Southern California Edison Company has indicated its system has the capacity to serve the demands of the project.

4.6.2.8 SERVICES

4.6.2.8.1 COMMUNITY SAFETY

The project site will receive police and fire protection from the City of Oxnard. The nearest fire station is located at 1450 Colonia Road, about two miles away. Police service is provided by the Oxnard Police Department.

Impact

No unusual demands will be placed upon police and fire service by the proposed project.[13]

4.6.2.8.2 HEALTH

The project will be served by St. John's Hospital in the City of Oxnard and the Ventura County General Hospital in Ventura.

Impact

First aid facilities will be available by the industry that is located on the property. Any additional health demands of the property could be adequately absorbed by the hospitals available.

4.6.2.8.3 SCHOOLS

There will be no demand upon the school systems of the area since the property will be devoted to industry.

Impact

There will be no direct impact upon the school system of the area. There could be an important indirect impact depending on the number of employees that would be relocating in this area.

Mitigation

None required.

4.6.2.8.4 RECREATION

Since the proposed project is an industrial development, there is no requirement for parkland dedication or a tax for park development.

Impact

There will be no impact upon recreation demands provided by this project.

Mitigation

None required.

4.6.2.8.5 SOLID WASTE DISPOSAL

The City of Oxnard is currently disposing of approximately 80,000 to 90,000 tons of solid waste a year[14] at the sanitary landfill operated by the Ventura Regional County Sanitation District off Ventura Road along the Santa Clara River. This site will probably reach capacity within the next two to four years. Alternative sites to handle the City's solid waste will be met by the Ventura Regional County Sanitation District.[15]

Impact

Since the type of industry for this project site has yet to be determined, a range for the solid waste generation seems the most appropriate. Solid waste generation figures were calculated based on a range of industrial use of 2.5 to 18 tons per employee per year.[16] The total estimated number of employees is 1,920. This is based on the average number of employees at an industry of this size (24 employees per acre). Based on this information, a range of 4,800 to 34,560 tons per year of solid waste will be generated by this project. The lower figure would be representative of a light industry while the higher figure would be indicative of a paper products or printing industry. An industry of this size would need further analysis.

Mitigation

Disposal of solid waste in Ventura County is an increasing problem because of the current practice of disposing solid waste at sanitary landfills that demand land not readily available. Resource recovery is in dire need of implementation. Reducing the output per capita is one aspect of solid waste reduction along with viable practices that create a valuable resource from the solid waste.

4.6.3 ADVERSE ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSAL IS IMPLEMENTED

Agriculture

The proposed project will replace 80 net acres of prime agricultural land with industrial construction. In the foreseeable future it would not be economically practical to reestablish the lot's present use once complete industrialization of the lot has occurred.

Air Quality

Associated with the project generated traffic are the increased vehicular emissions, which are summarized in Table 46. The airshed presently has the capacity to assimilate increased emissions for carbon monoxide and sulfur dioxide, but a problem exists in Ventura County during the summer months from particulate matter and ozone to which the project-generated emissions for particulates, hydrocarbons and nitrogen oxides will contribute. However, the estimated project-related emissions of these pollutants are insignificant in relation to the total problem and are expected to decline as stricter vehicle emission factors take effect. The cumulative effects of this project along with the other projects will be analyzed in a later section of this report.

Geology

The site of the proposed project is located in a region of historic seismic activity. No faults are known to exist at the site and the primary seismic danger is from ground shaking and liquefaction. The danger to the proposed project from liquefaction can be minimized with the proper structural and foundation designs.

4.6.4 ALTERNATIVES TO THE PROPOSED PROJECT

No Project

If ni industrial project occurs on the site the property will remain as 80 net acres of productive agriculture. This use would have no further impact on the road and sewer systems, but it would continue the present demand on the City's water supply. According to Mr. Brendler of the Ventura County Agricultural Extension,[17] row crops demand between 2 and 2.5 acre feet per year, using a figure of 2.25 acre feet per year, the property presently demands 58,662,000 gallons of water per year, or 160,718 gallons per day. The proposed project would demand 440,000 gallons per day (80 acres x 5,500 gallons per day per acre). The present use requires only 36.5 percent of the proposed project's water demand.

Alternative Locations

As of 1975 there are approximately 1,438 acres of industrial zoned land vacant and undeveloped within the City's incorporated area. Of this total 990 acres are unavailable as the land is being held by its owners for their use or future expansion. Of the 364 acres available for general development only one is both large enough and properly zoned (M-2, 112 acres) to accommodate the proposed project. On the following page, Tables 47 and 48 list the availability of vacant industrially zoned acreage in the City of Oxnard.

