

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
 89 SOUTH CALIFORNIA ST., SUITE 200
 VENTURA, CA 93001
 (805) 641-0142

WIOe



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 49th Day: 9/26/96
 180th Day: 2/4/97
 Staff: MHC
 Staff Report: 9/19/96
 Hearing Date: 10/8-11/96
 Commission Action: Final

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-96-119

APPLICANT: City of Santa Barbara AGENT: David H. Johnson/Bill Ferguson

PROJECT LOCATION: East of Stearns Wharf and the Santa Barbara Harbor, City of Santa Barbara

PROJECT DESCRIPTION: Conversion of temporary desalination facilities to permanent facilities. Facilities include liner sleeve in abandoned ocean outfall line, ocean intake structures, and appurtenant facilities to service a reverse osmosis desalination plant with a maximum production capacity of 10,000 acre feet per year.

Zoning: Major Public and Institutional Facilities, Open
 Space - Underground pipelines
 Plan designation: Major Public and Institutional Facilities, Open
 Space - Underground pipelines
 Project density: N/A
 Ht abv fin grade: N/A

LOCAL APPROVALS RECEIVED: Local Coastal Development Permit CDP95-0045 (Resolution No. 069-95) for on-shore portions of the desalination facility, issued December 5, 1995.

SUBSTANTIVE FILE DOCUMENTS: Final Environmental Impact Report for City of Santa Barbara and Ionics, Incorporated's Temporary Emergency Desalination Project, March 1991; Final Environmental Impact Report for City of Santa Barbara Long Term Water Supply Program, May 24, 1994.

SUMMARY OF STAFF RECOMMENDATION:

The staff recommends that the Commission determine that the proposed project, as conditioned, is consistent with the requirements of the Coastal Act. Staff recommends conditions regarding ocean discharge monitoring, NPDES permit requirements, and navigational safety.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

I. Approval with Conditions.

The Commission hereby grants a permit, subject to the conditions below, for the proposed development on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

II. Standard Conditions.

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date this permit is reported to the Commission. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Compliance. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
4. Interpretation. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
5. Inspections. The Commission staff shall be allowed to inspect the site and the project during its development, subject to 24-hour advance notice.
6. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
7. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. Special Conditions.

1. Ocean Discharge Monitoring. The applicant shall submit for the review and approval of the Executive Director an on-going monitoring program to provide an assessment of the effects of the municipal ocean waste discharge diluted with brine and backwash from the desalination plant on the water chemistry and marine biota of the discharge area. To minimize potential conflicts between regulatory agencies, development of this monitoring program shall be coordinated with the California Regional Water Quality Control Board, Central Coast Region.

The applicant shall provide the Commission with quarterly reports of the results of the monitoring program during periods of operation. If future ocean discharge monitoring results indicate the applicant's NPDES waste discharge requirements are exceeded the applicant shall take corrective action to meet the specified requirements of the City's NPDES waste discharge permit. In the event that the monitoring results indicate that the water chemistry or the marine biota of the discharge area are adversely affected, notwithstanding that the discharge meets the current NPDES requirements, the applicant shall apply to the California Regional Water Quality Control Board, Central Coast Region, for a modification of the City's NPDES waste discharge permit to ensure that the recognized ocean beneficial uses of the discharge area are fully protected.

2. Drinking Water Quality Reporting. The City shall provide the Executive Director with copies of the Annual Drinking Water Quality Reports for desalination product water prepared pursuant to the Surface Water Treatment Rules of the State Department of Health Services, Office of Drinking Water.

3. Waste Discharge Permit. Prior to the initiation of the discharge of brine and backwash from the desalination facilities, the applicant shall provide the Executive Director with evidence of a current NPDES waste discharge permit for the combined municipal waste ocean discharge and the desalination operation from the California Regional Water Quality Control Board, Central Coast Region.

4. Navigational Safety. The applicant shall submit for the review and approval of the Executive Director written evidence that the subsurface intake structures shall be marked with a standard lighted navigation buoy approved by the U.S. Coast Guard. Further, the applicant shall provide to the Executive Director written evidence that a notice of the location and method of marking the project has been placed in the weekly publication "Notice to Mariners" issued by the U.S. Coast Guard.

IV. Findings and Declarations.

The Commission hereby finds and declares:

1. Project Background

In 1991 the Commission granted a Coastal Development Permit (No. 4-91-18) to the City of Santa Barbara for the construction and temporary operation of facilities to service a desalination plant to supplement the City's municipal water supply. These facilities included a liner sleeve in an existing abandoned ocean outfall line, intake structures, and appurtenant facilities located in the Commission's area of retained original permit jurisdiction.

City of Santa Barbara No. 4-96-119

The Commission granted the permit with special conditions regarding pre and post project monitoring of waste discharges associated with the operation of the facility; protection and provision of public beach access and protection of archaeological resources during construction. Additionally, the Coastal Development Permit was conditioned to limit the operation of the facility to 5 years from the commencement of the operation of the facility. Specifically, Special Condition #1 provided that:

The Coastal Development Permit for the project shall be limited to 5 years from the projected commencement of operation of the facilities (March 1, 1992). At the end of the 5 year period, the above ground physical improvements of the project shall be removed and the project site restored to its previous condition. Any extension of time for the use of the permitted project shall require an amendment to the originally approved Coastal Development Permit.

The City has applied for a Coastal Development Permit to allow those elements within the Commission's area of retained original permit jurisdiction to be maintained and operated on a permanent basis. This Coastal Development Permit would supercede the temporary Coastal Development Permit originally issued by the Commission for the project.

2. Project Description

The City of Santa Barbara proposes to maintain on a permanent basis a number of facilities to support a desalination facility built to supplement the City's water supply, and potentially adjacent local public water purveyors, on an as-needed basis. The desalination plant itself is located within the City's area of original permit jurisdiction and has been issued a local Coastal Development Permit. (See Exhibit 6.)

Portions of the project, however, fall within the Commission's area of retained original permit jurisdiction and require a Coastal Development Permit from the Commission. These project elements are located seaward of Cabrillo Boulevard on the dry sand portion of Chase Palm Park, and seaward of the mean high tide line extending approximately 2,500 feet from the shoreline, and consist of the following elements: (See Exhibit 3.)

1) Two intake structures, each 15 feet high, and 19 feet in diameter, located approximately 2,500 feet offshore in 30 feet of water. Each intake is equipped with a 100 horsepower, 800 gallon per minute pump, and is screened to reduce entrainment of marine organisms and debris;

2) A 36 inch diameter intake line lined with a polyethylene pipe inside an existing abandoned 42 inch concrete outfall line located beneath the ocean floor, and extend 2,500 feet offshore;

3) An access manhole and 4 by 5 foot concrete cover flush with the grade located on the beach at Chase Palm Park.

A 48 inch wastewater outfall line that serves both the City's Wastewater Treatment Plant and the desalination facility was constructed in the 1970's as part of the Wastewater Treatment Plant and is not part of this application. The outfall terminates 8,700 feet offshore and contains a multi-port diffuser which is 720 feet in length.

Brine and backwash discharge will be conducted through the existing 48 inch diameter ocean municipal wastewater outfall extending approximately 8,700 feet offshore, in about 75 feet of water.

As noted above, the main desalination facilities are located outside the Commission's area of retained original permit jurisdiction, but within the Commission's appeal jurisdiction adjacent to and south of U.S. Highway 101 just west of Salsipuedes Street. The proposed desalination facility uses reverse osmosis technology with the following major components: (See Exhibits 4 and 5.)

