

CHEROKEE NATION
BID SPECIFICATIONS
FOR
2020 REAR LIFT FULL-SIZE CONVERSION VAN

1. **GENERAL DESCRIPTION:** These specifications set forth minimum standards for the procurement of a light transit vehicle that complies with Title 49 Code of Federal Regulations (CFR), Part 38 Subpart B, entitled “Americans with Disabilities Act (ADA) Accessibility Specifications for Buses, Vans and Systems”, and applicable procurement provisions of the Federal Transit Administration (FTA). All dimensions and equipment shall comply with the standards as set forth within the 49 CFR. The vehicle shall be new, the most current production model available, and must be complete with manufacturer’s standard equipment and accessories, fully serviced and ready for operation. The vehicle shall be equipped to meet all Federal Motor Vehicle Safety Standards and Procedures (FMVSSP) that apply. Any brand names and specifications mentioned within this document are for reference only. Bids will only be considered when brochures/specifications are included for each component provided with bid for evaluation.

2. **NO PROTOTYPES:** Must be a current production model van that has been in production for a minimum of one year.

3. **BODY STRUCTURE:** The vehicle shall be an Original Equipment Manufacturer (OEM) standard body style meeting all stated specifications.
 - a) The vehicle shall be reinforced such that the basic structure is not degraded.
 - b) Absolutely no cutting, welding, or drilling allowed on the high strength chassis structure such as structural high strength boron steel.
 - c) Vehicles shall meet all applicable ADA requirements with respect to the body.

4. **OEM CHASSIS FRAME AND BODY:** Ford Transit T350-HD High Roof, Extended Long Wheelbase Wagon (U4X) or approved equal; with deluxe interior and exterior trim (XLT Package).

5. **CHEROKEE NATION BUS WRAP:** Successful bidder shall design and install a bus wrap to fit a full size conversion van identified herein and similar to the attached Cherokee Nation bus example below. Cherokee Nation shall approve the rendering before installation. A large-scale drawing is available upon request.



 DESIGN CONCEPT	CLIENT NAME NATIONAL BUS CHEROKEE NATION	DESCRIPTION TRANSIT 148WB	040920	DESIGNER DJN	SALES APPROVAL <input checked="" type="checkbox"/>	CUSTOMER SIGNATURE	DATE
--	---	------------------------------	--------	-----------------	---	--------------------	------

LEGAL NOTICE: ©Signature Graphics 2017. All Rights Reserved. The intellectual property, design and all other rights, including copyright, are the legal ownership of Signature Graphics. Any use, reproduction, or similar design, without written consent and transfer of rights from Signature Graphics is a violation of United States copyright law.

6. **DRIVER’S DOOR AND CO-PILOT’S DOOR:** The vehicle must have OEM doors with power windows and power door locks.

7. **BUS-STYLE ENTRY DOORS:** Install a bus-style entry-doorway with dark deep tinted privacy glass with step well and handrails (see example below).
 - a) A bus-style entry-doorway shall be included rear of the curbside b pillar.
 - b) The bus-style entry-doorway shall be A & M brand or approved equal.
 - c) The minimum clear entry width shall be 32”
 - d) The steps shall be a uniform 9” deep and 9” tall with the first step approximately 9” from the ground.
 - e) The left and right vertical sides of the doorway shall be cut and fit to match the contour of the chassis body, protruding outward at the bottom only as necessary for the step well. No metal edge should extend outward from the contour of the chassis body higher than the chassis body side molding.
 - f) No cutting of chassis reinforcing structural steel, such as “boron steel”.
 - g) Stainless steel assist handrails on the interior left and right of the doorway structure shall be included.
 - h) An L.E.D. light that automatically illuminates when the doorway is opened shall be included.
 - i) Step well: The step well must be galvanized, primed, or powder coated steel.
 - Must have two steps covered with the same slip resistant floor covering as specified within this document.

- The maximum distance from the ground to the first step shall be 12 inches. The minimum distance shall be 8 inches.
 - Each riser shall be 9 inches with a minimum tread depth of 8½ inches.
 - All steps to get up to floor level must be in step well area.
- j) Handrail: The handrails shall be installed as follows:
- Handrails left and right of the front passenger door shall have a cross-sectional diameter between 1¼” and 1½”.
 - Do not install padding on the entrance handrail(s).
 - All handrails must have a minimum wall thickness of 18-gauge steel.
 - All handrails must be stainless steel and bolted into the structural steel.
 - No wood mounting allowed.