There are approximately 213 zoned M-1-PD and 20 to 30 acres zoned M1 that are vacant and available for general development. There are approximately 122 acres zoned M2 vacant and available for general development.[18]

Table 47. MANUFACTURING ACRES VACANT BUT NOT AVAILABLE

Name or Owner	Zone	Acres
Charmin	M-1-PD	100
Xerox Industrial Park	M-1-PD	430
Burlington Industries	M-1-PD	51
Gas Company, LNG	M-2-PD	197
Heublein	M-2	24
Edison Company	M-2	188
Total		990

Table 48. MANUFACTURING ACRES VACANT AND AVAILABLE[a]

Name or Owner	Zone	Acres
Randall	M-1-PD	100
Robert Power (in floodplain)	M-1-PD	50
McGrath	M-1-PD	22
Russell Industrial Park	M-1-PD	26
Airport	M-1-PD	15
Total M-1-PD		213
Gould Industries	M-1	20-30
Total M-1		20-30
Heublein	M-2	10
Edison Company	M-2	112
Total M-2		122

[a]As of February 1975 there was approximately 1,437.79 vacant acres of industrially zoned land in the City. Zoning M-1-PD (761 acres), M-2 (274 acres) and M-2-PD (314 acres) represents 94 percent of that acreage. The vacant acreage listed above is only a partial inventory of the total vacant acreage both available and unavailable. The sum of available and unavailable land is 1,355 acres. Unaccounted for in the inventory are 83 acres about half of which can be considered available.

4.6.5 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Completion of the proposed project will irreversibly alter the physical and biological characteristics of the land and prevent it from being used as agriculture. As a consequence, the 80 acres of agriculture land will represent a loss of 0.06 percent of the 121,219 acres of crop land in Ventura County and 0.14 percent of the 5,545 acres of vegetable and field crops in Ventura County. The 80 acres will be irretrievably commited to an industrial use.

4.6.6 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

As the site is presently used it is productive of agricultural products, petroleum and rail transport. As long as it stays in agriculture it will provide a resource in continuous demand and, depending on the economics and demands of agriculture, could be transferred to a more productive use should it be warranted. Relative to noise, air pollution, drainage costs, and traffic circulation, agricultural use has fewer external costs than industrial use.

The manufacturing facility or facilities on the property when fully developed will provide between 1,200 and 1,920 jobs. This is a long term productive benefit for individuals and the local economy. In the short run, or intermittently over the time period it takes to complete development on the entire acreage, the project will provide increased employment to the construction industry.

The location of the project is well suited relative to rail transport and proximity to U.S. 101. There are long term needs that can be met at the proposed project site.

4.6.7 THE GROWTH INDUCING IMPACT OF THE PROJECT

Sewer System

The proposed project will require the provision of a sewer main with adequate capacity. The needed sewer line is included in the General Plan's capital improvements program; however, it is unlikely to be built until the need necessitates it. The approval of the proposed project will necessitate the construction of adequate sewage facilities. Once the facilities are completed the excess sewer line capacity will be an inducement to further develop the surrounding rural area.

Traffic

The General Plan Circulation Plan designated Rice Avenue as a primary arterial. It also designates Del Norte Boulevard, Colonia Road, Fifth Street and Wooley Road as primary arterials. These streets will be improved at a pace determined in large measure by the volume of traffic that is generated over them by existing and new developments. As new developments occur, pressure to expand the existing road system initiates the improvements. The improved roads attract more travelers and traffic volume in the area grows. The proposed project will generate traffic volumes significant enough to require road improvements which will in turn encourage growth in the area road system traffic volumes.

Employment Generated

As indicated earlier, recent trends in industrial location in Oxnard suggest the subject property could, when fully developed, support industrial uses employing up to 1,200 to 1,920 persons.

A survey by EWA staff of nine of the firms which have located in Oxnard over the past ten years indicates that roughly 90 percent of the new jobs created were filled by person residing within Ventura County. The remaining 10 percent were generally key technical, administrative, and managerial personnel brought in from the firms' previous locations. The Special 1975 Census indicates that nearly 80 percent (79.7 percent) of the primary wage earners resident in Oxnard are employed in the Oxnard/Port Hueneme area. Assuming these two patterns hold constant for future employees on the subject site, only 120 to 190 of these new jobs would be filled by persons drawn from outside the County, and roughly 860 to 1,380 jobs (80 percent of the Ventura County jobs) would be filled by Oxnard residents.

If it is assumed that the City's continued growth will reduce the number of unemployed and/or under-employed persons able to move into the jobs created by new firms locating in the area, and that only 70 percent of the new jobs would be filled by Ventura County residents, then the number of persons drawn from outside the County to fill these positions would increase to 360 to 580. If 80 percent of the persons employed from Ventura County were Oxnard residents, this site would, when fully developed, draw 840 to 1,340 of its employees from local residents.

Secondary Employment Effects

New jobs created within an area will tend to support additional jobs in the local economy by increasing total area income and creating demands for additional goods and services from both the public and private sectors. This secondary job-creating effect will vary depending upon the types of jobs created, wage and salary levels, and the number and socio-economic characteristics of employees attracted from outside the local area.

