



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

REQUEST FOR PROPOSALS

**FOR DESIGN AND CONSTRUCTION ON STATE HIGHWAY IN
SAN MATEO COUNTY, AT VARIOUS LOCATIONS FROM 7.5 MILES NORTH
OF THE SANTA CLARA/SAN MATEO COUNTY LINE TO 0.2 MILE SOUTH OF
THE SAN MATEO/SAN FRANCISCO COUNTY LINE**

DISTRICT 04, ROUTE 101

**CONTRACT NO. 04-2A7904
04-SM-101-7.5/25.9 PM
Project ID 040000843**

**Federal Aid Project
ACNH-Q101(202)N**

Addendum No. 1 Issued June 3, 2011

The Department issues this Addendum No. 1 to inform Proposers of the following changes and corrections to the RFP.

INSTRUCTIONS TO PROPOSERS

The Instructions to Proposers is modified as indicated by the deletions and additions set forth below.

Section 2 Procurement

Replace Table 2-1 Procurement Schedule with the following:

Table 2-1 Procurement Schedule	
Issuance of RFQ	August 24, 2010
SOQ Due Date	September 27, 2010
Prequalification Announcement	November 23, 2010
Issuance of RFP by Department to Prequalified Proposers	April 11, 2011
Data Room, Access Permitted	April 11, 2011
One-on-One Meetings	May 9-13, 2011
Pre-Bid Conference	May 10, 2011
ATC Submittal Due Date	May 20, 2011
Request for Clarifications Submittal Deadline	June 10, 2011
Technical Proposal Due Date	July 5, 2011
Price Proposal Due Date	July 5, 2011
Public Opening Date	August 1, 2011
NTP1	September 15, 2011

Appendix I Proposal Checklist

Appendix I is deleted and replaced with the revised Appendix I attached to this Addendum.

Appendix I-1 Technical Proposal Submittal Details

Appendix I-1 is deleted and replaced with the revised Appendix I-1 attached to this Addendum.

BOOK 2 PROJECT REQUIREMENTS

The Book 2, Project Requirements, is modified as indicated by the deletions and additions set forth below. The Department has decided to install EMS's in lieu of VMS's.

Section 1.3.3 General Description

The Project generally provides to upgrade or install new ramp metering systems at various on-ramps and the mainline along Route 101. A total of 29 ramp metering systems on both northbound and southbound Route 101 are proposed under this project. Other major responsibilities involve environmental compliance and management, right-of-way utilities identification and coordination, traffic control and management, public relations, among other activities.

The Project scope of work includes, but is not limited to:

- Electrical work; specifically the installation of ramp metering system equipment at on-ramps and adjacent mainline. Equipment includes, but is not limited to: loop detectors (queue-loops, passenger/demand loops, mainline loops, counter loops), ‘Meter-On’ and ‘Prepare to Stop’ signs (mounted on Type 1B standards), ‘Meter-On’ and ‘Prepare to Stop’ ~~VMS-EMS~~ signs with flashing beacons (mounted on double wood posts or cantilever sign trusses), ramp metering traffic signals (mounted on Type 1B standards or mast arms), Model 170 controllers, Type 334 controller cabinets, [Type III-AF service equipment enclosures](#), conduits, pullboxes and wiring. [Electrical plans for the 29 locations are provided as RID. Design-Builder may rely only on the quantities and type of elements contained in the Revised Electrical Plans as required to complete the ramp metering systems. Any other information contained therein is provided for information only and the accuracy of such information shall be verified by the Design-Builder before inclusion in the final design.](#)
- Salvaging, removing and/or abandoning of existing ramp metering system equipment
- Structure work (foundations for sign structures and mounting sign structures such as EMS signs, ramp metering signal mast arms, and conduits onto existing barrier railing on freeway connectors.
- Roadway realignment and widening (to facilitate the addition of HOV (high occupancy vehicle) bypass lanes, will be required at 2 locations)
- Overlaying existing pavement with 0.1’ hot mix asphalt (including preparatory work such as sealing cracks in exist pavement, replacing failed areas in exist pavement, pavement milling or grinding). [Roadway plans for the 29 locations are provided as RID. Design-Builder may rely only on the limits of road work contained in the Roadway Plans. Any other information contained therein is provided for information only and the accuracy of such information shall be verified by the Design-Builder before inclusion in the final design.](#)
- Construction of maintenance vehicle pullouts (MVPs)
- Construction of California Highway Patrol (CHP) enforcement zones
- Installation of metal beam guard railing (MBRG) to protect signing structures and other fixed objects under the clear recovery zone requirements
- Hydraulic work (typical work at hot mix asphalt overlay locations include adjusting drainage inlets to grade, constructing hot mix asphalt dikes, concrete curbs or

