

TMT.BUS.MGT.19.045.REL01

TMT International Observatory LLC

Request for Quote

Primary Mirror Assembly Container Design

TMT Document No.: TMT.BUS.MGT.19.045.REL01

Date Issued: February 21, 2019

Quotes Due: April 3, 2019

The information contained herein is provided to the recipient for the purpose of preparing a Quote to the TMT Project. The institution or organization to which this RFQ is addressed may utilize the information contained herein only for the above stated purpose and shall not disseminate it to anyone not involved in the preparation of its quote.

1.0 Background and Purpose of Request for Quote (“RFQ”)

1.1 Background

The TMT Project (the “Project”) is a collaboration of the California Institute of Technology, the University of California, the Association of Canadian Universities for Research in Astronomy, the National Astronomical Observatory of Japan, the Department of Science and Technology of India, and the National Astronomical Observatories of China with a mission to design, construct and operate a thirty meter optical/infrared telescope. The TMT International Observatory LLC (“TMT”) is part of the Project and is the legal entity that is issuing this RFQ and any resultant contract(s).

The Project shall fabricate 580 Segment Support Assemblies (“SSA”). Polished Segments will then be mounted on each SSA to form a Primary Mirror Assembly (“PMA”). SSA (and eventually PMA) will be shipped internationally in accordance with the agreements executed between the Project Members.

To support the shipment of SSA and PMA, TMT is seeking a container design for the SSA and PMA that meets the Projects upcoming needs to protect, store, and ship each SSA and PMA.

TMT’s proposed Statement of Work (“SOW”), terms and conditions for this procurement are provided in the Model Contract (Section 5.0) of this RFQ.

1.2 RFQ Conditions

1.2.1 TMT is requesting that Respondents submit binding quotes for designing a Primary Mirror Assembly container that meets all of TMT’s requirements as defined in the Model Contract of this RFQ.

1.2.2 Contract Type – Firm Fixed Price (“FFP”)

The Contract, if one is awarded, will be a firm, fixed price contract. The terms and conditions of the awarded FFP contract are attached to this RFQ in Section 5.0 Model Contract.

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1.3 General Instructions

Carefully read the information contained in this RFQ, which includes the Model Contract, and submit a complete response to all requirements, specifications, and questions as directed.

1.3.1 Quote Form

The Quote shall be submitted in a standard form as described in Section 4.0.

1.3.2 Schedule of Events

Event Description	Date
RFQ Issued	February 21 2019
Submission of Respondents' RFQ Questions	March 6, 2019; 5:00 PM PST
Submission of Respondents' Quotes	April 3, 2019; 5:00 PM PST
Anticipated Contract Start	April 18, 2019

1.3.3 RFQ Questions

Respondent shall submit all questions regarding this RFQ no later than March 6, 2019 to ensure a response from TIO. Questions submitted after March 6, 2019 may not receive a response. All questions must be submitted in writing to TMT. Please note that TMT reserves the right to post all RFQ questions and answers on its website. Questions shall be directed (only) to: Pratheep Eamranond (pratheep@tmt.org).

1.3.4 Quote Submittal Form

The Quote shall be submitted with the completed and signed Quote Submittal Form (see Section 6.1) attached as the cover page.

1.3.5 Requisite Quote Format and Submission Protocol

Respondents shall submit their Quotes electronically via email to ehansen@tmt.org, cwong@tmt.org, and pratheep@tmt.org.

Respondent shall submit their quotes in USD to TMT by **April 3, 2019, 5:00 PM Pacific Standard Time.**

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Respondent must provide a table of contents with page number references in their Quote. The table of contents should be in sufficient detail to facilitate easy reference to the sections of the Quote and all separate supplemental information.

Paper document sizes should be either 8 1/2" x 11" or A4. The copies should be bound in a manner that facilitates easy handling and reading by the evaluation committee. All submitted copies, whether electronic or paper must be exactly the same. The font size of the Quote may not be less than 10 points.

