SEWER PROJECTS

ENCINA WATER POLLUTION CONTROL FACILITY PROJECTS

FUNDING MATRIX FOR ENCINA WATER POLLUTION CONTROL FACILITY PROJECTS

PROJ NO.	PROJECT TITLE	FUNDING SOURCE	TOTAL BUDGET	FUTURE YEAR BUDGET AMOUNTS						
				YEAR 1 2005-2006	YEAR 2 2006-2007	YEAR 3 2007-2008	YEAR 4 2008-2009	YEAR 5 2009-2010	YEAR 6-10 2010-2015	BUILDOUT 2015-2020
34892	BUILDING IMPROVEMENTS	SEWER REPL	3,046,926							
34112	CAPITAL ACQUISITIONS/REPLACEMENT/REHAB	SEWER REPL	10,561,943	467,273	442,474	738,974	385,187	423,803	2,732,235	2,831,593
36681	FLOW EQUALIZATION PROJECT	SEWER CONN	2,557,571							
	PHASE IV EXPANSION - DEBT SERVICE	SEWER CONN	9,327,985	936,394	933,944	935,506	937,169	933,006	4,651,966	
38071	PHASE V EXPANSION	SEWER CONN	11,796,787	2,804,221						
36701	PUMP STATION INTERFACES	SEWER REPL	30,836							
38851	STAFFING/PROF. SERVICES AND MISC.	SEWER REPL	2,508,045	276,403	254,303	150,696	115,385	117,359	602,971	639,030
36661	TECHNOLOGY ENHANCEMENT	SEWER CONN	633,717							

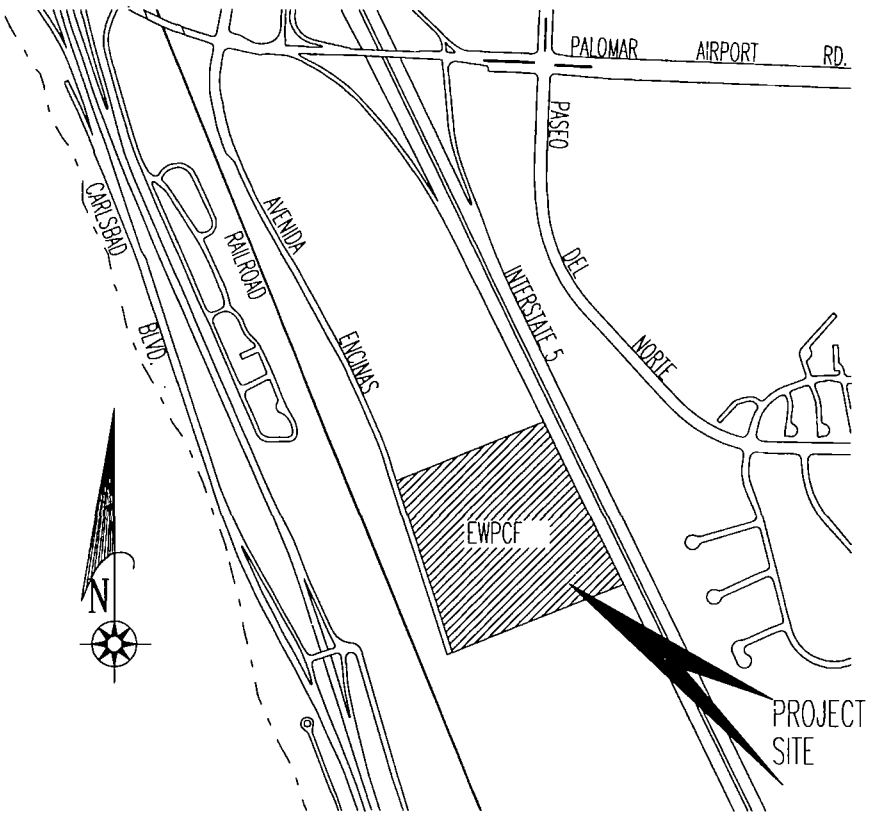
CAPITAL PROJECT DESCRIPTION

34892
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - BUILDING IMPROVEMENTS

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Encina Water Pollution Control Facility at 6200 Avenida Encinas.

PROJECT DESCRIPTION:

To construct and/or improve existing building facilities at the Encina Water Pollution Control Facility. Cost represents City's pro-rated share of the building improvements.

Building improvements include:

- Additional Office
- Employee Locker Facilities
- Expanded Laboratory Facilities

PROJECT NEED:

Needed to provide office and laboratory facilities at the Encina Water Pollution Control Facility.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Construction	$3,046,926	Sewer Replacement
Total Cost =	**$3,046,926**	

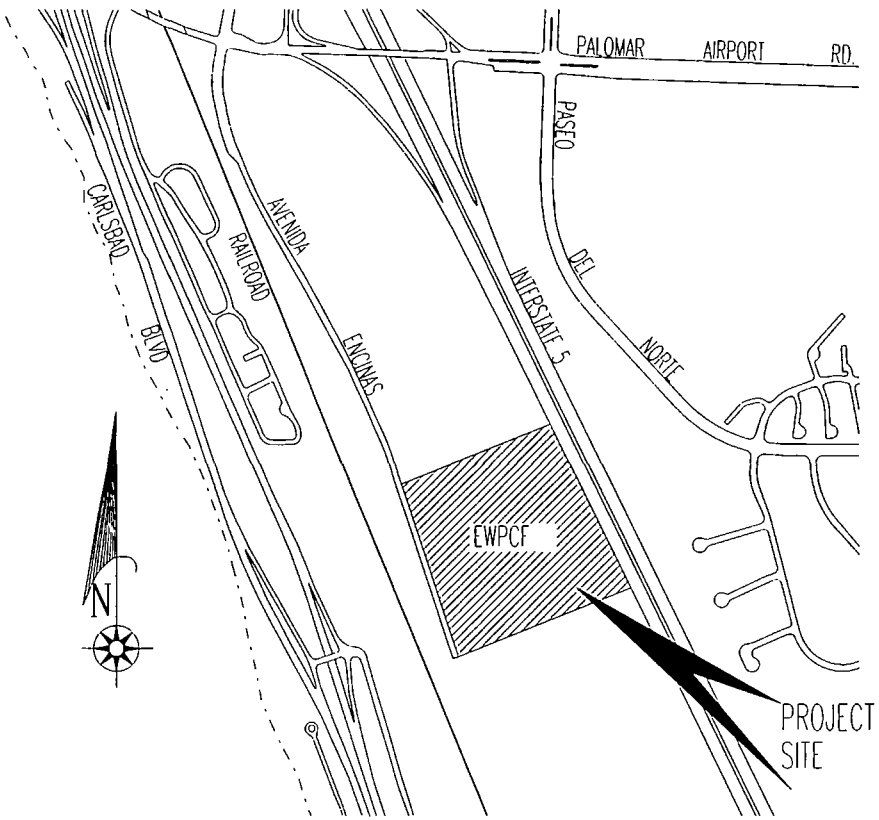
CAPITAL PROJECT DESCRIPTION

34112
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - CAPITAL ACQUISITIONS REPLACEMENT/REHABILITATION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Encina Water Pollution Control Facility at 6200 Avenida Encinas.

PROJECT DESCRIPTION:

Various Capital Improvements. Cost represents City's pro-rated share of the capital acquisitions, replacement, and rehabilitation.

PROJECT NEED:

To upgrade the existing plant.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Construction	$10,561,943	Sewer Replacement
Total Cost =	**$10,561,943**	

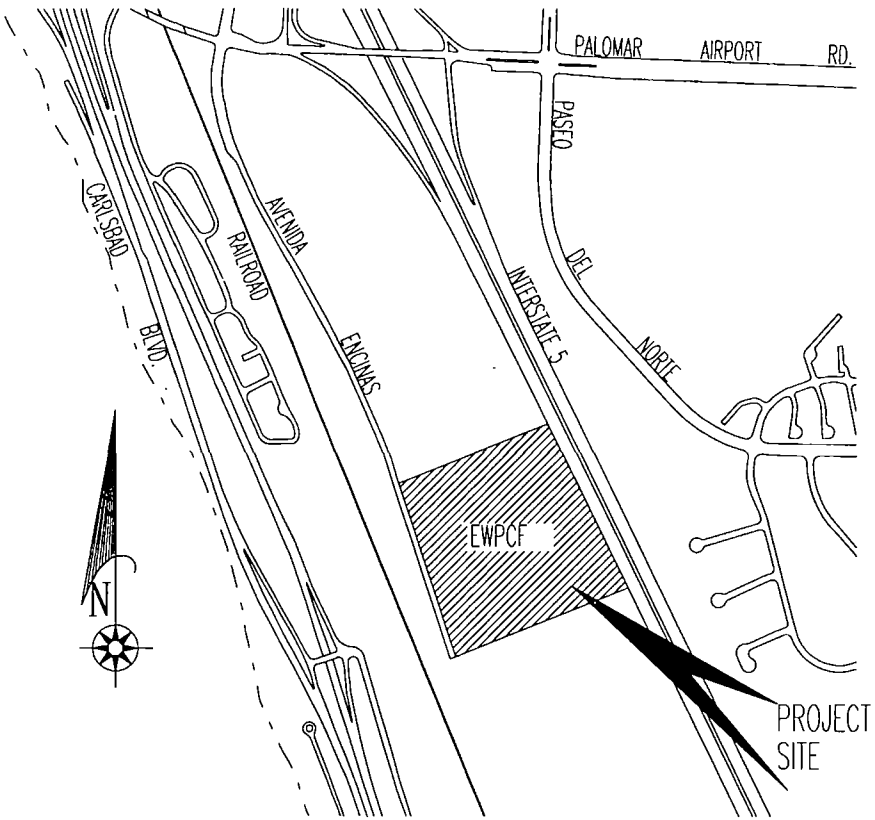
CAPITAL PROJECT DESCRIPTION

36681
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - FLOW EQUALIZATION PROJECT

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

South of Palomar Airport Road on the east side of Avenida Encinas.

PROJECT DESCRIPTION:

Construction of a reservoir/tank to retain flows which exceed the capacity of the ocean outfall line. Retained flows would be released during periods of low flow. The retention reservoir/tank may double as a reclycled water reservoir.

PROJECT NEED:

Required to meet Growth Management Standards and identified in the Master Plan of Sewage. Construction of the project will eliminate the need for a second ocean outfall line. Cost represents the City's pro-rated share of the Flow Equalization Project.

FINANCING:

Purpose	Estimated Cost	Funding Source
Studies/Engineering	$2,557,571	Sewer Connection
Total Cost =	**$2,557,571**	

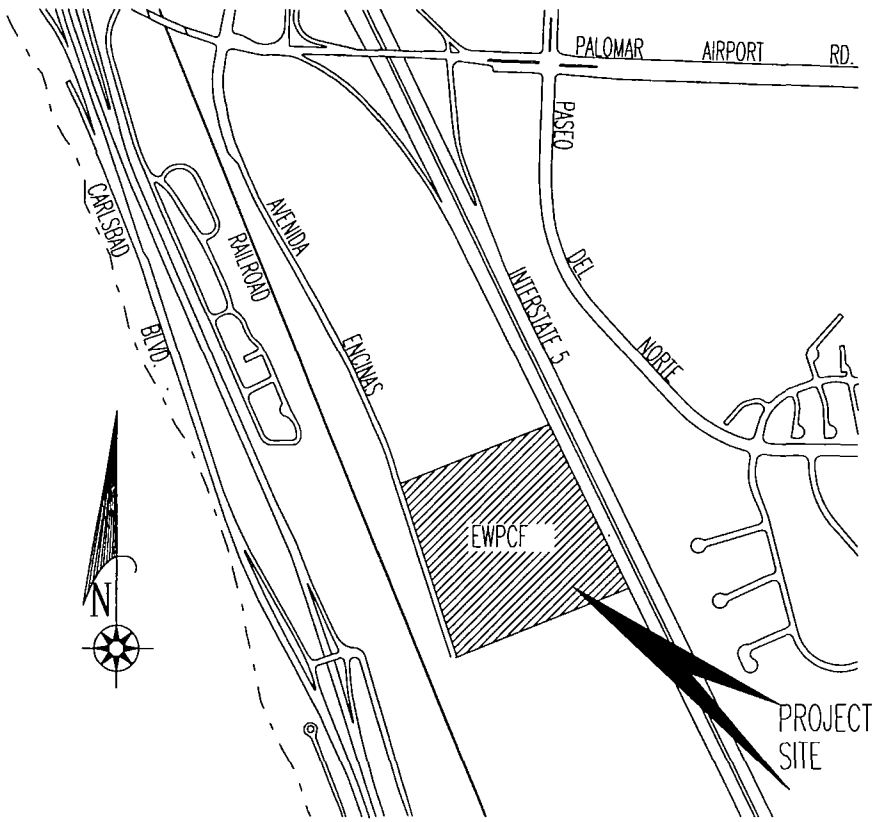
CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - PHASE IV EXPANSION DEBT SERVICE

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

South of Palomar Airport Road on the east side of Avenida Encinas.

