RIVERSIDE COUNTY TRANSPORTATION COMMISSION

MEETING AGENDA

Western Riverside County Programs and Projects Committee

Time: 1:30 p.m.

Date: February 23, 2026

Location: BOARD ROOM - County of Riverside Administration Center
4080 Lemon St, First Floor, Riverside, CA 92501
TELECONFERENCE SITE
LARGE CONFERENCE ROOM – French Valley Airport
37600 Sky Canyon Drive, Murrieta, CA 92563

COMMITTEE MEMBERS

Michael Vargas, **Chair** / Elizabeth Vallejo, City of Perris
Chuck Conder, **Vice Chair** / Patricia Lock Dawson, City of Riverside
Sheri Flynn / Cynthia Barrington, City of Banning
Lloyd White / Julio Martinez, City of Beaumont
Jim Steiner / Tony Daddario, City of Corona
Clint Lorimore / Todd Rigby, City of Eastvale
Linda Krupa / Joe Males, City of Hemet
Brian Berkson / Armando Carmona, City of Jurupa Valley
Fia Sullivan / Kevin Bash, City of Norco
Joseph Morabito / Dustin Nigg, City of Wildomar
Jose Medina, County of Riverside, District I
Karen Spiegel, County of Riverside, District II

STAFF

Aaron Hake, Executive Director
David Knudsen, Deputy Executive Director

AREAS OF RESPONSIBILITY

Air Quality, Capital Projects, Communications and Outreach Programs, Intermodal Programs, Motorist Services, New Corridors, Regional Agencies/Regional Planning, Regional Transportation Improvement Program (RTIP), Specific Transit Projects, State Transportation Improvement Program (STIP) Transportation Uniform Mitigation Fee (TUMF) Program and Provide Policy Direction on Transportation Programs and Projects related to Western Riverside County and other areas as may be prescribed by the Commission.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
WESTERN RIVERSIDE COUNTY PROGRAMS AND PROJECTS COMMITTEE

www.rctc.org

AGENDA*

**Actions may be taken on any item listed on the agenda*

1:30 p.m.

Monday, February 23, 2026

BOARD ROOM
County Administrative Center
4080 Lemon Street, First Floor
Riverside, California 92501

TELECONFERENCE SITE

LARGE CONFERENCE ROOM
French Valley Airport
37600 Sky Canyon Drive
Murrieta, California 92563

In compliance with the Brown Act and Government Code Section 54957.5, agenda materials distributed 72 hours prior to the meeting, which are public records relating to open session agenda items, will be available for inspection by members of the public prior to the meeting at the Commission office, 4080 Lemon Street, Third Floor, Riverside, CA, and on the Commission's website, www.rctc.org.

In compliance with the Americans with Disabilities Act, Government Code Section 54954.2, and the Federal Transit Administration Title VI, please contact the Clerk of the Board at (951) 787-7141 if special assistance is needed to participate in a Commission meeting, including accessibility and translation services. Assistance is provided free of charge. Notification of at least 48 hours prior to the meeting time will assist staff in assuring reasonable arrangements can be made to provide assistance at the meeting.

1. CALL TO ORDER

2. ROLL CALL

3. PLEDGE OF ALLEGIANCE

4. **PUBLIC COMMENTS –** *Each individual speaker is limited to speak three (3) continuous minutes or less. The Committee may, either at the direction of the Chair or by majority vote of the Committee, waive this three minute time limitation. Depending on the number of items on the Agenda and the number of speakers, the Chair may, at his/her discretion, reduce the time of each speaker to two (2) continuous minutes. Also, the Committee may terminate public comments if such comments become repetitious. In addition, the maximum time for public comment for any individual item or topic is thirty (30) minutes. Speakers may not yield their time to others without the consent of the Chair. Any written documents to be distributed or presented to the Committee shall be submitted to the Clerk of the Board. This policy applies to Public Comments and comments on Agenda Items.*

Under the Brown Act, the Board should not take action on or discuss matters raised during public comment portion of the agenda which are not listed on the agenda. Board members may refer such matters to staff for factual information or to be placed on the subsequent agenda for consideration.

5. **ADDITIONS/REVISIONS** *(The Committee may add an item to the Agenda after making a finding that there is a need to take immediate action on the item and that the item came to the attention of the Committee subsequent to the posting of the agenda. An action adding an item to the agenda requires 2/3 vote of the Committee. If there are less than 2/3 of the Committee members present, adding an item to the agenda requires a unanimous vote. Added items will be placed for discussion at the end of the agenda.)*

6. **CONSENT CALENDAR -** *All matters on the Consent Calendar will be approved in a single motion unless a Commissioner(s) requests separate action on specific item(s). Items pulled from the Consent Calendar will be placed for discussion at the end of the agenda.*

6A. APPROVAL OF MINUTES – JANUARY 26, 2026

Page 1

7. **ON-CALL PURCHASE AGREEMENTS FOR FASTRAK® 6C TRANSPONDERS**

Page 9

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Award the following agreements to provide FasTrak® 6C transponders for a three-year term, and two two-year extension options, in an amount of $2,300,000, plus a contingency amount of $230,000, for a total amount not to exceed an aggregate value of $2,530,000:
   a) Agreement No. 26-31-027-00 to Neology, Inc.;
   b) Agreement No. 26-31-040-00 to Kapsch TrafficCom USA, Inc.; and
   c) Agreement No. 26-31-041-00 to Star Systems America;
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements, on behalf of the Commission;
3) Authorize the Executive Director, or designee, to execute purchase orders awarded to the contractors under the terms of the agreements; and

4) Authorize the Executive Director, or designee, to approve the use of the contingency amount as may be required.

8. INTERSTATE 15 EXPRESS LANES PROJECT SOUTHERN EXTENSION AUTHORIZATION OF THE CALTRANS COOPERATIVE AGREEMENT

Page 187

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Approve Cooperative Agreement No. 26-31-050-00 with Caltrans for the Interstate 15 Express Lanes Project Southern Extension (ELPSE) oversight in the amount of $4,019,000 for progressive design-build (PDB) Phase 1 oversight and $30,585,000 for PDB Phase 2 oversight, for a total of $34,604,000 plus a 10 percent contingency amount of $3,460,400, for a not to exceed amount of $38,064,400;
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the agreement on behalf of the Commission; and
3) Authorize the Executive Director, or designee, to approve contingency work up to the total amount not to exceed as required for the Project.

9. STATE ROUTE 71 / STATE ROUTE 91 INTERCHANGE IMPROVEMENT PROJECT – CONSTRUCTION CONTINGENCY INCREASE

Page 242

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Approve an increase in the Contract Contingency for Agreement No. 20-31-042-00 between the Commission and Skanska USA Civil West California District Inc. (Skanska) for construction of the State Route 71 / State Route 91 Interchange Improvement project (Project), from $14,460,000 to $16,803,000 of the agreement amount of $120,500,000, an increase of $2,343,000, for a total amount not to exceed $137,303,000; and
2) Authorize the Chair or Executive Director, or designee, to approve contingency work up to the total amount not to exceed as required for the Project.

10. ON-CALL HIGHWAY DESIGN AND ENVIRONMENTAL SERVICES FOR CAPITAL AND TOLL PROGRAMS PROJECTS

Page 246

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Award the following agreements to provide on-call highway design and environmental services for capital and toll programs projects for a three-year term, and one two-year option to extend the agreement, in an amount not to exceed an aggregate value of $30,000,000;
   a) Agreement No. 26-31-023-00 HDR Engineering, Inc.;
   b) Agreement No. 26-31-047-00 HNTB Corporation;
   c) Agreement No. 26-31-048-00 Kimley-Horn and Associates, Inc.;
   d) Agreement No. 26-31-049-00 Parsons Transportation Group, Inc.;
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements, on behalf of the Commission; and
3) Authorize the Executive Director, or designee, to execute task orders awarded to the consultants under the terms of the agreements.

11. AMENDMENT NO. 1 WITH TROPICAL PLAZA NURSERY, INC., FOR LANDSCAPE MAINTENANCE SERVICES AT THE COMMUTER RAIL STATIONS AND TOLL FACILITIES

Page 406

Overview

This item is for the Committee to recommend the Commission take the following action(s):

1) Approve Amendment No. 1 to Agreement No. 22-24-007-00 with Tropical Plaza Nursery Inc., for landscape maintenance services at RCTC's nine Commuter Rail Stations and Toll Facilities for an additional amount of $420,000, for a total amount not to exceed $4,179,000; and
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the amendment, on behalf of the Commission.

12. EXECUTIVE DIRECTOR REPORT

13. COMMISSIONER COMMENTS

Overview

This item provides the opportunity for brief announcements or comments on items or matters of general interest.

14. ADJOURNMENT

The next Western Riverside County Programs and Projects Committee meeting is scheduled to be held at **1:30 p.m., Monday, March 23, 2026**.

AGENDA ITEM 6A

MINUTES

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

WESTERN RIVERSIDE COUNTY PROGRAMS AND PROJECTS COMMITTEE

Monday, January 26, 2026

MINUTES

1. CALL TO ORDER

The meeting of the Western Riverside County Programs and Projects Committee was called to order by Chair Joseph Morabito at 1:30 p.m. in the Board Room located at 4080 Lemon Street, Riverside, CA 92501. Additional teleconference site: Large Conference Room, French Valley Airport, 37600 Sky Canyon Drive, Murrieta, CA 92563.

2. ROLL CALL

Members/Alternates Present	Members Absent
Brian Berkson*	Lloyd White
Chuck Conder	
Sheri Flynn	
Linda Krupa	
Clint Lorimore	
Jose Medina	
Joseph Morabito	
Jim Steiner	
Karen Spiegel	
Fia Sullivan	
Michael Vargas	

*Arrived after the meeting was called to order.

3. PLEDGE OF ALLEGIANCE

Commissioner Linda Krupa led the Western Riverside County Programs and Projects Committee in a flag salute.

4. PUBLIC COMMENTS

There were no requests to speak from the public.

5. ADDITIONS/REVISIONS

There were no additions or revisions to the agenda.

6. CONSENT CALENDAR - *All matters on the Consent Calendar will be approved in a single motion unless a Commissioner(s) requests separate action on specific item(s). Items pulled from the Consent Calendar will be placed for discussion at the end of the agenda.*

M/S/C (Vargas/Lorimore) to approve the following Consent Calendar item(s):

6A. APPROVAL OF MINUTES – NOVEMBER 24, 2025
Abstain: Steiner

7. INTERSTATE 10/STATE ROUTE 79 INTERCHANGE IMPROVEMENT PROJECT INITIATION DOCUMENT CONSULTANT AWARD AND CALTRANS COOPERATIVE AGREEMENT

Joie Edles Yanez, Capital Projects Manager, presented the Interstate 10/State Route 79 Interchange Improvement Project agreement award and cooperative agreements, highlighting the following areas:

- Project location map
- Project background
  - ✓ Significance
    - Critical transportation hub for commuters (Western Riverside County, Orange and Los Angeles Counties)
    - Key corridor for freight traffic across California and the Western U.S.
  - ✓ Project purpose
    - Reduce congestion and improve local traffic circulation along the I-10/SR-79 interchange
    - Integrate multimodal transportation options, ensuring seamless connectivity between different modes of travel
- Project initiation and funding plan
  - ✓ In October 2024, the city of Beaumont requested RCTC to lead all project phases including a Project Initiation Document (PID), Project Approval and Environmental Document (PA&ED), Plans, Specifications, and Estimates (PS&E), and Construction
  - ✓ RCTC to allocate from Transportation Uniform Mitigation Fund (TUMF) Regional Arterials funds for the PID phase
  - ✓ City of Beaumont to fund all subsequent project phases
  - ✓ Cooperative agreement for PID phase between the City and RCTC is in development
  - ✓ Prepare a PID to evaluate potential alternatives and proposed improvements
- Agency agreement
  - ✓ Cooperative agreement between RCTC and the city of Beaumont
  - ✓ RCTC to lead all project phases including PA&ED, PS&E, ROW and Construction on behalf of the City
  - ✓ PID to be funded using RCTC's TUMF Regional Arterial funds

- ✓ City is responsible for funding all future project phases
- ✓ Amendment to this agreement is anticipated for future project phases

- Next steps
- Fiscal impact

Commissioner Karen Spiegel stated to Joie Edles Yanez that she did a great job with the slides mix up and handled it well.

At this time, Commissioner Brian Berkson joined the meeting.

Commissioner Krupa stated good job and asked what all is entailed and what does PID encompass.

Joie Edles Yanez went back to the project initiation and funding plan slide and stated on the graphic on the bottom the PID phase is the first phase of a project. Before it even goes into environmental, design, and construction it starts at the PID phase. At the PID level, since this is an interchange, the main key is defining the purpose and need of the project. She explained what that will ultimately achieve and what it will look like is they are going to explore a myriad of concepts for this interchange. Then they are going to make a recommendation in the environmental phase about the preferred alternative.

Commissioner Krupa stated that she is very familiar with that interchange and with all the development and all the housing going on up there, it is going to be interesting to see what types of choices are available.

Joie Edles Yanez agreed and stated they are geometrically constrained there is the SR-60/I-10 merge to the west, then immediately to the east there is Pennsylvania Ave., and then north and south there are very close frontage roads so that is going to be the biggest challenge of the project. They are going to look at everything and narrow it down from there, but they also understand there is existing right of way and businesses, and they are going to try to find a solution the meets the most agreeable of all.

Commissioner Krupa stated that they also have the railroad.

Joie Edles Yanez replied they are trying to avoid that hopefully they do not have to impede that as that is just going to impact their coordination efforts.

Commissioner Sheri Flynn thanked Joie Edles Yanez for the presentation as this is a much-needed project. Being in the city of Banning, often times there are cars backing up all the way on the freeway, it is very dangerous and it is at all times of the day and night. She asked when construction will start, when it ends, and what the possible costs will be. Joie Edles Yanez stated right now she cannot give a date because it all depends on funding. Currently they only have funding for this phase, the city will have to strategically pursue funding for the next three phases, not just construction, but for design and then environmental, so they have a long way to go.

Aaron Hake stated this initial phase here they are starting is transitioning the project simply from an idea and turning it into a concept and evaluating what could be feasible. Then they will go into the environmental phase which could take one or two years and then they have to design it which will take a couple of years. It is probably three to five years before they start construction.

Joie Edles Yanez stated if they have funding available maybe four or five years until construction begins.

Aaron Hake stated that each of those phases will need funding also.

Commissioner Flynn clarified not until 2030 at least.

Aaron Hake concurred and stated if they are going to ballpark it here today roughly. They need to make sure that they get through the environmental phase and can mitigate all the issues and deal with Vehicle Miles Traveled (VMT). There are some major questions that still need to be answered. Also, they need to propose a project that the community has comments on.

Commissioner Krupa stated that SR-79 project must be done first.

Aaron Hake replied that they have many other priorities so the Commission will have to make those decisions, but they are trying to get it off the ground.

Commissioner Flynn stated that the I-10/Highland Springs Avenue Interchange Project is in the pipeline and they could not be doing both these projects at the same time, because they are going to cut off all ways to get onto the freeway other than going through Banning to get on the freeway. She asked would the I-10/Highland Springs Avenue Interchange Project be starting before this one.

Aaron Hake stated that the I-10/Highland Springs Project is much further along than this one is so the odds are it would go first. If they had both projects ready to go, then they would want to sequence them so as not to cut down access to the community.

M/S/C (Krupa/Lorimore) for the Committee to recommend the Commission take the following action(s):

1) **Award Agreement No. 26-72-010-00 to Kimley-Horn and Associates, Inc., to prepare the Project Initiation Document (PID) for the Interstate 10/State Route 79 (I-10/SR-79) Interchange Improvement Project (Project), in the city of Beaumont in the amount of $1,192,860, plus a contingency amount of $119,286, for a total amount not to exceed $1,312,146;**
2) **Approve Cooperative Agreement No. 26-72-038-00 with Caltrans for review and oversight services for the Project, in the amount of $300,000, plus a contingency amount of $30,000, for a total amount not to exceed $330,000;**

3) Authorize the Executive Director, or designee, to approve contingency work as may be required for the Project; and

4) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements on behalf of the Commission.

8. MEASURE A SPECIALIZED TRANSIT AWARD RECOMMENDATIONS FOR FISCAL YEARS 2024/25 – 2026/27 - AMENDMENT NO. 3

Monica Morales, Senior Management Analyst, presented the Measure A Specialized Transit Program for Fiscal Years 2024/25 – 2026/27, Amendment No. 3:

- Program overview
  - ✓ Targets seniors, persons with disabilities, low-income populations, or those that are "truly needy" that cannot be served on the existing transportation network
  - ✓ Support expansion and extension of services for areas/special populations without alternate service options
- Call for project awards
- Additional awards

Commissioner Karen Spiegel stated that she knows staff looks at what they are doing but do they talk about how many people they are helping.

Monica Morales replied that they do and they track it monthly for every single agency so not only are they looking at how many trips they are providing regardless of if it is one person doing three trips a day. Staff is also looking at how many people individually they are serving by month and year. Staff track how many miles in total if they are using vehicles and how many hours of service they are providing.

Commissioner Spiegel stated for Kindful Restoration, Voices for Children, and Forest Folk, approximately how many do each of those have.

Monica Morales stated she does not have that information here, but she does have it.

Commissioner Spiegel stated that Forest Folk had $200,000 for another vehicle so she got that is why it increased but was curious about the determination of how much money they give and how they figured that.

Monica Morales stated that the number of dollars the Commission provides is not based off the number of trips that they can provide, a lot of times it is looking at their service area. For example, Forest Folk because they are in such a small community a lot of their trips are up and down the mountain. Even though they are not serving as many people as somebody down here in the Western Riverside area who is in a smaller service area. Staff is looking at it from an agency perspective and their entire service area.

Commissioner Lorimore appreciated the presentation and stated that Monica Morales had mentioned on the last recipient they were doing two replacement vehicles and then said that they were going to start operation of the second vehicle. He asked to expand on that because if they are replacing two vehicles but now, they are going to have two vehicles running.

Monica Morales went back to the additional awards slide and stated for Forest Folk, both vehicles have already been approved in total for $200,000 in budget and that was the previous amendments. The second vehicle originally was intended to be a backup vehicle especially because they have a lot of service miles. What they have realized is instead of having that second vehicle as a backup they are able to provide additional service by utilizing the second vehicle, so Forest Folk is seeking the operating funds of $37,300.

M/S/C (Vargas/Krupa) for the Committee to recommend the Commission take the following action(s):

1) **Approve Amendment No. 3 to the Measure A Specialized Transit Program for Fiscal Years 2024/25-2026/27, allocating an additional $366,317 for a total amount of $11,576,904;**
2) **Approve Agreement No. 26-26-042-00 with Kindful Restoration in the amount of $227,400 for operating and $65,000 in capital from Measure A Specialized Transit funds, for a total not to exceed contract amount of $292,400;**
3) **Approve Amendment No. 1 to Agreement No. 24-26-115-01 with Voices for Children for an additional amount of $36,617 for operating from Measure A Specialized Transit funds, for a total not to exceed contract amount of $391,212;**
4) **Approve Amendment No. 2 to Agreement No. 24-26-128-02 with Forest Folk, Inc. (Forest Folk) for an additional amount of $37,300 for operating from Measure A Specialized Transit funds, for a total not to exceed contract amount of $478,689; and**
5) **Authorize the Chair or Executive Director to execute the agreements, pursuant to legal counsel review.**

9. ELECTION OF OFFICERS FOR THE WESTERN RIVERSIDE COUNTY PROGRAMS AND PROJECTS COMMITTEE

Lisa Mobley, Administrative Services Director/Clerk of the Board, announced this item is for the committee to conduct an election of officers for Chair and Vice Chair for 2026 for the Western Riverside County Programs and Projects Committee.

At this time, Chair Morabito opened nominations for the Chair position for 2026.

Commissioner Joseph Morabito, seconded by Commissioner Michael Vargas nominated Commissioner Michael Vargas for the Chair position for 2026.

No other nominations were received. The Chair closed the nominations. Commissioner Vargas was elected as the Western Riverside County Programs and Projects Committee's Chair for 2026.

Commissioner Michael Vargas seconded by Commissioner Joseph Morabito nominated Commissioner Chuck Conder for the Vice Chair position for 2026.

No other nominations were received. The Chair closed the nominations. Commissioner Conder was elected as the Western Riverside County Programs and Projects Committee's Vice Chair for 2026.

10. EXECUTIVE DIRECTOR REPORT

Aaron Hake:

- Welcomed new Commissioner Jim Steiner to RCTC.
- Announced this is a big week at RCTC, it is the week of their Annual Commission Workshop. The Commission will be in the city of Cathedral City at the DoubleTree by Hilton on January 29 – January 30, 2026. On January 29, at 10:30 a.m. at the Double Tree by Hilton they have the Traffic Relief Plan (TRP) Commissioner Academy, this is optional, but it is an opportunity to really immerse themselves in what the TRP is. There will be an Executive Committee Special meeting at 11:45 a.m. and then the Commission Special meeting begins at 1:00 p.m. and at 1:30 p.m. the Commission Workshop will begin for the rest of the day and on into January 30. He is looking forward to some significant discussions and getting the Commissioners' direction. If there are any questions about the Commission Workshop, please contact Lisa Mobley.

  Commissioner Flynn requested to have that information sent in an email to the Commissioners.

  Aaron Hake stated that he or Lisa Mobley will be sending out a reminder email with all those times.

11. COMMISSIONER COMMENTS

There were no comments from the Commissioners.

12. ADJOURNMENT

There being no further business for consideration by the Western Riverside County Programs and Projects Committee, the meeting was adjourned at 1:59 p.m.

Respectfully submitted,

Tara S. Byerly
Deputy Clerk of the Board

AGENDA ITEM 7

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	February 23, 2026
TO:	Western Riverside County Programs and Projects Committee
FROM:	Anthony Parada, Senior Management Analyst
THROUGH:	Jennifer Crosson, Toll Operations Director
SUBJECT:	On-Call Purchase Agreements for FasTrak® 6C Transponders

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Award the following agreements to provide FasTrak® 6C transponders for a three-year term, and two two-year extension options, in an amount of $2,300,000, plus a contingency amount of $230,000, for a total amount not to exceed an aggregate value of $2,530,000:
   a) Agreement No. 26-31-027-00 to Neology, Inc.;
   b) Agreement No. 26-31-040-00 to Kapsch TrafficCom USA, Inc.; and
   c) Agreement No. 26-31-041-00 to Star Systems America;
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements, on behalf of the Commission;
3) Authorize the Executive Director, or designee, to execute purchase orders awarded to the contractors under the terms of the agreements; and
4) Authorize the Executive Director, or designee, to approve the use of the contingency amount as may be required.

BACKGROUND INFORMATION:

The Commission's requires all users of the 91 and 15 Express Lanes to have a transponder in their vehicle in order to process toll transactions accurately and efficiently. The Commission operates a customer service center for each of the express lanes. The 15 Express Lane customer service center is the sole responsibility of the Commission while the 91 Express Lanes customer service center is shared with Orange County Transportation Authority (OCTA).

One function of the customer service centers is the management of customer accounts, which includes the issuance of transponders. The transponders issued meet the regulatory requirement of 6C protocol adopted by the state in 2017. In the division of responsibilities for the 91 Express Lanes, the Commission is assigned the responsibility of providing transponders for the 91 Express Lanes. OCTA reimburses the Commission for one-half of the transponder costs for the 91 Express Lanes.

There are three forms of transponders offered to customers: interior sticker, exterior sticker, and 3-position switchable. The 3-position switchable is used to declare High Occupancy Vehicle (HOV) on most tolled facilities in California that offer a HOV discount. The 15 Express Lanes issues approximately 25,000 transponders each year and the 91 Express Lanes issues approximately 115,000 transponders each year.

The Commission's prior purchase agreement for transponders expired on July 10, 2025 and existing transponder inventory requires replenishment. There are a limited number of firms that provide transponders, have met the required testing certifications and have all three forms of transponders. To broaden the number of responsive proposers, multiple proposers were considered and proposals for the interior and exterior stick transponders or switchable transponders will be considered. In the months leading up to the release of the request for proposals (RFP), staff contacted all known possible proposers to ensure the market was aware of the forthcoming procurement.

Procurement Process

Staff determined the weighted factor method of source selection to be the most appropriate for this procurement as it allowed the Commission to identify the most advantageous proposal with price and other factors considered. Non-price factors included elements such as qualifications of firm, transponder attributes and quality, and the ability to respond to the Commission's needs for FasTrak® 6C transponders as set forth under the terms of RFP No. 26-31-027-00.

RFP No. 26-31-027-00 was released by staff on November 10, 2025. The RFP was posted on the PlanetBids website, which is accessible through the Commission's website. Utilizing PlanetBids, emails were sent to 133 firms, 17 of which are located in Riverside County. Through the PlanetBids site, 7 firms downloaded the RFP; none of these firms are located in Riverside County. A pre-proposal conference was held on November 19, 2025 and attended by two firms. Staff responded to all questions submitted by potential proposers prior to the December 3, 2025 clarification deadline. Three firms – Kapsch TrafficCom USA, Inc. (Duluth, GA), Neology, Inc. (Carlsbad, CA), and Star Systems America (Dallas, TX) – submitted responsive proposals prior to the 2:00 p.m. submittal deadline on December 17, 2025. Utilizing the evaluation criteria set forth in the RFP, the three proposals were evaluated and scored by an evaluation committee comprised of Commission and OCTA staff.

Based on the evaluation committee's assessment of the written proposals and submitted product samples, and pursuant to the terms of the RFP, the evaluation committee ranked the firms for each category of transponder, as follows:

Transponder type – 1) Interior Mounted Sticker and 2) Exterior Mounted Sticker:

Firm	Overall Ranking
Neology, Inc.	1
Kapsch TrafficCom USA, Inc.	2
Star Systems America	3

Transponder type – 3) 3-position Switchable:

Firm	Overall Ranking
Neology, Inc.	1
Star Systems America	2

Kapsch TrafficCom USA, Inc. did not submit a proposal for the 3-position switchable transponder.

As a result of the evaluation committee's rankings for each transponder type, the evaluation committee recommends contract awards to the top two firms in each category identified above. The evaluation committee recommends contract awards to Neology, Inc., Kapsch TrafficCom USA, Inc., and Star Systems America for a three-year term, and two two-year options to extend the agreements, in an amount of $2,300,000, plus a contingency amount of $230,000, for a total amount not to exceed an aggregate value of $2,530,000.

The multiple awards, on-call, indefinite delivery/indefinite quantity purchase order type contracts do not guarantee funds to any of the awardees. Purchase orders will be awarded on an as-needed basis to the highest ranked contractor in the category of transponder required. If that contractor is unable to meet the Commission's contractual or technical requirements for a particular purchase order, the Commission will award the purchase order to the second highest ranked contractor for that category of transponder. The Commission's on-call agreements will be entered into with the contractors subject to any changes approved by the Executive Director, and pursuant to legal counsel review. Staff oversight of the contracts and issuance of purchase orders will maximize the effectiveness of the contractors and minimize costs to the Commission.

This procurement included a three-year contract, and two two-year option periods. Projected FasTrak® 6C transponders needs were based on historical usage. Staff estimates expenses of $605,000 for the initial three-year period of which $275,000 is estimated to be reimbursed by OCTA.

FISCAL IMPACT:

Transponder purchases for the 91 Express Lanes are split evenly between the Commission and OCTA, with each having $25,000 available budget in Fiscal Year 2025/26. The 15 Express Lanes does not require transponder purchases in the current fiscal year.

Financial Information							
In Fiscal Year Budget:		Yes	Year:	FY 2025/26 FY2026/27+	Amount:	$50,000 $2,480,000	
Source of Funds:	Toll Revenue				Budget Adjustment:		Yes
GL/Project Accounting No.:	009199 90721 00000 0000 591 31 90101 001599 90721 00000 0000 515 31 90101						
Fiscal Procedures Approved:					Date:	02/17/2026	

Attachment:

1) Draft Agreement No. 26-31-027-00 with Neology, Inc.
2) Draft Agreement No. 26-31-040-00 with Kapsch TrafficCom USA, Inc.
3) Draft Agreement No. 26-31-041-00 with Star Systems America

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ON CALL PURCHASE AGREEMENT
FOR 6C TRANSPONDERS
WITH NEOLOGY, INC.

This On Call Purchase Agreement for 6C Transponders ("Agreement") is entered into this _____ day of _____, 2026, by and between the Riverside County Transportation Commission ("Commission"), and _NEOLOGY, INC., a Corporation with its principal place of business at 1917 Palomar Oaks Way, Ste. 110, Carlsbad, CA 92008 ("Contractor"). Commission and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

RECITALS.

A. The Commission has entered into On Call Purchase Agreements for 6C Transponders with a bench of qualified contractors selected pursuant to a request for proposal process ("On Call Bench").

B. Contractor is one of the selected contractors, and may, during the term of this Agreement, receive one or more order requests from the Commission for Devices, as defined herein.

C. Devices may be procured by the Commission for itself, and for the Orange County Transportation Authority ("OCTA").

Section 1. DEFINITIONS.

A. "Delivery Date(s)" means that date or dates upon which the Transponders are to be delivered to Commission as set forth in each Purchase Order.

B. "Devices" means the Transponders

C. "On Call Bench" shall have the meaning as set forth in Recital A above.

D. "Purchase Order" means an order request from the Commission in the form attached hereto as Exhibit "B". To be valid, a Purchase Order must be signed by both Parties in accordance with the terms contained in this Agreement.

E. "Transponders" means the 6C transponders, as specified in Scope of Services Section 2 of Exhibit "A,"

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Section 2. AGREEMENT TERM.

A. The term of this Agreement shall be three (3) years, commencing on the date first set forth above. The Commission shall have the option, in its sole discretion, to extend the term for two additional two-year extension terms. Any such extension shall be pursuant to a written amendment to this Agreement.

B. Notwithstanding the foregoing, in the case a Purchase Order has been issued prior to the termination date, the term of this Agreement shall be automatically extended until delivery and acceptance of all Devices under such Purchase Order, and completion of payment therefor, or until termination of such Purchase Order in accordance with the provisions of Section 18.A below.

Section 3. PURCHASE ORDERS.

A. To initiate the Purchase Order process, the Commission will issue a Purchase Order to the Contractor setting forth the desired Devices, quantity for the order, delivery times and pricing. Delivery time and pricing shall be based on the prices and delivery schedule set forth in Exhibit "C".

B. Contractor must accept the terms of the Purchase Order and return the executed Purchase Order to the Commission within three (3) business days of the date of the Purchase Order. Notwithstanding any other provision of this Agreement, a Purchase Order not signed by Contractor and returned to the Commission in accordance with the foregoing shall be void.

C. Any issuance of Purchase Orders to contractors on the On Call Bench shall be in accordance with the terms set forth in Exhibit "D".

D. Purchase by the Commission of any Devices under this Agreement must be authorized by a Purchase Order. All Purchase Orders shall be performed in accordance with and subject to the terms and conditions of this Agreement, the exhibits attached hereto, and all applicable local, state and federal laws, rules and regulations. No Devices shall be delivered, and no payment made by Commission therefor, unless authorized by a valid and fully executed Purchase Order.

Section 4. INSPECTIONS AND TESTS.

Commission shall have the right to inspect and/or test the Devices. If upon inspection or testing the Devices or any portion thereof are found to be nonconforming, unsatisfactory, defective, of inferior quality or workmanship, or fail to meet any requirements or specifications contained in Exhibit "A," then without prejudice to any other rights or remedies, Commission may reject the Devices or exercise any of its rights under Section 5. The inspection, failure to make inspection, acceptance of goods,

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or payment for goods shall not impair Commission's right to reject nonconforming goods, irrespective of Commission's failure to notify Contractor of a rejection of nonconforming goods or revocation of acceptance thereof or to specify with particularity any defect in nonconforming goods after rejection or acceptance thereof.

Section 5. <u>WARRANTY.</u>

A. *General Warranty*. Contractor warrants and represents that all of its Devices shall meet the requirements and specifications set forth in this Agreement. Contractor also warrants that the Devices are free and clear of all liens and encumbrances whatsoever, and that Contractor has a good and marketable title to same.

B. *Transponder Warranty.*

i. Contractor warrants and represents, as to each Purchase Order, that all of its Transponders provided under the Purchase Order shall be free from defects in functionality, usability, and appearance for a period of three (3) years from the date of receipt by the Commission of the Transponders under the relevant Purchase Order.

ii. If the Transponders provided under this Agreement have a third party warranty that exceeds the warranty period set forth in Section 5.B above, Contractor shall track and assign such third party warranty to the Commission on or before expiration of the warranty period set forth above in Section 5.B.

C. *Transponder Warranty Procedures*.

i. Upon discovery of defective Transponders, the Commission or its designated representative shall ship the defective Transponders to Contractor.

ii. Contractor shall ship conforming replacement Transponders to the address specified by the Commission in the documentation included with the defective Transponders. Contractor may use any shipping method provided the replacement Transponders arrive at the destination designated by the Commission within 120 days of receipt by Contractor of the defective Transponders.

iii. Replacement Transponders shall be warrantied for the warranty period set forth in Section 5.B above.

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iv. Contractor shall be responsible and liable for all costs of shipping the defective Transponders to and from Contractor during the warranty period. Contractor shall reimburse the Commission for its shipping costs immediately upon demand.

iv. Failure by the Contractor to provide replacement Transponders within 120 days, as required in (ii) above, shall result in a deduction by Commission from any outstanding payments owed to Contractor, or immediate repayment by Contractor of the purchase price of the defective Transponders not timely replaced.

D. *General Third Party Warranty Requirements*.

Contractor's agreements with any third parties for Devices provided under this Agreement shall require that such parties consent to the assignment of all representations and warranties for such Devices to the Commission, and enforcement thereof by the Commission. Contractor shall provide all assigned third party warranties to the Commission within the time set forth in the schedule included with a Purchase Order, or as otherwise specified in this Agreement.

E. *Excessive Failures of Transponders*.

In the event of an excessive failure of Transponders delivered to the Commission under this Agreement, Contractor shall be liable for all costs incurred by the Commission, including, but not limited to: the public end user notification and replacement costs; and labor and material costs. Excessive failure is defined as a defect in function, labor or materials that is present in ten percent (10%) or more of any Transponder type provided under a Purchase Order. By way of example and not limitation, if 10% of the Transponders activated and assigned to customer accounts are deemed defective, then Contractor shall be responsible for the Commission's costs such as notifying customers; establishing and operating locations where the customers could swap out their defective Transponders for a working Transponder or other means of replacement; and the Commission's administrative costs.

G. *Survival of Warranty Provisions*.

The warranty provisions contained in this Section 5 shall survive any termination or expiration of this Agreement, and shall remain in effect for the full warranty term.

Section 6. INTELLECTUAL PROPERTY

A. Intellectual Property Rights for Transponders. Contractor warrants that Contractor owns or has a valid license for all of the proprietary technology and intellectual property including, but not limited to, materials, data, computer programs or software and source code, enhancements,

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documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property Rights") incorporated within the Transponders. Contractor hereby grants to the Commission a fully paid-up, royalty-free, perpetual, irrevocable, non-exclusive license and/or sublicense to the Intellectual Property Rights contained in or used in connection with the Transponders to use, execute, maintain, display, perform, distribute, sell, create derivative works of, and to prepare derivative works based upon any Intellectual Property Rights provided by Contractor to the Commission under this Agreement. This license includes the right to make and have made copies of any and all software, firmware and documentation, and to use any and all such copies, reproductions, modifications, adaptations, improvements or derivative works to utilize and operate the Transponders. The license provided hereunder shall cover all aspects of software and firmware, except for source code to programs owned and/or developed by any of Contractor's subcontractors, and programs of any third parties which the Contractor integrates, bundles or provides as part of the Transponders. The Contractor shall secure all required licenses from any third party providers of software and firmware pursuant to the terms set forth above in the name the Commission, and shall ensure that such licenses are transferable to and assignable by the Commission, without additional compensation. The Contractor shall furnish the Commission with original license agreements it obtains from such third party providers of software and firmware upon delivery of the initial order of Transponders, and any such additional license agreements entered into thereafter that in any way effect Transponder's use of the Transponders. Contractor shall also provide to the Commission copies of the computer programs, disks and documentation for all software and firmware it obtains from third parties.

B. Intellectual Property Rights for Handheld Readers. Contractor shall ensure that in providing the Handheld Readers, the Commission shall have all Intellectual Property Rights required for the full and unencumbered use of the Handheld Readers.

C. Remedies for Breach of Warranties or Intellectual Property Rights. In the event of a breach by Contractor of its obligations under Section 5 or this Section 6, Commission will not be limited to the remedies set forth in these sections, but will have all the rights and remedies permitted by applicable law, including without limitation, all of the rights and remedies afforded to Commission under the California Commercial Code. Contractor further agrees to indemnify, defend and hold the Commission and OCTA harmless against any and all third party claims resulting from the breach or inaccuracy of any of the warranties contained in Section 5 or this Section 6.

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Section 7. PRICES.

Unless expressly provided otherwise, all prices and fees specified in Exhibit "C," attached hereto and incorporated herein by reference, are firm and shall not be subject to change without the written approval of Commission, and shall apply to all Purchase Orders under this Agreement for the term, and any extensions thereof. No extra charges of any kind will be allowed unless specifically agreed to in writing by Commission's authorized representative. Prices include (i) all federal, state and local use, excise, privilege, payroll, occupational and other taxes applicable to the Devices (excluding sales tax) furnished to Commission hereunder; (ii) all charges for packing, freight and transportation to destination, and (iii) full compliance with all requirements of this Agreement, including the attached Scope of Services and Technical Requirements.

The total compensation shall be specified under each Purchase Order, and shall not be exceeded.

Section 8. CHANGES.

Commission, at any time, by a written order, may make changes in the requirements for the Devices set forth in Exhibit "A", including but not limited to, Commission's requirements and specifications. If such changes affect the cost of the Devices or time required for performance under a Purchase Order, an equitable adjustment will be made in the price or time for performance under a Purchase Order, or both. Any change in the price necessitated by such change will be agreed upon between Commission and Contractor and such change will be authorized by an amendment to this Agreement, or to the Purchase Order, as applicable.

Section 9. PAYMENTS.

A. Terms of payment for each Purchase Order, are net thirty (30) days, less any applicable credits, or after receipt of invoice. Contractor shall invoice in accordance to the delivery schedule but not more frequently than each billing period. Final payment shall be made by Commission after Contractor has satisfied all contractual requirements for a Purchase Order. Payment of invoices shall not constitute acceptance of Devices.

B. Payments otherwise due may be withheld by Commission on account of defective Transponders not timely replaced in accordance with the warranty provisions, liens or other claims filed, reasonable evidence indicating probable filing of liens or other claims, failure of Contractor to make payments properly to its subcontractors or for material or labor, the failure of Contractor to perform any of its other obligations under the Agreement, or to protect Commission against any liability arising out of Contractor's failure to pay or discharge taxes or other obligations. If the causes for which payment is withheld are removed, the withheld payments will be made promptly. If the said causes are not removed within a reasonable period after written notice, Commission may remove them at

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Contractor's expense.

Section 10. SCHEDULE FOR DELIVERY.

The time of Contractor's performance is of the essence for this Agreement. The Devices will be delivered in accordance with the schedule set forth in each Purchase Order, and in accordance with the timeframes for delivery set forth in Exhibit "C". Contractor must immediately notify Commission in writing any time delivery is behind schedule or may not be completed on schedule.

Section 11. TAXES.

A. Contractor agrees to timely pay all sales and use tax (including any value added or gross receipts tax imposed similar to a sales and use tax) imposed by any federal, state or local taxing authority on the ultimate purchase price of the Devices provided under this Agreement. Sales tax is not included in the price of the Devices as set forth in Exhibit "C", and shall be determined at the time of issuance of a Purchase Order.

B. Contractor will withhold, and require its subcontractors, where applicable, to withhold all required taxes and contributions of any federal, state or local taxing authority which is measured by wages, salaries or other remuneration of its employees or the employees of its subcontractors. Contractor will deposit, or cause to be deposited, in a timely manner with the appropriate taxing authorities all amounts required to be withheld.

C. All other taxes, however denominated or measured, imposed upon the price of the Devices provided hereunder, will be the responsibility of Contractor. In addition, all taxes assessed by any taxing jurisdiction based on Contractor property used or consumed in the provision of the Devices such as and including ad valorem, use, personal property and inventory taxes will be the responsibility of Contractor.

D. Contractor will, upon written request, submit to Commission written evidence of any filings or payments of all taxes required to be paid by Contractor hereunder.

Section 12. INDEPENDENT CONTRACTOR.

Contractor enters into this Agreement and all Purchase Orders as an independent contractor and not as an employee of Commission. Contractor shall have no power or authority by this Agreement to bind Commission in any respect. Nothing in this Agreement or any Purchase Order shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by the Contractor are employees, agents, contractors or subcontractors of the Contractor and not of Commission. Commission shall not be obligated in any way to pay any wage claims or other claims made against Contractor by any such employees, agents, contractors or subcontractors or any other person resulting from performance of

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this Agreement.

Section 13. SUBCONTRACTS.

Unless otherwise specified, Contractor must obtain Commission's written permission before subcontracting any portion of this Agreement. Except for the insurance requirements in Section 16.A, all subcontracts must require that the subcontractor be bound by and subject to all of the terms and conditions of this Agreement, and the relevant Purchase Order. No subcontract or order will relieve Contractor from its obligations to Commission and OCTA, including, but not limited to Contractor's insurance and indemnification obligations. No subcontract or order will bind Commission.

Section 14. TITLE AND RISK OF LOSS.

Unless otherwise agreed, Commission will have title to, and risk of loss of the Devices upon delivery. However, Contractor will be liable for any loss or damage to the Devices caused by Contractor or its subcontractors, their agents or employees, and Contractor will replace said Devices at its own cost to the complete satisfaction of Commission. Notwithstanding the foregoing, in the event that the Commission has paid Contractor for all or a portion of the Devices which remain in the possession of Contractor, then Commission shall have title to, and the right to take possession of, such Devices at any time following payment therefor. Risk of loss for any Devices which remain in the possession of Contractor shall remain with Contractor until such Devices have been delivered or Commission has taken possession thereof.

Section 15. INDEMNIFICATION.

A. Contractor shall defend, indemnify and hold the Commission, OCTA and their officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Contractor, its officials, officers, employees, agents, subcontractors and subconsultants arising out of or in connection with the Transponders or the performance of this Agreement or any Purchase Order, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses except such loss or damage which was caused by the sole negligence or willful misconduct of the Commission.

B. Contractor's defense obligation includes any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the Commission, OCTA and their officials, officers, employees, agents or volunteers shall be at Contractor's own cost, expense and risk. Contractor shall pay and satisfy any judgment, award

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or decree that may be rendered against Commission, OCTA or their officials, officers, employees, agents or volunteers, in any such suit, action or other legal proceeding. Contractor shall reimburse Commission, OCTA and their officials, officers, employees, agents and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

C. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Commission, OCTA or their officials, officers, employees, agents or volunteers.

Section 16. INSURANCE.

A. General. Contractor shall take out and maintain:

1. Commercial General Liability Insurance, of at least $1,000,000 per occurrence/ $2,000,000 aggregate for bodily injury, personal injury and property damage, at least as broad as Insurance Services Office Commercial General Liability most recent Occurrence Form CG 00 01;

2. Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, of at least $1,000,000 per accident for bodily injury and property damage, at least as broad as most recent Insurance Services Office Form Number CA 00 01 covering automobile liability, Code 1 (any auto);

3. Workers' Compensation in compliance with applicable statutory requirements and Employer's Liability Coverage of at least $1,000,000 per occurrence; and

4. If Contractor is also the manufacturer of the Transponders, or any portion thereof, Contractor shall carry Product Liability and/or Errors and Omissions Insurance which covers said equipment with limits of not less than $1,000,000.

B. Additional Insured; Primary; Waiver of Subrogation; No Limitation on Coverage. The policies required under this Section shall give Commission, OCTA and their officials, officers, employees, agents or volunteers additional insured status. Such policies shall contain a provision stating that Contractor's policy is primary insurance and that any insurance, self-insurance or other coverage maintained by the Commission or any additional insureds shall not be called upon to contribute to any loss, and shall contain or be endorsed with a waiver of subrogation in favor of the Commission, OCTA and their officials, officers, employees, agents, and volunteers. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are

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brought, except with respect to the limits of liability. Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement.

C. Insurance Carrier. All insurance required under this Section is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

D. Evidence of Insurance. Contractor shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by the Agreement. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the Commission. All certificates and endorsements must be received and approved by the Commission before delivery commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

E. Subcontractors. All subcontractors shall meet the requirements of this Section before commencing work. In addition, Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

F. Freight. Contractor shall ensure that third party shippers contracted by Contractor have adequate insurance coverage for the shipped Devices.

Section 17. LIENS.

A. Contractor, subcontractors and suppliers will not make, file or maintain a mechanic's or other lien or claim of any kind or character against the Devices, for or on account of any labor, materials, fixtures, tools, machinery, equipment, or any other things furnished, or any other work done or performance given under, arising out of, or in any manner connected with the Agreement (such liens or claims referred to as "Claims"); and Contractor, subcontractor and suppliers expressly waive and relinquish any and all rights which they now have, or may subsequently acquire, to file or maintain any Claim and Contractor, subcontractor and suppliers agree that this provision waiving the right of Claims will be an independent covenant.

B. Contractor will save and hold Commission harmless from and against any and all Claims that may be filed by a subcontractor, supplier or any other person or entity and Contractor will, at its own expense, defend any and

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all actions based upon such Claims and will pay all charges of attorneys and all costs and other expenses arising from such Claims.

Section 18. TERMINATION OF AGREEMENT OR PURCHASE ORDER BY COMMISSION.

A. Should Contractor at any time refuse or fail to deliver the Devices with promptness and diligence, or to perform any of its other obligations under this Agreement or any Purchase Order, Commission may terminate Contractor's right to proceed with the delivery of the Devices by written notice to Contractor. In such event Commission may obtain the Devices by whatever method it may deem expedient, including the hiring of another Contractor or other contractors. In such case Contractor will not be entitled to receive any further payments, other than for Devices delivered and accepted prior to termination.. If Commission's cost of obtaining the Devices, including compensation for additional managerial and administrative services, will exceed the unpaid balance of the relevant Purchase Order, Contractor will be liable for and will pay the difference to Commission.

B. Commission may, for its own convenience, terminate this Agreement at any time, provided that no Purchase Order is outstanding at the time of such termination. Such termination will be effective in the manner specified in such notice.

C. Termination of this Agreement for convenience or cause shall be without prejudice to any claims which Commission may have against Contractor.

Section 19. NO EXPECTATION OF PURCHASE ORDER ISSUANCE

By entering into this Agreement, the Contractor acknowledges that the issuance of Purchase Orders is at the Commission's sole and absolute discretion. The Commission makes no representation or guarantee that it will issue any Purchase Orders under this Agreement, and the Contractor shall have no claim against the Commission for failure to make any orders hereunder. The Commission shall not be held responsible for any forecasts of anticipated purchases or requirements set forth in the procurement documents related to this Agreement, or otherwise.

Section 20. MISCELLANEOUS PROVISIONS.

A. Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address or at such other address as the respective parties may provide in writing for this purpose:

COMMISSION: CONTRACTOR:

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Riverside County Transportation Commission 4080 Lemon Street, 3rd Floor Riverside, CA 92501 Attn: Executive Director	Neology, Inc 1917 Palomar Oaks Way, Ste. 110 Carlsbad, CA 92008 Attn: Cindy Adamos

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

B. Assignment or Transfer. Contractor shall not assign or transfer any interest in this Agreement or any Purchase Order whether by assignment or novation, without the prior written consent of the Commission, which will not be unreasonably withheld. Provided, however, that claims for money due or to become due Contractor from the Commission under this Agreement may be assigned to a financial institution or to a trustee in bankruptcy, without such approval. Notice of any assignment or transfer, whether voluntary or involuntary, shall be furnished promptly to the Commission.

C. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

D. Amendment; Modification. No supplement, modification or amendment of this Agreement or any Purchase Order shall be binding unless executed in writing and signed by both Parties.

E. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

F. Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County.

G. Interpretation. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party.

H. No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

I. Authority to Enter Agreement. Each Party warrants that the individuals

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who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective Party.

J. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

K. Counterparts; Facsimile Signatures. This Agreement may be signed in counterparts, each of which shall constitute an original. Facsimile signatures affixed to this Agreement or any Purchase Order, including signatures transmitted via electronic mail, shall be considered and shall have the same force and effect as original signatures.

L. Commission's Right to Employ Other Contractors. Commission reserves its right to employ other Contractors in connection with the purchase of Devices.

M. Entire Agreement. This Agreement constitutes the entire agreement between the Parties relative to the matters specified herein. There are no understandings, agreements, conditions, representations, warranties or promises with respect to this Agreement, except those contained in or referred to in the writing.

N. Conflicting Provisions. In the event of any conflict between the terms of this Agreement and any exhibit or attachment hereto, the terms of this Agreement shall govern. In the event of any conflict between the terms of this Agreement and any Purchase Order issued pursuant to this Agreement, the terms of this Agreement shall govern.

O. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

P. Cooperative Use. Contractor agrees that agencies within the California Toll Operators Committee ("CTOC") may utilize this Agreement to obtain Devices on the same terms and conditions included in this Agreement, through a separate agreement with Contractor. CTOC agencies may provide a different logo to be printed on the Transponder and different materials to accompany the retail Transponders. The Commission shall not be responsible or liable for any agreement between any CTOC agency and Contractor. The Commission makes no representation or warranty regarding the legal authorization for any CTOC agency to rely on the Commission's procurement of Contractor.

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[SIGNATURES ON FOLLOWING PAGE]

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SIGNATURE PAGE TO
ON CALL PURCHASE AGREEMENT
FOR 6C TRANSPONDERS
BETWEEN THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AND NEOLOGY, INC.
AGREEMENT NO. 26-31-027-00

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	**NEOLOGY, INC.**
By: _____ Dana Reed, Chair	By: _____ Its: _____
APPROVED AS TO FORM:	ATTEST:
By: _____ Best Best & Krieger LLP Counsel to the Riverside County Transportation Commission	By: _____ Its: _____

A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

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EXHIBIT "A"
SCOPE OF SERVICES

AND SPECIFICATIONS

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SCOPE OF SERVICES

1. INTRODUCTION

Riverside County Transportation Commission (RCTC) operates the 15 Express Lanes and is jointly operating the 91 Express Lanes with the Orange County Transportation Authority (OCTA). The State of California has adopted ISO/IEC 18000-6C (6C) technology.

RCTC is a member of the California Toll Operator's Committee (CTOC) and 6C Coalition who have developed statewide 6C specifications attached as Appendix J to the RFP.

2. TRANSPONDERS

The Contractor shall provide one or more of the following transponder types:

- Interior mounted sticker;
- Exterior mounted sticker; or
- Interior mounted 3-position switchable.

The Contractor shall comply with the following requirements for all transponders.

2.1 California 6C Electronic Toll Collection Standards, Appendix J

The Contractor shall comply with the CTOC requirements included in Appendix J. If the CTOC requirements change during the term of the contract the Contractor shall conform to the new requirements for future orders within 60 days of notification.

2.2 Read and Write Capabilities

Transponders shall have the ability to transmit the unique transponder identification data and other data contained on the transponder when read by the reader when passing through the toll point.

The Contractor shall provide the ability to lock the write access permanently or allow write access restricted by a password provided by RCTC.

2.3 Power

The transponder shall not require a power supply.

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2.4 Consumer Product Safety

All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

2.5 Size

The interior and exterior mounted transponders shall be as small as possible, while meeting the requirements of this document. The transponder cannot be larger than the California Vehicle Code 26708 requirement for application of an object to a windshield, five (5) square inches.

2.6 Mounting

The exterior mounted sticker transponders shall be mountable on a headlamp. All interior mounted transponders shall be mounted on the interior of the windshield.

All transponders shall be designed to be secure when installed to prevent inadvertent displacement or projectile motion. All materials used to adhere a transponder shall be completely removable without damaging or marring the vehicle in any way. The Contractor shall supply the required mounting solution with all transponders.

The interior mounted switchable transponders shall be delivered with a two-sided mounting solution preinstalled, such as hook and loop, requiring the customer to only adhere the one half of the mounting solution to the windshield of the vehicle. The same side of a two-sided solution shall consistently be applied to the transponder to allow for ease of transfer from vehicle to vehicle. The mounting solution used shall be readily available in the market to support the provision of replacement of the windshield mounted side by RCTC over time.

The Contractor shall provide RCTC with the source and specifications for the mounting solution provided.

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2.7 Bar Code

All transponders shall come with a uniquely identified bar code as provided for in Appendix J. The bar code shall be readable with the human eye and by a handheld reader.

For interior mounted sticker transponders the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For interior mounted switchable transponders the bar code may either be permanently etched in the hard case or printed on a non-removable sticker (decal) that will be readable for the life of the transponder. The placement of the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For exterior mounted sticker transponders a bar code shall be printed on the transponder and/or the same material to which the transponder is adhered. If not printed on the transponder, it should be made clear that the barcode is not the transponder and should be retained for the customers records.

2.8 Transponder Artwork

RCTC will provide the required artwork. Artwork will be four-color not including the color of the transponder material. The Contractor shall provide the design specifications for the artwork for placement on the transponder, by transponder type.

The Contractor shall be responsible for printing and adhering transponder graphics as provided by RCTC. The Contractor shall provide a transponder prototype with final artwork for approval by RCTC.

The Contractor shall conduct a design session to determine the placement of the artwork and bar code.

The decal shall appear to be part of the transponder and stay affixed for the life of the transponder without degradation.

Transponders shall not carry any visible manufacturer or contractor brand names.

The interior mounted sticker transponder will require artwork on the interior facing side only.

The interior mounted switchable transponders will require artwork on the internal facing side and may require artwork on the external facing side, if the Contractor's design has insufficient space for the required information.

The exterior mounted transponder will not require artwork.

2.9 Switchable Transponder Design

The switchable transponder shall have an occupancy designation switch which is easy to use, clearly indicates which occupancy position it is in and stays secure in the position until the customer changes the occupancy.

2.10 Packaging

Transponders shall be packaged for shipping by individual transponder type in a manner to ensure that they are not damaged during transport. Individual boxes shall include an exterior label with a bar code of the beginning and ending transponder serial number. Any breaks in transponder serial number sequence shall be indicated with a barcode on the outside of the box. The number of sequence breaks for any single box shall not exceed 3. All transponders shall be shielded during shipping to ensure they are not read in transit.

Boxes shall be stackable up to six boxes high without compromising the structure of the box. The box shall not weigh more than 25 pounds each.

2.11 Shipping

The Contractor shall deliver all transponders to the address(s) provided by RCTC. The Contractor shall ensure unloading and delivery accommodations to commercial buildings where loading docks and unloading equipment are not available. This cost shall be included as part of the vendor cost proposal. The Contractor shall comply with any and all current

DRAFT

U.S. and international safety standards to permit unrestricted shipment by mail and commercial carriers with appropriate documentation.

The Contractor shall be responsible for tracking and replacing any boxes lost or damaged during shipment.

The manifest specified in Appendix J shall be provided electronically at the time of shipment. In addition, a printed manifest shall accompany the shipment.

2.12 Programming

All transponders shall be pre-programmed according to the specification in Appendix J. RCTC will provide the agency ID for each of its orders.

2.13 Protection

The scope includes implementing supporting strategies to monitor, detect, and mitigate bit flip occurrences using both system-level and chip-level solutions. The Contractor shall coordinate with RCTC on transponder programming in accordance with California 6C Standard.

RCTC will provide the Contractor with the necessary keys, settings, and passwords required for proper configuration. The Contractor shall be responsible for maintaining the confidentiality and security of all RCTC issued keys, settings, and passwords.

3. DOCUMENTATION

3.1 Certification of Compliance

The Contractor shall provide third party certification from certifiers approved by the California Toll Operators Committee (CTOC) for device standards compliance with the most recent version of the California 6C Electronic Toll Collection Standard, Appendix J. The transponders shall be certified by an approved 6C Coalition vendor. The Contractor shall provide RCTC with the required certification documentation and ten (10) certified transponders for each contracted transponder type.

Recertification will be required under any of the following conditions:

- Changes to the CTOC standards;
- Changes to the manufacturing process;
- Changes to materials used; and
- Failures exceeding the acceptable failure rate defined in the Contract.

3.2 Licenses, Permits and Patents

The transponders shall comply with applicable federal, state and local licensing and regulations for transponder technology. The Contractor shall document all related patents, licensing and regulations associated with their equipment.

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3.3 Installation Instructions

The Contractor shall provide the following installation instructions for each of the transponders supplied:

- Interior mounted sticker transponder;
- Exterior mounted sticker transponder;
- Interior mounted 3-position switchable; and
- Interior mounted sticker transponder and an interior mounted 3-position switchable transponder mounted in the same vehicle.

The installation instructions must comply with the California Vehicle Code 26708 requirement for application of an object to a windshield (lower left driver side five (5) inch square, lower right passenger side seven (7) inch square, or upper center five (5) inch square).

3.4 Disposal Procedures

If there are environmental restrictions for the disposal of any type of supplied transponder, the Contractor shall document the proper disposal procedures and the reason for the restrictions.

4. SAFETY REQUIREMENTS

The transponders shall meet all applicable safety and environmental requirements related to the technology and its applications in addition to any requirements of this document. The transponders shall not pose either a short-term safety risk or a long-term health risk to drivers, technicians, or other people who may frequently be near the transponder. Safety labels shall be placed on equipment as appropriate based on prevailing laws, regulations, and standards.

The Contractor shall provide the Material Safety Data Sheet for any materials or equipment utilized within any supplied product that has a Material Safety Data Sheet. The Contractor shall provide any information regarding any other materials that may be considered hazardous or require special handling or disposal. All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

5. ORDER PROCESS

The Contractor shall provide a direct point of contact for RCTC to place orders. The Contractor shall acknowledge receipt of the order within three (3) business days and provide a proposed delivery schedule.

6. INABILITY TO SUPPLY TRANSPONDERS

Within three (3) business days from the time of order, the Contractor shall acknowledge receipt of the order and adherence to the required delivery date. If the Contractor fails to

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respond within three (3) business days RCTC will assume the Contractor is unable to fulfill the order.

7. WARRANTY RETURNS

The Contractor shall provide a process for the return of transponders covered under warranty. The Contractor shall act as the sole point of contact for warranty service. Contractor shall provide RCTC with warranty return instructions. The Contractor shall pay for freight related to returned shipments.

8. QUALITY CONTROL

The Contractor shall perform quality control to ensure transponders comply with the requirements of the Contract. The Contractor shall conduct testing, as needed, to demonstrate compliance with the requirements. The Contractor shall provide RCTC with the Quality Control Plan. RCTC reserves the right to review any quality reports produced by the Contractor. RCTC or its designated representatives reserves the rights to visit the manufacturing and testing sites of the awarded Contractor(s).

9. ONGOING SUPPORT

The Contractor shall provide technical support and advice to RCTC or its designated representative at no additional cost during the term of the Contract. The Contractor shall support efforts to resolve transponder read issues arising from lane system compatibility, interference from in vehicle equipment (including multiple transponders), windshield material issues, or other issues causing a transponder read failure.

11. PRICING

Proposal pricing and delivery times includes full compliance with the requirements contained in this Scope of Services and with the requirements contained in Appendix H.

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AVI STANDARD

REQUIREMENTS AND GUIDANCE DOCUMENT

Version 4.0

OCTOBER 10, 2023

Document Control

Originator:	6C Coalition
Report Title:	AVI Standard (formerly the "AVI Transponder Programming Standard")
History:	V 0.1 – Initial Draft Release
	V 0.2 – Updates to "State" portion of EPC field Hash Key changed from 16 to 32 bytes Version Code added to Transponder Serial Number Field
	V 0.3 – Existing System Compatibility section added
	V 0.4 – Transponder and Reader Technical Requirements section added
	V 0.5 – Move Technical Requirements Section
	V 0.6 – Update to Barcode format and EPC/Password validation calculation examples
	V 0.7 – Update to User Memory Password validation calculation example and addition of comment regarding HOT declaration in EPC field
6/5/12	V 1.0 – Updated Agency Codes (E-470 changed from 1 to 2); Made the Barcode format optional; Prohibited Read protection of User Data Memory; Allowed optional Write protection of User Data Memory; Updated references to the TID length to allow use of all fully serialized ISO 18000-6C standard transponders
11/20/14	V 2.0 – Updated the name of the document; redesigned memory map; convert from EPCglobal format to ISO format; security update; changes to permit declarable transponders; updated Barcode format
10/26/15	V 3.0 – Fixed encoding details according to ISO requirements, giving more detail as needed. Combined State and Agency fields to be single Agency field and added Agency ID appendix. Clarified UII validation calculation.
1/28/16	V 3.0 Revision 2 – Added logo to cover page; clarified barcode format; corrected sample calculation of UII Validation hashing value.
3/15/16	V 3.0 Revision 3 – Added DSFID (0x3E) to be programmed as initial 2 bytes of UII.

DRAFT

7/22/16	V 3.0 Revision 4 – Added additional Agency codes to Appendix A. Corrected first bullet of 4.2 to reference new DSFID field in UII.
2/9/17	V 3.1 – Document title changed. Revised language in Section 1.1 to address backward compatibility. Deleted reference to backward compatibility in Section 1.2. Inserted Section 1.3 to clarify certification. Created a new Section 3 "Transponder Requirements" by combining previous barcode format and transponder manifest and adding transponder characteristics and environmental requirements. Previous Section 4 "Data Security" has been renumbered as Section 5 and has been edited to clarify Lock Status and Passwords. New Section 4 "Reader Requirements" has been created to clarify optional ISO Reader commands. Section 6 regarding backward compatibility and programming versions used by toll operators has been removed. Appendix A, code for TCA consolidated.
5/11/17	V 3.1 Revision 1 – Edited 3.1 to indicate method for calculating read distances of transponder parameters. Added clarification language to 3.1.1 and 3.1.2. Changed values and units for polarization and pointing loss in 3.1.3. Updated Agency ID list in Appendix A. Edits list of optional reader commands in 4.1
12/13/19	V 3.2 – Incorporated requirements from the 6C Coalition Interoperability Requirements and Certification Framework document (Document A) to a revamped Section 3. Removed requirement for 512bit minimum size of User Data. Formatting updates. Removed Agency ID listing (Appendix A) as it will now be a standalone document. Added new Appendix A (Legacy Toll Transponder Information) and Appendix B (Transponder Filtering).
9/22/2020	V 3.2a – Corrected binary DSFID value found in Appendix A Figure 7.
10/10/2023	V 4.0 – Added CRC to UII Memory Bank 01 mapping and marked certain fields in Memory Bank 01 as optional. Updated User Memory to be optional at agency discretion. Updated filtering information in Appendix A. Updated legacy tag quantities in Appendix B.

DRAFT

Table of Contents

List of Tables v
List of Figures v
1 Introduction 1
1.1 Purpose 1
1.2 Scope 1
1.3 Interoperability 1
1.4 Definitions, Acronyms, and Abbreviations 1
2 Transponder Memory Mapping 2
2.1 Reserved Memory Bank 00 Specification 2
2.2 CRC, PC, UII Memory Bank 01 Specification 2
2.2.1 Memory Bank 01 Mapping 3
2.3 TID Memory Bank 10 Specification 5
2.4 User Memory Bank 11 Specification 6
3 Interoperability Requirements 7
3.1 Overview 7
3.2 Conformance Testing 7
3.3 Baseline Testing 8
3.3.1 Functional Baseline Tests 8
3.3.2 Environmental Performance 9
3.3.3 RF Performance 9
3.3.4 Transponder Requirements 9
3.3.5 Reader Requirements 14
3.4 Field Testing 15
3.4.1 Transponders 15
3.4.2 Readers 16
3.5 Multiprotocol Environments 17
4 Barcode Format 18
5 Transponder Manifest Details 19
6 Security and Data Integrity Validation 19
6.1 Overview 19
6.2 Memory Bank Security 19
6.2.1 Reserved Memory Bank 19
6.2.2 UII Memory Bank 19
6.2.3 TID Memory bank 19
6.2.4 User Memory Bank 20
6.3 Encryption 20
6.4 UII Validation (CRC Calculation) 20

DRAFT

6.5 UII Authentication (Hash Value) 20
7 Appendices A-1
Appendix A Legacy 6C Toll Transponder Information A-1
A.1 Assumptions A-1
A.2 Determining the Tag Programming Standard A-1
A.3 Identifying Agencies A-3
Appendix B Transponder Filtering B-1

LIST OF TABLES

Table 1: Transponder Memory Map 2
Table 2: Stored CRC Memory Bank 01 Mapping 3
Table 3: Stored PC Memory Bank 01 Mapping 3
Table 4: UII Memory Bank 01 Mapping 3
Table 5: User Memory Bank 11 Mapping 6
Table 6: Conformance Testing Requirements 8
Table 7: Transponder Baseline Testing Requirements 9
Table 8: Reader Baseline Testing Requirements 14
Table 9: Transponder Performance Requirements 15
Table 10: Reader Field-testing Requirements 16
Table 11: Programing Standard Identification A-2
Table 12: Legacy Toll Tag Information B-1

DRAFT

LIST OF FIGURES

Figure 1: Diagram depicting roll angle between transponder and reader antenna 11
Figure 2: Diagram depicting pitch angle between transponder and reader antenna 12
Figure 3: Diagram depicting yaw angle between transponder and reader antenna 13
Figure 4: Snip of Memory Map - Highlights the location of key identification bits A-1
Figure 5: Version 0.9 and 1.0 State and Agency Code A-3
Figure 6: Version 2.0, 3.0, and 3.1 Agency Code – Currently used A-3
Figure 7: Memory Bank 01 Programming Summary by Version A-4

1 INTRODUCTION

1.1 Purpose

The purpose of this document is to create and maintain a standard based on the 2010 and subsequent version of the ISO/IEC 18000-63 (known as 6C) communication protocol for tolling applications that use automatic vehicle identification (AVI). The guidance is intended for transponder and reader manufacturers, toll lane vendors, system integrators, back-office providers, and other members of the RFID industry. The current programming requirements standards are backward compatible to all previous versions of the standard deployed. A few toll operators have deployed 6C transponders prior to the adoption of Version 1.0 and continue to use their legacy systems. More information on legacy 6C memory maps used by toll operators can be found on the 6C Coalition website and in Appendix A of this document.

1.2 Scope

This document addresses the following areas of interest:

- Transponder Memory Mapping
- Interoperability Requirements
- Barcode Format
- Transponder Manifest Details
- Security and Data Integrity Validation

1.3 Interoperability

This AVI Standard provides a reference that enables device manufacturers to produce interoperable transponders and readers. It also provides a standard that integrators and agencies can use to verify conformance that ensures interoperability. Certification is the primary method of verifying conformance with the 6C Coalition AVI Standard.

1.4 Definitions, Acronyms, and Abbreviations

6C	Refers to the Type C portion of the ISO/IEC 18000-6 Type C UHF standard, including later updates to Type C of the ISO/IEC 18000-63 standard
AFI	Application Family Identifier
CRC	Cyclic Redundancy Check
DSFID	Data Storage Format Identifier
EPC	Electronic Product Code
HOV	High Occupancy Vehicle
IEC	International Electrotechnical Commission

DRAFT

ISO	International Organization for Standardization
NAK	Negative Acknowledgement
PC	Protocol Control
RFID	Radio Frequency Identification
TID	Transponder Identification Gen2 transponder memory bank 10
TSN	Transponder Serial Number
UII	Unique Item Identifier, ISO/IEC 18000-63 (formerly '6C'), transponder memory bank 01
XPC	Extended protocol control

2 TRANSPONDER MEMORY MAPPING

The 6C transponder memory is separated into four memory as shown in Table 1 below.

Table 1: Transponder Memory Map

Bank #	Purpose
Bank 00	Reserved
Bank 01	CRC, PC, UII
Bank 10	TID
Bank 11	User Memory (Optional)

DRAFT

2.1 Reserved Memory Bank 00 Specification

The Reserved memory shall be programmed by the transponder provider and contents shared with the issuing agency.

2.2 CRC, PC, UII Memory Bank 01 Specification

Memory Bank 01 contains three addressed areas:

1. Stored CRC – This 16-bit long area is stored at memory location **0x00 – 0x0F** and calculated by the transponder.
2. Stored PC – This area is 16 bits long stored at memory location **0x10 – 0x1F**. The PC word contains the Application Family Identifier (AFI) – an 8-bit identifier (value **0xB0**) assigned to the 6C Coalition. This number can be used to filter the responses of V3.0 and later transponders to ensure that only toll transponders are being read. The ISO assigned this protocol control number for tolling, along with the Data Storage Format Identifier (DSFID, value **0x3E** which is programmed into the first byte of the UII memory area) and explicitly describes a transponder belonging to the 6C Coalition.

The Stored PC is encoded during chip initialization and is dependent on the type of chip being encoded, not on data within an individual transponder.

3. Unique Item Identifier (UII) – This area contains at least 96 bits of information beginning at memory location **0x20**. Any memory in excess of 96 bits remains undefined for this standard but usable by the issuing agency. However, the additional memory shall not interfere with any of the functionality contained in this document. The UII shall provide read-only access to users. The issuing agency may lock write access permanently or may allow write access by a password maintained by the issuing agency.

2.2.1 Memory Bank 01 Mapping

The following tables describe the memory mapping for Bank 01. The tables and values within the tables appear in Memory Address (hex value) order ascending. All fields are mandatory unless indicated otherwise.

Table 2: Stored CRC Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-16	00h-0Fh (16 bits)	Calculated	Calculated value based on other transponder memory values per ISO 18000-63 specification	Varies

Table 3: Stored PC Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-5	10h-14h (5 bits)	Length	Number of 16-bit words in the UII	00110 = 6 words (indicates 96-bit UII) Varies based on UII length
6	15h (1 bit)	User Memory	Indicates status of the User Memory	0 = No user memory 1 = User memory available
7	16h (1 bit)	XPC	Indicates status of extended transponder features	0 = No XPC 1 = XPC available
8	17h (1 bit)	Numbering System Indicator	Indicates whether transponder coded as EPC or ISO	0 = EPC 1 = ISO (correct value for 6C Coalition applications)
9-16	18h-1Fh (8 bits)	AFI	Application Family Identifier for 6C Coalition – B0h	1011 0000 = 6C Coalition AFI (B0h)

Table 4: UII Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-8	20h-27h (8 bits)	DSFID	Data Storage Format Identifier for 6C Coalition – 3Eh	0011 1110 = 6C Coalition DSFID (3Eh)

DRAFT

#	Memory Address	Section	Description	Values
9-16	28h–2Fh (8 bits)	UII Validation (CRC)	Cyclic Redundancy Check calculated value using UII bits 17 – 80 (Agency Use thru Transponder Serial Number fields). Example appears in Section 6.	Assigned at the time of transponder manufacture. Calculated as per Section 6. This field is mandatory for version 4.0 and higher tags, optional for earlier versions.
17-21	30h–34h (5 bits)	Agency Use	Individual agencies may add agency specific information here.	Assigned by agency (Optional)
22-33	35h-40h	Classification	Classification is taken directly from EZPass Inter-Customer Service Center Interface File and Reporting Specifications, Appendix C and includes:	Population of the first bit indicating class value assignment is mandatory. Remaining classification fields are optional if assignment bit is "0".
	(1 bit)	Class	The first bit indicates if the transponder has been assigned a classification value. If 0 is selected, the following 11 bits shall be ignored.	0 = No class value assigned (default) 1 = Class value assigned
	(5 bits)	Vehicle Type	This field indicates the type of vehicle.	00000 = Undefined (default) 00001 = Automobile 00010 = Motorcycle 00011 = Pickup truck 00100 = Van (seats 1-9) 00101 = Minibus (seats 10-15) 00110 = Bus (seats 16+) 00111 = Recreational vehicle 01000 = Truck 01001 = Auto transporter (≤ 65') 01010 = Auto transporter (>65') 01011 = Tractor & trailer (≤48') 01100 = Tractor & trailer (>48') 01101 = Tractor & dual trailers each (≤28.5') 01110 = Tractor & dual trailers each (>28.5') 01111 = Tractor & dual trailers each (one ≤28.5' other >28.5') 10000 = Undefined 10001 = Tractor/mobile home combination 10010-11111 = Undefined
	(4 bits)	Vehicle Axles	This field indicates the number of axles.	0000 = Undefined (default) 0001 = Undefined 0010 = 2 axles 0011 = 3 axles 0100 = 4 axles 0101 = 5 axles

DRAFT

#	Memory Address	Section	Description	Values
				0110 = 6 axles 0111 = 7 axles 1000 = 8 axles 1001 = 9 axles 1010 = 10 axles 1011 = 11 axles 1100 = 12 axles 1101 = 13 axles 1110 = 14 axles 1111 = 15 axles
	(1bit)	Vehicle Weight	This field indicates the weight of vehicle.	0 = ≤ 7,000 lbs. (default) 1 = > 7,000 lbs.
	(1 bit)	Vehicle Rear Tires	This field indicates the number of rear tires.	0 = Single rear tires (default) 1 = Dual rear tires
34-36	41h-43h (3 bits)	HOV Declaration	These three bits indicate the declaration status of the transponder. All single mode transponders shall be assigned the default value – 000, unless they are carpool specific transponders.	000 = Single mode (default) 001 = SOV (non-carpool) 010 = HOV 2+ 011 = HOV 3+ 100 = Carpool (as defined by roadway) 101 = Reserved for future use 110 = Reserved for future use 111 = Reserved for future use
37-40	44h-47h (4 bits)	Version	Allows for 16 possible values to indicate the version of the programming standard used on the transponder.	0000 = Unassigned 0001 = Ver. 1.0 0010 = Ver. 2.0 0011 = Ver. 3.0 0100 = Ver. 4.0 (current)
41-52	48h-53h (12 bits)	Agency	Allows for up to 4,096 agencies.	See 6C Coalition Table of Agencies (separate document)
53-80	54h-6Fh (28 bits)	Transponder Serial Number	Identifies the transponder within the agency. This space accommodates 268,435,456 values.	Assigned by agency
81-96	70h-7Fh (16 bits)	UII Authentication (Hash Value)	Calculated value using the first 80 UII bits and 32-byte key. Example appears in Section 6.	Assigned at the time of transponder manufacture. Calculated as per Section 6. Calculation/programming of this field is optional and it should be zero-filled if not calculated.

DRAFT

2.3 TID Memory Bank 10 Specification

The Transponder Identification (TID) memory has no specific value but is assumed to be unique and constant for all 6C transponders, per the 6C standard. The TID length can vary per the 6C specification and the length of a transponder's TID serial number is indicated on each transponder, in bits 0x20 – 0x22 of the TID. For fully serialized tags, the complete header and serialized portion of the TID can be

anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits. Transponders which are not fully serialized (that is, have at least a 48-bit unique serial number) should not be used for interoperable 6C tolling deployments.

2.4 User Memory Bank 11 Specification

This memory bank may be required to accommodate the future needs of group members or affiliates. Its provision and use are left optional at the discretion of individual members. It is important to note that given the absence of a universal requirement for User Memory, members should assume some portion of the tags programmed per this document may not contain a User Memory Bank 11.

Previous versions of this document required the User Memory bank be present on all tags and it be a minimum size of 64 bits. This memory was programmed per the following table. To maintain backwards compatibility with tags programmed under previous versions of this document, the below memory map must be used for tags that meet both conditions:

1. A User Memory bank is present on the tag
2. The 6C Coalition's DSFID value is programmed into the first byte of User Memory (per table 5 below)

Table 5: User Memory Bank 11 Mapping

#	Memory Address	Section	Description	Values
1-8	00h-07h (8 bits)	DSFID	Data Storage Format Identifier	0011 1110 = 6C TOC DSFID (3Eh)
9-20	08h-23h (12 bits)	Agency	Agency Code of agency writing to this memory bank.	See 6C Coalition Table of Agencies (separate document)
21-27	24h-1Ah (7 bits)	Plaza ID	7-bit Plaza ID. Each operator may choose.	Defined by agencies using this field.
28-32	1Bh-1Fh (5 bits)	Lane ID	5-bit Lane ID. Each operator may choose.	Defined by agencies using this field.
33-57	20h-38h (25 bits)	Day/Time	25-bit Day/Time. Each operator may choose. (seconds since Jan 01 00:00:00)	Defined by agencies using this field.
58—60	39h-3Bh (3 bits)	Occupancy Setting	3-bit Occupancy. Each operator may choose.	Defined by agencies using this field.
61+	3Ch -	Undefined	The remaining bits defined as individual agency needs arise.	

Tags that either do not have a User Memory bank, or do not have the 6C Coalition's DSFID programmed as the first byte of User Memory, are not subject to any requirements regarding User Memory.

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3 INTEROPERABILITY REQUIREMENTS

3.1 Overview

The purpose of these requirements is to have all compliant transponders and readers operate as seamlessly as possible from one installation to the next. They create a basis for the development and refinement of testing methods used in a certification process. The 6C Coalition uses a third party to administer and conduct the certification program.

Interoperability testing demonstrates in lab and field conditions (replicating a reference toll environment) that transponders and readers operate predictably together. Agencies and integrators purchasing these products should be assured of basic equipment interoperability, but it does not substitute for performance testing in specific tolling installations. Due to the unique nature of each tolling installation, site-specific conditions, vehicle types, environmental conditions, etc., it is incumbent upon purchasers of equipment to test and tune for desired interoperability performance levels.

All transponders that conform to this 6C Coalition standard should be operable in any AVI system using a reader that conforms to this standard, as well as supporting other aspects relevant to the procurement and management of transponders. This necessitates that:

- All transponders conform to the same 6C air interface protocol physical layer.
- All transponders must support the full mandatory set of communications from the referenced 6C air interface protocol and must operate at all mandatory data rates supported by the protocol.
- Transponder performance must be reliable, and the communication zone should be within bounded limits for common or reference systems, which includes but is not limited to RF requirements such as operating on vehicles at the same field strength and under similar RF geometries defined by the 6C Coalition.

All readers that conform to this 6C Coalition standard should be operable with all types of transponders that conform to this standard. This necessitates that:

- All the protocol communications used by the reader must conform to the referenced 6C air interface protocol. However, this does not require that all the functions or commands that are mandatory for generic interrogators in the air interface protocol be supported by toll readers.
- The reader commands NAK, Kill, and Lock are optional for readers.
- Readers can report and be limited to reporting transponders coded as 6C toll transponders, using coding as defined in this document in the presence of other 6C transponders. See Appendix B for additional information regarding filtering of legacy 6C tolling transponders.

3.2 Conformance Testing

Conformance testing shall prove devices operate in accordance with the 6C PHY (Physical) and MAC (Medium Access Control) layers. All transponders and readers shall meet the conformance requirements defined in Table 6 below.

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Table 7: Conformance Testing Requirements

#	Category	Requirement
1.1	Regulatory Approvals	Meet all applicable FCC compliance requirements for Part 15 and 90
1.2	Protocol Compliance	Conform to the 6C PHY (Physical) and MAC (Medium Access Control) layers, in accordance with ISO 18047-6 or EPCglobal Conformance test methods. For transponders - include mandatory modulation rates supported by the transponder (i.e., as per ISO 18047-6) and verification of QUERY and ACK as per ISO 18047-6 or equivalent. For readers –limited to only modulation rates that the reader manufacturer specifies (i.e., as per ISO 18047-6).
1.3	Frequency Range	Operate in the 902-928 MHz frequency range.
1.4	Regulatory Verification	Meet necessary regulatory and safety certifications specified by the FCC, vendor, or 6C Coalition as required/applicable.

3.3 Baseline Testing

Baseline Testing verifies that a device meets the minimum required performance for basic functionality, RF performance, and environmental performance in a lab environment.

3.3.1 Functional Baseline Tests

Functional Baseline Tests shall verify that the transponders comply with the 6C Coalition specifications. Transponders are tested to ensure that the various memory banks are properly programmed and can be written to as specified. Readers are tested to ensure transponders are properly read and transmitted to a higher-level system (e.g., lane controller).

Functional Baseline Tests are conducted in a laboratory environment to ensure that a transponder and a reader communicate via RFID commands. Testing of transponders for commands (executed with standardized parameters and transponder user data) may be embedded in automated test scripts run on the reference reader. There shall be enough tests to ensure that all commands and parameters function correctly, and that transponder data is read/written correctly and secured. For reader testing, the vendor shall state the set of commands used for toll operation. This testing shall verify through these commands the reader's capability to select, filter, and properly read 6C Coalition transponders.

Commands and Parameters – Transponders and readers shall be tested to make sure they can transition between all internal states while executing commands. A transponder must also demonstrate additional capabilities such as Lock, Kill, EPC re-programmability via secure access, and the ability to accept write directives. A reader must demonstrate the ability to filter only 6C Coalition transponders in the read zone.

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Test Parameters – Antenna height, transponder height, and distance between transponder and antenna shall be held constant.

Test Approach - A reader submitted for testing shall be tested against reference transponders. A transponder submitted for testing shall be tested against reference readers.

3.3.2 Environmental Performance

Environmental baseline testing shall verify performance of transponder under various environmental conditions.

3.3.3 RF Performance

RF Performance Baseline Tests will verify RF performance of transponders in controlled free space to ensure interoperability between devices based on the transponder characteristics specified by the 6C Coalition's requirements. Transponder testing will determine transponder minimum activation energy, backscatter range, antenna polarization, and pointing loss. The tests are conducted in a simulated operational environment, which is not meant to substitute for toll operators conducting performance accuracy testing in a real-world toll application. The EPCglobal test document titled, *Tag Performance Parameters and Test Methods Version 1.1.3*, shall serve as the basis for testing:

1. Read range (EPCglobal test document Section 8.1)
2. Orientation tolerance (EPCglobal test document Section 8.2)
3. Frequency tolerance (EPCglobal test document Section 8.3)
4. Backscatter range (EPCglobal test document Section 8.5)

All values are measured per the EPCglobal *Tag Performance Parameters and Test Methods Version 1.1.3* test protocol, limited to the 902 – 928 MHz frequency range and modified as follows:

1. Use a horizontally, linearly polarized test antenna
2. Transponders mounted on material applicable for the intended location on the vehicle

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3.3.4 Transponder Requirements

Transponders shall meet the baseline testing requirements shown in 8 below.