9. **WHEELCHAIR LIFT DOORS AT REAR OF VEHICLE:** Retain the OEM chassis rear doors and include an OEM magnetic door holder. The doors shall be easily operable from the inside with easily accessible door locks provided. Inside door handles shall be provided on inside of each hinged swing-out door for adequate closing of doors when inside.

10. **DOOR LOCKS:** All vehicle doors shall be equipped with a lock.
11. **RUNNING BOARDS:** The vehicle must have extra heavy-duty running boards for the driver's door and co-pilot's door.
 - a) The steps shall be constructed of galvanized one inch square 11 gauge steel tubing or angle iron and have cross center braces and be tested at 800 lbs.
 - b) The steps surface shall be made of expanded galvanized steel to allow debris and water run-off.
 - c) The steps shall be properly braced and secured to the van and be capable of supporting a minimum of 800 lbs.
12. **INTERIOR:** An OEM (XLT) Chassis Interior Trim System shall be provided.
 - a) Interior wall paneling and door trim shall be OEM
 - b) The headliner shall be OEM.
 - c) Passenger door OEM grab rails shall be included.
 - d) The driver's side ejection mitigation air bag shall be retained.
 - e) All interior panels, materials, and treatments shall meet all FMVSSP 302 requirements.
13. **STORAGE COMPARTMENT:** An overhead storage compartment shall be installed over the driver and front passenger interior. The overhead storage compartment shall be chassis OEM, if available.
14. **FLOOR ASSEMBLY:** The vehicles flooring and subflooring requirements are as follows:
 - a) The subflooring shall be a minimum of 3/4" thick Plywood securely fastened to the understructure.
 - b) The floor shall be sanded smooth to ensure a proper bonding of the vinyl flooring.
 - c) The floor covering shall be wall-to-wall hard fire-resistant slip-resistant, transit quality flooring securely bonded to the plywood floor with waterproof adhesive.
 - d) Acceptable flooring brands are Altro, or other approved equal.
 - e) Cherokee Nation shall determine flooring color.
15. **SLIP-RESISTANT FLOOR COVERING:** Floor covering shall be slip resistant vinyl flooring, constructed with aluminum oxide, silicon carbide and optional PVC chip blended throughout a high quality vinyl wear surface.

- a) Top coating is not acceptable.
- b) Backing to be polyester/cellulose material with fiberglass fiber reinforced center scrim for additional durability.
- c) Bacteriostats will be incorporated providing all exposed surfaces with excellent anti-bacterial properties.
- d) Must be Altro Chroma with a minimum thickness of 2.2 millimeters or equivalent.
- e) Color to be selected from current Altro color range by Cherokee Nation.
- f) The whole floor will be a uniform thickness throughout the vehicle, eliminating the need for ribbed surfaces, while exceeding the ADA minimum slip resistance standard rating of .06 static coefficient of friction under dry or wet conditions.
- g) Seams must be heat-welded to provide a permanent waterproof seal against water penetration leading to premature sub-floor failure or curling leading to possible tripping hazards.
- h) Landing area and step edgings are to be Altro yellow safety vinyl edging.
- i) Edging is to be heat welded to the main floor and step treads to provide for a long lasting seam.
- j) The floor must be installed according to manufacturer's directions using proper tools, accessories, and adhesives.
- k) Step tread and riser are to be a one continuous piece construction-eliminating seam at the back of the step. Tread to be supported at the upward bend at the back of the step and up the riser by coving material.
 - **Note:** If the flooring is not installed according to the flooring manufacturer (heat welded and adhesives) specifications, the van will not be accepted.