PROJECT DESCRIPTION:

Expansion of the Encina Water Pollution Control Facility to increase treatment capacity from 22.5 million gallons per day to 36.0 million gallons per day of raw sewage. Cost includes bond financing and interest costs.

PROJECT NEED:

Required to meet Growth Management Standards and identified in the Master Plan of Sewage.

FINANCING:

Purpose	Estimated Cost	Funding Source
Debt Service	$9,327,985	Sewer Connection
Total Cost =	**$9,327,985**	

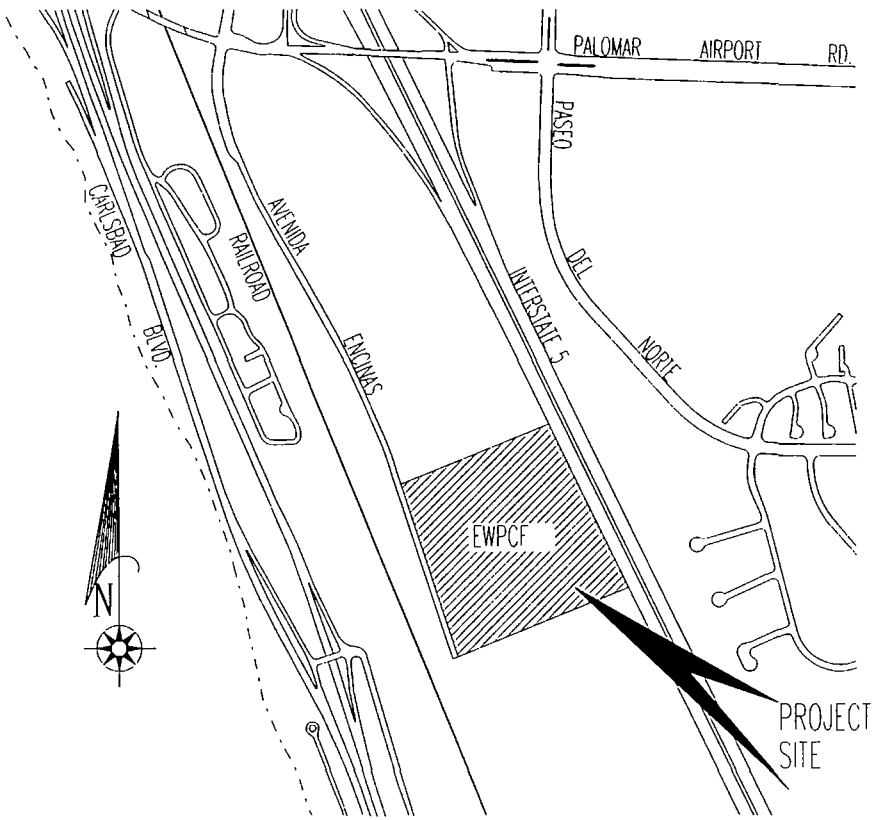
CAPITAL PROJECT DESCRIPTION

38071
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - PHASE V EXPANSION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Encina Water Pollution Control Facility at 6200 Avenida Encinas.

PROJECT DESCRIPTION:

Expand the Encina Water Pollution Control Facility to buildout for the treatment of 45-60 MGD of wastewater. Cost represents City's pro-rated share of the Phase V expansion.

PROJECT NEED:

To provide for ultimate wastewater treatment capacity of the Carlsbad Sewer District.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Construction	$11,796,787	Sewer Connection
Total Cost =	**$11,796,787**	

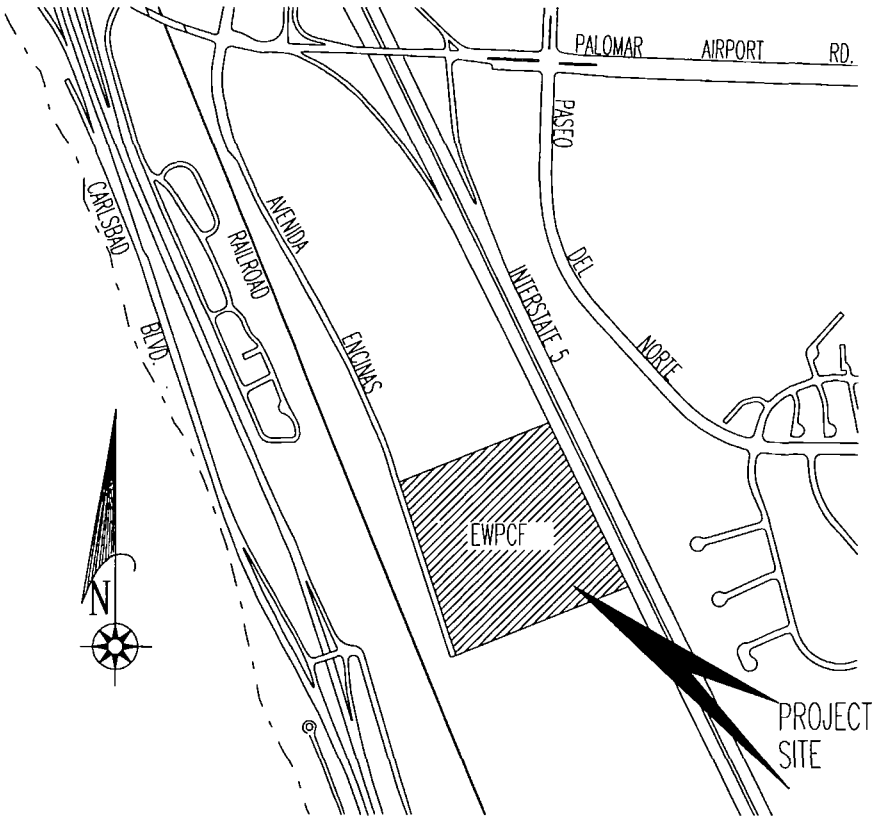
CAPITAL PROJECT DESCRIPTION

36701
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - PUMP STATION INTERFACES

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

South of Palomar Airport Road on the east side of Avenida Encinas.

PROJECT DESCRIPTION:

The project consists of a review of the possible methods to develop active monitoring of the various sewer pump stations which pump sewage from outside agencies. Presently, City capacity at Encina is calculated by subtracting other agency flows from the available plant capacity. Development of an active interface to the pump station would provide more accurate and reliable measurement of the City's treatment capacity.

PROJECT NEED:

Required to assure that Growth Management Standards for sewer treatment capacity will continue to be met.

FINANCING:

Purpose	Estimated Cost	Funding Source
Construction	$30,836	Sewer Replacement
Total Cost =	**$30,836**	

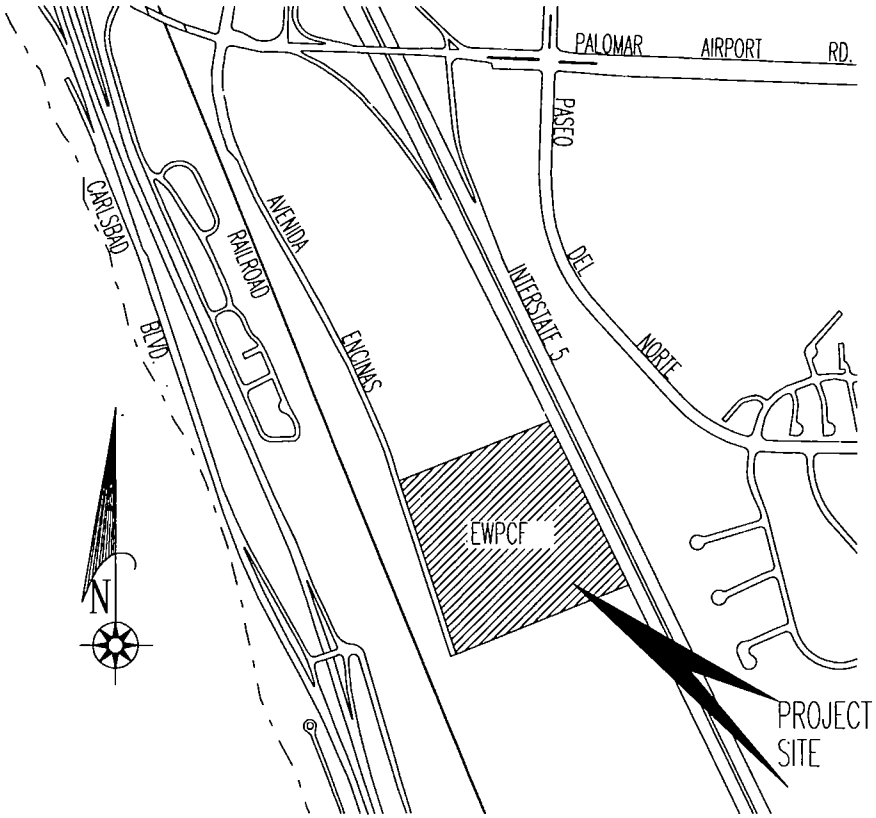
CAPITAL PROJECT DESCRIPTION

38851
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY – STAFFING/PROFESSIONAL SERVICES & MISC.

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Encina Water Pollution Control Facility at 6200 Avenida Encinas.

PROJECT DESCRIPTION:

The funds for this project are used by the Encina Water Pollution Control Facility to develop and implement its buildout Capital Improvement Program. The cost is Carlsbad's share to cover staff, overhead and hiring consultants to design and develop bid specifications for future capital acquisitions and the replacement / rehabilitation of facilities at the sewer treatment plant.

PROJECT NEED:

To ensure the efficient and effective operation of Encina Water Pollution Control Facility.

FINANCING:

Purpose	Estimated Cost	Funding Source
Admin/Professional Serv.	$2,508,045	Sewer Replacement
Total Cost =	**$2,508,045**	

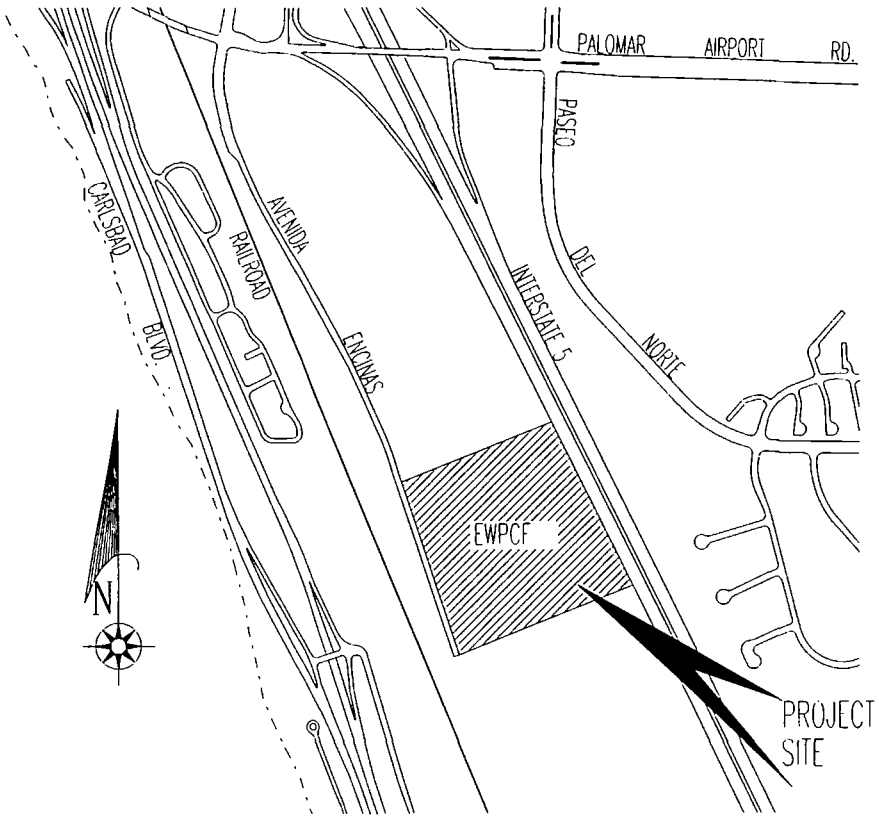
CAPITAL PROJECT DESCRIPTION

36661
PROJECT NO.

ENCINA WATER POLLUTION CONTROL FACILITY - TECHNOLOGY ENHANCEMENT

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

South of Palomar Airport Road on the east side of Avenida Encinas.

PROJECT DESCRIPTION:

Development of a master plan to evaluate new treatment technologies for possible incorporation into the Encina Treatment Plant.

PROJECT NEED:

New treatment technologies are constantly being developed. This study will help to evaluate whether any of the new technologies can be used in a cost effective manner at the Encina WPCF. Required to assure that Growth Management Standards for sewer treatment capacity will continue to be met.