- * Trailers containing reverse osmosis (RO) trains (high pressure pumps, energy recovery turbines, RO pressure tubes and membrane elements);
- * Skid mounted primary and secondary filters, cartridge filters, and product tanks;
- * Containerized control room, office and clean-in-place (CIP) systems;
- * Concrete pad mounted power distribution panels, product pumps, blower and compressor, backwash clarifier and filter; and parking area and access roads.

The desalination facility has a current capacity of 7,500 acre feet per year and an infrastructure sufficient to allow production of up to 10,000 acre feet per year on the site.

Operation of the desalination facilities would involve drawing seawater from a submerged intake structure attached to the City's abandoned outfall pipeline located approximately 2,500 feet off the beach at Chase Palm Park. The connecting pipe (which is not in the Commission's original permit jurisdiction) to the City's El Estero Waste Water Treatment Plant, as well as the existing abandoned ocean outfall pipe, is sleeved with a 36 inch diameter polyethylene insert.

On the El Estero site (also not in the Commission's area of original permit jurisdiction) a chemical and pump station with a new pipeline corridor has been constructed to carry treated water to the desalination facility site. Pretreatment and reverse osmosis equipment at the desalination facility site includes equipment trailers, filter tanks, a control office, parking area, fencing, and landscaping. A new 66 kV substation has been constructed at the El Estero plant across Yananoli Street from the desalination facility site. The substation occupies an area approximately 60 by 35 feet, and is 13 feet in height.

During periods when the facility is operating seawater is be filtered and the finished water is then be pumped into the City's water main system on Yananoli Street. The brine waste solution from the desalination process is piped to the City's existing sewer outfall, diluted with the treated waste water from the El Estero Plant and discharged into the ocean. When in operation, the desalination facilities produce approximately 13.3 million gallons per day (MGD) of waste brine and backwash; this added to the level of municipal waste discharge would produce a total effluent/brine backwash discharge ranging from 19.8 to 22.35 MGD. The as-built capacity of the existing ocean outfall is approximately 30 MGD.

The U.S. Army Corps of Engineers has issued the City a nationwide permit for the seaward portion of the project pursuant to section 330.5.(a)(7) of the Corps Nationwide Permit provisions. The State Lands Commission has determined that the project is located on sovereign tide and submerged land which the Legislature has granted in trust to the City of Santa Barbara pursuant to Chapter 78, Statutes of 1925, and therefore does not need a permit from the State Lands Commission.

The applicant has received a revised NPDES waste discharge permit from the Regional Water Quality Control Board, Central Coast Region to cover the addition of brine and backwash to its municipal waste discharge. (Order No. 91-83, September 13, 1994), and an NPDES waste discharge permit for municipal wastewater (Order No. 94-37, June 3, 1994). Additionally, the Regional Water Quality Control Board has adopted a monitoring and reporting program for both the desalination and wastewater facilities (Program No. 94-37, June 3, 1994.)

2. Coastal Issues

a. Sizing Public Works

Public Resources Section 30254 provides, in part, that:

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division . . . Where existing or planned public works facilities can accommodate only a limited amount of new and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

The purpose of the proposed project is to provide a supplemental water supply to meet anticipated water demand under the City's approved General Plan and certified Local Coastal Program. The desalination facility will augment other City water supplies which include local reservoirs, groundwater, imported water from the State Water Project, a comprehensive water conservation program, and the City Water Reclamation Project. Some of the desalination facility components (e.g., ocean intake and outfall lines) may also be used to meet the influent and effluent needs of a proposed marine aquarium project planned adjacent to the desalination facility.

The City relies heavily on the City owned Gibraltar Reservoir, as well as the Cachuma Reservoir which was built by the Bureau of Reclamation. Together these two reservoirs provide approximately 75% to 85% of the City's normal water supply. During the 1987-1992 drought the City overdrafted its groundwater basins to make up water supply deficits. This was a planned operations decision under the City's conjunctive management of its groundwater and surface water supplies; however the City recognizes that this pumping program cannot be continued indefinitely or for extended periods because of the limited groundwater supplies and the potential to permanently damage the aquifers. The following presents a summary of the City's current and projected water supplies/demands:

HISTORIC SANTA BARBARA WATER SUPPLY AND DEMAND

SUPPLY (Acre Feet Per Year)

Gibraltar Reservoir	5,426
Cachuma Reservoir	7,570
Jameson Reservoir	300
Mission Tunnel	400 - 1,072
Groundwater	1,400
Goleta Water District Transfer	85

 15,181 - 16,523

DEMAND (Acre Feet Per Year)

----- City Wide - 16,300

Because local and regional droughts affect all south coast water purveyors, the desalination facilities have been sized to potentially accommodate regional emergency water supply needs, as well as the City of Santa Barbara, on an as-needed basis. At the maximum proposed capacity of 10,000 acre feet per year, a portion of the desalination plant output may be available for sale to other neighboring water purveyors (e.g., Goleta, Montecito, Summerland and/or Carpinteria).

An adequate water supply which would obviate the need for the operation of the facility is defined by the City as 100,000 acre feet of storage in Lake Cachuma in combination with the replenishment/recovery of the City's groundwater basins.

The City has identified several scenarios under which the desalination facility would be utilized. These are described briefly below:

Scenario 1: Intermittent operation (i.e., during period droughts) at a level up to 3,125 acre feet per year to meet the drought needs of the City of Santa Barbara.

Scenario 2: Intermittent operation at a level up to 7,500 acre feet per year to meet regional drought needs of the City of Santa Barbara and the Goleta and Montecito Water Districts.

Scenario 3: Baseload operation (i.e., during both drought and non-drought periods) at a level up to 7,500 acre feet per year to meet regional needs during drought and to produce water for exchange with other water purveyors during non-drought periods.

Scenario 4: Intermittent operation at a level up to 10,000 acre feet per year during periods of drought.

Use of the desalination facility is expected to be infrequent based upon the modeling done as part of the City's long-term water supply planning, as well as the cost of desalinated water. Modeling indicates that the desalination facility would be needed during 6 of the next 75 years, assuming future rainfall patterns are similar to historical patterns. Baseload use as part of water exchange agreements will depend upon the economics of water exchanges, but is not anticipated in the near future based on current prices for water transfers, and the relatively high cost of desalination water compared to other local or imported sources.

Both the City and the unincorporated surrounding areas within the County of Santa Barbara have certified Local Coastal Programs which establish land uses, development densities and standards, and contain policies for the allocation of limited water resources for the service of developments having priority under the California Coastal Act. Only a small portion of the City lies within the Coastal Zone, and a majority of the potential service area, including unincorporated areas within the County of Santa Barbara, lies outside the Coastal Zone.

Expanded water supplies could contribute to growth and development beyond the limits currently provided for in the City's General Plan and Local Coastal Program. Additional growth in the Coastal Zone beyond that which is currently permitted in the City's (or the County of Santa Barbara's) Local Coastal Program would require, however, amendments to the Local Coastal Programs. Further, the configuration of the service area, coupled with the relatively high cost of desalinated water in comparison to local and imported supplies, will have the tendency to discourage the use of the facility to foster growth within the Coastal Zone. As a result, the project will not create an additional water supply that could allow for and or induce growth inconsistent with the type and intensity of development provided for in the certified Local Coastal Programs, or with the applicable policies of Chapter 3 of the Coastal Act.

The Commission therefore finds that the proposed project, as conditioned, is consistent with and adequate to carry out the requirements of PRC Section 30254.

b. Protection of Marine Resources

Public Resources Section 30230 provides that:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Public Resources Code Section 30231 provides, in part, that:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, . . .