16. CARPET DELETE OPTION: Install vinyl floor covering in the driver and passenger foot areas instead of the OEM carpet.

17. INSTRUMENT PANEL, DASH CONTROLS, AND FEATURES INCLUDED: The vehicle shall include the following instruments, controls, and features:

- a) Dash shall be color coordinated with interior trim color.
- b) Glove box with light and lock to be provided, if available from chassis manufacturer.
- c) All controls and switches shall be within easy reach of the driver.
- d) Overhead switches or controls must be in easy reach of driver.
- e) Lights in lieu of gauges are not acceptable except where noted.
- f) Power door locks with remote entry and Two Keys and Two Fobs are required.
- g) Power windows are required

- h) Power / Heated mirrors With Turn Signal Flashers are required.
- i) A tilting telescopic steering wheel shall be included.
- j) Chassis OEM Cruise Control is required.
- k) Instrument panel and dash shall be equipped with the following OEM instruments, gauges, and controls:
 - Speedometer with odometer and trip odometer
 - Tachometer
 - Oil pressure gauge
 - Engine coolant temperature
 - Fuel gauge
 - Upper beam head lamp indicator (light)
 - Dual-note horn
 - Directional signals (light)
 - Parking brake on (light)
 - Headlight switch
 - Inside hood release
 - Controls for heater, defroster, and air conditioner
 - A 12 Volt Power outlet
 - OEM chassis manufacturers AM/FM push button radio
 - Digital clock
 - Windshield wiper w/two speed, intermittent, and washer
 - Emergency flashers

18. TWO-WAY RADIO SYSTEM: UHF: ICOM F6021 UHF two-way Radio System with a PCTEL MUF4505 UHF antenna and coax or approved equal (special note: 4 vehicles with two-way radios and 2 vehicles without two-way radios**).**

- a) The antenna shall be mounted on an “L” bracket and attached to the fender opposite of the OEM AM/FM radio antenna.
- b) The two-way radio shall be easily accessible by the driver and mounted as such.
- c) Two-way radios must be programmed to the frequencies specified below at the time of delivery.

3 vehicles programmed as follows:			
Channel	RX	TX	TPL
1	463.475	463.475	82.5
2	451.450	456.450	445N
3	468.475	468.475	82.5
4	461.750	466.750	146.2

5	463.550	468.550	131.8
6	462.325	467.325	100.0 123.0
7	467.025	462.025	210.7
8	452.025	457.025	192.8
9	461.7125	466.7125	151.4

1 vehicle programmed as follows:			
Channel	RX	TX	TPL
1	464.475	469.475	103.5
2	464.475	464.475	103.5

2 vehicles without radios/no programming:
--

19. **INTERIOR BUS CAMERA SYSTEM:** REI Bus-Watch R4001 with 500GB Hard-drive and four cameras or approved equal. Successful vendor shall coordinate the location of cameras with Cherokee Nation.
20. **BUMPERS:** Vehicle bumpers front and rear must be OEM standard.
21. **AIR CONDITIONING AND HEATING:** An OEM chassis front and rear heating and A/C system is required.
- a) Front/Rear heater and front defroster shall be OEM chassis with the maximum BTU rating available.
 - b) Front/Rear, high capacity A/C system required.
 - c) Dash unit control to be separate from auxiliary system control.
22. **SAFETY EQUIPMENT:** All miscellaneous safety equipment must be secured to the vehicle and easily accessible.
- a) First aid kit: (24M – national standard school bus metal – must be certified safety manufacturing model S203-045 or equivalent).
 - b) Fire extinguisher – Multi-purpose stored pressure dry chemical extinguisher.
 - Must be a 5 lb. type 3A: 40B: C Pro Line, Kiddie Model # FXBND9 or equivalent.
 - Must have a gauge to indicate state of charge, be mounted to vehicle using a bracket, and include a heavy-duty vinyl cover.
 - c) Triangle warning devices (3) with storage container (Must meet FMVSSP # 125).
 - d) Bloodborne-pathogen-infection control kit (Must be certified safety manufacturing model #FK200-931, or equivalent).

e) Seat belt cutter.

23. **EXTERIOR MIRRORS:** The vehicle shall include OEM chassis power/heated dual exterior rearview mirrors with the following:

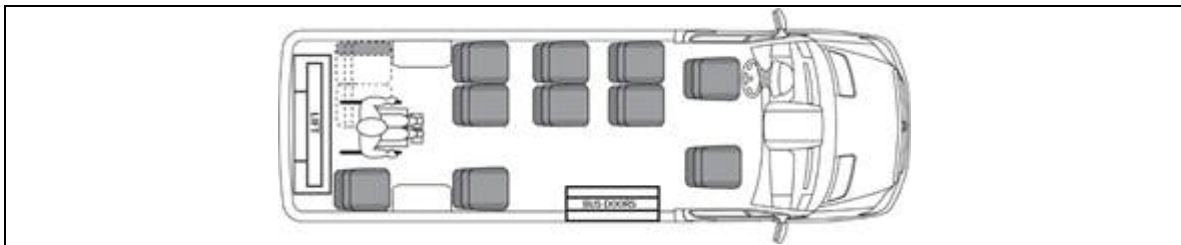
- a) Black matt or stainless finish.
- b) An integrated turn signal is required for safety.
- c) A convex lower mirror shall be included.

