REQUEST FOR PROPOSAL

3 WHEELCHAIR + 4 AMBULATORY, AND 12 PASSENGER CUTAWAY TRANSIT BUSES

2018 - 2020
SECTION 1

NOTICE OF REQUEST FOR PROPOSALS
SECTION 1: NOTICE OF REQUEST FOR PROPOSALS

NR 1. Request for Proposal (RFP) No. 17-00127-APES, 225 Transit Mini-Buses, Single Rear-Wheel Cutaway
NR 2. Proposal Submission
NR 3. Proposal Acceptance Period
NR 4. Pre-Proposal Meeting and Questions
SECTION 1: NOTICE OF REQUEST FOR PROPOSALS

ISSUE DATE: July 27, 2017

NR 1. Request for Proposal (RFP) No. 17-00127-APES, 225 Transit Mini-Buses, Single Rear-Wheel Cutaway

The Southeastern Pennsylvania Transportation Authority (SEPTA) is soliciting proposals for the purchase of 225 Transit Mini-Buses (Single Rear-Wheel Cutaway), and 60 additional/Optional Transit Mini-Buses (Single Rear-Wheel Cutaway). For Price Proposal to be considered, pricing must be included for the 60 Optional Mini-Buses. SEPTA will evaluate each bus proposal in accordance with the criteria specified in Section 2 – Instructions to Proposers of the RFP and recommendation for award, if made, to the SEPTA Board of Directors will be for the proposal that provides the best value to SEPTA. The proposals submitted should be identified as RFP No. 17-00127-APES, Transit Mini-Buses, Single Rear-Wheel Cutaway.

Proposers are advised that SEPTA is utilizing the Request for Proposal method for this Contract. This procedure affords all proposers the opportunity to submit requests for modifications to the Section 3 - Contract and General Conditions, other terms and provisions, and improvements to the Technical Specification.

NR 2. Proposal Submission

Each Proposal must be submitted in two (2) separate sealed parts, identified as the Technical Proposal and the Price Proposal. One (1) original and four (4) copies plus one (1) CD copy in PDF Format of the Technical Proposal; and, one (1) original and four (4) copies of the Price Proposal are to be submitted in writing to SEPTA by the close of business (4:30 PM) on Thursday, August 31, 2017. Please direct all correspondence to:

SEPTA
attn.: Paul Stavros, 11th floor
1234 Market Street
Philadelphia, PA 19107-3780

See Section 2 – IP 4 for Proposal Security Requirements.

NR 3. Proposal Acceptance Period

The Proposal shall be binding upon the Proposer for one hundred and twenty (120) calendar days following the "Best and Final Offer". Any proposal on which the Proposer shortens the acceptance period will be rejected, although the acceptance period may be extended by mutual agreement between SEPTA and the Proposer.
NR 4. Questions

All questions pertaining to this Request for Proposal must be submitted in writing to SEPTA - Procurement & Contracts Department, attn: Paul Stavros, 1234 Market Street - 11th Floor, Philadelphia, PA 19107-3780 or email at pStavros@SEPTA.org. **All questions must be received no later than the close of business (4:30 PM) on Thursday, August 10, 2017.**

Note: SEPTA will only accept questions from Bus Manufacturers.
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SECTION 2: INSTRUCTIONS TO PROPOSERS

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SECTION 2: INSTRUCTIONS TO PROPOSERS

IP 1. General
You (hereinafter referred to as “Proposer”) are requested to submit a formal proposal (hereinafter referred to as “Proposal”) for the required Material and / or Equipment detailed in the Contract Documents (hereinafter referred to as “Project”) in accordance with this Request for Proposal (RFP). Any information in addition to that required by this RFP which Proposer feels will help in the evaluation of its Proposal is to be submitted with its Proposal. Any Proposal submitted must comply with the requirements of this RFP as herein stated including all applicable Federal, State and Local laws, and is to be signed by an officer legally authorized to bind Proposer to a Contract (hereinafter referred to as “Contract”) and shall be submitted to SEPTA in writing, in the time and in the manner described herein. Following is the RFP Quantity & Delivery Schedule:

<table>
<thead>
<tr>
<th>Calendar Year Delivery</th>
<th>Guaranteed Quantity</th>
<th>Option Quantity</th>
<th>Guaranteed Quantity</th>
<th>Option Quantity</th>
<th>Total Guaranteed Per Calendar Year</th>
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<td><strong>30</strong></td>
<td><strong>113</strong></td>
<td><strong>30</strong></td>
<td><strong>225</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

Total Guaranteed & Options: 285

IP 2. Form of Proposal
Each Proposal shall be submitted in two (2) separate sealed envelopes/packages, one containing the Technical Proposal and one containing the Price Proposal. One (1) original and four (4) copies, plus one (1) CD PDF Format version of the Technical Proposal and one (1) original and four (4) copies of the Price Proposal, in sealed envelopes/packages which are identified on the face with the name of the Proposer and the Project name. This Bus Proposal must be identified as RFP No. 17-00127-APES.

IP 2.1 Technical Proposal Format
In a separate binder(s), each Proposer shall provide the following technical information. This binder shall contain alpha-numeric designated tabs, corresponding to the paragraphs and elements listed within IP 10 – Technical Proposal Format. The response to each paragraph should be contained within its respective tab. For example, the Proposer’s documentation on how acceleration requirements will be met should be presented within Tab 10.1 (F). Each tab should include all information requested in its entirety and be fully self-contained, and not reference attachments distributed throughout the proposal. Each Technical Proposal shall demonstrate that all the equipment integrates and satisfies the functional requirements in the specification. General statements or overall descriptions may be used to supplement the material presented. If any exceptions to the Technical Specification are to be
made, the Technical Proposal shall include a complete tabulation of every exception to the Technical Specification in the form of a compliance matrix.

The Technical Proposal should be clear and concise, and completely explain how the Proposer will meet the stated objectives. Brevity and clarity are desired. Statements merely indicating that the Proposer will meet specific requirements are not acceptable. The Technical Proposal will be judged on the completeness, clarity and technical content of the proposal as elaborated in IP 10 - Technical Proposal Format and IP 11 – Selection Process.

The submission shall be made on 8.5 by 11 inch paper. A limited number of 11 by 17 inch fold-out drawings are permitted, other than the drawings specifically requested below. Supplier promotional brochures need not be included, unless pertinent technical information is provided by them. Drawings shall be of a print quality that is easily readable in English.

**IP 3. Obtaining Proposal Documents**
All required proposal forms are included with this RFP.

**IP 4. Proposal Security Requirements**
Proposers within the competitive range, who are invited to submit a Best And Final Offer (BAFO), must submit a Proposal Security in one of the following forms: Proposal Bond; Cashier’s Check; Certified Check; Treasurer’s Check; or Official Bank Check (hereinafter called "Proposal Security"), along with the BAFO, in an amount of One Million Dollars ($1,000,000) and drawn in favor of the SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY.

The Proposal Security submitted by the proposers shall be retained by SEPTA for a period of ninety (90) days, or until a contract is awarded and entered into or all proposals are rejected, whichever comes first. SEPTA shall be entitled, but shall not have the obligation to cash Proposer's Proposal Security check and to invest the proceeds. The proposer, by submission of its proposal, consents to SEPTA's retention of any income generated by such Proposal Security.

Proposal Bond, if selected by proposer, must be issued by a fully qualified surety company acceptable to SEPTA and listed as a company currently authorized under 31 CFR Part 223 as possessing a Certificate of Authority as described thereunder.

**IP 4.1 Responsibility of Proposer**
SEPTA will only award a Contract to a firm which it has determined to be responsible. The Proposer shall furnish adequate documentation, as determined by SEPTA, within fifteen (15) days of receipt of SEPTA's written request to permit SEPTA to determine the responsibility of the Proposer. A responsible contractor is one which meets the following standards:

A. **Integrity and Ethics** - Has a satisfactory record of integrity and business ethics, in compliance with 49 U.S.C. section 5325(j) (2) (A);

B. **Debarment and Suspension** – Is neither debarred nor suspended from Federal programs under DOT regulations, “Nonprocurement Suspension and Debarment,” 2CFR Parts 180 and 1200, or under FAR at 48CFR Chapter 1 Part 9.4 or any Commonwealth of Pennsylvania funded programs;
C. **Affirmative Action and DBE** – Is in compliance with the Common Grant Rules’ affirmative action and DOTs’ Disadvantaged Business Enterprise requirements, 49 CFR part 26;

D. **Public Policy** – Is in compliance with the public policies of the Federal Government, as required by 49 U.S.C. Section 5325 (j) (2) (B) and Commonwealth of Pennsylvania public policies;

E. **Administrative and Technical Capacity** – has the necessary organization, experience, accounting, and operational controls and technical skills, or the ability to obtain them in compliance with 79 U.S.C Section 5325 (j) (2) (D);

F. **Licensing and Taxes** – Is in compliance with applicable licensing and tax laws and regulations;

G. **Financial Resources** – has, or can obtain, sufficient financial resources to perform the contract, as required by 49 U.S.C. Section 5325 (j) (2) (D);

H. **Production Capability** – Has, or can obtain, the necessary production, construction and technical equipment and facilities;

I. **Timeliness** – Is able to comply with the required delivery or performance schedule, taking into consideration all existing commercial and governmental business commitments; and,

J. **Performance Record** – Is able to provide a satisfactory current and past performance record.

**IP 4.2 Responsibility of Others**

**SEPTA:**

A. **PROJECT MANAGER** - SEPTA will provide a Project Manager (hereinafter referred to as "SEPTA's Project Manager") and management team which shall provide the technical direction of the Project. The SEPTA team shall also monitor and review the progress of the Proposer's services in order to aid in the program coordination. The participation by SEPTA's Project Manager shall not relieve the Proposer from its obligations under the terms of the Contract.

B. **CONTRACT ADMINISTRATOR** - SEPTA will also provide an administrator for the Contract (hereinafter referred to as "SEPTA's Contract Administrator"). All changes to contract requirements which need to be performed under the Contract must receive the prior written authorization of SEPTA's Contract Administrator

**IP 5. Submission of Proposals**

One (1) original and four (4) copies of the Technical Proposal and one (1) original and four (4) copies of the Price Proposal, in two separate sealed envelopes which are identified on the face with the name of the Proposer and the Project name, shall be submitted to:

Paul Stavros, Senior Contract Administrator
SEPTA - Procurement and SCM Dept., 11th Floor
1234 Market Street, Philadelphia, PA 19107-3780 USA
IP 5.1 Price Proposal  
The Price Proposal shall be submitted to SEPTA as a separate sealed document. Price Proposals which exclude or restrict cost items necessary for a Proposer to perform the SEPTA required scope of services are not acceptable and may be considered by SEPTA as non-responsive to the RFP.

1. The Price Proposal shall be submitted on Appendix 2 - Price Proposal found in Section 11 - Appendixes, along with any other additional information required to make it complete.

2. The requirements of the Contract included as Section 3 – Contract and General Conditions of this RFP should be carefully reviewed by the Proposer prior to preparation of its Price Proposal. In preparation of its Price Proposal, the Proposer must assume that SEPTA will not make any modifications to the terms of the Contract as attached

IP 6. Other Information Included with Technical Proposal  
If the Proposer is a joint venture, limited liability company, partnership, newly formed entity or holding company (Proposers Entity), then a copy of any written contract or understanding which exists between the members of the Proposer Entity” shall be included as part of the Technical Proposal. If no written contract or understanding exists, then the Proposer Entity shall include in its Technical Proposal a written statement explaining how the Proposer Entity will fulfill the requirements of the Contract included as Section 3 – Contract and General Conditions of this RFP. Such explanation shall fully discuss and identify the responsibility of the Proposer Entity for performing the services, providing the required insurance and bonding providing coverage for the indemnification of SEPTA required by the Contract. It shall clearly explain which parties of the Proposer Entity will interface with SEPTA on a design and technical basis, which major sections of the Technical Specifications will be handled by each party including post-delivery technical support and warranty, and which member of the Proposer Entity or partner will be responsible to resolve disputes between the Proposer Entity and SEPTA.

IP 6.1 Certification Regarding Lobbying  
The Proposer shall submit a signed Certification Regarding Lobbying as set forth in Section 9 – Forms and Certifications, CER 1 of this RFP, and, if required by the terms of the Certification Regarding Lobbying, Standard Form - LLL, Disclosure of Lobbying Activities as set forth in Section 5 – Federal and State Requirements, FR 11 – Compliance with Federal Lobbying Policy.

IP 6.2 Certification Regarding Debarment, Suspension, and Other Responsibility Matters  
(Lower Tier Covered Transactions. Instructions for Certifications)

Suspension and Debarment  
This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into. By signing and submitting its proposal, the Proposer certifies as follows:
The certification in this clause is a material representation of fact relied upon by SEPTA. If it is later determined that the proposer knowingly rendered an erroneous certification, in addition to remedies available to SEPTA, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The proposer agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

**IP 6.3 Buy America Provision**

This procurement is subject to the Federal Transit Administration (FTA) Buy America Requirements in 49 CFR Part 661 Section 165(b) (3) of the Surface Transportation Assistance Act of 1982, as amended. Each Proposer shall submit a signed copy of the "Buy America Certificate" with its proposal in accordance with the requirement of 49 CFR Part 666.13. (See Section 9 – Forms and Certifications, CER 2 - Buy America Certification).

A waiver from the Buy America Provision may be sought by SEPTA if grounds for the waiver exist. In order to qualify as a domestic end-product, the cost of components produced in the United States must exceed 60 percent, as defined in 49 CFR Part 661, of the cost of all components and subcomponents, and final assembly must take place in the United States.

The Proposer understands and agrees that, pursuant to 49 CFR Part 661.13, whether or not it certifies that it will comply with the applicable Buy America requirement, the Proposer is bound by its original certification or if given the opportunity, its certification submitted with its Best and Final Offer (BAFO), and is not permitted to change its certification after BAFO opening. In addition, if the Proposer certifies that it will comply with the applicable Buy America requirements, the Proposer understands and agrees that it is not eligible for a waiver of those requirements.

**IP 6.4 Disadvantaged Business Enterprise (DBE)**

Participation Requirements: In connection with this solicitation and any resulting contract, the proposal shall be accompanied by a signed DBE Approval Certification (See Section 9 – Forms and Certifications, CER 3 - DBE Approval Certification).

**IP 6.5 Steel Products Procurement Act of 1978**

By submitting a proposal it specifically agrees to fully comply with the Commonwealth of Pennsylvania's Steel Product Procurement Act of 1978 (Act No. 3 of 1978, March 3 P.L. 6 (73 P.S. '1881 et seq.)), as amended.

The Commonwealth of Pennsylvania's Steel Product Procurement Act of 1978, as amended, defines "steel products" as products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated or otherwise similarly processed, or processed by a combination of two or more of such operations, from steel made in the United States of America by the open hearth, basic oxygen, electric furnace, Bessemer or other steel making process, and shall include cast iron products and shall include machinery and equipment listed in the United States Department of Commerce Standard Industrial Classification 25 (furniture and fixture), 35 (machinery, except electrical), and 37 (transportation equipment) and made of, fabricated from, or containing steel components. If a product contains both foreign and United States steel, such product shall be determined to be a United States steel product only if at least 75 percent of the cost of the articles, materials and supplies have been mined, produced or manufactured, as the case may be, in the United States. Transportation equipment shall be determined to be a United States steel product if it complies with 49 U.S.C. ' 5325(j) [former Section 165 of the Federal Surface Transportation Assistance Act of 1982, as amended] and the applicable regulations in 49 CFR Part 661.
The Proposer understands and agrees that, whether or not it sets forth any exceptions on its Price Proposal with the Steel Product Procurement Act, the Proposer is bound by its original Price Proposal and is not permitted to change its Price Proposal after proposal opening. In addition, if the Proposer does not set forth any exceptions with the Steel Product Procurement Act requirements, the Proposer understands and agrees that it is not eligible for a waiver of those requirements.

**IP 6.6 Certification of Compliance with Bus Testing Requirements**

Certifies that the vehicles offered in this procurement comply and will, when delivered, comply with 49 U.S.C. § 5323(c) and FTA's implementing regulation at 49 CFR Part 665. (Section 9 – Forms and Certifications, CER 5 - Certificate of Compliance with Bus Testing Requirement).

**IP 6.7 Certificate of Compliance with Immigration Reform and Control Act of 1986**


**IP 6.8 Federal Motor Vehicles Safety Standards Certificates**

See Section 9 – Forms and Certifications, CER 7 - Federal Motor Vehicles Safety Standards Certificates.

**IP 7. Addenda**

The contents of all addenda to Proposers are to be incorporated in the proposal and will become part of the contract documents. Addenda should be acknowledged on the Acknowledgement of Addenda Form (Section 9 – Forms and Certifications, CER 8) and included as part of the technical proposal.

**IP 8. Disadvantaged Business Enterprise**

SEPTA hereby notifies all Proposers that Disadvantaged Business Enterprises (DBE) will be afforded full opportunity to submit Proposals in response to this RFP and will not be subject to discrimination on the basis of race, color, sex, age, physical handicap or national origin in consideration for an award.

SEPTA solicits and encourages DBE participation as a prime Contractor, joint venture partner, and/or as a subcontractor for the Project. DBE's will be afforded full consideration and will not be subject to discrimination. All respondents will be required to comply with FTA's DBE requirements for bus manufacturers found in 49 CFR Part 26. (See Section 9 – Forms & Certifications, CER 3 – DBE Approval Certification)

**IP 9. Rights Reserved By SEPTA**

SEPTA expressly reserves the right to reject any and all Proposals and/or to negotiate separately with any firm in any manner deemed appropriate to serve its best interest. If an award is made as a result of the Proposals, SEPTA will award the Contract to the prospective contractor who SEPTA has determined to be responsible and responsive, and whose Proposal represents the “best value” to SEPTA by providing a combination of both price/cost and technical evaluation factors which SEPTA determines is in the best interests of and the most advantageous to SEPTA. SEPTA is not liable for any expenses incurred by any Proposer(s) in the development of its Proposal or any subsequent activity related to the Proposal.

Any Contract to be entered into pursuant to this RFP is subject to financial assistance grants between SEPTA, the United States Department of Transportation, Federal Transit Administration (FTA), and the Pennsylvania Department of Transportation, and must conform to the requirements thereof.
IP 9.1 Modifications to SEPTA’s Form of Contract
If an award of Contract is made as a result of this RFP, the proposed form of Contract which the Proposer will be required to execute is included in Section 3 – Contract and General Conditions of this RFP, and the Proposers are urged to review the Contract carefully. SEPTA may, at its sole discretion consider modifications to the terms of the proposed Contract, provided the Proposer specifically requests such modifications in its Technical Proposal. Any subsequent submission of modification request could result in rejection of proposal and/or cancellation of award.

The Contract requires that all tasks described in the RFP and/or Proposal shall be the Proposer's sole responsibility and shall be performed by the Proposer and its subcontractors/ sub-consultants. As part of the negotiation process (see IP 11 - Selection Process), SEPTA may elect to consolidate the services described in the RFP and the Proposal into a single document. The single document shall then become an Attachment to the Contract instead of the RFP and Proposal.

IP 9.2 Insurance
The Proposer shall be required to provide insurance as subject to the requirements of GC 11 - Risk of Section 3 – Contract and General Conditions.

IP 9.3 Performance Bond
The successful Proposer shall be required to furnish a Performance Bond not later than fifteen (15) days after Intent of Notice of Award, in accordance with the requirements of GC 12 – Performance Bond of Section 3 – Contract and General Conditions. The acceptable bond form is AIA Document A311.

IP 9.4 Additional Guarantee
SEPTA reserves the right, at its sole discretion, to require Proposer to provide additional guarantee from parent, affiliated or related corporation.

IP 9.5 Proposal Acceptance Period
The Proposal shall be binding upon the Proposer for one hundred and twenty (120) calendar days following the "Best and Final Offer". Any proposal on which the Proposer shortens the acceptance period will be rejected, although the acceptance period may be extended by mutual agreement between SEPTA and the Proposer.

IP 9.6 Taxes
1. Pennsylvania Sales and Use Tax: As an agency and instrumentality of the Commonwealth of Pennsylvania, SEPTA is exempt from the payment of Federal Excise Taxes and Pennsylvania Sales and Use Taxes (71 P.S. Sec. 7071 et seq.) on material, equipment or other personal property purchases and contracts for its exclusive use or consumption: therefore, the Proposer shall not include these taxes in the computation of its price proposal. SEPTA will furnish exemption certificates, as required, upon the request of the Proposer.

2. City of Philadelphia and School District of Philadelphia Taxes: The Proposer as a result of any contract entered into pursuant to this Request for Proposal, may be subject to certain business taxes imposed by the City of Philadelphia and/or the School District of Philadelphia. The Proposer is solely responsible for making its own investigation to determine whether or not it is subject to the above-mentioned city and school district taxes, and for paying any such tax if applicable. Proposers are hereby informed that
SEPTA is obligated by law to furnish to the City of Philadelphia Department of Collections, upon its request, the name and address of any person or firm with whom it has a contract for goods and services. For information the following phone number is provided: Business and Earnings and School Income Tax (215) 686-6600.

**IP 9.7 Performance Evaluation**
SEPTA's Procurement Manual requires the formal performance evaluation of all Material/Equipment Contracts over $100,000. See Section 11 – Appendixes, Appendix 3.

**IP 9.8 Buy America Pre-Award Audit for Rolling Stock**
In compliance with 49 CFR Part 663, unless the Federal Transit Administration grants a waiver to the rolling stock to be purchased from the Buy America requirements, the successful Proposer will be required to provide SEPTA, or its designated independent third party reviewer, with sufficient documentation prior to contract award as to allow SEPTA, or its designated independent third party reviewer, to verify the accuracy of the Proposer’s Buy America Certification.

The documentation supplied by the Proposer must list (a) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin and costs; and (b) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.

SEPTA, or its designated independent third party reviewer, will also perform a post-delivery audit of the bus as actually manufactured in accordance with 49 CFR Part 663, and the Proposer shall supply sufficient documentation to verify compliance.

**IP 9.9 “Or Equal” Items**
Whenever in the Specification an article or material is defined by using a trade name or the name and catalog number of a particular manufacturer or vendor, or a limited description, the term "OR EQUAL" if not written thereafter shall be implied. Any reference to a particular manufacturer’s product either by trade name or limited description is only for purposes of setting a standard of performance, quality, composition, construction or size.

The term "OR EQUAL" means any other manufactured product or article which is equivalent in material, workmanship and service and is as efficient and economical in operation in the opinion of SEPTA.

The Proposer shall furnish the “OR EQUAL” documentation for SEPTA’s review.

SEPTA's opinion as to whether the proposed alternate is "EQUAL" to the specified items for SEPTA's specified use and purposes shall be final and conclusive.

**IP 9.10 Non-Collusion Requirement**
In the event Proposer is deemed the lowest responsive, responsible Proposer for this project, and as part of the proposal signed herewith, Proposer hereby agrees to sign an Affidavit of Non-Collusion in form acceptable to SEPTA prior to the award, if any, of the contract. A sample Affidavit of Non-Collusion is attached (Section 9 – Forms and Certifications, CER 4).
IP 9.11  SEPTA Protest Procedures
Protests relative to this procurement will be reviewed and adjudicated by SEPTA in accordance with SEPTA's Procurement manual (See Section 11 – Appendixes, Appendix 4).

SEPTA's Procurement Manual is available for inspection by Proposers in the offices of the Senior Director of Procurement - Procurement and Contracts Department, SEPTA, 1234 Market Street, 11th Floor, Philadelphia, Pennsylvania 19107-3780.

Since this procurement is receiving financial assistance from the Federal Transit Administration (FTA) and in the event all administrative remedies available under SEPTA's Bid Protest Procedures have been exhausted, the FTA will review protests under limited circumstances set forth in FTA Circular 4220.1F – Chapter VII, § 7.1 Protests.

(END OF PAGE)
IP 10. Technical Proposal Format

IP 10.1  Technical Approach

A. Bus Equipment Specification:
   Provide Section 11 - Appendix 1 - Design and Equipment Specification Form, completely filled out.

B. Passenger Capacity:
   1. Provide a seating layout delineating the number and type of seats that the bus can comfortably accommodate and include dimensions. The seating layout will be consistent with the Section 5 – Technical Specifications showing hip-to-knee and foot room dimensions. A seating cross section drawing shall be provided showing interior width, seat widths, vertical stanchions placement and aisle widths.
   2. ADA - Provide details on the provisions and plan/layout drawings being provided for ADA compliant wheelchair locations including turning radius requirements and proposed wheelchair tie down system and space, entry, maneuvering, parking and exiting of the wheelchair passenger to demonstrate compliance.
   3. Provide details on total seated load relative to GVWR of the vehicle.
   4. Provide a stanchion/grabrail layout that demonstrates continuous handholds for a fifth percentile female passenger.

C. Additional Technical Information:
   1. The bidder shall provide the following document(s): system suppliers, supplier’s technical information, specification sheet(s) and catalog pages, system theory of operation, operator's (driver's) instruction sheet(s) and a proposed equipment layout sketch. At minimum the systems must include Structure, Fire Suppression, and Electrical.
   2. Provide Altoona Testing Reports for the two configuration cutaway buses described in Section 5A-B: Technical Specifications.

IP 10.2  Program Management/Manufacturing Approach

A. Manufacturing Plan:
   1. Provide information that demonstrates the Proposer’s capability, capacity, and logistics to manufacture the bus in a timely manner. Include information on available plant capacity, personnel and other resources to perform the work.
   2. Describe the overall approach to manufacturing and assembly of bus components. Include information on locations where the bus will be manufactured and assembled.
   3. Provide a production schedule showing key milestones. The schedule, as a minimum, shall include award of major subcontracts, preproduction meeting(s), start of manufacturing and delivery of all buses.
   4. Provide organizational chart(s) showing management structure, various disciplines and interface among the disciplines for engineering, project management and manufacturing engineering, quality control and assurance and site manufacturing.

B. Warranty and “After Market Support”:
   1. Provide information that demonstrates the quality and duration of the Proposer to warranty and follow-up support services. Provide a copy of Proposer's Corporate Warranty Policy.
2. Specification Section 6 - Warranty Requirements: Provide comments, if any, or exceptions. If exceptions are taken the Proposer shall provide full justification in detail for each exception, and provide a recommended warranty period for said exceptions.

3. The Proposer shall provide a detail Logistics Plan description of the system that will be used for parts availability, capital and consumables, to support the Contract Warranty Program and after warranty period for the life of the bus. In addition, please provide the responsible contact person(s), including name and addresses, for two Chassis/OEM Dealerships, and other systems authorized repair stations.

IP 10.3 Quality Assurance Approach

A. Quality Assurance Plans:
   1. Provide information that demonstrates the Proposer’s commitment and capability to execute an effective testing and quality assurance program. Describe how the Quality Assurance Program and established work procedures will be utilized to monitor and remedy as needed the quality of materials and workmanship in-house and by subcontractors.
   2. Include sample assembly procedures and controls and sample material control program and forms.
   3. Provide information on Secondary Manufacturer Certification.

B. Publications:
   2. Provide supporting documentation as to the capability of the Proposer to provide all publications required in the form and timeframe specified. Include sample parts and service manuals.
   3. Describe the methodology for producing parts and service bulletins for aftermarket support. Include a sample part and service bulletin.

IP 10.4 Past Performance

A. Past Performance and Responsibility:
   1. List three bus contracts over the past 3 years, including customer, type of bus, brief description of the vehicle, quantity, major suppliers, contractual delivery schedule, and actual delivery schedule. List a contact person for each customer, including name, title, address and telephone number. Provide a sample of recommendation letter(s) from customers on support services after delivery, on workmanship and bus dependability.

IP 11. Selection Process

IP 11.1 Evaluation Criteria

A. The following technical evaluation criteria, listed in descending order of importance, will be used for the evaluation of Proposals according to SEPTA procedures:

1. Technical Approach

   This criterion considers the Proposer's approach toward the design of the Buses under this Contract and how the technical design approach meets the requirements of the Technical
Specification. As set forth in IP 10.1 – Technical Approach, the criterion will be comprised of Tabs 1a through 1b of the Technical Proposal.

2. **Program Management/Manufacturing Approach**

This criterion addresses the manufacturing capacity and logistics for the production of the proposed bus in a timely manner. Considerations include the overall approach to manufacturing and assembly of the bus, the approach to final assembly, the available plant capacity, personnel and other resources to perform the work. The Proposer's warranty system, methodology, warranty reimbursements rate for customer performed repairs, provisions and product support shall be described in this section. The criterion will be comprised of Tabs 2a thru 2b of the Technical Proposal as set forth in IP 10.2 - Program Management/Manufacturing Approach.

3. **Quality Assurance Plan**

This criterion addresses the Proposer's commitment to, and execution of, a thorough, effective Bus quality assurance program for this procurement. It considers the existence and role of quality assurance in the overall organization. The procedures established to monitor and remedy the quality of materials and workmanship, both in house and by subcontractors. SEPTA will contact previous customers of the Proposer and major subcontractors to verify this information. The criterion will be comprised of Tabs 3a thru 3b of the Technical Proposal as set forth in IP 10.3 - Quality Assurance Plan.

4. **Past Performance**

Past performance considers the Proposer's and major subcontractor's performance in previous Bus procurement contracts. It addresses contractual issues, technical capability, quality of work, contractual delivery schedules, actual delivery schedules, Bus performance, reliability and maintenance. SEPTA will contact previous customers of the Proposer and major subcontractors to confirm this information. The criterion will be comprised of Tabs 4a of the Technical Proposal as set forth in IP 10.4 - Past Performance.

B. **Of the four technical evaluation factors above, factor (1) (Technical Approach) is the most important factor. Factor (4) (Past Performance) is less important than factor (3) (Quality Assurance Plan). Factor (3) (Quality Assurance Plan) is less important than factor (2) (Program Management/Manufacturing Approach). When combined, factor (2), factor (3) and factor (4) are less important than factor (1).**

C. **SEPTA may conduct interviews and request and receive additional information from any as SEPTA deems necessary to properly evaluate the Proposals**

D. **Price is a factor in the overall evaluation. This factor considers what it will cost SEPTA to do business with a Proposer and the affordability of the proposed price. All of the technical evaluation factors, when combined, are approximately equal to price. Neither price/cost nor technical expertise shall be the sole determining factor. Accordingly, SEPTA may not necessarily make an award to the Proposer with the highest technical rating nor award to the Proposer with**
the lowest Price Proposal, if doing so would not be in the overall best interests of SEPTA, taking all of the factors into account. SEPTA, in its discretion, may determine that a higher-rated Technical Proposal may not justify SEPTA’s expenditure of the additional cost of the higher-rated Technical Proposal as opposed to a lower-priced Proposal, or may determine that although a Proposal may be the lowest price, the technical benefits of a higher-priced Proposal may be more advantageous to SEPTA, thus justifying the award to a higher-priced Proposal. As Proposals become more technically equivalent, price becomes more important, and conversely, as the price becomes more equivalent, the Technical Proposal becomes more important.

IP 11.2 Evaluation and Selection Process

A. The standards and qualifications that follow have been developed to serve as positive indicators of expected performance or compliance with the requirements of the RFP. SEPTA will form a Technical Evaluation Committee comprised of senior managers of SEPTA or its agent to independently evaluate each Proposal on the technical evaluation criteria based upon the application of adjectival codes supported by narrative explanations. The narrative explanations will identify the strengths, weaknesses (including deficiencies) of each Technical Proposal, as measured against the solicitation requirements and evaluation standards. The technical evaluation criteria will be evaluated as follows:

- **Excellent** - Significantly exceeds in all respects the specifications of the RFP; high probability of success; no significant weaknesses.
- **Very Good** - Substantial response: meets in all aspects and in some case exceeds, the specifications of the RFP; high probability of success; no significant weaknesses.
- **Acceptable** - Generally meets the specifications of the RFP; good probability of success; weaknesses can be readily corrected.
- **Marginal** - Lack of essential information; low probability of success; significant weaknesses, but correctable.
- **Unacceptable** - Fails to meet the specifications of the RFP; needs major revision to be acceptable.

These adjectival ratings are only guides to assist SEPTA in evaluating Proposals. They do not mandate the automatic selection or rejection of a particular Proposal or Proposer.

Proposals will be analyzed for conformance with the instructions and requirements of the RFP and contract documents. SEPTA reserves the right to request a Proposer to provide any missing information and/or to clarify any ambiguous or unclear matter.

The Technical Evaluation Committee will present its results to a Selection Committee composed of SEPTA executive staff members selected by the General Manager. The Price Proposals will not be opened until the Technical Evaluation Committee has concluded its technical evaluation of the Proposals and presented its results to the Selection Committee. The Technical Evaluation Committee will open the Price Proposals and brief the Selection Committee on their technical ratings and the original price proposal. The Selection Committee will determine which Proposals (if any) are within the competitive range as described in IP 11.2 (C), below. The Contract Administrator will make all decisions regarding the responsibility of Proposers. The Selection Committee in consultation with the Technical Evaluation Committee will also determine which
Proposers will be invited for further discussions and negotiations, as described in IP 11.2 (D), below, and the recommended contract awardee, (if any), as described in IP 11.3 Award, below.

B. If, after all Proposals have been evaluated, only one Proposal (both the Technical Proposal and Price Proposal) is determined to be acceptable without further discussion and/or negotiation, SEPTA may elect to award the Contract to that Proposer.

C. However, if no Proposal is deemed to be acceptable without discussion and/or negotiation, those Proposers who’s Proposals are determined by SEPTA to be within the competitive range will be contacted by SEPTA, in writing to formally schedule negotiations. Competitive range is determined by SEPTA and will be comprised of those Proposers who are determined to have a reasonable chance of being selected for award based on price as well as the technical evaluation factors. Proposers whose Proposals are determined by SEPTA not to be in the competitive range will be notified in writing. Notwithstanding the foregoing, SEPTA reserves the right to reject any and all Proposals, and to negotiate separately with any Proposer(s), if SEPTA determines that doing so would be in the best interests of SEPTA.

D. The Proposers whose Proposals are determined to be within the competitive range will be notified in writing. Each such Proposer may be invited to SEPTA’s offices to engage in negotiations and discussions of any facet of its Proposal.

E. No information, financial or otherwise, will be provided to any Proposer about any Proposals from other Proposers. Proposers will not be given a specific price or specific financial requirements which they must meet to gain further consideration, except that proposed prices may be considered too high with respect to the marketplace or unacceptable. Proposers will not be told of their ratings among the other Proposers.

F. After all negotiations and discussions have been completed, each of the Proposers within the competitive range with whom negotiations have been conducted will be afforded the opportunity to submit a BEST AND FINAL OFFER. The BAFO shall be each Proposer’s most favorable Price Proposal for the Technical Proposal and contractual terms which have been clarified and agreed upon during discussions and negotiations. The request for BAFOs will set forth the specific time and date for the submission of the BAFO. The BAFO will be evaluated by SEPTA based upon which BAFO represents the “best value” to SEPTA by providing a combination of both price/cost and technical evaluation factors which SEPTA determines is in the best interests of, and the most advantageous to SEPTA.

IP 11.3 Award

A. SEPTA will make an award, if any, only to a Proposer who has been determined by SEPTA to be responsible and fully responsive to the RFP requirements, taking into consideration technical evaluations, discussions and negotiations, if conducted, and the BAFO, and whose Proposal represents the “Best Value” to SEPTA by providing a combination of both price/cost and technical evaluation factors that SEPTA determines is in the best interests of and the most advantageous to SEPTA. As stated above in IP 11.1 (Evaluation Criteria), SEPTA may not necessarily make an award to the Proposer with the highest technical rating nor award to the Proposer with the lowest Price Proposal, if doing so would not be in the overall best interests of
SEPTA, taking all of the factors into account. SEPTA, in its discretion, may determine that a higher-rated Technical Proposer may not justify SEPTA’s expenditure of the additional cost of the higher-rated Technical Proposal as opposed to a lower-priced Proposal, or may determine that although a Proposal may be the lowest price, the technical benefits of a higher-priced Proposal may be more advantageous to SEPTA, thus justifying the award to a higher-priced Proposal. As Proposals become more technically equivalent, price becomes more important, and conversely, as the price becomes more equivalent, the Technical Proposal becomes more important.

B. The Selection Committee will make a recommendation to SEPTA’s Board of the Proposer who should receive the award of the Contract.

**IP 12 SEPTA Bid/Proposal Protest Procedure**

Proposal protests relative to this procurement will be reviewed and adjudicated by SEPTA in accordance with SEPTA Bid/Proposal Protest Procedure. See Appendix 4 – SEPTA Protest Procedures in RFP Section 11 – Appendices.