The ocean intake and discharge pipelines for the desalination plant are located within the marine environment of the Santa Barbara Channel. As part of the Southern California Bight, this area is situated in a biological transition zone between the cold water biota to the north of Point Conception and the warm-water subtropical biota of Mexico to the south.

The Santa Barbara coastal waters are characterized by a variety of marine habitats including rocky reefs, kelp beds, and sand flats. Near shore environments within the vicinity of the project are primarily sandy flats. The biological species diversity and abundance of this habitat, based upon visual reconnaissance is considered to be quite low. No federally listed endangered marine species have been reported for the project area, though the federally listed southern sea otter, and the California gray whale are found further offshore, and the Tidewater goby is found in the estuaries at the mouth of Mission and Sycamore Creeks. Recent surveys by the City have not revealed any eelgrass beds in the project area. Additionally, no kelp beds are currently found in the project areas as a result of the mortalities caused by the warm currents introduced by El Nino in 1983.

Because the seawater intake line and structures, as well as the brine discharge pipeline, already exist there are no construction impacts associated with the current project. Seawater will be inducted into the intake structures located in approximately 30 feet of water. The dual intake structures each cover an area of approximately 380 square feet on the ocean floor, and are capable of taking in a total of approximately 15,898 gallons per minute. This inflow rate will generate seawater velocities through the screens that range from 3 cm/second or less. This flow velocity is at the lowermost ranges of the natural ocean currents that have been reported in the vicinity of the outfall: 0-40 cm/second. Consequently, this flow is not considered sufficient to cause the entrainment of organisms (e.g. fish, mammals,) in the vicinity of the intake structures. Further the small mesh size of the intake filter screen (3/8 inch) will exclude most organisms except some small invertebrates, including planktonic forms.

Waste brine from the desalination project are discharged to the Santa Barbara Channel through the City's existing wastewater outfall line from the El Estero Wastewater Treatment Plant. The City's wastewater outfall line is 48 inches in diameter and extends approximately 8,700 feet off shore and terminates at a depth of about 75 feet. Wastewater is dispersed through a terminal diffuser 48 inches in diameter, with 60 ports ranging from 3.4 to 3.89 inches in diameter and spaced at 10 feet intervals over a length of 700 feet.

The effluents from the desalting process are conditioned by three processes before they leave the plant for disposal. Seawater brine will flow directly to the El Estero Waste Water Treatment Plant outfall. Wastewater generated

when membranes are chemically cleaned are discharged for treatment by the El Estero Water Treatment Plant. This process is regulated by the City through the issuance of an Industrial Waste Water Discharge Permit. Solids are removed by truck to a qualified solids disposal site. None of the normal operation or maintenance waste streams are expected to be hazardous materials.

The discharge brine salinity is slightly less than 1.82 times the ambient seawater salinity. Salinity of the combined reverse osmosis brine discharge and municipal wastewater from the El Estero plant, under normal operating conditions, is expected to vary from 25.9 parts per thousand to 54.0 parts per thousand relative to the salinity of the intake seawater, 35 parts per thousand. Because treated effluent seawater discharge from the El Estero Waste Water Treatment Plant has a very low degree of salinity (0.8 parts per thousand) and the desalination plant discharge has a higher salinity, the blending of the two waste streams is expected, under some combined flow regimes, to produce a discharge that more closely matches the salinity of the ambient seawater.

The offshore discharge of concentrated seawater brine via the existing El Estero Waste Water Treatment Plant has been reviewed by the California Regional Water Quality Control Board, Central Coast Region. Under the current NPDES permit, a monitoring program is being conducted to evaluate the density of the discharge plume, the dilution pattern of the discharge, and accumulation of discharge constituents in bottom sediments.

As noted above, the applicant has received a revised NPDES waste discharge permit from the Regional Water Quality Control Board, Central Coast Region to cover the addition of brine and backwash to its municipal waste discharge. (Order No. 91-83, September 13, 1994), and an NPDES waste discharge permit for municipal water (Order No. 94-37, June 3, 1994). Additionally, the Regional Water Quality Control Board has adopted a monitoring and reporting program for both the desalination and wastewater facilities (Program No. 94-37, June 3, 1994.)

The preliminary computer modeling of the combined municipal waste water and brine/backwash has not indicated any adverse effects from the combined discharge; however, the synergistic effects of the two waste streams is not known from actual observations, and warrants further monitoring.

To ensure that the proposed desalination discharge in combination with the existing municipal waste discharge will not adversely impact marine resources a base-line and operational monitoring program has been developed in consultation with the California Regional Water Quality Control Board, Central Coast Region. Any inconsistency with the revised NPDES waste discharge permit or adverse impacts on the marine resources of the discharge area should be addressed through corrective action or amendment to the NPDES permit by the California Regional Water Quality Control Board, Central Coast Region.

Special Conditions #1, #2, and #3 require a monitoring program, as well as evidence of the City having a current NPDES waste discharge permit to regulate the combine municipal water and brine/backwash discharge for the desalination plant.

The Commission therefore finds that the proposed project, as conditioned, is consistent with and adequate to carry out the provisions of PRC Sections 30230 and 30231.

c. Hazards

Public Resources Code Section 300253 provides, in part, that:

New development shall:

- 1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

The project will involve the maintenance of two intake structures 19 feet in diameter and 15 feet high in 30 feet of water. The structures are attached to an existing abandoned ocean outfall line at a point approximately 2,500 feet offshore just east of Stearns Wharf in the Santa Barbara Harbor. Because of the proximity to the Santa Barbara Harbor the project area is heavily traversed by a variety of private and commercial fishing vessels as well as pleasure craft. To ensure that the intake structures do not interfere with this marine traffic, the City should maintain markers over the site of the structures with a buoy approved by the U.S. Coast Guard.

Special Condition #4 requires that the City maintain the site of the intake structures with a light navigation buoy, and record the marking in the "Notice to Mariners" issued by the U.S. Coastal Guard.

The Commission therefore finds that the proposed project, as conditioned, is consistent with and adequate to carry out the requirements of PRC Section 30253.