24. **INTERIOR MIRRORS:** The interior of the vehicle shall include an OEM chassis review mirror mounted on the windshield and the driver/co-pilot sun visors.

25. **DRIVER & CO-PILOT SEATS:** The driver and co-pilot seats shall be (OEM XLT) deluxe high back, fully padded, Cloth contoured bucket types of heavy-duty construction with an armrest. The driver's seat shall adjust horizontally and vertically with ease and without the use of tools. OEM three-point restraint system is required. Upholstery shall be color-keyed to the passenger seats. **Note:** Bidder must supply seating diagram reflecting all listed dimensions for approval.

26. **PASSENGER SEATS:** Seating shall accommodate eleven (11) ambulatory passengers and one wheelchair securement station (See floor plan to include fold down seats). Bidder shall supply a diagram for seating.

- a) All seats shall be cloth. Chassis (OEM XLT).
- b) Fixed or folding seats may be Chassis OEM, Freedman, or approved equal and shall be a minimum of 16" wide and 16" deep.
- c) The seat back cushion shall measure a minimum of 17" wide to provide lumbar support and utilize channeling to aid lateral stability.
- d) When any aftermarket seat is used, seating shall be Freedman series GO-ES or approved equal, and be compliant with FMVSSP 208.
- e) Bolting seats to plywood floor without bolting into structural steel under floor is not allowed.



27. **2-PASSENGER FOLDING BENCH SEAT:** Vehicle must be equipped with a 2-

passenger folding bench seat to allow for extra passengers when the wheelchair bay is empty. The folding seat must be forward facing folding cloth bench with 3-point occupant restraints.

28. **PASSENGER RESTRAINT SYSTEM:** All restraints and retractors must be compliant with all FMVSSP regulations including the wheelchair occupant-restraint-systems. Successful "Pull Test" results from an A2LA Accredited Laboratory, including pictures shall be included with all Requests for Proposal (RFP) Responses.
29. **COLOR OF SEATS:** Bid must include all colors available. Successful vendor shall coordinate with Cherokee Nation in the selection of material and color of the seats.
30. **PRIORITY SEATING SIGNS:** Each vehicle shall contain a sign, which indicates that the seats in the front of the vehicle are priority seats for people with disabilities. Each wheelchair station location shall be designated as such. The signs shall comply with 49 CFR 38.27 and associated appendix.
31. **LIGHTING:** The vehicles lighting requirements are as follows:
 - a) OEM interior lighting shall illuminate the interior of the vehicle.
 - b) The chassis OEM lighting switch shall control the lighting fixtures.
 - c) The instrument panel illumination must allow the driver to see all the controls at night.
 - d) Chassis OEM instrument panel switch shall control the intensity of the lights.
 - e) All door lights and the side passenger door shall illuminate automatically when doors are opened.
 - f) L.E.D. lighting shall be required to illuminate on the lift.
 - g) Exterior lighting shall meet all state and federal regulations and include a one-third-high mounted center brake lamp.
32. **ELECTRICAL WIRING:** The electrical wiring shall comply with the following requirements:
 - a) All wiring that is run inside the body shall be in a protected area.
 - b) Any wiring that is exposed to the elements shall be non-metallic, loomed, and securely clipped every 18" for maximum protection.
 - c) Clips shall be rubber or plastic coated to prevent penetration of the wiring insulation.
 - d) Protective grommets shall be installed at all points where wiring penetrates metal and other materials.

- e) Circuit breakers and electrical panels shall be in easily accessible location.
- f) No lock-wire-connectors allowed.
- g) Grounding-off components shall be through polarized shielded terminals wired to main structural ground points.
- h) All accessories and electrical equipment except head and parking lights, emergency flashers, dome light(s), and wheelchair lift shall be wired through the vehicle ignition switch so as to be operative only with the switch is “on” or “accessory” position.
- i) Power wire to wheelchair lift shall include an in-line circuit breaker with manual reset provided by the wheelchair lift manufacturer.