(End of Section)
SECTION 3

CONTRACT AND GENERAL CONDITIONS
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SECTION 3: CONTRACT AND GENERAL CONDITIONS

GC 1. Contract
The Contract, entered into the _____ day of __________, 20 _____, by and between the Southeastern Pennsylvania Transportation Authority (hereinafter called "SEPTA"), a body corporate and politic exercising the powers of the Commonwealth of Pennsylvania, as an agency and instrumentality thereof, with offices located at 1234 Market Street, Philadelphia, Pennsylvania, and ________________, (hereinafter called "Contractor"), a ______________ organized under the laws of ________________ with principal offices located at ___________________.

NOW, THEREFORE, in consideration of the mutual covenants herein contained, the parties hereto, intending to be legally bound hereby, agree as follows:

GC 1.1 Definitions
The following are definitions of special terms used in this document.

Best and Final Offer (BAFO) - The Cost Proposal made by a Proposer after negotiations are finished.


Contract Administrator - The SEPTA person who has contract administrative responsibilities for the Contract.

Contractor - The successful Proposer who is awarded a Contract for providing all buses, services and equipment described in the contract documents.

Defect - Patent or latent malfunction or failure in manufacture, installation, or design of any component or subsystem.

Due Date - The date and time by which proposals must be received by SEPTA as specified in "Instructions to Proposers".

Proposal - A written plan, if accepted, to deliver equipment and services according to the underlying Request for Proposals (RFP) of SEPTA documented using the prescribed form in the RFP, including any proposal or Best and Final Offer.

Proposer - The name or designation under which a company transacts business.

Procurement - A formal solicitation for goods, rolling stock or work.

Project Manager - The SEPTA person who is responsible for technical management of the project and is the main interface between the Contractor and SEPTA.

Related Defect - Damage inflicted on any component or subsystem as a direct result of a separate Defect.

SEPTA - The Southeastern Pennsylvania Transportation Authority.

Solicitation - A formal request to an Offeror for a bid, request for qualification or a proposal (RFP).
Supplier or Subcontractor - Any manufacturer, company, or agency providing units, components, or subassemblies for inclusion in the Bus. Supplier items shall require qualification by type and acceptance tests in accordance with requirements defined in Section 8 - Quality Assurance Provisions.

Work - Any and all labor, supervision, services, materials, machinery, equipment, tools, supplies, and facilities called for by the Contract and necessary to the completion thereof.

**GC 2. Contract and Modifications**

**GC 2.1 Contract Award and Execution**
Contractor shall furnish, and if required by the Specifications install, the Material and/or Equipment described in the Specifications that are attached hereto and made a part of the Contract.

SEPTA shall pay to the Contractor, in consideration for furnishing the Material and/or Equipment in conformity with the Specification, the Firm Fixed Price(s) as set forth in the Price Proposal, attached hereto and made a part hereof as Appendix 2 – Price Proposal, in a total amount not to exceed $____________________, (hereinafter called "Contract Sum").

**GC 2.2 The Contract**
The Contract Documents form the Contract and represent the entire and integrated Contract between the parties and, except for substantial representations made by the Contractor upon which SEPTA was entitled to rely in making the decision to award the Contract to the Contractor, supersede all prior negotiations, representations, or Contracts, either written or oral. The Contract Documents which form the Contract consist of Sections 3 through 9, and Section 11.

**GC 2.3 Order of Precedence**
In the event of any conflicts among the Contract Documents, the Sections and requirements of the document which appears earliest in the listing shall govern.

1. Contract (Section 3 – Contract and General Conditions), including any amendment, modification or change order to the Contract mutually agreed to in writing and signed by proper officials of both parties;
2. Section 4 – Special Provisions;
3. Technical Specifications (Sections 6A, 6B);
4. Technical Proposal and any drawings;
5. Appendix 2 - Best and Final Offer (BAFO)

**GC 2.4 Responsibility for Those Performing Work**
The Contractor agrees that all personnel used in performance of the Contract shall be considered employees of the Contractor or its Subcontractors and in no event shall any of the personnel employed in the performance of the Contract be considered employees of SEPTA.
GC 2.5 Project Coordination
Contractor shall cooperate with SEPTA's Project Representatives, namely the Manager of Engineering - Buses of SEPTA, or his/her representative(s) designated in writing (hereinafter called "Project Manager"), who shall be responsible for technical direction provided by SEPTA, and the Contract Administrator of SEPTA, or his/her representative(s) designated in writing (hereinafter called "Contract Administrator"), who shall be responsible for the administration of the Contract on SEPTA's behalf.

GC 2.6 Contract Standard
The Specifications and Technical Proposal, including any addenda and modifications issued thereto, shall provide the standard for determining whether the Material and/or Equipment meets the Contract requirements.

Viewed individually and as a finished product, all material, components and parts installed in or on the Buses during its manufacture shall be newly made of the current model year under standard production by the manufacturer. Used, reconditioned or obsolete parts or components are not to be used in the assembly of the Buses or to be installed in or on it under any circumstances. Components or parts damaged prior to or during delivery are not acceptable and shall be replaced at the Contractor’s own expense with a new component or part. The Buses and all its components and parts shall be designed to permit ready accessibility for maintenance purposes with minimal disturbances of other components or parts. The term “heavy duty” where used in the Specification to describe a part or component shall be defined to mean “in excess of the usual or normal quantity, quality, or capacity that is supplied or manufactured.”

GC 2.7 Time of Performance
Contractor shall commence performance under the Contract within five (5) days of receipt of SEPTA's Notice to Proceed and shall fully complete performance of the Contract within the times specified in Appendix 2 – Price Proposal. All time limits contained in the Contract Documents are of the essence.

GC 2.8 Changes
Any proposed change in this Contract shall be submitted to SEPTA in writing for its prior approval. Oral Change Orders are NOT permitted.

GC 2.9 Change Orders
SEPTA, without invalidating the Contract, may order changes within the general scope of the Contract consisting of additions, deletions, or other revisions, with the Firm Fixed Price(s) set forth in Appendix 2 and the Contract time of performance being adjusted accordingly. All such changes shall be authorized by written change order issued by the Contract Administrator and shall be executed under the applicable conditions of the Contract Documents.

It is understood and agreed that refinement or detailing will be accomplished from time to time with respect to the Specifications. No adjustments in the Firm Fixed Price(s) set forth in Appendix 2 or the Contract time shall be made unless such refinement or detailing results in changes in the scope, quality, function and/or intent of the Specifications not reasonably inferable or foreseeable by the Contractor.
GC 2.9.1 Written Change Orders

Definitions
1. A "Change Order" is a written order to the Contractor, signed by the Contract Administrator, issued in accordance with SEPTA's standard procedures and, authorized either by its General Manager or by its Board, as appropriate, after the execution of the Contract, which makes a change in the Work or an adjustment in the Contract Sum or the Contract time. A Change Order shall also be signed by the Contractor if it agrees to the adjustment in the Contract Sum or the Contract time. The Contract Sum and the Contract time may be changed only by Change Order. A sample copy of the Change Order form that will be utilized by SEPTA is attached to this Contract.

2. "Material", as used in this Paragraph GC 2.9, means an item or items provided by:
   a. a factory or established facility that produces on its premises the item(s) obtained by the Contractor; or
   b. a firm that owns, operates, or maintains a store, warehouse, or other established facility in which the item(s) required for the performance of the Contract is brought, kept in stock, and regularly sold to the public in the usual course of business.

3. "Subcontractor", as used in this Paragraph GC 2.9, means a firm providing labor or services necessary to complete a distinct element of the work. The labor or services provided must be substantiated on the basis of direct labor hours at specified fixed hourly rates.

4. "Equipment", as used in this Paragraph GC 2.9, means apparatus used by the Contractor or a Subcontractor to complete a distinct element of the work.

GC 2.9.2 Change Order Procedure
As soon as reasonably possible but no later than 30 (thirty) calendar days after receipt of the written Contract Change Order Forms to modify the Contract, the Contractor shall submit to the Contract Administrator a detailed price and schedule proposal for the work to be performed. This proposal shall be accepted or modified by negotiations between the Contractor and SEPTA. At that time a detailed modification shall be executed in writing by both parties. Disagreements that cannot be resolved with negotiations shall be resolved in accordance with the Contract disputes clause. Regardless of any disputes, the Contractor shall proceed with the work ordered.

GC 2.9.3 Changes and Amendments to the Contract
No Change Order or amendment to the Contract shall be binding unless executed in writing by SEPTA, in a form approved by SEPTA and concurred in by the appropriate governmental funding agencies, if required. SEPTA will obtain all required concurrences from governmental funding agencies.

All Change Orders or amendments to the Contract by SEPTA shall be transmitted to the Contractor through the Contract Administrator.

The provisions of the Contract relating generally to the Material and/or Equipment and its installation and performance shall apply without exception to any Material and/or Equipment, authorized by Change Order and to the installation and performance thereof, except as may be otherwise provided by written agreement between the Contractor and SEPTA.
GC 2.9.4 Price Adjustment for Contract Changes
If price adjustment is indicated, either upward or downward, it shall be negotiated between SEPTA and the Contractor, including changes that are mandatory as a result of legislation or regulations that are promulgated and become effective after the Due Date. Such price adjustment may be audited, where required.

GC 2.9.4.1 Determination of Cost/Credit
The cost or credit to SEPTA resulting from a change in the Material and/or Equipment shall be determined in one or more of the following ways:

1. Unit Prices
   a. If changes in the Material and/or Equipment are ordered by SEPTA and such Change Order calls for the deletion or addition of items of Material and/or Equipment and/or installation thereof of the same type as those for which unit prices have been stated in the Contract Documents or subsequently agreed upon, the amount to be paid or credited shall be computed on the basis of such unit prices.
   b. If unit prices are stated in the Contract Documents or are subsequently agreed upon, and if the quantities of changed Material and/or Equipment proposed will create a hardship on SEPTA or the Contractor, the applicable unit prices shall be equitably adjusted to prevent such hardship.
   c. Where in the sole opinion of SEPTA the application of unit prices would not be appropriate, the cost or credit to SEPTA shall be determined under the terms and conditions set forth in either item 2 or 3 in GC 2.9.4.1 as determined appropriate by SEPTA.

2. Fixed Price Lump Sum Amount
Where SEPTA determines that the scope and extent of the change can be defined before the changed work is performed, and compensation is not computed on the basis of unit prices as set forth in GC 2.9.4.1 above, SEPTA may negotiate, based on direct and indirect cost elements, a fixed price lump sum amount with the Contractor as compensation for such work. The Contractor's price for changed Material and/or Equipment shall follow the guidelines set forth below:

   a. Labor
      (1) Actual Wages - base hourly rate for all levels but excluding premium pay paid to all employees directly engaged in the changed work.
      (2) Labor Burden - to be established as a percent of actual wages paid pursuant to contractual obligation or corporate policy and shall include: Vacation Allowance, Health and Welfare, Pension, Apprenticeship Programs and other programs as required for each craft, Social Security, Unemployment Insurance and Worker's Compensation Insurance.
      (3) Premium Time - Actual premium costs paid, plus paid social security taxes, unemployment insurance, workers' compensation insurance, and fringe benefits if required by contractual obligation or corporate policy.
(4) **Overhead** - In addition to Labor Burden, overhead could include additional indirect costs associated with manufacture and assembly. Any and all overhead will be subject to review and approval by SEPTA. In addition, overhead cost elements will be limited to GC 2.9.4.3 – Allowability and Allocability of Costs.

(5) **Profit** - Maximum ten (10) percent of the sum of subparagraphs (1), (2), (3) and (4) above. The negotiated Profit will be based on risk.

b. **Material**

(1) All materials incorporated into the final product of the Material and/or Equipment at the Contractor's net cost. Expendable materials, e.g., small tools and welding supplies, and reusable materials are not eligible for direct reimbursement, but are included in item 2.a. above.

(2) Actual freight and transportation costs of materials used.

(3) Material Overhead (if applicable) – Any and all overhead costs will be subject to review and approval by SEPTA. In addition, overhead cost limited to GC 2.9.4.3 – Allowability and Allocability of Costs.

(4) Profit: A negotiated maximum of four (4%) percent profit on items (1), (2) and (3), above.

c. **Subcontractor Cost**

(1) Subcontractor Cost - Shall be quoted in the manner prescribed above for the Contractor.

(2) Contractor's Overhead and Profit on Subcontractor Work - maximum five (5%) percent (combined overhead and profit) of the net amount of Subcontractor's cost of change.

3. **Time and Material**

Compensation for changed work on a time and material basis will be used only where SEPTA in its sole judgement determines that the scope and extent including cost of the work required cannot be readily determined or negotiated before the changed work is performed. Compensation due the Contractor for such changed work shall be determined by post audit of the Contractor's supporting documentation, priced in accordance with GC 2.9.4.1.(2) , above.

In the event SEPTA determines to compensate the Contractor for an item of changed work on a time and material basis, the Contractor shall, at the end of each day or at such other intervals as SEPTA shall direct in writing, furnish to SEPTA for such work, (a) daily time slips showing the name of each employee on such Material and/or Equipment, the number of hours which he or she was employed thereon, the character of his or her duties, and the wages paid to him or her, (b) a memorandum showing the rates and amounts of Workers' Compensation Insurance premiums and state and federal taxes based on such wages, (c) a memorandum showing vacation allowances, union dues and assessments and health, welfare, employment and retirement benefits which the employer actually pays pursuant to contractual obligation upon the basis of such wages, (d) a memorandum showing the amount and character of the materials furnished in the performance of the changed work, apparatus rented in connection therewith, from whom they were
purchased or rented, and the amount paid therefor, and (e) a memorandum detailing payments made to approved subcontractors (with copies of subcontractor invoices attached supported by backup detailed in items (a) through (d) of this paragraph). The failure of the Contractor to furnish time slips and memoranda with respect to any particular labor, equipment, materials, apparatus or subcontract in the timely manner as specified shall constitute a conclusive and binding determination on its part that such labor, equipment, materials, apparatus or subcontract work is not changed work, and shall constitute a waiver by the Contractor of its claim for payment based thereon.

**GC 2.9.4.2 Access**
Representatives of SEPTA shall have access during normal business hours to all records and documents of the Contractor relating to any labor, materials, apparatus, plant and equipment, and overhead, used in the performance of changed work, and the Contractor shall obtain for them similar access to the records and documents of its Suppliers and Subcontractors. Such access shall be given or obtained both before and after completion of the changed work.

**GC 2.9.4.3 Allowability and Allocability of Costs**
Wherever a determination of cost is to be made, and such determination is not otherwise limited by the foregoing guidelines, the provisions of Subpart 31.2 et seq. of the Federal Acquisition Regulations, shall be used to determine the allowability and allocability of such costs, except that (those regulations notwithstanding) state and local taxes on net income shall not be allowed.

**GC 2.9.4.4 Other Requirements**
In all cases, the costs and percentages detailed in this Section GC 2.9.4 will cover any and all costs and profit not specifically mentioned therein. The sum of these costs with the applicable percentages will be the only costs used to determine the Contract price increase or decrease.

**GC 2.9.4.5 Prior Notice Required as Express Condition for any Claims for Additional Cost**
If the Contractor wishes to make any claim for any increase in the Firm Fixed Price(s) set forth in Appendix 2, it must give the Project Manager, with a copy submitted to the Contract Administrator, written notice thereof within ten (10) days after the occurrence of the event giving rise to such claim or it shall not be entitled to any compensation therefor. This notice must be given by the Contractor before proceeding to execute any of the changed work, except in an emergency endangering life or property, in which case the Contractor shall act to prevent threatened damage, injury or loss, providing that SEPTA is notified at the earliest opportunity. No claim for any increase in the Firm Fixed Price(s) set forth in Appendix 2 shall be valid unless so made. To be considered for any additional money such claim must set forth the factual basis of the claim in sufficient detail for the party receiving it to know and understand, the nature, amount and extent of the claim and the event or events and fact or facts upon which the claim is based. The parties hereto agree that in the event of such claim or claims that they shall not proceed to litigation without first giving such notice and making reasonable efforts thereafter to resolve the claim or claims without the necessity of seeking recourse in the courts. The Contractor expressly agrees that it shall not make any claim, nor be entitled to any additional cost, against SEPTA resulting from the actions of any Subcontractor or other and separate contractors on the Project, it being clearly understood that the Contractor's sole avenue of recovery is against such Subcontractor or other and separate contractors on the Project.

Contractor agrees that failure to comply with the above, may result in waiver of its right, if any, to additional compensation.
GC 3. Parties and Changes in Parties

GC 3.1 Parties
The parties to the contract are SEPTA as defined in “Definitions”, GC 1.1 and the Contractor as set out in the accepted Proposal.

GC 3.2 Succession
The Contract will be binding on the parties, their successors, and assigns.

GC 3.3 Assignment and Subcontracting

GC 3.3.1 Assignment of Rights: Delegation of Duties
A. Contractor shall not sell, assign, transfer, or dispose of any interest in the Contract without the prior written consent of SEPTA thereto. SEPTA shall not be obligated to give such consent.

B. Contractor shall not delegate any duty to be performed under the Contract without prior written consent of SEPTA thereto. SEPTA shall not be obligated to give such consent.

C. Any attempt by Contractor to make such assignment or delegation prior to obtaining SEPTA’s written consent shall give SEPTA the right to terminate the Contract with no further obligation to Contractor or anyone to whom the Contractor has attempted to assign, transfer, or delegate rights or obligations under the Contract.

GC 3.3.2 Subcontracts
Definition
1. A Subcontractor is an individual or organization who enters into a Contract with the Contractor to furnish labor or materials or apparatus in connection with the Material and/or Equipment directly or indirectly for or on behalf of the Contractor and whether or not in privity of Contract with the Contractor.

The term “Subcontractor” is referred to throughout the Contract documents as if singular in number and neutral in gender and means a Subcontractor or its authorized representative.

2. Nothing contained in the Contract Documents shall create any contractual relationship between SEPTA and any Subcontractor.

Award of Subcontracts
1. Any new or additional or substituted Subcontractor proposed to be used by Contractor after the award shall be subject to SEPTA’s prior written approval. No increase in the Firm Fixed Price(s) set forth in Appendix 2 shall be allowed for any such substitution, however, SEPTA reserves the right to request a reduction in the Contract Sum for approving any requested substitution.

2. The Contractor shall not make any substitution for any Subcontractor or for any person or for any organization which has been previously accepted by SEPTA as part of the Contract unless and until requested to do so by SEPTA and/or unless such substitution is expressly approved by SEPTA in writing.

3. Within ten (10) days of receipt of written request from the Project Manager the Contractor shall furnish to SEPTA copies of all contracts between Contractor and any Subcontractor for the Material and/or Equipment.
Subcontractor Relations
The Contractor shall deal with each Subcontractor according to the terms and conditions of a written agreement between the Contractor and such Subcontractor. Said written agreement shall not be inconsistent with any term or condition of the Contract, shall include all terms and conditions required by the Contract and shall in every respect protect SEPTA’s interests in the work and conduct thereof.

In the absence of good and sufficient reasons, within twenty (20) days of the receipt of payment from SEPTA by the Contractor, the Contractor shall pay each Subcontractor with whom it has contracted, their earned share of the payment the Contractor received.

In addition, the Contractor shall pay its Subcontractors any retainage the Contractor has withheld from its Subcontractors within twenty (20) days after a Subcontractor’s work is satisfactorily completed.

With regard to any claim or dispute with respect to payment of a Subcontractor or Supplier at any tier, Contractor expressly agrees to defend, indemnify and hold SEPTA, its officers, agents, servants, and employees harmless in the event any suit is brought on account of a dispute between any of the parties including but not limited to Subcontractors, Suppliers and material men and in particular, the Contractor shall assume the defense affirmatively at its sole cost whenever such suit is brought in any jurisdiction.

GC 4. Specification and Proposal Omissions
Notwithstanding the provision of drawings, technical specifications, or other data by SEPTA, the Contractor shall have the responsibility of supplying all parts and details required to make the Material and/or Equipment complete and ready for service even though such parts and details may not be specifically mentioned in the drawings and specifications. Items that are installed by SEPTA shall not be the responsibility of the Contractor.

GC 4.1 Termination of Contract

GC 4.1.1 Termination For Convenience
SEPTA shall have the right to terminate the Contract, in whole or in part, at any time by written notice to the Contractor. The Contractor shall be paid all reasonable costs as determined by SEPTA in accordance with 48 CFR Subpart 31.2, that specifies the special treatment of certain costs under Subpart 31.2, Section 31.205-42, “Termination Costs.”

Such costs will include contract work performed up to the date of termination; any actual costs associated with termination for convenience, as agreed to by SEPTA; and profit on Work performed up to the time of termination. Furthermore, SEPTA will not pay any anticipatory profits and/or consequential damages claimed by the Contractor as a result of termination of the Contract. The amount of profit paid shall be determined by the parties based on the risk of the amount of actual work completed. The Contractor shall submit promptly its termination claim to SEPTA and SEPTA shall determine the settlement amount to be paid the Contractor. If the Contractor has any property in its possession belonging to SEPTA, the Contractor shall account for same and dispose of it in the manner SEPTA directs.

GC 4.1.2 Termination For Cause
A. If Contractor fails to remedy or fails to submit a plan to remedy to SEPTA's satisfaction the breach or default of any of the terms, covenants, or conditions of the Contract within ten (10) days after receipt by Contractor of written notice from SEPTA setting forth the nature of said breach or default and/or if the Contractor is suspended or debarred by any federal agency or by the Commonwealth of Pennsylvania, SEPTA shall have the right to terminate the Contract without any further
obligation to Contractor. Any such termination for cause shall not in any way operate to preclude
SEPTA from also pursuing all available remedies against Contractor and its sureties for said breach
or default.

B. In the event that SEPTA elects to waive its remedies for any breach by Contractor of any covenant,
term or condition of the Contract, such waiver by SEPTA shall not limit SEPTA's remedies for any
succeeding breach of that or of any other term, covenant, or condition of the Contract.

C. In the event that it is ultimately determined by SEPTA that the Contractor was not in default or that
the failure to perform arose out of causes beyond the control and without fault of the Contractor,
the termination shall be treated as one of convenience and the Contractor's sole rights and exclusive
remedies shall be those set forth in GC 4.1.1, above.

GC 4.2 Disputes
In General - The parties to this Contract hereby authorize and agree that the resolution of all disputes,
including claims arising under GC 2.9, under this Contract shall be resolved in accordance with this GC
4.2. Contractor and SEPTA agree that participation in each preceding step is a condition precedent to
SEPTA’s or Contractor’s right to pursue any and all unresolved disputes to the next step of the dispute
resolution process.

SEPTA and Contractor agree that all requests for additional compensation or an extension of time claims
shall, in the first instance, be submitted in accordance with GC 2.9. If any such additional compensation
or time extension claims have not been resolved by written agreement of SEPTA and Contractor within
ninety (90) days of submission, such claim may be considered a dispute subject to the dispute resolution
process outlined in distinct steps below; provided, however, that SEPTA may extend such ninety (90) day
period by an additional period of time not to exceed thirty (30) days by giving Contractor written notice of
such extension.

4.2.1: Step 1 – Project Staff Level. SEPTA’s Director of Contract Administration or his designee and an
authorized representative of Contractor shall attempt to resolve the dispute. Any resolution of the dispute
must be pursuant to a written agreement signed by both Parties and if applicable, incorporated into a Change
Order. If SEPTA’s Director of Contract Administration or his designee and an authorized representative
of Contractor cannot reach written agreement within thirty (30) days, then the Parties shall proceed to Step
2 of the dispute resolution process.

4.2.2: Step 2 – Dispute Resolution Board. Any dispute that has not been resolved at the Project Staff
Level explained in 4.2.1 above shall be subject to binding arbitration by the Dispute Resolution Board. The
Dispute Resolution Board (“Dispute Resolution Board”) will consist of three (3) members, (i) an authorized
representative of SEPTA’s Senior Director, Procurement and Supply Chain Management, (ii) an authorized
representative of the Contractor, and (iii) an independent representative (“Independent Representative”).
SEPTA and Contractor shall each propose three (3) names of persons to act as the Independent
Representative to create a list of six (6) names. SEPTA’s authorized representative on the Dispute
Resolution Board and Contractor’s authorized representative on the Dispute Resolution Board shall agree
upon the Independent Representative from the list of six (6) names. Should the Parties fail to agree on the
Independent Representative, SEPTA’s Senior Director of Supply Chain Management will make the final
selection. The costs for the services of the Dispute Resolution Board will be shared equally by SEPTA and
the Contractor.

All disputes subject to resolution by the Dispute Resolution Board shall be initiated through a written notice
by each Party to the Independent Representative, with copies to SEPTA’s Senior Director of Procurement
and Supply Chain Management and the authorized representative of the Contractor, within fifteen (15) days
of the expiration of the thirty (30) day period provided in 4.2.1 above. Such notice shall state clearly and in full detail the specific issues of the dispute to be considered by the Dispute Resolution Board.

4.2.3: Within thirty (30) days after the submission of such notice, the Party initiating the dispute resolution process must provide the Independent Representative for distribution to the Dispute Resolution Board with all materials and other pertinent information in support of the Party's position or claim. Within thirty (30) days from the date of the written notice, the Party against whom the dispute was filed shall submit any and all materials and other pertinent information to the Independent Representative for distribution to the Dispute Resolution Board. The Independent Representative shall have the discretion to extend the time for submittals required hereunder.

4.2.4: The Dispute Resolution Board shall decide when to conduct a hearing and shall advise the Parties of the date, time and location for such hearing. During the hearing, the Contractor and SEPTA shall each have reasonable opportunity to be heard and to offer evidence. The Dispute Resolution Board upon notice to the Parties may seek such technical or other expertise as the Dispute Resolution Board shall deem necessary or appropriate and may seek any such additional oral or written argument or materials from either or both Parties as it deems fit. If so requested by any Party, the Dispute Resolution Board shall permit any Subcontractor whose Work is at issue to participate in the hearing.

4.2.5: The Dispute Resolution Board’s resolution of the dispute will be given in writing, to both SEPTA and the Contractor, within fourteen (14) days of completion of the hearing. In exceptionally difficult cases, this time may be extended by mutual agreement of all parties. If requested by either party, the Dispute Resolution Board shall meet with SEPTA and Contractor to provide additional clarification of its determination. The determination rendered by the Dispute Resolution Board shall be final, conclusive and binding, and judgment upon the determination may be entered in any court having jurisdiction thereof.

4.2.6: Within fourteen (14) days of receiving the Dispute Resolution Board’s recommendations, or such other time as the SEPTA and Contractor may agree in writing, SEPTA and Contractor shall promptly process and execute any resulting Change Order.

4.2.7: Performance During Disputes - Unless otherwise directed by SEPTA in writing, Contractor shall continue its performance under this Contract while the matter in dispute is being resolved. If the Contractor fails or refuses to perform as directed, such action shall constitute an Event of Default hereunder.

**GC 4.3 Communications**

Communications in connection with this Contract shall be in writing and shall be delivered personally; or by facsimile; or by regular, registered, or certified mail addressed to the officer(s) or employee(s) of SEPTA and of the Contractor designated to receive such communications. Telephone calls may be used to expedite communications but shall not be official communication unless confirmed in writing.

Electronic [serially numbered letter] mail shall be an acceptable form of communication for this Contract; all [serially numbered letter] E-mail transmittals must be followed by the signed paper document(s) -- with attachment(s), if any, as described therein -- in order to qualify as bona fide official communication between Contractor and SEPTA.

**GC 4.3.1 Notices**

All notices given by either party to the other shall be effective only if given in writing and sent to the following addresses of the parties, or to such other addresses as may be designated by the parties in writing. Notice shall be effective upon receipt.
TO SEPTA:

Senior Director of Procurement - Procurement & Supply Chain Mgt. Dept.
Southeastern Pennsylvania Transportation Authority
1234 Market Street, 11th Floor
Philadelphia, Pennsylvania 19107-3780

TO CONTRACTOR:
Title: ________________________________________________
Company: _____________________________________________
Address: ______________________________________________

GC 5. Delivery and Title

GC 5.1 Deliveries

GC 5.1.1 Bus Delivery Procedure
Delivery of the Buses shall be determined by signed receipt of SEPTA's designated agent(s), at the following point of delivery and may be preceded by a delivery acceptance inspection of the bus at the final assembly plant. Reference GC 5.1.3 – Pre-Delivery Test and Inspections.

SEPTA
Germantown Brake Center
6725 Germantown Avenue
Philadelphia, PA 19119
Telephone: 215-580-6981

Or alternative location as determined by SEPTA.

GC 5.1.2 Delivery Schedule
Delivery shall be as required in SP-1 and Schedule A.

All the Buses are to be delivered in first class condition, complete, ready for operation or use, and in conformity with the Specifications and other terms and conditions of the Contract, with the exterior washed, the interior free of litter, and with fuel equaling at least two-thirds (2/3) of the total fuel capacity of each unit, if applicable. Contractor's delivery drivers must report to SEPTA any and all vehicle related incidents which occurred en route.

SEPTA shall accept up to ten (10) buses per week. Any deliveries greater than ten (10) per week shall require approval by the SEPTA project manager.

Delivery of Buses to SEPTA shall occur between the hours of 6:00 A.M. and 2:30 P.M. Monday through Friday, except for legal holidays. All drivers delivering Buses on behalf of the Contractor must be informed of these hours and notified that SEPTA will not accept after hour delivery. If the Contractor is late with delivery of the Buses, SEPTA may allow delivery on Saturday between the hours of 10:00 A.M. and 3:00 P.M. provided written notice from Contractor of said delivery is given to and accepted by SEPTA at least forty-eight (48) hours prior to the scheduled delivery time and date.
GC 5.1.3 Pre-Delivery Tests and Inspections

The pre-delivery tests and inspections shall be performed at or near the Contractor's plant; they shall be performed in accordance with the procedures defined in Section 8 - Quality Assurance and they may be witnessed by the SEPTA’s resident inspector. When the Bus passes these tests and inspections, the resident inspector shall authorize release of the Bus.

Inspection

A. Definition. "Material and/or Equipment," as used in this paragraph, GC 5.1.3 – Pre-Delivery Test and Inspections,. includes but is not limited to raw materials, components, intermediate assemblies, end products, and lots of supplies.

B. The Contractor shall provide and maintain an inspection system acceptable to SEPTA covering Material and/or Equipment under the Contract and shall tender to SEPTA for acceptance only Material and/or Equipment that has been inspected in accordance with the inspection system and has been found by the Contractor to be in conformity with Contract requirements. As part of the system, the Contractor shall prepare records evidencing all inspections made under the system and the outcome. These records shall be kept complete and made available to SEPTA during Contract performance and for as long afterwards as the Contract requires. SEPTA may perform reviews and evaluations as reasonably necessary to ascertain compliance with this paragraph. These reviews and evaluations shall be conducted in a manner that will not unduly delay the Contract work. The right of review, whether exercised or not, does not relieve the Contractor of its obligations under the Contract.

C. SEPTA has the right to inspect and test all Material and/or Equipment called for by the Contract, to the extent practicable, at all places and times, including the period of manufacture, and in any event before acceptance. SEPTA shall perform inspections and tests in a manner that will not unduly delay the work. SEPTA assumes no contractual obligation to perform any inspection and test for the benefit of the Contractor unless specifically set forth elsewhere in the Contract.

D. If SEPTA performs inspection or tests on the premises of the Contractor or a subcontractor, the Contractor shall furnish, and shall require subcontractors to furnish, without additional charge all reasonable facilities and assistance for the safe and convenient performance of these duties. Except as otherwise provided in the Contract, SEPTA shall bear the expense of SEPTA inspections or tests made at other than the Contractor's or subcontractor's premises; provided that in case of rejection, SEPTA shall not be liable for any reduction in the value of the inspected equipment or test samples.

E. 1. When Material and/or Equipment is not ready at the time specified by the Contractor for inspection or test, SEPTA may charge the Contractor for the additional cost of inspection or test.

2. SEPTA may also charge the Contractor for any additional cost of inspection or test when prior rejection makes reinspection or retest necessary.

F. SEPTA has the right either to reject or to require correction of nonconforming Material and/or Equipment. Material and/or Equipment is nonconforming when it is defective in material or workmanship or is otherwise not in conformity with Contract
requirements. SEPTA may reject nonconforming Material and/or Equipment with or without disposition instructions.

G. The Contractor shall remove Material and/or Equipment rejected or required to be corrected. However, SEPTA may require or permit correction in place, promptly after notice, by and at the expense of the Contractor. The Contractor shall not tender for acceptance corrected or rejected Material and/or Equipment without disclosing the former rejection or requirement for correction, and, when required, shall disclose the corrective action taken.

H. If the Contractor fails to promptly remove, replace, or correct rejected Material and/or Equipment that is required to be removed or to be replaced or corrected, SEPTA may either (1) by contract or otherwise, remove, replace, or correct the Material and/or Equipment and charge the cost to the Contractor or (2) terminate the Contract for default. Unless the Contractor corrects or replaces the Material and/or Equipment within the Contract specified delivery schedule, SEPTA may require delivery of Material and/or Equipment in accordance with a reasonable delivery schedule as determined by SEPTA and make an equitable price reduction in accordance with GC 2.9 – Change Orders.

I. 1. If the Contract provides for the performance of SEPTA quality assurance at source, and if requested by SEPTA, the Contractor shall furnish advance notification of the time (i) when Contractor inspection or tests will be performed in accordance with the terms and conditions of the Contract and (ii) when the Material and/or Equipment will be ready for SEPTA inspection.

2. SEPTA's request shall specify the period and method of the advance notification and SEPTA representative to whom it shall be furnished. Requests shall not require more than two (2) workdays of advance notification if a SEPTA representative is in residence in the Contractor's plant, nor more than seven (7) workdays in other instances.

J. SEPTA shall accept or reject, in writing, Material and/or Equipment as promptly as practicable after delivery, unless otherwise provided in the Contract. SEPTA's failure to inspect and accept or reject the Material and/or Equipment shall not relieve the Contractor from responsibility, nor impose liability on SEPTA for nonconforming Material and/or Equipment.

K. Inspections and tests by SEPTA do not relieve the Contractor of responsibility for defects or other failures to meet Contract requirements discovered before acceptance. Acceptance shall be conclusive, except for latent defects, fraud, gross mistakes amounting to fraud, or as otherwise provided in the Contract.

L. If acceptance is not conclusive for any of the reasons in Paragraph K. above, SEPTA, in addition to any other rights and remedies provided by law, or under other provisions of the Contract, shall have the right to require the Contractor (1) at no increase in Contract Price, to correct or replace the defective or nonconforming Material and/or Equipment at the original point of delivery or at the Contractor's plant at SEPTA's election, and in accordance with a reasonable delivery schedule as may be agreed upon between the Contractor and SEPTA; provided, that SEPTA may require a reduction in contract price if the Contractor fails to meet such delivery schedule, or (2) within a
reasonable time after receipt by the Contractor of notice of defects or nonconformance, to repay such portion of the Contract as is equitable under the circumstances if the Contract Administrator elects not to require correction or replacement. When Material and/or Equipment is returned to the Contractor, the Contractor shall bear the transportation cost from the original point of delivery to the Contractor's plant and return to the original point when that point is not the Contractor's plant. If the Contractor fails to perform or act as required in (1) or (2) above and does not cure such failure within a period of ten (10) days (or such longer period as SEPTA may authorize in writing) after receipt of notice from SEPTA specifying such failure, SEPTA shall have the right by contract or otherwise to replace or correct such Material and/or Equipment and charge to the Contractor the cost occasioned SEPTA thereby.

GC 5.1.4 Assumption of Risk of Loss
All risk of loss or damage to the Material and/or Equipment or any part thereof, prior to proper delivery to SEPTA and final written acceptance thereof by SEPTA shall be borne by Contractor. Contractor shall pay all transportation costs to the designated delivery site and shall provide and pay for all insurance as outlined in GC 11.1 "Insurance", of the Contract.

If a Bus is found to be damaged or defective upon delivery or the release of the vehicle was not approved by the SEPTA's in-plant inspectors, SEPTA reserves the right to reject the Bus upon delivery and have it removed from its property by the Contractor at the Contractor's expense. If the vehicle is rejected and the Contractor's delivery driver has left SEPTA property, SEPTA shall place the Bus on the nearest side street with parking available and immediately advise the Contractor as to the location of the Bus. SEPTA shall have no liability for any damage, including vandalism, resulting from such a rejection.

