



● **Board of Directors**
Engineering and Operations Committee

October 13, 2009 Board Meeting

8-1

Subject

Appropriate \$12.1 million; and award \$9,085,000 contract to Sukut Construction, Inc., for construction of the Diemer North Access Road (Approp. 15380)

Description

This action authorizes construction of the Diemer North Access Road. The addition of this road will provide a secondary emergency access route to and from the Diemer plant. The road will enhance plant security, provide fire break capabilities for the plant, enhance public safety within Chino Hills State Park (CHSP), and provide a secondary operational route to the Diemer plant.

Timing and Urgency

Constructing the Diemer North Access Road at this time presents a unique opportunity from an environmental and institutional perspective, and provides Metropolitan's best opportunity to construct a second plant access given encroaching regional development. The project will also aid in redistributing traffic during construction of the Diemer ozonation facilities, improving Metropolitan's ability to manage day-to-day operational traffic with ongoing construction traffic.

This project has been reviewed with Metropolitan's updated Capital Investment Plan (CIP) prioritization criteria, and is categorized as an Infrastructure Reliability Project. This project is budgeted within Metropolitan's CIP for fiscal year 2009/10.

Background

The Robert B. Diemer Water Treatment Plant was placed into service in 1963. Since that time, plant personnel have relied on a single entrance gate for primary access to the plant. This main entrance gate, located on Valley View Circle in the city of Yorba Linda, is situated in a residential neighborhood. A second unimproved plant entrance is located on Carbon Canyon Road, providing limited access via an easement through CHSP. This easement, commonly known as Telegraph Canyon Trail, provides access to Metropolitan's north solids lagoons and to existing Metropolitan infrastructure within CHSP. This easement cannot presently be used to access the main Diemer plant.

In mid-2005, the California Department of Parks and Recreation (State Parks) approached Metropolitan regarding construction of the future CHSP visitor center to be located along Carbon Canyon Road, at the entrance to CHSP on Telegraph Canyon Trail in the city of Brea. As Telegraph Canyon Trail is shared by both Metropolitan and State Parks (as a joint-use trail and roadway easement), both parties acknowledged the opportunity and benefits of removing Diemer plant traffic from Telegraph Canyon Trail, thereby separating Metropolitan traffic from the park's hikers, cyclists, and equestrian trail users. As a result of this concurrence, staff and State Parks negotiated roadway improvements and a property exchange on State Parks lands, which would facilitate implementation of a secondary access road to the Diemer plant.

In December 2005, Metropolitan's Board authorized preliminary design of the Diemer North Access Road and approved Phase I of the three-phase project. In February 2008, Metropolitan's Board authorized final design for Phases II and III of the Diemer North Access Road. **Attachment 2** shows the alignment of the Diemer North

Access Road within CHSP and the three phases of improvements. Table 1 summarizes the three phases and the current status of each phase.

**Table 1
Diemer North Access Road
Phases of Improvements**

Phase	Description	Board Authorization	Current Status
I	Improvements to intersection of Telegraph Canyon Trail and Carbon Canyon Road to provide safe access to Metropolitan’s existing easement on Telegraph Canyon Trail.	Phase I State Parks MOU authorized and funded (Dec. 2005)	Phase I State Parks MOU was executed in Nov. 2007 Currently being constructed by State Parks
II	Relocation of Metropolitan’s access route on State Parks’ property, with an exchange of existing easements to separate Metropolitan traffic from the park’s hikers, cyclists and equestrians as a safety measure.	Phase II State Parks MOU authorized, and preliminary design of Phase II improvements authorized (Aug. 2006) Final EIR for Phase II improvements certified, final design of Phase II improvements authorized, and funding provided for Phase II State Parks MOU (Feb. 2008) Award construction contract for Phase II improvements (Current action)	Phase II State Parks MOU was executed in Nov. 2007 Preliminary design of Phase II improvements is complete Final design for Phase II improvements is complete
III	Development of the North Access Road on Metropolitan property, from the Diemer solids lagoons to the main plant level for emergency and operational response needs.	Preliminary design of Phase III improvements authorized (Aug. 2006) Final EIR for Phase III improvements certified, and final design of Phase III improvements authorized (Feb. 2008) Award construction contract for Phase III improvements (Current action)	Preliminary design of Phase III improvements is complete Final design for Phase III improvements is complete