FINANCING:

Purpose	Estimated Cost	Funding Source
Master Plan	$633,717	Sewer Connection
Total Cost =	**$633,717**	

SEWER COLLECTION SYSTEM PROJECTS

FUNDING MATRIX FOR SEWER COLLECTION SYSTEM PROJECTS

				FUTURE YEAR BUDGET AMOUNTS						
PROJ NO.	PROJECT TITLE	FUNDING SOURCE	TOTAL BUDGET	YEAR 1 2005-2006	YEAR 2 2006-2007	YEAR 3 2007-2008	YEAR 4 2008-2009	YEAR 5 2009-2010	YEAR 6-10 2010-2015	BUILDOUT 2015-2020
	AVENIDA ENCINAS GRAVITY SEWER	SEWER REPL	266,963		266,963					
NEW	BUENA INTERCEPTOR SEWER IMPROVEMENTS	SEWER REPL	2,340,000	460,000	1,880,000					
33221	BUENA VISTA LIFT STATION	SEWER CONN	632,132							
	BUENA VISTA LIFT STATION FORCE MAIN	SEWER CONN	1,376,800							1,376,800
	CARLSBAD TRUNK SEWER REACHES VCT1A, VCT1B, VCT1C (SBA "A")	SEW BENEF	503,600			100,000	403,600			
36224	FARADAY AVENUE - ORION TO MELROSE SEWER (See Streets)	SEWER REPL	110,200							
34951	FOREST GRAVITY SEWER	SEWER REPL	900,000							
38731	HOME PLANT - PIPELINE REPLACEMENT	SEWER REPL	440,000							
	HOME PLANT LIFT STATION REHABILITATION	SEWER REPL	650,000		650,000					
39511	LA COSTA MEADOWS SEWER EXTENSION	SEWER REPL	283,000	160,000	73,000					
	LA GOLONDRIA SEWER EXTENSION	SEWER REPL	654,000	654,000						
35371	NORTH AGUA HEDIONDA INTERCEPTOR - WEST SEGMENT	SEWER REPL	4,177,750	547,750						
38741	NORTH AGUA HEDIONDA INTERCEPTOR REHAB - EAST SEGMENT	SEWER REPL	620,000							
	NORTH AGUA HEDIONDA TRUNK SEWER REACH NAHT1A	SEWER REPL	1,781,220		114,220	1,667,000				
35381	NORTH BATIQUITOS INTERCEPTOR REHABILITATION	SEWER REPL	1,199,000	99,000						
38091	NORTH BATIQUITOS SEWAGE LIFT STATION MODIFICATIONS	SEWER REPL	607,000							
38101	POINSETTIA LANE SEWER RELOCATION - Reimb	SEWER REPL	400,000							
38751	POINSETTIA SEWAGE LIFT STATION ODOR/NOISE ABATEMENT	SEWER REPL	283,800		243,800					
38401	SEWER LIFT STATION REPAIRS AND UPGRADES	SEWER REPL	1,360,380			80,000	100,000	100,000	500,000	
39271	SEWER LINE REFURBISHMENTS/REPLACEMENT	SEWER REPL	5,644,600	330,000	330,000	330,000	330,000	330,000	1,650,000	1,744,600
	SEWER MASTER PLAN/CONNECTION FEE UPDATE	SEWER REPL	354,200						354,200	
39522	SEWER MONITORING PROGRAM	SEWER CONN	330,000	22,000	22,000	22,000	22,000	22,000	110,000	110,000
35831	SOUTH AGUA HEDIONDA LIFT STATION AND FORCE MAIN	SEW BENEF	8,827,415							
NEW	TERRAMAR LIFT STATION EMERGENCY GENERATOR	SEWER REPL	198,000	25,000	173,000					
34921	VISTA/CARLSBAD INTERCEPTOR AGUA HEDIONDA LIFT STATION (VC12)	SEWER CONN	8,775,000		100,640	7,555,000				
38861	VISTA/CARLSBAD INTERCEPTOR REACH VC11B	SEWER CONN	3,549,000	625,000						
39491	VISTA/CARLSBAD INTERCEPTOR REACH VC13 TO VC15	SEWER CONN	13,000,000	1,300,000	11,200,000					
38671	VISTA/CARLSBAD INTERCEPTOR REHAB REACHES 1 AND 2	SEWER REPL	830,975	78,900						
39501	VISTA/CARLSBAD INTERCEPTOR REPLACEMENT REACH 3	SEWER CONN	2,570,000		70,000	500,000	2,000,000			

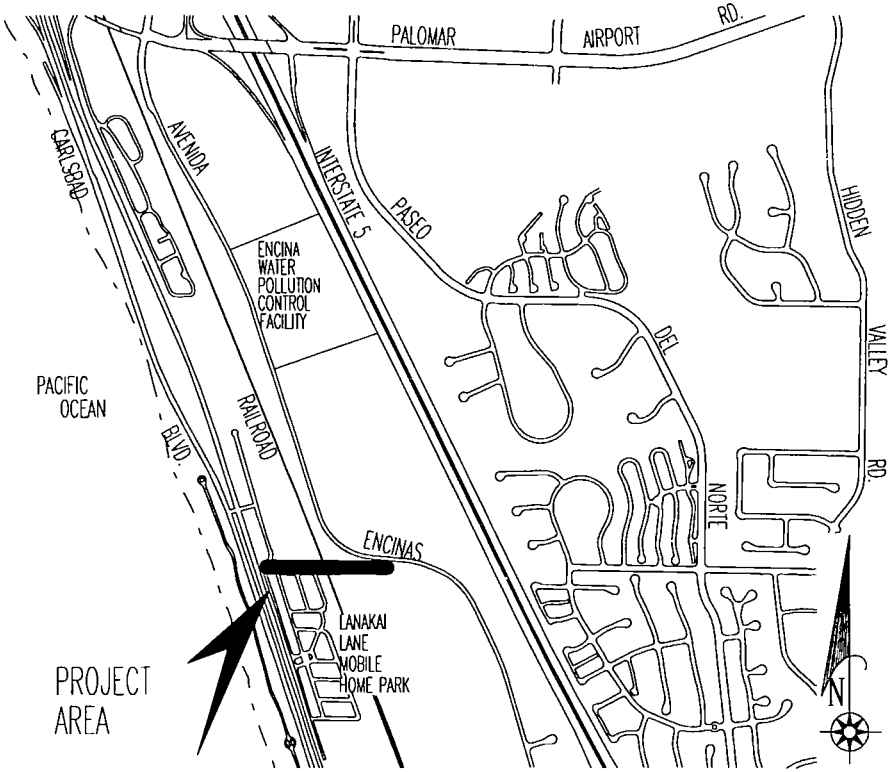
CAPITAL PROJECT DESCRIPTION

35811
PROJECT NO.

SEWER COLLECTION SYSTEM - AVENIDA ENCINAS GRAVITY SEWER

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Along north side of Lanakai Mobile Home Park.

PROJECT DESCRIPTION:

Replace approximately 1,000 feet of 8" gravity sewer.

PROJECT NEED:

The existing forcemain releases unacceptable levels of hydroden sulfide gas resulting in numerous odor complaints and deterioration of the gravity sewer system.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Admin/Insp	$61,250	Sewer Replacement
Construction	$205,713	Sewer Replacement
Total Cost =	**$266,963**	

CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM – BUENA INTERCEPTOR SEWER IMPROVEMENTS

PROJECT NAME

PROJECT LOCATION MAP:

PROJECT LOCATION:

Buena Interceptor Sewer from El Camino Real to the Encina Wastewater Treatment Plant.

PROJECT DESCRIPTION:

The Buena Interceptor Sewer conveys wastewater for the cities of Carlsbad and Vista. The existing system capacity is inadequate for projected future flows. The project will be mitigated with an alignment and capacity studies with an alternatives analysis.

PROJECT NEED:

Required to meet future sewer drainage basin flows. Also required pursuant to the Carlsbad/Buena Sanitation Agreement.

FINANCING:

Purpose	Estimated Cost	Funding Source
Studies	$100,000	Sewer Replacement
Design	$104,000	Sewer Replacement
Environmental	$80,000	Sewer Replacement
Construction	$1,800,000	Sewer Replacement
Admin/Inspection	$256,000	Sewer Replacement
Total Cost =	**$2,340,000**	

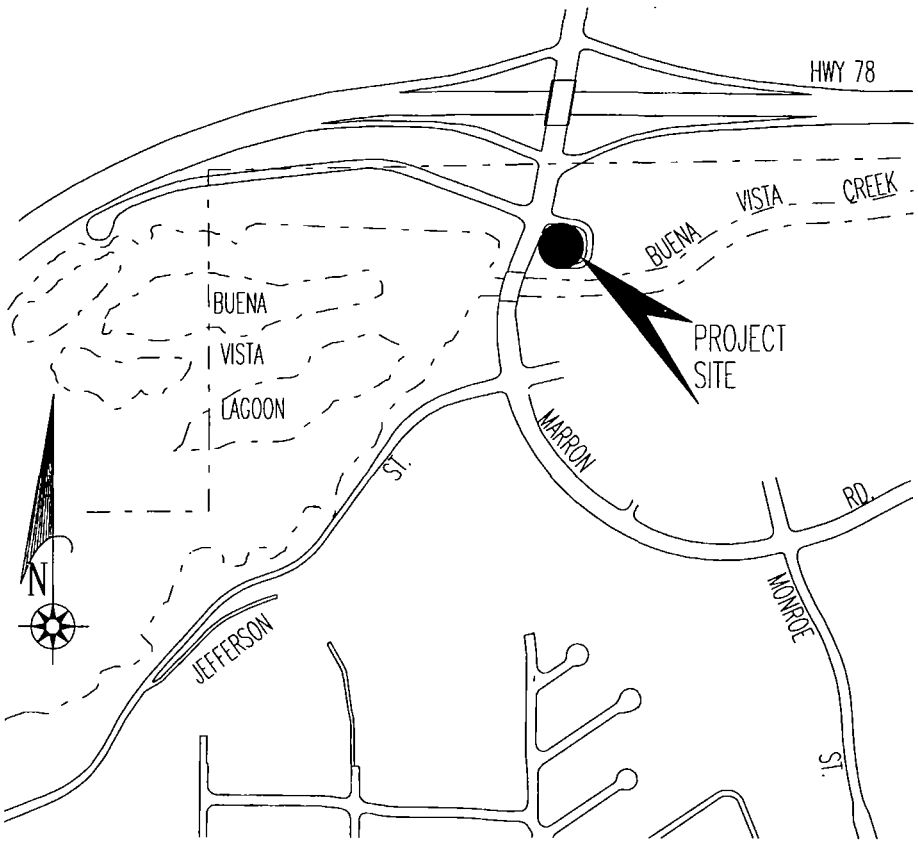
CAPITAL PROJECT DESCRIPTION

33221
PROJECT NO.

SEWER COLLECTION SYSTEM - BUENA VISTA LIFT STATION & PUMP ADDITION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Adjacent to the east side of Jefferson Street just south of Buena Vista Creek.

PROJECT DESCRIPTION:

Upgrade and expand the lift station facility to a capacity of 15.5 million gallons per day (MGD). Improvements include revision to building to add a second floor, new control systems, new back-up generator and the addition of one new pump. Project costs will be shared with the City of Vista. The below stated cost estimate is Carlsbad's share of the total project cost.

PROJECT NEED:

Needed to meet future demand.

FINANCING:

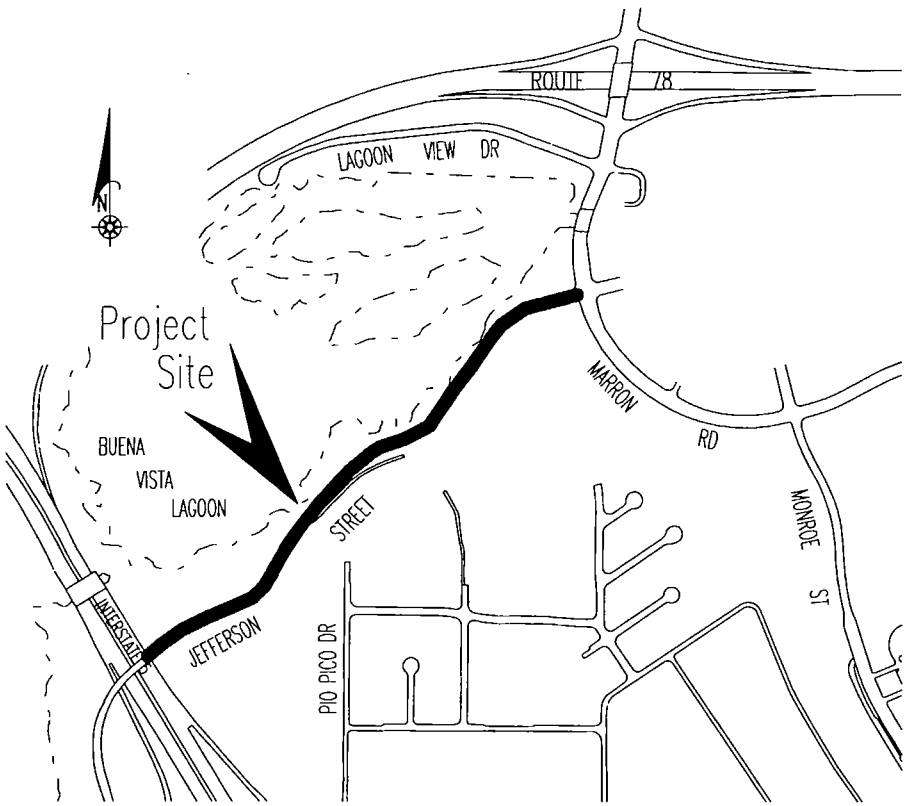
Purpose	Estimated Cost	Funding Source
Design/Construction	$632,132	Sewer Connect. Fees
Total Cost =	**$632,132**	

CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM – BUENA VISTA LIFT STATION FORCE MAIN (VC-4)
PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Along the south shore of the Buena Vista Lagoon between the Buena Vista Lift Station and I-5.