drainage ditches and construction of drainage systems including drainage inlets, pipes, and/or culverts at roadway widening locations)

- Pavement delineation work on both portions of and entire on-ramps (including removal of existing striping, new striping configurations for lane drops, adding lanes, extending lanes and HOV bypass lanes, restriping back to existing conditions after asphalt concrete overlays, and other incidental striping work)
- Signing work, in addition to “Meter-On” and “Prepare to Stop” signs mentioned above, additional signage includes, but is not limited to, all required regulatory signs, advisory signs, informational signs, construction area signing, and detour signing (work includes the installation of new signs, salvaging existing signs, the removal or relocation of existing signs, the installation of signs using new metal poles or wooden posts, the use of saddle brackets and mounts brackets, and the mounting of signing onto existing sign structures)
- Erosion control work (including slope stabilization and storm water pollution prevention)
- Landscape work (clearing and grubbing, maintaining all existing landscaping and
- landscaping irrigation facilities, replacement planting)
- Traffic control, maintaining traffic, installing and maintaining detours, on-ramp or off-ramp closures, and mainline or shoulder closures.

Section 13.1 General

The Design-Builder shall perform all Work necessary to meet the requirements associated with Ramp Metering in accordance with the requirements of the Contract Documents and these Technical Provisions. In general, this work includes the design and construction of ramp metering equipment (conduits, pullboxes, signals, signs, ~~VMS's~~EMS's) foundations and mounting details on existing structures.

Section 21.3.1.1 Structural Sections

The following pavement structural sections are to be used in the design of Pavement:

- 1) Locations requiring cold plane AC and hot mix asphalt (HMA) - Cold plane to a depth of 0.15' and replace with 0.15' HMA Type A.
- 2) Locations requiring replace AC surfacing - Remove 0.5' of existing pavement and replace with 0.5' of HMA Type A.
- 3) Locations requiring roadway widening:
 - Maintenance Vehicle Pullouts and CHP Enforcement Zones.- Full depth, 1.25' HMA Type A
 - Location 19 (Fashion Island Blvd on-ramp to Rte 101 SB) - Full depth, 1.25' HMA Type A

- Location 27 (Produce Ave/Airport Blvd on-ramp to Rte 101 SB) - Full depth, 1.50' HMA Type A

Hot Mix Asphalt requirements are:

- Produce and place HMA Type A using the Standard process.
- The grade of asphalt binder mixed with aggregate for HMA Type A must be PG 64-10.
- The aggregate for HMA Type A must comply with the 3/4-inch grading.
- For additional HMA requirements, see Section 39, "Hot Mix Asphalt," of the Standard Specifications.

Final pavement structural sections shall be submitted to the Department for approval. The Department will respond to the submittals within 5 Working Days.

A set of ~~Preliminary Engineering~~ Roadway Plans showing the limits and locations of pavement work is included in ~~Section 21 of the~~ RID. The Design-Builder may rely only on the limits and locations of pavement work contained in the Roadway Plans. Any other information contained therein is provided for information only and the accuracy of such information shall be verified by the Design-Builder before inclusion in the final design. Any reduction or modification to the limits of pavement work during design or construction requires the approval of the Department's Materials Engineer.