3. LCP/CEQA

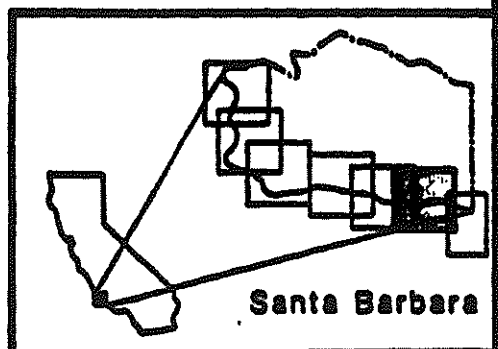
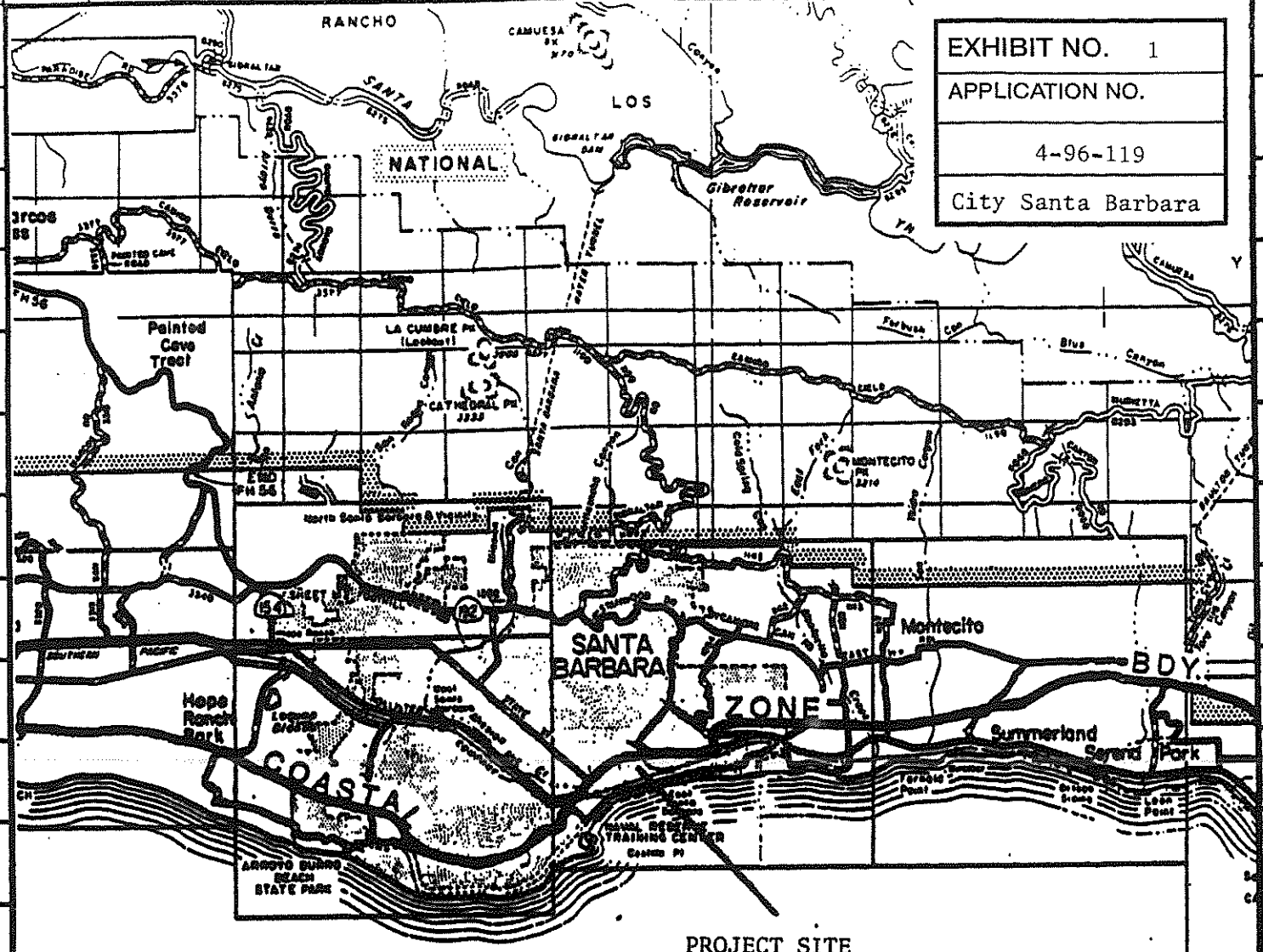
The proposed site lies within the City of Santa Barbara, but falls within the Commission's area of retained original permit jurisdiction because it is located on potential state tide lands or is below the mean high tide line. The Commission has certified the Local Coastal Program for the the City of Santa Barbara (Land Use Plan and Implementation Ordinances) which contains policies of the Waterfront Planing area, including those regarding the protection of marine and other environmentally sensitive habitats.

The Coastal Commission's permit process has been designated the functional equivalent of CEQA. CEQA requires the consideration of the least environmentally damaging alternative and the consideration of mitigation measures to lessen significant environmental impacts to a level of insignificance. As discussed in the findings above, the project as conditioned is the least environmentally damaging alternative and will not have a significant adverse effect on the environment within the meaning of CEQA.

The project is therefore consistent with the provisions of the California Environmental Quality Act and the California Coastal Act.

