

REQUEST FOR PROPOSAL

Kirkwood School District
Walker Natatorium LED Video Scoreboard Purchase and Installation
Proposal Due Date: 11:00 a.m. on Tuesday, May 6, 2025

Sealed proposals will be received until 11:00 AM on Tuesday, May 6, 2025. If you have questions, please reach out to shanon.orelup@kirkwoodschools.org.

1) OVERVIEW

Kirkwood School District ("Customer") is seeking proposals from qualified vendors that meet the below requirements and technical specifications, fulfill the scope of work, provide the required warranties, including on-site services and ongoing long-term support, and meet the requested installation timeline.

The request for proposals is for a new LED video scoreboard to be installed in the Walker Natatorium. The new video scoreboard will be installed onto the existing masonry wall. This proposal will include the sale and installation of the new system, along with the associated training, warranties, and services outlined below. Offerors must provide a technical and cost proposal detailing the solution that meets all set minimum requirements set in this document.

2) General Information per below detailed specifications:

- a) Removal and Disposal of Existing Scoreboard System
- b) Provide one (1) 3.9mm SMD LED full matrix video screen
- c) Installation of new LED video board system onto existing masonry wall
- d) Provide one complete control system equipped with custom advertising zoning and integrated scoring software (specs provided in sections 8 and 9 below)
- e) Provide and install Swimming Pool Timing System (specs provided in section 7 below)
- f) Reference Conceptual Rendering - Attachment A
- g) Reference Scope of Work / Responsibility Checklist – Attachment B
- h) Reference Projected Timeline for Completion – Schedule of Events – Attachment C

3) LED Video Screen Specifications:

- a) Minimum Screen Active Area: no less than 16.41' wide x 9.84' high
- b) SMD LED Screen Pixel Pitch of 3.9mm or better. Defined as the (Distance Between Light Points or Pixels) will be 3.9mm spacing or better between adjacent vertical and horizontal Pixels, creating uniform spacing between all Pixels. Only True 3.9mm Pixel Spacing or better will be considered. Line Spacing, Pixel Sharing, Virtual Pixel, Optimized, or Pixel Skipping technologies are unacceptable.
- c) The Minimum Pixel Matrix should be at least 1280 pixels wide by 768 pixels high. The pixel configuration should be one single full-color light point made up of 1 Red, 1 Blue, and 1 Green SMD LED within the pixel (3 in 1).
- d) Minimum Pixel Count must be equal to or better than 983,040 total Pixels
- e) Minimum Brightness 7,000 NIT or better
- f) Minimum LED Refresh Rate: 3840 Hz
- g) The LED Screen and the Video Processor must be able to show video on the LED screen at 60 frames per second.
- h) Single BIN LED's LED Screen must present a uniform color and even brightness without any factory calibration.
- i) Redundant Novastar A5S+ Receiving cards per tile are required on the video display.
- j) LED Lifetime: Minimum of 100,000 hours to half brightness
- k) Minimum Viewing Angle: 140° horizontally; 120° vertically
- l) Minimum viewing distance: 10+ Ft
- m) Energy-saving common-cathode technology
- n) Electrical Certification of the LED Screen or ETL

4) Environmental Cooling and Moisture Protection for the Video Display:

- a) IP67 LED Tiles: The LED PCB board must be enclosed and coated with Silicone potting material on the front and back, sealing it from moisture and contamination.
- b) IP-67 Watertight Sealed power and data connection to the LED Tiles.
- c) Fanless Power Supplies enclosed in a sealed power supply enclosure, 100% environmentally cooled cabinet
- e) Aluminum Cabinet Construction
- f) Must be Front Serviceable

5) Support, On-Site Service and Warranties

- a) Unlimited phone support for the life of the LED Screen, 7 days a week, 365 days a year
- b) Minimum Acceptable 11-Year LED Screen Parts Warranty
- c) Minimum Acceptable 5-Year LED Screen On-Site Labor Service
- d) Minimum Acceptable 2-Year Warranty on all third-party peripheral components and computers