Table 9: Transponder Baseline Testing Requirements

#	Category	Requirement
2.1	Functional - Memory Bank 10	Contain a minimum of 64 bits (8 byte) unique chip ID programmed by the chip manufacturer (TID)
2.2	Functional – Memory Bank 01	Programmed per section 2.2.1 of this document
2.3		Optional and length variable

#	Category	Requirement
2.4	Functional - Memory Bank 11	Previous versions of this standard required this area be programmed with the DSFID (00h-07h) set to 3Eh, 0011 1110 = 6C Coalition DSFID (3Eh). If this area of memory is present and programmed with the DSFID (as stated in previous sentence), the size of the User Memory Bank 11 shall be at least 64 bits.
2.5		Programmed unused and undefined bits with zeros
2.6	Functional - Memory Bank 00	See section 2.1 of this document
2.7	Environmental	All interior transponders – able to be subjected to and operated in 95% humidity, non-condensing environments
2.8		All exterior transponders – able operate in 100% humidity, condensing environments.
2.9		All interior transponders – able to operate at temperatures between – 40° F and +185° F.
2.10		All exterior transponders – able to operate at temperatures between – 40° F and +140° F.
2.11		All transponders – perform consistently under Ultraviolet (UV)/direct sunlight as well as in overcast conditions.
2.12	RF Performance - Minimum Activation Energy	All transponders - have a Minimum Activation Energy (forward link range) resulting in a baseline test read range between 7 m and 12 m.
2.13	RF Performance - Return Signal Strength (Backscatter Range)	All transponders - have a return signal strength/backscatter range (reverse link range) resulting in a baseline test read at a minimum of 14 m.

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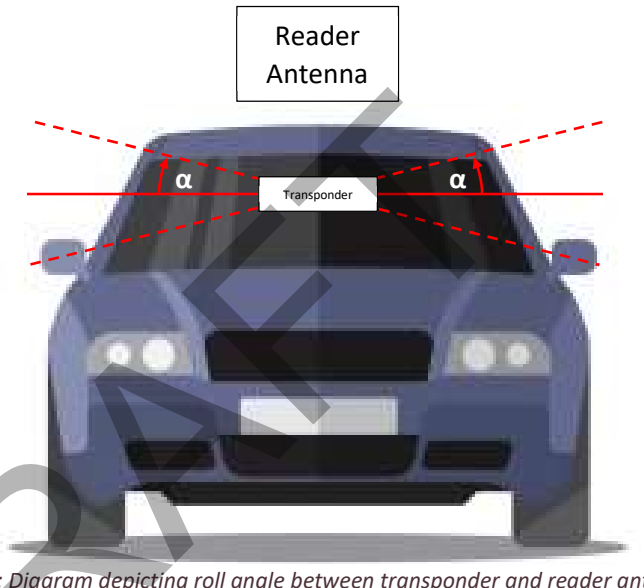
#	Category	Requirement
2.14	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Tilt from Horizontal" resulting in a baseline test read range, between 5 m and 12 m, when tilted +/- 15 degree horizontally (see Figure 1) from the installation reference angle defined by the transponder manufacturer. Facing the reader antenna, “Tilt from Horizontal” is the angle α from the horizontal mounting of a transponder. This represents transponders that are not installed horizontally level (“crooked”). **Tilt from horizontal reference plane (roll angle) = α**  *Figure 1: Diagram depicting roll angle between transponder and reader antenna*

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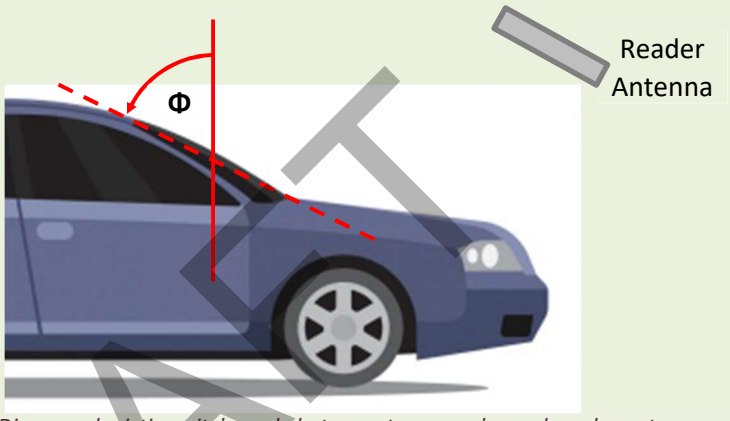
#	Category	Requirement
2.15	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Tilt from Vertical" resulting in a baseline test read range between 5 m and 12 m, when tilted up to 45 degrees from vertical. Looking from the side, "Tilt from Vertical" is the angle Φ showing the difference of the mounted transponder from perfectly vertical as shown in Figure 2. This represents windshield angles between steeply sloped windshields (sports car) and near vertical windshields (semi-tractor trailers). **Tilt from vertical reference plane (pitch angle) = Φ**  *Figure 2: Diagram depicting pitch angle between transponder and reader antenna*

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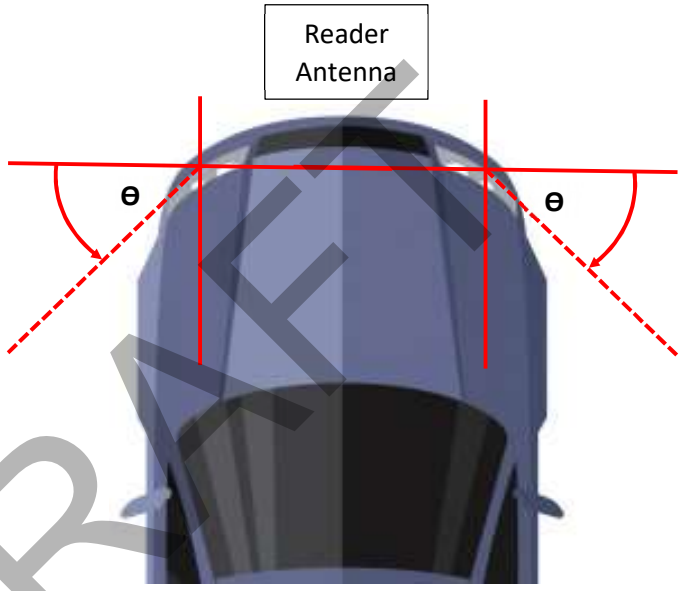
#	Category	Requirement
2.16	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Rotation from Horizontal" resulting in a baseline test read range between 5 m and 12 m, when rotated +/- 18 degrees from the horizontal plane (see Figure 3) from horizontal. Looking top down, Rotation from Horizontal is the rotation angle Θ from the horizontal plane of the transponder face away from the reader antenna. This represents transponder mounting locations on flat windshields versus curved windshields and headlights. **Rotation from horizontal reference plane (yaw angle) = Θ**  *Figure 3: Diagram depicting yaw angle between transponder and reader antenna*

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3.3.5 Reader Requirements

Readers shall meet the baseline testing requirements shown in Table 10 below.

Table 10: Reader Baseline Testing Requirements

#	Category	Requirement
3.1	Power Level	Have a maximum power/field strength allowed by local regulatory authority.
3.2	Interference	Provide interference mitigation for use with other readers at a toll plaza in single protocol reader and multiple protocol reader modes.
3.3	Transponder Filtering	Able to filter and report 6C Coalition coded transponders and information.
3.4	Transponder Filtering	Able to filter out non-6C Coalition transponders.
3.5	Reporting Transponder Data	Verify that reader can correctly read transponder data and supply it to a higher-level system (e.g. lane controller).

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3.4 Field Testing

Field Testing shall use a simulated field environment to evaluate device performance at different ranges, speeds (up to 85 mph), windshield angles, and lane placement. For both transponder and reader testing, reader frequency may be any frequency within the 902 – 928 MHz range and reader power or field strength can be up to the maximum allowed by local regulatory authorities.

3.4.1 Transponders

Tests occur in various toll operating environments (varied ranges, speeds and transponder densities). Transponders are tested using reader reference test systems set up per vendor instructions. Vehicle passages will cover both the mainline path and lane edges.

Transponder performance shall meet the field-testing requirements described in Table 11 below.

Table 12: Transponder Performance Requirements

#	Category	Requirement
4.1	Transponder Height	Above ground for car windshield mountings: 36”-48” (0.91m-1.2m) Above ground for medium truck windshield mountings: 48”-65” (1.2m-1.6m) Above ground for Large truck (Straight and Tractor) windshield mountings: 72”-108” (1.8m-2.7m)
4.2	Transponder orientation (3-D)	Tilt horizontal α = +/- 15 degrees (roll angle) Tilt vertical Φ = 0 to - 45 degrees (pitch angle) Rotation horizontal θ = +/- 18 degrees (yaw angle)
4.3	Transponder Speed	Speed of 0, 15, 85 MPH
4.4	Transponder Mounting	Windshield (Ford F150 4’x6’ portion) Headlight (Ford F150 full headlight assembly) Bumper (metal or plastic according to vendor instructions) Other mounting type per vendor instructions
4.5	Interrogator antenna orientation	Fixed reference system with horizontal linear polarization and antenna 15 degrees from horizontal facing oncoming traffic pattern
4.6	Antenna Height	Fixed reference system with lowest portion of antenna assembly 19’ above center point of travel lane

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3.4.2 Readers

Reader systems are configured as single lane or multiple lane ORT per the vendor recommended toll configuration setup.

Readers shall meet the field-testing requirements described in Table 13 below.

Table 14: Reader Field-testing Requirements

#	Category	Requirement
5.1	Transponder Population	Filter one 6C Coalition transponder (programming consistent with version 3.1 of this standard or higher) from nine non-6C Coalition transponders. Filtering information can be found in Appendix A Table 11 of this document (AFI, DSFID and Version values available to be filtered upon).
5.2	Transponder Lane Placements	Pass multiple reference transponders through the read zone on vehicles using in-line positions and cross-over (lane change) locations, and will include multiple simultaneous vehicles in the ORT configuration
5.3	Transponder Height	Above ground for car windshield mountings: 36”-48” (0.91m-1.2m) Above ground for medium truck windshield mountings: 48”-65” (1.2m-1.6m) Above ground for Large truck (Straight and Tractor) windshield mountings: 72”-108” (1.8m-2.7m)
5.4	Transponder orientation (3-D)	Tilt horizontal α = +/- 15 degrees (roll angle) Tilt vertical Φ = 0 to - 45 degrees (pitch angle) Rotation horizontal θ = +/- 18 degrees (yaw angle)
5.5	Transponder Speed	Speed of 0, 15, 85 MPH
5.6	Transponder Mounting	Windshield (Ford F150 4’x6’ portion) Headlight (Ford F150 full headlight assembly) Bumper (metal or plastic according to vendor instructions) Other mounting type per vendor instructions
5.7	Interrogator antenna orientation	Per vendor recommendation and using vendor antenna
5.8	Antenna Height	Per vendor recommendation and using vendor antenna

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3.5 Multiprotocol Environments

The 6C protocol will be used in conjunction with other protocols, therefore:

1. Multiprotocol transponders – Transponders with multiple protocols that incorporate the 6C protocol are required to meet the minimum 6C protocol performance prescribed in this document.
2. Multiprotocol readers – Readers with multiple protocol functionality that read the 6C protocol are required to meet the minimum 6C protocol performance described in this document.

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4 BARCODE FORMAT

The transponder barcode includes the Agency Code, the Transponder Serial Number, and a check digit. The barcode shall be printed using EPC Code 128 and the code data digits shall be in decimal format **AAAATTTTTTTTTTL** where **AAAA** is the Agency Code as a 4-digit number with leading zeros, **TTTTTTTTTT** is the Transponder Serial Number (TSN) as a 10-digit number with leading zeros and **L** is the Luhn check digit computed using only the last 2 digits of the Agency Code and all 10 digits of the TSN.

Below the barcode the Agency Code, the TSN and the check digit shall be displayed in the following decimal format:

<AA>AA TTTTTTTTTT L

The printed Agency Code shall NOT contain leading zeros and shall be separated from the TSN by a double space, where **<AA>AA** is the Agency code excluding leading zeros. The TSN shall include the leading zeros (to fill all 10 digits) and shall be separated from the check digit number **L** by a double space. The check digit **L** is Luhn (mod10) coded – calculated based upon **<AA>AA** (third and fourth digits only) and **TTTTTTTTTT** (all ten digits).

For example, a transponder with serial number 12 for agency 77 would return **007700000000123** as the barcode content and the printed information below the barcode would contain:

77 0000000012 3

Similarly, for agency 449, a transponder with serial number 12 would return **044900000000122** as the barcode content and the printed information below the barcode would contain:

449 0000000012 2

DRAFT

5 TRANSPONDER MANIFEST DETAILS

Accompanying an order of transponders, it is suggested that tag manufacturers provide a file including an entry for each transponder delivered to facilitate loading of data into back office systems. This should include both the UII programmed value and TID programmed value. Each transponder entry should appear on a new line as shown in the example below:

12_Byte_UII_Memory,TID (length varies)

0101CE00010000000101CE8C,E2003412012EC0FFEE041392

6 SECURITY AND DATA INTEGRITY VALIDATION

6.1 Overview

Transponder security and data integrity validation is critical to the toll industry. It is anticipated that as more security and validation features become available, they will be evaluated and deployed, as appropriate. The following measures are currently employed.

6.2 Memory Bank Security

6.2.1 Reserved Memory Bank

1. The Access Password shall have a Lock Status of locked with an Access Password known to and secured by the transponder issuing agency.
2. The Kill Password and its Lock Status shall be configurable by the transponder issuing agency. It is recommended that the transponder issuing agency configure transponders to permanently disable the ability to kill their transponders.

6.2.2 UII Memory Bank

1. The transponder issuing agency shall be the only entity authorized to change the encoded bits on the transponder. The UII memory bank shall have a Lock Status of locked.
2. UII Validation - The UII content can be validated by comparing a CRC computed on the received UII data against the UII validation byte contained within the UII. Further details are contained in section 6.4.
3. UII Authentication – The UII memory data should be authenticated with two hashed authentication bytes. The UII Authentication bytes can be used for transponder data authentication. Further details are contained in Section 6.5.

6.2.3 TID Memory bank

The transponder identification number shall be uniquely assigned by the manufacturer. It shall be readable without a password, cannot be altered and must be unique.

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6.2.4 User Memory Bank

1. Password – If a User Memory bank is included on the tag, it shall be writable without a password.
2. Lock Status - If a User Memory bank is included on the tag, it shall have a Lock Status of unlock.
3. Authentication/Validation – Authentication and validation shall not be used.

6.3 Encryption

Under development.

6.4 UII Validation (CRC Calculation)

The CRC is included in tag memory to easily validate the integrity of UII bits 17 – 80 (Agency Use through Transponder Serial Number fields). Should any portion of this area of tag memory become erroneous/faulty, validation of the CRC field provides a means to detect this. The CRC is calculated using an 8-bit CRC applied to UII bits 17 – 80. Note the *UII Authentication (Hash Value)* portion of tag memory is intentionally not included in this calculation. This allows the CRC to be calculated both prior to and independently of the calculation of the *UII Authentication*. The *UII Authentication* value can then be calculated once the CRC value is determined.

The CRC to be used is an 8-bit CRC (CRC-8/ITU), with a polynomial of $x^8 + x^2 + x + 1$, with a preset value of 0x00 and an output XOR mask of 0x55 (see 0x83 [implicit+1 notation] in Best CRC Polynomials[1]). As stated above, the data feed for the CRC calculation is UII bits 17 – 80.

Below is an example of how the CRC byte shall be calculated using:

1. An example UII bits 17 – 80 (64 bits or 8 bytes) value of **0xFFFFFFFFFFFFFFFF**
2. Polynomial (implicit+1 notation) **0x83**
3. Initial CRC value **0x00**
4. Output XOR **0x55**
5. CRC remainder **0xD7**
6. The resulting CRC output is **0x82**. CRC implementations can be verified using the CRC-8/ITU calculation in https://crccalc.com

6.5 UII Authentication (Hash Value)

Below is an example of how the UII Authentication bytes shall be calculated using:

1. The first 10 bytes of the UII (starting with the "DSFID" field)
2. The 32-byte key (determined by the transponder issuing agency)
3. The bytes of the transponder TID (length varies - see footnote)

[1] Implicit+1 notation in https://users.ece.cmu.edu/~koopman/crc/index.html by Phillip Koopman, Carnegie Mellon University, aka CRC-8-CCITT in https://en.wikipedia.org/wiki/Cyclic_redundancy_check#table

DRAFT

For ensuring interagency interoperability and consistency between transponders manufactured by different vendors the open standard SHA1 hashing algorithm shall be used. The hashing sequence shall be:

1. Concatenate the 10 UII memory bytes, the 32-byte key and the TID bytes to form a single byte sequence
2. Determine the SHA1 hash of this byte sequence above
3. For UII Validation the first 2 bytes from the 40-byte hash result shall be used.

UII Validation Reference Calculation is provided below:

UII 10 byte: **0xFFFFFFFFFFFFFFFFFFFF**

Key 32 byte:

0xABABABABABABABABABABABABABABABABABABABABABABABABABABABABABABABAB

TID (12-byte example): **0x000000000000000000000000**

Result 20-byte hash value: **0x167F9C5B3933148B68AAD51EE3C4B5F858166451**

UII Validation bytes: **0x167F**

The 12 UII bytes shall be encoded as: **0xFFFFFFFFFFFFFFFFFFFF167F**

For fully serialized tags, the complete header and serialized portion of the TID (which can be anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits) will be used for the indicated calculations.

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7 APPENDICES

Appendix A Legacy 6C Toll Transponder Information

The programming standard described in this document intends to enable consistent tag programming among the member agencies. However, developing the standard required several iterations before achieving a steady state in Version 3.1. Thus, slight differences exist between the current version and previous versions. This appendix explains how to determine the programming standard used and the forward compatibility of the Agency Codes.

A.1 Assumptions

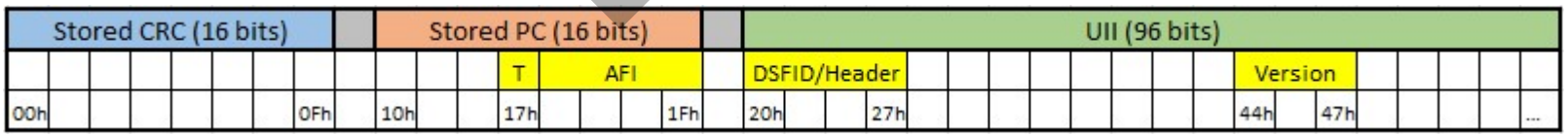
1. All values discussed appear in hexadecimal, except where noted.
2. This appendix only discusses Memory Bank 01 (CRC, PC, and the UII) described in section 2.2

A.2 Determining the Tag Programming Standard

Use the AFI, Header/DSFID, and Version values to validate the tag and determine the Programming Standard used. Figure 4 illustrates the location of the bits.

- AFI - Memory Address **`18h – 1Fh`**
- Header/DSFID - Memory Address **`20h – 27h`**
- Version - Memory Address **`44h – 47h`**

Figure 4: Snip of Memory Map - Highlights the location of key identification bits



For a tag to comply as an interoperable 6C Coalition tag, one of the following statements must apply:

1. [AFI] contains no value, [Header] contains **`35`**, and [Version] contains **`0`**, the tag uses Programming Standard Version 0.9.

DRAFT

2. [AFI] contains no value, [Header] is **35**, and [Version] is **1**, the tag uses Programming Standard Version 1.0. – no longer used
3. [AFI] contains no value, [Header] contains **B0**, and [Version] contains **2**, the tag uses Programming Standard Version 2.0.
4. [T] contains 1, [AFI] contains **B0**, [Header] contains no value, and [Version] contains **3**, the tag uses Programming Standard Version 3.0.
5. [T] contains 1, [AFI] contains **B0**, [DSFID] contains **3E**, and [Version] contains **3**, the tag uses Programming Standard Version 3.1.
6. [T] contains 1, [AFI] contains **B0**, [DSFID] contains **3E**, and [Version] contains **4**, the tag uses Programming Standard Version 4.0.

The following table provides a summary of the values discussed above:

Table 15: Programing Standard Identification

	T bit and AFI (9 Bits) **Memory Address:** 17h – 1Fh Bits 8-16 of the Stored PC		**DSFID / Header (8 Bits)** **Memory Address:** 20h – 27h Bits 1-8 of the UII		**Version (4 Bits)** **Memory Address:** 44h – 47h Bits 37-40 of the UII	
Version	**Binary**	**Hex**	**Binary**	**Hex**	**Binary**	**Hex**
4	1 1011 0000	1 B0	0011 1110	3E	0100	4
3.1	1 1011 0000	1 B0	0011 1110	3E	0011	3
3	1 1011 0000	1 B0	N/A	N/A	0011	3
2	N/A	N/A	1011 0000	B0	0010	2
1	N/A	N/A	0011 0101	35	0001	1
0.9	N/A	N/A	0011 0101	35	0000	0

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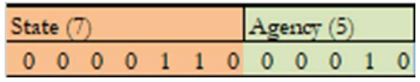
A.3 Identifying Agencies

For Versions 0.9 and 1.0, a combination of the State Code (7 bits) and the Agency Code (5 bits) identified an agency. This concept allowed a single state or region to have multiple agencies (Figure 5).

Figure 5: Version 0.9 and 1.0 State and Agency Code



Version 2.0 replaced the separate State Code and Agency Code with a single Agency Code (12 bits), using the same Memory Address (Figure 6). This code design allows forward compatibility. For example, in Version 0.9/1.0, the Colorado E-470 Public Highway Authority had a State Code of 6 for Colorado and an Agency Code of 2 for E-470. As depicted in Figure 5, the binary code **0000110** equals decimal value 6 and the binary code **00010** equals decimal value 2.

In Version 2.0 and above, the Agency Code uses the entire 12 bits and all Agency Code values have 12-bit values. Using the example from above, E-470 has a decimal value of 194 as shown in the figure below.

Figure 6: Version 2.0, 3.0, and 3.1 Agency Code – Currently used

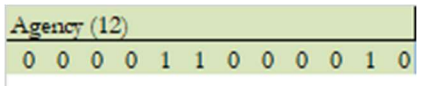


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Figure 7 provides a reference chart comparing the different programming standards by version.

Figure 7: Memory Bank 01 Programming Summary by Version

Version	1.0				2.0				3.0 Rev 2				3.1				4.0			
Area	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section
Stored CRC	1-16	00h - 0Fh	16	N/A	1-16	00h - 0Fh	16	N/A	1-16	00h - 0Fh	16	Calculated	1-16	00h - 0Fh	16	Calculated	1-16	00h - 0Fh	16	Calculated
Stored PC	1-5	10h - 14h	5	N/A	1-5	10h - 14h	5	N/A	1-5	10h - 14h	5	Length	1-5	10h - 14h	5	Length	1-5	10h - 14h	5	Length
	6	15h	1	N/A	6	15h	1	N/A	6	15h	1	User Memory	6	15h	1	User Memory	6	15h	1	User Memory
	7	16h	1	N/A	7	16h	1	N/A	7	16h	1	XPC	7	16h	1	XPC	7	16h	1	XPC
	8	17h	1	N/A	8	17h	1	N/A	8	17h	1	Numbering System Indicator	8	17h	1	Numbering System Indicator	8	17h	1	Numbering System Indicator
	9-16	18h - 1Fh	8	N/A	9-16	18h - 1Fh	8	N/A	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)
UII	1-8	20h-27h	8	Header (0011 0101)	1-16	20h-2Fh	16	Header (B0 = 1011 0000 xxxx xxxx)	1-21	20h-34h	21	Agency Use	1-8	20h-27h	8	DSFID (3E = 0011 1110)	1-8	20h-27h	8	DSFID (3E = 0011 1110)
	9-36	28h-43h	28	General Manager Number									9-21	28h-34h	13	Agency Use	9-16	28h-2Fh	8	CRC
					17-21	30h-34h	5	Reserved Space									17-21	30h-34h	5	Agency Use
					22	35h	1	Classification Code	22	35h	1	Class	22	35h	1	Class	22	35h	1	Class
					23-27	3Ah	5	Vehicle Type Code	23-27	3Ah	5	Vehicle Type	23-27	3Ah	5	Vehicle Type	23-27	3Ah	5	Vehicle Type
					28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles
					32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight
					33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires
					34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration
	37-40	44h-47h	4	VersionCode	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version
	41-52	48h-4Eh	7	State Code	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency
	48-52	4Fh-53h	5	Agency Code																
	53-80	54h-6Fh	28	Vehicle Code	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number
	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)

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Appendix B Transponder Filtering

The 6C standard allows 'filters' to be implemented by readers to separate a population of tags based on values of certain areas of the tag memory. This is useful in tolling environments to allow readers to only read/report 6C transponders that are programmed as tolling tags, as opposed to reading all 6C tags that may pass through a lane (e.g. tags used for retail, asset tracking, etc). To effectively filter all tolling tags in use as of August 2019 (with minor exceptions), three filters are required, detailed below:

1. Stored PC bits 9-16 = **0xB0** (6C Coalition V3.0 and all later versions)
2. UII bits 1-8 = **0xB0** (WSDOT V2.0 tags)
3. UII bits 1-8 = **0x35** (SRTA [old tags] and E470 [all])

With the following exceptions all tags are programmed to version 3.0 or above:

- SRTA tags prior to 2017 (~400k) are an older version that was the basis for V1 published by the 6C TOC
- E-470 tags distributed prior to November 2019 are very similar to these older SRTA tags
- WSDOT has about 750k version 2.0 tags distributed
- Utah DOT has a unique programming standard and may replace their tags prior to joining an IOP hub

Table 16: Legacy Toll Tag Information

Agency	6C Coalition Programming Version	Estimated Count (as of August 2023)
E470	Version 0.9	1,600,000
WSDOT	Version 2.0	1,600,000
SRTA	Version 0.9	187,000
UDOT	Unique to UDOT	78,000

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EXHIBIT "B"
FORM OF PURCHASE ORDER

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Riverside County Transportation Commission

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
4080 LEMON ST.
RIVERSIDE, CA 92501
951-787-7141

DATE	PO NUMBER

CONTRACTOR:

SHIP TO: RIVERSIDE CO TRANSPORT COMMISSION
4080 LEMON STREET
3RD FLOOR
RIVERSIDE, CA 92501

FOB Point:

Terms: Issued in accordance with the Contract identified below and subject to all terms and conditions therein, and the device type, quantity, delivery date and prices below.

Req. No:

Dept::

Contract No:

Special Inst:

By signing below, Contractor agrees to the terms of this Purchase Order. This Purchase Order must be signed by both parties to be valid. This Purchase Order shall be void if not signed by Contractor and returned to the Commission within three (3) days of the date above.

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Transponder Type	Quantity	Delivery Date	Unit Price	Extended Price

SUBTOTAL:

TAX:

TOTAL:

BILL TO:

Account Number	Amount	Account Number	Amount

Riverside County Transportation Commission Authorized Signature

Contractor

Exhibit "C"
FEE SCHEDULE AND DELIVERY TIMES

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APPENDIX H - PROPOSAL PRICING AND DELIVERY TIME FORM

Internal mounted sticker transponder	Weeks to Deliver (from purchase order date)	Price per Transponder (Base years 1 - 3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
Order Quantity				
Less than 250,000	8 weeks	$ 0.44	$ 0.45	$ 0.45
250,000 or more	8 weeks	$ 0.44	$ 0.45	$ 0.45

Exterior mounted sticker transponder	Weeks to Deliver (from purchase order date)	Price per Transponder (Base years 1 - 3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
Order Quantity				
Less than 10,000	8 weeks	$ 0.47	$ 0.48	$ 0.48
10,000 or more	8 weeks	$ 0.47	$ 0.48	$ 0.48

Internal mounted 3-position switch transponder	Weeks to Deliver (from purchase order date)	Price per Transponder (Base years 1 - 3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
Order Quantity				
Less than 100,000	8 weeks	$ 4.36	$ 4.41	$ 4.43
100,000 or more	8 weeks	$ 4.36	$ 4.41	$ 4.43

Printing of exterior facing artwork on switchable transponder		Price per Transponder (Base years 1 -3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
	Not Applicable	N/A	N/A	N/A

Mounting Solution		Price per 10,000 (Base years 1 -3)	Price per 10,000 (Option Period 1)	Price per 10,000 (Option Period 2)
	Not Applicable	N/A	N/A	N/A

Proposed prices shall include all costs including shipping and handling.

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EXHIBIT "D"

USE OF ON CALL BENCH

As part of the procurement for this Agreement, the Commission has ranked the contractors on the On Call Bench. The established ranking is on file at the Offices of the Commission, and available for review upon request. The Commission will award Purchase Orders to the top ranked contractor on the On Call Bench for each type of Device to be procured by the Commission.

Should the top ranked contractor on the On Call Bench fail to perform (as determined by the Commission in accordance with the criteria set forth below), the Commission may award a Purchase Order to the next highest ranked contractor.

FAILURE TO PERFORM

Failure to perform by Contractor shall be established if the Contractor fails to do one or more of the following:

1. Acknowledge receipt of and accept a Purchase Order within 3 business days of Commission emailing the Purchase Order to the designated Contractor representative;

2. Meet the delivery schedule in a Purchase Order;

3. Provide transponders that do not pass testing performed by the Commission or its agent. Testing will include the accuracy of the tag programming and functionality as defined in the Scope of Services. Failure for the purposes of this criteria shall be more than one transponder fails out of 200 from a single shipment;

4. Obtain or maintain Omni Air Certification (or other approved by the Commission);

5. Provide Transponders in accordance with the procured physical attributes and approved artwork;

6. Provide warranty replacement within 120 days of receipt by the Contractor;

7. Remedy Excessive Failures as defined in Section 5 G;

8. Otherwise perform under its Agreement with the Commission, resulting in a termination pursuant to Section 18 A.

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RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ON CALL PURCHASE AGREEMENT
FOR 6C TRANSPONDERS
WITH KAPSCH TRAFFICCOM USA, INC.

This On Call Purchase Agreement for 6C Transponders ("Agreement") is entered into this _____ day of _____, 2026, by and between the Riverside County Transportation Commission ("Commission"), and Kapsch TrafficCom USA, Inc., a Corporation with its principal place of business at 2855 Premiere Parkway, Ste. F, Duluth, GA 30097 ("Contractor"). Commission and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

RECITALS.

A. The Commission has entered into On Call Purchase Agreements for 6C Transponders with a bench of qualified contractors selected pursuant to a request for proposal process ("On Call Bench").

B. Contractor is one of the selected contractors, and may, during the term of this Agreement, receive one or more order requests from the Commission for Devices, as defined herein.

C. Devices may be procured by the Commission for itself, and for the Orange County Transportation Authority ("OCTA").

Section 1. DEFINITIONS.

A. "Delivery Date(s)" means that date or dates upon which the Transponders are to be delivered to Commission as set forth in each Purchase Order.

B. "Devices" means the Transponders

C. "On Call Bench" shall have the meaning as set forth in Recital A above.

D. "Purchase Order" means an order request from the Commission in the form attached hereto as Exhibit "B". To be valid, a Purchase Order must be signed by both Parties in accordance with the terms contained in this Agreement.

E. "Transponders" means the 6C transponders, as specified in Scope of Services Section 2 of Exhibit "A,"

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Section 2. AGREEMENT TERM.

A. The term of this Agreement shall be three (3) years, commencing on the date first set forth above. The Commission shall have the option, in its sole discretion, to extend the term for two additional two-year extension terms. Any such extension shall be pursuant to a written amendment to this Agreement.

B. Notwithstanding the foregoing, in the case a Purchase Order has been issued prior to the termination date, the term of this Agreement shall be automatically extended until delivery and acceptance of all Devices under such Purchase Order, and completion of payment therefor, or until termination of such Purchase Order in accordance with the provisions of Section 18.A below.

Section 3. PURCHASE ORDERS.

A. To initiate the Purchase Order process, the Commission will issue a Purchase Order to the Contractor setting forth the desired Devices, quantity for the order, delivery times and pricing. Delivery time and pricing shall be based on the prices and delivery schedule set forth in Exhibit "C".

B. Contractor must accept the terms of the Purchase Order and return the executed Purchase Order to the Commission within three (3) business days of the date of the Purchase Order. Notwithstanding any other provision of this Agreement, a Purchase Order not signed by Contractor and returned to the Commission in accordance with the foregoing shall be void.

C. Any issuance of Purchase Orders to contractors on the On Call Bench shall be in accordance with the terms set forth in Exhibit "D".

D. Purchase by the Commission of any Devices under this Agreement must be authorized by a Purchase Order. All Purchase Orders shall be performed in accordance with and subject to the terms and conditions of this Agreement, the exhibits attached hereto, and all applicable local, state and federal laws, rules and regulations. No Devices shall be delivered, and no payment made by Commission therefor, unless authorized by a valid and fully executed Purchase Order.

Section 4. INSPECTIONS AND TESTS.

Commission shall have the right to inspect and/or test the Devices. If upon inspection or testing the Devices or any portion thereof are found to be nonconforming, unsatisfactory, defective, of inferior quality or workmanship, or fail to meet any requirements or specifications contained in Exhibit "A," then without prejudice to any other rights or remedies, Commission may reject the Devices or exercise any of its rights under Section 5. The inspection, failure to make inspection, acceptance of goods,

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or payment for goods shall not impair Commission's right to reject nonconforming goods, irrespective of Commission's failure to notify Contractor of a rejection of nonconforming goods or revocation of acceptance thereof or to specify with particularity any defect in nonconforming goods after rejection or acceptance thereof.

Section 5. <u>WARRANTY.</u>

A. *General Warranty*. Contractor warrants and represents that all of its Devices shall meet the requirements and specifications set forth in this Agreement. Contractor also warrants that the Devices are free and clear of all liens and encumbrances whatsoever, and that Contractor has a good and marketable title to same.

B. *Transponder Warranty.*

i. Contractor warrants and represents, as to each Purchase Order, that all of its Transponders provided under the Purchase Order shall be free from defects in functionality, usability, and appearance for a period of three (3) years from the date of receipt by the Commission of the Transponders under the relevant Purchase Order.

ii. If the Transponders provided under this Agreement have a third party warranty that exceeds the warranty period set forth in Section 5.B above, Contractor shall track and assign such third party warranty to the Commission on or before expiration of the warranty period set forth above in Section 5.B.

C. *Transponder Warranty Procedures*.

i. Upon discovery of defective Transponders, the Commission or its designated representative shall ship the defective Transponders to Contractor.

ii. Contractor shall ship conforming replacement Transponders to the address specified by the Commission in the documentation included with the defective Transponders. Contractor may use any shipping method provided the replacement Transponders arrive at the destination designated by the Commission within 120 days of receipt by Contractor of the defective Transponders.

iii. Replacement Transponders shall be warrantied for the warranty period set forth in Section 5.B above.

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iv. Contractor shall be responsible and liable for all costs of shipping the defective Transponders to and from Contractor during the warranty period. Contractor shall reimburse the Commission for its shipping costs immediately upon demand.

iv. Failure by the Contractor to provide replacement Transponders within 120 days, as required in (ii) above, shall result in a deduction by Commission from any outstanding payments owed to Contractor, or immediate repayment by Contractor of the purchase price of the defective Transponders not timely replaced.

D. *General Third Party Warranty Requirements*.

Contractor's agreements with any third parties for Devices provided under this Agreement shall require that such parties consent to the assignment of all representations and warranties for such Devices to the Commission, and enforcement thereof by the Commission. Contractor shall provide all assigned third party warranties to the Commission within the time set forth in the schedule included with a Purchase Order, or as otherwise specified in this Agreement.

E. *Excessive Failures of Transponders*.

In the event of an excessive failure of Transponders delivered to the Commission under this Agreement, Contractor shall be liable for all costs incurred by the Commission, including, but not limited to: the public end user notification and replacement costs; and labor and material costs. Excessive failure is defined as a defect in function, labor or materials that is present in ten percent (10%) or more of any Transponder type provided under a Purchase Order. By way of example and not limitation, if 10% of the Transponders activated and assigned to customer accounts are deemed defective, then Contractor shall be responsible for the Commission's costs such as notifying customers; establishing and operating locations where the customers could swap out their defective Transponders for a working Transponder or other means of replacement; and the Commission's administrative costs.

G. *Survival of Warranty Provisions*.

The warranty provisions contained in this Section 5 shall survive any termination or expiration of this Agreement, and shall remain in effect for the full warranty term.

Section 6. INTELLECTUAL PROPERTY

A. Intellectual Property Rights for Transponders. Contractor warrants that Contractor owns or has a valid license for all of the proprietary technology and intellectual property including, but not limited to, materials, data, computer programs or software and source code, enhancements,

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documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property Rights") incorporated within the Transponders. Contractor hereby grants to the Commission a fully paid-up, royalty-free, perpetual, irrevocable, non-exclusive license and/or sublicense to the Intellectual Property Rights contained in or used in connection with the Transponders to use, execute, maintain, display, perform, distribute, sell, create derivative works of, and to prepare derivative works based upon any Intellectual Property Rights provided by Contractor to the Commission under this Agreement. This license includes the right to make and have made copies of any and all software, firmware and documentation, and to use any and all such copies, reproductions, modifications, adaptations, improvements or derivative works to utilize and operate the Transponders. The license provided hereunder shall cover all aspects of software and firmware, except for source code to programs owned and/or developed by any of Contractor's subcontractors, and programs of any third parties which the Contractor integrates, bundles or provides as part of the Transponders. The Contractor shall secure all required licenses from any third party providers of software and firmware pursuant to the terms set forth above in the name the Commission, and shall ensure that such licenses are transferable to and assignable by the Commission, without additional compensation. The Contractor shall furnish the Commission with original license agreements it obtains from such third party providers of software and firmware upon delivery of the initial order of Transponders, and any such additional license agreements entered into thereafter that in any way effect Transponder's use of the Transponders. Contractor shall also provide to the Commission copies of the computer programs, disks and documentation for all software and firmware it obtains from third parties.

B. Intellectual Property Rights for Handheld Readers. Contractor shall ensure that in providing the Handheld Readers, the Commission shall have all Intellectual Property Rights required for the full and unencumbered use of the Handheld Readers.

C. Remedies for Breach of Warranties or Intellectual Property Rights. In the event of a breach by Contractor of its obligations under Section 5 or this Section 6, Commission will not be limited to the remedies set forth in these sections, but will have all the rights and remedies permitted by applicable law, including without limitation, all of the rights and remedies afforded to Commission under the California Commercial Code. Contractor further agrees to indemnify, defend and hold the Commission and OCTA harmless against any and all third party claims resulting from the breach or inaccuracy of any of the warranties contained in Section 5 or this Section 6.

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Section 7. PRICES.

Unless expressly provided otherwise, all prices and fees specified in Exhibit "C," attached hereto and incorporated herein by reference, are firm and shall not be subject to change without the written approval of Commission, and shall apply to all Purchase Orders under this Agreement for the term, and any extensions thereof. No extra charges of any kind will be allowed unless specifically agreed to in writing by Commission's authorized representative. Prices include (i) all federal, state and local use, excise, privilege, payroll, occupational and other taxes applicable to the Devices (excluding sales tax) furnished to Commission hereunder; (ii) all charges for packing, freight and transportation to destination, and (iii) full compliance with all requirements of this Agreement, including the attached Scope of Services and Technical Requirements.

The total compensation shall be specified under each Purchase Order, and shall not be exceeded.

Section 8. CHANGES.

Commission, at any time, by a written order, may make changes in the requirements for the Devices set forth in Exhibit "A", including but not limited to, Commission's requirements and specifications. If such changes affect the cost of the Devices or time required for performance under a Purchase Order, an equitable adjustment will be made in the price or time for performance under a Purchase Order, or both. Any change in the price necessitated by such change will be agreed upon between Commission and Contractor and such change will be authorized by an amendment to this Agreement, or to the Purchase Order, as applicable.

Section 9. PAYMENTS.

A. Terms of payment for each Purchase Order, are net thirty (30) days, less any applicable credits, or after receipt of invoice. Contractor shall invoice in accordance to the delivery schedule but not more frequently than each billing period. Final payment shall be made by Commission after Contractor has satisfied all contractual requirements for a Purchase Order. Payment of invoices shall not constitute acceptance of Devices.

B. Payments otherwise due may be withheld by Commission on account of defective Transponders not timely replaced in accordance with the warranty provisions, liens or other claims filed, reasonable evidence indicating probable filing of liens or other claims, failure of Contractor to make payments properly to its subcontractors or for material or labor, the failure of Contractor to perform any of its other obligations under the Agreement, or to protect Commission against any liability arising out of Contractor's failure to pay or discharge taxes or other obligations. If the causes for which payment is withheld are removed, the withheld payments will be made promptly. If the said causes are not removed within a reasonable period after written notice, Commission may remove them at

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Contractor's expense.

Section 10. SCHEDULE FOR DELIVERY.

The time of Contractor's performance is of the essence for this Agreement. The Devices will be delivered in accordance with the schedule set forth in each Purchase Order, and in accordance with the timeframes for delivery set forth in Exhibit "C". Contractor must immediately notify Commission in writing any time delivery is behind schedule or may not be completed on schedule.

Section 11. TAXES.

A. Contractor agrees to timely pay all sales and use tax (including any value added or gross receipts tax imposed similar to a sales and use tax) imposed by any federal, state or local taxing authority on the ultimate purchase price of the Devices provided under this Agreement. Sales tax is not included in the price of the Devices as set forth in Exhibit "C", and shall be determined at the time of issuance of a Purchase Order.

B. Contractor will withhold, and require its subcontractors, where applicable, to withhold all required taxes and contributions of any federal, state or local taxing authority which is measured by wages, salaries or other remuneration of its employees or the employees of its subcontractors. Contractor will deposit, or cause to be deposited, in a timely manner with the appropriate taxing authorities all amounts required to be withheld.

C. All other taxes, however denominated or measured, imposed upon the price of the Devices provided hereunder, will be the responsibility of Contractor. In addition, all taxes assessed by any taxing jurisdiction based on Contractor property used or consumed in the provision of the Devices such as and including ad valorem, use, personal property and inventory taxes will be the responsibility of Contractor.

D. Contractor will, upon written request, submit to Commission written evidence of any filings or payments of all taxes required to be paid by Contractor hereunder.

Section 12. INDEPENDENT CONTRACTOR.

Contractor enters into this Agreement and all Purchase Orders as an independent contractor and not as an employee of Commission. Contractor shall have no power or authority by this Agreement to bind Commission in any respect. Nothing in this Agreement or any Purchase Order shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by the Contractor are employees, agents, contractors or subcontractors of the Contractor and not of Commission. Commission shall not be obligated in any way to pay any wage claims or other claims made against Contractor by any such employees, agents, contractors or subcontractors or any other person resulting from performance of

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this Agreement.

Section 13. SUBCONTRACTS.

Unless otherwise specified, Contractor must obtain Commission's written permission before subcontracting any portion of this Agreement. Except for the insurance requirements in Section 16.A, all subcontracts must require that the subcontractor be bound by and subject to all of the terms and conditions of this Agreement, and the relevant Purchase Order. No subcontract or order will relieve Contractor from its obligations to Commission and OCTA, including, but not limited to Contractor's insurance and indemnification obligations. No subcontract or order will bind Commission.

Section 14. TITLE AND RISK OF LOSS.

Unless otherwise agreed, Commission will have title to, and risk of loss of the Devices upon delivery. However, Contractor will be liable for any loss or damage to the Devices caused by Contractor or its subcontractors, their agents or employees, and Contractor will replace said Devices at its own cost to the complete satisfaction of Commission. Notwithstanding the foregoing, in the event that the Commission has paid Contractor for all or a portion of the Devices which remain in the possession of Contractor, then Commission shall have title to, and the right to take possession of, such Devices at any time following payment therefor. Risk of loss for any Devices which remain in the possession of Contractor shall remain with Contractor until such Devices have been delivered or Commission has taken possession thereof.

Section 15. INDEMNIFICATION.

A. Contractor shall defend, indemnify and hold the Commission, OCTA and their officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Contractor, its officials, officers, employees, agents, subcontractors and subconsultants arising out of or in connection with the Transponders or the performance of this Agreement or any Purchase Order, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses except such loss or damage which was caused by the sole negligence or willful misconduct of the Commission.

B. Contractor's defense obligation includes any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the Commission, OCTA and their officials, officers, employees, agents or volunteers shall be at Contractor's own cost, expense and risk. Contractor shall pay and satisfy any judgment, award

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or decree that may be rendered against Commission, OCTA or their officials, officers, employees, agents or volunteers, in any such suit, action or other legal proceeding. Contractor shall reimburse Commission, OCTA and their officials, officers, employees, agents and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

C. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Commission, OCTA or their officials, officers, employees, agents or volunteers.

Section 16. INSURANCE.

A. General. Contractor shall take out and maintain:

1. Commercial General Liability Insurance, of at least $1,000,000 per occurrence/ $2,000,000 aggregate for bodily injury, personal injury and property damage, at least as broad as Insurance Services Office Commercial General Liability most recent Occurrence Form CG 00 01;

2. Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, of at least $1,000,000 per accident for bodily injury and property damage, at least as broad as most recent Insurance Services Office Form Number CA 00 01 covering automobile liability, Code 1 (any auto);

3. Workers' Compensation in compliance with applicable statutory requirements and Employer's Liability Coverage of at least $1,000,000 per occurrence; and

4. If Contractor is also the manufacturer of the Transponders, or any portion thereof, Contractor shall carry Product Liability and/or Errors and Omissions Insurance which covers said equipment with limits of not less than $1,000,000.

B. Additional Insured; Primary; Waiver of Subrogation; No Limitation on Coverage. The policies required under this Section shall give Commission, OCTA and their officials, officers, employees, agents or volunteers additional insured status. Such policies shall contain a provision stating that Contractor's policy is primary insurance and that any insurance, self-insurance or other coverage maintained by the Commission or any additional insureds shall not be called upon to contribute to any loss, and shall contain or be endorsed with a waiver of subrogation in favor of the Commission, OCTA and their officials, officers, employees, agents, and volunteers. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are

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brought, except with respect to the limits of liability. Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement.

C. Insurance Carrier. All insurance required under this Section is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

D. Evidence of Insurance. Contractor shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by the Agreement. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the Commission. All certificates and endorsements must be received and approved by the Commission before delivery commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

E. Subcontractors. All subcontractors shall meet the requirements of this Section before commencing work. In addition, Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

F. Freight. Contractor shall ensure that third party shippers contracted by Contractor have adequate insurance coverage for the shipped Devices.

Section 17. LIENS.

A. Contractor, subcontractors and suppliers will not make, file or maintain a mechanic's or other lien or claim of any kind or character against the Devices, for or on account of any labor, materials, fixtures, tools, machinery, equipment, or any other things furnished, or any other work done or performance given under, arising out of, or in any manner connected with the Agreement (such liens or claims referred to as "Claims"); and Contractor, subcontractor and suppliers expressly waive and relinquish any and all rights which they now have, or may subsequently acquire, to file or maintain any Claim and Contractor, subcontractor and suppliers agree that this provision waiving the right of Claims will be an independent covenant.

B. Contractor will save and hold Commission harmless from and against any and all Claims that may be filed by a subcontractor, supplier or any other person or entity and Contractor will, at its own expense, defend any and

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all actions based upon such Claims and will pay all charges of attorneys and all costs and other expenses arising from such Claims.

Section 18. TERMINATION OF AGREEMENT OR PURCHASE ORDER BY COMMISSION.

A. Should Contractor at any time refuse or fail to deliver the Devices with promptness and diligence, or to perform any of its other obligations under this Agreement or any Purchase Order, Commission may terminate Contractor's right to proceed with the delivery of the Devices by written notice to Contractor. In such event Commission may obtain the Devices by whatever method it may deem expedient, including the hiring of another Contractor or other contractors. In such case Contractor will not be entitled to receive any further payments, other than for Devices delivered and accepted prior to termination.. If Commission's cost of obtaining the Devices, including compensation for additional managerial and administrative services, will exceed the unpaid balance of the relevant Purchase Order, Contractor will be liable for and will pay the difference to Commission.

B. Commission may, for its own convenience, terminate this Agreement at any time, provided that no Purchase Order is outstanding at the time of such termination. Such termination will be effective in the manner specified in such notice.

C. Termination of this Agreement for convenience or cause shall be without prejudice to any claims which Commission may have against Contractor.

Section 19. NO EXPECTATION OF PURCHASE ORDER ISSUANCE

By entering into this Agreement, the Contractor acknowledges that the issuance of Purchase Orders is at the Commission's sole and absolute discretion. The Commission makes no representation or guarantee that it will issue any Purchase Orders under this Agreement, and the Contractor shall have no claim against the Commission for failure to make any orders hereunder. The Commission shall not be held responsible for any forecasts of anticipated purchases or requirements set forth in the procurement documents related to this Agreement, or otherwise.

Section 20. MISCELLANEOUS PROVISIONS.

A. Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address or at such other address as the respective parties may provide in writing for this purpose:

COMMISSION: CONTRACTOR:

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Riverside County Transportation Commission 4080 Lemon Street, 3rd Floor Riverside, CA 92501 Attn: Executive Director	Kapsch TrafficCom USA, Inc. 2855 Premiere Parkway, Ste. F Duluth, GA 30097 Attn: Phil Thompson

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

B. Assignment or Transfer. Contractor shall not assign or transfer any interest in this Agreement or any Purchase Order whether by assignment or novation, without the prior written consent of the Commission, which will not be unreasonably withheld. Provided, however, that claims for money due or to become due Contractor from the Commission under this Agreement may be assigned to a financial institution or to a trustee in bankruptcy, without such approval. Notice of any assignment or transfer, whether voluntary or involuntary, shall be furnished promptly to the Commission.

C. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

D. Amendment; Modification. No supplement, modification or amendment of this Agreement or any Purchase Order shall be binding unless executed in writing and signed by both Parties.

E. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

F. Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County.

G. Interpretation. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party.

H. No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

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I. Authority to Enter Agreement. Each Party warrants that the individuals who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective Party.

J. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

K. Counterparts; Facsimile Signatures. This Agreement may be signed in counterparts, each of which shall constitute an original. Facsimile signatures affixed to this Agreement or any Purchase Order, including signatures transmitted via electronic mail, shall be considered and shall have the same force and effect as original signatures.

L. Commission's Right to Employ Other Contractors. Commission reserves its right to employ other Contractors in connection with the purchase of Devices.

M. Entire Agreement. This Agreement constitutes the entire agreement between the Parties relative to the matters specified herein. There are no understandings, agreements, conditions, representations, warranties or promises with respect to this Agreement, except those contained in or referred to in the writing.Conflicting Provisions. In the event of any conflict between the terms of this Agreement and any exhibit or attachment hereto, the terms of this Agreement shall govern. In the event of any conflict between the terms of this Agreement and any Purchase Order issued pursuant to this Agreement, the terms of this Agreement shall govern.

N. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

O. Cooperative Use. Contractor agrees that agencies within the California Toll Operators Committee ("CTOC") may utilize this Agreement to obtain Devices on the same terms and conditions included in this Agreement, through a separate agreement with Contractor. CTOC agencies may provide a different logo to be printed on the Transponder and different materials to accompany the retail Transponders. The Commission shall not be responsible or liable for any agreement between any CTOC agency and Contractor. The Commission makes no representation or warranty regarding the legal authorization for any CTOC agency to rely on the Commission's procurement of Contractor.

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[SIGNATURES ON FOLLOWING PAGE]

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SIGNATURE PAGE TO
ON CALL PURCHASE AGREEMENT
FOR 6C TRANSPONDERS
BETWEEN THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AND KAPSCH TRAFFICCOM USA, INC.
AGREEMENT NO. 26-31-040-00

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

By: _____
Dana Reed, Chair

APPROVED AS TO FORM:

By: _____
Best Best & Krieger LLP
Counsel to the Riverside County Transportation Commission

KAPSCH TRAFFICCOM USA, INC.

By: _____

Its: _____

ATTEST:

By: _____

Its: _____

A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

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EXHIBIT "A"
SCOPE OF SERVICES

AND SPECIFICATIONS

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SCOPE OF SERVICES

1. INTRODUCTION

Riverside County Transportation Commission (RCTC) operates the 15 Express Lanes and is jointly operating the 91 Express Lanes with the Orange County Transportation Authority (OCTA). The State of California has adopted ISO/IEC 18000-6C (6C) technology.

RCTC is a member of the California Toll Operator's Committee (CTOC) and 6C Coalition who have developed statewide 6C specifications attached as Appendix J to the RFP.

2. TRANSPONDERS

The Contractor shall provide one or more of the following transponder types:

- Interior mounted sticker;
- Exterior mounted sticker; or
- Interior mounted 3-position switchable.

The Contractor shall comply with the following requirements for all transponders.

2.1 California 6C Electronic Toll Collection Standards, Appendix J

The Contractor shall comply with the CTOC requirements included in Appendix J. If the CTOC requirements change during the term of the contract the Contractor shall conform to the new requirements for future orders within 60 days of notification.

2.2 Read and Write Capabilities

Transponders shall have the ability to transmit the unique transponder identification data and other data contained on the transponder when read by the reader when passing through the toll point.

The Contractor shall provide the ability to lock the write access permanently or allow write access restricted by a password provided by RCTC.

2.3 Power

The transponder shall not require a power supply.

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2.4 Consumer Product Safety

All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

2.5 Size

The interior and exterior mounted transponders shall be as small as possible, while meeting the requirements of this document. The transponder cannot be larger than the California Vehicle Code 26708 requirement for application of an object to a windshield, five (5) square inches.

2.6 Mounting

The exterior mounted sticker transponders shall be mountable on a headlamp. All interior mounted transponders shall be mounted on the interior of the windshield.

All transponders shall be designed to be secure when installed to prevent inadvertent displacement or projectile motion. All materials used to adhere a transponder shall be completely removable without damaging or marring the vehicle in any way. The Contractor shall supply the required mounting solution with all transponders.

The interior mounted switchable transponders shall be delivered with a two-sided mounting solution preinstalled, such as hook and loop, requiring the customer to only adhere the one half of the mounting solution to the windshield of the vehicle. The same side of a two-sided solution shall consistently be applied to the transponder to allow for ease of transfer from vehicle to vehicle. The mounting solution used shall be readily available in the market to support the provision of replacement of the windshield mounted side by RCTC over time.

The Contractor shall provide RCTC with the source and specifications for the mounting solution provided.

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2.7 Bar Code

All transponders shall come with a uniquely identified bar code as provided for in Appendix J. The bar code shall be readable with the human eye and by a handheld reader.

For interior mounted sticker transponders the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For interior mounted switchable transponders the bar code may either be permanently etched in the hard case or printed on a non-removable sticker (decal) that will be readable for the life of the transponder. The placement of the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For exterior mounted sticker transponders a bar code shall be printed on the transponder and/or the same material to which the transponder is adhered. If not printed on the transponder, it should be made clear that the barcode is not the transponder and should be retained for the customers records.

2.8 Transponder Artwork

RCTC will provide the required artwork. Artwork will be four-color not including the color of the transponder material. The Contractor shall provide the design specifications for the artwork for placement on the transponder, by transponder type.

The Contractor shall be responsible for printing and adhering transponder graphics as provided by RCTC. The Contractor shall provide a transponder prototype with final artwork for approval by RCTC.

The Contractor shall conduct a design session to determine the placement of the artwork and bar code.

The decal shall appear to be part of the transponder and stay affixed for the life of the transponder without degradation.

Transponders shall not carry any visible manufacturer or contractor brand names.

The interior mounted sticker transponder will require artwork on the interior facing side only.

The interior mounted switchable transponders will require artwork on the internal facing side and may require artwork on the external facing side, if the Contractor's design has insufficient space for the required information.

The exterior mounted transponder will not require artwork.

2.9 Switchable Transponder Design

The switchable transponder shall have an occupancy designation switch which is easy to use, clearly indicates which occupancy position it is in and stays secure in the position until the customer changes the occupancy.

2.10 Packaging

Transponders shall be packaged for shipping by individual transponder type in a manner to ensure that they are not damaged during transport. Individual boxes shall include an exterior label with a bar code of the beginning and ending transponder serial number. Any breaks in transponder serial number sequence shall be indicated with a barcode on the outside of the box. The number of sequence breaks for any single box shall not exceed 3. All transponders shall be shielded during shipping to ensure they are not read in transit.

Boxes shall be stackable up to six boxes high without compromising the structure of the box. The box shall not weigh more than 25 pounds each.

2.11 Shipping

The Contractor shall deliver all transponders to the address(s) provided by RCTC. The Contractor shall ensure unloading and delivery accommodations to commercial buildings where loading docks and unloading equipment are not available. This cost shall be included as part of the vendor cost proposal. The Contractor shall comply with any and all current

DRAFT

U.S. and international safety standards to permit unrestricted shipment by mail and commercial carriers with appropriate documentation.

The Contractor shall be responsible for tracking and replacing any boxes lost or damaged during shipment.

The manifest specified in Appendix J shall be provided electronically at the time of shipment. In addition, a printed manifest shall accompany the shipment.

2.12 Programming

All transponders shall be pre-programmed according to the specification in Appendix J. RCTC will provide the agency ID for each of its orders.

2.13 Protection

The scope includes implementing supporting strategies to monitor, detect, and mitigate bit flip occurrences using both system-level and chip-level solutions. The Contractor shall coordinate with RCTC on transponder programming in accordance with California 6C Standard.

RCTC will provide the Contractor with the necessary keys, settings, and passwords required for proper configuration. The Contractor shall be responsible for maintaining the confidentiality and security of all RCTC issued keys, settings, and passwords.

3. DOCUMENTATION

3.1 Certification of Compliance

The Contractor shall provide third party certification from certifiers approved by the California Toll Operators Committee (CTOC) for device standards compliance with the most recent version of the California 6C Electronic Toll Collection Standard, Appendix J. The transponders shall be certified by an approved 6C Coalition vendor. The Contractor shall provide RCTC with the required certification documentation and ten (10) certified transponders for each contracted transponder type.

Recertification will be required under any of the following conditions:

- Changes to the CTOC standards;
- Changes to the manufacturing process;
- Changes to materials used; and
- Failures exceeding the acceptable failure rate defined in the Contract.

3.2 Licenses, Permits and Patents

The transponders shall comply with applicable federal, state and local licensing and regulations for transponder technology. The Contractor shall document all related patents, licensing and regulations associated with their equipment.

DRAFT

3.3 Installation Instructions

The Contractor shall provide the following installation instructions for each of the transponders supplied:

- Interior mounted sticker transponder;
- Exterior mounted sticker transponder;
- Interior mounted 3-position switchable; and
- Interior mounted sticker transponder and an interior mounted 3-position switchable transponder mounted in the same vehicle.

The installation instructions must comply with the California Vehicle Code 26708 requirement for application of an object to a windshield (lower left driver side five (5) inch square, lower right passenger side seven (7) inch square, or upper center five (5) inch square).

3.4 Disposal Procedures

If there are environmental restrictions for the disposal of any type of supplied transponder, the Contractor shall document the proper disposal procedures and the reason for the restrictions.

4. SAFETY REQUIREMENTS

The transponders shall meet all applicable safety and environmental requirements related to the technology and its applications in addition to any requirements of this document. The transponders shall not pose either a short-term safety risk or a long-term health risk to drivers, technicians, or other people who may frequently be near the transponder. Safety labels shall be placed on equipment as appropriate based on prevailing laws, regulations, and standards.

The Contractor shall provide the Material Safety Data Sheet for any materials or equipment utilized within any supplied product that has a Material Safety Data Sheet. The Contractor shall provide any information regarding any other materials that may be considered hazardous or require special handling or disposal. All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

5. ORDER PROCESS

The Contractor shall provide a direct point of contact for RCTC to place orders. The Contractor shall acknowledge receipt of the order within three (3) business days and provide a proposed delivery schedule.

6. INABILITY TO SUPPLY TRANSPONDERS

Within three (3) business days from the time of order, the Contractor shall acknowledge receipt of the order and adherence to the required delivery date. If the Contractor fails to

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respond within three (3) business days RCTC will assume the Contractor is unable to fulfill the order.

7. WARRANTY RETURNS

The Contractor shall provide a process for the return of transponders covered under warranty. The Contractor shall act as the sole point of contact for warranty service. Contractor shall provide RCTC with warranty return instructions. The Contractor shall pay for freight related to returned shipments.

8. QUALITY CONTROL

The Contractor shall perform quality control to ensure transponders comply with the requirements of the Contract. The Contractor shall conduct testing, as needed, to demonstrate compliance with the requirements. The Contractor shall provide RCTC with the Quality Control Plan. RCTC reserves the right to review any quality reports produced by the Contractor. RCTC or its designated representatives reserves the rights to visit the manufacturing and testing sites of the awarded Contractor(s).

9. ONGOING SUPPORT

The Contractor shall provide technical support and advice to RCTC or its designated representative at no additional cost during the term of the Contract. The Contractor shall support efforts to resolve transponder read issues arising from lane system compatibility, interference from in vehicle equipment (including multiple transponders), windshield material issues, or other issues causing a transponder read failure.

11. PRICING

Proposal pricing and delivery times includes full compliance with the requirements contained in this Scope of Services and with the requirements contained in Appendix H.

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AVI STANDARD

REQUIREMENTS AND GUIDANCE DOCUMENT

Version 4.0

OCTOBER 10, 2023

Document Control

Originator:	6C Coalition
Report Title:	AVI Standard (formerly the "AVI Transponder Programming Standard")
History:	V 0.1 – Initial Draft Release
	V 0.2 – Updates to "State" portion of EPC field Hash Key changed from 16 to 32 bytes Version Code added to Transponder Serial Number Field
	V 0.3 – Existing System Compatibility section added
	V 0.4 – Transponder and Reader Technical Requirements section added
	V 0.5 – Move Technical Requirements Section
	V 0.6 – Update to Barcode format and EPC/Password validation calculation examples
	V 0.7 – Update to User Memory Password validation calculation example and addition of comment regarding HOT declaration in EPC field
6/5/12	V 1.0 – Updated Agency Codes (E-470 changed from 1 to 2); Made the Barcode format optional; Prohibited Read protection of User Data Memory; Allowed optional Write protection of User Data Memory; Updated references to the TID length to allow use of all fully serialized ISO 18000-6C standard transponders
11/20/14	V 2.0 – Updated the name of the document; redesigned memory map; convert from EPCglobal format to ISO format; security update; changes to permit declarable transponders; updated Barcode format
10/26/15	V 3.0 – Fixed encoding details according to ISO requirements, giving more detail as needed. Combined State and Agency fields to be single Agency field and added Agency ID appendix. Clarified UII validation calculation.
1/28/16	V 3.0 Revision 2 – Added logo to cover page; clarified barcode format; corrected sample calculation of UII Validation hashing value.
3/15/16	V 3.0 Revision 3 – Added DSFID (0x3E) to be programmed as initial 2 bytes of UII.

DRAFT

7/22/16	V 3.0 Revision 4 – Added additional Agency codes to Appendix A. Corrected first bullet of 4.2 to reference new DSFID field in UII.
2/9/17	V 3.1 – Document title changed. Revised language in Section 1.1 to address backward compatibility. Deleted reference to backward compatibility in Section 1.2. Inserted Section 1.3 to clarify certification. Created a new Section 3 "Transponder Requirements" by combining previous barcode format and transponder manifest and adding transponder characteristics and environmental requirements. Previous Section 4 "Data Security" has been renumbered as Section 5 and has been edited to clarify Lock Status and Passwords. New Section 4 "Reader Requirements" has been created to clarify optional ISO Reader commands. Section 6 regarding backward compatibility and programming versions used by toll operators has been removed. Appendix A, code for TCA consolidated.
5/11/17	V 3.1 Revision 1 – Edited 3.1 to indicate method for calculating read distances of transponder parameters. Added clarification language to 3.1.1 and 3.1.2. Changed values and units for polarization and pointing loss in 3.1.3. Updated Agency ID list in Appendix A. Edits list of optional reader commands in 4.1
12/13/19	V 3.2 – Incorporated requirements from the 6C Coalition Interoperability Requirements and Certification Framework document (Document A) to a revamped Section 3. Removed requirement for 512bit minimum size of User Data. Formatting updates. Removed Agency ID listing (Appendix A) as it will now be a standalone document. Added new Appendix A (Legacy Toll Transponder Information) and Appendix B (Transponder Filtering).
9/22/2020	V 3.2a – Corrected binary DSFID value found in Appendix A Figure 7.
10/10/2023	V 4.0 – Added CRC to UII Memory Bank 01 mapping and marked certain fields in Memory Bank 01 as optional. Updated User Memory to be optional at agency discretion. Updated filtering information in Appendix A. Updated legacy tag quantities in Appendix B.

DRAFT

Table of Contents

List of Tables v
List of Figures v
1 Introduction 1
1.1 Purpose 1
1.2 Scope 1
1.3 Interoperability 1
1.4 Definitions, Acronyms, and Abbreviations 1
2 Transponder Memory Mapping 2
2.1 Reserved Memory Bank 00 Specification 2
2.2 CRC, PC, UII Memory Bank 01 Specification 2
2.2.1 Memory Bank 01 Mapping 3
2.3 TID Memory Bank 10 Specification 5
2.4 User Memory Bank 11 Specification 6
3 Interoperability Requirements 7
3.1 Overview 7
3.2 Conformance Testing 7
3.3 Baseline Testing 8
3.3.1 Functional Baseline Tests 8
3.3.2 Environmental Performance 9
3.3.3 RF Performance 9
3.3.4 Transponder Requirements 9
3.3.5 Reader Requirements 14
3.4 Field Testing 15
3.4.1 Transponders 15
3.4.2 Readers 16
3.5 Multiprotocol Environments 17
4 Barcode Format 18
5 Transponder Manifest Details 19
6 Security and Data Integrity Validation 19
6.1 Overview 19
6.2 Memory Bank Security 19
6.2.1 Reserved Memory Bank 19
6.2.2 UII Memory Bank 19
6.2.3 TID Memory bank 19
6.2.4 User Memory Bank 20
6.3 Encryption 20
6.4 UII Validation (CRC Calculation) 20

DRAFT

6.5 UII Authentication (Hash Value) 20
7 Appendices A-1
Appendix A Legacy 6C Toll Transponder Information A-1
A.1 Assumptions A-1
A.2 Determining the Tag Programming Standard A-1
A.3 Identifying Agencies A-3
Appendix B Transponder Filtering B-1

LIST OF TABLES

Table 1: Transponder Memory Map 2
Table 2: Stored CRC Memory Bank 01 Mapping 3
Table 3: Stored PC Memory Bank 01 Mapping 3
Table 4: UII Memory Bank 01 Mapping 3
Table 5: User Memory Bank 11 Mapping 6
Table 6: Conformance Testing Requirements 8
Table 7: Transponder Baseline Testing Requirements 9
Table 8: Reader Baseline Testing Requirements 14
Table 9: Transponder Performance Requirements 15
Table 10: Reader Field-testing Requirements 16
Table 11: Programing Standard Identification A-2
Table 12: Legacy Toll Tag Information B-1

DRAFT

LIST OF FIGURES

Figure 1: Diagram depicting roll angle between transponder and reader antenna 11
Figure 2: Diagram depicting pitch angle between transponder and reader antenna 12
Figure 3: Diagram depicting yaw angle between transponder and reader antenna 13
Figure 4: Snip of Memory Map - Highlights the location of key identification bits A-1
Figure 5: Version 0.9 and 1.0 State and Agency Code A-3
Figure 6: Version 2.0, 3.0, and 3.1 Agency Code – Currently used A-3
Figure 7: Memory Bank 01 Programming Summary by Version A-4

1 INTRODUCTION

1.1 Purpose

The purpose of this document is to create and maintain a standard based on the 2010 and subsequent version of the ISO/IEC 18000-63 (known as 6C) communication protocol for tolling applications that use automatic vehicle identification (AVI). The guidance is intended for transponder and reader manufacturers, toll lane vendors, system integrators, back-office providers, and other members of the RFID industry. The current programming requirements standards are backward compatible to all previous versions of the standard deployed. A few toll operators have deployed 6C transponders prior to the adoption of Version 1.0 and continue to use their legacy systems. More information on legacy 6C memory maps used by toll operators can be found on the 6C Coalition website and in Appendix A of this document.

1.2 Scope

This document addresses the following areas of interest:

- Transponder Memory Mapping
- Interoperability Requirements
- Barcode Format
- Transponder Manifest Details
- Security and Data Integrity Validation

1.3 Interoperability

This AVI Standard provides a reference that enables device manufacturers to produce interoperable transponders and readers. It also provides a standard that integrators and agencies can use to verify conformance that ensures interoperability. Certification is the primary method of verifying conformance with the 6C Coalition AVI Standard.

1.4 Definitions, Acronyms, and Abbreviations

6C	Refers to the Type C portion of the ISO/IEC 18000-6 Type C UHF standard, including later updates to Type C of the ISO/IEC 18000-63 standard
AFI	Application Family Identifier
CRC	Cyclic Redundancy Check
DSFID	Data Storage Format Identifier
EPC	Electronic Product Code
HOV	High Occupancy Vehicle
IEC	International Electrotechnical Commission

DRAFT

ISO	International Organization for Standardization
NAK	Negative Acknowledgement
PC	Protocol Control
RFID	Radio Frequency Identification
TID	Transponder Identification Gen2 transponder memory bank 10
TSN	Transponder Serial Number
UII	Unique Item Identifier, ISO/IEC 18000-63 (formerly '6C'), transponder memory bank 01
XPC	Extended protocol control

2 TRANSPONDER MEMORY MAPPING

The 6C transponder memory is separated into four memory as shown in Table 1 below.

Table 1: Transponder Memory Map

Bank #	Purpose
Bank 00	Reserved
Bank 01	CRC, PC, UII
Bank 10	TID
Bank 11	User Memory (Optional)

DRAFT

2.1 Reserved Memory Bank 00 Specification

The Reserved memory shall be programmed by the transponder provider and contents shared with the issuing agency.

2.2 CRC, PC, UII Memory Bank 01 Specification

Memory Bank 01 contains three addressed areas:

1. Stored CRC – This 16-bit long area is stored at memory location **0x00 – 0x0F** and calculated by the transponder.
2. Stored PC – This area is 16 bits long stored at memory location **0x10 – 0x1F**. The PC word contains the Application Family Identifier (AFI) – an 8-bit identifier (value **0xB0**) assigned to the 6C Coalition. This number can be used to filter the responses of V3.0 and later transponders to ensure that only toll transponders are being read. The ISO assigned this protocol control number for tolling, along with the Data Storage Format Identifier (DSFID, value **0x3E** which is programmed into the first byte of the UII memory area) and explicitly describes a transponder belonging to the 6C Coalition.

The Stored PC is encoded during chip initialization and is dependent on the type of chip being encoded, not on data within an individual transponder.

3. Unique Item Identifier (UII) – This area contains at least 96 bits of information beginning at memory location **0x20**. Any memory in excess of 96 bits remains undefined for this standard but usable by the issuing agency. However, the additional memory shall not interfere with any of the functionality contained in this document. The UII shall provide read-only access to users. The issuing agency may lock write access permanently or may allow write access by a password maintained by the issuing agency.

2.2.1 Memory Bank 01 Mapping

The following tables describe the memory mapping for Bank 01. The tables and values within the tables appear in Memory Address (hex value) order ascending. All fields are mandatory unless indicated otherwise.

Table 2: Stored CRC Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-16	00h-0Fh (16 bits)	Calculated	Calculated value based on other transponder memory values per ISO 18000-63 specification	Varies

Table 3: Stored PC Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-5	10h-14h (5 bits)	Length	Number of 16-bit words in the UII	00110 = 6 words (indicates 96-bit UII) Varies based on UII length
6	15h (1 bit)	User Memory	Indicates status of the User Memory	0 = No user memory 1 = User memory available
7	16h (1 bit)	XPC	Indicates status of extended transponder features	0 = No XPC 1 = XPC available
8	17h (1 bit)	Numbering System Indicator	Indicates whether transponder coded as EPC or ISO	0 = EPC 1 = ISO (correct value for 6C Coalition applications)
9-16	18h-1Fh (8 bits)	AFI	Application Family Identifier for 6C Coalition – B0h	1011 0000 = 6C Coalition AFI (B0h)

Table 4: UII Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-8	20h-27h (8 bits)	DSFID	Data Storage Format Identifier for 6C Coalition – 3Eh	0011 1110 = 6C Coalition DSFID (3Eh)

DRAFT

#	Memory Address	Section	Description	Values
9-16	28h–2Fh (8 bits)	UII Validation (CRC)	Cyclic Redundancy Check calculated value using UII bits 17 – 80 (Agency Use thru Transponder Serial Number fields). Example appears in Section 6.	Assigned at the time of transponder manufacture. Calculated as per Section 6. This field is mandatory for version 4.0 and higher tags, optional for earlier versions.
17-21	30h–34h (5 bits)	Agency Use	Individual agencies may add agency specific information here.	Assigned by agency (Optional)
22-33	35h-40h	Classification	Classification is taken directly from EZPass Inter-Customer Service Center Interface File and Reporting Specifications, Appendix C and includes:	Population of the first bit indicating class value assignment is mandatory. Remaining classification fields are optional if assignment bit is "0".
	(1 bit)	Class	The first bit indicates if the transponder has been assigned a classification value. If 0 is selected, the following 11 bits shall be ignored.	0 = No class value assigned (default) 1 = Class value assigned
	(5 bits)	Vehicle Type	This field indicates the type of vehicle.	00000 = Undefined (default) 00001 = Automobile 00010 = Motorcycle 00011 = Pickup truck 00100 = Van (seats 1-9) 00101 = Minibus (seats 10-15) 00110 = Bus (seats 16+) 00111 = Recreational vehicle 01000 = Truck 01001 = Auto transporter (≤ 65') 01010 = Auto transporter (>65') 01011 = Tractor & trailer (≤48') 01100 = Tractor & trailer (>48') 01101 = Tractor & dual trailers each (≤28.5') 01110 = Tractor & dual trailers each (>28.5') 01111 = Tractor & dual trailers each (one ≤28.5' other >28.5') 10000 = Undefined 10001 = Tractor/mobile home combination 10010-11111 = Undefined
	(4 bits)	Vehicle Axles	This field indicates the number of axles.	0000 = Undefined (default) 0001 = Undefined 0010 = 2 axles 0011 = 3 axles 0100 = 4 axles 0101 = 5 axles

DRAFT

#	Memory Address	Section	Description	Values
				0110 = 6 axles 0111 = 7 axles 1000 = 8 axles 1001 = 9 axles 1010 = 10 axles 1011 = 11 axles 1100 = 12 axles 1101 = 13 axles 1110 = 14 axles 1111 = 15 axles
	(1bit)	Vehicle Weight	This field indicates the weight of vehicle.	0 = ≤ 7,000 lbs. (default) 1 = > 7,000 lbs.
	(1 bit)	Vehicle Rear Tires	This field indicates the number of rear tires.	0 = Single rear tires (default) 1 = Dual rear tires
34-36	41h-43h (3 bits)	HOV Declaration	These three bits indicate the declaration status of the transponder. All single mode transponders shall be assigned the default value – 000, unless they are carpool specific transponders.	000 = Single mode (default) 001 = SOV (non-carpool) 010 = HOV 2+ 011 = HOV 3+ 100 = Carpool (as defined by roadway) 101 = Reserved for future use 110 = Reserved for future use 111 = Reserved for future use
37-40	44h-47h (4 bits)	Version	Allows for 16 possible values to indicate the version of the programming standard used on the transponder.	0000 = Unassigned 0001 = Ver. 1.0 0010 = Ver. 2.0 0011 = Ver. 3.0 0100 = Ver. 4.0 (current)
41-52	48h-53h (12 bits)	Agency	Allows for up to 4,096 agencies.	See 6C Coalition Table of Agencies (separate document)
53-80	54h-6Fh (28 bits)	Transponder Serial Number	Identifies the transponder within the agency. This space accommodates 268,435,456 values.	Assigned by agency
81-96	70h-7Fh (16 bits)	UII Authentication (Hash Value)	Calculated value using the first 80 UII bits and 32-byte key. Example appears in Section 6.	Assigned at the time of transponder manufacture. Calculated as per Section 6. Calculation/programming of this field is optional and it should be zero-filled if not calculated.

DRAFT

2.3 TID Memory Bank 10 Specification

The Transponder Identification (TID) memory has no specific value but is assumed to be unique and constant for all 6C transponders, per the 6C standard. The TID length can vary per the 6C specification and the length of a transponder's TID serial number is indicated on each transponder, in bits 0x20 – 0x22 of the TID. For fully serialized tags, the complete header and serialized portion of the TID can be

anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits. Transponders which are not fully serialized (that is, have at least a 48-bit unique serial number) should not be used for interoperable 6C tolling deployments.

2.4 User Memory Bank 11 Specification

This memory bank may be required to accommodate the future needs of group members or affiliates. Its provision and use are left optional at the discretion of individual members. It is important to note that given the absence of a universal requirement for User Memory, members should assume some portion of the tags programmed per this document may not contain a User Memory Bank 11.

Previous versions of this document required the User Memory bank be present on all tags and it be a minimum size of 64 bits. This memory was programmed per the following table. To maintain backwards compatibility with tags programmed under previous versions of this document, the below memory map must be used for tags that meet both conditions:

1. A User Memory bank is present on the tag
2. The 6C Coalition's DSFID value is programmed into the first byte of User Memory (per table 5 below)

Table 5: User Memory Bank 11 Mapping

#	Memory Address	Section	Description	Values
1-8	00h-07h (8 bits)	DSFID	Data Storage Format Identifier	0011 1110 = 6C TOC DSFID (3Eh)
9-20	08h-23h (12 bits)	Agency	Agency Code of agency writing to this memory bank.	See 6C Coalition Table of Agencies (separate document)
21-27	24h-1Ah (7 bits)	Plaza ID	7-bit Plaza ID. Each operator may choose.	Defined by agencies using this field.
28-32	1Bh-1Fh (5 bits)	Lane ID	5-bit Lane ID. Each operator may choose.	Defined by agencies using this field.
33-57	20h-38h (25 bits)	Day/Time	25-bit Day/Time. Each operator may choose. (seconds since Jan 01 00:00:00)	Defined by agencies using this field.
58—60	39h-3Bh (3 bits)	Occupancy Setting	3-bit Occupancy. Each operator may choose.	Defined by agencies using this field.
61+	3Ch -	Undefined	The remaining bits defined as individual agency needs arise.	

Tags that either do not have a User Memory bank, or do not have the 6C Coalition's DSFID programmed as the first byte of User Memory, are not subject to any requirements regarding User Memory.

DRAFT

3 INTEROPERABILITY REQUIREMENTS

3.1 Overview

The purpose of these requirements is to have all compliant transponders and readers operate as seamlessly as possible from one installation to the next. They create a basis for the development and refinement of testing methods used in a certification process. The 6C Coalition uses a third party to administer and conduct the certification program.

Interoperability testing demonstrates in lab and field conditions (replicating a reference toll environment) that transponders and readers operate predictably together. Agencies and integrators purchasing these products should be assured of basic equipment interoperability, but it does not substitute for performance testing in specific tolling installations. Due to the unique nature of each tolling installation, site-specific conditions, vehicle types, environmental conditions, etc., it is incumbent upon purchasers of equipment to test and tune for desired interoperability performance levels.

All transponders that conform to this 6C Coalition standard should be operable in any AVI system using a reader that conforms to this standard, as well as supporting other aspects relevant to the procurement and management of transponders. This necessitates that:

- All transponders conform to the same 6C air interface protocol physical layer.
- All transponders must support the full mandatory set of communications from the referenced 6C air interface protocol and must operate at all mandatory data rates supported by the protocol.
- Transponder performance must be reliable, and the communication zone should be within bounded limits for common or reference systems, which includes but is not limited to RF requirements such as operating on vehicles at the same field strength and under similar RF geometries defined by the 6C Coalition.

All readers that conform to this 6C Coalition standard should be operable with all types of transponders that conform to this standard. This necessitates that:

- All the protocol communications used by the reader must conform to the referenced 6C air interface protocol. However, this does not require that all the functions or commands that are mandatory for generic interrogators in the air interface protocol be supported by toll readers.
- The reader commands NAK, Kill, and Lock are optional for readers.
- Readers can report and be limited to reporting transponders coded as 6C toll transponders, using coding as defined in this document in the presence of other 6C transponders. See Appendix B for additional information regarding filtering of legacy 6C tolling transponders.

3.2 Conformance Testing

Conformance testing shall prove devices operate in accordance with the 6C PHY (Physical) and MAC (Medium Access Control) layers. All transponders and readers shall meet the conformance requirements defined in Table 6 below.

DRAFT

Table 7: Conformance Testing Requirements

#	Category	Requirement
1.1	Regulatory Approvals	Meet all applicable FCC compliance requirements for Part 15 and 90
1.2	Protocol Compliance	Conform to the 6C PHY (Physical) and MAC (Medium Access Control) layers, in accordance with ISO 18047-6 or EPCglobal Conformance test methods. For transponders - include mandatory modulation rates supported by the transponder (i.e., as per ISO 18047-6) and verification of QUERY and ACK as per ISO 18047-6 or equivalent. For readers –limited to only modulation rates that the reader manufacturer specifies (i.e., as per ISO 18047-6).
1.3	Frequency Range	Operate in the 902-928 MHz frequency range.
1.4	Regulatory Verification	Meet necessary regulatory and safety certifications specified by the FCC, vendor, or 6C Coalition as required/applicable.

3.3 Baseline Testing

Baseline Testing verifies that a device meets the minimum required performance for basic functionality, RF performance, and environmental performance in a lab environment.

3.3.1 Functional Baseline Tests

Functional Baseline Tests shall verify that the transponders comply with the 6C Coalition specifications. Transponders are tested to ensure that the various memory banks are properly programmed and can be written to as specified. Readers are tested to ensure transponders are properly read and transmitted to a higher-level system (e.g., lane controller).

Functional Baseline Tests are conducted in a laboratory environment to ensure that a transponder and a reader communicate via RFID commands. Testing of transponders for commands (executed with standardized parameters and transponder user data) may be embedded in automated test scripts run on the reference reader. There shall be enough tests to ensure that all commands and parameters function correctly, and that transponder data is read/written correctly and secured. For reader testing, the vendor shall state the set of commands used for toll operation. This testing shall verify through these commands the reader's capability to select, filter, and properly read 6C Coalition transponders.