PROJECT DESCRIPTION:

Replace existing 16" pipeline with 24" pipeline to provide dual 24" force mains.

PROJECT NEED:

Increase capacity of sewer force main system to accommodate future sewer generation.

FINANCING:

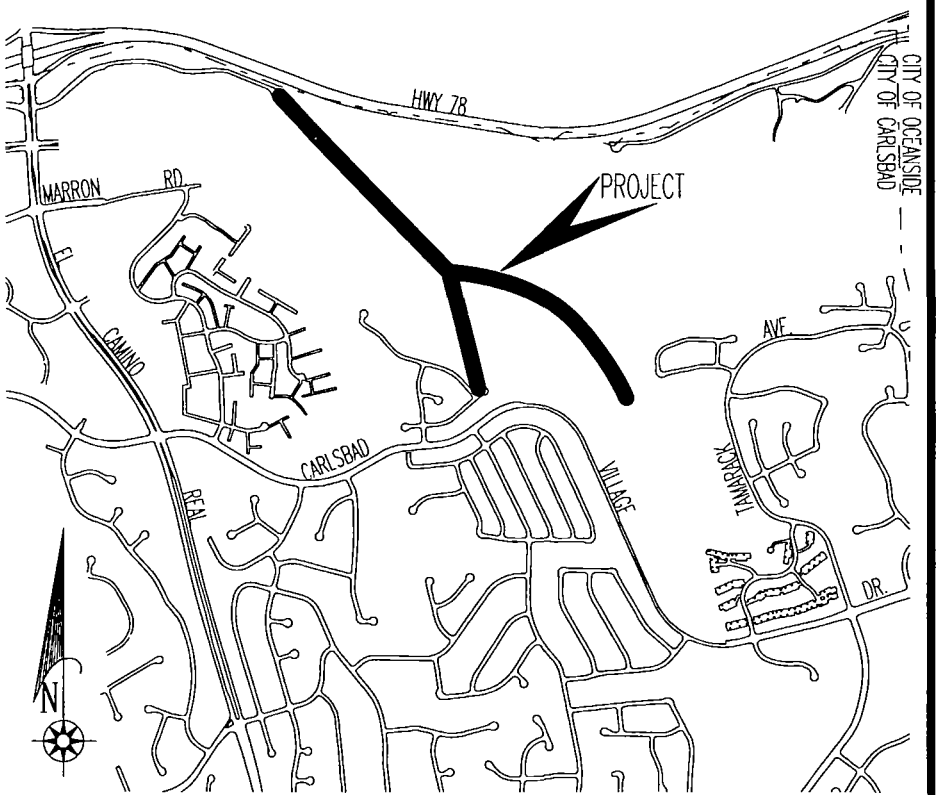
Purpose	Estimated Cost	Funding Source
Design	$75,000	Sewer Connection Fees
Environmental	$125,000	Sewer Connection Fees
Construction	$1,076,800	Sewer Connection Fees
Admin/Inspection	$100,000	Sewer Connection Fees
Total Cost =	**$1,376,800**	

CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM - CARLSBAD TRUNK SEWER REACHES VCT1A, VCT1B, VCT1C
PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

From Vancouver Street and Simsbury Court within Calavera Hills north to the Vista Carlsbad Trunkline located adjacent to Highway 78.

PROJECT DESCRIPTION:

Construct 1,000 feet of 8-inch diameter sewer, 2,000 feet of 10-inch diameter sewer, and 3,000 feet of 12-inch diameter sewer.

PROJECT NEED:

As Calavera Hills developed, several temporary sewage lift stations were constructed due to a lack of existing facilities downstream of the project sites. At the time, it was anticipated that the downstream properties would develop in a timely fashion negating any need for long-term maintenance of the temporary lift stations. The two listed stations are aging and in need of increased repair and maintenance. In lieu of expending the additional funds to upgrade temporary stations, staff is proposing completing the extension of the gravity lines from the stations to the existing Vista Carlsbad Trunk Line sewer. The lift stations would then be abandoned and removed.

FINANCING:

Purpose	Estimated Cost	Funding Source
Land Acquisition	$20,000	Sewer Benefit Zone Fee
Design	$80,000	Sewer Benefit Zone Fee
Construction	$403,600	Sewer Benefit Zone Fee
Total Cost =	**$503,600**	

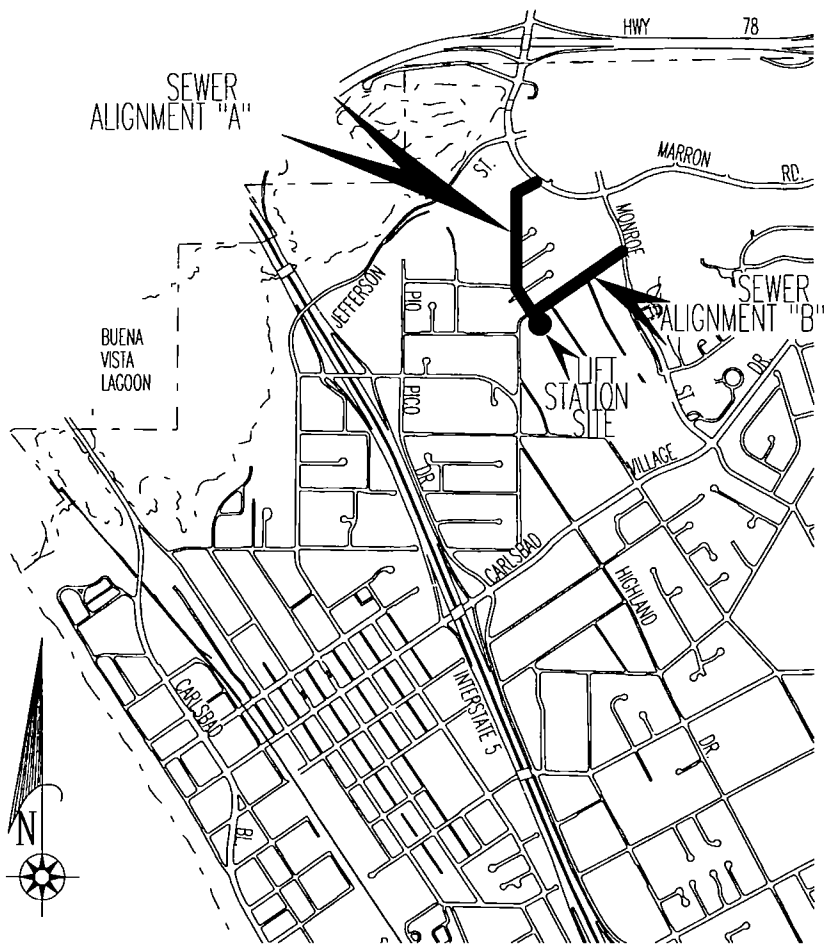
CAPITAL PROJECT DESCRIPTION

34951
PROJECT NO.

SEWER COLLECTION SYSTEM - FOREST GRAVITY SEWER

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Along Forest Avenue at Highland Drive.

PROJECT DESCRIPTION:

Abandon sewage lift station and construct gravity sewer.

PROJECT NEED:

Existing lift station does not meet current electrical and ventilation safety requirements, and wet well and mechanical equipment need replacement. Sewer pipeline eliminates need for upgrade of facility.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design	$100,000	Sewer Replacement
Construction	$700,000	Sewer Replacement
Admin/Inspection	$100,000	Sewer Replacement
Total Cost =	**$900,000**	

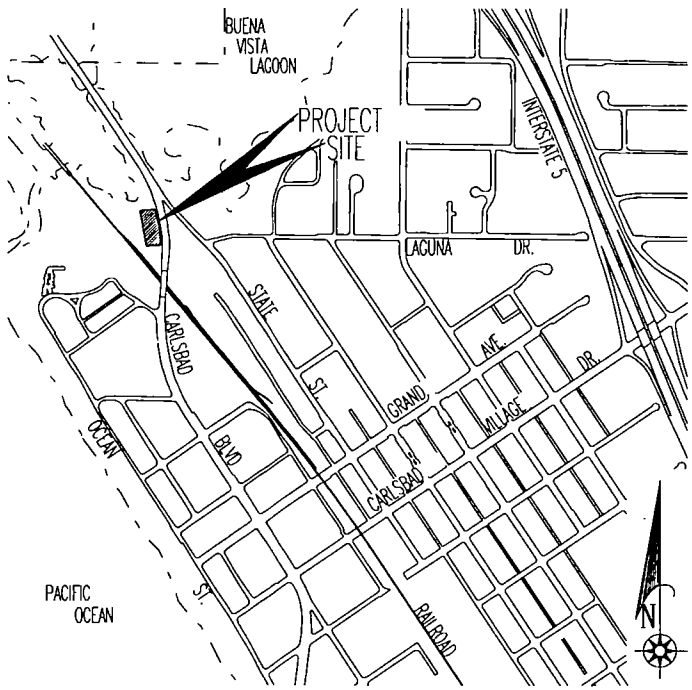
CAPITAL PROJECT DESCRIPTION

38731
PROJECT NO.

SEWER COLLECTION SYSTEM – HOME PLANT LIFT STATION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Home Plant Lift Station near Carlsbad Boulevard and northern City limits.

PROJECT DESCRIPTION:

Replace pumps, upgrade wetwell and manifold piping, relocate wetwell ventilation system, reconstruct influent sewer manhole, and replace 260 feet of 15-inch gravity sewer pipeline.

PROJECT NEED:

Field review shows that sand accumulating in the wet well is due to undersized pumps. Installing larger pumps, replacing existing pipeline, and completing the other upgrades will reduce the maintenance costs at the pump station.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design	$50,000	Sewer Replacement
Construction	$1,000,000	Sewer Replacement
Admin/Inspection	$40,000	Sewer Replacement
Total Cost =	**$1,090,000**	

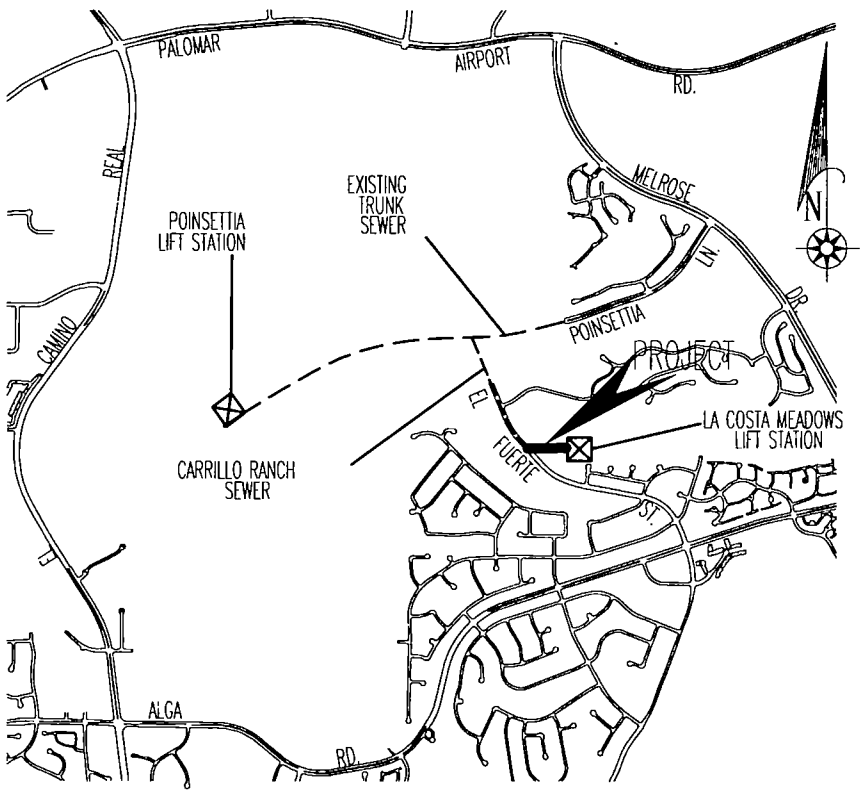
CAPITAL PROJECT DESCRIPTION

39511
PROJECT NO.

SEWER COLLECTION SYSTEM - LA COSTA MEADOWS SEWER EXTENSION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

In La Costa from the end of Chorlito Street to El Fuerte Street.

