



**May 3, 2021**

**To:** Regional Planning and Highways Committee

**From:** Darrell E. Johnson, Chief Executive Officer

**Subject:** Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue

### **Overview**

On December 14, 2020, the Orange County Transportation Authority Board of Directors approved the release of a request for proposals for the preparation of plans, specifications, and estimates for the Interstate 5 Widening Project between Interstate 405 and Yale Avenue. Board of Directors' approval is requested for the selection of a firm to perform the required work.

### **Recommendations**

- A. Approve the selection of AECOM Technical Services, Inc., as the firm to prepare the plans, specifications, and estimates for the Interstate 5 Widening Project between Interstate 405 and Yale Avenue.
- B. Authorize the Chief Executive Officer to negotiate and execute Agreement No. C-0-2637 between the Orange County Transportation Authority and AECOM Technical Services, Inc., to prepare the plans, specifications, and estimates for the Interstate 5 Widening Project between Interstate 405 and Yale Avenue.

### **Discussion**

The Interstate 5 (I-5) improvements between Interstate 405 (I-405) and State Route 55 (SR-55) (Project) is Project B in the Measure M2 (M2) freeway program. In the updated Next 10 Delivery Plan, adopted by the Orange County Transportation Authority (OCTA) Board of Directors (Board) in November 2019, the Project is listed as one of the M2 freeway projects to be cleared through the environmental process, and to move into design using federal and M2 funding.

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** *Page 2*

---

The Project will add a general purpose (GP) lane in the northbound and southbound directions between I-405 and SR-55, reestablish existing auxiliary lanes and provide new auxiliary lanes where necessary, and provide continuous access to the high-occupancy vehicle (HOV) lanes.

The final environmental document was signed on January 7, 2020, with build alternative 2B identified as the preferred alternative by the Project development team. Alternative 2 includes the addition of one GP lane in each direction of I-5 from north of I-405 to south of SR-55. The improvements include standard lane and shoulder widths, except where the improvements join existing non-standard lanes or shoulders, and at isolated locations at bridge columns, overhead signs, or other appurtenances. Design variation B of alternative 2, the preferred alternative, includes additional non-standard inside shoulder widths and/or lane widths to reduce right-of-way (ROW) impacts. The Project is being developed as two separate design and construction projects to enhance the participation and competitive bidding of consultants and contractors, with the following Project limits:

- Segment 1 extends from I-405 to Yale Avenue
- Segment 2 extends from Yale Avenue to SR-55

***Procurement Approach***

This procurement for Segment 1 was handled in accordance with OCTA's Board-approved procedures for architectural and engineering (A&E) services that conform to both state and federal laws. Proposals are evaluated and ranked in accordance with the qualifications of the firm, staffing and project organization, and work plan approach. As this is an A&E procurement, price is not an evaluation criterion pursuant to state and federal laws. Evaluation of the proposals was conducted based on overall qualifications to develop a competitive range of offerors. The highest-ranked firm is requested to submit a cost proposal, and the final agreement is negotiated. Should negotiations fail with the highest-ranked firm, a cost proposal will be solicited from the second-ranked firm in accordance with Board-approved procurement policies.

On December 14, 2020, the Board authorized the release of Request for Proposals (RFP) 0-2637 which was electronically issued on CAMM NET. The Project was advertised on December 14 and December 21, 2020, in a newspaper of general circulation. A pre-proposal conference was held on December 21, 2020, with 27 attendees representing 17 firms. Three addenda were issued to make available the pre-proposal conference registration sheets, provide responses to questions received, and handle administrative issues related to the RFP.

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** *Page 3*

---

On January 21, 2021, four proposals were received. An evaluation committee consisting of members from OCTA's Contracts Administration and Materials Management and Highway Programs departments, as well as external representatives from the California Department of Transportation (Caltrans) and the City of Irvine, met to review all submitted proposals. The proposals were evaluated utilizing the following Board-approved evaluation criteria and weightings:

- Qualifications of the Firm 20 percent
- Staffing and Project Organization 40 percent
- Work Plan 40 percent

In developing the criteria and weightings, several factors were considered. The firms' qualifications and experience in performing relevant work of similar scope and size is important to the success of the Project. Staffing and project organization of the firm was assigned a weighting of 40 percent as the qualifications of the project manager (PM) and other key personnel are important to the successful and timely delivery of the Project. Similarly, high importance was given to the work plan criterion to emphasize the importance of the teams' understanding of the Project, its challenges, and its approach to implementing the various elements of the scope of work (SOW). The technical approach to the Project is critical to a firm's successful performance.

