

M E M O R A N D U M

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TO: Commissioners and
Interested Persons

DATE: December 27, 1996

FROM: Staff

FILE NO: F9559/6-86-651-A12

SUBJECT: Annual Report - Relocation of Sludge Facilities

Attached is the City of San Diego's annual report regarding its efforts to relocate the existing sludge processing facilities from Fiesta Island. The report is required by a condition of Coastal Development Permit #F9559/6-86-651 (as amended), which permitted an expansion of the sludge beds on January 23, 1981.

Based on decisions reached during 1991, the City's Waste Management Department prepared a General Development Plan (GDP) for the siting of new facilities at Miramar NAS. These would include solid waste disposal, in addition to sludge processing. A Record of Decision on both the programmatic EIR/EIS for the GDP and a site-specific EIR/EIS for the Metro Biosolids Center (formerly called the Fiesta Island Replacement Project/Northern Sludge Processing Facility) was signed by the Navy on September 30, 1994. The City Council certified the environmental documents in December, 1994, and approved the first construction contract at that time. Construction on the replacement facilities began in December, 1994, and is maintaining a schedule which will meet the projected completion date for the sludge-processing plant at Miramar of July, 1997.

Three other related projects must be completed before the existing sludge facilities on Fiesta Island can be abandoned and the area restored. These include the Point Loma Sludge Pump Station, the North City Raw Sludge and Water Pipeline and the Fiesta Island Replacement Project Phase II Sludge Pipeline. Construction of the second item is complete and in the testing phase. Construction of the first and third items is currently underway. However, full restoration of the Fiesta Island site is not expected to occur until December, 1998, when all these components are fully operational.

During 1992 and 1993, the Commission granted permits for mechanical dewatering equipment at Fiesta Island. When the Commission authorized the first permit in 1992 (#6-92-75-G), it expected that the use of mechanical equipment would reduce the number of air-drying beds required on Fiesta Island and allow some restoration activities to begin. In conjunction with the second permit (#6-93-143-G) which authorized seven additional belt filter presses, and by action of the City Council, six previously-existing drying beds were vacated in the spring of 1994; restoration of that portion of the sludge facility was completed on June 21, 1995, when the Park and Recreation Department formally accepted the forty-acre land transfer. Both last year's and the current

annual reports indicate that mechanical dewatering continues to be successful, and the City is returning an additional eighteen acres of existing sludge facilities to the Park and Recreation Department in December, 1996. The remaining acreage will need to be retained for sludge operations until December, 1998.

In 1996, the City was granted an additional two-year extension of time for removal of the sludge beds and retention of the mechanical dewatering equipment. However, due to the City's failure to meet the original relocation deadline of January, 1987, and a notable lack of progress in relocation efforts until the past few years, the Commission has been assessing a penalty fee since 1989. Originally this was set at \$1,000,000 a year, but was raised to \$2,000,000 in 1992. The monies are transferred from the Metropolitan Wastewater Department to the City's Parks and Recreation Department, and expended for public access and recreation projects in Mission Bay Park.

For the past few years, the City has petitioned for relief from the sludge mitigation fee in conjunction with its request for time extensions and/or its annual reports. In 1995, the Commission approved an amendment to incorporate a reduction in the mitigation penalty fee from \$2,000,000 to \$1,500,000 annually, based on the significant progress towards relocation demonstrated in 1994. A similar request to either eliminate the fee altogether or further reduce it was denied by the Commission in February, 1996, when the two-year time extension on the coastal development permit was approved, making the subject permit valid until February, 1998. At that time, the Commission clearly stated its position that the continuance of the mitigation fee was appropriate as long as the public was denied access to existing dedicated public parklands, even though the City was working towards relocation of the sludge facilities by December, 1998.

As part of an amendment request for restoration of the eighteen acres of former sludge beds (Coastal Development Permit Amendment #6-86-651-A12), the City again requested relief from the mitigation fee this past summer. However, the Executive Director rejected that portion of the amendment request, on the grounds that it would "lessen or avoid the intended effect of a ... conditioned permit." Section 13166 of the California Code of Regulations requires that such an amendment request be rejected unless the applicant presents "newly discovered material information" which could not have been presented before the permit was approved. The only "new information" presented was a reminder of the continuing progress being made on the construction of replacement facilities. However, the construction schedule and projected completion dates were the same as those reported to the Commission when they denied the request in February 1996, so the Executive Director did not deem this to be "newly discovered material information."

The cover letter attached to the current annual report requests that the fee be discontinued altogether at this time, since the City is maintaining its construction schedules and has demonstrated that "considerable progress has been made." Again, this is not a change in circumstances or "newly discovered material information." Moreover, since the penalty is a condition of the amendment for Coastal Development Permit #6-86-651-A12, and the annual report

is not an action item for the Coastal Commission, the request for the penalty's removal must be made in the form of an amendment to that permit. In fact, such a formal request was submitted to the San Diego office. The Executive Director has rejected the amendment on the same grounds as before. However, the City has requested that the decision of the Executive Director to reject the amendment request be agendized for Commission review to determine whether or not the Commission will reverse the Executive Director's decision and direct staff to accept and process the amendment request.

There are a number of attachments/exhibits to the annual report, demonstrating the status of various project components necessary to effect the removal of the sludge facilities from Fiesta Island in Mission Bay Park. Also attached to the annual report is a November, 1996 accounting of sludge mitigation projects.

(1516A)



THE CITY OF

SAN DIEGO

METROPOLITAN WASTEWATER DEPARTMENT
600 B STREET, SUITE 500 • SAN DIEGO, CALIFORNIA 92101 - 4587
PHONE: (619) 533-4200 • FAX: (619) 533-4267



December 11, 1996

Mr. Chuck Damm, District Director
California Coastal Commission
State of California
3111 Camino del Rio North, Suite 200
San Diego, CA 92108

RECEIVED

DEC 13 1996

CALIFORNIA
COASTAL COMMISSION
SAN DIEGO COAST DISTRICT

Dear Mr. Damm:

SUBJECT: Metro Biosolids Center (formerly the Fiesta Island Replacement Project/Northern Sludge Processing Facility) Coastal Development Permit No. 6-86-651, Annual Report

Last year I reported to you that we had started construction on the projects that will lead to elimination of the sludge beds on Fiesta Island and returning the Island to park use. This year, as evidenced by the photographs in the back of the attached Annual Report, you can see that very significant progress was made in getting them built. In January 1996, Coastal Commission staff who accompanied me on a tour of the Metro Biosolids Center facilities saw a graded site with some excavations and foundations. During the intervening year a large, state-of-the-art industrial complex has arisen on the mesa. I am working with your staff to arrange another tour. There is a lot more to see.

During 1996 the City has maintained the same aggressive schedule that was presented in the previous two annual reports - July 1997 - for completion of construction of the facilities to replace those currently in operation at Fiesta Island. This report summarizes the progress of each of the projects involved, toward the inevitable conclusion of having modern sludge processing facilities at Naval Air Station Miramar - the Metro Biosolids Center - and returning Fiesta Island to recreational use.

The City has repeatedly demonstrated a strong commitment to completing this project. Last year the City Council issued \$350 million in sewer revenue bonds for sewer system improvements. On October 1, 1996, City Council approved 6% increases in sewer rates for each of the next two years. The current estimated cost of the project is \$339.4 million dollars, the most costly public works project ever undertaken in the region.

With the accomplishments mentioned above, and outlined in more detail in the Annual Report, I am again requesting that the Coastal Commission consider eliminating the



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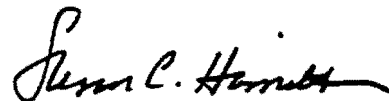
Mr. Chuck Damm, District Director
California Coastal Commission - State of California
December 11, 1996
Page 2 of 2

mitigation fee requirement. The \$2 million mitigation fee was established because the Commission was concerned in the past that progress was not being made quickly enough. We appreciate the fact that it was reduced to \$1.5 million in 1995, regret that it was not reduced in 1996, and respectfully request, on the basis of undeniable and tangible progress, that it be eliminated in 1997. Should the schedule slip significantly or if the Commission determines that the progress it has directed is not being adequately attained, reinstatement of the fee or other enforcement is always an option.