Any loss or damage to the Material and/or Equipment prior to delivery to SEPTA and final written acceptance thereof by SEPTA shall be made good by Contractor at its own cost and the performance of the Contract shall be carried forward in accordance with its terms and conditions at no additional cost to SEPTA. SEPTA may, however, grant reasonable extensions to the completion date where loss or damage is not the result of the negligence of Contractor, its employees or agents.

GC 5.1.5 Acceptance of Bus
Within fifteen (15) calendar days after arrival at the designated point of delivery, each Bus shall undergo tests by SEPTA as defined in the Section 8 – Quality Assurance. If a Bus passes these tests, the Bus shall receive final written acceptance by SEPTA on the fifteenth calendar day after delivery, except that SEPTA reserves the right to accept the Bus earlier than the fifteenth calendar day after delivery if SEPTA notifies the Contractor in writing of early acceptance or places the Bus in revenue service.

If a Bus fails these tests, SEPTA shall notify the Contractor that the Bus shall not be accepted until the repair procedures defined in GC 6 – Repairs After Non-Acceptance have been carried out and the Bus has been re-tested and subsequently passes all required tests to SEPTA’s satisfaction.

GC 6. Repairs After Non-Acceptance
In the event that SEPTA does not accept a Bus, SEPTA may require the Contractor to perform required repairs after non-acceptance, or SEPTA may, at its sole option, perform required repairs using personnel employed by SEPTA. In either case, the Contractor shall be liable to SEPTA for all costs associated with the required repairs.
GC 6.1 Repairs By Contractor
If SEPTA requires the Contractor to perform repairs after non-acceptance of the Bus, the Contractor must begin work within seven (7) calendar days after receiving notification from SEPTA of the Bus having failed to pass the acceptance tests. SEPTA shall make the coach available to the Contractor for completion of repairs.

Contractor shall provide, at its sole expense, all parts, tools, personnel and space required to complete the repairs. At SEPTA's sole option, Contractor may be required to remove the Bus from SEPTA property for repair work. Repair procedures must be diligently pursued by the Contractor, and Contractor shall continue to have all risk of loss until SEPTA's final written acceptance of the Bus. At its sole discretion, SEPTA may provide shop space to complete repairs, subject to availability.

GC 6.2 Repairs By SEPTA
Parts Used: If SEPTA decides to perform the repairs after non-acceptance of a Bus, it shall correct or repair the defect and any related defects using Contractor-specified parts available from SEPTA's own stock or parts supplied by the Contractor specifically for the repair. Monthly, or at a period to be mutually agreed upon, reports listing all repairs performed under this Paragraph, and the cost thereof, shall be submitted by SEPTA to the Contractor. The Contractor shall provide forms which are acceptable to SEPTA for making these reports.

If the Contractor supplies parts for repairs being performed by SEPTA after non-acceptance of a Bus, the parts shall be shipped prepaid to SEPTA from any source selected by the Contractor within five (5) working days after receipt of a written request from SEPTA for said parts.

Contractor may request that defective parts replaced under this provision be returned to the manufacturing plant. The total cost, including but not limited to packing and handling by SEPTA as well as all transportation charges, for returning said parts shall be paid by the Contractor.

SEPTA shall be reimbursed by the Contractor for the cost of parts in SEPTA's inventory consumed to correct or repair the defect or any related defect. The reimbursement shall include a part value percent handling cost per Section 7 – Warranty Requirements, WR 1.2.3.6 – Reimbursement for Parts.

Reimbursement for Labor: SEPTA shall be reimbursed by the Contractor for labor expended by SEPTA's personnel in performing repairs in accordance with this Paragraph. The amount shall be determined by multiplying the number of man-hours actually required to correct the defect by the per-hour rate (straight time) paid by SEPTA at the time of the repair work to the mechanic(s) actually performing the repair work, plus labor fringe rate and corporate overhead rate, plus the cost of towing the vehicle if such action was necessary. SEPTA shall not accept or consider parts credits as reimbursement for labor.

GC 7. Unavoidable Delays

GC 7.1 Delay In Completion Beyond Contractor’s Control
If Contractor shall be delayed in the completion and performance under the Contract by reason of unforeseeable causes beyond its control and without its contribution, neglect, fault, or negligence, including but not restricted to acts of God, acts of neglect of SEPTA, acts of neglect of the contractor’s primary subcontractors, fires, floods, epidemics, quarantines, strikes, or freight embargoes, the time herein specified for completion of Contract performance may be extended at the reasonable discretion of SEPTA, by such time as shall be fixed by SEPTA in writing. The Contractor shall not be entitled to any damages, compensation, or adjustment from SEPTA on account of any delay or delays, including delays in payment to Contractor, resulting from any of the aforesaid causes.
GC 7.2 Extension Of Time, Not Waiver Of Timely Performance
Any extension of time granted by SEPTA pursuant to GC 7.1 above shall operate only to mitigate Liquidated Damages contained in GC 7.3; no such extension of time shall be deemed a waiver by SEPTA of its right to terminate the Contract for delay by the Contractor, nor shall such extension relieve Contractor from full responsibility for performance of its obligations hereunder.

If the Contractor desires to apply for an extension of time pursuant to GC 7.1 above, Contractor shall notify SEPTA in writing and submit a Time Impact Analysis (TIA) within fourteen (14) days after becoming aware of the possibility of delay and any reasons for the delay and its estimated duration.

GC 7.3 Liquidated Damages
In the event that Buses to be furnished under the Contract are not furnished in accordance with the Specifications, properly adjusted, tested and ready for use by SEPTA as required by the Specifications, on the day herein fixed as the completion date, $51.04 per day per Bus shall be paid to SEPTA by Contractor, or shall be deducted from any amount due to the Contractor by SEPTA, as Liquidated Damages for every day or part thereof that the performance of the Contract shall remain uncompleted after the completion date for delivery of the Buses set forth in Appendix 2, as it may be modified by SEPTA in accordance with GC 7.1 - Delay in Completion Beyond Contractor's Control. All Liquidated Damages may be deducted from approved invoices at any time during the contract performance period. Liquidated Damages are limited to ten (10) percent of the total contract value.

In the event of delays, which are not subject to GC 7.1 - Delay in Completion Beyond Contractor's Control, in delivery of spare parts, performance of training or receipt of the Parts and Maintenance Manuals beyond the dates and schedule specified in the Contract Documents, SEPTA shall assess liquidated damages in the amount of $51.04 per calendar day per item or service not delivered or accomplished. An item is defined as a spare part or manual(s).

GC 7.4 Title
Contractor covenants and warrants that good title to all the Material and/or Equipment furnished under the Contract shall vest in SEPTA immediately upon acceptance by SEPTA of the Material and/or Equipment.

Adequate documents for securing title to each Bus in the Commonwealth of Pennsylvania shall be provided to SEPTA by Contractor at least fifteen (15) calendar days before each Bus is released to the common carrier driveway company.

GC 8. Payment
(A) SEPTA shall pay to Contractor the Contract Sum or a proportion thereof in accordance with GC 8, B. An invoice shall be approved by the Project Manager only after successful completion of acceptance testing in order to assure that the Equipment complies with the Specifications.

(B) If, under the terms of the Contract, Contractor is required to make more than one delivery of the Equipment, SEPTA shall pay Contractor, subject to written acceptance by SEPTA of each delivery, and installation if required by the Contract Documents, a proportionate share of the Contract Sum, due Contractor under the Contract, within thirty (30) days after written approval of an invoice by the responsible SEPTA manager. Contractor shall furnish SEPTA with a separate invoice for each lot of Equipment furnished, and installed if required by the Contract Documents, under the Contract. SEPTA shall, if it so elects, retain 10% of all such invoices for partial performance and shall release such retainage to Contractor at the time of final payment.
(C) SEPTA shall have the right, before paying any invoice, to require Contractor to furnish proof that all suppliers and workmen employed in connection with the performance of the Contract or any part thereof have been fully compensated by Contractor.

(D) SEPTA shall have the right to take advantage of any discounts offered by supplier for prompt payment, less retainage, of full invoiced amounts.

(E) An invoice shall be submitted to SEPTA’s designated Project Manager for each vehicle. Each invoice must include the following:
   - Invoice Number
   - SEPTA Purchase Order Number
   - Vehicle Identification Number (VIN)
   - SEPTA Fleet Number of Vehicle
   - Serial Number(s) of the Engine
   - Serial Number of Drive Unit
   - Cost of Optional Warranties
   - Total Invoice Amount

A Manufacturer Certificate of Origin for a Vehicle (MCO or COO) for each vehicle must be supplied to SEPTA by the Contractor at least fifteen (15) calendar days prior to shipment of a Bus.

SEPTA shall have the right, before paying any invoice, to require Contractor to furnish proof that all suppliers and workmen employed in connection with the performance of the Contract or any part thereof have been fully compensated by Contractor unless there are good and sufficient reasons, as determined by SEPTA in its sole discretion, such as the cases where the Contractor has negotiated payment schedules with Subcontractor that do not allow the Contractor to respect the preceding principle.

**GC 9. Service and Parts**

**GC 9.1 Engineer / Service Representatives**
The Contractor shall, at its own expense, have a competent engineering service representative(s) available on request to assist SEPTA staff in the solution of engineering or design problems within the scope of the Specifications that may arise during the warranty period. This does not relieve the Contractor of responsibilities under Section 7 - Warranty Requirements.

**GC 9.2 Documents**
Contractor shall provide current maintenance and parts manuals as outlined in the Specifications through the Warranty period. These computer manuals must detail, describe and be in reference to the actual vehicle built for SEPTA by the Contractor. Contractor shall provide operator manuals for each vehicle delivered as provided in the Specifications. After the Warranty period is completed the Contractor is responsible for providing electronic updates related to changed service requirements, recalls, retrofit and parts over the twelve (12) year design life of the vehicle or until the Buses are no longer the property of SEPTA.

**GC 9.3 Parts Availability Guaranty**
Contractor shall guarantee the availability of replacement parts for each vehicle supplied under the Contract for a period of 12 years minimum from the date of Final Payment.

Contractor shall not make exclusive agreements with Suppliers and/or Sub-suppliers that would preclude SEPTA from purchasing components directly from Sub-suppliers.
All spare parts supplied shall be interchangeable with original equipment without any modifications and shall be manufactured in accordance with Quality Assurance Provisions contained in the Specifications.

The Contractor shall establish an inventory of body and structural parts available for delivery to SEPTA within 48 hours after placement of an order during the warranty period and 7 days for all other parts requests. This inventory should include skirt panels, front and rear body panels, trim stripes, windshields, front cap glazing.

**GC 9.4 Interchangeability**

All units and components within each of the Buses to be supplied under the Contract, whether provided by Subcontractors or manufactured by the Contractor, shall be duplicated in design, manufacture and installation to assure interchangeability among all Buses within each vehicle type provided under the Contract. The interchangeability will extend to individual components as well as to their locations in the Buses. Contractor shall notify SEPTA of impending changes due to product improvements and changes between production runs (See Section 6 – Technical Specifications, TS 5.19 – Interchangeability). SEPTA shall approve the changes in accordance with GC 2.9 – Change Orders. SEPTA will require up to 14 days to review the Contractor's changes. The Contractor shall furnish cost and technical documentation with the notification.

**GC 9.5 Survivability**

Contractor's obligations under this section GC 9 shall survive the nominal expiration or discharge of other Contract obligations and SEPTA may obtain any remedy under law, Contract or equity to enforce the obligations of Contractor that survive the manufacturing, warranty, and final payment periods.

**GC 9.6 Warranties**

**GC 9.6.1 Definitions**

"Acceptance," as used in this section, means the act of an authorized representative of SEPTA by which SEPTA assumes ownership of existing and identified Equipment, or approves specific services rendered, as partial or complete performance of the Contract.

"Correction," as used in this section, means the elimination of a defect.

Patent or latent malfunction or failure in manufacture, installation or design of any component or subsystem.

"Material and/or Equipment," as used in this section, means the end items, including data, furnished by the Contractor and related services required under the Contract.

**GC 9.6.2 General**

Contractor warrants that all Material and/or Equipment, and installation thereof, meets all requirements and standards set by the Specifications. All Material and/or Equipment shall be new, the best of its kind or quality, reasonably fit for its intended use as set forth in the Specifications, and of safe, substantial, and durable construction. All installation shall be done in a good and workmanlike manner and shall be safe and operate in the manner intended in the Specifications. Contractor further warrants that any Material and/or Equipment, and installation thereof, shall conform to representations and descriptions, either oral or written, made by the Contractor and any literature, sample, or other vehicle of information supplied by Contractor prior to the time set for opening of the bids for the Contract. Contractor further warrants that any sample provided represents a minimum standard of quality for the Material and/or Equipment, and installation thereof, furnished hereunder.
GC 9.6.3 Payment of Suppliers and Subcontractors
Contractor warrants that all workmen, Subcontractors and Suppliers will be satisfied by Contractor prior to Contractor rendering final invoice to SEPTA so that, at the time SEPTA makes final payment to Contractor, no part of the performance under the Contract shall be subject to any claim or lien.

GC 9.6.4 Material and/or Workmanship
In addition to all warranties implied by law or required by the Specifications, Contractor expressly warrants all Material and/or Equipment, and installation thereof, against any defect in design, material or workmanship which may be discovered by SEPTA within one (1) year from the date of final acceptance of each coach and in accordance with the applicable warranty provision of Section 7 – Warranty Requirements. Contractor shall make any necessary repairs to and any replacements of all or parts of the Material and/or Equipment, and installation thereof, to make the vehicle or any subsystem thereof fully operational as designed and required by the Specifications at no additional cost to SEPTA.

GC 9.6.5 Infringement of Patents
Contractor shall defend, indemnify, and save harmless SEPTA, its officers, agents, servants, and employees from liability of any kind and will pay all costs and expenses for or on account of or arising from any infringement or violation or alleged violation of any copyright or patent or any right of any person, firm or corporation resulting from any act, omission, or negligence on the part of the Contractor in the performance of the Contract.

GC 9.6.6 Additional Warranties
1. If the customary standard warranties for the Material and/or Equipment, and installation thereof, exceed the period(s) specified above, such warranties shall run to SEPTA.

2. If separate or additional warranties covering the Material and/or Equipment are furnished by the manufacturer, supplier, or seller of component part or parts of any item of said Material and/or Equipment, SEPTA shall have the right, but not the duty, to benefit from these separate or additional warranties, along with the primary warranties set forth hereinabove and enumerated in Section 7 – Warranty Requirements of this Contract. SEPTA shall look only to Contractor for fulfillment of all warranty requirements expressed and implied by the making of the Contract.

3. The existence of any separate or additional warranties which run to the Contractor from the manufacturer, supplier, or installer of a component part of an item of Material and/or Equipment shall not relieve Contractor of its obligation to repair or replace any of the Material and/or Equipment on account of faulty design, manufacture or workmanship during the warranty period. SEPTA shall not be required to look to any other party for fulfillment of warranty provisions.

4. If the Contractor becomes aware at any time before acceptance by SEPTA that a defect exists in any Material and/or Equipment or services, the Contractor shall (i) promptly correct the defect or (ii) promptly notify SEPTA, in writing, of the defect.

5. SEPTA determines that a defect exists in any of the Equipment or services accepted by SEPTA under the Contract, SEPTA shall promptly notify the Contractor of the defect, in writing, within "60 days after discovery of the defect." Upon timely notification of the existence of a defect, or if the Contractor independently discovers a defect in accepted Material and/or Equipment or services, the Contractor shall submit to SEPTA, in writing, within 15 days a recommendation for corrective actions, together with supporting information in sufficient detail for SEPTA to determine what corrective action, if any, shall be undertaken.
6. The Contractor shall promptly comply with any timely written direction from SEPTA to correct or partially correct a defect, at no increase in the Contract Price.

7. The Contractor shall also prepare and furnish to SEPTA data and reports applicable to any correction required under this section (including revision and updating of all other affected data called for under the Contract) at no increase in the Contract Price.

8. In the event of timely notice of a decision not to correct or only to partially correct, the Contractor shall submit a technical and cost proposal within fifteen days (15) to amend the Contract to permit acceptance of the affected Material and/or Equipment or services in accordance with the revised requirement, and an equitable reduction in the Contract Price shall promptly be negotiated by the parties and be reflected in a Change Order to the Contract in accordance with GC 2.9.- Change Orders. Contractor must become cognizant of SEPTA's Change Order processing time requirements.

9. Any Material and/or Equipment or parts thereof corrected or furnished in replacement and any services re-performed shall also be subject to the conditions of this paragraph to the same extent as Material and/or Equipment or services initially accepted. The warranty, with respect to these supplies, parts or services, shall be equal in duration to that set forth in GC 9.6.4 – Material and/or Workmanship, above, and shall run from the date of delivery of the corrected or replaced Material and/or Equipment and for Buses in accordance with applicable provisions (Section 6 – Technical Specification and Section 7 – Warranty Requirements).

10. The Contractor shall not be responsible under this paragraph for the correction of defects in SEPTA furnished property, except for defects in installation, unless the Contractor performs, or is obligated to perform, any modifications or other work on such property. In that event, the Contractor shall be responsible for correction of defects that result from the modifications or other work.

11. If SEPTA returns Material and/or Equipment to the Contractor for correction or replacement under this paragraph, the Contractor shall be liable for transportation charges up to an amount equal to the cost of transportation by the usual commercial method of shipment from the place of delivery specified in the Contract (irrespective of the f.o.b. point or the point of acceptance) to the Contractor's plant and return to the place of delivery specified in the Contract. The Contractor shall also bear the responsibility for the supplies while in transit.

**GC 9.6.7 Remedies Available to SEPTA**
The rights and remedies of SEPTA provided in this paragraph

(i) Shall not be affected in any way by any terms or conditions of the Contract concerning the conclusiveness of inspection and acceptance; and

(ii) Are in addition to and do not limit any rights afforded to SEPTA by any other Paragraph of the Contract.

Within 30 days after receipt of the Contractor's recommendations for corrective action and adequate supporting information, SEPTA, at its sole discretion, shall give the Contractor written notice not to correct any defect, or to correct or partially correct any defect within a reasonable time at either Contractor's facility or at a SEPTA provided location, as determined by SEPTA.

In no event shall SEPTA be responsible for any extension or delays in the scheduled deliveries or periods of performance under the Contract as a result of the Contractor's obligations to correct defects, nor shall there be any adjustment of the delivery schedule or period of performance as a result of the correction of defects unless provided by a Change Order with adequate consideration to SEPTA.
This clause shall not be construed as obligating SEPTA to increase the Contract Price.

Any failure or refusal of the Contractor to take corrective action as required by this Paragraph shall be grounds for Termination for Cause in accordance with GC 4.1.2.

**GC 10. Audit and Inspection of Records**

SEPTA Audit Rights:
Contractor shall keep written records in reasonable detail of all services performed by it under the Contract. All written records, reports, work sheets, data, and information prepared, generated, or obtained in connection with Contractor’s performance of services for SEPTA shall be made available during the term of the Contract and for a period of five (5) years thereafter, together with all books and other data or information, in whatever form contained, relating to Contractor’s performance under the Contract. Contractor shall permit the audit and examination of the aforementioned material, including the making of excerpts and transcriptions, by appropriate officers or representatives of SEPTA and any governmental funding agency providing financial assistance for the Project, including the United States Department of Transportation, the Office of the Comptroller General of the United States, and the Pennsylvania Department of Transportation.

Contractor shall require its subcontractors/subconsultants to keep written records in reasonable detail of all services performed by them for Contractor under the Contract and to maintain all books, data, information and records in a form that will support the invoice billed to Contractor. Contractor shall further require that all written records, reports, work sheets, data, and information prepared, generated, or obtained in connection with such subcontractor’s/subconsultant’s performance of services for Contractor shall be made available during the term of the Contract and for a period of five (5) years thereafter to SEPTA, together with all books and other data or information, in whatever form contained, relating to such subcontractor’s/subconsultant’s performance for Contractor.

**GC 11. Risk**

*SEPTA MUST BE PROVIDED WITH TRUE COPIES OF DECLARATION PAGES AND POLICIES OF INSURANCE UPON REQUEST. SEPTA MUST BE LISTED AS AN ADDITIONAL INSURED AND MUST BE THE CERTIFICATE HOLDER ON ALL APPLICABLE LIABILITY COVERAGE EXCLUDING WORKERS COMPENSATION AND PROFESSIONAL LIABILITY WITH RESPECT TO THIS PROJECT AND IT SHOULD BE NOTED ON THE INSURANCE CERTIFICATE AND POLICIES. SEPTA MUST BE PROVIDED WITH ACCEPTABLE PROOF AND ANY ADDITIONAL EVIDENCE OF INSURANCE THAT DEMONSTRATES COMPLIANCE WITH THESE REQUIREMENTS AS WELL AS ALL LIMITS AND OTHER MANDATED ASPECTS OF COVERAGE.*

**GC 11.1 Commercial General Liability Insurance**
The Contractor shall purchase and maintain such insurance as will protect it from claims set forth below which may arise out of or result from the Contractor's operations under the Contract, whether such operations are by itself or by any Subcontractor or by anyone directly or indirectly employed by any of them or by anyone for whose acts any of them may be liable:

1. Worker's Compensation claims as required by the laws of the State(s) in which the Contractor is conducting operations in connection with this Project, and specifically including the Commonwealth of Pennsylvania;

2. claims for damages because of bodily injury, occupational sickness or disease, or death of its employees (Employee Liability Insurance);
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees;

4. claims for damages insured under Personal and Advertising Injury liability coverage which are sections of a standard Commercial General Liability Policy; and

5. claims for damages because of injury to or destruction of tangible property, including loss of use resulting there from.

**GC 11.2 Evidence of Compliance**

1. **Certificates of Insurance**

   Within ten (10) days after receipt from SEPTA of notice of Intent to Award of the Contract, the Contractor shall furnish SEPTA with CERTIFICATES OF INSURANCE and any other documents which SEPTA may require, such as copies of policies or endorsements, as evidence of compliance with these Insurance Requirements. All insurance carriers for these coverages shall have an A. M. Best Rating of at least B+.

2. **Written Approval Required**

   Such Certificates or other documents must be approved in writing by SEPTA before a NOTICE TO PROCEED will be given.

**GC 11.3 Policies to Remain in Force**

1. **Until Completion and Acceptance**

   All insurance coverage which the Contractor is required to provide for the Contract shall be maintained in full force and effect until all of the Material and/or Equipment of the Contract training and for the period specified under the Maintenance (or Warranty) Bond shall have been completed and accepted by SEPTA.

2. **All policies shall provide for thirty (30) days written notice to SEPTA before cancellation by the Company issuing the insurance. If such notice is not provided for within the basic terms of the policy, it shall be provided by endorsement or notation of the Certificate.**

3. **Replacement Coverage Required**

   In the event that any or all of the insurance coverages required by the Contract are cancelled, are reduced below the required minimum limits or lapse, then the Contractor will be suspended from further prosecution of the Material and/or Equipment until such time as replacement coverage satisfactory to SEPTA has been obtained and is in force.

**GC 11.4 Additional Insureds Required**

The Contractor shall have all policies, i.e., the Commercial General Liability and Automobile Liability Policies endorsed to include the following as Additional Insureds: Southeastern Pennsylvania Transportation Authority.
GC 11.5 Waiver of Liability for Premiums
All policies wherein the parties designated in GC 11.4 are included as additional insureds shall contain a Waiver of Liability for the payment of premiums covering those additional Insureds.

GC 11.6 Limits of Liability
The insurance required by GC 11.1 shall be written for not less than any limits of liability specified below or required below, whichever is greater.

1. **Workers’ Compensation Insurance**
   As required by the applicable laws of the Commonwealth of Pennsylvania and any other State where the Contractor is conducting operations in the performance of this project.

2. **General Liability Insurance** (excluding Vehicles)
   Commercial General Liability Insurance for Bodily Injury and Property Damage to others, including Product and Operations Liability:
   
   (a) **Minimum Limits to Liability**
   Combined Single Limit (Bodily Injury and Property Damage) per occurrence $5,000,000. Combined Single Limit (Products-Completed Operations) per occurrence $5,000,000. General Aggregate not less than $10,000,000 annual aggregate. If this coverage is written on a claims basis, there shall be a three (3) year discovery period. Note that SEPTA will accept Competed Operations Coverage insurance for three years in lieu of.

   (b) **Additional Insureds**
   Policy shall be written or endorsed to include as additional Insureds those parties or persons designated in GC 11.4.

   (c) **Contractual Liability (Hold Harmless) Coverage**
   Policy shall be written or endorsed to include coverage for the liability assumed by the terms of the Contract, including GC 14 - Indemnification. Certificate or policy will state that the coverage applies to the Contract described as: "Purchase of CCT Mini-Buses".

GC 11.7 Vehicle Liability
Liability Insurance (covering all autos, trucks, and other vehicles used in connection with the Project or Contract) for Bodily Injury and Property Damage to others.

(a) **Minimum Limits of Liability**
   Combined Single Limit (Bodily Injury and Property Damage) per occurrence $5,000,000.

(b) **Additional Insureds**
   Policy shall be written or endorsed to include as additional Insureds those parties or persons designated in GC 11.4.
Vehicle Liability Policy shall be written or endorsed to include coverage for Hired, Leased or other Non-Owned Vehicles.

**GC 12. Performance Bond**

**GC 12.1 Contract Security**
Within fifteen (15) days of Notice of Award and before the Notice to Proceed and issuance of the Purchase Order, the Contractor shall furnish and maintain properly executed AIA A311 Performance Bond and/or an irrevocable and automatically renewable Letter of Credit (LOC) written by a good and sufficient surety and in a form acceptable to SEPTA. If the surety shall become insolvent or bankrupt in a technical or equitable sense, or otherwise become unqualified to underwrite the bond or the Contract Sum is adjusted so as to exceed the penalties of such bond, SEPTA may require, on fifteen (15) days written notice, the Contractor to furnish new or additional bond from the same or different surety so as to be fully secured at all times. Bond must be issued by a fully qualified surety company acceptable to SEPTA and listed as a company currently authorized under 31 CFR Part 223 as possessing a Certificate of Authority as described herein. The Performance Bond shall be effective from the award date until the date of completion of all work, provided, however, that thirty (30) days after acceptance or conditional acceptance of the final bus under the Base Order the Contractor may substitute a Maintenance (or Warranty) Bond in accordance with GC 12.2 below.

**GC 13. Production of Documents**
Upon award of the Contract to a Contractor, such Contractor shall commence performance under the Contract by executing all Contract Guaranty Agreements provided with the Proposal, by furnishing any required bonds, and by furnishing copies of the certificates of insurance required to be procured by the Contractor pursuant to the Contract documents within fifteen (15) days after the date of receipt of the notice of award. Failure to fulfill these requirements within the specified time is cause for termination of the Contract under GC 4.1.2 - Termination for Default.

**GC 14. Indemnification**
In addition to all other obligations of Indemnification specified herein, Contractor agrees to release and be liable for and to defend, indemnify and save harmless SEPTA, its Board Members, officers, agents, servants, workmen, employees, subsidizers and indemnities, the Pennsylvania Department of Transportation, the City of Philadelphia and any and all government funding agencies providing funds or services in connection with this Project (hereinafter collectively referred to as "SEPTA"), from and against any and all loss, cost, damage, liability and expense, including consequential damages, counsel fees, whether or not arising out of any claim, suit or action at law, in equity, or otherwise, of any kind or nature whatsoever, including arising out of the performance of the work by reason of any accident, loss or damage of property, including the work site, property of SEPTA and Contractor, or injury, including death, to any person or persons, including employees of SEPTA, Contractor, subcontractors at any tier or any person working on Contractor's behalf, caused by Contractor, which may be sustained either during the term of the Contract, or upon or after completion of the Project, whether brought directly by these persons or by anyone claiming under or through them including heirs, dependents and estates.

Contractor also agrees for itself and on behalf of its agents, servants, subcontractors, materialmen and employees to defend, indemnify and hold harmless SEPTA from and against any and all claims of any kind or nature whatsoever regarding subcontractors and materialmen and agrees to assume the defense of SEPTA to any such suit at its cost and expense. The Contractor further assumes the risk of loss and damage to
materials, machinery and equipment to be incorporated in the Work at all times prior to delivery to the Project site or while in the possession or under the control of the Contractor.

Contractor, for itself and its employees, Board members, officers, agents, servants, workmen, contractors, subcontractors, licensees and invitees, or any other person working on Contractor's behalf, hereby releases and agrees to be liable for and to defend, indemnify and save harmless SEPTA, except to the extent that SEPTA is negligent in whole or in part, for any claims made by an employee, Board member, officer, agent, workman or servant of Contractor's or any other person working on Contractor's behalf, including claims for compensation or benefits payable to any extent by or for Contractor under any workers' or similar compensation acts or other employee benefit acts, and Contractor expressly waives its statutory protection under §303, as amended, of The Pennsylvania Workers' Compensation Act, 77 P.S. §481 (b).

In addition, Contractor shall indemnify SEPTA for any fines and legal fees incurred because employees, agents, or workers supplied by Contractor are not authorized to work in the United States.

**GC 15. Materials / Accessories Responsibility**

The Contractor shall be responsible for all materials and workmanship in the construction of the Material and/or Equipment, whether the same are manufactured by the Contractor or purchased from Supplier. This provision excludes tires, fare boxes, radios, and any equipment leased or supplied by SEPTA, except insofar as such equipment procured by the Contract is damaged by the failure of a part or component for which the Contractor is responsible, or except insofar as the damage to such equipment is caused by the Contractor during the manufacture of the Buses. Risk of damage to or loss of the Buses is the subject of "Assumption of Risk of Loss" (GC 5.1.4).

**GC 16. Federal, State, and local Contract Requirements**

**GC 16.1 Federal and State Requirements**

The Contractor shall abide by all requirements attached hereto and made a part hereof in Section 5 - Federal and State Requirements for all the work performed in connection with the Contract.

**GC 16.2 Compliance With Federal, State, and Local Laws**

The Contractor shall comply with all applicable laws, ordinances, regulations, rules, standards and orders of Federal, State and Local governments or authorities (collectively, the “Applicable Laws”) in effect or which become effective during the term of the Contract. All Material and/or Equipment furnished hereunder shall comply with the provisions of said Applicable Laws.

The Contractor shall be responsible for compliance with all safety rules and regulations of the Federal Occupational Safety and Health Act of 1970 and those of all Applicable Laws during the conduct and performance of the Contract. The Contractor shall indemnify the SEPTA Parties against fines, penalties and corrective measures that result from or are required by any acts of commission or omission of the Contractor, Subcontractor(s), agents, employees and assignees and their failure to comply with such safety rules and regulations.

The Contractor shall give all notices and comply with all Applicable Laws bearing on the performance of the Contract, or concerning the production of the Bus and/or items of Material and/or Equipment thereunder, including, but not limited to, any laws referred to in the Contract Documents. Within five (5) days of receipt of a written request from SEPTA, the Contractor shall furnish to SEPTA certificates of compliance with all such Applicable Laws. The Contractor shall be responsible for obtaining all necessary permits and licenses required for performance under the Contract.
SEPTA shall consider issuing a Change Order for any Applicable Laws enacted after the date of the Best and Final Offer that actually modifies the Materials and/or Equipment, or the Bus themselves. Applicable Laws signed into law or issued prior to the date of the Best and Final Offer but with an effective date after the date of the Best and Final Offer shall be considered as having been enacted prior to the date of the Best and Final Offer.

**GC 16.3 Prohibited Interest**
No member, officer, or employee of SEPTA or of a local public body during his or her tenure or one year thereafter shall have any financial interest, direct or indirect, in the Contract or the proceeds thereof.

**GC 17. Policies for Prime Contract**

**GC 17.1 Certifications Required**
The Contractor agrees to comply with 49 U.S.C. § 5323(l) and FTA's implementing regulation at 49 C.F.R. Part 663.

**GC 17.2 Buy America Requirements**

**GC 17.3 Federal Motor Vehicle Safety Standards (FMVSS)**
The Contractor shall submit 1) manufacturer's FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or 2) manufacturer's certified statement that the contracted Buses will not be subject to FMVSS regulations.

**GC 17.4 Bus Testing**
The Contractor agrees to comply with 49 U.S.C. § 5323(c) and FTA's implementing regulation at 49 CFR Part 665 and shall perform the following:

1. A manufacturer of a new Bus model or a Bus produced with a major change in components or configuration shall provide a copy of the final test report to SEPTA prior to the recipient's final acceptance of the first Bus.

2. A manufacturer who releases a report under Paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.

3. If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to SEPTA prior to SEPTA's final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.

4. If the manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.
GC 18. Taxes
The Contractor shall pay all sales, consumer, use and other taxes which it is by law required to pay.
Pennsylvania Sales and Use Tax: As an agency and instrumentality of the Commonwealth of Pennsylvania, SEPTA is exempt from the payment of Federal Excise Taxes and Pennsylvania Sales and Use Taxes (71 P.S. Sec. 7071 et seq.) on material, equipment or other personal property purchases and contracts for its exclusive use or consumption; therefore, the Proposer shall not include these taxes in the computation of its price proposal. SEPTA will furnish exemption certificates, as required, upon the request of the Proposer.

City of Philadelphia and School District of Philadelphia Taxes: The Proposer as a result of any contract entered into pursuant to this Request for Proposal, may be subject to certain business taxes imposed by the City of Philadelphia and/or the School District of Philadelphia. The Proposer is solely responsible for making its own investigation to determine whether or not it is subject to the above-mentioned city and school district taxes, and for paying any such tax if applicable. Proposers are hereby informed that SEPTA is obligated by law to furnish to the City of Philadelphia Department of Collections, upon its request, the name and address of any person or firm with whom it has a contract for goods and services. For information the following phone number is provided: Business and Earnings and School Income Tax (215) 686-6600.

GC 19. Governing Law
All matters or claims arising out of, related to, or in connection with the Contract, the Project or the relationship between the parties shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania without giving effect to the principles of conflicts of laws of such state. All matters, disputes, claims, litigation, or proceedings of any nature whatsoever based upon, arising out of, under or in connection with the Contract, the Project or relationship between the parties shall be solely and exclusively brought, maintained, resolved, and enforced in the state or federal courts located in the City of Philadelphia, Pennsylvania, irrespective of any procedural rules or laws related to venue and forum non conveniens, including but not limited to any choices Contractor may have under any such rules or law. Contractor hereby expressly consents to the jurisdiction of the state and federal courts located in the City of Philadelphia and hereby expressly and irrevocably waives any objection which Contractor may have or hereafter may have to jurisdiction or venue in the state and federal courts located in the City of Philadelphia and any claim that such court is inconvenient or lacks personal jurisdiction over Contractor. Contractor represents and acknowledges that the choice of jurisdiction and venue described above is reasonable and has been freely and voluntarily made by Contractor. Further, the choice of jurisdiction and venue described above shall be mandatory and not permissive in nature, thereby precluding the possibility by Contractor of litigation or trial in any other jurisdiction, court or venue other than specified above, except that any final judgment may be enforced in other jurisdictions in any manner provided by law.

GC 20. Personnel Security Measures
SEPTA reserves the right to impose personnel security measures upon the Contractor and its employees as SEPTA deems necessary and appropriate to ensure the safety of its patrons, employees and property. These measures may include, but are not limited to, registration of all employees of the Contractor and its subcontractors who shall be working on SEPTA property, photo identification of all registered employees, and background investigations of all registered employees. In addition, SEPTA reserves the right to institute personnel security measures, which may be imposed at any time during the course of the Work. SEPTA shall assume the costs of such security measures. The Contractor and its employees shall cooperate fully with SEPTA in implementing and enforcing security measures on SEPTA property. The Contractor shall be notified by SEPTA, in writing, regarding what is required by SEPTA to carry out any personnel security measures that are being imposed on the Contractor.
GC 21. Labels
The Contractor shall not place its name, stencil, stamping, or marking of any type as advertisement on any of the merchandise other than concealed trademarks or trade names normally installed by the Contractor.

GC 22. Use of “SEPTA” Name in Contractor Advertising or Public Relations
The Contractor shall not allow any information and/or material of any kind whatsoever related to the Contract to be used in the Contractor's advertisements or public relations programs until submitting the said material to SEPTA in advance and receiving prior written approval from SEPTA. The Contractor covenants and agrees that any published information on the Contract permitted by SEPTA shall be factual and in no way imply endorsement of the Contractor's firm, service, or product by SEPTA.

GC 23. Integration
Subject to SEPTA's right to rely upon substantial representations made by the Contractor in making the decision to award the Contract to Contractor, the Contract represents the entire and integrated agreement between SEPTA and Contractor and supersedes all prior or contemporaneous negotiation, representation, or agreement, either written or oral.

