

# Joliet Public Library

# Request for Proposal

And Mobile "Cart Hauler" Outreach Vehicle Project Specifications

Version: 1.1

Released: 19-Sep-2023

Project #: SVS00520

Prepared for: Jim Deiters

Joliet Public Library 3395 Black Road Joliet, IL 60431

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#### PROPOSAL INSTRUCTIONS

Prospective vendors ("vendors") are asked to provide a competitive sealed bid/proposal based on the following specifications and supplied drawing. These specifications should be regarded as minimal and potential vendors should include within their proposal all accessories and components not specifically specified, but necessary for the completed vehicle to meet or exceed the general intent.

This single vehicle project has been developed by Specialty Vehicle Services, LLC. ("SVS"), under contract with the Joliet Public Library ("Library") in Joliet, IL.

A digital PDF version of your bid/proposal shall be delivered by the deadline to:

Jim Deiters - <u>ideiters@jolietlibrary.org</u>

With copy to:

Michael Swendrowski – <u>mswendrowski@vehiclesuccess.com</u>

To be properly considered for award of this project, your proposal must be received by no later than:

# 1:00 PM CST Friday, October 27, 2023

#### Items to include with proposal:

- Cost Proposal on company letterhead, signed by officer of company, including requested options pricing, proposed delivery time (in calendar days including weekends and holidays), and stated lifetime of the proposed unit.
- Detailed Exceptions/Clarifications document detailing all variations from the specifications detailed herein. The document shall also specifically accept all other RFP specifications as written unless detailed as an exception or clarification.
- Timeline detailing anticipated project milestones including, but not limited to, payment schedule, chassis and body order dates, and overall production schedule including client decision points.
- □ Local service facility list for chassis, conversion, and all other major components.
- □ Extended warranty options, if available, including coverage and cost.
- □ A reference list of three (3) clients with delivered projects of similar complexity completed within the last three (3) years.
- Any company brochures, photos, or literature deemed beneficial in demonstrating company history and necessary experience required to successfully complete a project of this complexity.



#### **Revisions**

Upon release of this RFP, all communications concerning this procurement must be directed to the library or SVS. Unauthorized contact regarding the RFP with other than Library employees may result in disqualification.

The library shall respond in writing to written communications and reserves the right, at its sole discretion, to determine appropriate and adequate responses to written comments, questions, and requests for clarification. Should any question or response require revision to the specifications as originally published, such revisions will be made in writing, by formal addendum only.

#### **Award Authority**

The library and/or its representatives or agents, shall be the sole judge of the quality, construction, and suitability of the equipment, materials, and craftsmanship offered in its determination of the successful vendor.

#### Method of Award

The successful vendor will be determined based on both cost and criteria outlined elsewhere in the solicitation as providing the greatest value to the library. The library, however, reserves the right to reject all proposals, and to waive any informality in proposals received whenever such waiver is in the best interest of Library. It also reserves the right to reject the proposal of a vendor who has previously failed to perform properly or complete on time contracts of a similar nature, or the proposal of a vendor who is not able to perform the contract.

#### **Brand Names**

Any reference to a specific manufacturer or make or model of product not followed by "or equivalent" may not be substituted. The particulars listed within this specification shall be considered minimal, and the vendor is expected to increase them where necessary to meet or exceed the general intent.

# **Contract Required**

The successful vendor will be required to enter a written contract with the library, setting forth the conditions specified in this RFP, as well as other standard terms and conditions. The successful vendor shall be solely liable for compliance with all specifications contained herein.

#### **Contract Alterations and Integration**

All documents including but not limited to this RFP, specifications, drawings, change orders, or other pertinent documents created by either party in the performance of this agreement shall be



incorporated in the Contract between Library and the successful vendor. No alteration or variation of the terms of this Contract shall be valid unless made in writing and signed by the parties hereto, and no oral understanding or agreement not incorporated herein, shall be binding on any of the parties hereto.

#### **Delivery**

Proposal shall state the time required for delivery in calendar days (including weekends and holidays) and/or firm calendar date.

The completed vehicle shall be delivered to the following address:

Joliet Public Library 3395 Black Road Joliet, IL 60431

#### **Evaluation Criteria**

Library or its authorized agents may contact and evaluate the vendor's and/or subcontractor's references; contact any vendor to clarify any response; contact any current users of a vendor's services; solicit information from any available source concerning any aspect of a proposal; and seek and review any other information deemed pertinent to the evaluation process. Library or its authorized agents shall not be obligated to accept the lowest priced proposal but shall make an award in the best interests of Library. Proposals shall be evaluated to determine the offertory's overall capability to provide the goods and/or services required, the proposed delivery dates, and the associated cost for providing such goods and/or services.

