

TECHNICAL SPECIFICATION FOR PROCUREMENT OF BULLET PROOF VEH (5-DOOR) WITH STANDARD TOOLS AND ACCESSORIES, QUANTITY-02 UNIT (01 X UN MSN, BAF & 01 X UN MSN, BN) FY 2025-26

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|---|--|--|
| 1. | Type of the Vehicle | Armoured/ Bullet Proof Vehicle (5 Door) ✓ | |
| 2. | Name of the Local Agent with full Address | To be mentioned and certified by the armoring manufacturer/ Principal | |
| 3. | a. Name of the Manufacturer with full Address (Base Vehicle) | Toyota Motor Corporation ✓ Address: 1 Toyota-Cho, Toyota City, Aichi Prefecture 471-8571, Japan Phone: +81-565-28-2121 | |
| | | INKAS® ✓ Armored Address: 3605 Weston Road, Toronto ON, M9L 1V7, Canada Phone.: +1(416) 744 3222 / +1 416 645 8725 Email: info@inkas.ca Website: www.inkasarmored.com | |
| | b. Name of the Manufacturer/modifier with full Address (Armoured Modification) | Alpine Armoring Inc. (USA) ✓ Address: 570 Herndon Parkway, Herndon, VA 20170, USA Phone: +1 (703) 471-0002 Fax: +1 (703) 471-0202 Email: sales@alpineco.com Website: www.alpineco.com | |
| | | Armormax (USA / EU) ✓ Address: 181 S 600 W 3A/5, Ogden, Utah 84401, USA Phone: +1 801 393 1075 Email: sales@armormax.com Website: www.armormax.com | |
| | | The Armored Group (USA / Germany) ✓ USA Address: 5050 E Red Rock Dr, Phoenix, Arizona 85018, USA Germany Address: Nordsehler Str. 47, Stadthagen, Niedersachsen 31655, DE Phone: +1 602 840 2271 (USA) Website: www.armoredcars.com | |
| | Miami Armored (USA) ✓ Address: 2409 SW 59th Terrace, West Park, Florida, 33023 NE 13th Ave, Miami, FL 33161,USA Phone: +17869446044 Email: sales@miami-armored.com Website: www.miami-armored.com | | |

RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|---|---|--|
| | | Zida Armored Expert Address: Ras Al Khaimah, UAE Phone: +971527837036 Email: info@zidasecurity.com Website: www.zidasecurity.com | |
| | | Autogroup International (Australia) Address: Level 3, 267 St Georges Terrace, Perth, WA 6000, Australia Email: info@autogroupinternational.com Website: www.autogroupinternational.com | |
| | | Margalla Heavy Industries Limited (MHIL) HIT Armour Division Taxila Cantonment, Pakistan Phone: +92519315020 Email: hit-armour@margallahil.com Website: www.margallahil.com | |
| | | SVI Engineering SVI Armouring Solutions Bashewa, South Africa Phone: +27(0)129993082 Email: info@svi.co.za Website: www.svi.co.za | |
| | | AKSUM Armoured Vehicle Dubai Investment Park-1 Dubai, UAE Phone: +971503701954 Email: s.evans@aksumarmoured.com Website: www.aksumarmoured.com | |
| 4. | Name of the Principal with full Address | To be mentioned and certified by the armouring modifier | |
| 5. | Brand | Toyota | |
| 6. | Model | Toyota Land Cruiser 300 Series VX or higher variant, latest production model, brand new, unregistered, not manufactured earlier than the year of contract | |
| 7. | Country of Origin | Base Vehicle – Japan Bullet Proof modification Canada/USA/UK/Australia/EU Countries/Pakistan/UAE/South Africa | |
| 8. | Manufacturing Country | Base Vehicle – Japan Bullet Proof modification Canada/USA/UK/Australia/EU Countries/Pakistan/UAE/South Africa | |
| 9. | Country of Assembly | Base Vehicle – Japan Bullet Proof modification Canada/USA/UK/Australia/EU Countries/Pakistan/UAE/South Africa | |
| 10. | Drive | Right Hand Drive (RHD) | |
| 11. | Configuration | 4x4 Wheel Drive (AWD) | |



RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------------------|---|---|--|
| 12. | Weight Declaration | Final armored curb weight, GVW, axle loads, and payload shall be declared and certified by the armoring manufacturer. All suspension, braking, steering, and drivetrain components shall be rated for at least 120% of the final armored GVW. | ✓ |
| 13. | Vehicle Integrity & VIN Protection | The original OEM Vehicle Identification Number (VIN), chassis number, engine number, and ECU serial numbers shall remain intact and unchanged after armoring. No grinding, re-stamping, cutting, or welding of the OEM ladder frame or powertrain mounting points shall be permitted. | |
| 14. | Seating capacity | Minimum 04 person including driver ✓ | |
| 15. | Maximum turning radius | To be mentioned | |
| 16. | Wheel Base | To be mentioned | |
| 17. | Dimension (Length, Width and Height) | To be mentioned ✓ | |
| 18. | Engine | OEM gasoline engine as supplied by Toyota. No permanent engine modification is permitted. | |
| | a. Type | To be mentioned ✓ | |
| | b. Model | To be mentioned (latest production model, not before the year of signing of the contract) | |
| | c. Country of origin | Japan ✓ | |
| | d. Manufacturing Country | Japan ✓ | |
| | e. Country of Assembly | Japan ✓ | |
| | f. No of cylinder | To be mentioned | |
| | g. Piston Displacement | To be mentioned | |
| | h. Power Enhancement Requirement | Engine performance shall remain within OEM reliability limits. Any power enhancement, if offered, must be plug-and-play, OEM-safe, removable, and shall not affect engine longevity or warranty | |
| | j. Torque | To be mentioned | |
| | k. Fuel tank capacity: In-built tank capacity for minimum cruising range of 400 km on level 1 st class road | To be mentioned ✓ | |
| | l. Maximum Speed: | | |
| | (1) High Way | To be mentioned | |
| | (2) Cross Country (Vehicle must have cross country mob) | To be mentioned ✓ | |
| m. Life Expectancy | Life expectancy of new engine up to 1 st overhauling not less than 1,00,000 km (Certificate to be provided by manufacturer along with quotation) | | |



| Ser No | <u>Nomenclature/ Description</u> | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|--|--|--|
| 19. | <u>Transmission:</u> | | |
| | a. Type | Automatic transmission (A/T) ✓ | |
| | b. Gear box Model | To be mentioned (latest production model, not before the year of signing of the contract) | |
| | c. Country of Origin | Japan ✓ | |
| | d. Manufacturing Country | Canada/USA/Japan/UK/Australia/EU Countries | |
| | e. Country of Assembly | Canada/USA/Japan/UK/Australia/EU Countries | |
| | f. All Gear Ratio | To be mentioned ✓ | |
| 20. | Type of steering | Power steering ✓ | |
| 21. | <u>Transfer case:</u> | | |
| | a. Type | Full time transfer ✓ | |
| | b. Model | To be mentioned (latest production model, not before the year of signing of the contract) | |
| | c. Country of Origin | Japan ✓ | |
| | d. Manufacturing Country | Canada/USA/Japan/UK/Australia/EU Countries | |
| | e. Country of Assembly | Canada/USA/Japan/UK/Australia/EU Countries | |
| | f. High Gear Ratio | To be mentioned | |
| | g. Low Gear Ratio | To be mentioned | |
| 22. | <u>Suspension Details (Post-Armor):</u> | | |
| | a. Front | To be mentioned ✓ | |
| | b. Rear | To be mentioned | |
| | c. Suspension System | Upgraded suspension, including replacement of Coil Springs and Shock absorber of four wheels must be custom made to counterbalance the extra armor weight | |
| | d. Suspension Support | Suspension components shall be specifically engineered and rated for the final armored Gross Vehicle Weight (GVW) and certified by the armoring manufacturer to safely support at least 120% of the armored GVW. | |
| | e. Suspension Tuning and Ride Quality | Post-armor suspension tuning shall ensure ride comfort comparable to OEM LC300 VX, with no excessive vibration, noise, or harshness (NVH). Road test certification shall be submitted. | |
| 23. | <u>Brake system (Post-Armour):</u> | Braking system shall be upgraded to compensate for increased vehicle mass and shall maintain OEM ABS, ESC, and traction control functionality. Details are to be submitted along with the offer. | |