GC 24. Severability
If any paragraph, clause, section or part of the Contract is held or declared to be void or non-enforceable for any reason, all other paragraphs, clauses, sections or parts shall nevertheless continue in full force and effect.

GC 25. Joint and Several Liability (If Applicable)
The liability of ____________________ to comply with the terms of this Contract including, but not limited to, the Contract Documents set forth in Section________ shall be joint and several and all notices, payments and agreements given or made by, with or to any one of such corporations shall be deemed to have been given or made by, with or to all of them.
IN WITNESS WHEREOF, the parties hereto have caused the Contract to be executed by the undersigned duly authorized officers, under seal, as of the day and the year first above written.

ATTEST:  

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

CAROL R. LOOBY  
SECRETARY TO THE BOARD

JEFFREY D. KNUEPPEL  
GENERAL MANAGER

SEAL

ATTEST:  

CONTRACTOR: ________________________

By: ________________________________  By: ________________________________
*(Asst.) Secretary or *(Asst.) Treasurer  *President or *Vice President

Typed Name: _________________________  Typed Name: _________________________

* Cross out the inappropriate titles and if signed by some other officer, attach a power of attorney or certified Board Resolution authorizing such signature.

[CORPORATE SEAL]

APPROVED AS TO FORM:

By: ________________________________, Esq.
Office of General Counsel  
Southeastern Pennsylvania Transportation Authority

RFP Section 3
SECTION 4

SPECIAL PROVISIONS
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SECTION 4: SPECIAL PROVISIONS

SP 1. Project Schedule

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<th>Item No.</th>
<th>Event</th>
<th>Date</th>
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<tr>
<td>1</td>
<td>Delivery of 1st 2 Pilot Buses (3 Wheelchair Plus 4 Ambulatory, 12 Passenger)</td>
<td>30 days prior to start of CY 2018 deliveries of 3 Wheelchair Plus 4 Ambulatory, and 12 Passenger Mini Cutaway Buses</td>
</tr>
<tr>
<td>2</td>
<td>Delivery of 1st group 86 Production buses guaranteed for CY 2018</td>
<td>Between 180 Days Minimum and 270 Days Maximum after Notice to Proceed Date</td>
</tr>
<tr>
<td>3</td>
<td>Delivery of 2nd group 68 Production buses guaranteed for CY 2019</td>
<td>Between 540 Days Minimum and 635 Days Maximum after Notice to Proceed Date.</td>
</tr>
<tr>
<td>4</td>
<td>Delivery of 3rd group 71 Production buses guaranteed for CY 2020</td>
<td>Between 900 Days Minimum and 1000 Days Maximum after Notice to Proceed Date.</td>
</tr>
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*Example: If Notice to Proceed (GC 2.7) is given to a contractor on August 1, 2017, production buses for calendar year 2018 would have to completely delivered to SEPTA between 1/28/2018 and 4/28/2018 in order to avoid Liquidated Damages in accordance with GC 7.3.

Note 1 – For any yearly option order, the Contractor will be notified in writing 190 days prior to the respective scheduled delivery period. The written notification will be for:

<table>
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<th>Calendar Year Delivery</th>
<th>Guaranteed Quantity</th>
<th>Option Quantity</th>
<th>Guaranteed Quantity</th>
<th>Option Quantity</th>
<th>Total Guaranteed Per Calendar Year</th>
<th>Total Options Per Calendar Year</th>
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<tr>
<td>2018</td>
<td>55</td>
<td>10</td>
<td>31</td>
<td>10</td>
<td>86</td>
<td>20</td>
</tr>
<tr>
<td>2019</td>
<td>34</td>
<td>10</td>
<td>34</td>
<td>10</td>
<td>68</td>
<td>20</td>
</tr>
<tr>
<td>2020</td>
<td>23</td>
<td>10</td>
<td>48</td>
<td>10</td>
<td>71</td>
<td>20</td>
</tr>
<tr>
<td>Totals</td>
<td>112</td>
<td>30</td>
<td>113</td>
<td>30</td>
<td>225</td>
<td>60</td>
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Total Guaranteed & Options: 285
SECTION 5

FEDERAL AND STATE

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SECTION 5: FEDERAL & STATE REQUIREMENTS

FEDERAL REQUIREMENTS (FR)

FR 1 - Access to Records
The Contractor agrees to maintain all books, records, accounts and reports required under this Contract for a period of not less than three years after the date of termination or expiration of this Contract, except in the event of litigation or settlement of claims arising from the performance of this Contract, in which case Contractor agrees to maintain same until the Agency, the FTA Administrator, the Comptroller General or any of their duly authorized representatives have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

The following access to records requirements apply to this Contract:

FR 1.1 Local Governments
In accordance with 49 CFR 18.36(i), the Contractor agrees to provide the Agency, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor that are directly pertinent to this Contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 CFR 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor’s records and construction sites pertaining to a major capital project, defined at 49 USC 5302(a)1, which is receiving federal financial assistance through the programs described at 49 USC 5307, 5309 or 5311.

FR 1.2 State Governments
In accordance with 49 CFR 633.17, the Contractor agrees to provide the Agency, the FTA Administrator or his authorized representatives, including any PMO Contractor, access to the Contractor’s records and construction sites pertaining to a major capital project, defined at 49 USC 5302(a)1, which is receiving federal financial assistance through the programs described at 49 USC 5307, 5309 or 5311. By definition, a major capital project excludes contracts of less than the simplified acquisition threshold currently set at $100,000.

The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

FR 2 - Federal Funding, Incorporation of FTA Terms and Federal Changes
The preceding provisions include, in part, certain standard terms and conditions required by the Department of Transportation, whether or not expressly set forth in the preceding Contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F or its successors are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this agreement. The Contractor shall not perform any act, fail to perform any act or refuse to comply with any Southeastern Pennsylvania Transportation Authority (SEPTA) requests that would cause SEPTA to be in violation of the FTA terms and conditions.

The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between Agency and
FTA, as they may be amended or promulgated from time to time during the term of this Contract. Contractor’s failure to so comply shall constitute a material breach of this Contract.

**FR 3 - Federal Energy Conservation Requirements**

The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency that are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

**FR 4 - Civil Rights Requirements**

The following requirements apply to the underlying Contract:

1. **Nondiscrimination:** In accordance with Title VI of the Civil Rights Act, as amended, 42 USC § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 USC § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 USC § 12132, and Federal transit law at 49 USC § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

2. **Equal Employment Opportunity:** The following equal employment opportunity requirements apply to the underlying Contract:

   (a) **Race, Color, Creed, National Origin, Sex:** In accordance with Title VII of the Civil Rights Act, as amended, 42 USC § 2000e, and Federal transit laws at 49 USC § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor,” 41 CFR Parts 60 et seq., (which implement Executive Order No. 11246, “Equal Employment Opportunity,” as amended by Executive Order No. 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” 42 USC § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

   (b) **Age:** In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 USC §§ 623 and Federal transit law at 49 USC § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

   (c) **Disabilities:** In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 USC § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, “Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act,” 29 CFR Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
3. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

**FR 5 - No Government Obligation to Third Parties**

1. The Agency and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the Solicitation or award of the underlying Contract, absent the express written consent by the Federal Government, the Federal Government is not a party to this Contract and shall not be subject to any obligations or liabilities to the Agency, Contractor, or any other party (whether or not a party to that Contract) pertaining to any matter resulting from the underlying Contract.

2. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the Subcontractor who will be subject to its provisions.

**FR 6 - Program Fraud and False or Fraudulent Statements or Related Acts**

1. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 USC §§ 3801 et seq. and U.S. DOT regulations, “Program Fraud Civil Remedies,” 49 CFR Part 31, apply to its actions pertaining to this Project. Upon execution of the underlying Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the underlying Contract or the FTA assisted project for which this Contract Work is being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.

2. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a Contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 USC § 5307, the Government reserves the right to impose the penalties of 18 USC § 1001 and 49 USC § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.

3. The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clauses shall not be modified, except to identify the Subcontractor who will be subject to the provisions.

**FR 7 - Suspension and Debarment**

This Contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C, and must include the requirement to comply with 49 CFR 29, Subpart C, in any lower-tier covered transaction it enters into.

By signing and submitting its bid or Proposal, the Bidder or Proposer certifies as follows:

The certification in this clause is a material representation of fact relied upon by SEPTA. If it is later determined that the Bidder or Proposer knowingly rendered an erroneous certification, in addition to remedies available to
SEPTA, the federal government may pursue available remedies, including but not limited to suspension and/or debarment. The Bidder or Proposer agrees to comply with the requirements of 49 CFR 29, Subpart C, while this Proposal is valid and throughout the period of any Contract that may arise from this Proposal. The Bidder or Proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

**FR 8 - Disadvantaged Business Enterprise (DBE)**

This Contract is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs.

The Contractor shall maintain compliance with “DBE Approval Certification” throughout the period of Contract performance.

The Contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this Contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted Contract. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as SEPTA deems appropriate. Each subcontract the Contractor signs with a Subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).

**FR 9 - Clean Water Requirements**

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 USC 1251 et seq. The Contractor agrees to report each violation to the Agency and understands and agrees that the Agency will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2. The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

**FR 10 - Clean Air Requirements**

1. The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 USC §§ 7401 et seq. The Contractor agrees to report each violation to the Agency and understands and agrees that the Agency will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

2. The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

**FR 11 - Compliance with Federal Lobbying Policy**

Contractors who apply or bid for an award of $100,000 or more shall file the certification required by 49 CFR Part 20, “New Restrictions on Lobbying.” Each tier certifies to the tier above that it will not and has not used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any Agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal Contract, grant or any other award covered by 31 USC 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-federal funds with respect to that federal Contract, grant or award covered by 31 USC 1352. Such disclosures are forwarded from tier to tier up to the recipient.
FR 12 - Buy America

The Contractor agrees to comply with 49 USC 5323(j) and 49 CFR Part 661, which provide that federal funds may not be obligated unless steel, iron and manufactured products used in FTA-funded projects are produced in the United States, unless a waiver has been granted by FTA or the product is subject to a general waiver. General waivers are listed in 49 CFR 661.7. A general public interest waiver from the Buy America requirements applies to microprocessors, computers, microcomputers, software or other such devices, which are used solely for the purpose of processing or storing data. This general waiver does not extend to a product or device that merely contains a microprocessor or microcomputer and is not used solely for the purpose of processing or storing data.

Separate requirements for rolling stock are set out at 49 USC 5323(j)(2)(C) and 49 CFR 661.11. Rolling stock must be assembled in the United States and have a 60 percent domestic content.

A Bidder or Proposer must submit to the Agency the appropriate Buy America Certification with all offers on FTA-funded contracts, except those subject to a general waiver. Proposals that are not accompanied by a properly completed Buy America certification are subject to the provisions of 49 CFR 661.13 and may be rejected as nonresponsive.

FR 13 - Testing of New Bus Models

The Contractor agrees to comply with 49 USC A 5323(c) and FTA’s implementing regulation at 49 CFR Part 665 and shall perform the following:

1. A manufacturer of a new bus model or a bus produced with a major change in components or configuration shall provide a copy of the final test report to the recipient at a point in the procurement process specified by the recipient, which will be prior to the recipient’s final acceptance of the first vehicle.

2. A manufacturer who releases a report under Paragraph 1 above shall provide notice to the operator of the testing facility that the report is available to the public.

3. If the manufacturer represents that the vehicle was previously tested, the vehicle being sold should have the identical configuration and major components as the vehicle in the test report, which must be provided to the recipient prior to recipient’s final acceptance of the first vehicle. If the configuration or components are not identical, the manufacturer shall provide a description of the change and the manufacturer’s basis for concluding that it is not a major change requiring additional testing.

4. If the manufacturer represents that the vehicle is “grandfathered” (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), the manufacturer shall provide the name and address of the recipient of such a vehicle and the details of that vehicle’s configuration and major components.

FR 14 - Pre-Award and Post-Delivery Audits

The Contractor agrees to comply with 49 USC § 5323(l) and FTA’s implementing regulation at 49 CFR Part 663 and to submit the following certifications:

1. **Buy America requirements:** The Contractor shall complete and submit a declaration certifying either compliance or noncompliance with Buy America. If the recommended Bidder/Proposer certifies compliance with Buy America, it shall submit documentation that lists (1) component and subcomponent parts of the rolling stock to be purchased identified by manufacturer of the parts, their country of origin
and costs; and (2) the location of the final assembly point for the rolling stock, including a description of the activities that will take place at the final assembly point and the cost of final assembly.

2. **Solicitation specification requirements:** The Contractor shall submit evidence that it will be capable of meeting the bid specifications.

3. **Federal Motor Vehicle Safety Standards (FMVSS):** The Contractor shall submit (1) manufacturer’s FMVSS self-certification, Federal Motor Vehicle Safety Standards, that the vehicle complies with relevant FMVSS or (2) manufacturer’s certified statement that the contracted buses will not be subject to FMVSS regulations.

**FR 15 - Cargo Preference**

The Contractor agrees to the following:

- To use privately owned U.S.-flag commercial vessels to ship at least fifty (50) percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners and tankers) involved, whenever shipping any equipment, material or commodities pursuant to the underlying Contract to the extent such vessels are available at fair and reasonable rates for U.S.-flag commercial vessels;
- To furnish within twenty (20) working days following the date of loading for shipments originating within the United States or within thirty (30) working days following the date of leading for shipments originating outside the United States, a legible copy of a rated, “on-board” commercial ocean bill of lading in English for each shipment of cargo described in the preceding paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to the FTA recipient (through the Contractor in the case of a Subcontractor’s bill-of-lading.)
- To include these requirements in all subcontracts issued pursuant to this Contract when the subcontract may involve the transport of equipment, material or commodities by ocean vessel.

**FR 16 - Fly America**

The Contractor agrees to comply with 49 USC 40118 (the “Fly America” Act) in accordance with the General Services Administration’s regulations at 41 CFR Part 301-10, which provide that recipients and sub recipients of federal funds and their contractors are required to use U.S. flag air carriers for U.S. government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

**FR 17 - Contract Work Hours And Safety Standards**

A. **Overtime requirements** - No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

B. **Violation; liability for unpaid wages; liquidated damages** - In the event of any violation of the clause set forth in paragraph (1) of this section the Contractor and any subcontractor responsible therefor shall be
liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (A) of this section.

C. **Withholding for unpaid wages and liquidated damages** – SEPTA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (B) of this section.

D. **Subcontracts** - The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (A) through (D) of this section.

**FR 18 - Accessibility**

STATE REQUIREMENTS (SR)

SR 1 - Nondiscrimination Clause.

A. In the hiring of any employee(s) for the manufacture of supplies, performance of work, or any other activity required under the Contract or any subcontract, the Contractor, subcontractor, or any person acting on behalf of the Contractor or subcontractor shall not, by reason of gender, race, creed, or color, discriminate against any citizen of this Commonwealth who is qualified and available to perform the work to which the employment relates.

B. Neither the Contractor nor any subcontractor nor any person on their behalf shall in any manner discriminate against or intimidate any employee involved in the manufacture of supplies, the performance of work, or any other activity required under the Contract on account of gender, race, creed, or color.

C. Contractor and subcontractors shall establish and maintain a written sexual harassment policy and shall inform their employees of the policy. The policy must contain a notice that sexual harassment will not be tolerated and employees who practice it will be disciplined.

D. Contractor shall not discriminate by reason of gender, race, creed, or color, against any subcontractor or supplier who is qualified to perform the work to which the Contract relates.

E. The Contractor and each subcontractor shall furnish all necessary employment documents and records to and permit access to their books, records, and accounts by the contracting agency and the Bureau of Contract Administration and Business Development, for purposes of investigation, to ascertain compliance with provisions of this Nondiscrimination/Sexual Harassment Clause. If the Contractor or any subcontractor does not possess documents or records reflecting the necessary information requested, the Contractor or subcontractor shall furnish such information on reporting forms supplied by SEPTA or the Bureau of Contract Administration and Business Development.

F. The Contractor shall include the provisions of this Nondiscrimination/Sexual Harassment Clause in every subcontract so that such provision will be binding upon each subcontractor.

G. The Commonwealth or SEPTA may cancel or terminate the Contract, and all money due or to become due under the Contract may be forfeited for a violation of the terms and conditions of this Nondiscrimination/Sexual Harassment Clause. In addition, the Commonwealth and/or SEPTA may proceed with debarment or suspension and place a record of the action regarding the Contractor in the Commonwealth Contractor Responsibility Files.
SR 2 - Air Pollution and Environmental Protection.

The Contract is subject to the provisions of the Air Pollution Control Act of 1960, as amended (35 P.S. 4001, et seq.) and any rules, regulations or orders issued by the Pennsylvania Department of Environmental Resources under the provisions of that Act.

SR 3 - Additional Work Due to Changes in Environmental Protection Requirements.

a. For purposes of this Paragraph 3., "Environmental Laws" shall mean the provisions of the Air Pollution Control Act of 1960, as amended (35 P.S. 4001, et seq.), and any rules, regulations or orders issued by the Pennsylvania Department of Environmental Resources under the provisions of that Act.

b. If the Contractor must undertake additional work due to the enactment of new or the amendment of existing Environmental Laws occurring after the submission of the successful bid, SEPTA shall issue a change order setting forth the additional work that must be undertaken which shall not invalidate the Contract. The cost of such a change order to SEPTA shall be determined in accordance with the provisions of Paragraph XIV. of the Agreement; provided, however, that such additional costs to undertake work not specified in the invitation for bid shall not be approved unless written authorization is given the Contractor prior to its undertaking such additional activity. In the event of a dispute between SEPTA and the Contractor, arbitration procedures may be commenced under the applicable terms of the construction contract, or, if the contract contains no such provision for arbitration, the then obtaining rules of the American Arbitration Association.

SR 4 - Steel Products

All steel products used or supplied in the performance of the Contract shall be products produced from steel made in the United States in conformity with the Steel Products Procurement Act of 1978 (Act No. 3 of 1978, March 3, P.L. 6 (73 P.S. 1881 et seq.)), as amended, and if the federal Buy America Requirements are applicable to the Contract, in full conformity with the Buy America provisions of Section 165(a) of the Federal Surface Transportation Assistance Act of 1982, as amended, and the applicable regulations in 49 CFR Part 661.

Contractor shall insert this requirement as a special condition for any subcontract awarded under the Contract.

SR 5 - Reporting of Political Contributions

Contractor shall comply with the applicable provision of 25 PS §3260a. hereinafter set forth:

1. Any business entity including but not limited to a corporation, association, partnership or sole proprietorship, which has been awarded non-bid contracts from the Commonwealth or its political subdivisions during the preceding calendar year, shall report by February 15 of each year to the
Secretary of the Commonwealth an itemized list of all political contributions known to the business entity by virtue of the partner or individual owner that has been made by:

a. any officer, director, associate, partner, limited partner, individual owner or members of their immediate family; or

b. any employee or members of his immediate family whose political contribution exceeded one thousand dollars ($1,000) during the preceding year.

For the purposes of this subsection, "immediate family" means a person's spouse and any unemancipated child.

2. It shall be the duty of the Secretary of the Commonwealth to publish sixty (60) days after February 15 of each year a complete itemized list of all contributions given under the provisions of subsection 1. This list shall be a matter of public record open to public inspection and copies made available at cost to any individual who requests them.

SR 6 - Membership in Clubs

In accordance with Chapter 17-400 of the Philadelphia Code, Contractor agrees with its payment or reimbursement of membership fees or other expenses associated with participation by its employees in an exclusionary private organization, insofar as such participation confers an employment advantage or constitutes or results in discrimination with regard to hiring, tenure of employment, promotions, terms, privileges or conditions of employment on the basis of race, color, sex, sexual orientation, religion, national origin or ancestry, constitutes a substantial breach of the Agreement entitling SEPTA to all rights and remedies provided in the Agreement or otherwise available in law or equity.

Contractor agrees to include the immediately preceding paragraph, with appropriate adjustments for the identity of the parties, in all subcontracts which are entered into after the date of the Agreement for services to be performed pursuant to the Agreement.

SR 7 - Contractor Responsibility.

For the purpose of these provisions, the term “Contractor” is defined as any person, including, but not limited to, a proposer, offeror, loan recipient, grantee, or subgrantee, who has furnished or seeks to furnish goods, supplies, services, or leased space, or who has performed or seeks to perform construction activity under contract, subcontract, grant, or subgrant with the Commonwealth, or with a person under institutions. The term “Contractor” may include a permittee, licensee, or any agency, political subdivision, instrumentality, public authority, or other entity of the Commonwealth.

1. The Contractor must certify, in writing, for itself and all its subcontractors, that as of the date of its execution of any Commonwealth contract, that neither the Contractor, nor any subcontractors, nor any suppliers are under suspension or debarment by the Commonwealth or any governmental entity, instrumentality, or authority and, if the Contractor cannot so certify, then it agrees to submit, along with the bid/proposal, a written explanation of why such certification cannot be made.

2. The Contractor must also certify, in writing, that as of the date of its execution of any Commonwealth contract, it has no tax liabilities or other Commonwealth obligations.
3. The Contractor’s obligations pursuant to these provisions are ongoing from and after the effective date of the contract through the termination date thereof. Accordingly, the Contractor shall have an obligation to inform the contracting agency if, at any time during the term of the contract, it becomes delinquent in the payment of taxes, or other Commonwealth obligations, or if it or any of its subcontractors are suspended or debarred by the Commonwealth, the federal government, or any other state governmental entity. Such notification shall be made within 15 days of suspension or debarment.

4. The failure of the Contractor to notify the contracting agency of its suspension or debarment by the Commonwealth, any other state, or the federal government shall constitute an event of default of the Contract with the Commonwealth.

5. The Contractor agrees to reimburse the Commonwealth for reasonable costs of investigation incurred by the Office of the Inspector General for investigations of the Contractor’s compliance with the terms of this or any other agreement between the Contractor and the Commonwealth, which results in the suspension or debarment of the Contractor. Such costs shall include, but shall not be limited to, salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees. The Contractor shall not be responsible for investigative costs for investigations which do not result in the Contractor’s suspension or debarment.

6. The Contractor may obtain the current list of suspended and debarred Commonwealth Contractors by either searching the Internet at http://www.dgs.state.pa.us/debarment.htm or contacting the:

   Department of General Services
   Office of Chief Counsel
   603 North Office Building
   Harrisburg, PA 17125
SECTION 6 A

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SECTION 6A: TECHNICAL SPECIFICATION (3 + 4)

**TS 1. Scope**
This specification outlines the requirement for a single rear wheel mini bus with three (3) wheelchair positions and ambulatory seating for four (4) adult passengers plus a driver.

The vehicle supplier shall design the coach interior and seating arrangement to maximize comfort for all passengers.

The vehicle shall meet all applicable FMVSS, FTA, State of Pennsylvania, EPA requirements, ADA Accessibility Guidelines for transportation vehicles, and Society of Automotive Engineers (S.A.E.) recommended practices in effect for the model year of manufacture of the vehicle. The vehicle shall meet all tests and standards requested prior to date of Proposal submission. The vehicle shall be certified as a Light-Duty Cutaway Bus for a minimum service life of four years/100,000 miles as described in CFR Part 49.3 665.11. The vehicle shall comply with O.E.M. chassis manufacturer recommended practices as outlined in the Body Builder and Van Modifier Manuals.

**TS 1.1 Pilot Bus**
The Contractor shall build a “Pilot” bus prior to each yearly production run. The pilot bus shall precede production buses by 30 days minimum. A complete configurations audit will be conducted on each pilot bus. All specification compliance issues shall be mutually resolved prior to the production run. The conformed pilot bus shall serve as the configuration standard for the production bus run. Under no circumstances shall the vehicle configuration be changed from the conformed pilot bus configuration without written authorization from SEPTA Project Management.

**TS 2. Equipment**

**TS 2.1 Engine**
Engine shall be gasoline powered with a minimum displacement of 5.4 liters and 190 SAE net minimum horsepower. Gasoline engine shall be electronically fuel injected. Gasoline engine shall meet all 49 state EPA Exhaust Emissions Standards applicable to this class of vehicle. If any component of the exhaust system is modified in any manner the contractor shall utilize like materials to complete said modifications. Carbon steel exhaust pipe is not an acceptable substitute for Aluminized Steel OEM exhaust pipe.

Fuel requirement: Unleaded “Regular” Octane gasoline. “Unleaded Gasoline Only” shall be stenciled in contrasting paint/decal over the fuel filler location.

The interior engine cover shall be easily removable. The removal of the interior engine cover shall not require disassembly of any other components to gain access.

**TS 2.2 Transmission**
Transmission shall be heavy duty minimum 4 speed automatic with maximum factory available cooling, and shall include maximum auxiliary transmission cooler that is offered by the Chassis O.E.M.
TS 2.3 Chassis
Gross vehicle weight rating of 10,050 pounds maximum.

TS 2.3.1 Front Axle
Front Axle 3,600 pounds GAWR minimum.

TS 2.3.2 Rear Axle
Rear axle shall be full floating, one piece forged steel housing and single reduction. Single tires shall be provided on rear axle.

Rear axle ratio shall be compatible to allow vehicle to cruise at 55 mph with full passenger load.

TS 2.3.3 Drive Shaft Protectors
Two drive shaft protectors shall be supplied to prevent contact with the roadway or with parts of vehicle in the event the drive shaft becomes disconnected at either end.

TS 2.3.4 Steering
Steering shall be hydraulic power assisted.

TS 2.3.5 Brakes
Service brakes shall be equipped with heavy duty split power hydraulic system with power booster.

TS 2.3.5.1 Front Brakes
Front heavy duty disc brakes.

TS 2.3.5.2 Rear Brakes
Rear heavy duty disk brakes.

TS 2.3.6 Tires/Wheels
Tires shall be all season tubeless steel belted radials. Chassis O.E.M. steel wheels shall be supplied. An identical spare tire/wheel with TPS transponder installed shall be supplied with each bus. Tires shall be suitable for the vehicle application, as recommended by chassis O.E.M. All wheels, including the spare shall be painted chassis OEM white.

The spare tire and wheel assembly shall be shipped with each bus.
Maximum tire pressure shall be stenciled in contrasting paint/decal over each tire on fender or body, one-half inch high letters.

**TS 2.3.7 Fuel Tank**
Fuel tank(s) capacity shall be 35 gallons minimum and I.C.C. approved type with protective shield. Tank must meet FMVSS standard 301. A single tank is required.

**TS 2.3.8 Wheel Base**
Wheelbase shall be 135.5 inches minimum.

**TS 2.3.9 Frame**
Frame shall be single channel 33,000 PSI minimum steel. Frame shall be minimum of 212,520 foot-pounds resisting bending moment. RBM=SM x yield strength.

Section modulus per side shall be 2.86 cubic inches with resisting bending moment of 123,480 pounds.

Any frame or chassis extension must comply with all chassis O.E.M. recommended practices as outlined for body builders and van modifiers (i.e.: Ford QVM). Contractor shall provide documentation from the Chassis O.E.M. indicating compliance with the Chassis O.E.M. recommended practices.

**TS 2.3.10 Suspension**
The Proposer shall supply a weight analysis worksheet to SEPTA for review as part of Technical Proposal. The analysis must provide:

- Actual completed weight of vehicle
- Adjustment for fuel load
- Unloaded vehicle weight
- Weight of the occupants
- Loaded vehicle weight
- Available cargo capacity
- Gross Vehicle Weight Ratings
- Exceeded weight ratings @ each wheel pass/fail and axle totals

**TS 2.3.10.1 Front Suspension**
Front-Heavy duty coil springs suitable for the GVWR of the vehicle.

**TS 2.3.10.2 Rear Suspension**
Rear – Heavy duty two (2) stage multi-leaf springs suitable for the GVWR of the vehicle.
**TS 2.3.10.3 Shock Absorbers**
Heavy duty front and rear shock absorbers.

**TS 2.3.10.4 Front Stabilizer Bar**
Heavy duty front stabilizer bar.

**TS 2.4 Cooling System**
The cooling system shall be equipped with heavy duty increased capacity tubular radiator.

**TS 2.4.1 Coolant**
System to be protected with permanent type antifreeze to minus 20 degrees Fahrenheit. Label listing coolant protection level and date checked shall be supplied and attached to radiator.

**TS 2.4.2 Capacity**
Cooling system must be heavy duty and maximum cooling available from the chassis O.E.M. for the specific chassis.

**TS 2.4.3 Recovery Tank**
The system shall have a coolant recovery element within its design.

**TS 2.5 HVAC**
The heater/defroster shall be heavy duty, fresh air type sufficient to heat the interior of the vehicle and defrost the windshield under all climate/weather conditions experienced in Philadelphia. Heating system requires prior approval of SEPTA.

**TS 2.5.1 Auxiliary Heat**
An Auxiliary rear heater shall be provided. An inline cut off valve shall be installed in engine compartment or under the floor of the bus and red tagged/labeled. The BTU rating of the rear heater shall be a minimum of 29,000 BTU’s. No heater components shall interfere with any seating position. The auxiliary heater shall be equipped with a minimum two speed fan. The coolant hoses to the heater shall be premium silicone automotive type with stainless steel constant torque hose clamps.

**TS 2.5.2 Front Heat**
In addition to the auxiliary rear heater, a front heater shall be supplied with a minimum of three-speed fan.
TS 2.5.3 Air Conditioning
Front/rear air conditioning shall be supplied and installed. Both units shall operate independently of each other. Front and rear units shall be equipped with individual compressors, evaporators, condensers, and controls for temperature and fan speed. Units in combination shall be a minimum of 41,000 BTU. Air conditioning units, at ambient conditions of ninety-five (95º) degree Fahrenheit and seventy-five (75%) humidity, must be capable of dropping temperature twenty-five (25º) degrees within thirty (30) minutes of listed situation at standard park high idle. (Ref. Sec. 2.5.6). The chassis O.E.M. air conditioner as a front unit is acceptable. Air conditioning units shall be manufactured by MCC or Thermo-King or approved equal. A skirt mounted condenser is required with a minimum of two (2) fan units.

TS 2.5.4 Equipment
All air conditioning lines shall be attached/supported with rubber insulated steel clamps throughout the entire vehicle. All refrigerant lines added by the Contractor shall be suitable for R-134-A. The lines shall have an effusion rate that meets all applicable standards for the current model year. All refrigerant lines added by the Contractor shall be protected from chafing by covering the lines with a suitable loom or conduit. All line fittings shall be permanently attached using closed cycle crimp-on connections, or other fastening system(s) approved by SEPTA. MCC “Flex-Click” system is approved.

TS 2.5.5 Refrigerant
The refrigerant used in the air conditioning system shall be R-134A. The refrigerant systems for the front and rear unit shall be independent of each other.

TS 2.5.6 Testing
General air conditioning testing procedure; Vehicle shall be soaked to at least ninety-five (95º) degree F and seventy-five (75%) humidity for a minimum of four (4) hours in a controlled atmosphere. Temperature will be taken at three (3) locations within passenger compartment at three (3) different levels, twelve (12”) inches from ceiling, twelve (12”) inches from floor, twelve (12”) inches from hip line, at front, midcoach, and rear of passenger compartment. System electrical draw shall not exceed 60 amps at high, medium or low speed during operational mode. A printout of test results of both air conditioning pull-down and electrical load shall be supplied prior to delivery of the first bus.

TS 2.6 Electrical System

TS 2.6.1 Batteries
There shall be two batteries as supplied by Chassis O.E.M. Manufacturer. Batteries – 72 amp-hours minimum, twelve (12) volt, 650 CCA, heavy-duty, maintenance free or meet standard battery package provided by the respective chassis O.E.M. manufacturer and comply with the other elements of the section.

If the Chassis O.E.M. does not provide two (2) batteries mounted under the front hood, a separate roll-out battery tray shall be provided to hold the auxiliary battery. Auxiliary battery must be equal to original equipment in regards to voltage, amp hours and cold cranking amps. If an Auxiliary battery box is used, the door shall be hinged on a horizontal plane. The battery tray shall be a stainless steel, roll-out type. The tray shall be retained in its stowed position by a “quick release” latch mechanism.
Alternator(s) shall be sized to meet all electrical load requirements and maintain a charged battery system. Proposal requires an electrical system datasheet and calculation showing minimum and maximum electrical load requirements and alternator(s) that will be provided.

**TS 2.6.2  Back-Up Alarm**
LED Back-up lights shall be provided. A back-up-alarm shall be provided. Alarm requires approval by SEPTA. Alarm range shall be adjustable from 85 to 110 db.

**TS 2.6.3  Protection**
Fuse panel or manual reset circuit breakers shall be conveniently accessible for service.

The box or panel shall be moisture proof and sealed to prevent any possible water intrusion. An electrical schematic/legend shall be located inside the panel door to identify all circuits, fuses/breakers and components within the box.

Access door to panel box shall have a door retainer to maintain door in open position for service if panel box door is hinged on top.

The Contractor shall supply all mounting hardware and wiring to support the SEPTA radio and mobile data terminal. The bus as delivered to SEPTA shall be in a “plug and play” state. Information regarding the instructions and equipment for this installation are included in attachment # 5 to this specification.

**TS 2.6.4  Harnesses**
All electrical wires have to be heavy duty plastic covered enclosed in a loom. All exposed electrical junction boxes shall be enclosed with a gasket for protection against water, salt and road chemicals.

All penetration of wires through body must have a commercial grommet to prevent chafing, rubbing or cutting of electrical wires or conduit.

All electrical wires and looms under vehicle shall be fastened with vinyl/rubber insulated steel clamps.

Wiring may not pass over top of fuse receptacle.

**TS 2.6.5  Electrical System, Other than Chassis O.E.M**
Insulated wiring shall conform to current SAE standards J1127 and J1128. Insulation material shall be selected for the maximum ambient temperature of its on-vehicle environment per table 1 of SAE standard J1292 latest edition.

Insulated wiring shall be color coded to the maximum extent practicable for easy identification of system functions and permanently number coded at 6" intervals with no duplication of numbers between functions. Each wire’s gauge, color and number code and SAE type (GPT, HDB, SXL, etc.) shall be referenced on electrical diagrams covering all contractor-installed electrical systems and their connections to O.E.M. electrical systems.
A component legend must be provided and posted in the fuse compartment. Wires may be function coded at 1' intervals on lieu of color coding.

Wiring shall be continuously enclosed in non-metallic loom meeting current SAE standard J562, and be adequately supported and routed for protection from heat, moisture, solvents, corrosion, road debris, abrasion and tension. Wiring shall be of sufficient length to permit proper positioning as well as replacement of terminals at least twice without excessive tension. Rubber grommets shall be provided at points where wiring penetrates metal or other material with acute edges.

Battery cables shall be a minimum No. 00 AWG type SGX meeting current SAE standard J1127.

**TS 2.6.6 Connectors**
The Contractor shall use AMP (PIDG) Pre-insulated Diamond Grip Terminals, Molex or approved equal installed with tool which will not release until crimp is tight. Machine crimped and/or weather-pak connectors are acceptable substitutes. Any other terminal requires prior approval from SEPTA.

**TS 2.6.7 Documentation**
The Contractor shall provide electrical diagrams for all Contractor installed electrical wiring and components. These diagrams shall be provided coincident to the delivery of the first vehicle to SEPTA.

**TS 2.7 Body Construction**
Vehicle shall be all steel cage construction.

**TS 2.7.1 Roof**
The roof shall meet the performance requirements of FMVSS 220 with respect to static rollover protection. A steel roll cage structure shall be supplied. The structure must be attached in an acceptable manner to the floor structure described in TS 2.7.3.

The roof shall be supported by a steel roll cage. The roll cage shall have prior approval of SEPTA. The roll cage shall allow a clear floor to ceiling distance in the passenger compartment of seventy two and one-half (72.5”) inches minimum. Insulation shall be installed throughout the headliner and side liner. Ribs or bows for roll structure shall be welded or bolted to body upright frames.

There shall be a minimum of five (5) roof bows in roof construction. Each roof bow shall be appropriately spaced to give maximum strength to bus. All roof panel seams shall be sealed and impervious to moisture intrusion. The rear air conditioning evaporator system must be fastened either directly or via tapping plates, to the steel roll cage structure to obtain proper support.

**TS 2.7.2 Wall Construction**
Side walls shall be constructed of steel tubing of suitable strength to meet all applicable FMVSS and service requirements for this class of vehicle.
All body wall construction shall be aluminum or galvanized steel exterior skin.

If O.E.M. body side ribs have been removed, new structure must meet the equivalent strength of the original body. Any body ribs removed must be replaced.

If any part of the forward facing body, perpendicular to the frame, extends beyond the OEM cab profile, Aluminum diamond plate (or approved equivalent) shall be added to this entire extended body only below the interior floor level.