The evaluation committee reviewed all proposals based on the evaluation criteria and found three firms most qualified to perform the required services. The most qualified firms are listed below in alphabetical order:

Firm and Location

AECOM Technical Services, Inc. (AECOM)  
Orange, California

HNTB Corporation (HNTB)  
Santa Ana, California

WSP USA, Inc. (WSP)  
Orange, California

On March 9, 2021, the evaluation committee interviewed the three short-listed firms. The interviews consisted of a presentation allowing each team to present its qualifications, highlight its proposal, and respond to evaluation committee questions. Each firm also discussed its staffing plan, work plan, and perceived Project challenges. Each firm was asked general questions related to

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** *Page 4*

---

qualifications, relevant experience, Project organization, and approach to the work plan. All firms were asked questions specific to each firm's proposals regarding its team's approach to the requirements of the SOW, management of the Project, coordination with various agencies, experience with similar projects, and the proposed solutions toward achieving the Project goals. After considering responses to the questions asked during the interviews, the evaluation committee adjusted the preliminary scores for one of the firms; however, AECOM remained as the top-ranked firm with the highest cumulative score.

Based on the evaluation of written proposals and information obtained during the interviews, staff recommends AECOM as the top-ranked firm to prepare the plans, specifications, and estimates (PS&E) for the Project. AECOM received the highest ranking due to its recent PS&E experience with projects of similar scope and scale, familiarity with Caltrans requirements, comprehensive understanding of the Project objectives and constraints, and presentation of technical solutions that consider both time and cost-saving improvements along the I-5 corridor. The firm demonstrated a clear understanding of the Project requirements and presented a comprehensive work plan addressing key issues that are critical to the success of the Project. The following is a brief summary of the proposal evaluation results.

#### Qualifications of the Firm

All short-listed firms are well established with recent and relevant experience and are qualified to perform the services.

AECOM was founded in 1927 and specializes in preliminary and final design, construction management, and program management for infrastructure projects on a local and global level. Local highway engineering services have been provided by AECOM to state and local government agencies that include OCTA, Caltrans, Riverside County Transportation Commission, and the San Bernardino County Transportation Authority. The firm has five offices throughout Southern California, including an office in the City of Orange which is comprised of 460 staff members. AECOM recently completed similar projects, including the following: State Route 210 (SR-210) lane addition widening project approval and environmental document (PA/ED) and PS&E, I-5 lane addition widening from I-405 to SR-55 PA/ED, and the Interstate 215 (I-215) lane addition widening from Scott Road to Nuevo Road PS&E. AECOM proposed to utilize eight subconsultants in a wide range of disciplines to provide services required by the SOW, which all have experience working with AECOM on past projects.

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** *Page 5*

---

Founded in 1914, HNTB is a full-service design engineering firm that provides a wide range of services, including transportation planning, transportation design, highway design, structures design, and cost estimating. HNTB has 60 offices nationwide, which include five Southern California offices, including two office locations in the City of Los Angeles, and a single office in the cities of Ontario, San Diego, and Santa Ana. Relevant firm experience includes OCTA's State Route 91 (SR-91) to State Route 57 interchange improvements, Los Angeles County Metropolitan Transportation Authority's (LA Metro) I-405 Sepulveda Pass widening, and, more recently, OCTA's SR-55 widening project from I-405 to I-5 for which HNTB is providing design support services as a subconsultant. The team has prior working relationships with all eight of the proposed subconsultants, and demonstrated experience working together on projects of similar size and scope.

WSP was founded in 1885 and provides services in the areas of highway final design, transportation engineering, environmental compliance, constructability reviews, and construction support. The firm has 108 offices nationwide and four offices in Southern California located in the cities of Los Angeles, Orange, San Bernardino, and San Diego. WSP has completed and delivered 58 PS&E packages in California within the past ten years. Relevant experience includes PS&E for LA Metro's I-5 north improvements for which the firm is performing work as a design subconsultant, the Transportation Corridor Agency's toll road program management, and the United States Highway 50 multimodal corridor enhancement and rehabilitation design-build for Caltrans, District 3. WSP proposed to utilize eight subconsultants in which all firms have worked with WSP on past projects.