Diemer North Access Road, Phases II and III – Construction (\$12,100,000)

Specifications No. 1629 for the Diemer North Access Road was advertised for bids on July 23, 2009. As shown in [Attachment 3](#), eleven bids were received and opened on September 9, 2009. The apparent low bidder, Metro Builders & Engineers Group, LTD., requested to be relieved from its bid in accordance with the California Public Contract Code due to an inadvertent clerical error made during the bid process, which materially changed its bid. Upon review of the request and documentation submitted, Metropolitan released Metro Builders & Engineers from its bid.

The second low bid from Sukut Construction, Inc., in the amount of \$9,085,000, complies with the requirements of the specifications. The nine higher bids ranged from approximately \$9.46 million to \$13.3 million. The engineer's estimate was \$10,916,000. For this contract, Metropolitan has established a Small Business Enterprise (SBE) participation level of 20 percent. Sukut Construction, Inc., has committed to meet this level of participation.

This action appropriates \$12.1 million and awards a \$9,085,000 contract to Sukut Construction, Inc. In addition to the amount of the contract, the requested funds include: \$1.1 million for construction inspection; \$225,000 for installation of security-related equipment; \$325,000 for technical support by the design consultants during construction; \$400,000 for environmental monitoring support; \$585,000 for permitting and agency coordination, oversight of consultants, preparation of as-builts, and project management; and \$380,000 for remaining budget. Technical support during construction is recommended to be performed by RBF, Inc. and GeoPentech, as discussed below. Environmental support is recommended to be performed by LSA, Inc.

Metropolitan staff will perform construction inspection of the contract. The anticipated cost of inspection as a percentage of the total construction cost is approximately 11.8 percent. Engineering Services' goal for inspection of contracts with construction cost greater than \$3 million is 9 to 12 percent.

Installation of security-related equipment is recommended to be performed by Johnson Controls, Inc. under an existing board-authorized agreement. Johnson Controls was initially selected in 2003 through a competitive process via Request for Proposals No. 600, and was subsequently awarded a security-related installation agreement in 2007. Johnson Controls will design, procure and install security-related equipment, and will integrate the new entrance gate with the existing plant security system. Due to the specialized nature of the work, Metropolitan did not establish an SBE participation level for this agreement. No amendment to the existing Johnson Controls, Inc. agreement is required for this work. The estimated cost for Johnson Controls' services is \$225,000.

Specialized Professional Services (No Action Required)

Technical support for construction of the bridge crossing of Carbon Canyon Creek will be provided by the project's design consultant, RBF, Inc., under an existing board-authorized agreement. RBF was selected through a competitive process via Request for Proposals No. 575. As the engineer of record, RBF will review submittals, respond to requests for information, and advise inspection staff on technical issues as they may arise. For this agreement, Metropolitan has established an SBE participation level of 20 percent. No amendment to the existing RBF agreement is required for this work. The estimated cost for RBF's services is \$175,000.

Technical support for construction of the roadway's retaining wall systems will be provided by the project's geotechnical consultant, GeoPentech, under an existing board-authorized agreement. GeoPentech was selected through a competitive process via Request for Proposals No. 761. GeoPentech will assist Metropolitan staff in the review of submittals, respond to requests for information, and advise inspection staff on geotechnical issues. For this agreement, Metropolitan has established an SBE participation level of 20 percent. No amendment to the existing Geopentech agreement is required for this work. The estimated cost for GeoPentech's services is \$150,000.