6) Video Processor Specifications

- a) Inputs
 - 1 x HDMI 1.4 (in a Loop)
 - 1 x HDMI 1.4
 - 1 DVI input sources
 - 1 x 3G SDI (in a loop)
 - 1 x 10G Optical fiber port
 - Standard Resolutions supported
 - HDCP 1.4 compliant
 - EDID management
- b) Outputs
 - Ethernet port 10 x Gigabit Ethernet output connectors, allowing for a load capacity of up to 6,500,000 pixels
 - Max loading capacity of a single Ethernet port to meet or exceed 6,500,000 pixels
 - 1 x HDMI 1.3 for Monitoring or Video Output
 - 2 x 10G Optical Fiber Ports
- c) Control
 - 1 x Ethernet
 - 1 x USB 2.0
 - 1 x Light Sensor
 - 1 x Genlock (in and loop)

7) Swimming Pool Timing System (Swiss Timing/Omega System or equivalent)

- a) This section includes all swim timing-related equipment and MUST function as a complete timing system. Timing components shall include but not be limited to:
 - Omega Quantum Timer, or equiv. (qty. 1)
 - Deck plates (qty. 8) and all related wiring or On Deck 8-lane harness
 - Wall plate (qty.8) and all related wiring
 - 8-lane ODB harness box (if in deck System)
 - Touchpads (qty. 8 + 2 spares required)
 - Touchpad caddie which holds up to 10 (qty. 1)
 - StartTime V Start System with speakers (qty. 1), cabling, and microphone
 - All needed cabling and connections to deliver a complete and functioning system.
 - OSB 11 or OSB 12 with Relay Break Detection (RBD) (qty. 1)

b) Quality Assurance

- All work of this section shall be performed by the Swimming Pool Contractor or Sub-Contractor in conjunction and oversight by United Sports Services.
- The Swimming Pool Contractor/Subcontractor for work included in this section shall have been successfully engaged in the swimming pool timing equipment business for at least five (5) years immediately prior to the commencement of this work. This Contractor shall provide a satisfactory record of workmanship that meets with the approval of the Client's Representative.
- Only trained and experienced workers familiar with the materials and methods specified in this section will be used.
- There shall always be at least one person present during this phase of work who shall be thoroughly familiar with the materials and methods specified and direct all work performed under this specification.
- DELIVERY, STORAGE, AND HANDLING
 - Deliver materials to the Project site in original unopened containers or bundles with labels indicating the manufacturer, product name, and material designation.
 - Store and handle materials per the manufacturer's recommendations to prevent deterioration or damage.

c) Project Conditions

- Manufacturers proposing to submit a quotation for the electronic timing (and scoreboard system) must confirm that all embedded items are compatible with the installation of their respective systems.
- Manufacturers shall review the construction documents and notify the architect 10 days prior to the bid date of any conflicts or additions to the work of other subcontractors to ensure the proper installation of their system.

d) System Training

- Manufacturer or manufacturer's approved representative must provide system training to High School personnel after construction at no additional cost to the High School. The Pool Contractor shall include this cost within the base bid proposal.

e) Products – Decking Mounting (if In-Deck System)

- The swimming pool contractor shall provide and install deck plates (8 required) to permit plug-in connections for touch pads, 3 backup buttons, electronic relay break detection, and a smart speaker. Deck plates shall be mounted flush underneath the starting block to protect the connections.
- Deck plates with a recessed corrosion-resistant connector (qty.8) shall be provided and mounted flush with ceramic deck tile.
- Under-deck cabling must be connected in place and then potted with epoxy cement to prevent wire joint corrosion. Maintenance must utilize organic, non-toxic cleaners and lubricants.
- Recommended junction box: Carlon—Model #E989NNR-CAR with custom length or equivalent shall be used to mount the in-deck plate. Conduit shall be plumbed through housing to achieve a fully functioning system. Drain holes or pipes shall be installed in the bottom of each junction box to remove water that might seep into the system.

f) Products – Wall Plates (WLP-A)