PROJECT DESCRIPTION:

Removal of the La Costa Meadows Lift Station and extension of an eight-inch gravity sewer approximately 600 feet to the new gravity sewer constructed in El Fuerte Street by the Rancho Carrillo project developer.

PROJECT NEED:

The La Costa Meadows Lift Station was constructed to temporarily divert sewage flows into existing Leucadia County Water District (LCWD) facilities. The diversion was required due to a lack of City sewer facilities located downstream of the La Costa Meadows project within the Rancho Carrillo Valley. The "diversion" agreement between the City and LCWD required the abandonment of the lift station and connection to City sewer facilities when the downstream properties were developed and new sewer facilities extended up El Fuerte Street. The needed downstream sewer collection facilities were recently constructed as part of the Rancho Carrillo project.

FINANCING:

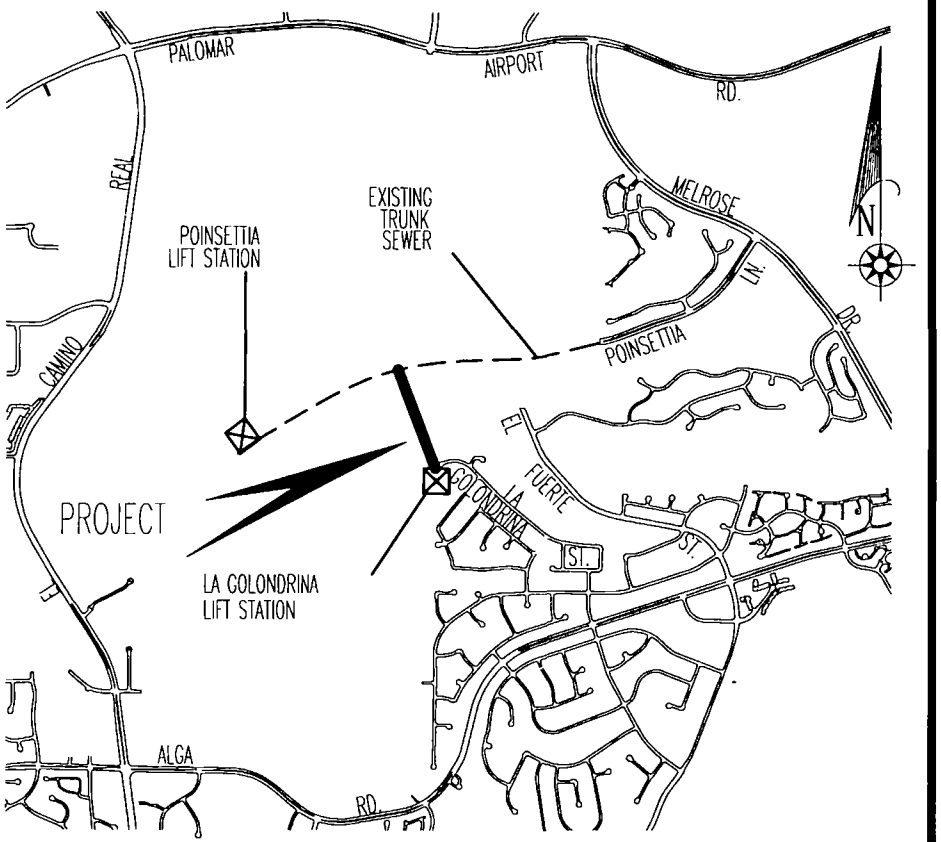
Purpose	Estimated Cost	Funding Source
Design	$25,000	Sewer Replacement
Construction	$210,000	Sewer Replacement
Admin/Inspection	$35,000	Sewer Replacement
Total Cost =	**$283,000**	

CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM - LA GOLONDRINA SEWER EXTENSION
PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

In La Costa from the end of La Golondrina Street north of Poinsettia Lane.

PROJECT DESCRIPTION:

Removal of the La Golondrina Lift Station and extension of an eight-inch diameter gravity sewer approximately 1,000 feet to the new gravity sewer constructed in Poinsettia Lane by the Rancho Carrillo project developer.

PROJECT NEED:

The La Costa Golondrina Lift Station was constructed to temporarily divert sewage flows into existing Leucadia County Water District (LCWD) facilities. The diversion was required due to a lack of City sewer facilities located downstream of the Ponderosa Homes project within the Rancho Carrillo Valley. The "diversion" agreement between City and LCWD require the abandonment of the lift station and connection to City sewer facilities when the downstream properties were developed and new sewer facilities extended up the future Poinsettia Lane. The needed downstream sewer collection facilities were recently completed as part of the Rancho Carrillo project.

FINANCING:

Purpose	Estimated Cost	Funding Source
Planning/Study	$10,000	Sewer Replacement
Land Acquisition	$5,000	Sewer Replacement
Environmental	$25,000	Sewer Replacement
Design	$60,000	Sewer Replacement
Construction	$489,000	Sewer Replacement
Admin/Inspection	$65,000	Sewer Replacement
Total Cost =	**$654,000**	

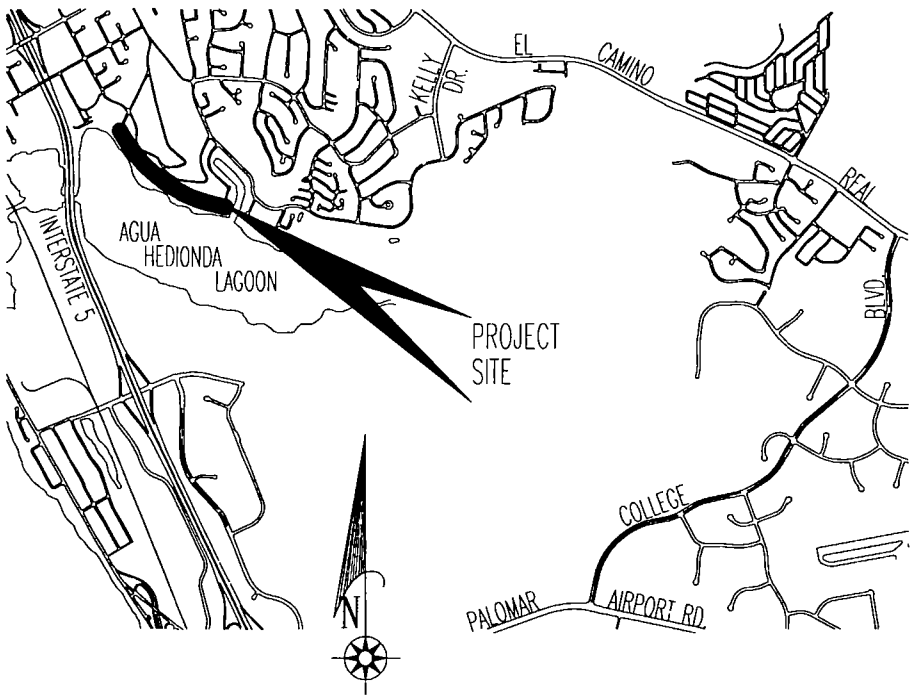
CAPITAL PROJECT DESCRIPTION

35371
PROJECT NO.

SEWER COLLECTION SYSTEM – NORTH AGUA HEDIONDA INTERCEPTOR REHABILITATION – WEST SEGMENT COVE DRIVE TO HOOVER STREET

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

North bank of Agua Hedionda Lagoon and Creek, from Cove Drive to Hoover Street.

PROJECT DESCRIPTION:

- Design and construct access road and shoreline protection wall to facilitate gravity sewer maintenance from Cove Drive to Hoover Street.
- Design and construct erosion protection for access road and existing gravity sewer where needed.
- Replace 700 linear feet of 24-inch diameter sewerline.
- Replace/rehabilitate 19 access holes.
- Conduct environmental survey and prepare Environmental Impact Report necessary to obtain permits.
- Design and construct mitigation site.

PROJECT NEED:

Implementation of the project will avoid accidental sewage spill to the lagoon and creek, reduce inflow to the sewer, and allow for maintenance vehicles to access the sewer.

FINANCING:

Purpose	Estimated Cost	Funding Source
Study	$24,599	Sewer Replacement
Environmental	$829,808	Sewer Replacement
Property Acquisition	$45,000	Sewer Replacement
Design	$199,916	Sewer Replacement
Construction	$3,078,427	Sewer Replacement
Total Cost =	**$4,177,750**	

Annual Operating Cost = $5,000

NAI_west

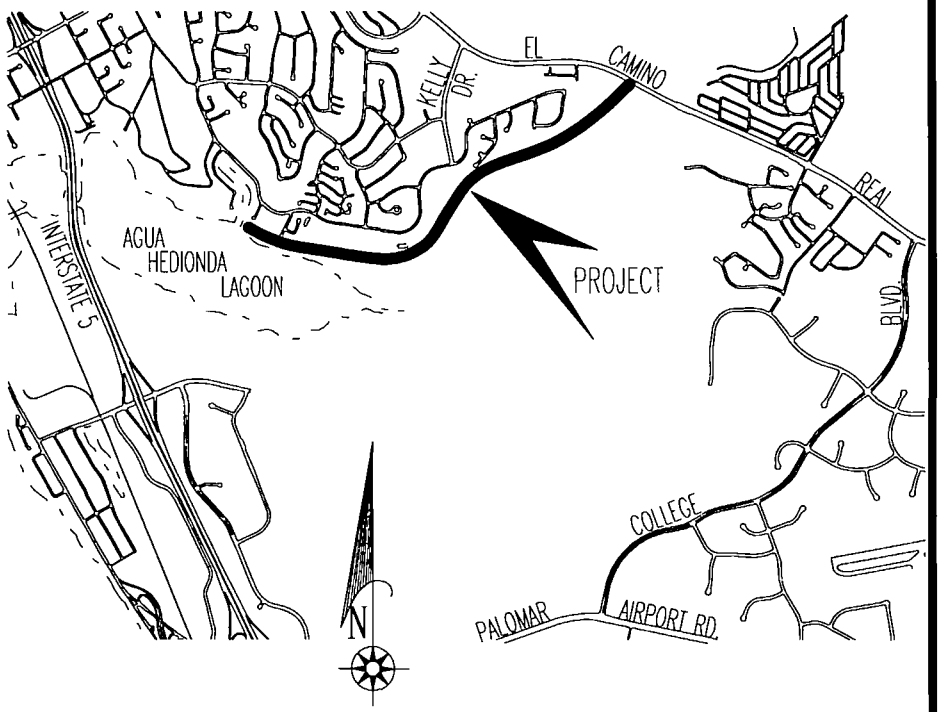
CAPITAL PROJECT DESCRIPTION

38741
PROJECT NO.

SEWER COLLECTION SYSTEM – NORTH AGUA HEDIONDA INTERCEPTOR REHABILITATION – EAST SEGMENT EL CAMINO REAL TO KELLY DRIVE

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

North bank of Agua Hedionda Lagoon and Creek, from El Camino Real and Cannon Road intersection to the Kelly Drive/Cove Drive intersection.

PROJECT DESCRIPTION:

- Replace/rehabilitate 21 access holes.
- Conduct environmental survey and prepare documents necessary to obtain permits.

PROJECT NEED:

Implementation of the project will avoid accidental sewage spill to the lagoon and creek, and reduce inflow to the sewer.