The enclosed annual report of the City's progress to relocate the sludge processing operations from Fiesta Island provides a summary of our progress during the last year. We look forward to making a presentation to the Coastal Commission on this project at the February meeting of the Coastal Commission in San Diego.

Should you have any questions about the attached report, please do not hesitate to contact me directly at 533-4201.

Sincerely,



for
F.D. SCHLESINGER
Director

JSG/cj
G:\KOMMON\JSG\DAMMLET.WPD

Enclosure: Annual Report

cc: Deborah Lee, California Coastal Commission (w/encl.)
Ellen Lirley, California Coastal Commission (w/encl.)

ANNUAL REPORT
FIESTA ISLAND RELOCATION PROJECT
(F9559)

December 11, 1996

Introduction and Table of Contents

In response to the Coastal Commission's directive to relocate the City's sludge drying beds from Fiesta Island on Mission Bay and return the island to recreational use, the City has continued during 1996 with an aggressive construction effort on the Metro Biosolids Center located at NAS Miramar. In order to comply with the directive, a sewerage facility to process sludge to replace the drying beds had to be built, as well as the pipelines and pump stations to support it. From January to December of this year progress has been substantial as demonstrated in the attached photographs (Attachments B-C). This 1996 Annual Report provides a summary of those activities and others associated with the removal of sludge processing facilities from Fiesta Island.

This report contains the following sections:

- I. Metropolitan Wastewater Program Progress
 - Background
 - Fiesta Island Relocation - Building New Facilities
 - ▶ Metro Biosolids Center
 - ▶ Point Loma Sludge Pump Station
 - ▶ Sludge Pipeline Connecting Point Loma and MBC
 - ▶ Sludge Pipeline Connecting NCWRP and MBC

- II. Fiesta Island - Interim Activities and Demobilization
 - Current Operations
 - Return of 18 Acres to Park and Recreation Department
 - Fiesta Island Demobilization Operation (FIDO)

- III. Sludge Beneficial Use/Disposal
 - Beneficial Use Plan
 - Privatization Projects
 - Off-site Beneficial Use/Disposal
 - Information Exchange

- IV. Sludge Mitigation Fund Projects

- V. Conclusions

- | | |
|----------|-------------------------------------|
| Figure 1 | Cost Summary |
| Figure 2 | Metro System Sludge Processing 1997 |
| Figure 3 | Metro Biosolids Center Site Plan |

Introduction and Table of Contents, Cont'd.

Figure 4	Sludge Projects Location Map
Figure 5	Fiesta Island Demobilization Operation (FIDO)
Attachment A1,2	Status of Mission Bay Sludge Mitigation Programs, November 21, 1996
Attachment B	Last Year's and This Year's Photos of Metro Biosolids Center Construction
Attachment C	Last Year's and This Year's Photos of Point Loma Sludge Pump Station Construction

METROPOLITAN WASTEWATER PROGRAM PROGRESS

BACKGROUND

The Metropolitan Sewerage System ("Metro") has been providing wastewater treatment for the City of San Diego ("City") and other local agencies since 1963. Its major facilities include the Point Loma Wastewater Treatment Plant (PLWTP) and related ocean outfall, a sludge drying facility at Fiesta Island, and a number of pump stations and connecting interceptors. The City began its most recent efforts to upgrade and expand the sewerage system in 1987. The facilities included in the upgrade will increase the capacity from the current 219 million gallons per day (mgd) to 340 mgd (in 2050), enhance the City's water supply through the use of water reclamation, and comply with all state and federal standards.

On October 31, 1994, President Clinton signed into law the Ocean Pollution Reduction Act (OPRA), allowing the City to apply for a waiver from secondary treatment requirements. The application for the waiver, submitted in April 1995, included a commitment by the City to implement 45 mgd of water reclamation capacity by 2010 and to reduce the suspended solids discharged into the marine environment. The City must also achieve removal of not less than 58% of the biological oxygen demand (on an annual average) and remove not less than 80% of the total suspended solids (on a monthly average).

On November 9, 1995, the Environmental Protection Agency and the Regional Water Quality Control Board approved the City's application and issued a National Pollutant Discharge Elimination System (NPDES) Permit for advanced primary treatment at the Point Loma Wastewater Treatment Plant.

The Coastal Commission's directive to relocate the sludge drying beds has been rigorously pursued throughout the year and construction of replacement facilities at NAS Miramar will be completed in July 1997 as scheduled.

On February 8, 1996, the Coastal Commission amended Coastal Development Permit 6-86-651-A11, to continue operating the belt filter presses and the sludge drying beds on Fiesta

Island until April, 1998. However the \$1.5 million mitigation fee was not reduced. So far the mitigation fees paid total \$11 million.

FIESTA ISLAND RELOCATION - BUILDING NEW FACILITIES

Metro Biosolids Center - \$241 million

The Metro Biosolids Center (MBC) is the largest infrastructure project ever undertaken by the City of San Diego. The digested sludge from the PLWTP, currently being dewatered and dried at Fiesta Island, will be pumped to MBC for centrifuge dewatering. Sludge produced at the North City Water Reclamation Plant (NCWRP) and the proposed future Mission Valley Water Reclamation Plant will undergo centrifuge thickening and anaerobic digestion at MBC before being dewatered by centrifuges. Costs are higher for the project this year due to increased automation and controls. An extensive computerized control system, accessible from numerous on-site and remote locations, will allow continuous monitoring of all process operations. See Figure 2 for a schematic diagram of sludge processing in 1997. Figure 3 provides a plan view of the MBC. Privatized cogeneration facilities are also being located at the MBC and are discussed under "Sludge Beneficial Use/Disposal."

After twenty four months of construction, the project's ambitious schedule remains unchanged from what we have reported to the Coastal Commission for the last two years. Construction of the FIRP related facilities is to be completed by July, 1997. To date, 60,000 cubic yards of concrete have been poured, and over 9 million lbs of reinforcing steel has been placed. The concrete poured to date would fill a football field 36 feet deep. The tanks for holding liquid sludge have a capacity of 12,410,525 gallons. The square footage of floor space at MBC, 222,000 sq. ft., is the equivalent of 4 ½ football fields. The attached photographs show progress between December 1995 and December 1996 (Attachment B).

The MBC, combined with the adjacent landfill, will form an integrated waste management complex. The facilities will be powered and heated by a privatized cogeneration plant running on digester and landfill gas. The beneficially usable sludge cake product (also called biosolids) will be trucked off site for use as a soil amendment, and may also be composted or pelletized.

The MBC is one of four projects needed to successfully relocate the sludge processing facility at Fiesta Island. A description of the other projects follows.

Point Loma Sludge Pump Station - \$38.8 million

Located at the Point Loma Wastewater Treatment Plant (PLWTP), this facility will pump digested sludge that is currently going to Fiesta Island the additional distance to MBC. This Capital Improvement Project includes the sludge pump station, a sludge holding tank, a sludge blending tank, an extension of the existing underground pipe gallery, a retaining wall and the 12-inch diameter sludge force main leading from the pump station at PLWTP. With completion

of the roof next week, the sludge pump station building shell will be finished. The concrete work for the sludge holding and blending tanks were also completed over the last year. The mechanical systems are well underway which includes ventilation ductwork, biosolids, chemical (for odor control), industrial and potable water piping. The contractor is beginning work on the computer controlled electrical system. The three 34,000 lb. pumps are in place. Attachment C shows progress at the construction site over the last year.