Statistics on which to base such an analysis for the subject parcel are very limited. Experience in similar situations where most new jobs created are filled by local residents suggests that 0.3 to 0.5 secondary jobs may be created by each job created on the proposed industrial parcel. This would mean roughly 360 to 960 secondary jobs could result from the 1,200 to 1,920 original jobs created. If 90 percent of these jobs go to Ventura County residents and 80 percent of this 90 percent (360 - 36 (10%) = 324, 324 - 64 (20%) = 260) go to Oxnard, only 36 to 96 new employees would be attracted to secondary jobs from outside the County, and 260 to 690 would go to then-existing Oxnard residents.

If the percentage of new secondary jobs filled from outside the County were increased from 10 percent to 30 percent, the number of employees attracted from outside the County would increase from 110 to 290, and the number going to existing Oxnard residents would be reduced to 200 from 540.

Impact on Population Growth

Assuming development on the subject site were completed with the 15 to 24 employees per acre estimated, and that 10 percent of the new employees were brought into the area from outside the County, roughly 160 to 290 new employees would

have been drawn to the area in both primary and secondary jobs. At an estimated average household size of 3.0 persons, in 1980 there would be a Countywide population increase attributable to the project of 480 to 870 persons, of whom roughly 380 to 700 might be expected to move to Oxnard.

If the proportion of "outsiders" attracted to the jobs increases from 10 percent to 30 percent, the potential new population attributable to the site triples to 1,440 to 2,610, of whom 80 percent or 1,150 to 2,090 could move to Oxnard.

The Need for Additional Industrially Zoned Land

Site needs for industrial firms seeking a new location range from a few hundred square feet in an existing, multi-tenant building, to many hundred acres of unimproved, raw land. Some require sites located in densely developed inner city areas while others, less compatible with other uses, demand a more remote location. Transportation facilities, parcel size, degree of development required, utilities, proximity to suitable employee housing are also important variables. Industrial firms generally prefer locations in concentrations of other industrial land uses.

To attract new industrial firms, a community must be able to offer a wide "inventory" of industrial sites, or risk limiting the number of new firms which will locate there. There are no general standards, however, as to what constitutes an "adequate" inventory of industrial sites necessary to maintain a City's competitiveness.

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14. Telephone conversation of August 21, 1975 with William Shaw, Refuse Superintendent, Oxnard.
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17. Telephone conversation, 8-27-75.
18. Gene L. Hosford, Planning Director, City of Oxnard.

5. CUMULATIVE ANALYSIS OF ALL PROJECTS

Cumulative Analysis of Proposed Annexation Projects - General

The cumulaltive demands of the proposed annexation projects and their impacts on the land and urban systems are illustrated in Table 49.

As can be seen, the proposed annexations will increase the population of Oxnard by approximately 4,757 people, or 5.6 percent. The housing demands will increase the housing stock by approximately 1,617 dwelling units, or 6.1 percent.

With full development of the industrial projects, assuming 30 percent of the employees would be new and from "outside" Ventura County (see Table 50, Summary of New Population and Households), there would be an additional increase of 503 to 1,053 households and 1,510 to 3,160 persons, for a total household increase of 2,120 to 2,670 and a total population increase of 6,267 to 7,917. With industrial employees added, the percentage increase would be 8.04 to 10.13 for households and 7.36 to 9.30 for population.

The developed land in the City will increase approximately 296 acres, or 3.4 percent. The water demands of the projects can be adequately served by the present system.

With some expansion of sewer line capacity for projects 75-11, 75-30 and 75-26, the wastewater treatment plant of Oxnard has adequate capacity for future developments. Part of the collection system, however, is inadequate for the proposed projects and future projects where they are planned in the project areas discussed in this report. Expansion of the sewage collection system is deemed necessary, but specific remedies will not be known until the City completes its sewage Master Study Plan.

Table 49. CUMULATIVE ANALYSIS OF PROPOSED ANNEXATION PROJECTS' DEMANDS ON LAND AND URBAN SYSTEMS

	No. or Capacity of Present System	Present Unused Capacity	Total Proposed Annexed Projects	Impact/Capacity after Projects
Population	85,104	-	4,757[h]	89,861 (+5.6%)
Housing - Total Dwelling Units	26,356	-	1,617	27,973 (+6.1%)
Single Family Dwelling Units	16,031	-	973	17,004 (+6.1%)
Multiple Family Dwelling Units	10,325	-	644	10,969 (+6.2%)
Land - Total Acres Without Streets	6,177[a]	5,913[b]	286	6,463[c] (+4.6%)
Residential	3,507	1,096	182	3,689 (+5.2%)
Commercial	657	188	-	657
Industrial	1,070	1,438	104	1,174 (+9.7%)
Other	941	3,191	-	941
Water (gallons/day)	71,100,000	63,506,000	1,286,715	62,219,290[d] (-2.0%)
Sewage (gallons/day)	16,500,000	5,500,000	1,017,540	4,482,460[e] (-18.5%)
Air Quality (Reactive Hydrocarbons, tons/day)-Ventura Co.	32.5	-	0.52	33.02 (+1.6%)
-Oxnard	6.4	-	0.52	6.92 (+8.12%)
Energy: Electricity (KWH/year)			5,630,264 to 18,129,287	Adequate
Gas (cubic feet/year)	4.37 billion[f]	-	98,672,700	Adequate (+2.2%)
Students (K-12)	10,887[g]	56	1,359	1,303 overcapacity
Agriculture Total Ventura Co. Crop Acreage	121,219	-	286	120,933 (-0.2%)

