

Capital Area Transportation Authority

Bus Maintenance Garage Roof Replacement Project

Request for Proposal Project # 2016-105

SCHEDULE OF ACTIVITIES

RFP Released:	January 19, 2016
Written Questions due to CATA:	January 26, 2016 at noon
Pre-Proposal Meeting/ Walk-Through:	January 29, 2016 at 1:00 PM
Responses to Questions released:	February 1, 2016
Number of Proposals and Due Date:	Submit 7 proposal copies and 1 electronic ("PDF") copy on CD/DVD or flash drive by 2:00 PM on February 4, 2016
Oral Interview(s) (optional):	February 8, 2016
Anticipated Award Date:	February 17, 2016

Released On January 19, 2016

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Capital Area Transportation Authority Bus Maintenance Garage Roof Replacement Project Request for Proposal Project # 2016-105

SECTION 1: PROCUREMENT PROCESS

1-A Issuing Office

This Request for Proposal (“RFP”) is issued by Capital Area Transportation Authority (“CATA”), 4615 Tranter Street, Lansing, MI 48910.

All communications regarding this project during the procurement process must be addressed to CATA’s Purchasing & Contracts Manager:

Ms. Susan Holmes
Purchasing and Contracts Manager
Capital Area Transportation Authority
4615 Tranter Street
Lansing, MI 48910
Fax: (517) 394-3733
E-mail: sholmes@cata.org

1-B Project Management

The person designated to perform as CATA’s Project Manager **AFTER AWARD** of the Project is named below. This person is not to be contacted by respondents prior to award. The only CATA contact during the RFP process is CATA’s Purchasing & Contracts Manager named above.

Mr. Barry Flowers
Facilities Superintendent
Capital Area Transportation Authority
4615 Tranter Street
Lansing, MI 48910

1-C Project Oversight

The oversight of this CATA Project is the responsibility of the CATA Project Manager named in Project Management Section above.

The Contractor will be required to work with CATA staff and service agencies as directed by CATA throughout the duration of the Contract and attend Progress Meetings as required by the CATA Project Manager.

1-D Incurring Costs

CATA is not liable for any cost incurred by any party prior to signing of a contract with that party and then only upon written authorization from CATA to proceed with the project.

1-E Contract Term

The contract shall enter into force on the date on which it is signed by the last Contracting Party and continue until project completion based on agreed upon project schedule.

1-F Contract Extension

CATA reserves the right to extend the term of any contract resulting from this RFP for up to one year. Any extension will be in writing.

1-G Type of Contract

The award of this solicitation will result in a Firm Fixed Price Contract.

1-H Questions/Changes to the RFP

It is the desire of CATA to provide the same information to all interested parties to ensure fairness and impartiality in the procurement process. To that end, CATA will not respond to telephone inquiries or personal visits. Visitation by respondents or their representatives may be made to CATA only at the pre-proposal meeting, if held. All questions are to be submitted in writing. **Submit written questions (via U.S. postal service, e-mail, or fax) to the CATA Purchasing & Contracts Manager at the address indicated in Section I above no later than the date and time indicated on the Schedule of Activities above.** Any changes made to this RFP, in response to the questions or concerns raised in any scheduled pre-proposal meeting or through correspondence received by CATA prior to the pre-proposal meeting, will be put in writing to all firms attending any scheduled pre-proposal meeting or otherwise indicating an interest in this project by the date stated on the above *Schedule of Activities* page.

1-I Pre-Proposal Meeting

See *Schedule of Activities* page above for date and time of any Pre-Proposal Meeting scheduled for this RFP. Any such meeting will be held at the CATA Administrative offices unless otherwise stated. The purpose of this meeting is to discuss with prospective contractors the work to be performed and to answer questions about this RFP. The pre-proposal meeting is for information only; vendor attendance is not mandatory. However, interested vendors are strongly encouraged to attend.

1-J Proposals

To be considered for award, each respondent must submit a complete response to the RFP, using the designated format (if any) and accepting the requirements of Sections II and III below. Proposals are to be submitted only to CATA. No other distributions of proposals are to be made. An official authorized to bind the respondent to the proposal must sign the proposal in ink. Submission of a proposal shall bind the respondent to all provisions of the proposal, including costs, for a period extending not less than one hundred eighty (180) days following the Proposal Due Date, which is stated in the *Schedule of Activities* above. Submit the number of proposal copies per the directions indicated on the *Schedule of Activities* page above. Proposals, including price sheets, must be submitted to CATA by the time and date set as the Proposal Due Date indicated on the *Schedule of Activities* page above. The respondent is solely responsible for the timely delivery of the proposal to CATA. Except as provided below, late proposals will not be considered.

Late proposals which are received after the Proposal Due Date may be considered, if the respondent establishes to CATA's satisfaction within five (5) days of the Proposal Due Date that the delay was due to an independent event outside the control of respondent, such as acts of God or the public enemy, war, national emergency, labor strikes, the failure of the U. S. Postal Service to deliver first-class, registered, or certified mail within five (5) days, or the failure of a national courier service recognized by CATA to deliver as guaranteed or specified. CATA will require documentation to excuse late delivery, including, but not limited to, signed statements or affidavits, postmarks, original postal receipts, courier receipts, and shipment tracking logs in a form satisfactory to CATA. All proposals submitted in response to this RFP will become the property of CATA and will not be returned to the respondent.

1-K Acceptance of RFP Content

The contents of this RFP, its attachments, and the proposal as it is consistent with the RFP will become contractual obligations if a contract ensues. Failure of the successful respondent to accept these obligations may result in elimination of the respondent from the selection process. CATA further reserves the right to interview the key personnel assigned by the successful respondent to this project and to recommend reassignment of personnel deemed unsatisfactory by CATA.

1-L Economy of Presentation

Each proposal should be prepared simply and economically, providing a straightforward, concise description of the respondent's ability to be creative and to meet the requirements and objectives of this RFP. Emphasis should be on completeness and clarity of content.