Commands and Parameters – Transponders and readers shall be tested to make sure they can transition between all internal states while executing commands. A transponder must also demonstrate additional capabilities such as Lock, Kill, EPC re-programmability via secure access, and the ability to accept write directives. A reader must demonstrate the ability to filter only 6C Coalition transponders in the read zone.

DRAFT

Test Parameters – Antenna height, transponder height, and distance between transponder and antenna shall be held constant.

Test Approach - A reader submitted for testing shall be tested against reference transponders. A transponder submitted for testing shall be tested against reference readers.

3.3.2 Environmental Performance

Environmental baseline testing shall verify performance of transponder under various environmental conditions.

3.3.3 RF Performance

RF Performance Baseline Tests will verify RF performance of transponders in controlled free space to ensure interoperability between devices based on the transponder characteristics specified by the 6C Coalition's requirements. Transponder testing will determine transponder minimum activation energy, backscatter range, antenna polarization, and pointing loss. The tests are conducted in a simulated operational environment, which is not meant to substitute for toll operators conducting performance accuracy testing in a real-world toll application. The EPCglobal test document titled, *Tag Performance Parameters and Test Methods Version 1.1.3*, shall serve as the basis for testing:

1. Read range (EPCglobal test document Section 8.1)
2. Orientation tolerance (EPCglobal test document Section 8.2)
3. Frequency tolerance (EPCglobal test document Section 8.3)
4. Backscatter range (EPCglobal test document Section 8.5)

All values are measured per the EPCglobal *Tag Performance Parameters and Test Methods Version 1.1.3* test protocol, limited to the 902 – 928 MHz frequency range and modified as follows:

1. Use a horizontally, linearly polarized test antenna
2. Transponders mounted on material applicable for the intended location on the vehicle

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3.3.4 Transponder Requirements

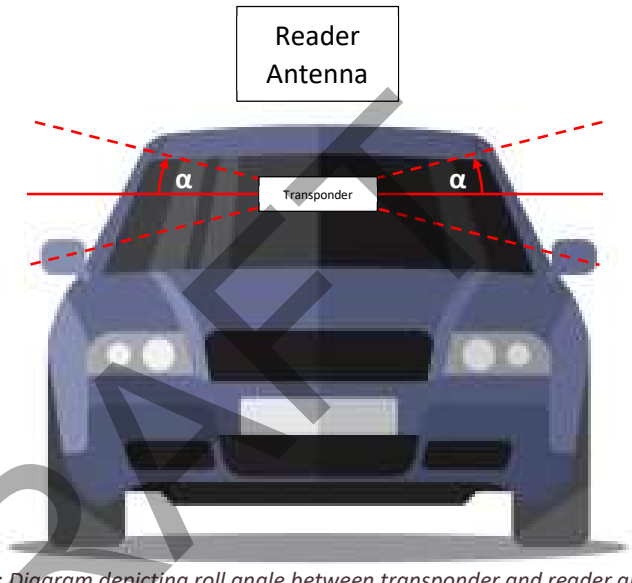
Transponders shall meet the baseline testing requirements shown in 8 below.

Table 9: Transponder Baseline Testing Requirements

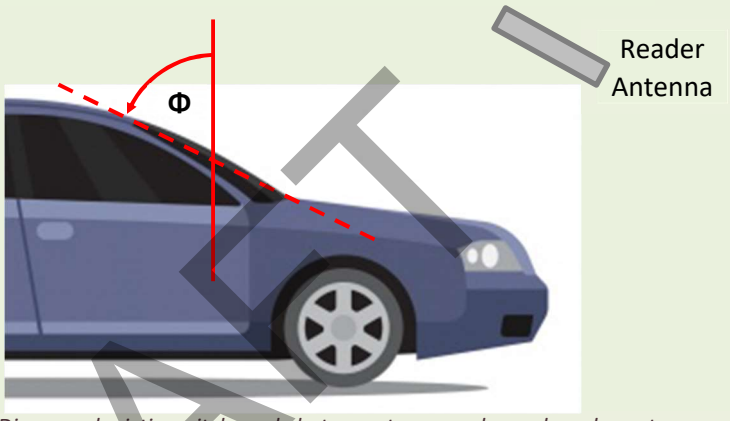
#	Category	Requirement
2.1	Functional - Memory Bank 10	Contain a minimum of 64 bits (8 byte) unique chip ID programmed by the chip manufacturer (TID)
2.2	Functional – Memory Bank 01	Programmed per section 2.2.1 of this document
2.3		Optional and length variable

#	Category	Requirement
2.4	Functional - Memory Bank 11	Previous versions of this standard required this area be programmed with the DSFID (00h-07h) set to 3Eh, 0011 1110 = 6C Coalition DSFID (3Eh). If this area of memory is present and programmed with the DSFID (as stated in previous sentence), the size of the User Memory Bank 11 shall be at least 64 bits.
2.5		Programmed unused and undefined bits with zeros
2.6	Functional - Memory Bank 00	See section 2.1 of this document
2.7	Environmental	All interior transponders – able to be subjected to and operated in 95% humidity, non-condensing environments
2.8		All exterior transponders – able operate in 100% humidity, condensing environments.
2.9		All interior transponders – able to operate at temperatures between – 40° F and +185° F.
2.10		All exterior transponders – able to operate at temperatures between – 40° F and +140° F.
2.11		All transponders – perform consistently under Ultraviolet (UV)/direct sunlight as well as in overcast conditions.
2.12	RF Performance - Minimum Activation Energy	All transponders - have a Minimum Activation Energy (forward link range) resulting in a baseline test read range between 7 m and 12 m.
2.13	RF Performance - Return Signal Strength (Backscatter Range)	All transponders - have a return signal strength/backscatter range (reverse link range) resulting in a baseline test read at a minimum of 14 m.

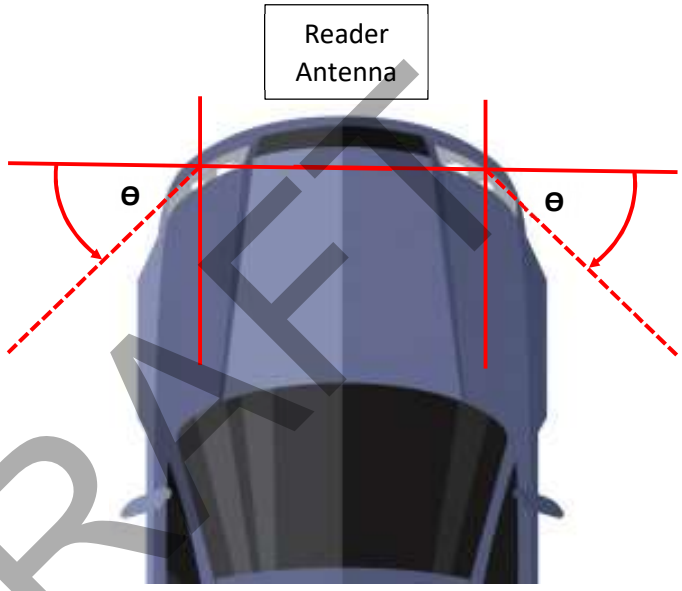
DRAFT

#	Category	Requirement
2.14	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Tilt from Horizontal" resulting in a baseline test read range, between 5 m and 12 m, when tilted +/- 15 degree horizontally (see Figure 1) from the installation reference angle defined by the transponder manufacturer. Facing the reader antenna, “Tilt from Horizontal” is the angle α from the horizontal mounting of a transponder. This represents transponders that are not installed horizontally level (“crooked”). **Tilt from horizontal reference plane (roll angle) = α**  *Figure 1: Diagram depicting roll angle between transponder and reader antenna*

DRAFT

#	Category	Requirement
2.15	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Tilt from Vertical" resulting in a baseline test read range between 5 m and 12 m, when tilted up to 45 degrees from vertical. Looking from the side, "Tilt from Vertical" is the angle Φ showing the difference of the mounted transponder from perfectly vertical as shown in Figure 2. This represents windshield angles between steeply sloped windshields (sports car) and near vertical windshields (semi-tractor trailers). **Tilt from vertical reference plane (pitch angle) = Φ**  *Figure 2: Diagram depicting pitch angle between transponder and reader antenna*

DRAFT

#	Category	Requirement
2.16	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Rotation from Horizontal" resulting in a baseline test read range between 5 m and 12 m, when rotated +/- 18 degrees from the horizontal plane (see Figure 3) from horizontal. Looking top down, Rotation from Horizontal is the rotation angle Θ from the horizontal plane of the transponder face away from the reader antenna. This represents transponder mounting locations on flat windshields versus curved windshields and headlights. **Rotation from horizontal reference plane (yaw angle) = Θ**  *Figure 3: Diagram depicting yaw angle between transponder and reader antenna*

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3.3.5 Reader Requirements

Readers shall meet the baseline testing requirements shown in Table 10 below.

Table 10: Reader Baseline Testing Requirements

#	Category	Requirement
3.1	Power Level	Have a maximum power/field strength allowed by local regulatory authority.
3.2	Interference	Provide interference mitigation for use with other readers at a toll plaza in single protocol reader and multiple protocol reader modes.
3.3	Transponder Filtering	Able to filter and report 6C Coalition coded transponders and information.
3.4	Transponder Filtering	Able to filter out non-6C Coalition transponders.
3.5	Reporting Transponder Data	Verify that reader can correctly read transponder data and supply it to a higher-level system (e.g. lane controller).

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3.4 Field Testing

Field Testing shall use a simulated field environment to evaluate device performance at different ranges, speeds (up to 85 mph), windshield angles, and lane placement. For both transponder and reader testing, reader frequency may be any frequency within the 902 – 928 MHz range and reader power or field strength can be up to the maximum allowed by local regulatory authorities.

3.4.1 Transponders

Tests occur in various toll operating environments (varied ranges, speeds and transponder densities). Transponders are tested using reader reference test systems set up per vendor instructions. Vehicle passages will cover both the mainline path and lane edges.

Transponder performance shall meet the field-testing requirements described in Table 11 below.

Table 12: Transponder Performance Requirements

#	Category	Requirement
4.1	Transponder Height	Above ground for car windshield mountings: 36”-48” (0.91m-1.2m) Above ground for medium truck windshield mountings: 48”-65” (1.2m-1.6m) Above ground for Large truck (Straight and Tractor) windshield mountings: 72”-108” (1.8m-2.7m)
4.2	Transponder orientation (3-D)	Tilt horizontal α = +/- 15 degrees (roll angle) Tilt vertical Φ = 0 to - 45 degrees (pitch angle) Rotation horizontal θ = +/- 18 degrees (yaw angle)
4.3	Transponder Speed	Speed of 0, 15, 85 MPH
4.4	Transponder Mounting	Windshield (Ford F150 4’x6’ portion) Headlight (Ford F150 full headlight assembly) Bumper (metal or plastic according to vendor instructions) Other mounting type per vendor instructions
4.5	Interrogator antenna orientation	Fixed reference system with horizontal linear polarization and antenna 15 degrees from horizontal facing oncoming traffic pattern
4.6	Antenna Height	Fixed reference system with lowest portion of antenna assembly 19’ above center point of travel lane

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3.4.2 Readers

Reader systems are configured as single lane or multiple lane ORT per the vendor recommended toll configuration setup.

Readers shall meet the field-testing requirements described in Table 13 below.

Table 14: Reader Field-testing Requirements

#	Category	Requirement
5.1	Transponder Population	Filter one 6C Coalition transponder (programming consistent with version 3.1 of this standard or higher) from nine non-6C Coalition transponders. Filtering information can be found in Appendix A Table 11 of this document (AFI, DSFID and Version values available to be filtered upon).
5.2	Transponder Lane Placements	Pass multiple reference transponders through the read zone on vehicles using in-line positions and cross-over (lane change) locations, and will include multiple simultaneous vehicles in the ORT configuration
5.3	Transponder Height	Above ground for car windshield mountings: 36”-48” (0.91m-1.2m) Above ground for medium truck windshield mountings: 48”-65” (1.2m-1.6m) Above ground for Large truck (Straight and Tractor) windshield mountings: 72”-108” (1.8m-2.7m)
5.4	Transponder orientation (3-D)	Tilt horizontal α = +/- 15 degrees (roll angle) Tilt vertical Φ = 0 to - 45 degrees (pitch angle) Rotation horizontal θ = +/- 18 degrees (yaw angle)
5.5	Transponder Speed	Speed of 0, 15, 85 MPH
5.6	Transponder Mounting	Windshield (Ford F150 4’x6’ portion) Headlight (Ford F150 full headlight assembly) Bumper (metal or plastic according to vendor instructions) Other mounting type per vendor instructions
5.7	Interrogator antenna orientation	Per vendor recommendation and using vendor antenna
5.8	Antenna Height	Per vendor recommendation and using vendor antenna

DRAFT

3.5 Multiprotocol Environments

The 6C protocol will be used in conjunction with other protocols, therefore:

1. Multiprotocol transponders – Transponders with multiple protocols that incorporate the 6C protocol are required to meet the minimum 6C protocol performance prescribed in this document.
2. Multiprotocol readers – Readers with multiple protocol functionality that read the 6C protocol are required to meet the minimum 6C protocol performance described in this document.

DRAFT

4 BARCODE FORMAT

The transponder barcode includes the Agency Code, the Transponder Serial Number, and a check digit. The barcode shall be printed using EPC Code 128 and the code data digits shall be in decimal format **AAAATTTTTTTTTTL** where **AAAA** is the Agency Code as a 4-digit number with leading zeros, **TTTTTTTTTT** is the Transponder Serial Number (TSN) as a 10-digit number with leading zeros and **L** is the Luhn check digit computed using only the last 2 digits of the Agency Code and all 10 digits of the TSN.

Below the barcode the Agency Code, the TSN and the check digit shall be displayed in the following decimal format:

<AA>AA TTTTTTTTTT L

The printed Agency Code shall NOT contain leading zeros and shall be separated from the TSN by a double space, where **<AA>AA** is the Agency code excluding leading zeros. The TSN shall include the leading zeros (to fill all 10 digits) and shall be separated from the check digit number **L** by a double space. The check digit **L** is Luhn (mod10) coded – calculated based upon **<AA>AA** (third and fourth digits only) and **TTTTTTTTTT** (all ten digits).

For example, a transponder with serial number 12 for agency 77 would return **007700000000123** as the barcode content and the printed information below the barcode would contain:

77 0000000012 3

Similarly, for agency 449, a transponder with serial number 12 would return **044900000000122** as the barcode content and the printed information below the barcode would contain:

449 0000000012 2

DRAFT

5 TRANSPONDER MANIFEST DETAILS

Accompanying an order of transponders, it is suggested that tag manufacturers provide a file including an entry for each transponder delivered to facilitate loading of data into back office systems. This should include both the UII programmed value and TID programmed value. Each transponder entry should appear on a new line as shown in the example below:

12_Byte_UII_Memory,TID (length varies)

0101CE00010000000101CE8C,E2003412012EC0FFEE041392

6 SECURITY AND DATA INTEGRITY VALIDATION

6.1 Overview

Transponder security and data integrity validation is critical to the toll industry. It is anticipated that as more security and validation features become available, they will be evaluated and deployed, as appropriate. The following measures are currently employed.

6.2 Memory Bank Security

6.2.1 Reserved Memory Bank

1. The Access Password shall have a Lock Status of locked with an Access Password known to and secured by the transponder issuing agency.
2. The Kill Password and its Lock Status shall be configurable by the transponder issuing agency. It is recommended that the transponder issuing agency configure transponders to permanently disable the ability to kill their transponders.

6.2.2 UII Memory Bank

1. The transponder issuing agency shall be the only entity authorized to change the encoded bits on the transponder. The UII memory bank shall have a Lock Status of locked.
2. UII Validation - The UII content can be validated by comparing a CRC computed on the received UII data against the UII validation byte contained within the UII. Further details are contained in section 6.4.
3. UII Authentication – The UII memory data should be authenticated with two hashed authentication bytes. The UII Authentication bytes can be used for transponder data authentication. Further details are contained in Section 6.5.

6.2.3 TID Memory bank

The transponder identification number shall be uniquely assigned by the manufacturer. It shall be readable without a password, cannot be altered and must be unique.

DRAFT

6.2.4 User Memory Bank

1. Password – If a User Memory bank is included on the tag, it shall be writable without a password.
2. Lock Status - If a User Memory bank is included on the tag, it shall have a Lock Status of unlock.
3. Authentication/Validation – Authentication and validation shall not be used.

6.3 Encryption

Under development.

6.4 UII Validation (CRC Calculation)

The CRC is included in tag memory to easily validate the integrity of UII bits 17 – 80 (Agency Use through Transponder Serial Number fields). Should any portion of this area of tag memory become erroneous/faulty, validation of the CRC field provides a means to detect this. The CRC is calculated using an 8-bit CRC applied to UII bits 17 – 80. Note the *UII Authentication (Hash Value)* portion of tag memory is intentionally not included in this calculation. This allows the CRC to be calculated both prior to and independently of the calculation of the *UII Authentication*. The *UII Authentication* value can then be calculated once the CRC value is determined.

The CRC to be used is an 8-bit CRC (CRC-8/ITU), with a polynomial of $x^8 + x^2 + x + 1$, with a preset value of 0x00 and an output XOR mask of 0x55 (see 0x83 [implicit+1 notation] in Best CRC Polynomials[1]). As stated above, the data feed for the CRC calculation is UII bits 17 – 80.

Below is an example of how the CRC byte shall be calculated using:

1. An example UII bits 17 – 80 (64 bits or 8 bytes) value of **0xFFFFFFFFFFFFFFFF**
2. Polynomial (implicit+1 notation) **0x83**
3. Initial CRC value **0x00**
4. Output XOR **0x55**
5. CRC remainder **0xD7**
6. The resulting CRC output is **0x82**. CRC implementations can be verified using the CRC-8/ITU calculation in https://crccalc.com

6.5 UII Authentication (Hash Value)

Below is an example of how the UII Authentication bytes shall be calculated using:

1. The first 10 bytes of the UII (starting with the "DSFID" field)
2. The 32-byte key (determined by the transponder issuing agency)
3. The bytes of the transponder TID (length varies - see footnote)

[1] Implicit+1 notation in https://users.ece.cmu.edu/~koopman/crc/index.html by Phillip Koopman, Carnegie Mellon University, aka CRC-8-CCITT in https://en.wikipedia.org/wiki/Cyclic_redundancy_check#table

DRAFT

For ensuring interagency interoperability and consistency between transponders manufactured by different vendors the open standard SHA1 hashing algorithm shall be used. The hashing sequence shall be:

1. Concatenate the 10 UII memory bytes, the 32-byte key and the TID bytes to form a single byte sequence
2. Determine the SHA1 hash of this byte sequence above
3. For UII Validation the first 2 bytes from the 40-byte hash result shall be used.

UII Validation Reference Calculation is provided below:

UII 10 byte: **0xFFFFFFFFFFFFFFFFFFFF**

Key 32 byte:

0xABABABABABABABABABABABABABABABABABABABABABABABABABABABABABABABAB

TID (12-byte example): **0x000000000000000000000000**

Result 20-byte hash value: **0x167F9C5B3933148B68AAD51EE3C4B5F858166451**

UII Validation bytes: **0x167F**

The 12 UII bytes shall be encoded as: **0xFFFFFFFFFFFFFFFFFFFF167F**

For fully serialized tags, the complete header and serialized portion of the TID (which can be anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits) will be used for the indicated calculations.

DRAFT

7 APPENDICES

Appendix A Legacy 6C Toll Transponder Information

The programming standard described in this document intends to enable consistent tag programming among the member agencies. However, developing the standard required several iterations before achieving a steady state in Version 3.1. Thus, slight differences exist between the current version and previous versions. This appendix explains how to determine the programming standard used and the forward compatibility of the Agency Codes.

A.1 Assumptions

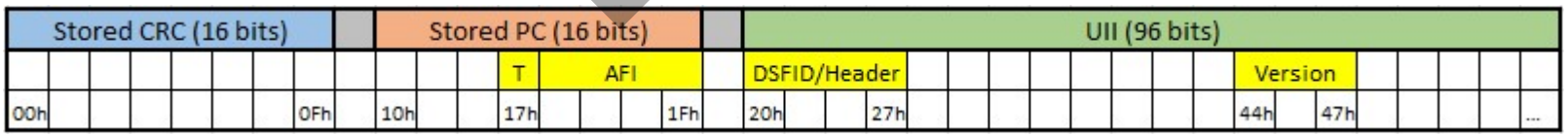
1. All values discussed appear in hexadecimal, except where noted.
2. This appendix only discusses Memory Bank 01 (CRC, PC, and the UII) described in section 2.2

A.2 Determining the Tag Programming Standard

Use the AFI, Header/DSFID, and Version values to validate the tag and determine the Programming Standard used. Figure 4 illustrates the location of the bits.

- AFI - Memory Address **`18h – 1Fh`**
- Header/DSFID - Memory Address **`20h – 27h`**
- Version - Memory Address **`44h – 47h`**

Figure 4: Snip of Memory Map - Highlights the location of key identification bits



For a tag to comply as an interoperable 6C Coalition tag, one of the following statements must apply:

1. [AFI] contains no value, [Header] contains **`35`**, and [Version] contains **`0`**, the tag uses Programming Standard Version 0.9.

DRAFT

2. [AFI] contains no value, [Header] is **35**, and [Version] is **1**, the tag uses Programming Standard Version 1.0. – no longer used
3. [AFI] contains no value, [Header] contains **B0**, and [Version] contains **2**, the tag uses Programming Standard Version 2.0.
4. [T] contains 1, [AFI] contains **B0**, [Header] contains no value, and [Version] contains **3**, the tag uses Programming Standard Version 3.0.
5. [T] contains 1, [AFI] contains **B0**, [DSFID] contains **3E**, and [Version] contains **3**, the tag uses Programming Standard Version 3.1.
6. [T] contains 1, [AFI] contains **B0**, [DSFID] contains **3E**, and [Version] contains **4**, the tag uses Programming Standard Version 4.0.

The following table provides a summary of the values discussed above:

Table 15: Programing Standard Identification

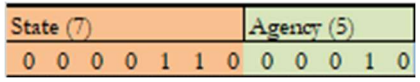
	T bit and AFI (9 Bits) **Memory Address:** 17h – 1Fh Bits 8-16 of the Stored PC		**DSFID / Header (8 Bits)** **Memory Address:** 20h – 27h Bits 1-8 of the UII		**Version (4 Bits)** **Memory Address:** 44h – 47h Bits 37-40 of the UII	
Version	**Binary**	**Hex**	**Binary**	**Hex**	**Binary**	**Hex**
4	1 1011 0000	1 B0	0011 1110	3E	0100	4
3.1	1 1011 0000	1 B0	0011 1110	3E	0011	3
3	1 1011 0000	1 B0	N/A	N/A	0011	3
2	N/A	N/A	1011 0000	B0	0010	2
1	N/A	N/A	0011 0101	35	0001	1
0.9	N/A	N/A	0011 0101	35	0000	0

DRAFT

A.3 Identifying Agencies

For Versions 0.9 and 1.0, a combination of the State Code (7 bits) and the Agency Code (5 bits) identified an agency. This concept allowed a single state or region to have multiple agencies (Figure 5).

Figure 5: Version 0.9 and 1.0 State and Agency Code



Version 2.0 replaced the separate State Code and Agency Code with a single Agency Code (12 bits), using the same Memory Address (Figure 6). This code design allows forward compatibility. For example, in Version 0.9/1.0, the Colorado E-470 Public Highway Authority had a State Code of 6 for Colorado and an Agency Code of 2 for E-470. As depicted in Figure 5, the binary code **0000110** equals decimal value 6 and the binary code **00010** equals decimal value 2.

In Version 2.0 and above, the Agency Code uses the entire 12 bits and all Agency Code values have 12-bit values. Using the example from above, E-470 has a decimal value of 194 as shown in the figure below.

Figure 6: Version 2.0, 3.0, and 3.1 Agency Code – Currently used

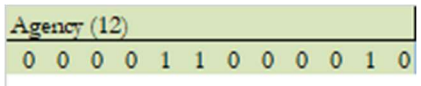


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Figure 7 provides a reference chart comparing the different programming standards by version.

Figure 7: Memory Bank 01 Programming Summary by Version

Version	1.0				2.0				3.0 Rev 2				3.1				4.0			
Area	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section
Stored CRC	1-16	00h - 0Fh	16	N/A	1-16	00h - 0Fh	16	N/A	1-16	00h - 0Fh	16	Calculated	1-16	00h - 0Fh	16	Calculated	1-16	00h - 0Fh	16	Calculated
Stored PC	1-5	10h - 14h	5	N/A	1-5	10h - 14h	5	N/A	1-5	10h - 14h	5	Length	1-5	10h - 14h	5	Length	1-5	10h - 14h	5	Length
	6	15h	1	N/A	6	15h	1	N/A	6	15h	1	User Memory	6	15h	1	User Memory	6	15h	1	User Memory
	7	16h	1	N/A	7	16h	1	N/A	7	16h	1	XPC	7	16h	1	XPC	7	16h	1	XPC
	8	17h	1	N/A	8	17h	1	N/A	8	17h	1	Numbering System Indicator	8	17h	1	Numbering System Indicator	8	17h	1	Numbering System Indicator
	9-16	18h - 1Fh	8	N/A	9-16	18h - 1Fh	8	N/A	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)
UII	1-8	20h-27h	8	Header (0011 0101)	1-16	20h-2Fh	16	Header (B0 = 1011 0000 xxxx xxxx)	1-21	20h-34h	21	Agency Use	1-8	20h-27h	8	DSFID (3E = 0011 1110)	1-8	20h-27h	8	DSFID (3E = 0011 1110)
	9-36	28h-43h	28	General Manager Number									9-21	28h-34h	13	Agency Use	9-16	28h-2Fh	8	CRC
					17-21	30h-34h	5	Reserved Space									17-21	30h-34h	5	Agency Use
					22	35h	1	Classification Code	22	35h	1	Class	22	35h	1	Class	22	35h	1	Class
					23-27	3Ah	5	Vehicle Type Code	23-27	3Ah	5	Vehicle Type	23-27	3Ah	5	Vehicle Type	23-27	3Ah	5	Vehicle Type
					28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles
					32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight
					33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires
					34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration
	37-40	44h-47h	4	VersionCode	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version
	41-52	48h-4Eh	7	State Code	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency
	48-52	4Fh-53h	5	Agency Code																
	53-80	54h-6Fh	28	Vehicle Code	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number
	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)

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Appendix B Transponder Filtering

The 6C standard allows 'filters' to be implemented by readers to separate a population of tags based on values of certain areas of the tag memory. This is useful in tolling environments to allow readers to only read/report 6C transponders that are programmed as tolling tags, as opposed to reading all 6C tags that may pass through a lane (e.g. tags used for retail, asset tracking, etc). To effectively filter all tolling tags in use as of August 2019 (with minor exceptions), three filters are required, detailed below:

1. Stored PC bits 9-16 = **0xB0** (6C Coalition V3.0 and all later versions)
2. UII bits 1-8 = **0xB0** (WSDOT V2.0 tags)
3. UII bits 1-8 = **0x35** (SRTA [old tags] and E470 [all])

With the following exceptions all tags are programmed to version 3.0 or above:

- SRTA tags prior to 2017 (~400k) are an older version that was the basis for V1 published by the 6C TOC
- E-470 tags distributed prior to November 2019 are very similar to these older SRTA tags
- WSDOT has about 750k version 2.0 tags distributed
- Utah DOT has a unique programming standard and may replace their tags prior to joining an IOP hub

Table 16: Legacy Toll Tag Information

Agency	6C Coalition Programming Version	Estimated Count (as of August 2023)
E470	Version 0.9	1,600,000
WSDOT	Version 2.0	1,600,000
SRTA	Version 0.9	187,000
UDOT	Unique to UDOT	78,000

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EXHIBIT "B"
FORM OF PURCHASE ORDER

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Riverside County Transportation Commission

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
4080 LEMON ST.
RIVERSIDE, CA 92501
951-787-7141

DATE	PO NUMBER

CONTRACTOR:

SHIP TO: RIVERSIDE CO TRANSPORT COMMISSION
4080 LEMON STREET
3RD FLOOR
RIVERSIDE, CA 92501

FOB Point:

Terms: Issued in accordance with the Contract identified below and subject to all terms and conditions therein, and the device type, quantity, delivery date and prices below.

Req. No:

Dept::

Contract No:

Special Inst:

By signing below, Contractor agrees to the terms of this Purchase Order. This Purchase Order must be signed by both parties to be valid. This Purchase Order shall be void if not signed by Contractor and returned to the Commission within three (3) days of the date above.

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Transponder Type	Quantity	Delivery Date	Unit Price	Extended Price

SUBTOTAL:

TAX:

TOTAL:

BILL TO:

Account Number	Amount	Account Number	Amount

Riverside County Transportation Commission Authorized Signature

Contractor

Exhibit "C"
FEE SCHEDULE AND DELIVERY TIMES

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Solicitation No.	RFP No. 26-31-027-00
Solicitation Title	6C Transponders
Contractor	Kapsch TrafficCom

APPENDIX H

PROPOSAL PRICING AND DELIVERY TIME FORM

Internal Mounted Sticker Transponder	**Weeks to Deliver** *(from purchase order date)*	**Price per Transponder** *(Base years 1 - 3)*	**Price per Transponder** *(Option Period 1)*	**Price per Transponder** *(Option Period 2)*
Order Quantity				
Less than 250,000	**10** weeks	**$ 0.61**	**$ 0.63**	**$ 0.63**
250,000 or more	**10** weeks	**$ 0.61**	**$ 0.63**	**$ 0.63**

External Mounted Sticker Transponder	**Weeks to Deliver** *(from purchase order date)*	**Price per Transponder** *(Base years 1 - 3)*	**Price per Transponder** *(Option Period 1)*	**Price per Transponder** *(Option Period 2)*
Order Quantity				
Less than 10,000	**10** weeks	**$ 0.61**	**$ 0.63**	**$ 0.63**
10,000 or more	**10** weeks	**$ 0.61**	**$ 0.63**	**$ 0.63**

Internal Mounted 3-Position Switch Transponder	**Weeks to Deliver** *(from purchase order date)*	**Price per Transponder** *(Base years 1 - 3)*	**Price per Transponder** *(Option Period 1)*	**Price per Transponder** *(Option Period 2)*
Order Quantity				
Less than 100,000	___ weeks	$ -	$ -	$ -
100,000 or more	___ weeks	$ -	$ -	$ -

Printing of Exterior Facing Artwork on Switchable Transponder		**Price per Transponder** *(Base years 1 - 3)*	**Price per Transponder** *(Option Period 1)*	**Price per Transponder** *(Option Period 2)*
	Not Applicable	$ -	$ -	$ -

Mounting Solution		**Price per 10,000** *(Base years 1 - 3)*	**Price per 10,000** *(Option Period 1)*	**Price per 10,000** *(Option Period 2)*
	Not Applicable	$ -	$ -	$ -

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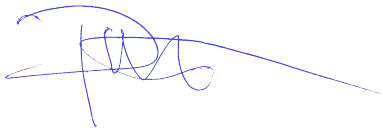
Proposed prices shall include all costs including shipping and handling.



Phil Thompson,
Vice President, Sales and Business Development

Kapsch Confidential and Proprietary

EXHIBIT “D”

USE OF ON CALL BENCH

As part of the procurement for this Agreement, the Commission has ranked the contractors on the On Call Bench. The established ranking is on file at the Offices of the Commission, and available for review upon request. The Commission will award Purchase Orders to the top ranked contractor on the On Call Bench for each type of Device to be procured by the Commission.

Should the top ranked contractor on the On Call Bench fail to perform (as determined by the Commission in accordance with the criteria set forth below), the Commission may award a Purchase Order to the next highest ranked contractor.

FAILURE TO PERFORM

Failure to perform by Contractor shall be established if the Contractor fails to do one or more of the following:

1. Acknowledge receipt of and accept a Purchase Order within 3 business days of Commission emailing the Purchase Order to the designated Contractor representative;

2. Meet the delivery schedule in a Purchase Order;

3. Provide transponders that do not pass testing performed by the Commission or its agent. Testing will include the accuracy of the tag programming and functionality as defined in the Scope of Services. Failure for the purposes of this criteria shall be more than one transponder fails out of 200 from a single shipment;

4. Obtain or maintain Omni Air Certification (or other approved by the Commission);

5. Provide Transponders in accordance with the procured physical attributes and approved artwork;

6. Provide warranty replacement within 120 days of receipt by the Contractor;

7. Remedy Excessive Failures as defined in Section 5 G;

8. Otherwise perform under its Agreement with the Commission, resulting in a termination pursuant to Section 18 A.

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RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ON CALL PURCHASE AGREEMENT
FOR 6C TRANSPONDERS
WITH STAR SYSTEMS AMERICA

This On Call Purchase Agreement for 6C Transponders ("Agreement") is entered into this _____ day of _____, 2026, by and between the Riverside County Transportation Commission ("Commission"), and Star Systems America, a Limited Liability Company with its principal place of business at 9525 Forest View Street, Dallas, TX 75243 ("Contractor"). Commission and Contractor are sometimes individually referred to as "Party" and collectively as "Parties" in this Agreement.

RECITALS.

A. The Commission has entered into On Call Purchase Agreements for 6C Transponders with a bench of qualified contractors selected pursuant to a request for proposal process ("On Call Bench").

B. Contractor is one of the selected contractors, and may, during the term of this Agreement, receive one or more order requests from the Commission for Devices, as defined herein.

C. Devices may be procured by the Commission for itself, and for the Orange County Transportation Authority ("OCTA").

Section 1. DEFINITIONS.

A. "Delivery Date(s)" means that date or dates upon which the Transponders are to be delivered to Commission as set forth in each Purchase Order.

B. "Devices" means the Transponders

C. "On Call Bench" shall have the meaning as set forth in Recital A above.

D. "Purchase Order" means an order request from the Commission in the form attached hereto as Exhibit "B". To be valid, a Purchase Order must be signed by both Parties in accordance with the terms contained in this Agreement.

E. "Transponders" means the 6C transponders, as specified in Scope of Services Section 2 of Exhibit "A,"

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Section 2. AGREEMENT TERM.

A. The term of this Agreement shall be three (3) years, commencing on the date first set forth above. The Commission shall have the option, in its sole discretion, to extend the term for two additional two-year extension terms. Any such extension shall be pursuant to a written amendment to this Agreement.

B. Notwithstanding the foregoing, in the case a Purchase Order has been issued prior to the termination date, the term of this Agreement shall be automatically extended until delivery and acceptance of all Devices under such Purchase Order, and completion of payment therefor, or until termination of such Purchase Order in accordance with the provisions of Section 18.A below.

Section 3. PURCHASE ORDERS.

A. To initiate the Purchase Order process, the Commission will issue a Purchase Order to the Contractor setting forth the desired Devices, quantity for the order, delivery times and pricing. Delivery time and pricing shall be based on the prices and delivery schedule set forth in Exhibit "C".

B. Contractor must accept the terms of the Purchase Order and return the executed Purchase Order to the Commission within three (3) business days of the date of the Purchase Order. Notwithstanding any other provision of this Agreement, a Purchase Order not signed by Contractor and returned to the Commission in accordance with the foregoing shall be void.

C. Any issuance of Purchase Orders to contractors on the On Call Bench shall be in accordance with the terms set forth in Exhibit "D".

D. Purchase by the Commission of any Devices under this Agreement must be authorized by a Purchase Order. All Purchase Orders shall be performed in accordance with and subject to the terms and conditions of this Agreement, the exhibits attached hereto, and all applicable local, state and federal laws, rules and regulations. No Devices shall be delivered, and no payment made by Commission therefor, unless authorized by a valid and fully executed Purchase Order.

Section 4. INSPECTIONS AND TESTS.

Commission shall have the right to inspect and/or test the Devices. If upon inspection or testing the Devices or any portion thereof are found to be nonconforming, unsatisfactory, defective, of inferior quality or workmanship, or fail to meet any requirements or specifications contained in Exhibit "A," then without prejudice to any other rights or remedies, Commission may reject the Devices or exercise any of its rights under Section 5. The inspection, failure to make inspection, acceptance of goods,

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or payment for goods shall not impair Commission's right to reject nonconforming goods, irrespective of Commission's failure to notify Contractor of a rejection of nonconforming goods or revocation of acceptance thereof or to specify with particularity any defect in nonconforming goods after rejection or acceptance thereof.

Section 5. <u>WARRANTY.</u>

A. *General Warranty*. Contractor warrants and represents that all of its Devices shall meet the requirements and specifications set forth in this Agreement. Contractor also warrants that the Devices are free and clear of all liens and encumbrances whatsoever, and that Contractor has a good and marketable title to same.

B. *Transponder Warranty.*

i. Contractor warrants and represents, as to each Purchase Order, that all of its Transponders provided under the Purchase Order shall be free from defects in functionality, usability, and appearance for a period of three (3) years from the date of receipt by the Commission of the Transponders under the relevant Purchase Order.

ii. If the Transponders provided under this Agreement have a third party warranty that exceeds the warranty period set forth in Section 5.B above, Contractor shall track and assign such third party warranty to the Commission on or before expiration of the warranty period set forth above in Section 5.B.

C. *Transponder Warranty Procedures*.

i. Upon discovery of defective Transponders, the Commission or its designated representative shall ship the defective Transponders to Contractor.

ii. Contractor shall ship conforming replacement Transponders to the address specified by the Commission in the documentation included with the defective Transponders. Contractor may use any shipping method provided the replacement Transponders arrive at the destination designated by the Commission within 120 days of receipt by Contractor of the defective Transponders.

iii. Replacement Transponders shall be warrantied for the warranty period set forth in Section 5.B above.

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iv. Contractor shall be responsible and liable for all costs of shipping the defective Transponders to and from Contractor during the warranty period. Contractor shall reimburse the Commission for its shipping costs immediately upon demand.

iv. Failure by the Contractor to provide replacement Transponders within 120 days, as required in (ii) above, shall result in a deduction by Commission from any outstanding payments owed to Contractor, or immediate repayment by Contractor of the purchase price of the defective Transponders not timely replaced.

D. *General Third Party Warranty Requirements*.

Contractor's agreements with any third parties for Devices provided under this Agreement shall require that such parties consent to the assignment of all representations and warranties for such Devices to the Commission, and enforcement thereof by the Commission. Contractor shall provide all assigned third party warranties to the Commission within the time set forth in the schedule included with a Purchase Order, or as otherwise specified in this Agreement.

E. *Excessive Failures of Transponders*.

In the event of an excessive failure of Transponders delivered to the Commission under this Agreement, Contractor shall be liable for all costs incurred by the Commission, including, but not limited to: the public end user notification and replacement costs; and labor and material costs. Excessive failure is defined as a defect in function, labor or materials that is present in ten percent (10%) or more of any Transponder type provided under a Purchase Order. By way of example and not limitation, if 10% of the Transponders activated and assigned to customer accounts are deemed defective, then Contractor shall be responsible for the Commission's costs such as notifying customers; establishing and operating locations where the customers could swap out their defective Transponders for a working Transponder or other means of replacement; and the Commission's administrative costs.

G. *Survival of Warranty Provisions*.

The warranty provisions contained in this Section 5 shall survive any termination or expiration of this Agreement, and shall remain in effect for the full warranty term.

Section 6. INTELLECTUAL PROPERTY

A. Intellectual Property Rights for Transponders. Contractor warrants that Contractor owns or has a valid license for all of the proprietary technology and intellectual property including, but not limited to, materials, data, computer programs or software and source code, enhancements,

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documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property Rights") incorporated within the Transponders. Contractor hereby grants to the Commission a fully paid-up, royalty-free, perpetual, irrevocable, non-exclusive license and/or sublicense to the Intellectual Property Rights contained in or used in connection with the Transponders to use, execute, maintain, display, perform, distribute, sell, create derivative works of, and to prepare derivative works based upon any Intellectual Property Rights provided by Contractor to the Commission under this Agreement. This license includes the right to make and have made copies of any and all software, firmware and documentation, and to use any and all such copies, reproductions, modifications, adaptations, improvements or derivative works to utilize and operate the Transponders. The license provided hereunder shall cover all aspects of software and firmware, except for source code to programs owned and/or developed by any of Contractor's subcontractors, and programs of any third parties which the Contractor integrates, bundles or provides as part of the Transponders. The Contractor shall secure all required licenses from any third party providers of software and firmware pursuant to the terms set forth above in the name the Commission, and shall ensure that such licenses are transferable to and assignable by the Commission, without additional compensation. The Contractor shall furnish the Commission with original license agreements it obtains from such third party providers of software and firmware upon delivery of the initial order of Transponders, and any such additional license agreements entered into thereafter that in any way effect Transponder's use of the Transponders. Contractor shall also provide to the Commission copies of the computer programs, disks and documentation for all software and firmware it obtains from third parties.

B. Intellectual Property Rights for Handheld Readers. Contractor shall ensure that in providing the Handheld Readers, the Commission shall have all Intellectual Property Rights required for the full and unencumbered use of the Handheld Readers.

C. Remedies for Breach of Warranties or Intellectual Property Rights. In the event of a breach by Contractor of its obligations under Section 5 or this Section 6, Commission will not be limited to the remedies set forth in these sections, but will have all the rights and remedies permitted by applicable law, including without limitation, all of the rights and remedies afforded to Commission under the California Commercial Code. Contractor further agrees to indemnify, defend and hold the Commission and OCTA harmless against any and all third party claims resulting from the breach or inaccuracy of any of the warranties contained in Section 5 or this Section 6.

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Section 7. PRICES.

Unless expressly provided otherwise, all prices and fees specified in Exhibit "C," attached hereto and incorporated herein by reference, are firm and shall not be subject to change without the written approval of Commission, and shall apply to all Purchase Orders under this Agreement for the term, and any extensions thereof. No extra charges of any kind will be allowed unless specifically agreed to in writing by Commission's authorized representative. Prices include (i) all federal, state and local use, excise, privilege, payroll, occupational and other taxes applicable to the Devices (excluding sales tax) furnished to Commission hereunder; (ii) all charges for packing, freight and transportation to destination, and (iii) full compliance with all requirements of this Agreement, including the attached Scope of Services and Technical Requirements.

The total compensation shall be specified under each Purchase Order, and shall not be exceeded.

Section 8. CHANGES.

Commission, at any time, by a written order, may make changes in the requirements for the Devices set forth in Exhibit "A", including but not limited to, Commission's requirements and specifications. If such changes affect the cost of the Devices or time required for performance under a Purchase Order, an equitable adjustment will be made in the price or time for performance under a Purchase Order, or both. Any change in the price necessitated by such change will be agreed upon between Commission and Contractor and such change will be authorized by an amendment to this Agreement, or to the Purchase Order, as applicable.

Section 9. PAYMENTS.

A. Terms of payment for each Purchase Order, are net thirty (30) days, less any applicable credits, or after receipt of invoice. Contractor shall invoice in accordance to the delivery schedule but not more frequently than each billing period. Final payment shall be made by Commission after Contractor has satisfied all contractual requirements for a Purchase Order. Payment of invoices shall not constitute acceptance of Devices.

B. Payments otherwise due may be withheld by Commission on account of defective Transponders not timely replaced in accordance with the warranty provisions, liens or other claims filed, reasonable evidence indicating probable filing of liens or other claims, failure of Contractor to make payments properly to its subcontractors or for material or labor, the failure of Contractor to perform any of its other obligations under the Agreement, or to protect Commission against any liability arising out of Contractor's failure to pay or discharge taxes or other obligations. If the causes for which payment is withheld are removed, the withheld payments will be made promptly. If the said causes are not removed within a reasonable period after written notice, Commission may remove them at

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Contractor's expense.

Section 10. SCHEDULE FOR DELIVERY.

The time of Contractor's performance is of the essence for this Agreement. The Devices will be delivered in accordance with the schedule set forth in each Purchase Order, and in accordance with the timeframes for delivery set forth in Exhibit "C". Contractor must immediately notify Commission in writing any time delivery is behind schedule or may not be completed on schedule.

Section 11. TAXES.

A. Contractor agrees to timely pay all sales and use tax (including any value added or gross receipts tax imposed similar to a sales and use tax) imposed by any federal, state or local taxing authority on the ultimate purchase price of the Devices provided under this Agreement. Sales tax is not included in the price of the Devices as set forth in Exhibit "C", and shall be determined at the time of issuance of a Purchase Order.

B. Contractor will withhold, and require its subcontractors, where applicable, to withhold all required taxes and contributions of any federal, state or local taxing authority which is measured by wages, salaries or other remuneration of its employees or the employees of its subcontractors. Contractor will deposit, or cause to be deposited, in a timely manner with the appropriate taxing authorities all amounts required to be withheld.

C. All other taxes, however denominated or measured, imposed upon the price of the Devices provided hereunder, will be the responsibility of Contractor. In addition, all taxes assessed by any taxing jurisdiction based on Contractor property used or consumed in the provision of the Devices such as and including ad valorem, use, personal property and inventory taxes will be the responsibility of Contractor.

D. Contractor will, upon written request, submit to Commission written evidence of any filings or payments of all taxes required to be paid by Contractor hereunder.

Section 12. INDEPENDENT CONTRACTOR.

Contractor enters into this Agreement and all Purchase Orders as an independent contractor and not as an employee of Commission. Contractor shall have no power or authority by this Agreement to bind Commission in any respect. Nothing in this Agreement or any Purchase Order shall be construed to be inconsistent with this relationship or status. All employees, agents, contractors or subcontractors hired or retained by the Contractor are employees, agents, contractors or subcontractors of the Contractor and not of Commission. Commission shall not be obligated in any way to pay any wage claims or other claims made against Contractor by any such employees, agents, contractors or subcontractors or any other person resulting from performance of

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this Agreement.

Section 13. SUBCONTRACTS.

Unless otherwise specified, Contractor must obtain Commission's written permission before subcontracting any portion of this Agreement. Except for the insurance requirements in Section 16.A, all subcontracts must require that the subcontractor be bound by and subject to all of the terms and conditions of this Agreement, and the relevant Purchase Order. No subcontract or order will relieve Contractor from its obligations to Commission and OCTA, including, but not limited to Contractor's insurance and indemnification obligations. No subcontract or order will bind Commission.

Section 14. TITLE AND RISK OF LOSS.

Unless otherwise agreed, Commission will have title to, and risk of loss of the Devices upon delivery. However, Contractor will be liable for any loss or damage to the Devices caused by Contractor or its subcontractors, their agents or employees, and Contractor will replace said Devices at its own cost to the complete satisfaction of Commission. Notwithstanding the foregoing, in the event that the Commission has paid Contractor for all or a portion of the Devices which remain in the possession of Contractor, then Commission shall have title to, and the right to take possession of, such Devices at any time following payment therefor. Risk of loss for any Devices which remain in the possession of Contractor shall remain with Contractor until such Devices have been delivered or Commission has taken possession thereof.

Section 15. INDEMNIFICATION.

A. Contractor shall defend, indemnify and hold the Commission, OCTA and their officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner arising out of or incident to any alleged acts, omissions, negligence or willful misconduct of Contractor, its officials, officers, employees, agents, subcontractors and subconsultants arising out of or in connection with the Transponders or the performance of this Agreement or any Purchase Order, including without limitation the payment of all consequential damages and attorneys' fees and other related costs and expenses except such loss or damage which was caused by the sole negligence or willful misconduct of the Commission.

B. Contractor's defense obligation includes any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against the Commission, OCTA and their officials, officers, employees, agents or volunteers shall be at Contractor's own cost, expense and risk. Contractor shall pay and satisfy any judgment, award

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or decree that may be rendered against Commission, OCTA or their officials, officers, employees, agents or volunteers, in any such suit, action or other legal proceeding. Contractor shall reimburse Commission, OCTA and their officials, officers, employees, agents and/or volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

C. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the Commission, OCTA or their officials, officers, employees, agents or volunteers.

Section 16. INSURANCE.

A. General. Contractor shall take out and maintain:

1. Commercial General Liability Insurance, of at least $1,000,000 per occurrence/ $2,000,000 aggregate for bodily injury, personal injury and property damage, at least as broad as Insurance Services Office Commercial General Liability most recent Occurrence Form CG 00 01;

2. Automobile Liability Insurance for bodily injury and property damage including coverage for owned, non-owned and hired vehicles, of at least $1,000,000 per accident for bodily injury and property damage, at least as broad as most recent Insurance Services Office Form Number CA 00 01 covering automobile liability, Code 1 (any auto);

3. Workers' Compensation in compliance with applicable statutory requirements and Employer's Liability Coverage of at least $1,000,000 per occurrence; and

4. If Contractor is also the manufacturer of the Transponders, or any portion thereof, Contractor shall carry Product Liability and/or Errors and Omissions Insurance which covers said equipment with limits of not less than $1,000,000.

B. Additional Insured; Primary; Waiver of Subrogation; No Limitation on Coverage. The policies required under this Section shall give Commission, OCTA and their officials, officers, employees, agents or volunteers additional insured status. Such policies shall contain a provision stating that Contractor's policy is primary insurance and that any insurance, self-insurance or other coverage maintained by the Commission or any additional insureds shall not be called upon to contribute to any loss, and shall contain or be endorsed with a waiver of subrogation in favor of the Commission, OCTA and their officials, officers, employees, agents, and volunteers. The limits set forth herein shall apply separately to each insured against whom claims are made or suits are

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brought, except with respect to the limits of liability. Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. Any available coverage shall be provided to the parties required to be named as additional insured pursuant to this Agreement.

C. Insurance Carrier. All insurance required under this Section is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

D. Evidence of Insurance. Contractor shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by the Agreement. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms supplied or approved by the Commission. All certificates and endorsements must be received and approved by the Commission before delivery commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

E. Subcontractors. All subcontractors shall meet the requirements of this Section before commencing work. In addition, Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

F. Freight. Contractor shall ensure that third party shippers contracted by Contractor have adequate insurance coverage for the shipped Devices.

Section 17. LIENS.

A. Contractor, subcontractors and suppliers will not make, file or maintain a mechanic's or other lien or claim of any kind or character against the Devices, for or on account of any labor, materials, fixtures, tools, machinery, equipment, or any other things furnished, or any other work done or performance given under, arising out of, or in any manner connected with the Agreement (such liens or claims referred to as "Claims"); and Contractor, subcontractor and suppliers expressly waive and relinquish any and all rights which they now have, or may subsequently acquire, to file or maintain any Claim and Contractor, subcontractor and suppliers agree that this provision waiving the right of Claims will be an independent covenant.

B. Contractor will save and hold Commission harmless from and against any and all Claims that may be filed by a subcontractor, supplier or any other person or entity and Contractor will, at its own expense, defend any and

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all actions based upon such Claims and will pay all charges of attorneys and all costs and other expenses arising from such Claims.

Section 18. TERMINATION OF AGREEMENT OR PURCHASE ORDER BY COMMISSION.

A. Should Contractor at any time refuse or fail to deliver the Devices with promptness and diligence, or to perform any of its other obligations under this Agreement or any Purchase Order, Commission may terminate Contractor's right to proceed with the delivery of the Devices by written notice to Contractor. In such event Commission may obtain the Devices by whatever method it may deem expedient, including the hiring of another Contractor or other contractors. In such case Contractor will not be entitled to receive any further payments, other than for Devices delivered and accepted prior to termination.. If Commission's cost of obtaining the Devices, including compensation for additional managerial and administrative services, will exceed the unpaid balance of the relevant Purchase Order, Contractor will be liable for and will pay the difference to Commission.

B. Commission may, for its own convenience, terminate this Agreement at any time, provided that no Purchase Order is outstanding at the time of such termination. Such termination will be effective in the manner specified in such notice.

C. Termination of this Agreement for convenience or cause shall be without prejudice to any claims which Commission may have against Contractor.

Section 19. NO EXPECTATION OF PURCHASE ORDER ISSUANCE

By entering into this Agreement, the Contractor acknowledges that the issuance of Purchase Orders is at the Commission's sole and absolute discretion. The Commission makes no representation or guarantee that it will issue any Purchase Orders under this Agreement, and the Contractor shall have no claim against the Commission for failure to make any orders hereunder. The Commission shall not be held responsible for any forecasts of anticipated purchases or requirements set forth in the procurement documents related to this Agreement, or otherwise.

Section 20. MISCELLANEOUS PROVISIONS.

A. Delivery of Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address or at such other address as the respective parties may provide in writing for this purpose:

COMMISSION: CONTRACTOR:

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Riverside County Transportation Commission
4080 Lemon Street, 3rd Floor
Riverside, CA 92501
Attn: Executive Director

[INSERT]

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

B. Assignment or Transfer. Contractor shall not assign or transfer any interest in this Agreement or any Purchase Order whether by assignment or novation, without the prior written consent of the Commission, which will not be unreasonably withheld. Provided, however, that claims for money due or to become due Contractor from the Commission under this Agreement may be assigned to a financial institution or to a trustee in bankruptcy, without such approval. Notice of any assignment or transfer, whether voluntary or involuntary, shall be furnished promptly to the Commission.

C. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the Parties.

D. Amendment; Modification. No supplement, modification or amendment of this Agreement or any Purchase Order shall be binding unless executed in writing and signed by both Parties.

E. Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege or service voluntarily given or performed by a Party shall give the other Party any contractual rights by custom, estoppel or otherwise.

F. Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Riverside County.

G. Interpretation. Since the Parties or their agents have participated fully in the preparation of this Agreement, the language of this Agreement shall be construed simply, according to its fair meaning, and not strictly for or against any Party.

H. No Third-Party Beneficiaries. There are no intended third-party beneficiaries of any right or obligation assumed by the Parties.

I. Authority to Enter Agreement. Each Party warrants that the individuals

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who have signed this Agreement have the legal power, right and authority to make this Agreement and bind each respective Party.

J. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

K. Counterparts; Facsimile Signatures. This Agreement may be signed in counterparts, each of which shall constitute an original. Facsimile signatures affixed to this Agreement or any Purchase Order, including signatures transmitted via electronic mail, shall be considered and shall have the same force and effect as original signatures.

L. Commission's Right to Employ Other Contractors. Commission reserves its right to employ other Contractors in connection with the purchase of Devices.

M. Entire Agreement. This Agreement constitutes the entire agreement between the Parties relative to the matters specified herein. There are no understandings, agreements, conditions, representations, warranties or promises with respect to this Agreement, except those contained in or referred to in the writing.

N. Conflicting Provisions. In the event of any conflict between the terms of this Agreement and any exhibit or attachment hereto, the terms of this Agreement shall govern. In the event of any conflict between the terms of this Agreement and any Purchase Order issued pursuant to this Agreement, the terms of this Agreement shall govern.

O. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

P. Cooperative Use. Contractor agrees that agencies within the California Toll Operators Committee ("CTOC") may utilize this Agreement to obtain Devices on the same terms and conditions included in this Agreement, through a separate agreement with Contractor. CTOC agencies may provide a different logo to be printed on the Transponder and different materials to accompany the retail Transponders. The Commission shall not be responsible or liable for any agreement between any CTOC agency and Contractor. The Commission makes no representation or warranty regarding the legal authorization for any CTOC agency to rely on the Commission's procurement of Contractor.

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[SIGNATURES ON FOLLOWING PAGE]

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SIGNATURE PAGE TO
ON CALL PURCHASE AGREEMENT
FOR 6C TRANSPONDERS
BETWEEN THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AND STAR SYSTEMS AMERICA, LLC
AGREEMENT NO. 26-31-041-00

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year first above written.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	**STAR SYSTEMS AMERICA, LLC**
By: _____ Dana Reed, Chair	By: _____ Its: _____
APPROVED AS TO FORM:	ATTEST:
By: _____ Best Best & Krieger LLP Counsel to the Riverside County Transportation Commission	By: _____ Its: _____

A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

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EXHIBIT "A"
SCOPE OF SERVICES

AND SPECIFICATIONS

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SCOPE OF SERVICES

1. INTRODUCTION

Riverside County Transportation Commission (RCTC) operates the 15 Express Lanes and is jointly operating the 91 Express Lanes with the Orange County Transportation Authority (OCTA). The State of California has adopted ISO/IEC 18000-6C (6C) technology.

RCTC is a member of the California Toll Operator's Committee (CTOC) and 6C Coalition who have developed statewide 6C specifications attached as Appendix J to the RFP.

2. TRANSPONDERS

The Contractor shall provide one or more of the following transponder types:

- Interior mounted sticker;
- Exterior mounted sticker; or
- Interior mounted 3-position switchable.

The Contractor shall comply with the following requirements for all transponders.

2.1 California 6C Electronic Toll Collection Standards, Appendix J

The Contractor shall comply with the CTOC requirements included in Appendix J. If the CTOC requirements change during the term of the contract the Contractor shall conform to the new requirements for future orders within 60 days of notification.

2.2 Read and Write Capabilities

Transponders shall have the ability to transmit the unique transponder identification data and other data contained on the transponder when read by the reader when passing through the toll point.

The Contractor shall provide the ability to lock the write access permanently or allow write access restricted by a password provided by RCTC.

2.3 Power

The transponder shall not require a power supply.

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2.4 Consumer Product Safety

All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

2.5 Size

The interior and exterior mounted transponders shall be as small as possible, while meeting the requirements of this document. The transponder cannot be larger than the California Vehicle Code 26708 requirement for application of an object to a windshield, five (5) square inches.

2.6 Mounting

The exterior mounted sticker transponders shall be mountable on a headlamp. All interior mounted transponders shall be mounted on the interior of the windshield.

All transponders shall be designed to be secure when installed to prevent inadvertent displacement or projectile motion. All materials used to adhere a transponder shall be completely removable without damaging or marring the vehicle in any way. The Contractor shall supply the required mounting solution with all transponders.

The interior mounted switchable transponders shall be delivered with a two-sided mounting solution preinstalled, such as hook and loop, requiring the customer to only adhere the one half of the mounting solution to the windshield of the vehicle. The same side of a two-sided solution shall consistently be applied to the transponder to allow for ease of transfer from vehicle to vehicle. The mounting solution used shall be readily available in the market to support the provision of replacement of the windshield mounted side by RCTC over time.

The Contractor shall provide RCTC with the source and specifications for the mounting solution provided.

2.7 Bar Code

All transponders shall come with a uniquely identified bar code as provided for in Appendix J. The bar code shall be readable with the human eye and by a handheld reader.

For interior mounted sticker transponders the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For interior mounted switchable transponders the bar code may either be permanently etched in the hard case or printed on a non-removable sticker (decal) that will be readable for the life of the transponder. The placement of the bar code shall be incorporated into the interior facing design detail as described in Section 2.8.

For exterior mounted sticker transponders a bar code shall be printed on the transponder and/or the same material to which the transponder is adhered. If not printed on the transponder, it should be made clear that the barcode is not the transponder and should be retained for the customers records.

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2.8 Transponder Artwork

RCTC will provide the required artwork. Artwork will be four-color not including the color of the transponder material. The Contractor shall provide the design specifications for the artwork for placement on the transponder, by transponder type.

The Contractor shall be responsible for printing and adhering transponder graphics as provided by RCTC. The Contractor shall provide a transponder prototype with final artwork for approval by RCTC.

The Contractor shall conduct a design session to determine the placement of the artwork and bar code.

The decal shall appear to be part of the transponder and stay affixed for the life of the transponder without degradation.

Transponders shall not carry any visible manufacturer or contractor brand names.

The interior mounted sticker transponder will require artwork on the interior facing side only.

The interior mounted switchable transponders will require artwork on the internal facing side and may require artwork on the external facing side, if the Contractor's design has insufficient space for the required information.

The exterior mounted transponder will not require artwork.

2.9 Switchable Transponder Design

The switchable transponder shall have an occupancy designation switch which is easy to use, clearly indicates which occupancy position it is in and stays secure in the position until the customer changes the occupancy.

2.10 Packaging

Transponders shall be packaged for shipping by individual transponder type in a manner to ensure that they are not damaged during transport. Individual boxes shall include an exterior label with a bar code of the beginning and ending transponder serial number. Any breaks in transponder serial number sequence shall be indicated with a barcode on the outside of the box. The number of sequence breaks for any single box shall not exceed 3. All transponders shall be shielded during shipping to ensure they are not read in transit.

Boxes shall be stackable up to six boxes high without compromising the structure of the box. The box shall not weigh more than 25 pounds each.

2.11 Shipping

The Contractor shall deliver all transponders to the address(s) provided by RCTC. The Contractor shall ensure unloading and delivery accommodations to commercial buildings where loading docks and unloading equipment are not available. This cost shall be included as part of the vendor cost proposal. The Contractor shall comply with any and all current

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U.S. and international safety standards to permit unrestricted shipment by mail and commercial carriers with appropriate documentation.

The Contractor shall be responsible for tracking and replacing any boxes lost or damaged during shipment.

The manifest specified in Appendix J shall be provided electronically at the time of shipment. In addition, a printed manifest shall accompany the shipment.

2.12 Programming

All transponders shall be pre-programmed according to the specification in Appendix J. RCTC will provide the agency ID for each of its orders.

2.13 Protection

The scope includes implementing supporting strategies to monitor, detect, and mitigate bit flip occurrences using both system-level and chip-level solutions. The Contractor shall coordinate with RCTC on transponder programming in accordance with California 6C Standard.

RCTC will provide the Contractor with the necessary keys, settings, and passwords required for proper configuration. The Contractor shall be responsible for maintaining the confidentiality and security of all RCTC issued keys, settings, and passwords.

3. DOCUMENTATION

3.1 Certification of Compliance

The Contractor shall provide third party certification from certifiers approved by the California Toll Operators Committee (CTOC) for device standards compliance with the most recent version of the California 6C Electronic Toll Collection Standard, Appendix J. The transponders shall be certified by an approved 6C Coalition vendor. The Contractor shall provide RCTC with the required certification documentation and ten (10) certified transponders for each contracted transponder type.

Recertification will be required under any of the following conditions:

- Changes to the CTOC standards;
- Changes to the manufacturing process;
- Changes to materials used; and
- Failures exceeding the acceptable failure rate defined in the Contract.

3.2 Licenses, Permits and Patents

The transponders shall comply with applicable federal, state and local licensing and regulations for transponder technology. The Contractor shall document all related patents, licensing and regulations associated with their equipment.

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3.3 Installation Instructions

The Contractor shall provide the following installation instructions for each of the transponders supplied:

- Interior mounted sticker transponder;
- Exterior mounted sticker transponder;
- Interior mounted 3-position switchable; and
- Interior mounted sticker transponder and an interior mounted 3-position switchable transponder mounted in the same vehicle.

The installation instructions must comply with the California Vehicle Code 26708 requirement for application of an object to a windshield (lower left driver side five (5) inch square, lower right passenger side seven (7) inch square, or upper center five (5) inch square).

3.4 Disposal Procedures

If there are environmental restrictions for the disposal of any type of supplied transponder, the Contractor shall document the proper disposal procedures and the reason for the restrictions.

4. SAFETY REQUIREMENTS

The transponders shall meet all applicable safety and environmental requirements related to the technology and its applications in addition to any requirements of this document. The transponders shall not pose either a short-term safety risk or a long-term health risk to drivers, technicians, or other people who may frequently be near the transponder. Safety labels shall be placed on equipment as appropriate based on prevailing laws, regulations, and standards.

The Contractor shall provide the Material Safety Data Sheet for any materials or equipment utilized within any supplied product that has a Material Safety Data Sheet. The Contractor shall provide any information regarding any other materials that may be considered hazardous or require special handling or disposal. All components used in the transponder shall be approved for use in consumer products in terms of safety. The transponder shall not give off dangerous substances at any time including when damaged.

5. ORDER PROCESS

The Contractor shall provide a direct point of contact for RCTC to place orders. The Contractor shall acknowledge receipt of the order within three (3) business days and provide a proposed delivery schedule.

6. INABILITY TO SUPPLY TRANSPONDERS

Within three (3) business days from the time of order, the Contractor shall acknowledge receipt of the order and adherence to the required delivery date. If the Contractor fails to

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respond within three (3) business days RCTC will assume the Contractor is unable to fulfill the order.

7. WARRANTY RETURNS

The Contractor shall provide a process for the return of transponders covered under warranty. The Contractor shall act as the sole point of contact for warranty service. Contractor shall provide RCTC with warranty return instructions. The Contractor shall pay for freight related to returned shipments.

8. QUALITY CONTROL

The Contractor shall perform quality control to ensure transponders comply with the requirements of the Contract. The Contractor shall conduct testing, as needed, to demonstrate compliance with the requirements. The Contractor shall provide RCTC with the Quality Control Plan. RCTC reserves the right to review any quality reports produced by the Contractor. RCTC or its designated representatives reserves the rights to visit the manufacturing and testing sites of the awarded Contractor(s).

9. ONGOING SUPPORT

The Contractor shall provide technical support and advice to RCTC or its designated representative at no additional cost during the term of the Contract. The Contractor shall support efforts to resolve transponder read issues arising from lane system compatibility, interference from in vehicle equipment (including multiple transponders), windshield material issues, or other issues causing a transponder read failure.

11. PRICING

Proposal pricing and delivery times includes full compliance with the requirements contained in this Scope of Services and with the requirements contained in Appendix H.

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AVI STANDARD

REQUIREMENTS AND GUIDANCE DOCUMENT

Version 4.0

OCTOBER 10, 2023

Document Control

Originator:	6C Coalition
Report Title:	AVI Standard (formerly the "AVI Transponder Programming Standard")
History:	V 0.1 – Initial Draft Release
	V 0.2 – Updates to "State" portion of EPC field Hash Key changed from 16 to 32 bytes Version Code added to Transponder Serial Number Field
	V 0.3 – Existing System Compatibility section added
	V 0.4 – Transponder and Reader Technical Requirements section added
	V 0.5 – Move Technical Requirements Section
	V 0.6 – Update to Barcode format and EPC/Password validation calculation examples
	V 0.7 – Update to User Memory Password validation calculation example and addition of comment regarding HOT declaration in EPC field
6/5/12	V 1.0 – Updated Agency Codes (E-470 changed from 1 to 2); Made the Barcode format optional; Prohibited Read protection of User Data Memory; Allowed optional Write protection of User Data Memory; Updated references to the TID length to allow use of all fully serialized ISO 18000-6C standard transponders
11/20/14	V 2.0 – Updated the name of the document; redesigned memory map; convert from EPCglobal format to ISO format; security update; changes to permit declarable transponders; updated Barcode format
10/26/15	V 3.0 – Fixed encoding details according to ISO requirements, giving more detail as needed. Combined State and Agency fields to be single Agency field and added Agency ID appendix. Clarified UII validation calculation.
1/28/16	V 3.0 Revision 2 – Added logo to cover page; clarified barcode format; corrected sample calculation of UII Validation hashing value.
3/15/16	V 3.0 Revision 3 – Added DSFID (0x3E) to be programmed as initial 2 bytes of UII.

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7/22/16	V 3.0 Revision 4 – Added additional Agency codes to Appendix A. Corrected first bullet of 4.2 to reference new DSFID field in UII.
2/9/17	V 3.1 – Document title changed. Revised language in Section 1.1 to address backward compatibility. Deleted reference to backward compatibility in Section 1.2. Inserted Section 1.3 to clarify certification. Created a new Section 3 "Transponder Requirements" by combining previous barcode format and transponder manifest and adding transponder characteristics and environmental requirements. Previous Section 4 "Data Security" has been renumbered as Section 5 and has been edited to clarify Lock Status and Passwords. New Section 4 "Reader Requirements" has been created to clarify optional ISO Reader commands. Section 6 regarding backward compatibility and programming versions used by toll operators has been removed. Appendix A, code for TCA consolidated.
5/11/17	V 3.1 Revision 1 – Edited 3.1 to indicate method for calculating read distances of transponder parameters. Added clarification language to 3.1.1 and 3.1.2. Changed values and units for polarization and pointing loss in 3.1.3. Updated Agency ID list in Appendix A. Edits list of optional reader commands in 4.1
12/13/19	V 3.2 – Incorporated requirements from the 6C Coalition Interoperability Requirements and Certification Framework document (Document A) to a revamped Section 3. Removed requirement for 512bit minimum size of User Data. Formatting updates. Removed Agency ID listing (Appendix A) as it will now be a standalone document. Added new Appendix A (Legacy Toll Transponder Information) and Appendix B (Transponder Filtering).
9/22/2020	V 3.2a – Corrected binary DSFID value found in Appendix A Figure 7.
10/10/2023	V 4.0 – Added CRC to UII Memory Bank 01 mapping and marked certain fields in Memory Bank 01 as optional. Updated User Memory to be optional at agency discretion. Updated filtering information in Appendix A. Updated legacy tag quantities in Appendix B.

DRAFT

Table of Contents

List of Tables v
List of Figures v
1 Introduction 1
1.1 Purpose 1
1.2 Scope 1
1.3 Interoperability 1
1.4 Definitions, Acronyms, and Abbreviations 1
2 Transponder Memory Mapping 2
2.1 Reserved Memory Bank 00 Specification 2
2.2 CRC, PC, UII Memory Bank 01 Specification 2
2.2.1 Memory Bank 01 Mapping 3
2.3 TID Memory Bank 10 Specification 5
2.4 User Memory Bank 11 Specification 6
3 Interoperability Requirements 7
3.1 Overview 7
3.2 Conformance Testing 7
3.3 Baseline Testing 8
3.3.1 Functional Baseline Tests 8
3.3.2 Environmental Performance 9
3.3.3 RF Performance 9
3.3.4 Transponder Requirements 9
3.3.5 Reader Requirements 14
3.4 Field Testing 15
3.4.1 Transponders 15
3.4.2 Readers 16
3.5 Multiprotocol Environments 17
4 Barcode Format 18
5 Transponder Manifest Details 19
6 Security and Data Integrity Validation 19
6.1 Overview 19
6.2 Memory Bank Security 19
6.2.1 Reserved Memory Bank 19
6.2.2 UII Memory Bank 19
6.2.3 TID Memory bank 19
6.2.4 User Memory Bank 20
6.3 Encryption 20
6.4 UII Validation (CRC Calculation) 20

DRAFT

6.5 UII Authentication (Hash Value) 20
7 Appendices A-1
Appendix A Legacy 6C Toll Transponder Information A-1
A.1 Assumptions A-1
A.2 Determining the Tag Programming Standard A-1
A.3 Identifying Agencies A-3
Appendix B Transponder Filtering B-1

LIST OF TABLES

Table 1: Transponder Memory Map 2
Table 2: Stored CRC Memory Bank 01 Mapping 3
Table 3: Stored PC Memory Bank 01 Mapping 3
Table 4: UII Memory Bank 01 Mapping 3
Table 5: User Memory Bank 11 Mapping 6
Table 6: Conformance Testing Requirements 8
Table 7: Transponder Baseline Testing Requirements 9
Table 8: Reader Baseline Testing Requirements 14
Table 9: Transponder Performance Requirements 15
Table 10: Reader Field-testing Requirements 16
Table 11: Programing Standard Identification A-2
Table 12: Legacy Toll Tag Information B-1

DRAFT

LIST OF FIGURES

Figure 1: Diagram depicting roll angle between transponder and reader antenna 11
Figure 2: Diagram depicting pitch angle between transponder and reader antenna 12
Figure 3: Diagram depicting yaw angle between transponder and reader antenna 13
Figure 4: Snip of Memory Map - Highlights the location of key identification bits A-1
Figure 5: Version 0.9 and 1.0 State and Agency Code A-3
Figure 6: Version 2.0, 3.0, and 3.1 Agency Code – Currently used A-3
Figure 7: Memory Bank 01 Programming Summary by Version A-4

1 INTRODUCTION

1.1 Purpose

The purpose of this document is to create and maintain a standard based on the 2010 and subsequent version of the ISO/IEC 18000-63 (known as 6C) communication protocol for tolling applications that use automatic vehicle identification (AVI). The guidance is intended for transponder and reader manufacturers, toll lane vendors, system integrators, back-office providers, and other members of the RFID industry. The current programming requirements standards are backward compatible to all previous versions of the standard deployed. A few toll operators have deployed 6C transponders prior to the adoption of Version 1.0 and continue to use their legacy systems. More information on legacy 6C memory maps used by toll operators can be found on the 6C Coalition website and in Appendix A of this document.

1.2 Scope

This document addresses the following areas of interest:

- Transponder Memory Mapping
- Interoperability Requirements
- Barcode Format
- Transponder Manifest Details
- Security and Data Integrity Validation

1.3 Interoperability

This AVI Standard provides a reference that enables device manufacturers to produce interoperable transponders and readers. It also provides a standard that integrators and agencies can use to verify conformance that ensures interoperability. Certification is the primary method of verifying conformance with the 6C Coalition AVI Standard.

1.4 Definitions, Acronyms, and Abbreviations

6C	Refers to the Type C portion of the ISO/IEC 18000-6 Type C UHF standard, including later updates to Type C of the ISO/IEC 18000-63 standard
AFI	Application Family Identifier
CRC	Cyclic Redundancy Check
DSFID	Data Storage Format Identifier
EPC	Electronic Product Code
HOV	High Occupancy Vehicle
IEC	International Electrotechnical Commission

DRAFT

ISO	International Organization for Standardization
NAK	Negative Acknowledgement
PC	Protocol Control
RFID	Radio Frequency Identification
TID	Transponder Identification Gen2 transponder memory bank 10
TSN	Transponder Serial Number
UII	Unique Item Identifier, ISO/IEC 18000-63 (formerly '6C'), transponder memory bank 01
XPC	Extended protocol control

2 TRANSPONDER MEMORY MAPPING

The 6C transponder memory is separated into four memory as shown in Table 1 below.

Table 1: Transponder Memory Map

Bank #	Purpose
Bank 00	Reserved
Bank 01	CRC, PC, UII
Bank 10	TID
Bank 11	User Memory (Optional)

DRAFT

2.1 Reserved Memory Bank 00 Specification

The Reserved memory shall be programmed by the transponder provider and contents shared with the issuing agency.

2.2 CRC, PC, UII Memory Bank 01 Specification

Memory Bank 01 contains three addressed areas:

1. Stored CRC – This 16-bit long area is stored at memory location **0x00 – 0x0F** and calculated by the transponder.
2. Stored PC – This area is 16 bits long stored at memory location **0x10 – 0x1F**. The PC word contains the Application Family Identifier (AFI) – an 8-bit identifier (value **0xB0**) assigned to the 6C Coalition. This number can be used to filter the responses of V3.0 and later transponders to ensure that only toll transponders are being read. The ISO assigned this protocol control number for tolling, along with the Data Storage Format Identifier (DSFID, value **0x3E** which is programmed into the first byte of the UII memory area) and explicitly describes a transponder belonging to the 6C Coalition.

The Stored PC is encoded during chip initialization and is dependent on the type of chip being encoded, not on data within an individual transponder.

3. Unique Item Identifier (UII) – This area contains at least 96 bits of information beginning at memory location **0x20**. Any memory in excess of 96 bits remains undefined for this standard but usable by the issuing agency. However, the additional memory shall not interfere with any of the functionality contained in this document. The UII shall provide read-only access to users. The issuing agency may lock write access permanently or may allow write access by a password maintained by the issuing agency.

2.2.1 Memory Bank 01 Mapping

The following tables describe the memory mapping for Bank 01. The tables and values within the tables appear in Memory Address (hex value) order ascending. All fields are mandatory unless indicated otherwise.

Table 2: Stored CRC Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-16	00h-0Fh (16 bits)	Calculated	Calculated value based on other transponder memory values per ISO 18000-63 specification	Varies

Table 3: Stored PC Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-5	10h-14h (5 bits)	Length	Number of 16-bit words in the UII	00110 = 6 words (indicates 96-bit UII) Varies based on UII length
6	15h (1 bit)	User Memory	Indicates status of the User Memory	0 = No user memory 1 = User memory available
7	16h (1 bit)	XPC	Indicates status of extended transponder features	0 = No XPC 1 = XPC available
8	17h (1 bit)	Numbering System Indicator	Indicates whether transponder coded as EPC or ISO	0 = EPC 1 = ISO (correct value for 6C Coalition applications)
9-16	18h-1Fh (8 bits)	AFI	Application Family Identifier for 6C Coalition – B0h	1011 0000 = 6C Coalition AFI (B0h)

Table 4: UII Memory Bank 01 Mapping

#	Memory Address	Section	Description	Values
1-8	20h-27h (8 bits)	DSFID	Data Storage Format Identifier for 6C Coalition – 3Eh	0011 1110 = 6C Coalition DSFID (3Eh)

DRAFT

#	Memory Address	Section	Description	Values
9-16	28h–2Fh (8 bits)	UII Validation (CRC)	Cyclic Redundancy Check calculated value using UII bits 17 – 80 (Agency Use thru Transponder Serial Number fields). Example appears in Section 6.	Assigned at the time of transponder manufacture. Calculated as per Section 6. This field is mandatory for version 4.0 and higher tags, optional for earlier versions.
17-21	30h–34h (5 bits)	Agency Use	Individual agencies may add agency specific information here.	Assigned by agency (Optional)
22-33	35h-40h	Classification	Classification is taken directly from EZPass Inter-Customer Service Center Interface File and Reporting Specifications, Appendix C and includes:	Population of the first bit indicating class value assignment is mandatory. Remaining classification fields are optional if assignment bit is "0".
	(1 bit)	Class	The first bit indicates if the transponder has been assigned a classification value. If 0 is selected, the following 11 bits shall be ignored.	0 = No class value assigned (default) 1 = Class value assigned
	(5 bits)	Vehicle Type	This field indicates the type of vehicle.	00000 = Undefined (default) 00001 = Automobile 00010 = Motorcycle 00011 = Pickup truck 00100 = Van (seats 1-9) 00101 = Minibus (seats 10-15) 00110 = Bus (seats 16+) 00111 = Recreational vehicle 01000 = Truck 01001 = Auto transporter (≤ 65') 01010 = Auto transporter (>65') 01011 = Tractor & trailer (≤48') 01100 = Tractor & trailer (>48') 01101 = Tractor & dual trailers each (≤28.5') 01110 = Tractor & dual trailers each (>28.5') 01111 = Tractor & dual trailers each (one ≤28.5' other >28.5') 10000 = Undefined 10001 = Tractor/mobile home combination 10010-11111 = Undefined
	(4 bits)	Vehicle Axles	This field indicates the number of axles.	0000 = Undefined (default) 0001 = Undefined 0010 = 2 axles 0011 = 3 axles 0100 = 4 axles 0101 = 5 axles

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#	Memory Address	Section	Description	Values
				0110 = 6 axles 0111 = 7 axles 1000 = 8 axles 1001 = 9 axles 1010 = 10 axles 1011 = 11 axles 1100 = 12 axles 1101 = 13 axles 1110 = 14 axles 1111 = 15 axles
	(1bit)	Vehicle Weight	This field indicates the weight of vehicle.	0 = ≤ 7,000 lbs. (default) 1 = > 7,000 lbs.
	(1 bit)	Vehicle Rear Tires	This field indicates the number of rear tires.	0 = Single rear tires (default) 1 = Dual rear tires
34-36	41h-43h (3 bits)	HOV Declaration	These three bits indicate the declaration status of the transponder. All single mode transponders shall be assigned the default value – 000, unless they are carpool specific transponders.	000 = Single mode (default) 001 = SOV (non-carpool) 010 = HOV 2+ 011 = HOV 3+ 100 = Carpool (as defined by roadway) 101 = Reserved for future use 110 = Reserved for future use 111 = Reserved for future use
37-40	44h-47h (4 bits)	Version	Allows for 16 possible values to indicate the version of the programming standard used on the transponder.	0000 = Unassigned 0001 = Ver. 1.0 0010 = Ver. 2.0 0011 = Ver. 3.0 0100 = Ver. 4.0 (current)
41-52	48h-53h (12 bits)	Agency	Allows for up to 4,096 agencies.	See 6C Coalition Table of Agencies (separate document)
53-80	54h-6Fh (28 bits)	Transponder Serial Number	Identifies the transponder within the agency. This space accommodates 268,435,456 values.	Assigned by agency
81-96	70h-7Fh (16 bits)	UII Authentication (Hash Value)	Calculated value using the first 80 UII bits and 32-byte key. Example appears in Section 6.	Assigned at the time of transponder manufacture. Calculated as per Section 6. Calculation/programming of this field is optional and it should be zero-filled if not calculated.

DRAFT

2.3 TID Memory Bank 10 Specification

The Transponder Identification (TID) memory has no specific value but is assumed to be unique and constant for all 6C transponders, per the 6C standard. The TID length can vary per the 6C specification and the length of a transponder's TID serial number is indicated on each transponder, in bits 0x20 – 0x22 of the TID. For fully serialized tags, the complete header and serialized portion of the TID can be

anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits. Transponders which are not fully serialized (that is, have at least a 48-bit unique serial number) should not be used for interoperable 6C tolling deployments.

2.4 User Memory Bank 11 Specification

This memory bank may be required to accommodate the future needs of group members or affiliates. Its provision and use are left optional at the discretion of individual members. It is important to note that given the absence of a universal requirement for User Memory, members should assume some portion of the tags programmed per this document may not contain a User Memory Bank 11.

Previous versions of this document required the User Memory bank be present on all tags and it be a minimum size of 64 bits. This memory was programmed per the following table. To maintain backwards compatibility with tags programmed under previous versions of this document, the below memory map must be used for tags that meet both conditions:

1. A User Memory bank is present on the tag
2. The 6C Coalition's DSFID value is programmed into the first byte of User Memory (per table 5 below)

Table 5: User Memory Bank 11 Mapping

#	Memory Address	Section	Description	Values
1-8	00h-07h (8 bits)	DSFID	Data Storage Format Identifier	0011 1110 = 6C TOC DSFID (3Eh)
9-20	08h-23h (12 bits)	Agency	Agency Code of agency writing to this memory bank.	See 6C Coalition Table of Agencies (separate document)
21-27	24h-1Ah (7 bits)	Plaza ID	7-bit Plaza ID. Each operator may choose.	Defined by agencies using this field.
28-32	1Bh-1Fh (5 bits)	Lane ID	5-bit Lane ID. Each operator may choose.	Defined by agencies using this field.
33-57	20h-38h (25 bits)	Day/Time	25-bit Day/Time. Each operator may choose. (seconds since Jan 01 00:00:00)	Defined by agencies using this field.
58—60	39h-3Bh (3 bits)	Occupancy Setting	3-bit Occupancy. Each operator may choose.	Defined by agencies using this field.
61+	3Ch -	Undefined	The remaining bits defined as individual agency needs arise.	