FINANCING:

Purpose	Estimated Cost	Funding Source
Environmental/Design	$9,000	Sewer Replacement
Construction	$611,000	Sewer Replacement
Total Cost =	**$620,000**	

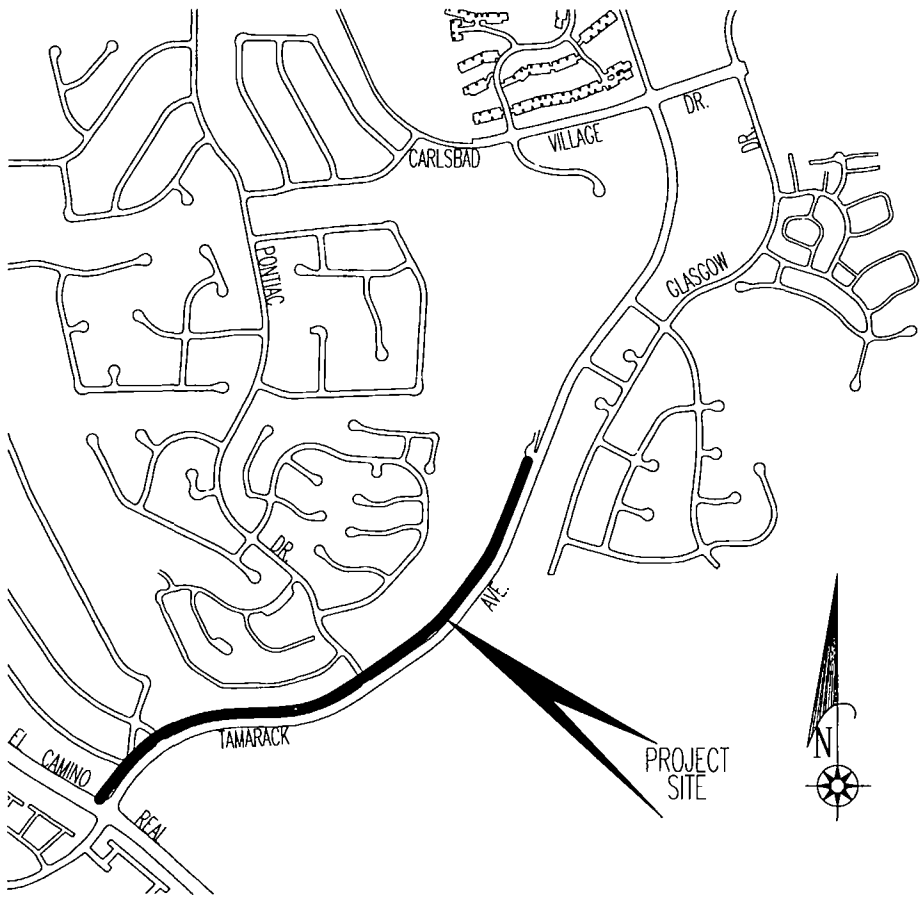
CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM - NORTH AGUA HEDIONDA TRUNK SEWER REACH NAHT1A

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Along the north side of Tamarack Avenue from El Camino Real to Calavera Hills Treatment Plant.

PROJECT DESCRIPTION:

Remove existing forcemain and construct 5,000 feet of 8-inch diameter gravity sewer pipeline.

PROJECT NEED:

When the Calavera Hills Sewer Treatment Plant was initially constructed, there was no provision for extending a gravity sewer line downstream of the plant. When the decision was made not to activate the plant, the sewer mains discharging into the plant site were connected to force main pipe which was originally intended to carry flow up to the plant from projects located downstream of the plant. The existing force main is not sloped properly to handle gravity flow and lacks the necessary access holes for proper maintenance. Removal of the existing force main and construction of a new gravity line will complete this portion of the Sewer Master Plan.

FINANCING:

Purpose	Estimated Cost	Funding Source
Planning/Study	$58,000	Sewer Replacement
Design	$100,000	Sewer Replacement
Construction	$1,523,220	Sewer Replacement
Admin/Inspection	$100,000	Sewer Replacement
Total Cost =	**$1,781,220**	

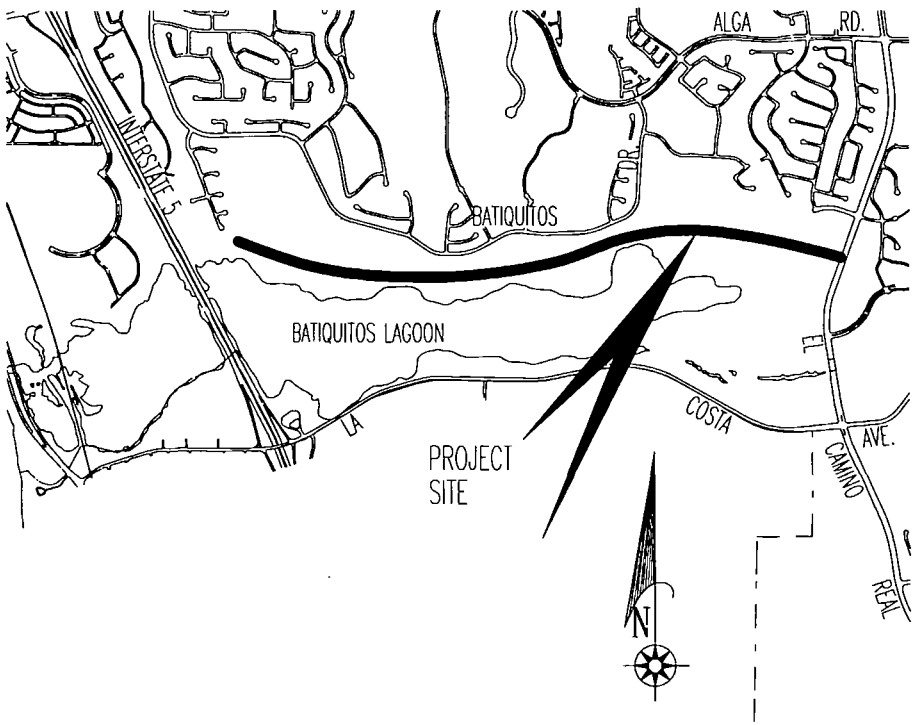
CAPITAL PROJECT DESCRIPTION

35381
PROJECT NO.

SEWER COLLECTION SYSTEM - NORTH BATIQUITOS INTERCEPTOR REHABILITATION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

North side of Batiquitos Lagoon from El Camino Real west to North Batiquitos Lift Station.

PROJECT DESCRIPTION:

During high rainfall periods, the Batiquitos Lagoon level rises to flood above the existing access road and access hole covers. The project will design a new access road to the sewer and raise access hole covers to a higher elevation where required.

PROJECT NEED:

To avoid accidental sewage spill, reduce inflow to the sewer, and allow for maintenance vehicles to access the sewer.

FINANCING:

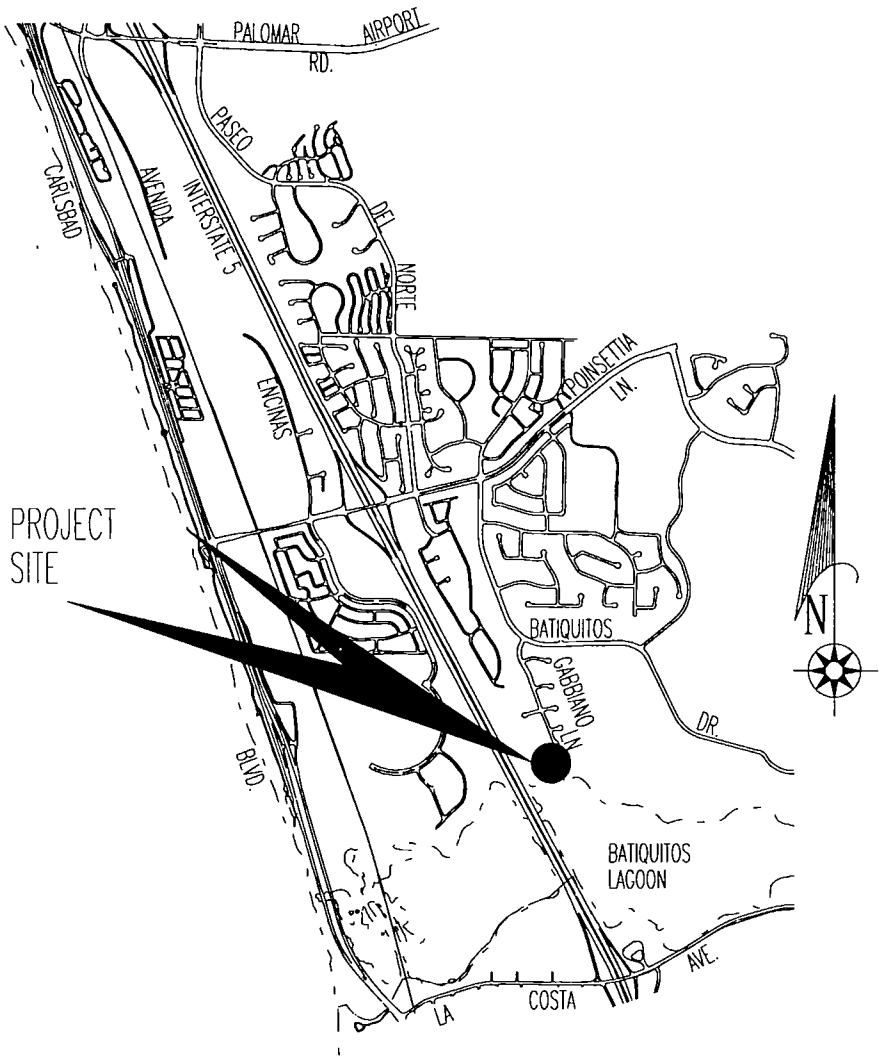
Purpose	Estimated Cost	Funding Source
Design	$270,000	Sewer Replacement
Environmental	$80,000	Sewer Replacement
Land Acquisition	$30,000	Sewer Replacement
Construction	$719,000	Sewer Replacement
Admin/Inspection	$100,000	Sewer Replacement
Total Cost =	**$1,199,000**	

CAPITAL PROJECT DESCRIPTION

38091
PROJECT NO.

SEWER COLLECTION SYSTEM - NORTH BATIQUITOS SEWAGE LIFT STATION MODIFICATIONS
PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

End of Gabbiano Lane.

PROJECT DESCRIPTION:

Replace miscellaneous equipment damaged by corrosion. Provide structural modifications to dry well and wet well. Modify mechanical and electrical systems as needed to eliminate failures. Provide color study and necessary HVAC and odor control modifications.

PROJECT NEED:

Existing structure does not allow wet well to be cleaned out. Existing structure needs openings to allow lift station pumps to be removed. Existing electrical system needs to be modified to stop pumps from locking out unnecessarily.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design	$124,880	Sewer Replacement
Construction	$429,120	Sewer Replacement
Admin/Inspection	$53,000	Sewer Replacement
Total Cost =	**$607,000**	

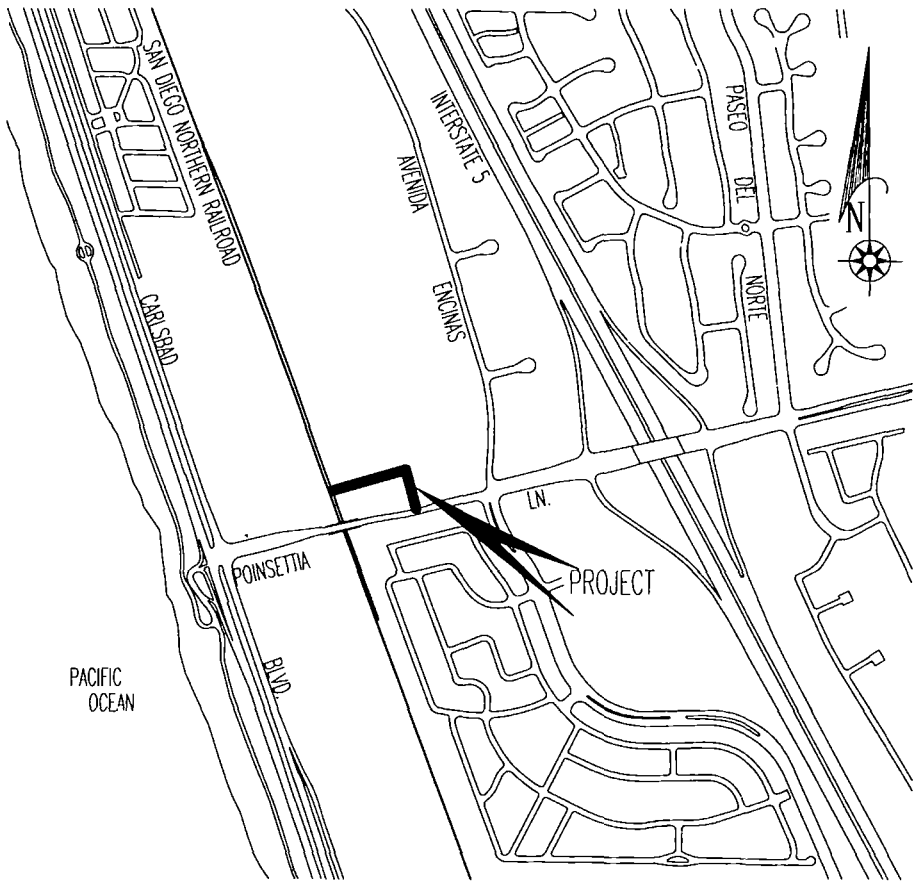
CAPITAL PROJECT DESCRIPTION

38101
PROJECT NO.

SEWER COLLECTION SYSTEM - POINSETTIA LANE SEWER RELOCATION

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Poinsettia Lane near railroad.

PROJECT DESCRIPTION:

Relocate 2,000 feet of 21" sewer.

PROJECT NEED:

The existing sewer facilities beneath the Poinsettia Lane bridge crossing the SDNRR are inaccessible and are difficult to maintain properly. The proposed widening of the Poinsettia Lane bridge improvements will exacerbate the problem. The proposed relocation project will be timed to coincide with the development of the adjacent Poinsettia Properties project to reduce costs and eliminate the need to pay for the necessary easements.