1-M Primary Contractor Responsibilities

The selected contractor will be required to assume responsibility for all services offered in its proposal whether or not the contractor performs them. Further, CATA will consider the selected respondent to be the sole point of contact with regard to contractual matters, including payment of any and all charges resulting from the contract. If any part of the work is to be subcontracted, the prime contractor must provide a complete description of work subcontracted and descriptive information about the subcontractor's organization and capabilities. The prime contractor is totally responsible for adherence by the subcontractors to all provisions of the contract. CATA must review and approve in writing all subcontractors. All subcontractors must be included in the initial proposal with descriptions of the firms' qualifications and the qualifications of the key individuals assigned to this project.

1-N Other Duties Assigned by CATA

Because of the nature of this project, CATA is unable to determine all possible work components and tasks to be completed. The Contractor may be asked to provide additional service that has not been outlined in this RFP. When additional duties beyond those outlined in this RFP and in the Contractor's proposal are identified, CATA and the Contractor will discuss the Contractor's ability to complete this work. If CATA determines the Contractor should conduct the additional work, contractor will provide request for Task Order describing the work to be done and all associated costs. A written task order will then be issued by CATA.

1-O Selection Criteria

Responses to this RFP will be evaluated based upon the following factors as presented in the respondent's proposal. These are not listed in order of importance:

Company Qualifications. Provide copies of all licenses, certifications or other documentation required in order to enable the Proposer to perform the work proposed. Include a brief history of the Proposer (years in business, annual volume of work over past five (5) years, company ownership, officers, etc.) Include information regarding similar project experience the Proposer possesses that relates in complexity and/or scope to this project. Include up to five (5) projects that have been completed in the past five (5) years. Include associated qualifications/references for sub-consultants or subcontractors,

if any, proposed. Include reference for each project described (contact name, email, phone, position on project).

Methodology/Approach. Provide information specific to this project that best displays the approach and methodology that will be used to complete the scope of this work (planning, schedules, coordination, tracking, management systems, etc.). Include a letter from the insurance company that would be issuing the unconditional payment and performance bond, indicating that it is willing to provide the bonds and including a sample of the form of bonds to be provided.

Personnel & Experience. Provide a resume for each key individual included in the Proposal and describe their role/responsibilities. Identify if project experience gained within the company or outside company and with whom, years worked, identify related included in Company Qualifications. Include associated qualifications for employees of sub-consultants/subcontractors proposed as Key Personnel. Include an organizational chart and/or work flow chart to identify each key role. Also addresses distribution of staff time to the project and the respondent's past record of performance on similar assignments (such as control of costs, quality of work, and ability to meet schedules). The respondent will also be evaluated on past experience in managing subcontractor relationships.

Price/Cost. Provide pricing information.

Warranty Program. Describe the warranty being offered on materials and workmanship.

Demonstrated Ability to Complete the Project on Time and on Budget. Respondents must demonstrate experience, ability, and willingness to work with CATA and provide evidence of successful engagements elsewhere with other customers on similar projects.

Overall Evaluation. Overall evaluation of the proposal and the vendor, including with respect to vendor, satisfactory references, legal status and compliance, experience with other projects and procurements, and other matters of concern.

CATA will constitute an ad hoc committee to evaluate all proposals. Those firms deemed by CATA to be most responsive to the needs of CATA may be asked to make oral presentations to CATA. That firm determined to be the most highly qualified based on the submitted proposal and any oral presentation may be asked to enter final negotiations. If the most qualified firm is unable to consummate agreement with CATA, then the next most qualified firm will be considered for award, and so on. At any time during this process, CATA reserves the right to re-bid, award, or cancel the project, as CATA determines.

Each contractor should make every effort to include Disadvantaged Business Enterprises in this project.

1-P Procurement Review / Oral Presentation

All Proposals will initially be reviewed by the CATA Purchasing & Contracts Department. The Purchasing & Contracts Department's review shall be limited to determining whether the Proposals comply with the requirements of this RFP. The Purchasing & Contracts Manager may, in his or her sole discretion, (i) reject any Proposals that are incomplete, (ii) reject any Proposals that fail to conform to the requirements of the RFP, and/or (iii) reject any Proposals that take exception to the Scope of Work. The Purchasing & Contracts Manager may waive any informalities or irregularities in any Proposal if he or she determines that such irregularities or informalities are not material.

Respondents may be required to make oral presentations of their proposals. These presentations provide an opportunity for the respondent to clarify the proposals through mutual discussion. This is not a time to simply review the contents of the proposal but to present to CATA your approach to this project and the uniqueness of the respondent's team in meeting the requirements of this RFP. Key members of the respondent's project

team, including a representative from each subcontractor, must be part of the presentation. If held, the presentations will be on the date indicated on the cover of this RFP. A maximum of 30 minutes will be allowed for each presentation, followed by 45 minutes for questions and answers (timing and duration to be determined by CATA).

1-Q Independent Price Determination

By submission of a proposal, the respondent certifies, or, in the case of a joint proposal, each party thereto certifies as to its own organization, that in connection with this proposal:

- The prices in the proposal have been determined independently and without consultation, communication, or agreement for the purpose of restricting competition as to any matter relating to such prices with any other respondent or with any competitor.
- Unless otherwise required by law, the prices that have been quoted in the proposal have not been knowingly disclosed by the respondent prior to award directly or indirectly to any other respondent or to any competitor.
- No attempt has been made or will be made by the respondent to induce any other persons or firm to submit or not submit a proposal for the purpose of restricting competition.
- Each person signing the proposal certifies that she/he:
- Is the person in the respondent's organization responsible within that organization for the decision as to the prices being offered in the proposal and has not participated (and will not participate) in any action contrary to the requirements indicated in the bullets above.
- Is not the person within the respondent's organization responsible for the decisions as to the pricing being offered in the proposal but has been authorized, in writing, to act as an agent for the persons responsible for such a decision and certifying that such persons have not participated (and will not participate) in any action contrary to the requirements indicated in the bullets above.