33. WINDOWS: The windshield and front most doors shall be chassis OEM with standard tint. The remaining rear windows shall have a dark OEM privacy tint.

- a) An Electric Defogger shall be included on the rear windows.
- b) All front windows shall be OEM chassis safety glass and be capable of venting.
- c) All side and rear windows shall be OEM chassis safety glass and fixed all around.
- d) All windows, windshield, and tinting shall be FMVSSP compliant.

34. SAFETY BACK-UP EQUIPMENT: The vehicle shall include the following safety equipment, chassis OEM if available:

- a) An audible “back-up” warning device shall be included (i.e. OEM Ford Backup Alarm).
- b) The vehicle shall include a rear-view camera with dashboard monitor that activates when the transmission is shifted into reverse.
- c) Back-Up Sensor System with Audible Alert Warnings.

35. WHEELCHAIR LIFT: An electric powered hydraulic wheelchair lift shall be installed inside the vehicle at the rear of the vehicle. The vehicle must meet FMVSSP 403-404 lift installation requirements. The wheelchair lift shall a Braun NL919FIB-2 with handrail safety belt (Millennium-2 Series or equivalent) that meets the following MINIMUM requirements:

- a) An 800-pound load capacity lifts assembly.
- b) An electric hydraulic pump, powered by vehicle’s electrical system.
- c) Platform dimensions 34” wide by 51” long.
- d) Platform to be constructed of 11 gauge expanded metal.
- e) Platform shall be stored in an upright position within the vehicle.
- f) Powered operation for (1) unfolding and folding the platforms and (2) raising and

lowering the platform.

- g) Emergency platforms release to permit the platform to be unfolded manually and lowered by gravity.
- h) To prevent the wheelchair from rolling off, a barrier 1½” at minimum shall be provided on the outer edges of the platform and have an outboard roll stop that engages and locks before the platform leaves the ground to form a safety barrier when platform is raised or lowered
- i) A free floating bridge plate will be replaced between the lift platform and the vehicle. This bridge plate will be hinged in a manner to permit upward movement should a person’s foot become entangled.
- j) Lift shall be securely bolted to the floor and floor reinforced as necessary to support the load.
- k) To permit the lift platform to be raised without electrical power such as a hand pump that allows the operator to raise the platform shall be installed.
- l) An interior light shall be provided to illuminate the lift area;
- m) All moving parts likely to cause personal injury shall be shielded.
- n) Working parts, such as cables, pulleys, and shafts, which can be expected to wear, and upon which the lift depends for support of the load, shall have a safety factor of at least six, based on the ultimate strength of the material.
- o) Nonworking parts, such as platform, frame, and attachment hardware, which would not be expected to wear, shall have a safety factor of a least three, based on the ultimate strength of the material.
- p) Lift shall be installed as specified by the manufacturer and shall be thoroughly tested before delivery.
- q) Repair manual, parts list, and instructions for adjusting hydraulic valves and electrical equipment shall be provided.
- r) Lift controls shall be interlocked with the vehicle brakes, transmission, or door, or shall provide other appropriate mechanisms to ensure that the vehicle cannot be moved when the lift deployed.
- s) The left control cord must be secured in a manner not to interfere with the door being closed.

36. USE BY STANDEES: Lift shall accommodate persons using walkers, crutches, canes or braces or who otherwise have difficulty using steps. The platform may be marked to indicate a preferred standing position.

37. HANDRAILS: Platform on lift shall be equipped with handrails on two sides, which move in tandem with the lift, and which shall be graspable and provide support to standees throughout the entire lift operation.

- a) Handrails shall have a usable component at least 8” long with the lowest portion a minimum 30” above the platform and the highest portion a maximum 38” above the platform.
- b) Capability of withstanding a force of 100 pounds concentrated at any point on the handrail without permanent deformation of the rail or its supporting structure required.
- c) Cross-sectional diameter of handrail shall be between 1¼” and 1½”, and shall have eased edges with corner radii of not less than 1/8”.
- d) Handrails shall not interfere with wheelchair or mobility aid maneuverability when entering or leaving the vehicle.

38. WHEELCHAIR SECUREMENT: Wheelchair parking space shall have clear floor area of 30” wide by 52” long and be equipped with a four-point wheelchair securement tie-down.