- Wall plates (qty. 8) shall be provided and installed by Swimming Pool Contractor and shall be the termination point for connections between deck cables, timers, start system and other wall plates.
- The wall plate shall permit connections to be made to all components in the system. Screw connectors shall be used for start system integration to prevent accidental disconnection.
- The wall plate shall permit the connection of the start system, timing system, and scoreboard.
- The wall plate shall be 15" x 15" material, with all connection points labeled.
- The wall plate shall mount to a 12"x 12" x 6" junction box, flush with the finished wall, a minimum of 18" above the finished floor.
- The location of the wall plate shall be determined by the School at the time of Shop Drawings, but it is recommended it be installed in one of the offices adjacent to the long length of the lap pool. Conduit runs should be included based on this recommendation

g) Products – Timing System

- Omega Quantum Timer (qty. 1) shall be provided and installed by United Sports Services or a qualified installer.
- Timing system shall include the following components:
 - **Hardware:** 1 Omega Quantum Timer or equiv. & 1 Laptop computer HP ProBook 450 G1 or better
 - **Software:** Swimming software shall store lap times and split times, store an unlimited number of meets only limited by the size of the PC's hard drive, and have a race log with backup data.

h) Products – Touchpad System

- Touchpad system(s) for the Omega Quantum timing system or equiv. shall be provided and installed by Swimming
- Touchpad system shall include an 8-lane cable harness, one pushbutton per lane + two spare (qty 8)

i) Products – Touchpads

- Omega gutter hung touchpads (200 cm x 60 mm) as manufactured by Swiss Timing / Omega shall be provided and installed by United Sports Services.
- The pool contractor shall provide 10 touchpads in total (8 for use and 2 spares).
- Touchpads shall include:
 - Special-size Touchpad brackets are specifically designed to mount to the Rim flow gutter coping (the Gutter diagram and measurements must be fully coordinated by the Pool Contractor to achieve a successful installation).
 - Touchpad caddy (qty.1) for gutter-hung touchpads (holds up to ten touchpads).

j) Products – Start System

- Starttime V start system (qty.1) shall be provided and installed by the Swimming Pool Contractor. It shall be supplied with a wired microphone, volume control on each microphone input, external connections for additional strobe lights, LED battery indication light, AC/DC power capabilities and an external 360° strobe: tripod or tabletop options.
- The start system shall include the following components:
 - Portable tripod for the StartTime V start system.
 - 25' foot Start Cable.
 - 16-ohm individual block speaker (qty. 8 required).
 - Speaker mounting kit. (qty 1 per lane)

k) Products – Cabling

- Swimming Pool Contractor shall provide 25' interface cable from the wall plate to the Timing Console
- A cable for Starttime V to Wall plate 25' long shall be provided by Swimming Pool Contractor.

l) Products – Relay Break Detection (optional)

- Relay break detection (qty. 1) shall be provided and installed by Swimming Pool Contractor. RBD will be in the form of OSB 11 starting blocks or OSB 12 starting Platforms.

m) Products – Timing accessories (Each of these is optional)

- The following timing accessories shall be provided and installed by the Swimming Pool Contractor:
 - 65-watt speaker with 125' of cable for the StartTime V start system
 - Remote Flash for deaf and hard-of-hearing Swimmers
 - Flagpole Mount for StartTime V
 - Serial Printer for Quantum Timer
 - Streamline Scoreboard Interface Software
 - Streamline Webcasting Interface or Plugin

8) Video Board Scoring and Controls

- a) Device Control – Controllable by industry-standard scoreboard controllers or by the on-screen interface
- b) Remote Control – Built-in web server to control the interface remotely via tablet or laptop (not provided by awarded vendor)

9) Ad and Scoring Software to include:

- a) Template Based Layouts
- b) The ability for full or partial-screen video playback
- c) Advertising Zones – unlimited ad zones with rotating stills, animations and/or video
- d) Ad tracking – Comprehensive reports for ads
- e) Video Input capabilities – One or more live video feeds can be shown on the display
- f) Player profiles – Present formatted XML data images
- g) Dynamic Statistics Display – Display web-based stats dynamically from a variety of services

10) Mounting to existing

- a) Vendor is to provide design drawings for installing the new scoreboard system onto the existing masonry wall.
- b) The vendor is solely responsible for assembling, lifting, rigging, and permanently installing the new scoreboard on the existing masonry wall.
- c) The exact height of the LED display is TBD by the Customer.

