



# AGENDA ITEM

## Public Utilities Commission

*City and County of San Francisco*



DEPARTMENT Infrastructure AGENDA NO. \_\_\_\_\_  
MEETING DATE September 23, 2008

### SUMMARY OF PROPOSED COMMISSION ACTION

**Approve the selection of PCL Civil Constructors Inc.; award** Water Enterprise Water System Improvement Program-Funded Agreement No. DB-116, Tesla Treatment Facility, a Design-Build Agreement (DBA) for design, construction, and commissioning of a new treatment facility at the existing Tesla Portal site; and **authorize the General Manager of the San Francisco Public Utilities Commission to execute** a DBA with PCL Civil Constructors Inc. consistent with the requirements of Section 6.61(G) of the San Francisco Administrative Code for an amount up to \$81,420,562.

### DESCRIPTION OF AGREEMENT ACTION

Tesla Portal is in unincorporated San Joaquin County. Work consists of designing and building including all labor and materials of a new 315-MGD treatment facility. Specifically, the facility's components include:

- Ultraviolet (UV) disinfection facility;
- Chemical feed facility (sodium hypochlorite, carbon dioxide, and hydrofluosilicic acid);
- Connections to the existing pipelines upstream and downstream of the proposed treatment facility;
- A new operations building containing an office/control room, a water quality laboratory, maintenance/spare parts room(s), locker rooms, and other related work space;
- A separate building/enclosure to house chemical storage tanks and feed equipment. Other site structures for a new electrical supply, standby generator(s), an uninterruptible power supply (UPS), and vaults for chemical injection and valve access; and
- Miscellaneous site improvements, including new access roads, drainage and pipeline blowoff containment basins, and fencing.

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#### APPROVAL:

PERFORMING ORGANISATION Infrastructure

FINANCE Todd Rydstrom

COMMISSION SECRETARY Michael Housh

GENERAL MANAGER Ed Harrington

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Estimated Cost of Services

The cost of this DBA is for an amount up to \$81,420,562, which will include both Design and Construction. That amount is below the Engineer's Estimate for both Design and Construction of \$88,630,787.

Summary Of Project Funds	
Planning	\$1,511,139
Environmental Review	\$1,589,332
Right of Way	\$ 56,400
Design - Others	\$ 3,132,853
Design portion of the Design Build Contract	\$ 7,449,000
Construction portion of the Design Build Contract	\$73,971,562
Contingency for Design Build Contract	\$8,142,056
Environmental Avoidance & Mitigation Cost	\$ 110,900
Environmental Construction Compliance	\$ 675,286
Arts Commission Fees	\$ 271,000
Security Cost	\$ 2,788,000
Legal Support	\$ 187,000
Construction Management	\$ 6,429,157
Project Management	\$2,877,196
Operations Support	\$937,680
Engineering Support During Construction	\$1,809,585
Project Fund Balance (Underrun)	\$7,466,168.00
<b>Total Project Funding</b>	<b>\$119,404,314.00</b>

Funding

Funding in the amount of \$7,449,000 for both Phase 1, Design Engineering, Procurement Preparation, and Limited Down Payments for Long Lead Items, and Phase 2A, Final Design, Long Lead Item Procurement and Fabrication of Material, is available from WSIP CUW384, Tesla Treatment Facility project.

The remaining funding of the DBA in the amount of \$73,971,562 for both Phase 2B, Construction and Phase 3, Commissioning will be requested through a formal budget request to the SFPUC and the Board of Supervisors, after the Planning Commission certifies the project Final Environmental Impact Report (FEIR), and the Commission and the Board review and consider the FEIR and determine whether to

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**Department:** Infrastructure

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**Agreement:** DB-116, Tesla Treatment Facility

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proceed. This action shall not be considered an approval of the project. Construction work will not begin until environmental review of the project is complete and this Commission approves or approves with modifications the project. The DBA reserves the SFPUC's right to, among other things, modify the project to mitigate any significant environmental impacts or terminate the contract if the SFPUC elects not to proceed with the project based on information generated by the environmental review process.

#### Environmental Determination

The project Draft Environmental Impact Report (DEIR), Planning Department Case No. 2007.0427E, was published on August 25, 2008. Public hearings were held at San Joaquin County in Tracy, CA. on September 16, 2008 and in San Francisco County at the regularly scheduled San Francisco Planning Commission meeting on September 18, 2008. The public comment period will end on October 8, 2008 and the FEIR is scheduled to be certified on or about December 18, 2008.