#### Staffing and Project Organization

All firms proposed qualified PMs, key personnel, and subconsultants with relevant PS&E experience in interchange and freeway widening projects.

AECOM proposed a qualified project team with relevant experience and comprehensive understanding of the Project issues, risks, and challenges. The team is proficient in the various disciplines required for the Project and has extensive recent OCTA and Caltrans experience. The team has demonstrated experience working on projects of similar size and scope. The proposed PM has over 36 years of experience, with the past 15 years working on Caltrans PS&E-focused projects that include the I-215 Murrieta lane addition widening from Murrieta Hot Springs Road to Scott Road PS&E, and the I-215 lane addition widening from Scott Road to Nuevo Road PS&E. The proposed PM provided support during the PA/ED phase of this Project to finalize key deliverables,

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** **Page 6**

---

including the cost estimate and final project report, and has in-depth knowledge of Caltrans and local agency design standards, procedures, and requirements. The proposed roadway lead has 27 years of experience in freeway and interchange design improvements to optimize safety and traffic flow while meeting Caltrans' design standards. The roadway lead's experience includes conceptual, preliminary, final design, and design-build engineering, which demonstrates a thorough understanding of both the Project development and Project delivery phases. The proposed structures lead has 36 years of civil and structural engineering experience, including the design of more than 200 bridges, and was involved in the preparation of PS&E packages for more than 50 Caltrans projects. The proposed team includes qualified and experienced subconsultants for geometric, structural, traffic engineering, environmental, survey and ROW, landscaping aesthetics, geotechnical, and ground anchor wall design services.

HNTB proposed a qualified project team with relevant experience and understanding of the Project issues, risks, and challenges. The team, including subconsultants, are experienced in the various disciplines required for the Project and have relevant experience in PS&E projects in Southern California. The proposed PM has 33 years of experience in highway design, including freeway corridor widening PS&E projects such as the Interstate 605 HOV between SR-91 and Los Angeles-Orange County Line, Interstate 10 (I-10) median lane addition in Redlands, and the I-405 improvement project. The proposed roadway lead has 34 years of experience in planning and design of freeways, interchanges, and high-speed rail corridors, and has a successful history of managing various disciplines to coordinate and deliver final PS&E packages. The proposed structures lead has 19 years of experience specializing in structural engineering for highway bridge structures, flood control facilities, and various retaining wall and special foundation systems.

WSP proposed a project team and subconsultants with relevant experience in PS&E projects in Southern California. The proposed PM has 36 years of experience with an expansive background in construction management, Caltrans standards, final design, structural design, and constructability. Relevant project experience includes the I-405/State Route 22 west county connectors project, I-10 HOV lanes PS&E, and providing engineering services for the PA/ED phase of the I-405 improvement project. The proposed roadway lead has 21 years of experience on Caltrans projects and most recently served as the roadway lead for the PA/ED phase of the I-5 widening project from I-405 to SR-55 and brings familiarity and knowledge of the Project corridor. The proposed structures lead has 20 years of experience in planning, funding, permitting, design, and construction of structures for highway, roadway, and rail projects. The WSP team includes subconsultants that will also be performing

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** *Page 7*

---

work on Segment 2 of this Project, which may facilitate Caltrans coordination and approvals.

#### Work Plan

All short-listed firms met the requirements of the RFP, and each firm adequately discussed its approach to the Project.

AECOM presented a comprehensive and viable work plan that demonstrated an understanding of the Project design requirements, constraints, challenges, and risks. AECOM identified more than 25 special issues on the Project. The firm's work plan focused on 14 of the most critical items, which would eliminate or improve non-standard design features, potentially reduce Project costs, and deliver a constructable PS&E package. The work plan proposed four detailed solutions for the Irvine overhead widening, one of which is a cantilever solution previously used on the SR-210 lane addition project that would avoid impacts to existing utilities and impacts to the Southern California Regional Rail Authority. The work plan also identified several enhancements for Soundwall No. 3.3, located to the adjacent Northwood Place Apartment Homes, which would preserve the existing landscaping and simplify the ROW acquisition process, resulting in reduced construction and ROW costs. AECOM identified areas that will need to be closely coordinated with Segment 2 of the Project that include soundwall aesthetics, traffic management between the two Project boundaries, and consistency in specifications and unit pricing.