A B C D E F G H I J K L M N O

EXHIBIT NO. 1
APPLICATION NO.
4-96-119
City Santa Barbara



PROJECT SITE

SANTA BARBARA

PACIFIC

LOCATION MAP



California Coastal Commission

County of Santa Barbara

EXHIBIT NO. 2
APPLICATION NO.
4-96-119
City Santa Barbara

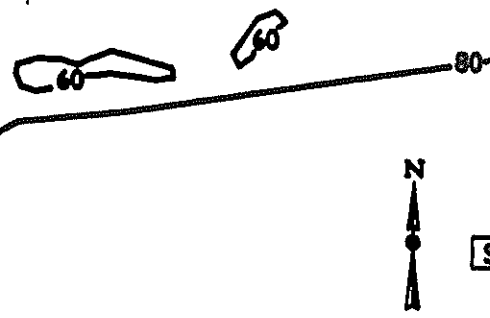
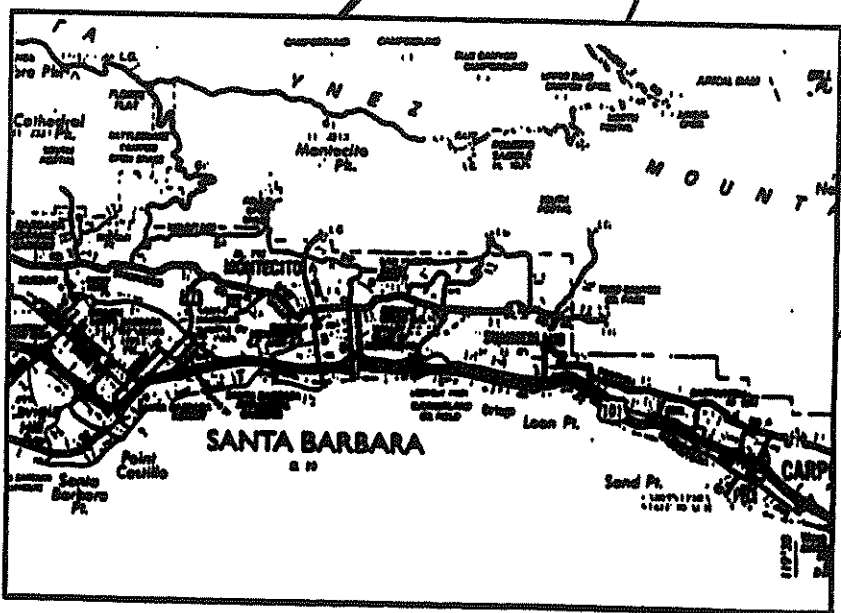
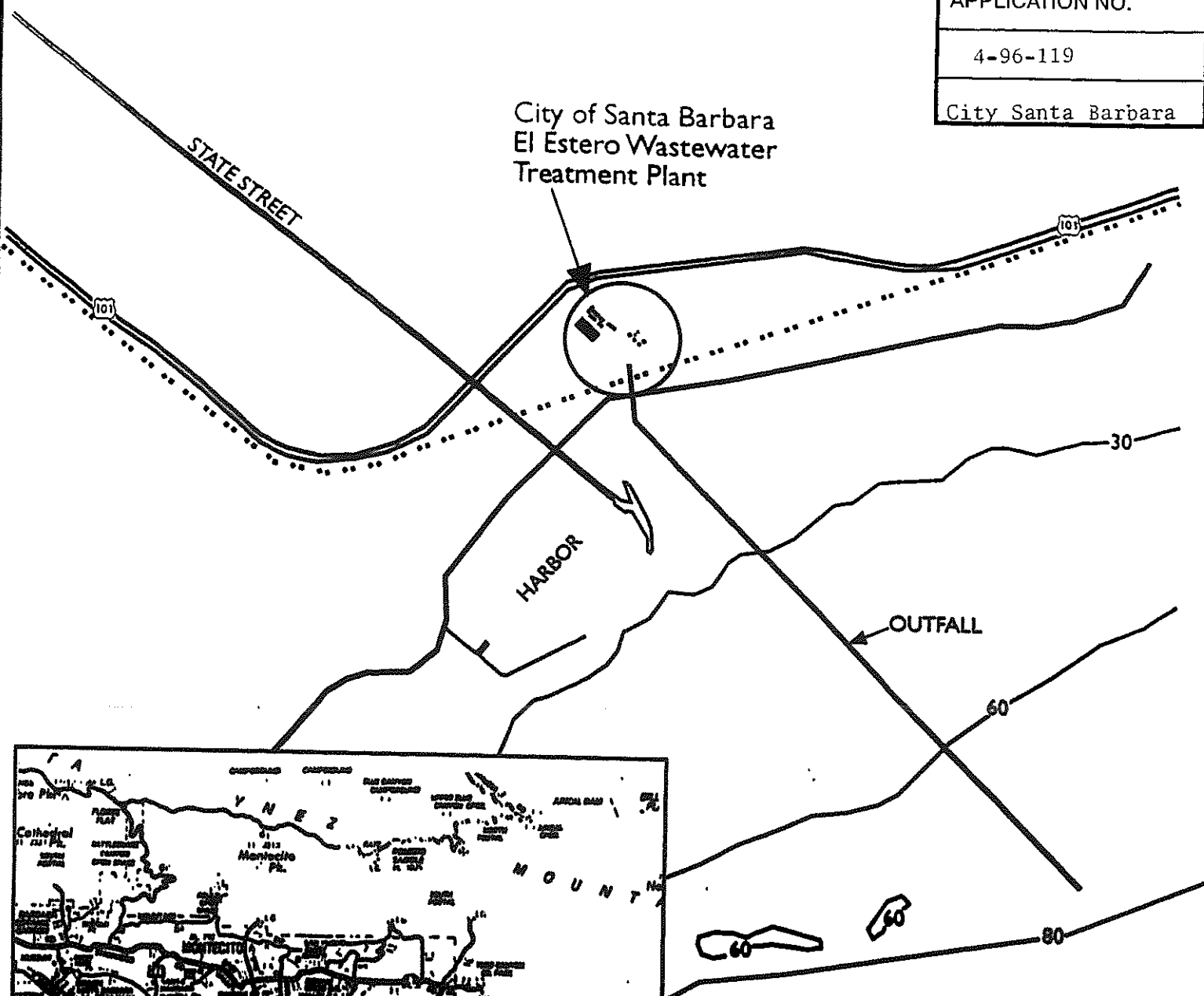
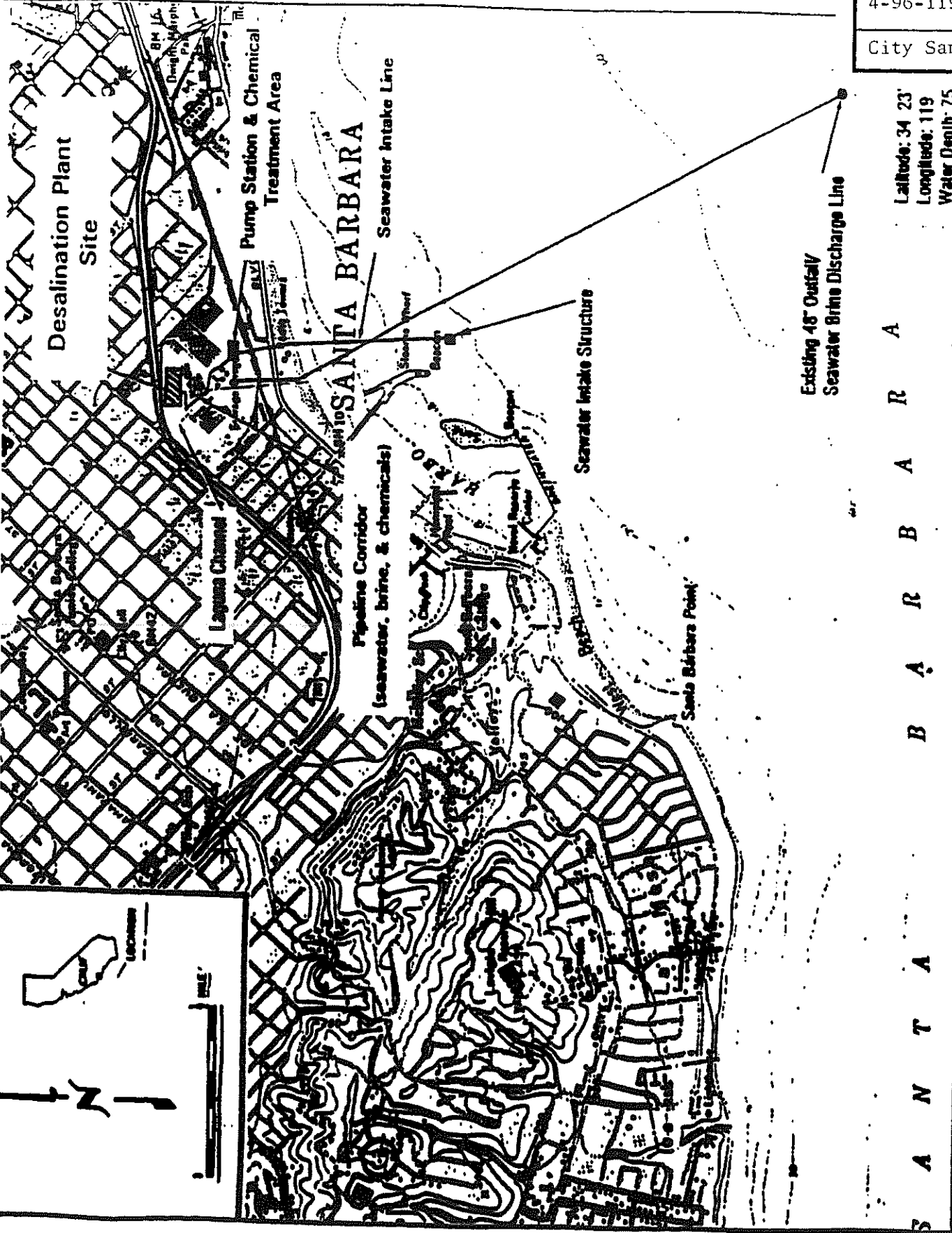