#### Schedule

Design Engineering, Procurement Preparation, and Limited Down Payments for Long Lead Items work under this DBA will commence upon certification of the agreement and issuance of a Notice To Proceed (NTP) with Phase 1. Final Design, Long Lead Item Procurement and Fabrication of Material work under this DBA will commence upon issuance of NTP for Phase 2A and after Project EIR certification.

The time allowance for construction work under this DBA is 821 calendar days from NTP for Phase 2B, Construction to substantial completion and 1 year, or 365 calendar days from substantial completion to final completion for Phase 3, Commissioning.

#### Liquidated Damages

The contract provides for assessment of progressively increasing liquidated damages for delay in the achievement of substantial completion within the specified time allowance: \$8,000 per day for the first 30 calendar days; \$12,000 per day for calendar days 31-60; \$15,000 per day for calendar days 61-90; and \$20,000 for each calendar day of delay in excess of 90. Additionally the contract provides for assessing liquidated damages of \$1,000 per calendar day of avoidable delay for failure to complete punch list work on site and \$20,000 per calendar day of avoidable delay for failure to complete work under the DBA and submit the closeout documents in the specified time allowance.

The contract also provides for assessing liquidated damages of \$55,000 per calendar day of avoidable delay for failure to complete the critical pipeline connection work during the 36 day shutdown of the Hetch Hetchy Aqueduct.

#### Compliance with Affirmative Action Requirement

HRC subconsulting/subcontracting goals of 7% LBE participation of the total value of the entire contract has been established and approved for this DBA by the HRC Contract Compliance Officer (CCO) assigned to the SFPUC.

Recommendation

SFPUC staff recommends that the Commission adopt the attached resolution.

**CONTEXT OF THIS ACTION**

Because of its purity, Hetch Hetchy is an unfiltered source of drinking water. It currently requires only pH-adjustment at Rock River Lime Plant for corrosion control and disinfection at Tesla Portal, using sodium hypochlorite in accordance with Environmental Protection Agency (EPA) regulations. However, new requirements of the EPA's Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) require that unfiltered supplies utilize redundant disinfection processes for Cryptosporidium inactivation. Compliance with the LT2ESWTR is required by March 30, 2012.

The Tesla Treatment Facility Project calls for construction of a new 315-MGD treatment facility utilizing ultraviolet (UV) disinfection (advanced disinfection technology), and a new chemical feed facility (sodium hypochlorite, carbon dioxide, and, hydrofluorosilicic acid) at the existing Tesla Portal site. It is envisioned that the proposed project will also include final design and construction of the connections to the existing pipelines upstream and downstream of the proposed UV treatment facility, a new operations building containing an office/control room, a water quality laboratory, maintenance/spare parts room(s), locker rooms, and other related work space. A separate building/enclosure will house chemical storage tanks and feed equipment. Other site structures will be constructed for a new electrical supply, standby generator(s), an uninterruptible power supply (UPS), and vaults for chemical injection and valve access. Site work will include new access roads, drainage and pipeline blowoff containment basins, and fencing.

Total Engineer's estimate for the Construction costs were estimated at \$83,972,000 and design costs were estimated at \$4,658,787 for a total Engineer's Estimate of \$88,630,787.

Due to the large scale and unique complexities of the design and construction required for the Tesla Treatment Facility, the Commission under Resolution 08-0027 dated February 26, 2008 authorized the General Manager of the SFPUC to advertise the RFP for DB- 116, Tesla Treatment Facility and allow Design-Build Lump Sum (DBLS) as an Alternative Project Delivery method for the WSIP Project CUW384, Tesla Treatment Facility. The Commission further resolved that the DBLS project delivery method approach was in the best interests of the SFPUC and would provide the best overall value to the City. Also on April 7, 2008 approval was obtained by the Civil Service Commission to proceed with the advertisement of the request for proposals, (RFP).

Under the DBLS project delivery approach, staff prepared an RFP including a preliminary design document that defines the project scope, constraints, quality standards, and other bid documents that establish the required qualifications for

the Design-Build (DB) firm or team. The Tesla Treatment Facility RFP was advertised on April 8, 2008 to provide the opportunity for the three pre-qualified teams to propose on the design, construction and commissioning of the project. The SFPUC received final proposals on August 18, 2008 from the following DB firms:

- CDM/Monterey Mechanical JV
- Black & Veatch/Schimmick Construction JV
- PCL Civil Constructors Inc.

Oral Interviews were held on September 9, 2008 for the written evaluation portion of the RFP and bid packages for the cost portion of the RFP were unsealed on September 10, 2008. The scores for both the written evaluation and cost portion were tallied and the results were posted on September 15, 2008. The successful team based on the written evaluation, oral interview and cost is:

- PCL Civil Constructors Inc.