1-R Pricing & Payment

- One fixed-price must be submitted. This fixed price will include all costs related to fully complete the scope of work.
- The Contractor shall submit a proper invoice as required. CATA reserves the right to return an invoice which is incomplete. Payments will be made not more than once monthly. CATA pays on a 30 day basis. Payment to be made upon receipt and verification of the invoice for the previous month, along with confirmation of the receipt and acceptance of any required progress or other report, and proof of satisfactory work completion. No advance payments, CATA will consider milestone payment based on work completed if presented as an option in the proposal.
- All payments for any contract entered into as a result of this RFP will be made only upon successful completion of the specified work and acceptance by CATA. Proposals shall include the following:
 - TOTAL PROJECT COST.

SECTION 2: STATEMENT OF WORK

2-A Background

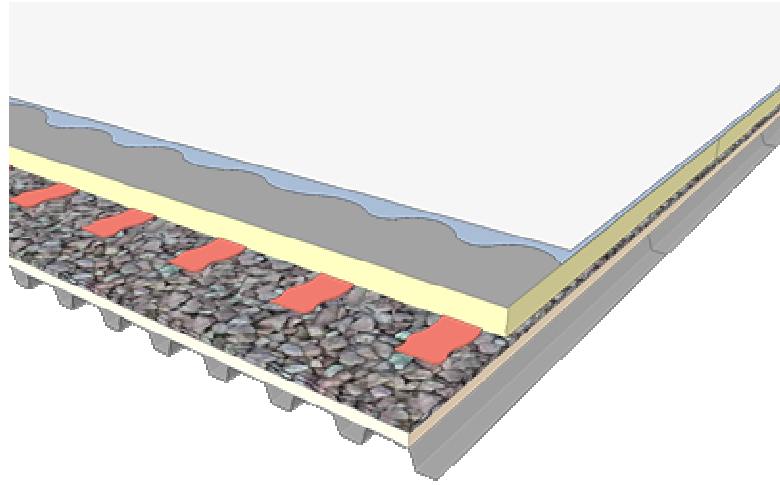
The Capital Area Transportation Authority (“CATA”) is the regional public transportation provider for the greater Lansing, Michigan area including the Cities of Lansing and East Lansing, and the Townships of Lansing, Delhi, and Meridian. Additionally, CATA Rural Service operates throughout the non-urban areas of Ingham County. CATA’s service includes over 30 fixed routes, complimentary ADA paratransit service, rural demand-response service, and local demand-response service in certain cities and townships. CATA provided 11.6 million passenger trips in Fiscal Year 2014, roughly a quarter of which were on the Michigan State University (MSU) campus.

In 1978, CATA began operation out of a new maintenance facility, located at 4615 Tranter Street, Lansing, Michigan. This facility contains several hundred

2-B Objectives of the Project

- Replacement of existing roofing system in the CATA Maintenance Garage, located within the CATA Administration Building and Bus Garage, 4615 Tranter Street, Lansing, Michigan.
- Tear off existing roof system.
- Provide and install a Polyvinyl-Chloride finished roofing system in accordance with the Roof Assembly Description, as well as all installation instructions, project guidelines, and specifications outlined in the Scope of Work.
- CATA must be able to maintain daily operations of the maintenance garage during all phases of this project.
- Contractor must secure all necessary permits and licenses required by City of Lansing and any other governmental unit for this project.
- Project to be completed within 60 days after Contractor’s receipt of the Notice to Proceed.

2-C Scope of Work



Roof Assembly Description:

- **PVC thermoplastic membrane**
Membrane Thickness: 50 mil, nominal
Color: White
Attachment: Adhered with membrane adhesive
- **Polyisocyanurate (flat)**
Attachment: Attached with insulation adhesive
- **BUR: Gravel-Surfaced**
- **Steel Roof Deck**



Estimated 34,000 Square Feet

PART 1 GENERAL SCOPE:

1. Tear off existing system down to the coal tar pitch with gravel.
2. Remove existing loose gravel from surface.
3. Include 8000 square feet of removal and replacement of saturated insulation in coal tar pitch area; ; provide square foot price for removal and replacement of saturated insulation in coal tar pitch area.
4. Perform and provide thermal/moisture surveys throughout installation to determine areas of wet/saturated insulation.
5. Fully adhere 1.5" polyisocyanurate insulation to cover entire deck. Fasten in accordance with the manufacturer's specifications.
6. Contractor shall furnish and install a fully adhered 50mil white single-ply membrane roofing system.
7. Install pre-fabricated flashings around all deck penetrations.
8. Install drain inserts where applicable.
9. Install pre-fabricated scupper flashings.
10. Install 2 piece compression edge with Kynar-coated steel metal cover. Must be ES1 compliant. Size and color to be determined by building owner or authorized representative.
11. Finished roofing system to be installed in accordance with membrane manufacturers published specifications in order to receive the standard 20-year NDL warranty.

1.1 SECTION INCLUDES

- A. Overlay BUR: Gravel-Surfaced.
- B. PVC thermoplastic membrane adhered with water or solvent-based adhesive.
- C. Polyisocyanurate (flat), attached with insulation adhesive.
- D. Prefabricated flashings, corners, parapets, stacks, vents, and related details.
- E. Fasteners, adhesives, and other accessories required for a complete roofing installation.
- F. Traffic Protection.

1.2 REFERENCES

- A. NRCA - The NRCA Roofing and Waterproofing Manual.
- B. ASCE 7 - Minimum Design Loads For Buildings And Other Structures.
- C. UL - Roofing Materials and Systems Directory, Roofing Systems (TGFU.R10128).
- D. ASTM C 1289 - Standard Specification for Faced Rigid Cellular Polyisocyanurate Thermal Insulation Board.
- E. ASTM D 751 - Standard Test Methods for Coated Fabrics.
- F. ASTM D 4434 - Standard Specification for Poly(Vinyl Chloride) Sheet Roofing.
- G. ASTM E 108 - Standard Test Methods for Fire Tests of Roof Coverings.
- H. ASTM E 119 - Standard Test Methods for Fire Tests of Building Construction and Materials.