EXHIBIT NO. 3
APPLICATION NO.
4-96-119
City Santa Barbara

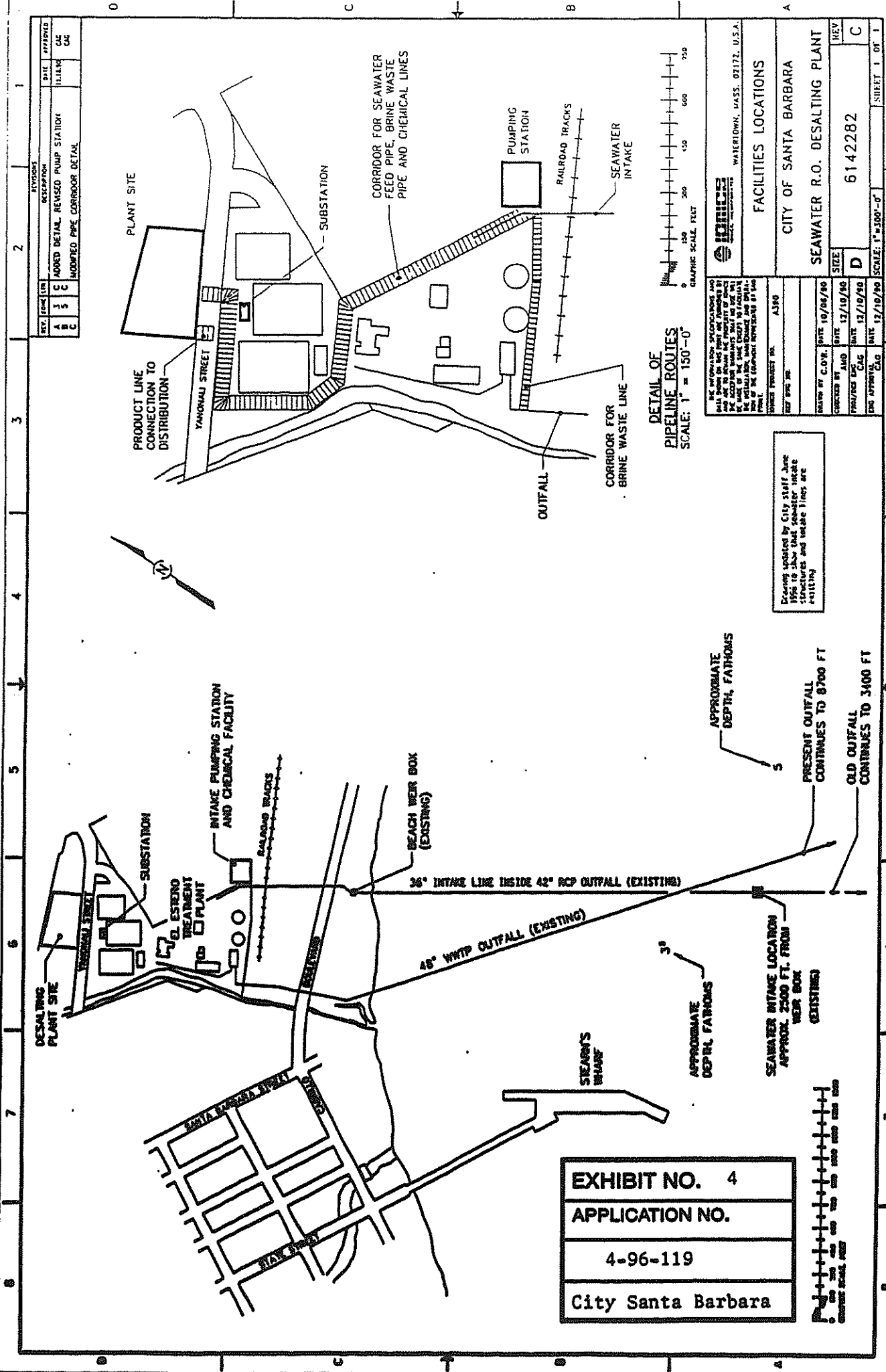


VICINITY MAP

City of Santa Barbara Desalination Facility

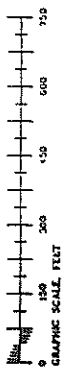
Latitude: 34 23'
 Longitude: 119
 Water Depth: 75

S A N T A B A R B A R A



REV.	DATE	DESCRIPTION	BY	CHK	DATE APPROVED
A	3	ADDED DETAIL, REVISED PUMP STATION	IL	CA	11/18/00
B	5	ADDED PIPE CORRIDOR DETAIL	IL	CA	11/18/00
C					

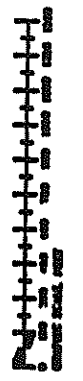
DETAIL OF PIPELINE ROUTES
SCALE: 1" = 150'-0"



		WATERLOO, MASS. 02172, U.S.A.	
FACILITIES LOCATIONS			
CITY OF SANTA BARBARA			
SEAWATER R.O. DESALTING PLANT			
PROJECT NO. 6142282	SHEET NO. D	SHEET 1 OF 1	DATE 12/19/99
DESIGNER ALJG	DATE 10/06/00	CHECKED BY AGB	DATE 12/19/99
DRAWN BY COT	DATE 12/19/99	PROJECT NO. 6142282	SHEET NO. D
DATE APPROVED 12/19/99	SCALE 1" = 300'-0"	SHEET 1 OF 1	DATE 12/19/99

Drawing updated by City staff June 1996 to show that seawater intake structures and intake lines are 4-11194

EXHIBIT NO.	4
APPLICATION NO.	4-96-119
City Santa Barbara	



NO.	CONTRACT	REVISION	DATE	APPROVED

EXHIBIT NO. 5

APPLICATION NO.

