Los Angeles County
Metropolitan Transportation
Authority
One Gateway Plaza
3rd Floor Board Room
Los Angeles, CA

File #: 2016-1004, **File Type:** Contract **Agenda Number:** 50.

SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE
MAY 18, 2017

SUBJECT: CONSULTANT BENCH FOR RAIL VEHICLE & SYSTEMS ENGINEERING SUPPORT

ACTION: AWARD BENCH CONTRACT

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

A. AWARD Bench Contract No.PS37755 to consultant firms CH2M Hill, Inc., LTK Engineering Services, Mott McDonald, LLC, WSP/Parsons Brinkerhoff, and STV Inc., to establish a general account for consultant support services that will be utilized for **Rail Vehicle and Rail Systems Engineering Consultant Services**, for an amount not-to-exceed $8,027,100, subject to resolution of protest, if any; and

B. EXECUTE Task Work Orders within the approved total not-to-exceed amount of the Contract.

ISSUE

Metro requires as-needed consultant support services from qualified firms to support Metro Rail Vehicle and Systems Engineering capital and operating projects.

In April 2008, the Board authorized the award of Bench Contract No.OP39602112 in the total amount of $20,000,000 to five (5) qualified consulting firms. These firms provided Metro with professional engineering and project management support to develop technical specifications, independent cost estimates and to provide oversight for the procurement and installation of our rail fleet systems and equipment. This bench contract expired in March 2017.

DISCUSSION

The bench Contract permits Metro to supplement internal resources by having available consulting firms with a wide range of specialized engineering, technical and program management experience and expertise.

The consulting firms that will form the vehicle bench have the demonstrated depth and breadth of technical and engineering experience and capacity to support Metro with the anticipated tasks and

projects. On an as-needed basis Statements of Work will be developed, defining the type and level of support required for specific tasks and projects. Consultants on the vehicle bench will be eligible to bid for the work that they were approved under each Disciplines. This bench Contract consists of three disciplines: A) Support services for rail vehicle acquisition, overhauls and system compatibility, B) Support services for fleet reliability, operating rail vehicles, systems, and facilities, and C) Support services for traction power, rail vehicles, systems and facilities. Work will then be assigned to the successful consultant firm through task orders.

Subject to Metro's direction, the consultant shall apply appropriate engineering, technical and program management support services and resources to facilitate the timely execution of the associated deliverables for Metro's Rail Vehicle and Systems Engineering capital and operating projects.

Potential work under this bench Contract includes, but is not limited to: Specification development and review; condition based assessments of exiting fleets; car specific failure investigations; vehicle/MOC interface failure investigations; fleet reliability studies; review and development of shop maintenance practices; conduct vendor visits and audits; verification and validation of hardware and software modifications; development and testing of prototypes; development and testing of existing train control system and train control track circuits; and assist with developing specifications and procedures for TWC replacement, signal system rehabilitation, and line emergency trip system replacement.

The Diversity & Economic Opportunity Department (DEOD) has completed its evaluation of the Proposers' commitment to meet the overall twenty percent (20%) SBE/DVBE or DBE goal established for this project. The qualified firms, CH2M Hill, Inc., LTK Engineering Services, Mott McDonald, LLC, WSP/Parsons Brinkerhoff, and STV Inc., have committed to meeting the 20% goal.

DETERMINATION OF SAFETY IMPACT

The required consultant support services will contribute to maintaining the rail system in a State of Good Repair which is essential in providing safe and reliable service for the Metro rail system riders.

FINANCIAL IMPACT

As the support services under the bench Contract are intended to support capital and operations projects that are already funded, the funds for these expenses are included in the FY17 Operating budget and Life-of-Project budget of each individual project that these consultants will be supporting. As specific Rail Vehicle and Systems Engineering services needs arise, task orders will be issued and funded from the associated project budgets, upon approval by the responsible Project Manager. $400,000 is included in the FY17 budget in Cost Center 3043, in account 50316 - Professional Services under various projects. Since this a multi-year contract, the cost center manager and project manager will be responsible to ensure that funding is budgeted in future years.

ALTERNATIVES CONSIDERED

Staff has considered using in-house Metro resources to perform this work; however, this approach is

not recommended as Metro does not have sufficient resources and subject matter experts available to perform this work.

The Board of Directors may choose not to authorize the Contract award for this project; however, this alternative is not recommended as this Bench Contract is critical to facilitate the timely execution and associated deliverables of Metro's Rail Vehicle Acquisition, Rail Systems Engineering and Rail Vehicle Engineering capital and operating projects.