Environmental Monitoring – Amendment to Existing Agreement with LSA Associates

LSA Associates prepared the environmental permit applications for the Diemer North Access Road Project, and is recommended to provide follow-up environmental monitoring services during construction. The project's environmental documentation and various regulatory permits require that Metropolitan implement, monitor, and report on numerous mitigation measures. The follow-up environmental services include: monitoring of general construction activities for environmental mitigation measures and permit compliance; providing technical expertise on air quality, biology, cultural resources, noise, traffic, water quality, and plant restoration issues; and reporting on the monitoring program in compliance with the California Environmental Quality Act and all other environmental permits acquired for this project. LSA was selected through a competitive process (Request for Qualifications No. 581) and its environmental activities were performed under a board-authorized agreement.

Amendment of the existing LSA agreement is consistent with the agreement's scope of work. Due to the specialized nature of the work, Metropolitan did not establish an SBE participation level for this agreement.

This action authorizes an increase of \$400,000 to the existing agreement with LSA Associates, for a new not-to-exceed total of \$650,000, to provide environmental monitoring support during construction of the Diemer North Access Road project.

Summary

This action appropriates \$12.1 million, awards a \$9,085,000 contract to Sukut Construction, Inc., to construct the Diemer North Access Road, and authorizes an increase of \$400,000 to the existing agreement with LSA Associates. This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds have been included in the fiscal year 2009/10 capital budget. See [Attachment 1](#) for the Financial Statement and [Attachment 4](#) for the Location Map.

This project is consistent with Metropolitan's goals for sustainability by enhancing the reliability of the Diemer plant, in order to maintain reliable water deliveries in the future.

Project Milestones

January 2011 – Completion of construction

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The environmental effects from the construction of the proposed Diemer North Access Road project were evaluated in the Robert B. Diemer Filtration Plant North Access Road Project Final Environmental Impact Report (Final EIR), which was certified by the Board on February 10, 2008. The Board also approved the Findings of Fact (Findings), the Statement of Overriding Considerations, (SOC), the Mitigation Monitoring and Reporting Program (MMRP), and the project itself. The current board action is solely based on authorizing construction and related agreements, and not on any changes to the approved project itself. Hence, the previous environmental documentation acted on by the Board in conjunction with the proposed action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the certified Final EIR, Findings, SOC, and MMRP, and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination and

- a. Appropriate \$12.1 million;
- b. Award \$9,085,000 contract to Sukut Construction, Inc., for construction of the Diemer North Access Road; and
- c. Authorize an increase of \$400,000 to the existing agreement with LSA Associates, for a new not-to-exceed total of \$650,000.

Fiscal Impact: \$12.1 million of budgeted funds under Approp. 15380

Business Analysis: This option will enhance reliability and continued operation of the Diemer plant by providing an emergency secondary access road, and will improve the safety and security of the Diemer plant's north boundary by providing an alternate access for patrol, security monitoring, and emergency response purposes. This option will improve public safety within Chino Hills State Park (by eliminating Metropolitan-based traffic on Telegraph Canyon Trail) and may accommodate construction traffic for a three-year period after completion of the North Access Road. This option will improve safety at the entrance to the North Access Road from Carbon Canyon Road, by providing a safer intersection for Metropolitan-based traffic.

Option #2

Do not award the construction contract and re-advertise in an attempt to receive more favorable bids.

Fiscal Impact: None

Business Analysis: This option may or may not result in a lower bid, and would delay construction of the emergency secondary access to the Diemer plant.

Staff Recommendation

Option #1



Roy L. Wolfe
Manager, Corporate Resources

9/22/2009

Date



Jeffrey Nightlinger
General Manager

9/28/2009

Date

Attachment 1 – Financial Statement

Attachment 2 – Chino Hills State Park Easement Map

Attachment 3 – Abstract of Bids

Attachment 4 – Location Map

BLA #6824

Financial Statement for Diemer Water Treatment Plant Improvements Program

A breakdown of Board Action No. 17 for Appropriation No. 15380 for the Diemer North Access Road project* is as follows:

	Previous Total Appropriated Amount (Dec. 2008)	Current Board Action No. 17 (Oct. 2009)	New Total Appropriated Amount
Labor			
Studies and Investigations	\$ 1,419,500	\$ -	\$ 1,419,500
Final Design	1,748,900	-	1,748,900
Owner Costs (Program mgmt., permitting, envir. support)	5,681,756 **	555,000	6,236,756
Construction Inspection and Support	4,542,966	1,100,000	5,642,966
Metropolitan Force Construction	1,944,268	-	1,944,268
Materials and Supplies	785,416	-	785,416
Incidental Expenses	293,767	30,000	323,767
Professional/Technical Services	9,228,375 **	-	9,228,375
RBF, Inc.	-	175,000	175,000
GeoPentech	-	150,000	150,000
Johnson Controls	-	225,000	225,000
LSA	-	400,000	400,000
Equipment Use	96,608	-	96,608
Contracts	58,158,300 ***	-	58,158,300
North Access Road	-	9,085,000	9,085,000
Remaining Budget	1,821,744 **, ***	380,000	2,201,744
Total	\$ 85,721,600	\$ 12,100,000	\$ 97,821,600

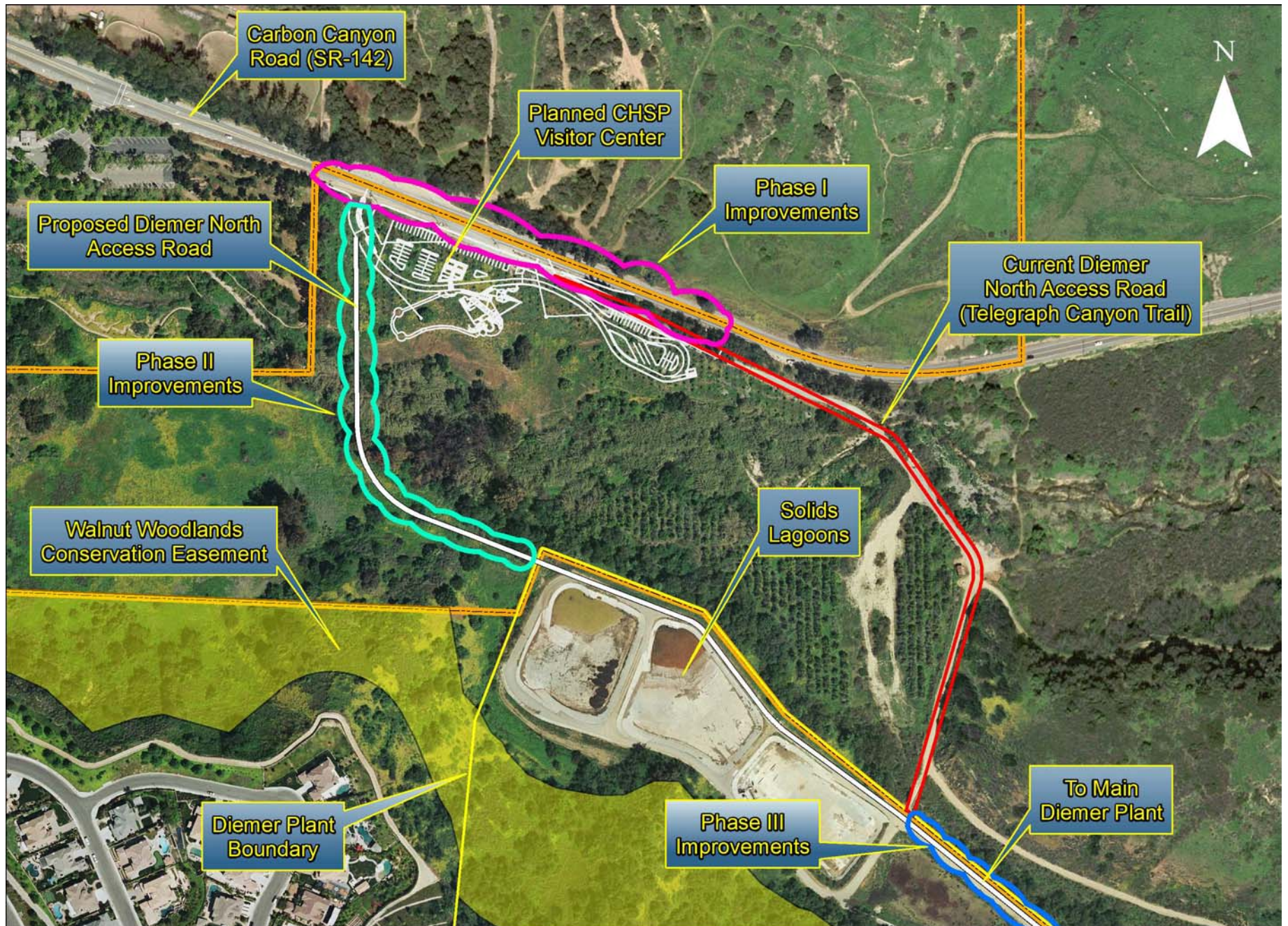
Funding Request

Program Name:	Diemer Water Treatment Plant Improvements Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15380	Board Action No.:	17
Requested Amount:	\$ 12,100,000	Capital Program No.:	15380-I
Total Appropriated Amount:	\$ 97,821,600	Capital Program Page No.:	E-25
Total Program Estimate:	\$ 144,100,000	Program Goal:	I – Infrastructure Reliability

* The total amount expended to date on the Diemer North Access Road project is approximately \$5,712,000.

** Reflects reallocation of \$97,612 from projects completed under budget to Remaining Budget.

*** Reflects reallocation of \$167,000 from Remaining Budget to Contracts for installation of a new 4kV grounding system resistor at the Diemer plant 66kV electrical substation.



The Metropolitan Water District of Southern California

Abstract of Bids Received on September 9, 2009 at 2:00 P.M.

Specifications No. 1629

Diemer North Access Road Project