Section 23.1 General

The Design-Builder shall perform all Work necessary to meet the requirements associated with Ramp Metering in accordance with the requirements of the Contract Documents and these Technical Provisions. In general, this work includes the installation of ramp metering system elements. Elements include, but are not limited to: loop detectors (queue-loops, passenger/demand loops, mainline loops, counter loops, off-loops), ~~Variable-Extinguishable~~ Message Signs (mounted on Type 1B standards, double wood posts, or cantilever sign trusses), ramp metering traffic signals (mounted on Type 1B standards or mast arms), Model 170E controllers, Type 334 controller cabinets, Type III-AF service equipment enclosures, conduits, pullboxes, light emitting diodes (LED) signal heads, wiring systems, electrical service, and all associated or required equipment. Additionally, Work also includes the salvaging, removing and/or abandoning of existing ramp metering system equipment.

Section 23.3.1 – Project Specific Requirements

The locations for the limit lines and ramp metering elements for each ramp metering system shown on the Preliminary Engineering Documents in the RID are approximate only. The Design-Builder shall determine the final design and locations of the limit lines and ramp metering elements in accordance with the Department's standards.

The type and number of ramp metering elements shown on the ~~Revised Preliminary Engineering Documents in the RID~~ Revised Electrical Plans in the RID represent the Department's minimum requirement under this Project. The Design-Builder shall obtain approval from the Department for any modifications to the types or numbers of ramp metering elements shown in the ~~Preliminary Engineering Documents~~ Revised Electrical Plans. Design-Builder may rely only on the type and number of ramp metering elements contained in the Revised Electrical

Plans. In meeting the Department's standards for complete and functional ramp metering systems, when additional ramp metering elements are required at locations not shown in the ~~Preliminary Engineering Documents~~ Revised Electrical Plans provided, it will be the Design-Builder's responsibility to include all required elements in the RFC documents submitted for approval.

Where existing ramp metering elements are shown on the ~~Preliminary Engineering Documents~~ Revised Electrical Plans, the Design-Builder shall verify the working status of such equipment before incorporating them in the design.

The existing service equipment enclosures at the following locations shall be replaced with new

Type III-AF service equipment enclosures to energize the additional loads of the proposed ramp metering systems at the following locations:

Locations 6, 22, and 23 (one service equipment enclosure for these three locations)

Location 7

Locations 8 and 9 (one service equipment enclosure for these two locations)

Location 12

Location 13

Location 28

The replacement of service equipment enclosures shall be made to accept PG&E Time-of-Use service under the A6 service rate. After replacement, all required service equipment items and connections for existing and proposed electrical systems must be in place and functional. Functional tests of the existing electrical systems are required. The existing electrical systems may include, but are not limited to the following electrical systems:

Traffic Operation System (TOS)

Traffic Signal

Highway Lighting

Irrigation

Traffic signal system shutdowns shall be limited to the hours between of 9:00 am and 2:00 pm. The Design Builder shall notify the Department a minimum of three working days prior to performing any such work on existing electrical systems.

Existing loop detectors that are to be incorporated into new ramp metering systems shall be replaced with new loop detectors as shown on Electrical Plans.

Typical Electrical Details for ramp metering elements, GPRS modems, and ~~Variable Extinguishable~~ Message Signs are included in the RID or in Department Standards. The Design-Builder shall submit final designs for Electrical Details, including all required calculations, parameters, and assumptions used in the design to the Department for approval.

Special provisions for the following items are included in the Book 3, Section 5 - Modifications to Special Provisions:

- a. Vehicle Sensor Node(S) (VSN)

- b. Long Lead-In Cable Loop Detector (LLLD) Sensor Unit
- c. ~~Variable Message Sign (VMS) Assembly~~
- d. ~~General Packet Radio System Wireless Modem Assembly~~

Electrical service points shown on the ~~Preliminary Engineering Documents in the~~ ~~RID~~ [Revised Electrical Plans](#) are for information only. The use of these electrical service points for this Project have not been verified by the Department nor the responsible utility companies. It is the Design-Builder's sole responsibility to identify all electrical service points and/or telephone service points. All work and costs associated with verification and use of electrical service points and/or telephone service points is the responsibility of the Design-Builder; see Section 23.3.4 Electrical Service for additional information.