NEXT STEPS

Upon Board approval, staff will continue to competitively award individual task orders, on an as-needed basis, for engineering, technical, and program management support services.

ATTACHMENTS

Attachment A - Procurement Summary
Attachment B - DEOD Summary

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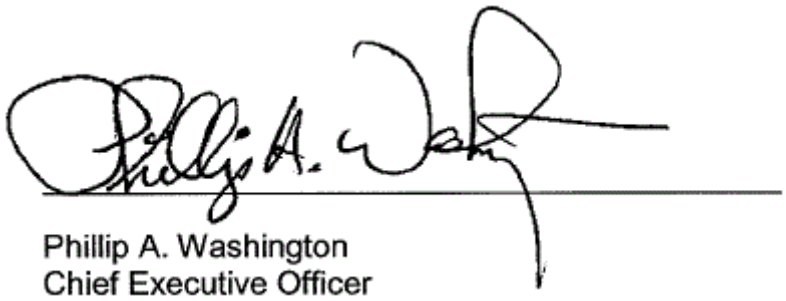

Phillip A. Washington
Chief Executive Officer

PROCUREMENT SUMMARY

CONSULTANT BENCH FOR RAIL VEHICLE AND SYSTEMS ENGINEERING SUPPORT / PS37755

1.	**Contract Number**: **PS37755**	
2.	**Recommended Vendor (In alphabetical order):** 1) CH2M Hill, Inc. 2) LTK Engineering Services, Inc. 3) Mott MacDonald, Inc., 4) Parsons Brinkerhoff, Inc. 5) STV, Inc.	
3.	**Type of Procurement (check one):** ☐ **IFB** ☐ **RFP** ☒ **RFP–Qualification Based** ☐ **Non-Competitive** ☐ **Modification** ☐ **Task Order**	
4.	**Procurement Dates**:	
	A. Issued: February 3, 2017	
	B. Advertised/Publicized: February 3, 2017	
	C. Pre-Proposal Conference: February 15, 2017	
	D. Proposals Due: March 6, 2017	
	E. Pre-Qualification Completed: In process	
	F. Conflict of Interest Form Submitted to Ethics: March 9, 2017	
	G. Protest Period End Date: April 21, 2017	
5.	**Solicitations Picked up/Downloaded**: 64	**Proposals Received**: 5
6.	**Contract Administrator**: Nicole Dang	**Telephone Number**: 213-922-7438
7.	**Project Manager**: Julio Rodriguez	**Telephone Number**: 213-922-3169

A. Procurement Background

This Board Action is to approve Contract No. PS37755 issued to establish a bench contract with qualified firms to support Metro Rail Vehicle Acquisition Department. This bench Contract contains three disciples which are A) Support services for rail vehicle acquisition, overhauls and system compatibility, B) Support services for fleet reliability, operating rail vehicles, systems, and facilities, and C) Support services for traction power, rail vehicles, systems and facilities. Board approval of contract awards are subject to resolution of any properly submitted protest.

The RFP was issued in accordance with Metro's Acquisition Policy for a qualification based non-Architect & Engineering procurement and the contract type is a cost plus fixed fee.

Two amendments were issued during the solicitation phase of this RFP:

- Amendment No. 1, issued on February 17, 2017, revised Exhibit A entitled "Statement of Qualifications".
- Amendment No. 2, issued on February 22, 2017, revised Section 3 of the RFP document entitled "Submittal Requirements".

The pre-proposal conference was held on February 15, 2017 and 16 firms attended this meeting. A total of 13 questions were received and responded to by March 1, 2017. A total of five proposals were received on March 6, 2017.

B. Evaluation of Proposals

A Proposal Evaluation Team (PET) consisting of staff from Metro Vehicle Acquisition department and Metro Service Warranty and Quality Assurance department was convened and conducted a comprehensive technical evaluation of the five proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- Prime Firm Qualification 40% percent
- Project Manager and Experience 50% percent
- Availability/Effective Schedule/ Cost Management Plan 10% percent

The evaluation criteria are appropriate and consistent with criteria developed for other, similar professional services bench procurements. Several factors were considered when developing these weights, giving the greatest importance to the project manager and experience. This is a qualification based bench contract; therefore, firms that scored over 59 percent and met the minimum qualifications were considered qualified. Price was not an evaluation factor for establishing the qualified firms for this Bench. However, price shall be an evaluation factor for all task order solicitations and awards. All task orders will be awarded on a competitive basis.