#### Indemnification

Vendor, at its own expense, shall indemnify and hold Library, its officers, employees, agents, customers, constituents, designees and assignees harmless from any loss, damage, liability or expense, on account of damage to property and injuries, including death, to all persons, arising from any occurrence caused by any act or omission of vendor, and at its expense, shall defend any suit or dispose of any claim or other proceedings brought against said indemnities on account of such damage or injury, and shall pay all expenses, including attorney's fee, and satisfy all judgments which may be incurred by or rendered against said indemnities. This obligation applies to all material under this contract, which will involve exposure to hazardous materials or items containing this material. Neither the requirements of this clause nor any act or failure to act by Library shall relieve the vendor of any responsibility or liability for the safety of Library, vendor, or subcontractor personnel or property. The vendor shall comply with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in conjunction with hazardous material.

#### Infringement

The vendor must save, keep, hold harmless and fully indemnify the Library and its officers and employees and agents from all damages, or claims for damages, costs or expenses in law or equity



that at any time arise or be set up for any infringement of patent rights, copyright or trademark on any person or persons in consequence of the use by library, or by any of its officers, employees, or agents, of articles to be supplied under this proposal, and of which the vendor is not the patentee or assignee or has not the lawful right to sell same.

#### Insurance

The vendor shall have in force or obtain Commercial General Liability insurance, including products and completed operations coverage, and Automobile Liability insurance in the amount not less than One Million Five Hundred Thousand Dollars (\$1,500,000) per occurrence. If a general aggregate limit is used, either the general aggregate limit shall apply separately to this contract or the general aggregate limit shall be twice the required occurrence limit. The vendor's insurance coverage shall be written on an occurrence basis.

Insurance is to be placed with insurers with a current Best Rating of A:VII unless otherwise accepted by Library.

Insurance, deductibles or self-insurance retentions shall be subject to Library's approval. Original Certificates of Insurance with endorsements shall be received and approved by Library before work commences, and insurance must be in effect for the duration of the contract. The absence of insurance or a reduction of stated limits shall cause all work on the project to cease. Any delays shall not increase costs to Library or increase the duration of the project.

The library, its officers, officials, employees and volunteers are to be covered as additional insured by Endorsement CG 20 10 11 85 for Commercial General and Automobile Liability coverage.

For any claims related to this project, the vendor's insurance coverage shall be primary and any insurance or self-insurance maintained by Library, its officers, officials, employees and volunteers shall not contribute to it.

Each insurance policy required shall be endorsed that a thirty (30) day notice be given to Library in the event of cancellation or modification to the stipulated insurance coverage.

In the event the vendor employs subcontractors as part of the work covered by this Agreement, it shall be the responsibility of the vendor to ensure that all subcontractors comply with the same insurance requirements that are stated in this Agreement.

#### Payments, Discounts, Taxes, and Invoices

The payment schedule for this contract shall be 50% down, 40% upon delivery, and 10% upon completion of loading, evaluation, and acceptance (approximately 30-days after delivery).

Vendor shall detail acceptance of these terms, proposed alternate, and/or any discounts offered in the proposal.

In connection with any discount offered, except when provision is made for testing period preceding acceptance by Library, time will be computed from the date of delivery of the unit as specified, or from the date correct invoices are received in the office specified by library if the latter date is later than the date of delivery.

The vendor shall submit invoices to library for payment of goods and services rendered. Unless otherwise specified, payments will be made in accordance with library protocol. The vendor's



invoice must easily match the prices listed on their proposal and must include the vendor's social security number or federal tax ID.

The proposals to be made are **F.O.B. Joliet**, **IL** and shall be valid for ninety (90) days from after date of proposal opening. No "escalator" clauses or increase in bid price shall be accepted.

No charge for delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, cost of bonds, or for any other purpose will be paid by library unless expressly included and itemized in the bid.

#### **Vendor and Subcontractors**

The vendor shall perform the work as an independent contractor pursuant to this agreement and supervise and direct the work, using contractor's best skill and attention. The contractor shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the work under the contract.

Unless otherwise specifically noted, the contractor shall provide and pay for all labor, expertise, materials, freight/delivery equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the work.

The contractor shall always enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the task assigned to him. The contractor shall comply with all OSHA and all applicable trade-related rules and regulations.

The contractor warrants to the owner that all materials and equipment incorporated in the work will be new unless otherwise specified, and that all work will be of excellent quality, free from faults and defects and in conformance with the contract documents. All work not so conforming to these standards may be considered defective.

The contractor shall pay all sales, consumer, use and other similar taxes required by law and shall secure all permits, and licenses necessary for the execution of the work at contractor's expense.

The contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work and shall notify the library or its agent if the drawings, specifications, and provisions are at variance therewith.

The contractor shall be responsible for the acts and omissions of all contractor's employees and all sub-contractors, their agents and employees and all other persons performing any of the work under a contract with the contractor.