Sludge Pipeline Connecting PLWTP and MBC (FIRP Phase II Sludge Pipeline) - \$30.6 million

This pipeline will convey digested sludge produced at the PLWTP from the Sunset Cliffs Bridge (near Fiesta Island) to the MBC. After significant controversy in the local community in 1994 over the location of the sludge pipeline, City Council approved the current alignment in January 1995. On July 6, 1995, the Coastal Commission issued Coastal Development Permit #6-95-40 for construction of approximately 10 miles of the 14 inch diameter sludge pipeline, two subterranean pigging stations, thirteen isolation valve vaults and 22 associated operational valve vaults. The project includes the restoration of all disturbed areas of the bike path and maintenance road in Mission Bay Park. Construction began in June of 1996. To date 6 miles of 14"-Ductile-Iron pipe has been laid. The pigging stations are excavated. The tunnel under Interstate Highway 52 is finished and pipe is being installed.

Sludge Pipeline Connecting NCWRP and MBC - \$23.6 million

This 16" pipeline carries raw sludge generated at the NCWRP along a 22,200' route to the MBC. The project also includes the 20-inch pipeline which will carry centrate from the MBC centrifuge to the North City Water Reclamation Plant pipelines. Both of these pipelines were completely installed in 1996, including five tunnels under sensitive environmental areas at NAS Miramar. The North City Raw Sludge Pump Station building was also completed and the three pumps delivered on site. They are currently being connected and tested.

FIESTA ISLAND ACTIVITIES

Current Operations

Mechanical dewatering activities continued through calendar year 1996. The remaining sludge beds are being used for subsequent air-drying activities. It remains the City's intent to continue to operate the mechanical sludge dewatering equipment (belt filter presses) at the Fiesta Island Facility until such time as the City is successfully operating the MBC.

Due to the concerns raised by the bicycling club last year about the conditions of the road on Fiesta Island the MWWWD has repaired the damaged parts of the road and resurfaced the road around Fiesta Island with 2" of new asphalt concrete. This project was completed in March, 1996.

Fiesta Island Demobilization Operation (FIDO) - \$1.5 Million

City staff has developed a comprehensive closure plan for the entire area that has been historically used for sludge processing. The first phase, completed in June 1995 returned 40 acres of land to recreational use. The remainder of the plan will take place in two phases. Phase II will return an additional 18 acres in December 1996, and Phase III will return the remaining 60 acres in December 1998 (see Figure 5). The steps followed will be the same as used to return the initial 40 Acres to the Park and Recreation Department. 1) Sludge will be removed from the beds; 2) Geotechnical and chemical testing to characterize subsurface conditions will be performed and used as a basis for regulatory approvals; 3) Any equipment, pipe, concrete, etc. will be removed; 4) The beds will be filled in and graded; and 5) The area will be hydro-seeded for erosion control.

Phase II of FIDO was approved by the Coastal Commission (Permit #6-86-651-A12) on November 15, 1996. Acceptance of the 18 acres will require the review of the Mission Bay Park Committee and final approval by the Park & Recreation Board. Both approval authorities will meet in December, 1996 to discuss the transfer.

Beneficial Use Plan

In keeping with the Biosolids Beneficial Use Plan, all of the biosolids generated by the City have been put to beneficial use in 1996. The material consistently met the federal, state and local quality requirements making it suitable for direct application to farm land. The biosolids were applied to land in southern California and Arizona. An agronomic demonstration project using San Diego biosolids was initiated in Imperial Valley, California as a means to expand the market for biosolids in that region and further the goals of the Beneficial Use Plan.

Privatization Projects

The City is pursuing three (3) privatization projects. A cogeneration project and a biosolids beneficial use operation will be located at MBC, and a second cogeneration project will be located at NCWRP.

On December 4, 1995, the City awarded a privatization contract to Minnesota Methane and NEO Corporation for a cogeneration project to serve the City at the Miramar landfill. The privatization contract calls for NEO Corporation to design, construct and operate a landfill gas collection system in the Miramar Landfill. The gas will be sold to Minnesota Methane for use in power production. Methane gas, a by-product of the MBC facility, will also be used by Minnesota Methane for power generation at the MBC and NCWRP sites. The electricity will be used to supply energy demands at MBC and NCWRP and, potentially, adjacent solid waste facilities. The heat will be used in the warming of anaerobic digester tanks.

The Miramar Landfill gas collection system will be completed by the end of 1996, and the MBC cogeneration plant is expected to start up in May 1997. Request for Council approval of the North City Cogeneration Facility is scheduled for February of 1997.

An additional privatization project is being studied to convert dewatered biosolids into usable products, such as dried pellets, and then market and distribute it. On May 16, 1995, the City Council authorized the start of negotiations with Wheelabrator Clean Water Systems for a drying facility to produce biosolids pellets suitable for use in agriculture. Alternative drying systems are now being evaluated in order to lower the cost of this process to the City.

Off-Site Beneficial Use/Disposal

The City currently directs 100% of its biosolids to agricultural beneficial use sites in Arizona and Riverside and San Diego Counties. All of the biosolids beneficially used are incorporated into the soil after dewatering and supplemental drying on Fiesta Island. While none of the biosolids was landfilled in 1996, biosolids can be disposed of in landfills if the beneficial reuse option is temporarily interrupted due to weather or other conditions beyond the City's control.

Information Exchange

The City hosted its ninth Biosolids Symposium in April 1996. Topics covered included: Innovative Sludge Processing Techniques; The Role of the Biosolids Land Applier; A Farmer's Perspective on Use of Biosolids; The Role of Inspectors of Biosolids Beneficial Use Sites; and Public Perspectives on Biosolids. MWWD staff delivered two papers at the Water Environment Federation's Annual Biosolids Specialty Conference. MWWD staff also serve as officers of Biosolids Recyclers of Southern California, Inc. Information exchange also continues via the City's participation in TriTAC, the Southern California Alliance of POTWs (SCAP), and the Biosolids Producers of Southern California, and the Association of Metropolitan Sewerage Agencies (AMSA).

SLUDGE MITIGATION FUND PROJECTS

A separate list and status of these projects are attached to this report (Attachment A) from John Leppert, Assistant to the City Manager, to Ellen Lirley, Coastal Commission staff.

On August 28, 1996, Coastal Commission staff responded to the Metropolitan Wastewater Department regarding the Commission's review of our request to include relief from Special Condition #2 of the Coastal Development Permit (CDP) 6-86-651-A10, stating that there has been "no new evidence presented, nor have circumstances changed since the Commission last took action." Therefore, the portion of Amendment #12 addressing elimination of the mitigation fee was not accepted for processing. Since that time considerable progress has been made, and the City respectfully requests the opportunity to make its case to the Coastal Commission.

CONCLUSIONS

During the past year the City has continued to demonstrate extraordinary commitment to the relocation of the sludge drying facilities on Fiesta Island. The City has also maintained the very aggressive completion date of July 1997 committed to in last year's Annual Report. As we proceed with our accelerated construction activities over the next year, we will keep the Coastal Commission staff updated on our progress.