11) Installation

- a) The vendor shall install all items per the attached responsibilities checklist. Attachment B

12) Maintenance Access and Spare Parts

- a) The video board will be maintained from the front of the video system. The vendor's proposal should include a maintenance program with at least 3% spare parts and detailed information regarding service accessibility of all display components.

13) Scoreboard Power

- a) The vendor will provide power specifications to Kirkwood High School for the full capacity needed.
- b) The customer will verify and provide appropriate power to the video display.
- c) If a new electrical panel or sub-panel is required, all costs and labor associated with such will be the customer's responsibility.

14) Video Scoreboard Data Communications

- a) The customer is to provide and install all required Cat6 data drops as specified by the awarded vendor.
- b) The customer is to provide data terminations as specified by the awarded vendor.

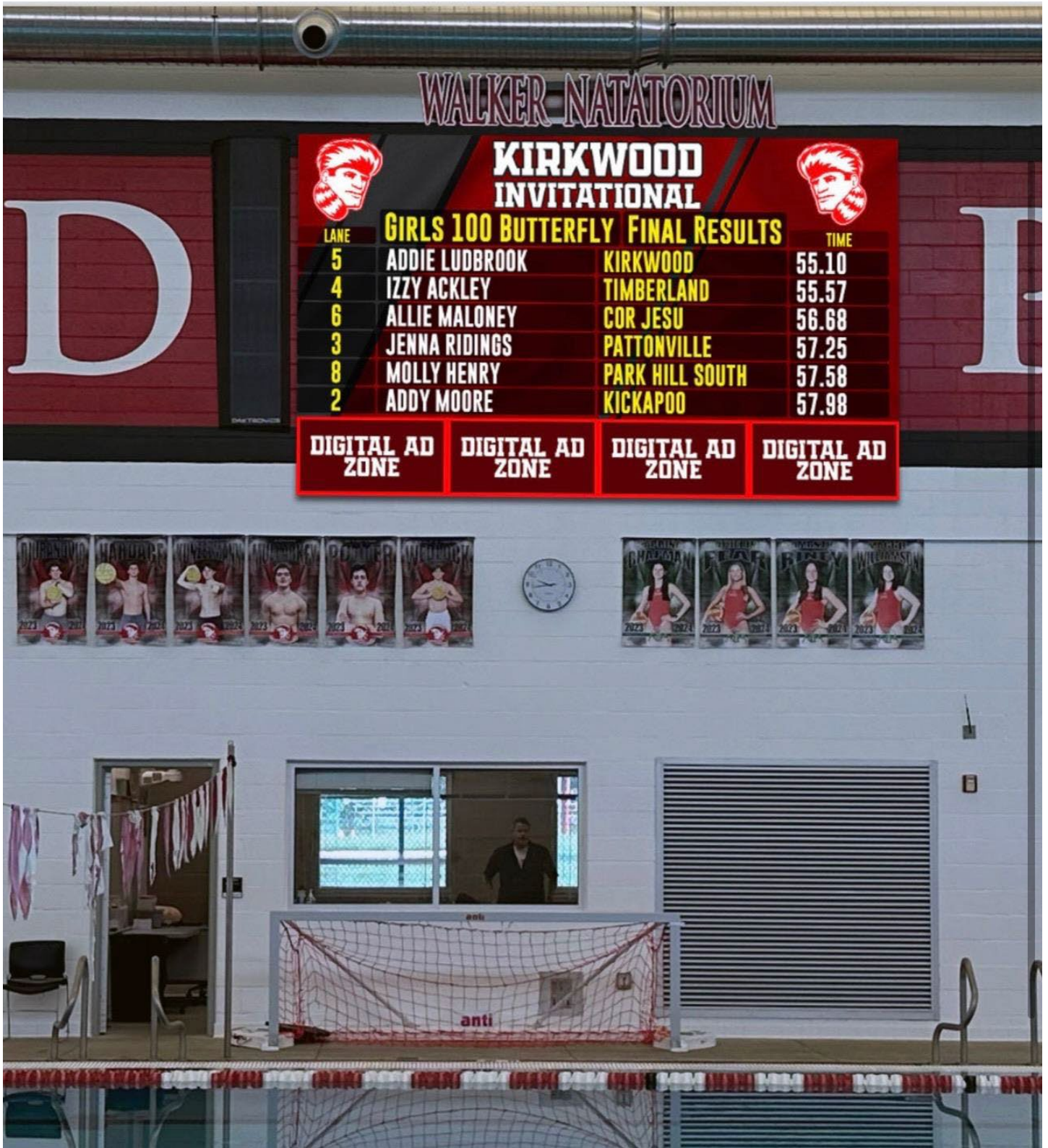
15) Project Management and Training

- a) The vendor is to provide full onsite training on system operations and complete project management for the entire project.