The contractor shall review, stamp with his approval, and submit all samples and shop drawings as directed for approval by the library or agent for conformance with the design concept and with the information given in the contract documents. The work shall be in accordance with approved samples and shop drawings.



#### **Vehicle Lifetime**

Vendor shall officially state the design lifetime of the vehicle with his or her proposal. This is the amount of time, from the date of delivery, which the library can reasonably expect the vehicle, with routine and proper maintenance, to perform for the community before replacement is required.

#### 1. GENERAL SPECIFICATIONS

# 1.1 <u>Scope</u>

- 1.1.1. The intent of this specification is to describe the modification of one (1) 24-foot (approximate) long Mercedes Sprinter 4500 cargo van into a "cart hauler" type outreach vehicle for use by the Joliet Public Library ("Library").
- 1.1.2. The completed vehicle described herein is intended to provide contemporary mobile library services to patrons of all ages in an operationally efficient manner. The unit will operate within a suburban environment in Illinois and shall be designed and equipped to safely operate in an environment of primarily flat paved roadways.
- 1.1.3. The unit will be kept outside the library when not in service.
- 1.1.4. It is the library's utmost goal to ensure that the vehicle is well-equipped to operate efficiently and safely in this environment.
- 1.1.5. Weight loading shall be of significant concern during the conversion of this vehicle. Substantial effort has been put into the interior designs with this factor in mind. Vendor is cautioned to use the lightest materials and construction methods available that will meet all specifications as described herein and make recommendations as appropriate for lightening the static load of the conversion.
- 1.1.6. Renewable and/or recycled materials shall be used as practical during the conversion of this vehicle.
- 1.1.7. The successful vendor shall furnish all materials not specifically denoted as "customer supplied", as well as the labor to complete the conversion of the bookmobile specified herein, as shown on the attached drawings, or as required to complete and/or exceed the general intent of these specifications.
- 1.1.8. These specifications have been developed by Specialty Vehicle Services, LLC. ("SVS") under contract with the library.
- 1.1.9. Any reference to a specific manufacturer or make or model of product not followed by "or equivalent" or "or equal" may not be substituted. The library and/or its authorized agents shall be the sole judge of whether a manufacturer's offerings are deemed equivalent for the purpose of this project, and all proposed "equivalent" or "equal" substitutes shall be expressly accepted prior to installation.



#### 1.2. Contacts

1.2.1. All contractual correspondence shall be directed to:

Joliet Public Library Attn: Jim Deiters 3395 Black Road Joliet, IL 60431

Phone: 815.846.6519

Email: jdeiters@jolietlibrary.org

1.2.2. All technical correspondence shall be directed to:

Specialty Vehicle Services, LLC.

Attn: Michael Swendrowski - President

3312 West Sycamore Street

Franklin, WI 53130 Phone: 262.679.9096

Email: <a href="mailto:mswendrowski@vehiclesuccess.com">mswendrowski@vehiclesuccess.com</a>

#### 1.3. Manuals and Documentation

- 1.3.1. The following shall be provided for each unit at the time the equipment is delivered:
  - 1.3.1.1. One (1) line set/order sheet for chassis.
  - 1.3.1.2. One (1) certified IL weight ticket listing front axle, rear axle and total weights.
  - 1.3.1.3. Two (2) complete key sets (ignition, doors, auxiliary locks); maximum keys per set shall be four (4).
  - 1.3.1.4. One (1) complete dimensional layout drawing of exterior and interior front, rear, and both sides.
  - 1.3.1.5. "As built" electrical schematics accurately detailing AC and DC electrical systems installed during the upfitting.

#### 1.4. New Equipment

1.4.1. Equipment shall be new (unused), and of manufacturer's current model year production and shall comply with all applicable Federal environmental, motor vehicle, and safety regulations. The conversion shall be equipped with all features and accessories considered standard for the make and model vehicle/equipment provided as well as those specifically detailed within this specification.



# 1.5. Quality & Standards

- 1.5.1. Brand names and model numbers are used throughout this document to convey desired quality levels, with the option for equivalents. The library and/or its authorized agents shall be the sole judge of whether a manufacturer's offerings are deemed equivalent for the purpose of this project, and all proposed "equivalent" or "equal" substitutes shall be expressly accepted prior to installation.
- 1.5.2. Conversion accessories shall be built and assembled in accordance with the specifications and shall conform to the best standard practices in the industry at the time of construction. All dimensions, weight, and performance values shall be in accordance with SAE J732c and J742b, as last revised. The vendor will provide all systems integration and testing. All electronics will be installed, fully operational, and tested by the vendor. The vehicle shall be equipped with all features and accessories considered standard for the make and model vehicle/equipment provided.
- 1.5.3. All equipment and construction methods shall meet all applicable regulations of the Occupational Safety and Health Act (OSHA), Federal Motor Vehicle Safety Standards (FMVSS), Department of Transportation (DOT), National Electrical Code (NEC), Federal and State noise and pollution control restrictions, and all other applicable local, state and/or federal regulations in effect at the time of execution.
- 1.5.4. All workmanship, welding, and construction shall be in the best manner of the trade. Workmanship shall be subject to inspection and approval by the library and/or its authorized representatives.
- 1.5.5. Welding fillets shall have good penetration, good fusion, good appearance, and shall show no cracks or undercutting.