- a) Occupant restraint system must be a Q’Straint Q8-6325 Standard QRT Lap Belt assembly and a Q’Straint Q5-6410-RET-HR Retractable Shoulder Belt, Fixed Mounting with Retractable Height Adjuster or equivalent that is anchored to floor and wall meeting SAE J2249 and ADA requirements.
- b) Bolting to plywood floor without bolting into structural steel under floor is not allowed.
- c) Wheel Chair Securement system must be Q’Straint QRT MAX Automatic Retractor System Q-8301-L with L Track anchorage system and J-Hooks, or equivalent.
 - Anchors must be bolted to structural steel.
- d) There must be at least 54” minimum and 60” maximum measured from center to center between front and rear L-Track anchor points; and be fully assembled and ready to use.
- e) A metal Storage bin shall be provided to store belts when not in use. Must include Four (4) Q’Straint Q5-7580 Webbing Loops or equivalent for Securing Scooters. Wheelchair location must be in the rear of bus.
 - **Note:** Each wheelchair securement location shall have sign designating it as such. Lettering size and type on these signs shall be ADA compliant.

39. WHEELCHAIR STATIONS: At a minimum, one wheelchair station shall be provided in each vehicle (See options for additional wheelchair securement station and fold down seats and floor plans).

- a) Wheelchair stations are the spaces inside the vehicle for transporting people in wheelchairs and are to be provided on all vehicles.

- b) Each wheelchair station shall consist of usable floor area in which a passenger in a wheelchair may be positioned and where the wheelchair occupant-restraint-systems and wheelchair securement devices are located.
 - c) Wheelchair stations will secure wheelchairs in a forward facing position only.
40. **WHEELCHAIR ACCESSIBILITY SYMBOL:** The vehicle will display the international wheelchair accessibility symbol of a person in a wheelchair that is outlined in white on blue background. This symbol will be placed on all four sides of the bus.
41. **VEHICLE COLOR:** OEM white is the preferred vehicle color.
42. **VEHICLE FLOOR PLAN:** A proposed floor plan including all pertinent interior dimensions such as overall length, width, distance between seats, etc., shall be submitted with the bid proposal.
43. **CHASSIS SPECIFICATIONS:** It is the bidder's responsibility to calculate the actual loaded weight, spring, and axle ratings so that the vehicle is engineered for safety (Gross Vehicle Weight Rating (GVWR) for axle, spring, and tire: 10,350 lb. minimum). The bidder must list chassis specs on the mandatory bid response sheet.
- a) Overall vehicle length (262" minimum – 266" maximum)
 - b) Exterior width (minimum 80")
 - c) Interior width (minimum 70")
 - d) Exterior height (minimum 100" – maximum 120")
 - e) Interior height (minimum 73")
 - f) Wheelbase (minimum – 146" – maximum 150")
44. **WHEELS AND TIRES:** The wheel rims shall be manufacturers-standard for GVWR. The Tires – seven (7), including full spare; shall be steel belted, all season radials, to meet GVWR.
- a) All tires shall be the same make or brand, shall be mounted on rims, and balanced.
 - b) Hubcaps – required for all wheels.
45. **ENGINE – GASOLINE:** The OEM engine shall be a 3.5L PFDi six-cylinder with electronic fuel injection.
- a) The engine shall be designed to have a useful life of at least 100,000 miles.
 - b) The engine shall be equipped with the largest external oil cooler available from the OEM manufacturer of the base van.