1.3 SYSTEM DESCRIPTION

- A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing membrane manufacturer based on testing and field experience.
- C. Physical Properties:
1. Roof product must meet the requirements of Type III PVC sheet roofing as defined by ASTM D 4434 and must meet or exceed the following physical properties.
 2. Thickness: 50 mil, nominal, in accordance with ASTM D 751.
 3. Thickness Over Scrim: ≥ 26 mil in accordance with ASTM D 751.
 4. Breaking Strengths: ≥ 423 lbf. (MD) and ≥ 278 lbf. (XMD) in accordance with ASTM D 751, Grab Method.
 5. Elongation at Break: $\geq 31\%$ (MD) and $\geq 30\%$ (XMD) in accordance with ASTM D 751, Grab Method.
 6. Heat Aging in accordance with ASTM D 3045: 176 °F for 56 days. No sign of cracking, chipping or crazing. (In accordance with ASTM D 4434).
 7. Factory Seam Strength: ≥ 423 lbf. in accordance with ASTM D 751, Grab Method.
 8. Tearing Strength: ≥ 90 lbf. (MD) and ≥ 143 lbf. (XMD) in accordance with ASTM D 751, Procedure B.
 9. Low Temperature Bend (Flexibility): Pass at -40 °F in accordance with ASTM D 2136.
 10. Accelerated Weathering: No cracking, checking, crazing, erosion or chalking after 5,000 hours in accordance with ASTM G 154.
 11. Linear Dimensional Change: $< 0.20\%$ (MD) and 0.10% (XMD) in accordance with ASTM D 1204 at 176 ± 2 °F for 6 hours.
 12. Water Absorption: $< 2.60\%$ in accordance with ASTM D 570 at 158 °F for 166 hours.
 13. Static Puncture Resistance: ≥ 33 lbs. in accordance with ASTM D 5602.
 14. Dynamic Puncture Resistance: ≥ 14.7 ft-lbf. in accordance with ASTM D 5635.
- D. Cool Roof Rating Council (CRRC):
1. Membrane must be listed on CRRC website.
 - a. Initial Solar Reflectance: $\geq 85\%$
 - b. Initial Thermal Emittance: $\geq 89\%$
 - c. Initial Solar Reflective Index (SRI): ≥ 108
- E. Insulation:
1. Provide overall thermal resistance for roofing system as follows:
 - a. Minimum Thickness: 1.5 inch.

2. Install using a minimum of two layers.
3. Configuration as indicated on the Drawings.

1.4 SUBMITTALS

- A. Data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
 4. Maintenance requirements.
- B. Shop Drawings: Indicate insulation pattern, overall membrane layout, field seam locations, joint or termination detail conditions, and location of fasteners.
- C. Verification Samples: For each product specified, two samples, representing actual product, color, and finish.
 1. 4 inch by 6 inch sample of roofing membrane, of color specified.
 2. 4 inch by 6 inch sample of walkway pad.
 3. Termination bar, fascia bar with cover, drip edge and gravel stop if to be used.
 4. Each fastener type to be used for installing membrane, insulation/recover board, termination bar and edge details.
- D. Installer Certification: Certification from the roofing system manufacturer that Installer is approved, authorized, or licensed by manufacturer to install roofing system. Installer must have a minimum of five years experience installing the accepted product.
- E. Manufacturer's warranties.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with manufacturer's installation instructions.
- B. Manufacturer Qualifications: A manufacturer specializing in the production of PVC membranes systems and utilizing a Quality Control Manual during the production of the membrane roofing system that has been approved by and is inspected by Underwriters Laboratories.
- C. Installer Qualifications: Company specializing in installation of roofing systems similar to those specified in this project and approved by the roofing system manufacturer.
- D. Source Limitations: Obtain components for membrane roofing system from roofing membrane manufacturer.
- E. There shall be no deviations from the roof membrane manufacturer's specifications or the approved shop drawings without the prior written approval of the manufacturer.

1.6 REGULATORY REQUIREMENTS

- A. Conform to applicable code for roof assembly wind uplift and fire hazard requirements.
- B. Fire Exposure: Provide membrane roofing materials with the following fire-test-response characteristics. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
 - 1. Exterior Fire-Test Exposure:
 - a. Class A; ASTM E 108, for application and roof slopes indicated.
 - 2. Fire-Resistance Ratings: Comply with ASTM E 119 for fire-resistance-rated roof assemblies of which roofing system is a part.
 - 3. Conform to applicable code for roof assembly fire hazard requirements.
- C. Wind Uplift:
 - 1. Roofing System Design: Provide a roofing system designed to resist uplift pressures calculated according to the current edition of the ASCE-7 Specification *Minimum Design Loads for Buildings And Other Structures*.

1.7 PRE-INSTALLATION MEETING

- A. Convene meeting not less than one week before starting work of this section.
- B. Review methods and procedures related to roof deck construction and roofing system including, but not limited to, the following.
 - 1. Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing installer, roofing system manufacturer's representative, deck installer, and installers whose work interfaces with or affects roofing including installers of roof accessories and roof-mounted equipment.
 - 2. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 3. Examine deck substrate conditions and finishes for compliance with requirements, including flatness and fastening.
 - 4. Review structural loading limitations of roof deck during and after roofing.
 - 5. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
 - 6. Review governing regulations and requirements for insurance and certificates if applicable.
 - 7. Review temporary protection requirements for roofing system during and after installation.
 - 8. Review roof observation and repair procedures after roofing installation.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storing and mixing with other components.

- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Store roof materials and place equipment in a manner to avoid permanent deflection of deck.
- E. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.9 WARRANTY

- A. Contractor's Warranty: The contractor shall warrant the roof application with respect to workmanship and proper application for two (2) years from the effective date of the warranty issued by the manufacturer.
- B. Manufacturer's Warranty: Must be no-dollar limit type and provide for completion of repairs, replacement of membrane or total replacement of the roofing system at the then-current material and labor prices throughout the life of the warranty. In addition the warranty must meet the following criteria:
 - 1. Warranty Period: 20 years from date issued by the manufacturer.
 - 2. No exclusion for damage caused by ponding water.
 - 3. No exclusion for damage caused by biological growth.
 - 4. Issued direct from and serviced by the roof membrane manufacturer.
 - 5. Transferable for the full term of the warranty.

PART 2: PRODUCTS

2.1 MANUFACTURER

- A. All roofing system components to be provided or approved by roof system manufacturer.
- B. Acceptable Manufacturers: Must meet the minimum standard in specification.

2.2 ROOFING SYSTEM COMPONENTS

- A. Roofing Membrane: PVC thermoplastic membrane conforming to ASTM D 4434, type III, fabric-reinforced, PVC. Membrane properties as follows:
 - 1. Thickness:
 - a. 50 mil, nominal.
 - 2. Exposed Face Color:
 - a. White.
- B. Accessory Materials: Provide accessory materials supplied by or approved for use by roof system

manufacturer

1. Sheet Flashing: Manufacturer's standard reinforced PVC sheet flashing.
 2. Factory Prefabricated Flashings: manufactured using Manufacturer's standard reinforced PVC membrane.
 - a. Stack Flashings.
 - b. Curb Flashings.
 - c. Inside and Outside Corners.
 - d. Drain Boots, Composite Drain Rings (CDR) and Dome Strainers.
 - e. Membrane Scupper Liners.
 - f. Vinyl Coated Metal Scupper Inserts.
 3. Sealants and Adhesives: Compatible with roofing system and supplied by roof system manufacturer.
 - a. Low-Rise Foam Insulation Adhesive.
 - b. Caulk.
 - c. Strip Mastic.
 4. Slip Sheet: Compatible with roofing system and supplied by roof system manufacturer.
 5. Fasteners and Plates: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening membrane and insulation to substrate. Supplied by roof system manufacturer.
 - a. #14 Heavy Duty Fasteners.
 - b. Polyethylene Membrane Plates.
 6. Termination and Edge Details: Supplied by roof system manufacturer.
 - a. Termination Bar.
 - b. 2-Piece Edge Metal System.
 - c. Vinyl Coated Metal Drip Edge With Factory Attached Membrane Skirt.
 - d. Fascia Base with Kynar Steel Cover (or approved equal).
 7. Vinyl Coated Metal: 24 gauge, hot-dipped galvanized, grade 90 metal with a minimum of 17 mil of PVC roofing membrane laminated to one side.
- C. Walkways:
1. Provide non-skid, maintenance-free walkway pads in areas of heavy foot traffic and around mechanical equipment.
 - a. Walkway Pad.

2.3 ROOF INSULATION

A. General:

1. Provide preformed roof insulation boards that comply with requirements and referenced standards, as selected from manufacturer's standard sizes.
 2. Provide preformed saddles, crickets, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.
- B. Polyisocyanurate Board Insulation: Complying with ASTM C 1289, Type II, felt or glass-fiber mat facer on both major surfaces. Material as supplied by roof system manufacturer.
1. Polyisocyanurate (flat).

2.4 ROOF INSULATION ACCESSORIES

- A. General: Provide roof insulation accessories approved by the roof membrane manufacturer and as recommended by insulation manufacturer for the intended use.
- B. Insulation Adhesive: Provide insulation adhesive for attaching insulation and/or insulation cover boards in conformance to specified design requirements.

PART 3: EXECUTION

3.1 EXAMINATION

- A. Verify that the surfaces and site conditions are ready to receive work.
- B. Verify that the deck is supported and secured.
- C. Verify that the deck is clean and smooth, free of depressions, waves, or projections, and properly sloped to drains, valleys, eaves, scuppers or gutters.
- D. Verify that the deck surfaces are dry and free of standing water, ice or snow.
- E. Verify that all roof openings or penetrations through the roof are solidly set.
- F. If substrate preparation is the responsibility of another contractor, notify Architect of unsatisfactory preparation before proceeding.
- G. Prior to re-covering an existing roofing system, conduct an inspection of the roof system accompanied by a representative of the membrane manufacturer or an authorized contractor.
1. Determine required fastener type, length, and spacing.
 2. Verify that moisture content of existing roofing is within acceptable limits.
 3. Identify damaged areas requiring repair before installation of new roofing.
 4. Conduct core cuts as required to verify information required.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- C. Surfaces shall be clean, smooth, free of fins, sharp edges, loose and foreign material, oil, grease, and bitumen.

3.3 INSTALLATION

- A. Install insulation in accordance with the roof manufacturer's requirements.
- B. Insulation: Polyisocyanurate (flat).
 - 1. Install insulation in accordance with the roof manufacturer's requirements.
 - 2. Insulation shall be adequately supported to sustain normal foot traffic without damage.
 - 3. Where field trimmed, insulation shall be fitted tightly around roof protrusions with no gaps greater than ¼ inch.
 - 4. No more insulation shall be applied than can be covered with the roof membrane by the end of the day or the onset of inclement weather.
 - 5. If more than one layer of insulation is used, all joints between subsequent layers shall be offset by at least 6 inches.
- C. Roof Membrane: 50 mil, nominal, PVC thermoplastic membrane.
 - 1. Use only membrane adhesive acceptable to the roof manufacturer's that meets the applicable design requirements.
 - a. Water-based membrane adhesive.
 - b. Solvent-based membrane adhesive.
 - 2. Cut membrane to fit neatly around all penetrations and roof projections.
 - 3. Unroll roofing membrane and positioned with a minimum 6 inch overlap.
 - 4. Apply adhesive in accordance with the roof manufacturer's requirements.
 - a. Apply at the required rate in smooth, even coatings without voids, globs, puddles or similar irregularities. Use care not to contaminate the area of the membrane where hot air welding will occur.
 - 5. Follow guidelines outlined in the adhesive's Product Data Sheet.
 - 6. Read the adhesive's Material Safety Data Sheet (MSDS) prior to using the adhesive.
- D. Seaming:
 - 1. Weld overlapping sheets together using hot air. Minimum weld width is 1-1/2 inches.
 - 2. Check field welded seams for continuity and integrity and repair all imperfections by the end of each work day.
- E. Membrane Termination/Securement: All membrane terminations shall be completed in accordance with the membrane manufacturer's requirements.
 - 1. Provide securement at all membrane terminations at the perimeter of each roof level, roof section, curb flashing, skylight, expansion joint, interior wall, penthouse, and other similar condition.
 - 2. Provide securement at any angle change where the slope or combined slopes exceeds two inches in one horizontal foot.
- F. Flashings: Complete all flashings and terminations as indicated on the drawings and in accordance with the membrane manufacturer's requirements.
 - 1. Provide securement at all membrane terminations at the perimeter of each roof level, roof section,