Where applicable the following requirements shall be incorporated in the design of the ramp metering systems:

- No staggered limit lines.
- HOV Preferential Lanes shall be metered.
- Where shown on the ~~Preliminary Engineering Documents~~ [Revised Electrical Plans](#), install 2 (Type A) loop detectors per lane and connect back to the appropriate ramp metering controller cabinet.
- Install 3 demand loops and 1 passage loop at limit line per metered lane.
- One (Type A) loop detector shall be installed at a location on the off-ramp where it is a single full width lane, and shall be connected to the nearest ramp metering controller cabinet.
- No more than 22 detector inputs are allowed per controller cabinet.
- Use oversized loops for ramp lane widths greater than 12 feet.
- All loops shall be cut on the final layer of the roadway pavement.
- Use GPRS Modems for communication.
- Upper signal heads shall be 12 inches and lower heads shall be 8 inches on Type 1 standards.
- Install red status light for enforcement per metered lane.
- Use R91-3 (HOV Sign), CA R10-6(R90old, STOP Here On Red), and either R89 or R89-1 where applicable. See Ramp Metering Design Manual for mounting locations and other sign details.

If the Design-Builder requests approval to utilize designs that are not Department standards, such request shall include comprehensive specifications, special provisions, and plans associated with the proposed non-standard methods or materials.

Section 25.3.1 Project Specific Requirements

Signing for HOV lanes shall be in accordance with the Ramp Metering Design Manual and the HOV Guidelines for Planning, Design, and Operations.

~~VMS~~-EMS and all signing mounted onto structures shall conform to the requirements of Section 13 and these Technical Provisions.

Sign panels shall meet the Department's standards for retro-reflective panels.

Where applicable the following requirements shall be incorporated in the design for signing:

- The Design-Builder shall provide for modifications to signage outside the Planned Right of Way limits that are rendered inaccurate, ineffective, confusing, or unnecessary by the Project. The modifications shall include the addition, removal, or alteration of signs and appurtenances.
- If permanent signing is erected by the Design-Builder that could be used for motorist guidance, continue to display such signing during the length of the Project.
- Signs shall be located in such a manner that they do not conflict with other signs, vegetation, or structures, and are clearly visible according to Department standards.

REFERENCE INFORMATION DOCUMENTS (RID)

See Revised Electrical Plans and Roadway Plans posted under the RID in the Data Room.

APPENDIX I
PROPOSAL CHECKLIST
Summary and Order of Proposal Contents

Administrative Information – Volume 1A		
Proposers should follow the order of this checklist in their submissions. A referenced copy of this document should be submitted with Volume 1A – Administrative Submittals.		
Proposal Component	Form (if any)	ITP Cross-Reference
A. Technical Proposal Executive Summary		
Technical Proposal Executive Summary	No forms provided	Appendix C §1
B. Proposer Information, Certifications & Documents		
Technical Proposal Letter	Form 1A	§4.6; Appendix B §3.1
Authorization Documents	No forms provided	§4.6; Appendix B §3.1
Conflict of Interest Disclosure Statement	Form 4	§1.16.3; Appendix B §3.3
Key Personnel Commitment	Form 2	Appendix B §3.2
Equal Employment Opportunity Certification	Form 5	Appendix B §3.4
Debarment and Suspension Certification	Form 6	Appendix B §3.5
Changes in Proposer's Organization	Letter from Department approving the change	§1.10; Appendix B §3.8
Organizational Documents	No forms provided	Appendix B §3.10
Draft Special Purpose Entity Corporate Formation Documents	No forms provided	§1.12; Appendix B §3.10
Executed copy of Partnering/Consortium Agreements	No forms provided	Appendix B §3.10
Insurance Certificates/Letters	No forms provided	§4.13; Appendix B §3.12