- c) The engine shall have a CNG/LPG gaseous prep package.
46. **RADIATOR:** Engine cooling – Heavy-duty radiator with capacity to prevent engine overheating while operating in stop-and-go transit operations in ambient temperatures as high as 110 degrees F and provide protection to -30 degrees F.
47. **TRANSMISSION:** The vehicle shall have the uppermost heavy-duty transmission available from OEM with the following:
- a) OEM auxiliary transmission oil-to-air cooling.
 - b) Dipstick and add oil filler tube shall be easily identifiable.
 - c) Automatic 10-speed with overdrive.
48. **DRIVE SHAFT:** The driveshaft shall be rated and capable of transmitting the torque multiplication of the engine/transmission to the drive wheels.
- a) The chassis OEM shall balance the drive shaft.
 - b) A driveshaft guard shall be provided to prevent the driveshaft from hitting the ground. A Chassis OEM guard is preferred.
49. **BRAKES:** Two (2) braking systems are required. Service brakes shall be dual hydraulic, disc front and disc rear.
- a) A cable to the rear wheels, or Drive Shaft Drum Brake shall operate the parking brake system.
 - b) The braking system shall be adequate for the GVWR of the vehicle.
50. **GEAR RATIO:** The vehicle's gear ratio shall be an OEM 4.10-limited slip axle. The OEM vehicle shall be configured for rear wheel drive.
51. **FUEL CAPACITY:** Gasoline – Install the largest available tank from the chassis manufacturer.
52. **SUSPENSION SYSTEM:** Suspension system shall be heavy duty and load rated for GVWR of the vehicle.
- a) Shock absorbers shall be extra heavy duty gas and load rated, capable of controlling the ride when empty, as well as when loaded to maximum GVWR.
 - b) Use independent MacPherson-struts.
 - c) Leaf with Rear stabilizer bar required if available from OEM

d) A Chassis OEM Electronic Anti-Rollover System shall be included.

53. **STEERING:** The vehicle must have power-assisted steering.
54. **AIR CLEANER:** The vehicle must have a heavy-duty dry type air cleaner.
55. **OIL FILTER:** The vehicle must have a heavy-duty throwaway type oil filter.
56. **ALTERNATOR:** Vehicle shall have an OEM 220-amp alternator.
57. **BATTERIES:** Include two (2) heavy-duty maintenance free OEM batteries.
58. **STABILIZER BAR:** The vehicle must have heavy-duty front and rear stabilizer bars.
59. **HORN:** The vehicle must have a dual electric horn.
60. **SIGNALS:** The vehicle shall have directional and self-canceling with hazard warning flashers.
61. **WINDSHIELD WIPERS:** A minimum of two speeds with intermittent feature and washer shall be included on the vehicle.
62. **KEYS:** Vehicle must include two (2) sets of keys and fobs.
63. **RADIO:** The vehicle must have an OEM AM/FM CD radio mounted in the chassis OEM location in the dash.
64. **PAINTING, DECALS AND MONOGRAMS:** All signs required by state and federal law shall be affixed to each vehicle exterior and interior.
 - a) It is up to the bus dealer/manufacture to add such signs and decals upon delivery of vehicle.
 - b) No decals, name plates, or painted identification of the bus dealer/manufacture are to be added to the vehicle.
65. **ALTOONA TESTING:** Each bidder shall supply documentation that the vehicle has been Altoona-tested or proof that the vehicle is exempt from such testing because the vehicle has not undergone enough modification by these specifications to warrant such action.

66. **WARRANTY REQUIREMENTS:** The contractor warrants and guarantees that each completed bus; its subsystems, and components for 100% parts and labor as follows:
- a) OEM standard factory warranties for chassis and engine.
 - b) Add-on components shall have component manufacture's standard warranty.
 - c) Warranty shall begin on the day the vehicle is accepted by Cherokee Nation.
67. **GENERAL:** All equipment cataloged as standard for the basic vehicle, unless superseded by these specifications, must be included in the purchase price of each vehicle. Complete printed specifications, published literature, and photos, or illustrations of the basic units that the bidder proposes to furnish with this bid must accompany each bid.
68. **QUALITY OF MATERIALS:** Material & Equipment Quality Standards – All materials and equipment used shall be built and/or attached in accordance with all applicable safety codes and design standards including but not limited to:
- a) Society of Automotive Engineers (electrical components and wiring, hydraulic components, fasteners).
 - b) American National Standards Institute (chain drive and wire rope components).
 - c) American Welding Society (welding code and recommended practices).
 - d) FMVSSP.
 - e) All parts shall be new.
 - f) All necessary servicing and adjustments shall be made on the equipment before delivery of the vehicle.
 - g) All exposed metal surfaces shall be painted or shall be corrosion-resistant.
 - h) All wheel chair lift components wiring located on the underside of the vehicle shall be fully loomed.
69. **PUBLICATIONS AND PRINTED MATERIALS:** Each vehicle shall have a complete set of operation, quality assurance, and warranty publications. The information shall be organized in a three ring binder format with each sections clearly identified as follows:
- a) As built wiring diagram and as built parts manuals for body and all auxiliary equipment.
 - b) Maintenance and inspection schedule incorporating the required maintenance and inspection of the basic vehicle and its sub-systems.
 - c) Operator's manual: A complete operations manual and troubleshooting guide with a detailed manufacturer's parts list that covers the conversion features on the vehicle as listed in this specification. The manual will provide complete,

comprehensive instructions for the wheelchair accessories, wheelchair list deployment, air conditioning system, tie downs, heater, deployment of seats, wiring diagram and related equipment.