Staff is requesting authority to issue NTP immediately for Phase 1, Design Engineering, Procurement Preparation, and Limited Down Payments for Long Lead Items portions now, and will request authority to issue a subsequent NTP following Project EIR Certification, expected by December 2008, for Phase 2A, Final Design, Long Lead Item Procurement and Fabrication of Material.

NTP for Phase 2B, Construction and Phase 3, Commissioning will not be issued until after the Planning Commission certifies the project FEIR, and the Commission and the Board review and consider the FEIR and determine whether to proceed, and if approved, pending receipt of all environmental regulatory permits necessary to start construction.

The RFP and the DBA reserve the City's right to modify the project to mitigate any significant environmental impacts or terminate the contract if the City elects not to proceed with the project based on information generated by the environmental review process.

## **PROS/CONS**

### PROS

- Award of this DBA will allow the SFPUC to immediately issue NTP for Phase 1, Design Engineering, Procurement Preparation, and Limited Down Payments for Long Lead Items. This approach will allow the completion of the majority of the design, and submittal review process and improve the probability of meeting the scheduled critical Coast Range Tunnel shutdown window in January 2010 and timely completion of this complex project to meet the EPA's LT2ESWTR mandatory compliance date of March 30, 2012.

CONS

Not awarding this DBA would:

- Delay the start of the final design.
- Delay the early equipment procurement preparation process needed to meet the critical Coast Range Tunnel shutdown window scheduled in January 2010.
- Reduce the one year Startup/Commissioning period that has been established for validating the operational efficacy of the new Tesla Treatment Facility.
- Jeopardize meeting the EPA's LT2ESWTR mandatory compliance date of March 30, 2012.

**ATTACHMENTS**

SFPUC Resolution

HRC memo

Project Manager: Bijan Ahmadzadeh Phone: (415) 551-4532

# **PUBLIC UTILITIES COMMISSION**

City and County of San Francisco

RESOLUTION NO. 08-0173

WHEREAS, Design-Build Agreement (DBA) No. DB-116, Tesla Treatment Facility was advertised on April, 8, 2008 under Resolution No. 08-0027

WHEREAS, It is necessary to procure the services of a qualified firm to provide specialized design-build services to supplement SFPUC staff; and

WHEREAS, The cost of the DBA is an amount of \$81,420,562, over the life of the project; and

WHEREAS, The Design Engineering, Procurement Preparation, and Limited Down Payments for Long Lead Items work under this DBA will commence upon certification of the agreement and issuance of NTP for Phase 1.

WHEREAS, The Final Design, Long Lead Item Procurement and Fabrication of Material work under this DBA will commence upon issuance of NTP for Phase 2A and after Project EIR certification;

WHEREAS, The estimated DBA duration is 821 calendar days from the start of Construction to substantial completion and 365 calendar days from substantial completion to final completion for Phase 3, Commissioning; and

WHEREAS, SFPUC's Bureau of Environmental Management is working with the Planning Department's Major Environmental Analysis Section to obtain a final certified Environmental Impact Report under the California Environmental Quality Act for Contract No. DB-116, Tesla Treatment Facility, anticipated by December 18, 2008 under San Francisco Planning Department Case No. 2007.0427E; and

WHEREAS, Three (3) bids were received on August 18, 2008, oral interviews were held on September 9, 2008, and bids were opened on September 10, 2008; and

WHEREAS, SFPUC staff and HRC review of the bids for qualifications, responsibility, responsiveness and application of bid preferences resulted in the determination that PCL Civil Constructors Inc., is the lowest, qualified, responsible and responsive bidder; and

WHEREAS, HRC subconsulting/subcontracting goals of 7% LBE participation of the total value of the entire contract has been established and approved for this DBA by the HRC Contract Compliance Officer (CCO) assigned to the SFPUC. The lowest, qualified, responsible and responsive bidder, PCL Civil Constructors Inc., is committed to meet the goals of 7% LBE submitted in its bid which meet the HRC goals established; and

WHEREAS, The firm being awarded a contract by the SFPUC must be in compliance with the Equal Benefits Provisions of Chapter 12B of the City's Administrative Code either at the time of the award, or within 2 weeks of the date of the Commission award; failure of the bidder to obtain compliance certification from HRC may result in award of the contract to the next lowest, responsible and responsive bidder, or re-bidding of the contract at the discretion of the City; and

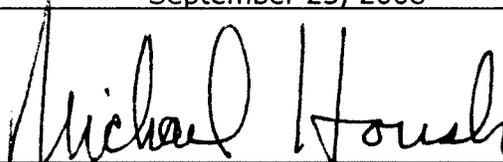
WHEREAS, Funding in the amount of \$7,449,000 for both Phase 1, Design Engineering, Procurement Preparation, and Limited Down Payments for Long Lead Items, and Phase 2A, Final Design, Long Lead Item Procurement and Fabrication of Material, is available from WSIP CUW384, Tesla Treatment Facility project.