1.3.6 Late Submission

Quote submissions must be received by TMT prior to the Quote Submission Date and Time. The submission of the Quote must be confirmed in writing by TMT before it can be considered appropriately received in accordance with this RFQ. TMT shall submit receipt confirmations no later than 5:00 PM Pacific Standard Time of the following work day. TMT is not obligated to review or respond to Quotes submitted after the designated Quote Submission Date and Time ("Late Submissions"). TMT reserves the right to review or respond to Late Submissions at TMT's sole discretion.

1.4 Subcontracting

TMT does not anticipate that the Awardee will use subcontractors in the performance of the Contract. All use of subcontractors must be disclosed in the Quote.

1.5 Explanation of Exceptions

Any request for an exception to the requirements of this RFQ shall be submitted in writing in the Respondent's Quote.

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2.0 Quote Evaluation Process

2.1 Quote Evaluation Guidelines

Quotes will be reviewed by a TMT Project Source Selection Board ("SSB") comprised of reviewers designated by TMT to determine the proposals that provide best value to TMT. The SSB will submit the result of their review to the Source Selection Official. The Source Selection Official will render the final determination of an award, if any, for this RFP.

Each Quote will be evaluated separately. The Source Selection Board's evaluation criteria are listed below in approximate order of importance with the most important criteria listed first:

- A. Quoted Firm, Fixed Price of Work in USD
- B. Respondent's Approach to Developing the PMASC Design
- C. Respondent's Approach to the Prototype Test Plan
- D. Estimated Price for Fabricating 580 PMASC Units based on PMASC Design
- E. Respondent Experience
- F. Qualifications of Respondent's Personnel who will perform the Work
- G. Availability of Resources and Personnel
- H. Quoted Work Schedule (including Delivery Milestones)
- I. RFQ Exceptions

Quote Evaluation Process

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3.0 Contract Award Process

3.1 Contract Award Conditions

Issuance of this RFQ does not require TMT to award a contract. TMT reserves the right to reject any or all quotes; to waive any technicalities, informalities, or irregularities in any quote at its sole and absolute discretion. TMT reserves the right to request clarification or additional information at any time. TMT reserves the right to award multiple contracts to multiple Contractors; to re-solicit quotes or to temporarily or permanently abandon the procurement. If TMT awards a contract, it will award the contract to the respondent(s) whose quote(s) is (are) the most advantageous to TMT as determined by TMT in the exercise of its sole and absolute discretion.

An award may be made on the basis of the quotes initially submitted, without discussion, clarification, modification, or on the basis of negotiation with any or all of the respondents. Therefore, respondents should make sure their quotes contain the best offer.

3.2 Issuance of Contract by any TMT project member organization

Respondent is hereby notified that a contract may be awarded by any TMT Project Member (as defined in Section 1.1), based upon the respondent's response to this RFQ.

3.3 Notification of Award

If TMT awards a contract as a result of this RFQ process, it will issue a contract according to the terms and conditions attached hereto in Section 5.0 Model Contract.

4.0 Quote Form

The Quote should be organized as follows:

4.1 Table of Contents

4.2 Introduction

4.3 Description of PMASC Design Development and Prototype Fabrication

1. Quotes shall be in USD.
2. Quotes should demonstrate the Respondent's ability to develop a PMASC Design that is compliant with TMT's Requirements.
3. Quotes should demonstrate the Respondent's ability to develop a PMASC design that would enable TMT to implement a cost effective fabrication program for 580 PMASC units.
4. Quotes shall describe the quoted Test Plan of the Prototypes. Quotes shall demonstrate how their Test Plan will comply and perform given the requirements for the Test Plan defined in the Model Contract.

4.4 Work Schedule

Describe the schedule for the completion and delivery for all significant milestones and activities for the Work. Respondents shall demonstrate in their Quote how their quoted schedules are reasonable and credible. For the purposes of this RFQ, TIO notes that a target date that respondents should consider for the completion of the Work (including delivery of the Prototypes) is August 30, 2019. The actual date for the completion of the Work shall be mutually agreed upon by TIO and the Awardee at a later date during contract negotiations.