**TS 2.7.3 Floors**

Floor structure, wheel housings, belly pan, shall be all steel construction. Wheelhouses shall have a minimum intrusion into the coach interior or interference for a seated passenger. The floor shall be supported by steel frames. The floor shall have steel side rails and front and rear steel end rails.

Floor shall have a 5/8" minimum sub-floor, 5-ply, pressure treated, or three-quarter inch exterior grade A/C plywood. Plywood shall be finished and shall be installed with finish side down and with all edges and joints sealed.

The floor shall be covered with Altro or Tarabus non-slip flooring. This includes the stepwell, entrance area, center aisle floor area and wheelchair area if applicable. The flooring material provided shall be Genome TFM 1802 Altro or 6727 Anthracite, Sirius NT, Tarabus. The flooring shall be warranted for no less than seven (7) years.

A floor plan shall be submitted to SEPTA for review with Proposal. The floor plan shall be to scale. The plan at a minimum shall include seat locations, door locations, wheel housings, steps and step well, aisle, seat spacing, wheelchair positions, windows, stanchions, driver’s position, and all emergency exits. All body dimensions shall be listed.

If the vehicle design includes the fuel tank filler neck passing through the passenger compartment the interior cover for the filler shall withstand an impact of no less than 500 lbs. with a 2" round steel ball. The interior cover shall be constructed of 300 series stainless steel.

The cover shall be completely sealed to prevent moisture or fumes from entering the passenger compartment.

**TS 2.7.4 Steps and Step Well**

All steps in front entrance shall be covered with nonskid, Altro or Tarabus non-skid flooring that shall remain effective in all weather conditions. Color of the tread covering shall match the floor of the interior. The edge of the step tread shall have a bright, high visibility yellow over the full width of the step including edge at floor level. The color shall be permanently blended into the tread covering material. Any steel or aluminum fastening strips must have flush fasteners. The protrusion of the steps shall not extend past body. The passenger door area and step well shall be illuminated by overhead LED lighting. Said lighting shall meet all requirements of spec section TS 2.12.15.
TS 2.7.5 Front Entrance Door
Front passenger door shall be driver actuated, manual, heavy duty; operated with control located conveniently for the driver. The door operator shall have a locking feature. Front doors shall have either upper and lower glazing or a single full-length pane.

Door(s) may be double folding type with vertical closing edge(s) of door covered with rubber or a rubberized material to create a safety seal. Outward opening door is acceptable as long as width of opening is not compromised.

A header pad shall be provided inside over entrance door and covered with upholstery that matches interior color scheme.

Door opening shall be a minimum of seventy six and one-half (76.5”) inches high from top of first step to entrance header. Ground height to first step shall not exceed twelve (12”) inches +/- one-half inch (1/2”). Risers shall not be greater than eight and three-quarter inches. The front entrance door shall have an opening with a minimum width of twenty four (24”) inches. External key locking is not required. Front entrance door shall have heavy duty gasket and seal door fully. The door opener mechanism shall have a locking feature.

TS 2.7.6 Emergency Door(s)
Emergency door(s) shall be located in center of rear of vehicle. Door(s) shall be permanently marked “EMERGENCY DOOR” on the inside with red letters not less than two (2”) inches high. The marking described in previous sentence shall be duplicated on the exterior in black letters.

The emergency door shall be a minimum of thirty-two (32”) inches wide by fifty-four (54”) inches high. The emergency door(s) shall be equipped with warning buzzer (for door ajar condition). Operating instructions must be posted in area of latch release. The door(s) shall have an exterior and interior emergency release. Switches for warning buzzer shall be integral to the door frame and the emergency door handle. The emergency door(s) shall have both an upper and lower window. The size of the window shall be the maximum permitted. Emergency door(s) shall have acceptable tie back securement device or gas spring for emergency exit.

TS 2.7.7 Wheelchair Lift Door
In addition to front door(s) and emergency door(s), vehicle shall have a door for the wheelchair lift located on the curb side between rear axle and the front passenger door. The door opening shall have a minimum of sixty three (63”) inches clear height and thirty five (35”) inches clear width. The door(s) shall be opened from the exterior with a single mechanical non-locking latch. In addition to the mechanical door latch the Contractor shall install a safety cable on the inside of the door. The safety cable shall be anchored to the door frame on one end and have a spring loaded, quick release hook on the opposite end. The safety cable is to be hooked to the door by the driver from the inside of the vehicle. The cable shall not let the door open more than two (2) inches if the primary door latch is unlocked.

The door(s) shall be a single or double panel, piano or strap hinged. A single door is preferred for insulation purposes. Alternate hinging systems shall be considered if equivalency can be demonstrated. An interlock shall prevent vehicle movement when the wheelchair door is open or ajar. The interlock system shall utilize solid state components to sense wheelchair door position. The system shall be inherently reliable and require minimal
maintenance or adjustment. Any system malfunction shall “fail safe”. An interlock system description shall be submitted as part of proposer’s technical proposal.

The door shall have a mechanical feature to maintain open position when lift is deployed. Mechanical lock must positively retain door.

The Lift door(s) must have a heavy-duty gasket. The door shall swing towards the rear of the vehicle. The Lift door(s) shall have a window(s). Window area will be a minimum of 400 square inches. Lift door(s) shall have an exterior latch handle with the capability of inside release when interior door handle is activated. Interior door handle shall be red.

**TS 2.7.8 Drivers Door**
Vehicle shall have a driver’s door on left side with full roll up window.

**TS 2.7.9 Windows**
Windows, with the exceptions of windshield (AS-1) and drivers side windows (AS-2), shall be AS-3 minimum grade safety glass and meet applicable federal standards. All windows shall be tinted with a minimum of 20% and a maximum of 31% light reduction. Passenger windows shall be the maximum size permitted. Knockout type split sash windows shall not be used.

Vehicle shall be equipped with full emergency exit push-out windows equipped with quick-release catch and warning buzzer and red lights above each egress windows. The method of operations and instructions for operation shall be installed on plates in close proximity to operating handle.

Vehicle shall be equipped with a minimum of two (2) emergency exit windows on the left side and one (1) emergency exit on the right side. These windows shall open outward and shall be permanently labeled inside to indicate proper use. Labeling shall not be on window. The vehicle shall be equipped with a window at each passenger seat position. A minimum of two (2) windows shall be supplied in rear wall exclusive of windows in emergency door unless rear wall does not have enough space. All side windows exclusive of driver compartment shall be top “T” sliders.

Right front transitional panel shall have largest window available or, if necessary, multi-windows for safety and security. Window shall be the maximum size permitted. View from window shall permit line-of-vision to small children and occupants of wheelchairs.

**TS 2.7.10 Insulation**
Insulation shall be provided between the exterior and interior panels, including the ceiling. Insulation shall have sound deadening and vibration reduction qualities. Insulation material shall be moisture proof. Insulation shall be laminated to body sidewall. If insulation is loose, it shall be bagged. Loose is not acceptable.
TS 2.7.11 Interior Body Walls and Ceiling
Interior body walls and ceiling shall be fiberglass reinforced plastic which meets the requirements of FMVSS-302. The Contractor must supply certification that materials meet FMVSS-302.

TS 2.7.12 Body Dimensions
Body width shall be 84" inches maximum, excluding mirrors. Body length shall be minimum of 225.5 to a maximum of 262.5 inches bumper to bumper. Body height shall not exceed ten (10) feet including open roof vents. Interior width in passenger compartment shall not be less than seventy-four (74") inches measured at any dimension above floor level. Any trim pieces installed on the exterior body by the secondary manufacturer shall be mechanically fastened to the body. Adhesives alone for this purpose are not acceptable.

TS 2.7.13 Water Test
Entire body shall be subjected to water/air spray test to validate adequacy of all caulking, body sealing, door and window gaskets. The Contractor shall test the vehicle and repair all leaks prior to presenting the vehicle to SEPTA for testing. The duration of the Water Spray Test shall be 15 minutes minimum. The Water Spray Test shall be repeated until all leaks are repaired to the satisfaction of SEPTA.

TS 2.8 Seating

TS 2.8.1 Driver’s Seat
Driver’s seat shall be full foam bucket seat equipped with shoulder harness and lap belt. Chassis O.E.M. high back drivers seat. Driver’s seat shall be a minimum of 36 oz. anti-microbial vinyl (Chassis OEM Vinyl acceptable). The seat cushion and back rest shall have inverted seams, (no piping allowed).

Minimum distance between steering wheel and back rest of driver’s seat is to be eleven (11") inches. Driver’s seat is to be securely attached, and to have fore and aft adjustment of not less than four (4") inches. The fore and aft adjustment lever shall not interfere with driver foot traffic. Driver’s seat anchorage is to comply with acceptable installation procedures and FMVSS 207.

TS 2.8.2 Passenger Seating
The vehicle is to seat four (4) adults while simultaneously accommodating the use of two (2) wheelchair stations. The location of the third wheelchair station may utilize a double transverse “fold-away seat.” The double transverse seat shall have a flip-up armrest on the aisle side. Additional seating is to consist of two (2) seventeen (17") inches wide forward facing seats. One of these seats is to be located on the driver side directly behind the front wheelchair position. The fourth seat is to be placed behind the wheelchair-lift stanchion/barrier. All seating shall be positioned to maximize passenger comfort. Seat spacing is to allow for 24" hip to knee room and 30" aisle space. One wheelchair station shall be placed directly behind the driver's seat and two of the wheelchair stations shall be at the rear of the coach interior. Each wheelchair location shall allow for a 30" wide by 52" pocket. The 30" X 52" pocket shall be a clear opening that does not utilize areas under other seating, panels or barriers. The 30" X 52" pocket shall be positioned to minimize the effort required to completely secure mobility devices from inside the vehicle.
TS 2.8.2.1 Seat Construction
- Foam material shall be polyurethane or approved equal.
- Separate back and seat cushions for each seat shall be supplied.
- ABS material is required on all backs and rear underside edges of seats. Not required on seats in rear row.
- Individual energy absorbing grab rails are required with a maximum diameter of 1 and ¼ inch to minimum on one (1) inch. Padding shall be high visibility yellow in color. Padding material shall be designed to last the life of the bus. Grab rails are not required on seats in rear row.
- Back cushions must have side bolsters or wings of a minimum of two inches each.
- Upholstery shall be a minimum of 36 oz. Antimicrobial vinyl.
- Upholstery color shall be light gray.
* Seats shall have flip-up arm rests on the aisle side.

TS 2.8.2.2 Anchorage
Seat anchorage shall comply with Federal Motor Vehicle Safety Standard 207.

TS 2.8.2.3 Seat Belts
All passengers seats shall have appropriate number of certified seat belts with automatic retractors. All window seats must have retracting shoulder harness. All passenger seat belts must have a minimum of 100" usable length. Q-Straint System Part Number S5-6410-RET-A seatbelt or Sure-Lok AL700727HA or approved equal.

TS 2.8.2.4 Spacing
Minimum center-to-center seat spacing is to be twenty-nine (29") inches.

TS 2.8.2.5 Seat Cushions
Seat and back cushions of all seats to be designed to safely support designated number of passengers under normal road conditions. The back cushions to be constructed to minimize exposed screws or bolts that contribute to vandalism of seats and their components. Necessary exposed fasteners must be tamper-proof.

TS 2.8.2.6 Seat Back
Backs of all seats of similar size to be of the same width at top, of same height from floor and have identical seat back angle.

TS 2.8.2.7 Seat Cushion Retention System
Passenger seat cushion retention system shall be employed to prevent passenger seat cushions from disengaging from seat frames in event of accident. Each seat cushion retention system shall be capable of withstanding vertical static load equal to minimum of five times weight of cushion. System shall also be capable of withstanding forward or rearward static load, of 600 lbs. (Federal White Book Standard).

TS 2.8.2.8 Seat Depth
All seats are to have minimum depth of seventeen (17") inches.
TS 2.8.2.9  Seat Flammability
All seats shall comply with FMVSS 302 regarding flammability.

TS 2.8.2.10  Seating Floor Plan
A floor plan shall be submitted for review with proposal. An overall floor plan shall include placement of all seats, seat belt anchorage, stanchions and modesty panel(s). The floor plan shall include all dimensions clearly identifying measurements as required, e.g. hip to knee, aisle width, etc.

TS 2.9  Wheelchair – Passenger Restraint System

TS 2.9.1  General
The Contractor shall supply and install complete wheelchair passenger restraint system.

Retractor Wheelchair Securement and Occupant Restraint Systems design, installation and operation shall comply with the standards listed below. Omission in this specification does not relieve the bidder from compliance requirements of the standards listed below. Retractor Wheelchair Securement and Occupant Restraint Systems shall be forward facing, stowable, and non-removable. Retractor Wheelchair Securement Systems shall be a FF600 Series Q.Straint QRT (PN Q-1007)(QRT360) or Sure-Lok Titan 800 (PN AL827S4C) or approved equivalent.

The retractor wheelchair securement system shall comply with the following requirements:

- ANSI/RESNA WC-18 Wheelchair Support Equipment.
- 49CFR Part 38 Americans with Disabilities Act (ADA) and
- CSA Z605 Mobility Aid Securement and Occupant Restraint Systems for Motor Vehicles (30MPH/20G impact test criteria).
- FMVSS 222 School Bus Passenger Seating and Crash Protection.
- National Standards for School Transportation.

The wheelchair securement system shall limit the movement of an occupied wheelchair to 2 inches or less in any direction under normal vehicle operation. The Retractors shall be heavy duty with heat-treated, plated components and a minimum of 12 ratchet teeth in a metal housing. The retractor kit shall include a minimum of four retractors for securing the wheelchair. Webbing for the wheelchair securement and the occupant restraint shall be of contrasting or same color(s). The retractors shall be equipped with manual positive-locking tension knobs for tightening the webbing. The retractor shall have a positive-locking release button for releasing the webbing. The wheelchair retractor assemblies shall be equipped with S-hooks or J-hooks.
TS 2.9.2 Occupant Restraint
The occupant restraint shall be Q.Straint QRT (PN Q8-6326-A1-L) or Sure-Lok Titan P/N AL700868-8 or approved equivalent. The occupant restraint system shall comply with the following requirements, when used in conjunction with the retractor securement system:

- Federal Motor Vehicle Standards (FMVSS 209 and FMVSS 302)
- 49 CFR part 38 Americans with Disabilities Act (ADA)
- CSA Z605 Mobility Aid Securement and Occupant Restraint Systems for Motor Vehicles (30MPH/20G impact test criteria).
- ANSI/RESNA WC-18 Wheelchair Support Equipment.
- FMVSS 222 School Bus Passenger Seating and Crash Protection.
- National Standards for School Transportation.

The occupant restraint system shall be equipped with a height adjuster for the shoulder belt, having a vertical adjustment of approximately 12 inches, Q.Straint QRT (Part of kit P/N Q-7100 QRT360) System or Sure-Lok Titan P/N AL700868-8 and AL827S4C WC-18 Compliant Retractors or approved equivalent.

Wheelchair securement and occupant restraint systems, shall have a label, on each assembly, which will identify type of belt, date of manufacture and manufacturer name and part number.

Floor retractors shall be mounted into an OMNI track system(s) Q-Straint/Sure Lok PN FE753MA100-04-3 or approved equal, permanently installed in the vehicle, adjustable to various mobility device widths and able to store out of the way when not in use. Floor retractors shall be installed in the track with the retractor offsets opposing one another. This will allow for maximum adjustment and minimum space used when stored.

Shoulder harness shall be retractable.

TS 2.10 Stanchions and Guard Rails
Vertical stanchion shall be installed at right rear corner of driver’s seat in such position as neither to interfere with adjustment of driver’s seat nor to obstruct the aisle. The horizontal rail shall be so placed as not to interfere with fore and aft adjustment of driver’s seat and shall extend from vertical stanchion to left hand wall behind driver’s seat.

Vertical stanchions shall be installed at rear of the entrance stepwell from roof to floor. Stanchion placement shall not restrict passageway at any level to less than thirty-two (32") inches.

Guard rail and step well guard panel shall be installed from step well stanchion to right hand wall. Guard rails to be approximately thirty (30") inches above floor and its guard panel shall not restrict entrance passageway to less than twenty-four (24") at any level. Panel is to extend from guard rail to within two (2") inches of floor. If panel extends over or into step well opening, it must be flanged at floor line so as to close any opening between panel and floor. A left side entrance grab rail shall be positioned so passengers entering vehicle will have added support when boarding the vehicle. Right side entrance grab rail shall also be supplied. All guard rail panels must have padded backs, unless there is no passenger seat to the rear of guard rail panel. ABS or Melamine panels do not require padding.
Horizontal grab rails, shall be installed on the sidewalk adjacent to all seated positions including wheelchair positions. This grab rail shall serve as an assist for passengers. This grab rail shall protrude from the sidewalk no more than 3” and shall not inhibit ingress or egress to the seat. Black ABS or Stainless Steel 5-6” horizontal grab handles shall be installed at each wheelchair position.

Clearance between stepwell guard panel and first passenger seat to be at least ten (10”) inches measured from panel to front face of seat at cushion height.

All stanchions, handrails, and guard rails to be of stainless steel or equivalent strength tubing having minimum of one (1”) inch outside diameter. Guard rails and stanchions shall have a cross-hatched finish (Diamond grip) and be powder coated high visibility yellow.

All stanchions and grab rails must have a non-slip surface.
A rigid clear tinted plastic or Plexiglas shield at least 3/8” thick shall be provided to rear of driver’s station. The shield must comply with PennDOT regulations and must allow for complete adjustment of driver’s seat forward and rearward.

All vertical stanchions must extend from floor to ceiling and be securely fastened to roof bows or tapping plates.

**TS 2.11 Wheelchair Lift**

Wheelchair lift -- The vehicle shall be equipped with a wheelchair lift meeting or exceeding ADA regulations and FMVSS 403. Door(s) for wheelchair lift shall be between the front and rear axle and on the same side of the vehicle as the passenger service door. Lift doorway height shall be minimum of 63 inches and 35 inches wide. These measurements are listed as minimums and may need to exceed the figures in order to comply with specifications.

The wheelchair lift shall be an electro-hydraulic or electric platform with totally enclosed hydraulic cylinder(s). Lift shall operate with power up and either power or gravity down modes. Lift shall have a usable minimum platform dimensions of 32” x 51”. The dimensions shall be taken at floor level. The Lift shall be of welded metal construction.

The Lift system in stored, "non-deployed position" shall not extend more than twenty-three inches (23”) into the vehicle interior at floor level.

The platform shall have an automatic anti-roll device on its outer end. This stop shall be a mechanically operated automatically actuated barrier. The barrier shall be a minimum of six (6”) inches high and shall form a ramp incline of not more than a ratio of 1 to 8 slope to facilitate rolling the wheelchair onto the platform when the lift is at ground level. The lift shall be fully automatic. Platform release shall be accessible from both interior and exterior of vehicle. Release shall be labeled. There shall be no shear points on the lift where a foot or hand can be severed.

The bridge plate* (the plate forming the bridge between the platform and vehicle floor when the platform is at floor level position), shall be hinged upward to prevent injury in the event the wheelchair is placed too far forward on the platform and occupants' feet come in contact with the bridge plate during raising cycle. A cutoff switch shall be provided on the bridge plate which will stop the down travel of the lift platform in the event any part of the wheelchair or its occupants creates a downward pressure on the bridge plate during the lowering cycle. The bridge plate design shall allow at floor level a clear platform length of 50 inches minimum exclusive of bridge
plate. NOTE: If the bridge plate in the lift design becomes the inner barrier then no bridge plate cutoff switch is required. An inner barrier is required. Some lift designs do not have a bridge plate.

A cutoff switch shall be provided on the lift mechanism which will stop the downward travel of the platform upon minimum contact with an obstruction or upon ground contact if the lift is not gravity down in the down cycle.

The lift shall as an automatic feature have a weight sensor to prevent folding if occupied. The lift shall be totally self-contained and connect only to the vehicle's electrical system. The lift shall have a minimum test capacity of 950 lbs. and a constant (10 cycle - up down) test load capacity of 750 lbs. The lift shall not have a crossbar over the top unless a seventy-two (72") inch headroom can be maintained. Installation of the lift shall be made without modifications to the vehicle frame. Hydraulic cylinder(s) and rod(s) shall be concealed, providing safety to the passengers. Exposed hydraulic cylinder(s) is unacceptable.

The lift electrical system shall be circuit breaker protected. The circuit breaker must be readily accessible for maintenance and service and be sized as recommended by the lift manufacturer. All switches shall be designed to prevent inappropriate "operator action" in operating cycles of the lift. A manual back-up system shall be provided to ensure operation of the lift in case of electrical failure. The back-up system shall provide a reliable means of manually raising and lowering the lift while occupied. The back-up system shall fold and unfold the platform. The back-up pump shall be integrated with the hydraulic power pack system such that no hydraulic lines or fittings are required for fluidic transfer. The system shall be fail safe.

The lift control for lowering and raising the lift shall be on a flexible, cut resistant cord and shall incorporate a weather tight hand control with moisture proof switches appropriately spaced and located at the end of the cord and shall provide easy operation by the attendant when operating lift from ground level. The flexible "up/down" control box shall have a fixed position receiver when not in use by attendant/driver. When not in use, the control box shall be placed in the receiver. The receiver shall be positioned so that the flexible cord and control box cannot entangle in lift mechanism, lift platform or doors. The receiver area shall be labeled. "Place control handle here when not in use."

The lift control tower shall be mounted on the forward side of the lift. The lift doors shall be provided with a positive locking mechanism feature to lock door(s) open during lift operation. The unit shall have a safety cut-off switch to prevent operation of the lift when door(s) is closed. A flashing red light located in the driver's area shall indicate when side doors are not fully locked. If a non-flashing light is provided it must have a minimum diameter of 2.25". The lift shall be insulated from doors and other metal contact surfaces of the vehicle to prevent rattles, squeaks and other metal contact noises. The lift door area shall be illuminated by a weather proof flood light when lift doors are in fully opened position.

Cycle time for lift: shall lower in 12 seconds and raise in 12 seconds. Temperature range for operation of lift shall be 20°F to +150°F.

Lift platform shall have insulators, stops and retainers to maintain platform in closed position and eliminate rattles, squeaks and other "sounds" produced by vibrating metal.

Vehicle shall have lift interlock to prevent movement of vehicle when lift is in operation. The transmission shall be in the park position and the parking brake shall be fully engaged to properly activate the interlock. Until circuit is activated, lift shall not function. Once circuit is activated, the lift interlock shall prevent the transmission
gear selector from disengaging from the park position and/or cause the engine to stall upon release of the parking brake or movement of the gear selector. The interlock shall incorporate an electronic monitor that displays interlock status to the driver.

A lift handrail shall be provided and shall not decrease 32 inches clear width of platform.

Automatic lifts must have a "fail safe device" to prevent folding when occupied or when a load of 50 pounds or greater is on the platform.

**TS 2.12 Other Equipment**
To be provided as follows:

**TS 2.12.1 Automatic Fire Suppression System**
The vehicle shall be equipped with the FMNA water mist fire suppression system or approved equal. The system shall automatically detect and suppress fire in the engine compartment. The system shall be sized based on the suppression system manufacturer recommendations. The system installation shall be certified by system manufacturer. The system manufacturer shall be approved and listed by recognized National Testing Laboratories such as Factory Mutual and Underwriter’s Laboratories. The system installation shall be completed by personnel trained and certified by the system manufacturer. The system supplied shall comply with all applicable federal, state and local regulations in effect at time of manufacture.

The Contractor shall demonstrate that their extinguisher media, detection sensors, monitoring and delivery system shall operate when required, and under all operating circumstances. The system manufacturer shall provide a letter of approval of proper application of the system as installed on the pilot vehicle.

**TS 2.12.1.1 Loss of Pressure Detection System**
The detection system shall be UL approved. The detection system shall be of a Linear Thermal tube hydro-mechanical design. The detector cylinder shall be US DOT certified. The detector fluid shall be environmentally friendly. The detector tube shall be resistant to oils, fuels, and chemicals, normally found in a garage environment, and UV light. The detector tube shall be routed in such a manner that it will cover all risk zones. The detector tube shall be protected by a stainless steel coil throughout the entire detection area. The working temperature of the system shall be -30°C to 65°C (-22°F to 149°F). The system pressure shall be monitored visually through the use of a pressure gauge located on the detector cylinder. The system shall provide a signal for integration into the vehicle system controls to provide the following shut down at time of detection:

- HVAC System
- Engine cooling fan
- Initiate an engine shut down process (Extended operating time under fire conditions, beyond 15 seconds, is not recommended)

**TS 2.12.1.2 Display/Control Panel**
An APTA compliant control panel should be provided for all detection and/or suppression systems. The control panel should provide, at a minimum, electrical supervision of system power and detection. The system pressure shall also be monitored electrically with a normally open low-pressure switch. The panel shall contain
an audible alarm, warning light and alarm/indicator light test switch. The electric pressure switch located on the
detector cylinder shall control the alarm system.

**TS 2.12.1.3 Piston Accumulator System**
The piston accumulator system shall utilize a water-based system. The system combats all 3 fire components heat, oxygen & fuel. The fluid is an environmentally friendly suppressing fluid that can be washed off with water. Dry chemical shall not be allowed. The piston accumulator system shall be UL approved. The system must be able to activate automatically without electricity. The piston accumulator must be able to operate in the vehicle regardless of its orientation (when vehicle is on its side or roof as a result of an accident). The piston accumulator shall be equipped with a pressure gauge to allow monitoring of the system pressure. The piston accumulator shall be protected by an over pressure relief valve. The piston accumulator shall be a high-pressure piston accumulator constructed from anodized aluminum AA 6061 T6 alloy. The accumulator shall be USDOT compliant. The system shall have an operating temperature range of -30°C to 65°C (-22°F to 149°F). The system when activated shall release the entire contents of piston accumulator. The time required to release the fluid should take at least 40 seconds. The gaseous propellant must remain in the accumulator after system discharge. The fluid and gas in the system must be able to be serviced without removing the piston accumulator from the vehicle.

**TS 2.12.1.4 Distribution System**
The distribution system shall be UL approved. The distribution system shall utilize nozzles for high-pressure water mist. The nozzle shall deliver water droplets between 80-105mm.(micrometer). The nozzles shall be protected with a cover to prevent dirt and other foreign matter from entering the nozzle. The nozzles must be easily replaceable. The nozzle must contain a mesh filter located in the inlet of the nozzle. The nozzle must be constructed from brass. All steel piping must be 8mm stainless steel. All flexible High Pressure hoses shall be rated to SAE100.

**TS 2.12.1.5 System Options**
The detection system can be of a Linear Thermal wire design. The detection system can be a combination of a Linear Thermal wire design with Loss Of Pressure. System can be activated automatically, electrically or manually. Pressure switch can be provided on the piston accumulator to monitor pressure, indicate pressure loss, and activate fire alarm. A Micro switch to provide a signal to control panel showing system armed (ie – safety screw removed).

**TS 2.12.2 Gauges**
Gauges – volt/ammeter, fuel, water temperature, oil pressure, speedometer and odometer.

**TS 2.12.3 Air Bag**
If available from the chassis O.E.M. the vehicle shall be equipped with driver’s side air bag.

**TS 2.12.4 Interior Advertising**
All buses shall be equipped with interior advertising sign frame on the rear of the operator’s compartment barrier. The sign frame shall be divided into 3 sections. The upper sections shall accommodate two (2) 8.5" W x 11" H ad media side by side. The lower section shall be one frame that will accommodate 17" w x 11" h media. The ad
frame assembly shall be made of anodized aluminum or stainless steel. The ad frame shall be a simple design with no moving parts.

**TS 2.12.5 Windshield Wipers**
The vehicle shall be equipped with variable speed windshield wipers and washers on right and left side. Wipers shall have intermittent feature.

**TS 2.12.6 Horns**
The vehicle shall be equipped with dual electric horns.

**TS 2.12.7 Sun-Visor**
Driver side sun visor shall be supplied.

**TS 2.12.8 Dome Light**
Dome light in driver’s compartment shall be activated by a dash mounted switch.

**TS 2.12.9 Indicator Light**
A brake warning light is required.

**TS 2.12.10 Switches**
Light switches – separate light switches shall be provided for driver’s compartment, exterior lighting and interior lighting.

**TS 2.12.11 Mirrors - Exterior**
Mirror head shall be a Hadley model F1113 & F1112 6”x12”. Mirror head shall contain an adjustable convex mirror that is contained inside the housing. Housing shall be made of high impact ABS. Mirror head shall contain a ball for easy movement.

Mirror arm and bracket shall be adjustable for easy movement in bus washing applications. Mirror arms shall be made so as not to exceed the width or the flare on chassis. Mirror width to be approved by SEPTA. Mirrors arms shall be made of 11 gauge steel tube powder coated black.

Mirror brackets are to be made of cast aluminum. Roadside mirror shall fit in frame of driver’s window. Curbside mirror shall be mounted on front corner of chassis. C/S Mirror shall contain six mounting to points to insure a tight fit on frame/fender.

**TS 2.12.12 Mirrors - Interior**
An interior driver's mirror shall be provided to give driver view of passenger compartment. The minimum dimension is six by twelve (6 x 12") inches and must not interfere with operation of drivers sun visor.
TS 2.12.13 Roof Hatch
Roof escape hatch--supply and install a multi purpose safety type roof escape hatch. Transpec or Specialty
Manufacturing Company Roof Hatch or approved equal for emergency exit, ventilation and light transmission.

TS 2.12.14 Bumpers
Chassis O.E.M. front bumper shall be supplied. Rear bumper shall be Romeo Rim or approved equal. Bumpers
shall be rated to withstand impact of up to five miles per hour (5 m.p.h.).

TS 2.12.15 Interior Lighting
Passenger compartment lighting shall be supplied to give sufficient interior lighting for both safety and security.
Interior lights shall be LED. The interior lights shall not be wired directly to Chassis O.E.M. dash light and/or
headlight switch, but shall have separate switch and circuit breaker.

TS 2.12.16 Driver’s Lighting
Supply and install separate "directed" map light in driver compartment with individual driver control.

TS 2.12.17 Mud Flaps
Mud flaps front and rear are required.

TS 2.12.18 Steering Column
A tilt steering column shall be provided.

TS 2.12.19 Hood Release
Inside locking hood release shall be provided.

TS 2.12.20 Exterior Lighting
Vehicle shall be equipped with armored marker lights and a center brake light. Vehicle shall be equipped with
LED lighting for all FMVSS108 & Non FMVSS108 applications with the exception of headlights.

TS 2.12.21 Automatic Idle Shutdown
The contractor shall supply and install an automatic idle shutdown device manufactured by InterMotive. The idle
shutdown device shall turn off the engine when specific safety conditions are met, i.e. vehicle is in park, vehicle
speed is 0 mph, wheelchair lift interlock is not engaged and a programmed period of time has elapsed. The timed
shutdown shall be adjustable and password protected.
TS 2.12.22 Reverse Assistance System

The bus shall be equipped with a reverse assistance system: Intermotive Vehicle Controls Hawkeye Plus.

TS 2.12.23 USB Charger for Tablet Based Scheduling

A USB charger with Micro USB male plug shall be installed toward the center of the dash board for tablet based scheduling system. Circuitry shall be installed in the area intended for an OEM passenger’s side air bag. Power from the chassis fuse panel shall be 3A fused protected, 16 AWG minimum. Connections shall be made via a bus bar provided in the air bag compartment. The USB cord shall extend from the dash board to the OEM radio area with sufficient slack to accommodate the route tablet. End USB connector at the center stack shall be right angle, micro USB.

TS 2.13 Safety Equipment

Safety equipment shall be provided as follows:

TS 2.13.1 First Aid Kit

Fifteen (15) unit first aid kit with mounting bracket. In addition to the first aid kit, the Contractor shall also provide a body fluid cleanup kit.

TS 2.13.2 Fire Extinguisher

Five (5 lbs.) pound fire extinguisher, with a ten (10) ABC rating and visible gauge with mounting bracket. Fire extinguisher location shall be determined by SEPTA during the manufacture of the first bus.

TS 2.13.3 Flare Kit

ICC triangular flare kit with mounting bracket and storage container. Kit shall be mounted in driver’s compartment.

TS 2.13.4 Location

Equipment should be mounted in front portion of bus in close proximity to driver. Mounted equipment shall not pose hazard passengers entering or exiting the vehicle.

TS 2.13.5 Spare Fuses

Supply of spare electrical emergency fuses.
**TS 2.14 Rust-Proofing / Undercoating**

Rust proofing/Undercoating - the frame, fenders, underbody, cab, chassis, and body except driveshaft, catalytic converter, engine, transmission, differential, heat shields, power steering and exhaust system shall be completely undercoated. Undercoating shall be composed of a nonvolatile base, grit and abrasive free material, dispersed in a petroleum solvent, which shall provide a homogenous formulation. All undercoating shall be applied to a uniform thickness with no bare spots. Overspray shall be removed. Rust proofing of doors and fenders to be included. Fuel tanks shall not be undercoated. Warranty (36 Months) for rust proofing shall be supplied.

**TS 2.15 Paint**

Paint - Standard Chassis O.E.M. white. If vehicle not O.E.M., bus shall be thoroughly cleaned and painted with one (1) coat of rust resistant zinc chromate primer, (U.S. Federal Spec. TT-P-645, or equal) and exterior finished with one (1) coat of an air dried DuPont Imron - No. 508U or equal. This requirement is waived for manufacturers which employ pre-painted sheet metal.

**TS 2.16 Signage/Decals**

**TS 2.16.1 Emergency Exits**

All emergency exits shall be identified with appropriate labeling including operating instructions for evacuation, lock operation and handle or control direction/operation.

**TS 2.16.2 Interior Graphics**

A decal indicating the height clearance shall be posted in driver's compartment and on front and rear exterior. The height clearance shall be taken with the roof vent in the fully open vent position.

"No Smoking, Eating or Drinking", and vehicle number, shall be placed on the front wall in full view of driver and passenger seating area.

Decal stripping shall be placed on lower edge of rear air conditioning to warn of low clearance.

**TS 2.16.3 Wheelchair Device Instructions**

Instructions for operation of wheelchair securement devices, 4 point strap tie, and wheelchair seatbelts shall be posted on the panels at all wheelchair position(s).

**TS 2.16.4 Securement Signage**

A sign shall be included stating “All wheelchair securement belts must be placed on wheelchair and all passenger lap belts must be utilized by passengers prior to vehicle movement.”

The sign, as described in above shall be placed on the front wall overhead in full view of driver and passenger prior to vehicle movement.
TS 2.16.5 Exterior Graphics
Exterior Graphics Package (Ref. Attachment #6).

TS 2.17 On-Board Video Surveillance System
This section defines the general and specific requirements for the implementation of a video data monitoring system that shall improve the quality of service to our customers. The Contractor shall furnish and install a Digital Technologies International Corp., (DTI) MDR5 based on-board video surveillance system. The video data acquisition system shall monitor and record data acquired from multiple onboard camera sources that shall be arranged to maximize the coverage of the internal activities of SEPTA’s passengers on vehicles in revenue operations.

The Vehicle onboard camera system shall provide the level of video fidelity necessary to monitor the movements of all passengers for which the cameras are arranged. The system in operation shall provide frame rates necessary to avoid latency and/or frame loss that would cause discontinuity of motion and loss of apparent causal circumstance.

All acquired data shall be written, stored and suitably encrypted and said data shall reside on the Vehicle, on a storage system that is designed and applied for the purpose of mobile data acquisition and storage.

The Contractor shall provide drive capacity with the following conditions:
1. System camera capacity-16
2. Frame rate at 15 fps (frames per second)
3. Video resolution, D1 720 x 480 NTSC nom.
4. System hard drive capacity shall, at maximum operating demand, shall store all video and ancillary data for 21 days minimum prior to overwrite, system budgeted for tagged data at 10% of hard drive capacity. The hard drive shall be two (2) terabytes minimum.

All HDD units shall be secured and removable for maintenance and custodial transport.

The system shall integrate and fully support Septa’s current WiMax WiFi transceiver 802.16e 802.11 network. The video contractor shall be responsible for full integration to Septa’s current access points, server system and other necessary infrastructure.

The Contractor shall provide a system that enables video data to be monitored by and from near field mobile radio/PC based platforms at a distance of up to four (4) city blocks or 1,600 lineal feet. Data acquired in this mode shall be of quality sufficient to allow the monitoring personnel to view data that equals the quality of data as written to the onboard HDD device. The mobile data acquisition users, SEPTA Police and Transportation personnel and elects, shall be able to go online and acquire said data to local PC based systems without loss of storage and fidelity of data stored to the Vehicle HDD system.