All five proposals received were determined to be within the competitive range. The five firms within the competitive range are listed below in alphabetical order:

1. CH2M Hill, Inc.
2. LTK Engineering Services, Inc.
3. Mott MacDonald, Inc.
4. Parsons Brinckerhoff, Inc.
5. STV, Inc.

The PET met during the month of March 2017 to review the five proposals received. During the week of March 6-24, 2017, Requests for Clarification were issued to CH2M Hill, Inc., LTK Engineering Services, Inc., Mott MacDonald, Inc., Parsons Brinckerhoff, Inc. and STV, Inc. The clarification requests were mainly for additional documentation of resumes. The responses received were satisfactory. All five firms submitted proposals for disciplines A, B, and C, and all five firms were approved and qualifed for all three disciplines (A, B, & C).

This professional services bench Contract is anticipated to have a cumulative total of $8,027,100 in task orders for the three disciplines combined over the six year term of the contracts. Individual task orders will be competed between the 5 firms on the benchand awarded competitively through a Request for Proposal (RFP).

Qualifications Summary of Firms within the Competitive Range:

CH2M Hill, Inc. (Disciplines A, B, C)

CH2M Hill, Inc. (CH2M) was founded in 1942 and is headquartered in Englewood, CO. CH2M has a local office in Los Angeles, CA. CH2M has 20,000 employees, including 600 transit staff that specializes in consulting, design, construction, and operation services. CH2M provided consultant support services to Metro A650 HRV Overhaul and P2000 LRV Mid Life Overhaul. CH2M is among the firms in Metro's current rail vehicle consultant support bench. CH2M has provided satisfactory rail vehicle and systems engineering services to Metro's staff.

LTK Engineering Services, Inc. (Disciplines A, B, C)

LTK Engineering Services, Inc. (LTK) was founded in 1921 and is headquartered in Ambler, Pennsylvania. LTK has a local office in Los Angeles, CA. LTK specializes in rail system engineering, maintenance facilities, signals and communications, traction electrification and fare collection. LTK clients include local, regional, state and federal public agencies, domestic and foreign operating commuter rail, rapid transit, light rail, railroads, and People Mover systems. LTK has served as Metro's vehicle engineer for the procurement of the Red Line Option cars, Metro's consultant support services for the P3010 Light Rail Vehicles. LTK is among the firms in Metro's current rail vehicle consultant support bench. LTK has provided satisfactory rail vehicle and systems engineering services to Metro's staff.

Mott MacDonald, Inc. (Disciplines A, B, C)

Mott MacDonald provides design and management of rail and transit projects and is headquartered in Los Angeles, CA. Mott MacDonald has 16,000 staff worldwide and 2,300 staff in North America in 60 offices. Mott MacDonald specializes in engineering, management, and development consultancy working in 150 countries. Mott MacDonald clients include municipals such as LA Metro, Bay Area Rapid Transit, California High Speed Rail Authority, Orange County Transportation Authority, North County Transit District (NCTD), San Bernardino County Transportation Authority (SBCTA), and Santa Clara Valley Transportation Authority. This will be Mott MacDonald's first opportunity to provide rail vehicle and systems engineering services. Mott MacDonald has provided other satisfactory services to Metro.

WSP/Parsons Brinckerhoff, Inc. (Disciplines A, B, C)

WSP/ Parsons Brinckerhoff, Inc. (PB) was founded in 1885 and has a local office in Los Angeles, CA. PB has over 36,700 employees located in more than 500 offices reaching across 40 countries worldwide. PB Transit and Rail System Technical Excellence Center (TEC) maintains more than 260 engineers and technical specialists dedicated to railroad systems which includes rolling stock, signals, train controls, communications, traction power, overhead catenary systems, fare collection, operations planning, safety and security, track and rail intermodal facilities. PB through a joint venture developed the performance based technical specification for Metro HR4000 Heavy Rail Vehicle procurement. PB is among the firms in Metro's current rail vehicle consultant support bench. PB has provided satisfactory rail vehicle and systems engineering services to Metro.

STV, Inc. (Disciplines A, B, C)

STV, Inc. (STV) has been in business for 100 years and has a local office in Los Angeles, CA. STV has incorporated a Vehicle Technology and Operations group into their organization which offers consulting support in rail vehicle specification development and procurement, rail vehicle condition assessment, rail vehicle overhaul specification development and support, inspection and quality control support, and failure analysis. STV through a joint venture developed the performance based technical specification for Metro HR4000 Heavy Rail Vehicle procurement. STV has provided rail engineering support to municipals such as Massachusetts Bay Transportation Authority (MBTA), Maryland MTA, City of Ottawa Confederation and LA Metro. STV has provided satisfactory rail vehicle and systems engineering services to Metro.