[a] Developed land - Oxnard.

[b] Undeveloped land - Oxnard.

[c] Total developed with projects.

[d] Unused capacity remaining after projects.

[e] Unused capacity remaining after projects.

[f] See Reference 1 at end of this section.

[g] Capacity of all schools students will attend.

[h] Industrial employees not included.

Table 50. SUMMARY OF NEW POPULATION AND HOUSEHOLDS WITHIN CITY LIMITS ASSOCIATED WITH NEW ANNEXATIONS

Parcel No.	Use	Population	Households
75-11	Residential	1,641[a]	469
75-13	Residential	1,352[a]	644
75-16(A)	Residential	1,260[a]	360
75-30	Residential	504[a]	144
75-16(B)	Industrial	360-550[b]	120-183
75-26	Industrial	1,150-2,610[b]	383-870
	Totals	6,267-7,917	2,120-2,670

[a]Based upon 100 percent occupancy of dwellings allowable on site at maximum permissable density.

[b]Based upon new population anticipated within Oxnard as a result of increased employment opportunities. The figures shown assume 30 percent of the new jobs created will draw persons from outside Ventura County, and that 80 percent of these persons will become new residents of Oxnard. (See "Growth Inducing Impacts" for derivation--page 4.2-60--project 75-16(B).)

Air emissions will increase about 1.6 percent within Ventura County and approximately 8.12 percent within the Oxnard area as a result of the 0.52 tons per day of reactive hydrocarbons emitted from the proposed projects. Since motor vehicle emissions account for approximately 95 percent of reactive hydrocarbons in Ventura County, they were calculated and used for air quality analysis. Reactive hydrocarbons were used for evaluation since they are a good indicator of air quality in general.

According to company representatives, energy demands of the projects can be met by the Southern California Edison and Gas Companies. The students generated from the proposed projects will put the schools involved 1,303 over capacity (see Table 49). Presently, the schools involved are at or near capacity.

Development of the proposed projects will eliminate 286 acres, or 0.2 percent, of productive agricultural land from the present inventory of 121,219 acres of crop acreage in Ventura County. Some of this land is adjacent to or surrounded by urbanized areas and is not well located over the long term for agriculture.

Cumulative Analysis of Projects 75-16(A) and 75-16(B) on the Gonzales Road-Rose Avenue Intersection and Area

The cumulative impact of projects 75-16(A) and 75-16(B) would cause the road system around the intersection of Rose Avenue and Gonzales Road to approach or exceed capacity. Gonzales Road west of Rose Avenue is the only road area that actually receives enough project generated trips to exceed its desired capacity. The other sections of road would have their ADT's increased to within the range of the desired capacities. The intersection of Rose Avenue and Gonzales Road is presently considered by the County Transportation Office to be

over capacity at peak hour periods. The projects individually adversely impact the intersection. Combined, they generate 370 additional peak hour trips through the intersection. This is a 21 percent increase and represents a significant adverse impact on the intersection (see Table 51).

There are road system improvements planned for this area that will, when completed, provide capacity adequate to handle these developments and others. The by-pass freeway included in the General Plan is scheduled to begin construction in 1983 but its funding is presently not confirmed. It would be aligned north-south just east of the projects and have a half interchange with Rose Avenue. Rose Avenue and Gonzales Road are included as primary arterials in the General Plan. The actual construction to widen them, however, is not yet scheduled. When widened their capacities will be more than double the present.

Table 51. TRAFFIC GENERATION IMPACT OF 75-16(A) AND 75-16(B) ON THE GONZALES ROAD/ROSE AVENUE INTERSECTION AREA

Project Generation	75-16A	75-16B	Present Flow	Total	Designed Capacity
ADT on Gonzales west of Rose	1,674	847	8,330	10,851	9-10,000
ADT on Rose north of Gonzales	1,004	726	6,700	9,370	9-10,000
ADT on Rose south of Gonzales	670	726	7,640	9,036	9-10,000
Peak hour through intersection	184	186	1,743	2,113	
Total ADT generated	3,348	2,420[a]			

[a]This generation figure is based on 100 trips per acre. Both 100 and 191 trips per acre are used in the text.