#### 1.6. Guarantee

- 1.6.1. The successful vendor shall furnish a warranty stating that the equipment is suitable for the service intended in accordance with the specifications. The vendor shall also furnish the library with a minimum <u>FULL ONE (1) YEAR BUMPER-TO-BUMPER WARRANTY</u> and shall agree to replace and install without charge, within the warranty, any defective part, or parts not suitable for the service intended or found to be defective due to poor workmanship. The proposal will be weighted toward longer warranties and vendor is encouraged to offer, as an option, any available extended warranties with related literature and their costs. Warranty period shall start on the date the unit is put into service by the library.
- 1.6.2. All warranty work shall be completed by the vendor within a reasonable time or repaired by the vendor at the library facility. The library reserves the right to schedule and complete warranty work at a local facility of its choice if requests for resolution are not satisfied in a reasonable time frame. Vendor shall be given proper notice of such intent prior to execution and an invoice shall be forwarded to the vendor for payment.



- 1.6.3. That the Library may be assured of being able to maintain and repair equipment purchased, there shall be a local service facility with a stock of repair parts identified with the vendor's proposal.
- 1.6.4. Proposal shall list names, locations, and contact information for the nearest authorized service, parts, and warranty facilities. This list shall include facilities related to chassis, body, generator, conversion, etc.
- 1.6.5. All extended warranty options applicable to this vehicle and its components shall be listed within vendor's proposal with associated costs.

#### 1.7. Inspections

- 1.7.1. If the equipment/vehicle(s) is inspected after delivery and rejected because of deficiencies, it shall be the vendor's responsibility to make the necessary corrections and re-deliver the vehicle for inspection and acceptance. Payment and/or the commencement of a discount period (if applicable) will not be made until the defects are corrected.
- 1.7.2. Library will make every endeavor to note deficiencies. However, if a variation or an omission between the vehicle and the written specifications is discovered, the contract's written specifications will prevail.
- 1.7.3. Vehicle may be inspected at vendor's place of business at any time during the conversion process by authorized representatives of the library. The cost of these trips shall be the responsibility of the library.
- 1.7.4. Equipment/vehicle(s) will be inspected at vendor's place of business at least once before delivery by an authorized representative of SVS for workmanship, appearance, proper functioning of all equipment and systems, and conformance to all other requirements of this specification. The costs of these trip(s) shall be the responsibility of SVS. If deficiencies are detected, the vehicle may be rejected, and the vendor will be required to make the necessary repairs, adjustments, or replacements.
  - 1.7.4.1. Dependent on the severity of inspection discrepancies and/or the vehicle is not deemed adequately complete at the time of final (pre-delivery) inspection; vendor shall be responsible for all SVS costs and fees related to a re-inspection. The library shall have the final decision regarding the need for a re-inspection.

## 1.8. Training

1.8.1. Vendor shall provide in service training and familiarization at the time of delivery. Training shall be conducted by factory-trained personnel and shall be comprehensive enough to allow library staff to operate and maintain the equipment provided with maximum safety and design efficiencies.



1.8.1.1. All trainings shall occur at the time of delivery and last a total of approximately 6 hours.

#### 2. VEHICLE SPECIFICATIONS

#### 2.1. Intent

2.1.1. It is the intent of the following sections to describe the type of vehicle that shall be supplied by the vendor for the outreach vehicle conversion. Accessories and construction techniques not specifically mentioned herein, but necessary to furnish a complete unit ready for immediate use shall also be included.

#### 2.2. <u>Type</u>

2.2.1. The base vehicle shall be a 2024 or current model year Mercedes Benz 4500 High Roof 170" Wheelbase Extended van. The unit shall conform to the best standard practices in the industry at the time of construction.

#### 2.3. Capacities/Dimensions

2.3.1.	Overall exterior length:	24' (approximate)
2.3.2.	Overall exterior width:	79.7" (excluding mirrors)
2.3.3.	Overall exterior height:	107.5"
2.3.4.	Interior length:	185" (load space)
2.3.5.	Interior height:	76.4"
2.3.6.	Interior width:	70.1" (at floor line)
2.3.7.	Wheelbase:	170.0"
2.3.8.	Fuel tank capacity:	25 gallons
2.3.9.	GVWR:	12,120 lbs.