Tags that either do not have a User Memory bank, or do not have the 6C Coalition's DSFID programmed as the first byte of User Memory, are not subject to any requirements regarding User Memory.

DRAFT

3 INTEROPERABILITY REQUIREMENTS

3.1 Overview

The purpose of these requirements is to have all compliant transponders and readers operate as seamlessly as possible from one installation to the next. They create a basis for the development and refinement of testing methods used in a certification process. The 6C Coalition uses a third party to administer and conduct the certification program.

Interoperability testing demonstrates in lab and field conditions (replicating a reference toll environment) that transponders and readers operate predictably together. Agencies and integrators purchasing these products should be assured of basic equipment interoperability, but it does not substitute for performance testing in specific tolling installations. Due to the unique nature of each tolling installation, site-specific conditions, vehicle types, environmental conditions, etc., it is incumbent upon purchasers of equipment to test and tune for desired interoperability performance levels.

All transponders that conform to this 6C Coalition standard should be operable in any AVI system using a reader that conforms to this standard, as well as supporting other aspects relevant to the procurement and management of transponders. This necessitates that:

- All transponders conform to the same 6C air interface protocol physical layer.
- All transponders must support the full mandatory set of communications from the referenced 6C air interface protocol and must operate at all mandatory data rates supported by the protocol.
- Transponder performance must be reliable, and the communication zone should be within bounded limits for common or reference systems, which includes but is not limited to RF requirements such as operating on vehicles at the same field strength and under similar RF geometries defined by the 6C Coalition.

All readers that conform to this 6C Coalition standard should be operable with all types of transponders that conform to this standard. This necessitates that:

- All the protocol communications used by the reader must conform to the referenced 6C air interface protocol. However, this does not require that all the functions or commands that are mandatory for generic interrogators in the air interface protocol be supported by toll readers.
- The reader commands NAK, Kill, and Lock are optional for readers.
- Readers can report and be limited to reporting transponders coded as 6C toll transponders, using coding as defined in this document in the presence of other 6C transponders. See Appendix B for additional information regarding filtering of legacy 6C tolling transponders.

3.2 Conformance Testing

Conformance testing shall prove devices operate in accordance with the 6C PHY (Physical) and MAC (Medium Access Control) layers. All transponders and readers shall meet the conformance requirements defined in Table 6 below.

DRAFT

Table 7: Conformance Testing Requirements

#	Category	Requirement
1.1	Regulatory Approvals	Meet all applicable FCC compliance requirements for Part 15 and 90
1.2	Protocol Compliance	Conform to the 6C PHY (Physical) and MAC (Medium Access Control) layers, in accordance with ISO 18047-6 or EPCglobal Conformance test methods. For transponders - include mandatory modulation rates supported by the transponder (i.e., as per ISO 18047-6) and verification of QUERY and ACK as per ISO 18047-6 or equivalent. For readers –limited to only modulation rates that the reader manufacturer specifies (i.e., as per ISO 18047-6).
1.3	Frequency Range	Operate in the 902-928 MHz frequency range.
1.4	Regulatory Verification	Meet necessary regulatory and safety certifications specified by the FCC, vendor, or 6C Coalition as required/applicable.

3.3 Baseline Testing

Baseline Testing verifies that a device meets the minimum required performance for basic functionality, RF performance, and environmental performance in a lab environment.

3.3.1 Functional Baseline Tests

Functional Baseline Tests shall verify that the transponders comply with the 6C Coalition specifications. Transponders are tested to ensure that the various memory banks are properly programmed and can be written to as specified. Readers are tested to ensure transponders are properly read and transmitted to a higher-level system (e.g., lane controller).

Functional Baseline Tests are conducted in a laboratory environment to ensure that a transponder and a reader communicate via RFID commands. Testing of transponders for commands (executed with standardized parameters and transponder user data) may be embedded in automated test scripts run on the reference reader. There shall be enough tests to ensure that all commands and parameters function correctly, and that transponder data is read/written correctly and secured. For reader testing, the vendor shall state the set of commands used for toll operation. This testing shall verify through these commands the reader's capability to select, filter, and properly read 6C Coalition transponders.

Commands and Parameters – Transponders and readers shall be tested to make sure they can transition between all internal states while executing commands. A transponder must also demonstrate additional capabilities such as Lock, Kill, EPC re-programmability via secure access, and the ability to accept write directives. A reader must demonstrate the ability to filter only 6C Coalition transponders in the read zone.

DRAFT

Test Parameters – Antenna height, transponder height, and distance between transponder and antenna shall be held constant.

Test Approach - A reader submitted for testing shall be tested against reference transponders. A transponder submitted for testing shall be tested against reference readers.

3.3.2 Environmental Performance

Environmental baseline testing shall verify performance of transponder under various environmental conditions.

3.3.3 RF Performance

RF Performance Baseline Tests will verify RF performance of transponders in controlled free space to ensure interoperability between devices based on the transponder characteristics specified by the 6C Coalition's requirements. Transponder testing will determine transponder minimum activation energy, backscatter range, antenna polarization, and pointing loss. The tests are conducted in a simulated operational environment, which is not meant to substitute for toll operators conducting performance accuracy testing in a real-world toll application. The EPCglobal test document titled, *Tag Performance Parameters and Test Methods Version 1.1.3*, shall serve as the basis for testing:

1. Read range (EPCglobal test document Section 8.1)
2. Orientation tolerance (EPCglobal test document Section 8.2)
3. Frequency tolerance (EPCglobal test document Section 8.3)
4. Backscatter range (EPCglobal test document Section 8.5)

All values are measured per the EPCglobal *Tag Performance Parameters and Test Methods Version 1.1.3* test protocol, limited to the 902 – 928 MHz frequency range and modified as follows:

1. Use a horizontally, linearly polarized test antenna
2. Transponders mounted on material applicable for the intended location on the vehicle

3.3.4 Transponder Requirements

Transponders shall meet the baseline testing requirements shown in 8 below.

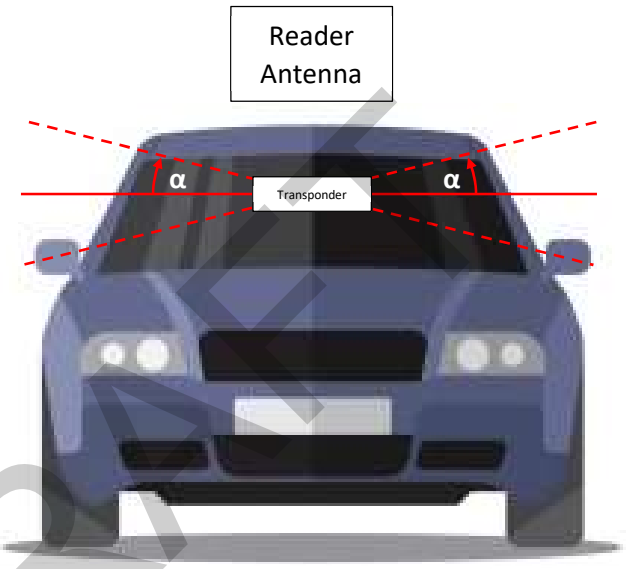
Table 9: Transponder Baseline Testing Requirements

#	Category	Requirement
2.1	Functional - Memory Bank 10	Contain a minimum of 64 bits (8 byte) unique chip ID programmed by the chip manufacturer (TID)
2.2	Functional – Memory Bank 01	Programmed per section 2.2.1 of this document
2.3		Optional and length variable

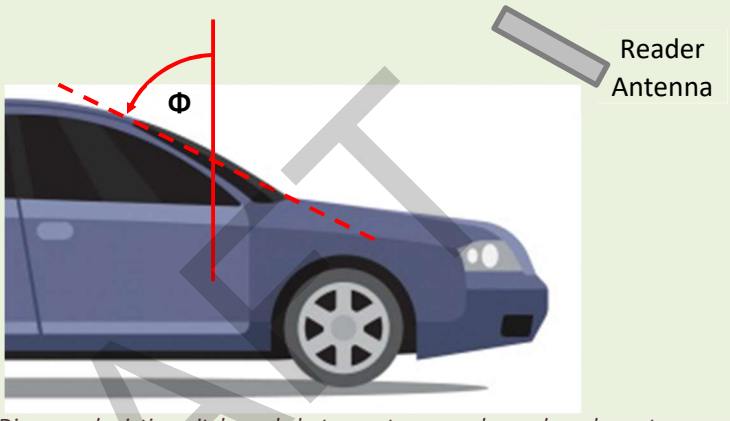
DRAFT

#	Category	Requirement
2.4	Functional - Memory Bank 11	Previous versions of this standard required this area be programmed with the DSFID (00h-07h) set to 3Eh, 0011 1110 = 6C Coalition DSFID (3Eh). If this area of memory is present and programmed with the DSFID (as stated in previous sentence), the size of the User Memory Bank 11 shall be at least 64 bits.
2.5		Programmed unused and undefined bits with zeros
2.6	Functional - Memory Bank 00	See section 2.1 of this document
2.7	Environmental	All interior transponders – able to be subjected to and operated in 95% humidity, non-condensing environments
2.8		All exterior transponders – able operate in 100% humidity, condensing environments.
2.9		All interior transponders – able to operate at temperatures between – 40° F and +185° F.
2.10		All exterior transponders – able to operate at temperatures between – 40° F and +140° F.
2.11		All transponders – perform consistently under Ultraviolet (UV)/direct sunlight as well as in overcast conditions.
2.12	RF Performance - Minimum Activation Energy	All transponders - have a Minimum Activation Energy (forward link range) resulting in a baseline test read range between 7 m and 12 m.
2.13	RF Performance - Return Signal Strength (Backscatter Range)	All transponders - have a return signal strength/backscatter range (reverse link range) resulting in a baseline test read at a minimum of 14 m.

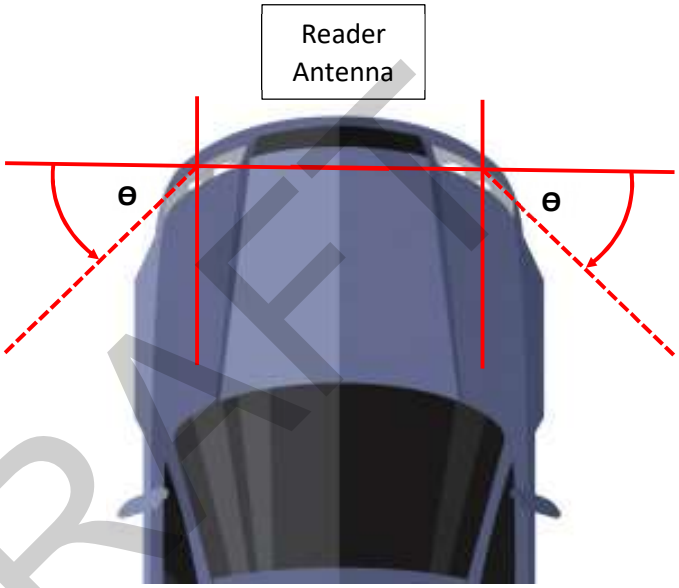
DRAFT

#	Category	Requirement
2.14	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Tilt from Horizontal" resulting in a baseline test read range, between 5 m and 12 m, when tilted +/- 15 degree horizontally (see Figure 1) from the installation reference angle defined by the transponder manufacturer. Facing the reader antenna, “Tilt from Horizontal” is the angle α from the horizontal mounting of a transponder. This represents transponders that are not installed horizontally level (“crooked”). **Tilt from horizontal reference plane (roll angle) = α**  *Figure 1: Diagram depicting roll angle between transponder and reader antenna*

DRAFT

#	Category	Requirement
2.15	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Tilt from Vertical" resulting in a baseline test read range between 5 m and 12 m, when tilted up to 45 degrees from vertical. Looking from the side, "Tilt from Vertical" is the angle Φ showing the difference of the mounted transponder from perfectly vertical as shown in Figure 2. This represents windshield angles between steeply sloped windshields (sports car) and near vertical windshields (semi-tractor trailers). **Tilt from vertical reference plane (pitch angle) = Φ**  *Figure 2: Diagram depicting pitch angle between transponder and reader antenna*

DRAFT

#	Category	Requirement
2.16	RF Performance - Antenna Polarization and Pointing Loss	All transponders - have a minimum activation energy (forward link range) for "Rotation from Horizontal" resulting in a baseline test read range between 5 m and 12 m, when rotated +/- 18 degrees from the horizontal plane (see Figure 3) from horizontal. Looking top down, Rotation from Horizontal is the rotation angle Θ from the horizontal plane of the transponder face away from the reader antenna. This represents transponder mounting locations on flat windshields versus curved windshields and headlights. **Rotation from horizontal reference plane (yaw angle) = Θ**  *Figure 3: Diagram depicting yaw angle between transponder and reader antenna*

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3.3.5 Reader Requirements

Readers shall meet the baseline testing requirements shown in Table 10 below.

Table 10: Reader Baseline Testing Requirements

#	Category	Requirement
3.1	Power Level	Have a maximum power/field strength allowed by local regulatory authority.
3.2	Interference	Provide interference mitigation for use with other readers at a toll plaza in single protocol reader and multiple protocol reader modes.
3.3	Transponder Filtering	Able to filter and report 6C Coalition coded transponders and information.
3.4	Transponder Filtering	Able to filter out non-6C Coalition transponders.
3.5	Reporting Transponder Data	Verify that reader can correctly read transponder data and supply it to a higher-level system (e.g. lane controller).

DRAFT

3.4 Field Testing

Field Testing shall use a simulated field environment to evaluate device performance at different ranges, speeds (up to 85 mph), windshield angles, and lane placement. For both transponder and reader testing, reader frequency may be any frequency within the 902 – 928 MHz range and reader power or field strength can be up to the maximum allowed by local regulatory authorities.

3.4.1 Transponders

Tests occur in various toll operating environments (varied ranges, speeds and transponder densities). Transponders are tested using reader reference test systems set up per vendor instructions. Vehicle passages will cover both the mainline path and lane edges.

Transponder performance shall meet the field-testing requirements described in Table 11 below.

Table 12: Transponder Performance Requirements

#	Category	Requirement
4.1	Transponder Height	Above ground for car windshield mountings: 36”-48” (0.91m-1.2m) Above ground for medium truck windshield mountings: 48”-65” (1.2m-1.6m) Above ground for Large truck (Straight and Tractor) windshield mountings: 72”-108” (1.8m-2.7m)
4.2	Transponder orientation (3-D)	Tilt horizontal α = +/- 15 degrees (roll angle) Tilt vertical Φ = 0 to - 45 degrees (pitch angle) Rotation horizontal θ = +/- 18 degrees (yaw angle)
4.3	Transponder Speed	Speed of 0, 15, 85 MPH
4.4	Transponder Mounting	Windshield (Ford F150 4’x6’ portion) Headlight (Ford F150 full headlight assembly) Bumper (metal or plastic according to vendor instructions) Other mounting type per vendor instructions
4.5	Interrogator antenna orientation	Fixed reference system with horizontal linear polarization and antenna 15 degrees from horizontal facing oncoming traffic pattern
4.6	Antenna Height	Fixed reference system with lowest portion of antenna assembly 19’ above center point of travel lane

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3.4.2 Readers

Reader systems are configured as single lane or multiple lane ORT per the vendor recommended toll configuration setup.

Readers shall meet the field-testing requirements described in Table 13 below.

Table 14: Reader Field-testing Requirements

#	Category	Requirement
5.1	Transponder Population	Filter one 6C Coalition transponder (programming consistent with version 3.1 of this standard or higher) from nine non-6C Coalition transponders. Filtering information can be found in Appendix A Table 11 of this document (AFI, DSFID and Version values available to be filtered upon).
5.2	Transponder Lane Placements	Pass multiple reference transponders through the read zone on vehicles using in-line positions and cross-over (lane change) locations, and will include multiple simultaneous vehicles in the ORT configuration
5.3	Transponder Height	Above ground for car windshield mountings: 36”-48” (0.91m-1.2m) Above ground for medium truck windshield mountings: 48”-65” (1.2m-1.6m) Above ground for Large truck (Straight and Tractor) windshield mountings: 72”-108” (1.8m-2.7m)
5.4	Transponder orientation (3-D)	Tilt horizontal α = +/- 15 degrees (roll angle) Tilt vertical Φ = 0 to - 45 degrees (pitch angle) Rotation horizontal θ = +/- 18 degrees (yaw angle)
5.5	Transponder Speed	Speed of 0, 15, 85 MPH
5.6	Transponder Mounting	Windshield (Ford F150 4’x6’ portion) Headlight (Ford F150 full headlight assembly) Bumper (metal or plastic according to vendor instructions) Other mounting type per vendor instructions
5.7	Interrogator antenna orientation	Per vendor recommendation and using vendor antenna
5.8	Antenna Height	Per vendor recommendation and using vendor antenna

DRAFT

3.5 Multiprotocol Environments

The 6C protocol will be used in conjunction with other protocols, therefore:

1. Multiprotocol transponders – Transponders with multiple protocols that incorporate the 6C protocol are required to meet the minimum 6C protocol performance prescribed in this document.
2. Multiprotocol readers – Readers with multiple protocol functionality that read the 6C protocol are required to meet the minimum 6C protocol performance described in this document.

DRAFT

4 BARCODE FORMAT

The transponder barcode includes the Agency Code, the Transponder Serial Number, and a check digit. The barcode shall be printed using EPC Code 128 and the code data digits shall be in decimal format **AAAATTTTTTTTTTL** where **AAAA** is the Agency Code as a 4-digit number with leading zeros, **TTTTTTTTTT** is the Transponder Serial Number (TSN) as a 10-digit number with leading zeros and **L** is the Luhn check digit computed using only the last 2 digits of the Agency Code and all 10 digits of the TSN.

Below the barcode the Agency Code, the TSN and the check digit shall be displayed in the following decimal format:

<AA>AA TTTTTTTTTT L

The printed Agency Code shall NOT contain leading zeros and shall be separated from the TSN by a double space, where **<AA>AA** is the Agency code excluding leading zeros. The TSN shall include the leading zeros (to fill all 10 digits) and shall be separated from the check digit number **L** by a double space. The check digit **L** is Luhn (mod10) coded – calculated based upon **<AA>AA** (third and fourth digits only) and **TTTTTTTTTT** (all ten digits).

For example, a transponder with serial number 12 for agency 77 would return **007700000000123** as the barcode content and the printed information below the barcode would contain:

77 0000000012 3

Similarly, for agency 449, a transponder with serial number 12 would return **044900000000122** as the barcode content and the printed information below the barcode would contain:

449 0000000012 2

DRAFT

5 TRANSPONDER MANIFEST DETAILS

Accompanying an order of transponders, it is suggested that tag manufacturers provide a file including an entry for each transponder delivered to facilitate loading of data into back office systems. This should include both the UII programmed value and TID programmed value. Each transponder entry should appear on a new line as shown in the example below:

12_Byte_UII_Memory,TID (length varies)

0101CE00010000000101CE8C,E2003412012EC0FFEE041392

6 SECURITY AND DATA INTEGRITY VALIDATION

6.1 Overview

Transponder security and data integrity validation is critical to the toll industry. It is anticipated that as more security and validation features become available, they will be evaluated and deployed, as appropriate. The following measures are currently employed.

6.2 Memory Bank Security

6.2.1 Reserved Memory Bank

1. The Access Password shall have a Lock Status of locked with an Access Password known to and secured by the transponder issuing agency.
2. The Kill Password and its Lock Status shall be configurable by the transponder issuing agency. It is recommended that the transponder issuing agency configure transponders to permanently disable the ability to kill their transponders.

6.2.2 UII Memory Bank

1. The transponder issuing agency shall be the only entity authorized to change the encoded bits on the transponder. The UII memory bank shall have a Lock Status of locked.
2. UII Validation - The UII content can be validated by comparing a CRC computed on the received UII data against the UII validation byte contained within the UII. Further details are contained in section 6.4.
3. UII Authentication – The UII memory data should be authenticated with two hashed authentication bytes. The UII Authentication bytes can be used for transponder data authentication. Further details are contained in Section 6.5.

6.2.3 TID Memory bank

The transponder identification number shall be uniquely assigned by the manufacturer. It shall be readable without a password, cannot be altered and must be unique.

DRAFT

6.2.4 User Memory Bank

1. Password – If a User Memory bank is included on the tag, it shall be writable without a password.
2. Lock Status - If a User Memory bank is included on the tag, it shall have a Lock Status of unlock.
3. Authentication/Validation – Authentication and validation shall not be used.

6.3 Encryption

Under development.

6.4 UII Validation (CRC Calculation)

The CRC is included in tag memory to easily validate the integrity of UII bits 17 – 80 (Agency Use through Transponder Serial Number fields). Should any portion of this area of tag memory become erroneous/faulty, validation of the CRC field provides a means to detect this. The CRC is calculated using an 8-bit CRC applied to UII bits 17 – 80. Note the *UII Authentication (Hash Value)* portion of tag memory is intentionally not included in this calculation. This allows the CRC to be calculated both prior to and independently of the calculation of the *UII Authentication*. The *UII Authentication* value can then be calculated once the CRC value is determined.

The CRC to be used is an 8-bit CRC (CRC-8/ITU), with a polynomial of $x^8 + x^2 + x + 1$, with a preset value of 0x00 and an output XOR mask of 0x55 (see 0x83 [implicit+1 notation] in Best CRC Polynomials[1]). As stated above, the data feed for the CRC calculation is UII bits 17 – 80.

Below is an example of how the CRC byte shall be calculated using:

1. An example UII bits 17 – 80 (64 bits or 8 bytes) value of **`0xFFFFFFFFFFFFFFFF`**
2. Polynomial (implicit+1 notation) **`0x83`**
3. Initial CRC value **`0x00`**
4. Output XOR **`0x55`**
5. CRC remainder **`0xD7`**
6. The resulting CRC output is **`0x82`**. CRC implementations can be verified using the CRC-8/ITU calculation in https://crccalc.com

6.5 UII Authentication (Hash Value)

Below is an example of how the UII Authentication bytes shall be calculated using:

1. The first 10 bytes of the UII (starting with the "DSFID" field)
2. The 32-byte key (determined by the transponder issuing agency)
3. The bytes of the transponder TID (length varies - see footnote)

[1] Implicit+1 notation in https://users.ece.cmu.edu/~koopman/crc/index.html by Phillip Koopman, Carnegie Mellon University, aka CRC-8-CCITT in https://en.wikipedia.org/wiki/Cyclic_redundancy_check#table

DRAFT

For ensuring interagency interoperability and consistency between transponders manufactured by different vendors the open standard SHA1 hashing algorithm shall be used. The hashing sequence shall be:

1. Concatenate the 10 UII memory bytes, the 32-byte key and the TID bytes to form a single byte sequence
2. Determine the SHA1 hash of this byte sequence above
3. For UII Validation the first 2 bytes from the 40-byte hash result shall be used.

UII Validation Reference Calculation is provided below:

UII 10 byte: **0xFFFFFFFFFFFFFFFFFFFF**

Key 32 byte:

0xABABABABABABABABABABABABABABABABABABABABABABABABABABABABABABABAB

TID (12-byte example): **0x000000000000000000000000**

Result 20-byte hash value: **0x167F9C5B3933148B68AAD51EE3C4B5F858166451**

UII Validation bytes: **0x167F**

The 12 UII bytes shall be encoded as: **0xFFFFFFFFFFFFFFFFFFFF167F**

For fully serialized tags, the complete header and serialized portion of the TID (which can be anywhere from 96 - 192 bits, given the allowable serial number length of 48 - 144 bits) will be used for the indicated calculations.

DRAFT

7 APPENDICES

Appendix A Legacy 6C Toll Transponder Information

The programming standard described in this document intends to enable consistent tag programming among the member agencies. However, developing the standard required several iterations before achieving a steady state in Version 3.1. Thus, slight differences exist between the current version and previous versions. This appendix explains how to determine the programming standard used and the forward compatibility of the Agency Codes.

A.1 Assumptions

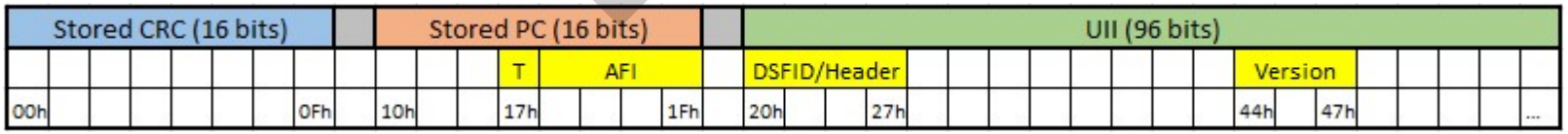
1. All values discussed appear in hexadecimal, except where noted.
2. This appendix only discusses Memory Bank 01 (CRC, PC, and the UII) described in section 2.2

A.2 Determining the Tag Programming Standard

Use the AFI, Header/DSFID, and Version values to validate the tag and determine the Programming Standard used. Figure 4 illustrates the location of the bits.

- AFI - Memory Address **`18h – 1Fh`**
- Header/DSFID - Memory Address **`20h – 27h`**
- Version - Memory Address **`44h – 47h`**

Figure 4: Snip of Memory Map - Highlights the location of key identification bits



For a tag to comply as an interoperable 6C Coalition tag, one of the following statements must apply:

1. [AFI] contains no value, [Header] contains **`35`**, and [Version] contains **`0`**, the tag uses Programming Standard Version 0.9.

DRAFT

2. [AFI] contains no value, [Header] is **35**, and [Version] is **1**, the tag uses Programming Standard Version 1.0. – no longer used
3. [AFI] contains no value, [Header] contains **B0**, and [Version] contains **2**, the tag uses Programming Standard Version 2.0.
4. [T] contains 1, [AFI] contains **B0**, [Header] contains no value, and [Version] contains **3**, the tag uses Programming Standard Version 3.0.
5. [T] contains 1, [AFI] contains **B0**, [DSFID] contains **3E**, and [Version] contains **3**, the tag uses Programming Standard Version 3.1.
6. [T] contains 1, [AFI] contains **B0**, [DSFID] contains **3E**, and [Version] contains **4**, the tag uses Programming Standard Version 4.0.

The following table provides a summary of the values discussed above:

Table 15: Programing Standard Identification

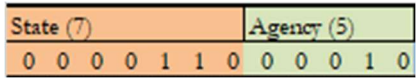
	T bit and AFI (9 Bits) **Memory Address:** 17h – 1Fh Bits 8-16 of the Stored PC		**DSFID / Header (8 Bits)** **Memory Address:** 20h – 27h Bits 1-8 of the UII		**Version (4 Bits)** **Memory Address:** 44h – 47h Bits 37-40 of the UII	
Version	**Binary**	**Hex**	**Binary**	**Hex**	**Binary**	**Hex**
4	1 1011 0000	1 B0	0011 1110	3E	0100	4
3.1	1 1011 0000	1 B0	0011 1110	3E	0011	3
3	1 1011 0000	1 B0	N/A	N/A	0011	3
2	N/A	N/A	1011 0000	B0	0010	2
1	N/A	N/A	0011 0101	35	0001	1
0.9	N/A	N/A	0011 0101	35	0000	0

DRAFT

A.3 Identifying Agencies

For Versions 0.9 and 1.0, a combination of the State Code (7 bits) and the Agency Code (5 bits) identified an agency. This concept allowed a single state or region to have multiple agencies (Figure 5).

Figure 5: Version 0.9 and 1.0 State and Agency Code



Version 2.0 replaced the separate State Code and Agency Code with a single Agency Code (12 bits), using the same Memory Address (Figure 6). This code design allows forward compatibility. For example, in Version 0.9/1.0, the Colorado E-470 Public Highway Authority had a State Code of 6 for Colorado and an Agency Code of 2 for E-470. As depicted in Figure 5, the binary code **0000110** equals decimal value 6 and the binary code **00010** equals decimal value 2.

In Version 2.0 and above, the Agency Code uses the entire 12 bits and all Agency Code values have 12-bit values. Using the example from above, E-470 has a decimal value of 194 as shown in the figure below.

Figure 6: Version 2.0, 3.0, and 3.1 Agency Code – Currently used

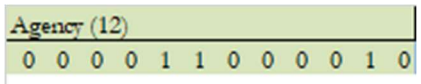


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Figure 7 provides a reference chart comparing the different programming standards by version.

Figure 7: Memory Bank 01 Programming Summary by Version

Version	1.0				2.0				3.0 Rev 2				3.1				4.0			
Area	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section	#	Memory Address	Bits	Section
Stored CRC	1-16	00h - 0Fh	16	N/A	1-16	00h - 0Fh	16	N/A	1-16	00h - 0Fh	16	Calculated	1-16	00h - 0Fh	16	Calculated	1-16	00h - 0Fh	16	Calculated
Stored PC	1-5	10h - 14h	5	N/A	1-5	10h - 14h	5	N/A	1-5	10h - 14h	5	Length	1-5	10h - 14h	5	Length	1-5	10h - 14h	5	Length
	6	15h	1	N/A	6	15h	1	N/A	6	15h	1	User Memory	6	15h	1	User Memory	6	15h	1	User Memory
	7	16h	1	N/A	7	16h	1	N/A	7	16h	1	XPC	7	16h	1	XPC	7	16h	1	XPC
	8	17h	1	N/A	8	17h	1	N/A	8	17h	1	Numbering System Indicator	8	17h	1	Numbering System Indicator	8	17h	1	Numbering System Indicator
	9-16	18h - 1Fh	8	N/A	9-16	18h - 1Fh	8	N/A	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)	9-16	18h - 1Fh	8	AFI (B0 = 1011 0000)
UII	1-8	20h-27h	8	Header (0011 0101)	1-16	20h-2Fh	16	Header (B0 = 1011 0000 xxxx xxxx)	1-21	20h-34h	21	Agency Use	1-8	20h-27h	8	DSFID (3E = 0011 1110)	1-8	20h-27h	8	DSFID (3E = 0011 1110)
	9-36	28h-43h	28	General Manager Number									9-21	28h-34h	13	Agency Use	9-16	28h-2Fh	8	CRC
					17-21	30h-34h	5	Reserved Space									17-21	30h-34h	5	Agency Use
					22	35h	1	Classification Code	22	35h	1	Class	22	35h	1	Class	22	35h	1	Class
					23-27	3Ah	5	Vehicle Type Code	23-27	3Ah	5	Vehicle Type	23-27	3Ah	5	Vehicle Type	23-27	3Ah	5	Vehicle Type
					28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles	28-31	3Bh-3Eh	4	Vehicle Axles
					32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight	32	3Fh	1	Vehicle Weight
					33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires	33	40h	1	Vehicle Rear Tires
					34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration	34-36	41h-43h	3	HOV Declaration
	37-40	44h-47h	4	VersionCode	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version	37-40	44h-47h	4	Version
	41-52	48h-4Eh	7	State Code	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency	41-52	48h-53h	12	Agency
	48-52	4Fh-53h	5	Agency Code																
	53-80	54h-6Fh	28	Vehicle Code	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number	53-80	54h-6Fh	28	Transponder Serial Number
	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)	81-96	70h-7Fh	16	UII Validation (Hash Value)

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Appendix B Transponder Filtering

The 6C standard allows 'filters' to be implemented by readers to separate a population of tags based on values of certain areas of the tag memory. This is useful in tolling environments to allow readers to only read/report 6C transponders that are programmed as tolling tags, as opposed to reading all 6C tags that may pass through a lane (e.g. tags used for retail, asset tracking, etc). To effectively filter all tolling tags in use as of August 2019 (with minor exceptions), three filters are required, detailed below:

1. Stored PC bits 9-16 = **0xB0** (6C Coalition V3.0 and all later versions)
2. UII bits 1-8 = **0xB0** (WSDOT V2.0 tags)
3. UII bits 1-8 = **0x35** (SRTA [old tags] and E470 [all])

With the following exceptions all tags are programmed to version 3.0 or above:

- SRTA tags prior to 2017 (~400k) are an older version that was the basis for V1 published by the 6C TOC
- E-470 tags distributed prior to November 2019 are very similar to these older SRTA tags
- WSDOT has about 750k version 2.0 tags distributed
- Utah DOT has a unique programming standard and may replace their tags prior to joining an IOP hub

Table 16: Legacy Toll Tag Information

Agency	6C Coalition Programming Version	Estimated Count (as of August 2023)
E470	Version 0.9	1,600,000
WSDOT	Version 2.0	1,600,000
SRTA	Version 0.9	187,000
UDOT	Unique to UDOT	78,000

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EXHIBIT "B"
FORM OF PURCHASE ORDER

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Riverside County Transportation Commission

RIVERSIDE COUNTY TRANSPORTATION COMMISSION
4080 LEMON ST.
RIVERSIDE, CA 92501
951-787-7141

DATE	PO NUMBER

CONTRACTOR:

SHIP TO: RIVERSIDE CO TRANSPORT COMMISSION
4080 LEMON STREET
3RD FLOOR
RIVERSIDE, CA 92501

FOB Point:

Terms: Issued in accordance with the Contract identified below and subject to all terms and conditions therein, and the device type, quantity, delivery date and prices below.

Req. No:

Dept::

Contract No:

Special Inst:

By signing below, Contractor agrees to the terms of this Purchase Order. This Purchase Order must be signed by both parties to be valid. This Purchase Order shall be void if not signed by Contractor and returned to the Commission within three (3) days of the date above.

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Transponder Type	Quantity	Delivery Date	Unit Price	Extended Price

SUBTOTAL:

TAX:

TOTAL:

BILL TO:

Account Number	Amount	Account Number	Amount

Riverside County Transportation Commission Authorized Signature

Contractor

Exhibit "C"
FEE SCHEDULE AND DELIVERY TIMES

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APPENDIX H - PROPOSAL PRICING AND DELIVERY TIME FORM

Internal mounted sticker transponder	Weeks to Deliver (from purchase order date)	Price per Transponder (Base years 1 - 3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
Order Quantity				
Less than 250,000	__6-8__ weeks	$ 0.37 -	$ 0.38 -	$ 0.39 -
250,000 or more	__10__ weeks	$ 0.36 -	$ 0.37 -	$ 0.38 -

Exterior mounted sticker transponder	Weeks to Deliver (from purchase order date)	Price per Transponder (Base years 1 - 3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
Order Quantity				
Less than 10,000	__6__ weeks	$ 0.39 -	$ 0.40 -	$ 0.41 -
10,000 or more	__8__ weeks	$ 0.38 -	$ 0.39 -	$ 0.40 -

Internal mounted 3-position switch transponder	Weeks to Deliver (from purchase order date)	Price per Transponder (Base years 1 - 3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
Order Quantity				
Less than 100,000	_8-10___ weeks	$ 4.73 -	$ 4.87 -	$ 5.02 -
100,000 or more	_14___ weeks	$ 4.45 -	$ 4.58 -	$ 4.72 -

Printing of exterior facing artwork on switchable transponder		Price per Transponder (Base years 1 -3)	Price per Transponder (Option Period 1)	Price per Transponder (Option Period 2)
	Not Applicable	$ Included -	$ Included -	$ Included -

Mounting Solution		Price per 10,000 (Base years 1 -3)	Price per 10,000 (Option Period 1)	Price per 10,000 (Option Period 2)
	Not Applicable	$ Included -	$ Included -	$ Included -

Proposed prices shall include all costs including shipping and handling

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EXHIBIT “D”

USE OF ON CALL BENCH

As part of the procurement for this Agreement, the Commission has ranked the contractors on the On Call Bench. The established ranking is on file at the Offices of the Commission, and available for review upon request. The Commission will award Purchase Orders to the top ranked contractor on the On Call Bench for each type of Device to be procured by the Commission.

Should the top ranked contractor on the On Call Bench fail to perform (as determined by the Commission in accordance with the criteria set forth below), the Commission may award a Purchase Order to the next highest ranked contractor.

FAILURE TO PERFORM

Failure to perform by Contractor shall be established if the Contractor fails to do one or more of the following:

1. Acknowledge receipt of and accept a Purchase Order within 3 business days of Commission emailing the Purchase Order to the designated Contractor representative;

2. Meet the delivery schedule in a Purchase Order;

3. Provide transponders that do not pass testing performed by the Commission or its agent. Testing will include the accuracy of the tag programming and functionality as defined in the Scope of Services. Failure for the purposes of this criteria shall be more than one transponder fails out of 200 from a single shipment;

4. Obtain or maintain Omni Air Certification (or other approved by the Commission);

5. Provide Transponders in accordance with the procured physical attributes and approved artwork;

6. Provide warranty replacement within 120 days of receipt by the Contractor;

7. Remedy Excessive Failures as defined in Section 5 G;

8. Otherwise perform under its Agreement with the Commission, resulting in a termination pursuant to Section 18 A.

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AGENDA ITEM 8

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	February 23, 2026
TO:	Western Riverside County Programs and Projects Committee
FROM:	Jeff Dietzler, Capital Projects Manager David Thomas, Tolling Project Delivery Director
THROUGH:	Aaron Hake, Executive Director
SUBJECT:	Interstate 15 Express Lanes Project Southern Extension Authorization of the Caltrans Cooperative Agreement

STAFF RECOMMENDATION:

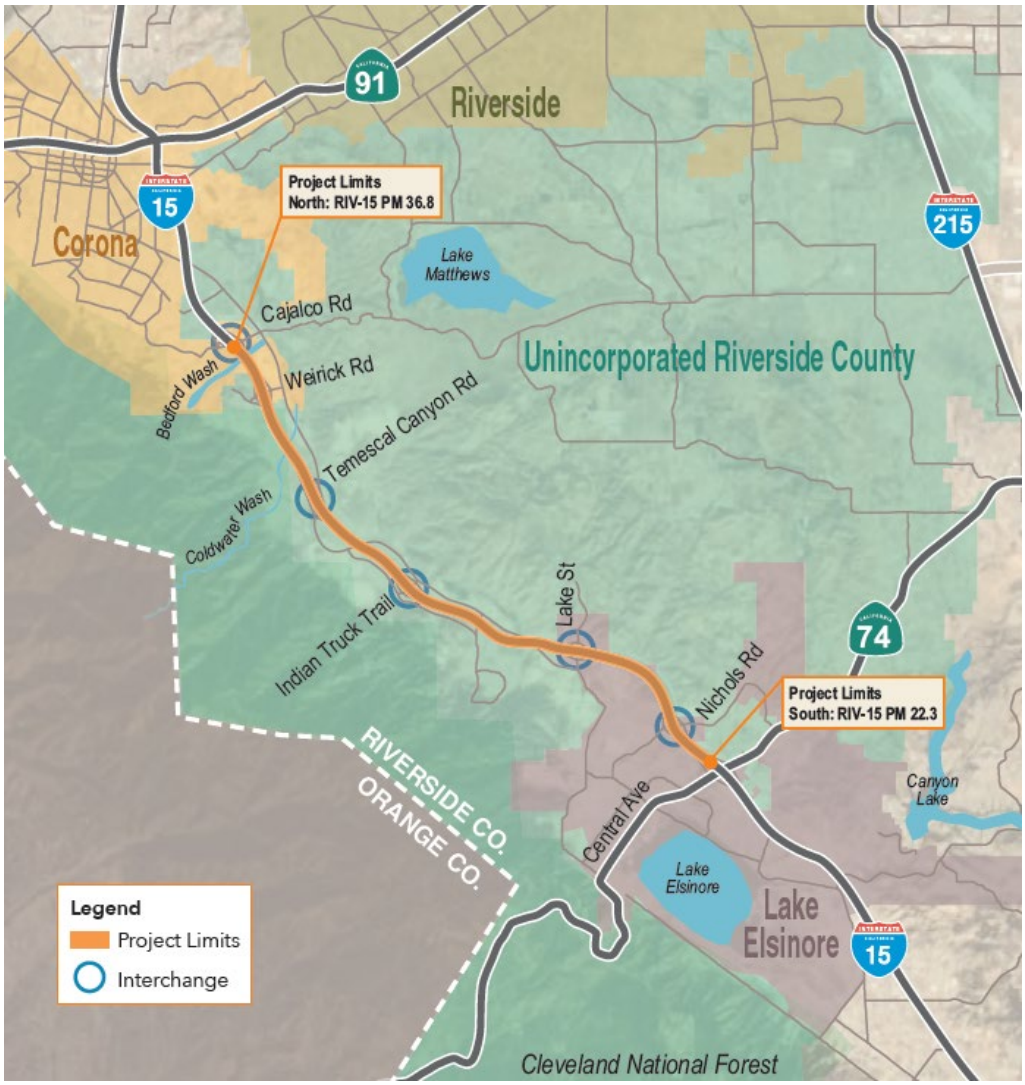
This item is for the Committee to recommend the Commission take the following action(s):

1) Approve Cooperative Agreement No. 26-31-050-00 with Caltrans for the Interstate 15 Express Lanes Project Southern Extension (ELPSE) oversight in the amount of $4,019,000 for progressive design-build (PDB) Phase 1 oversight and $30,585,000 for PDB Phase 2 oversight, for a total of $34,604,000 plus a 10 percent contingency amount of $3,460,400, for a not to exceed amount of $38,064,400;
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the agreement on behalf of the Commission; and
3) Authorize the Executive Director, or designee, to approve contingency work up to the total amount not to exceed as required for the Project.

BACKGROUND INFORMATION:

Project Overview

Riverside County Transportation Commission (RCTC), in cooperation with Caltrans and local agencies, is advancing the I-15 ELPSE to address growing congestion along the I-15 corridor. The project will extend the existing I-15 Express Lanes south from Cajalco Road in the city of Corona to State Route 74 (Central Avenue) in the city of Lake Elsinore, adding two tolled express lanes in each direction within the freeway median for approximately 15.8 miles. Improvements include widening up to 15 bridges, constructing auxiliary lanes, installing electronic toll collection systems, and implementing drainage and noise abatement features—all within existing state right of way. The project is being delivered through a PDB approach, and the initial operating segment is anticipated to open to traffic by 2030. See Figure 1 below for a project location map. The I-15 ELPSE meets a Measure A commitment and is identified in the Commission adopted 2019-2029 Highway Delivery Plan.



DISCUSSION

Caltrans Cooperative Agreement

As the implementing agency, the Commission is leading project delivery efforts with Caltrans providing oversight. The Commission is currently working with Caltrans on a cooperative agreement, which includes staffing estimates for each project phase for the initial operating segment, currently limited to the northernmost tolling segment (Segment 1). Caltrans will provide review and oversight services for both project phases, PDB Phase 1 (initial design and GMP) and PDB Phase 2 (final design and construction). The agreement defines the roles and responsibilities for each party. Caltrans estimates a cost of $4,019,000 for PDB Phase 1 oversight and $30,585,000 for PDB Phase 2 oversight, for a total of $34,604,000.

Of note, the estimated costs for Caltrans oversight for the I-15 ELPSE included in this cooperative agreement are significantly higher than comparable cooperative agreements on previous

Commission toll design-build projects, such as the SR-91 Corridor Improvement Project and I-15 Express Lanes Project. This is primarily due to the implementation of Caltrans Deputy Directive 90 (DD-90-R1) which requires revenue generating projects (such as tolled express lanes) to reimburse Caltrans for all of their oversight cost for a project. Previously, reimbursement was limited to reimbursement of enhanced oversight for key staff positions.

Currently, the draft cooperative agreement is under review by each agency, with legal concurrence pending. It is not anticipated that notable changes will be required as a result of the pending final reviews. This agreement will not be executed until legal counsel approval has been received.

Next Steps

In preparation for awarding the I-15 ELPSE PDB Phase 1 contract, staff is finalizing several associated agreements which will be presented at the March Committee and April Commission meetings. These agreements include:

1. Toll Facility Agreement (TFA) with Caltrans
2. Memorandum of Understanding (MOU) with the city of Lake Elsinore
3. Memorandum of Understanding (MOU) with the city of Corona
4. Toll Services Provider (TSP) Contract Change Order with Kapsch TrafficCom USA, Inc. for Phase 1 Design Support
5. PDB Phase 1 Contract Award

STAFF RECOMMENDATION:

Staff recommends the approval of the Caltrans cooperative agreement in support of progressing the Project into PDB Phase 1.

FISCAL IMPACT:

Funding Source Breakdown

	Item	Dollar Amount	Fund Source
1	Caltrans Co-op (Oversight, PDB Phase 1)	$4,019,000	STBG
2	Caltrans Co-op (Oversight, PDB Phase 2)	$30,585,000	CMAQ
3	Caltrans Co-op Contingency	$3,460,400	CMAQ
	Total	$38,064,400	

Expenditure Schedule

	Item	FY 2025/26	FY 2026/27+	Project/GL Accounting No.
1	**Caltrans Co-op, PDB Phase 1**	**$682,000**	**$3,410,000**	**153044-81601-00000-0000 515 31 81601**
2	**Caltrans Co-op, PDB Phase 2**	**$0**	**$33,9725,400**	**153044-81601-00000-0000 515 31 81601**
	Total	**$682,000**	**$37,382,400**	**$38,064,400**

Financial Information						
In Fiscal Year Budget:	Yes	Year:	FY 2025/26 FY 2026/27+	Amount:	$682,000 $37,382,400	
Source of Funds:	STBG (PDB Phase 1) CMAQ (PDB Phase 2) I-15 Toll Revenue			Budget Adjustment:		No
GL/Project Accounting No.:	153044 81601 00000 0000 515 31 81601 – Cooperative Agreement					
Fiscal Procedures Approved:				Date:	02/18/2026	

Attachment: Draft Agreement 26-31-050-00 - Caltrans Cooperative Agreement

District Agreement 08-1814
RCTC Agreement 26-31-050-00

08-RIV-15-20.3/40.1
EA: 08-0J0820
District Agreement 08-1814
Project Number 0818000063
RCTC Agreement 26-31-050-00

COOPERATIVE AGREEMENT
FOR PROGRESSIVE DESIGN-BUILD OF THE INTERSTATE 15 EXPRESS LANES PROJECT SOUTHERN EXTENSION

This AGREEMENT, entered into effective on _____, 2025, is between the STATE OF CALIFORNIA, acting by and through its Department of Transportation, referred to herein as "STATE," and the RIVERSIDE COUNTY TRANSPORTATION COMMISSION, referred to herein as "RCTC."

RECITALS

1. STATE and RCTC (collectively referred to as "PARTIES" and each singularly referred to as "PARTY"), pursuant to Streets and Highways Code sections 114,149.7, and 149.8, are authorized to enter into a Cooperative Agreement for potential improvements to the State Highway System (SHS) within the County of Riverside.

2. Under the authority of Streets and Highways Code sections 149.8 and 149.7, the California Transportation Commission (CTC) on April 9, 2008, granted RCTC, tolling authority for the I-15 Express Lanes, and to construct a project to add tolled express lanes to the median of I-15 in Riverside County. The project includes 15 miles of express lanes between Route 60 and Route 91 (now Cajalco Road), which opened in April 2021.

3. The PROJECT to be covered under this AGREEMENT is intended to include the "TOLL FACILITY" and "NON-TOLL PROJECT FACILITIES," as defined below, and as described and depicted in the attached Exhibit A. STATE and RCTC acknowledge that a "no project" alternative will also be studied as part of future environmental review and may, depending on the circumstances, be selected as the preferred alternative. For the purpose of this AGREEMENT, the development and construction of the TOLL FACILTY and the NON-TOLL PROJECT FACILITIES will be referred to hereinafter as PROJECT. The PROJECT scope of work is defined in Exhibit A -Project Description and in the project initiation and approval documents.

4. Nothing in this AGREEMENT is intended to commit RCTC or STATE to completing the PROJECT, as identified in Exhibit A, or any other improvements shown in Exhibit A. Instead, this AGREEMENT is intended to recite the financial obligation and other responsibilities of the respective PARTIES in the event that the proposed PROJECT is approved.

5. The RCTC will procure and administer contract(s) for project management, planning, design, right-of-way, financing, construction management and other related services, toll system integration, toll system operations and maintenance, and a PROGRESSIVE DESIGN-BUILD contract.

6. STATE recognizes that RCTC has, prior to the effective date of this AGREEMENT, selected and retained certain consultants to work on the PROJECT.

7. Pursuant to Public Contract Code section 22180, *et seq*., the PARTIES desire to enter into this AGREEMENT which sets forth the roles and responsibilities of the PARTIES as they relate to the design and construction of the PROJECT.

8. The PROJECT is a PROGRESSIVE DESIGN-BUILD projects identified in Public Contract Code section 22180.1.

9. PROGRESSIVE DESIGN-BUILD is a variation of design-build and is required to follow the FHWA procurement policies and procedures under Title 23, CFR Part 636.

10. RCTC , as part of its role in planning and developing regional transportation facilities and in order to bring about the earliest completion of studies, design, and potential construction of the PROJECT, has determined that the PROJECT, if constructed, will be implemented using a PROGRESSIVE DESIGN-BUILD contracting process in accordance with section 22180, et seq. of the Public Contracts Code, and RCTC , as a county transportation RCTC established under Section 130050 of the Public Utilities Code, falls within the definition of a "regional transportation agency" authorized to utilize PROGRESSIVE DESIGN-BUILD under section 22180, et. seq. of the Public Contract Code.

11. RCTC intends to utilize the PROGRESSIVE DESIGN BUILD contracting process to design and construct the Project in segments as funding becomes available. The first PROJECT segment to be constructed and opened to traffic is the INITIAL OPERATING SEGMENT. Additional segments added to the INITIAL OPERATING SEGMENT will require an amendment to the AGREEMENT.

12. Pursuant to Chapter 4.6 (commencing with Section 22180), Part III of Division 2 of the Public Contract Code, RCTC is authorized to use PROGRESSIVE DESIGN-BUILD contracting process that shall have project costs greater than five million dollars ($5,000,000). RCTC shall advertise, award and administer the PROGRESSIVE DESIGN-BUILD contract.

13. STATE and RCTC will define the terms and conditions under which PROJECT is to be developed, designed, and constructed consistent with STATE'S standards, policies and procedures for implementation of PROGRESSIVE DESIGN-BUILD projects on the SHS, as the same may be modified by the PARTIES, and such standards, and modifications thereto, will be reflected in the CONTRACT DOCUMENTS.

14. RCTC will, pursuant to the legislative authority cited above, advertise, award, and administer the PROGRESSIVE DESIGN-BUILD contract. STATE shall not be considered to be in privity with the PROGRESSIVE DESIGN-BUILD ENTITY and the CONTRACT

DOCUMENTS shall reflect the fact that no contractual relationship is to be created between the PROGRESSIVE DESIGN-BUILD ENTITY and the STATE.

15. The terms of this AGREEMENT shall supersede any inconsistent terms of any prior Memorandum of Understanding (MOU) or agreement relating to the PROJECT with the exception of any agreements between or among the RCTC and the Federal Highway Administration or the U.S. Department of Transportation.

16. STATE and RCTC intend to define herein the terms and conditions under which PROJECT is to be developed, designed, and constructed. This AGREEMENT shall not define the terms and conditions of operations or hand back of the facility to the STATE.

17. STATE and RCTC agree and understand that, upon completion of the PROJECT, RCTC shall, maintain and operate the TOLL FACILITY portion of the PROJECT subject to the terms and conditions contained under a separate TOLL FACILITY Agreement to be entered into between the PARTIES.

18. STATE and RCTC agree and understand that, upon acceptance of the PROJECT FACILITIES by STATE such facilities shall become part of the SHS and the NON-TOLL PROJECT FACILITIES shall be operated and maintained by STATE, except for those facilities that would be operated and maintained by other agencies.

19. RCTC and STATE agree to fund their respective share of the PROJECT costs, as summarized in the attached Attachment A- FUNDING SUMMARY, and as further set forth herein.

20. The total PROJECT cost estimate, including funding sources and allocations, is shown on the FUNDING SUMMARY attached hereto and made a part of this AGREEMENT.

21. RCTC is the only SPONSOR for PROJECT and agrees to fund PROJECT costs, as summarized in the FUNDING SUMMARY, and as further set forth herein.

DEFINITIONS

For the purposes of this AGREEMENT, the following terms shall have the meanings hereinafter provided:

22. **BETTERMENTS** - As used herein, the term "BETTERMENTS" shall mean and refer to any improvements which are not part of the PROJECT scope and which are requested by STATE for inclusion as part of PROJECT, and which are to be paid for solely by STATE. Safety Standards defined as A CHANGE IN LAW shall not constitute a BETTERMENT, unless the cost of such a change is attributable to a BETTERMENT. If mutually agreed to by both PARTIES, RCTC agrees that BETTERMENTS will be included in PROJECT as requested by STATE.

23. **CHANGE IN LAW –** As used herein, the term "CHANGE IN LAW" shall mean (a) the adoption of any Law of the State on or before the PROJECT SETTING DATE (b) any change in any Law of the State or in the interpretation or application thereof by any governmental entity, excluding FHWA and STATE, on or before the PROJECT SETTING DATE or (c) changes in Safety Standards that apply to the PROJECT; in each case that is materially inconsistent with the Laws, or interpretations thereof, respectively, in effect on or before the PROJECT SETTING DATE. Notwithstanding the foregoing, a CHANGE IN LAW does not include the following: (i) any change in or a new Law of the State passed or adopted but which is not effective on or before the PROJECT SETTING DATE ; (ii) any change in the standards that qualifies as a Betterment; (iii) any change in State labor Laws; or (iv) any change in State tax Laws of general application.

24. **COMPLETION OF WORK** – As used herein, the term "COMPLETION OF WORK," shall mean that the PARTIES have met all scope, cost, and schedule commitments included in this AGREEMENT and have signed a COOPERATIVE AGREEMENT CLOSURE STATEMENT.

25. **CONSTRUCTION INSPECTION SERVICES** – As used herein, the term "CONSTRUCTION INSPECTION SERVICES" as specified in Streets and Highways Code section 91.2(a) includes, but is not limited to, material source testing, certification testing, surveying, monitoring of environmental compliance, independent quality control testing and inspection, and quality assurance audits. CONSTRUCTION INSPECTION SERVICES does not include surveying work performed as part of the PROGRESSIVE DESIGN-BUILD contract.

26. **CONSTRUCTION WORK ZONE.** As used herein, "Construction Work Zone" means the portion of the PROJECT SHS RIGHT-OF-WAY with construction, maintenance, or utility activities. Typically, that would include areas with workers, construction equipment or materials, or temporary traffic control devices in place.

27. **CONTRACT DOCUMENTS** – As used herein, the term "CONTRACT DOCUMENTS" shall mean and refer to the set of contractually binding documents between RCTC and its PROGRESSIVE DESIGN-BUILD ENTITY, as approved by STATE.

28. **CONTRACT INDEPENDENT ASSURANCE TESTING** - As used herein, the term "CONTRACT INDEPENDENT ASSURANCE TESTING" shall mean and refer to the activities that are an unaffiliated, unbiased and independent evaluation of all the sampling and testing procedures used on PROJECT to accept the PROGRESSIVE DESIGN-BUILD ENTITY's work.

29. **COOPERATIVE AGREEMENT CLOSURE STATEMENT** – As used herein, the term "COOPERATIVE AGREEMENT CLOSURE STATEMENT" shall mean and refer to the document that verifies the completion of all scope, cost, and schedule commitments included in this AGREEMENT. A sample document is attached hereto as Exhibit G.

30. **DEPARTMENT FURNISHED MATERIALS or DFM** – As used herein, the term "DFM" shall mean and refer to material for the PROJECT or services to be provided by STATE, at RCTC 's request, for which RCTC will reimburse STATE. The PARTIES expressly agree that Construction Zone Enhanced Enforcement Program ("COZEEP") services shall be considered DFM

31. **ENVIRONMENTAL DOCUMENTS** – As used herein, the term "ENVIRONMENTAL DOCUMENTS" shall mean and refer to the final, adopted Mitigated Negative Declaration or Finding of No Significant Impact (FONSI) for the PROJECT, any related Mitigation Monitoring and Reporting Program and all supporting environmental documentation.

32. **FHWA STANDARDS** – As used herein, the term "FHWA STANDARDS" shall mean and refer to FHWA manuals, technical memoranda, standards, guidelines, and modifications to such standards.

33. **FUNDING SUMMARY**- As used herein, the term "FUNDING SUMMARY" shall mean and refer to the PROJECT funding summary attached to this AGREEMENT.

34. **GUARANTEED MAXIMUM PRICE** - As used herein, the term "GUARANTEED MAXIMUM PRICE" shall mean and refer to the agreed price between the RCTC and the PROGRESSIVE DESIGN-BUILD ENTITY for each PROGRESSIVE DESIGN-BUILD CONTRACT amendment.

35. **HM-1** – As used herein, the term "HM-1" shall mean and refer to hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law whether it is disturbed by PROJECT or not.

36. **HM-2** – As used herein, the term "HM-2" shall mean and refer to hazardous material (including, but not limited to, hazardous waste) that may require removal and disposal pursuant to federal or state law only if disturbed by PROJECT.

37. **HM MANAGEMENT ACTIVITIES –** Management activities related to either HM-1 or HM-2 including, without limitation, any necessary manifest requirements and disposal facility designations.

38. **IMPLEMENTING AGENCY**- As used herein, the term "IMPLEMENTING AGENCY" shall refer to the PARTY responsible for managing the scope, cost, schedule, and quality of the work activities and products of a PROJECT.

39. **INITIAL OPERATING SEGMENT** – As used herein, the term "INITIAL OPERATING SEGMENT" shall mean the first segment of the PROJECT that is constructed and open to traffic.

40. **NON-TOLL PROJECT FACILITIES** – As used herein, the term "NON-TOLL" or "NON-TOLL PROJECT FACILITIES" shall mean and refer to the Interstate 15 general purpose lane improvements and any PROJECT related corridor improvements not part of the TOLL FACILITY, as depicted in Exhibit A.

41. **OWNER VERIFICATION** - As used herein, the term "OWNER VERIFICATION" shall mean and refer to work performed by RCTC and STATE to verify the PROGRESSIVE DESIGN-BUILD ENTITY's compliance with the CONTRACT DOCUMENTS.

42. **PDB PHASE 1** - As used herein, the term "PDB PHASE 1" shall mean and refer to the time frame of the PROGRESSIVE DESIGN-BUILD approach during which preliminary engineering, construction estimating, and PDB PHASE 2 scope and cost negotiations are performed.

43. **PDB PHASE 2** - As used herein, the term "PDB PHASE 2" shall mean and refer to the time frame of the PROGRESSIVE DESIGN-BUILD approach during which final design and construction activities are performed.

44. **PROGRESSIVE DESIGN-BUILD CONTRACT**; As used herein, the term "PROGRESSIVE DESIGN-BUILD CONTRACT" shall mean and refer to an agreement, as may be amended, entered into between the RCTC and the PROGRESSIVE DESIGN-BUILD ENTITY to deliver the PROJECT, including preliminary engineering, final design, and, if a GMP is agreed upon, for construction.

45. **PROGRESSIVE DESIGN-BUILD ENTITY** - The proposer (or single purpose entity, if any,) who enters into a contract with RCTC to deliver the preliminary engineering of the PROJECT, and subject to successful negotiation of a Guaranteed Maximum Price (GMP) a contract amendment with RCTC for the final design and construction of the PROJECT.

46. **PROGRESSIVE DESIGN-BUILD or PDB** - As used herein, the term "PROGRESSIVE DESIGN-BUILD (or "PDB")" shall mean and refer to contracting process in which both the design and construction of a project are procured from a single entity that is selected through a qualifications-based selection.

47. **PROJECT** – As used herein, the term "PROJECT" shall mean and refer to the development and construction of express lanes in I-15 between El Cerrito Road in Corona and State Route 74 (Central Avenue) in Lake Elsinore, and the construction of o the TOLL FACILITY and NON-TOLL PROJECT FACILITIES, as those terms are defined herein, and as further described and depicted in Exhibit A.

48. **PROJECT SETTING DATE** – As used herein, the term "PROJECT SETTING DATE" shall mean and refer to the effective date for various standards and requirements applicable to a PDB Phase 2 agreement between the RCTC and the PROGRESSIVE DESIGN BUILD ENTITY.

49. **PROJECT SHS RIGHT OF WAY** – As used herein, the term "PROJECT SHS RIGHT OF WAY" shall mean and refer to the right-of-way covered under the STATE issued encroachment permits for the PROJECT.

50. **QUALITY MANAGEMENT PLAN** - As used herein, the "QUALITY MANAGEMENT PLAN" shall mean and refer to the plan prepared by the PROGRESSIVE DESIGN-BUILD ENTITY, which is submitted to the RCTC for approval, and to STATE for concurrence. The QUALITY MANAGEMENT PLAN shall establish the PROGRESSIVE DESIGN-BUILD ENTITY's procedures for quality control and quality assurance. The QMP will include a process for resolving disputes between the PARTIES at the team level. The QMP is subject to STATE review and concurrence.

51. **QUALITY MANAGEMENT PROGRAM** - As used herein, the term "QUALITY MANAGEMENT PROGRAM" shall mean and refer to the quality programs developed by the RCTC and PROGRESSIVE DESIGN-BUILD ENTITY to provide verification of conformance with the CONTRACT DOCUMENTS.

52. **QUALITY MANAGEMENT ASSESSMENT OR QMA** – As used herein, the term "QUALITY MANAGEMENT ASSESSMENT" or "QMA", is defined in Deputy Directive 23-R2, Roles and Responsibilities for Development of Projects on the State Highway System, dated 12/21/2018, shall mean and refer to the systematic activities by the STATE that verifies the RCTC's quality assurance program effectiveness that precede the STATE's approval.

53. **REIMBURSED WORK** - As used herein, the term "REIMBURSED WORK" shall mean and refer to work to be performed by STATE and reimbursed by RCTC, of this AGREEMENT. REIMBURSED WORK shall, unless otherwise specified in this AGREEMENT, include STATE performed QMA work, and shall commence upon the issuance of the Notice to Proceed from RCTC to the PROGRESSIVE DESIGN-BUILD ENTITY for the PDB PHASE 1.

54. **RELIEF OF MAINTENANCE** - As used herein, the term "RELIEF OF MAINTENANCE" shall mean and refer to the point at which STATE will grant the NON-TOLL PROJECT FACILITIES "Maintenance and Protection Relief," as allowed in the applicable Caltrans Construction Manual existing as of the PROJECT SETTING DATE and as may further be set forth in the CONTRACT DOCUMENTS.

55. **REQUEST FOR QUALIFICATIONS or RFQ** - As used herein, the term "REQUEST FOR QUALIFICATIONS" or "RFQ" shall mean and refer to the Request for Qualifications, and all associated documents, issued by RCTC identifying the work to be performed and the qualifications required to perform the work to complete the PROJECT, in response to which an SOQ may be submitted by a Proposer.

56. **SAFETY STANDARD** – As used herein, the term "SAFETY STANDARD" shall mean and refer to (i) a standard adopted and published by the FHWA or STATE expressly pertaining to endangerment to life or safety on similarly situated STATE transportation facilities; (ii) applied within the same time period to all similarly situated State transportation facilities; (iii) necessary to correct an anticipated or actual imminent and substantial endangerment to life or safety; and (iv) which requires immediate implementation.

57. **SCOPE OF WORK** - The term "SCOPE OF WORK" shall mean and refer to the document(s) included in the relevant contractor or consultant contract that details the services and work to be performed under such contract.

58. **SEGMENT 1 -** As used herein, the term "SEGMENT 1' shall mean and refer a project constructible segment that contains independent operational utility and encompasses all work required to add one toll zone in each direction by extending the existing I-15 Express Lanes to the south. SEGMENT 1 is generally described as the northerly most toll zone of the PROJECT with approximate construction limits from Cajalco Road to Indian Truck Trail.

59. **SOURCE INSPECTION** - As used herein, the term "SOURCE INSPECTION" shall mean and refer to sampling, testing and/or inspection of manufactured or prefabricated materials at locations other than the jobsite, generally at the manufactured location.

60. **STATE STANDARDS** – As used herein, the term "STATE STANDARDS" shall mean and refer to those STATE documents which are in effect on or before the PROJECT SETTING DATE, including, as applicable, the FHWA STANDARDS; the version of the Standard Specifications referenced in the CONTRACT DOCUMENTS; Standard Plans; the guidance provided in the *Guide to Capital Project Delivery Workplan Standards* (previously known as WBS Guide) available at http://www.dot.ca.gov/hq/projmgmt/guidance.htm; STATE manuals (including but not limited to the Right of Way Manual, Construction Manual, Highway Design Manual, California Manual on Uniform Transportation Control Devices, etc.); technical memoranda; standards; guidelines; and modifications to such standards that are set forth in or expressly incorporated into the CONTRACT DOCUMENTS.

61. **STATEMENT OF QUALIFICATIONS** As used herein, the term "STATEMENT OF QUALIFICATIONS" or "SOQ" shall mean and refer to a proposer's response to an RFQ issued by the RCTC.

62. **STEWARDSHIP AGREEMENT** – As used herein, the term "STEWARDSHIP AGREEMENT" shall mean and refer to the *STEWARDSHIP AND OVERSIGHT AGREEMENT ON PROJECT ASSUMPTION AND PROGRAM OVERSIGHT BY AND BETWEEN THE FEDERAL HIGHWAY ADMINISTRATION, CALIFORNIA DIVISION OFFICE, AND THE CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS).*

63. **TOLL FACILITY** – As used herein, the term "TOLL FACILITY" shall mean and refer to the express lanes and related equipment and facilities that RCTC intends to design, construct and maintain on the existing SHS, as shown in Exhibit A.

SECTION I

RCTC AGREES:

64. RCTC is the SPONSOR for the PROJECT

65. RCTC is the IMPLEMENTING AGENCY for the PROJECT

66. To provide a Quality Management Plan (QMP) for the PROJECT.

67. To make its personnel and consultants that work on PROJECT available to help resolve PROJECT-related problems and changes for the entire duration of the PROJECT including PROJECT work that may occur under separate agreements.

68. To fund one hundred percent (100%) of all PROJECT costs as shown in FUNDING SUMMARY, including but not limited to the costs of:

    1) REIMBURSED WORK, Department Furnished Materials (DFM) and other PROJECT work requested and agreed to by STATE in writing.

    2) Legal challenges, awards, judgments, settlements, fines, interest, and penalties, environmental commitments and compliance.

    3) Keeping the PROJECT right of way in a safe and operable condition.

    4) Obtaining, implementing and renewing resource agency permits.

    5) Hazardous material management activities as assigned in this AGREEMENT.

69. Per National Environmental Policy Act (NEPA) assignment and California Environmental Quality Act (CEQA) statutes, STATE will perform environmental document quality control and NEPA assignment review procedures for environmental documentation. STATE quality control and quality assurance procedures for all environmental documents are described in Chapter 38 of the Standard Environmental Reference (SER), available at https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-1-guidance-for-compliance/ch-38-nepa-assignment. This also includes the independent judgment analysis and determination under CEQA that the environmental documentation meets CEQA requirements.

70. To provide PROJECT-related products and supporting documentation upon STATE' request for the purpose of STATE's OVERSIGHT.

71. RCTC, including any employee, agent, consultant or sub-consultant retained by the RCTC, shall implement uniform document control policies necessary to retain all records and electronically stored information associated with the WORK, including but not limited to those records identified in California Public Resources Code, Section 21167.6, and

including email and attachments, in a manner consistent with the STATE Uniform Filing System and the "Final STATE Environmental Records Retention Policy", available at https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/ser/nepa-recordretention-policy-final-a11y.pdf. These records, along with an index of the records, shall be provided to CALTRANS within 60 days of STATE' written request.

72. STATE is the CEQA and NEPA Lead Agency for the PROJECT.

73. Environmental Permits, Approvals and Agreements- RCTC will comply with the commitments and conditions set forth in the environmental documentation, environmental permits, approvals, and applicable agreements as those commitments and conditions apply to RCTC 's responsibilities in this AGREEMENT.

74. Unless otherwise assigned in this AGREEMENT, as the IMPLEMENTING AGENCY is responsible for all PROJECT work associated with coordinating, obtaining, implementing, renewing, and amending the PROJECT permits, agreements, and approvals whether they are identified in the planned project scope of work or become necessary in the course of completing the PROJECT.

75. It is expected that the PROJECT requires the following environmental permits/approvals:

Agency	Permit/Approval	Status
U.S. Fish and Wildlife Service (USFWS)	Joint Project Review (JPR) for Multiple Species Habitat Conservation Plan (MSHCP) consistency (part of Streamlined Federal Endangered Species Act [FESA] Section 7 Consultation for the MSHCP).	JPR submitted to USFWS for MSHCP consistency review. USFWS concurrence pending review of JPR.
	Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP) review for consistency.	SKR HCP consistency analysis included in JPR submittal.
U. S. Army Corps of Engineers (USACE)	Clean Water Act (CWA) Section 404 Nationwide Permit and Section 408 NEPA Compliance.	To be submitted after approval of Project Report and Final Environmental Document.
California Department of Fish and Wildlife (CDFW)	California Fish and Game Code (CFGC) Section 1602 Lake or Streambed Alteration Agreement (SAA).	Application to be submitted during the Plans, Specifications, and Estimates (PS&E)/final design phase.
	JPR for MSHCP consistency.	JPR submitted to CDFW for MSHCP consistency review and concurrence through the JPR process.
FHWA	Air Quality conformity determination.	Prior to approval of Final Environmental Document.
Regional Water Quality Control Board (RWQCB)	Porter-Cologne Act and CWA Section 401 Water Quality Certification.	To be submitted after approval of Project Report and Final Environmental Document.

Western Riverside County Regional Conservation Authority (RCA)	JPR for MSHCP consistency.	JPR submitted to the RCA for MSHCP consistency review and concurrence through the JPR process.
SWRCB	CWA Section 402- A SWPPP required by the General NPDES Construction Permit would be prepared and is expected to provide all the necessary temporary pollution and erosion control measures required during construction. Post construction BMPs are required by Caltrans' NPDES permit and would be incorporated into PS&E package.	SWPPP would be submitted to Storm Water Multiple Application and Report Tracking System 30 days prior to construction, and post construction BMPs would be incorporated into construction documents.
County of Riverside	Oak Tree Management Guidelines	The Project would comply with the County of Riverside Oak Tree Management Guidelines if any oak trees are proposed for removal.

76. To:

- Implement the environmental commitments as identified in the environmental document.
- Obtain and comply with the PROJECT permits, approvals, and agreements.
- Provide STATE with a copy of all environmental permits, approvals and agreements from resource and regulatory agencies, including the terms and conditions of the permits, agreements and approvals.
- Incorporate permit requirements and mitigation commitments into the final PROJECT plans.
- Implement all environmental commitments during construction.

77. To procure, advertise, award, and administer the PROGRESSIVE DESIGN-BUILD contract provided that CONTRACT DOCUMENTS will be developed by RCTC in compliance with RCTC ’s regulatory and statutory procurement and contracting authority for PROGRESSIVE DESIGN-BUILD procurements on the SHS. Furthermore, the PARTIES agree STATE shall not be considered to have privity with the PROGRESSIVE DESIGN-BUILD ENTITY and the CONTRACT DOCUMENTS shall reflect the fact that no contractual relationship is to be created between the PROGRESSIVE DESIGN-BUILD ENTITY and STATE.

78. To carry out the PROJECT with RCTC forces, consultants and contractors. If environmentally approved, PROJECT will be implemented in accordance with the ENVIRONMENTAL DOCUMENTS and all applicable federal, State, and local laws and regulations, as well as compliance with the applicable STATE STANDARDS.

79. To be responsible for one hundred (100%) percent of all PROJECT construction capital (excluding the cost of BETTERMENTS), right-of-way and support costs, and for the cost of REIMBURSED WORK, up to the maximum amount as set forth in the following sentence, and for DFM requested by RCTC. RCTC shall reimburse STATE the actual cost of REIMBURSED WORK up to the maximum amount shown on Exhibit D ("RCTC Maximum REIMBURSED WORK Payment Obligation"). RCTC has no obligation to reimburse STATE over the stipulated Maximum REIMBURSED WORK Payment Obligation amount without a written addendum to this AGREEMENT signed by both PARTIES.

80. That the purpose of Exhibit D is to illustrate the estimated STATE personnel to be assigned to REIMBURSED WORK, and that STATE shall manage such personnel and personnel assignments and classifications, including the use of consultants, at STATE's sole discretion, except as otherwise set forth in paragraph 139, up to the RCTC Maximum REIMBURSED WORK Payment Obligation. Except as otherwise provided herein, it is agreed that STATE has no obligation to provide STATE personnel services beyond what is provided for in Exhibit D unless otherwise agreed to by the PARTIES.

81. To fund the total amount as shown on the FUNDING SUMMARY for the PROJECT,

82. That all of the RCTC and STATE obligations set forth in this entire AGREEMENT with respect to the construction and/or implementation of the PROJECT are expressly contingent upon the completion of all required environmental review under both California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) and the approval of the proposed PROJECT. In the event that the "no project" alternative is selected as a result of the environmental review process, except as otherwise specified in this AGREEMENT, all RCTC and STATE obligations under this AGREEMENT shall terminate. STATE shall be compensated for all REIMBURSED WORK performed for PROJECT as of the effective date of this AGREEMENT. RCTC may perform PROGRESSIVE DESIGN-BUILD procurement work, preliminary engineering and any STATE approved early right-of-way acquisition, at RCTC 's sole risk and cost prior to completion of review under CEQA and NEPA and approval of the proposed PROJECT.

83. As ratified by adoption of Streets and Highways Code section 149.8, and California Public Contract Code section 22180, et. seq., to utilize the PROGRESSIVE DESIGN-BUILD contracting process for implementation of PROJECT. To carry out PROJECT with RCTC forces, consultants, and contractors. PROJECT is to be defined and implemented in accordance with the ENVIRONMENTAL DOCUMENTS, and all applicable federal, State, and local laws, rules, and regulations. RCTC will implement the PROJECT in accordance with applicable STATE STANDARDS, except as the same may be modified in the approved CONTRACT DOCUMENTS. RCTC will coordinate with STATE during development of the CONTRACT DOCUMENTS, and STATE shall review, comment and,

approve the CONTRACT DOCUMENTS in accordance with the terms of this AGREEMENT.

84. As of the effective date of this agreement, STATE will participate in RCTC 's selection of the PROGRESSIVE DESIGN-BUILD ENTITY. RCTC has, prior to the effective date of this AGREEMENT, selected and retained certain consultants to work on PROJECT. RCTC agrees at the request of STATE to consider discontinuing the services of any personnel considered by STATE to be unqualified based on credentials, professional expertise, or failure to perform in accordance with SCOPE OF WORK and/or other pertinent criteria.

85. As the ultimate owner of the facility, STATE will be named as the intended third-party beneficiary in the CONTRACT DOCUMENTS. The CONTRACT DOCUMENTS will include a provision granting STATE, in addition to RCTC, the right to pursue all legal remedies against the PROGRESSIVE DESIGN-BUILD ENTITY for any "latent deficiency" pursuant to California Code of Civil Procedure section 337.15 (b), and shall amend any contrary provision contained in the STATE STANDARDS.

86. To require the PROGRESSIVE DESIGN-BUILD ENTITY to maintain professional liability insurance through completion of construction of PROJECT and the resolution of all construction contract claims and/or litigation, with a limit of liability as set forth in the CONTRACT DOCUMENTS. If Owner Control Insurance Program (OCIP) is proposed, to have an OCIP Feasibility Study, prepared to commercially accepted insurance standards, for approval by STATE. PROGRESSIVE DESIGN-BUILD ENTITY shall maintain in force, until completion and acceptance of all phase or elements of the PROGRESSIVE DESIGN-BUILD contract for PROJECT, a policy of Contractual Liability Insurance, including coverage for Bodily Injury Liability and Property Damage Liability, with coverage that at a minimum meets the requirements set forth in the CONTRACT DOCUMENTS. Such policy shall contain an endorsement naming the State of California, its officers, agents, and employees as additional first-party insureds. Coverage shall be evidenced by a Certificate of Insurance, Policy of Insurance and a Declarations Page in a form satisfactory to STATE, all of which shall be delivered to STATE before the issuance of an encroachment permit to RCTC 's PROGRESSIVE DESIGN-BUILD ENTITY or any other consultant or agent of RCTC.

87. To be responsible for the preparation and implementation of the Mitigation and Monitoring Plan to be approved by STATE as part of the ENVIRONMENTAL DOCUMENTS and environmental permit, agreement, or approval process. RCTC, its consultant or PROGRESSIVE DESIGN-BUILD ENTITY shall submit progress reports, per STATE and FHWA guidelines, to STATE for review and approval. As set forth in the ENVIRONMENTAL DOCUMENTS, and although STATE is the lead agency with respect to the ENVIRONMENTAL DOCUMENTS, RCTC agrees and warrants it shall comply, or cause its PROGRESSIVE DESIGN-BUILD ENTITY to comply, with all PROJECT mitigation measures, including the terms and conditions of the ENVIRONMENTAL DOCUMENTS and any required environmental permits, agreements and approvals as those terms and conditions apply to STATE's and RCTC 's responsibilities as set forth in this AGREEMENT and shall provide and certify a Mitigation

Monitoring Report and Certificate of Environmental Compliance at the completion of the PROJECT.

88. If required by FHWA, to prepare and submit FHWA "Major Project Deliverables." The Major Project Deliverables, if required, shall be prepared in accordance with FHWA guidelines and the STEWARDSHIP AGREEMENT.

89. To retain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred by RCTC, including support data for cost proposals (to the extent received from contractors), and make such materials available at the respective offices of RCTC and its consultants and contractors at all reasonable times during the contract period and for three years from the date of COMPLETION OF WORK or Federal Final Voucher, whichever is later. STATE or FHWA shall have access to any books, records, and documents of RCTC that are pertinent to this AGREEMENT for audits, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested. Upon completion of all work under this AGREEMENT, ownership and title to all planning and engineering reports, documents, plans, specifications and estimates, including but not limited to Resident Engineer memos and estimates backups, produced for delivery to STATE as part of PROJECT will automatically be vested in STATE and no further agreement will be necessary to transfer ownership to STATE.

90. To furnish STATE, prior to commencing work on PROGRESSIVE DESIGN-BUILD activities, a proposed time schedule to complete PROJECT.

91. To have the release for construction design documents and drawings of structural, mechanical, electrical, civil, architectural, or other engineering features of PROJECT prepared by or under the direction of engineers or architects registered and licensed accordance with the most current version of the State of California, Professional Engineers Act at the time. Any reports, specifications, and each sheet of plans shall bear the professional seal, certificate number, registration classification, expiration date of certificate, and signature of the professional engineer responsible for their preparation.

92. To not specify any materials or equipment of single or sole source origin in the design of PROJECT unless RCTC complies with the requirements set forth in Public Contract Code section 3400(c).

93. To ensure PROJECT deliverables are subject to review, comment and approval, as appropriate, in accordance with the QUALITY MANAGEMENT PROGRAM. All PROJECT design submittals once deemed complete as defined in the CONTRACT DOCUMENTS shall be provided to STATE for review, comment and approval, as appropriate. All release for construction design documents and drawings are subject to review and approval by STATE, provided that the scope of STATE's review shall be limited to compliance with the CONTRACT DOCUMENTS. STATE shall complete its review and provide any comments in accordance with the requirements specified in SECTION II, of this AGREEMENT.

94. To notify STATE of any deviation(s) to the PROJECT's Area of Potential Effects (APE) and/or description of the PROJECT as set forth in the ENVIRONMENTAL DOCUMENTS. Said notification shall occur within two business days of when the deviation(s) has been discovered by RCTC or determined to be necessary, whichever occurs first in time.

95. To obtain approval of Change Orders (CO), to be issued under the CONTRACT DOCUMENTS, from STATE and FHWA (to the extent specified in the STEWARSHIP AGREEMENT) for federally eligible construction costs when the CO exceeds $200,000, and for all changes to the STATE STANDARDS, except as the same may be modified in the CONTRACT DOCUMENTS, or as otherwise approved by STATE.

96. To prepare or cause to be prepared any additional environmental documentation, including applications for new, or amendments to, environmental permits, agreements and approvals that are needed to maintain PROJECT environmental compliance and to submit said documentation to STATE for review, comment and, if appropriate, approval.

97. Further, if changes to PROJECT warrant preparation of supplemental or subsequent ENVIRONMENTAL DOCUMENTS, RCTC will prepare or cause to be prepared the supplemental or subsequent ENVIRONMENTAL DOCUMENTS and STATE as CEQA and NEPA lead agency will review and, if appropriate certify and/or approve the supplemental or subsequent ENVIRONMENTAL DOCUMENTS. All noticing and circulation and other procedural responsibilities will be carried out as set forth for the original ENVIRONMENTAL DOCUMENTS.

98. To perform all right-of-way acquisition activities, including the exercise of RCTC 's power of eminent domain granted under California Public Utilities Code (CPUC) section 130220.5, including, the right to hear Resolutions of Necessity without STATE's written approval for PROJECT pursuant to its authority under Section 149.8 of the Streets and Highways Code, if necessary, as a cost to PROJECT. All such acquisition activities shall be in compliance with applicable state and federal laws and regulations, and applicable FHWA STANDARDS and STATE STANDARDS, unless otherwise approved by STATE, subject to STATE OVERSIGHT under this AGREEMENT, to ensure that the acquired properties are acceptable for incorporation into the SHS right-of-way.

99. To transfer title to properties to be incorporated into STATE's highway right-of-way in a manner acceptable to STATE in fee simple absolute and free and clear of all liens, claims or encumbrances except as approved by STATE. Acceptance of said title by STATE is subject to a prior review and approval of a Policy of Title Insurance issued in the name of the State of California and in an amount commensurate with the estimated fair market value of the realty.

100. To maintain and manage any excess land acquired as a result of PROJECT until said excess land is disposed of by RCTC, unless such land was purchased with federal funds, in which case applicable federal rules shall govern the vesting and/or disposition of such property. Any existing STATE-owned right-of-way not needed for the PROJECT shall not be

deemed "excess" by RCTC and shall remain vested in STATE, unless otherwise agreed by the STATE.

101. To provide a land surveyor licensed in the State of California to be responsible for surveying and right-of-way engineering. All survey and right-of-way engineering documents shall bear the professional seal, certification number, registration classification, expiration date of certificate, and signature of the responsible surveyor consistent with the Professional Land Surveyors Act.