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CITY OF SAN DIEGO
M E M O R A N D U M

Attachment A

FILE NO.: SLDGMIT.STA
DATE: November 21, 1996
TO: Ellen Lirley, California Coastal Commission
FROM: John Leppert, Assistant to the City Manager
SUBJECT: Status Report - Sludge Mitigation Fund Projects

COMPLETED PROJECTS:

Natural Resource Signage	\$ 2,500	(Nov '90)
Bonita Cove Playground Equipment	40,000	(Sep '91)
Santa Clara Point Parking Lot Study	10,000	(Jan '91)
Tecolote Shores Parking Lot Construction	250,000	(July '92)
Sea World Drive Tree Planting Ph I & II	45,000	(Apr '92)
Fiesta Island Waterline	12,000	(Aug '92)
Bonita Cove Parking Lots Safety Lighting	100,000	(Dec '93)
Wildlife Preserve Sidewalk & Platform	90,000	(Apr '94)
Acquisition of Frost Property	1,610,000	(Mar '93)
S.W. Vacation Isle Parking Lot Safety Lights	22,000	(Apr '93)
West Mission Bay Dr. Walkway Ph I	80,000	(Jun '93)
Sail Bay Briarfield Cove Bridge	200,000	(Apr '94)
Hospitality Point Picnic Shelter	70,000	(Jun '94)
Tecolote Shores ADA Playground & Park	582,500	(Jun '94)
Sea World Drive Tree Planting Ph III	30,000	(July '94)
Mission Bay Park Master Plan Update	500,000	(Aug '94)
South Crown Point Walkway	150,000	(Feb '95)
North Crown Point Access Improvements	10,000	(Nov '95)
West Mission Bay Drive Sidewalk Ph II	105,000	(Nov '95)
North Ski Beach Picnic Shelter	100,000	(Nov '95)
East Shore Parking Lots Safety Lights	180,000	(Jun '95)
Vacation Isle Playground	100,000	(Dec '95)
Mariner's Point Picnic Shelter	100,000	(Dec '95)
Mission Pt. Playground to ADA Standards	80,000	(Dec '95)
Bonita Cove Playgrounds ADA Upgrade	160,000	(Apr '96)
Ski Beach Restrooms	300,000	(May '96)
South Shores Phase III	2,350,000	(May '96)
Fiesta Island Youth Camping Facilities	35,000	(July '96)

PROJECTS IN PROCESS OF DEVELOPMENT OR UNDER CONSTRUCTION

Water Quality Testing Program - \$150,000. First, second and third phases completed. Final testing and analysis will be completed after the winter 1996-97 rainy season.

Picnic Shelters - \$600,000. The following six (6) new picnic shelters have been grouped together for one design and construction contract: Sunset Point, De Anza Cove, La Playa Cove, South Crown Point, Tecolote Shores, and Ventura Point. Locations have been selected and the type of shelter selected. Current target for completion is Summer of '97.

Crown Point Shores Parking Lot Safety Lighting - \$100,000. Designed and scheduled for completion in April '97.

De Anza Cove Parking Lot Safety Lighting - \$100,000. Designed and scheduled for completion in April '97.

Crown Point Salt Marsh - \$40,000. Request for matching State grant not approved in '96. Other grants are being sought. Project is on hold while seeking additional funding or labor sources.

Bicycle/Pathway Improvements - \$80,000. Additional funds received. Extensions being planned in South Shores area, Hospitality Point, Ventura Cove, Rose Creek and other "missing links."

Sail Bay Walkway Lighting & Landscaping - \$150,000. Consultant selection process underway. Current completion estimate is Spring of '98, with no construction during summer months.

Information Center Playground ADA Upgrade - \$100,000. Completion of improvements scheduled for May '97.

Stormdrain Education Program - \$150,000. All phases completed except for informational educational signage in eight (8) locations around the park. With the assistance of San Diego Zoo designers, displays should be in place by the Spring of '97.

Crown Point Playground ADA Standards - \$50,000. Installation to be completed by the Fall of '97.

PROJECT ON HOLD:

Fiesta Island Improvement Reserve - \$3,498,000. Funds will be used for public improvements on Fiesta Island when the sludge treatment facilities are removed from the Island and the area returned to the control of the Park & Recreation Department. A design consultant contract is now being considered to plan in detail the public improvements included in the Mission Bay Park Master Plan, for the areas previously occupied by the sludge treatment facilities and the adjacent southern areas of Fiesta Island.

John C. Leppert

cc: Jack McGrory, City Manager
Dave Schlesinger, Metropolitan Wastewater Director
Marcia McLatchy, Park & Recreation Director
Frank Belock, Engineering & Capital Projects Director

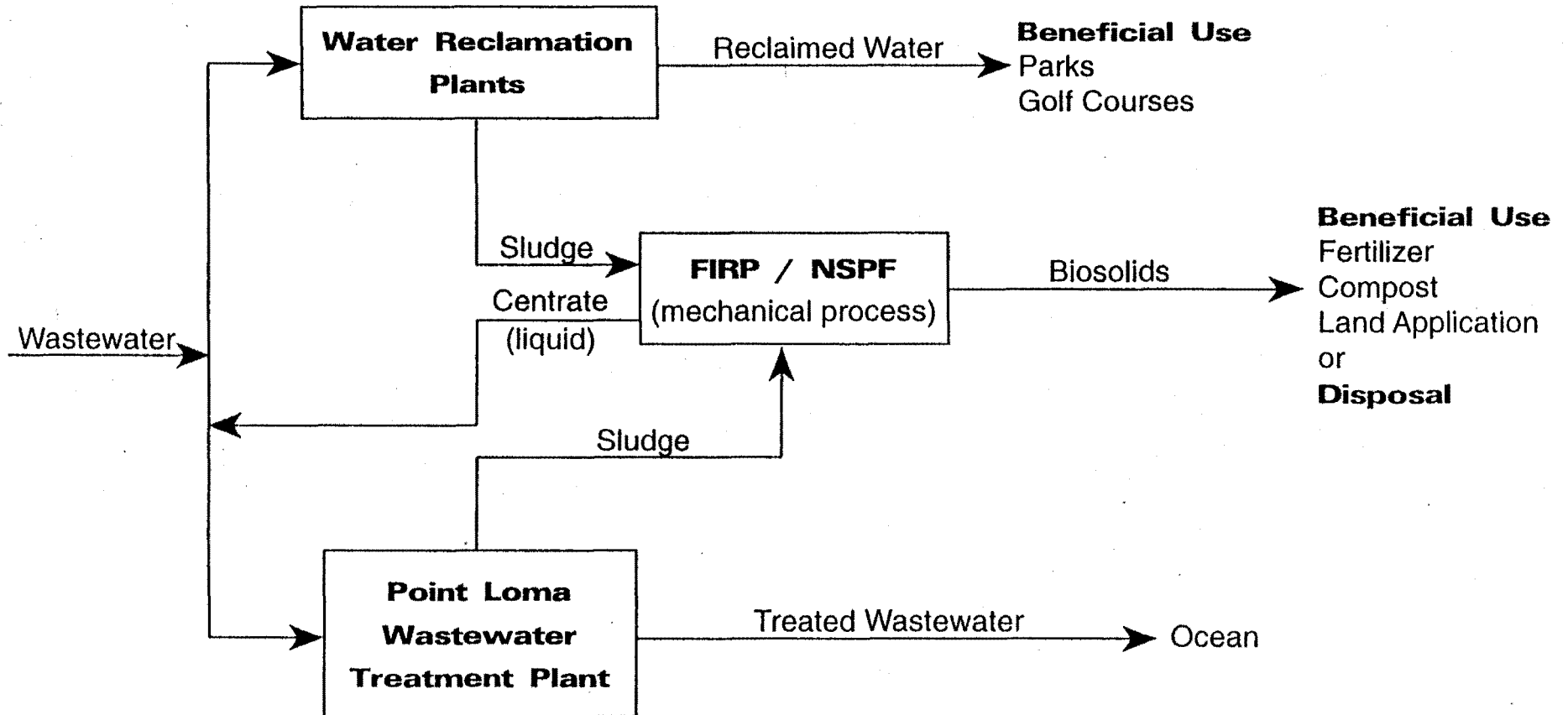
City of San Diego
METROPOLITAN WASTEWATER DEPARTMENT