TS 2.17.1 Vehicle Camera System Installation Requirements

TS 2.17.1.1 General Requirements
The Contractor shall install all required equipment to the vehicle in a manner consistent with industry standard practice and the requirements of this specification. Up to twelve (12) Camera channels shall be provided. All color cameras shall provide built in infrared lighting source.
<table>
<thead>
<tr>
<th>Camera Position</th>
<th>Notes</th>
<th>Camera Make &amp; Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Forward Facing</td>
<td>Non-articulating post mount, camera adjustability within housing</td>
<td>DR-MD5BR60028</td>
</tr>
<tr>
<td>1 – Exterior Waterproof</td>
<td>Impact resistant, lens guard, low profile housing, shall not accumulate</td>
<td>Safety Vision model SV-</td>
</tr>
<tr>
<td>RS/curbside</td>
<td>condensation/moisture</td>
<td>835L4EXB-5</td>
</tr>
<tr>
<td>1 – Exterior Waterproof</td>
<td>Impact resistant, lens guard, low profile housing, shall not accumulate</td>
<td>Safety Vision model SV-</td>
</tr>
<tr>
<td>streetside</td>
<td>condensation/moisture</td>
<td>835L4EXBR-5</td>
</tr>
<tr>
<td>1 – Entrance Facing</td>
<td></td>
<td>DTI model DR-MD5BR60028VW</td>
</tr>
<tr>
<td>1 – Operator Overhead</td>
<td>Provision for install-no camera mounted at delivery</td>
<td>DTI model DR-MD5BR60028VW</td>
</tr>
<tr>
<td>2– Cross-field Interior</td>
<td></td>
<td>DTI model DR-MD5BR60028VW</td>
</tr>
<tr>
<td></td>
<td>7 Total</td>
<td></td>
</tr>
</tbody>
</table>

**TS 2.17.1.2 Workmanship**

The workmanship must be the best obtainable in the various trades.
All wires, cables must follow generally straight line installation to avoid chatter and must not potentially chafe against adjacent metal or plastic components. Minimum safe tolerance shall be 0.125” unless specifically waived in writing by SEPTA. All punched and/or drilled holes shall be properly de-burred and bushed.

All video cabling shall be fully engineered, molded termination type (no field installed crimped connections permitted). Video and power shall be unitized.

Special care shall be taken with the outside sheathing, roof, roof bonnets, and the interior panels so that drilling and/or punching does not cause damage and/or or water leakage.

**TS 2.17.1.3 Production Prototype**

The Contractor shall provide a first Article or Prototype installation that fully documents the mechanical and electrical vehicle interfaces, the equipment installation deployment and mapping, and all other necessary documentation required to insure proper operation and maintainability. SEPTA shall inspect and make all required approvals at this program point. No other vehicle installations shall proceed until SEPTA installation requirements are satisfied.

**TS 2.17.1.4 System Operation - HDD Drive Interface**

The HDD system shall be configured to operate upon activation of the bus ignition switch to run mode. The system shall be arranged to record data from all cameras for 15 minutes after the bus ignition switch is set to its off position.
TS 2.17.1.5 HDD Drive Location
The location of the HDD device shall be determined during the pre-production Engineering Design Review Meetings. The drive shall be properly arranged for sustainable structural mounting durability. The HDD shall be arranged for ease of maintenance and other attendant operating circumstances.

TS 2.17.1.6 Camera Mounting(s)
Camera locations shall be determined as specified by the Camera Installation Pilot Program § TS 2.17.1.6 (Camera Mounting). Upon First Article camera selection agreements, no alteration of camera location(s) lensing or other physical location circumstances shall be permitted unless directed by SEPTA due to a demonstrable coverage issue defect. All cameras and housings shall be securely mounted using tamper resistant hardware. All cameras shall maintain their initial adjustment points and settings under customary and routine 3 axis vibrations attendant to transit bus operation and camera systems shall not be re-adjust for drift to a degree that diminishes their initial set positions.

TS 2.17.1.6.1 Camera Mounting(s) Pilot Bus Requirements and PC Inspection
The Contractor shall arrange temporary fixture permitting the temporary installation of cameras for the purpose of placement determination at Pilot Vehicle delivery.
The pilot installation cameras shall be equipped with suction cup devices that can be temporarily affix the camera placements along with an appliqué if the lining is textured or otherwise unsuitable to proper surface sealing. The temporary camera fixtures shall be fabricated to minimize vertical offset due to the suction device itself- and/or the permanent fixtures shall be offset to compensate for the temporary fixturing.

The Contractor shall install and distribute necessary cabling along wire ways in order to facilitate connection to temporary cameras.

Upon notice to proceed from the Septa project manager or their elects, the Contractor shall install said cameras permanently to the pilot vehicle.
The Contractor shall provide a laptop PC with the system that is suitable and capable to verify the operation of the camera placements and completed system functionality.

TS 2.17.1.7 Panic Button/Status Lamp Panel
The tagged event/Status Lamp Panel assembly shall be located in the driver’s area. The switch button/status lamp panel location shall require SEPTA approval at Pilot Bus Inspection.

TS 2.17.1.8 Digital Inputs
The Contractor shall configure an analog, digital or CAN signal input signal that shall initiate an orderly shutdown of the system or equal system.
TS 2.17.1.9 3-Axis Sensor Installation Requirements
A 3 axis accelerometer shall be installed that shall interface directly to the camera System HDD. The device shall report impacts within applied parameters and said event shall be recorded to the system HDD with a date and time stamp.

TS 2.17.1.10 Documentation
The Contractor shall supply all schematics, diagrams and related service and parts manuals required to maintain, troubleshoot, diagnose and service the specified system. Complete sets of the described material shall be provided at a rate of one set for every ten buses delivered.

TS 2.17.1.11 GPS and Time Tracking
The system shall be equipped with GPS sourced hardware, along with a system software redundancy that ensures reliable time and location acquisition and adjustments.

TS 3. Manuals
The Contractor shall provide for every five (5) vehicles purchased, one set of each of the following manuals to SEPTA.

- Complete Shop Repair (factory service) Manual
- Complete Operation and Routine Maintenance Manual
- Complete Warranty Manual that includes terms for Chassis O.E.M. and all conversion components added to vehicle.

NOTE: Manuals for chassis, body, air conditioner, seats and electrical systems and wiring diagrams must be supplied, packaged and catalogued.

All manuals shall be delivered at the time of the first vehicle inspection by SEPTA.

Two CD formatted manuals are required upon delivery of the fifth vehicle.

TS 4. Vehicle Orientation (Training)
Contractor shall supply and conduct a training orientation on all components of supplied vehicles, including but not limited to chassis, body, lift operation, wheelchair securement operation, and air-conditioning operation. The orientation shall take place within ten (10) workdays of acceptance of last vehicle. From each release quantity the orientation shall take place at the purchasing agency's designated location or other appropriate facility selected by the Project Manager. Orientation at a minimum should include:

1. Air conditioning operation and maintenance
2. Wheelchair Lift operation and maintenance
3. Wheelchair securement
4. Electrical system
5. Chassis
6. Body Conversion

A minimum of 2 working days (16 hours) shall be provided for training/orientation.
TS 4.1 Chassis O.E.M. Training
In addition to the aforementioned orientation the Contractor shall provide chassis OEM Training. Training shall be of sufficient detail to allow technicians to perform troubleshooting, diagnosis and repairs to all chassis components including the electrical system. Training shall be web-base with the option of utilizing regional training centers as classroom space is available (An example of the type of training specified would be the Ford Fleet Training Package). Web based training shall be for up to five (5) locations annually for each consecutive year of this Contract through completion of this Contract.
SECTION 6 B

TECHNICAL SPECIFICATION ( 12 Passenger )
SECTION 6B: TECHNICAL SPECIFICATION (12 PASSENGER)....1

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SECTION 6B: TECHNICAL SPECIFICATION (12 PASSENGER)

TS 1. Scope
This specification outlines the requirement for a single rear wheel mini bus with 12 ambulatory seating, plus a driver.

The vehicle supplier shall design the coach interior and seating arrangement to maximize comfort for seated passengers.

The vehicle shall meet all applicable FMVSS, FTA, State of Pennsylvania, EPA requirements, ADA Accessibility Guidelines for transportation vehicles, and Society of Automotive Engineers (S.A.E.) recommended practices in effect for the model year of manufacture of the vehicle. The vehicle shall meet all tests and standards requested prior to date of Proposal submission. The vehicle shall be certified as a Light-Duty Cutaway Bus for a minimum service life of four years/100,000 miles as described in CFR Part 49.3 665.11. The vehicle shall comply with O.E.M. chassis manufacturer recommended practices as outlined in the Body Builder and Van Modifier Manuals.

TS 1.1 Pilot Bus
The Contractor shall build a “Pilot” bus prior to each yearly production run. The pilot bus shall precede production buses by 30 days minimum. A complete configurations audit will be conducted on each pilot bus. All specification compliance issues shall be mutually resolved prior to the production run. The conformed pilot bus shall serve as the configuration standard for the production bus run. Under no circumstances shall the vehicle configuration be changed from the conformed pilot bus configuration without written authorization from SEPTA Project Management.

TS 2. Equipment

TS 2.1 Engine
Engine shall be gasoline powered 5.4 liter minimum displacement and 190 SAE net minimum horsepower. Gasoline engine shall be electronically fuel injected. Gasoline engine shall meet all 49 state EPA Exhaust Emissions Standards applicable to this class of vehicle. If any component of the exhaust system is modified in any manner the contractor shall utilize like materials to complete said modifications. Carbon steel exhaust pipe is not an acceptable substitute for Aluminized Steel OEM exhaust pipe.

Fuel requirement: Unleaded “Regular” Octane gasoline. “Unleaded Gasoline Only” shall be stenciled in contrasting paint/decal over the fuel filler location.

The interior engine cover shall be easily removable. The removal of the interior engine cover shall not require disassembly of any other components to gain access.

TS 2.2 Transmission
Transmission shall be heavy duty minimum 4 speed automatic with maximum factory available cooling, and shall include maximum auxiliary transmission cooler that is offered by the Chassis O.E.M.
TS 2.3 Chassis
Gross vehicle weight of 10,050 pounds maximum.

TS 2.3.1 Front Axle
Front Axle 3,600 pounds GAWR minimum.

TS 2.3.2 Rear Axle
Rear axle shall be full floating, one piece forged steel housing and single reduction. Single tires shall be provided on rear axle.

Rear axle ratio shall be compatible to allow vehicle to cruise at 55 mph with full passenger load.

TS 2.3.3 Drive Shaft Protectors
Two drive shaft protectors shall be supplied to prevent contact with the roadway or with parts of vehicle in the event the drive shaft becomes disconnected at either end.

TS 2.3.4 Steering
Steering shall be hydraulic power assisted.

TS 2.3.5 Brakes
Service brakes shall be equipped with heavy duty split power hydraulic system with power booster.

TS 2.3.5.1 Front Brakes
Front heavy duty disc brakes.

TS 2.3.5.2 Rear Brakes
Rear heavy duty disk brakes.

TS 2.3.6 Tires/Wheels
Tires shall be all season tubeless steel belted radials. Chassis O.E.M. steel wheels shall be supplied. An identical spare tire/wheel with TPS transponder installed shall be supplied with each bus. Tires shall be suitable for the vehicle application, as recommended by chassis O.E.M. All wheels, including the spare shall be painted chassis OEM white.

The spare tire and wheel assembly shall be shipped with each bus.
Maximum tire pressure shall be stenciled in contrasting paint/decal over each tire on fender or body, one-half inch high letters.

**TS 2.3.7 Fuel Tank**
Fuel tank(s) capacity shall be 35 gallons minimum and I.C.C. approved type with protective shield. Tank must meet FMVSS standard 301. A single tank is required.

**TS 2.3.8 Wheel Base**
Wheelbase shall be 135.5 inches minimum.

**TS 2.3.9 Frame Strength**
Frame shall be single channel 33,000 PSI minimum steel. Frame shall be minimum of 212,520 foot-pounds resisting bending moment. RBM=SM x yield strength.

Section modulus per side shall be 2.86 cubic inches with resisting bending moment of 123,480 pounds.

Any frame or chassis extension must comply with all chassis O.E.M. recommended practices as outlined for body builders and van modifiers (i.e.: Ford QVM). Contractor shall provide documentation from the Chassis O.E.M. indicating compliance with the Chassis O.E.M. recommended practices.

**TS 2.3.10 Suspension**
The Proposer shall supply a weight analysis worksheet to SEPTA for review as part of Technical Proposal. The analysis must provide:

- Actual completed weight of vehicle
- Adjustment for fuel load
- Unloaded vehicle weight
- Weight of the occupants
- Loaded vehicle weight
- Available cargo capacity
- Gross Vehicle Weight Ratings
- Exceeded weight ratings @ each wheel pass/fail and axle totals

**TS 2.3.10.1 Front Suspension**
Front – Heavy duty coil springs suitable for the GVWR of the vehicle.

**TS 2.3.10.2 Rear Suspension**
Rear – heavy duty two (2) stage multi-leaf springs suitable for the GVWR of the vehicle.

**TS 2.3.10.3 Shock Absorbers**
Heavy duty front and rear shock absorbers.
TS 2.3.10.4 Front Stabilizer Bar
Heavy duty front stabilizer bar.

TS 2.4 Cooling System
The cooling system shall be equipped with heavy duty increased capacity tubular radiator.

TS 2.4.1 Coolant
System to be protected with permanent type antifreeze to minus 20 degrees Fahrenheit. Label listing coolant protection level and date checked shall be supplied and attached to radiator.

TS 2.4.2 Capacity
Cooling system must be heavy duty and maximum cooling available from the chassis O.E.M. for the specific chassis.

TS 2.4.3 Recovery Tank
The system shall have a coolant recovery element within its design.

TS 2.5 HVAC
The heater/defroster shall be heavy duty, fresh air type sufficient to heat the interior of the vehicle and defrost the windshield under all climate/weather conditions experienced in Philadelphia. Heating system requires prior approval of SEPTA.

TS 2.5.1 Auxiliary Heat
An Auxiliary rear heater shall be provided. An inline cut off valve shall be installed in engine compartment or under the floor of the bus and red tagged/labeled. The BTU rating of the rear heater shall be a minimum of 29,000 BTU’s. No heater components shall interfere with any seating position. The auxiliary heater shall be equipped with a minimum two speed fan. The coolant hoses to the heater shall be premium silicone automotive type with stainless steel constant torque hose clamps.

TS 2.5.2 Front Heat
In addition to the auxiliary rear heater, a front heater shall be supplied with a minimum of three-speed fan.

TS 2.5.3 Air Conditioning
Front/rear air conditioning shall be supplied and installed. Both units shall operate independently of each other. Front and rear units shall be equipped with individual compressors, evaporators, condensers, and controls for temperature and fan speed. Units in combination shall be a minimum of 41,000 BTU. Air conditioning units, at
ambient conditions of ninety-five (95º) degree Fahrenheit and seventy-five (75%) humidity, must be capable of
dropping temperature twenty-five (25º) degrees within thirty (30) minutes of listed situation at standard park high
idle. (Ref. Sec. 2.5.6). The chassis O.E.M. air conditioner as a front unit is acceptable. Air conditioning units
shall be manufactured by MCC or Thermo-King or approved equal. A skirt mounted condenser is required with a
minimum of two (2) fan units.

TS 2.5.4 Equipment
All air conditioning lines shall be attached/supported with rubber insulated steel clamps throughout the entire
vehicle. All refrigerant lines added by the Contractor shall be suitable for R-134-A. The lines shall have an
effusion rate that meets all applicable standards for the current model year. All refrigerant lines added by the
Contractor shall be protected from chafing by covering the lines with a suitable loom or conduit. All line fittings
shall be permanently attached using closed cycle crimp-on connections, or other fastening system(s) approved by
SEPTA. MCC “Flex-Click” system is approved.

TS 2.5.5 Refrigerant
The refrigerant used in the air conditioning system shall be R-134A. The refrigerant systems for the front and
rear unit shall be independent of each other.

TS 2.5.6 Testing
General air conditioning testing procedure; Vehicle shall be soaked to at least ninety-five (95º) degree F and
seventy-five (75º) humidity for a minimum of four (4) hours in a controlled atmosphere. Temperature will be
taken at three (3) locations within passenger compartment at three (3) different levels, twelve (12”) inches from
ceiling, twelve (12”) inches from floor, twelve (12”) inches from hip line, at front, midcoach, and rear of
passenger compartment. System electrical draw shall not exceed 60 amps at high, medium or low speed during
operational mode. A printout of test results of both air conditioning pull-down and electrical load shall be
supplied prior to delivery of the first bus.

TS 2.6 Electrical System

TS 2.6.1 Batteries
There shall be two batteries as supplied by Chassis O.E.M. Manufacturer. Batteries – 72 amp-hours minimum,
twelve (12) volt, 650 CCA, heavy-duty, maintenance free or meet standard battery package provided by the
respective chassis O.E.M. manufacturer and comply with the other elements of the section.

If the Chassis O.E.M. does not provide two (2) batteries mounted under the front hood, a separate roll-out battery
tray shall be provided to hold the auxiliary battery. Auxiliary battery must be equal to original equipment in
regards to voltage, amp hours and cold cranking amps. If an Auxiliary battery box is used, the door shall be
hinged on a horizontal plane. The battery tray shall be a stainless steel, roll-out type. The tray shall be retained in
its stowed position by a “quick release” latch mechanism.

Alternator(s) shall be sized to meet all electrical load requirements and maintain a charged battery system.
Proposal requires an electrical system datasheet and calculation showing minimum and maximum electrical load
requirements and alternator(s) that will be provided.
TS 2.6.2 Back-Up Alarm
LED Back-up lights shall be provided. A back-up-alarm shall be provided. Alarm requires approval by SEPTA. Alarm range shall be adjustable from 85 to 110 db.

TS 2.6.3 Protection
Fuse panel or manual reset circuit breakers shall be conveniently accessible for service.

The box or panel shall be moisture proof and sealed to prevent any possible water intrusion. An electrical schematic/legend shall be located inside the panel door to identify all circuits, fuses/breakers and components within the box.

Access door to panel box shall have a door retainer to maintain door in open position for service if panel box door is hinged on top.

The Contractor shall supply all mounting hardware and wiring to support the SEPTA radio and mobile data terminal. The bus as delivered to SEPTA shall be in a “plug and play” state. Information regarding the instructions and equipment for this installation are included in attachment # 5 to this specification.

TS 2.6.4 Harnesses
All electrical wires have to be heavy duty plastic covered enclosed in a loom. All exposed electrical junction boxes shall be enclosed with a gasket for protection against water, salt and road chemicals.

All penetration of wires through body must have a commercial grade rubber grommet to prevent chafing, rubbing or cutting of electrical wires or conduit.

All electrical wires and looms under vehicle shall be fastened with vinyl/rubber insulated steel clamps.

Wiring may not pass over top of fuse receptacle.

TS 2.6.5 Electrical System, Other than Chassis O.E.M
Insulated wiring shall conform to current SAE standards J1127 and J1128. Insulation material shall be selected for the maximum ambient temperature of its on-vehicle environment per table 1 of SAE standard J1292 latest edition.

Insulated wiring shall be color coded to the maximum extent practicable for easy identification of system functions and permanently number coded at 6” intervals with no duplication of numbers between functions. Each wire’s gauge, color and number code and SAE type (GPT, HDB, SXL, etc.) shall be referenced on electrical diagrams covering all contractor-installed electrical systems and their connections to O.E.M. electrical systems. A component legend must be provided and posted in the fuse compartment. Wires may be function coded at 1’ intervals on lieu of color coding.
Wiring shall be continuously enclosed in non-metallic loom meeting current SAE standard J562, and be adequately supported and routed for protection from heat, moisture, solvents, corrosion, road debris, abrasion and tension. Wiring shall be of sufficient length to permit proper positioning as well as replacement of terminals at least twice without excessive tension. Rubber grommets shall be provided at points where wiring penetrates metal or other material with acute edges.

Battery cables shall be a minimum No. 2 AWG type SGX meeting current SAE standard J1127.

**TS 2.6.6 Connectors**
The Contractor shall use AMP (PIDG) Pre-insulated Diamond Grip Terminals, Molex or approved equal installed with tool which will not release until crimp is tight. Machine crimped and/or weather-pak connectors are acceptable substitutes. Any other terminal requires prior approval from SEPTA.

**TS 2.6.7 Documentation**
The Contractor shall provide electrical diagrams for all Contractor installed electrical wiring and components. These diagrams shall be provided coincident to the delivery of the first vehicle to SEPTA.

**TS 2.7 Body Construction**
Vehicle shall be all steel cage construction.

**TS 2.7.1 Roof**
The roof shall meet the performance requirements of FMVSS 220 with respect to static rollover protection. A steel roll cage structure shall be supplied. The structure must be attached in an acceptable manner to the floor structure described in TS 2.7.3. The roof shall be supported by a steel roll cage. The roll cage shall have prior approval of SEPTA. The roll cage shall allow a clear floor to ceiling distance in the passenger compartment of seventy two and one-half (72.5”) inches minimum. Insulation shall be installed throughout the headliner and side liner. Ribs or bows for roll structure shall be welded or bolted to body upright frames.

There shall be a minimum of five (5) roof bows in roof construction. Each roof bow shall be appropriately spaced to give maximum strength to bus. All roof panel seams shall be sealed and impervious to moisture intrusion. The air conditioning evaporator system must be fastened either directly or via tapping plates, to the steel roll cage structure to obtain proper support.

**TS 2.7.2 Wall Construction**
Side walls shall be constructed of steel tubing of suitable strength to meet all applicable FMVSS and service requirements for this class of vehicle.

All body wall construction shall be aluminum or galvanized steel exterior skin.

If O.E.M. body side ribs have been removed, new structure must meet the equivalent strength of the original body. Any body ribs removed must be replaced.
If any part of the forward facing body, perpendicular to the frame, extends beyond the OEM cab profile, Aluminum diamond plate (or approved equivalent) shall be added to this entire extended body only below the interior floor level.

**TS 2.7.3 Floors**
Floor structure, wheel housings, belly pan, shall be all steel construction. Wheelhouses shall have a minimum intrusion into the coach interior or interference for a seated passenger. The floor shall be supported by steel frames. The floor shall have steel side rails and front and rear steel end rails.

Floor shall have a 5/8" minimum sub-floor, 5-ply, pressure treated, or three-quarter inch exterior grade A/C plywood. Plywood shall be finished and shall be installed with finish side down and with all edges and joints sealed.

The floor shall be covered with Altro or Tarabus non-skid flooring. This includes the step well, entrance area, center aisle floor area and wheelchair area if applicable. The flooring material provided shall be Genome TFM 1802 Altro or 6727 Anthracite, Sirius NT, Tarabus. The flooring shall be warranted for no less than seven (7) years.

A floor plan shall be submitted to SEPTA for review with Proposal. The floor plan shall be to scale. The plan at a minimum shall include seat locations, door locations, wheel housing, steps and step wells, aisles, seat spacing, windows, stanchions, driver’s position, and all emergency exits. All body dimensions shall be listed.

If the vehicle design includes the fuel tank filler neck passing through the passenger compartment the interior cover for the filler shall withstand an impact of no less than 500 lbs. with a 2" round steel ball. The interior cover shall be constructed of 300 series stainless steel.

The cover shall be completely sealed to prevent moisture or fumes from entering the passenger compartment.

**TS 2.7.4 Steps and Step Well**
All steps in front entrance shall be covered with nonskid, Altro or Tarabus non-skid flooring that shall remain effective in all weather conditions. Color of the tread covering shall match the floor of the interior. The edge of the step tread shall have a bright, high visibility yellow over the full width of the step including edge at floor level. The color shall be permanently blended into the tread covering material. Any steel or aluminum fastening strips must have flush fasteners. The protrusion of the steps shall not extend past body.

**TS 2.7.5 Front Entrance Door**
Front passenger door shall be driver actuated, manual, heavy duty; operated with control located conveniently for the driver. The door operator shall have a locking feature. Front doors shall have either upper and lower glazing or a single full-length pane.

Door(s) may be double folding type with vertical closing edge(s) of door covered with rubber or a rubberized material to create a safety seal. Outward opening door is acceptable as long as width of opening is not compromised.
A header pad shall be provided inside over entrance door and covered with upholstery that matches interior color scheme.

Door opening shall be a minimum of seventy six and one-half (76.5”) inches high from top of first step to entrance header. Ground height to first step shall not exceed twelve (12”) inches +/- one-half inch (1/2”). Risers shall not be greater than eight and three-quarter inches. The front entrance door shall have an opening with a minimum width of twenty four (24”) inches. External key locking is not required. Front entrance door shall have heavy duty gasket and seal door fully. The door opener mechanism shall have a locking feature.

**TS 2.7.6 Emergency Door(s)**

Emergency door(s) shall be located in center of rear of vehicle. Door(s) shall be permanently marked “EMERGENCY DOOR” on the inside with red letters not less than two (2”) inches high. The marking described in previous sentence shall be duplicated on the exterior in black letters.

The emergency door shall be a minimum of thirty-two (32”) inches wide by fifty-four (54”) inches high. The emergency door(s) shall be equipped with warning buzzer (for door ajar condition). Operating instructions must be posted in area of latch release. The door(s) shall have an exterior and interior emergency release. Switches for warning buzzer shall be integral to the door frame and the emergency door handle. The emergency door(s) shall have both an upper and lower window. The size of the window shall be the maximum permitted. Emergency door(s) shall have acceptable tie back securement device or gas spring for emergency exit.

**TS 2.7.7 Drivers Door**

Vehicle shall have a driver’s door on left side with full roll up window.

**TS 2.7.8 Windows**

Windows, with the exceptions of windshield (AS-1) and drivers side windows (AS-2), shall be AS-3 minimum grade safety glass and meet applicable federal standards. All windows shall be tinted with a minimum of 20% and a maximum of 31% light reduction. Passenger windows shall be the maximum size permitted. Knockout type split sash windows shall not be used.

Vehicle shall be equipped with full emergency exit push-out windows equipped with quick-release catch and warning buzzer and red lights above each egress windows. The method of operations and instructions for operation shall be installed on plates in close proximity to operating handle.

Vehicle shall be equipped with a minimum of two (2) emergency exit windows on the left side and one (1) emergency exit on the right side. These windows shall open outward and shall be permanently labeled inside to indicate proper use. Labeling shall not be on window. The vehicle shall be equipped with a window at each passenger seat position. A minimum of two (2) windows shall be supplied in rear wall exclusive of windows in emergency door unless rear wall does not have enough space. All side windows exclusive of driver compartment shall be top “T” sliders.

Right front transitional panel shall have largest window available or, if necessary, multi-windows for safety and security. Window shall be the maximum size permitted. View from window shall permit line-of-vision to small children and occupants of wheelchairs.
TS 2.7.9 Insulation
Insulation shall be provided between the exterior and interior panels, including the ceiling. Insulation shall have sound deadening and vibration reduction qualities. Insulation material shall be moisture proof. Insulation shall be laminated to body sidewall. If insulation is loose, it shall be bagged. Loose is not acceptable.

TS 2.7.10 Interior Body Walls and Ceiling
Interior body walls and ceiling shall be fiberglass reinforced plastic which meets the requirements of FMVSS-302. The Contractor must supply certification that materials meet FMVSS-302.

TS 2.7.11 Body Dimensions
Body width shall be 84" inches maximum, excluding mirrors. Body length shall be minimum of 225.5 to a maximum of 262.5 inches bumper to bumper. Body height shall not exceed ten (10) feet including open roof vent. Interior width in passenger compartment shall not be less than seventy-four (74") inches measured at any dimension above floor level. Any trim pieces installed on the exterior body by the secondary manufacturer shall be mechanically fastened to the body. Adhesives alone for this purpose are not acceptable.

TS 2.7.12 Water Test
Entire body shall be subjected to water/air spray test to validate adequacy of all caulking, body sealing, door and window gaskets. The Contractor shall test the vehicle and repair all leaks prior to presenting the vehicle to SEPTA for testing. The duration of the Water Spray Test shall be 15 minutes minimum. The Water Spray Test shall be repeated until all leaks are repaired to the satisfaction of SEPTA.

TS 2.8 Seating

TS 2.8.1 Driver’s Seat
Driver’s seat shall be full foam bucket seat equipped with shoulder harness and lap belt. Chassis O.E.M. high back driver’s seat preferred. Driver’s seat shall be a minimum of 36 oz. anti-microbial vinyl (Chassis OEM Vinyl acceptable). The seat cushion and back rest shall have inverted seams, (no piping allowed).

Minimum distance between steering wheel and back rest of driver’s seat is to be eleven (11") inches. Driver’s seat is to be securely attached, and to have fore and aft adjustment of not less than four (4") inches. The fore and aft adjustment lever shall not interfere with driver foot traffic. Driver’s seat anchorage is to comply with acceptable installation procedures and FMVSS 207.

TS 2.8.2 Passenger Seating
The vehicle is to seat twelve (12) adults. Seating is to consist of four (4) single occupant, forward facing, seventeen (17") inch wide seats on the passenger side of the vehicle. Four (4) double, 17" wide seats are to be installed behind the driver. All seating shall be positioned to maximize passenger comfort. Spacing is to allow for 27" hip to knee room and an 18" minimum aisle space.
TS 2.8.2.1 Seat Construction
Foam material shall be polyurethane or approved equal.
▪ Separate back and seat cushions for each seat shall be supplied.
▪ ABS material is required on all backs and rear underside edges of seats. Not required on seats in rear row.
▪ Individual energy absorbing grab rails are required with a maximum diameter of 1 and ¼ inch to minimum on one (1) inch. Padding shall be high visibility yellow in color. Padding material shall be designed to last the life of the bus. Grab rails are not required on seats in rear row.
▪ Back cushions must have side bolsters or wings of a minimum of two inches each.
▪ Upholstery shall be a minimum of 36 oz. Antimicrobial vinyl.
▪ Upholstery color shall be light gray.
* Seats shall have flip-up arm rests on the aisle side.

TS 2.8.2.2 Anchorage
Seat anchorage shall comply with Federal Motor Vehicle Safety Standard 207.

TS 2.8.2.3 Seat Belts
All passengers seats shall have appropriate number of certified seat belts with automatic reTRACTORS. All window seats must have retracting shoulder harness. All passenger seat belts must have a minimum of 100" usable length. Q-Straint System Part Number S5-6410-RET-A seatbelt or Sure-Lok AL700727HA or approved equal.

TS 2.8.2.4 Spacing
Minimum center-to-center seat spacing is to be twenty-nine (29") inches.

TS 2.8.2.5 Seat Cushions
Seat and back cushions of all seats to be designed to safely support designated number of passengers under normal road conditions. The back cushions to be constructed so as to minimize exposed screws or bolts, which contribute to vandalism of seats and their components. Necessary exposed fasteners must be tamper-proof.

TS 2.8.2.6 Seat Back
Backs of all seats of similar size to be of the same width at top, of same height from floor and have identical seat back angle.

TS 2.8.2.7 Seat Cushion Retention System
Passenger seat cushion retention system shall be employed to prevent passenger seat cushions from disengaging from seat frames in event of accident. Each seat cushion retention system shall be capable of withstanding vertical static load equal to minimum of five times weight of cushion. System shall also be capable of withstanding forward or rearward static load, of 600 lbs. (Federal White Book Standard).
TS 2.8.2.8  Seat Depth  
All seats are to have minimum depth of seventeen (17") inches.

TS 2.8.2.9  Seat Flammability  
All seats shall comply with FMVSS 302 regarding flammability.

TS 2.8.2.10  Seating Floor Plan  
A floor plan shall be submitted for review with proposal. An overall floor plan shall include placement of all seats, seat belt anchorage, stanchions and modesty panel(s). The floor plan shall include all dimensions clearly identifying measurements as required, e.g. hip to knee, aisle width, etc.

TS 2.9  Stanchions and Guard Rails  
Vertical stanchion shall be installed at right rear corner of driver’s seat in such position as neither to interfere with adjustment of driver’s seat nor to obstruct the aisle. The horizontal rail shall be so placed as not to interfere with fore and aft adjustment of driver’s seat and shall extend from vertical stanchion to left hand wall behind driver’s seat.

Vertical stanchions shall be installed at rear of the entrance step well from roof to floor. Stanchion placement shall not restrict passageway at any level to less than thirty-two (32") inches.

Guard rail and step well guard panel shall be installed from step well stanchion to right hand wall. Guard rails to be approximately thirty (30") inches above floor and its guard panel shall not restrict entrance passageway to less than twenty-four (24") at any level. Panel is to extend from guard rail to within two (2") inches of floor. If panel extends over or into step well opening, it must be flanged at floor line so as to close any opening between panel and floor. A left side entrance grab rail shall be positioned so passengers entering vehicle will have added support when boarding the vehicle. Right side entrance grab rail shall also be supplied. All guard rail panels must have padded backs, unless there is no passenger seat to the rear of guard rail panel. ABS or Melamine panels do not require padding.

Clearance between step well guard panel and first passenger seat to be at least ten (10") inches measured from panel to front face of seat at cushion height.

All stanchions, handrails, and guard rails to be of stainless steel or equivalent strength tubing having minimum of one (1") inch outside diameter. Guard rails and stanchions shall have a cross-hatched finish (Diamond grip) and be powder coated high visibility yellow.

All stanchions and grab rails must have a non-slip surface.

A rigid clear tinted plastic or Plexiglas shield at least 3/8" thick shall be provided to rear of driver’s station. The shield must comply with PennDOT regulations and must allow for complete adjustment of drivers seat forward and rearward.

All vertical stanchions must extend from floor to ceiling and be securely fastened to roof bows or tapping plates.
TS 2.10 Other Equipment
To be provided as follows:

**TS 2.10.1 Automatic Fire Suppression System**
The vehicle shall be equipped with the FMNA water mist fire suppression system or approved equal. The system
shall automatically detect and suppress fire in the engine compartment. The system shall be sized based on the
suppression system manufacturer recommendations. The system installation shall be certified by system
manufacturer. The system manufacturer shall be approved and listed by recognized National Testing Laboratories
such as Factory Mutual and Underwriter’s Laboratories. The system installation shall be completed by personnel
trained and certified by the system manufacturer. The system supplied shall comply with all applicable federal,
state and local regulations in effect at time of manufacture.

The Contractor shall demonstrate that their extinguisher media, detection sensors, monitoring and delivery system
shall operate when required, and under all operating circumstances. The system manufacturer shall provide a
letter of approval of proper application of the system as installed on the pilot vehicle.

**TS 2.10.1.1 Loss of Pressure Detection System**
The detection system shall be UL approved. The detection system shall be of a Linear Thermal tube hydro-
mechanical design. The detector cylinder shall be US DOT certified. The detector fluid shall be environmentally
friendly. The detector tube shall be resistant to oils, fuels, and chemicals, normally found in a garage
environment, and UV light. The detector tube shall be routed in such a manner that it will cover all risk zones.
The detector tube shall be protected by a stainless steel coil throughout the entire detection area. The working
temperature of the system shall be -30°C to 65°C (-22°F to 149°F). The system pressure shall be monitored
visually through the use of a pressure gauge located on the detector cylinder. The system shall provide a signal
for integration into the vehicle system controls to provide the following shut down at time of detection:

- HVAC System
- Engine cooling fan
- Initiate an engine shut down process (Extended operating time under fire
  conditions, beyond 15 seconds, is not recommended)

**TS 2.10.1.2 Display/Control Panel**
An APTA compliant control panel should be provided for all detection and/or suppression systems. The
control panel should provide, at a minimum, electrical supervision of system power and detection. The system
pressure shall also be monitored electrically with a normally open low-pressure switch. The panel shall contain
an audible alarm, warning light and alarm/indicator light test switch. The electric pressure switch located on the
detector cylinder shall control the alarm system.

**TS 2.10.1.3 Piston Accumulator System**
The piston accumulator system shall utilize a water-based system. The system combats all 3 fire components heat,
oxygen & fuel. The fluid is an environmentally friendly suppressing fluid that can be washed off with water. Dry
chemical shall not be allowed. The piston accumulator system shall be UL approved. The system must be able to
activate automatically without electricity. The piston accumulator must be able to operate in the vehicle
regardless of its orientation (when vehicle is on its side or roof as a result of an accident). The piston accumulator
shall be equipped with a pressure gauge to allow monitoring of the system pressure. The piston accumulator shall be protected by an over pressure relief valve. The piston accumulator shall be a high-pressure piston accumulator constructed from anodized aluminum AA 6061 T6 alloy. The accumulator shall be USDOT compliant. The system shall have an operating temperature range of -30°C to 65°C (-22°F to 149°F). The system when activated shall release the entire contents of piston accumulator. The time required to release the fluid should take at least 40 seconds. The gaseous propellant must remain in the accumulator after system discharge. The fluid and gas in the system must be able to be serviced without removing the piston accumulator from the vehicle.

