



**November 8, 2018**

**To:** Transit Committee

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

**Subject:** Contract Change Order for Utilities to the Hydrogen Fuel Station

### **Overview**

On November 13, 2017, the Orange County Transportation Authority Board of Directors authorized Agreement No. C-7-1577 with Trillium USA Company LLC, for the construction, operation, and maintenance of a hydrogen fuel station, and liquid hydrogen deliveries. A contract change order is requested to install private utilities to the hydrogen fuel station for electrical power and communication.

### **Recommendation**

Authorize the Chief Executive Officer to negotiate and execute Contract Change Order No. 3 to Agreement No. C-7-1577 with Trillium USA Company LLC, in the amount of \$400,000, for the installation of new private utilities for electrical power and communication to the hydrogen fueling station. This will increase the maximum obligation of the agreement to a total contract value of \$7,514,432.

### **Discussion**

On February 13, 2017, the Orange County Transportation Authority (OCTA) Board of Directors (Board) authorized the Chief Executive Officer to negotiate and execute an agreement with the Center for Transportation and the Environment (CTE) to accept \$13,241,092 in grant funds from the California Air Resources Board (CARB) and the South Coast Air Quality Management District. These grant funds will provide funding to purchase ten hydrogen fuel cell electric buses, construct a hydrogen fuel station, upgrade utilities for the station, and upgrade facilities for the detection of hydrogen gas. Of the awarded grant funds, \$4,777,732 is for the construction of the hydrogen fuel station.

On November 13, 2017, the OCTA Board awarded Agreement No. C-7-1577 to Trillium USA Company LLC, (Trillium) for the construction of the hydrogen fuel station, operations and maintenance (O&M) of the station, and delivery of

liquid hydrogen. The new private utility installation is required at Santa Ana Bus Base (SABB) to operate the new hydrogen fueling station facility. The contract change order (CCO) work was budgeted and funded in the grant line items by CTE for utility upgrades. CCO No. 3 will incorporate into Trillium's agreement installation of new electrical equipment, including a new 300KVA transformer and primary switch, 600AMP 480/277V 3-phase distribution panel, 25KVA transformer and 120/240 V single phase panel, and installation of a splice vault and a 700-foot primary electrical conduit and conductor run to the hydrogen fuel station from an existing tie-in point at the SABB.

The Trillium agreement includes \$4,335,427 for the construction of the station, including three years of O&M, and \$2,136,700 for the delivery of liquid hydrogen.

### ***Procurement Approach***

The initial procurement was conducted by CTE in consultation with OCTA staff and in accordance with OCTA procurement guidelines. On November 13, 2017, the Board authorized Agreement No. C-7-1577 with Trillium, in the amount of \$6,472,127, for the construction of the hydrogen fuel station, O&M of the station, and delivery of liquid hydrogen.

The OCTA project engineer's cost estimate for CCO No. 3 was at approximately \$400,000; therefore, Trillium's budgetary cost estimate of \$379,428, with addition of allowable mark-up under the agreement, is deemed fair and reasonable.

The two CCOs that have been executed to date for the installation of additional equipment to the hydrogen fueling station are listed in Attachment A.

Proposed CCO No. 3, in the amount of \$400,000, will increase the maximum cumulative payment obligation of the agreement to \$7,514,432.

### **Fiscal Impact**

Grant funds in the amount of \$4,777,732 for the project were approved by the Board on November 13, 2017, as an amendment to OCTA's Fiscal Year 2017-18 Budget, Capital Programs Division, Account 1722-9022-D2157-0MO. Utility upgrades were approved and funded through the Low Carbon Transportation Investments and Air Quality Improvement Program grant from CARB's allocation of Cap and Trade Program funds.

***Summary***

Based on the information provided, staff recommends authorization for the Chief Executive Officer to negotiate and execute Contract Change Order No. 3 to Agreement No. C-7-1577 with Trillium USA Company LLC, in the amount of \$400,000, for the installation of private utilities for electrical power and communication to the hydrogen fueling station.

***Attachment***

- A. Trillium USA Company LLC, Agreement No. C-7-1577, Contract Change Order Log

**Prepared by:**



George Olivo, P.E.  
Program Manager  
(714) 560-5872

**Approved by:**



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



Virginia Abadessa  
Director, Contracts Administration and  
Materials Management  
(714) 560-5623