COST SUMMARY FOR MWWD BIOSOLIDS PROCESSING PROJECTS

PROJECTS	COST
Metro Biosolids Center	\$241.0 Million
Pt. Loma Sludge Pump Station (FIRP)	\$38.8 Million
FIRP Phase I Digested Sludge Pipeline	\$3.9 Million
FIRP Phase II Digested Sludge and Centrate Pipeline	\$30.6 Million
Sludge Pipeline Connecting NCWRP to MBC	\$23.6 Million
Fiesta Island Demobilization Operation (FIDO)	\$1.5 Million
Total	\$339.4 Million

Figure 2

Metro System Sludge Processing (Beginning 1997)



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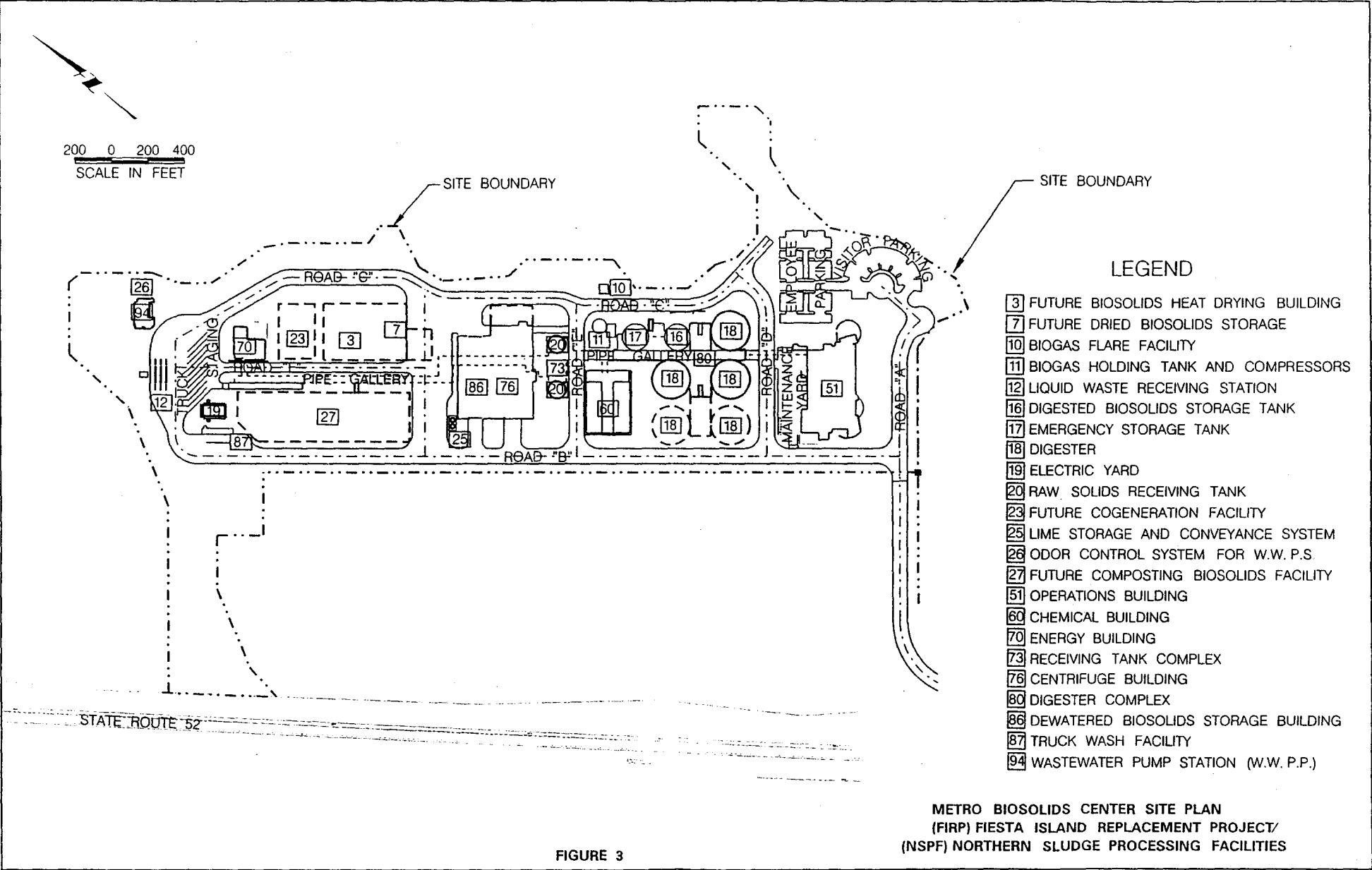
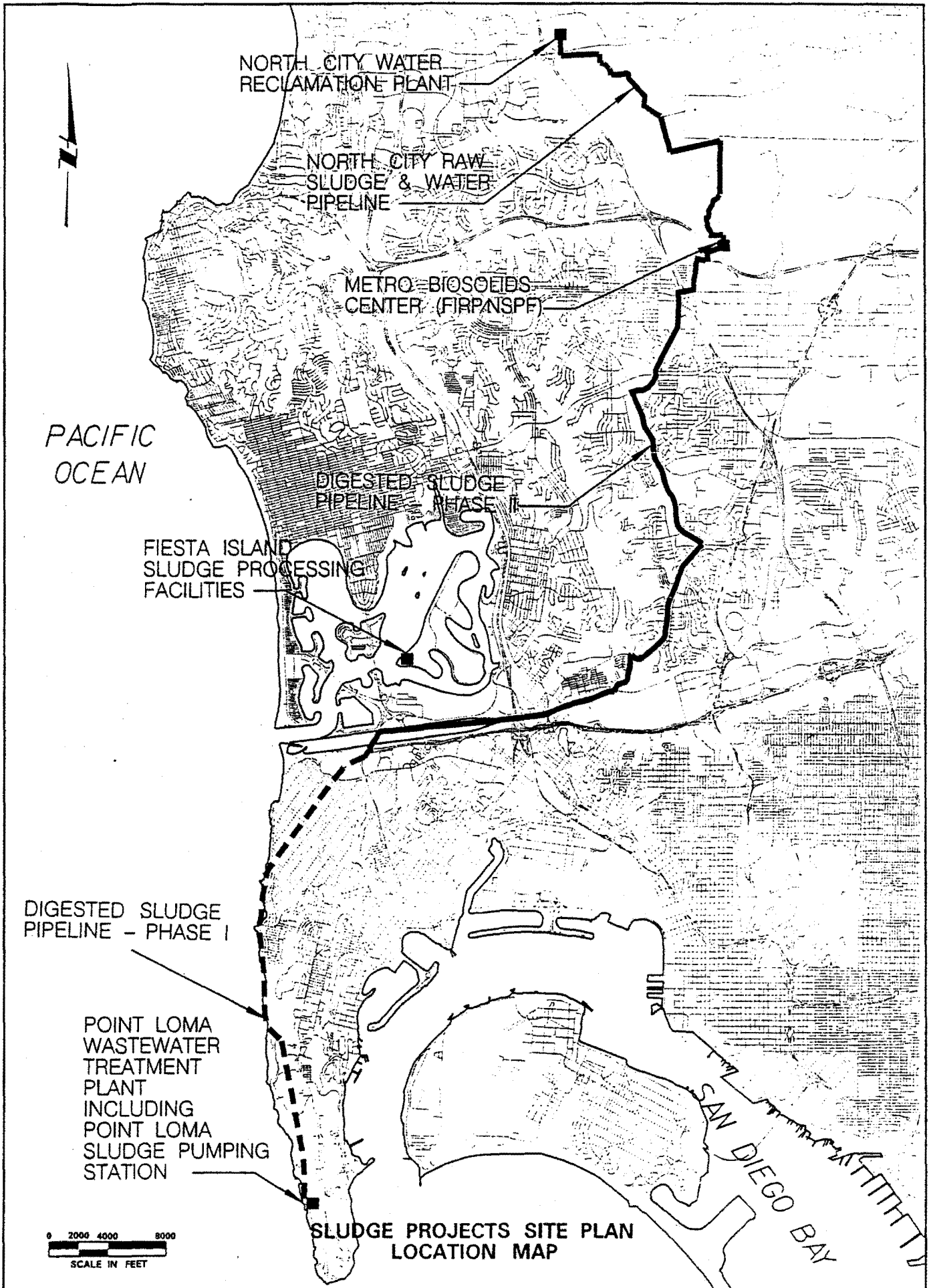