102. To be responsible for performance, within SHS right-of-way, of all pre-construction monumentation perpetuation and perform, or cause to be performed, all post-construction monumentation and the mapping/documentation thereof in conformance with applicable STATE STANDARDS, except where modified in the CONTRACT DOCUMENTS. This work includes, but is not limited to:

a) the recovery, reestablishment, and survey of points which control existing SHS right-of-way lines, or other pertinent boundary lines and centerlines, and the monumentation thereof;

b) the survey and establishment of existing SHS right-of-way lines and monumentation thereof for areas where the PROJECT improvements are outside or directly adjacent to the existing right-of-way;

c) the preservation of existing monumentation threatened by construction;

d) the survey, establishment and monumentation of new SHS right-of-way lines and re-monumentation of points destroyed by construction because of PROJECT.

103. To identify and locate all high and low risk underground facilities within the area of PROJECT and to protect or otherwise provide for such facilities, all in accordance with applicable law and the procedures set forth in STATE's policy on high and low risk underground facilities.

104. If existing public and/or private utilities conflict with construction of PROJECT, RCTC shall make all necessary arrangements with the owners of such facilities for their protection, relocation, or removal and shall inspect the protection, relocation, or removal of such facilities at no cost to STATE. RCTC shall require any utility owner performing the protection or relocation work within SHS right-of-way to obtain an encroachment permit from STATE prior to the performance of said work. Any relocated or new utilities shall be shown and identified on the As-Built plans.

105. To comply with the requirements of existing STATE Utility Master Agreements of record.

106. To furnish evidence to STATE, in a form reasonably acceptable to STATE, that arrangements have been made for the protection, relocation, or removal of all conflicting facilities within SHS right-of-way and that such work will be either completed by the utility providers, or will be provided for in the CONTRACT DOCUMENTS.

107. To be responsible for the investigation of potential hazardous material sites within and outside of the existing SHS right-of-way that would impact PROJECT as part of RCTC responsibility for the PROJECT Environmental Document. If RCTC encounters hazardous material contamination or unanticipated protected cultural materials within the existing and proposed SHS right-of-way during said investigation or in the course of construction, RCTC shall immediately notify STATE and responsible control agencies of such discovery.

108. To procure, advertise, award, and administer the PROGRESSIVE DESIGN-BUILD contract for PROJECT provided that CONTRACT DOCUMENTS will be developed by RCTC in compliance with RCTC 's regulatory and statutory procurement and contracting authority for PROGRESSIVE DESIGN-BUILD procurements on SHS, including Public Contract Code Section 22180, et. seq. If the work performed on PROJECT is done under contract and falls within the Labor Code section 1720(a)(1) definition of "public work" in that it is construction, alteration, demolition, installation, or repair; or maintenance work under Labor Code section 1771, RCTC must conform to the provisions of Labor Code sections 1720 through 1815, and all applicable provisions of California Code of Regulations found in Title 8, Chapter 8, Subchapter 3, Articles 1-7. RCTC agrees to include prevailing wage requirements in its contracts for public work. Work performed by RCTC 's own forces is exempt from the Labor Code's Prevailing Wage requirements.

109. require its contractors to include prevailing wage requirements in accordance with the CONTRACT DOCUMENTS in all subcontracts funded by this AGREEMENT when the work to be performed by the subcontractor is a "public work" as defined in Labor Code section 1720(a)(1) and Labor Code section 1771. Subcontracts shall include all applicable prevailing wage requirements. RCTC shall obtain applicable wage rates from the State Department of Industrial Relations.

110. To utilize a qualified STATE-approved public agency or consultant in all right-of-way activities. Right-of-way consultant contracts will be administered by a qualified right-of-way professional.

111. To apply for and obtain encroachment permits for required work within SHS right-of-way in accordance with STATE standard permit procedures. To obtain all other permits and approvals, including local agency and regulatory agency permits, and approval documentation for construction of PROJECT. In the event that railroads are involved, RCTC will coordinate with the railroad and the California Public Utilities RCTC to obtain needed approvals. Copies of all permits obtained for PROJECT shall be submitted to STATE. Additionally, the Quality Management Plan to be prepared by the PROGRESSIVE DESIGN-BUILD ENTITY is to be submitted to STATE for review and approval prior to construction of the PROJECT in accordance with the CONTRACT DOCUMENTS.

112. That in recognition that PROJECT construction work done on STATE property will not be directly funded and paid by STATE, for the purpose of protecting stop notice claimants and the interests of STATE relative to the successful completion of PROJECT, RCTC shall require the PROGRESSIVE DESIGN-BUILD ENTITY to furnish both a payment and

performance bond, issued by a California admitted surety naming RCTC as obligee with both bonds complying with the requirements of applicable laws and in the form provided in the CONTRACT DOCUMENTS, or other security approved in writing by STATE. RCTC shall defend, indemnify, and hold harmless STATE and all its officers and employees from all claims by stop notice claimants related to the construction of PROJECT under the payment bond or otherwise.

113. That all survey work shall conform to the methods, procedures, and requirements of Caltrans Surveys Manual and Caltrans Staking Information Booklet, except as the same may be modified in the CONTRACT DOCUMENTS. RCTC agrees to use primary horizontal and vertical survey control information provided by STATE in developing the survey control for PROJECT.

114. Material testing and quality control shall conform to those provisions of applicable STATE STANDARDS, except as the same may be modified in the CONTRACT DOCUMENTS, and shall be performed by a material-tester certified by STATE in accordance with its standard certification procedures.

115. To submit for STATE approval a Traffic Management Plan (TMP) which will be prepared by the PROGRESSIVE DESIGN-BUILD ENTITY and comply with STATE TMP guidelines during PROJECT design. RCTC shall provide the final TMP to STATE for review and approval in accordance with the CONTRACT DOCUMENTS and PROJECT timelines and schedules.

116. To furnish, at PROJECT expense and subject to the approval of STATE, PROJECT Representatives who are licensed Civil Engineers in the State of California, to perform the functions of a Resident Engineer and a Structural Engineer. The Resident Engineer and the Structural Engineer shall not be employees or agents of the PROGRESSIVE DESIGN-BUILD ENTITY or any related entity. If the Resident Engineer is not also a registered Landscape Architect, RCTC will furnish, at RCTC's expense a registered Landscape Architect to perform work related to architecture treatment and landscaping and to perform the function of an Assistant Resident Engineer/Inspector who is responsible for both daily on-site inspection and final decisions including, but not limited to, any highway planting and the irrigation systems that comprise a portion of the PROJECT work, consistent with any applicable measures in the environmental commitments record.

117. At PROJECT expense, to furnish qualified support staff to assist the Resident Engineer with contract administration, and other inspection and staff services necessary to assure that construction is being performed in conformance with this AGREEMENT and with the CONTRACT DOCUMENTS. Said qualified support staff engaged in RCTC activities shall be independent of the PROGRESSIVE DESIGN-BUILD ENTITY and shall not be an employee or agent of any related entity.

118. To provide a Safety Engineer/Manager who will be responsible for auditing the PROGRESSIVE DESIGN-BUILD ENTITY for compliance with any PROJECT safety plans, Occupational Safety and Health Administration (OSHA) requirements and STATE, RCTC, and local jurisdiction requirements set forth in the CONTRACT DOCUMENTS.

119. Prior to Final Acceptance, as that term is defined in the CONTRACT DOCUMENTS, to furnish STATE with a complete set of pre-approved design plans depicting the proposed construction of the PROJECT; a complete set of "As-Built" plans and all STATE requested contract records, including survey documents, Records of Surveys, and structure As-Built documents according to the CONTRACT DOCUMENTS. The format of these plans, records and documents shall be in a format consistent with the format used by STATE as of the PROJECT SETTING DATE.

120. To be responsible for maintenance and repair of the TOLL FACILITY and the NON-TOLL PROJECT FACILITIES located within the limits of an encroachment permit issued by the STATE or as otherwise specified in Section III and the CONTRACT DOCUMENTS. RCTC shall be responsible for such maintenance and repair of the NON-TOLL PROJECT FACILITIES until RELIEF OF MAINTENANCE is granted by STATE of the NON-TOLL PROJECT FACILITIES. Maintenance and repair of PROJECT facilities includes, but is not limited to, compliance with all legally required storm water provisions, landscaping and irrigation, pavement, signs, lighting, barriers, guardrail, graffiti abatement, weed abatement, removing debris, and general housekeeping. Major damage to PROJECT structures and roadway facilities by hazardous spills and causes beyond RCTC control, including but not limited to, any incidence of fire, flood, earthquake, or other acts of God will be STATE's responsibility.

121. To maintain any part of the PROJECT facilities located outside of the current SHS right-of-way until acceptance of any such part of the PROJECT facilities into the SHS by STATE.

122. If RCTC terminates PROJECT prior to completion thereof, STATE may require RCTC, at RCTC expense, to return the affected SHS right-of-way to its original condition or a condition acceptable for permanent public operations. If RCTC fails to do so, STATE reserves the right to finish the NON-TOLL PROJECT FACILITIES or to place the NON-TOLL PROJECT FACILITIES in a condition satisfactory for permanent public operations. STATE will bill RCTC for all actual expenses incurred and RCTC agrees to pay said expenses within thirty (30) days of issuance of that invoice or STATE, acting through the State Controller or State Treasurer, may withhold an equal amount from future apportionments due RCTC from STIP or any other sources.

123. If unanticipated cultural, archaeological, paleontological, biological, or other protected resources are encountered during construction of PROJECT, RCTC shall stop work in that area until a qualified professional evaluates the nature and significance of the find and a plan is approved for the removal or protection of that resource, which plan must be in accordance with applicable law. RCTC shall notify STATE within 24 hours of any said discovery. The costs for any removal or protection shall be covered as a PROJECT cost.

124. To provide STATE personnel assigned full-time to the PROJECT and performing REIMBURSED WORK acceptable office space, including furniture, utilities, Internet access and any other items necessary to perform their work at no expense to STATE for the duration of PROJECT. RCTC will not be responsible to provide vehicles and vehicle costs (including, but not limited to fuel, maintenance, registration, insurance, etc.). RCTC

shall also provide acceptable shared workspace for STATE personnel to perform their part time QMA responsibilities.

125. To notify STATE in writing of the projected date for achievement of Final Acceptance, as that term is defined in the CONTRACT DOCUMENTS.

126. Final Acceptance of PROJECT will include all necessary documentation and approvals from affected local agencies for those segments which will have maintenance and operational control relinquished back to said local agencies.

127. To accept maintenance of the TOLL FACILITY upon PROJECT substantial completion, as that term shall be defined in the CONTRACT DOCUMENTS. RCTC will accept control of, operate, and maintain, at RCTC 's sole cost and expense, the TOLL FACILITY lying within the SHS right-of-way. The terms and conditions for the operation and maintenance of the TOLL FACILITY will be covered in a separate maintenance agreement.

128. To obtain all required permits for construction of PROJECT from third parties, including but not limited to the Cities of Corona and Lake Elsinore, the County of Riverside, and resource agencies.

129. To ensure that the CONTRACT DOCUMENTS include the provisions of STATE Standard Specification 7-1.03 (2010 ed.), subject to amendments approved by STATE, to ensure that public convenience is maintained by the PROGRESSIVE DESIGN-BUILD ENTITY whenever work is performed by or on behalf of RCTC under an encroachment permit within the SHS right-of-way. RCTC shall enforce such provisions in a reasonable manner pursuant to the procedures set forth in, and terms of, the CONTRACT DOCUMENTS.

130. To submit a written request for any DFM identified in the PROJECT plans and specifications, or as may otherwise be required by RCTC, a minimum of one hundred eighty (180) days in advance of the need for such materials or services identified by the PARTIES as DFM. Such notice may be waived at STATE's discretion on a case by case basis. As applicable, RCTC may take delivery of the DFM after STATE's receipt of RCTC 's payment at the location directed by STATE. DFM shall be considered a PROJECT cost.

131. To pay STATE, within thirty (30) days of receipt of STATE's billing, the actual cost invoiced for the requested DFM.

132. As part of PROJECT, incorporate into the PROJECT scope and REQUEST FOR QUALIFICATIONS, STATE requested BETTERMENTS all as further set forth in Exhibit E.

133. As may be necessary based on the funding source, RCTC will submit invoices to STATE for those funding sources identified in the FUNDING SUMMARY.

134. To pay STATE, within thirty (30) days of receipt of STATE's billing, the actual cost invoiced for the REIMBURSED WORK, up to the RCTC Maximum REIMBURSED WORK Payment Obligation, as defined in SECTION I, of this AGREEMENT.

SECTION II

STATE AGREES:

135. To be the CEQA Lead Agency for the PROJECT.

136. To be the NEPA Lead Agency for the PROJECT.

137. That all of RCTC and STATE obligations set forth in this entire AGREEMENT with respect to the construction and/or implementation of the PROJECT are expressly contingent upon the completion of all required environmental review under both CEQA and NEPA and the approval of the proposed PROJECT which results from said reviews. In the event that the "no project" alternative is selected and except as otherwise specified in this AGREEMENT, all RCTC and STATE obligations under this AGREEMENT shall terminate.

138. To fund up to the amount set forth in Exhibit E for BETTERMENTS. Total STATE contribution towards the PROJECT cost is shown on the FUNDING SUMMARY attached hereto and made a part of this AGREEMENT.

139. To be the agency responsible for timely performing the REIMBURSED WORK for the NOT TO EXCEED amount identified in Exhibit D. STATE shall notify RCTC in writing prior to commencing performance of any REIMBURSED WORK for which it feels exceed or is not consistent with the mutually agreed upon staff plan, and shall provide RCTC at least ninety (90) days prior written notice that its costs are anticipated to exceed the NOT TO EXCEED amount identified in Exhibit D. Notwithstanding the foregoing, if the PARTIES are unable to reach agreement on an amended NOT TO EXCEED amount for any reason, the PARTIES shall promptly follow the issue resolution process identified in paragraph 214.

140. To provide additional work and services not included herein as requested in writing by RCTC and agreed to in writing by STATE followed by an amendment to Exhibit D.

141. To participate, through the review of procurement documents and involvement in the evaluation process, in the selection of the PROGRESSIVE DESIGN-BUILD ENTITY. RCTC and STATE shall mutually identify any other PROJECT-related contracts that are appropriate for participation by STATE in the evaluation and selection process. Although not required to participate, STATE shall timely notify RCTC if STATE desires to participate in any such identified procurements or evaluations.

142. To provide its concurrence in a timely manner, in accordance with the timeframes set forth in the CONTRACT DOCUMENTS, to RCTC for the issuance of a Certificate of Substantial Completion and a Certificate of Final Acceptance for the PROGRESSIVE DESIGN-BUILD contract.

143. To perform CONSTRUCTION INSPECTION SERVICES for PROJECT using STATE employees or consultants under an on-call construction administration contract with STATE.

144. As part of its CONSTRUCTION INSPECTION SERVICES responsibilities, STATE shall include a direct reporting relationship between the STATE inspectors and senior STATE engineers responsible for all STATE inspectors and CONSTRUCTION INSPECTION SERVICES. This direct reporting relationship shall be administrative in nature with the senior STATE engineers remaining independent with no direct role on the PROJECT.

145. Notwithstanding any other provision of law, STATE retains the authority to stop the PROGRESSIVE DESIGN-BUILD ENTITY's work wholly or in part and take appropriate action when public safety is jeopardized on PROJECT. STATE' authority to stop the PROGRESSIVE DESIGN-BUILD ENTITY'S work includes but is not limited to work performed under an encroachment permit within the SHS right-of-way, including, but not limited to, work performed that includes lane closures, signing, work performed at night, detours, dust control, temporary pavement quality, crash cushions, temporary railings, pavement transitions, falsework, shoring, and delineation. STATE shall regularly inspect the job sites for safety compliance and any possible deficiencies. If any deficiency is observed, a written notice shall be sent by STATE to RCTC for corrective action. Once the deficiency is corrected, a written notice describing the resolution of the deficiency shall be sent to STATE by RCTC and documented.

146. To provide additional REIMBURSED WORK not included herein as requested in writing by the RCTC and agreed to by STATE in writing. If such additional REIMBURSED WORK is required, the PARTIES will negotiate and execute an addendum to this AGREEMENT.

147. To process, review and approve, as appropriate, complete submittals by RCTC. Incomplete submittals shall be promptly returned without review but with explanation as to what is required to render such submittals "complete." STATE shall cooperate with RCTC and its consultants and contractors (including, without limitation, the PROGRESSIVE DESIGN-BUILD ENTITY) with development of PROJECT and shall provide comments, reviews and if appropriate, approvals within the time frames and in accordance with the standards of review specified in the CONTRACT DOCUMENTS and as agreed to in the quality assurance procedures contained in the QUALITY MANAGEMENT PROGRAM. RCTC shall not be required to implement comments not timely submitted by STATE, unless it is necessary to maintain STATE STANDARDS. Nothing in this paragraph precludes the reasonable exercise of the professional discretion by STATE with respect to review and approvals in accordance with the terms of the CONTRACT DOCUMENTS, including the potential to refuse requested approvals under the terms of the CONTRACT DOCUMENTS, provided that the scope of STATE's review shall be limited to compliance with the CONTRACT DOCUMENTS. STATE agrees to provide reviews of and any comments to each submittal at the time the submittal is provided to STATE in order to avoid compiling all comments to the final review of a submittal.

148. To refer RCTC to all necessary regulations, policies, procedures, manuals, standard plans and specifications, and other standards required for the administration of PROJECT.

149. To make a determination of need for a NEPA/CEQA revalidation/reevaluation within 30 calendar days of receiving the proper documentation from RCTC. The STATE determination of need shall include, but not be limited to, the following information: 1) If Work in the area of the PROJECT can continue, 2) the type of future documentation required, and 3) if re-evaluation is required, an estimate of time to process the re-evaluation based upon the documentation provided by RCTC.

150. To participate in the selection and approval of RCTC 's consultants and contractors who will perform PROJECT. STATE recognizes that RCTC has, prior to the effective date of this AGREEMENT, selected and retained certain consultants to work on PROJECT.

151. Prior to assigning any Key Personnel identified in Exhibit C, consult with RCTC and provide information regarding such personnel's professional qualifications and availability. STATE will make reasonable efforts to maintain continuity of key personnel and shall notify RCTC before substituting any such personnel. The State shall have the final authority in the assignment or substitution of the key personnel.

152. For any consultant retained by STATE to perform Construction Inspection Services, STATE shall prior to assigning any staff, consult with RCTC and provide information regarding the consultant's professional qualifications and availability. STATE will make reasonable efforts to maintain continuity of consultants and shall provide RCTC with prior notice before substituting any such consultant; however, STATE retains the right to remove consultants based on poor performance without prior notice.

153. Upon RCTC written request, and subject to reimbursement by RCTC, make reasonable efforts to engage additional staff or consultants for PROJECT who may be available, as needed, to perform any PROJECT work or services as necessary, as further specified in this AGREEMENT.

154. To issue, at no cost to RCTC, upon acceptable completed applications by RCTC and its consultants or PROGRESSIVE DESIGN-BUILD ENTITY, those necessary encroachment permits to authorize entry onto SHS right-of-way to perform activities required for PROJECT, within thirty (30) days following receipt of an acceptable application. The standards for approval of such permit application shall be no more stringent than applied on STATE projects. If RCTC uses consultants rather than its own staff to perform required work, those consultants will also be required to obtain an encroachment permit which will be issued at no cost upon proper application by the consultants. In reviewing and issuing any necessary encroachment permits, STATE shall approve encroachment permits that are consistent with the CONTRACT DOCUMENTS which will have been approved by STATE. The generally-applicable requirement of evidence of insurance coverage by encroachment permittees, including the procurement of a certificate of insurance naming the State of California and its employees, officers and agents as a first party, additional named insured, is not a "cost" within the meaning of this paragraph and is expressly not waived as a condition of issuance of any encroachment permit RCTC 's Permit shall be contingent upon submittal of RCTC 's QUALITY MANAGEMENT PLAN concurrence by STATE.

155. That, except to the extent that STATE reasonably determines that work is required for public safety or to prevent significant property damage, STATE will, to the extent possible, avoid performing major maintenance, rehabilitation or construction within the existing SHS right-of-way that would increase costs, delay PROJECT completion or otherwise adversely and materially impact PROJECT. Prior to STATE undertaking any major maintenance or repair work within the SHS right-of-way adjacent to PROJECT, STATE shall contact RCTC to coordinate its work with RCTC in order to avoid interference with the PROJECT. Prior to issuance, any STATE encroachment permit for work within the PROJECT limits, except in cases requiring the immediate protection of public safety or to prevent significant property damage, shall be forwarded to RCTC Resident Engineer for review and comment.

156. To work with RCTC with the goal that all applicable State and Federal rules and regulations are followed and approvals obtained. Exceptions to applicable STATE STANDARDS needed for PROGRESSIVE DESIGN-BUILD procurement are to be approved in the sole discretion of STATE, and such approval shall be in writing. Incorporation of such approved exceptions into the CONTRACT DOCUMENTS shall satisfy the foregoing requirement.

157. To participate in first, and if necessary, second level Condemnation Panel Reviews scheduled and facilitated by the RCTC.

158. Upon presentation by RCTC, to accept from RCTC, good and sufficient fee simple absolute title to that real property acquired in fee by RCTC for STATE pursuant to this AGREEMENT subject to a prior review and approval by STATE of the form of title, free of liens or exceptions, except as otherwise approved by STATE, and supported by a policy of title insurance issued in the name of STATE.

159. To timely provide, at RCTC 's cost and upon RCTC 's request, any DFM as determined by STATE to be appropriate and available during construction of PROJECT. STATE shall not be obligated to provide DFM, but may do so at its discretion. Upon receipt of RCTC 's request for any such DFM, STATE will order the DFM and STATE's PROJECT Coordinator will have an invoice submitted to RCTC for the cost of the DFM. Upon receipt of the DFM and RCTC 's payment, STATE will make the DFM available to RCTC at a STATE designated site, or will provide the DFM as agreed upon in writing by the PARTIES.

160. Upon completion of PROJECT, to furnish RCTC with a detailed final accounting of the DFM and REIMBURSED WORK. Based on the final accounting, STATE will refund or invoice as necessary in order to satisfy the financial obligations of this AGREEMENT.

161. To retain all books, documents, papers, accounting records, and other evidence pertaining to costs incurred by STATE and make such materials available at the respective offices of STATE and its consultants and contractors at all reasonable times during the contract period and for three years from the date of COMPLETION OF WORK or Federal Final Voucher, whichever is later. Upon request, STATE agrees to provide copies of any books, records, and documents that are pertinent to this AGREEMENT.

162. To provide primary horizontal and vertical survey control information for use in developing the survey control for PROJECT.

163. As applicable, to grant RELIEF OF MAINTENANCE of NON-TOLL PROJECT FACILITIES upon acceptance of such facilities as further set forth herein. Upon such grant of relief, STATE will accept control of and operate and maintain, at STATE's sole cost and expense, those NON-TOLL PROJECT FACILITIES lying within the SHS right-of-way, except local roads delegated to local agencies for maintenance.

164. To perform SOURCE INSPECTION as outlined in STATE's Construction Manual. RCTC shall reimburse STATE, as part of the REIMBURSED WORK, up to the RCTC Maximum REIMBURSED WORK Payment Obligation, for all direct and indirect costs incurred for any SOURCE INSPECTION performed by STATE, as further set forth in Exhibit D.

165. Independent assurance testing, testing required to verify the PROGRESSIVE DESIGN-BUILD ENTITY's work, which is not available commercially and which is proprietary (STATE-owned), and approval of the type of asphalt and concrete plants shall be performed by STATE and shall be considered REIMBURSED WORK.

166. To invoice RCTC for DFM within thirty (30) days of STATE's receipt of RCTC 's request for the DFM.

167. Will contribute the maximum amount shown on Exhibit E of STATE funds to RCTC, as payment for BETTERMENTS.

168. Will pay RCTC within 30 calendar days of receipt of invoice as payment for BETTERMENTS.

169. Will invoice RCTC for an initial deposit upon execution of this AGREEMENT by the PARTIES in the amount of $650,000. This deposit represents two (2) months' estimated support costs for REIMBURSED WORK. Thereafter, STATE will submit to RCTC monthly invoices based on the prior month's actual expenditures

170. In the event of damage to the SHS or its appurtenances; and to the extent the repair is the responsibility of the PROGRESSIVE DESIGN-BUILD ENTITY or of RCTC; and to the extent STATE has available inventory of appropriate materials in its inventory; STATE agrees to make such materials available for use by the PROGRESSIVE DESIGN-BUILD ENTITY or RCTC. Materials provided pursuant to this section shall not be deemed DFM and RCTC shall reimburse STATE for the cost of replacement and/or, restocking of STATE's inventory.

171. When STATE is to be reimbursed from state or federal funds that are provided by RCTC and STATE administers those funds, then STATE will draw from those funds without invoicing RCTC in advance of the draw down. Within the timeframe set forth in paragraph 186 below, STATE shall provide to RCTC monthly invoices supporting the draw down, which invoices shall be prepared in accordance with the requirements of this

AGREEMENT. RCTC shall have the right to dispute any invoice, or portion thereof, for which a draw down of funds has been made. If it is determined pursuant to a resolution of any such dispute that a draw down of funds, or portion thereof, was not in accordance with the terms of this AGREEMENT, STATE shall reimburse the PROJECT in the amount of the disputed funds.

SECTION III

IT IS MUTUALLY AGREED:

172. STATE and RCTC desire to implement a collaborative approach for the development of PROJECT, using the resources of both agencies to expedite the process and agree to implement all the provisions of California Public Contract Code section 22180, et. seq. and Streets and Highways Code section 91.2.

173. The PROJECT SETTING DATE for the INITIAL OPERATING SEGMENT shall be the earliest date of either the CONTRACTORS' submittal of a complete PDB PHASE 2 proposal for the INITIAL OPERATING SEGMENT, or any PDB PHASE 2 proposal for an early work package for work within the INITIAL OPERATING SEGMENT. A PDB PHASE 2 proposal is defined in the CONTRACT DOCUMENTS. The SETTING DATE becomes fixed for the duration of the INITIAL OPERATING SEGMENT if the RCTC executes a PROGRESSIVE DESIGN-BUILD CONTRACT amendment for PDB PHASE 2 within six months (6) of receipt of a PDB PHASE 2 proposal. In the event the PROGRESSIVE DESIGN-BUILD CONTRACT amendment for PDB PHASE 2 is not executed within six (6) months, the parties shall mutually agree upon a revised PROJECT SETTING DATE.

174. The PROJECT SETTING DATE for additional construction segments occurring separately from the INITIAL OPERATING SEGMENT shall be mutually agreed upon by the parties. The PARTIES agree that it is desirable to limit varied PROJECT SETTING DATES for concurrent and overlapping construction segments.

175. The cost of any engineering support performed by STATE includes all direct and applicable indirect costs. STATE calculates indirect costs based solely on the type of funds used to pay support costs. State and federal funds are subject to the current Program Functional Rate. Local funds are subject to the current Program Functional Rate and the current Administration Rate. The Program Functional Rate and the Administration Rate are adjusted periodically.

176. That RCTC intends to utilize the PROGRESSIVE DESIGN BUILD contracting process to design and construct the Project in segments as funding becomes available. The first PROJECT segment to be constructed and opened to traffic is the INITIAL OPERATING SEGMENT.

177. STATE and RCTC recognize that applicable STATE STANDARDS and other standards may be in conflict with a PROGRESSIVE DESIGN-BUILD contracting process. RCTC shall coordinate with STATE during development of both the PDB PHASE 1 and PDB PHASE 2 CONTRACT DOCUMENTS, and STATE shall be afforded the opportunity to review, comment and approve prior to the RCTC and PROGRESSIVE DESIGN BUILD ENTITY entering into an agreement. Once approved by STATE, the CONTRACT DOCUMENTS shall control the design and construction of the PROJECT and any deviations to the applicable STATE STANDARDS and other standards that are set forth in the CONTRACT DOCUMENTS shall be deemed approved by STATE.

178. That RCTC has the right and authority, in accordance with 23 CFR 636.109 and as allowed in the amended (August 14, 2007) FHWA regulations for DESIGN-BUILD contracting, Section 1503 of the ‘‘Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users” (SAFETEA–LU), and as modified by the federal Moving Ahead for Progress in the 21st Century Act (MAP-21) legislation, to issue the Request for Qualifications (RFQ) prior to completion of the NEPA process. The release of the RFQ prior to NEPA approval shall be subject to the following limitations as outlined in the FHWA regulations:

(a) Issue an RFQ prior to the conclusion of the NEPA process as long as the RFQ informs proposers of the general status of the NEPA process and that no commitment will be made as to any alternative under evaluation in the NEPA process, including the no-build alternative;

(b) Preclude a contractor from proceeding with final design or construction before NEPA is complete, unless otherwise permitted by law.

179. That all obligations of STATE under the terms of this AGREEMENT are subject to the appropriation of resources by the Legislature and allocation of funds by the CTC to STATE for the purposes of fulfilling STATE obligations herein. Should the Legislature fail to allocate funds to STATE for purposes of fulfilling STATE obligations hereunder, the PARTIES agree to meet and confer in an attempt to close the funding shortfall.

180. PARTIES acknowledge that, pursuant to Section 91.2(c) of the Streets and Highways Code, STATE resources necessary for the performance of those services identified hereunder as STATE ENHANCED OVERSIGHT, CONSTRUCTION INSPECTION SERVICES and SOURCE INSPECTION, including personnel requirements, are legally mandated to be included in STATE’s capital outlay support program for workload purposes in the annual Budget Act.

181. In the event this AGREEMENT is terminated in accordance with SECTION I, of this AGREEMENT, payments to STATE shall be made through and including the entire month in which the termination occurred for amounts earned and owing under this AGREEMENT.

182. To meet prior to September 1 of every year to review the STATE’s staffing plan for REIMBURSED WORK for the following fiscal year. The PARTIES shall mutually agree to the staffing levels to be programmed in the following fiscal year by the STATE and any necessary adjustments to the REIMBURSED WORK Summary shown on EXHIBIT D. The STATE agrees to provide the appropriate staffing and resources as mutually agreed in the work plan and to fulfill its responsibilities for performing all REIMBURSED WORK. The RCTC will not be responsible for any REIMBURSED WORK in excess of the yearly budget derived from the staff plan, unless a mutually agreed adjustment is made to the REIMBURSED WORK Summary shown on EXHIBIT D.

183. STATE and RCTC desire to provide efficient and cost-effective implementation of PROJECT, and will mutually establish PROJECT timelines and schedules related to review and/or concurrence with and/or approval of PROJECT submittals and documents by

STATE. Such timelines, schedules, submittal requirements and standards for review by STATE will be reflected in the CONTRACT DOCUMENTS. STATE, in carrying out its role under this AGREEMENT, agrees, as further set forth herein, that it will be required to provide its review, comments, non-concurrence, concurrence and/or approval of PROJECT submittals and documents in a timely manner, in accordance with agreed upon PROJECT timelines and schedules.

184. That timely and accurate invoicing by the STATE and subsequent payment by RCTC is of high importance to both PARTIES. Accordingly, the following shall be implemented:

(a) STATE Corridor Director, or his designee, shall review and approve all monthly STATE invoices prior to submission to RCTC.

(b) STATE shall submit to RCTC an approved monthly invoice no more than 30 calendar days following the close of the previous month's billing cycle. REIMBURSED WORK invoiced by the STATE to the RCTC more than 180 days after the work was performed shall be considered delinquent and not reimbursable by the RCTC. STATE invoices for support costs shall include all direct and applicable indirect costs. Costs for REIMBURSED WORK not invoiced to RCTC within 180 days shall be the responsibility of the STATE.

(c) RCTC shall remit payment to STATE for REIMBURSED WORK, up to the RCTC Maximum REIMBURSED WORK Payment Obligation, as defined in SECTION I of this AGREEMENT, within 30 days of RCTC approval of STATE's invoice.

(d) Prior to any REIMBURSED WORK being performed on PROJECT, STATE and RCTC Project Managers shall mutually agree on the individuals allowed to charge to REIMBURSED WORK. Those individuals shall be limited to those required to fill the positions shown on Exhibit D. In consultation with the RCTC s' Project Manager, the STATE Project Manager shall update this approved list monthly.

(e) STATE will be responsible for the development of the REIMBURSED WORK invoice format, including cost, schedule and status reports, to be jointly agreed upon prior to implementation and payment. STATE shall be responsible for implementing project controls and monitoring to ensure all invoice charges are accurate and provide monthly reporting to RCTC

185. To incorporate into the PROJECT scope STATE requested BETTERMENTS as shown on Exhibit E. The cost of the BETTERMENTS shall be borne in their entirety by the STATE and paid in accordance with the provisions of this section. STATE acknowledges the potentially negative impact of changes occurring during construction and shall endeavor to minimize any Betterment requests after issuance of the Notice-to-Proceed for any PDB PHASE 2 contract amendment between the RCTC and the PROGRESSIVE DESIGN BUILD ENTITIY.

(a) The cost of the BETTERMENTS set forth in Exhibit E shall be the agreed upon lump sum amount set forth in Exhibit E. The foregoing lump sum amount shall constitute full payment for all design, construction, testing, and inspections performed by

RCTC, its consultants, and/or contractor. The lump sum amount of the BETTERMENTS shall only be changed if a material change in the BETTERMENTS is requested by STATE, or if the PROGRESSIVE DESIGN-BUILD ENTITY is entitled a change order under the "Changes of Work" clause of the CONTRACT DOCUMENTS. Change order costs directly attributed to the BETTERMENTS are not included in the lump sum amount for the BETTERMENTS, and shall be the financial responsibility of STATE. STATE shall be afforded the opportunity to inspect, review and participate in any change order discussions directly impacting the BETTERMENTS.

(b) RCTC shall have no obligation to undertake any Betterment requested beyond those identified in Exhibit E or after issuance of the Notice-to-Proceed for any PDB PHASE 2 contract amendment between the RCTC and the PROGRESSIVE DESIGN BUILD ENTITY. If such BETTERMENTS are acceptable to RCTC in its sole discretion, RCTC shall include them in the SCOPE OF WORK for the PROJECT. No BETTERMENTS that are inconsistent with the PROJECT's ENVIRONMENTAL DOCUMENTS, or that would require re-evaluation, revalidation or supplementation of the environmental document shall be considered, unless otherwise determined by the RCTC, in its sole discretion. Proposed BETTERMENTS must be in compliance with SAFETY STANDARDS and with all applicable law.

(c) In the event STATE requests BETTERMENTS for incorporation into the PROJECT after issuance of the Notice-to-Proceed for any PDB PHASE 2 contract amendment between the RCTC and the PROGRESSIVE DESIGN BUILD ENTITIY and RCTC agrees to incorporate such BETTERMENTS into the PROJECT, STATE shall be solely responsible for all costs and expenses related thereto, including (i) the costs incurred to incorporate the BETTERMENTS into the SCOPE OF WORK of the PROJECT, (ii) additional design, construction and oversight costs arising from or associated with the BETTERMENTS, including change orders related thereto; (iii) additional operations and maintenance costs arising from or associated with the BETTERMENTS, including change orders related thereto; and (iv) costs associated with any impact on the design and construction schedule associated with the BETTERMENTS, including any associated PROJECT delay cost and damages.

186. That STATE shall designate a STATE representative to represent STATE, and RCTC shall designate a PROJECT Representative through whom all communications between the two agencies shall be channeled. The STATE representative or other official designated by STATE shall review the work of RCTC through completion of PROJECT.

187. That RCTC shall establish a PROJECT document control system acceptable to STATE. Document control, storage, and retrieval methods will utilize a format that is compatible with existing filing systems. When PROJECT is complete, it is intended that the appropriate documents be transferred to the appropriate PARTIES in a format that is compatible with existing filing systems.

188. To develop warranty terms and requirements to be included in the CONTRACT DOCUMENTS.

189. If required by the STATE STANDARDS governing Freeway Agreements, RCTC shall prepare and STATE shall execute Freeway Agreements with the local agencies for PROJECT. Freeway Agreements shall be executed prior to issuance of a notice to proceed to the PROGRESSIVE DESIGN-BUILD ENTITY for PDB PHASE 2.

190. Freeway Maintenance Agreements, if necessary, shall be executed prior to the STATE's acceptance of RELIEF OF MAINTENANCE for PROJECT.

191. That STATE shall issue encroachment permits for utility improvements which lie within the SHS right-of-way. PROJECT specific utility agreements will be negotiated between the RCTC and the individual utility owners, with work orders addressing individual relocations coordinated between the PROGRESSIVE DESIGN-BUILD ENTITY and the utility owners.

192. That RCTC shall not start PROJECT construction until and unless environmental review under CEQA and NEPA are first completed, PROJECT approval – if any – is granted, right-of-way has been secured in such area, all pre-construction environmental surveys and mitigation completed for the area(s) proposed for construction have been completed and legal and physical control of rights of way have been acquired in accordance with the CONTRACT DOCUMENTS.

193. That during the construction of PROJECT, representatives of RCTC and STATE will cooperate and consult with each other, and all work pursuant to PROJECT shall be accomplished according to the CONTRACT DOCUMENTS. Satisfaction of these requirements shall be verified by STATE's representative who is authorized to enter RCTC property during construction for the purpose of monitoring, inspecting, and coordinating construction and post-construction activities.

194. That any and all material changes to the CONTRACT DOCUMENTS shall be approved by STATE in advance of performing the work. If STATE does not provide its comments, complete its reviews or provide its approval in accordance with the requirements of the CONTRACT DOCUMENTS, including the PROJECT timelines and schedules, the provisions of SECTION II, shall apply.

195. Unless otherwise directed by STATE representative, changes authorized as provided herein will not require an encroachment permit rider. The foregoing does not preclude deviations from the CONTRACT DOCUMENTS necessitated by emergency situations or to address an immediate safety issue. STATE shall be notified, as soon as reasonably possible, of any such deviations. All changes shall be shown on the As-Built plans referred to in this AGREEMENT.

196. The PARTIES agree that under the CONTRACT DOCUMENTS and the encroachment permits to be issued for the PROJECT, RCTC and the PROGRESSIVE DESIGN-BUILD ENTITY will be responsible maintenance within the construction work zone.

197. The PARTIES hereby agree that RCTC shall be the party responsible for repair or replacement of third-party caused damage that occurs within the CONSTRUCTION WORK ZONE. ,

198. Consistent with Streets and Highways Code section 730 and Vehicle Code sections 17300 through 17303, the cost of damage to the State Highway System and its appurtenances may be recovered by either STATE or the authority in charge of the highway or bridge. To the extent RCTC is obligated to perform repair or replacement of damage to the PROJECT SHS RIGHT OF WAY or its appurtenances within the CONSTRUCTION WORK ZONE, STATE authorizes RCTC to take all actions to recover its costs related thereto. STATE agrees to reasonably assist in such actions, if requested by RCTC, and to waive any rights to recovery, except as to any direct damage to STATE not remedied by RCTC repair work.

199. Should RCTC decide not to pursue a recovery action, as described in paragraph 184 above, STATE reserves the right to do so in its own name. In such case, STATE shall reimburse RCTC, for any RCTC incurred costs related to the third-party damage, from any proceeds of such recovery action in excess of STATE's attorney and other litigation related fees. and in excess of any damages incurred by STATE.

200. In order to assist RCTC with repairing or replacing third-party caused damage to the PROJECT SHS RIGHT OF WAY, STATE shall, if available, provide impact attenuators, special light or sign poles, electrical cabinets, and other items from STATE's stock, as needed. Such materials provided by STATE shall be replaced in kind by RCTC.

201. The PARTIES hereby agree that STATE shall be the party responsible for maintenance and third-party caused damage that occurs outside the CONSTRUCTION WORK ZONE,

202. In the case of an emergency which requires immediate action outside the CONSTRUCTION WORK ZONE, RCTC shall make all reasonable efforts to contact STATE in order to determine which PARTY is best able to complete the required work. In the case of an emergency, STATE may provide verbal authorization for RCTC to direct the DESIGN-BUILD contractor to conduct emergency repair efforts at STATE's cost. STATE shall follow its verbal approval with written authorization. If RCTC is unable to contact STATE after reasonable efforts to do so, and the nature of the emergency requires, in RCTC's reasonable judgment, immediate action, RCTC may, but shall not be obligated to, undertake repairs to the extent required to remediate the emergency condition. In such case, RCTC shall notify STATE of such work at the earliest time possible, and STATE shall confirm in writing whether or not the repair work was the responsibility of the STATE under paragraph 201 within ten (10) days of notification. For repair work determined to be the responsibility of the STATE, the parties shall mutually agree the methods to which to reimburse RCTC for the actual costs thereof. STATE shall reimburse RCTC for repair work conducted under this paragraph within thirty (30) days of receipt of RCTC's invoice therefor, unless otherwise agreed upon by the PARTIES.

203. In the case of third-party damage which does not require immediate action, the PARTIES shall meet and confer to determine which party is responsible for the work. If it is determined that the work is the responsibility of the STATE, STATE may request that

RCTC direct the DESIGN-BUILD contractor to perform the work, and shall reimburse RCTC for all costs thereof.

204. The PARTIES agree that RCTC shall not be responsible for repair to the PROJECT SHS RIGHT OF WAY which is necessitated by (i) war, riot, homeless disturbances, and acts of a public enemy or other civil disturbance, (ii) acts of God, including but not limited to, greater than a 25-year storm event, lightning, earthquakes, hailstorms, ice storms, tornados, typhoons, hurricanes, landslides, fires, and objects striking the earth from space (such as meteorites), or (iii) any other human or natural disaster specified in paragraph 212.

205. Prior to STATE undertaking any maintenance or repair work within the PROJECT SHS RIGHT OF WAY, STATE shall contact RCTC to coordinate its work with RCTC in order to avoid interference with the PROJECT.

206. That RCTC shall provide a contract claims process reasonably acceptable to STATE and shall process any and all claims through RCTC 's claim process. STATE's representative will be made available to RCTC to provide advice and technical input in any claim process. Said representative shall not be deemed to be an agent of RCTC.

207. The PARTY that discovers hazardous material (HM) will immediately notify the other PARTY(IES) to this AGREEMENT.

HM-1 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, whether it is disturbed by PROJECT or not.

HM-2 is defined as hazardous material (including but not limited to hazardous waste) that may require removal and disposal pursuant to federal or state law, only if disturbed by PROJECT.

208. STATE, independent of PROJECT, is responsible for any HM-1 found solely within existing SHS right-of-way. STATE will undertake or cause to be undertaken HM-1 management activities with minimum impact to PROJECT schedule. STATE, independent of PROJECT, will pay all costs for HM-1 management activities related to HM-1 found solely within existing SHS right-of-way. STATE shall make reasonable efforts to investigate any HM-1 found within existing SHS right-of-way within 72 hours of notification of STATE by RCTC of such discovery, and shall immediately commence work with regulatory agencies to develop and implement an action plan to remediate the site. STATE shall involve RCTC in all meetings and work with governmental/regulatory agencies and third parties related to any HM-1 found solely within existing SHS right-of-way.

209. STATE has no responsibility for management activities or costs associated with HM-1 found outside the existing SHS right-of-way. RCTC, independent of PROJECT, is responsible for any HM-1 found within PROJECT limits outside existing SHS right-of-way. RCTC will undertake, or cause to be undertaken, HM-1 management activities with minimum impact to PROJECT schedule, and RCTC will pay, or cause to be paid, all costs associated with HM-1 management activities.

210. If HM-2 is found within the limits of PROJECT, RCTC will be responsible for HM-2 management activities. Any management activity cost associated with HM-2 is a PROJECT cost.

211. Management activities associated with HM-1 or HM-2 include, without limitation, any necessary manifest requirements and designation of disposal facility.

212. The PARTIES agree that RCTC is designated as the Legally Responsible Person and the Approved Signatory Authority pursuant to the Construction General Permit, State Water Resources Control Board (SWRCB) Order Number 2022-0057-DWQ, as defined in Appendix 5, Glossary, and assumes all roles and responsibilities assigned to the Legally Responsible Person and the Approved Signatory Authority as mandated by the Construction General Permit.

213. STATE's acquisition or acceptance of title to any property on which any hazardous material is found will proceed in accordance with the applicable FHWA STANDARDS and STATE STANDARDS.

214. That pursuant to the authority contained in Section 591 of the Vehicle Code for areas within the limits of PROJECT that are open to public traffic, RCTC shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. RCTC shall take all necessary precautions for safe operation of RCTC vehicles, the construction contractor's equipment and vehicles and/or vehicles of personnel retained by RCTC, and for the protection of the traveling public from injury and damage from such vehicles or equipment.

215. STATE will accept control and operate and maintain, at its own cost and expense, those segments of the NON-TOLL PROJECT FACILITIES lying within the SHS right-of-way upon granting of RELIEF OF MAINTENANCE, except local roads delegated to local agencies for maintenance. Upon granting of RELIEF OF MAINTENANCE by STATE of the NON-TOLL PROJECT FACILITIES, STATE shall also be deemed to exercise ownership and control of those facilities for which RELIEF OF MAINTENANCE has been granted.

216. After PARTIES agree that all REIMBURSED WORK is complete for Construction, Right-of-Way, Design and SOURCE INSPECTION, billing PARTIES will submit a final accounting for all costs. Based on the final accounting, PARTIES will refund or invoice as necessary in order to satisfy the financial commitments of this AGREEMENT.

217. STATE and RCTC will invoice for funds where the FUNDING SUMMARY shows that either STATE or RCTC provides funds for use by the other. STATE or RCTC will pay invoices within thirty (30) calendar days of receipt of invoice when not paying with Electronic Funds Transfer (EFT). When paying with EFT, STATE or RCTC will pay invoices within five (5) calendar days of receipt of invoice.

218. Use, operation and maintenance of the TOLL FACILITY shall be the subject of a separate TOLL FACILITY Agreement between RCTC and STATE.

219. Upon issuance of an encroachment permit for construction to RCTC 's PROGRESSIVE DESIGN-BUILD ENTITY, and subject to paragraphs 182 through 190 of this AGREEMENT, RCTC shall control and maintain, at its own cost and expense, those portions of PROJECT lying within the SHS right-of-way and, as applicable, within the limits of the INITIAL OPERATING SEGMENT or any subsequent PDB PHASE 2 construction contract. RCTC will also maintain, at RCTC expense, local roads within the SHS right-of-way delegated to local agencies for maintenance and remaining portions of any local road overcrossing structures, including the deck surface and above, as well as all traffic service facilities that may be required for the exclusive benefit or control of local road traffic. This responsibility will remain for each area outside of SHS right-of-way until each area has been relinquished back to local agency. This paragraph shall apply except as specifically set forth in paragraph 108.

220. That upon completion of all work under this AGREEMENT, ownership and title to materials, equipment and appurtenances installed within SHS right-of-way, excluding any toll plazas, gantries and equipment cabinets; conduit, fiber, cameras, readers, signage and supporting or related computerized communications systems; and other toll related toll operations equipment and systems, will automatically be vested in STATE, subject to the TOLL FACILITY Agreement. No further agreement will be necessary to transfer ownership as herein above stated. RCTC shall arrange for the transfer of ownership and title to materials, equipment and appurtenances installed outside of STATE right-of-way, excluding those materials, equipment and appurtenances owned by RCTC as described in the foregoing sentence, to be retained by appropriate local agencies, unless otherwise agreed to by STATE and RCTC in the TOLL FACILITY Agreement.

221. That nothing in the provisions of this AGREEMENT is intended to create duties or obligations to or rights of third parties in this AGREEMENT or affect the legal liability of either party to the AGREEMENT to third parties by imposing any standard of care with respect to the development, design, construction, operation and maintenance of SHS and public facilities different from the standard of care imposed by law or applicable STATE STANDARDS.

222. Neither STATE nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by RCTC, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority or jurisdiction conferred upon RCTC under this AGREEMENT. It is understood and agreed that RCTC, to the extent permitted by law, will defend, indemnify and save harmless STATE and all its officers and employees from all claims, suits or actions of every name, kind and description including but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by RCTC, its contractors, sub-contractors, and/or its agents under this AGREEMENT.

223. Neither RCTC nor any officer or employee thereof is responsible for any injury, damage or liability occurring by reason of anything done or omitted to be done by STATE, its contractors, sub-contractors, and/or its agents under or in connection with any work, authority or jurisdiction conferred upon STATE under this AGREEMENT. It is understood

and agreed that, STATE, to the extent permitted by law, will defend, indemnify and save harmless RCTC and all its officers and employees from all claims, suits or actions of every name, kind and description including but not limited to, tortious, contractual, inverse condemnation or other theories or assertions of liability occurring by reason of anything done or omitted to be done by STATE, its contractors, sub-contractors, and/or its agents under this AGREEMENT.

224. Notwithstanding any other term of this AGREEMENT, existing corridor utility service expenses, including water and electrical, shall remain the responsibility of STATE, whereas RCTC will be responsible for utility service expenses when modifying existing utilities. RCTC will not utilize existing STATE sources for any temporary connection, unless otherwise approved by STATE.

225. That no alteration, or variation of the terms of this AGREEMENT shall be valid unless made in writing and signed by the PARTIES hereto and no oral understanding or agreement which is not incorporated herein shall be binding on any of the PARTIES hereto.

226. A party is not liable for failure to perform the party's obligations if such failure is as a result of Acts of God (including fire, flood, earthquake, storm, hurricane or other natural disaster), war, invasion, act of foreign enemies, hostilities (regardless of whether war is declared), civil war, rebellion, revolution, insurrection, military or usurped power or confiscation, terrorist activities, nationalization, government sanction, blockage, embargo, labor dispute, strike, lockout or interruption.

227. In the event of damage caused by third parties, which may require repair or other remedial response, the PARTIES agree to coordinate to determine which PARTY is responsible for the repair or remedial action; which PARTY's forces or agents are most appropriate to perform the remedial action; and what the mechanism for reimbursement may be. To the extent STATE does not exercise its authority to seek recovery of response costs from third parties, STATE expressly authorizes RCTC to exercise any and all authority conferred as result of Vehicle Code sections 17000-17303 with respect to actions to recover response costs.

228. If the PARTIES are unable to reach agreement on a particular issue, including concerns over timeliness of submittal reviews or performance of REIMBURSED WORK, the PARTIES agree to promptly follow a mutually agreed upon issue resolution process. The final form and content of the issue resolution process will be mutually developed prior to commencement of construction. The primary objective of the issue resolution process is timely decision making.

229. To form an Executive Oversight Committee (EOC) as part of the issue resolution process. The EOC will be available to provide direction to the PROJECT team when issues are elevated to the EOC. The EOC will be the final step in the PROJECT level dispute resolution process. The primary objective of the EOC will be to ensure that PROJECT stays on schedule and issues are resolved in a timely manner. The EOC will meet on an as-needed basis to resolve issues that otherwise threaten to delay the overall PROJECT schedule or adversely impact PROJECT costs.

230. That no waiver of any claim, defense or obligation shall be imputed to either party as a result of that party's failure or delay in assertion of said claim, defense or obligation.

231. This AGREEMENT will terminate upon selection of the "no project" alternative as a result of the environmental review process, COMPLETION OF WORK or upon 30 calendar days' written notification to terminate and acceptance between STATE and RCTC, whichever occurs first. However, all obligations to pay amounts accrued or due and payable as of the date of termination, indemnification, document retention, audit, claims, environmental commitment, legal challenge, ownership articles and other provisions that, by their express terms survive termination or expiration of this AGREEMENT, will remain in effect until terminated or modified in writing by mutual agreement.

232. RCTC will operate under the STATE Disadvantaged Business Enterprise (DBE) Program, and will develop contract-specific DBE goals for the applicable PROJECT contracts with subcontracting opportunities, including the PROGRESSIVE DESIGN-BUILD contract. RCTC will report its DBE participation on the PROJECT through STATE.

233. If any portion of this AGREEMENT is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

234. PARTIES agree to sign a CLOSURE STATEMENT to terminate this AGREEMENT. However, all indemnification, document retention, audit, claims, environmental commitment, legal challenge, maintenance and ownership articles will remain in effect until terminated or modified in writing by mutual agreement or expired by the statute of limitations.

235. PARTIES intend this AGREEMENT to be their final expression that supersedes any oral understanding or writings pertaining to the scope of work of this AGREEMENT.

236. The attached Attachment A and Exhibits A through F are incorporated into this AGREEMENT by reference.

(a) Attachment A- FUNDING SUMMARY with SPENDING SUMMARY

(b) Exhibit A PROJECT DESCRIPTION

(c) Exhibit B PROJECT ORGANIZATIONAL CHART

(d) Exhibit C REIMBURSED WORK SUMMARY

(e) Exhibit D- STATE BETTERMENTS SUMMARY

(f) Exhibit E – DEPARTMENT FURNISHED MATERIAL

(g) Exhibit F- closure statement

(h) Exhibit G- Contact information.

237. **Revising Exhibits**. PARTIES can revise this AGREEMENT by mutually amending, replacing, or providing additional pages to the Exhibits that must be signed by authorized representatives of PARTIES. The revised exhibit will thereafter supersede the previous Exhibit and become part of this AGREEMENT.

238. Amendment to AGREEMENT. Except as provided in the preceding section concerning Exhibit amendments, the terms of this AGREEMENT can be changed only by a formal written amendment executed by all PARTIES.

**SIGNATURE PAGE TO
COOPERATIVE AGREEMENT
FOR PROGRESSIVE DESIGN-BUILD OF THE INTERSTATE 15 EXPRESS LANES
PROJECT SOUTHERN EXTENSION**

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

By:_____
Catalino A. Pining III
District 8 Director

RIVERSIDE COUNTY
TRANSPORTATION COMMISSION

By:_____
Aaron Hake
Executive Director

APPROVED AS TO FORM AND
PROCEDURE:

By:_____

APPROVED AS TO FORM:
Best Best & Krieger LLP

By:_____
Steven C. DeBaun,
RCTC General Counsel

CERTIFIED AS TO FUNDS:

By:_____
District Budget Manager

CERTIFIED AS TO FINANCIAL TERMS
AND POLICIES:

By:_____
Accounting Administrator

Attachment A

FUNDING SUMMARY

December 1, 2025

Funding Table

Funding Type	Funding Source	Party	PA/ED	PS&E		R/W Support	R/W Capital	DFM	Construction Capital	Construction Support	Totals
STBG	Federal	Commission	$29,962,000	$4,080,000	*				$16,620,000		**$50,662,000**
CMAQ	Federal	Commission	$56,586,000	$45,000,000	*			$50,000	$31,607,000	$15,455,000	**$148,698,000**
CRP	Federal	Commission	$3,966,000								**$3,966,000**
HIP	Federal	Commission	$3,000,000								**$3,000,000**
STIP	State	Commission							$37,416,000		**$37,416,000**
CRRSAA	Federal	Commission	$6,314,000								**$6,314,000**
Toll Revenue	Local	Commission							$480,324,250	$3,863,750	**$484,188,000**
Total:			**$99,828,000**	**$49,080,000**		**$0**	**$0**		**$565,967,250**	**$19,318,750**	**$734,244,000**

*Toll Credits Applied

SPENDING SUMMARY

Spending Summary

Funding Type	PA&ED		PS&E		DFM		Construction Capital		Construction Support		Totals
	Department	Commission	Department	Commission	Department	Commission	Department	Commission	Department	Commission	
STBG	0	$29,962,000	0	$4,080,000	0		0	$16,620,000	0		**$50,662,000**
CMAQ	0	$56,586,000	0	$45,000,000	0	$50,000	0	$31,607,000	0	$15,455,000	**$148,698,000**
CRP	0	$3,966,000	0		0		0		0		**$3,966,000**
HIP	0	$3,000,000	0		0		0		0		**$3,000,000**
STIP	0		0		0		0	$37,416,000	0		**$37,416,000**
CRRSAA	0	$6,314,000	0		0		0		0		**$6,314,000**
Toll Revenue	0		0		0		0	$480,324,250	0	$3,863,750	**$484,188,000**
Total:	**$0**	**$99,828,000**	**$0**	**$49,080,000**	**$0**	**$50,000**	**$0**	**$565,967,250**	**$0**	**$19,318,750**	**$734,244,000**

Exhibit A

PROJECT DESCRIPTION

The Project constructs new lanes along I-15 between post mile (PM) 20.3 and PM 40.1 in Riverside County, California. The primary component of the I-15 Express Lanes Project Southern Extension (ELPSE) Project (Project) would be the addition of two tolled express lanes in both the northbound (NB) and southbound (SB) directions within the median of Interstate (I-) 15 from State Route (SR-) 74 (Central Avenue) (PM 22.3) in the City of Lake Elsinore, through the unincorporated Riverside County community of Temescal Valley, to El Cerrito Road (PM 38.1) in the City of Corona, for a distance of approximately 15.8 miles.

The Project would also add a SB auxiliary lane between both the Main Street (PM21.2) Off-Ramp and SR-74 (Central Avenue) On-Ramp (approximately 0.75 mile), and the SR-74 (Central Avenue) Off-Ramp and Nichols Road On-Ramp (PM 23.9) (approximately 1 mile). Along with the lane additions, which would extend from PM 21.2to PM 38.1, the Project would include widening of up to 15 bridges; potential construction of noise barriers, retaining walls, and drainage systems; and implementation of electronic toll collection equipment and signs.

In addition, due to the SB express lanes access between the Cajalco Road and Weirick Road Interchanges, the SB I-15 Weirick Road Off-Ramp would be configured as a dual-lane exit. Associated improvements for the toll lanes, including advance signage and transition striping, would extend approximately 2 miles from each end of the express lane limits to PM 20.3 in the south and PM 40.1 in the north. The proposed lane additions and supporting infrastructure are expected to be constructed primarily within the existing State right-of-way. No new permanent right-of-way is expected to be required as part of this Project.

Figure 1

PROJECT MAP

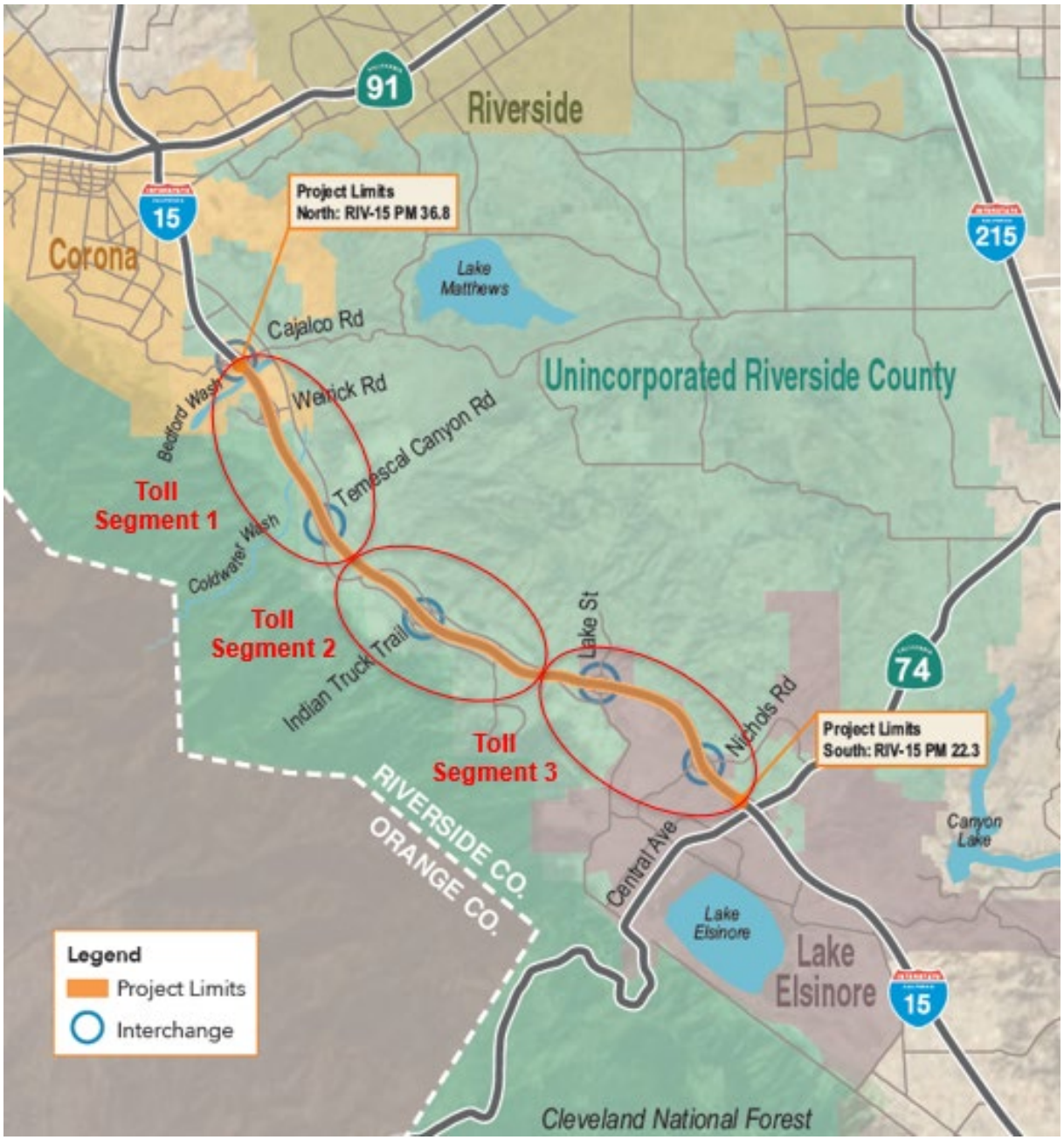


Figure 2

Typical Cross-Sections

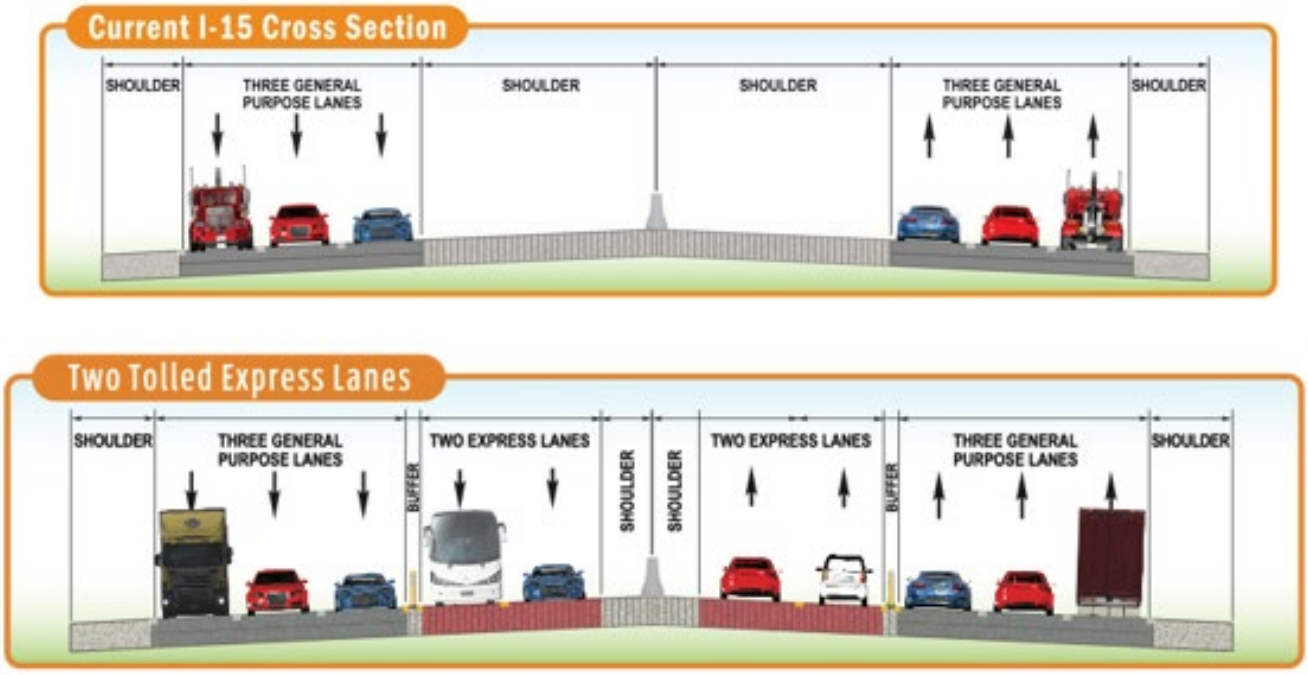


Figure 3

Typical Toll Facility Tolling Read Point

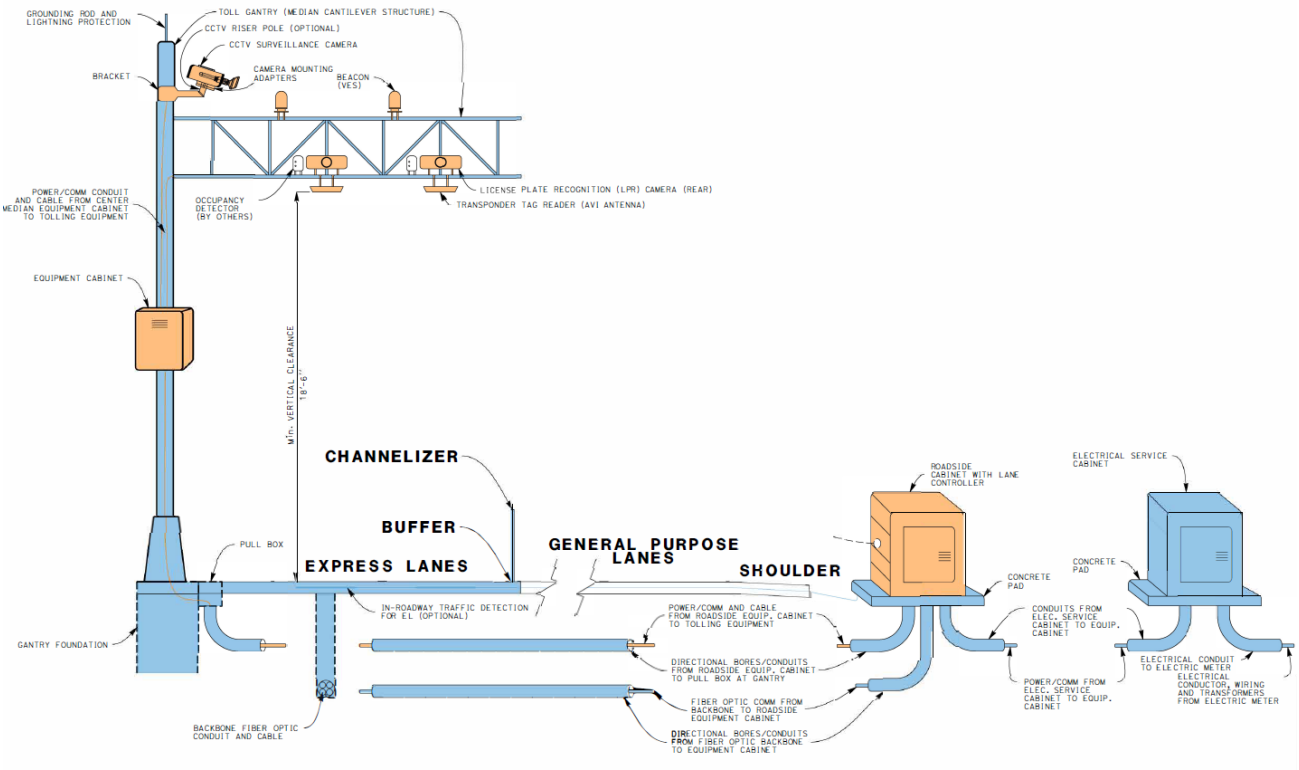


Exhibit B

PROJECT ORGANIZATIONAL CHART

I-15 Express Lanes Project Southern Extension (I-15 ELPSE)

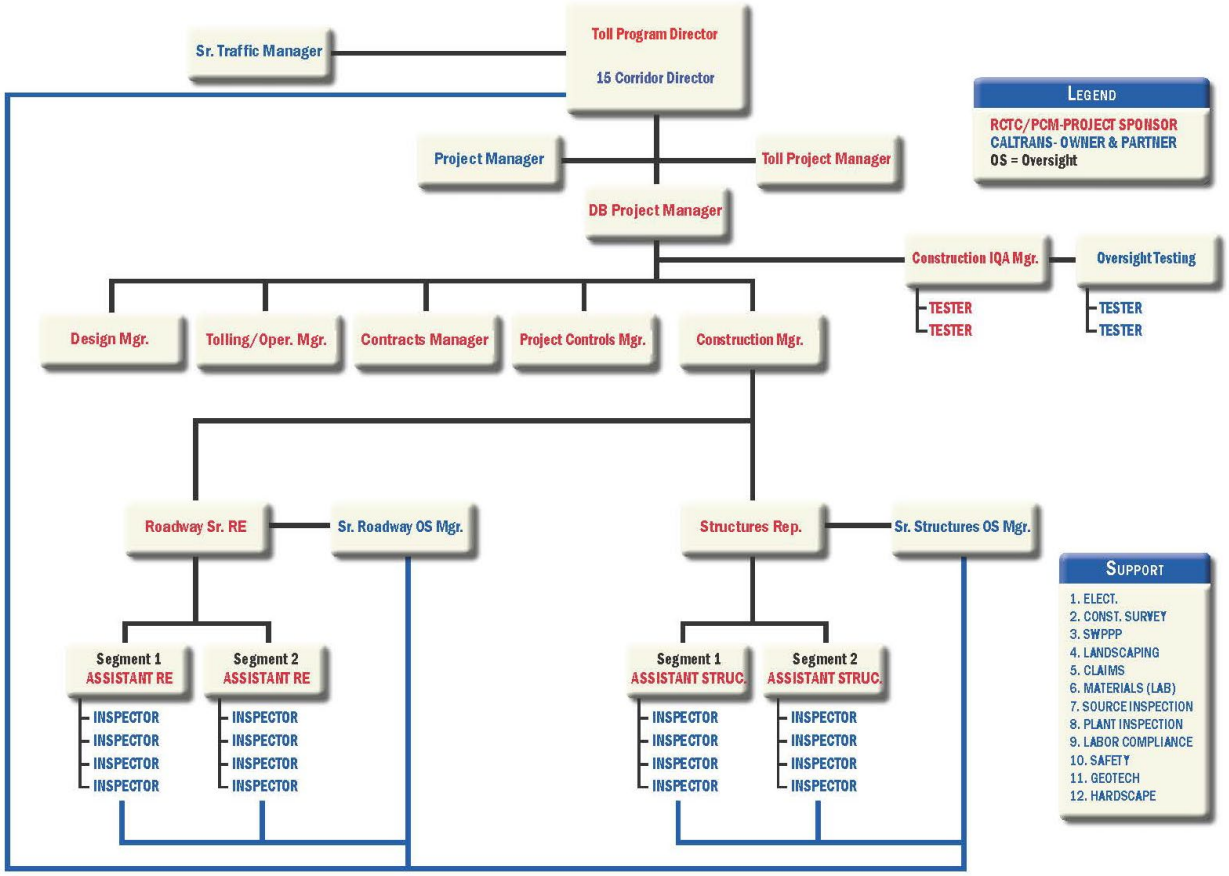


Exhibit C

ESTIMATED REIMBURSED WORK SUMMARY

DIVISION	HOURS		COST	
	PDB Phase 1	PDB Phase 2	PDB Phase 1	PDB Phase 2
METS	150	3,004	$ 29,342	$ 608,197
DES Design/Support	3,800	750	$ 1,013,518	$ 207,038
DES Construction	750	42,000	$ 181,448	$ 10,516,699
District Design	6,940	8,802	$ 1,821,636	$ 2,391,244
Traffic Ops	1,500	2,204	$ 311,559	$ 473,807
Maintenance	120	200	$ 13,122	$ 22,635
District Construction	800	54,986	$ 197,842	$ 14,074,083
Fontana Lab	100	3,700	$ 22,700	$ 869,280
Project Management	800	3,200	$ 254,996	$ 1,055,683
Right-of-Way	300	500	$ 70,609	$ 121,800
Planning/LAO	300	400	$ 72,249	$ 99,704
Environmental	150	700	$ 29,903	$ 144,431
TOTALS	15,710	120,446	$ 4,018,924	$ 30,584,601

Notes:

1. The Reimbursed Work Summary includes work covering both PDB Phase 1 and PDB Phase 2 for the Initial Operating Segment only, which encompasses Toll Segment 1 as shown in Figure 1 of Exhibit A, as well as an express lane transitional areas to approximately Indian Truck Trail. Substantive changes to the scope of the Initial Operating Segment, as well as the construction of additional segments, will require an amendment to this Agreement and Exhibit C.

2. Designated Key Personnel:

    a. Project Director
    b. Project Manager
    c. Roadway Design Manager
    d. Structures Design Manager
    e. Environmental Manager
    f. Traffic Operations Manager

Exhibit D

STATE BETTERMENTS SUMMARY

There are no STATE requested BETTEMENTS identified at this time. Any STATE Betterments identified during PDB Phase 1 will be added via an amendment to this agreement

Exhibit E

DEPARTMENT FURNISHED MATERIAL (DFM)

The STATE shall provide the following DEPARTMENT FURNISHED MATERIALS in total value estimated value of $50,000

1. 334L cabinet for Ramp Metering and 332LS cabinet for signals
2. Update Controller model to 2070E
3. Update Isolator Model to 242L

Exhibit F
(SAMPLE)

COOPERATIVE AGREEMENT CLOSURE STATEMENT

STATE and RCTC agree that all scope, cost and schedule commitments included in the Cooperative Agreement for PROGRESSIVE DESIGN-BUILD of the Interstate 15 Express Lanes Project Southern Extensions entered into as of _____ (the "Agreement") have been completed. As of the date this COOPERATIVE AGREEMENT CLOSURE STATEMENT has been executed by the representatives of the PARTIES, as set forth below, the Agreement shall terminate.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	RIVERSIDE COUNTY TRANSPORTATION COMMISSION
By: _____ District 8 Director	By: _____ Executive Director
Date: _____	Date: _____

Exhibit G

CONTACT INFORMATION

The information provided below indicates the primary contact information for each PARTY to this AGREEMENT. PARTIES will notify each other in writing of any personnel or location changes. Contact information changes do not require an amendment to this AGREEMENT.

Riverside County Transportation Commission

Jeff Dietzler, Capital Projects Manager (Tolling)

Phone Number: (951) 787-4019

Billing Address: __4080 Lemon Street, 3rd Floor_____
Riverside, CA 92502

CALTRANS

Project Manager: Ashraf Habbak

Phone Number: (909) 838-2280

E-mail: Ashraf.Habbak@dot.ca.gov

AGENDA ITEM 9

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	February 23, 2026
TO:	Western Riverside County Programs and Projects Committee
FROM:	John Tarascio, Senior Capital Projects Manager
THROUGH:	Erik Galloway, Project Delivery Director
SUBJECT:	State Route 71 / State Route 91 Interchange Improvement Project – Construction Contingency Increase

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Approve an increase in the Contract Contingency for Agreement No. 20-31-042-00 between the Commission and Skanska USA Civil West California District Inc. (Skanska) for construction of the State Route 71 / State Route 91 Interchange Improvement project (Project), from $14,460,000 to $16,803,000 of the agreement amount of $120,500,000, an increase of $2,343,000, for a total amount not to exceed $137,303,000; and
2) Authorize the Chair or Executive Director, or designee, to approve contingency work up to the total amount not to exceed as required for the Project.

BACKGROUND INFORMATION:

Project Scope

The Project was identified and approved by voters in 2009 as part of Measure A and was included in the Measure A 10-Year Western Riverside County Highway Delivery Plan. The Project improves mobility on SR-91 and SR-71 by enhancing operations and the capacity of the 71/91 interchange by constructing the following:

- Construct a direct two-lane connector ramp from SR-91 eastbound to SR-71 northbound to replace the existing single-lane loop.
- Construct SR-91 eastbound auxiliary lane to improve access to the new direct connector to SR-71 northbound.
- Construct overhead bridge ramp over BNSF tracks to improve access to SR-71 northbound connector and SR-91 eastbound.
- Realign SR-71 southbound to create space for the new direct connector.
- Widen SR-91 eastbound bridge over Fresno Creek to improve access to SR-91 eastbound from Green River on-Ramp.
- Expand SR-71 southbound to SR-91 eastbound underpass connector from single-lane to two-lane connector.

On October 12, 2022, the Commission awarded Agreement No. 20-31-042-00 to Skanska, as the lowest responsive, responsible bidder, for the construction of the Project in the amount of $120,500,000. Additionally, the Commission approved a 12 percent contingency in the amount of $14,460,000 to cover potential change orders during construction for a total not to exceed amount of $134,960,000.

Project Status

Skanska received full notice to proceed for construction on January 31, 2023. Construction commenced with the main bridge elements which were completed and opened to the public on June 21, 2025. Substantial completion was granted to Skanska on August 19, 2025. Currently, Skanska is completing punch list and closeout activities for the Project which is expected to be finalized by the end of February 2026. Final project closeout and Caltrans acceptance is anticipated by the end of March 2026.

DISCUSSION

During construction of the bridge Cast-in-Drilled-Hole (CIDH) pile foundations, the Project encountered several significant and unforeseen subsurface conditions. These included extremely hard drilling conditions with large quantities of cobbles and boulders, elevated groundwater levels, and buried man-made objects such as abandoned concrete structures. These subsurface conditions were materially different from those indicated in the Project plans and contract documents, qualifying as Differing Site Conditions (DSCs) under the contract. These DSCs substantially impacted the construction of numerous CIDH pile foundations, resulting in additional cost increases and extended work durations. Of the 13 CIDH pile foundations required for the Project, 10 were impacted by DSCs.

To minimize schedule impacts and mitigate the substantial costs associated with project schedule delays, RCTC's construction team worked with Skanska to develop mitigation measures to re-sequence the work operations, mobilize additional equipment and manpower, work extended shifts and accelerate critical operations. Through these efforts, the Project was able to maintain schedule and complete on time despite the significant challenges encountered.

However, despite the team's best efforts in mitigating costs, the cumulative effect of the numerous DSC's has resulted in cost impacts beyond the original Commission-authorized contract contingency. Staff forecasts that the Project will exceed the contract contingency by $2,343,000 which is necessary to fully complete and close out the Project. A summary of the construction Contract Change Orders (CCOs) for the Project is provided in Table 1.

Table 1 – Summary of Contract Change Orders

CCO Category	CCO Amount	% of CCO's Issued
Differing Site Conditions (DSC's)	$13,189,784	78%
Maintenance During Construction (*Traffic, Electrical, Trash, Drainage, Public Damage Repairs, etc.*)	$2,462,637	15%
Other Project Change Orders	$1,150,579	7%
Total CCOs	**$16,803,000**	
Total Authorized Contract Contingency	$14,460,000	
Contract Contingency Shortfall	**($2,343,000)**	

Staff is requesting an additional contract contingency amount of $2,343,000, which is approximately a 2 percent increase or a total of 14 percent (approximately). Approval of this request will allow the Commission to finalize the Project and maintain compliance with its contractual obligations. Table 2 provides an overall summary of the forecasted final construction contract value, including the additional contingency being requested.

Table 2 – Construction Contract Summary

	Construction Contract (Skanska)
Award	$ 120,500,000
Initial Contract Contingency (12%)	$ 14,460,000
Additional Contract Contingency Required (approximately 2%)	$ 2,343,000
Forecast Final Contract Value	**$ 137,303,000**

FISCAL IMPACT:

Although the construction contract has exceeded its original authorized contingency, the overall Project remains within its approved budget and there is sufficient construction funding available to cover these additional costs. Table 3 summarizes the funding sources currently allocated to the construction phase of the Project in comparison with the forecasted final construction contract value. In summary, this request for additional contingency will not increase the overall project budget and will be funded from existing allocations.

Table 3 - Funding Source Breakdown (Construction Phase)

	Fund Source	Dollar Amount	Fund Type
1	LY10 Earmarks CA669	$600,000	Federal
2	LY10 Earmarks CA428	$1,332,000	Federal
3	LY60 Earmarks CA793	$158,000	Federal
4	Surface Transportation Block Grant	$15,214,000	Federal
5	SB1 Trade Corridors Enhancement Program (TCEP) – Roadway & Structures	$58,108,000	State
6	State Transportation Improvement Program (STIP) – Roadway & Structures	$57,507,000	State
7	STIP – COVID Relief Funds (CRRSAA)	$100,000	State
8	Measure A Match	$4,284,000	Local
	Total Funding	**$137,303,000**	
	Final Construction Contract Value	**$137,303,000**	

Financial Information					
In Fiscal Year Budget:	Yes	Year:	FY 2025/26	Amount:	$2,343,000
Source of Funds:	STBG, STIP, Federal Earmarks, TCEP			Budget Adjustment:	No
GL/Project Accounting No.:	003021 81301 00000 0000 262 31 81301				
Fiscal Procedures Approved:				Date:	02/12/2026

AGENDA ITEM 10

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	February 23, 2026
TO:	Western Riverside County Programs and Projects Committee
FROM:	David Lewis, Capital Projects Manager
THROUGH:	Erik Galloway, Project Delivery Director
SUBJECT:	On-Call Highway Design and Environmental Services for Capital and Toll Programs Projects

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Award the following agreements to provide on-call highway design and environmental services for capital and toll programs projects for a three-year term, and one two-year option to extend the agreement, in an amount not to exceed an aggregate value of $30,000,000;
   a) Agreement No. 26-31-023-00 HDR Engineering, Inc.;
   b) Agreement No. 26-31-047-00 HNTB Corporation;
   c) Agreement No. 26-31-048-00 Kimley-Horn and Associates, Inc.;
   d) Agreement No. 26-31-049-00 Parsons Transportation Group, Inc.;
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the agreements, on behalf of the Commission; and
3) Authorize the Executive Director, or designee, to execute task orders awarded to the consultants under the terms of the agreements.

BACKGROUND INFORMATION:

The Riverside County Transportation Commission (Commission) has an ongoing need for professional engineering and environmental services to support the delivery of highway capital and toll program projects throughout Riverside County. These projects routinely advance through the Caltrans Project Delivery phases, including Project Initiation Document (PID), Project Approval and Environmental Document (PA&ED), and final design (Plans, Specifications, and Estimates).

