Roof Sign Fabrication and Delivery - Scope of Work

SCOPE OF WORK:

Arena seeks the services of a specialized, interdisciplinary, and highly qualified and experienced vendor to purchase or manufacture all equipment, materials and supplies and perform all services necessary for the successful fabrication, assembly, and delivery of the Roof Sign to Arena for the Roof Signage Project at Arena. The Roof Sign and Services shall meet the following specifications:

- 1. The Sign shall be an approximately 18,460 square foot internally illuminated roof sign that is designed and fabricated and assembled in a manner appropriate for installation on the Arena Roof.
- 2. Sign design and build shall comply with all applicable City of Miami, Miami-Dade County, and State of Florida building codes and requirements.
- 3. All electrical connections and data terminations must be suitable for high moisture/salt air environments. All data connections shall be connected via approved weather tight multi-pin connectors. All power connections shall be connected via approved weather tight multi-pin connectors.
- 4. All data connection boxes, and data amplifiers shall be encased in a weather tight box within the sign structure with compression gasket connectors for cable entry/exits. All data devices and amplifiers shall be rated for outdoor use.
- 5. All Data cabling shall have proper wire labeling with transparent protective wrap-over. All electrical wiring shall have clear labeling for Voltage Load-Source and Output Voltage to devices.
- 6. Cable passages for data or power to the LED strips shall have a gasket or rubber seal to prevent rainwater and salt air contamination from taking place inside the Sign structure.
- 7. All Sign entry panels shall be designed for easy serviceability by one or two people on the roof without the use of heavy equipment. All Sign panels shall be easily removable and shall have captive nuts for continued serviceability.
- 8. A spare parts inventory for quick servicing of the Sign shall be delivered to Arena upon Sign completion. Prior to Final Completion, vendor will turn over all product specifications to Arena in addition to providing 10% overage on fixtures (final selection of LEDs to come from mockup and prototype phase), 5% overage on power supplies, and 5% overage on controllers, and a spare parts inventory list that details the spare parts and quantities provided.
- 9. The Sign shall be capable of producing brightness of 500 Nits from sunset to sunrise (as established by the Miami office of the National Weather Service) and 5,000 Nits at all other times.
- 10. All Sign materials shall be rated to withstand a high moisture/salt air environment. Sign materials shall be marine rated where applicable. All Sign materials shall also be able to withstand direct, intense sun, high-heat sun exposure.
- 11. Quality Control Arena to confirm approval of satisfactory Sign fabrication upon deliverer of the Sign to the Arena and after vendor fully assembles the Sign at the jobsite.
- 12. On-Site Support Vendor shall provide sufficient on-site supervision, technical support and management during the entire commissioning process.
- 13. Tech Elements Service Agreement Project cost shall include a one-year Tech Elements Service Agreement that shall commence upon Final Completion and continue for a period of one year thereafter.

QUALIFICATIONS:

- The proposed Vendor must have the following experience and certifications:
 - Must be a firm with at least ten (10) years of successful experience with projects of similar scope and complexity. The Vendor shall be a full-service sign company and shall have in-house sign design, engineering, software programming, fabrication, assembly, and commissioning capabilities.
 - Vendor shall provide documentation of a minimum of five (5) facilities (facility, contact name, title, address, and current phone number) where the Vendor has successfully completed and provided internally illuminated exterior signage fabrication, assembly, and delivery projects of equivalent size and scope within the last five (5) years.

- Vendor must have minimum ten (10) years of experience for technicians, fabricators, and assemblers, working with their firm.
- Provide U/L certification under Vendor's name.
- o Capacity to meet all deadlines to ensure successful implementation.

GENERAL REQUIREMENTS:

- A. Furnishing all labor, operations, materials, accessories, incidentals, services and equipment (exclusive of prepurchased or Owner provided materials, accessories and/or equipment) indicated, specified, mentioned, scheduled or implied in this Scope of Work.
- B. Fabricate and deliver full-scale signs.
 - 1. Aluminum Constructed Channel Letters with Black Day, Illuminated Night Flex face.
 - 2. "Arena" Aluminum Constructed Channel Letters with Black Day, Illuminated Night Flex face.
 - 3. Logo Mark: Aluminum Constructed Channel Letters with Black Day, Illuminated Night Flex face and Illuminated Brand Colors.
 - 4. Galvanized Steel Support Structure
 - 5. LED Fixtures 1' and 4' sections, includes an allowance for connecting cables, line level voltage fixtures.
- C. Provide renditions or mock-ups as requested by Arena.
- D. Capacity of employees and firm to perform the work within the specified time period: Capacity of employees and firm, including all consultants and their representatives, qualifications and locations, to perform the work, including specialized services, within the time limitations. Provide detailed project schedule for scope of work.
- E. Warrant to the Arena in writing that the materials and equipment furnished will be high quality and free of defects and equipped to sustain South Florida weather.
- F. Warrant to the Arena in writing that all the paint finishes and the protective clearcoat finishes furnished will be high quality, free of defects in appearance or application, will not develop excessive fading or excessive non-uniformity of color, and will not yellow, crack, peel, or otherwise fail as a result of defects in materials or workmanship.
- G. All work shall be performed by skilled professionals and shall be executed in a workmanlike manner in accordance with the best standards and practices.
- H. Arena will provide logo to be utilized for project.
- I. All electrical and lighting components provided shall be UL listed. Identify in the Shop Drawings the materials and wiring to be used. Internally illuminated signs shall be internally wired with concealed leads for connection to the electric power service.
- J. All the light fixtures and related components used with the internally illuminated sign shall comply with all applicable codes including, but not limited to, the State of Florida Electrical Code and the National Electrical Code. All the light fixtures and related components used with the internally illuminated signs shall comply with all applicable UL, ANSI, and NEC safety and performance standards and all other applicable safety and performance standards. Illuminated sign shall be UL approved.
- K. Final Completion by vendor includes fabrication, assembly, and completion of the Sign in accordance with this scope, successful commissioning of RGB downlighting show controls, successful operation and full functionality of the installed Roof Sign for fifteen (15) consecutive calendar days, and the provision to Arena of all warranties, documentation and Spare Parts required under this Scope of Work. Final Completion shall be achieved by vendor within 22 weeks.