FIGURE 3

FIGURE 4



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SLUDGE PROJECTS SITE PLAN
LOCATION MAP



TRUE NORTH

NOT TO SCALE

18 Acres to be Returned
to Park & Rec. Dept.
December 1996

40 Acres Returned
to Park & Rec. Dept.

PRESERVE

SLUDGE
DRYING
FACILITY

BELT
FILTER
PRESSES

OVER
THE
LINE
AREA

AQUADIC FACILITY

MISSION BAY

PACIFIC PASSAGE

FIESTA ISLAND
DEMobilIZATION OPERATION
(FIDO)

FIGURE 5

PACIFIC PASSAGE

FIESTA

ISLAND

ROAD

Status of Mission Bay Sludge Mitigation Programs
As Of Period 03 (9/20/86), Fiscal Year 1997

Source: Grant / Projects Status Report C40-320

JOB ORDER NUMBER		(B) EXPENDITURES										EXP & ENCUMB	(A)-(B)		
		(A)													
		Appropriations	FY90	FY91	FY92	FY93	FY94	FY95	FY96	FY97	Encumb			Project to date	Amount Remaining
000001	SURPLUS DUE TO SAVINGS FROM CIP	176,278.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	176,278.55
000002	SLUDGE FUND INTEREST EARNINGS	112,262.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	112,262.51
120760	MB WATER QUALITY TESTING	150,000.00	0.00	0.00	0.00	0.00	0.00	85,130.67	12,355.16				97,485.83	52,514.17	
120770	MB STORM DRAIN EDUCATION PROGRAM	100,000.00	0.00	0.00	0.00	0.00	28,512.96	6,863.33	0.00		9,536.67		44,912.96	55,087.04	
220242	S. SHORES DEVELOPMENT PH 2 (MITG. SIGNAGE)	2,500.00	0.00	1,310.70	1,189.30	0.00	0.00	0.00	0.00				2,500.00	0.00	
220243	SOUTH SHORES DEVELOPMENT PH 3	2,350,000.00	0.00	0.00	0.00	0.00	0.00	164,697.32	1,558,389.11	320,331.52	256,223.58		2,299,641.53	50,358.47	
220750	CROWN POINT RESTROOM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	
220760	SAIL BAY DEVELOPMENT PH 4	200,000.00	0.00	0.00	0.00	0.00	0.00	196,337.71	3,662.29				200,000.00	0.00	
220790	NO. WILDLIFE RESERVE REQ. (SIDEWALK & PLATFORM)	85,074.26	0.00	1,800.00	15,081.75	30,458.38	37,734.15	0.00	0.00				85,074.28	0.00	
220800	SANTA CLARA PT PARKING LOT (STUDY)	10,000.00	0.00	5,200.00	0.00	4,800.00	0.00	0.00	0.00				10,000.00	0.00	
220810	TECOLOTE SHORES PARKING LOT	172,518.57	0.00	8,482.42	135,856.87	28,177.28	0.00	0.00	0.00				172,518.57	0.00	
220820	TECOLOTE SHORES DISABLED PLAY AREA	574,805.50	0.00	2,352.03	(2,346.63)	1,504.00	286,129.79	231,760.30	57,719.59				577,119.08	(2,313.58)	
220830	BONITA COVE IMPROVEMENT (PLAYGROUND EQUIPMENT	29,775.26	0.00	0.00	29,775.26	0.00	0.00	0.00	0.00				29,775.26	0.00	
220840	MB TREE PLANTING (PALM TREES PH-1)	14,216.03	0.00	0.00	14,216.03	0.00	0.00	0.00	0.00				14,216.03	0.00	
220850/51	MB MASTER PLAN UPDATE / CONSULTANT SERVICES	500,000.00	10,000.00	3,494.45	351,903.93	58,743.95	24,473.54	26,590.66	20,028.88		4,764.59		500,000.00	0.00	
220860	FIESTA ISLAND IMPROVEMENT RESERVE	3,498,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	3,498,000.00	
220870	BONITA COVE PARKING LOT LIGHTS (SW VACATION ISLDS	170,060.69	0.00	0.00	0.00	185,888.44	2,233.36	1,589.26	0.00		349.63		170,060.69	0.00	
220880	SKI BEACH RESTROOMS	258,000.00	0.00	0.00	36,104.03	2,989.15	2,824.69	17,300.26	163,763.38	17,447.25	4,485.63		244,914.39	13,085.61	
220890	HOSPITALITY POINT PICNIC CENTER	64,191.92	0.00	1,799.80	8,377.79	15,077.90	8,282.56	26,175.84	4,478.03				64,191.92	0.00	
220900	MB PARK TREE PLANTING (PALM TREES PH2 & PH3)	60,783.97	0.00	0.00	28,500.00	0.00	0.00	31,763.18	0.00				60,263.18	520.79	
220920	SOUTH CROWN POINT WALKWAY	140,924.02	0.00	0.00	5,003.14	12,033.90	21,590.87	95,946.39	6,349.72				140,924.02	0.00	
220930	WEST MISSION BAY DRIVE SIDEWALK	78,357.18	0.00	0.00	11,992.12	49,322.73	17,042.31	0.00	0.00				78,357.18	0.00	
229180	MB NORTH WILDLIFE EXPANSION (FROST ACQUISITION)	1,598,369.64	0.00	0.00	0.00	1,598,369.64	0.00	0.00	0.00				1,598,369.64	4,000.00	
229190	VACATION ISLAND PLAYGROUND	94,616.00	0.00	0.00	0.00	0.00	5,844.95	12,672.42	71,844.21	110.20	706.11		91,177.89	3,438.11	
229200	NORTH CROWN PT. - ACCESS AND LANDSCAPE IMPROVE	10,027.54	0.00	0.00	0.00	0.00	2,466.40	3,436.65	4,124.49				10,027.54	0.00	
229210	WEST MISSION BAY DRIVE SIDEWALK PH 2	105,000.00	0.00	0.00	0.00	0.00	4.20	244.00	31,040.00	4,370.30	1,863.70		37,522.20	67,477.80	
229220	MARINERS POINT PICNIC SHELTER	92,988.00	0.00	0.00	0.00	0.00	980.12	14,746.37	69,312.74	135.77	885.36		88,060.38	6,927.64	
229230	NORTH SKI BEACH PICNIC SHELTER	101,477.86	0.00	0.00	0.00	0.00	966.23	18,706.05	80,949.31	275.11	650.64		101,547.34	(69.48)	
229240	BONITA COVE PLAYGROUNDS ADA UPGRADE	109,354.00	0.00	0.00	0.00	0.00	1,128.12	17,919.56	68,072.69	17,129.82	931.85		105,182.04	4,171.96	
229250	MISSION POINT PLAYGROUND ADA UPGRADE	53,934.00	0.00	0.00	0.00	0.00	841.41	12,366.66	36,056.58	432.68	517.17		50,214.50	3,719.50	
229260	FIESTA ISLAND GROUP CAMPING SITE IMPROVEMENTS P	35,000.00	0.00	0.00	0.00	0.00	0.00	22,437.96	4,733.00	0.00	0.00		27,170.96	7,829.04	
229270	EAST SHORE PARKING LOTS - SAFETY LIGHTS	132,432.54	0.00	0.00	0.00	0.00	125.19	52,478.41	66,264.09	251.24	1,789.51		120,908.44	11,524.10	
229280	BICYCLE / WALKWAY IMPROVEMENTS	80,000.00	0.00	0.00	0.00	0.00	0.00	0.00	10,295.41	0.00			10,295.41	69,704.59	
229290	SUNSET POINT PICNIC SHELTER	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	1,267.41	203.76			1,471.17	98,528.83	
229320	MISSION BAY INFORMATION	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	1,554.38	802.04	10,240.00		12,596.42	87,403.58	
274920	PMT TO BOY SCOUTS FOR FIESTA ISLAND WATER LINE	12,000.00	0.00	0.00	12,000.00	0.00	0.00	0.00	0.00	0.00			12,000.00	0.00	
229410	CROWN POINT SALT MARSH	40,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	40,000.00	
229310	VENTURA POINT PICNIC SHELTER	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229370	SOUTH CROWN POINT PICNIC SHELTER	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229350	SAIL BAY WALKWAY LIGHTING AND LANDSCAPING	150,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	150,000.00	
229340	DEANZA COVE SAFETY LIGHTING	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229300	LA PLAYA COVE PICNIC SHELTER	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229390	CROWN POINT SAFETY LIGHTING	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229400	DEANZA PARK PLAYGROUND UPGRADE	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	50,000.00	
229360	TECOLOTE SHORES PICNIC SHELTER	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229380	DEANZA PARK PICNIC SHELTER	100,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	100,000.00	
229330	CROWN POINT PLAYGROUND UPGRADE	50,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			0.00	50,000.00	
		12,366,946.04	10,000.00	24,439.40	647,653.59	1,967,365.37	441,180.85	1,039,163.00	2,272,260.47	361,489.69	292,944.44		7,056,496.81	5,310,449.23	