Cumulative Impact of Proposed Projects Upon Ventura County Agriculture

All proposed projects presently contain productive agricultural land. The development of the projects would eliminate 286.4 acres from agricultural production. The projects comprise 0.236 percent of the total 1974 crop acreage in Ventura County (see Table 52). The projects' land devoted to lemon trees is 75.7 acres, or 0.253 percent, of Ventura County's lemon tree acreage of 29,840. This includes both trees that are non-bearing and trees that are bearing marketable fruit.

The proposed project land devoted to vegetable and field crops is 210.7 acres, or 0.516 percent, of the total Ventura County vegetable and field crop acreage (approximately 55,454 acres).

The soil of the proposed projects is 1.8 percent Class I, 79.4 percent Class II, and 18.8 percent Class III, according to the U.S. Soil Conservation Service. Class I soil is prime agricultural soil and comprises approximately 1.8 of the projects' land. Soils of Class II type have moderate limitations that reduce the choice of plants or that require moderate conservation practices. Class II soil is considered prime and very productive agricultural land. Approximately 18.8 percent of the soil is Class III which has severe limitations that reduce the choice of plants.

Table 52. IMPACT OF PROJECTS UPON VENTURA COUNTY AGRICULTURE

	75-16(A) 51.5 ac.	75-16(B) 24.2 ac.	75-11 67 ac.	75-30 31.5 ac.	75-13 32.2 ac.	75-26 80 ac.[a]	Total 286.4 ac.
% Total Acreage of Crop Production in Ventura Co. 1975 (121,219 acres)[b]	0.042	0.020	0.05	0.026	0.026	0.066	0.236
% Total Acreage of Lemon Production in V. Co. (29,840 ac.)[c]	0.172	0.081	-	-	-	-	0.253
% Total Field & Vegetable Production V. Co. (approx. 55,454 ac.)[d]	-	-	0.121	0.057	0.058	0.141	0.516
% of 6 Projects that is Class I Soil	10.0	-	-	-	-	-	1.79
Acres of Class I Soil	5.15	-	-	-	-	-	5.15
% of 6 Projects that is Class II Soil	80.0	60.0	70.0	40.0	100.0	100.0	79.41
Ac. of Class II Soil	41.2	14.52	46.9	12.6	32.2	80.0	227.42
% of 6 Projects that is Class III Soil	10.0	40.0	30.0	60.0	-	-	18.80
Ac. Class III Soil	5.15	9.68	20.1	18.9	-	-	53.83

[a] 80 acres of 89.72 are in agricultural use.

[b] The total crop acreage was provided by R.A. Brendler, Ventura Co. Agricultural Cooperative Extension, 8-25-75.

[c] Ventura County Agricultural Crop Report 1974, County of Ventura, Dept. of Agriculture

[d] See Reference 2 at end of this section.

Cumulative Analysis of Proposed Projects - Industry

The industrial areas would consume 104 acres of land. The industrial projects, fully developed, would have 2,501 employees, an estimated market value (1975) of $29,291,870 and pay $877,391 per year in property taxes. (See Table 53 for method of arriving at industrial property market value and taxes.) Based on the average of seven existing Oxnard industrial firms, the industrial projects could pay out as much as $18,434,416 in payroll per year.

Estimated Sales Tax Revenue

Industrial uses on annexation parcels 75-16(B) and 75-26 will generate some direct sales tax revenue for the City of Oxnard. The amount of such revenue cannot be estimated without more detailed information on the industrial firms to locate there.

Retail sales generated by the new population associated with the proposed annexations can be estimated. Per capita income in Oxnard in 1969 was $3,253. Using estimates of growth in personal income in Ventura County between 1969 and 1975 prepared by the California Department of Finance, per capita income has grown to $4,500 in 1975. Data prepared by the U.S. Department of Commerce indicates that per capita retail sales in areas of this income level will spend 53.9 percent of their income, or $2,425, on retail purchases.

Roughly 75 percent of all retail sales in California are taxable. Assuming Oxnard retailers "capture" half of all retail purchases made by new residents, and that the City's share of sales tax revenues remains at one percent of the value of all taxable transactions, the City of Oxnard will derive roughly $9.10 per year in sales tax revenue per capita from its new population. Total population-based sales tax revenues attributable to the subject parcels are displayed in Table 54.