The overall approach to Project execution described in the work plan and presented during the interview identified potential risks, accompanied by mitigation plans, corridor coordination discussions, and construction staging. The interview confirmed the technical knowledge and expertise of the AECOM team and its comprehensive understanding of Project risks, challenges, and requirements. The AECOM team demonstrated in-depth knowledge of its proposed approach to the SOW by providing detailed, Project-specific responses to all interview questions with participation from all team members present.

HNTB presented a detailed work plan that demonstrated an understanding of the SOW, Project issues, and risks. The work plan identified six geometric enhancements that centered on the reduction of ROW and construction impacts, eliminating non-standard features, and improving constructability. The work plan provided a detailed narrative as to how corridor-wide coordination strategies would be implemented based off previous successful multi-segment projects HNTB has completed. The proposed highway interchange designs would address various stakeholders' interests by incorporating Complete Streets

**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** *Page 8*

---

elements, such as reducing bicycle lane conflicts and improving crosswalk visibility, which are more closely aligned with all modes of travel.

The overall approach described in the HNTB work plan highlighted enhancements that were built upon previous similar experience and knowledge that would adhere to Caltrans' design standards. The information presented during the interview demonstrated the firm's knowledge of the SOW, objectives, and risks associated with the Project. The firm presented an interview with detailed responses from all personnel to the evaluation committee questions, demonstrating an experienced cohesive team with relevant project experience.

WSP presented a work plan identifying issues, recommendations, challenges, and potential solutions that demonstrated an understanding of the SOW and risks associated with the Project. The work plan included a "First 30-Day" and a "First 90-Day" plan that identified immediate tasks to be completed to ensure the Project is delivered within the proposed schedule. WSP proposed eliminating portions of pavement, retaining walls, ROW acquisitions, and two bridge widenings that would potentially provide cost-saving opportunities.

The overall approach to Project execution described in the work plan and presented during the interview demonstrated an understanding of the SOW, challenges, risks, and project requirements. The WSP team was responsive to evaluation committee's interview questions; however, the proposed PM relied on the proposed design manager in providing detail in response to several questions.

#### Procurement Summary

Based on the evaluation of the written proposals, team qualifications, and information obtained during the interviews, the evaluation committee recommends the selection of AECOM as the top-ranked firm to prepare the PS&E for the I-5 Widening Project between I-405 and Yale Avenue.

#### Fiscal Impact

The Project is included in OCTA's proposed Fiscal Year 2021-22 Budget, Capital Programs Division, Account No. 0017-7519-FB102-1OC, and will be funded through a combination of state and M2 funds.



**Consultant Selection for the Preparation of Plans, Specifications, and Estimates for the Interstate 5 Widening Project Between Interstate 405 and Yale Avenue** **Page 9**

---

**Summary**

Staff requests Board of Directors' approval for the Chief Executive Officer to negotiate and execute Agreement No. C-0-2637 with AECOM Technical Services, Inc., as the firm to prepare the plans, specifications, and estimates for the Interstate 5 Widening Project between Interstate 405 and Yale Avenue.

**Attachments**

- A. Review of Proposals, RFP 0-2637 Consultant Services for the Preparation of Plans, Specifications, and Estimates for Interstate 5 Widening Project Between Interstate 405 and Yale Avenue
- B. Proposal Evaluation Criteria Matrix (Short-Listed), RFP 0-2637 Consultant Services for the Preparation of Plans, Specifications, and Estimates for Interstate 5 Widening Project Between Interstate 405 and Yale Avenue
- C. Contract History for the Past Two Years, RFP 0-2637 Consultant Services for the Preparation of Plans, Specifications, and Estimates for Interstate 5 Widening Project Between Interstate 405 and Yale Avenue

**Prepared by:**



Josue Vaglienty, P.E.  
Senior Project Manager  
(714) 560-5852

**Approved by:**



James G. Beil, P.E.  
Executive Director, Capital Programs  
(714) 560-5646



Pia Veerapen  
Director, Contracts Administration and  
Materials Management  
(714) 560-5619