Historically, the Commission has procured these services on a project-specific basis as needs arise. While effective, this approach can result in longer procurement timelines and limited flexibility when responding to changing project priorities, funding availability, partner agency requests, or accelerated delivery schedules. Establishing an on-call bench of pre-qualified consultants provides a more efficient and streamlined delivery method by completing solicitation, selection, and contract execution in advance.

The intent of this procurement is to establish a bench of highly qualified consulting firms to provide on-call highway design and environmental services in support of the Commission's Capital and Toll Programs. The on-call structure allows the Commission to issue task orders on an as-needed basis, enabling timely initiation of work, improved coordination with Caltrans and partner agencies, and enhanced ability to deliver projects on schedule and within budget.

Services performed under this on-call agreement may be funded through a combination of Federal Highway Administration (FHWA), Federal Transit Administration (FTA), State of California funds (including Proposition 1B), toll revenues, and local funds, depending on the individual task order and project funding strategy.

DISCUSSION

The on-call highway design and environmental services contracts are intended to support a broad range of highway capital and toll program projects across Riverside County. Services will be authorized through individual task orders issued at the discretion of the Commission based on project needs, schedule considerations, and available funding. No work or funding is guaranteed to any consultant, and each task order will be evaluated independently.

The scope of services includes, but is not limited to, feasibility studies, Project Study Reports/Project Development Support (PSR/PDS), PID, environmental clearance documents, design engineering, and final design (PS&E), as well as supporting technical studies and coordination required to advance projects through the Caltrans Project Delivery process.

Based on recent project experience, typical estimated cost ranges for projects advanced using the on-call bench are anticipated to be as follows:

- PID: approximately $2–3 million
- PA&ED: approximately $5–7 million
- PS&E: approximately $8–10 million

The on-call bench is expected to support a variety of current and future projects, including but not limited to:

- State Route 91 Third Express Lane – PSR/PDS
- SR-91 Pavement Rehabilitation – PA&ED
- Interstate 15/SR-91 Express Toll Connector – PA&ED
- I-15 Bundy Canyon Road Interchange – PA&ED
- I-15 Wildomar Trail Interchange – PA&ED
- Highland Springs – Final Design
- Future Santa Ana River Trail (SART) phases
- Partner and local agency highway projects supported or administered by the Commission

Establishing an on-call bench provides the Commission with flexibility to advance projects as funding becomes available, respond to schedule changes, support the delivery of local agency project requests, and efficiently manage multiple projects concurrently, while maintaining consistency in quality, oversight, and compliance with applicable federal, state, and local requirements.

Procurement

Pursuant to Government Code 4525 et seq, the selection of architect, engineer, and related services shall be on the basis of demonstrated competence and on professional qualifications necessary for the satisfactory performance of the services required. Therefore, staff used the qualification method of selection for the procurement of these services. Evaluation criteria included elements such as qualifications of firm, qualifications of personnel, project understanding and approach, and the ability to respond to the requirements set forth under the terms of the request for qualifications (RFQ).

RFQ No. 26-31-023-00 for on-call highway design and environmental services for capital and toll programs projects was released by staff on November 4, 2025. The RFQ was posted on the Commission's PlanetBids website, which is accessible through the Commission's website. Through PlanetBids, 95 firms downloaded the RFQ; 18 of these firms are located in Riverside County. A pre-submittal meeting was held on November 12, 2025, and was attended by 25 firms. Staff responded to all questions submitted by potential proposers prior to the November 25, 2025, clarification deadline. Nine (9) firms - AECOM Technical Services, Inc. (Orange, CA); GFT Infrastructure, Inc. (Riverside, CA); HDR Engineering, Inc. (Riverside, CA); HNTB Corporation (Ontario, CA); Jacobs Engineering Group Inc. (Riverside, CA); Kimley-Horn and Associates, Inc. (Riverside, CA); Parsons Transportation Group, Inc. (Corona, CA); TRC Engineers, Inc. (Santa Ana, CA); and WSP USA Inc. (San Bernardino, CA) - submitted responsive and responsible statements of qualifications (SOQ) prior to the 2:00 p.m. submittal deadline on December 9, 2025.

The firms were scored by an evaluation committee comprised of Commission and Caltrans staff. The committee evaluated the written SOQs pursuant to the criteria set forth in the RFQ and shortlisted and invited six (6) firms (AECOM Technical Services, Inc., HDR Engineering, Inc., HNTB Corporation, Jacobs Engineering Group Inc., Kimley-Horn and Associates, Inc., and Parsons Transportation Group, Inc.) to the interview phase of the evaluation and selection process. Interviews were conducted on January 21, 2026.

As a result of the evaluation committee's assessment of the written SOQs and interviews, the evaluation committee determined four (4) firms – HDR Engineering, Inc., HNTB Corporation, Kimley-Horn and Associates, Inc., and Parsons Transportation Group, Inc.– to be the most qualified firms to provide on-call highway design and environmental services for capital and toll programs projects. The evaluation committee recommends contract awards to HDR Engineering, Inc., HNTB Corporation, Kimley-Horn and Associates, Inc., and Parsons Transportation Group, Inc. for a three-year term, and one, two-year option to extend the agreements, in the aggregate amount of $30,000,000, as these firms earned the highest total evaluation scores.

The multiple awards, on-call, indefinite delivery/ indefinite quantity task order type contracts do not guarantee work to any of the awardees; therefore, no funds are guaranteed to any consultant. Pre-qualified consultants will be selected for specific tasks based on information contained in their proposals for the specific tasks. Services will be provided through the Commission's issuance of task orders to the consultants on an as-needed basis. To ensure the consultants' prices are fair and reasonable, the contracts are subject to a pre-award audit.

The Commission's model on-call professional services agreement will be entered into with each consultant firm, subject to any changes approved by the Executive Director, pursuant to legal counsel review. Staff oversight of the contracts and task orders will maximize the effectiveness of the consultants and minimize costs to the Commission.

FISCAL IMPACT:

The Commission seeks authorization to establish on-call highway design and environmental services agreements with an aggregate not to exceed amount of $30,000,000 for an initial three-year term, with two one-year options to extend, subject to Commission approval and funding availability. The on-call agreements are indefinite delivery/indefinite quantity contracts and do not guarantee any minimum amount of work or funding. Expenditures will be authorized only through individual task orders issued on an as-needed basis and will be limited to available project funding.

Financial Information							
In Fiscal Year Budget:	Yes	Year:	FY 2025/26+	Amount:	$30,000,000		
Source of Funds:	Various – Federal, State, Local			Budget Adjustment:		No	
GL/Project Accounting No.:	Preliminary Engineering – XXXXX – 81101 – XXX – 31 - XXXXX Final Design – XXXXX – 81102 – XXX – 31 - XXXXX						
Fiscal Procedures Approved:					Date:	02/11/2026	

Attachments:

1) Draft Agreement No. 26-31-023-00 With HDR Engineering, Inc.
2) Draft Agreement No. 26-31-047-00 With HNTB Corporation
3) Draft Agreement No. 26-31-048-00 With Kimley-Horn and Associates, Inc.
4) Draft Agreement No. 26-31-049-00 With Parsons Transportation Group, Inc.

Agreement No 26-31-023-00

**PROFESSIONAL SERVICES AGREEMENT
WITH FHWA, STATE, FTA AND PROPOSITION 1B FUNDING ASSISTANCE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT WITH
HDR ENGINEERING, INC.
FOR ON-CALL HIGHWAY DESIGN AND ENVIRONMENTAL SERVICES
FOR CAPITAL AND TOLL PROGRAMS PROJECTS**

Parties and Date.

This Agreement is made and entered into this ___ day of _____, 2026, by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION ("the Commission") and **HDR ENGINEERING, INC. ("Consultant"), a Nebraska corporation.** The Commission and Consultant are sometimes referred to herein individually as “Party”, and collectively as the “Parties”.

Recitals.

A. On November 8, 1988 the Voters of Riverside County approved Measure A authorizing the collection of a one-half percent (1/2 %) retail transactions and use tax (the "tax") to fund transportation programs and improvements within the County of Riverside, and adopting the Riverside County Transportation Improvement Plan (the "Plan").

B. Pursuant to Public Utility Code Sections 240000 et seq., the Commission is authorized to allocate the proceeds of the Tax in furtherance of the Plan.

C. On November 5, 2002, the voters of Riverside County approved an extension of the Measure A tax for an additional thirty (30) years for the continued funding of transportation and improvements within the County of Riverside.

D. A source of funding for payment for on-call professional consulting services provided under this Agreement may be Federal Highway Administration (“FHWA”) funds administered by the California Department of Transportation (“Caltrans”) from the United States Department of Transportation, Proposition 1B funds (“Prop 1B”) funds administered by Caltrans, and/or funds from the Federal Transit Administration (“FTA”). This Agreement shall not be deemed to be approved by the Commission until the certification shown in Exhibit “E” attached hereto and incorporated herein by reference, is executed.

E. Consultant desires to perform and assume responsibility for the provision of certain on-call design engineering and environmental services for the construction of commuter rail station capital improvement projects in the County of Riverside, California. Services shall be provided on the terms and conditions set forth in this Agreement and in the task order(s) to be solicited, awarded and authorized by Commission as further described in this Agreement (“Task Order”). Consultant represents that it is experienced in providing such services to public clients, is licensed in the State of California (if necessary), and is familiar with the plans of the Commission.

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F. Commission desires to engage Consultant to render such services on an on-call basis. Services shall be ordered by Task Order(s) to be issued pursuant to this Agreement for future projects as set forth herein and in each Task Order (each such project shall be designated a “Project” under this Agreement).

Terms.

1. General Scope of Services. Consultant shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise, and incidental and customary work necessary to fully and adequately supply the on-call design engineering and environmental services for the Projects ("Services"). The Services are generally described in Exhibit "A" attached hereto and incorporated herein by reference. The Services shall be more particularly described in the individual Task Orders issued by the Commission’s Executive Director or designee. No Services shall be performed unless authorized by a fully executed Task Order. All Services shall be subject to, and performed in accordance with, this Agreement, the relevant Task Order, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

2. Task Orders; Commencement of Services; Schedule of Services. Services under this Agreement shall be requested by the Commission pursuant to Task Order requests. If Commission accepts Consultant’s Task Order proposal, Commission shall issue a purchase order or executed task order for the Services (“Commission’s Task Order Authorization”). Consultant’s agreement to the final terms of a proposed Task Order, Commission’s Task Order Authorization and Consultant’s commencement of the Services shall indicate the Parties’ agreement to the terms of the relevant Task Order.

Consultant shall commence Services under a Task Order within five (5) days of receiving Commission’s Task Order Authorization.

Consultant shall perform the Services expeditiously, in accordance with the Schedule of Services set forth in a Task Order. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, Commission shall respond to Consultant's submittals in a timely manner. Upon request of the Commission, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3. Pre-Award Audit. As a result of the funding for this Project, and to the extent Caltrans procedures apply in connection therewith, issuance of a “Notice to Proceed” or

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other authorization to proceed under a Task Order may be contingent upon completion and approval of a pre-award audit. Any questions raised during the pre-award audit shall be resolved before the Commission will consider approval of this Agreement. The funding provided under this Agreement is contingent on meeting all funding requirements and could be withdrawn, thereby entitling the Commission to terminate this Agreement, if the procedures are not completed. The Consultant's files shall be maintained in a manner to facilitate State process reviews. In addition, Caltrans may require that prior to performance of any work for which funding reimbursement through Caltrans is requested and provided, that Caltrans must give to Commission an "Authorization to Proceed".

4. Audit Procedures.

4.1 Consultant and certain subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an Independent Cost Review (ICR) Audit, or a CPA ICR audit work paper review. If selected for audit or review, this Agreement, Consultant's cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is Consultant's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. This Agreement, Consultant's cost proposal, and ICR shall be adjusted by Consultant and approved by the Commission's contract manager to conform to the audit or review recommendations. Consultant agrees that individual terms of costs identified in the audit report shall be incorporated into this Agreement by this reference if directed by Commission at its sole discretion. Refusal by Consultant to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of the Agreement terms and cause for termination of this Agreement and disallowance of prior reimbursed costs. Additional audit provisions applicable to this Agreement are set forth in Sections 22 and 23 of this Agreement..

4.2 During any Caltrans' review of the ICR audit work papers created by the Consultant's independent CPA, Caltrans will work with the CPA and/or Consultant toward a resolution of issues that arise during the review. Each party agrees to use its best efforts to resolve any audit disputes in a timely manner. If Caltrans identifies significant issues during the review and is unable to issue a cognizant approval letter, Commission will reimburse the Consultant at an accepted ICR until a FAR (Federal Acquisition Regulation) compliant ICR {e.g. 48 CFR Part 31; GAGAS (Generally Accepted Auditing Standards); CAS (Cost Accounting Standards), if applicable; in accordance with procedures and guidelines of the American Association of State Highways and Transportation Officials (AASHTO) Audit Guide; and other applicable procedures and guidelines is received and approved by Caltrans.

Accepted rates will be as follows:

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a. If the proposed rate is less than one hundred fifty percent (150%) - the accepted rate reimbursed will be ninety percent (90%) of the proposed rate.

b. If the proposed rate is between one hundred fifty percent (150%) and two hundred percent (200%) - the accepted rate will be eighty-five percent (85%) of the proposed rate.

c. If the proposed rate is greater than two hundred percent (200%) - the accepted rate will be seventy-five percent (75%) of the proposed rate.

4.3 If Caltrans is unable to issue a cognizant letter per Section 4.2 above, Caltrans may require Consultant to submit a revised independent CPA-audited ICR and audit report within three (3) months of the effective date of the Caltrans' management letter. Caltrans will then have up to six (6) months to review the Consultant's and/or the independent CPA's revisions.

4.4 If the Consultant fails to comply with the provisions of this Section 4, or if Caltrans is still unable to issue a cognizant approval letter after the revised independent CPA audited ICR is submitted, overhead cost reimbursement will be limited to the accepted ICR that was established upon initial rejection of the ICR and set forth in Section 4.2 above for all rendered services. In this event, this accepted ICR will become the actual and final ICR for reimbursement purposes under this Agreement.

4.5 Consultant may submit to Commission final invoice only when all of the following items have occurred: (1) Caltrans accepts or adjusts the original or revised independent CPA audited ICR; (2) all work under this Agreement has been completed to the satisfaction of Commission; and, (3) Caltrans has issued its final ICR review letter. The Consultant must submit its final invoice to Commission no later than sixty (60) calendar days after occurrence of the last of these items. The accepted ICR will apply to this Agreement and all Task Orders issued under this Agreement, and all other agreements executed between the Commission and the Consultant, either as a prime or subconsultant, with the same fiscal period ICR.

5. Term.

5.1 This Agreement shall go into effect on the date first set forth above, contingent upon approval by Commission, and Consultant shall commence work after notification to proceed by Commission's Contract Administrator. This Agreement shall remain in effect for three years from the Effective Date, unless extended by contract amendment. The Commission may extend the term of this Agreement, in its sole discretion, for one additional two (2) year period.

5.2 Consultant is advised that any recommendation for contract award is not binding on Commission until this Agreement is fully executed and approved by the Commission.

5.3 This Agreement shall remain in effect until the date set forth above, unless earlier terminated as provided herein. Consultant shall complete the Services

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within the term of this Agreement, and shall meet any other established schedules and deadlines. All applicable indemnification provisions of this Agreement shall remain in effect following the termination of this Agreement.

6. Commission's Contract Administrator. The Commission hereby designates the Commission's Executive Director, or his or her designee, to act as its Contract Administrator for the performance of this Agreement ("Commission's Contract Administrator"). Commission's Contract Administrator shall have the authority to act on behalf of the Commission for all purposes under this Agreement. Commission's Contract Administrator shall also review and give approval, as needed, to the details of Consultant's work as it progresses. Consultant shall not accept direction or orders from any person other than the Commission's Contract Administrator or his or her designee.

7. Consultant's Representative. Consultant hereby designates **Mark Hager** to act as its Representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to act on behalf of Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his or her professional skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement. Consultant shall work closely and cooperate fully with Commission's Contract Administrator and any other agencies which may have jurisdiction over, or an interest in, the Services. Consultant's Representative shall be available to the Commission staff at all reasonable times. Any substitution in Consultant's Representative shall be approved in writing by Commission's Contract Administrator.

8. Substitution of Key Personnel. Consultant has represented to the Commission that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval by the Commission. In the event that the Commission and Consultant cannot agree as to the substitution of the key personnel, the Commission shall be entitled to terminate this Agreement for cause, pursuant to the provisions herein. The key personnel for performance of this Agreement are: **Mark Hager, Brian Smith, Brooke Bannasch , Montse Martin, David Ungemah** or as otherwise identified in the Task Order.

9. Standard of Care; Licenses. Consultant represents and maintains that it is skilled in the professional calling necessary to perform all Services, duties and obligations required by this Agreement to fully and adequately complete the Project. Consultant shall perform the Services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Consultant further represents and warrants to the Commission that its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. Consultant shall perform, at its own

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cost and expense and without reimbursement from the Commission, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein, and shall be fully responsible to the Commission for all damages and other liabilities provided for in the indemnification provisions of this Agreement arising from the Consultant's errors and omissions. Any employee of Consultant or its sub-consultants who is determined by the Commission to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the Commission, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

10. Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. Commission retains Consultant on an independent contractor basis and not as an employee, agent or representative of the Commission. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries and other amounts due such personnel in connection with their performance of Services and as required by law. Consultant shall be responsible for all reports and obligations respecting such personnel, including but not limited to, social security taxes, income tax withholdings, unemployment insurance, disability insurance, and workers' compensation insurance.

11. Project Progress.

11.1 Modification of the Schedule. Consultant shall regularly report to the Commission, through correspondence or progress reports, its progress in providing required Services within the scheduled time periods. Commission shall be promptly informed of all anticipated delays. In the event that Consultant determines that a schedule modification is necessary, Consultant shall promptly submit a revised Schedule of Services for approval by Commission's Contract Administrator.

11.2 Trend Meetings. Consultant shall conduct trend meetings with the Commission's Contract Administrator and other interested parties, as requested by the Commission, on a bi-weekly basis or as may be mutually scheduled by the Parties at a standard day and time. These trend meetings will encompass focused and informal discussions concerning scope, schedule, and current progress of Services, relevant cost issues, and future Project objectives. Consultant shall be responsible for the preparation and distribution of meeting agendas to be received by the Commission and other attendees no later than three (3) working days prior to the meeting.

11.3 Progress Reports. As part of its monthly invoice, Consultant shall submit a progress report, in a form determined by the Commission, which will indicate the progress achieved during the previous month in relation to the Schedule of Services.

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Submission of such progress report by Consultant shall be a condition precedent to receipt of payment from the Commission for each monthly invoice submitted.

12. Delay in Performance.

12.1 Excusable Delays. Should Consultant be delayed or prevented from the timely performance of any act or Services required by the terms of the Agreement by reason of acts of God or of the public enemy, acts or omissions of the Commission or other governmental agencies in either their sovereign or contractual capacities, fires, floods, pandemics, epidemics, quarantine restrictions, strikes, freight embargoes or unusually severe weather, performance of such act shall be excused for the period of such delay.

12.2 Written Notice. If Consultant believes it is entitled to an extension of time due to conditions set forth in subsection 12.1, Consultant shall provide written notice to the Commission within seven (7) working days from the time Consultant knows, or reasonably should have known, that performance of the Services will be delayed due to such conditions. Failure of Consultant to provide such timely notice shall constitute a waiver by Consultant of any right to an excusable delay in time of performance.

12.3 Mutual Agreement. Performance of any Services under this Agreement may be delayed upon mutual agreement of the Parties. Upon such agreement, Consultant's Schedule of Services shall be extended as necessary by the Commission. Consultant shall take all reasonable steps to minimize delay in completion, and additional costs, resulting from any such extension.

13. Preliminary Review of Work. All reports, working papers, and similar work products prepared for submission in the course of providing Services under this Agreement shall be submitted to the Commission's Contract Administrator in draft form, and the Commission may require revisions of such drafts prior to formal submission and approval. In the event plans and designs are to be developed as part of the Project, final detailed plans and designs shall be contingent upon obtaining environmental clearance as may be required in connection with Federal funding. In the event that Commission's Contract Administrator, in his or her sole discretion, determines the formally submitted work product to be not in accordance with the standard of care established under this Agreement, Commission's Contract Administrator may require Consultant to revise and resubmit the work at no cost to the Commission.

14. Appearance at Hearings. If and when required by the Commission, Consultant shall render assistance at public hearings or other meetings related to the Project or necessary to the performance of the Services. However, Consultant shall not be required to, and will not, render any decision, interpretation or recommendation regarding questions of a legal nature or which may be construed as constituting a legal opinion.

15. Opportunity to Cure; Inspection of Work. Commission may provide Consultant an opportunity to cure, at Consultant's expense, all errors and omissions

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which may be disclosed during Project implementation. Should Consultant fail to make such correction in a timely manner, such correction may be made by the Commission, and the cost thereof charged to Consultant. Consultant shall allow the Commission's Contract Administrator and Caltrans to inspect or review Consultant's work in progress at any reasonable time.

16. Claims Filed by Contractor.

16.1 If claims are filed by the Commission's contractor for the Project ("Contractor") relating to work performed by Consultant's personnel, and additional information or assistance from the Consultant's personnel is required by the Commission in order to evaluate or defend against such claims; Consultant agrees to make reasonable efforts to make its personnel available for consultation with the Commission's construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.

16.2 Consultant's personnel that the Commission considers essential to assist in defending against Contractor claims will be made available on reasonable notice from the Commission. Consultation or testimony will be reimbursed at the same rates, including travel costs that are being paid for the Consultant's personnel services under this Agreement.

16.3 Services of the Consultant's personnel and other support staff in connection with Contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Agreement in order to finally resolve the claims.

16.4 Nothing contained in this Section shall be construed to in any way limit Consultant's indemnification obligations contained in Section 29. In the case of any conflict between this Section and Section 29, Section 29 shall govern. This Section is not intended to obligate the Commission to reimburse Consultant for time spent by its personnel related to Contractor claims for which Consultant is required to indemnify and defend the Commission pursuant to Section 29 of this Agreement.

17. Final Acceptance. Upon determination by the Commission that Consultant has satisfactorily completed the Services required under this Agreement and within the term set forth herein the Commission shall give Consultant a written Notice of Final Acceptance. Upon receipt of such notice, Consultant shall incur no further costs hereunder, unless otherwise specified in the Notice of Final Acceptance. Consultant may request issuance of a Notice of Final Acceptance when, in its opinion, it has satisfactorily completed all Services required under the terms of this Agreement. In the event copyrights are permitted under this Agreement, then in connection with Federal funding, it is hereby acknowledged and agreed that the United States Department of Transportation shall have the royalty-free non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for governmental purposes.

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18. Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. For example, and not by way of limitation, Consultant shall keep itself fully informed of and in compliance with all implementing regulations, design standards, specifications, previous commitments that must be incorporated in the design of the Project, and administrative controls including those of the United States Department of Transportation. Compliance with Federal procedures may include completion of the applicable environmental documents and approved by the United States Department of Transportation. For example, and not by way of limitation, a signed Categorical Exclusion, Finding of No Significant Impact, or published Record of Decision may be required to be approved and/or completed by the United States Department of Transportation. For Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Commission, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold Commission, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

19. Fees and Payment.

19.1 The method of payment for this Agreement will be based on actual cost plus a fixed fee. Commission shall reimburse Consultant for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by Consultant in performance of the Services. Consultant shall not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved Consultant cost proposal attached hereto as Exhibit “B” and incorporated herein by reference, or any cost proposal included as part of a Task Order (“Cost Proposal”) unless additional reimbursement is provided for by written amendment. In no event, shall Consultant be reimbursed for overhead costs at a rate that exceeds Commission’s approved overhead rate set forth in the Cost Proposal. To the extent legally permissible, Consultant’s approved overhead rate shall be fixed for the term of this Agreement. In the event that Commission determines that a change to the Services from that specified in the Cost Proposal, this Agreement or any Task Order is required, the Agreement time or actual costs reimbursable by Commission shall be adjusted by written amendment to accommodate the changed work. The maximum total cost as specified in Section 19.8 shall not be exceeded, unless authorized by a written amendment.

19.2 In addition to the allowable incurred costs, Commission shall pay Consultant a fixed fee to be set forth in each Task Order (“Fixed Fee”). The Fixed Fee is nonadjustable for each Task Order, except in the event of a significant change in the Scope of Services, and such adjustment is made by written amendment.

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19.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal. In addition, payments to Consultant for travel and subsistence expenses claimed for reimbursement or applied as local match credit shall not exceed rates authorized to be paid exempt non- represented State employees under current State Department of Personnel Administration (DPA) rules, unless otherwise authorized by Commission. If the rates invoiced are in excess of those authorized DPA rates, and Commission has not otherwise approved said rates, then Consultant is responsible for the cost difference and any overpayments shall be reimbursed to the Commission on demand.

19.4 When milestone cost estimates are included in the approved Cost Proposal for a Task Order, Consultant shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.

19.5 Progress payments shall be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of the Fixed Fee shall be included in the monthly progress payments. If Consultant fails to submit the required deliverable items according to the schedule set forth in the Scope of Services, Commission shall have the right to delay payment or terminate this Agreement in accordance with the provisions of Section 21, Termination.

19.6 No payment shall be made prior to approval of any Services, nor for any Services performed prior to approval of this Agreement.

19.7 Consultant shall be reimbursed, as promptly as fiscal procedures will permit upon receipt by Commission's Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which Consultant is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this Agreement number and project title. Final invoice must contain the final cost and all credits due Commission including any equipment purchased under the Equipment Purchase provisions of this Agreement. The final invoice should be submitted within 60 calendar days after completion of Consultant's work. Invoices shall be mailed to Commission's Contract Administrator at the following address:

Riverside County Transportation Commission
Attention: Accounts Payable
P.O. 12008
Riverside, CA 92502

19.8 The total amount payable by Commission, including the Fixed Fee, shall not exceed the amount set forth in each Task Order.

19.9 Commission has or will enter into **four (4)** task order contracts for performance of the Scope of Services identified in Exhibit "A", including this

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Agreement ("**On-Call Highway Design & Environmental Services Task Order Contracts**"). The other On-Call Highway Design & Environmental Services Task Order Contracts are **Agreement No. 26-31-047-00 with HNTB Corporation, Agreement No. 26-31-048-00 with Kimley-Horn and Associates, Inc and Agreement No. 26-31-049-00 Parsons Transportation Group, Inc.** The total amount payable by Commission for the On-Call Highway Design & Environmental Services Task Order Contracts shall not exceed a cumulative maximum total value of **Thirty Million Dollars ($30,000,00)** "NTE Sum". It is understood and agreed that there is no guarantee, either expressed or implied that this dollar amount will be authorized under the Design & Environmental Services Task Order Contracts through Task Orders. Each time a Task Order is awarded under any of the Design & Environmental Services Task Order Contracts, Commission must send written notification to Consultant and each of the other consultants entering into the Highway Design & Environmental Services Task Order Contracts. The notice must identify the total funds allocated under issued Task Orders, and the remaining unencumbered amount of the NTE Sum. Consultant acknowledges and agrees that Commission must not pay any amount under this Agreement that would exceed the NTE Sum, and Consultant must not enter into a Task Order that exceeds the NTE Sum.

19.10 Salary increases shall be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by Commission's Contract Administrator. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

19.11 Consultant shall not be reimbursed for any expenses unless authorized in writing by the Commission's Contract Administrator.

19.12 All subcontracts in excess of $25,000 shall contain the above provisions.

20. Disputes.

20.1 Any dispute, other than audit, concerning a question of fact arising under this Agreement that is not disposed of by mutual agreement of the Parties shall be decided by a committee consisting of RCTC's Contract Administrator and the Director of Capital Projects, who may consider written or verbal information submitted by Consultant.

20.2 Not later than 30 days after completion of all Services under this Agreement, Consultant may request review by the Commission's Executive Director of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

20.3 Neither the pendency of a dispute, nor its consideration by the committee will excuse Consultant from full and timely performance in accordance with the terms of this Agreement.

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21. Termination.

21.1 Commission reserves the right to terminate this Agreement upon thirty (30) calendar days written notice to Consultant, for any or no reason, with the reasons for termination stated in the notice. Commission may terminate Services under a Task Order, at any time, for any or no reason, with the effective date of termination to be specified in the notice of termination of Task Order.

21.2 Commission may terminate this Agreement with Consultant should Consultant fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, Commission may proceed with the Services in any manner deemed proper by Commission. If Commission terminates this Agreement with Consultant, Commission shall pay Consultant the sum due to Consultant under this Agreement for Services completed and accepted prior to termination, unless the cost of completion to Commission exceeds the funds remaining in the Agreement. In such case, the overage shall be deducted from any sum due Consultant under this Agreement and the balance, if any, shall be paid to Consultant upon demand.

21.3 In addition to the above, payment upon termination shall include a prorated amount of profit, if applicable, but no amount shall be paid for anticipated profit on unperformed Services. Consultant shall provide documentation deemed adequate by Commission's Contract Administrator to show the Services actually completed by Consultant prior to the effective date of termination. This Agreement shall terminate on the effective date of the Notice of Termination

21.4 Upon receipt of the written Notice of Termination, Consultant shall discontinue all affected Services as directed in the Notice or as otherwise provided herein, and deliver to the Commission all Documents and Data, as defined in this Agreement, as may have been prepared or accumulated by Consultant in performance of the Services, whether completed or in progress.

21.5 In addition to the above, Consultant shall be liable to the Commission for any reasonable additional costs incurred by the Commission to revise work for which the Commission has compensated Consultant under this Agreement, but which the Commission has determined in its sole discretion needs to be revised, in part or whole, to complete the Project because it did not meet the standard of care established in this Agreement. Termination of this Agreement for cause may be considered by the Commission in determining whether to enter into future agreements with Consultant.

21.6 The rights and remedies of the Parties provided in this Section are in addition to any other rights and remedies provided by law or under this Agreement.

21.7 Consultant, in executing this Agreement, shall be deemed to have waived any and all claims for damages which may otherwise arise from the Commission's termination of this Agreement, for convenience or cause, as provided in this Section.

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21.8 Consultant may not terminate this Agreement except for cause.

22. Cost Principles and Administrative Requirements.

22.1 Consultant agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.

22.2 Consultant also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

22.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 2 CFR, Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by Consultant to Commission.

22.4 All subcontracts in excess of $25,000 shall contain the above provisions.

23. Retention of Records/Audit. For the purpose of determining compliance with, as applicable, 2 CFR Part 200, Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of this Agreement pursuant to Government Code 8546.7; Consultant, subconsultants, and Commission shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of this Agreement, including but not limited to, the costs of administering this Agreement. All parties shall make such materials available at their respective offices at all reasonable times during the Agreement period and for three years from the date of final payment under this Agreement. The State, State Auditor, Commission, or any duly authorized representative of the State or Federal Government shall have access to any books, records, and documents of Consultant and it's certified public accountants (CPA) work papers that are pertinent to this Agreement and, if applicable, indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested. Subcontracts in excess of $25,000 shall contain this provision.

23.1 Accounting System. Consultant and its subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate expenditures by line item for the Services. The accounting system of Consultant and its subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), enable the determination of incurred costs at interim points of completion, and provide support for reimbursement payment vouchers or invoices.

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24. Audit Review Procedures.

24.1 Any dispute concerning a question of fact arising under an interim or post audit of this Agreement that is not disposed of by agreement, shall be reviewed by Commission's Chief Financial Officer.

24.2 Not later than 30 days after issuance of the final audit report, Consultant may request a review by Commission's Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.

24.3 Neither the pendency of a dispute nor its consideration by Commission shall excuse Consultant from full and timely performance, in accordance with the terms of this Agreement.

25. Subcontracting.

25.1 Nothing contained in this Agreement or otherwise, shall create any contractual relation between Commission and any subconsultant(s), and no subcontract shall relieve Consultant of its responsibilities and obligations hereunder. Consultant agrees to be as fully responsible to Commission for the acts and omissions of its subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by Consultant. Consultant's obligation to pay its subconsultant(s) is an independent obligation from Commission's obligation to make payments to the Consultant.

25.2 Consultant shall perform the Services contemplated with resources available within its own organization and no portion of the Services pertinent to this Agreement shall be subcontracted without written authorization by Commission's Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.

25.3 Consultant shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to Consultant by Commission.

25.4 Any subcontract in excess of $25,000 entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement to be applicable to subconsultants.

25.5 Any substitution of subconsultant(s) must be approved in writing by Commission's Contract Administrator prior to the start of work by the subconsultant(s).

25.6 Exhibit "B" may set forth the rates at which each subconsultant shall bill the Consultant for Services and that are subject to reimbursement by the Commission to Consultant. Additional Direct Costs, as defined in Exhibit "B" shall be the same for both the Consultant and all subconsultants, unless otherwise identified in Exhibit "B" or in a Task Order. The subconsultant rate schedules and cost proposals contained herein are for accounting purposes only.

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26. Equipment Purchase

26.1 Prior authorization, in writing, by Commission's Contract Administrator shall be required before Consultant enters into any unbudgeted purchase order, or subcontract for supplies, equipment, or services. Consultant shall provide an evaluation of the necessity or desirability of incurring such costs.

26.2 For purchase of any item, service or consulting work not covered in the Cost Proposal and exceeding $5,000 prior authorization, in writing, by Commission's Contract Administrator is required. Three competitive quotations must be submitted with the request for such purchase, or the absence of bidding must be adequately justified.

26.3 Any equipment purchased as a result of this Agreement is subject to the following: Consultant shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of $5,000 or more. If the purchased equipment needs replacement and is sold or traded in, Commission shall receive a proper refund or credit at the conclusion of this Agreement, or if this Agreement is terminated, Consultant may either keep the equipment and credit Commission in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established Commission procedures; and credit Commission in an amount equal to the sales price. If Consultant elects to keep the equipment, fair market value shall be determined at Consultant's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by Commission and Consultant. If Consultant determines to sell the equipment, the terms and conditions of such sale must be approved in advance by Commission. 2 CFR, Part 200 requires a credit to Federal funds when participating equipment with a fair market value greater than $5,000 is credited to the Project.

26.4 All subcontracts in excess $25,000 shall contain the above provisions.

27. Labor Code Requirements.

27.1 Prevailing Wages.

(a) Consultant shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the Services.

(b) Any subcontract entered into as a result of this Agreement, if for more than $25,000 for public works construction or more than $15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Section.

(c) When prevailing wages apply to the Services described in the Scope of Services, transportation and subsistence costs shall be reimbursed at the

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minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See http://www.dir.ca.gov.

(d) Copies of the prevailing rate of per diem wages in effect at commencement of this Agreement are on file at the Commission's offices. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold the Commission, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

27.2 DIR Registration. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This Project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements.

27.3 Eight-Hour Law. Pursuant to the provisions of the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any worker employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment for overtime is made at not less than one and one-half the basic rate for all hours worked in excess of eight hours per day ("Eight-Hour Law"), unless Consultant or the Services are not subject to the Eight-Hour Law. Consultant shall forfeit to Commission as a penalty, $50.00 for each worker employed in the execution of this Agreement by him, or by any sub-consultant under him, for each calendar day during which such workman is required or permitted to work more than eight hours in any calendar day and forty hours in any one calendar week without such compensation for overtime violation of the provisions of the California Labor Code, unless Consultant or the Services are not subject to the Eight-Hour Law.

27.4 Employment of Apprentices. This Agreement shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on the work performed hereunder solely on the ground of race, creed, national origin, ancestry, color or sex. Every qualified apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade in which he or she is employed and shall be employed only in the craft or trade to which he or she is registered.

If California Labor Code Section 1777.5 applies to the Services, Consultant and any subcontractor hereunder who employs workers in any apprenticeable craft or trade

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shall apply to the joint apprenticeship council administering applicable standards for a certificate approving Consultant or any sub-consultant for the employment and training of apprentices. Upon issuance of this certificate, Consultant and any sub-consultant shall employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

The parties expressly understand that the responsibility for compliance with provisions of this Section and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with Consultant

28. Ownership of Materials/Confidentiality.

28.1 Documents & Data. This Agreement creates an exclusive and perpetual license for Commission to copy, use, modify, reuse, or sub-license any and all copyrights and designs embodied in plans, specifications, studies, drawings, estimates, materials, data and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data").

Consultant shall require all subcontractors to agree in writing that Commission is granted an exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement.

Consultant represents and warrants that Consultant has the legal right to grant the exclusive and perpetual license for all such Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or provided to Consultant by the Commission.

Commission shall not be limited in any way in its use of the Documents & Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at Commission's sole risk.

28.2 Intellectual Property. In addition, Commission shall have and retain all right, title and interest (including copyright, patent, trade secret and other proprietary rights) in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property") prepared or developed by or on behalf of Consultant under this Agreement as well as any other such Intellectual Property prepared or developed by or on behalf of Consultant under this Agreement.

The Commission shall have and retain all right, title and interest in Intellectual Property developed or modified under this Agreement whether or not paid for

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wholly or in part by Commission, whether or not developed in conjunction with Consultant, and whether or not developed by Consultant. Consultant will execute separate written assignments of any and all rights to the above referenced Intellectual Property upon request of Commission.

Consultant shall also be responsible to obtain in writing separate written assignments from any subcontractors or agents of Consultant of any and all right to the above referenced Intellectual Property. Should Consultant, either during or following termination of this Agreement, desire to use any of the above-referenced Intellectual Property, it shall first obtain the written approval of the Commission.

All materials and documents which were developed or prepared by the Consultant for general use prior to the execution of this Agreement and which are not the copyright of any other party or publicly available and any other computer applications, shall continue to be the property of the Consultant. However, unless otherwise identified and stated prior to execution of this Agreement, Consultant represents and warrants that it has the right to grant the exclusive and perpetual license for all such Intellectual Property as provided herein.

Commission further is granted by Consultant a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional, or supplemental work created under this Agreement.

28.3 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of Commission, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use Commission's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of Commission.

28.4 Infringement Indemnification. Consultant shall defend, indemnify and hold the Commission, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by Commission of the Documents & Data, including any method, process, product, or concept specified or depicted.

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29. Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold Commission, Caltrans and their directors, officials, officers, employees, consultants, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, inverse condemnation, and any claims related to property acquisition and relocation rules or failure to detect or abate hazardous materials, which are brought by a third party, and which , in any manner arise out of or are incident to alleged negligent acts, omissions, or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of consequential damages, expert witness fees, and attorneys fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against Commission, Caltrans, and their directors, officials, officers, employees, consultants, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against Commission, Caltrans or their directors, officials, officers, employees, consultants, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse Commission, Caltrans and their directors, officials, officers, employees, consultants, agents, and/or volunteers, for any and all legal expenses and costs, including reasonable attorney's fees, incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Commission, Caltrans or their directors, officials officers, employees, consultants, agents, or volunteers.

If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Consultant's obligations as set forth in this Section shall survive expiration or termination of this Agreement.

30. Insurance.

30.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to the Commission that it has secured all insurance required under this Section, in a form and with insurance companies acceptable to the Commission. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this Section.

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30.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(a) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(b) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; (2) *Automobile Liability:* $1,000,000 per accident for bodily injury and property damage. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of $1,000,000 per accident.

30.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. For Consultant, such insurance shall be in an amount not less than $1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend. Subconsultants of Consultant shall obtain such insurance in an amount not less than $2,000,000 per claim. Notwithstanding the foregoing, the Commission may consider written requests to lower or dispense with the errors and omissions liability insurance requirement contained in this Section for certain subconsultants of Consultant, on a case-by-case basis, depending on the nature and scope of the Services to be provided by the subconsultant. Approval of such request shall be in writing, signed by the Commission's Contract Administrator.

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30.4 Aircraft Liability Insurance. Prior to conducting any Services requiring use of aircraft, Consultant shall procure and maintain, or cause to be procured and maintained, aircraft liability insurance or equivalent form, with a single limit as shall be required by the Commission. Such insurance shall include coverage for owned, hired and non-owned aircraft and passengers, and shall name, or be endorsed to name, the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds with respect to the Services or operations performed by or on behalf of the Consultant.

30.5 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by the Commission to add the following provisions to the insurance policies:

(a) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give the Commission, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be “primary and non-contributory” and will not seek contribution from the Commission’s or Caltrans’ insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(b) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) the Commission, Caltrans and their directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects the Commission, Caltrans and their directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant’s scheduled underlying coverage. Any insurance or self-insurance maintained by the Commission, Caltrans and their directors, officials, officers, employees and agents shall be excess of the Consultant’s insurance and shall not be called upon to contribute with it in any way.

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(c) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against the Commission, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(d) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the Commission (if agreed to in a written contract or agreement) before the Commission's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) Consultant shall provide the Commission at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the Commission at least ten (10) days prior to the effective date of cancellation or expiration.

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(v) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vi) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the Commission, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(vii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, Commission has the right but not the duty to obtain the insurance it deems necessary and any premium paid by Commission will be promptly reimbursed by Consultant or Commission will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, Commission may cancel this Agreement. The Commission may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(viii) Neither the Commission nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

30.6 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Commission. If the Commission does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of the Commission, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Commission, its directors, officials, officers, employees and agents; or, (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expense.

30.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

30.8 Verification of Coverage. Consultant shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the Commission. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by the Commission before work commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

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30.9 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the Commission that they have secured all insurance required under this Section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the Commission as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, the Commission may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

30.10 Other Insurance. At its option, the Commission may require such additional coverage(s), limits and/or the reduction of deductibles or retentions it considers reasonable and prudent based upon risk factors that may directly or indirectly impact the Project. In retaining this option Commission does not warrant Consultant's insurance program to be adequate. Consultant shall have the right to purchase insurance in addition to the insurance required in this Section.

31. Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the Commission has determined that the Project will contain areas that are open to public traffic. Consultant shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. Consultant shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.

32. Additional Work. Any work or activities that are in addition to, or otherwise outside of, the Services to be performed pursuant to this Agreement shall only be performed pursuant to a separate agreement between the parties. Notwithstanding the foregoing, the Commission's Executive Director may make a change to the Agreement, other than a Cardinal Change. For purposes of this Agreement, a Cardinal Change is a change which is "outside the scope" of the Agreement; in other words, work which should not be regarded as having been fairly and reasonably within the contemplation of the parties when the Agreement was entered into. An example of a change which is not a Cardinal Change would be where, in a contract to construct a building there are many changes in the materials used, but the size and layout of the building remains the same.

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Cardinal Changes are not within the authority of this provision to order, and shall be processed by the Commission as "sole source" procurements according to applicable law, including the requirements of FTA Circular 4220.1D, paragraph 9(f).

(a) In addition to the changes authorized above, a modification which is signed by Consultant and the Commission's Executive Director, other than a Cardinal Change, may be made in order to: (1) make a negotiated equitable adjustment to the Agreement price, delivery schedule and other terms resulting from the issuance of a Change Order, (2) reflect definitive letter contracts, and (3) reflect other agreements of the parties modifying the terms of this Agreement ("Bilateral Contract Modification").

(b) Consultant shall not perform, nor be compensated for any change, without written authorization from the Commission's Executive Director as set forth herein. In the event such a change authorization is not issued and signed by the Commission's Executive Director, Consultant shall not provide such change.

33. Prohibited Interests.

33.1 Solicitation. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Commission shall have the right to rescind this Agreement without liability.

33.2 Consultant Conflict of Interest.

(a) Consultant shall disclose any financial, business, or other relationship with Commission that may have an impact upon the outcome of this Agreement, or any ensuing Commission construction project. Consultant shall also list current clients who may have a financial interest in the outcome of this Agreement, or any ensuing Commission construction project, which will follow.

(b) Consultant hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.

(c) Any subcontract in excess of $25,000 entered into as a result of this Agreement, shall contain all of the provisions of this Article.

(d) Consultant further certifies that neither Consultant, nor any firm affiliated with Consultant, will bid on any construction subcontracts included within the construction contract. Additionally, Consultant certifies that no person working under

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this Agreement is also employed by the construction contractor for any project included within this Agreement.

33.3 Commission Conflict of Interest. For the term of this Agreement, no member, officer or employee of the Commission, during the term of his or her service with the Commission, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

33.4 Conflict of Employment. Employment by the Consultant of personnel currently on the payroll of the Commission shall not be permitted in the performance of this Agreement, even though such employment may occur outside of the employee's regular working hours or on weekends, holidays or vacation time. Further, the employment by the Consultant of personnel who have been on the Commission payroll within one year prior to the date of execution of this Agreement, where this employment is caused by and or dependent upon the Consultant securing this or related Agreements with the Commission, is prohibited.

33.5 Covenant Against Contingent Fees. As required in connection with federal funding, the Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or secure this Agreement, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, the Commission shall have the right to terminate this Agreement without liability pursuant to the terms herein, or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

33.6 Rebates, Kickbacks or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any Commission employee. For breach or violation of this warranty, Commission shall have the right in its discretion; to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the Agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

33.7 Covenant Against Expenditure of Commission, State or Federal Funds for Lobbying. The Consultant certifies that to the best of his/ her knowledge and belief no state, federal or local agency appropriated funds have been paid, or will be paid by or on behalf of the Consultant to any person for the purpose of influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the award of any state or federal contract, grant, loan, or cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

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(a) If any funds other than federal appropriated funds have been paid, or will be paid to any person for the purpose of influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this Agreement, the Consultant shall complete and submit the attached Exhibit "F", Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with the attached instructions.

(b) The Consultant's certification provided in this Section is a material representation of fact upon which reliance was placed when this Agreement was entered into, and is a prerequisite for entering into this Agreement pursuant to Section 1352, Title 31, US. Code. Failure to comply with the restrictions on expenditures, or the disclosure and certification requirements set forth in Section 1352, Title 31, US. Code may result in a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

(c) The Consultant also agrees by signing this Agreement that he/she shall require that the language set forth in this Section 3.23.5 be included in all Consultant subcontracts which exceed $100,000, and that all such subcontractors shall certify and disclose accordingly.

33.8 Employment Adverse to the Commission. Consultant shall notify the Commission, and shall obtain the Commission’s written consent, prior to accepting work to assist with or participate in a third-party lawsuit or other legal or administrative proceeding against the Commission during the term of this Agreement.

34. Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

35. Right to Employ Other Consultants. Commission reserves the right to employ other consultants in connection with the Project.

36. Governing Law. This Agreement shall be governed by and construed with the laws of the State of California. Venue shall be in Riverside County.

37. Disputes; Attorneys' Fees.

37.1 Prior to commencing any action hereunder, the Parties shall attempt in good faith to resolve any dispute arising between them. The pendency of a dispute shall not excuse Consultant from full and timely performance of the Services.

37.2. If the Parties are unable to resolve a dispute after attempting in good faith to do so, the Parties may seek any other available remedy to resolve the dispute. If

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either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorneys' fees and, all other costs of such actions.

38. Time of Essence. Time is of the essence for each and every provision of this Agreement.

39. Headings. Article and Section Headings, paragraph captions or marginal headings contained in this Agreement are for convenience only and shall have no effect in the construction or interpretation of any provision herein.

40. Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

CONSULTANT:	**COMMISSION:**
HDR Engineering, Inc	Riverside County Transportation Commission
2280 Market Street, Suite 100	4080 Lemon Street, 3rd Floor
Riverside, CA 92501	Riverside, CA 92501
Attn:Mark Hager	Atten: Executive Director

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. mail, first class postage prepaid, and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

41. Conflicting Provisions. In the event that provisions of any attached exhibits conflict in any way with the provisions set forth in this Agreement, the language, terms and conditions contained in this Agreement shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the performance of the Services.

42. Amendment or Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

43. Entire Agreement. This Agreement contains the entire agreement of the Parties relating to the subject matter hereof and supersedes all prior negotiations, agreements or understandings.

44. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

45. Provisions Applicable When State Funds or Federal Funds Are Involved. When funding for the Services under a Task Order is provided, in whole or in part, from

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Caltrans, Consultant shall also fully and adequately comply with the provisions included in Exhibit "C" (California Department of Transportation requirements) attached hereto and incorporated herein by reference. When funding for the Services under a Task Order is provided, in whole or in part, from the FTA, Consultant shall also fully and adequately comply with the provisions included in Exhibit "D" (FTA Requirements) attached hereto and incorporated herein by reference.

46. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

47. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

48. Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

49. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

50. Subpoenas or Court Orders. Should Consultant receive a subpoena or court order related to this Agreement, the Services or the Project, Consultant shall immediately provide written notice of the subpoena or court order to the Commission. Consultant shall not respond to any such subpoena or court order until notice to the Commission is provided as required herein, and shall cooperate with the Commission in responding to the subpoena or court order.

51. Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein, without the prior written consent of the Commission. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

52. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by Consultant without the prior written consent of Commission.

53. Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated into this Agreement as though fully set forth herein.

54. No Waiver. Failure of Commission to insist on any one occasion upon strict compliance with any of the terms, covenants or conditions hereof shall not be deemed a waiver of such term, covenant or condition, nor shall any waiver or relinquishment of any

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rights or powers hereunder at any one time or more times be deemed a waiver or relinquishment of such other right or power at any other time or times.

[Signatures on following page]

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SIGNATURE PAGE
TO
PROFESSIONAL SERVICES AGREEMENT
WITH STATE, FHWA, FTA AND PROPOSITION 1B FUNDING/ASSISTANCE

IN WITNESS WHEREOF, this Agreement was executed on the date first written above.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION		**CONSULTANT** **HDR Engineering, Inc**
By:_____ Aaron Hake Executive Director		By: _____ Signature _____ Name _____ Title
Approved as to Form: By:_____ Best, Best & Krieger LLP General Counsel		**ATTEST:** By: _____ Its: _____

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* A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

Exhibits:

EXHIBIT "A" - SCOPE OF SERVICES

EXHIBIT "B"- COMPENSATION AND PAYMENT

EXHIBIT "C" – FEDERAL REQUIREMENTS

EXHIBIT "D" CERTIFICATE OF CONSULTANT

EXHIBIT “E” – LOBBYING ACTIVITIES DISCLOSURE

EXHIBIT “F”- EXECUTIVE ORDER N-6-22 CERTIFICATION

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EXHIBIT "A"
SCOPE OF
WORK

The Riverside County Transportation Commission (RCTC) intends to contract a “bench” of qualified consultants to provide on-call Preliminary Engineering, Environmental, and Design Engineering Services for Capital and Toll Projects on an on-call basis pursuant to task orders or purchase orders to be issued in accordance with the terms of this Request For Qualifications (RFQ) and the Commission’s model agreement. The selected consultants will supplement the work of the Commission Staff in accordance with the specifications described herein.

The Capital Program and Toll Program oversee various projects throughout Riverside County. Work for this contract will be authorized through the issuance of task orders or purchase orders (PO). **A maximum of four consultant teams will be selected**. Task orders or POs will be issued to the consultants at RCTC’s discretion based on an assessment of the highest qualifications, availability of qualified resources, and past performance on prior task orders/assignments. These project delivery support services agreements are intended to facilitate the completion of Capital and Toll projects on time and within budget.

In general, the RCTC seeks the following services including, but not limited to, preparation of Feasibility Studies; Project Initiation Documents (PID), Project Study Reports/Project Development Support (PSR/PDS); Project Approval and Environmental Documents (PA/ED); Plans, Specifications, and Estimates (PS&E); other planning studies, reports and technical services and associated documents; independent review and oversight of environmental, design, traffic, structures, electrical studies and plans prepared by others; development and management of databases for schedule, cost and quality control, risk assessments and management studies & plans; preparation of agreements; grant writing and support and other related tasks as deemed necessary; and preparation of regulatory permit applications and coordination.

Right-of-Way (ROW) and public outreach services will be primarily procured through other RCTC contracts currently in place. However, the consultants shall provide ROW and Public Outreach support services for all phases, as necessary.

All Consultant teams shall have the capability to provide the full range of services associated with federal, state and local highway project planning and development processes.

PERIOD OF PERFORMANCE

The period of performance is **three years, with one two-year extension option**. Specific term limits may also be dictated by Task orders/POs.

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List of Potential Projects

- New Road Construction
- Roadway Widening
- Resurfacing, Restoration, and Rehabilitation
- Intersection Improvements
- New Interchange or Reconfiguration
- Grade Separation Projects
- Bridge Improvement and Widening
- Roadway Safety
- Access Management
- Pedestrian and ADA Facilities
- Multi-Use Trails
- Express Toll/Transit Lanes
- Intermodal Facilities
- Intelligent Transportation Systems
- Ramp widening and/or metering

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SCOPE OF WORK

Consultants shall be responsible for the delivery of services, the preparation of documents and the review of work by others in the categories/phases of projects. Tasks Consultants are expected to perform, but not limited to, are listed below:

1 - Planning and Technical Studies

- Feasibility Studies
- Corridor Studies
- Project Study Reports/Project Development Support (PSR/PDS) or equivalent documents
- Project Initiation Document
- Technical studies
- Other similar studies per Caltrans Project Development Procedures Manual (Storm Water Data Reports, Initial Site Assessment, Traffic Engineering Performance Assessment, Preliminary Environmental Assessment Report)
- Development of Purpose & Need
- Independent Utility

2 - Specific Literature Research/Data Collection

- Research, collection, review, and analysis of applications and technologies to support the development of highway improvement projects
- Coordination and assimilation of existing datasets and identification of additional data collection needs

3 - Project Approval and Environmental Document (PA&ED)

- Scoping Documents
- Environmental Documents (CE/CE, EA/IS, EIS/EIR)
- Alternatives Analysis
- Environmental Technical Studies (Cultural, Biological, Air Quality, Noise, Traffic, Community Impacts, Hazardous Waste)
- Agency Permit Applications and coordination
- Public Hearings (including providing technical and logistical support)
- Support for Public Outreach activities/events
- Project Report (PR) or PSR/PRs
- Advanced Planning Studies
- Utilities Conflicts Identification
- Life Cycle Cost Analysis
- Value Engineering
- Traffic Report (TOAR)Equity Analysis
- Preparation of exhibits or materials needed for coordination purposes
- Preliminary site visitations and field surveys
- Preliminary engineering and geometric approval drawings
- Design standard deviations and exception investigations and identification (DSDD, CSDD, VMTDD)
- Other similar documents and activities per the Caltrans PDPM
- Managed Lane Engineering Studies and Toll Policy Reports
- Modified Access Reports for FHWA conceptual approval
- Cost Estimates
- AB194 Tolling Authority application and public hearing support

4 - Plans, Specifications, and Estimates (PS&E)

- Data Collection and Preliminary investigations
- Engineering Plans per the Caltrans Plan Preparation Manual including but not limited to: Layout, Superelevation and profile, typical sections, contour grading plans, and construction details
- Civil/structural/traffic/electrical/landscaping-irrigation design, plans, and specifications
- Stage Construction Plans and Traffic Management Plan
- Utilities Plans and Coordination, Utility Policy Exceptions

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- Drainage design, details, plans and profiles, Storm Water Data Reports (SWDR), Hydraulics/Hydrology Report and Drainage Report
- Geotechnical engineering, calculations, and investigations. Foundation reports, Geotechnical Design Reports, and Materials Reports
- Surveying, topographic mapping, and aerial photography
- Hazardous Waste studies and reports
- Quantity calculations and cost estimates
- Pavement delineation/markers, traffic control, signing and striping
- Technical specifications and Special Provisions
- Exceptions to Caltrans Standards/Design Standards Decision Document (DSDD)
- Permits and approvals by other agencies
- Other services required to secure approvals of pre-construction phases of projects and County PS&E for all State Highway improvement projects shall be prepared in accordance with Caltrans Standards. PS&E for local projects shall be prepared in accordance with local agency standards and procedures.
- Environmental Commitments Record, Environmental Revalidation and Environmental Certifications
- Construction Support Services
- Right of Way Identification, Right of Way Requirements Maps, PD-26, Right of Way and Utility Certification

5 - Project Right-of-Way & Utility Services

- ROW activities will be primarily conducted by RCTC ROW Department. Consultants shall provide ROW support services as required for all phases.
- Perform utility investigations and potholing to review and assess relocation needs due to the project.

6 - Intelligent Transportation Systems (ITS) and Transportation Technology Support Services

- Systems engineering documentation/plans (concept exploration, Concept of Operations, system requirements, Design, Testing)
- Feasibility studies
- Cost estimating
- Engineering plans/drawings
- System plans
- Communications plans
- Systems integration plans
- Equipment specifications
- Software specifications and applications
- Connected and automated vehicle research, studies, and/or deployments
- Transit signal priority systems, plans, support, and modernization
- Goods Movement technology research, studies, and/or deployments

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- Inventory management support (Infrastructure)
- ITS architecture support

7 - Traffic Engineering Support Services

- Traffic data collection (turn movement counts, automated counts, 3rd party probe data)
- Traffic studies/analysis (traffic impact studies, queuing analyses, ISOAP etc.)
- Transportation mobility Studies (Before and after evaluations, travel time studies, destination studies, etc.)
- Traffic operation studies
- Traffic signal timing documents
- Micro and macro simulation modeling using Synchro, VISSIM, TransModeler, or other traffic analysis software
- Traffic data synthesis and analytic tools for performance measurement
- Vehicle Miles Traveled (VMT) analysis per SB 743 Caltrans guidelines
- Managed lanes – Traffic and revenue studies (Investment Grade)
- Managed lanes – Concept of Operations support
- Scope of Work development (final design/build contract)

8 - Project Management Support

- Developing or reviewing project scopes of work
- Developing and maintaining baseline and project schedules, cost-loaded schedule, and expenditure forecasts
- Providing cost estimating services for the various stages in the project development/delivery process
- Project Risk Assessment and Risk Monitoring/Management Services, including developing and maintaining the risk register
- General project management
- Attending meetings, internally and externally, in connection with project management and development, including producing any materials necessary
- Performing internal and external project coordination and public outreach
- Prepare Project Management Plan
- Monthly trend and Project Development Team meetings with agendas, minutes, and look-ahead schedules
- Quality Management and Quality Control

9 – Public Outreach Support

- Develop Public Outreach Plans
- Prepare project fact sheets, messages, and content for Commission website and media
- Manage project social media, monitor/respond to public comments
- Provide support for public scoping meetings and hearings
- Provide outreach activity summaries

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10 - Miscellaneous Administrative Project Support

- Preparing grant application packages including, but not limited to, writing grant applications, assisting with required research, data, and justification preparation, and developing supporting materials, exhibits, and financial analysis to support the grant opportunity.
- Preparing documents for solicitations, preparing independent cost estimates & other documents supporting contract negotiations, preparing reports and other correspondences, interfacing with consultants and agency personnel, conducting post award contract administration, monitoring contract compliance, preparing modifications/contract amendments, and performing other related work and duties.
- Providing regular project progress status reports
- Maintaining project information/fact sheets, webpages, and social media platforms
- Developing Memorandum of Understandings and/or Cooperative/Funding Agreements, maintaining databases, and updating various project tracking sheets
- Preparing procurements/contracts and task orders
- Supporting project audits; processing invoices; preparing financial data; reviewing technical task reports/technical memos; preparing materials for meetings and presentations (written and oral); preparing agendas, meeting notes, and following through with action items
- Graphics/digital content design

Other relevant services may be included by RCTC via this On-Call.

Each Task Order shall be evaluated independently based on established criteria, including scope, complexity, and required expertise. RCTC shall have full discretion in requiring assignment of specific Consultant/sub-consultant resources/staff to individual task orders, provided such decisions are made in consideration of qualifications and past performance/success in efficient delivery of assignments. Task Orders may include phased Notice to Proceed as determined appropriate by RCTC.

Project Understanding and Approach

The I-15/Cantu Galleano Ranch Road Interchange Improvement Project, located in the City of Eastvale, has been identified by RCTC as a long-range capital and toll improvement effort. The proposed project will evaluate a range of interchange and express lane alternatives and advance through the Caltrans Project Delivery Phases, including Project Initiation Document (PID), Project Approval and Environmental Document (PA/ED), and Plans, Specifications, and Estimate (PS&E).

Consultants should use this project as the basis for developing their Statement of Qualifications (SOQ), specifically the Project Understanding and Approach section; demonstrating their technical understanding, proposed methodologies, and approach to delivering each phase in compliance with Caltrans standards and RCTC objectives.

The activities outlined in this Scope of Work are intended to support the PID, PA/ED, and PS&E phases, as approved by Caltrans and applicable local agencies. Consultants should demonstrate in their Approach and Understanding how they will effectively address the key tasks and objectives associated with each project phase.

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EXHIBIT "B"

COMPENSATION SUMMARY[1]

FIRM	PROJECT TASKS/ROLE	COST
	Prime Consultant:	
HDR ENGINEERING, INC.	On-Call Highway Design and Environmental Services for Capital and Toll Programs Projects	$30,000,000.00
	Sub Consultants:	
A/E Tech LLC	Sub Consultant	TBD per Task Order
Duke Cultural Resources Management, LLC	Sub Consultant	TBD per Task Order
Fehr & Peers	Sub Consultant	TBD per Task Order
GHD Inc.	Sub Consultant	TBD per Task Order
GPA Consulting	Sub Consultant	TBD per Task Order
GUIDA	Sub Consultant	TBD per Task Order
HELIX Environmental Planning, Inc.	Sub Consultant	TBD per Task Order
ICF International	Sub Consultant	TBD per Task Order
Westbound Communications, Inc.	Sub Consultant	TBD per Task Order
	TOTAL COSTS	**$30,000,000.00**

[1] Commission authorization pertains to total contract award amount. Compensation adjustments between consultants may occur; however, the maximum total compensation authorized may not be exceeded.

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Agreement No 26-31-047-00

**PROFESSIONAL SERVICES AGREEMENT
WITH FHWA, STATE, FTA AND PROPOSITION 1B FUNDING ASSISTANCE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT WITH
HNTB CORPORATION
FOR ON-CALL HIGHWAY DESIGN AND ENVIRONMENTAL SERVICES
FOR CAPITAL AND TOLL PROGRAMS PROJECTS**

Parties and Date.

This Agreement is made and entered into this ___ day of _____, 2026, by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION ("the Commission") and **HNTB Corporation. ("Consultant"),** a Delaware corporation**.** The Commission and Consultant are sometimes referred to herein individually as “Party”, and collectively as the “Parties”.

Recitals.

A. On November 8, 1988 the Voters of Riverside County approved Measure A authorizing the collection of a one-half percent (1/2 %) retail transactions and use tax (the "tax") to fund transportation programs and improvements within the County of Riverside, and adopting the Riverside County Transportation Improvement Plan (the "Plan").

B. Pursuant to Public Utility Code Sections 240000 et seq., the Commission is authorized to allocate the proceeds of the Tax in furtherance of the Plan.

C. On November 5, 2002, the voters of Riverside County approved an extension of the Measure A tax for an additional thirty (30) years for the continued funding of transportation and improvements within the County of Riverside.

D. A source of funding for payment for on-call professional consulting services provided under this Agreement may be Federal Highway Administration (“FHWA”) funds administered by the California Department of Transportation (“Caltrans”) from the United States Department of Transportation, Proposition 1B funds (“Prop 1B”) funds administered by Caltrans, and/or funds from the Federal Transit Administration (“FTA”). This Agreement shall not be deemed to be approved by the Commission until the certification shown in Exhibit “E” attached hereto and incorporated herein by reference, is executed.

E. Consultant desires to perform and assume responsibility for the provision of certain on-call design engineering and environmental services for the construction of commuter rail station capital improvement projects in the County of Riverside, California. Services shall be provided on the terms and conditions set forth in this Agreement and in the task order(s) to be solicited, awarded and authorized by Commission as further described in this Agreement (“Task Order”). Consultant represents that it is experienced in providing such services to public clients, is licensed in the State of California (if necessary), and is familiar with the plans of the Commission.

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F. Commission desires to engage Consultant to render such services on an on-call basis. Services shall be ordered by Task Order(s) to be issued pursuant to this Agreement for future projects as set forth herein and in each Task Order (each such project shall be designated a "Project" under this Agreement).

Terms.

1. General Scope of Services. Consultant shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise, and incidental and customary work necessary to fully and adequately supply the on-call design engineering and environmental services for the Projects ("Services"). The Services are generally described in Exhibit "A" attached hereto and incorporated herein by reference. The Services shall be more particularly described in the individual Task Orders issued by the Commission's Executive Director or designee. No Services shall be performed unless authorized by a fully executed Task Order. All Services shall be subject to, and performed in accordance with, this Agreement, the relevant Task Order, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

2. Task Orders; Commencement of Services; Schedule of Services. Services under this Agreement shall be requested by the Commission pursuant to Task Order requests. If Commission accepts Consultant's Task Order proposal, Commission shall issue a purchase order or executed task order for the Services ("Commission's Task Order Authorization"). Consultant's agreement to the final terms of a proposed Task Order, Commission's Task Order Authorization and Consultant's commencement of the Services shall indicate the Parties' agreement to the terms of the relevant Task Order.

Consultant shall commence Services under a Task Order within five (5) days of receiving Commission's Task Order Authorization.

Consultant shall perform the Services expeditiously, in accordance with the Schedule of Services set forth in a Task Order. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, Commission shall respond to Consultant's submittals in a timely manner. Upon request of the Commission, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3. Pre-Award Audit. As a result of the funding for this Project, and to the extent Caltrans procedures apply in connection therewith, issuance of a "Notice to Proceed" or

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other authorization to proceed under a Task Order may be contingent upon completion and approval of a pre-award audit. Any questions raised during the pre-award audit shall be resolved before the Commission will consider approval of this Agreement. The funding provided under this Agreement is contingent on meeting all funding requirements and could be withdrawn, thereby entitling the Commission to terminate this Agreement, if the procedures are not completed. The Consultant's files shall be maintained in a manner to facilitate State process reviews. In addition, Caltrans may require that prior to performance of any work for which funding reimbursement through Caltrans is requested and provided, that Caltrans must give to Commission an "Authorization to Proceed".

4. Audit Procedures.

4.1 Consultant and certain subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an Independent Cost Review (ICR) Audit, or a CPA ICR audit work paper review. If selected for audit or review, this Agreement, Consultant's cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is Consultant's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. This Agreement, Consultant's cost proposal, and ICR shall be adjusted by Consultant and approved by the Commission's contract manager to conform to the audit or review recommendations. Consultant agrees that individual terms of costs identified in the audit report shall be incorporated into this Agreement by this reference if directed by Commission at its sole discretion. Refusal by Consultant to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of the Agreement terms and cause for termination of this Agreement and disallowance of prior reimbursed costs. Additional audit provisions applicable to this Agreement are set forth in Sections 22 and 23 of this Agreement..

4.2 During any Caltrans' review of the ICR audit work papers created by the Consultant's independent CPA, Caltrans will work with the CPA and/or Consultant toward a resolution of issues that arise during the review. Each party agrees to use its best efforts to resolve any audit disputes in a timely manner. If Caltrans identifies significant issues during the review and is unable to issue a cognizant approval letter, Commission will reimburse the Consultant at an accepted ICR until a FAR (Federal Acquisition Regulation) compliant ICR {e.g. 48 CFR Part 31; GAGAS (Generally Accepted Auditing Standards); CAS (Cost Accounting Standards), if applicable; in accordance with procedures and guidelines of the American Association of State Highways and Transportation Officials (AASHTO) Audit Guide; and other applicable procedures and guidelines is received and approved by Caltrans.

Accepted rates will be as follows:

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a. If the proposed rate is less than one hundred fifty percent (150%) - the accepted rate reimbursed will be ninety percent (90%) of the proposed rate.

b. If the proposed rate is between one hundred fifty percent (150%) and two hundred percent (200%) - the accepted rate will be eighty-five percent (85%) of the proposed rate.

c. If the proposed rate is greater than two hundred percent (200%) - the accepted rate will be seventy-five percent (75%) of the proposed rate.

4.3 If Caltrans is unable to issue a cognizant letter per Section 4.2 above, Caltrans may require Consultant to submit a revised independent CPA-audited ICR and audit report within three (3) months of the effective date of the Caltrans' management letter. Caltrans will then have up to six (6) months to review the Consultant's and/or the independent CPA's revisions.

4.4 If the Consultant fails to comply with the provisions of this Section 4, or if Caltrans is still unable to issue a cognizant approval letter after the revised independent CPA audited ICR is submitted, overhead cost reimbursement will be limited to the accepted ICR that was established upon initial rejection of the ICR and set forth in Section 4.2 above for all rendered services. In this event, this accepted ICR will become the actual and final ICR for reimbursement purposes under this Agreement.

4.5 Consultant may submit to Commission final invoice only when all of the following items have occurred: (1) Caltrans accepts or adjusts the original or revised independent CPA audited ICR; (2) all work under this Agreement has been completed to the satisfaction of Commission; and, (3) Caltrans has issued its final ICR review letter. The Consultant must submit its final invoice to Commission no later than sixty (60) calendar days after occurrence of the last of these items. The accepted ICR will apply to this Agreement and all Task Orders issued under this Agreement, and all other agreements executed between the Commission and the Consultant, either as a prime or subconsultant, with the same fiscal period ICR.

5. Term.

5.1 This Agreement shall go into effect on the date first set forth above, contingent upon approval by Commission, and Consultant shall commence work after notification to proceed by Commission's Contract Administrator. This Agreement shall remain in effect for three years from the Effective Date, unless extended by contract amendment. The Commission may extend the term of this Agreement, in its sole discretion, for one additional two (2) year period.

5.2 Consultant is advised that any recommendation for contract award is not binding on Commission until this Agreement is fully executed and approved by the Commission.

5.3 This Agreement shall remain in effect until the date set forth above, unless earlier terminated as provided herein. Consultant shall complete the Services

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within the term of this Agreement, and shall meet any other established schedules and deadlines. All applicable indemnification provisions of this Agreement shall remain in effect following the termination of this Agreement.

6. Commission's Contract Administrator. The Commission hereby designates the Commission's Executive Director, or his or her designee, to act as its Contract Administrator for the performance of this Agreement ("Commission's Contract Administrator"). Commission's Contract Administrator shall have the authority to act on behalf of the Commission for all purposes under this Agreement. Commission's Contract Administrator shall also review and give approval, as needed, to the details of Consultant's work as it progresses. Consultant shall not accept direction or orders from any person other than the Commission's Contract Administrator or his or her designee.

7. Consultant's Representative. Consultant hereby designates **Karen Chapman** to act as its Representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to act on behalf of Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his or her professional skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement. Consultant shall work closely and cooperate fully with Commission's Contract Administrator and any other agencies which may have jurisdiction over, or an interest in, the Services. Consultant's Representative shall be available to the Commission staff at all reasonable times. Any substitution in Consultant's Representative shall be approved in writing by Commission's Contract Administrator.

8. Substitution of Key Personnel. Consultant has represented to the Commission that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval by the Commission. In the event that the Commission and Consultant cannot agree as to the substitution of the key personnel, the Commission shall be entitled to terminate this Agreement for cause, pursuant to the provisions herein. The key personnel for performance of this Agreement are **Karen Chapman, Ryan Mitry, James Santos, Liz Suh, Joe Gonzalez** or as otherwise identified in the Task Order.

9. Standard of Care; Licenses. Consultant represents and maintains that it is skilled in the professional calling necessary to perform all Services, duties and obligations required by this Agreement to fully and adequately complete the Project. Consultant shall perform the Services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Consultant further represents and warrants to the Commission that its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. Consultant shall perform, at its own

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cost and expense and without reimbursement from the Commission, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein, and shall be fully responsible to the Commission for all damages and other liabilities provided for in the indemnification provisions of this Agreement arising from the Consultant's errors and omissions. Any employee of Consultant or its sub-consultants who is determined by the Commission to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the Commission, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

10. Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. Commission retains Consultant on an independent contractor basis and not as an employee, agent or representative of the Commission. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries and other amounts due such personnel in connection with their performance of Services and as required by law. Consultant shall be responsible for all reports and obligations respecting such personnel, including but not limited to, social security taxes, income tax withholdings, unemployment insurance, disability insurance, and workers' compensation insurance.

11. Project Progress.

11.1 Modification of the Schedule. Consultant shall regularly report to the Commission, through correspondence or progress reports, its progress in providing required Services within the scheduled time periods. Commission shall be promptly informed of all anticipated delays. In the event that Consultant determines that a schedule modification is necessary, Consultant shall promptly submit a revised Schedule of Services for approval by Commission's Contract Administrator.

11.2 Trend Meetings. Consultant shall conduct trend meetings with the Commission's Contract Administrator and other interested parties, as requested by the Commission, on a bi-weekly basis or as may be mutually scheduled by the Parties at a standard day and time. These trend meetings will encompass focused and informal discussions concerning scope, schedule, and current progress of Services, relevant cost issues, and future Project objectives. Consultant shall be responsible for the preparation and distribution of meeting agendas to be received by the Commission and other attendees no later than three (3) working days prior to the meeting.

11.3 Progress Reports. As part of its monthly invoice, Consultant shall submit a progress report, in a form determined by the Commission, which will indicate the progress achieved during the previous month in relation to the Schedule of Services.

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Submission of such progress report by Consultant shall be a condition precedent to receipt of payment from the Commission for each monthly invoice submitted.

12. Delay in Performance.

12.1 Excusable Delays. Should Consultant be delayed or prevented from the timely performance of any act or Services required by the terms of the Agreement by reason of acts of God or of the public enemy, acts or omissions of the Commission or other governmental agencies in either their sovereign or contractual capacities, fires, floods, pandemics, epidemics, quarantine restrictions, strikes, freight embargoes or unusually severe weather, performance of such act shall be excused for the period of such delay.

12.2 Written Notice. If Consultant believes it is entitled to an extension of time due to conditions set forth in subsection 12.1, Consultant shall provide written notice to the Commission within seven (7) working days from the time Consultant knows, or reasonably should have known, that performance of the Services will be delayed due to such conditions. Failure of Consultant to provide such timely notice shall constitute a waiver by Consultant of any right to an excusable delay in time of performance.

12.3 Mutual Agreement. Performance of any Services under this Agreement may be delayed upon mutual agreement of the Parties. Upon such agreement, Consultant's Schedule of Services shall be extended as necessary by the Commission. Consultant shall take all reasonable steps to minimize delay in completion, and additional costs, resulting from any such extension.

13. Preliminary Review of Work. All reports, working papers, and similar work products prepared for submission in the course of providing Services under this Agreement shall be submitted to the Commission's Contract Administrator in draft form, and the Commission may require revisions of such drafts prior to formal submission and approval. In the event plans and designs are to be developed as part of the Project, final detailed plans and designs shall be contingent upon obtaining environmental clearance as may be required in connection with Federal funding. In the event that Commission's Contract Administrator, in his or her sole discretion, determines the formally submitted work product to be not in accordance with the standard of care established under this Agreement, Commission's Contract Administrator may require Consultant to revise and resubmit the work at no cost to the Commission.

14. Appearance at Hearings. If and when required by the Commission, Consultant shall render assistance at public hearings or other meetings related to the Project or necessary to the performance of the Services. However, Consultant shall not be required to, and will not, render any decision, interpretation or recommendation regarding questions of a legal nature or which may be construed as constituting a legal opinion.

15. Opportunity to Cure; Inspection of Work. Commission may provide Consultant an opportunity to cure, at Consultant's expense, all errors and omissions

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which may be disclosed during Project implementation. Should Consultant fail to make such correction in a timely manner, such correction may be made by the Commission, and the cost thereof charged to Consultant. Consultant shall allow the Commission's Contract Administrator and Caltrans to inspect or review Consultant's work in progress at any reasonable time.

16. Claims Filed by Contractor.

16.1 If claims are filed by the Commission's contractor for the Project ("Contractor") relating to work performed by Consultant's personnel, and additional information or assistance from the Consultant's personnel is required by the Commission in order to evaluate or defend against such claims; Consultant agrees to make reasonable efforts to make its personnel available for consultation with the Commission's construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.

16.2 Consultant's personnel that the Commission considers essential to assist in defending against Contractor claims will be made available on reasonable notice from the Commission. Consultation or testimony will be reimbursed at the same rates, including travel costs that are being paid for the Consultant's personnel services under this Agreement.

16.3 Services of the Consultant's personnel and other support staff in connection with Contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Agreement in order to finally resolve the claims.

16.4 Nothing contained in this Section shall be construed to in any way limit Consultant's indemnification obligations contained in Section 29. In the case of any conflict between this Section and Section 29, Section 29 shall govern. This Section is not intended to obligate the Commission to reimburse Consultant for time spent by its personnel related to Contractor claims for which Consultant is required to indemnify and defend the Commission pursuant to Section 29 of this Agreement.

17. Final Acceptance. Upon determination by the Commission that Consultant has satisfactorily completed the Services required under this Agreement and within the term set forth herein the Commission shall give Consultant a written Notice of Final Acceptance. Upon receipt of such notice, Consultant shall incur no further costs hereunder, unless otherwise specified in the Notice of Final Acceptance. Consultant may request issuance of a Notice of Final Acceptance when, in its opinion, it has satisfactorily completed all Services required under the terms of this Agreement. In the event copyrights are permitted under this Agreement, then in connection with Federal funding, it is hereby acknowledged and agreed that the United States Department of Transportation shall have the royalty-free non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for governmental purposes.

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18. Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. For example, and not by way of limitation, Consultant shall keep itself fully informed of and in compliance with all implementing regulations, design standards, specifications, previous commitments that must be incorporated in the design of the Project, and administrative controls including those of the United States Department of Transportation. Compliance with Federal procedures may include completion of the applicable environmental documents and approved by the United States Department of Transportation. For example, and not by way of limitation, a signed Categorical Exclusion, Finding of No Significant Impact, or published Record of Decision may be required to be approved and/or completed by the United States Department of Transportation. For Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Commission, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold Commission, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

19. Fees and Payment.

19.1 The method of payment for this Agreement will be based on actual cost plus a fixed fee. Commission shall reimburse Consultant for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by Consultant in performance of the Services. Consultant shall not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved Consultant cost proposal attached hereto as Exhibit “B” and incorporated herein by reference, or any cost proposal included as part of a Task Order (“Cost Proposal”) unless additional reimbursement is provided for by written amendment. In no event, shall Consultant be reimbursed for overhead costs at a rate that exceeds Commission’s approved overhead rate set forth in the Cost Proposal. To the extent legally permissible, Consultant’s approved overhead rate shall be fixed for the term of this Agreement. In the event that Commission determines that a change to the Services from that specified in the Cost Proposal, this Agreement or any Task Order is required, the Agreement time or actual costs reimbursable by Commission shall be adjusted by written amendment to accommodate the changed work. The maximum total cost as specified in Section 19.8 shall not be exceeded, unless authorized by a written amendment.

19.2 In addition to the allowable incurred costs, Commission shall pay Consultant a fixed fee to be set forth in each Task Order (“Fixed Fee”). The Fixed Fee is nonadjustable for each Task Order, except in the event of a significant change in the Scope of Services, and such adjustment is made by written amendment.

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19.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal. In addition, payments to Consultant for travel and subsistence expenses claimed for reimbursement or applied as local match credit shall not exceed rates authorized to be paid exempt non- represented State employees under current State Department of Personnel Administration (DPA) rules, unless otherwise authorized by Commission. If the rates invoiced are in excess of those authorized DPA rates, and Commission has not otherwise approved said rates, then Consultant is responsible for the cost difference and any overpayments shall be reimbursed to the Commission on demand.

19.4 When milestone cost estimates are included in the approved Cost Proposal for a Task Order, Consultant shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.

19.5 Progress payments shall be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of the Fixed Fee shall be included in the monthly progress payments. If Consultant fails to submit the required deliverable items according to the schedule set forth in the Scope of Services, Commission shall have the right to delay payment or terminate this Agreement in accordance with the provisions of Section 21, Termination.

19.6 No payment shall be made prior to approval of any Services, nor for any Services performed prior to approval of this Agreement.

19.7 Consultant shall be reimbursed, as promptly as fiscal procedures will permit upon receipt by Commission's Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which Consultant is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this Agreement number and project title. Final invoice must contain the final cost and all credits due Commission including any equipment purchased under the Equipment Purchase provisions of this Agreement. The final invoice should be submitted within 60 calendar days after completion of Consultant's work. Invoices shall be mailed to Commission's Contract Administrator at the following address:

Riverside County Transportation Commission
Attention: Accounts Payable
P.O. 12008
Riverside, CA 92502

19.8 The total amount payable by Commission, including the Fixed Fee, shall not exceed the amount set forth in each Task Order.

19.9 Commission has or will enter into **four (4)** task order contracts for performance of the Scope of Services identified in Exhibit "A", including this

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Agreement ("**On-Call Highway Design & Environmental Services Task Order Contracts**"). The other On-Call Highway Design & Environmental Services Task Order Contracts are **Agreement No. 26-31-023-00 with HDR Engineering, Inc, Agreement No. 26-31-048-00 with Kimley-Horn and Associates, Inc and Agreement No. 26-31-049-00 with Parsons Transportation Group, Inc.** The total amount payable by Commission for the On-Call Highway Design & Environmental Services Task Order Contracts shall not exceed a cumulative maximum total value of **Thirty Million Dollars ($30,000,00)** "NTE Sum". It is understood and agreed that there is no guarantee, either expressed or implied that this dollar amount will be authorized under the Design & Environmental Services Task Order Contracts through Task Orders. Each time a Task Order is awarded under any of the Design & Environmental Services Task Order Contracts, Commission must send written notification to Consultant and each of the other consultants entering into the Highway Design & Environmental Services Task Order Contracts. The notice must identify the total funds allocated under issued Task Orders, and the remaining unencumbered amount of the NTE Sum. Consultant acknowledges and agrees that Commission must not pay any amount under this Agreement that would exceed the NTE Sum, and Consultant must not enter into a Task Order that exceeds the NTE Sum.

19.10 Salary increases shall be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by Commission's Contract Administrator. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

19.11 Consultant shall not be reimbursed for any expenses unless authorized in writing by the Commission's Contract Administrator.

19.12 All subcontracts in excess of $25,000 shall contain the above provisions.

20. Disputes.

20.1 Any dispute, other than audit, concerning a question of fact arising under this Agreement that is not disposed of by mutual agreement of the Parties shall be decided by a committee consisting of RCTC's Contract Administrator and the Director of Capital Projects, who may consider written or verbal information submitted by Consultant.

20.2 Not later than 30 days after completion of all Services under this Agreement, Consultant may request review by the Commission's Executive Director of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

20.3 Neither the pendency of a dispute, nor its consideration by the committee will excuse Consultant from full and timely performance in accordance with the terms of this Agreement.