- curb flashing, skylight, expansion joint, interior wall, penthouse, and other similar condition.
- a. Do not apply flashing over existing thru-wall flashings or weep holes.
 - b. Secure flashing on a vertical surface before the seam between the flashing and the main roof sheet is completed.
 - c. Extend flashing membrane a minimum of 6 inches (152 mm) onto the main roof sheet beyond the mechanical securement.
 - d. Use care to ensure that the flashing does not bridge locations where there is a change in direction (e.g. where the parapet meets the roof deck).
2. Penetrations:
- a. Flash all pipes, supports, soil stacks, cold vents, and other penetrations passing through the roofing membrane as indicated on the Drawings and in accordance with the membrane manufacturer's requirements.
 - b. Utilize custom prefabricated flashings supplied by the membrane manufacturer.
 - c. Existing Flashings: Remove when necessary to allow new flashing to terminate directly to the penetration.
3. Pipe Clusters and Unusual Shapes:
- a. Clusters of pipes or other penetrations which cannot be sealed with prefabricated membrane flashings shall be sealed by surrounding them with a prefabricated vinyl-coated metal pitch pan and sealant supplied by the membrane manufacturer.
 - b. Vinyl-coated metal pitch pans shall be installed, flashed and filled with sealant in accordance with the membrane manufacturer's requirements.
 - c. Pitch pans shall not be used where prefabricated or field fabricated flashings are possible.
- G. Roof Drains:
1. Coordinate installation of roof drains and vents specified in Section 15146 - Plumbing Specialties.
 2. Remove existing flashing and asphalt at existing drains in preparation for sealant and membrane.
 3. Provide a smooth clean surface on the mating surface between the clamping ring and the drain base.
- H. Edge Details:
1. Provide edge details as indicated on the Drawings. Install in accordance with the membrane manufacturer's requirements.
 2. Join individual sections in accordance with the membrane manufacturer's requirements.
 3. Coordinate installation of metal flashing and counter flashing specified in Section 07620.
 4. Manufactured Roof Specialties: Coordinate installation of copings, counter flashing systems, gutters, downspouts, and roof expansion assemblies specified in Section 07710.
- I. Walkways:
1. Install walkways in accordance with the membrane manufacturer's requirements.
 2. Provide walkways where indicated on the Drawings.
 3. Install walkway pads at roof hatches, access doors, rooftop ladders and all other traffic

concentration points regardless of traffic frequency. Provided in areas receiving regular traffic to service rooftop units or where a passageway over the surface is required.

4. Do not install walkways over flashings or field seams until manufacturer's warranty inspection has been completed.

J. Water cut-offs:

1. Provide water cut-offs on a daily basis at the completion of work and at the onset of inclement weather.
2. Provide water cut-offs to ensure that water does not flow beneath the completed sections of the new roofing system.
3. Remove water cut-offs prior to the resumption of work.
4. The integrity of the water cut-off is the sole responsibility of the roofing contractor.
5. Any membrane contaminated by the cut-off material shall be cleaned or removed.

3.4 FIELD QUALITY CONTROL

- A. The membrane manufacturer's representative shall provide a comprehensive final inspection after completion of the roof system. All application errors shall be addressed and final punch list completed.

3.5 PROTECTION

- A. Protect installed roofing products from construction operations until completion of project.
- B. Where traffic is anticipated over completed roofing membrane, protect from damage using durable materials that are compatible with membrane.
- C. Repair or replace damaged products after work is completed.

2-D CATA Responsibility

CATA will:

- Provide general site information.
- Provide access to appropriate CATA facility / construction site as required.
- Maintain minimum temperature of 60 °F (15.6°C) for at least 72 hours before, during and after construction and roof installation.
- Provide permanent lighting and adequate supply of utilities, including electricity, water, and heat.
- Provide a location not larger than 30' X 50' to store equipment and supplies for this project. CATA will not be held liable for loss or damage to vendor's equipment and supplies stored on CATA property.
- Conduct Walk-Through of CATA Bus Maintenance Garage Facility to all proposers on the date and time indicated in the *Schedule of Activities*.