# 2.4. Base Vehicle

- 2.4.1. One (1) Mercedes Benz 4500 DRW High Roof 170" Wheelbase Extended Cargo Van
  - 2.4.1.1. 4-cylinder diesel engine, 2.0L, 170HP, 295 lb-ft torque
    - 2.4.1.1.1. Ultra Low Emissions Vehicle (ULEV) certification
  - 2.4.1.2. 9G-Tronic Plus, nine-speed automatic transmission
  - 2.4.1.3. Monotone paint, color TBD post award from OEM options
  - 2.4.1.4. Interior finishes, color TBD post award from OEM options
  - 2.4.1.5. Power windows, locks, and mirrors
  - 2.4.1.6. Cab air conditioning



- 2.4.1.7. Antilock brakes
- 2.4.1.8. Dual rear wheels
- 2.4.1.9. Sunscreen glass
- 2.4.1.10. Rear doors with windows
- 2.4.1.11. Sliding passenger side door with OEM power sliding step beneath
- 2.4.1.12. AM/FM radio with Bluetooth and aux. connections including front speakers
- 2.4.1.13. Rear view camera
- 2.4.1.14. Windshield glass with band filter
- 2.4.1.15. Swivel front seats with parking brake handle modification
- 2.4.1.16. Security alarm with interior motion sensor
- 2.4.1.17. Dual batteries with high output alternator
- 2.4.1.18. Backup alarm
- 2.4.1.19. Wheel chocks
- 2.4.1.20. First aid kit
- 2.4.1.21. Manufacturer's Statement of Origin ("MSO")
  - 2.4.1.21.1. Exterior color: Chosen pre-order by library from OEM manufacturer's selections

#### 3. VAN CONVERSION SPECIFICATIONS

#### 3.1. Exterior

- 3.1.1. Vehicle shall have a "heavy" level vinyl graphics package in addition to the base paint. Vendor shall indicate organization or persons that the library will work with in the development of this graphics scheme.
  - 3.1.1.1. Vendor shall include a \$8,000 allowance for the development, printing, and installation of this graphics package within their proposal.
  - 3.1.1.2. The library shall approve the final design prior to printing and installation.
- 3.1.2. One (1) 20"x30" (approx.) exterior worksurface shall be installed on the passenger side exterior.
  - 3.1.2.1. The surface shall be constructed of aluminum or other non-corrosive material.
  - 3.1.2.2. The surface shall attach to the exterior using quick release brackets designed for this purpose.
- 3.1.3. One (1) recessed monitor compartment shall be installed curbside to house the exterior 43" monitor on the curbside. Compartment shall include a back panel for



monitor mounting, and a top-hinged door that acts as a sun and weather shield when open.

- 3.1.3.1. Compartment shall be constructed of aluminum or equivalent materials.
- 3.1.3.2. Compartment shall not interfere with the interior shelving upright configuration.
- 3.1.3.3. Door shall be constructed of aluminum and horizontally hinged with ½" pin stainless steel continuous hinge.
- 3.1.3.4. Door shall have positive "compression" style, "slam latch", or equivalent latches
- 3.1.3.5. Door shall have pneumatic lift assist struts to support the door horizontally when open.
- 3.1.4. Vehicle underbody shall be fully undercoated with rubberized spray to provide additional sound resonance dampening and underbody insulation protection.

#### 3.2. Interior

- 3.2.1. The outreach vehicle interior shall be designed to accommodate a collection of approximately 1,100 items, which includes but is not limited to: books of various sizes, DVDs, CDs, books on disc, oversized materials of odd shapes, magazines, etc.
- 3.2.2. The outreach vehicle interior shall also be designed to support the library's technology and information services.
- 3.2.3. Completed unit shall utilize environmentally conscious "green" elements wherever practical, including, but not limited to recycled and/or sustainable construction materials and low VOC finishes.
- 3.2.4. Weight loading is a significant concern during the conversion of this vehicle for efficiency reasons. Substantial effort has been put into the interior design with this factor in mind. Vendor is cautioned to use the lightest materials available that will meet all specifications as described herein and make recommendations as appropriate for lightening the static load of the conversion.
- 3.2.5. One (1) full height composite safety partition shall be installed behind the driver and passenger seats.
  - 3.2.5.1. Partition shall be installed per manufacturer's instructions.
- 3.2.6. Vehicle ceiling shall be left unfinished
- 3.2.7. Vehicle walls shall be left unfinished.
- 3.2.8. Vehicle floor shall be sub-floored with lightweight 3/8" furniture grade plywood or equivalent to provide a smooth and durable sub-surface.
- 3.2.9. Commercial quality vinyl sheet floor covering shall be installed.
  - 3.2.9.1. Sub-flooring shall be properly prepared prior to installation of the floor covering.