Table 53. PER ACRE VALUE, TAXES AND PAYROLL OF EIGHT INDUSTRIAL FIRMS

Industrial Firms	Acres	Assessed Valuation (FY 1973-74)	Estimated Market Value	Total Taxes (FY 1973-74)	Annual Payroll
Abex Corporation	15	$1,413,705		$ 153,636.50	$5,578,000
Arcturus Forge	10	494,715		52,271.88	1,454,000
Diamond Shamrock	53	966,439		103,194.22	300,000
Charmin Paper Co.	89	6,250,000		696,241.92	-
BioQuest	15	2,246,726		256,249.26	6,450,000
Kaiser Aluminum	10	901,348		95,987.02	1,000,004
Western Kraft	10	288,302		30,925.70	649,000
Stratham Instrument	20	1,735,870		193,426.49	6,000,633
Total	222	14,183,356	56,733,424	1,581,932.80	21,431,637
Plus 10% update to 1975		15,601,691	62,406,764	1,740,126.00	23,574,800
Average per acre		70,278	281,112	7,838.40	177,254

Table 54. ESTIMATED ANNUAL SALES TAX REVENUES TO THE CITY OF OXNARD ATTRIBUTABLE TO NEW POPULATION IN PARCELS ANNEXED

Annexation Parcel	Estimated New Population	Total Retail Purchases	Taxable Retail Sales	Estimated Local Sales Tax at 1%	Captured by Oxnard (50%)
75-11	1,641	$3,979,430	$2,984,570	$29,850	$14,925
75-13	1,352	3,278,600	2,458,950	24,590	12,295
75-16(A)	1,260	3,055,500	2,291,630	22,920	11,460
75-30	504	1,222,200	916,650	9,170	4,585
75-16(B)	360-550	873,000-1,333,750	654,750-1,000,310	6,550-10,000	3,275-5,000
75-26	1,150-2,610	2,788,750-6,329,250	2,901,560-4,746,940	20,920-47,470	10,460-23,735
Totals	6,267-7,917	15,197,480-19,198,730	12,208,110-14,399,050	114,000-144,000	57,000-72,000

Per capita income of persons in 1975 estimated as $4,500. Retail sales comprise 53.9 percent of total income, or $2,425. Taxable sales are estimated at 75 percent of total retail sales.

Source: U.S. Department of Commerce, California Department of Finance.

Cumulative Analysis of Annexed and Pending Projects' Impacts on Land and Urban Systems

On the following pages Tables 55 and 56 illustrate the cumulative demands of the proposed annexations analyzed in this report, and the demands of other projects pending in the incorporated City of Oxnard. Shown also are impacts of these demands on the existing land and urban systems capacity. Demands are shown for housing, land, service resources such as water, sewage and air, and for energy, students, and agricultural land. Table 55 shows only the cumulative demands made of the proposed annexations and other pending projects. Table 56 shows the impact of the demands.

As indicated in Table 55 the demands of all pending and proposed projects on undeveloped land will require 726 acres. Table 56 indicates the land demands (726 acres: Total Annexed and Proposed Projects' Demands, second column from right) will add 11.75 percent to the total developed land area, bringing it to 6,903 acres, and subtract 726 acres from the Present Unused Capacity of 5,913 acres (second column from left). Since the majority of the undeveloped land is presumed to be in agriculture, the 726 acres[3] represents a 0.6 percent decrease in the total County productive agricultural stock (bottom of table). When developed the acreage will represent a decrease of 12.28 percent of the total undeveloped land within Oxnard.

The proposed and pending projects will represent an increase of 13.8 percent in the City's population, bringing it to 96,855. The housing stock will increase an average of 17.2 percent from 26,356 to 30,885 dwelling units, a significant increase including a 28.03 percent increase in multiple family units alone. With full development of the industrial projects (using the highest figure), assuming 30 percent of the new employees would be from "outside" Ventura County, there would

Table 55. CUMULATIVE DEMANDS OF ANNEXED AND PENDING PROJECTS

	Total Proposed Projects	Total[a] Pending Projects	Total Proposed and Pending Projects
Population	4,757	6,994	11,751
Housing	1,617	2,912	4,529
Single Family Dwelling Units	973	628	1,601
Multiple Family Dwelling Units	644	2,284	2,928
Land (Acres)	296	440	726
Residential	182	273	455
Commercial	-	1	1
Industrial	104	47	151
Institutional	-	119	119
Water (gal./day)	1,286,715	1,557,340	2,844,050
Sewage (gal./day)	1,017,540	1,192,800	2,210,340
Air Quality (reactive hydrocarbons, tons/day)	0.52	0.48	1.0
Energy: Electricity (KHW/yr)	5,630,264 to 18,129,287	9,065,132 to 18,380,652	14,695,396 to 36,509,939
Gas (cu. ft./year)	98,672,700	168,245,400	266,918,100
Students (K-12)	1,359	1,511	2,870
Agriculture (acres)	286	440	726

[a]Submitted but not approved projects total 213 acres and consist of a steel mill and an LNG plant which are undergoing analysis and their demands are unknown at this time.