2-E General Requirements

- Period of Performance. The Contractor shall have 60 calendar days after receipt of the Notice to Proceed to complete the work.
- Timeliness. The services of the successful Respondent are to commence upon execution of the contract and receipt of the Purchase Order and Notice to Proceed, and shall be undertaken and completed so as to assure project completion in the timeframe set forth above.
- Liquidated Damages. If the Contractor failed to complete the work within the time specified in the contract, the Contractor shall pay liquidated damages to CATA in the amount of \$105 for each calendar day of delay until the work is completed or accepted. If CATA terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination Clause.
- Payment and Performance Bonds. The Contractor shall furnish at its own expense performance and payment bonds. These bonds shall be furnished to CATA within ten (10) calendar days after contract award. Bond requirements are as follows:
 - (a) Performance bond in the amount of one-hundred percent (100%) of Contract amount.
 - (b) Payment bond in the amount of fifty percent (50%) of the Contract amount.
- Prevailing Wage. Contractors must comply with the provisions of the Davis-Bacon Act, 1931 PA 403, as amended, concerning payment by the contractor of wages prevailing in the area in which the work is performed.
- Meetings. The Contractor shall meet with the CATA Project Manager during the project at least monthly. These sessions may be conducted over the telephone, in person, or via e-mail, as determined by the CATA Project Manager. The Contractor shall make immediate phone calls to the CATA Project Manager if any significant problems are encountered during the project.
- Progress Reports. The successful respondent shall provide monthly written progress memos to CATA's Project Manager. These reports will identify work accomplished, problems encountered during the past month, methodology and timeline for resolving these problems and the activities planned for the upcoming month. These memos shall be provided to the Project Manager by the 10th day of each month. The report can be faxed, mailed or e-mailed to the Project Manager.
- Site Access. The Contractor will have limited access to the work area. Work hours will be limited to Monday through Friday (hours to be determined). The Contractor will need prior approval from the Project Manager to work outside these hours.
- Vendor Site Inspection and Evaluation. CATA reserves the right to inspect vendor's facilities prior to award or at any reasonable time throughout the contract period.
- Contract Modifications. No change in this contract shall be made unless CATA gives its prior written approval. Therefore, the Contractor shall be liable for all costs resulting from, and/or for satisfactorily correcting, any specification change not properly ordered by written modification to the contract and signed by the Contracting Officer. Any changes requested by the Contractor must be submitted to the Contract Administrator assigned under this contract.
- Project Manager. The Project Manager ("PM") (see Section 1-B, above) assigned to this contact is responsible to ensure the goods provided under this contract are in compliance and handling warranty issues. The Project Manager has no authority to make any changes to the contract.

- Contracting Officer. The Contracting Officer (“CO”) (see Section 1-A, above) assigned to this contract is responsible to ensure the Contractor is in compliance with the contract. Any requests for Contract changes must be sent directly to the CO. All DBE reporting (if required) will be submitted to the CO as required.
- Public Funding/Additional Terms or Conditions. In the event that CATA obtains funding, in whole or in part, from a public entity (e.g., Federal Transit Administration, Michigan Department of Transportation, Department of Homeland Security, etc.) for the Services, there may be additional conditions imposed by said funding agency, including for example, a requirement that the Contractor comply with any rules and regulations promulgated by that funding agency. CATA has attempted to identify in the BID/RFP and the Contract the source of funding available to CATA as well as any requirements of any such funding agency, but, in any event, the Contractor will be required to comply with any requirements imposed by the funding agency. The Contractor specifically agrees to so comply with said requirements, without any adjustments or increase in the amount to be paid to the Contractor, provided, however, if said requirement is not contained in the BID/RFP or the Contract and said requirement is both material and would impose on the Contractor a material burden, then the Contractor would be entitled to submit to CATA a Change Order for any additional cost of compliance by the Contractor.

2-F Deliverables

Successful completion of the work to CATA specifications as outlined in this RFP.

2-G Detailed Work Plan

Within 10 working days of the award of the contract, the Contractor will submit to CATA’s Project Manager, for discussion, review and approval, an adjusted technical work plan including the following:

- The Contractor final project organization structure.
- The Contractor’s (and subcontractors) detailed manning table with names, titles, addresses, telephone numbers, fax numbers, e-mail addresses and any other critical information, by task if appropriate.
- The project breakdown showing phases, activities and tasks, and the amount of time to complete each elements of the work plan.
- The time-phases planned for completing the project.

Within one week following the submittal of the detailed work plan, the Contractor’s representative will meet with CATA’s Project Manager to review the components of the work plan and to finalize the direction of the project.

2-H Proposal Requirements

- Detailed description of Respondent’s plan for implementing Scope of Work; Respondent’s detailed technical work plan including such things as a proposed schedule/time line. Tell the prospective respondents what you need regarding project specific requirements, such as: *hiring, training, equipment, facilities, insurance, utilities, and any other requirements for successful completion of the project.*
- Statement describing the Respondent’s understanding of CATA’s stated problem and project objectives.
- Qualifications of the Primary Contractor and each sub-contractor.
- Qualifications of the key individuals from each firm assigned to the project.

- Past experience on similar projects – up to 3 examples for the prime and each sub-contractor.
- List of references including specific contact names, addresses, telephone numbers, fax numbers and e-mail addresses.
- DBE firms to be involved in the project.
- Statement of Agreement with CATA Standard Terms & Conditions and the RFP.
- Statement of compliance and agreement to continue compliance with Federal and State laws and regulations, including regulations of the Federal Transit Administration (“FTA”) and the Michigan Department of Transportation (“MDOT”).
- Detailed timeline for each task including key meetings and critical tasks.
- Additional Information and Comment – include any other information that is believed to be pertinent, but not specifically asked for elsewhere.
- A description of the Respondent’s Quality Assurance Program – Service and Repairs.
- Cost proposals based on total project cost, including all labor and required materials.
- A list of any work that is to be sub-contracted and a description of the qualifications of the Prime Contractor and each Sub-Contractor on the team.
- An organizational chart of the Respondent and all Sub-Contractors.
- The name and telephone number of person(s) in the Respondent’s organization authorized to negotiate/expedite the proposed contract with CATA.
- Prevailing Wage: Contractors must comply with the provisions of the Davis-Bacon Act, 1931 PA 403, as amended, concerning payment by the contractor of wages prevailing in the area in which the work is performed.
- Executed “Buy America,” “Lobbying,” and “Debarment, Suspension and other responsibility matters” certificates.

2-1 Cost of Project

Respondents to include with their proposal detailed and complete project costs.