- 3.2.9.2. Covering shall be installed in a manner consistent with the manufacturer's recommendations.
- 3.2.9.3. Any flooring remnants remaining from the installation shall be shipped loose with the completed vehicle.
- 3.2.9.4. Exact color and/or style are subject to approval by the library, based on vendor's offerings.
- 3.2.10. Two (2) 8' long, heavy-duty flanged "O" type, aircraft style tie-down tracks shall be installed flush into the flooring for securing additional cargo.
  - 3.2.10.1. These tracks shall be securely mounted to the vehicle floor and generally flush with the finished floor height.
  - 3.2.10.2. Sixteen (16) single stud fittings with round ring shall be provided
  - 3.2.10.3. Eight (8) sets of appropriately rated, over center or ratchet style straps shall be provided to work with the tie-down tracks.
- 3.2.11. Acore Shelving & Products, Inc. aluminum shelving system shall be supplied and installed. Shelving components shall be powder coated after assembly where possible using coatings containing no lead or lead products. All components shall be constructed from superior grade lightweight materials and be built to withstand the unique stresses imposed by a mobile environment. The shelving layout shall be designed to accommodate approximately 1,100 items, which includes but is not limited to: books of various sizes, DVDs, CDs, videos, books on CD, oversized materials of odd shapes, magazines, etc. All shelving running along the sidewalls of the vehicle shall tilt back 15 degrees. Shelving is anticipated to be a combination of 7" and 9" depths, with additional components described herein.
  - 3.2.11.1. The carts and shelving within the interior must be rapidly changeable to meet Library needs. All efforts shall be made by the vendor in the construction of these vehicles, as applicable, to assist in this goal.
  - 3.2.11.2. System shall utilize nine (9) slotted shelf uprights, place on 36" centers. The uprights shall be mounted vertically to the side walls up to approximately 30" high, and angled inward approximately 8° above that, to an approximate height of 66" measured from the vehicle floor.
  - 3.2.11.3. This configuration has been designed by SVS in conjunction with Acore to maximize the aisle width of the completed vehicle. All efforts shall be made to retain the "wide aisle" design intent during construction of these vehicles.
  - 3.2.11.4. Uprights shall be firmly attached directly to the vehicle side wall substructure in a manner suitable to withstand the stress and forces unique to a mobile environment, including, but not limited to back plate fastening of the uppermost area of the uprights.
  - 3.2.11.5. The areas between the uprights shall be finished as detailed. The design of the upright mounting and sidewall finish integration shall be subject to Library approval prior to installation.



- 3.2.11.6. The complete Acore/SVS modular system is expected to include the following components:
  - 3.2.11.6.1. Nine (9) Acore slotted shelf uprights, specially modified to maximize van wall curvature.
  - 3.2.11.6.2. Five (5) Acore single sided van "wall hugger" carts with three (3) shelves each, specially modified to fit completely between the uprights
  - 3.2.11.6.3. Five (5) Acore "Wall Security Units", to allow locking of wall hugger carts to the upright system.
  - 3.2.11.6.4. Four (4) Acore AB9, 9" wall shelves.
  - 3.2.11.6.5. Twenty-one (21) Acore AB7(8°), 7" wall shelves, specially modified to accommodate the inward slanting upper uprights.
- 3.2.11.7. Vehicle shall be configured as depicted in the finalized drawing upon delivery. Any remaining components (extras) of this system shall be shipped loose with each vehicle.
- 3.2.11.8. Final configuration of the interior shelving and cabinetry shall be subject to approval of the library prior to installation.
- 3.2.11.9. Shelving installation shall provide a minimum 42" aisle width.
- 3.2.11.10.Acore Shelving & Products, Inc. has been heavily involved in the development of this specialty system. Vendors are urged to contact the following for additional information and/or pricing:

# Acore Shelving & Products

Attn: Don Thompson, Sr. - Owner 1460 N.E. State Road 16 Starke, FL 32091 Phone: 904.964.4320

Email: acore@atlantic.net
Web: www.acoreshelving.com

# 3.3. Electrical System - DC/Other

- 3.3.1. Shall be a 12-volt, negative ground type system designed to provide and distribute electrical power at a level of performance that meets the requirements of all components and/or accessories utilizing such power throughout the vehicle.
  - 3.3.1.1. Design emphasis of system furnished shall be on both reliability and serviceability. System furnished shall be a modular type design, modular being defined as a system where major power train, chassis, body component assemblies, including lighting, wiring and switch harnesses, and heater harnesses are easily separable for purposes of repair or replacement, using either simple hand tool or automotive type plug-in connectors. Special emphasis shall be made on accessibility to all wiring harnesses in all