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21. Termination.

21.1 Commission reserves the right to terminate this Agreement upon thirty (30) calendar days written notice to Consultant, for any or no reason, with the reasons for termination stated in the notice. Commission may terminate Services under a Task Order, at any time, for any or no reason, with the effective date of termination to be specified in the notice of termination of Task Order.

21.2 Commission may terminate this Agreement with Consultant should Consultant fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, Commission may proceed with the Services in any manner deemed proper by Commission. If Commission terminates this Agreement with Consultant, Commission shall pay Consultant the sum due to Consultant under this Agreement for Services completed and accepted prior to termination, unless the cost of completion to Commission exceeds the funds remaining in the Agreement. In such case, the overage shall be deducted from any sum due Consultant under this Agreement and the balance, if any, shall be paid to Consultant upon demand.

21.3 In addition to the above, payment upon termination shall include a prorated amount of profit, if applicable, but no amount shall be paid for anticipated profit on unperformed Services. Consultant shall provide documentation deemed adequate by Commission's Contract Administrator to show the Services actually completed by Consultant prior to the effective date of termination. This Agreement shall terminate on the effective date of the Notice of Termination

21.4 Upon receipt of the written Notice of Termination, Consultant shall discontinue all affected Services as directed in the Notice or as otherwise provided herein, and deliver to the Commission all Documents and Data, as defined in this Agreement, as may have been prepared or accumulated by Consultant in performance of the Services, whether completed or in progress.

21.5 In addition to the above, Consultant shall be liable to the Commission for any reasonable additional costs incurred by the Commission to revise work for which the Commission has compensated Consultant under this Agreement, but which the Commission has determined in its sole discretion needs to be revised, in part or whole, to complete the Project because it did not meet the standard of care established in this Agreement. Termination of this Agreement for cause may be considered by the Commission in determining whether to enter into future agreements with Consultant.

21.6 The rights and remedies of the Parties provided in this Section are in addition to any other rights and remedies provided by law or under this Agreement.

21.7 Consultant, in executing this Agreement, shall be deemed to have waived any and all claims for damages which may otherwise arise from the Commission's termination of this Agreement, for convenience or cause, as provided in this Section.

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21.8 Consultant may not terminate this Agreement except for cause.

22. Cost Principles and Administrative Requirements.

22.1 Consultant agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.

22.2 Consultant also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

22.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 2 CFR, Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by Consultant to Commission.

22.4 All subcontracts in excess of $25,000 shall contain the above provisions.

23. Retention of Records/Audit. For the purpose of determining compliance with, as applicable, 2 CFR Part 200, Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of this Agreement pursuant to Government Code 8546.7; Consultant, subconsultants, and Commission shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of this Agreement, including but not limited to, the costs of administering this Agreement. All parties shall make such materials available at their respective offices at all reasonable times during the Agreement period and for three years from the date of final payment under this Agreement. The State, State Auditor, Commission, or any duly authorized representative of the State or Federal Government shall have access to any books, records, and documents of Consultant and it's certified public accountants (CPA) work papers that are pertinent to this Agreement and, if applicable, indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested. Subcontracts in excess of $25,000 shall contain this provision.

23.1 Accounting System. Consultant and its subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate expenditures by line item for the Services. The accounting system of Consultant and its subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), enable the determination of incurred costs at interim points of completion, and provide support for reimbursement payment vouchers or invoices.

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24. Audit Review Procedures.

24.1 Any dispute concerning a question of fact arising under an interim or post audit of this Agreement that is not disposed of by agreement, shall be reviewed by Commission's Chief Financial Officer.

24.2 Not later than 30 days after issuance of the final audit report, Consultant may request a review by Commission's Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.

24.3 Neither the pendency of a dispute nor its consideration by Commission shall excuse Consultant from full and timely performance, in accordance with the terms of this Agreement.

25. Subcontracting.

25.1 Nothing contained in this Agreement or otherwise, shall create any contractual relation between Commission and any subconsultant(s), and no subcontract shall relieve Consultant of its responsibilities and obligations hereunder. Consultant agrees to be as fully responsible to Commission for the acts and omissions of its subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by Consultant. Consultant's obligation to pay its subconsultant(s) is an independent obligation from Commission's obligation to make payments to the Consultant.

25.2 Consultant shall perform the Services contemplated with resources available within its own organization and no portion of the Services pertinent to this Agreement shall be subcontracted without written authorization by Commission's Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.

25.3 Consultant shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to Consultant by Commission.

25.4 Any subcontract in excess of $25,000 entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement to be applicable to subconsultants.

25.5 Any substitution of subconsultant(s) must be approved in writing by Commission's Contract Administrator prior to the start of work by the subconsultant(s).

25.6 Exhibit "B" may set forth the rates at which each subconsultant shall bill the Consultant for Services and that are subject to reimbursement by the Commission to Consultant. Additional Direct Costs, as defined in Exhibit "B" shall be the same for both the Consultant and all subconsultants, unless otherwise identified in Exhibit "B" or in a Task Order. The subconsultant rate schedules and cost proposals contained herein are for accounting purposes only.

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26. Equipment Purchase

26.1 Prior authorization, in writing, by Commission's Contract Administrator shall be required before Consultant enters into any unbudgeted purchase order, or subcontract for supplies, equipment, or services. Consultant shall provide an evaluation of the necessity or desirability of incurring such costs.

26.2 For purchase of any item, service or consulting work not covered in the Cost Proposal and exceeding $5,000 prior authorization, in writing, by Commission's Contract Administrator is required. Three competitive quotations must be submitted with the request for such purchase, or the absence of bidding must be adequately justified.

26.3 Any equipment purchased as a result of this Agreement is subject to the following: Consultant shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of $5,000 or more. If the purchased equipment needs replacement and is sold or traded in, Commission shall receive a proper refund or credit at the conclusion of this Agreement, or if this Agreement is terminated, Consultant may either keep the equipment and credit Commission in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established Commission procedures; and credit Commission in an amount equal to the sales price. If Consultant elects to keep the equipment, fair market value shall be determined at Consultant's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by Commission and Consultant. If Consultant determines to sell the equipment, the terms and conditions of such sale must be approved in advance by Commission. 2 CFR, Part 200 requires a credit to Federal funds when participating equipment with a fair market value greater than $5,000 is credited to the Project.

26.4 All subcontracts in excess $25,000 shall contain the above provisions.

27. Labor Code Requirements.

27.1 Prevailing Wages.

(a) Consultant shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the Services.

(b) Any subcontract entered into as a result of this Agreement, if for more than $25,000 for public works construction or more than $15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Section.

(c) When prevailing wages apply to the Services described in the Scope of Services, transportation and subsistence costs shall be reimbursed at the

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minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See http://www.dir.ca.gov.

(d) Copies of the prevailing rate of per diem wages in effect at commencement of this Agreement are on file at the Commission's offices. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold the Commission, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

27.2 DIR Registration. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This Project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements.

27.3 Eight-Hour Law. Pursuant to the provisions of the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any worker employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment for overtime is made at not less than one and one-half the basic rate for all hours worked in excess of eight hours per day ("Eight-Hour Law"), unless Consultant or the Services are not subject to the Eight-Hour Law. Consultant shall forfeit to Commission as a penalty, $50.00 for each worker employed in the execution of this Agreement by him, or by any sub-consultant under him, for each calendar day during which such workman is required or permitted to work more than eight hours in any calendar day and forty hours in any one calendar week without such compensation for overtime violation of the provisions of the California Labor Code, unless Consultant or the Services are not subject to the Eight-Hour Law.

27.4 Employment of Apprentices. This Agreement shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on the work performed hereunder solely on the ground of race, creed, national origin, ancestry, color or sex. Every qualified apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade in which he or she is employed and shall be employed only in the craft or trade to which he or she is registered.

If California Labor Code Section 1777.5 applies to the Services, Consultant and any subcontractor hereunder who employs workers in any apprenticeable craft or trade

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shall apply to the joint apprenticeship council administering applicable standards for a certificate approving Consultant or any sub-consultant for the employment and training of apprentices. Upon issuance of this certificate, Consultant and any sub-consultant shall employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

The parties expressly understand that the responsibility for compliance with provisions of this Section and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with Consultant

28. Ownership of Materials/Confidentiality.

28.1 Documents & Data. This Agreement creates an exclusive and perpetual license for Commission to copy, use, modify, reuse, or sub-license any and all copyrights and designs embodied in plans, specifications, studies, drawings, estimates, materials, data and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data").

Consultant shall require all subcontractors to agree in writing that Commission is granted an exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement.

Consultant represents and warrants that Consultant has the legal right to grant the exclusive and perpetual license for all such Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or provided to Consultant by the Commission.

Commission shall not be limited in any way in its use of the Documents & Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at Commission's sole risk.

28.2 Intellectual Property. In addition, Commission shall have and retain all right, title and interest (including copyright, patent, trade secret and other proprietary rights) in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property") prepared or developed by or on behalf of Consultant under this Agreement as well as any other such Intellectual Property prepared or developed by or on behalf of Consultant under this Agreement.

The Commission shall have and retain all right, title and interest in Intellectual Property developed or modified under this Agreement whether or not paid for

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wholly or in part by Commission, whether or not developed in conjunction with Consultant, and whether or not developed by Consultant. Consultant will execute separate written assignments of any and all rights to the above referenced Intellectual Property upon request of Commission.

Consultant shall also be responsible to obtain in writing separate written assignments from any subcontractors or agents of Consultant of any and all right to the above referenced Intellectual Property. Should Consultant, either during or following termination of this Agreement, desire to use any of the above-referenced Intellectual Property, it shall first obtain the written approval of the Commission.

All materials and documents which were developed or prepared by the Consultant for general use prior to the execution of this Agreement and which are not the copyright of any other party or publicly available and any other computer applications, shall continue to be the property of the Consultant. However, unless otherwise identified and stated prior to execution of this Agreement, Consultant represents and warrants that it has the right to grant the exclusive and perpetual license for all such Intellectual Property as provided herein.

Commission further is granted by Consultant a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional, or supplemental work created under this Agreement.

28.3 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of Commission, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use Commission's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of Commission.

28.4 Infringement Indemnification. Consultant shall defend, indemnify and hold the Commission, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by Commission of the Documents & Data, including any method, process, product, or concept specified or depicted.

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29. Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold Commission, Caltrans and their directors, officials, officers, employees, consultants, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, inverse condemnation, and any claims related to property acquisition and relocation rules or failure to detect or abate hazardous materials, which are brought by a third party, and which , in any manner arise out of or are incident to alleged negligent acts, omissions, or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of consequential damages, expert witness fees, and attorneys fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against Commission, Caltrans, and their directors, officials, officers, employees, consultants, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against Commission, Caltrans or their directors, officials, officers, employees, consultants, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse Commission, Caltrans and their directors, officials, officers, employees, consultants, agents, and/or volunteers, for any and all legal expenses and costs, including reasonable attorney's fees, incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Commission, Caltrans or their directors, officials officers, employees, consultants, agents, or volunteers.

If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Consultant's obligations as set forth in this Section shall survive expiration or termination of this Agreement.

30. Insurance.

30.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to the Commission that it has secured all insurance required under this Section, in a form and with insurance companies acceptable to the Commission. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this Section.

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30.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(a) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(b) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; (2) *Automobile Liability:* $1,000,000 per accident for bodily injury and property damage. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of $1,000,000 per accident.

30.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. For Consultant, such insurance shall be in an amount not less than $1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend. Subconsultants of Consultant shall obtain such insurance in an amount not less than $2,000,000 per claim. Notwithstanding the foregoing, the Commission may consider written requests to lower or dispense with the errors and omissions liability insurance requirement contained in this Section for certain subconsultants of Consultant, on a case-by-case basis, depending on the nature and scope of the Services to be provided by the subconsultant. Approval of such request shall be in writing, signed by the Commission's Contract Administrator.

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30.4 Aircraft Liability Insurance. Prior to conducting any Services requiring use of aircraft, Consultant shall procure and maintain, or cause to be procured and maintained, aircraft liability insurance or equivalent form, with a single limit as shall be required by the Commission. Such insurance shall include coverage for owned, hired and non-owned aircraft and passengers, and shall name, or be endorsed to name, the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds with respect to the Services or operations performed by or on behalf of the Consultant.

30.5 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by the Commission to add the following provisions to the insurance policies:

(a) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give the Commission, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be “primary and non-contributory” and will not seek contribution from the Commission’s or Caltrans’ insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(b) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) the Commission, Caltrans and their directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects the Commission, Caltrans and their directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant’s scheduled underlying coverage. Any insurance or self-insurance maintained by the Commission, Caltrans and their directors, officials, officers, employees and agents shall be excess of the Consultant’s insurance and shall not be called upon to contribute with it in any way.

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(c) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against the Commission, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(d) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the Commission (if agreed to in a written contract or agreement) before the Commission's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) Consultant shall provide the Commission at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the Commission at least ten (10) days prior to the effective date of cancellation or expiration.

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(v) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vi) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the Commission, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(vii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, Commission has the right but not the duty to obtain the insurance it deems necessary and any premium paid by Commission will be promptly reimbursed by Consultant or Commission will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, Commission may cancel this Agreement. The Commission may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(viii) Neither the Commission nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

30.6 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Commission. If the Commission does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of the Commission, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Commission, its directors, officials, officers, employees and agents; or, (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expense.

30.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

30.8 Verification of Coverage. Consultant shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the Commission. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by the Commission before work commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

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30.9 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the Commission that they have secured all insurance required under this Section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the Commission as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, the Commission may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

30.10 Other Insurance. At its option, the Commission may require such additional coverage(s), limits and/or the reduction of deductibles or retentions it considers reasonable and prudent based upon risk factors that may directly or indirectly impact the Project. In retaining this option Commission does not warrant Consultant's insurance program to be adequate. Consultant shall have the right to purchase insurance in addition to the insurance required in this Section.

31. Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the Commission has determined that the Project will contain areas that are open to public traffic. Consultant shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. Consultant shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.

32. Additional Work. Any work or activities that are in addition to, or otherwise outside of, the Services to be performed pursuant to this Agreement shall only be performed pursuant to a separate agreement between the parties. Notwithstanding the foregoing, the Commission's Executive Director may make a change to the Agreement, other than a Cardinal Change. For purposes of this Agreement, a Cardinal Change is a change which is "outside the scope" of the Agreement; in other words, work which should not be regarded as having been fairly and reasonably within the contemplation of the parties when the Agreement was entered into. An example of a change which is not a Cardinal Change would be where, in a contract to construct a building there are many changes in the materials used, but the size and layout of the building remains the same.

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Cardinal Changes are not within the authority of this provision to order, and shall be processed by the Commission as "sole source" procurements according to applicable law, including the requirements of FTA Circular 4220.1D, paragraph 9(f).

(a) In addition to the changes authorized above, a modification which is signed by Consultant and the Commission's Executive Director, other than a Cardinal Change, may be made in order to: (1) make a negotiated equitable adjustment to the Agreement price, delivery schedule and other terms resulting from the issuance of a Change Order, (2) reflect definitive letter contracts, and (3) reflect other agreements of the parties modifying the terms of this Agreement ("Bilateral Contract Modification").

(b) Consultant shall not perform, nor be compensated for any change, without written authorization from the Commission's Executive Director as set forth herein. In the event such a change authorization is not issued and signed by the Commission's Executive Director, Consultant shall not provide such change.

33. Prohibited Interests.

33.1 Solicitation. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Commission shall have the right to rescind this Agreement without liability.

33.2 Consultant Conflict of Interest.

(a) Consultant shall disclose any financial, business, or other relationship with Commission that may have an impact upon the outcome of this Agreement, or any ensuing Commission construction project. Consultant shall also list current clients who may have a financial interest in the outcome of this Agreement, or any ensuing Commission construction project, which will follow.

(b) Consultant hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.

(c) Any subcontract in excess of $25,000 entered into as a result of this Agreement, shall contain all of the provisions of this Article.

(d) Consultant further certifies that neither Consultant, nor any firm affiliated with Consultant, will bid on any construction subcontracts included within the construction contract. Additionally, Consultant certifies that no person working under

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this Agreement is also employed by the construction contractor for any project included within this Agreement.

33.3 Commission Conflict of Interest. For the term of this Agreement, no member, officer or employee of the Commission, during the term of his or her service with the Commission, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

33.4 Conflict of Employment. Employment by the Consultant of personnel currently on the payroll of the Commission shall not be permitted in the performance of this Agreement, even though such employment may occur outside of the employee's regular working hours or on weekends, holidays or vacation time. Further, the employment by the Consultant of personnel who have been on the Commission payroll within one year prior to the date of execution of this Agreement, where this employment is caused by and or dependent upon the Consultant securing this or related Agreements with the Commission, is prohibited.

33.5 Covenant Against Contingent Fees. As required in connection with federal funding, the Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or secure this Agreement, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, the Commission shall have the right to terminate this Agreement without liability pursuant to the terms herein, or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

33.6 Rebates, Kickbacks or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any Commission employee. For breach or violation of this warranty, Commission shall have the right in its discretion; to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the Agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

33.7 Covenant Against Expenditure of Commission, State or Federal Funds for Lobbying. The Consultant certifies that to the best of his/ her knowledge and belief no state, federal or local agency appropriated funds have been paid, or will be paid by or on behalf of the Consultant to any person for the purpose of influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the award of any state or federal contract, grant, loan, or cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

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(a) If any funds other than federal appropriated funds have been paid, or will be paid to any person for the purpose of influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this Agreement, the Consultant shall complete and submit the attached Exhibit "F", Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with the attached instructions.

(b) The Consultant's certification provided in this Section is a material representation of fact upon which reliance was placed when this Agreement was entered into, and is a prerequisite for entering into this Agreement pursuant to Section 1352, Title 31, US. Code. Failure to comply with the restrictions on expenditures, or the disclosure and certification requirements set forth in Section 1352, Title 31, US. Code may result in a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

(c) The Consultant also agrees by signing this Agreement that he/she shall require that the language set forth in this Section 3.23.5 be included in all Consultant subcontracts which exceed $100,000, and that all such subcontractors shall certify and disclose accordingly.

33.8 Employment Adverse to the Commission. Consultant shall notify the Commission, and shall obtain the Commission’s written consent, prior to accepting work to assist with or participate in a third-party lawsuit or other legal or administrative proceeding against the Commission during the term of this Agreement.

34. Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

35. Right to Employ Other Consultants. Commission reserves the right to employ other consultants in connection with the Project.

36. Governing Law. This Agreement shall be governed by and construed with the laws of the State of California. Venue shall be in Riverside County.

37. Disputes; Attorneys' Fees.

37.1 Prior to commencing any action hereunder, the Parties shall attempt in good faith to resolve any dispute arising between them. The pendency of a dispute shall not excuse Consultant from full and timely performance of the Services.

37.2. If the Parties are unable to resolve a dispute after attempting in good faith to do so, the Parties may seek any other available remedy to resolve the dispute. If

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either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorneys' fees and, all other costs of such actions.

38. Time of Essence. Time is of the essence for each and every provision of this Agreement.

39. Headings. Article and Section Headings, paragraph captions or marginal headings contained in this Agreement are for convenience only and shall have no effect in the construction or interpretation of any provision herein.

40. Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

CONSULTANT:	**COMMISSION:**
HNTB Corporation	Riverside County
3633 Inland Empire Boulevard	Transportation Commission
Suite 955	4080 Lemon Street, 3rd Floor
Ontario, CA 91764	Riverside, CA 92501
Attn: Karen Chapman	Atten: Executive Director

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. mail, first class postage prepaid, and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

41. Conflicting Provisions. In the event that provisions of any attached exhibits conflict in any way with the provisions set forth in this Agreement, the language, terms and conditions contained in this Agreement shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the performance of the Services.

42. Amendment or Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

43. Entire Agreement. This Agreement contains the entire agreement of the Parties relating to the subject matter hereof and supersedes all prior negotiations, agreements or understandings.

44. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

45. Provisions Applicable When State Funds or Federal Funds Are Involved. When funding for the Services under a Task Order is provided, in whole or in part, from

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Caltrans, Consultant shall also fully and adequately comply with the provisions included in Exhibit "C" (California Department of Transportation requirements) attached hereto and incorporated herein by reference. When funding for the Services under a Task Order is provided, in whole or in part, from the FTA, Consultant shall also fully and adequately comply with the provisions included in Exhibit "D" (FTA Requirements) attached hereto and incorporated herein by reference.

46. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

47. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

48. Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

49. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

50. Subpoenas or Court Orders. Should Consultant receive a subpoena or court order related to this Agreement, the Services or the Project, Consultant shall immediately provide written notice of the subpoena or court order to the Commission. Consultant shall not respond to any such subpoena or court order until notice to the Commission is provided as required herein, and shall cooperate with the Commission in responding to the subpoena or court order.

51. Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein, without the prior written consent of the Commission. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

52. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by Consultant without the prior written consent of Commission.

53. Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated into this Agreement as though fully set forth herein.

54. No Waiver. Failure of Commission to insist on any one occasion upon strict compliance with any of the terms, covenants or conditions hereof shall not be deemed a waiver of such term, covenant or condition, nor shall any waiver or relinquishment of any

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rights or powers hereunder at any one time or more times be deemed a waiver or relinquishment of such other right or power at any other time or times.

[Signatures on following page]

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SIGNATURE PAGE
TO
PROFESSIONAL SERVICES AGREEMENT
WITH STATE, FHWA, FTA AND PROPOSITION 1B FUNDING/ASSISTANCE

IN WITNESS WHEREOF, this Agreement was executed on the date first written above.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION		**CONSULTANT** **HNTB Corporation**
By:_____ Aaron Hake Executive Director		By: _____ Signature _____ Name _____ Title
Approved as to Form: By:_____ Best, Best & Krieger LLP General Counsel		**ATTEST:** By: _____ Its: _____

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* A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

Exhibits:

EXHIBIT "A" - SCOPE OF SERVICES

EXHIBIT "B"- COMPENSATION AND PAYMENT

EXHIBIT "C" – FEDERAL REQUIREMENTS

EXHIBIT "D" CERTIFICATE OF CONSULTANT

EXHIBIT “E” – LOBBYING ACTIVITIES DISCLOSURE

EXHIBIT “F”- EXECUTIVE ORDER N-6-22 CERTIFICATION

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EXHIBIT "A"
SCOPE OF
WORK

The Riverside County Transportation Commission (RCTC) intends to contract a “bench” of qualified consultants to provide on-call Preliminary Engineering, Environmental, and Design Engineering Services for Capital and Toll Projects on an on-call basis pursuant to task orders or purchase orders to be issued in accordance with the terms of this Request For Qualifications (RFQ) and the Commission’s model agreement. The selected consultants will supplement the work of the Commission Staff in accordance with the specifications described herein.

The Capital Program and Toll Program oversee various projects throughout Riverside County. Work for this contract will be authorized through the issuance of task orders or purchase orders (PO). **A maximum of four consultant teams will be selected**. Task orders or POs will be issued to the consultants at RCTC’s discretion based on an assessment of the highest qualifications, availability of qualified resources, and past performance on prior task orders/assignments. These project delivery support services agreements are intended to facilitate the completion of Capital and Toll projects on time and within budget.

In general, the RCTC seeks the following services including, but not limited to, preparation of Feasibility Studies; Project Initiation Documents (PID), Project Study Reports/Project Development Support (PSR/PDS); Project Approval and Environmental Documents (PA/ED); Plans, Specifications, and Estimates (PS&E); other planning studies, reports and technical services and associated documents; independent review and oversight of environmental, design, traffic, structures, electrical studies and plans prepared by others; development and management of databases for schedule, cost and quality control, risk assessments and management studies & plans; preparation of agreements; grant writing and support and other related tasks as deemed necessary; and preparation of regulatory permit applications and coordination.

Right-of-Way (ROW) and public outreach services will be primarily procured through other RCTC contracts currently in place. However, the consultants shall provide ROW and Public Outreach support services for all phases, as necessary.

All Consultant teams shall have the capability to provide the full range of services associated with federal, state and local highway project planning and development processes.

PERIOD OF PERFORMANCE

The period of performance is **three years, with one two-year extension option**. Specific term limits may also be dictated by Task orders/POs.

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List of Potential Projects

- New Road Construction
- Roadway Widening
- Resurfacing, Restoration, and Rehabilitation
- Intersection Improvements
- New Interchange or Reconfiguration
- Grade Separation Projects
- Bridge Improvement and Widening
- Roadway Safety
- Access Management
- Pedestrian and ADA Facilities
- Multi-Use Trails
- Express Toll/Transit Lanes
- Intermodal Facilities
- Intelligent Transportation Systems
- Ramp widening and/or metering

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SCOPE OF WORK

Consultants shall be responsible for the delivery of services, the preparation of documents and the review of work by others in the categories/phases of projects. Tasks Consultants are expected to perform, but not limited to, are listed below:

1 - Planning and Technical Studies

- Feasibility Studies
- Corridor Studies
- Project Study Reports/Project Development Support (PSR/PDS) or equivalent documents
- Project Initiation Document
- Technical studies
- Other similar studies per Caltrans Project Development Procedures Manual (Storm Water Data Reports, Initial Site Assessment, Traffic Engineering Performance Assessment, Preliminary Environmental Assessment Report)
- Development of Purpose & Need
- Independent Utility

2 - Specific Literature Research/Data Collection

- Research, collection, review, and analysis of applications and technologies to support the development of highway improvement projects
- Coordination and assimilation of existing datasets and identification of additional data collection needs

3 - Project Approval and Environmental Document (PA&ED)

- Scoping Documents
- Environmental Documents (CE/CE, EA/IS, EIS/EIR)
- Alternatives Analysis
- Environmental Technical Studies (Cultural, Biological, Air Quality, Noise, Traffic, Community Impacts, Hazardous Waste)
- Agency Permit Applications and coordination
- Public Hearings (including providing technical and logistical support)
- Support for Public Outreach activities/events
- Project Report (PR) or PSR/PRs
- Advanced Planning Studies
- Utilities Conflicts Identification
- Life Cycle Cost Analysis
- Value Engineering
- Traffic Report (TOAR)Equity Analysis
- Preparation of exhibits or materials needed for coordination purposes
- Preliminary site visitations and field surveys
- Preliminary engineering and geometric approval drawings
- Design standard deviations and exception investigations and identification (DSDD, CSDD, VMTDD)
- Other similar documents and activities per the Caltrans PDPM
- Managed Lane Engineering Studies and Toll Policy Reports
- Modified Access Reports for FHWA conceptual approval
- Cost Estimates
- AB194 Tolling Authority application and public hearing support

4 - Plans, Specifications, and Estimates (PS&E)

- Data Collection and Preliminary investigations
- Engineering Plans per the Caltrans Plan Preparation Manual including but not limited to: Layout, Superelevation and profile, typical sections, contour grading plans, and construction details
- Civil/structural/traffic/electrical/landscaping-irrigation design, plans, and specifications
- Stage Construction Plans and Traffic Management Plan
- Utilities Plans and Coordination, Utility Policy Exceptions

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- Drainage design, details, plans and profiles, Storm Water Data Reports (SWDR), Hydraulics/Hydrology Report and Drainage Report
- Geotechnical engineering, calculations, and investigations. Foundation reports, Geotechnical Design Reports, and Materials Reports
- Surveying, topographic mapping, and aerial photography
- Hazardous Waste studies and reports
- Quantity calculations and cost estimates
- Pavement delineation/markers, traffic control, signing and striping
- Technical specifications and Special Provisions
- Exceptions to Caltrans Standards/Design Standards Decision Document (DSDD)
- Permits and approvals by other agencies
- Other services required to secure approvals of pre-construction phases of projects and County PS&E for all State Highway improvement projects shall be prepared in accordance with Caltrans Standards. PS&E for local projects shall be prepared in accordance with local agency standards and procedures.
- Environmental Commitments Record, Environmental Revalidation and Environmental Certifications
- Construction Support Services
- Right of Way Identification, Right of Way Requirements Maps, PD-26, Right of Way and Utility Certification

5 - Project Right-of-Way & Utility Services

- ROW activities will be primarily conducted by RCTC ROW Department. Consultants shall provide ROW support services as required for all phases.
- Perform utility investigations and potholing to review and assess relocation needs due to the project.

6 - Intelligent Transportation Systems (ITS) and Transportation Technology Support Services

- Systems engineering documentation/plans (concept exploration, Concept of Operations, system requirements, Design, Testing)
- Feasibility studies
- Cost estimating
- Engineering plans/drawings
- System plans
- Communications plans
- Systems integration plans
- Equipment specifications
- Software specifications and applications
- Connected and automated vehicle research, studies, and/or deployments
- Transit signal priority systems, plans, support, and modernization
- Goods Movement technology research, studies, and/or deployments

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- Inventory management support (Infrastructure)
- ITS architecture support

7 - Traffic Engineering Support Services

- Traffic data collection (turn movement counts, automated counts, 3rd party probe data)
- Traffic studies/analysis (traffic impact studies, queuing analyses, ISOAP etc.)
- Transportation mobility Studies (Before and after evaluations, travel time studies, destination studies, etc.)
- Traffic operation studies
- Traffic signal timing documents
- Micro and macro simulation modeling using Synchro, VISSIM, TransModeler, or other traffic analysis software
- Traffic data synthesis and analytic tools for performance measurement
- Vehicle Miles Traveled (VMT) analysis per SB 743 Caltrans guidelines
- Managed lanes – Traffic and revenue studies (Investment Grade)
- Managed lanes – Concept of Operations support
- Scope of Work development (final design/build contract)

8 - Project Management Support

- Developing or reviewing project scopes of work
- Developing and maintaining baseline and project schedules, cost-loaded schedule, and expenditure forecasts
- Providing cost estimating services for the various stages in the project development/delivery process
- Project Risk Assessment and Risk Monitoring/Management Services, including developing and maintaining the risk register
- General project management
- Attending meetings, internally and externally, in connection with project management and development, including producing any materials necessary
- Performing internal and external project coordination and public outreach
- Prepare Project Management Plan
- Monthly trend and Project Development Team meetings with agendas, minutes, and look-ahead schedules
- Quality Management and Quality Control

9 – Public Outreach Support

- Develop Public Outreach Plans
- Prepare project fact sheets, messages, and content for Commission website and media
- Manage project social media, monitor/respond to public comments
- Provide support for public scoping meetings and hearings
- Provide outreach activity summaries

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10 - Miscellaneous Administrative Project Support

- Preparing grant application packages including, but not limited to, writing grant applications, assisting with required research, data, and justification preparation, and developing supporting materials, exhibits, and financial analysis to support the grant opportunity.
- Preparing documents for solicitations, preparing independent cost estimates & other documents supporting contract negotiations, preparing reports and other correspondences, interfacing with consultants and agency personnel, conducting post award contract administration, monitoring contract compliance, preparing modifications/contract amendments, and performing other related work and duties.
- Providing regular project progress status reports
- Maintaining project information/fact sheets, webpages, and social media platforms
- Developing Memorandum of Understandings and/or Cooperative/Funding Agreements, maintaining databases, and updating various project tracking sheets
- Preparing procurements/contracts and task orders
- Supporting project audits; processing invoices; preparing financial data; reviewing technical task reports/technical memos; preparing materials for meetings and presentations (written and oral); preparing agendas, meeting notes, and following through with action items
- Graphics/digital content design

Other relevant services may be included by RCTC via this On-Call.

Each Task Order shall be evaluated independently based on established criteria, including scope, complexity, and required expertise. RCTC shall have full discretion in requiring assignment of specific Consultant/sub-consultant resources/staff to individual task orders, provided such decisions are made in consideration of qualifications and past performance/success in efficient delivery of assignments. Task Orders may include phased Notice to Proceed as determined appropriate by RCTC.

Project Understanding and Approach

The I-15/Cantu Galleano Ranch Road Interchange Improvement Project, located in the City of Eastvale, has been identified by RCTC as a long-range capital and toll improvement effort. The proposed project will evaluate a range of interchange and express lane alternatives and advance through the Caltrans Project Delivery Phases, including Project Initiation Document (PID), Project Approval and Environmental Document (PA/ED), and Plans, Specifications, and Estimate (PS&E).

Consultants should use this project as the basis for developing their Statement of Qualifications (SOQ), specifically the Project Understanding and Approach section; demonstrating their technical understanding, proposed methodologies, and approach to delivering each phase in compliance with Caltrans standards and RCTC objectives.

The activities outlined in this Scope of Work are intended to support the PID, PA/ED, and PS&E phases, as approved by Caltrans and applicable local agencies. Consultants should demonstrate in their Approach and Understanding how they will effectively address the key tasks and objectives associated with each project phase.

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EXHIBIT "B"

COMPENSATION SUMMARY[1]

FIRM	PROJECT TASKS/ROLE	COST
	Prime Consultant:	
HNTB Corporation	On-Call Highway Design and Environmental Services for Capital and Toll Programs Projects	$30,000,000.00
	Sub Consultants:	
Costin Public Outreach Group	Sub Consultant	TBD per Task Order
David Evans and Associates	Sub Consultant	TBD per Task Order
DUKE Cultural Resources Management, LLC	Sub Consultant	TBD per Task Order
ECORP Consulting Inc.	Sub Consultant	TBD per Task Order
Environmental Geoscience PlanningConsulting, Inc.	Sub Consultant	TBD per Task Order
Earth Mechanics Inc.	Sub Consultant	TBD per Task Order
Fehr and Peers	Sub Consultant	TBD per Task Order
GPA Consulting	Sub Consultant	TBD per Task Order
ICF Consulting	Sub Consultant	TBD per Task Order
Iteris	Sub Consultant	TBD per Task Order
Laurel Civil and Environmental Consultant	Sub Consultant	TBD per Task Order
MNS Engineers Inc.	Sub Consultant	TBD per Task Order
Monument ROW	Sub Consultant	TBD per Task Order
Stantec	Sub Consultant	TBD per Task Order
Statistical Research Inc.	Sub Consultant	TBD per Task Order
TYLin	Sub Consultant	TBD per Task Order
	TOTAL COSTS	**$30,000,000.00**

[1] Commission authorization pertains to total contract award amount. Compensation adjustments between consultants may occur; however, the maximum total compensation authorized may not be exceeded.

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Agreement No 26-31-048-00

**PROFESSIONAL SERVICES AGREEMENT
WITH FHWA, STATE, FTA AND PROPOSITION 1B FUNDING ASSISTANCE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT WITH
KIMLEY-HORN AND ASSOCIATES INC.
FOR ON-CALL HIGHWAY DESIGN AND ENVIRONMENTAL SERVICES
FOR CAPITAL AND TOLL PROGRAMS PROJECTS**

Parties and Date.

This Agreement is made and entered into this ___ day of _____, 2026, by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION ("the Commission") and **KIMLEY-HORN AND ASSOCIATES INC. ("Consultant"),** a corporation**.** The Commission and Consultant are sometimes referred to herein individually as “Party”, and collectively as the “Parties”.

Recitals.

A. On November 8, 1988 the Voters of Riverside County approved Measure A authorizing the collection of a one-half percent (1/2 %) retail transactions and use tax (the "tax") to fund transportation programs and improvements within the County of Riverside, and adopting the Riverside County Transportation Improvement Plan (the "Plan").

B. Pursuant to Public Utility Code Sections 240000 et seq., the Commission is authorized to allocate the proceeds of the Tax in furtherance of the Plan.

C. On November 5, 2002, the voters of Riverside County approved an extension of the Measure A tax for an additional thirty (30) years for the continued funding of transportation and improvements within the County of Riverside.

D. A source of funding for payment for on-call professional consulting services provided under this Agreement may be Federal Highway Administration (“FHWA”) funds administered by the California Department of Transportation (“Caltrans”) from the United States Department of Transportation, Proposition 1B funds (“Prop 1B”) funds administered by Caltrans, and/or funds from the Federal Transit Administration (“FTA”). This Agreement shall not be deemed to be approved by the Commission until the certification shown in Exhibit “E” attached hereto and incorporated herein by reference, is executed.

E. Consultant desires to perform and assume responsibility for the provision of certain on-call design engineering and environmental services for the construction of commuter rail station capital improvement projects in the County of Riverside, California. Services shall be provided on the terms and conditions set forth in this Agreement and in the task order(s) to be solicited, awarded and authorized by Commission as further described in this Agreement (“Task Order”). Consultant represents that it is experienced in providing such services to public clients, is licensed in the State of California (if necessary), and is familiar with the plans of the Commission.

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F. Commission desires to engage Consultant to render such services on an on-call basis. Services shall be ordered by Task Order(s) to be issued pursuant to this Agreement for future projects as set forth herein and in each Task Order (each such project shall be designated a "Project" under this Agreement).

Terms.

1. General Scope of Services. Consultant shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise, and incidental and customary work necessary to fully and adequately supply the on-call design engineering and environmental services for the Projects ("Services"). The Services are generally described in Exhibit "A" attached hereto and incorporated herein by reference. The Services shall be more particularly described in the individual Task Orders issued by the Commission's Executive Director or designee. No Services shall be performed unless authorized by a fully executed Task Order. All Services shall be subject to, and performed in accordance with, this Agreement, the relevant Task Order, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

2. Task Orders; Commencement of Services; Schedule of Services. Services under this Agreement shall be requested by the Commission pursuant to Task Order requests. If Commission accepts Consultant's Task Order proposal, Commission shall issue a purchase order or executed task order for the Services ("Commission's Task Order Authorization"). Consultant's agreement to the final terms of a proposed Task Order, Commission's Task Order Authorization and Consultant's commencement of the Services shall indicate the Parties' agreement to the terms of the relevant Task Order.

Consultant shall commence Services under a Task Order within five (5) days of receiving Commission's Task Order Authorization.

Consultant shall perform the Services expeditiously, in accordance with the Schedule of Services set forth in a Task Order. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, Commission shall respond to Consultant's submittals in a timely manner. Upon request of the Commission, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3. Pre-Award Audit. As a result of the funding for this Project, and to the extent Caltrans procedures apply in connection therewith, issuance of a "Notice to Proceed" or

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other authorization to proceed under a Task Order may be contingent upon completion and approval of a pre-award audit. Any questions raised during the pre-award audit shall be resolved before the Commission will consider approval of this Agreement. The funding provided under this Agreement is contingent on meeting all funding requirements and could be withdrawn, thereby entitling the Commission to terminate this Agreement, if the procedures are not completed. The Consultant's files shall be maintained in a manner to facilitate State process reviews. In addition, Caltrans may require that prior to performance of any work for which funding reimbursement through Caltrans is requested and provided, that Caltrans must give to Commission an "Authorization to Proceed".

4. Audit Procedures.

4.1 Consultant and certain subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an Independent Cost Review (ICR) Audit, or a CPA ICR audit work paper review. If selected for audit or review, this Agreement, Consultant's cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is Consultant's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. This Agreement, Consultant's cost proposal, and ICR shall be adjusted by Consultant and approved by the Commission's contract manager to conform to the audit or review recommendations. Consultant agrees that individual terms of costs identified in the audit report shall be incorporated into this Agreement by this reference if directed by Commission at its sole discretion. Refusal by Consultant to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of the Agreement terms and cause for termination of this Agreement and disallowance of prior reimbursed costs. Additional audit provisions applicable to this Agreement are set forth in Sections 22 and 23 of this Agreement..

4.2 During any Caltrans' review of the ICR audit work papers created by the Consultant's independent CPA, Caltrans will work with the CPA and/or Consultant toward a resolution of issues that arise during the review. Each party agrees to use its best efforts to resolve any audit disputes in a timely manner. If Caltrans identifies significant issues during the review and is unable to issue a cognizant approval letter, Commission will reimburse the Consultant at an accepted ICR until a FAR (Federal Acquisition Regulation) compliant ICR {e.g. 48 CFR Part 31; GAGAS (Generally Accepted Auditing Standards); CAS (Cost Accounting Standards), if applicable; in accordance with procedures and guidelines of the American Association of State Highways and Transportation Officials (AASHTO) Audit Guide; and other applicable procedures and guidelines is received and approved by Caltrans.

Accepted rates will be as follows:

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a. If the proposed rate is less than one hundred fifty percent (150%) - the accepted rate reimbursed will be ninety percent (90%) of the proposed rate.

b. If the proposed rate is between one hundred fifty percent (150%) and two hundred percent (200%) - the accepted rate will be eighty-five percent (85%) of the proposed rate.

c. If the proposed rate is greater than two hundred percent (200%) - the accepted rate will be seventy-five percent (75%) of the proposed rate.

4.3 If Caltrans is unable to issue a cognizant letter per Section 4.2 above, Caltrans may require Consultant to submit a revised independent CPA-audited ICR and audit report within three (3) months of the effective date of the Caltrans' management letter. Caltrans will then have up to six (6) months to review the Consultant's and/or the independent CPA's revisions.

4.4 If the Consultant fails to comply with the provisions of this Section 4, or if Caltrans is still unable to issue a cognizant approval letter after the revised independent CPA audited ICR is submitted, overhead cost reimbursement will be limited to the accepted ICR that was established upon initial rejection of the ICR and set forth in Section 4.2 above for all rendered services. In this event, this accepted ICR will become the actual and final ICR for reimbursement purposes under this Agreement.

4.5 Consultant may submit to Commission final invoice only when all of the following items have occurred: (1) Caltrans accepts or adjusts the original or revised independent CPA audited ICR; (2) all work under this Agreement has been completed to the satisfaction of Commission; and, (3) Caltrans has issued its final ICR review letter. The Consultant must submit its final invoice to Commission no later than sixty (60) calendar days after occurrence of the last of these items. The accepted ICR will apply to this Agreement and all Task Orders issued under this Agreement, and all other agreements executed between the Commission and the Consultant, either as a prime or subconsultant, with the same fiscal period ICR.

5. Term.

5.1 This Agreement shall go into effect on the date first set forth above, contingent upon approval by Commission, and Consultant shall commence work after notification to proceed by Commission's Contract Administrator. This Agreement shall remain in effect for three years from the Effective Date, unless extended by contract amendment. The Commission may extend the term of this Agreement, in its sole discretion, for one additional two (2) year period.

5.2 Consultant is advised that any recommendation for contract award is not binding on Commission until this Agreement is fully executed and approved by the Commission.

5.3 This Agreement shall remain in effect until the date set forth above, unless earlier terminated as provided herein. Consultant shall complete the Services

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within the term of this Agreement, and shall meet any other established schedules and deadlines. All applicable indemnification provisions of this Agreement shall remain in effect following the termination of this Agreement.

6. Commission's Contract Administrator. The Commission hereby designates the Commission's Executive Director, or his or her designee, to act as its Contract Administrator for the performance of this Agreement ("Commission's Contract Administrator"). Commission's Contract Administrator shall have the authority to act on behalf of the Commission for all purposes under this Agreement. Commission's Contract Administrator shall also review and give approval, as needed, to the details of Consultant's work as it progresses. Consultant shall not accept direction or orders from any person other than the Commission's Contract Administrator or his or her designee.

7. Consultant's Representative. Consultant hereby designates **Darren Adrian** to act as its Representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to act on behalf of Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his or her professional skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement. Consultant shall work closely and cooperate fully with Commission's Contract Administrator and any other agencies which may have jurisdiction over, or an interest in, the Services. Consultant's Representative shall be available to the Commission staff at all reasonable times. Any substitution in Consultant's Representative shall be approved in writing by Commission's Contract Administrator.

8. Substitution of Key Personnel. Consultant has represented to the Commission that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval by the Commission. In the event that the Commission and Consultant cannot agree as to the substitution of the key personnel, the Commission shall be entitled to terminate this Agreement for cause, pursuant to the provisions herein. The key personnel for performance of this Agreement are **Darren Adrian, Sarmad Farjo, Ian Allegoren Jason Valencia, Tim Miller** or as otherwise identified in the Task Order.

9. Standard of Care; Licenses. Consultant represents and maintains that it is skilled in the professional calling necessary to perform all Services, duties and obligations required by this Agreement to fully and adequately complete the Project. Consultant shall perform the Services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Consultant further represents and warrants to the Commission that its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. Consultant shall perform, at its own

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cost and expense and without reimbursement from the Commission, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein, and shall be fully responsible to the Commission for all damages and other liabilities provided for in the indemnification provisions of this Agreement arising from the Consultant's errors and omissions. Any employee of Consultant or its sub-consultants who is determined by the Commission to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the Commission, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

10. Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. Commission retains Consultant on an independent contractor basis and not as an employee, agent or representative of the Commission. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries and other amounts due such personnel in connection with their performance of Services and as required by law. Consultant shall be responsible for all reports and obligations respecting such personnel, including but not limited to, social security taxes, income tax withholdings, unemployment insurance, disability insurance, and workers' compensation insurance.

11. Project Progress.

11.1 Modification of the Schedule. Consultant shall regularly report to the Commission, through correspondence or progress reports, its progress in providing required Services within the scheduled time periods. Commission shall be promptly informed of all anticipated delays. In the event that Consultant determines that a schedule modification is necessary, Consultant shall promptly submit a revised Schedule of Services for approval by Commission's Contract Administrator.

11.2 Trend Meetings. Consultant shall conduct trend meetings with the Commission's Contract Administrator and other interested parties, as requested by the Commission, on a bi-weekly basis or as may be mutually scheduled by the Parties at a standard day and time. These trend meetings will encompass focused and informal discussions concerning scope, schedule, and current progress of Services, relevant cost issues, and future Project objectives. Consultant shall be responsible for the preparation and distribution of meeting agendas to be received by the Commission and other attendees no later than three (3) working days prior to the meeting.

11.3 Progress Reports. As part of its monthly invoice, Consultant shall submit a progress report, in a form determined by the Commission, which will indicate the progress achieved during the previous month in relation to the Schedule of Services.

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Submission of such progress report by Consultant shall be a condition precedent to receipt of payment from the Commission for each monthly invoice submitted.

12. Delay in Performance.

12.1 Excusable Delays. Should Consultant be delayed or prevented from the timely performance of any act or Services required by the terms of the Agreement by reason of acts of God or of the public enemy, acts or omissions of the Commission or other governmental agencies in either their sovereign or contractual capacities, fires, floods, pandemics, epidemics, quarantine restrictions, strikes, freight embargoes or unusually severe weather, performance of such act shall be excused for the period of such delay.

12.2 Written Notice. If Consultant believes it is entitled to an extension of time due to conditions set forth in subsection 12.1, Consultant shall provide written notice to the Commission within seven (7) working days from the time Consultant knows, or reasonably should have known, that performance of the Services will be delayed due to such conditions. Failure of Consultant to provide such timely notice shall constitute a waiver by Consultant of any right to an excusable delay in time of performance.

12.3 Mutual Agreement. Performance of any Services under this Agreement may be delayed upon mutual agreement of the Parties. Upon such agreement, Consultant's Schedule of Services shall be extended as necessary by the Commission. Consultant shall take all reasonable steps to minimize delay in completion, and additional costs, resulting from any such extension.

13. Preliminary Review of Work. All reports, working papers, and similar work products prepared for submission in the course of providing Services under this Agreement shall be submitted to the Commission's Contract Administrator in draft form, and the Commission may require revisions of such drafts prior to formal submission and approval. In the event plans and designs are to be developed as part of the Project, final detailed plans and designs shall be contingent upon obtaining environmental clearance as may be required in connection with Federal funding. In the event that Commission's Contract Administrator, in his or her sole discretion, determines the formally submitted work product to be not in accordance with the standard of care established under this Agreement, Commission's Contract Administrator may require Consultant to revise and resubmit the work at no cost to the Commission.

14. Appearance at Hearings. If and when required by the Commission, Consultant shall render assistance at public hearings or other meetings related to the Project or necessary to the performance of the Services. However, Consultant shall not be required to, and will not, render any decision, interpretation or recommendation regarding questions of a legal nature or which may be construed as constituting a legal opinion.

15. Opportunity to Cure; Inspection of Work. Commission may provide Consultant an opportunity to cure, at Consultant's expense, all errors and omissions

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which may be disclosed during Project implementation. Should Consultant fail to make such correction in a timely manner, such correction may be made by the Commission, and the cost thereof charged to Consultant. Consultant shall allow the Commission's Contract Administrator and Caltrans to inspect or review Consultant's work in progress at any reasonable time.

16. Claims Filed by Contractor.

16.1 If claims are filed by the Commission's contractor for the Project ("Contractor") relating to work performed by Consultant's personnel, and additional information or assistance from the Consultant's personnel is required by the Commission in order to evaluate or defend against such claims; Consultant agrees to make reasonable efforts to make its personnel available for consultation with the Commission's construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.

16.2 Consultant's personnel that the Commission considers essential to assist in defending against Contractor claims will be made available on reasonable notice from the Commission. Consultation or testimony will be reimbursed at the same rates, including travel costs that are being paid for the Consultant's personnel services under this Agreement.

16.3 Services of the Consultant's personnel and other support staff in connection with Contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Agreement in order to finally resolve the claims.

16.4 Nothing contained in this Section shall be construed to in any way limit Consultant's indemnification obligations contained in Section 29. In the case of any conflict between this Section and Section 29, Section 29 shall govern. This Section is not intended to obligate the Commission to reimburse Consultant for time spent by its personnel related to Contractor claims for which Consultant is required to indemnify and defend the Commission pursuant to Section 29 of this Agreement.

17. Final Acceptance. Upon determination by the Commission that Consultant has satisfactorily completed the Services required under this Agreement and within the term set forth herein the Commission shall give Consultant a written Notice of Final Acceptance. Upon receipt of such notice, Consultant shall incur no further costs hereunder, unless otherwise specified in the Notice of Final Acceptance. Consultant may request issuance of a Notice of Final Acceptance when, in its opinion, it has satisfactorily completed all Services required under the terms of this Agreement. In the event copyrights are permitted under this Agreement, then in connection with Federal funding, it is hereby acknowledged and agreed that the United States Department of Transportation shall have the royalty-free non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for governmental purposes.

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18. Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. For example, and not by way of limitation, Consultant shall keep itself fully informed of and in compliance with all implementing regulations, design standards, specifications, previous commitments that must be incorporated in the design of the Project, and administrative controls including those of the United States Department of Transportation. Compliance with Federal procedures may include completion of the applicable environmental documents and approved by the United States Department of Transportation. For example, and not by way of limitation, a signed Categorical Exclusion, Finding of No Significant Impact, or published Record of Decision may be required to be approved and/or completed by the United States Department of Transportation. For Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Commission, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold Commission, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

19. Fees and Payment.

19.1 The method of payment for this Agreement will be based on actual cost plus a fixed fee. Commission shall reimburse Consultant for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by Consultant in performance of the Services. Consultant shall not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved Consultant cost proposal attached hereto as Exhibit “B” and incorporated herein by reference, or any cost proposal included as part of a Task Order (“Cost Proposal”) unless additional reimbursement is provided for by written amendment. In no event, shall Consultant be reimbursed for overhead costs at a rate that exceeds Commission’s approved overhead rate set forth in the Cost Proposal. To the extent legally permissible, Consultant’s approved overhead rate shall be fixed for the term of this Agreement. In the event that Commission determines that a change to the Services from that specified in the Cost Proposal, this Agreement or any Task Order is required, the Agreement time or actual costs reimbursable by Commission shall be adjusted by written amendment to accommodate the changed work. The maximum total cost as specified in Section 19.8 shall not be exceeded, unless authorized by a written amendment.

19.2 In addition to the allowable incurred costs, Commission shall pay Consultant a fixed fee to be set forth in each Task Order (“Fixed Fee”). The Fixed Fee is nonadjustable for each Task Order, except in the event of a significant change in the Scope of Services, and such adjustment is made by written amendment.

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19.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal. In addition, payments to Consultant for travel and subsistence expenses claimed for reimbursement or applied as local match credit shall not exceed rates authorized to be paid exempt non- represented State employees under current State Department of Personnel Administration (DPA) rules, unless otherwise authorized by Commission. If the rates invoiced are in excess of those authorized DPA rates, and Commission has not otherwise approved said rates, then Consultant is responsible for the cost difference and any overpayments shall be reimbursed to the Commission on demand.

19.4 When milestone cost estimates are included in the approved Cost Proposal for a Task Order, Consultant shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.

19.5 Progress payments shall be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of the Fixed Fee shall be included in the monthly progress payments. If Consultant fails to submit the required deliverable items according to the schedule set forth in the Scope of Services, Commission shall have the right to delay payment or terminate this Agreement in accordance with the provisions of Section 21, Termination.

19.6 No payment shall be made prior to approval of any Services, nor for any Services performed prior to approval of this Agreement.

19.7 Consultant shall be reimbursed, as promptly as fiscal procedures will permit upon receipt by Commission's Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which Consultant is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this Agreement number and project title. Final invoice must contain the final cost and all credits due Commission including any equipment purchased under the Equipment Purchase provisions of this Agreement. The final invoice should be submitted within 60 calendar days after completion of Consultant's work. Invoices shall be mailed to Commission's Contract Administrator at the following address:

Riverside County Transportation Commission
Attention: Accounts Payable
P.O. 12008
Riverside, CA 92502

19.8 The total amount payable by Commission, including the Fixed Fee, shall not exceed the amount set forth in each Task Order.

19.9 Commission has or will enter into **four (4)** task order contracts for performance of the Scope of Services identified in Exhibit "A", including this

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Agreement ("**On-Call Highway Design & Environmental Services Task Order Contracts**"). The other On-Call Highway Design & Environmental Services Task Order Contracts are **Agreement No. 26-31-023-00 with HDR Engineering, Inc, Agreement No. 26-31-047-00 with HNTB Corporation and Agreement No. 26-31-049-00 with Parsons Transportation Group, Inc.** The total amount payable by Commission for the On-Call Highway Design & Environmental Services Task Order Contracts shall not exceed a cumulative maximum total value of **Thirty Million Dollars ($30,000,00)** "NTE Sum". It is understood and agreed that there is no guarantee, either expressed or implied that this dollar amount will be authorized under the Design & Environmental Services Task Order Contracts through Task Orders. Each time a Task Order is awarded under any of the Design & Environmental Services Task Order Contracts, Commission must send written notification to Consultant and each of the other consultants entering into the Highway Design & Environmental Services Task Order Contracts. The notice must identify the total funds allocated under issued Task Orders, and the remaining unencumbered amount of the NTE Sum. Consultant acknowledges and agrees that Commission must not pay any amount under this Agreement that would exceed the NTE Sum, and Consultant must not enter into a Task Order that exceeds the NTE Sum.

19.10 Salary increases shall be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by Commission's Contract Administrator. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

19.11 Consultant shall not be reimbursed for any expenses unless authorized in writing by the Commission's Contract Administrator.

19.12 All subcontracts in excess of $25,000 shall contain the above provisions.

20. Disputes.

20.1 Any dispute, other than audit, concerning a question of fact arising under this Agreement that is not disposed of by mutual agreement of the Parties shall be decided by a committee consisting of RCTC's Contract Administrator and the Director of Capital Projects, who may consider written or verbal information submitted by Consultant.

20.2 Not later than 30 days after completion of all Services under this Agreement, Consultant may request review by the Commission's Executive Director of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

20.3 Neither the pendency of a dispute, nor its consideration by the committee will excuse Consultant from full and timely performance in accordance with the terms of this Agreement.

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21. Termination.

21.1 Commission reserves the right to terminate this Agreement upon thirty (30) calendar days written notice to Consultant, for any or no reason, with the reasons for termination stated in the notice. Commission may terminate Services under a Task Order, at any time, for any or no reason, with the effective date of termination to be specified in the notice of termination of Task Order.

21.2 Commission may terminate this Agreement with Consultant should Consultant fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, Commission may proceed with the Services in any manner deemed proper by Commission. If Commission terminates this Agreement with Consultant, Commission shall pay Consultant the sum due to Consultant under this Agreement for Services completed and accepted prior to termination, unless the cost of completion to Commission exceeds the funds remaining in the Agreement. In such case, the overage shall be deducted from any sum due Consultant under this Agreement and the balance, if any, shall be paid to Consultant upon demand.

21.3 In addition to the above, payment upon termination shall include a prorated amount of profit, if applicable, but no amount shall be paid for anticipated profit on unperformed Services. Consultant shall provide documentation deemed adequate by Commission's Contract Administrator to show the Services actually completed by Consultant prior to the effective date of termination. This Agreement shall terminate on the effective date of the Notice of Termination

21.4 Upon receipt of the written Notice of Termination, Consultant shall discontinue all affected Services as directed in the Notice or as otherwise provided herein, and deliver to the Commission all Documents and Data, as defined in this Agreement, as may have been prepared or accumulated by Consultant in performance of the Services, whether completed or in progress.

21.5 In addition to the above, Consultant shall be liable to the Commission for any reasonable additional costs incurred by the Commission to revise work for which the Commission has compensated Consultant under this Agreement, but which the Commission has determined in its sole discretion needs to be revised, in part or whole, to complete the Project because it did not meet the standard of care established in this Agreement. Termination of this Agreement for cause may be considered by the Commission in determining whether to enter into future agreements with Consultant.

21.6 The rights and remedies of the Parties provided in this Section are in addition to any other rights and remedies provided by law or under this Agreement.

21.7 Consultant, in executing this Agreement, shall be deemed to have waived any and all claims for damages which may otherwise arise from the Commission's termination of this Agreement, for convenience or cause, as provided in this Section.

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21.8 Consultant may not terminate this Agreement except for cause.

22. Cost Principles and Administrative Requirements.

22.1 Consultant agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.

22.2 Consultant also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

22.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 2 CFR, Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by Consultant to Commission.

22.4 All subcontracts in excess of $25,000 shall contain the above provisions.

23. Retention of Records/Audit. For the purpose of determining compliance with, as applicable, 2 CFR Part 200, Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of this Agreement pursuant to Government Code 8546.7; Consultant, subconsultants, and Commission shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of this Agreement, including but not limited to, the costs of administering this Agreement. All parties shall make such materials available at their respective offices at all reasonable times during the Agreement period and for three years from the date of final payment under this Agreement. The State, State Auditor, Commission, or any duly authorized representative of the State or Federal Government shall have access to any books, records, and documents of Consultant and it's certified public accountants (CPA) work papers that are pertinent to this Agreement and, if applicable, indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested. Subcontracts in excess of $25,000 shall contain this provision.

23.1 Accounting System. Consultant and its subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate expenditures by line item for the Services. The accounting system of Consultant and its subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), enable the determination of incurred costs at interim points of completion, and provide support for reimbursement payment vouchers or invoices.

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24. Audit Review Procedures.

24.1 Any dispute concerning a question of fact arising under an interim or post audit of this Agreement that is not disposed of by agreement, shall be reviewed by Commission's Chief Financial Officer.

24.2 Not later than 30 days after issuance of the final audit report, Consultant may request a review by Commission's Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.

24.3 Neither the pendency of a dispute nor its consideration by Commission shall excuse Consultant from full and timely performance, in accordance with the terms of this Agreement.

25. Subcontracting.

25.1 Nothing contained in this Agreement or otherwise, shall create any contractual relation between Commission and any subconsultant(s), and no subcontract shall relieve Consultant of its responsibilities and obligations hereunder. Consultant agrees to be as fully responsible to Commission for the acts and omissions of its subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by Consultant. Consultant's obligation to pay its subconsultant(s) is an independent obligation from Commission's obligation to make payments to the Consultant.

25.2 Consultant shall perform the Services contemplated with resources available within its own organization and no portion of the Services pertinent to this Agreement shall be subcontracted without written authorization by Commission's Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.

25.3 Consultant shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to Consultant by Commission.

25.4 Any subcontract in excess of $25,000 entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement to be applicable to subconsultants.

25.5 Any substitution of subconsultant(s) must be approved in writing by Commission's Contract Administrator prior to the start of work by the subconsultant(s).

25.6 Exhibit "B" may set forth the rates at which each subconsultant shall bill the Consultant for Services and that are subject to reimbursement by the Commission to Consultant. Additional Direct Costs, as defined in Exhibit "B" shall be the same for both the Consultant and all subconsultants, unless otherwise identified in Exhibit "B" or in a Task Order. The subconsultant rate schedules and cost proposals contained herein are for accounting purposes only.

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26. Equipment Purchase

26.1 Prior authorization, in writing, by Commission's Contract Administrator shall be required before Consultant enters into any unbudgeted purchase order, or subcontract for supplies, equipment, or services. Consultant shall provide an evaluation of the necessity or desirability of incurring such costs.

26.2 For purchase of any item, service or consulting work not covered in the Cost Proposal and exceeding $5,000 prior authorization, in writing, by Commission's Contract Administrator is required. Three competitive quotations must be submitted with the request for such purchase, or the absence of bidding must be adequately justified.

26.3 Any equipment purchased as a result of this Agreement is subject to the following: Consultant shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of $5,000 or more. If the purchased equipment needs replacement and is sold or traded in, Commission shall receive a proper refund or credit at the conclusion of this Agreement, or if this Agreement is terminated, Consultant may either keep the equipment and credit Commission in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established Commission procedures; and credit Commission in an amount equal to the sales price. If Consultant elects to keep the equipment, fair market value shall be determined at Consultant's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by Commission and Consultant. If Consultant determines to sell the equipment, the terms and conditions of such sale must be approved in advance by Commission. 2 CFR, Part 200 requires a credit to Federal funds when participating equipment with a fair market value greater than $5,000 is credited to the Project.

26.4 All subcontracts in excess $25,000 shall contain the above provisions.

27. Labor Code Requirements.

27.1 Prevailing Wages.

(a) Consultant shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the Services.

(b) Any subcontract entered into as a result of this Agreement, if for more than $25,000 for public works construction or more than $15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Section.

(c) When prevailing wages apply to the Services described in the Scope of Services, transportation and subsistence costs shall be reimbursed at the

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minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See http://www.dir.ca.gov.

(d) Copies of the prevailing rate of per diem wages in effect at commencement of this Agreement are on file at the Commission's offices. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold the Commission, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

27.2 DIR Registration. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This Project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements.

27.3 Eight-Hour Law. Pursuant to the provisions of the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any worker employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment for overtime is made at not less than one and one-half the basic rate for all hours worked in excess of eight hours per day ("Eight-Hour Law"), unless Consultant or the Services are not subject to the Eight-Hour Law. Consultant shall forfeit to Commission as a penalty, $50.00 for each worker employed in the execution of this Agreement by him, or by any sub-consultant under him, for each calendar day during which such workman is required or permitted to work more than eight hours in any calendar day and forty hours in any one calendar week without such compensation for overtime violation of the provisions of the California Labor Code, unless Consultant or the Services are not subject to the Eight-Hour Law.

27.4 Employment of Apprentices. This Agreement shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on the work performed hereunder solely on the ground of race, creed, national origin, ancestry, color or sex. Every qualified apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade in which he or she is employed and shall be employed only in the craft or trade to which he or she is registered.

If California Labor Code Section 1777.5 applies to the Services, Consultant and any subcontractor hereunder who employs workers in any apprenticeable craft or trade

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shall apply to the joint apprenticeship council administering applicable standards for a certificate approving Consultant or any sub-consultant for the employment and training of apprentices. Upon issuance of this certificate, Consultant and any sub-consultant shall employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

The parties expressly understand that the responsibility for compliance with provisions of this Section and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with Consultant

28. Ownership of Materials/Confidentiality.

28.1 Documents & Data. This Agreement creates an exclusive and perpetual license for Commission to copy, use, modify, reuse, or sub-license any and all copyrights and designs embodied in plans, specifications, studies, drawings, estimates, materials, data and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data").

Consultant shall require all subcontractors to agree in writing that Commission is granted an exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement.

Consultant represents and warrants that Consultant has the legal right to grant the exclusive and perpetual license for all such Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or provided to Consultant by the Commission.

Commission shall not be limited in any way in its use of the Documents & Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at Commission's sole risk.

28.2 Intellectual Property. In addition, Commission shall have and retain all right, title and interest (including copyright, patent, trade secret and other proprietary rights) in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property") prepared or developed by or on behalf of Consultant under this Agreement as well as any other such Intellectual Property prepared or developed by or on behalf of Consultant under this Agreement.

The Commission shall have and retain all right, title and interest in Intellectual Property developed or modified under this Agreement whether or not paid for

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wholly or in part by Commission, whether or not developed in conjunction with Consultant, and whether or not developed by Consultant. Consultant will execute separate written assignments of any and all rights to the above referenced Intellectual Property upon request of Commission.

Consultant shall also be responsible to obtain in writing separate written assignments from any subcontractors or agents of Consultant of any and all right to the above referenced Intellectual Property. Should Consultant, either during or following termination of this Agreement, desire to use any of the above-referenced Intellectual Property, it shall first obtain the written approval of the Commission.

All materials and documents which were developed or prepared by the Consultant for general use prior to the execution of this Agreement and which are not the copyright of any other party or publicly available and any other computer applications, shall continue to be the property of the Consultant. However, unless otherwise identified and stated prior to execution of this Agreement, Consultant represents and warrants that it has the right to grant the exclusive and perpetual license for all such Intellectual Property as provided herein.

Commission further is granted by Consultant a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional, or supplemental work created under this Agreement.

28.3 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of Commission, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use Commission's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of Commission.

28.4 Infringement Indemnification. Consultant shall defend, indemnify and hold the Commission, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by Commission of the Documents & Data, including any method, process, product, or concept specified or depicted.

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29. Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold Commission, Caltrans and their directors, officials, officers, employees, consultants, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, inverse condemnation, and any claims related to property acquisition and relocation rules or failure to detect or abate hazardous materials, which are brought by a third party, and which , in any manner arise out of or are incident to alleged negligent acts, omissions, or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of consequential damages, expert witness fees, and attorneys fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against Commission, Caltrans, and their directors, officials, officers, employees, consultants, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against Commission, Caltrans or their directors, officials, officers, employees, consultants, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse Commission, Caltrans and their directors, officials, officers, employees, consultants, agents, and/or volunteers, for any and all legal expenses and costs, including reasonable attorney's fees, incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Commission, Caltrans or their directors, officials officers, employees, consultants, agents, or volunteers.

If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Consultant's obligations as set forth in this Section shall survive expiration or termination of this Agreement.

30. Insurance.

30.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to the Commission that it has secured all insurance required under this Section, in a form and with insurance companies acceptable to the Commission. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this Section.

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30.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(a) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(b) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; (2) *Automobile Liability:* $1,000,000 per accident for bodily injury and property damage. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of $1,000,000 per accident.

30.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. For Consultant, such insurance shall be in an amount not less than $1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend. Subconsultants of Consultant shall obtain such insurance in an amount not less than $2,000,000 per claim. Notwithstanding the foregoing, the Commission may consider written requests to lower or dispense with the errors and omissions liability insurance requirement contained in this Section for certain subconsultants of Consultant, on a case-by-case basis, depending on the nature and scope of the Services to be provided by the subconsultant. Approval of such request shall be in writing, signed by the Commission's Contract Administrator.

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30.4 Aircraft Liability Insurance. Prior to conducting any Services requiring use of aircraft, Consultant shall procure and maintain, or cause to be procured and maintained, aircraft liability insurance or equivalent form, with a single limit as shall be required by the Commission. Such insurance shall include coverage for owned, hired and non-owned aircraft and passengers, and shall name, or be endorsed to name, the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds with respect to the Services or operations performed by or on behalf of the Consultant.

30.5 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by the Commission to add the following provisions to the insurance policies:

(a) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give the Commission, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be “primary and non-contributory” and will not seek contribution from the Commission’s or Caltrans’ insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(b) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) the Commission, Caltrans and their directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects the Commission, Caltrans and their directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant’s scheduled underlying coverage. Any insurance or self-insurance maintained by the Commission, Caltrans and their directors, officials, officers, employees and agents shall be excess of the Consultant’s insurance and shall not be called upon to contribute with it in any way.

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(c) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against the Commission, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(d) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the Commission (if agreed to in a written contract or agreement) before the Commission's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) Consultant shall provide the Commission at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the Commission at least ten (10) days prior to the effective date of cancellation or expiration.

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(v) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vi) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the Commission, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(vii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, Commission has the right but not the duty to obtain the insurance it deems necessary and any premium paid by Commission will be promptly reimbursed by Consultant or Commission will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, Commission may cancel this Agreement. The Commission may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(viii) Neither the Commission nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

30.6 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Commission. If the Commission does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of the Commission, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Commission, its directors, officials, officers, employees and agents; or, (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expense.

30.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

30.8 Verification of Coverage. Consultant shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the Commission. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by the Commission before work commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

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30.9 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the Commission that they have secured all insurance required under this Section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the Commission as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, the Commission may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

30.10 Other Insurance. At its option, the Commission may require such additional coverage(s), limits and/or the reduction of deductibles or retentions it considers reasonable and prudent based upon risk factors that may directly or indirectly impact the Project. In retaining this option Commission does not warrant Consultant's insurance program to be adequate. Consultant shall have the right to purchase insurance in addition to the insurance required in this Section.

31. Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the Commission has determined that the Project will contain areas that are open to public traffic. Consultant shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. Consultant shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.

32. Additional Work. Any work or activities that are in addition to, or otherwise outside of, the Services to be performed pursuant to this Agreement shall only be performed pursuant to a separate agreement between the parties. Notwithstanding the foregoing, the Commission's Executive Director may make a change to the Agreement, other than a Cardinal Change. For purposes of this Agreement, a Cardinal Change is a change which is "outside the scope" of the Agreement; in other words, work which should not be regarded as having been fairly and reasonably within the contemplation of the parties when the Agreement was entered into. An example of a change which is not a Cardinal Change would be where, in a contract to construct a building there are many changes in the materials used, but the size and layout of the building remains the same.

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Cardinal Changes are not within the authority of this provision to order, and shall be processed by the Commission as "sole source" procurements according to applicable law, including the requirements of FTA Circular 4220.1D, paragraph 9(f).

(a) In addition to the changes authorized above, a modification which is signed by Consultant and the Commission's Executive Director, other than a Cardinal Change, may be made in order to: (1) make a negotiated equitable adjustment to the Agreement price, delivery schedule and other terms resulting from the issuance of a Change Order, (2) reflect definitive letter contracts, and (3) reflect other agreements of the parties modifying the terms of this Agreement ("Bilateral Contract Modification").

(b) Consultant shall not perform, nor be compensated for any change, without written authorization from the Commission's Executive Director as set forth herein. In the event such a change authorization is not issued and signed by the Commission's Executive Director, Consultant shall not provide such change.

33. Prohibited Interests.

33.1 Solicitation. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Commission shall have the right to rescind this Agreement without liability.

33.2 Consultant Conflict of Interest.

(a) Consultant shall disclose any financial, business, or other relationship with Commission that may have an impact upon the outcome of this Agreement, or any ensuing Commission construction project. Consultant shall also list current clients who may have a financial interest in the outcome of this Agreement, or any ensuing Commission construction project, which will follow.

(b) Consultant hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.

(c) Any subcontract in excess of $25,000 entered into as a result of this Agreement, shall contain all of the provisions of this Article.

(d) Consultant further certifies that neither Consultant, nor any firm affiliated with Consultant, will bid on any construction subcontracts included within the construction contract. Additionally, Consultant certifies that no person working under

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this Agreement is also employed by the construction contractor for any project included within this Agreement.

33.3 Commission Conflict of Interest. For the term of this Agreement, no member, officer or employee of the Commission, during the term of his or her service with the Commission, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

33.4 Conflict of Employment. Employment by the Consultant of personnel currently on the payroll of the Commission shall not be permitted in the performance of this Agreement, even though such employment may occur outside of the employee's regular working hours or on weekends, holidays or vacation time. Further, the employment by the Consultant of personnel who have been on the Commission payroll within one year prior to the date of execution of this Agreement, where this employment is caused by and or dependent upon the Consultant securing this or related Agreements with the Commission, is prohibited.

33.5 Covenant Against Contingent Fees. As required in connection with federal funding, the Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or secure this Agreement, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, the Commission shall have the right to terminate this Agreement without liability pursuant to the terms herein, or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

33.6 Rebates, Kickbacks or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any Commission employee. For breach or violation of this warranty, Commission shall have the right in its discretion; to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the Agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

33.7 Covenant Against Expenditure of Commission, State or Federal Funds for Lobbying. The Consultant certifies that to the best of his/ her knowledge and belief no state, federal or local agency appropriated funds have been paid, or will be paid by or on behalf of the Consultant to any person for the purpose of influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the award of any state or federal contract, grant, loan, or cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

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(a) If any funds other than federal appropriated funds have been paid, or will be paid to any person for the purpose of influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this Agreement, the Consultant shall complete and submit the attached Exhibit "F", Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with the attached instructions.

(b) The Consultant's certification provided in this Section is a material representation of fact upon which reliance was placed when this Agreement was entered into, and is a prerequisite for entering into this Agreement pursuant to Section 1352, Title 31, US. Code. Failure to comply with the restrictions on expenditures, or the disclosure and certification requirements set forth in Section 1352, Title 31, US. Code may result in a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

(c) The Consultant also agrees by signing this Agreement that he/she shall require that the language set forth in this Section 3.23.5 be included in all Consultant subcontracts which exceed $100,000, and that all such subcontractors shall certify and disclose accordingly.

33.8 Employment Adverse to the Commission. Consultant shall notify the Commission, and shall obtain the Commission’s written consent, prior to accepting work to assist with or participate in a third-party lawsuit or other legal or administrative proceeding against the Commission during the term of this Agreement.

34. Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

35. Right to Employ Other Consultants. Commission reserves the right to employ other consultants in connection with the Project.

36. Governing Law. This Agreement shall be governed by and construed with the laws of the State of California. Venue shall be in Riverside County.

37. Disputes; Attorneys' Fees.

37.1 Prior to commencing any action hereunder, the Parties shall attempt in good faith to resolve any dispute arising between them. The pendency of a dispute shall not excuse Consultant from full and timely performance of the Services.

37.2. If the Parties are unable to resolve a dispute after attempting in good faith to do so, the Parties may seek any other available remedy to resolve the dispute. If

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either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorneys' fees and, all other costs of such actions.

38. Time of Essence. Time is of the essence for each and every provision of this Agreement.

39. Headings. Article and Section Headings, paragraph captions or marginal headings contained in this Agreement are for convenience only and shall have no effect in the construction or interpretation of any provision herein.

40. Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

CONSULTANT:	**COMMISSION:**
Kimley-Horn and Associates, Inc	Riverside County
3801 University Avenue	Transportation Commission
Suite 300	4080 Lemon Street, 3rd Floor
Riverside, CA 92501	Riverside, CA 92501
Attn: Darren Adrian	Atten: Executive Director

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. mail, first class postage prepaid, and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

41. Conflicting Provisions. In the event that provisions of any attached exhibits conflict in any way with the provisions set forth in this Agreement, the language, terms and conditions contained in this Agreement shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the performance of the Services.

42. Amendment or Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

43. Entire Agreement. This Agreement contains the entire agreement of the Parties relating to the subject matter hereof and supersedes all prior negotiations, agreements or understandings.

44. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

45. Provisions Applicable When State Funds or Federal Funds Are Involved. When funding for the Services under a Task Order is provided, in whole or in part, from

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Caltrans, Consultant shall also fully and adequately comply with the provisions included in Exhibit "C" (California Department of Transportation requirements) attached hereto and incorporated herein by reference. When funding for the Services under a Task Order is provided, in whole or in part, from the FTA, Consultant shall also fully and adequately comply with the provisions included in Exhibit "D" (FTA Requirements) attached hereto and incorporated herein by reference.

46. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

47. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

48. Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

49. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

50. Subpoenas or Court Orders. Should Consultant receive a subpoena or court order related to this Agreement, the Services or the Project, Consultant shall immediately provide written notice of the subpoena or court order to the Commission. Consultant shall not respond to any such subpoena or court order until notice to the Commission is provided as required herein, and shall cooperate with the Commission in responding to the subpoena or court order.

51. Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein, without the prior written consent of the Commission. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

52. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by Consultant without the prior written consent of Commission.

53. Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated into this Agreement as though fully set forth herein.

54. No Waiver. Failure of Commission to insist on any one occasion upon strict compliance with any of the terms, covenants or conditions hereof shall not be deemed a waiver of such term, covenant or condition, nor shall any waiver or relinquishment of any

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rights or powers hereunder at any one time or more times be deemed a waiver or relinquishment of such other right or power at any other time or times.

[Signatures on following page]

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SIGNATURE PAGE
TO
PROFESSIONAL SERVICES AGREEMENT
WITH STATE, FHWA, FTA AND PROPOSITION 1B FUNDING/ASSISTANCE

IN WITNESS WHEREOF, this Agreement was executed on the date first written above.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION		**CONSULTANT** **Kimley-Horn and Associates, Inc.**
By:_____ Aaron Hake Executive Director		By: _____ Signature
		_____ Name
Approved as to Form:		_____ Title
By:_____ Best, Best & Krieger LLP General Counsel		**ATTEST:**
		By: _____
		Its: _____

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* A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

Exhibits:

EXHIBIT "A" - SCOPE OF SERVICES

EXHIBIT "B"- COMPENSATION AND PAYMENT

EXHIBIT "C" – FEDERAL REQUIREMENTS

EXHIBIT "D" CERTIFICATE OF CONSULTANT

EXHIBIT “E” – LOBBYING ACTIVITIES DISCLOSURE

EXHIBIT “F”- EXECUTIVE ORDER N-6-22 CERTIFICATION

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EXHIBIT "A"
SCOPE OF
WORK

The Riverside County Transportation Commission (RCTC) intends to contract a “bench” of qualified consultants to provide on-call Preliminary Engineering, Environmental, and Design Engineering Services for Capital and Toll Projects on an on-call basis pursuant to task orders or purchase orders to be issued in accordance with the terms of this Request For Qualifications (RFQ) and the Commission’s model agreement. The selected consultants will supplement the work of the Commission Staff in accordance with the specifications described herein.

The Capital Program and Toll Program oversee various projects throughout Riverside County. Work for this contract will be authorized through the issuance of task orders or purchase orders (PO). **A maximum of four consultant teams will be selected**. Task orders or POs will be issued to the consultants at RCTC’s discretion based on an assessment of the highest qualifications, availability of qualified resources, and past performance on prior task orders/assignments. These project delivery support services agreements are intended to facilitate the completion of Capital and Toll projects on time and within budget.

In general, the RCTC seeks the following services including, but not limited to, preparation of Feasibility Studies; Project Initiation Documents (PID), Project Study Reports/Project Development Support (PSR/PDS); Project Approval and Environmental Documents (PA/ED); Plans, Specifications, and Estimates (PS&E); other planning studies, reports and technical services and associated documents; independent review and oversight of environmental, design, traffic, structures, electrical studies and plans prepared by others; development and management of databases for schedule, cost and quality control, risk assessments and management studies & plans; preparation of agreements; grant writing and support and other related tasks as deemed necessary; and preparation of regulatory permit applications and coordination.

Right-of-Way (ROW) and public outreach services will be primarily procured through other RCTC contracts currently in place. However, the consultants shall provide ROW and Public Outreach support services for all phases, as necessary.

All Consultant teams shall have the capability to provide the full range of services associated with federal, state and local highway project planning and development processes.

PERIOD OF PERFORMANCE

The period of performance is **three years, with one two-year extension option**. Specific term limits may also be dictated by Task orders/POs.

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List of Potential Projects

- New Road Construction
- Roadway Widening
- Resurfacing, Restoration, and Rehabilitation
- Intersection Improvements
- New Interchange or Reconfiguration
- Grade Separation Projects
- Bridge Improvement and Widening
- Roadway Safety
- Access Management
- Pedestrian and ADA Facilities
- Multi-Use Trails
- Express Toll/Transit Lanes
- Intermodal Facilities
- Intelligent Transportation Systems
- Ramp widening and/or metering

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SCOPE OF WORK

Consultants shall be responsible for the delivery of services, the preparation of documents and the review of work by others in the categories/phases of projects. Tasks Consultants are expected to perform, but not limited to, are listed below:

1 - Planning and Technical Studies

- Feasibility Studies
- Corridor Studies
- Project Study Reports/Project Development Support (PSR/PDS) or equivalent documents
- Project Initiation Document
- Technical studies
- Other similar studies per Caltrans Project Development Procedures Manual (Storm Water Data Reports, Initial Site Assessment, Traffic Engineering Performance Assessment, Preliminary Environmental Assessment Report)
- Development of Purpose & Need
- Independent Utility

2 - Specific Literature Research/Data Collection

- Research, collection, review, and analysis of applications and technologies to support the development of highway improvement projects
- Coordination and assimilation of existing datasets and identification of additional data collection needs

3 - Project Approval and Environmental Document (PA&ED)

- Scoping Documents
- Environmental Documents (CE/CE, EA/IS, EIS/EIR)
- Alternatives Analysis
- Environmental Technical Studies (Cultural, Biological, Air Quality, Noise, Traffic, Community Impacts, Hazardous Waste)
- Agency Permit Applications and coordination
- Public Hearings (including providing technical and logistical support)
- Support for Public Outreach activities/events
- Project Report (PR) or PSR/PRs
- Advanced Planning Studies
- Utilities Conflicts Identification
- Life Cycle Cost Analysis
- Value Engineering
- Traffic Report (TOAR)Equity Analysis
- Preparation of exhibits or materials needed for coordination purposes
- Preliminary site visitations and field surveys
- Preliminary engineering and geometric approval drawings
- Design standard deviations and exception investigations and identification (DSDD, CSDD, VMTDD)
- Other similar documents and activities per the Caltrans PDPM
- Managed Lane Engineering Studies and Toll Policy Reports
- Modified Access Reports for FHWA conceptual approval
- Cost Estimates
- AB194 Tolling Authority application and public hearing support

4 - Plans, Specifications, and Estimates (PS&E)

- Data Collection and Preliminary investigations
- Engineering Plans per the Caltrans Plan Preparation Manual including but not limited to: Layout, Superelevation and profile, typical sections, contour grading plans, and construction details
- Civil/structural/traffic/electrical/landscaping-irrigation design, plans, and specifications
- Stage Construction Plans and Traffic Management Plan
- Utilities Plans and Coordination, Utility Policy Exceptions

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- Drainage design, details, plans and profiles, Storm Water Data Reports (SWDR), Hydraulics/Hydrology Report and Drainage Report
- Geotechnical engineering, calculations, and investigations. Foundation reports, Geotechnical Design Reports, and Materials Reports
- Surveying, topographic mapping, and aerial photography
- Hazardous Waste studies and reports
- Quantity calculations and cost estimates
- Pavement delineation/markers, traffic control, signing and striping
- Technical specifications and Special Provisions
- Exceptions to Caltrans Standards/Design Standards Decision Document (DSDD)
- Permits and approvals by other agencies
- Other services required to secure approvals of pre-construction phases of projects and County PS&E for all State Highway improvement projects shall be prepared in accordance with Caltrans Standards. PS&E for local projects shall be prepared in accordance with local agency standards and procedures.
- Environmental Commitments Record, Environmental Revalidation and Environmental Certifications
- Construction Support Services
- Right of Way Identification, Right of Way Requirements Maps, PD-26, Right of Way and Utility Certification

5 - Project Right-of-Way & Utility Services

- ROW activities will be primarily conducted by RCTC ROW Department. Consultants shall provide ROW support services as required for all phases.
- Perform utility investigations and potholing to review and assess relocation needs due to the project.