SECTION 3: COMPLIANCE REQUIREMENTS

3-A FTA and MDOT Required Clauses

The Contractor will comply with all relevant procurement and contract requirements of the Federal Transit Administration (“FTA”) and the Michigan Department of Transportation (“MDOT”).

The website address of the Federal Transit Administration is www.fta.dot.gov.

The website address of the Michigan Department of Transportation is www.michigan.gov/mdot.

The Contractor shall furnish to CATA, certificates of compliance with all such laws, rules and regulations. The Contractor shall, at its own expense, be responsible for obtaining all necessary permits and licenses required for performance of the Contract.

All contractual provisions required by MDOT or mandated by FTA as set forth in FTA Circular 4220.1F, are hereby incorporated by reference. The Contractor shall not perform any act, fail to perform any act or refuse to comply with any CATA requests which would cause CATA or the Contractor to be in violation of FTA or MDOT terms and conditions.

3-B Disadvantaged Business Enterprises

Disadvantaged Business Enterprises (“DBE”) are encouraged to bid on this project. Any applicable DBE firm’s certifications must be included in the proposal. Cost Proposals must list the amount and activity of service provided by the DBE firm, as applicable. Information on becoming certified as a Disadvantaged Business Enterprise is available from Michigan Department of Transportation (“MDOT”) at the following website address: <http://mdot270.state.mi.us:8080/UCP/HomePageServlet>.

3-C Compliance with Laws

The Contractor shall comply with all federal, state, and local laws, ordinances, rules, regulations, and orders, including, but not limited to:

1. Motor Carrier Safety Act, 1963 P A 181, as amended.
2. Motor Bus Transportation Act, 1982, P A 432, as amended.
3. Rules and Regulations of the Department of Transportation may promulgate to accomplish the purpose of 1990 P A 339.
4. Motor Safety Carrier Regulations, being 49 CFR, Parts 387, 390-393, 395-397, and 399 including appendices C, D, E, and G.
5. Drug-Free Workplace Act of 1988.
6. Procedures for Transportation Workplace Drug Testing Progress, 49 CFR 40.
7. Physical Qualification Requirements of 49 CFR 391.41 to 391.49.
8. Debarment Certification per 49 CFR 29; Appendix C must be signed by Respondent and included in proposal submittal.

9. Surface Transportation Assistance act of 1982 ("Buy America Act"); Appendix D must be signed by Respondent and included in proposal submittal.
10. Lobbying Disclosure Act of 1985; Appendix E must be signed by Respondent and included in proposal submittal
11. Non-Discrimination Clause per 49 CFR, Part 26.
12. Prohibition of Discrimination per 1976 P A 453, Public Acts of 1976.

Upon request, Contractor shall furnish to CATA certificates of compliance with all such laws, rules and regulations. The Contractor shall, at its own expense, be responsible for obtaining all necessary permits and licenses required for performance outlined in this RFP.

Information regarding the regulations listed above may be obtained from the Federal Motor Carrier Safety Administration at www.fmcsa.dot.gov/rulesregs/fmcsr/fmcsrguide.htm.

3-D Ownership

All original renderings, written documents, calculations, and work products produced by CONTRACTOR, whether produced on paper or electronic media or otherwise in performance of this Agreement, shall be the property of CATA. CONTRACTOR shall have the right to retain a copy of such renderings, written documents, calculations, and work products. CONTRACTOR shall make available to CATA copies of all CONTRACTOR correspondence, notes, and other papers relating to the work, upon request of CATA. All works of original authorship created in the scope of this Agreement are "works made for hire", as that term is used in connection with the U.S. Copyright Act. To the extent that by operation of law CONTRACTOR retains any intellectual property rights to any work product, CONTRACTOR hereby irrevocably assigns and licenses to CATA all right, title, and interest in such work product, including copyrights and patents, and agrees to execute such assignments and licenses as may be required in the opinion of CATA's legal counsel to confirm this provision. The work product produced by CONTRACTOR in the performance of services under this Agreement is intended for use by CATA solely for the purpose intended. Any use or reuse of such work product by CATA for any purpose other than its intended purpose shall be at the sole risk of CATA and without any liability or responsibility of CONTRACTOR. To the extent that the work product produced by CONTRACTOR contains standard design or construction details or other standardized material previously developed by CONTRACTOR in its professional architectural, engineering, and planning practices, then CONTRACTOR shall have the right to reuse any such material on other projects for other clients or persons without the prior knowledge or permission of CATA and without the payment of any compensation to CATA, provided that the reuse or continued use of such material contains no CATA identifying information or confidential information.

3-E News Releases

News releases pertaining to this RFP or the services provided on the project to which it relates will not be made without prior written CATA approval, and then only in accordance with the instructions from CATA's Executive Director.

3-F Audit and Inspection of Records

In the case of all negotiated contracts, and contracts for construction, reconstruction, or improvement of facilities and equipment which were entered into under other than competitive bidding procedures, the Contractor agrees that the grantee, the Comptroller General of the United States, or any of their duly authorized representative shall, for the purpose of audit and examination, be permitted to inspect all work, materials, payrolls, and other date and records, and accounts with regard to the project. Further, the Contractor agrees to maintain all required records for at least three (3) years after grantees make final payments and all other pending matters are closed.

3-G Complaints or Protests

CATA's Procurement Protest Procedures are available from CATA's Purchasing & Contracts Manager.

3-H Contractual Terms and Conditions

See attached CATA Standard Terms and Conditions for details. The Contractor must state in their proposal that they agree to all Terms and Conditions.

APPENDICES

- Appendix A: CATA Standard Terms and Conditions
- Appendix B: Prohibition of Discrimination in State Contracts
- Appendix C: Assurances That Recipients and Contractors Must Make
- Appendix D: Disadvantaged Business Enterprise Policy
- Appendix E: Certificate Regarding Lobbying
- Appendix F: Certification Regarding Debarment
- Appendix G: "Buy America" Provision
- Appendix H: Iran Economic Sanctions Act Certificate
- Appendix I: Davis-Bacon Wage Determination