4.5 Availability of Resources and Personnel

Respondent shall state the dates they are available to perform. Additionally, respondents must list all foreseeable dates when their performance is limited or

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restricted so TMT can understand potential disruptions of the Work given certain dates. Respondents shall describe any potential issues with the procurement of materials (or any other resources) that could disrupt the Work.

4.6 Financial Resources and DUNS Number

Include the DUNS number of firm.

4.7 Respondent's Experience

The Quote should describe the experience and expertise that qualifies the respondent to perform the Work. In particular, respondents should list any design or manufacturing projects similar to the Work.

4.8 Qualifications of Personnel

List the key personnel of Respondent and of any subcontractors who will be performing the work requested by the RFP. A curriculum vita shall be provided for key personnel.

4.9 RFQ Exceptions

Respondent may offer exceptions to the requirements, terms and conditions of this RFQ for TMT's consideration. Proposed exceptions to the RFQ including, but not limited to, the requirements for the project plan, the design of the PMASC, or the Model Contract must be listed in the Quote.

Unless an exception is specifically agreed upon in writing by both Parties, all the terms and conditions of the Section 5.0 Model Contract and the RFQ will be considered accepted, valid, binding and enforceable upon the respondent by TMT.

TMT can accept or deny any respondent's exception at its sole and absolute discretion.

In the event a respondent submits an exception, TMT requests that the respondent also provide a Quote that accounts for the Work without the requested deviation. The absence of such information may be evaluated by TMT as non-responsive regarding the relevant point.

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4.10 Estimated Price for Fabricating 580 PMASC Units based on PMASC Design

The price of \$1,100 USD stated in Article I.A.1.i.d of the Model Contract for a PMA Unit is not a firm requirement but a target price. While TIO evaluates each Quote's estimated price based on its merits and the Quote's compliance with the DRD. An estimated price that significantly exceeds the target price is likely to negatively impact TIO's evaluation of the Quote. To clarify, TIO is not asking Respondents to design the PMASC with strict deference to the target price at the expense of essential technical considerations. The target price is only provided as general guidance. If desired, Respondents may submit more than one estimated price for TIO's consideration as long as each estimate is substantiated and provided in accordance with the requirements of this RFQ.

4.11 Price for PMASC Design and Prototype Fabrication

Quote the firm, fixed price for the Work (including payment schedule, if applicable). The Quote must include the cost for shipping all deliverables DDP TIO Facilities in Monrovia, CA USA. The firm, fixed price must be inclusive of all taxes, shipping fees, insurance and duties required for the Work and its shipment.

5.0 Model Contract

Please see Appendix 1 of the RFQ.

Model Contract

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6.0 Attachments

6.1 Quote Submittal Form

All Quotes must be accompanied by the Quote Submittal Form attached.

Attachments

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TMT International Observatory LLC

Phone: (626) 395-1607 Fax: (626) 395-8909

Quote Submittal Form

Offeror Information

Full Name:

Last

First

M.I.

Title:

Address:

Street Address

City

State

ZIP Code

Phone: ()

Fax: ()

E-mail Address:

Quote Information

Description	Unit Cost	Total Cost
Design		
Manufacturing of Prototypes		
Verification Testing		

Tax, Shipping Fees, Insurance and Duties (Attach Additional Pages If Necessary)

Cost Description	Total Cost

Mailing Instructions

Please send to:

Pratheep Eamranond

TMT Project

100 W. Walnut Street

Suite 300

Pasadena, CA 91124

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Terms and Conditions

Acceptance. The Offeror hereby accepts all the terms and condition set forth in the referenced RFQ.

The signature affixed below is made by an individual authorized to bind the Offeror.

Authorized Signature

Date Signed

Print Name

Title