- locations. Wiring shall not be rendered un-accessible behind permanently installed panels or appointments.
- 3.3.1.2. The power source for all electrical equipment furnished shall be taken from a single point on the power train specifically designed for this purpose.
- 3.3.1.3. The main ground wire grounding the body to the chassis shall be minimum 8-gauge size; all ground wires furnished for insulated-return type systems shall be equal in size to the feed wire in the respective circuit. Redundant grounds shall be used if required to attain a satisfactory level of system performance desired. For maximum system reliability, all serrated eyelets and screws or bolts utilized at points of ground shall be either coated or plated with an electrically conductive type material to improve their resistance to corrosion.
- 3.3.1.4. All electromagnetic type switches, relays and solenoids furnished shall be suppressed to protect the entire electrical system from major damage from the large negative voltage spikes these devices can produce.
- 3.3.1.5. All auxiliary electrical circuits shall be safety protected from current overloading by heavy-duty automotive circuit breakers, each properly capacity sized to the circuit they serve, and located as close as practical to the battery. A master circuit breaker, minimum 150-amp shall also be furnished.
- 3.3.1.6. All terminals and connectors furnished shall be designed and approved by their manufacturer for heavy-duty automotive vocational application; material shall be a corrosion-resistant type. To eliminate disconnects; all terminals furnished shall incorporate a positive locking, seated type design to assure terminal position. Socket (female side of connectors shall be wired to electrical source side of circuit and plug (male) side of connector shall be wired to electrical load side of the circuit to help prevent a short circuit when disconnected. All connections made on the vehicle underbody shall be adequately protected against moisture and corrosion with dielectric grease, heat shrink tubing, or other similar techniques.
- 3.3.1.7. All insulated cable furnished shall comply with SAE Standards J1127 and J1128. All wiring furnished in the engine compartment area, where extreme heat and fire are of concern, shall be multi-stranded, low voltage insulated automotive type cross-linked polyethylene fire-retardant SAE approved SXL type. All wiring furnished in the body portion of the coach shall be multi-stranded, low voltage insulated automotive type; either SAE approved SXL or GXL types are acceptable. All wiring in each circuit shall be of sufficient size, and with 125% capacity rating of anticipated load to transmit the electrical current load of the circuit. Sizing shall consider the length of the circuit and the voltage drop occurring in the circuit. Voltage at the load shall be +/- 5% of rated voltage when measured in a normal operating state.
- 3.3.1.8. All wiring shall be routed meeting the following minimum requirements:
  - 3.3.1.8.1. No contact with sharp or puncturing edges.



- 3.3.1.8.2. No tension or strain between fixed points.
- 3.3.1.8.3. Adequate and safe clearance of moving parts.
- 3.3.1.8.4. 5-inch clearance from radiant heat sources.
- 3.3.1.8.5. Adequately secured to prevent pinching.
- 3.3.1.8.6. Wiring to be color-coded and numbered, grease-, oil- and moisture-resistant and securely fastened.
- 3.3.1.9. All wiring furnished shall be routed in protective harnesses, either woven vinyl or corrugated vinyl or nylon types acceptable. When harnesses go through metal structure, rubber grommets shall be used to further protect the integrity of the harnesses.
- 3.3.2. A 12VDC, LED main cabin lighting system shall be installed to provide interior lighting meeting library minimum stack ratings.
  - 3.3.2.1. Lighting fixtures shall be switched at the vehicle dash using a labeled illuminated switch.
  - 3.3.2.2. Lighting level should be 6 foot-candles (ft-c) minimum measured on the stack face (vertically) at a height of 12", and 35 ft-c maximum at any height to achieve no more than a 6-to-1 maximum-to-minimum ratio across the entire stack face.
  - 3.3.2.3. Light output temperature shall be a "warm" white between 2400K 3300K.
  - 3.3.2.4. Lighting system fixtures and/or design shall be approved by the library prior to installation.
- 3.3.3. One (1) eleven foot (11') long Dometic 9500 or equivalent 12VDC power awning shall be installed on the curbside of the vehicle.
  - 3.3.3.1. Awning shall include a wind sensor to close the awning when it detects high sustained winds.
  - 3.3.3.2. Awning shall include a hard-wired switch mounted high inside and above the main patron door, as well as a hand-held wireless remote control.
  - 3.3.3.3. Color of awning shall be chosen post-award by the library from manufacturer's standard selections.
- 3.3.4. One (1) Cradlepoint R1900 series or equivalent, wireless 5G/LTE advanced ruggedized modem shall be provided.
  - 3.3.4.1. Modem shall be powered by the auxiliary 12VDC system.
  - 3.3.4.2. Modem shall support 5G and Cat 20 LTE wireless connectivity.
  - 3.3.4.3. Modem shall include Wi-Fi 6
  - 3.3.4.4. Modem shall include the ability to configure a virtual private network (VPN).
  - 3.3.4.5. Modem shall include one (1) Cradlepoint 8 cable antenna, mounted to the exterior roof of the vehicle.