FINANCING:

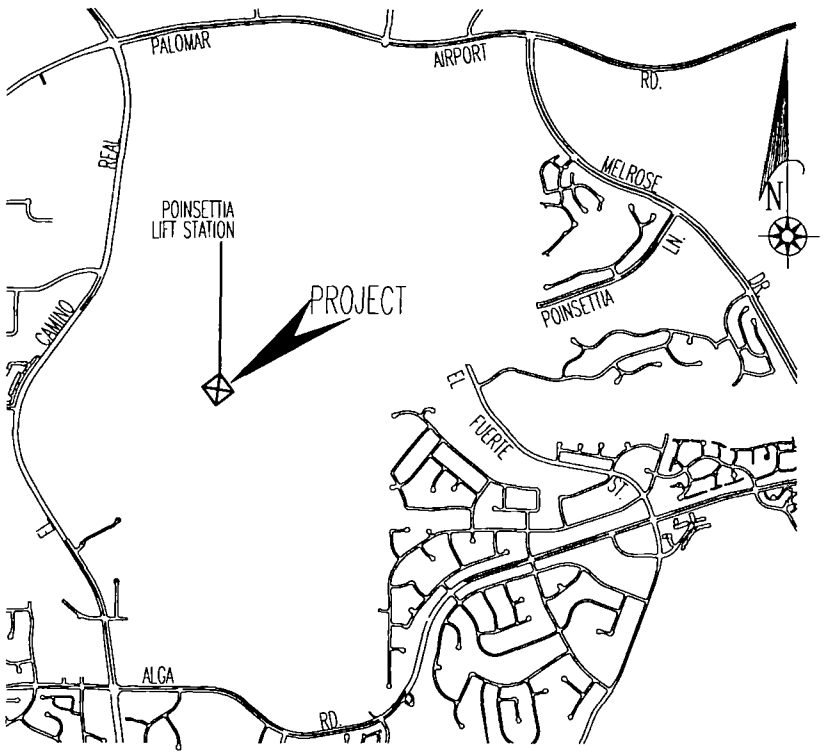
Purpose	Estimated Cost	Funding Source
Design	$100,000	Sewer Replacement
Construction	$300,000	Sewer Replacement
Total Cost =	**$400,000**	

CAPITAL PROJECT DESCRIPTION

38751
PROJECT NO.

SEWER COLLECTION SYSTEM – POINSETTIA SEWAGE LIFT STATION ODOR AND NOISE ABATEMENT
PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

2425 Poinsettia Lane – Poinsettia Sewage Lift Station.

PROJECT DESCRIPTION:

Installation of an activated carbon adsorption odor control system, including ducting, to treat foul air from the lift station wetwell to reduce corrosion and control odor emissions, and sound enclosures for outdoor fans.

PROJECT NEED:

The existing lift station emits odors that can reach future developments in close proximity to the lift station. In addition, uncovered supply and exhaust fans generate noise that reach or exceed 60 dBa at the fenceline. Control of the odors and reduction of noise will promote "good neighbor" policy and a higher level of service to adjacent residents.

FINANCING:

Purpose	Estimated Cost	Funding Source
Environmental	$6,000	Sewer Replacement
Design	$15,700	Sewer Replacement
Construction	$217,100	Sewer Replacement
Admin/Inspection	$45,000	Sewer Replacement
Total Cost =	**$283,800**	

Annual Operating Cost = $11,000

CAPITAL PROJECT DESCRIPTION

SEWER COLLECTION SYSTEM - SEWER LIFT STATION - MISCELLANEOUS REPAIRS & UPGRADES
PROJECT NAME

38401
PROJECT NO.

PROJECT LOCATION MAP:

PROJECT LOCATION:

Villas, Terramar and Gateshead sewer lift stations.

PROJECT DESCRIPTION:

Repair and upgrade various sewer lift stations throughout the City. Repairs include replacing existing malfunctioning alarm dialers at the Home Plant and Villas Sewer Lift Stations; replacing old pumps at the Terramar, Villas and Gateshead Sewer Lift Stations; replacing existing gas monitoring units, and the wet well lining at the Villas Sewer Lift Station.

PROJECT NEED:

These projects are needed to properly maintain the existing sewer lift stations and prevent potential sewage spills. Many of the existing stations are 15 years or older and require periodic upgrades and/or replacement of pumps and electrical systems to increased maintenance costs.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design	$40,000	Sewer Replacement
Construction	$1,275,380	Sewer Replacement
Admin/Inspection	$45,000	Sewer Replacement
Total Cost =	**$1,360,380**	

CAPITAL PROJECT DESCRIPTION

39271
PROJECT NO.

SEWER COLLECTION SYSTEM - SEWER LINE REFURBISHMENT/REPLACEMENT

PROJECT NAME

PROJECT LOCATION MAP:

VARIOUS LOCATIONS THROUGHOUT THE CITY

PROJECT LOCATION:

Various locations within the City sewer limits.

PROJECT DESCRIPTION:

Clean and refurbish existing sewer lines older than 30 years or replace if not able to refurbish. The sewer lines needing repair will be determined by yearly TV inspection.

PROJECT NEED:

Maintain system in good condition to avoid major problems.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Construction	$5,644,600	Sewer Replacement
Total Cost =	**$5,644,600**	

CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM – MASTER PLAN/CONNECTION FEE UPDATE
PROJECT NAME

PROJECT LOCATION MAP:

LOCATIONS THROUGHOUT THE CITY

PROJECT LOCATION:

Throughout the City.

PROJECT DESCRIPTION:

Update the City's 2003 Sewer Master Plan based on anticipated growth projections.

PROJECT NEED:

The Master Plan update will help identify the need for changes to planned facilities based on the timing of growth projections and Growth Management Standards.

FINANCING:

Purpose	Estimated Cost	Funding Source
Report/Admin	$354,200	Sewer Replacement
Total Cost =	**$354,200**	

CAPITAL PROJECT DESCRIPTION

39522
PROJECT NO.

SEWER COLLECTION SYSTEM - SEWER MONITORING PROGRAM
PROJECT NAME

PROJECT LOCATION MAP:

N/A

PROJECT LOCATION:

Citywide within the City's sewer service area.

PROJECT DESCRIPTION:

Monitor sewer flows and remaining capacities in lines and pump stations within the Carlsbad sewer service area. Perform sewer flow measurements when required. Update Sewer Master Plan and review adequacy of sewer fees as required.

PROJECT NEED:

To ensure that sewer flows do not exceed line capacity and to ensure timely upgrades of sewer systems in conformance with the Growth Management Standards.

FINANCING:

Purpose	Estimated Cost	Funding Source
Monitoring	$330,000	Sewer Connection
Total Cost =	**$330,000**	

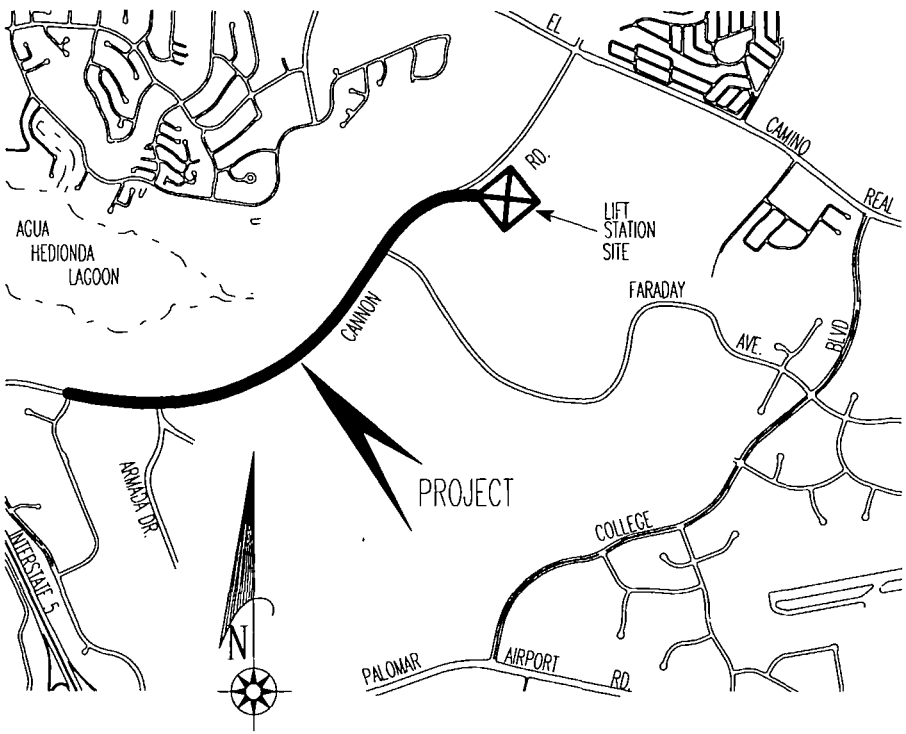
CAPITAL PROJECT DESCRIPTION

35831 & 38281
PROJECT NO.

SEWER COLLECTION SYSTEM - SOUTH AGUA HEDIONDA LIFT STATION AND FORCE MAIN

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Along Cannon Road from Armada Drive to El Camino Real.

PROJECT DESCRIPTION:

Construct 350 HP sewage lift station and force main in Cannon Road Reaches SAH1, SAH2, and SAH3.

PROJECT NEED:

To provide sewer service to those areas generally tributary to the south side of Agua Hedionda Lagoon.

FINANCING:

Purpose	Estimated Cost	Funding Source
Planning, Permitting & Design	$1,500,000	Sewer Benefit Area Fee
Construction	$7,327,415	Sewer Benefit Area Fee
Total Cost =	**$8,827,415**	

Annual Operating Cost = $435,000

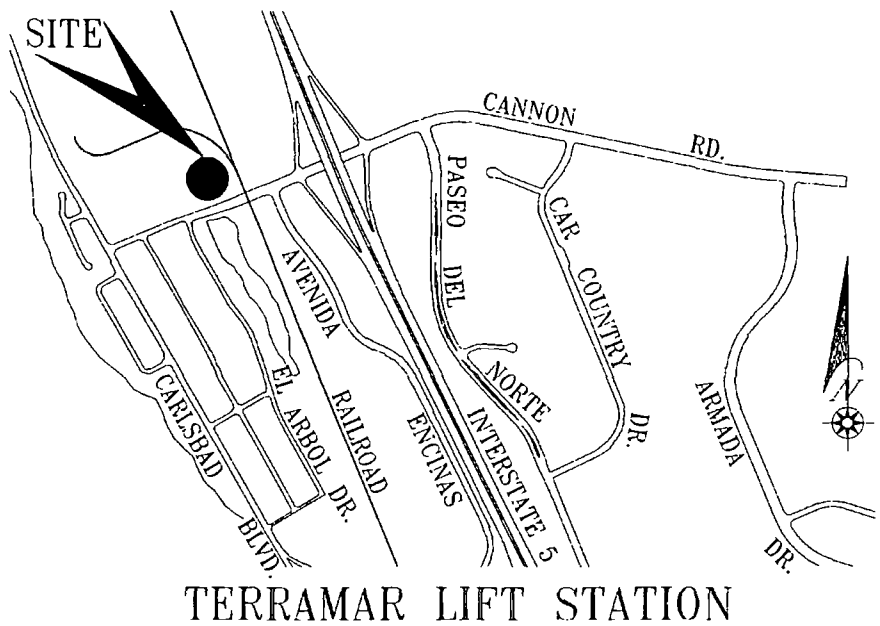
CAPITAL PROJECT DESCRIPTION

NONE
PROJECT NO.

SEWER COLLECTION SYSTEM – TERRAMAR LIFT STATION EMERGENCY GENERATOR

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

The existing lift station is located approximately 500 feet west of the railroad right-of-way on the north side of Cannon Road.

PROJECT DESCRIPTION:

Construct approximately 500 linear feet of sewer pipeline from the lift station to the Vista/Carlsbad interceptor or install a standby generator.