**TS 2.10.1.4 Distribution System**
The distribution system shall be UL approved. The distribution system shall utilize nozzles for high-pressure water mist. The nozzle shall deliver water droplets between 80-105mm.(micrometer). The nozzles shall be protected with a cover to prevent dirt and other foreign matter from entering the nozzle. The nozzles must be easily replaceable. The nozzle must contain a mesh filter located in the inlet of the nozzle. The nozzle must be constructed from brass. All steel piping must be 8mm stainless steel. All flexible High Pressure hoses shall be rated to SAE100.

**TS 2.10.1.5 System Options**
The detection system can be of a Linear Thermal wire design. The detection system can be a combination of a Linear Thermal wire design with Loss Of Pressure. System can be activated automatically, electrically or manually. Pressure switch can be provided on the piston accumulator to monitor pressure, indicate pressure loss, and activate fire alarm. A Micro switch to provide a signal to control panel showing system armed (ie – safety screw removed).

**TS 2.10.2 Gauges**
Gauges – volt/ammeter, fuel, water temperature, oil pressure, speedometer, odometer.

**TS 2.10.3 Air Bag**
If available from the chassis O.E.M. the vehicle shall be equipped with driver’s side air bag.

**TS 2.10.4 Interior Advertising**
All buses shall be equipped with interior advertising sign frame on the rear of the operator’s compartment barrier. The sign frame shall be divided into 3 sections. The upper sections shall accommodate two (2) 8.5" x 11" ad media side by side. The lower section shall be one frame that will accommodate 17" w x 11” h media. The ad frame assembly shall be made of anodized aluminum or stainless steel. The ad frame shall be a simple design with no moving parts.

**TS 2.10.5 Windshield Wipers**
The vehicle shall be equipped with variable speed windshield wipers and washers on right and left side. Wipers shall have intermittent feature.
TS 2.10.6  Horns
The vehicle shall be equipped with dual electric horns.

TS 2.10.7  Sun-Visor
Driver side sun-visor shall be supplied.

TS 2.10.8  Dome Light
Dome light in driver's compartment shall be activated by a dash mounted switch.

TS 2.10.9  Indicator Light
Brake warning indicator light is required.

TS 2.10.10  Switches
Light switches – separate light switches shall be provided for driver’s compartment, exterior lighting and interior lighting.

TS 2.10.11  Mirrors - Exterior
Mirror head shall be a Hadley model F1113 & F1112 6”x12”. Mirror head shall contain an adjustable convex mirror that is contained inside the housing. Housing shall be made of high impact ABS. Mirror head shall contain a ball for easy movement.

Mirror arm and bracket shall be adjustable for easy movement in bus washing applications. Mirror arms shall be made so as not to exceed the width or the flare on chassis. Mirror width to be approved by SEPTA. Mirrors arms shall be made of 11 gauge steel tube powder coated black.

Mirror brackets are to be made of cast aluminum. Roadside mirror shall fit in frame of driver’s window. Curbside mirror shall be mounted on front corner of chassis. C/S Mirror shall contain six mounting to points to insure a tight fit on frame/fender.

TS 2.10.12  Mirrors - Interior
An interior driver's mirror shall be provided to give driver view of passenger compartment. The minimum dimension is six by twelve (6 x 12") inches and must not interfere with operation of driver’s sun visor.

TS 2.10.13  Roof Hatch
A roof escape hatch shall be supplied. A multi purpose safety type roof escape hatch is required. Transpec or Specialty Manufacturing Company Roof Hatch or approved equal for emergency exit, ventilation and light transmission.
TS 2.10.14 Bumpers
Chassis O.E.M. front bumper shall be supplied. Rear bumper shall be Romeo Rim or approved equal. Bumpers shall be rated to withstand impact of up to five miles per hour (5 m.p.h.).

TS 2.10.15 Interior Lighting
Passenger compartment lighting shall be supplied to give sufficient interior lighting for both safety and security. Interior lights shall not be wired directly to Chassis O.E.M. dash light and/or headlight switch, but shall have separate switch and circuit breaker.

TS 2.10.16 Driver’s Lighting
Supply and install separate "directed" map light in driver compartment with individual driver control.

TS 2.10.17 Mud Flaps
Mud flaps front and rear are required.

TS 2.10.18 Steering Column
A tilt steering column shall be provided.

TS 2.10.19 Hood Release
Inside locking hood release.

TS 2.10.20 Exterior Lighting
Vehicle shall be equipped with armored marker lights and a center brake light. Vehicle shall be equipped with LED lighting for all FMVSS108 & Non FMVSS108 applications with the exception of the headlights.

TS 2.10.21 Automatic Idle Shutdown
The contractor shall supply and install an automatic idle shutdown device manufactured by InterMotive. The idle shutdown device shall turn off the engine when specific safety conditions are met, i.e. vehicle is in park, vehicle speed is 0 mph, wheelchair lift interlock is not engaged and a programmed period of time has elapsed. The timed shutdown shall be adjustable and password protected.

TS 2.10.22 Reverse Assistance System
The bus shall be equipped with a reverse assistance system: Intermotive Vehicle Controls Hawkeye Plus
TS 2.10.23 USB Charger for Tablet Based Scheduling

A USB charger with Micro USB male plug shall be installed toward the center of the dash board for tablet based scheduling system. Circuitry shall be installed in the area intended for an OEM passenger’s side air bag. Power from the chassis fuse panel shall be 3A fused protected, 16 AWG minimum. Connections shall be made via a bus bar provided in the air bag compartment. The USB cord shall extend from the dash board to the OEM radio area with sufficient slack to accommodate the route tablet. End USB connector at the center stack shall be right angle, micro USB.

TS 2.11 Safety Equipment

Safety equipment shall be provided as follows:

TS 2.11.1 First Aid Kit
Fifteen (15) unit first aid kit with mounting bracket. In addition to the first aid kit, the Contractor shall also provide a body fluid cleanup kit.

TS 2.11.2 Fire Extinguisher
Five (5 lbs.) pound fire extinguisher, with a ten (10) ABC rating and visible gauge with mounting bracket. Fire extinguisher location shall be determined by SEPTA during the manufacture of the first bus.

TS 2.11.3 Flare Kit
ICC triangular flare kit with mounting bracket and storage container. Kit shall be mounted in driver's compartment.

TS 2.11.4 Location
Equipment should be mounted in front portion of bus in close proximity to driver. Mounted equipment shall not pose hazard passengers entering or exiting the vehicle.

TS 2.11.5 Spare Fuses
Supply of spare electrical emergency fuses.

TS 2.12 Rust-Proofing / Undercoating
Rust proofing/Undercoating - the frame, fenders, underbody, cab, chassis, and body except driveshaft, catalytic converter, engine, transmission, differential, heat shields, power steering and exhaust system shall be completely undercoated. Undercoating shall be composed of a nonvolatile base, grit and abrasive free material, dispersed in a petroleum solvent, which shall provide a homogenous formulation. All undercoating shall be applied to a uniform thickness with no bare spots. Overspray shall be removed. Rust proofing of doors and fenders to be included. Fuel tanks shall not be undercoated. Warranty (36 Months) for rust proofing shall be supplied.
TS 2.13 Paint
Paint - Standard Chassis O.E.M. white. If vehicle not O.E.M., bus shall be thoroughly cleaned and painted with
one (1) coat of rust resistant zinc chromate primer, (U.S. Federal Spec. TT-P-645, or equal) and exterior finished
with one (1) coat of an air dried DuPont Imron - No. 508U or equal. This requirement is waived for manufacturers
which employ pre-painted sheet metal.

TS 2.14 Signage/Decals

TS 2.14.1 Emergency Exits
All emergency exits shall be identified with appropriate labeling including operating instructions for evacuation,
lock operation and handle or control direction/operation.

TS 2.14.2 Interior Graphics
A decal indicating the height clearance shall be posted in driver's compartment and on front and rear exterior.
The height clearance shall be taken with the roof vent in the fully open vent position.

"No Smoking, Eating or Drinking", and vehicle number, shall be placed on the front wall in full view of driver
and passenger seating area.

A sign shall be included stating "All passenger lap belts must be utilized by passengers prior to vehicle
movement."

Decal stripping shall be placed on lower edge of rear air conditioning to warn of low clearance.

TS 2.14.3 Exterior Graphics
Exterior Graphics Package (Ref. Attachment #6).

TS 2.15 On-Board Video Surveillance System
This section defines the general and specific requirements for the implementation of a video data monitoring system
that shall improve the quality of service to our customers. The Contractor shall furnish and install a Digital
Technologies International Corp., (DTI) MDR5 based on-board video surveillance system. The video data
acquisition system shall monitor and record data acquired from multiple onboard camera sources that shall be
arranged to maximize the coverage of the internal activities of SEPTA’s passengers on vehicles in revenue
operations.

The Vehicle onboard camera system shall provide the level of video fidelity necessary to monitor the movements
of all passengers for which the cameras are arranged. The system in operation shall provide frame rates necessary
to avoid latency and/or frame loss that would cause discontinuity of motion and loss of apparent causal
circumstance.

All acquired data shall be written, stored and suitably encrypted and said data shall reside on the Vehicle, on a
storage system that is designed and applied for the purpose of mobile data acquisition and storage.
The Contractor shall provide drive capacity with the following conditions:
1. System camera capacity - 16
2. Frame rate at 15 fps (frames per second)
3. Video resolution, D1 720 x 480 NTSC nom.
4. System hard drive capacity shall, at maximum operating demand, shall store all video and ancillary data for 21 days minimum prior to overwrite, system budgeted for tagged data at 10% of hard drive capacity. The hard drive shall be two (2) terabytes minimum.

All HDD units shall be secured and removable for maintenance and custodial transport.

The system shall integrate and fully support Septa’s current WiFi transceiver 802.11 network. The video contractor shall be responsible for full integration to Septa’s current access points, server system and other necessary infrastructure.

The Contractor shall provide a system that enables video data to be monitored by and from near field mobile radio/PC based platforms at a distance of up to four (4) city blocks or 1,600 lineal feet. Data acquired in this mode shall be of quality sufficient to allow the monitoring personnel to view data that equals the quality of data as written to the onboard HDD device. The mobile data acquisition users, SEPTA Police and Transportation personnel and elects, shall be able to go online and acquire said data to local PC based systems without loss of storage and fidelity of data stored to the Vehicle HDD system.

**TS 2.15.1 Vehicle Camera System Installation Requirements**

**TS 2.15.1.1 General Requirements**
The Contractor shall install all required equipment to the vehicle in a manner consistent with industry standard practice and the requirements of this specification. Up to twelve (12) Camera channels shall be provided. All color cameras shall provide built in infrared lighting source.

**Vehicle Based Video Data Equipment Cutaway Bus Application**

<table>
<thead>
<tr>
<th>Camera Position</th>
<th>Notes</th>
<th>Camera Make &amp; Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Forward Facing</td>
<td>Non-articulating post mount, camera adjustability within housing</td>
<td>DR-MD5BR60028</td>
</tr>
<tr>
<td>1 – Exterior Waterproof</td>
<td>Impact resistant, lens guard, low profile housing, shall not accumulate condensation/moisture</td>
<td>Safety Vision model SV-835L4EXB-5</td>
</tr>
<tr>
<td>RS/curbside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – Exterior Waterproof</td>
<td>Impact resistant, lens guard, low profile housing, shall not accumulate condensation/moisture</td>
<td>Safety Vision model SV-835L4EXBR-5</td>
</tr>
<tr>
<td>streetside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 – Entrance Facing</td>
<td></td>
<td>DTI model DR-MD5BR60028VW</td>
</tr>
<tr>
<td>1 – Operator Overhead</td>
<td>Provision for install-no camera mounted at delivery</td>
<td>DTI model DR-MD5BR60028VW</td>
</tr>
<tr>
<td>2 – Cross-field Interior</td>
<td></td>
<td>DTI model DR-MD5BR60028VW</td>
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<td>7 Total</td>
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TS 2.15.1.2 Workmanship
The workmanship must be the best obtainable in the various trades. All wires, cables must follow generally straight line installation to avoid chatter and must not potentially chafe against adjacent metal or plastic components. Minimum safe tolerance shall be 0.125” unless specifically waived in writing by SEPTA. All punched and/or drilled holes shall be properly de-burred and bushed.

All video cabling shall be fully engineered, molded termination type (no field installed crimped connections permitted). Video and power shall be unitized.

Special care shall be taken with the outside sheathing, roof, roof bonnets, and the interior panels so that drilling and/or punching does not cause damage and/or or water leakage.

TS 2.15.1.3 Production Prototype
The Contractor shall provide a first Article or Prototype installation that fully documents the mechanical and electrical vehicle interfaces, the equipment installation deployment and mapping, and all other necessary documentation required to insure proper operation and maintainability. SEPTA shall inspect and make all required approvals at this program point. No other vehicle installations shall proceed until SEPTA installation requirements are satisfied.

TS 2.15.1.4 System Operation - HDD Drive Interface
The HDD system shall be configured to operate upon activation of the bus ignition switch to run mode. The system shall be arranged to record data from all cameras for 15 minutes after the bus ignition switch is set to it’s off position.

TS 2.15.1.5 HDD Drive Location
The location of the HDD device shall be determined during the pre-production Engineering Design Review Meetings. The drive shall be properly arranged for sustainable structural mounting durability. The HDD shall be arranged for ease of maintenance and other attendant operating circumstances.

TS 2.15.1.6 Camera Mounting(s)
Camera locations shall be determined as specified by the Camera Installation Pilot Program § TS 2.17.1.6 (Camera Mounting). Upon First Article camera selection agreements, no alteration of camera location(s) lensing or other physical location circumstances shall be permitted unless directed by SEPTA due to a demonstrable coverage issue defect. All cameras and housings shall be securely mounted using tamper resistant hardware. All cameras shall maintain their initial adjustment points and settings under customary and routine 3 axis vibrations attendant to transit bus operation and camera systems shall not be re-adjust for drift to a degree that diminishes their initial set positions.

TS 2.15.1.6.1 Camera Mounting(s) Pilot Bus Requirements and PC Inspection
The Contractor shall arrange temporary fixture permitting the temporary installation of cameras for the purpose of placement determination at Pilot Vehicle delivery.
The pilot installation cameras shall be equipped with suction cup devices that can be temporarily affix the camera placements along with an appliqué if the lining is textured or otherwise unsuitable to proper surface sealing. The temporary camera fixtures shall be fabricated to minimize vertical offset due to the suction device itself- and/or the permanent fixtures shall be offset to compensate for the temporary fixturing.

The Contractor shall install and distribute necessary cabling along wire ways in order to facilitate connection to temporary cameras.

Upon notice to proceed from the Septa project manager or their elects, the Contractor shall install said cameras permanently to the pilot vehicle.

The Contractor shall provide a laptop PC with the system that is suitable and capable to verify the operation of the camera placements and completed system functionality

**TS 2.15.1.7 Panic Button/Status Lamp Panel**

The tagged event/Status Lamp Panel assembly shall be located in the driver’s area. The switch button/status lamp panel location shall require SEPTA approval at Pilot Bus Inspection.

**TS 2.15.1.8 Digital Inputs**

The Contractor shall configure an analog, digital or CAN signal input signal that shall initiate an orderly shutdown of the system or equal system.

**TS 2.15.1.9 3-Axis Sensor Installation Requirements**

A 3 axis accelerometer shall be installed that shall interface directly to the camera System HDD. The device shall report impacts within applied parameters and said event shall be recorded to the system HDD with a date and time stamp.

**TS 2.15.1.10 Documentation**

The Contractor shall supply all schematics, diagrams and related service and parts manuals required to maintain, troubleshoot, diagnose and service the specified system. Complete sets of the described material shall be provided at a rate of one set for every ten buses delivered.

**TS 2.15.1.11 GPS and Time Tracking**

The system shall be equipped with GPS sourced hardware, along with a system software redundancy that ensures reliable time and location acquisition and adjustments.

**TS 3. Manuals**

The Contractor shall provide for every five (5) vehicles purchased, one set of each of the following manuals to SEPTA.

- Complete Shop Repair (factory service) Manual
- Complete Operation and Routine Maintenance Manual
- Complete Warranty Manual that includes terms for Chassis O.E.M. and all conversion components added to vehicle.
NOTE: Manuals for chassis, body, air conditioner, seats and electrical must be supplied, packaged and catalogued.

All manuals shall be delivered at the time of the first vehicle inspection by SEPTA.

Two CD formatted manuals will be accepted in lieu of two equivalent paper manuals.

**TS 4. Vehicle Orientation (Training)**
Contractor shall supply and conduct a training orientation on all components of supplied vehicles, including but not limited to chassis, body, lift operation, wheelchair securement operation, and air-conditioning operation. The orientation shall take place within ten (10) workdays of acceptance of last vehicle. From each release quantity the orientation shall take place at the purchasing agency's designated location or other appropriate facility selected by the Project Manager. Orientation at a minimum should include:

1. Air conditioning operation and maintenance
2. Wheelchair Lift operation and maintenance
3. Wheelchair securement
4. Electrical system
5. Chassis
6. Body Conversion

A minimum of 2 working days (16 hours) shall be provided for training/orientation.

**TS 4.1 Chassis O.E.M. Training**
In addition to the aforementioned orientation the Contractor shall provide chassis OEM Training. Training shall be of sufficient detail to allow technicians to perform troubleshooting, diagnosis and repairs to all chassis components including the electrical system. Training shall be web-base with the option of utilizing regional training centers as classroom space is available (An example of the type of training specified would be the Ford Fleet Training Package). Web based training shall be for up to five (5) locations annually for each consecutive year of this Contract through completion of this Contract.
SECTION 7

WARRANTY REQUIREMENTS
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SECTION 7: WARRANTY REQUIREMENTS

WR 1. Warranty
The Contractor warrants that each vehicle and all its component parts comply with the Federal Motor Vehicle Safety Standards. The Pennsylvania State Motor Vehicle Code, and these specifications. The entire vehicle shall be warranted for a period/mileage no less than the chassis O.E.M. warranty.

SEPTA reserves the right to assign to its Paratransit operating contractor(s) the function to act as warranty representative for vehicles purchased under this contract.

The Contractor shall supply the names and addresses of two separate Chassis O.E.M. dealerships, within the City of Philadelphia, where the Contractor has made arrangements to have warranty work performed. A responsible contact person at each of these dealerships shall also be supplied.

In addition, the Contractor shall supply the names and addresses, along with a responsible contact person, of facilities that will perform warranty repairs to any add-on components or subsystems (i.e.: Air Conditioning, W/C Lifts).

If the Contractor is not the actual manufacturer, the Contractor is required to include this provision in any contractual agreements with the manufacture(s) at any tier.

WR 1.1 Fleet Defects

WR 1.1.1 Occurrence and Remedy
A fleet defect is defined as cumulative failure, retrofit, recall, modification, or campaign of any kind in the same components in the same or similar application where such items covered by the warranty and such failure, retrofit, recall, modification, or campaign has affected twenty (20) percent of the buses delivered under this contract. For example, an A/C compressor is purchased, installed and warranted as a unit. Any failure, retrofit, recall, modification, or campaign on that unit under warranty necessitating compressor removal regardless of the cause is handled by the same method; i.e., the entire A/C compressor is removed and is repaired or replaced by another A/C compressor. Thus, with regard to warranty service, the compressor assembly is the lowest recognized component. The item covered by the warranty in this example is the complete compressor not a sub-component within the unit. This interpretation applies to all other equipment items specified in the warranty.

The Contractor is responsible to correct a fleet defect under the warranty provisions defined in "Repair Procedures" (Section WR 1.2). After correcting the Defect, SEPTA and the Contractor shall mutually agree to and the Contractor shall promptly undertake and complete a work program designed to prevent the occurrence of the same Defect in all other buses. Where the specific Defect can be solely attributed to particular identifiable part(s), the work program shall include redesign and/or replacement of the defectively designed and/or manufactured part(s). In all other cases, the work program shall include inspection and/or correction of all of the buses in the fleet via a mutually agreed to arrangement.
The Contractor shall demonstrate the performance efficacy of the fleet defect correction work program(s). The Contractor shall develop and provide SEPTA the engineering analysis, test data, reliability improvement forecast and on-site system or component testing data to validate the Contractor's work program recommendation. Recommendation Data must be presented to SEPTA for concurrence and milestone submittals.

The Contractor shall provide SEPTA with documentation listing the bus number or each retrofit, campaign and modification work showing start and finish date for each bus and a project completion date. Upon completion of a project, process instructions, Bill of Material(s) and functional checkout procedures will be submitted to the Project Manager within seven working days after the last bus is completed.

For a period not less than one (1) year after completion of a work program, the Contractor shall monitor the effectiveness of the work program designed to prevent a re-occurrence of the same defect in the fleet. This period will be used to evaluate the performance of the repair. The status of the defect will remain open during this period until the Contractor has demonstrated the effectiveness of the repair to SEPTA. The warranty on items determined to be fleet defects shall be extended for the same time and/or miles as the original warranty. This extended warranty shall begin on the date of completion of the repair / replacement work program as agreed to by SEPTA. SEPTA will not perform “fleet defect” repairs under the provisions of this warranty. The Contractor or his representative must perform all repairs to fleet defects.

WR 1.1.2 Exceptions to Fleet Defect Provisions
The fleet defect warranty provisions shall not apply to SEPTA supplied items such as radio and communication systems.

Fleet defect warranty provisions shall not apply to defects caused by noncompliance with the Contractor’s normal maintenance practices and procedures as long as they are not in conflict with this specification. The Contractor shall pass on to SEPTA any warranty, offered by a component supplier, that is superior to that required herein. The Contractor's maintenance practices and procedures shall be approved by SEPTA.

WR 1.2 Repair Procedures

WR 1.2.1 Repair Performance
The Contractor is responsible for all warranty-covered repair work. The Contractor shall be responsible for the performance of all required warranty work at its sole cost and expense during the warranty period. The Contractor will perform, or have performed, all required warranty work as promptly as possible so as to preclude or minimize any interruptions to, or disruptions of, the operation of normal route service of the buses resulting from delays in the performance of warranty work under this Contract. At its discretion, SEPTA or its designated representative may perform such work if it determines it needs to do so based on transit service or other requirements. Such work shall be reimbursed by the Contractor.
WR 1.2.2 Repairs by Contractor
The Contractor or its designated representative must begin work on warranty-covered repairs within five (5) working days after receiving notification of a Defect from SEPTA. The Contractor shall perform such work in a timely manner to make the bus available for transit service or other requirements.

The Contractor shall provide at its own expense all parts, tools, and space required to complete repairs. At SEPTA’s option, the Contractor may be required to remove the bus from SEPTA’s property while repairs are being effected. If the bus is removed from SEPTA’s property, the Contractor’s representative must diligently pursue repair procedures.

WR 1.2.3 Repairs by SEPTA

WR 1.2.3.1 Parts Used
If SEPTA performs the warranty-covered repairs, it shall correct or repair the Defect and any Related Defects utilizing parts supplied by the Contractor specifically for this repair. At its discretion, SEPTA may use Contractor-specified parts available from its own stock if deemed in its best interest. On a monthly basis, or at a period to be mutually agreed upon, reports of all repairs covered by this warranty shall be submitted by SEPTA to the Contractor for reimbursement or replacement of parts. The Contractor shall use SEPTA's or mutually agreed to forms for these reports.

WR 1.2.3.2 Contractor Supplied Parts
SEPTA may require that the Contractor supply new parts for warranty-covered repairs being performed by SEPTA. These parts shall be shipped prepaid to SEPTA from any source selected by the Contractor within three (3) working days of receipt of the request for said parts. Parts supplied by the Contractor shall be Original Equipment Manufacturer (OEM) equivalent or superior to that used in the bus original manufacture.

WR 1.2.3.3 Defective Components Return
The Contractor may request that failed part covered by the warranty be returned to the manufacturing plant. SEPTA will hold failed parts as requested in writing by the Contractor on an individual basis for pickup and return to the manufacturer for fifteen (15) calendar days from date of replacement of the part. All other failed parts will be inspected and scrapped locally by the Contractor and/or his designated representative. Returns of failed parts are the responsibility of the Contractor. Warranty claim status and/or duration of warranty coverage shall not be adversely affected for any repair made by SEPTA or its designated representative to a vehicle for which the Contractor did not obtain the failed part for examination. Failed part removals by the Contractor's personnel, designee or supplier support resources shall be responsible for returning the part(s) to the proper designee and location or coordinating the parts disposition with the Contractor's field representative.

WR 1.2.3.4 Failure Analysis
The Contractor shall, upon specific request of SEPTA, provide a failure analysis of fleet defect- or safety-related parts, or major components, removed from buses under the terms of the warranty, that could affect fleet operation. Such reports shall be delivered within 60 (sixty) days of the receipt of the request.
WR 1.2.3.5 Reimbursement For Labor
SEPTA shall be reimbursed by the Contractor for labor. The amount shall be determined by multiplying the number of man-hours actually required to correct the Defect by a per hour, first (1st) class mechanic, straight wage rate, plus seventy-two (72) percent fringe benefits and overhead at the prevailing rate in effect at the time of repair; not to exceed fifty-five (55) percent of direct labor only, plus the cost of towing in the bus if such action was necessary and if the bus was in the normal service area. These wage and fringe benefit rates shall not exceed the rates in effect in the SEPTA’s service garage at the time the Defect correction is made. Labor required to correct fleet defects shall be reimbursed by the Contractor at one and one quarter (1-¼) the actual rate in effect at the time the campaign is made plus fringe benefits and overhead rate if SEPTA chooses to participate in a fleet defect campaign.

WR 1.2.3.6 Reimbursement for Parts
The Contractor has sole responsibility under this contract to maintain sufficient spare parts in his own stock on SEPTA’s property to support the warranty period requirement. SEPTA is under no obligation to provide spare parts to the Contractor for warranty purposes. In the event the Contractor does not have needed spare parts on hand, SEPTA on a individual item basis and in kinds and amounts solely within its discretion, may permit its spare parts to be used by the Contractor in performance of warranty work.
SEPTA shall be reimbursed by the Contractor for the use of such parts and for parts that must be replaced to correct the Defect. The reimbursement for parts shall be at the current price at the time of repair and shall include taxes where applicable and fifteen (15) percent handling costs on parts valued between $0.01 cents and $3,000 dollars. Part value over $3,000 dollars, the material handling cost will be ten (10) percent. Any investment type or regular spare part from SEPTA’s stock that is used to correct a warranty covered defect shall be replaced within fifteen (15) calendar days by the Contractor with a new part of original quality.

WR 1.2.3.7 Reimbursement Requirements
The Contractor shall reimburse SEPTA for warranty covered expenditures within 60 (sixty) days of receipt of warranty claim.

WR 1.2.4 Warranty after Replacement/Repairs
The warranty on items determined to be fleet defects as defined in Section WR 1.1.1 shall be extended for the time and/or miles of the original warranty remaining at the time the fleet defect was identified. This extended warranty shall begin on the repair/replacement date for corrected items on each bus.
SECTION 8

QUALITY ASSURANCE
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SECTION 8: QUALITY ASSURANCE


QA 1.1 Contractor’s In-Plant Quality Assurance Requirements

QA 1.1.1 Quality Assurance Requirements
The Contractor shall establish and maintain an effective in-plant quality assurance organization. It shall be a specifically defined organization and be directly responsible to the Contractor's Senior management. The Quality Assurance Organization shall not report to Production Management. The Contractor should maintain a build schedule, if possible, and present buses to SEPTA's Inspector(s) in sequence number order. Schedule changes must be coordinated in a timely manner with the Resident Inspector and reason(s) for the delay(s). Upon notification of a schedule delay, the Contractor shall provide a recovery schedule for presentation to the Resident Inspector and Project Management within 14 Calendar days of the Delay.

QA 1.1.2 Quality Assurance Organization

QA 1.1.2.1 Control
The quality assurance organization shall exercise quality control over all phases of production, from initiation of design through manufacture and preparation for delivery. The organization shall also control the quality of supplied articles.

QA 1.1.2.2 Authority and Responsibility
The quality assurance organization shall have the authority and responsibility for reliability, quality control, inspection planning, establishment of the quality control system, and acceptance/rejection of materials and manufactured articles in the production of the transit buses.

QA 1.1.3 Quality Assurance Organization Functions

QA 1.1.3.1 Minimum Functions

QA 1.1.3.2 Work Instructions
The quality assurance organization shall verify inspection operation instructions to ascertain that the manufactured product meets all prescribed requirements.

QA 1.1.3.3 Records Maintenance
The quality assurance organization shall maintain and use records and data essential to the effective operation of its program. These records and data shall be available for review by the Resident Inspectors. Inspection and test records for this procurement shall be available for a minimum of one year after inspections and tests are completed.
QA 1.1.3.4 Corrective Actions
The quality assurance organization shall detect and promptly assure correction of any conditions that may result in the production of defective transit buses. These conditions may occur in designs, purchases, manufacture, tests or operations that culminate in effective supplies, services, facilities, technical data, or standards. Production problems, parts shortages shall be brought to the attention of the Resident Inspector at the stage when they occur rather than at a future stage or when the vehicle is virtually complete.

QA 1.1.4 Standards and Facilities

QA 1.1.4.1 Basic Standards and Facilities
The following standards and facilities shall be basic in the quality assurance process.

QA 1.1.4.2 Configuration Control
The Contractor shall maintain drawings and other documentation that completely describe a qualified bus that meets all of the options and special requirements of this procurement. The quality assurance organization shall verify that each transit bus is manufactured in accordance with these controlled drawings and documentation. Copies of the aforementioned drawings and documents shall be provided to the Resident Inspector for purposes of Configuration and Process Audits.

QA 1.1.4.3 Measuring and Testing Facilities
The Contractor shall provide and maintain the necessary gauges and other measuring and testing devices for use by the quality assurance organization to verify that the buses conform to all specification requirements. These devices shall be calibrated at established periods against certified measurement standards that have known valid relationships to national standards.

QA 1.1.4.4 Production Tooling as Media of Inspection
When production jigs, fixtures, tooling masters, templates, patterns, and other devices are used as media of inspection, they shall be proved for accuracy at formally established intervals and adjusted, replaced, or repaired as required to maintain quality.

QA 1.1.4.5 Equipment Used by Resident Inspectors
The Contractor's gauges, measuring testing devices and any other tools required shall be made available for use by the Resident Inspectors to verify that the buses conform to all specification requirements. If necessary, the Contractor's personnel shall be made available to operate the devices and to verify their condition and accuracy.

QA 1.1.5 Control of Purchases

QA 1.1.5.1 Maintenance of Control
The Contractor shall maintain quality control of purchases.

QA 1.1.5.2 Supplier Control
The Contractor shall require that each supplier maintains a quality control program for the services and supplies that it provides. The Contractor's quality assurance organization shall inspect and test materials provided by suppliers for conformance to specification requirements. Materials that have been inspected, tested and approved
shall be identified as acceptable to the point of use in the manufacturing or assembly processes. Controls shall be established to prevent inadvertent use of nonconforming materials.

**QA 1.1.5.3 Purchasing Data**

The Contractor shall verify that all applicable specification requirements are properly included or referenced in purchase orders of articles to be used on transit buses.

**QA 1.1.6 Manufacturing Control**

**QA 1.1.6.1 Controlled Conditions**
The Contractor shall ensure that all basic production operations, as well as all other processing and fabricating, are performed under controlled conditions. Establishment of these controlled conditions shall be based on the documented work instructions, adequate production equipment, and special working environments if necessary.

**QA 1.1.6.2 Completed Items**
A system for final inspection and test of completed transit buses shall be provided by the quality assurance organization. It shall measure the overall quality of each completed bus and have a process improvement procedure in place to eliminate repeated defects.

**QA 1.1.6.3 Nonconforming Materials**
The quality assurance organization shall monitor the Contractor's system for controlling nonconforming materials. The system shall include procedures for identification, segregation, and disposition.

**QA 1.1.6.4 Statistical Techniques**
Statistical analysis, tests, and other quality control procedures shall be available for review by the Resident Inspector.

**QA 1.1.6.5 Inspection Status**
A system shall be maintained by the quality assurance organization for identifying the inspection status of components and completed transit buses. Identification may include cards, tags, or other normal quality control devices. The Quality Organization shall ensure that the completed transit bus meets all of their Organizations Quality Standards before turning the bus over to the Resident Inspector.

**QA 1.1.7 Inspection System**

**QA 1.1.7.1 Inspection System Scope**
The quality assurance organization shall establish, maintain, and periodically audit a fully documented inspection system. The system shall prescribe inspection and test of materials, work in progress, and completed articles. As a minimum, it shall include the following controls:

**QA 1.1.7.2 Inspection Personnel**
Sufficient trained inspectors shall be used to ensure that all materials, components, and assemblies are inspected for conformance with the qualified bus design.
QA 1.1.7.3 Inspection Records
Acceptance, rework, or rejection identification shall be attached to inspected articles. Articles that have been accepted as a result of approved materials review actions shall be identified. Articles that have been reworked to specified drawing configurations shall not require special identification. Articles rejected as unsuitable or scrap shall be plainly marked and controlled to prevent installation on the bus. Articles that become obsolete as a result of engineering changes by the Contractor, or other actions, shall be controlled to prevent unauthorized assembly or installation. Unusable articles shall be isolated and then scrapped. Discrepancies noted by the Contractor or Resident Inspector during assembly shall be entered by the inspection personnel on a record that accompanies the major component, subassembly, assembly, or bus from start of assembly through final inspection. Actions shall be taken to correct discrepancies or deficiencies in the manufacturing processes, procedures, or other conditions that cause articles to be in nonconformity with the requirements of the contract specifications. The inspection personnel shall verify the corrective actions and mark the discrepancy record. If discrepancies cannot be corrected by replacing the nonconforming materials, SEPTA shall approve the modification, repair, or method of correction to the extent that the Contract specifications are affected.

QA 1.1.7.4 Quality Assurance Audits
The quality assurance organization shall establish and maintain a quality control audit program. Records of this program shall be subject to review by SEPTA.

QA 1.2 Inspections

QA 1.2.1 Inspections Stations

QA 1.2.1.1 Inspection Location
Inspection stations shall be at the best locations to provide for work content and characteristics to be inspected. Stations shall provide the facilities and equipment to inspect structural, electrical, hydraulic, and other components and assemblies for compliance with the design requirements. Stations shall also be at the best locations to inspect or test characteristics before they are concealed by subsequent fabrication or assembly operations.

QA 1.2.1.2 Inspection Procedures
A minimum of three in-process inspection stations shall be established by the Contractor at various stages of manufacturing. As the vehicle completes these stages, the SEPTA Resident Inspector(s) shall be notified and may elect to inspect the bus at this station. SEPTA shall perform all necessary inspections to ascertain compliance to specifications or waive the inspection. In either case, the contractor shall provide sufficient time to perform an effective inspection. SEPTA shall only inspect the bus after the Contractor's Quality Assurance staff has completed their inspection and all deficiencies have been corrected.

QA 1.2.2 Resident Inspector

QA 1.2.2.1 Resident Inspector Role
SEPTA may be represented at the Contractor's or Supplier(s) plant(s) by a Resident Inspector(s). They shall monitor, in the Contractor's plant, the manufacture of transit buses built under this procurement. The Resident
Inspector(s) will be authorized to approve the pre-delivery acceptance tests and to release the buses for delivery. Upon request to the Quality Assurance Supervisor, the Resident Inspector(s) shall have access to the Contractor's quality assurance files related to this procurement. These files shall include drawings, material standards, parts lists, inspection processing and reports, and records of defects.

Resident Inspector shall be provided with copies of a complete set of engineering drawings and document for the bus being built. Engineering or manufacturing changes must be formally documented and included in documents provided to SEPTA. These documents include "out-in" changes during a production run, authorized material substitutions and production improvement changes. These documents will be given to the Resident Inspector upon request or authorization date.

The Contractor shall provide office space for the Resident Inspector(s) in close proximity to the final assembly area. This office space shall be equipped with desks, outside and interplant telephones.

The Contractor's Resident Inspector(s) office or Supplier(s) site shall be equipped with High Speed Internet Access.

The presence of the Resident Inspector(s) in the plant shall not relieve the Contractor of its responsibility to meet all of the requirements of this Contract document.

**QA 1.2.2.2 Pre-Production Meetings**

The primary resident inspector shall participate in design review and pre-production meetings with the Project Manager. At these meetings the configuration of the buses and the manufacturing processes shall be finalized.