6 - Intelligent Transportation Systems (ITS) and Transportation Technology Support Services

- Systems engineering documentation/plans (concept exploration, Concept of Operations, system requirements, Design, Testing)
- Feasibility studies
- Cost estimating
- Engineering plans/drawings
- System plans
- Communications plans
- Systems integration plans
- Equipment specifications
- Software specifications and applications
- Connected and automated vehicle research, studies, and/or deployments
- Transit signal priority systems, plans, support, and modernization
- Goods Movement technology research, studies, and/or deployments

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- Inventory management support (Infrastructure)
- ITS architecture support

7 - Traffic Engineering Support Services

- Traffic data collection (turn movement counts, automated counts, 3rd party probe data)
- Traffic studies/analysis (traffic impact studies, queuing analyses, ISOAP etc.)
- Transportation mobility Studies (Before and after evaluations, travel time studies, destination studies, etc.)
- Traffic operation studies
- Traffic signal timing documents
- Micro and macro simulation modeling using Synchro, VISSIM, TransModeler, or other traffic analysis software
- Traffic data synthesis and analytic tools for performance measurement
- Vehicle Miles Traveled (VMT) analysis per SB 743 Caltrans guidelines
- Managed lanes – Traffic and revenue studies (Investment Grade)
- Managed lanes – Concept of Operations support
- Scope of Work development (final design/build contract)

8 - Project Management Support

- Developing or reviewing project scopes of work
- Developing and maintaining baseline and project schedules, cost-loaded schedule, and expenditure forecasts
- Providing cost estimating services for the various stages in the project development/delivery process
- Project Risk Assessment and Risk Monitoring/Management Services, including developing and maintaining the risk register
- General project management
- Attending meetings, internally and externally, in connection with project management and development, including producing any materials necessary
- Performing internal and external project coordination and public outreach
- Prepare Project Management Plan
- Monthly trend and Project Development Team meetings with agendas, minutes, and look-ahead schedules
- Quality Management and Quality Control

9 – Public Outreach Support

- Develop Public Outreach Plans
- Prepare project fact sheets, messages, and content for Commission website and media
- Manage project social media, monitor/respond to public comments
- Provide support for public scoping meetings and hearings
- Provide outreach activity summaries

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10 - Miscellaneous Administrative Project Support

- Preparing grant application packages including, but not limited to, writing grant applications, assisting with required research, data, and justification preparation, and developing supporting materials, exhibits, and financial analysis to support the grant opportunity.
- Preparing documents for solicitations, preparing independent cost estimates & other documents supporting contract negotiations, preparing reports and other correspondences, interfacing with consultants and agency personnel, conducting post award contract administration, monitoring contract compliance, preparing modifications/contract amendments, and performing other related work and duties.
- Providing regular project progress status reports
- Maintaining project information/fact sheets, webpages, and social media platforms
- Developing Memorandum of Understandings and/or Cooperative/Funding Agreements, maintaining databases, and updating various project tracking sheets
- Preparing procurements/contracts and task orders
- Supporting project audits; processing invoices; preparing financial data; reviewing technical task reports/technical memos; preparing materials for meetings and presentations (written and oral); preparing agendas, meeting notes, and following through with action items
- Graphics/digital content design

Other relevant services may be included by RCTC via this On-Call.

Each Task Order shall be evaluated independently based on established criteria, including scope, complexity, and required expertise. RCTC shall have full discretion in requiring assignment of specific Consultant/sub-consultant resources/staff to individual task orders, provided such decisions are made in consideration of qualifications and past performance/success in efficient delivery of assignments. Task Orders may include phased Notice to Proceed as determined appropriate by RCTC.

Project Understanding and Approach

The I-15/Cantu Galleano Ranch Road Interchange Improvement Project, located in the City of Eastvale, has been identified by RCTC as a long-range capital and toll improvement effort. The proposed project will evaluate a range of interchange and express lane alternatives and advance through the Caltrans Project Delivery Phases, including Project Initiation Document (PID), Project Approval and Environmental Document (PA/ED), and Plans, Specifications, and Estimate (PS&E).

Consultants should use this project as the basis for developing their Statement of Qualifications (SOQ), specifically the Project Understanding and Approach section; demonstrating their technical understanding, proposed methodologies, and approach to delivering each phase in compliance with Caltrans standards and RCTC objectives.

The activities outlined in this Scope of Work are intended to support the PID, PA/ED, and PS&E phases, as approved by Caltrans and applicable local agencies. Consultants should demonstrate in their Approach and Understanding how they will effectively address the key tasks and objectives associated with each project phase.

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EXHIBIT "B"

COMPENSATION SUMMARY[1]

FIRM	PROJECT TASKS/ROLE	COST
	Prime Consultant:	
Kimley-Horn and Associates	On-Call Highway Design and Environmental Services for Capital and Toll Programs Projects	$30,000,000.00
	Sub Consultants:	
ARRB Group Inc.	Sub Consultant	TBD per Task Order
CNS Engineers, Inc.	Sub Consultant	TBD per Task Order
Costin PublicOutreach Group, Inc	Sub Consultant	TBD per Task Order
Earth Mechanics, Inc.	Sub Consultant	TBD per Task Order
Fehr & Peers	Sub Consultant	TBD per Task Order
ICF International, Inc.	Sub Consultant	TBD per Task Order
Monument ROW	Sub Consultant	TBD per Task Order
NV5 Global, Inc.	Sub Consultant	TBD per Task Order
Psomas	Sub Consultant	TBD per Task Order
N. SaylorConsulting Group, Inc	Sub Consultant	TBD per Task Order
Silicon TransportationConsultants, LLC	Sub Consultant	TBD per Task Order
Stantec Inc.	Sub Consultant	TBD per Task Order
Value ManagementStrategies, Inc.	Sub Consultant	TBD per Task Order
	TOTAL COSTS	**$30,000,000.00**

[1] Commission authorization pertains to total contract award amount. Compensation adjustments between consultants may occur; however, the maximum total compensation authorized may not be exceeded.

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Agreement No 26-31-049-00

**PROFESSIONAL SERVICES AGREEMENT
WITH FHWA, STATE, FTA AND PROPOSITION 1B FUNDING ASSISTANCE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AGREEMENT WITH
PARSONS TRANSPORTATION GROUP, INC
FOR ON-CALL HIGHWAY DESIGN AND ENVIRONMENTAL SERVICES
FOR CAPITAL AND TOLL PROGRAMS PROJECTS**

Parties and Date.

This Agreement is made and entered into this ___ day of _____, 2026, by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION ("the Commission") and **PARSONS TRANSPORTATION GROUP, INC ("Consultant"),** a corporation**.** The Commission and Consultant are sometimes referred to herein individually as “Party”, and collectively as the “Parties”.

Recitals.

A. On November 8, 1988 the Voters of Riverside County approved Measure A authorizing the collection of a one-half percent (1/2 %) retail transactions and use tax (the "tax") to fund transportation programs and improvements within the County of Riverside, and adopting the Riverside County Transportation Improvement Plan (the "Plan").

B. Pursuant to Public Utility Code Sections 240000 et seq., the Commission is authorized to allocate the proceeds of the Tax in furtherance of the Plan.

C. On November 5, 2002, the voters of Riverside County approved an extension of the Measure A tax for an additional thirty (30) years for the continued funding of transportation and improvements within the County of Riverside.

D. A source of funding for payment for on-call professional consulting services provided under this Agreement may be Federal Highway Administration (“FHWA”) funds administered by the California Department of Transportation (“Caltrans”) from the United States Department of Transportation, Proposition 1B funds (“Prop 1B”) funds administered by Caltrans, and/or funds from the Federal Transit Administration (“FTA”). This Agreement shall not be deemed to be approved by the Commission until the certification shown in Exhibit “E” attached hereto and incorporated herein by reference, is executed.

E. Consultant desires to perform and assume responsibility for the provision of certain on-call design engineering and environmental services for the construction of commuter rail station capital improvement projects in the County of Riverside, California. Services shall be provided on the terms and conditions set forth in this Agreement and in the task order(s) to be solicited, awarded and authorized by Commission as further described in this Agreement (“Task Order”). Consultant represents that it is experienced in providing such services to public clients, is licensed in the State of California (if necessary), and is familiar with the plans of the Commission.

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F. Commission desires to engage Consultant to render such services on an on-call basis. Services shall be ordered by Task Order(s) to be issued pursuant to this Agreement for future projects as set forth herein and in each Task Order (each such project shall be designated a "Project" under this Agreement).

Terms.

1. General Scope of Services. Consultant shall furnish all technical and professional services, including labor, material, equipment, transportation, supervision and expertise, and incidental and customary work necessary to fully and adequately supply the on-call design engineering and environmental services for the Projects ("Services"). The Services are generally described in Exhibit "A" attached hereto and incorporated herein by reference. The Services shall be more particularly described in the individual Task Orders issued by the Commission's Executive Director or designee. No Services shall be performed unless authorized by a fully executed Task Order. All Services shall be subject to, and performed in accordance with, this Agreement, the relevant Task Order, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

2. Task Orders; Commencement of Services; Schedule of Services. Services under this Agreement shall be requested by the Commission pursuant to Task Order requests. If Commission accepts Consultant's Task Order proposal, Commission shall issue a purchase order or executed task order for the Services ("Commission's Task Order Authorization"). Consultant's agreement to the final terms of a proposed Task Order, Commission's Task Order Authorization and Consultant's commencement of the Services shall indicate the Parties' agreement to the terms of the relevant Task Order.

Consultant shall commence Services under a Task Order within five (5) days of receiving Commission's Task Order Authorization.

Consultant shall perform the Services expeditiously, in accordance with the Schedule of Services set forth in a Task Order. Consultant represents that it has the professional and technical personnel required to perform the Services in conformance with such conditions. In order to facilitate Consultant's conformance with the Schedule, Commission shall respond to Consultant's submittals in a timely manner. Upon request of the Commission, Consultant shall provide a more detailed schedule of anticipated performance to meet the Schedule of Services.

3. Pre-Award Audit. As a result of the funding for this Project, and to the extent Caltrans procedures apply in connection therewith, issuance of a "Notice to Proceed" or

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other authorization to proceed under a Task Order may be contingent upon completion and approval of a pre-award audit. Any questions raised during the pre-award audit shall be resolved before the Commission will consider approval of this Agreement. The funding provided under this Agreement is contingent on meeting all funding requirements and could be withdrawn, thereby entitling the Commission to terminate this Agreement, if the procedures are not completed. The Consultant's files shall be maintained in a manner to facilitate State process reviews. In addition, Caltrans may require that prior to performance of any work for which funding reimbursement through Caltrans is requested and provided, that Caltrans must give to Commission an "Authorization to Proceed".

4. Audit Procedures.

4.1 Consultant and certain subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an Independent Cost Review (ICR) Audit, or a CPA ICR audit work paper review. If selected for audit or review, this Agreement, Consultant's cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is Consultant's responsibility to ensure federal, state, or local government officials are allowed full access to the CPA's work papers including making copies as necessary. This Agreement, Consultant's cost proposal, and ICR shall be adjusted by Consultant and approved by the Commission's contract manager to conform to the audit or review recommendations. Consultant agrees that individual terms of costs identified in the audit report shall be incorporated into this Agreement by this reference if directed by Commission at its sole discretion. Refusal by Consultant to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of the Agreement terms and cause for termination of this Agreement and disallowance of prior reimbursed costs. Additional audit provisions applicable to this Agreement are set forth in Sections 22 and 23 of this Agreement..

4.2 During any Caltrans' review of the ICR audit work papers created by the Consultant's independent CPA, Caltrans will work with the CPA and/or Consultant toward a resolution of issues that arise during the review. Each party agrees to use its best efforts to resolve any audit disputes in a timely manner. If Caltrans identifies significant issues during the review and is unable to issue a cognizant approval letter, Commission will reimburse the Consultant at an accepted ICR until a FAR (Federal Acquisition Regulation) compliant ICR {e.g. 48 CFR Part 31; GAGAS (Generally Accepted Auditing Standards); CAS (Cost Accounting Standards), if applicable; in accordance with procedures and guidelines of the American Association of State Highways and Transportation Officials (AASHTO) Audit Guide; and other applicable procedures and guidelines is received and approved by Caltrans.

Accepted rates will be as follows:

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a. If the proposed rate is less than one hundred fifty percent (150%) - the accepted rate reimbursed will be ninety percent (90%) of the proposed rate.

b. If the proposed rate is between one hundred fifty percent (150%) and two hundred percent (200%) - the accepted rate will be eighty-five percent (85%) of the proposed rate.

c. If the proposed rate is greater than two hundred percent (200%) - the accepted rate will be seventy-five percent (75%) of the proposed rate.

4.3 If Caltrans is unable to issue a cognizant letter per Section 4.2 above, Caltrans may require Consultant to submit a revised independent CPA-audited ICR and audit report within three (3) months of the effective date of the Caltrans' management letter. Caltrans will then have up to six (6) months to review the Consultant's and/or the independent CPA's revisions.

4.4 If the Consultant fails to comply with the provisions of this Section 4, or if Caltrans is still unable to issue a cognizant approval letter after the revised independent CPA audited ICR is submitted, overhead cost reimbursement will be limited to the accepted ICR that was established upon initial rejection of the ICR and set forth in Section 4.2 above for all rendered services. In this event, this accepted ICR will become the actual and final ICR for reimbursement purposes under this Agreement.

4.5 Consultant may submit to Commission final invoice only when all of the following items have occurred: (1) Caltrans accepts or adjusts the original or revised independent CPA audited ICR; (2) all work under this Agreement has been completed to the satisfaction of Commission; and, (3) Caltrans has issued its final ICR review letter. The Consultant must submit its final invoice to Commission no later than sixty (60) calendar days after occurrence of the last of these items. The accepted ICR will apply to this Agreement and all Task Orders issued under this Agreement, and all other agreements executed between the Commission and the Consultant, either as a prime or subconsultant, with the same fiscal period ICR.

5. Term.

5.1 This Agreement shall go into effect on the date first set forth above, contingent upon approval by Commission, and Consultant shall commence work after notification to proceed by Commission's Contract Administrator. This Agreement shall remain in effect for three years from the Effective Date, unless extended by contract amendment. The Commission may extend the term of this Agreement, in its sole discretion, for one additional two (2) year period.

5.2 Consultant is advised that any recommendation for contract award is not binding on Commission until this Agreement is fully executed and approved by the Commission.

5.3 This Agreement shall remain in effect until the date set forth above, unless earlier terminated as provided herein. Consultant shall complete the Services

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within the term of this Agreement, and shall meet any other established schedules and deadlines. All applicable indemnification provisions of this Agreement shall remain in effect following the termination of this Agreement.

6. Commission's Contract Administrator. The Commission hereby designates the Commission's Executive Director, or his or her designee, to act as its Contract Administrator for the performance of this Agreement ("Commission's Contract Administrator"). Commission's Contract Administrator shall have the authority to act on behalf of the Commission for all purposes under this Agreement. Commission's Contract Administrator shall also review and give approval, as needed, to the details of Consultant's work as it progresses. Consultant shall not accept direction or orders from any person other than the Commission's Contract Administrator or his or her designee.

7. Consultant's Representative. Consultant hereby designates **Amit Shah** to act as its Representative for the performance of this Agreement ("Consultant's Representative"). Consultant's Representative shall have full authority to act on behalf of Consultant for all purposes under this Agreement. The Consultant's Representative shall supervise and direct the Services, using his or her professional skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Agreement. Consultant shall work closely and cooperate fully with Commission's Contract Administrator and any other agencies which may have jurisdiction over, or an interest in, the Services. Consultant's Representative shall be available to the Commission staff at all reasonable times. Any substitution in Consultant's Representative shall be approved in writing by Commission's Contract Administrator.

8. Substitution of Key Personnel. Consultant has represented to the Commission that certain key personnel will perform and coordinate the Services under this Agreement. Should one or more of such personnel become unavailable, Consultant may substitute other personnel of at least equal competence upon written approval by the Commission. In the event that the Commission and Consultant cannot agree as to the substitution of the key personnel, the Commission shall be entitled to terminate this Agreement for cause, pursuant to the provisions herein. The key personnel for performance of this Agreement are **Amit Shah, Kedar Sawant, David Ovadia, Lesley Wang, Jeff Sparks, Angela Schnapp** or as otherwise identified in the Task Order.

9. Standard of Care; Licenses. Consultant represents and maintains that it is skilled in the professional calling necessary to perform all Services, duties and obligations required by this Agreement to fully and adequately complete the Project. Consultant shall perform the Services and duties in conformance to and consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Consultant further represents and warrants to the Commission that its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services, and that such licenses and approvals shall be maintained throughout the term of this Agreement. Consultant shall perform, at its own

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cost and expense and without reimbursement from the Commission, any services necessary to correct errors or omissions which are caused by the Consultant's failure to comply with the standard of care provided for herein, and shall be fully responsible to the Commission for all damages and other liabilities provided for in the indemnification provisions of this Agreement arising from the Consultant's errors and omissions. Any employee of Consultant or its sub-consultants who is determined by the Commission to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the Commission, shall be promptly removed from the Project by the Consultant and shall not be re-employed to perform any of the Services or to work on the Project.

10. Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. Commission retains Consultant on an independent contractor basis and not as an employee, agent or representative of the Commission. Consultant retains the right to perform similar or different services for others during the term of this Agreement. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall at all times be under Consultant's exclusive direction and control. Consultant shall pay all wages, salaries and other amounts due such personnel in connection with their performance of Services and as required by law. Consultant shall be responsible for all reports and obligations respecting such personnel, including but not limited to, social security taxes, income tax withholdings, unemployment insurance, disability insurance, and workers' compensation insurance.

11. Project Progress.

11.1 Modification of the Schedule. Consultant shall regularly report to the Commission, through correspondence or progress reports, its progress in providing required Services within the scheduled time periods. Commission shall be promptly informed of all anticipated delays. In the event that Consultant determines that a schedule modification is necessary, Consultant shall promptly submit a revised Schedule of Services for approval by Commission's Contract Administrator.

11.2 Trend Meetings. Consultant shall conduct trend meetings with the Commission's Contract Administrator and other interested parties, as requested by the Commission, on a bi-weekly basis or as may be mutually scheduled by the Parties at a standard day and time. These trend meetings will encompass focused and informal discussions concerning scope, schedule, and current progress of Services, relevant cost issues, and future Project objectives. Consultant shall be responsible for the preparation and distribution of meeting agendas to be received by the Commission and other attendees no later than three (3) working days prior to the meeting.

11.3 Progress Reports. As part of its monthly invoice, Consultant shall submit a progress report, in a form determined by the Commission, which will indicate the progress achieved during the previous month in relation to the Schedule of Services.

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Submission of such progress report by Consultant shall be a condition precedent to receipt of payment from the Commission for each monthly invoice submitted.

12. Delay in Performance.

12.1 Excusable Delays. Should Consultant be delayed or prevented from the timely performance of any act or Services required by the terms of the Agreement by reason of acts of God or of the public enemy, acts or omissions of the Commission or other governmental agencies in either their sovereign or contractual capacities, fires, floods, pandemics, epidemics, quarantine restrictions, strikes, freight embargoes or unusually severe weather, performance of such act shall be excused for the period of such delay.

12.2 Written Notice. If Consultant believes it is entitled to an extension of time due to conditions set forth in subsection 12.1, Consultant shall provide written notice to the Commission within seven (7) working days from the time Consultant knows, or reasonably should have known, that performance of the Services will be delayed due to such conditions. Failure of Consultant to provide such timely notice shall constitute a waiver by Consultant of any right to an excusable delay in time of performance.

12.3 Mutual Agreement. Performance of any Services under this Agreement may be delayed upon mutual agreement of the Parties. Upon such agreement, Consultant's Schedule of Services shall be extended as necessary by the Commission. Consultant shall take all reasonable steps to minimize delay in completion, and additional costs, resulting from any such extension.

13. Preliminary Review of Work. All reports, working papers, and similar work products prepared for submission in the course of providing Services under this Agreement shall be submitted to the Commission's Contract Administrator in draft form, and the Commission may require revisions of such drafts prior to formal submission and approval. In the event plans and designs are to be developed as part of the Project, final detailed plans and designs shall be contingent upon obtaining environmental clearance as may be required in connection with Federal funding. In the event that Commission's Contract Administrator, in his or her sole discretion, determines the formally submitted work product to be not in accordance with the standard of care established under this Agreement, Commission's Contract Administrator may require Consultant to revise and resubmit the work at no cost to the Commission.

14. Appearance at Hearings. If and when required by the Commission, Consultant shall render assistance at public hearings or other meetings related to the Project or necessary to the performance of the Services. However, Consultant shall not be required to, and will not, render any decision, interpretation or recommendation regarding questions of a legal nature or which may be construed as constituting a legal opinion.

15. Opportunity to Cure; Inspection of Work. Commission may provide Consultant an opportunity to cure, at Consultant's expense, all errors and omissions

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which may be disclosed during Project implementation. Should Consultant fail to make such correction in a timely manner, such correction may be made by the Commission, and the cost thereof charged to Consultant. Consultant shall allow the Commission's Contract Administrator and Caltrans to inspect or review Consultant's work in progress at any reasonable time.

16. Claims Filed by Contractor.

16.1 If claims are filed by the Commission's contractor for the Project ("Contractor") relating to work performed by Consultant's personnel, and additional information or assistance from the Consultant's personnel is required by the Commission in order to evaluate or defend against such claims; Consultant agrees to make reasonable efforts to make its personnel available for consultation with the Commission's construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or arbitration proceedings.

16.2 Consultant's personnel that the Commission considers essential to assist in defending against Contractor claims will be made available on reasonable notice from the Commission. Consultation or testimony will be reimbursed at the same rates, including travel costs that are being paid for the Consultant's personnel services under this Agreement.

16.3 Services of the Consultant's personnel and other support staff in connection with Contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Agreement in order to finally resolve the claims.

16.4 Nothing contained in this Section shall be construed to in any way limit Consultant's indemnification obligations contained in Section 29. In the case of any conflict between this Section and Section 29, Section 29 shall govern. This Section is not intended to obligate the Commission to reimburse Consultant for time spent by its personnel related to Contractor claims for which Consultant is required to indemnify and defend the Commission pursuant to Section 29 of this Agreement.

17. Final Acceptance. Upon determination by the Commission that Consultant has satisfactorily completed the Services required under this Agreement and within the term set forth herein the Commission shall give Consultant a written Notice of Final Acceptance. Upon receipt of such notice, Consultant shall incur no further costs hereunder, unless otherwise specified in the Notice of Final Acceptance. Consultant may request issuance of a Notice of Final Acceptance when, in its opinion, it has satisfactorily completed all Services required under the terms of this Agreement. In the event copyrights are permitted under this Agreement, then in connection with Federal funding, it is hereby acknowledged and agreed that the United States Department of Transportation shall have the royalty-free non-exclusive and irrevocable right to reproduce, publish, or otherwise use, and to authorize others to use, the work for governmental purposes.

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18. Laws and Regulations. Consultant shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. For example, and not by way of limitation, Consultant shall keep itself fully informed of and in compliance with all implementing regulations, design standards, specifications, previous commitments that must be incorporated in the design of the Project, and administrative controls including those of the United States Department of Transportation. Compliance with Federal procedures may include completion of the applicable environmental documents and approved by the United States Department of Transportation. For example, and not by way of limitation, a signed Categorical Exclusion, Finding of No Significant Impact, or published Record of Decision may be required to be approved and/or completed by the United States Department of Transportation. For Consultant shall be liable for all violations of such laws and regulations in connection with Services. If the Consultant performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to the Commission, Consultant shall be solely responsible for all costs arising therefrom. Consultant shall defend, indemnify and hold Commission, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Agreement, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

19. Fees and Payment.

19.1 The method of payment for this Agreement will be based on actual cost plus a fixed fee. Commission shall reimburse Consultant for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by Consultant in performance of the Services. Consultant shall not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved Consultant cost proposal attached hereto as Exhibit “B” and incorporated herein by reference, or any cost proposal included as part of a Task Order (“Cost Proposal”) unless additional reimbursement is provided for by written amendment. In no event, shall Consultant be reimbursed for overhead costs at a rate that exceeds Commission’s approved overhead rate set forth in the Cost Proposal. To the extent legally permissible, Consultant’s approved overhead rate shall be fixed for the term of this Agreement. In the event that Commission determines that a change to the Services from that specified in the Cost Proposal, this Agreement or any Task Order is required, the Agreement time or actual costs reimbursable by Commission shall be adjusted by written amendment to accommodate the changed work. The maximum total cost as specified in Section 19.8 shall not be exceeded, unless authorized by a written amendment.

19.2 In addition to the allowable incurred costs, Commission shall pay Consultant a fixed fee to be set forth in each Task Order (“Fixed Fee”). The Fixed Fee is nonadjustable for each Task Order, except in the event of a significant change in the Scope of Services, and such adjustment is made by written amendment.

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19.3 Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal. In addition, payments to Consultant for travel and subsistence expenses claimed for reimbursement or applied as local match credit shall not exceed rates authorized to be paid exempt non- represented State employees under current State Department of Personnel Administration (DPA) rules, unless otherwise authorized by Commission. If the rates invoiced are in excess of those authorized DPA rates, and Commission has not otherwise approved said rates, then Consultant is responsible for the cost difference and any overpayments shall be reimbursed to the Commission on demand.

19.4 When milestone cost estimates are included in the approved Cost Proposal for a Task Order, Consultant shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.

19.5 Progress payments shall be made monthly in arrears based on Services provided and allowable incurred costs. A pro rata portion of the Fixed Fee shall be included in the monthly progress payments. If Consultant fails to submit the required deliverable items according to the schedule set forth in the Scope of Services, Commission shall have the right to delay payment or terminate this Agreement in accordance with the provisions of Section 21, Termination.

19.6 No payment shall be made prior to approval of any Services, nor for any Services performed prior to approval of this Agreement.

19.7 Consultant shall be reimbursed, as promptly as fiscal procedures will permit upon receipt by Commission's Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which Consultant is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this Agreement number and project title. Final invoice must contain the final cost and all credits due Commission including any equipment purchased under the Equipment Purchase provisions of this Agreement. The final invoice should be submitted within 60 calendar days after completion of Consultant's work. Invoices shall be mailed to Commission's Contract Administrator at the following address:

Riverside County Transportation Commission
Attention: Accounts Payable
P.O. 12008
Riverside, CA 92502

19.8 The total amount payable by Commission, including the Fixed Fee, shall not exceed the amount set forth in each Task Order.

19.9 Commission has or will enter into **four (4)** task order contracts for performance of the Scope of Services identified in Exhibit "A", including this

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Agreement ("**On-Call Highway Design & Environmental Services Task Order Contracts**"). The other On-Call Highway Design & Environmental Services Task Order Contracts are **Agreement No. 26-31-023-00 with HDR Engineering, Inc, Agreement No. 26-31-047-00 with HNTB Corporation and Agreement No. 26-31-048-00 with Kimley-Horn and Associates, Inc.** The total amount payable by Commission for the On-Call Highway Design & Environmental Services Task Order Contracts shall not exceed a cumulative maximum total value of **Thirty Million Dollars ($30,000,00)** "NTE Sum". It is understood and agreed that there is no guarantee, either expressed or implied that this dollar amount will be authorized under the Design & Environmental Services Task Order Contracts through Task Orders. Each time a Task Order is awarded under any of the Design & Environmental Services Task Order Contracts, Commission must send written notification to Consultant and each of the other consultants entering into the Highway Design & Environmental Services Task Order Contracts. The notice must identify the total funds allocated under issued Task Orders, and the remaining unencumbered amount of the NTE Sum. Consultant acknowledges and agrees that Commission must not pay any amount under this Agreement that would exceed the NTE Sum, and Consultant must not enter into a Task Order that exceeds the NTE Sum.

19.10 Salary increases shall be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by Commission's Contract Administrator. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

19.11 Consultant shall not be reimbursed for any expenses unless authorized in writing by the Commission's Contract Administrator.

19.12 All subcontracts in excess of $25,000 shall contain the above provisions.

20. Disputes.

20.1 Any dispute, other than audit, concerning a question of fact arising under this Agreement that is not disposed of by mutual agreement of the Parties shall be decided by a committee consisting of RCTC's Contract Administrator and the Director of Capital Projects, who may consider written or verbal information submitted by Consultant.

20.2 Not later than 30 days after completion of all Services under this Agreement, Consultant may request review by the Commission's Executive Director of unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

20.3 Neither the pendency of a dispute, nor its consideration by the committee will excuse Consultant from full and timely performance in accordance with the terms of this Agreement.

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21. Termination.

21.1 Commission reserves the right to terminate this Agreement upon thirty (30) calendar days written notice to Consultant, for any or no reason, with the reasons for termination stated in the notice. Commission may terminate Services under a Task Order, at any time, for any or no reason, with the effective date of termination to be specified in the notice of termination of Task Order.

21.2 Commission may terminate this Agreement with Consultant should Consultant fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, Commission may proceed with the Services in any manner deemed proper by Commission. If Commission terminates this Agreement with Consultant, Commission shall pay Consultant the sum due to Consultant under this Agreement for Services completed and accepted prior to termination, unless the cost of completion to Commission exceeds the funds remaining in the Agreement. In such case, the overage shall be deducted from any sum due Consultant under this Agreement and the balance, if any, shall be paid to Consultant upon demand.

21.3 In addition to the above, payment upon termination shall include a prorated amount of profit, if applicable, but no amount shall be paid for anticipated profit on unperformed Services. Consultant shall provide documentation deemed adequate by Commission's Contract Administrator to show the Services actually completed by Consultant prior to the effective date of termination. This Agreement shall terminate on the effective date of the Notice of Termination

21.4 Upon receipt of the written Notice of Termination, Consultant shall discontinue all affected Services as directed in the Notice or as otherwise provided herein, and deliver to the Commission all Documents and Data, as defined in this Agreement, as may have been prepared or accumulated by Consultant in performance of the Services, whether completed or in progress.

21.5 In addition to the above, Consultant shall be liable to the Commission for any reasonable additional costs incurred by the Commission to revise work for which the Commission has compensated Consultant under this Agreement, but which the Commission has determined in its sole discretion needs to be revised, in part or whole, to complete the Project because it did not meet the standard of care established in this Agreement. Termination of this Agreement for cause may be considered by the Commission in determining whether to enter into future agreements with Consultant.

21.6 The rights and remedies of the Parties provided in this Section are in addition to any other rights and remedies provided by law or under this Agreement.

21.7 Consultant, in executing this Agreement, shall be deemed to have waived any and all claims for damages which may otherwise arise from the Commission's termination of this Agreement, for convenience or cause, as provided in this Section.

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21.8 Consultant may not terminate this Agreement except for cause.

22. Cost Principles and Administrative Requirements.

22.1 Consultant agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.

22.2 Consultant also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

22.3 Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 2 CFR, Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by Consultant to Commission.

22.4 All subcontracts in excess of $25,000 shall contain the above provisions.

23. Retention of Records/Audit. For the purpose of determining compliance with, as applicable, 2 CFR Part 200, Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of this Agreement pursuant to Government Code 8546.7; Consultant, subconsultants, and Commission shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of this Agreement, including but not limited to, the costs of administering this Agreement. All parties shall make such materials available at their respective offices at all reasonable times during the Agreement period and for three years from the date of final payment under this Agreement. The State, State Auditor, Commission, or any duly authorized representative of the State or Federal Government shall have access to any books, records, and documents of Consultant and it's certified public accountants (CPA) work papers that are pertinent to this Agreement and, if applicable, indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested. Subcontracts in excess of $25,000 shall contain this provision.

23.1 Accounting System. Consultant and its subcontractors shall establish and maintain an accounting system and records that properly accumulate and segregate expenditures by line item for the Services. The accounting system of Consultant and its subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), enable the determination of incurred costs at interim points of completion, and provide support for reimbursement payment vouchers or invoices.

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24. Audit Review Procedures.

24.1 Any dispute concerning a question of fact arising under an interim or post audit of this Agreement that is not disposed of by agreement, shall be reviewed by Commission's Chief Financial Officer.

24.2 Not later than 30 days after issuance of the final audit report, Consultant may request a review by Commission's Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.

24.3 Neither the pendency of a dispute nor its consideration by Commission shall excuse Consultant from full and timely performance, in accordance with the terms of this Agreement.

25. Subcontracting.

25.1 Nothing contained in this Agreement or otherwise, shall create any contractual relation between Commission and any subconsultant(s), and no subcontract shall relieve Consultant of its responsibilities and obligations hereunder. Consultant agrees to be as fully responsible to Commission for the acts and omissions of its subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by Consultant. Consultant's obligation to pay its subconsultant(s) is an independent obligation from Commission's obligation to make payments to the Consultant.

25.2 Consultant shall perform the Services contemplated with resources available within its own organization and no portion of the Services pertinent to this Agreement shall be subcontracted without written authorization by Commission's Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.

25.3 Consultant shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to Consultant by Commission.

25.4 Any subcontract in excess of $25,000 entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement to be applicable to subconsultants.

25.5 Any substitution of subconsultant(s) must be approved in writing by Commission's Contract Administrator prior to the start of work by the subconsultant(s).

25.6 Exhibit "B" may set forth the rates at which each subconsultant shall bill the Consultant for Services and that are subject to reimbursement by the Commission to Consultant. Additional Direct Costs, as defined in Exhibit "B" shall be the same for both the Consultant and all subconsultants, unless otherwise identified in Exhibit "B" or in a Task Order. The subconsultant rate schedules and cost proposals contained herein are for accounting purposes only.

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26. Equipment Purchase

26.1 Prior authorization, in writing, by Commission's Contract Administrator shall be required before Consultant enters into any unbudgeted purchase order, or subcontract for supplies, equipment, or services. Consultant shall provide an evaluation of the necessity or desirability of incurring such costs.

26.2 For purchase of any item, service or consulting work not covered in the Cost Proposal and exceeding $5,000 prior authorization, in writing, by Commission's Contract Administrator is required. Three competitive quotations must be submitted with the request for such purchase, or the absence of bidding must be adequately justified.

26.3 Any equipment purchased as a result of this Agreement is subject to the following: Consultant shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of $5,000 or more. If the purchased equipment needs replacement and is sold or traded in, Commission shall receive a proper refund or credit at the conclusion of this Agreement, or if this Agreement is terminated, Consultant may either keep the equipment and credit Commission in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established Commission procedures; and credit Commission in an amount equal to the sales price. If Consultant elects to keep the equipment, fair market value shall be determined at Consultant's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by Commission and Consultant. If Consultant determines to sell the equipment, the terms and conditions of such sale must be approved in advance by Commission. 2 CFR, Part 200 requires a credit to Federal funds when participating equipment with a fair market value greater than $5,000 is credited to the Project.

26.4 All subcontracts in excess $25,000 shall contain the above provisions.

27. Labor Code Requirements.

27.1 Prevailing Wages.

(a) Consultant shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the Services.

(b) Any subcontract entered into as a result of this Agreement, if for more than $25,000 for public works construction or more than $15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Section.

(c) When prevailing wages apply to the Services described in the Scope of Services, transportation and subsistence costs shall be reimbursed at the

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minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See http://www.dir.ca.gov.

(d) Copies of the prevailing rate of per diem wages in effect at commencement of this Agreement are on file at the Commission's offices. Consultant shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Consultant's principal place of business and at the project site. Consultant shall defend, indemnify and hold the Commission, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties or interest arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

27.2 DIR Registration. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, then pursuant to Labor Code Sections 1725.5 and 1771.1, the Consultant and all subconsultants must be registered with the Department of Industrial Relations. Consultant shall maintain registration for the duration of the Project and require the same of any subconsultants. This Project may also be subject to compliance monitoring and enforcement by the Department of Industrial Relations. It shall be Consultant's sole responsibility to comply with all applicable registration and labor compliance requirements.

27.3 Eight-Hour Law. Pursuant to the provisions of the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any worker employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment for overtime is made at not less than one and one-half the basic rate for all hours worked in excess of eight hours per day ("Eight-Hour Law"), unless Consultant or the Services are not subject to the Eight-Hour Law. Consultant shall forfeit to Commission as a penalty, $50.00 for each worker employed in the execution of this Agreement by him, or by any sub-consultant under him, for each calendar day during which such workman is required or permitted to work more than eight hours in any calendar day and forty hours in any one calendar week without such compensation for overtime violation of the provisions of the California Labor Code, unless Consultant or the Services are not subject to the Eight-Hour Law.

27.4 Employment of Apprentices. This Agreement shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on the work performed hereunder solely on the ground of race, creed, national origin, ancestry, color or sex. Every qualified apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade in which he or she is employed and shall be employed only in the craft or trade to which he or she is registered.

If California Labor Code Section 1777.5 applies to the Services, Consultant and any subcontractor hereunder who employs workers in any apprenticeable craft or trade

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shall apply to the joint apprenticeship council administering applicable standards for a certificate approving Consultant or any sub-consultant for the employment and training of apprentices. Upon issuance of this certificate, Consultant and any sub-consultant shall employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

The parties expressly understand that the responsibility for compliance with provisions of this Section and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with Consultant

28. Ownership of Materials/Confidentiality.

28.1 Documents & Data. This Agreement creates an exclusive and perpetual license for Commission to copy, use, modify, reuse, or sub-license any and all copyrights and designs embodied in plans, specifications, studies, drawings, estimates, materials, data and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data").

Consultant shall require all subcontractors to agree in writing that Commission is granted an exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement.

Consultant represents and warrants that Consultant has the legal right to grant the exclusive and perpetual license for all such Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were prepared by design professionals other than Consultant or provided to Consultant by the Commission.

Commission shall not be limited in any way in its use of the Documents & Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at Commission's sole risk.

28.2 Intellectual Property. In addition, Commission shall have and retain all right, title and interest (including copyright, patent, trade secret and other proprietary rights) in all plans, specifications, studies, drawings, estimates, materials, data, computer programs or software and source code, enhancements, documents, and any and all works of authorship fixed in any tangible medium or expression, including but not limited to, physical drawings or other data magnetically or otherwise recorded on computer media ("Intellectual Property") prepared or developed by or on behalf of Consultant under this Agreement as well as any other such Intellectual Property prepared or developed by or on behalf of Consultant under this Agreement.

The Commission shall have and retain all right, title and interest in Intellectual Property developed or modified under this Agreement whether or not paid for

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wholly or in part by Commission, whether or not developed in conjunction with Consultant, and whether or not developed by Consultant. Consultant will execute separate written assignments of any and all rights to the above referenced Intellectual Property upon request of Commission.

Consultant shall also be responsible to obtain in writing separate written assignments from any subcontractors or agents of Consultant of any and all right to the above referenced Intellectual Property. Should Consultant, either during or following termination of this Agreement, desire to use any of the above-referenced Intellectual Property, it shall first obtain the written approval of the Commission.

All materials and documents which were developed or prepared by the Consultant for general use prior to the execution of this Agreement and which are not the copyright of any other party or publicly available and any other computer applications, shall continue to be the property of the Consultant. However, unless otherwise identified and stated prior to execution of this Agreement, Consultant represents and warrants that it has the right to grant the exclusive and perpetual license for all such Intellectual Property as provided herein.

Commission further is granted by Consultant a non-exclusive and perpetual license to copy, use, modify or sub-license any and all Intellectual Property otherwise owned by Consultant which is the basis or foundation for any derivative, collective, insurrectional, or supplemental work created under this Agreement.

28.3 Confidentiality. All ideas, memoranda, specifications, plans, procedures, drawings, descriptions, computer program data, input record data, written information, and other Documents and Data either created by or provided to Consultant in connection with the performance of this Agreement shall be held confidential by Consultant. Such materials shall not, without the prior written consent of Commission, be used by Consultant for any purposes other than the performance of the Services. Nor shall such materials be disclosed to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant which is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use Commission's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television or radio production or other similar medium without the prior written consent of Commission.

28.4 Infringement Indemnification. Consultant shall defend, indemnify and hold the Commission, its directors, officials, officers, employees, volunteers and agents free and harmless, pursuant to the indemnification provisions of this Agreement, for any alleged infringement of any patent, copyright, trade secret, trade name, trademark, or any other proprietary right of any person or entity in consequence of the use on the Project by Commission of the Documents & Data, including any method, process, product, or concept specified or depicted.

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29. Indemnification. To the fullest extent permitted by law, Consultant shall defend, indemnify and hold Commission, Caltrans and their directors, officials, officers, employees, consultants, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, inverse condemnation, and any claims related to property acquisition and relocation rules or failure to detect or abate hazardous materials, which are brought by a third party, and which , in any manner arise out of or are incident to alleged negligent acts, omissions, or willful misconduct of Consultant, its officials, officers, employees, agents, consultants, and contractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of consequential damages, expert witness fees, and attorneys fees and other related costs and expenses. Consultant shall defend, at Consultant's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against Commission, Caltrans, and their directors, officials, officers, employees, consultants, agents, or volunteers. Consultant shall pay and satisfy any judgment, award or decree that may be rendered against Commission, Caltrans or their directors, officials, officers, employees, consultants, agents, or volunteers, in any such suit, action or other legal proceeding. Consultant shall reimburse Commission, Caltrans and their directors, officials, officers, employees, consultants, agents, and/or volunteers, for any and all legal expenses and costs, including reasonable attorney's fees, incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Consultant's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Commission, Caltrans or their directors, officials officers, employees, consultants, agents, or volunteers.

If Consultant's obligation to defend, indemnify, and/or hold harmless arises out of Consultant's performance as a "design professional" (as that term is defined under Civil Code section 2782.8), then, and only to the extent required by Civil Code section 2782.8, which is fully incorporated herein, Consultant's indemnification obligation shall be limited to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant, and, upon Consultant obtaining a final adjudication by a court of competent jurisdiction, Consultant's liability for such claim, including the cost to defend, shall not exceed the Consultant's proportionate percentage of fault.

Consultant's obligations as set forth in this Section shall survive expiration or termination of this Agreement.

30. Insurance.

30.1 Time for Compliance. Consultant shall not commence work under this Agreement until it has provided evidence satisfactory to the Commission that it has secured all insurance required under this Section, in a form and with insurance companies acceptable to the Commission. In addition, Consultant shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this Section.

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30.2 Minimum Requirements. Consultant shall, at its expense, procure and maintain for the duration of the Agreement insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Agreement by the Consultant, its agents, representatives, employees or subcontractors. Consultant shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Agreement. Such insurance shall meet at least the following minimum levels of coverage:

(a) Minimum Scope of Insurance. Coverage shall be at least as broad as the latest version of the following: (1) *General Liability*: Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001 or exact equivalent); (2) *Automobile Liability*: Insurance Services Office Business Auto Coverage (form CA 0001, code 1 (any auto) or exact equivalent); and (3) *Workers' Compensation and Employer's Liability*: Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.

(b) Minimum Limits of Insurance. Consultant shall maintain limits no less than: (1) *General Liability:* $2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Agreement/location or the general aggregate limit shall be twice the required occurrence limit. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; (2) *Automobile Liability:* $1,000,000 per accident for bodily injury and property damage. Limits may be achieved by any combination of primary and excess or umbrella liability insurance; and (3) *Workers' Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of $1,000,000 per accident.

30.3 Professional Liability. Consultant shall procure and maintain, and require its sub-consultants to procure and maintain, for a period of five (5) years following completion of the Project, errors and omissions liability insurance appropriate to their profession. For Consultant, such insurance shall be in an amount not less than $1,000,000 per claim. This insurance shall be endorsed to include contractual liability applicable to this Agreement and shall be written on a policy form coverage specifically designed to protect against acts, errors or omissions of the Consultant. "Covered Professional Services" as designated in the policy must specifically include work performed under this Agreement. The policy must "pay on behalf of" the insured and must include a provision establishing the insurer's duty to defend. Subconsultants of Consultant shall obtain such insurance in an amount not less than $2,000,000 per claim. Notwithstanding the foregoing, the Commission may consider written requests to lower or dispense with the errors and omissions liability insurance requirement contained in this Section for certain subconsultants of Consultant, on a case-by-case basis, depending on the nature and scope of the Services to be provided by the subconsultant. Approval of such request shall be in writing, signed by the Commission's Contract Administrator.

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30.4 Aircraft Liability Insurance. Prior to conducting any Services requiring use of aircraft, Consultant shall procure and maintain, or cause to be procured and maintained, aircraft liability insurance or equivalent form, with a single limit as shall be required by the Commission. Such insurance shall include coverage for owned, hired and non-owned aircraft and passengers, and shall name, or be endorsed to name, the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds with respect to the Services or operations performed by or on behalf of the Consultant.

30.5 Insurance Endorsements. The insurance policies shall contain the following provisions, or Consultant shall provide endorsements on forms approved by the Commission to add the following provisions to the insurance policies:

(a) General Liability.

(i) Commercial General Liability Insurance must include coverage for (1) bodily Injury and property damage; (2) personal Injury/advertising Injury; (3) premises/operations liability; (4) products/completed operations liability; (5) aggregate limits that apply per Project; (6) explosion, collapse and underground (UCX) exclusion deleted; (7) contractual liability with respect to this Agreement; (8) broad form property damage; and (9) independent consultants coverage.

(ii) The policy shall contain no endorsements or provisions limiting coverage for (1) contractual liability; (2) cross liability exclusion for claims or suits by one insured against another; or (3) contain any other exclusion contrary to this Agreement.

(iii) The policy shall give the Commission, its directors, officials, officers, employees, and agents insured status using ISO endorsement forms 20 10 10 01 and 20 37 10 01, or endorsements providing the exact same coverage.

(iv) The additional insured coverage under the policy shall be “primary and non-contributory” and will not seek contribution from the Commission’s or Caltrans’ insurance or self-insurance and shall be at least as broad as CG 20 01 04 13, or endorsements providing the exact same coverage.

(b) Automobile Liability. The automobile liability policy shall be endorsed to state that: (1) the Commission, Caltrans and their directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Consultant or for which the Consultant is responsible; and (2) the insurance coverage shall be primary insurance as respects the Commission, Caltrans and their directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Consultant’s scheduled underlying coverage. Any insurance or self-insurance maintained by the Commission, Caltrans and their directors, officials, officers, employees and agents shall be excess of the Consultant’s insurance and shall not be called upon to contribute with it in any way.

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(c) Workers' Compensation and Employers Liability Coverage.

(i) Consultant certifies that he/she is aware of the provisions of Section 3700 of the California Labor Code which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing work under this Agreement.

(ii) The insurer shall agree to waive all rights of subrogation against the Commission, its directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by the Consultant.

(d) All Coverages.

(i) Defense costs shall be payable in addition to the limits set forth hereunder.

(ii) Requirements of specific coverage or limits contained in this Section are not intended as a limitation on coverage, limits, or other requirement, or a waiver of any coverage normally provided by any insurance. It shall be a requirement under this Agreement that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits set forth herein shall be available to the Commission, Caltrans and their directors, officials, officers, employees and agents as additional insureds under said policies. Furthermore, the requirements for coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in this Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the Commission (if agreed to in a written contract or agreement) before the Commission's own insurance or self-insurance shall be called upon to protect it as a named insured. The umbrella/excess policy shall be provided on a "following form" basis with coverage at least as broad as provided on the underlying policy(ies).

(iv) Consultant shall provide the Commission at least thirty (30) days prior written notice of cancellation of any policy required by this Agreement, except that the Consultant shall provide at least ten (10) days prior written notice of cancellation of any such policy due to non-payment of premium. If any of the required coverage is cancelled or expires during the term of this Agreement, the Consultant shall deliver renewal certificate(s) including the General Liability Additional Insured Endorsement to the Commission at least ten (10) days prior to the effective date of cancellation or expiration.

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(v) The retroactive date (if any) of each policy is to be no later than the effective date of this Agreement. Consultant shall maintain such coverage continuously for a period of at least three years after the completion of the work under this Agreement. Consultant shall purchase a one (1) year extended reporting period A) if the retroactive date is advanced past the effective date of this Agreement; B) if the policy is cancelled or not renewed; or C) if the policy is replaced by another claims-made policy with a retroactive date subsequent to the effective date of this Agreement.

(vi) The foregoing requirements as to the types and limits of insurance coverage to be maintained by Consultant, and any approval of said insurance by the Commission, is not intended to and shall not in any manner limit or qualify the liabilities and obligations otherwise assumed by the Consultant pursuant to this Agreement, including but not limited to, the provisions concerning indemnification.

(vii) If at any time during the life of the Agreement, any policy of insurance required under this Agreement does not comply with these specifications or is canceled and not replaced, Commission has the right but not the duty to obtain the insurance it deems necessary and any premium paid by Commission will be promptly reimbursed by Consultant or Commission will withhold amounts sufficient to pay premium from Consultant payments. In the alternative, Commission may cancel this Agreement. The Commission may require the Consultant to provide complete copies of all insurance policies in effect for the duration of the Project.

(viii) Neither the Commission nor any of its directors, officials, officers, employees or agents shall be personally responsible for any liability arising under or by virtue of this Agreement.

30.6 Deductibles and Self-Insurance Retentions. Any deductibles or self-insured retentions must be declared to and approved by the Commission. If the Commission does not approve the deductibles or self-insured retentions as presented, Consultant shall guarantee that, at the option of the Commission, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Commission, its directors, officials, officers, employees and agents; or, (2) the Consultant shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expense.

30.7 Acceptability of Insurers. Insurance is to be placed with insurers with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the Commission.

30.8 Verification of Coverage. Consultant shall furnish Commission with original certificates of insurance and endorsements effecting coverage required by this Agreement on forms satisfactory to the Commission. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by the Commission before work commences. The Commission reserves the right to require complete, certified copies of all required insurance policies, at any time.

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30.9 Subconsultant Insurance Requirements. Consultant shall not allow any subcontractors or subconsultants to commence work on any subcontract until they have provided evidence satisfactory to the Commission that they have secured all insurance required under this Section. Policies of commercial general liability insurance provided by such subcontractors or subconsultants shall be endorsed to name the Commission as an additional insured using ISO form CG 20 38 04 13 or an endorsement providing the exact same coverage. If requested by Consultant, the Commission may approve different scopes or minimum limits of insurance for particular subcontractors or subconsultants.

30.10 Other Insurance. At its option, the Commission may require such additional coverage(s), limits and/or the reduction of deductibles or retentions it considers reasonable and prudent based upon risk factors that may directly or indirectly impact the Project. In retaining this option Commission does not warrant Consultant's insurance program to be adequate. Consultant shall have the right to purchase insurance in addition to the insurance required in this Section.

31. Safety. Consultant shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Consultant shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and life saving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the Commission has determined that the Project will contain areas that are open to public traffic. Consultant shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. Consultant shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.

32. Additional Work. Any work or activities that are in addition to, or otherwise outside of, the Services to be performed pursuant to this Agreement shall only be performed pursuant to a separate agreement between the parties. Notwithstanding the foregoing, the Commission's Executive Director may make a change to the Agreement, other than a Cardinal Change. For purposes of this Agreement, a Cardinal Change is a change which is "outside the scope" of the Agreement; in other words, work which should not be regarded as having been fairly and reasonably within the contemplation of the parties when the Agreement was entered into. An example of a change which is not a Cardinal Change would be where, in a contract to construct a building there are many changes in the materials used, but the size and layout of the building remains the same.

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Cardinal Changes are not within the authority of this provision to order, and shall be processed by the Commission as "sole source" procurements according to applicable law, including the requirements of FTA Circular 4220.1D, paragraph 9(f).

(a) In addition to the changes authorized above, a modification which is signed by Consultant and the Commission's Executive Director, other than a Cardinal Change, may be made in order to: (1) make a negotiated equitable adjustment to the Agreement price, delivery schedule and other terms resulting from the issuance of a Change Order, (2) reflect definitive letter contracts, and (3) reflect other agreements of the parties modifying the terms of this Agreement ("Bilateral Contract Modification").

(b) Consultant shall not perform, nor be compensated for any change, without written authorization from the Commission's Executive Director as set forth herein. In the event such a change authorization is not issued and signed by the Commission's Executive Director, Consultant shall not provide such change.

33. Prohibited Interests.

33.1 Solicitation. Consultant maintains and warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Consultant, to solicit or secure this Agreement. Further, Consultant warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Consultant, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Commission shall have the right to rescind this Agreement without liability.

33.2 Consultant Conflict of Interest.

(a) Consultant shall disclose any financial, business, or other relationship with Commission that may have an impact upon the outcome of this Agreement, or any ensuing Commission construction project. Consultant shall also list current clients who may have a financial interest in the outcome of this Agreement, or any ensuing Commission construction project, which will follow.

(b) Consultant hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this Agreement.

(c) Any subcontract in excess of $25,000 entered into as a result of this Agreement, shall contain all of the provisions of this Article.

(d) Consultant further certifies that neither Consultant, nor any firm affiliated with Consultant, will bid on any construction subcontracts included within the construction contract. Additionally, Consultant certifies that no person working under

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this Agreement is also employed by the construction contractor for any project included within this Agreement.

33.3 Commission Conflict of Interest. For the term of this Agreement, no member, officer or employee of the Commission, during the term of his or her service with the Commission, shall have any direct interest in this Agreement, or obtain any present or anticipated material benefit arising therefrom.

33.4 Conflict of Employment. Employment by the Consultant of personnel currently on the payroll of the Commission shall not be permitted in the performance of this Agreement, even though such employment may occur outside of the employee's regular working hours or on weekends, holidays or vacation time. Further, the employment by the Consultant of personnel who have been on the Commission payroll within one year prior to the date of execution of this Agreement, where this employment is caused by and or dependent upon the Consultant securing this or related Agreements with the Commission, is prohibited.

33.5 Covenant Against Contingent Fees. As required in connection with federal funding, the Consultant warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or secure this Agreement, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, the Commission shall have the right to terminate this Agreement without liability pursuant to the terms herein, or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

33.6 Rebates, Kickbacks or Other Unlawful Consideration. Consultant warrants that this Agreement was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any Commission employee. For breach or violation of this warranty, Commission shall have the right in its discretion; to terminate this Agreement without liability; to pay only for the value of the work actually performed; or to deduct from the Agreement price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

33.7 Covenant Against Expenditure of Commission, State or Federal Funds for Lobbying. The Consultant certifies that to the best of his/ her knowledge and belief no state, federal or local agency appropriated funds have been paid, or will be paid by or on behalf of the Consultant to any person for the purpose of influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the award of any state or federal contract, grant, loan, or cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

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(a) If any funds other than federal appropriated funds have been paid, or will be paid to any person for the purpose of influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this Agreement, the Consultant shall complete and submit the attached Exhibit "F", Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with the attached instructions.

(b) The Consultant's certification provided in this Section is a material representation of fact upon which reliance was placed when this Agreement was entered into, and is a prerequisite for entering into this Agreement pursuant to Section 1352, Title 31, US. Code. Failure to comply with the restrictions on expenditures, or the disclosure and certification requirements set forth in Section 1352, Title 31, US. Code may result in a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

(c) The Consultant also agrees by signing this Agreement that he/she shall require that the language set forth in this Section 3.23.5 be included in all Consultant subcontracts which exceed $100,000, and that all such subcontractors shall certify and disclose accordingly.

33.8 Employment Adverse to the Commission. Consultant shall notify the Commission, and shall obtain the Commission’s written consent, prior to accepting work to assist with or participate in a third-party lawsuit or other legal or administrative proceeding against the Commission during the term of this Agreement.

34. Equal Opportunity Employment. Consultant represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

35. Right to Employ Other Consultants. Commission reserves the right to employ other consultants in connection with the Project.

36. Governing Law. This Agreement shall be governed by and construed with the laws of the State of California. Venue shall be in Riverside County.

37. Disputes; Attorneys' Fees.

37.1 Prior to commencing any action hereunder, the Parties shall attempt in good faith to resolve any dispute arising between them. The pendency of a dispute shall not excuse Consultant from full and timely performance of the Services.

37.2. If the Parties are unable to resolve a dispute after attempting in good faith to do so, the Parties may seek any other available remedy to resolve the dispute. If

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either Party commences an action against the other Party, either legal, administrative or otherwise, arising out of or in connection with this Agreement, the prevailing Party in such litigation shall be entitled to have and recover from the losing Party reasonable attorneys' fees and, all other costs of such actions.

38. Time of Essence. Time is of the essence for each and every provision of this Agreement.

39. Headings. Article and Section Headings, paragraph captions or marginal headings contained in this Agreement are for convenience only and shall have no effect in the construction or interpretation of any provision herein.

40. Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

CONSULTANT:	**COMMISSION:**
Parsons Transportation Group, Inc.	Riverside County
1250 Corona Pointe Ct	Transportation Commission
Suite 310	4080 Lemon Street, 3rd Floor
Corona, CA 92879	Riverside, CA 92501
Attn: Amit Shah	Atten: Executive Director

Such notice shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. mail, first class postage prepaid, and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service.

41. Conflicting Provisions. In the event that provisions of any attached exhibits conflict in any way with the provisions set forth in this Agreement, the language, terms and conditions contained in this Agreement shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the performance of the Services.

42. Amendment or Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by both Parties.

43. Entire Agreement. This Agreement contains the entire agreement of the Parties relating to the subject matter hereof and supersedes all prior negotiations, agreements or understandings.

44. Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.

45. Provisions Applicable When State Funds or Federal Funds Are Involved. When funding for the Services under a Task Order is provided, in whole or in part, from

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Caltrans, Consultant shall also fully and adequately comply with the provisions included in Exhibit "C" (California Department of Transportation requirements) attached hereto and incorporated herein by reference. When funding for the Services under a Task Order is provided, in whole or in part, from the FTA, Consultant shall also fully and adequately comply with the provisions included in Exhibit "D" (FTA Requirements) attached hereto and incorporated herein by reference.

46. Survival. All rights and obligations hereunder that by their nature are to continue after any expiration or termination of this Agreement, including, but not limited to, the indemnification and confidentiality obligations, shall survive any such expiration or termination.

47. No Third Party Beneficiaries. There are no intended third party beneficiaries of any right or obligation assumed by the Parties.

48. Labor Certification. By its signature hereunder, Consultant certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

49. Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.

50. Subpoenas or Court Orders. Should Consultant receive a subpoena or court order related to this Agreement, the Services or the Project, Consultant shall immediately provide written notice of the subpoena or court order to the Commission. Consultant shall not respond to any such subpoena or court order until notice to the Commission is provided as required herein, and shall cooperate with the Commission in responding to the subpoena or court order.

51. Assignment or Transfer. Consultant shall not assign, hypothecate, or transfer, either directly or by operation of law, this Agreement or any interest herein, without the prior written consent of the Commission. Any attempt to do so shall be null and void, and any assignees, hypothecates or transferees shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer.

52. Successors and Assigns. This Agreement shall be binding on the successors and assigns of the parties, and shall not be assigned by Consultant without the prior written consent of Commission.

53. Incorporation of Recitals. The recitals set forth above are true and correct and are incorporated into this Agreement as though fully set forth herein.

54. No Waiver. Failure of Commission to insist on any one occasion upon strict compliance with any of the terms, covenants or conditions hereof shall not be deemed a waiver of such term, covenant or condition, nor shall any waiver or relinquishment of any

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rights or powers hereunder at any one time or more times be deemed a waiver or relinquishment of such other right or power at any other time or times.

[Signatures on following page]

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SIGNATURE PAGE
TO
PROFESSIONAL SERVICES AGREEMENT
WITH STATE, FHWA, FTA AND PROPOSITION 1B FUNDING/ASSISTANCE

IN WITNESS WHEREOF, this Agreement was executed on the date first written above.

RIVERSIDE COUNTY TRANSPORTATION COMMISSION		**CONSULTANT** **Parsons Transportation Group, Inc.**
By:_____ Aaron Hake Executive Director *Approved as to Form:* By:_____ Best, Best & Krieger LLP General Counsel		By: _____ Signature _____ Name _____ Title **ATTEST:** By: _____ Its: _____

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* A corporation requires the signatures of two corporate officers.

One signature shall be that of the chairman of board, the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

Exhibits:

EXHIBIT "A" - SCOPE OF SERVICES

EXHIBIT "B"- COMPENSATION AND PAYMENT

EXHIBIT "C" – FEDERAL REQUIREMENTS

EXHIBIT "D" CERTIFICATE OF CONSULTANT

EXHIBIT “E” – LOBBYING ACTIVITIES DISCLOSURE

EXHIBIT “F”- EXECUTIVE ORDER N-6-22 CERTIFICATION

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EXHIBIT "A"
SCOPE OF
WORK

The Riverside County Transportation Commission (RCTC) intends to contract a "bench" of qualified consultants to provide on-call Preliminary Engineering, Environmental, and Design Engineering Services for Capital and Toll Projects on an on-call basis pursuant to task orders or purchase orders to be issued in accordance with the terms of this Request For Qualifications (RFQ) and the Commission's model agreement. The selected consultants will supplement the work of the Commission Staff in accordance with the specifications described herein.

The Capital Program and Toll Program oversee various projects throughout Riverside County. Work for this contract will be authorized through the issuance of task orders or purchase orders (PO). **A maximum of four consultant teams will be selected**. Task orders or POs will be issued to the consultants at RCTC's discretion based on an assessment of the highest qualifications, availability of qualified resources, and past performance on prior task orders/assignments. These project delivery support services agreements are intended to facilitate the completion of Capital and Toll projects on time and within budget.

In general, the RCTC seeks the following services including, but not limited to, preparation of Feasibility Studies; Project Initiation Documents (PID), Project Study Reports/Project Development Support (PSR/PDS); Project Approval and Environmental Documents (PA/ED); Plans, Specifications, and Estimates (PS&E); other planning studies, reports and technical services and associated documents; independent review and oversight of environmental, design, traffic, structures, electrical studies and plans prepared by others; development and management of databases for schedule, cost and quality control, risk assessments and management studies & plans; preparation of agreements; grant writing and support and other related tasks as deemed necessary; and preparation of regulatory permit applications and coordination.

Right-of-Way (ROW) and public outreach services will be primarily procured through other RCTC contracts currently in place. However, the consultants shall provide ROW and Public Outreach support services for all phases, as necessary.

All Consultant teams shall have the capability to provide the full range of services associated with federal, state and local highway project planning and development processes.

PERIOD OF PERFORMANCE

The period of performance is **three years, with one two-year extension option**. Specific term limits may also be dictated by Task orders/POs.

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List of Potential Projects

- New Road Construction
- Roadway Widening
- Resurfacing, Restoration, and Rehabilitation
- Intersection Improvements
- New Interchange or Reconfiguration
- Grade Separation Projects
- Bridge Improvement and Widening
- Roadway Safety
- Access Management
- Pedestrian and ADA Facilities
- Multi-Use Trails
- Express Toll/Transit Lanes
- Intermodal Facilities
- Intelligent Transportation Systems
- Ramp widening and/or metering

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SCOPE OF WORK

Consultants shall be responsible for the delivery of services, the preparation of documents and the review of work by others in the categories/phases of projects. Tasks Consultants are expected to perform, but not limited to, are listed below:

1 - Planning and Technical Studies

- Feasibility Studies
- Corridor Studies
- Project Study Reports/Project Development Support (PSR/PDS) or equivalent documents
- Project Initiation Document
- Technical studies
- Other similar studies per Caltrans Project Development Procedures Manual (Storm Water Data Reports, Initial Site Assessment, Traffic Engineering Performance Assessment, Preliminary Environmental Assessment Report)
- Development of Purpose & Need
- Independent Utility

2 - Specific Literature Research/Data Collection

- Research, collection, review, and analysis of applications and technologies to support the development of highway improvement projects
- Coordination and assimilation of existing datasets and identification of additional data collection needs

3 - Project Approval and Environmental Document (PA&ED)

- Scoping Documents
- Environmental Documents (CE/CE, EA/IS, EIS/EIR)
- Alternatives Analysis
- Environmental Technical Studies (Cultural, Biological, Air Quality, Noise, Traffic, Community Impacts, Hazardous Waste)
- Agency Permit Applications and coordination
- Public Hearings (including providing technical and logistical support)
- Support for Public Outreach activities/events
- Project Report (PR) or PSR/PRs
- Advanced Planning Studies
- Utilities Conflicts Identification
- Life Cycle Cost Analysis
- Value Engineering
- Traffic Report (TOAR)Equity Analysis
- Preparation of exhibits or materials needed for coordination purposes
- Preliminary site visitations and field surveys
- Preliminary engineering and geometric approval drawings
- Design standard deviations and exception investigations and identification (DSDD, CSDD, VMTDD)
- Other similar documents and activities per the Caltrans PDPM
- Managed Lane Engineering Studies and Toll Policy Reports
- Modified Access Reports for FHWA conceptual approval
- Cost Estimates
- AB194 Tolling Authority application and public hearing support

4 - Plans, Specifications, and Estimates (PS&E)

- Data Collection and Preliminary investigations
- Engineering Plans per the Caltrans Plan Preparation Manual including but not limited to: Layout, Superelevation and profile, typical sections, contour grading plans, and construction details
- Civil/structural/traffic/electrical/landscaping-irrigation design, plans, and specifications
- Stage Construction Plans and Traffic Management Plan
- Utilities Plans and Coordination, Utility Policy Exceptions

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- Drainage design, details, plans and profiles, Storm Water Data Reports (SWDR), Hydraulics/Hydrology Report and Drainage Report
- Geotechnical engineering, calculations, and investigations. Foundation reports, Geotechnical Design Reports, and Materials Reports
- Surveying, topographic mapping, and aerial photography
- Hazardous Waste studies and reports
- Quantity calculations and cost estimates
- Pavement delineation/markers, traffic control, signing and striping
- Technical specifications and Special Provisions
- Exceptions to Caltrans Standards/Design Standards Decision Document (DSDD)
- Permits and approvals by other agencies
- Other services required to secure approvals of pre-construction phases of projects and County PS&E for all State Highway improvement projects shall be prepared in accordance with Caltrans Standards. PS&E for local projects shall be prepared in accordance with local agency standards and procedures.
- Environmental Commitments Record, Environmental Revalidation and Environmental Certifications
- Construction Support Services
- Right of Way Identification, Right of Way Requirements Maps, PD-26, Right of Way and Utility Certification

5 - Project Right-of-Way & Utility Services

- ROW activities will be primarily conducted by RCTC ROW Department. Consultants shall provide ROW support services as required for all phases.
- Perform utility investigations and potholing to review and assess relocation needs due to the project.

6 - Intelligent Transportation Systems (ITS) and Transportation Technology Support Services

- Systems engineering documentation/plans (concept exploration, Concept of Operations, system requirements, Design, Testing)
- Feasibility studies
- Cost estimating
- Engineering plans/drawings
- System plans
- Communications plans
- Systems integration plans
- Equipment specifications
- Software specifications and applications
- Connected and automated vehicle research, studies, and/or deployments
- Transit signal priority systems, plans, support, and modernization
- Goods Movement technology research, studies, and/or deployments

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- Inventory management support (Infrastructure)
- ITS architecture support

7 - Traffic Engineering Support Services

- Traffic data collection (turn movement counts, automated counts, 3rd party probe data)
- Traffic studies/analysis (traffic impact studies, queuing analyses, ISOAP etc.)
- Transportation mobility Studies (Before and after evaluations, travel time studies, destination studies, etc.)
- Traffic operation studies
- Traffic signal timing documents
- Micro and macro simulation modeling using Synchro, VISSIM, TransModeler, or other traffic analysis software
- Traffic data synthesis and analytic tools for performance measurement
- Vehicle Miles Traveled (VMT) analysis per SB 743 Caltrans guidelines
- Managed lanes – Traffic and revenue studies (Investment Grade)
- Managed lanes – Concept of Operations support
- Scope of Work development (final design/build contract)

8 - Project Management Support

- Developing or reviewing project scopes of work
- Developing and maintaining baseline and project schedules, cost-loaded schedule, and expenditure forecasts
- Providing cost estimating services for the various stages in the project development/delivery process
- Project Risk Assessment and Risk Monitoring/Management Services, including developing and maintaining the risk register
- General project management
- Attending meetings, internally and externally, in connection with project management and development, including producing any materials necessary
- Performing internal and external project coordination and public outreach
- Prepare Project Management Plan
- Monthly trend and Project Development Team meetings with agendas, minutes, and look-ahead schedules
- Quality Management and Quality Control

9 – Public Outreach Support

- Develop Public Outreach Plans
- Prepare project fact sheets, messages, and content for Commission website and media
- Manage project social media, monitor/respond to public comments
- Provide support for public scoping meetings and hearings
- Provide outreach activity summaries

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10 - Miscellaneous Administrative Project Support

- Preparing grant application packages including, but not limited to, writing grant applications, assisting with required research, data, and justification preparation, and developing supporting materials, exhibits, and financial analysis to support the grant opportunity.
- Preparing documents for solicitations, preparing independent cost estimates & other documents supporting contract negotiations, preparing reports and other correspondences, interfacing with consultants and agency personnel, conducting post award contract administration, monitoring contract compliance, preparing modifications/contract amendments, and performing other related work and duties.
- Providing regular project progress status reports
- Maintaining project information/fact sheets, webpages, and social media platforms
- Developing Memorandum of Understandings and/or Cooperative/Funding Agreements, maintaining databases, and updating various project tracking sheets
- Preparing procurements/contracts and task orders
- Supporting project audits; processing invoices; preparing financial data; reviewing technical task reports/technical memos; preparing materials for meetings and presentations (written and oral); preparing agendas, meeting notes, and following through with action items
- Graphics/digital content design

Other relevant services may be included by RCTC via this On-Call.

Each Task Order shall be evaluated independently based on established criteria, including scope, complexity, and required expertise. RCTC shall have full discretion in requiring assignment of specific Consultant/sub-consultant resources/staff to individual task orders, provided such decisions are made in consideration of qualifications and past performance/success in efficient delivery of assignments. Task Orders may include phased Notice to Proceed as determined appropriate by RCTC.

Project Understanding and Approach

The I-15/Cantu Galleano Ranch Road Interchange Improvement Project, located in the City of Eastvale, has been identified by RCTC as a long-range capital and toll improvement effort. The proposed project will evaluate a range of interchange and express lane alternatives and advance through the Caltrans Project Delivery Phases, including Project Initiation Document (PID), Project Approval and Environmental Document (PA/ED), and Plans, Specifications, and Estimate (PS&E).

Consultants should use this project as the basis for developing their Statement of Qualifications (SOQ), specifically the Project Understanding and Approach section; demonstrating their technical understanding, proposed methodologies, and approach to delivering each phase in compliance with Caltrans standards and RCTC objectives.

The activities outlined in this Scope of Work are intended to support the PID, PA/ED, and PS&E phases, as approved by Caltrans and applicable local agencies. Consultants should demonstrate in their Approach and Understanding how they will effectively address the key tasks and objectives associated with each project phase.

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EXHIBIT "B"

COMPENSATION SUMMARY[1]

FIRM	PROJECT TASKS/ROLE	COST
	Prime Consultant:	
Parsons Transportation Group, Inc	On-Call Highway Design and Environmental Services for Capital and Toll Programs Projects	$30,000,000.00
	Sub Consultants:	
ADVANTEC Consulting Engineers, Inc.	Sub Consultant	TBD per Task Order
Costin PublicOutreach Group, Inc	Sub Consultant	TBD per Task Order
Chen Ryan Associates	Sub Consultant	TBD per Task Order
EGP Consulting	Sub Consultant	TBD per Task Order
Earth Mechanics Inc.	Sub Consultant	TBD per Task Order
Fehr and Peers	Sub Consultant	TBD per Task Order
GPA Consulting	Sub Consultant	TBD per Task Order
Psomas	Sub Consultant	TBD per Task Order
Stantec	Sub Consultant	TBD per Task Order
	TOTAL COSTS	**$30,000,000.00**

[1] Commission authorization pertains to total contract award amount. Compensation adjustments between consultants may occur; however, the maximum total compensation authorized may not be exceeded.

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AGENDA ITEM 11

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	February 23, 2026
TO:	Western Riverside County Programs and Projects Committee
FROM:	Ernesto Salinas, Facility Administrator
THROUGH:	Erik Galloway, Project Delivery Director
SUBJECT:	Amendment No. 1 with Tropical Plaza Nursery, Inc., for Landscape Maintenance Services at the Commuter Rail Stations and Toll Facilities

STAFF RECOMMENDATION:

This item is for the Committee to recommend the Commission take the following action(s):

1) Approve Amendment No. 1 to Agreement No. 22-24-007-00 with Tropical Plaza Nursery Inc., for landscape maintenance services at RCTC's nine Commuter Rail Stations and Toll Facilities for an additional amount of $420,000, for a total amount not to exceed $4,179,000; and
2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to finalize and execute the amendment, on behalf of the Commission.

BACKGROUND INFORMATION:

The Commission owns and operates nine commuter rail stations (Riverside-Downtown, Jurupa Valley-Pedley, Riverside-La Sierra, Corona-West, Corona-North Main, Riverside-Hunter Park, Moreno Valley-March Field, Perris-Downtown, and Perris-South) which require routine landscape maintenance and repair, among other services. Station landscape maintenance services include, but are not limited to, tree care, pruning/trimming, weed abatement, vegetation/brush control, planting, debris/litter collection, grass/turf mowing, landscape bed upkeep, bioswale maintenance, irrigation monitoring and repair, plant disease control and pest abatement and other related general grounds maintenance activities.

In an effort to maintain a high standard of landscape maintenance at our stations and other RCTC-owned properties such as our toll facility and storage building, the Commission authorized RCTC's Executive Director to enter into Agreement No. 22-24-007-00 with Tropical Landscape Nursery, Inc. (Tropical Plaza), for landscape and related on-call maintenance services on December of 2021. The agreement was effective January 1, 2022, for a five-year term ending on December 31, 2026, in an amount not to exceed $3,759,000.

The monthly costs for routine services have averaged approximately $35,900 with authorized consumer price index (CPI) increases occurring throughout the life of the contract, for a total approximate amount of $431,000 for routine services annually. However, this amount does not

include costs for supplemental services (emergency, on-call, and non-routine), which can fluctuate depending on various factors. As a result, total annual costs for this contract have varied throughout the years and have presented a challenge to accurately forecast, resulting in the current anticipated shortfall.

This landscape agreement is largely funded using Measure A funds, but certain maintenance work tasks are eligible for reimbursement using FTA (Federal Transit Administration) funds. The agreement includes a provision for on-call emergency or urgent landscape services through the utilization of task orders. It is these task orders that are eligible for FTA funding; however, regardless of the funding source, the contract is currently capped at $3,759,000 for both routine and task-order-related services.

To date, task orders for supplemental landscape services have been utilized for certain non-routine work tasks and urgent repairs (such as irrigation line breaks). These task orders have also included costs related to repairs stemming from inclement weather conditions, aging irrigation infrastructure, and sporadic vandalism. The table below summarizes all annual expenses and other additional services incurred or anticipated. Additional services have also been requested to address landscaping upgrades added to several stations resulting from capital project initiatives.

Current and Projected Landscape Expenses

YEAR	Annual Routine Services	Supplemental Services (emergency, on-call, non-routine)	Total	Original Contract Amount $3,759,000
2022	$431,000	$474,147	$905,147	$2,853,853
2023	$431,000	$451,271	$882,271	$1,971,582
2024	$431,000	$507,704	$938,704	$1,032,878
2025	$431,000	$397,656	$828,656	$204,222
Projected 2026*	$444,624	$179,598	$624,222	($420,000)

***Reflects all projected and current expenses**

No prior amendments have been sought for this agreement. Note that a Request for Proposal (RFP) will be issued prior to the end of the current term in December of 2026 for landscape maintenance services; however, this one-time amendment request is still required to fulfill the landscaping obligations for the remainder of the current services agreement term.

DISCUSSION

There are several factors that have necessitated the requested amendment to this contract. Chief among them is the increased costs related to supplemental services (emergency, on-call, non-routine). In recent years, our stations have experienced several weather events that resulted in non-routine (extra cost) work. Several rain and wind related events have resulted in fallen trees, large branches, palm fronds, and other debris and litter, requiring priority clearing. In addition to these weather events, our stations are occasionally subject to vandalism of irrigation lines or inadvertent traffic collisions within landscaped areas. Repairing irrigation lines (not due to negligence on the part of the contractor) results in increased expenditures for materials and labor that are paid utilizing a task order issued to the contractor. Additionally, drier climate conditions and extended heat during summers have reduced the lifespan of our irrigation lines—causing breaks needing immediate repair. Warmer temperatures also affect plants that decline quicker and require replacement (again, at an extra cost). Lastly, landscape upgrades at several stations have also resulted in the expenditure of supplemental funds which required our landscape services contractor to adjust their staffing levels to complete these initiatives via an authorized task order. Some of these upgrades involved converting traditional landscaping to drought-tolerant versions. They are an upfront investment that will decrease reliance on traditional irrigation and help reduce overall maintenance costs in the long term.

As a result of weather-related landscaping maintenance tasks, landscape upgrades, vandalism, and a high volume of irrigation repairs related to aging infrastructure mentioned above, staff is requesting the Commission approve a one-time amendment to the Tropical Plaza contract by $420,000 and amend the current agreement to a new amount not to exceed $4,179,000. This amendment provides sufficient funds to address the shortfall in projected routine services, potential emergency, and other supplemental repairs for the remainder of the contract. This adjustment is necessary to ensure staff can maintain a high standard of maintenance and appearance at our stations. Approval of this budget amendment will allow staff to sustain safe, attractive, and functional station environments, protecting RCTC's infrastructure investments, and ensuring uninterrupted service to the public.

FISCAL IMPACT:

Funding for this amendment will consist mainly of Measure A funding. However, some costs are eligible for reimbursement using FTA grant funding and Toll Revenue. The breakdown of the funding is detailed in the table below.

Funding Source Breakdown

	Item	Dollar Amount	Fund Source
1	Amendment #1 Routine/Supplemental services	$420,000	Measure A / FTA/ Toll Revenue
	Total	**$420,000**	

Financial Information					
In Fiscal Year Budget:	N/A	Year:	FY 2025/26 FY 2026/27+	Amount:	FY 2025/26: $215,400 FY 2026/27+: $204,600
Source of Funds:	2009 Measure A Western County Rail, Toll Revenues, Federal Transit Administration Section 5307 Grant			Budget Adjustment:	No
GL/Project Accounting No.:	24400X-73312-00000-0000 265-24-73301 004011-90701-0XXXX-4XXX 265-33-90501 001599-73312-00000-0000 515-31-73301 009199-73312-00000-0000 591-31-73301				
Fiscal Procedures Approved:				Date:	02/18/2026

Attachment: Draft Agreement No. 22-24-007-01 with Tropical Plaza Nursery, Inc.

AMENDMENT NO. 1 TO RIVERSIDE COUNTY TRANSPORTATION COMMISSION AGREEMENT FOR ROUTINE AND ON-CALL LANDSCAPE MAINTENANCE SERVICES WITH TROPICAL PLAZA NURSERY, INC.

1. PARTIES AND DATE

This Amendment No. 1 to the Agreement for routine and on-call landscape maintenance services is made and entered into this _____ day of _____, 2026, by and between the RIVERSIDE COUNTY TRANSPORTATION COMMISSION ("Commission") and TROPICAL PLAZA NURSERY, INC. ("Contractor"), a Corporation.

2. RECITALS

2.1 The Commission and the Contractor have entered into an agreement dated January 1, 2022, for the purpose of providing routine and on-call landscape maintenance services for the Commission (the "Master Agreement").

2.2 The parties now desire to amend the Master Agreement in order to add additional compensation for continued routine and on-call landscape maintenance services.

3. TERMS

3.1 The maximum compensation for Services performed pursuant to this Amendment No. 1 shall not exceed Four Hundred Twenty Thousand Dollars ($420,000). Work shall be performed at the rates set forth in Exhibit “C” of the Master Agreement.

3.2 The total contract value of the Master Agreement, as amended by this Amendment No. 1, shall be Four Million, One Hundred Seventy-Nine Thousand Dollars ($4,179,000).

3.3 Except as amended by this Amendment No. 1, all provisions of the Master Agreement, including without limitation the indemnity and insurance provisions, shall remain in full force and effect and shall govern the actions of the parties under this Amendment.

3.4 This Amendment No. 1 shall be governed by the laws of the State of California. Venue shall be in Riverside County.

3.5 This Amendment No. 1 may be signed in counterparts, each of which shall

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constitute an original.

3.6 A manually signed copy of this Amendment No. 1 which is transmitted by facsimile, email or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original executed copy of this Amendment No. 1 for all purposes. This Amendment No. 1 may be signed using an electronic signature.

[Signatures on following page]

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SIGNATURE PAGE
TO
AMENDMENT NO. 1 TO
AGREEMENT FOR ROUTINE AND
ON-CALL LANDSCAPE
MAINTENANCE SERVICES WITH
TROPICAL PLAZA NURSERY, INC.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the date first herein above written.

RIVERSIDE COUNTY

TRANSPORTATION COMMISSION

By: _____
Aaron Hake, Executive Director

TROPICAL PLAZA NURSERY, INC.

By: _____
Signature

_____
Name

_____
Title

APPROVED AS TO FORM:

By: _____
Best Best & Krieger LLP
Counsel to the Riverside County
Transportation Commission

ATTEST:

By: _____
Its: _____

One signature shall be that of the chairman of board the president or any vice president and the second signature (on the attest line) shall be that of the secretary, any assistant secretary, the chief financial officer or any assistant treasurer of such corporation.

If the above persons are not the intended signators, evidence of signature authority shall be provided to RCTC.

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