1	Firm	Average Score	Factor Weight	Weighted Average Score	Rank
2	**Mott MacDonald, Inc.**				1
3	Prime Firm Qualification	8.83	40.00%	35.32%	
4	Project Management and Experience	8.70	50.00%	43.50%	
5	Availability/Effective Schedule/Cost Management Plan	9.33	10.00%	9.33%	
	Total		100.00%	88.15%	
8	**STV, Inc.**				2
9	Prime Firm Qualification	8.88	40.00%	35.52%	
10	Project Management and Experience	8.33	50.00%	41.65%	
11	Availability/Effective Schedule/Cost Management Plan	9.03	10.00%	9.03%	
12	Total		100.00%	86.20%	
13	**LTK Engineering, Inc.**				3
14	Prime Firm Qualification	8.75	40.00%	35.00%	
15	Project Management and Experience	8.43	50.00%	42.15%	
16	Availability/Effective Schedule/Cost Management Plan	8.93	10.00%	8.93%	
17	Total		100.00%	86.08%	
18	**Parsons Brinckerhoff, Inc.**				4
19	Prime Firm Qualification	8.58	40.00%	34.32%	
20	Project Management and Experience	7.93	50.00%	39.65%	
21	Availability/Effective Schedule/Cost Management Plan	8.53	10.00%	8.53%	
22	Total		100.00%	82.50%	
23	**CH2M Hill, Inc.**				5
24	Prime Firm Qualification	8.20	40.00%	32.80%	
25	Project Management and Experience	7.87	50.00%	39.35%	
	Availability/Effective Schedule/Cost Management Plan	8.23	10.00%	8.23%	
	Total		100.00%	**80.38%**	

C. Cost/Price Analysis

This section is not applicable to the qualification approval of a bench Contract. However, task orders relating to this bench Contract will be awarded on a competitive

basis to the firms that provide Metro with the most advantageous proposal where price is a material factor. Individual task order awards shall include, cost/price analysis, technical evaluation, independent cost estimates, and as appropriate, audits will be performed for each Task Order.

CONSULTANT BENCH FOR RAIL VEHICLE AND SYSTEMS ENGINEERING SUPPORT / PS37755

A. Small Business Participation

Rail Vehicle and Rail Systems Engineering Consultant Support Services Bench Proposers formed teams that included Disadvantaged Business Enterprise (DBE), Small Business Enterprise (SBE) and Disabled Veteran Business Enterprise (DVBE) firms without schedules or specific dollar commitments prior to the establishment of the bench Contract.

The Bench Contract has a DBE goal of 20% for task orders awarded with federal funds. In addition, the bench Contract has a SBE goal of 20%, inclusive of 17% SBE/3% DVBE, for task orders awarded with non-federal funds. Overall DBE, SBE, and DVBE participation for the bench will be determined based on the total aggregate of all Task Orders issued dependent upon funding source.

Small Business Goal	**20% DBE & 17% SBE 3% DVBE**	**Small Business Commitment**	**20% DBE & 17% SBE 3% DVBE**

Prime: Mott MacDonald LLC

	DBE Subcontractors	**Ethnicity**	**% Committed**
1.	Electrical Building Systems, Inc.	Hispanic American	TBD
2.	LKG-CMC	Caucasian Female	TBD
3.	NBA Engineering	Caucasian Female	TBD
4.	Pacific Railway Enterprises	Caucasian Female	TBD
5.	Raul Bravo + Associates	Hispanic American	TBD
6.	Virginkar and Associates	Subcontinent Asian American	TBD
		Total DBE Commitment	**20%**

	SBE Subcontractors	**% Committed**
1.	LKG-CMC	TBD
2.	NBA Engineering	TBD
3.	Pacific Railway Enterprises	TBD
4.	Raul Bravo + Associates	TBD
5.	Virginkar and Associates	TBD
	Total SBE Commitment	**17%**

	DVBE Subcontractors	**% Committed**
1.	PSM Associates	TBD
	Total DVBE Commitment	**3%**

Prime: CH2M Hill

	DBE Subcontractors	Ethnicity	% Committed
1.	Parthenon Corporation	Hispanic American	TBD
2.	LKG-CMC	Caucasian Female	TBD
3.	Virginkar and Associates	Subcontinent Asian American	TBD
4.	Capitol Gov't Contract Specialists	Hispanic American	TBD
5.	E.W. Moon Inc.	African American	TBD
6.	Civil Earth Engineering	Asian Pacific American	TBD
		Total DBE Commitment	**20%**