The Diemer North Access Road project is a 1.25-mile secondary access road partially located within the Diemer Plant property and partially within Chino Hills State Park (CHSP) property. The road will begin south of SR-142, in the city of Brea, directly adjacent to the new entrance of the CHSP Visitor Center; will cross State Parks lands and Carbon Canyon Creek; and will connect to the existing Diemer entrance road located on the southeast side of the Diemer plant. The fully-constructed roadway will be 28-feet in width. The road will be paved and have guard rails, and will include storm drains, a water line to accommodate fire hydrants and irrigation, buried conduit supporting electrical and utility lines, and a system of earth-retaining structures.

Engineer's Estimate: \$10,916,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE**
Metro Builders & Engineers Group, Ltd., Newport Beach, CA*	\$ 8,836,100	N/A	N/A	N/A
Sukut Construction, Inc., Riverside, CA	\$ 9,085,000	\$3,236,000	35.62%	Yes
Mountain Movers Engineering Contractors, San Marcos, CA	\$ 9,460,000	N/A	N/A	N/A
Los Angeles Engineering, Inc., Covina, CA	\$ 10,850,000	N/A	N/A	N/A
Shimmick Construction Company, Inc./Obayashi Corporation JV, Oakland, CA	\$ 10,925,000	N/A	N/A	N/A
J.F. Shea Construction, Inc., Riverside, CA	\$ 11,074,000	N/A	N/A	N/A
Flatiron West, Inc., San Marcos, CA	\$ 11,333,777	N/A	N/A	N/A
TC Construction Co., Inc., Santee, CA	\$ 11,555,000	N/A	N/A	N/A
SEMA Construction, Inc., Lake Forest, CA	\$ 12,277,000	N/A	N/A	N/A
Griffith Company, Santa Ana, CA	\$ 12,990,800	N/A	N/A	N/A
Riverside Construction Company, Inc., Riverside, CA	\$ 13,287,469	N/A	N/A	N/A

* Metro Builders & Engineers Group, Ltd., requested to be relieved from its bid in accordance with the California Public Contract Code due to an inadvertent clerical error, which materially changed its bid for the project. Upon review of the request and documentation submitted, Metropolitan released Metro from its bid.

**SBE (Small Business Enterprise) participation was established at 20% for this contract

Robert B. Diemer Water Treatment Plant