CITY OF SAN DIEGO
M E M O R A N D U M

Attachment A1

FILE NO.: SLDGMIT.STA
DATE: November 21, 1996
TO: Ellen Lirley, California Coastal Commission
FROM: John Leppert, Assistant to the City Manager
SUBJECT: Status Report - Sludge Mitigation Fund Projects

COMPLETED PROJECTS:

Natural Resource Signage	\$ 2,500	(Nov '90)
Bonita Cove Playground Equipment	40,000	(Sep '91)
Santa Clara Point Parking Lot Study	10,000	(Jan '91)
Tecolote Shores Parking Lot Construction	250,000	(July '92)
Sea World Drive Tree Planting Ph I & II	45,000	(Apr '92)
Fiesta Island Waterline	12,000	(Aug '92)
Bonita Cove Parking Lots Safety Lighting	100,000	(Dec '93)
Wildlife Preserve Sidewalk & Platform	90,000	(Apr '94)
Acquisition of Frost Property	1,610,000	(Mar '93)
S.W. Vacation Isle Parking Lot Safety Lights	22,000	(Apr '93)
West Mission Bay Dr. Walkway Ph I	80,000	(Jun '93)
Sail Bay Briarfield Cove Bridge	200,000	(Apr '94)
Hospitality Point Picnic Shelter	70,000	(Jun '94)
Tecolote Shores ADA Playground & Park	582,500	(Jun '94)
Sea World Drive Tree Planting Ph III	30,000	(July '94)
Mission Bay Park Master Plan Update	500,000	(Aug '94)
South Crown Point Walkway	150,000	(Feb '95)
North Crown Point Access Improvements	10,000	(Nov '95)
West Mission Bay Drive Sidewalk Ph II	105,000	(Nov '95)
North Ski Beach Picnic Shelter	100,000	(Nov '95)
East Shore Parking Lots Safety Lights	180,000	(Jun '95)
Vacation Isle Playground	100,000	(Dec '95)
Mariner's Point Picnic Shelter	100,000	(Dec '95)
Mission Pt. Playground to ADA Standards	80,000	(Dec '95)
Bonita Cove Playgrounds ADA Upgrade	160,000	(Apr '96)
Ski Beach Restrooms	300,000	(May '96)
South Shores Phase III	2,350,000	(May '96)
Fiesta Island Youth Camping Facilities	35,000	(July '96)

Status Report - Sludge Mitigation Fund Projects

November 21, 1996

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PROJECTS IN PROCESS OF DEVELOPMENT OR UNDER CONSTRUCTION

Water Quality Testing Program - \$150,000. First, second and third phases completed. Final testing and analysis will be completed after the winter 1996-97 rainy season.

Picnic Shelters - \$600,000. The following six (6) new picnic shelters have been grouped together for one design and construction contract: Sunset Point, De Anza Cove, La Playa Cove, South Crown Point, Tecolote Shores, and Ventura Point. Locations have been selected and the type of shelter selected. Current target for completion is Summer of '97.

Crown Point Shores Parking Lot Safety Lighting - \$100,000. Designed and scheduled for completion in April '97.

De Anza Cove Parking Lot Safety Lighting - \$100,000. Designed and scheduled for completion in April '97.

Crown Point Salt Marsh - \$40,000. Request for matching State grant not approved in '96. Other grants are being sought. Project is on hold while seeking additional funding or labor sources.

Bicycle/Pathway Improvements - \$80,000. Additional funds received. Extensions being planned in South Shores area, Hospitality Point, Ventura Cove, Rose Creek and other "missing links."

Sail Bay Walkway Lighting & Landscaping - \$150,000. Consultant selection process underway. Current completion estimate is Spring of '98, with no construction during summer months.

Information Center Playground ADA Upgrade - \$100,000. Completion of improvements scheduled for May '97.

Stormdrain Education Program - \$150,000. All phases completed except for informational educational signage in eight (8) locations around the park. With the assistance of San Diego Zoo designers, displays should be in place by the Spring of '97.

Crown Point Playground ADA Standards - \$50,000. Installation to be completed by the Fall of '97.

PROJECT ON HOLD:

Fiesta Island Improvement Reserve - \$3,498,000. Funds will be used for public improvements on Fiesta Island when the sludge treatment facilities are removed from the Island and the area returned to the control of the Park & Recreation Department. A design consultant contract is now being considered to plan in detail the public improvements included in the Mission Bay Park Master Plan, for the areas previously occupied by the sludge treatment facilities and the adjacent southern areas of Fiesta Island.