WHEREAS, The remaining funding of the DBA in the amount of \$73,971,562 for both Phase 2B, Construction and Phase 3, Commissioning will be requested from the SFPUC and the Board of Supervisors, after the Planning Commission certifies the project Final Environmental Impact Report (FEIR), and the Commission and the Board review and consider the FEIR and determine whether to modify the project and whether to proceed with the project and this action shall not be considered an approval of the project; now, therefore, be it

RESOLVED, that this Commission hereby awards Water System Improvement Program (WSIP) DBA No. DB-116, Tesla Treatment Facility, in the amount up to \$81,420,562, to the lowest, qualified, responsible and responsive bidder, PCL Civil Constructors Inc., and authorizes the General Manager to execute a DBA with PCL Civil Constructors Inc. consistent with the requirements of Section 6.61(G) of the San Francisco Administrative Code; and be it further

RESOLVED, that implementation of Phase 2B and Phase 3 will not begin until environmental review of the project is complete and this Commission approves, or approves with modifications, the project. This Commission reserves the right to, among other things, modify the project to mitigate any significant environmental impacts or terminate the DBA if the SFPUC elects not to proceed with the project based on information generated by the environmental review process.

*I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of* \_\_\_\_\_ *September 23, 2008*

A handwritten signature in black ink, reading "Michael Housh". The signature is written in a cursive style and is positioned above a horizontal line.

Secretary, Public Utilities Commission



MEMORANDUM

Date: September 22, 2008  
To: Bijan Ahmadzadeh, Project Manager, PUC  
Lora Bowman, Construction Contracts Manager, PUC  
From: Nichole Truax, Senior Contract Compliance Officer, HRC  
Re: DB-116 Design Build Services for Tesla Treatment Facility Project

The Human Rights Commission (“HRC”) has reviewed the score sheets submitted by the panelists and the Total Evaluation Bids submitted by the Proposers. Based on the final score tabulations submitted by the PUC, the final rankings are as follows:

Firm	Rank
PCL Civil Constructors	1
CDM/MM (Joint Venture)	2
Shimmick/Black & Veatch (Joint Venture)	3

PCL Civil Constructors (“PCL”) is the highest ranked Proposer. Additionally, PCL complied with HRC’s Chapter 14B pre-award requirements.

The LBE subconsulting/subcontracting goal for this project is 7% of the total value of the entire contract. The 7% LBE subconsulting/subcontracting goal must be met by the cumulative participation by LBEs in the two phases for this project: (1) the design phase; and (2) the construction phase.

Due to the time anticipated between the submission of the RFP, final design and construction, the Proposers were required to document their good faith efforts to obtain LBE participation for the design phase only. Additionally, Proposers were required to submit HRC Form 2A and list the certified LBE subconsultants including their individual amount, scope of work, and the sum it represents as a percentage of the entire bid/contract amount. The total amount of all LBE subconsultants for the design phase will be fixed at this amount, leaving the remaining balance of the 7% subconsulting/subcontracting goal to apply to the construction phase.



PCL documented its good faith efforts to utilize LBE participation for the design phase. It listed the following LBE subconsulting/subcontracting firms:

<b>Firm</b>	<b>Service</b>	<b>LBE Status</b>	<b>LBE %</b>
Robert La Rocca & Associates	Landscape Architectural Design	SF LBE – OBE	0.0123
Smartplotting Services	Document Reproduction	SF LBE – MBE	0.0491
Geotechnical Consultants, Inc.	Geotechnical Engineering	SF LBE – MBE	0.1228
Telamon Engineering	Site Civil Engineering	SF LBE – MBE	0.0860
Oliv & Associates	Graphics	SF LBE – MBE	0.0061
<b>TOTAL</b>			<b>0.2763%</b>

After award, but no later than 14 days after NTP for Phase 2 (Construction Phase), the Prime contractor shall identify on an updated HRC Form 2A for review and approval by HRC all additional certified LBEs (for the construction portion-construction related services and equipment and material supply sub contractors) that will be utilized to fulfill the remaining percentage of the 7% LBE subconsulting/subcontracting goal, which is 6.7237%.

Based on PCL’s compliance with HRC’s Chapter 14B pre-award requirements, HRC has determined that the PUC may begin negotiations with PCL. Should you have any questions, or if I can be of further assistance, please do not hesitate to contact me at (415) 554-3104.