- 3.3.4.6. Installation shall include one (1) CAT6 10/100 Mbps RJ-45 hardwire run to the staff desk.
- 3.3.4.7. Vendor shall transfer component license, support, and administrative access to library staff immediately upon delivery of completed unit(s).
- 3.3.5. One (1) 43" high-resolution LCD monitor shall be installed in the exterior compartment on the curb side of the vehicle.
  - 3.3.5.1. Unit shall be shock-mounted, but easily removable for service and/or replacement.
  - 3.3.5.2. Unit shall be capable of playing content via USB and include one (1) HDMI cable run from the front passenger seat area.
  - 3.3.5.3. Unit shall be powered by the battery.
- 3.3.6. One (1) Bose Solo 5 or equivalent sound bar shall be provided and mounted below the screen.
  - 3.3.6.1. Unit shall be powered by the battery.
- 3.3.7. Two (2) Fan-tastic Vent 3350, 3-speed 12VDC reversible powered roof vents shall be installed in the vehicle roof. Units shall feature a built-in thermostat and rain sensor.
- 3.3.8. One (1) Ricon K-series or equivalent, folding in-body wheelchair lift shall be supplied and installed just inside the rear doors as depicted in the concept drawings.
  - 3.3.8.1. System shall be rated for 800lbs., include a pendant style control, and have provisions for backup manual control.
  - 3.3.8.2. System shall include all safety interlocks available for this system.

#### 3.4. Miscellaneous Components

- 3.4.1. One (1) battery-operated Carbon Monoxide (CO) detector shall be installed on the interior ceiling.
- 3.4.2. One (1) battery-operated smoke detector shall be installed on the interior ceiling.
- 3.4.3. One (1) 5 lb. ABC fire extinguisher shall be installed within the completed vehicle.
- 3.4.4. One (1) IL State DOT approved first aid kit shall be supplied and installed within the completed vehicle.
- 3.4.5. One (1) set of three (3) red emergency reflective triangles with dedicated ABS plastic enclosure shall be provided and installed.
- 3.4.6. One (1) "vehicle height" tag shall be applied in the dash area to indicate overall vehicle height.



# **4. OPTIONS** (please quote these items separately)

#### 4.1. Exterior pop-up doors

- 4.1.1. One (1) exterior shelving access system with pop-up doors shall be designed and fabricated on the driver's side of the vehicle.
  - 4.1.1.1. System shall include three (3) five foot (5') long (approx.) weatherproof doors that overlay the OEM vehicle sidewall and protect the interior collection when in transit.
    - 4.1.1.1. Doors shall hinge at the top to provide sun/rain protection when open.
    - 4.1.1.1.2. Doors shall include pneumatic stay open and locking latch hardware
  - 4.1.1.2. Aforementioned driver's side interior components shall be reconfigured and rotated to support this feature.
  - 4.1.1.3. An interior wall/support system shall be fabricated to back and support the Acore shelving uprights and components.
  - 4.1.1.4. Final design of this system shall be subject to library approval prior to installation.



Exterior pop-up doors

#### 4.2. Skylights

4.2.1. Two (2) 14"x22" (approx.) single piece polycarbonate domed skylights shall be installed on the vehicle ceiling with PVC interior trim.



#### 4.3. PA system

- 4.3.1. One (1) public address system shall be installed to allow staff to broadcast their voices as desired.
  - 4.3.1.1. System shall include two (2) weatherproof exterior speakers on the curbside of the vehicle.
  - 4.3.1.2. System shall include one (1) wireless microphone.

# 4.4. Security system

- 4.4.1. One (1) Aqualarm 20446 or equivalent 12VDC powered security system with cell and email alert shall be installed. System shall include the following features:
  - 4.4.1.1. Keypad activation/deactivation.
  - 4.4.1.2. IR remote
  - 4.4.1.3. Motion detector
  - 4.4.1.4. Door contacts for all doors
  - 4.4.1.5. One (1) Aqualarm 20421 solar powered exterior siren/strobe light.

# 4.5. Bubble machine

- 4.5.1. One (1) bubble machine, modified to fit within a receiver when desired.
- 4.5.2. Feature shall include all necessary power and attachment components required for successful operation.

# 4.6. Multitone musical horn

4.6.1. Provide and install one (1) Wolo 336 or equivalent juke box electronic musical horn system.

# 4.7. Mercedes premium plus package

- 4.7.1. Tray for smartphones including wireless charging
- 4.7.2. Navigation
- 4.7.3. MBUX touchscreen
- 4.7.4. Traffic sign assist
- 4.7.5. Acoustic package



# 4.8. Mercedes premium package

- 4.8.1. Leather steering wheel
- 4.8.2. Wet wiper system
- 4.8.3. Active lane-keeping assist