	SBE Subcontractors	% Committed
1.	Parthenon Corporation	TBD
2.	LKG-CMC	TBD
3.	Virginkar and Associates	TBD
4.	Turner Engineering Corporation	TBD
5.	Capitol Gov't Contract Specialists	TBD
6.	E.W. Moon Inc.	TBD
7.	Civil Earth Engineering	TBD
	Total SBE Commitment	**17%**

	DVBE Subcontractors	% Committed
1.	Capitol Gov't Contract Specialists	TBD
	Total DVBE Commitment	**3%**

Prime: Parsons Brinckerhoff

	DBE Subcontractors	Ethnicity	% Committed
1.	Capitol Gov't Contract Specialists	Hispanic American	TBD
2.	Casamar Group	Hispanic American	TBD
3.	Information Design Consultants	African American	TBD
4.	LKG-CMC, Inc.	Caucasian Female	TBD
5.	Pacific Railways Enterprises	Caucasian Female	TBD
6.	Systems Consulting LLC	African American	TBD
7.	Virginkar & Associates Inc.	Caucasian Female	TBD
8.	VP Engineering	Subcontinent Asian American	TBD
		Total DBE Commitment	**20%**

Prime: Parsons Brinckerhoff (cont.)

	SBE Subcontractors	% Committed
1.	Capitol Gov't Contract Specialists	TBD
2.	Casamar Group	TBD
3.	Information Design Consultants	TBD
4.	LKG-CMC, Inc.	TBD
5.	Pacific Railways Enterprises	TBD
6.	Systems Consulting LLC	TBD
7.	Turner Engineering Corporation	TBD
8.	Virginkar & Associates Inc.	TBD
9.	VP Engineering	TBD
	Total SBE Commitment	**17%**

	DVBE Subcontractors	% Committed
1.	Capitol Gov't Contract Specialists	TBD
	Total DVBE Commitment	**3%**

Prime: LTK Engineering

	DBE Subcontractors	Ethnicity	% Committed
1.	Capitol Gov't Contract Specialists	Hispanic American	TBD
2.	DAV-LEAR Systems, Inc.	African American	TBD
3.	Ramos Consulting Services	Hispanic American	TBD
4.	Virginkar & Associates	Subcontinent Asian American	TBD
		Total DBE Commitment	**20%**

	SBE Subcontractors	% Committed
1.	Capitol Gov't Contract Specialists	TBD
2.	DAV-LEAR Systems, Inc.	TBD
3.	Ramos Consulting Services	TBD
4.	Turner Engineering Inc.	TBD
5.	Virginkar & Associates	TBD
	Total SBE Commitment	**17%**

	DVBE Subcontractors	% Committed
1.	DAV-LEAR Systems, Inc.	TBD
	Total DVBE Commitment	**3%**

Prime: STV Incorporated

	DBE Subcontractors	Ethnicity	% Committed
1.	Capitol Gov't Contract Specialists	Hispanic American	TBD
2.	Casamar Group	Hispanic American	TBD
3.	dHA + CALPEC	Sub-Continent Asian American	TBD
4.	ERJ Engineering Consultants	Sub-Continent Asian American	TBD
5.	E.W. Moon, Inc.	African American	TBD
6.	LKG-CMC, Inc.	Caucasian Female	TBD
7.	Virginkar & Associates	Sub-Continent Asian American	TBD
8.	VP Engineering	Sub-Continent Asian American	TBD
		Total DBE Commitment	**20%**

	SBE Subcontractors	% Committed
1.	Capitol Gov't Contract Specialists	TBD
2.	Casamar Group	TBD
3.	dHA + CALPEC	TBD
4.	ERJ Engineering Consultants	TBD
5.	E.W. Moon, Inc.	TBD
6.	LKG-CMC, Inc.	TBD
7.	Virginkar & Associates	TBD
8.	VP Engineering	TBD
	Total SBE Commitment	**17%**

	DVBE Subcontractors	% Committed
1.	Capitol Gov't Contract Specialists	TBD
	Total DVBE Commitment	**3%**

B. Living Wage and Service Contract Worker Retention Policy Applicability

The Living Wage and Service Contract Worker Retention Policy is not applicable to this Contract.

C. Prevailing Wage Applicability

Prevailing wage is not applicable to this Contract.

D. Project Labor Agreement/Construction Careers Policy

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.