RESTRICTED

| Ser No | <u>Nomenclature/ Description</u> | Specification Specified | To be filled up by the principal/ manufacturer |
|---|--|---|--|
| 24. | <u>Electrical system:</u> | | |
| | a. Battery (Volt & AH) | To be mentioned | |
| | b. No of Battery | To be mentioned | |
| | c. Alternator (Volt, Amp) | To be mentioned | |
| | d. Starter (KW) | To be mentioned | |
| | e. <u>Lighting System:</u> | | |
| | (1) 02 x Signature Dual Barrel Headlamps (Dual barrel LED projector), 04 x LED turn indicator (ORVM) (front & rear), 02 x Stop/brake Lights, 02 x Reverse Light, 01 x Cabin Light, all gauges and meters in dashboard fuel gauges, hazard warning lights etc as required for proper functioning of all system of the vehicle | To be provided | |
| | (2) 02 x LED Projector Fog lamps at front for driving during foggy weather | To be provided | |
| | (3) Sting like LED Daytime Running Lamps | To be provided | |
| | (4) LED Sequential turn indicator | To be provided | |
| (5) Tachometer/Engine rpm meter and speedometer (MKS system) in digital dashboard | To be provided | | |
| 25. | Noise Suppressor | All components producing noise and spark will be adequately cushioned/ shielded as per manufacturers' latest standard | |
| 26. | Fire Suppressor System | To be provided | |
| 27. | <u>Clutch System:</u> | | |
| | a. Clutch Details | To be mentioned | |
| | b. Type of Gear Shifting Lever | To be mentioned | |
| 28. | <u>Front Axle:</u> | | |
| | a. Type | To be mentioned | |
| | b. Capacity | To be mentioned | |
| 29. | <u>Rear Axle:</u> | | |
| | a. Type | To be mentioned | |
| | b. Capacity | To be mentioned | |
| | c. Differential Lock | To be mentioned | |
| 30. | <u>Bullet Proof Requirements:</u> | | |
| | a. Country of Origin | Canada/USA/UK/Australia/EU Countries/Pakistan/UAE/South Africa | |

RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|---|--|--|
| | b. Country of Manufacturer | Canada/USA/UK/Australia/EU Countries/Pakistan/UAE/South Africa | |
| | c. Country of Conversion | Canada/USA/UK/Australia/EU Countries/Pakistan/UAE/South Africa | |
| | d. Armoring Architecture | Integrated, overlapping, self-supporting armored capsule providing 360° ballistic protection, including Doors, Roof, Firewall, Floor, Pillars, Bulkhead and Glass interfaces. Design shall be CAD-modeled and load-validated for final armored GVW. Drawings to be submitted during PSI. | |
| | e. Ballistic Protection Level | Minimum protection level shall be CEN EN 1063 B6 or above. | |
| | f. Type of Tires and wheel | Run-Flat-Inserts or best heavy-duty tires for armour veh in all four wheels to allow the vehicle to drive up to 50km + travel at 50km/H after total air loss. Ensure the tires are rated for at least 120% of the vehicle's Gross Vehicle Weight (GVW) to account for the armour. In this regard, the bidders are to submit their proposal along with the offer for BAF confirmation. | |
| | g. Ballistic Windows and Windshield Glasses | <p>a. Multi-layer curved ballistic glass certified to BR6/BR7.</p> <p>b. Optical distortion shall not exceed 2.5 mrad.</p> <p>c. Glass shall be free from delamination, bubbles, haze, or edge defects.</p> <p>d. Preferred glass manufacturers: AGP / ISocIMA / OPTIMA or equivalent.</p> <p>e. Driver window-controlled drop shall not exceed 100 mm.</p> <p>f. Driver windows actuator to allow lowering of a single window for up to 4 inches is to be provided.</p> <p>g. Minimum two years delamination warranty is to be provided</p> | |
| | h. Blast & Fragmentation Protection | <p>a. Floor blast protection against DM-51 or equivalent hand grenade</p> <p>b. Fragmentation liner on roof and doors.</p> | |
| | j. Ballistic Overlaps & Anti-Spall Protection | Ballistic overlaps and anti-spall splash-return protection shall be provided at all joints, seams, door frames, and glass interfaces. | |
| | k. Doors & Hinges | <p>a. All doors shall be reinforced with:</p> <ol style="list-style-type: none"> (1) Multi-layer ballistic overlaps (2) Reinforced hinges (3) Heavy-duty door checkers (4) Soft-close mechanism <p>b. Doors shall not sag or misalign after extended use</p> <p>c. Door opening/closing force shall remain within ergonomic OEM limits</p> | |

| | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|-----|---|---|--|
| | I. Fuel Tank Protection | Fuel tank shall be self-sealing, explosion-resistant, and protected to the same ballistic level as the passenger cell | |
| | m. Interior Comfort & Ergonomics | a. Interior layout, seating comfort, visibility, ingress/egress, and rear passenger legroom shall not be inferior to OEM LC300 VX. b. Luxury finish shall be retained without visible compromise due to armouring. | |
| | n. Ballistic Protection Test and certifications | To be provided | |
| | p. HVAC (Heating, Ventilation, and Air Conditioning) Performance | The manufacturer shall provide a comprehensive upgradation to the vehicle's Air Conditioning and Environmental Control System to ensure operational efficiency in extreme thermal conditions. The system must maintain a stabilized cabin temperature of 20°C – 22°C while operating in external ambient temperature of up to 45°C. To meet the performance, an Auxiliary Cooling Unit may be provided. In this regard, the manufacturer must include detailed equipment specifications and supporting performance certificates alongside the offer to verify the system's operational capabilities. | |
| | q. Manufacturing Accuracy | To eliminate "ballistic gaps," the manufacturer shall utilize 3D laser scanning of the OEM interior and CNC plasma/laser cutting for all ballistic plates, ensuring high-tolerance fitment at all glass-to-metal and door-to-pillar interfaces. The manufacturer shall provide supporting certification to validate that the final assembly meets these precision-fit and ballistic protection standards. | |
| | r. Miscellaneous | To be mentioned | |
| 31. | Colour | Vehicles are to be painted from manufacturer/modifiers' factory (chips for exterior body colour and interior seat material & exterior colour sample plate are to be submitted along with offer for BAF selection) | |
| | Accessories: Following accessories are to be provided with each vehicle: | | |
| | a. Dual zone FATC | To be provided | |
| | b. Separate AC vent at rear row | To be provided | |
| 32. | c. Comfortable Seat with original Leather Binding | To be provided | |
| | d. 02 x Rear seat entertainment Screens | To be provided | |
| | e. Electrochromic rear view Adjustable Mirrors | To be provided | |
| | f. Steering remote controls | To be provided | |

RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|---|-------------------------|--|
| | g. Electronic Stability Control (ESC) | To be provided | |
| | h. Powerful RWD SUV/robust construction | To be provided | |
| | j. Chrome Door Handles | To be provided | |
| | k. Parking Sensors (front and rear) | To be provided | |
| | l. Activated Carbon Filter | To be provided | |
| | m. VSC (Vehicle Stability Control), DAC (Downhill Assist Control) and CRAWL (Control and Cruise Control) system | To be provided | |
| | n. Cluster | To be provided | |
| | p. Rear Spoiler | To be provided | |
| | q. Leather wrapped Steering + Gear Shift lever | To be provided | |
| | r. Auto Headlamp + Auto wiper | To be provided | |
| | s. 8-Way Driver Power Seat | To be provided | |
| | t. Seat height adjust + Lumbar Support | To be provided | |
| | u. Rear Wiper, Washer and Demister | To be provided | |
| | v. A Pillar Grab Handle (both sides) | To be provided | |
| | w. DAC (Downhill Assist Control) | To be provided | |
| | x. Touchscreen Infotainment | To be provided | |
| | y. Digital Quartz Clock at Dashboard | To be provided | |
| | z. Door locks: Auto door lock operated from driver seat for all doors (speed sensitive door lock). | To be provided | |
| | aa. Front foot lamps and lighting for side steps (both sides) | To be provided | |
| | ab. Digital Instrument Panel | To be provided | |
| | ac. Towing Hook 02 nos at front and 02 nos at rear | To be provided | |
| | ad. Fire Extinguisher: 01 kg capacity A B C & E type or A, B, C type which capable of extinguishing A, B, C & E type fire with bracket and chemical to be fitted at the side of driver seat | To be provided | |
| | ae. Inspection lamp complete with cable (10 meter), plug & | To be provided | |

RESTRICTED

| | | |
|---|---|--|
| arrangement of socket in the vehicle for using inspection lamp | | |
| af. Boost ventilator with central fresh, cool & air circulation (dual type air condition) with climate control system | To be provided | |
| ag. 360° Camera with front & rear Camera recorder | To be provided | |
| ah. Fold Type Arm Rest in 2 nd row with cup holder | To be provided | |
| aj. Sufficient number of Airbags to ensure driver and both front and rear passenger's safety (SRS) | To be provided | |
| ak. 02 x Sun visors with fitting brackets | To be provided | |
| al. 01 x Inside rear-view mirror | To be provided | |
| am. 02 x outside rear-view mirror | To be provided | |
| an. SD Card Quatity-01 with each vehicle | To be provided | |
| ap. Windshield Glass with defogger | To be provided | |
| aq. Both side door: Full size normal door with power operated windows power operated | To be provided | |
| ar. Rear windshield with Defogger | To be provided | |
| as. Type of Seat: original leather seat luxurious comfort quality | To be provided | |
| at. Roof mount cabin lamp inside cabin | To be provided | |
| au. Intermittent windshield wiper 2 x front & 1 x rear | To be provided | |
| av. Seat belt warning | To be provided | |
| aw. Remote door lock | To be provided | |
| ax. Glove box | To be provided | |
| ay. Foot rest (both side & rear) | To be provided | |
| az. 01 x floor mat front & rear complete | To be provided | |
| aaa. Air conditioner | Dual zone AC Vent with climate control (Front & Rear row separately), Hot & cold air circulation and auto 4 seats independent control (dual type) system to be provided | |
| aab. Mudguard with mud flap for all wheels | To be provided | |
| aac. Front spoiler | To be provided | |
| aad. Cup holders front & rear | To be provided | |
| aae. Roof rail in both side | To be provided | |



RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|---|-------------------------|--|
| | aaf. Standard seat belt to be provided for driver and all passengers | To be provided | |
| | aag. Rear console box | To be provided | |
| | aah. Collision avoidance control system | To be provided | |
| | aaj. GPS/Navigation System | To be provided | |
| | aak. USB and Bluetooth Connectivity with USB charging C port (2nd row) | To be provided | |
| | aal. Android Auto™ + Apple CarPlay Compatibility | To be provided | |
| | aam. Infotainment display for rear passenger seat | To be provided | |
| | aan. Wireless charging | To be provided | |
| | aap. Radio set integrated with digital multimedia system | To be provided | |
| | aaq. Back Camera with monitor to avoid collision while reversing | To be provided | |
| | aar. Laser Sensor with provision of audio warning while reversing | To be provided | |
| | aas. Anti-theft system: alarm & immobilizer (scr-horn) | To be provided | |
| | aat. Tyre pressure monitoring system | To be provided | |
| | aau. Any other standard accessories (if applicable) | To be provided | |
| | Tools set: Following tools set are to be provided with each vehicle within quoted price: | | |
| | a. 01 x Jack assembly with handle | To be provided | |
| | b. 01 x Wheel wrench with handle | To be provided | |
| | c. 01 x Adjustable wrench | To be provided | |
| | d. 01 x Pliers | To be provided | |
| 33. | e. 01 set x Screw driver (+/-) with handle | To be provided | |
| | f. 02 Nos double ended spanner | To be provided | |
| | g. 01 x Tool bag/box for above tools | To be provided | |
| | h. 02 x Wheel stopper | To be provided | |
| | j. 01 set x Tyre inflator kit set | To be provided | |

RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified | To be filled up by the principal/ manufacturer |
|--------|---|--|--|
| | k. 1 x Grease gun with replaceable tip | To be provided | |
| | l. Any other items required for ready hand maintenance | To be provided | |
| | <u>Following essential spares are to be provided with each vehicle within quoted price:</u> | | |
| 34. | a. 01 Set x brake pad for all wheel | To be provided | |
| | b. 04 x tires with all accessories | To be provided | |
| | c. 01 set x door hinges and pillars | To be provided | |
| | d. 01 set x shock absorber | To be provided | |
| | <u>Publication/Manuals:</u> Following publication/technical manuals are to be provided free of cost with the vehicle | | |
| 35. | a. Driver's / Owner's manual in English complete set book type quantity-01 | To be provided | |
| | b. Updated Maintenance /Repair/Workshop manual including necessary Block Diagram and Flow Chart for engine, chassis, body, electrical system & all other in-built accessories in English complete book type quantity-01 | To be provided | |
| | c. Complete updated master spare parts catalogue for engine, chassis, body, electrical system & all other accessories in English complete book type quantity-01 | To be provided | |
| 36. | Documentation & Certification | The following shall be provided: a. VIN-linked ballistic certificates b. Ballistic material test reports c. CAD drawings of armoured capsule d. Suspension and brake upgrade certification e. Road test and performance reports | |
| | <u>Petrol Oil Lubricant (POL) information:</u> The following information must be submitted with the offer: | | |
| 37. | a. Details maintenance schedule of vehicle and engine | To be mentioned | |
| | b. Grade of fuel used in vehicle (high speed petrol) should be compatible with available fuel used in Bangladesh | To be mentioned | |
| | c. Type of engine oil used in vehicle, engine oil confirming to API C14 Plus, (SAE 15W-40) or higher-grade engine oil | To be mentioned | |

RESTRICTED

| Ser No | Nomenclature/ Description | Specification Specified ✓ | To be filled up by the principal/ manufacturer |
|--------|---|---|--|
| | d. Type of gear & differential oil used in vehicle | To be mentioned | |
| 38. | Fast- and slow-moving spares | Quote separately for each item. ✓ | |
| 39. | Special Service Tools (SST) | If required, quote separately for each item | |
| 40. | Special Service Materials (SSM) | If required, quote separately for each item | |
| 41. | Analyzer Measuring & Testing/Fault Finding & Diagnostic Set for Engine (01 set) | Quote separately ✓ | |
| 42. | Local workshop facilities | Level of repair facilities available like field repair, overhauling to be mentioned in details | |
| 43. | Production Date | To be manufactured not before the year of contract. Production date must be mentioned on the vehicle identification (ID) plate by the Manufacturer / assembler or certificate of production date from the manufacturer must be provided | |
| 44. | Design, drawing with dimension of vehicle and details specs of vehicle in manufacturer's brochure must be submitted with the offer. | To be provided ✓ | |
| 45. | Consignee | Officer Commanding 201 MU BAF, Dhaka Cantonment, Dhaka, Bangladesh <u>Care of:</u> Officer Commanding BAF Embarkation Unit, Chattogram, Bangladesh | |
| 46. | Price | To be mentioned in foreign currency. FOB value, Freight and Agency commission must be mentioned separately | |