Administrative Information – Volume 1B		
Proposers should follow the order of this checklist in their submissions. A referenced copy of this document should be submitted with Volume 1B – Administrative Submittals.		
Proposal Component	Form (if any)	ITP Cross-Reference
A. Proposer Information, Certifications & Documents		
Price Proposal Letter	Form 1B	§4.6; Appendix B §4.1
Authorization Documents	No forms provided	§4.6; Appendix B §4.1
Non-Collusion Affidavit	Form 3	§1.16.2 C; Appendix B §4.2
Certification Regarding Contract Funds for Lobbying	Form 7	§1.14; Appendix B §3.6
UDBE Certification and Program Description	Form 17	§1.13; Appendix B §4.8
Buy America Certification	Form 8	Appendix B §4.3
Letter of Commitment from Surety or Bank	No forms provided	Appendix B §4.6
Changes in Proposer's Organization	Letter from Department approving the change	§1.10; Appendix B §4.9

B. Proposal Security		
Proposal Bond or Proposal Letter(s) of Credit	Form 11	§4.10; Appendix B §4.5
C. Miscellaneous		
Three electronic copies of the entire Proposal (Volumes 1A, 1B, 2, 3, and 4) in “PDF” format, each on a separate CD or DVD.	No forms provided	§4.4

Technical Proposal		
Proposers should follow the order of this checklist in their submissions. A referenced copy of this document should be submitted with Volume 2 - Technical Proposal. See Appendix I-1 for additional information regarding the components of the Technical Proposal.		
Proposal Component	Form (if any)	ITP Cross-Reference
A. Management / Administration		
Preliminary Project Management Plan	No forms provided	Appendix C, §2.1
Preliminary Design Approach Submittal	No forms provided	Appendix C, §2.2
Environmental Compliance Plan	No forms provided	Appendix C, §2.3
Risk Management Plan	No forms provided	Appendix C, §2.4
Utility Coordination	No forms provided	Appendix C, §2.5
B. Project Schedule and Construction Phasing/Sequencing Plan/Safety Plan		
Project Schedule	No forms provided	Appendix C, §3.1
Construction Phasing/Sequencing Plan	Appendix C-1	Appendix C, §3.2
Safety Program	No forms provided	Appendix C, §3.3

Price Proposal		
Proposers should follow the order of the Price Proposal Checklist in their submissions. A referenced copy of this document should be submitted with Volume 3 – Price Proposal.		
Proposal Component	Form (if any)	ITP Cross-Reference
A. Price Proposal		
Price Proposal	Form 9	Appendix D, §2(A)
Written confirmation of parent company Guarantee (if applicable)	Form 16	Appendix B §4.7

APPENDIX I-1
TECHNICAL PROPOSAL SUBMITTAL DETAILS

All hardcopy materials shall be provided in 3-ring binder(s) (4" maximum). CDs/DVDs shall be clearly labeled.

Item	Media	Label
A. Management / Administration		
Written Technical Proposal <ul style="list-style-type: none"> • Preliminary Project Management Plan • Environmental Compliance Plan • Transportation Management Plan • Utilities • Electrical Systems • Risk Management Plan • Utility Coordination 	8.5" x 11" and/or 11"x17" CD/DVD with original electronic file format and PDFs of all items	CD/DVD Label: <u>Vol 2 Technical Proposal-2 Management / Administration</u>
Preliminary Design Approach Overview	8.5" x 11" CD/DVD with original electronic file format and PDFs of all items	CD/DVD Label: <u>Vol 2 Technical Proposal-2 Design Approach Overview</u>
On-ramp Design	11" x 17" CD/DVD with original electronic file format and PDFs of all items	CD/DVD Label: <u>Vol 2 Technical Proposal-2 On-ramp Design</u>
B. Project Schedule and Construction Phasing/Sequencing Plan/Safety Plan		
Project Schedule	24" x 36" color plots in Primavera format CD/DVD with original electronic file format and PDFs of all items	CD/DVD Label: <u>Vol 2 Technical Proposal-3 Project Schedule</u>
Construction Phasing/Sequencing Plan/Lane Closure Impacts	8.5" x 11" and/or 11" x 17" CD/DVD with original electronic file format and PDFs of all items	CD/DVD Label: <u>Vol 2 Technical Proposal-3 Construction Phasing/Sequencing Plan</u>
Safety Plan	8.5" x 11" CD/DVD with original electronic file format and PDFs of all items	CD/DVD Label: <u>Vol 2 Technical Proposal-3 Safety Plan</u>

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