4-96-119

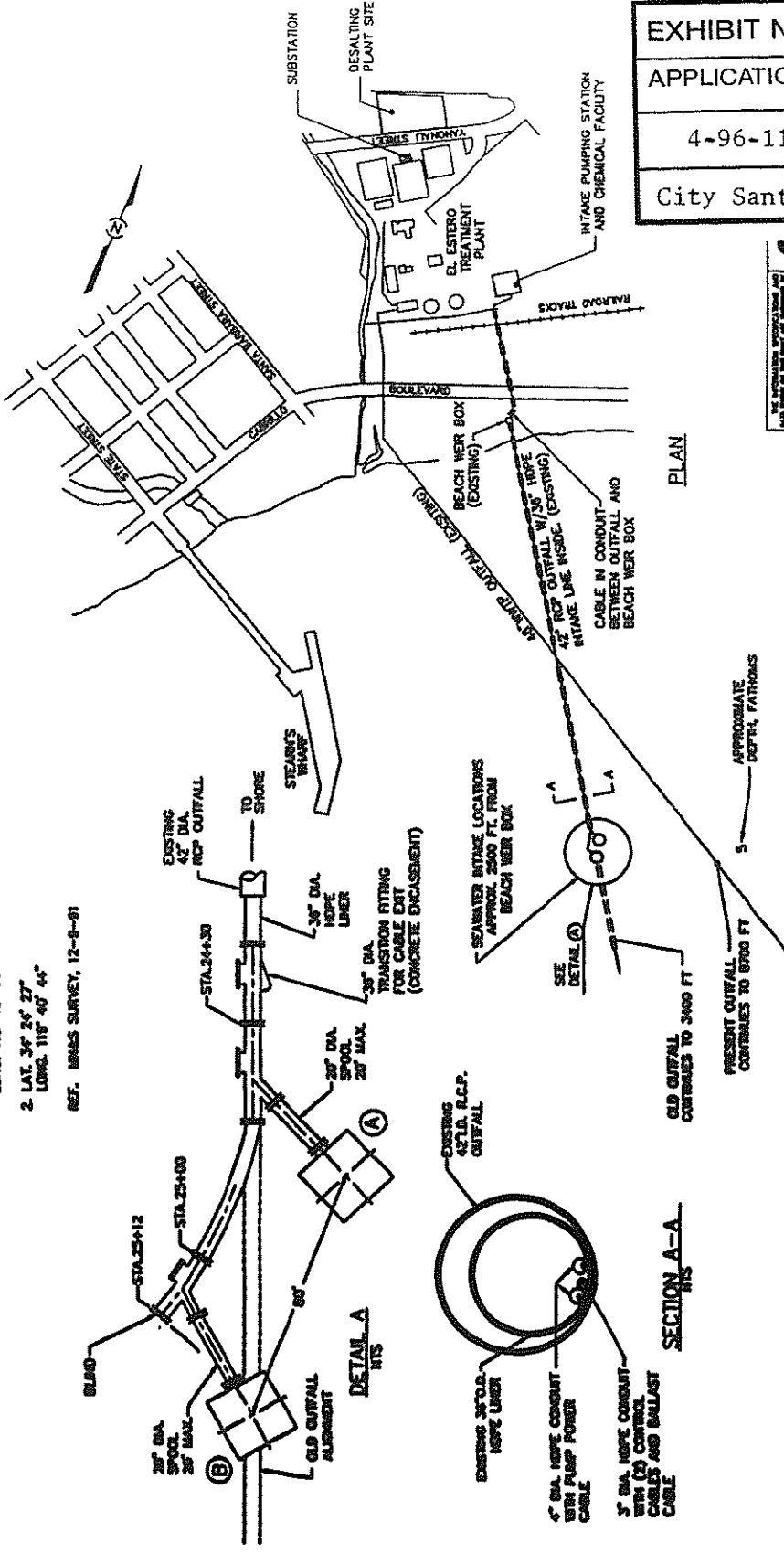
City Santa Barbara

PROJECT NO.	8144283	DATE	7 JULY 95
DESIGNER	ALSO	SCALE	D
CHECKED BY		DATE	
APPROVED BY		DATE	

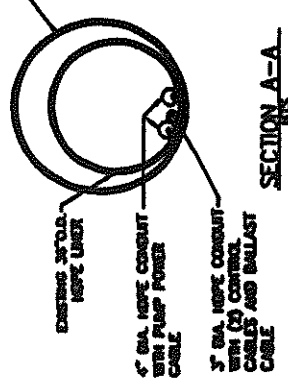
INTAKE COORDINATES

1. LAT. 34° 24' 28"
LONG. 118° 40' 44"
2. LAT. 34° 24' 27"
LONG. 118° 40' 44"

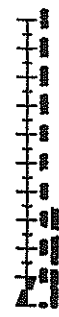
REF. MANS SURVEY, 12-8-81



PLAN



SECTION A-A



- NOTES**
1. FOR FURTHER DETAILS OF INTAKE STRUCTURE REFER TO U.S.C. DRAWINGS SHEETS EB143088, EB143089, AND BCO DRAWINGS 18007-1 TO 6.
 2. FOR FURTHER DETAILS OF ELECTRICAL INSTALLATION REFER TO DRAWINGS DB144133.



City of Santa Barbara
California

EXHIBIT NO. 6
APPLICATION NO.
4-96-119
City Santa Barbara

CITY OF SANTA BARBARA PLANNING COMMISSION

Pages 1 -8

RESOLUTION NO. 069-95
520 & 525 E. YANONALI STREET
AND 400 BLOCK OF QUINIENTOS STREET
DESAL PLANT
DECEMBER 7, 1995

SUBJECT:

Application of Bill Ferguson, Agent for City of Santa Barbara Public Works Department, 520 and 525 E. Yanonali Street and 400 Block of Quinientos Street, APNs 17-010-35, -36 and -46; 17-113-16; and 17-540-05 and -07; OM-1/HRC-2/SP-1/PR/HC/SD-3 Ocean Manufacturing/Hotel and Related Commerce/Specific Plan 1/Park and Recreation Harbor Commercial/Coastal Zones, General Plan Designations Industrial/Major Public Institutional/Buffer-Stream/Open Space (MST95-0425)

The project involves a conversion of the existing temporary desalination plant and related facilities to a permanent facility. Additional landscaping around the facility would be provided and two utility poles would be removed and the existing utility lines would be placed underground. Changes to accommodate additional reverse osmosis trailers or second pass treatment equipment may occur depending on which of four possible operational scenarios is implemented. The discretionary actions required for this project are:

1. A Coastal Development Permit to allow conversion of the temporary desalination facilities which are located in the appealable jurisdiction of the Coastal Zone (SBMC §28.45.009); and
2. A recommendation to the California Coastal Commission regarding the proposed project's conformance with the City Local Coastal Program for the portion of the temporary desalination facilities located within the jurisdiction of the California Coastal Commission (SBMC §28.45.009.6(p)).

A Final Environmental Impact Report, the Long Term Water Supply Program EIR (SB-97-91) (ENV95-0192), has been prepared and certified for the project, and prior to an action on the project, the Planning Commission must make findings pursuant to the California Environmental Quality Act Guidelines Section 15091. (LAO)

Resolution No. 069-95
520 & 525 E. Yanonali Street
and 400 Block of Quinientos Street
Desal Plant
December 7, 1995
Page 2

WHEREAS, the Planning Commission has held the required public hearing on the above application, and the Applicant was present.

WHEREAS, no one appeared to speak in favor of the application or in opposition thereto, and the following exhibits were presented for the record:

1. Staff Report with Attachments, December 7, 1995
2. Site Plan

NOW, THEREFORE BE IT RESOLVED that the City Planning Commission:

- I. Approve the subject application making the following findings and determinations:

Environmental Findings:

- A. The Planning Commission has read and considered the Long Term Water Supply Program EIR (SB-97-91) which includes an assessment of the project-level impacts associated with conversion of the temporary desalination plant to a permanent facility.
- B. Changes and alterations have been incorporated into the project design or have been included in the conditions of approval which avoid or substantially lessen the significant effects identified in EIR pertaining to water quality, noise and visual quality as follows:

Water Quality Impacts: Impacts related to the potentially high sodium adsorption rate (SAR) in irrigation water will be mitigated by calculating the SAR prior to distribution of desalinated water and demonstrating that the water will not cause significant impacts to vegetation either on the basis of scientific information available at that time or by keeping the SAR at a level that is not significantly outside the range of SAR for other City water supplies. Additionally, testing to monitor SAR levels shall continue during the period of operation and the City will publish brochures or hold forums which address proper irrigation practices to mitigate any potential adverse impacts to vegetation.

Resolution No. 069-95
520 & 525 E. Yanonali Street
and 400 Block of Quinientos Street
Desal Plant
December 7, 1995
Page 3

Noise Impacts: Potential noise impacts to the Rescue Mission resulting from the optional second pass treatment will be mitigated by the City conducting 24-hour noise monitoring within one month of initiating operation of the plant with second pass equipment. If the noise level generated by the second pass equipment is above 70 Ldn, modifications to mitigate the noise impacts will be required.

Visual Impacts: Impacts related to the visibility of plant equipment from off-site vantage points will be mitigated by proper irrigation and maintenance of landscaped areas, provision of additional landscaping as necessary to screen views from Highway 101 and installation of additional landscaping to screen the electrical substation and the surrounding chain link fence.

- C. The EIR assessed a number of alternatives to the proposed project, including the no-project alternative and determined that the proposed project is the environmentally superior alternative.
- D. The Planning Commission approves the Mitigation Monitoring Plan included in the Long Term Water Supply Program EIR which implements the mitigation measures and conditions imposed on the project in order to mitigate or avoid significant effects on the environment.

Findings for the Coastal Development Permit:

- A. The project is consistent with the policies of the California Coastal Act since the project would be carried out in a manner that would sustain the biological productivity and the quality of coastal waters and maintain healthy populations of all species of marine organisms consistent with Coastal Act Sections 30230 and 30231. Additionally, the project would be visually compatible with the character of surrounding area and enhance visual quality in a visually degraded areas consistent with Coastal Act Section 30251.