Table 56. CUMULATIVE ANALYSIS OF ANNEXED AND PENDING PROJECTS' IMPACTS ON LAND AND URBAN SYSTEMS

	No. or Capacity of Present System	Present Unused Capacity	Total Annexed and Pending Proj. Demands	Impact/Capacity of Present System after Projects
Population	85,104	-	11,751	plus 13.8%
Housing	26,356	2,470	4,529	plus 17.2%
Single Family DUs	16,031	769	1,601	plus 10.0%
Multiple Family DUs	10,325	1,731	2,928	plus 28.3%
Land (acres) without streets	6,177[a]	5,913[b]	726	6,903[c] (+11.75%)
Residential	3,507	1,096	455	3,962 (+12.97%)
Commercial	657	188	1	658 (+ 0.15%)
Industrial	1,070	1,438	151	1,221 (+14.11%)
Other	941	3,191	119	1,060 (+12.65%)
Water (gallons per day)	71,100,000	63,506,000	2,844,050	60,661,950
Sewage (gal. per day)	16,500,000	5,500,000	2,210,340	3,289,660
Air Quality (RHC tons/day)			1.0	
RHC Ventura Co. " "	32.5	-		plus 3.1%
RHC Oxnard (tons/day)	6.4			plus 15.6%
Energy: Electricity (KWH/yr)			14,695,396-36,509,939	Adequate
Gas (cu. ft./year)	4.37 billion[d]		266,918,100	Adequate (+6.1%)
Students (K-12)	25,441	-	2,870	plus 11.3%
Agriculture (Ventura Co. crop acreage)	121,219	-	726	loss of 0.6%

[a]Developed land - Oxnard area.

[b]Undeveloped land - Oxnard area.

[c]Total developed with projects.

[d]See Reference 4 at the end of this section.

be an additional increase of 3,160 for a total of 100,015 persons and the housing stock would increase an additional 1,053 for a total of 31,938.

The domestic water needs of the pending and proposed projects amount to 2,844,050 gallons per day, a considerable increase but not significant in view of the large unused capacity available. The sewage demands are 2,210,340 gallons per day, a significant increase representing a 40 percent reduction in the present unused capacity.[5]

There will be a significant percentage increase in the amount of reactive hydrocarbons emitted into the Oxnard air system (1980) as a result of the project. The increase will be 15.6 percent or 0.99 tons per day. The Ventura County Air Pollution Controll District indicates that air quality will improve in Ventura County due to technological programs presently being pursued. After 1985 the air quality is expected to deteriorate again due to the increase in population and active polluting systems.

There is adequate gas and electrical energy supplies to accommodate the demands imposed by the pending and proposed projects according to the Edison Company and Southern California Gas Company.

The number of students generated is estimated at 2,870, an 11 percent increase in the present number. Several schools in the City are presently over capacity and as the population increase inherent with the completion of the project is realized, educational facilities will have to be expanded.

Summary

The water energy systems and the land supply in Oxnard are capable of absorbing the demands of the projects and the increased housing and population they represent. The waste-water treatment system is adequate for the projects relative only to the treatment plant itself. The sewer collection system is at or near capacity in several areas of the City and its ability to provide for the increased demand of the projects within the collection system is questionable pending the initiation and completion of a detailed analysis of the present system which will result in the creation of a Master Sewer Plan for the City.

Cumulative Analysis - References

1. According to Oscar Johnson, Ventura County District Manager, Southern California Gas Company, this is the amount of gas sold in the City of Oxnard, 1974-75, excluding the Edison Steam Generating Plant.

2. The total listed in the Ventura County Agriculture Crop Report, 1974 is 73,794 acres. Mr. R.A. Brendler, Ventura County Agriculture Cooperative Extension, informed the consultant that this figure includes land that has had more than one crop grown on it during the year; therefore, the land has been accounted for more than once. Mr. Brendler advised that about 40 percent of the total vegetable acreage in the Report has been already accounted for. So, the actual amount of land devoted to vegetable crops is about 27,000 acres. The field crops acreage is 28,454 for a total of field and vegetable crop acreage of 55,454.

3. Seven hundred twenty six acres are indicated for agricultural land proposed and pending. Ten acres have been subtracted from 736 to account for railroad lines.

4. According to Oscar Johnson, Ventura County District Manager, Southern California Gas Company, this is the amount of gas sold in the City of Oxnard, 1974-75, excluding the Edison Steam Generating Plant.

5. Unused average daily capacity after the Point Mugu/Port Hueneme allotment of 5.5 million gallons per day.

6. LIST OF PERSONS CONTACTED

Names	Sources
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Merle Betz Associate Planner	Planning Department City of Oxnard
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L.A. Yurko, Jr., P.E. Civil Engineer	Public Works Department City of Oxnard

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8. APPENDIX

Appendix A.

OFFICE OF THE

Board of Supervisors

COUNTY OF VENTURA
STATE OF CALIFORNIA

COURT HOUSE, VENTURA

TELEPHONE MILLER 3-6131

August 31, 1970

City Council
City of Oxnard
P. O. Box 1192
Oxnard, California

SUBJECT: THE NEED FOR CURTAILMENT OF URBAN DEVELOPMENT IN THE DEL NORTE AREA, BEARDSLEY WASH, FLOOD CONTROL ZONE II

Gentlemen:

It has been brought to the attention of this Board that the Larwin Company is proposing the development of approximately 250 acres of land in the northwest quadrant of the intersection of Santa Clara and Central Avenues, within the limits of the City of Oxnard. If this development proceeds at this time it will have a very detrimental effect on adjacent areas, on the taxpayers of the City of Oxnard, the County, and the population and taxpayers of the Ventura County Flood Control District, Flood Zones II and III.