The Contractor shall provide a complete Bill of Material prior to the start of bus fabrication.

**QA 1.2.2.3 Authority**

Records and data maintained by the quality assurance organization shall be available for review by the resident inspectors. Inspection and test records for this procurement shall be available for a minimum of one year after inspections and tests are completed.

Discrepancies noted by the resident inspector during assembly shall be entered by the Contractor's inspection personnel on a record that accompanies the major component, subassembly, assembly, or bus from start of assembly through final inspection. Actions shall be taken to correct discrepancies or deficiencies in the manufacturing processes, procedures, or other conditions that cause articles to be in nonconformity with the requirements of the contract specifications. The inspection personnel shall verify the corrective actions and mark the discrepancy record. If discrepancies cannot be corrected by replacing the nonconforming materials, SEPTA shall approve the modification, repair, or method of correction to the extent that the contract specifications are affected.

The primary resident inspector shall remain in the Contractor's plant for the duration of bus assembly work under this contract. Only the primary resident inspector or designee shall be authorized to release the buses for delivery. The resident inspectors shall be authorized to approve the pre-delivery acceptance tests. Upon request to the quality assurance supervisors, the resident inspectors shall have access to the Contractor's quality assurance files related to this procurement. These files shall include drawings, assembly procedures, material standards, parts lists, inspection processing and reports, and records of defects.
QA 1.3 Acceptance Tests

QA 1.3.1 Responsibility
Fully documented tests shall be conducted on each production bus following manufacture to determine its acceptability to SEPTA. These acceptance tests shall include pre-delivery inspections and testing by the Contractor, and SEPTA. The Pilot bus shall undergo a Configuration Audit Inspection.

QA 1.3.2 Pre-Delivery Tests
The Contractor shall conduct acceptance tests at its plant on each bus following completion of manufacture and before delivery to SEPTA. These pre-delivery tests shall include visual and measured inspections, as well as testing the total bus operation. The tests shall be conducted and documented in accordance with written test plans. Additional tests may be conducted at the Contractor's discretion to ensure that the completed buses have attained the desired quality and have met the requirements of the Technical Specifications. This additional testing shall be recorded on appropriate test forms provided by the Contractor and shall be conducted before acceptance of the bus.

The pre-delivery tests shall be scheduled and conducted with sufficient notice so that they may be witnessed by the Resident Inspectors, who may accept or reject the results of the tests. The results of pre-delivery tests, or any other tests, shall be filed with the assembly inspection records for each bus. The under floor equipment shall be made available for inspection by the Resident Inspectors using a pit or bus hoist provided by the Contractor. A hoist, scaffold, or elevated platform shall be provided by the Contractor to easily and safely inspect bus roofs. Delivery of each bus shall require written authorization of a Resident Inspector. Authorization forms for the release of each bus for delivery shall be provided by the Contractor. An executed copy of the authorization shall accompany the delivery of each bus.

QA 1.3.2.1 Inspection – Visual and Measured
Visual and measured inspections shall be conducted with the bus in a static condition. The purpose of the inspection testing is to verify overall dimensional and weight requirements, to verify that required components are included and are ready for operation, and to verify that components and subsystems that are designed to operate with the bus in a static condition do function as designed.

QA 1.3.2.2 Total Bus Operation
Total bus operation shall be evaluated during road tests. The purpose of the road tests is to observe and verify the operation of the bus as a system and to verify the functional operation of the subsystems that can be operated only while the bus is in motion. Each bus shall be driven for a minimum of 10 miles during the road tests. Observed defects shall be recorded on test forms. The bus shall be retested when defects are corrected and adjustments are made. This process shall continue until defects or required adjustments are no longer detected. Results shall be pass/fail for these bus operations tests.
SECTION 9

FORMS & CERTIFICATIONS
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CER 1 - CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an Officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Signature: ________________________________

Company Name: ________________________________

Title: ________________________________

Date: ________________________________
CER 2 - BUY AMERICA CERTIFICATION

Certification requirement for the procurement of buses, other rolling stock, and associated equipment,


The Proposer hereby certifies that it will comply with the requirements of 49 U.S.C. § 5323(j)(2)(C) [formerly Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended] and the regulations of 49 CFR Part 661.11.

Signature: ____________________________________________

Company Name: ____________________________________________

Title: ____________________________________________

Date: ____________________________________________

or


The Proposer hereby certifies that it cannot comply with the requirements of 49 U.S.C. § 5323(j)(2)(C) [formerly Section 165(b)(3) of the Surface Transportation Assistance Act of 1982, as amended] but may qualify for an exception to the requirement consistent with 49 U.S.C. § 5323(j)(2)(B) or (j)(2)(D) [formerly Section 165(b)(2) or (b)(4) of the Surface Transportation Assistance Act, as amended] and the regulations in 49 CFR Part 661.7.

Signature: ____________________________________________

Company Name: ____________________________________________

Title: ____________________________________________

Date: ____________________________________________
I hereby certify that the Proposer has complied with the requirements of 49 CFR Part 26.49, “How are overall goals established for Transit Vehicle Manufacturers”, and that its goals have been either approved or not disapproved by the Federal Transit Administration.

Proposer is required to initial one of the two boxes below:

- [ ] Approved
- [ ] Not Disapproved

Signature of Proposer's Authorized Official: __________________________________________

Name and Title of Proposer's Authorized Official: _____________________________________

Company Name: __________________________________________

Date: __________________________________________
CER 4 - NON-COLLUSION AFFIDAVIT

State of ____________________________)   SS:
County of ____________________________)

____________________________________, being first duly sworn, deposes and says that he/she is authorized to

attest on behalf of himself/herself and is _____________________________________________

(insert "sole owner", "a partner", or other proper title)

of ____________________________ the offeror submitting this proposal; that such offer was not made in the interest of or on behalf of any undisclosed person, partnership, company, organization or corporation; that such offer is genuine and not collusive or a sham; and that said offeror has not been a party to any agreement to offer a fixed amount or to refrain from offering and has not, directly or indirectly, by agreement, communication or conference with anyone attempted to induce action prejudicial to the interests of the Southeastern Pennsylvania Transportation Authority, of any offeror or anyone else interested in the proposed contract.

Signature: ________________________________________________________________
Company: ______________________________________________________________
Title: _________________________________________________________________
Date: _________________________________________________________________
CER 5 - CERTIFICATE OF COMPLIANCE WITH BUS TESTING REQUIREMENT

The undersigned certifies that the vehicles offered in this procurement comply and will, when delivered, comply with 49 U.S.C. § 5323(c) and FTA's implementing regulation at 49 CFR Part 665 according to the indicated one of the following three alternatives.

(mark one and only one of the three blank spaces with an "x")

1. ___ The buses offered herewith have been tested in accordance with 49 CFR Part 665 on (date). The vehicles being sold should have the identical configuration and major components as the vehicle in the test report, which must be submitted with this Offer. If the configuration or components are not identical, the manufacturer shall provide with its Offer a description of the change and the manufacturer's basis for concluding that it is not a major change requiring additional testing.

2. ___ The manufacturer represents that the vehicle is "grandfathered" (has been used in mass transit service in the United States before October 1, 1988, and is currently being produced without a major change in configuration or components), and submits with this Offer the name and address of the recipient of such a vehicle and the details of that vehicle's configuration and major components.

3. ___ The vehicle is a new model and will be tested and the results will be submitted to Procuring Agency prior to acceptance of the first bus.

The undersigned understands that misrepresenting the testing status of a vehicle acquired with Federal financial assistance may subject the undersigned to civil penalties as outlined in the Department of Transportation's regulation on Program Fraud Civil Remedies, 49 CFR Part 31. In addition, the undersigned understands that FTA may suspend or debar a manufacturer under the procedures in 49 CFR Part 29.

Signature: ____________________________________________

Company Name: ________________________________________

Title: __________________________________________________

Date: ___________________________________________________
CER 6 - CERTIFICATE OF COMPLIANCE WITH IMMIGRATION REFORM AND CONTROL
ACT OF 1986

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. Contractor has and will continue to comply with, for the duration of this Contract, the requirements of 8 U.S.C. § 1324a with respect to the hiring, recruiting or referral for employment of an alien in the United States of America.

2. Contractor will complete the Employee Eligibility Form (I-9) for each person that it hires, and shall keep each I-9 Form on file for at least three (3) years, or one (1) year after employment ends, whichever is longer.

3. Contractor shall require that the provisions of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when the parties entered into this Contract. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Act 43 of 2006, the Illegal Alien Labor on Assisted Act also known and cited as the Prohibition of Illegal Alien Labor on Assisted Projects Act.

Signature: __________________________________________

Company Name: ______________________________________

Title: ______________________________________________

Date: _______________________________________________
CER 7 - FEDERAL MOTOR VEHICLE SAFETY STANDARDS CERTIFICATES

The Proposer and (if selected) Contractor shall submit (1) manufacturer’s FMVSS self-certification sticker information that the vehicle complies with relevant FMVSS or (2) manufacturer’s certified statement that the contracted buses will not be subject to FMVSS regulations.

Company name:

Name of signer:

Title:

Authorized signature          Date
CER 8 - ACKNOWLEDGEMENT OF ADDENDA FORM

The following form shall be completed for the acknowledgement of all addenda by inserting the dates next to the appropriate addenda number and including in the Technical Proposal submittal. Failure to properly acknowledge the addenda, as set forth below, may cause your proposal to be considered non-responsive to the solicitation.

The undersigned acknowledges receipt of the following addenda to this RFP No. 11-025-JBW and certifies that all changes have been taken into account in the total price of the proposal.

ADDENDUM NO. 1          DATED: ____________
ADDENDUM NO. 2          DATED: ____________
ADDENDUM NO. 3          DATED: ____________
ADDENDUM NO. 4          DATED: ____________
ADDENDUM NO. 5          DATED: ____________
ADDENDUM NO. 6          DATED: ____________

Proposer Name: ________________________________________________________________

Street Address: ________________________________________________________________

City,     State,      Zip

Signature of Authorized Signer: ________________________________________________

Print/Type Name: _______________________________________________________________

Phone Number : _______________________________________________________________
CER 9 – PERFORMANCE BOND “SAMPLE”

Know all men and women (or persons) by these presents, that ____________________________ as principal (hereinafter called the Contractor) and ____________________________ as Surety (hereinafter called the Surety) are held and firmly bound unto SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY, 1234 MARKET STREET, PHILADELPHIA, PA 19107-3780, as Obligee (hereinafter called SEPTA) in the amount of _________ dollars ($________), for the payment whereof the said Contractor and Surety bind themselves, and their respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Contractor has by written agreement dated ______________ entered into a contract with SEPTA for _______________________________ which contract is hereby referred to and made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, the condition of this obligation is such, that if the Contractor shall fully indemnify SEPTA against any loss or damage directly suffered through the failure of the Contractor to faithfully perform said contract, at the time(s), and in the manner therein specified, then this obligation shall be void; otherwise it shall remain in full force and effect.

Provided however, whenever Contractor shall be, and declared by SEPTA to be in default under the Contract, the Surety may promptly remedy the default, or shall promptly:

1. Complete the Contract in accordance with its terms and conditions, or

2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if SEPTA elects, upon determination by SEPTA and/or the Surety of the lowest responsible bidder, arrange for a contract between such bidder and SEPTA, and make available as work progresses and continue to make available (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price," as used in this paragraph, shall mean the total amount payable by SEPTA to Contractor under the Contract and any amendments or other entitlements thereto, less the amount properly paid by SEPTA to Contractor.

AND PROVIDED FURTHER, that no action, suit or proceeding be instituted on this bond after the expiration of two (2) years from the date on which final payment under the Contract falls due.

Signed, Sealed and Dated this ___ day of __________, 20__.

(Contractor)

BY: ____________________________ (SEAL)

(Surety)

BY: ____________________________ (SEAL)
CER 10 – MAINTENANCE BOND “SAMPLE”

KNOW ALL PERSONS BY THESE PRESENTS, that we, ________________________________,
(Contractor)
(hereinafter called "Principal"), and ________________________________,
(Surety Company)
authorized to transact business in the Commonwealth of Pennsylvania, (hereinafter called "Surety"), are
held and firmly bound unto the Southeastern Pennsylvania Transportation Authority ("SEPTA") as
Obligee, in the penal sum of ________________________________ good and lawful money of the United
States of America, for the payment of which well and truly to be made, we bind ourselves, our heirs,
executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has, by written Agreement, dated __________, entered into a contract with
SEPTA for the ___________________________________________________________________________; and

WHEREAS, the contract requires that the Principal shall furnish a bond in the penalty of 100 percent of
the contract price which shall remain in force for a period of __________ year(s) after the date of Final
Payment by SEPTA and which shall be conditioned to guarantee against all defects in workmanship and
materials which shall become apparent during said period.

NOW, Therefore, The Condition of This Obligation Is Such, that if the Principal shall well and truly
repair and replace any defects or deficiency in materials or workmanship which may develop in
connection with said work during the period of __________ year(s) from Final Payment and which have
been occasioned by faulty workmanship or defects in materials, then this obligation shall be null and void,
otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, said Principal and Surety have caused these presents to be signed and their
seals to be affixed the day and year first written below.

Signed, Sealed and Dated this ___ day of ________________, 20__.

Contractor: ________________________________

______________________________ (SEAL) (Authorized Signature) (Authorized Signature)

Surety Company:

______________________________ (SEAL) (Authorized Signature) (Authorized Signature)
CER 11 – CONTRACT CHANGE ORDER FORM “SAMPLE”

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
CONTRACT CHANGE ORDER
1234 Market Street
Philadelphia, Pennsylvania 19107-780

Change Order No.:  
SEPTA Fund No. ______ Contractor:
CPMS No. ________________ SEPTA Commitment No:
Federal Grant No. __________ Contract Title:

Requested by:

THIS ORDER, WHEN PROPERLY EXECUTED, CONSTITUTES AUTHORIZATION TO PROCEED WITH THE CHANGES DESCRIBED BELOW, AND TO CHANGE THE AMOUNT OF THE CONTRACT AS NOTED.

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<tr>
<th>DESCRIPTION OF CHANGE</th>
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All terms, covenants and conditions of the original Agreement dated ____________ with amendments to date, if any, remain in full force and effect except as herein stated.

Contractor does hereby acknowledge that the increase in the Contract Sum, as set forth in this Change Order, shall be in full and complete satisfaction of all indebtedness and obligation of any nature whatsoever for the additional services performed or to be performed under this Change Order, and that such increase includes any and all costs for inefficiency, disruption or delay associated with such additional services. Contractor, for itself, its successors and assigns hereby remises, releases and forever discharges SEPTA of and from all manner of debts, demands, claims, actions, causes of action, suits, accounts, covenants, contracts, agreements and any and all claims and liabilities whatsoever, in law and in equity, arising under or by virtue of this and any other Change Orders.
SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY                      CONTRACT CHANGE ORDER
1234 Market Street                          Page  2   of 2
Philadelphia, Pennsylvania  19107-3780

Change Order No.:______________________ SEPTA Fund No. _____ Contractor: ____________________________

CPMS No. _______________ SEPTA Commitment No: ____________________________

Federal Grant No.__________ Contract Title: ________________________________

Requested by: ______________________________

A. Original Value of Contract $________
B. Previous Change Orders $________
C. This Change $________
D. New Contract Sum (A+B+C) $________ (Not to exceed)
E. % Change - This Change (C) A ______
F. Cumulative % Change [(B+C)] A ______
G. Cumulative $ Change (B+C) $________

APPROVALS:  This change order made subject to Resolution adopted by the SEPTA Board on
(date to be inserted is that of adoption of original authorizing resolution for contract), incorporated by reference
herein.

Is specific SEPTA Board Approval Required YES  NO, if YES Date of Approval ____________.

Is Funding Agency Approval Required YES  NO, if YES Date of Approval ____________.

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<thead>
<tr>
<th>SEPTA</th>
<th>VENDOR/CONTRACTOR</th>
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<tr>
<td>CONTRACT ADMINISTRATOR</td>
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<td>PRESIDENT, VICE PRESIDENT *</td>
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<td>SECRETARY, ASST. SECRETARY *</td>
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<td>TREASURER, ASST. TREASURER *</td>
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<td>• Strike out title(s) that do not apply.</td>
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APPROVED AS TO FORM:  
BY: __________________ Esq.
GENERAL COUNSEL’S OFFICE
SECTION 10

NOT USED
SECTION 11 - APPENDICES

APPENDIX 1 - VEHICLE DESIGN & SPECIFICATION FORM

Cutaway Type Paratransit Bus With & Without Wheelchair Lift:
1. 3 WHEELCHAIR plus 4 AMBULATORY
2. 12 PASSENGER

APPENDIX 2 – PRICE PROPOSAL ACKNOWLEDGEMENT & PRICE PROPOSAL

APPENDIX 3 - PROJECT PROGRESS AND PERFORMANCE EVALUATION FORM

APPENDIX 4 - SEPTA PROTEST PROCEDURES

APPENDIX 5 – SEPTA PLUG & PLAY WIRING

APPENDIX 6 – SEPTA EXTERIOR BUS GRAPHICS
APPENDIX 1

VEHICLE DESIGN & SPECIFICATION FORM
### APPENDIX #1 – VEHICLE DESIGN & SPECIFICATION FORM

**3 WHEELCHAIR PLUS 4 AMBULATORY, AND 12 PASSENGER**  
(TO BE PROVIDED WITH PROPOSAL)

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<tr>
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<th>3 + 4</th>
<th>12 Passenger</th>
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<tr>
<td>A</td>
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<td>B</td>
<td><strong>Chassis Manufacturer</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. <strong>Skin Material</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. <strong>Roof Material</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. <strong>Skirt Panel Material</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D</td>
<td><strong>Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Overall Length (including bumpers)</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>2. Overall Width (w/mirrors extended)</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>3. Overall Width (excluding mirrors)</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>4. Overall Height (Roof Line)</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>5. Wheel Base</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>6. Interior Head Room</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Front of Passenger Compartment</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>b. Rear of Passenger Compartment</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>7. Aisle Width</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>a. Height</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>b. Width</td>
<td>In.</td>
</tr>
<tr>
<td></td>
<td>9. Passenger Capacity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Total Maximum Seating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Minimum Hip to Knee Room</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Minimum Foot Room</td>
<td></td>
</tr>
</tbody>
</table>
### E. Weight of Bus (GVWR)
1. Front Axle
   - 3 + 4
   - 12 Passenger
2. Rear Axle
   - 3 + 4
   - 12 Passenger
3. Total
   - 3 + 4
   - 12 Passenger

### F. Power Train
1. Engine Type/Displacement/HP
   - 3 + 4
2. Transmission Type/# of Speeds
   - 3 + 4
3. Differential Type/Mfg.
   - 3 + 4
4. Fuel Tank Capacity
   - 3 + 4

### G. Alternator(s) Mfg./Output
   - 3 + 4
   - 12 Passenger

### H. Fire Suppression System Mfg./Type
   - 3 + 4
   - 12 Passenger

### I. Wheelchair Lift Type/Mfg.
   - 3 + 4
   - N/A

### J. Wheelchair Securement Equipment
1. Manufacturer
   - 3 + 4
   - N/A
   Model
   - 3 + 4
   - N/A
2. Securement System
   a. Retractor
      - 3 + 4
      - N/A
   b. Floor Securement
      - 3 + 4
      - N/A

### K. Secondary A/C System
1. Manufacturer
2. System Capacity
   - 3 + 4
   - BTU
3. Compressor Type/Mfg.
L.  Brake System
   1.  Type
      a.  Front
      b.  Rear

M.  Auxiliary Heater
   1.  Manufacturer
   2.  Capacity

N.  Passenger Windows Type/Mfg.

O.  Mirrors - Mfg.

P.  Interior Lighting
   1.  Manufacturer
   2.  Model/Number

Q.  Seat Manufacturer
   1.  Model
   2.  Vinyl Type
   3.  Fabric Weight
APPENDIX 2

PRICE PROPOSAL ACKNOWLEDGEMENT & PRICE PROPOSAL
PRICE PROPOSAL ACKNOWLEDGEMENT (1-Page)

Delivery of the buses to be in accordance with the following Project Schedules:

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Delivery of 1st 2 Pilot Buses (3-Wheelchair Plus 4-Ambulatory, 12 Passenger)</td>
<td>30 days prior to start of CY 2018 deliveries of 3 Wheelchair Plus 4 Ambulatory, and 12 Passenger Mini Cutaway Buses</td>
</tr>
<tr>
<td>2</td>
<td>Delivery of 1st group 84 Production buses guaranteed for CY 2018</td>
<td>Between 180 Days Minimum and 270 Days Maximum after Notice to Proceed Date</td>
</tr>
<tr>
<td>3</td>
<td>Delivery of 2nd group 68 Production buses guaranteed for CY 2019</td>
<td>Between 540 Days Minimum and 635 Days Maximum after Notice to Proceed Date</td>
</tr>
<tr>
<td>4</td>
<td>Delivery of 3rd group 71 Production buses guaranteed for CY 2020</td>
<td>Between 900 Days Minimum and 1000 Days Maximum after Notice to Proceed Date</td>
</tr>
</tbody>
</table>

*Example: If Notice to Proceed (GC 2.7) is given to a contractor on August 1, 2017, production buses for calendar year 2018 would have to completely delivered to SEPTA between 1/28/2018 and 4/28/2018 in order to avoid Liquidated Damages in accordance with GC 7.3.

For any yearly Option order, the Contractor will be notified in writing 190 days prior to the respective scheduled delivery period. The written notification will be for:

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Guaranteed Quantity</th>
<th>Option Quantity</th>
<th>Guaranteed Quantity</th>
<th>Option Quantity</th>
<th>Total Guaranteed Per Calendar Year</th>
<th>Total Options Per Calendar Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>55</td>
<td>10</td>
<td>31</td>
<td>10</td>
<td>86</td>
<td>20</td>
</tr>
<tr>
<td>2019</td>
<td>34</td>
<td>10</td>
<td>34</td>
<td>10</td>
<td>68</td>
<td>20</td>
</tr>
<tr>
<td>2020</td>
<td>23</td>
<td>10</td>
<td>48</td>
<td>10</td>
<td>71</td>
<td>20</td>
</tr>
<tr>
<td>Totals</td>
<td>112</td>
<td>30</td>
<td>113</td>
<td>30</td>
<td>225</td>
<td>60</td>
</tr>
</tbody>
</table>

Price Proposal Acknowledgement, RFP 17-00127-APES, Single Rear-Wheel Cutaway Transit Buses

Name of Proposer: ____________________________________________________________________________

Author. Representative/Title: __________________ ____________________ / ____________________________

Contact Nos., Phone/Mobile:         / ______________________________________________________

Contact Name/Email:__________________________________ / ______________________________________

Date: _______________________

Address:  __________________________________________________________________________________
## PRICE PROPOSAL (1-Page)

Single Rear-Wheel Cutaway Transit Mini-Buses per SEPTA Specifications & Schedules

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
<th>Qty</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Total Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CY 2018 Base: 3 Wheelchair + 4 Ambulatory Cutaway Bus per Spec. 6A &amp; Schedule</td>
<td>55</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CY 2018 Option: 3 Wheelchair + 4 Ambulatory Cutaway Option per Spec. 6A &amp; Schedule</td>
<td>10</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CY 2018 Base: 12 Passenger Cutaway Bus per Spec. 6B &amp; Schedule</td>
<td>31</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>CY 2018 Option: 12 Passenger Cutaway Bus per Spec. 6B &amp; Schedule</td>
<td>10</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>CY 2019 Base: 3 Wheelchair + 4 Ambulatory Cutaway Bus per Spec. 6A &amp; Schedule</td>
<td>34</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>CY 2019 Option: 3 Wheelchair + 4 Ambulatory Cutaway Option per Spec. 6A &amp; Schedule</td>
<td>10</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>CY 2019 Base: 12 Passenger Cutaway Bus per Spec. 6B &amp; Schedule</td>
<td>34</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>CY 2019 Option: 12 Passenger Cutaway Bus per Spec. 6B &amp; Schedule</td>
<td>10</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CY 2020 Base: 3 Wheelchair + 4 Ambulatory Cutaway Bus per Spec. 6A &amp; Schedule</td>
<td>23</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>CY 2020 Option: 3 Wheelchair + 4 Ambulatory Cutaway Option per Spec. 6A &amp; Schedule</td>
<td>10</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>CY 2020 Base: 12 Passenger Cutaway Bus per Spec. 6B &amp; Schedule</td>
<td>48</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>CY 2020 Option: 12 Passenger Cutaway Bus per Spec. 6B &amp; Schedule</td>
<td>10</td>
<td>Each</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Amount for Items 1 through 12: ________________________________

Name of Firm: _______________________________________________________

Name of Contact Person: ______________________________________________

Title of Contact Person: _____________________________________________

Signature of Contact Person: _________________________________________

Date: _____________________________________________________________
APPENDIX 3

PROJECT PROGRESS AND PERFORMANCE EVALUATION FORM
PERFORMANCE EVALUATION -  
CONSTRUCTION CONTRACTS

PART I - GENERAL CONTRACT DATA

3. CONTRACTOR (Name, address and ZIP code)

4. TYPE OF CONTRACT (Check)
   A. FIRM FIXED PRICE
   B. COST PLUS FIXED FEE
   C. OTHER (Specify) ______

5. COMPLEXITY OF WORK
   A. DIFFICULT
   B. ROUTINE

PART II - PERFORMANCE EVALUATION OF CONTRACTOR (Check appropriate box)

10. PERFORMANCE ELEMENTS
    A. QUALITY OF WORK
    B. TIMELY PERFORMANCE
    C. EFFECTIVENESS OF MANAGEMENT
    D. COMPLIANCE WITH LABOR STANDARDS
    E. COMPLIANCE WITH SAFETY STANDARDS

11. OVERALL EVALUATION
    A. OUTSTANDING (Explain in Item 14, on reverse)
    B. SATISFACTORY
    C. UNSATISFACTORY (Explain in Item 15, on reverse)

12. EVALUATED BY
    A. ORGANIZATION
    B. NAME AND TITLE
    C. SIGNATURE
    D. DATE

13. EVALUATION REVIEWED BY
    A. ORGANIZATION
    B. NAME AND TITLE
    C. SIGNATURE
    D. DATE

14. REMARKS ON OUTSTANDING PERFORMANCE AS INDICATED BY THE CONTRACTOR'S PERFORMANCE ON THIS CONTRACT. IF YOU CONSIDER THE CONTRACTOR OUTSTANDING, SET FORTH FACTUAL DATA SUPPORTING THIS OBSERVATION. THESE DATA MUST BE IN SUFFICIENT DETAIL TO ASSIST SEPTA IN SELECTING CONTRACTORS THAT HAVE DEMONSTRATED OUTSTANDING QUALITY OF WORK AND RELIABILITY. (Continue on separate sheet if needed)

15. EXPLANATION OF UNSATISFACTORY EVALUATION. FOR EACH UNSATISFACTORY ELEMENT, PROVIDE FACTS CONCERNING SPECIFIC EVENTS OR ACTIONS TO JUSTIFY THE EVALUATION (e.g., extent of SEPTA inspection required, rework required, subcontracting, cooperation of contractor, quality of workmen and availability of equipment). THIS DATA MUST BE IN SUFFICIENT DETAIL TO ASSIST SEPTA IN SELECTING CONTRACTORS RESPONSIBILITY. (Continue on separate sheet if needed)
APPENDIX 4

SEPTA PROTEST PROCEDURES
**SEPTA Bid/Proposal Protest Procedure:** Bid/proposal protests relative to this procurement will be reviewed and adjudicated by SEPTA in accordance with the attached Bid/Proposal Protest Procedure.

**SEPTA BID/PROPOSAL PROTEST PROCEDURE**

1.0 **PURPOSE**

1.1 This section describes the policies and procedures governing the receipt and resolution of protests in connection with an Invitation for Bid (IFB) or Request for Proposal (RFP). This procedure is applicable to all procurements in excess of $100,000. Bid/proposal protests for procurements of less than $100,000 shall be informally handled by the Senior Director of Procurement or his/her designee.

2.0 **DEFINITIONS**

2.1 "Interested Party” means any bidders/proposers.

2.2 "days" means business days.

2.3 “Filed” means the date of receipt by The Office of SEPTA’s Senior Director of Procurement or his/her designee (hereinafter Senior Director of Procurement).

2.4 “Federal/State Law or Regulation” means any valid requirement imposed by Federal, state, or other Statute or regulation.

2.5 “Presumptive Contractor” means the bidder/proposer that is in line for award of the contract in the event that the protest is denied.

2.6 “Protestant” is an Interested Party who is aggrieved in connection with the solicitation or award of a contract and who files a protest.

3.0 **TYPES OF PROTESTS/ TIME LIMITS**

3.1 **Pre-Bid/Proposal** Protest is based upon alleged restrictive specifications or alleged improprieties in SEPTA’s procurement process. A Protestant must file a pre-bid/proposal protest no later than five (5) days prior to bid opening date by 4:30 p.m. Philadelphia prevailing time.

3.2 **Pre-Award** Protest is based upon alleged improprieties of a Bid/Proposal. A Protestant must file a pre-award protest no later than five (5) days after the Protestant knows or should have known of the facts giving rise thereto by 4:30 p.m. Philadelphia prevailing time.

3.3 **Post-Award Protest** is based upon the award of a contract. A Protestant must file a post-award protest no later than five (5) days after the notification to the unsuccessful firms of SEPTA’s intent to award, or no later than five (5) days after an unsuccessful firm becomes aware of SEPTA’s intent to award a contract, whichever comes first, by 4:30 p.m. Philadelphia prevailing time.
4.0 CONTENTS OF PROTEST

4.1 Protests must be in writing, and filed directly with the Office of SEPTA’s Senior Director of Procurement, at the address indicated in the solicitation, and must contain the following information:

1. The name, address and telephone number of the Protestant; and

2. Identity of the IFB or RFP (by number and description); and

3. A detailed factual statement of the grounds for protest; and

4. The desired relief, action or ruling.

5.0 ACTION BY SEPTA

5.1 Procurement Process Status

Upon timely receipt of a protest, SEPTA will delay the opening of bids until after resolution of the protest for protests filed prior to the bid opening, or withhold award until after resolution of the protest for protests filed after bid opening. However, SEPTA may open bids or award a contract whenever SEPTA, at its sole discretion, determines that:

a. The items or work to be procured are urgently required; or
b. Delivery or performance will be unduly delayed by failure to make the award promptly; or
   c. Failure to make prompt award will otherwise cause undue harm to SEPTA or a funding source.

If the protest is filed before the award of the contract, SEPTA will advise the Presumptive Contractor of the pending protest.

5.2 If deemed appropriate, SEPTA may conduct an informal conference on the merits of the protest with all Interested Parties invited to attend.

5.3 Response to the Protest

SEPTA’s Senior Director of Procurement will respond in detail to each substantive issue raised in the protest within a reasonable time after the protest is filed. SEPTA’s response shall address only the issues raised originally by the Protestant.

When, on its face a protest does not state a valid basis for protest or is untimely, the Senior Director of Procurement may summarily dismiss the protest without requiring a detailed response.

5.4 Rebuttal to SEPTA Response

The Protestant may submit a written rebuttal to SEPTA’s response, addressed to the Senior Director of Procurement, but must do so within five (5) days after
receipt of the original SEPTA response. SEPTA will not address new issues raised in the rebuttal. After receipt of the Protestant’s rebuttal, the Senior Director of Procurement will review the protest and notify the Protestant of his/her final decision.

5.5 Request for Additional Information

Failure of the Protestant to comply with a request for information as specified by SEPTA’s Senior Director of Procurement, may result in determination of the protest without consideration of the additional information if subsequently produced. If any Interested Party requests information from another Interested Party, the request shall be made to SEPTA’s Senior Director of Procurement, and, if SEPTA so directs, shall be complied with by the other party within five (5) days.

5.6 Request for Reconsideration

If data becomes available that were not previously known, or there has been an error of law, a Protestant may submit a request for reconsideration of the protest. SEPTA’s Senior Director of Procurement will again review the protest considering all currently available information. The Senior Director of Procurement’s determination will be made within a reasonable period of time, and his/her decision will be considered final.

5.7 Decision

Upon review and consideration of all relevant information the determination as issued by SEPTA will be final.

6.0 CONFIDENTIALITY OF PROTEST

Material submitted by a Protestant will not be withheld from any Interested Party, except to the extent that the withholding of information is permitted or required by law or regulation. If the Protestant considers that the protest contains proprietary material which should be withheld, a statement advising of this fact must be affixed to the front page of the protest submission and the allegedly protected information must be so identified whenever it appears.

7.0 FEDERAL TRANSIT ADMINISTRATION (FTA) INVOLVEMENT

Where procurements are funded by the FTA, the Protestant may file a protest with the FTA only where the protest alleges that SEPTA failed to have or failed to adhere to its protest procedures. Any protest to the FTA must be filed in accordance with FTA Circular 4220.1F.
APPENDIX 5 – SEPTA PLUG & PLAY WIRING
# XEROX/ACS Plug & Play Bill of Material

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>140933-1</td>
<td>Card Reader</td>
</tr>
<tr>
<td>DM2-2400/1575</td>
<td>GPS / WLAN Antenna</td>
</tr>
<tr>
<td>120004-7</td>
<td>Handset</td>
</tr>
<tr>
<td>UL-4850-414-White-TNCF</td>
<td>RF Antenna Voice / Data</td>
</tr>
<tr>
<td>120105</td>
<td>OBD-II Scan Tool (Mileage - Van)</td>
</tr>
<tr>
<td>145802</td>
<td>Cable, OBD-II &quot;Y&quot;</td>
</tr>
<tr>
<td>140852-216</td>
<td>Cable, OrbStar to IVU-2100T, W01</td>
</tr>
<tr>
<td>140859-36</td>
<td>Cable, Radio to IVU-2100T, W04</td>
</tr>
<tr>
<td>140860-240</td>
<td>Cable, Odometer (OBD-II), W06</td>
</tr>
<tr>
<td>140854-216</td>
<td>Cable, Handset, W09</td>
</tr>
<tr>
<td>140855-240</td>
<td>Cable, Emergency Switch, W10B</td>
</tr>
<tr>
<td>140857-120</td>
<td>Cable, GPS Antenna, W11</td>
</tr>
<tr>
<td>140856-240</td>
<td>Cable, Main Power, W14</td>
</tr>
<tr>
<td>140932-180</td>
<td>Cable, Radio Antenna, W20</td>
</tr>
<tr>
<td>140394-216</td>
<td>Cable, WLAN Antenna, W21</td>
</tr>
<tr>
<td>140941-300</td>
<td>Cable, Card Reader Extension (Van), W25</td>
</tr>
<tr>
<td>131300-1 (p/o 110394)</td>
<td>Plate, Mounting (Assembly, Radio Equipment - Van)</td>
</tr>
<tr>
<td>131301-1 (p/o 110394)</td>
<td>Bracket Support (Assembly, Radio Equipment - Van)</td>
</tr>
<tr>
<td>130615-1</td>
<td>Bracket, OrbStar Trunnion (Van)</td>
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<tr>
<td>130627-1</td>
<td>Box, Handset Bracket</td>
</tr>
<tr>
<td>131258-1</td>
<td>Mounting Plate, OrbStar/Handset (Van)</td>
</tr>
<tr>
<td>131214-1</td>
<td>Bracket, Card Reader (Van)</td>
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<tr>
<td>HLN6861C</td>
<td>Bracket, Radio Mounting</td>
</tr>
<tr>
<td>131271-1</td>
<td>Plate, Antenna Cover</td>
</tr>
<tr>
<td>120094-1</td>
<td>Knob, Trunion, OrbStar</td>
</tr>
<tr>
<td>HKN4192B</td>
<td>Cable, Radio Power</td>
</tr>
</tbody>
</table>
APPENDIX 6 – SEPTA EXTERIOR BUS GRAPHICS
The decal design includes a blend from red to blue in the proportions shown in the attached sketch.

Transitions from the red through the blend to the blue must be smooth and without banding or visual separation.

A preproduction proof/prototype digitally printed on 3M Controtact (not a color computer plot simulation) must be provided for SEPTA’s approval of: A) color matches for the red and blue samples provided; B) location and proportions of the blend; and C) smoothness of the resulting blend.

The decals are to be digitally printed and made from 3M 180-10C Controtact Plus film. All colors to be printed with 3M digital UV resistant inks to match the PMS colors specified then clear coated with 3M 9730UV. The reflective decals are to be made from 3M 680-10CR Reflection Film. No substitutes.

<!-- Graphics for CCT Service Outline of Specifications (without wheelchair lift) -->