Resolution No. 069-95
520 & 525 E. Yanonali Street
and 400 Block of Quinientos Street
Desal Plant
December 7, 1995
Page 4

- B. The project is consistent with all applicable policies of the City's Coastal Plan, all applicable implementing guidelines, and all applicable provisions of the Code because the project is a permitted use in the OM-1 Zone and would be carried out in a manner that would preserve and protect marine resources, maintain optimum populations of marine organisms consistent with Coastal Policy 6.2. The project would also enhance existing views, to, from, and along scenic coastal areas by providing additional landscaping and undergrounding utilities consistent with Coastal Plan policy 9.1 and policy 9.3.
- II. Said approval is subject to the following conditions:
- A. Owner shall provide for the flow of water through the Real Property including, but not limited to, swales, natural water courses, conduits and any access road, as appropriate. Owner is responsible for the adequacy of any drainage facilities and for the continued maintenance thereof in a manner which will preclude any hazard to life, health, or damage to the Real Property or any adjoining property.
 - B. The development of the Real Property approved by the Planning Commission on December 7, 1995 is limited to 780 sq. ft. of building area and the improvements shown on the Site Plan signed by the Chairman of the Planning Commission on December 7, 1995 and on file at the City of Santa Barbara.
 - C. Owner shall comply with the monitoring program for the project's mitigation measures, as stated in the Long Term Water Supply Program Environmental Impact Report, SB-97-91. A qualified mitigation monitor acceptable to the Environmental Analyst which will be responsible for permit compliance monitoring shall be selected. The Coordinator will be responsible for monitoring activities, enforcement of permit compliance conditions, maintaining contact with the City Public Works Department, the Environmental Analyst, and the public and preparing written reports of monitoring activities.

Resolution No. 069-95
520 & 525 E. Yanonali Street
and 400 Block of Quinientos Street
Desal Plant
December 7, 1995
Page 5

- D. The owner shall comply with the Landscape Plan as approved by the Architectural Board of Review (ABR). Such plan shall not be modified unless prior written approval is obtained from the ABR. The landscaping on the Real Property shall be provided, irrigated and maintained in excellent condition in accordance with said landscape plan for the life of the project.
- E. The following is subject to the review and approval of the Architectural Board of Review (ABR):
1. Within six months of Coastal Development Permit approval by the California Coastal Commission, additional landscaping shall be installed consistent with the landscape plan to screen views of the plant's facilities from the freeway. Prior to installation, landscape plans shall be subject to review and approval by Caltrans.
 2. Within six months of Coastal Development Permit approval by the California Coastal Commission, the electrical substation and surrounding chain link fence shall be screened with landscaping from the view of pedestrians and motorists along Yanonali Street.
 3. Additional screening of the view of the reverse osmosis trailers from Yanonali Street shall be considered.
 4. Installation of second pass treatment equipment or additional reverse osmosis equipment trailers per operating scenario #4 as described in the Project Description of the Final Long Term Water Supply Program EIR, if the City elects to carry out either of these options shall be subject to ABR review and approval prior to issuance of a building permit.
 5. Proposed plantings involving *Eucalyptus ficifolia* shall be carried out using trees in 24 inch boxes rather than 15 gallon containers.
- F. Within six months of Coastal Development Permit approval by the California Coastal Commission, utilities shall be placed underground and the two utilities poles along Yanonali Street shall be removed.

Resolution No. 069-95
520 & 525 E. Yanonali Street
and 400 Block of Quinientos Street
Desal Plant
December 7, 1995
Page 6

- G. Prior to distribution of desalinated water (other than small amounts which might result from short-term operation for testing purposes), the City shall calculate the anticipated sodium absorption ratio (SAR) and demonstrate that the water will not cause significant impacts to vegetation, either on the basis of scientific information available at the time or by keeping the SAR at a level that is not significantly outside the range of SAR for other City water supplies. Testing of the water shall continue during the period of use to monitor the SAR level. Treatment to improve the SAR shall be carried out to the extent feasible and as allowed by regulatory agencies, in particular the State Department of Health Services, Office of Drinking Water. Additionally, the City shall publish/sponsor public education brochures or forums which address proper irrigation practices to mitigate any potential adverse impacts to vegetation.
- H. Prior to operation of the permanent desalination plant, appropriate emergency plans shall be developed to temporarily shut down the desalination plant and associated facilities in the event of a flood, earthquake, accident or similar emergency.
- I. Prior to operation of the permanent desalination plant, the City shall, in conjunction with the Regional Water Quality Control Board (RWQCB), develop an appropriate monitoring program which will protect marine water quality and the environment. A baseline study shall be completed prior to the desalination plant start-up and marine water quality/biological monitoring shall be conducted in accordance with RWQCB requirements during the operational phase of the project.
- J. If future offshore discharge monitoring results indicate that RWQCB Waste Discharge Requirements are exceeded, corrective action shall be taken to meet specified requirements.
- K. Measures to attain noise levels of 70 Ldn or less at the Rescue Mission shall be maintained at all times. These measures shall be shown on the plans and include locating the exhaust fans for each of the reverse osmosis pump trailers at the western edge (versus eastern) of each trailer.

Resolution No. 069-95
520 & 525 E. Yanonali Street
and 400 Block of Quinientos Street
Desal Plant
December 7, 1995
Page 7

- L. If the City elects to implement the "second pass" treatment option, prior to issuance of a Certificate of Occupancy, a contract with a qualified acoustical engineer shall be submitted to the Community Development Department for review and approval, and the applicant shall hire an acoustical engineer subject to the terms of the agreed upon contract. The contract shall include 24-hour monitoring of noise levels within one (1) month of plant start-up with second pass option equipment. The monitoring shall be conducted along the western perimeter of the Santa Barbara Rescue Mission. If the noise level generated by the second pass equipment is above 70 Ldn, modifications based on the recommendations of the acoustical engineer shall be required to further mitigate the noise impacts. A report recommending necessary mitigation measures shall be submitted to the Community Development Department with a schedule for completion of such measures.
- M. The subsurface intake structure shall continue to be marked with a standard lighted navigational buoy to alert boaters to the underwater obstruction.
- N. Due to the potential to encounter buried cultural resources, all contractors and construction personnel doing work at the site (including utility undergrounding) shall be alerted to the sensitivity of this area. If cultural features are exposed or suspected, work shall be promptly halted and a professional archaeologist and the Environmental Analyst will be consulted.
- O. All Planning Commission Conditions of Approval shall be provided on a full size drawing sheet as part of the drawing sets for building permits. A statement shall also be placed on the above sheet as follows: The undersigned have read and understand the above conditions, and agree to abide by any and all conditions which it is their usual and customary responsibility to perform, and which are within their authority to perform.

Resolution No. 069-95
520 & 525 E. Yancovich Street
and 400 Block of Quintientos Street
Desal Plant
December 7, 1995
Page 8

Signed:

Property Owner Date

Contractor Date License No.

Architect Date License No.

Engineer Date License No.

This motion was passed and adopted on the 7th day of
December, 1995 by the Planning Commission of the City of Santa
Barbara, by the following vote:

AYES: 7 NAYS: 0 ABSTAIN: 0 ABSENT:

I hereby certify that this Resolution correctly reflects the
action taken by the City of Santa Barbara Planning Commission at
its meeting of the above date.

Anita L. Leski Jan. 5, 1996
Anita L. Leski, Secretary Date

**THIS ACTION OF THE PLANNING COMMISSION CAN BE APPEALED TO THE
CITY COUNCIL WITHIN TEN (10) DAYS AFTER THE DATE THE ACTION WAS
TAKEN BY THE PLANNING COMMISSION.**