- d) Warranty papers for chassis, body, and additional equipment.
- e) Warranty Information: Each vehicle must have a published listing of contractor-warranty-repair locations, including address, telephone number, and contact names for the Cherokee Nation.

70. DELIVERY: The vendor must deliver the vehicle(s) at a maximum of 150 calendar days from the date a purchase order is issued unless prior written approval is obtained from Cherokee Nation. As a part of the pre-delivery servicing and adjustments before acceptance, the vendor shall service and adjust each vehicle for operation. This process shall include but not be limited to the following:

- a) The vehicle must have a full tank of fuel when delivered.
- b) Each vehicle shall be designed to facilitate the disassembly, reassembly, servicing, or maintenance thereof by use of tools and items that are normal and available as commercial standard items. The body and structure shall be designed for ease of maintenance and repair.
- c) All parts added, as part of the modification process shall be new.
- d) Headlights properly aligned.
- e) Engine tuned.
- f) All accessories properly adjusted.
- g) Electrical, braking and suspension systems inspected.
- h) Both batteries charged.
- i) Front-end aligned, all wheels balanced, including spare tire.
- j) All lubricants checked, and greased if needed.
- k) Cooling system serviced with permanent type anti-freeze and summer coolant for minus 20 degrees F (-28.888C).
- l) Warranty papers and owner's guide.
- m) Exterior and interior cleaned and washed.
- n) Odometer cannot exceed 3,000 miles at the time of delivery. There will be a charge of one dollar (\$1.00) per mile for each vehicle with an odometer reading in excess of 3,000 miles payable to Cherokee Nation at the time of delivery.
- o) Under no circumstances are tow vehicles to be attached to any buses.
- p) Each vehicle must be delivered to the Cherokee Nation Complex in Tahlequah, Oklahoma.
- q) Copies of the all Certificate of Origins and signed invoices must be sent to Cherokee Nation before vehicle delivery. Receipt of these documents after delivery is not acceptable.

71. **PRE-AWARD AUDIT:** A Pre-Award Audit shall be conducted to determine if the bid proposal meets specifications. The bidder shall submit documents, which include certification of the manufacturer's compliance with the FTA Pre-Award Buy America Audit Requirements. The document submitted shall also include the following information for each major component used on vehicle bid:
- a) Name and address of each supplier.
 - b) Cost of each major component and subcomponent. In order to protect proprietary information, the document may reflect the percentage of total cost each item represents instead of the actual cost.
 - c) Country of origin of each major component and subcomponent. Name and address of company where final assembly occurs.
 - d) Cost of final assembly.
 - e) Signature of authorized representative of vehicle manufacturer.
72. **POST-DELIVERY AUDIT:** A Post-Delivery Audit of the vehicle(s) shall be conducted at the Cherokee Nation to ensure vehicle(s) meet specifications.
- a) The vehicle(s) are not considered delivered until Cherokee Nation completes the required FTA documents.
 - b) The successful bidder shall insure all vehicles until the post-delivery audit has been conducted.
73. **ACCEPTANCE OF VEHICLES:** Final acceptance will occur upon successful vehicle inspection and testing, and completion of FTA's post-delivery audit requirements.

**FORM OF BID PRICING LIST
2019 REAR LIFT FULL SIZE CONVERSION VAN**

BASE VEHICLE:	COST PER UNIT
• 22' Full Size Conversion Van – Gasoline:	\$ _____

Any like-kind or equivalent equipment and/or accessories must be provided as a part of the submitted bid. The list must contain:

- Item
- Description and functionality detail
- Cost of item installed in final delivery of vehicle
- Any changes to listed specifications as outlined above must accommodate options

BID EXCEPTIONS:

Bidder must list any exceptions here to be used as a part of the bid evaluation and analysis. Please list the number on the standard specification or the number for the options when listing any bid exceptions (attach additional sheets if necessary).