The Board of Supervisors, at its meeting on August 31, 1970, directed the Chairman to advise the City Council of the Board's opinion that this development, along with other developments in the Del Norte area, should be discouraged until such time as permanent flood control facilities are installed in the downstream channels, as well as adequate facilities to protect the developments themselves.

Items of concern to this Board are as follows:

1. Under Public Law 566, the U. S. Department of Agriculture Soil Conservation Service is authorized to install permanent flood control facilities in the Revolon Slough-Beardsley Wash Watersheds in order to protect agricultural lands. This plan was authorized in 1963 by Congress. The plan contemplated the change of land use from agriculture to urban of some 2,000 acres in the total watershed with 710 acres specified as changing in the Beardsley portion of the watershed. This limit is rapidly being reached. Approval of the Larwin Company development will exceed the 710 acre limitation. In the event that this occurs, it may well place the Beardsley portion of the P. L. 566 portion of the project in a position where the Soil Conservation Service must cancel the project. The value of the authorized project is $4,500,000.00, as related to a 1962 cost base. Cancellation of the project will

prolong indefinitely the time before adequate flood control facilities are available in this area and increase the burden to local taxpayers since they will have to pay for the necessary main channel facilities which are presently federally authorized.

2. No expenditure for construction is contemplated to be included in the Flood Zone II bond issue in the Del Norte area. In the event of cancellation of the federal project, no funds will be available from the Flood Control District Zone II budget for construction in this area for at least ten (10) years, if at all.

3. The existing Nyland Acres development has a serious health hazard caused by a combination of septic tanks and high ground water. Minor storms presently cause some of the septic tanks within the area to overflow. The County has placed a sump pump in the vicinity of the Almond Avenue overcrossing of Highway 101 in an effort to reduce this problem by drawing down the ground water table and flood plain and shortening the period of time water stands in the fields adjacent to Nyland Acres. This effort has been partially successful.

   Development of the Del Norte area can only worsen the ground water situation in this area by virtue of prolonging the time storm flows are in the vicinity of Nyland Acres.

4. None of the County roads which lead to this development are adequate when the traffic load generated by development is considered.

5. The development, as proposed by Larwin and discussed with County staff, may possibly be protected from flood hazard. The protection of the particular development alone is not the primary concern of this Board, but rather the other overall effects of the further development on the surrounding area and County as a whole, as expressed in 2 through 4 above.

For the foregoing reasons, this Board wishes to recommend that the City Council delay development in the Del Norte area prior to construction of adequate road and drainage facilities in order to protect the public from flood and traffic hazards, and for public health reasons. It is further suggested that the City's staff be requested to coordinate with the County staff, identifying the adverse effects of further development in the Del Norte area.

Very truly yours,

Thomas E. Laubacher
CHAIRMAN PRO TEM

cc: Clerk, Board of Supervisors
Local Agency Formation Commission

Appendix B.

Ventura County Archaeological Society

267 S. Petit Ave., Ventura, California 93003

September 1, 1975

Eugene D. Wheeler & Associates, Inc.
1512 Anchors Way Drive
Ventura, California 93003

SUBJECT: Annexation by the City of Oxnard of parcels 75-11, 75-13, 75-16(A), 75-16(B) and 75-30.

Dear Mr. Wheeler:

In responce to your letter of August 27, 1975 concerning the Draft Environmental Impact Report your company is preparing for the City of Oxnard's proposed annexation of parcels 75-11, 75-13, 75-16(A), 75-16(B) and 75-30. The records of the Ventura County Archaeological Society reveal that these parcels have never been surveyed to determine their archaeological nature and thus there are no known and/or recorded archaeological sites on them.

Normally, in such cases where an area has never been surveyed, we recommend that a qualified archaeologist be brought in to physically walk an area and determine its archaeological nature. However, we doubt that such a survey of these five parcels would yield any information, since all have been intensely involved for at least the last eighty years with the agricultural history of the area.

We do, however, strongly recommend that your final report make recommendation for the unforeseen encounter of deeply buried archaeological resources by suggesting that if such suspect materials should be encountered during the course of subsurface excavations, work should be halted in the immediate area of the discovery and a qualified archaeologist should be called in to evaluate and make recommendations concerning the find.

I hope that this information will aid you in the completion of your final report. If there are any further questions, please feel free to call upon me.

Sincerely,

VENTURA COUNTY ARCHAEOLOGICAL SOCIETY

Robert Lopez, President