John C. Leppert

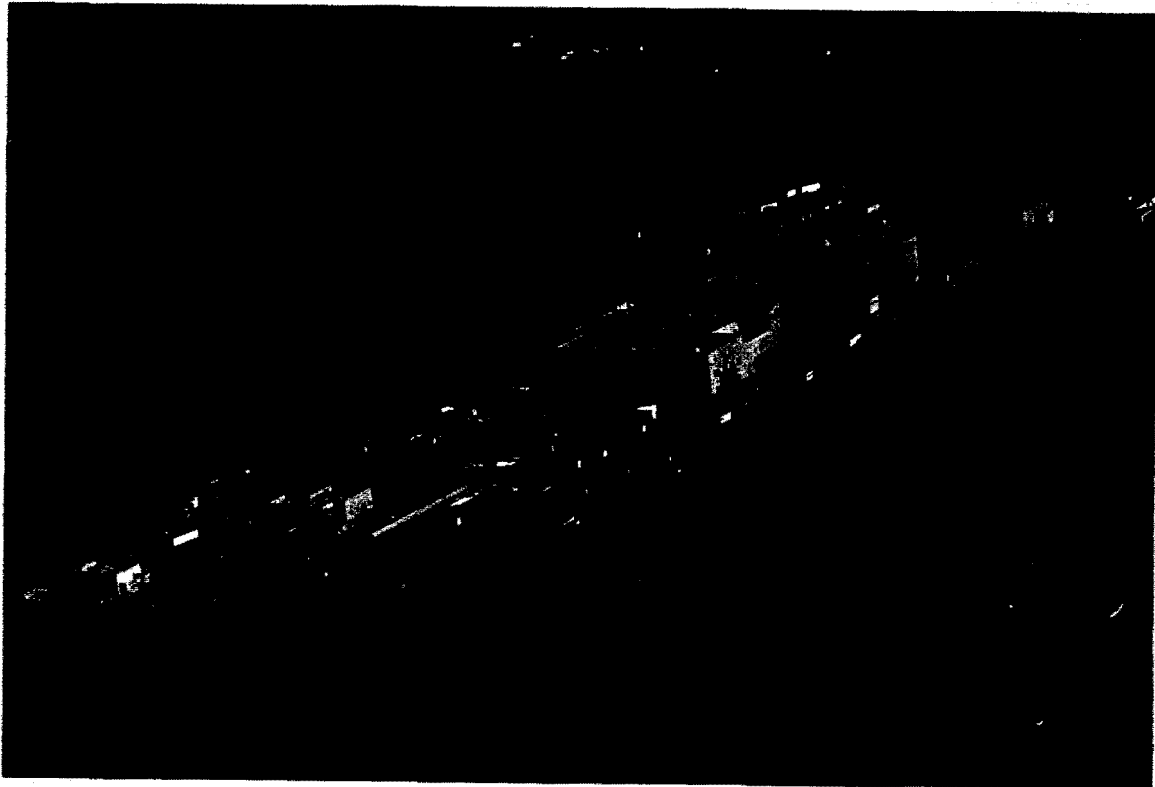
cc: Jack McGrory, City Manager
Dave Schlesinger, Metropolitan Wastewater Director
Marcia McLatchy, Park & Recreation Director
Frank Belock, Engineering & Capital Projects Director

Metro Biosolids Center (MBC) - A Year of Construction

MBC in December 1995



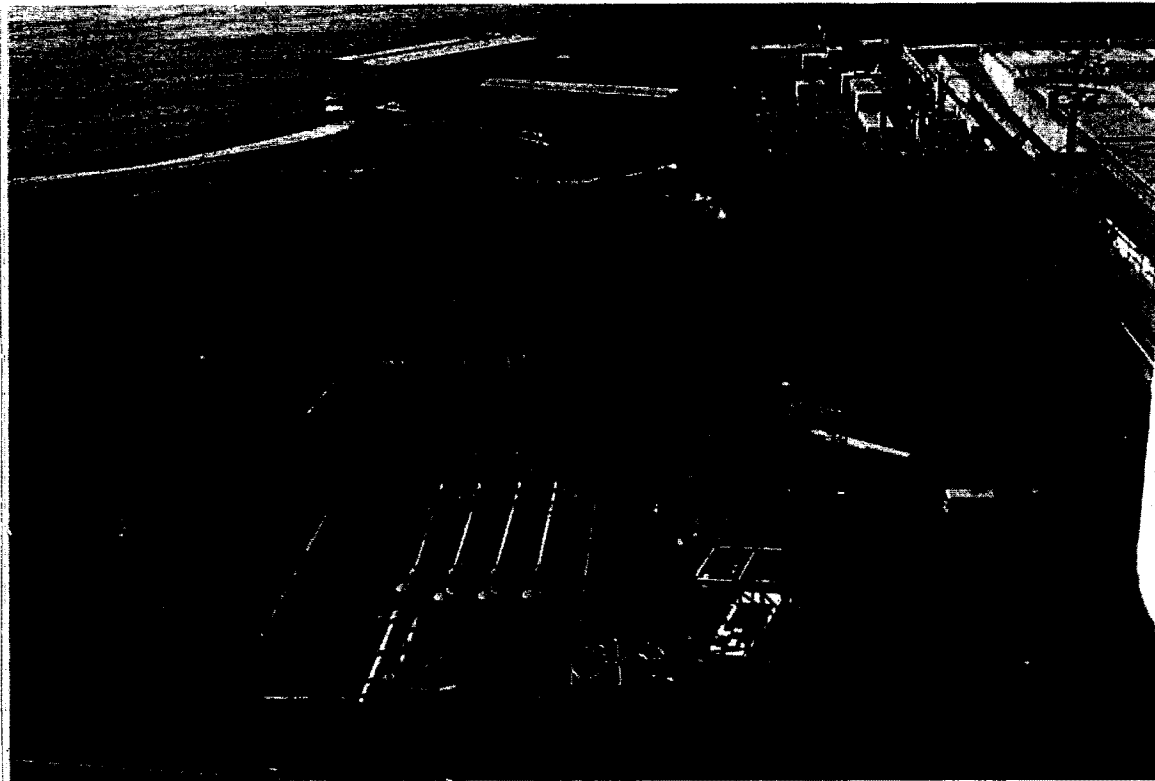
MBC in December 1996



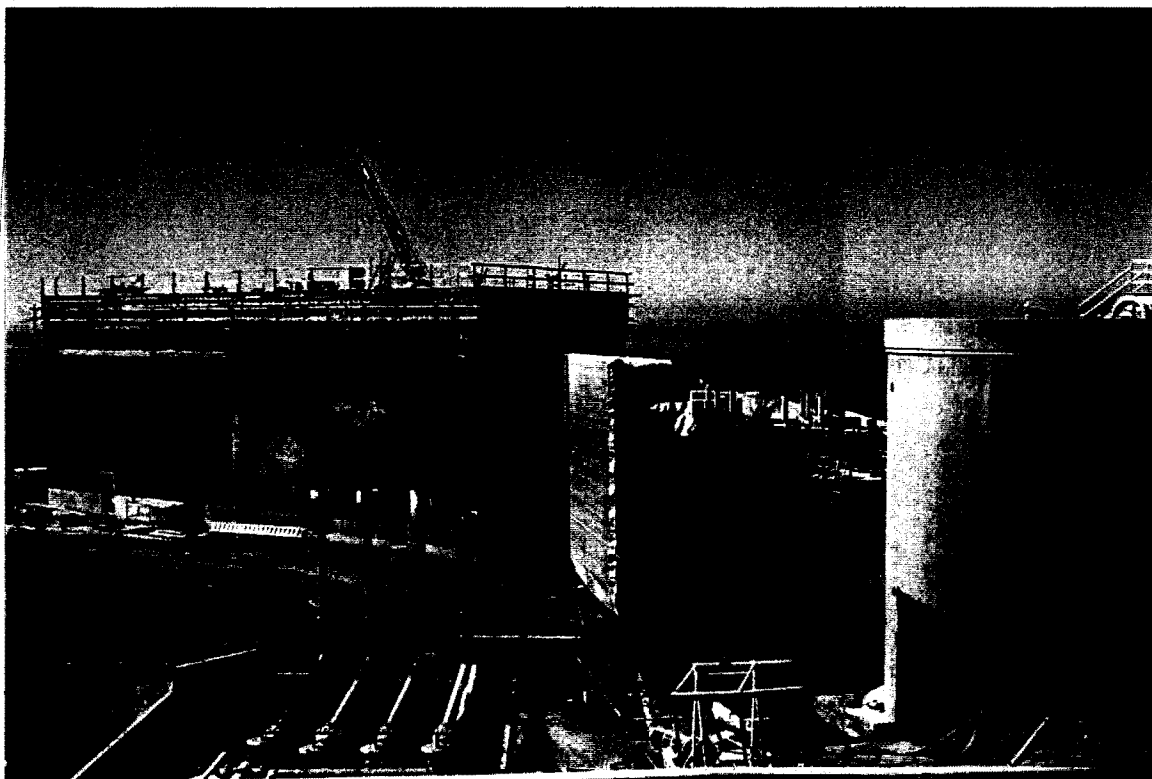


Fiesta Island Replacement Project (FIRP) Pump Station at Point Loma -
A Year of Construction

FIRP Pump Station in October, 1995



FIRP Pump Station in November, 1996



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