PROJECT NEED:

Currently, the Terramar Lift Station has no redundancy for electric power outages. Staff responds by bringing a portable generator to the site. Installation of an emergency overflow pipe system or emergency generator will diminish risk of sewer spills.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Studies	$20,200	Sewer Replacement
Construction	$154,000	Sewer Replacement
Admin/Inspection	$24,000	Sewer Replacement
Total Cost =	**$198,000**	

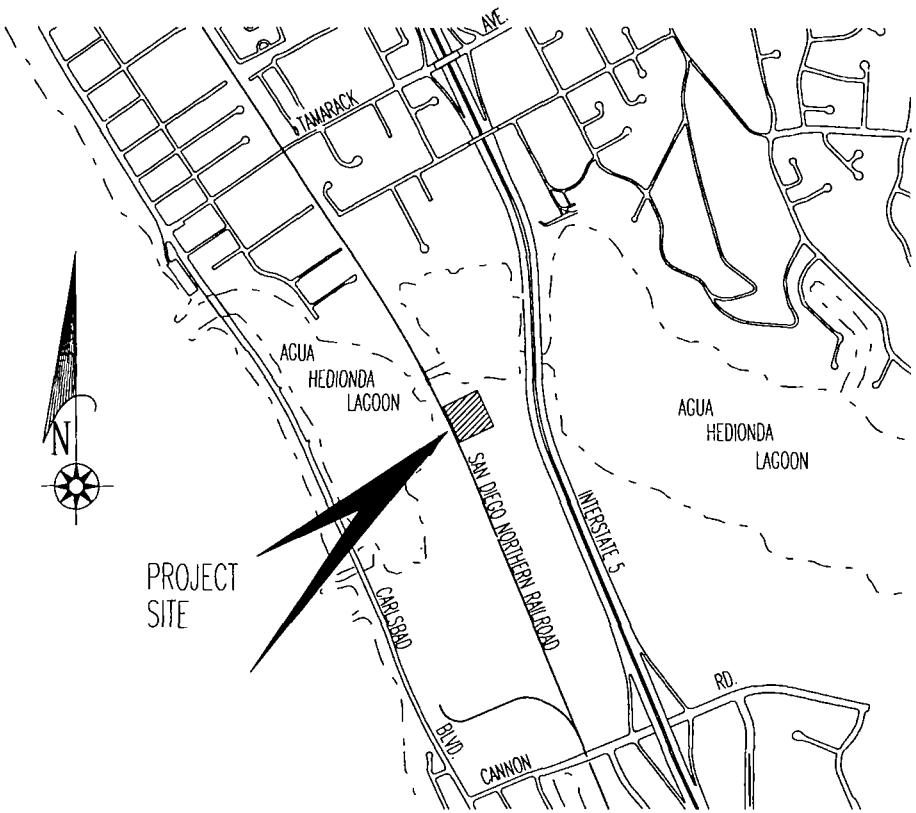
CAPITAL PROJECT DESCRIPTION

34921
PROJECT NO.

SEWER COLLECTION SYSTEM – VISTA/CARLSBAD INTERCEPTOR
AGUA HEDIONDA LIFT STATION (VC 12)

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

On the south shore of Agua Hedionda Lagoon adjacent to the east side of the railroad tracks.

PROJECT DESCRIPTION:

Upgrade existing pump station to increase capacity for buildout conditions. Replace existing pumps with larger capacity pumps and associated appurtenances. Carlsbad shares the total cost of the project with the City of Vista at a 50/50% share.

PROJECT NEED:

Required to handle sewage flows for buildout population.

FINANCING:

Purpose	Estimated Cost	Funding Source
Environmental	$508,800	Sewer Connection Fee
Design	$610,600	Sewer Connection Fee
Construction	$7,655,600	Sewer Connection Fee
Total Cost =	**$8,775,000 ***	

*Includes Vista's share of costs.

Annual Operating Cost = $149,000

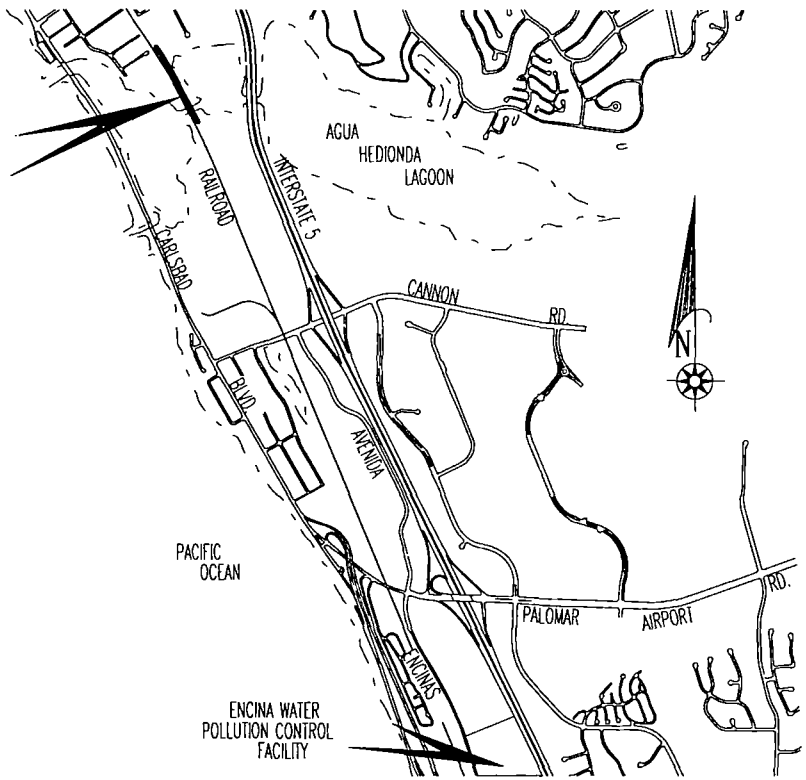
CAPITAL PROJECT DESCRIPTION

38861
PROJECT NO.

SEWER COLLECTION SYSTEM - VISTA/CARLSBAD INTERCEPTOR SEWER REACH VC11B

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Along NCTD railroad right-of-way from Olive Avenue south across Agua Hedionda Lagoon to the Agua Hedionda Lift Station.

PROJECT DESCRIPTION:

Replace existing Vista/Carlsbad Interceptor Sewer Reach VC11B and bridge (wood trestle) with 800 feet of 54-inch pipeline and a new concrete bridge. Project cost is shared with the City of Vista.

PROJECT NEED:

Required to handle buildout flows by replacing existing pipeline and the wood bridge.

FINANCING:

Purpose	Estimated Cost	Funding Source
Environmental	$100,000	Sewer Connection Fee
Design	$200,000	Sewer Connection Fee
Property Acquisition	$14,000	Sewer Connection Fee
Construction	$3,235,000	Sewer Connection Fee
Total Cost =	**$3,549,000 ***	

**Cost includes Vista's share of costs.*

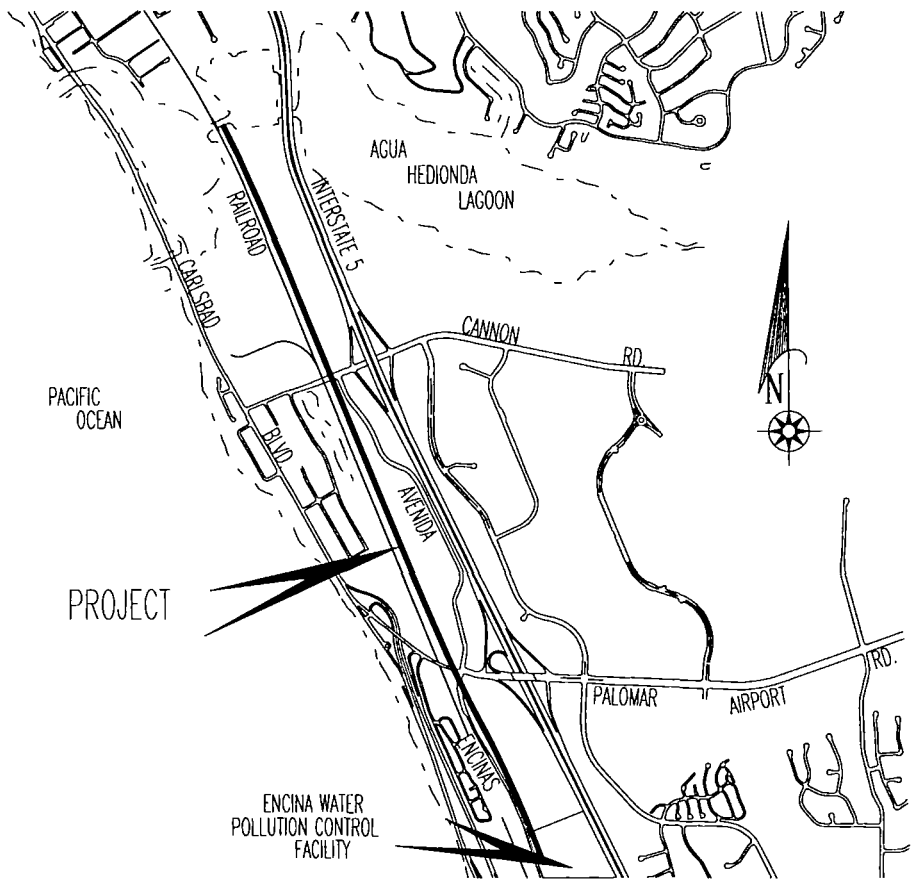
Annual Operating Cost = $568

CAPITAL PROJECT DESCRIPTION

SEWER COLLECTION SYSTEM - VISTA/CARLSBAD INTERCEPTOR SEWER REACHES VC13 TO VC15
PROJECT NAME

39491
PROJECT NO.

PROJECT LOCATION MAP:



PROJECT LOCATION:

From the Agua Hedionda Lift Station south to the Encina Water Pollution Control Facility.

PROJECT DESCRIPTION:

Replace existing Vista/Carlsbad Interceptor Sewer Reaches VC13 to VC15 with a 54" pipeline. Project cost is shared with the City of Vista.

PROJECT NEED:

Required to handle buildout flows and deteriorated pipelines.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design	$700,000	Sewer Connection Fees
Construction	$12,300,000	Sewer Connection Fees
Total Cost =	**$13,000,000 ***	

*Cost includes Vista's share.

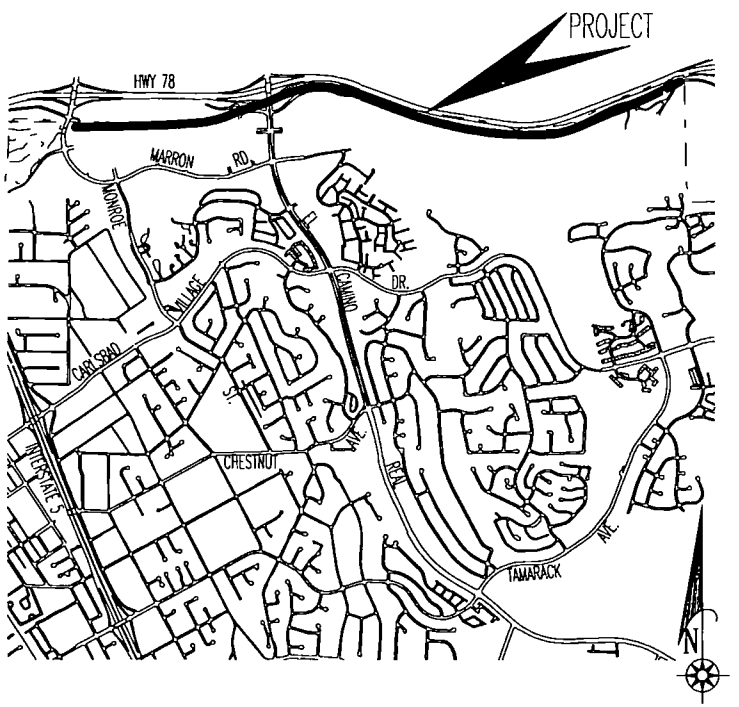
CAPITAL PROJECT DESCRIPTION

39501 & 38671
PROJECT NO.

SEWER COLLECTION SYSTEM – VISTA/CARLSBAD INTERCEPTOR SEWER REHABILITATION REACHES 1 THRU 3

PROJECT NAME

PROJECT LOCATION MAP:



PROJECT LOCATION:

Reaches 1, 2 and 3 of the Vista/Carlsbad Interceptor Sewer located south of Highway 78 from Jefferson Street to the City limits.

PROJECT DESCRIPTION:

Reaches 1, 2 and 3 of the Vista/Carlsbad (V/C) 36" Ductile Iron Interceptor and manholes have corroded significantly. VC1 and 2 will be lined with PVC and manholes will be rehabilitated. VC3 will be completely replaced. V/C interceptor is jointly owned by the City of Vista and the City of Carlsbad. Through a joint City agreement, Carlsbad is responsible for 15% of the cost for maintenance and improvements to Reaches 1, 2 and 3. The City of Vista is responsible for managing projects within these reaches. Costs below reflect the City of Carlsbad's share of project.

PROJECT NEED:

- Increase safety: Pipeline and manholes have been determined to be in poor condition. Risk of pipeline failure and sewage spill in environmentally sensitive area exists.
- Unmet needs: Manholes are currently unlined. Concrete is exposed to hydrogen sulfide environment. Lining will increase longevity of the manhole. Lining of pipeline will reduce ground water infiltration into the wastewater system.

FINANCING:

Purpose	Estimated Cost	Funding Source
Design/Construction	$830,975	Sewer Replacement
Construction	$2,570,000	Sewer Connection
Total Cost =	**$3,400,975 ***	

*Cost includes Administration and Inspection costs.