APPROXIMATE PROJECT COST:

SUBMITTALS:

- A. Product Data Submit manufacturer's technical data, preparation, installation, storage, handling, and maintenance instructions for all the materials, components, and applied finishes used for the Work. At a minimum, provide Product Data for the following:
 - 1. All metal materials and components.
 - 2. All acrylic, polycarbonate, and PVC materials and components.
 - 3. All concrete.
 - 4. All mounting components and hardware.
 - 5. Standard and custom extrusions.
 - 6. Each manufactured component used within fabricated assemblies.
 - 7. Shop applied painting, and priming systems.
 - 8. Field applied painting and priming systems.
 - 9. All UV resistant clearcoat finishes.
 - 10. Adhesives and sealants.
 - 11. All vinyl graphic sheeting, films, and overlaminates.
 - 12. Silkscreen and inkjet printing inks.
 - 13. Electrical components.
 - 14. All lighting components, lamps, and fixtures.
 - 15. All embedded graphic panels.
 - 16. All LED dynamic displays and related components.
- B. Prior to the start of fabrication, submit complete and detailed Shop Drawings for all sign types and all sign components. Shop Drawings shall show all sign fabrication and mounting methods, materials, dimensions, and details. Show all the final sign locations in the Shop Drawings.
- C. All sign structural and mounting components shall be professionally engineered. Submit Shop Drawings that have been signed and sealed by a qualified professional structural engineer, licensed in the State of Florida, for all sign structures, sign supports, signposts, sign mounting methods, sign mounting components and hardware, adhesives, embeds, fabricated sign bases, and all other sign structural and mounting components.

TIMELINE:

- Fabrication, assembly, and delivery of the Sign and Final Completion of the Sign must be completed within 22 weeks.
- Vendor must coordinate dates with Director or Vice President of Operations.
- Vendor must submit a schedule of anticipated workdays to Director of Operations for approval and must account for events as follows:
 - Event Days crews allowed onsite from 7am–3pm when the event occurs in the evening;
 - Crews will not be allowed onsite when an event occurs in the morning and/or afternoon (e.g., Disney on Ice matinees and school shows); and
 - Non-Event Days crews allowed onsite for extended hours as needed.

WARRANTY:

• Vendor to provide three year warranty for all Sign lighting components, including electronics, and a one year warranty for all other Sign components from the date of Final Completion. One year warranty for workmanship from the time of Final Completion is required.

INSURANCE:

• Vendor shall purchase and maintain during the entire project and for two years after project completion insurance with the minimum limits and coverage shown below from insurance companies acceptable. BPL has the right to reject unacceptable insurance carriers.

STANDARD INSURANCE REQUIREMENTS	
Coverage Type	Limits
General Liability	\$1,000,000 Per Occurrence;\$2,000,000 General Aggregate;\$2,000,000 Completed Operations Aggregate

Auto Liability (All Hired Non-Owned)	\$1,000,000 for all jobs
Umbrella Policy	\$5,000,000 Per Occurrence
Worker's Compensation	Statutory Limits; \$1,000,000 Employers Liability

- Vendor shall carry standard ISO General Liability coverage, written on an occurrence basis including Completed Operations. Coverages on an occurrence basis shall be maintained without interruption from date of commencement of the Vendor's Work until date of final payment or date coverage is required to be maintained after final payment to the Vendor, whichever is later. The coverage must be endorsed to name Basketball Properties, Ltd. as additional insured on a primary and non-contributory basis.
- Risk of Loss Insurance Vendor shall provide, pay for and maintain insurance coverage, including transportation
 and casualty insurance, which insures the risks of loss, damage, or destruction in an amount not less than the
 total value of the Sign materials. The risk of any loss, damage or destruction to any of the materials or equipment
 provided for in this Scope of Work from any casualty or cause shall be borne by and remain with vendor until
 successful completion of the assembly of the Sign, delivery of the Assembled Sign to Arena and acceptance of
 the Assembled Sign by Arena or Arena's authorized general contractor.