16) Delivery Date

- a) Unless otherwise specified herein, all items shall be delivered and 100% operational no later than 10 weeks from the award of the contract.
- b) See Attachment C – Schedule of Events to be filled out by each vendor.

ATTACHMENT A – CONCEPTUAL RENDERING



ATTACHMENT B – SCOPE OF WORK / RESPONSIBILITIES CHECKLIST

Responsibility Checklist:

Vendor	KSD	TBD	N/A	Installation Responsibility
X				Assign an in-house Project Manager to coordinate the installation with the Owner and/or Construction Manager.
X				Coordinate with the Owner all factors of the Design/Build contract, including the scheduling, submittal process, manufacturing, construction, on-site subcontracting, system integration and field-testing/commissioning.
X				Complete a site survey to gather data pertinent to the system installation
X				Provide certificate of insurance upon receipt of award of contract.
X				Complete a set of shop drawings for the screen installation, power and data risers and control system/control room
X				Complete drawings showing the design of all equipment
	X			Approve the operational overview of the system capabilities and functions.
	X			Approval of all shop drawings and controller locations.
X				Provide applicable engineered structural certification and stamped drawings of the mounting solution.
	X			Secure all necessary permits.
X				Provide an installation supervisor onsite, during the installation process
X				Provide factory trained technicians for the installation process as needed
X				Provide all necessary labor, materials, and appropriate insurance coverage for assembly and lifting.
	X			Provide man lift access to the LED Screen location.
	X			Provide access to facility per installation schedule
	X			Provide a secure, work-free area during systems installation, including electrical service and lighting.
X				Provide freight to site, unloading, and handling of proposed LED Screen equipment.
X				Lift and attach each new LED Screen section into place per approved installation drawings.
X				Remove and reinstall wall mounted speaker
X				Provide site clean-up and disposal of debris caused by work, including shipping material
X				Provide all necessary riser diagrams showing systems power requirements and signal cable requirements.
	X			Provide dedicated power to LED screen location
	X			Provide power for the computer equipment in the rack control room
	X			Provide and install low voltage wiring (cat6) and conduit (if required) from the rack location to the back of the new videoboard as well as required data runs from the rack location to the display control location, including final terminations on each end
	X			Terminate new data/signal cable at the controller location and at all new LED Screen equipment.
X				Fully test the operational system for the facility
X				Train facility personnel on operation and maintenance of equipment. Provide qualified staff for maintenance and operator training sessions. (Owner)

ATTACHMENT C
SCHEDULE OF EVENTS
(To Be Filled in By Vendor with best available timeline)

Project Start Date	
Installation of All New Equipment Date	
System Testing, Training and Completion Date	

Additional Notes:

Pricing should include all equipment and installation.
Pricing should include removal of existing equipment.
Provide warranty information, if any, for all items.
If an extended warranty is available, provide this option with its cost.

EVALUATION

The contract will be awarded to the firm whose offer, conforming to the RFP, is determined to be most advantageous to the District, price and other factors considered. The District reserves the right to act as sole and undisputed judge of what is most advantageous to the District.

The District reserves the right to reject a proposal for any reason; to accept any proposal that it deems in its best interest; or to reject all proposals and solicit new proposals. The District further reserves the right to waive any technicalities and/or requirements in this specification.

The District reserves the right to negotiate with selected qualified vendor(s).

The District is a tax-exempt entity pursuant to Chapter 144, RSMO. A copy of the official Missouri Tax exemption certificate will be provided to the successful vendor.

The District may request lien waivers at any time from subcontractors and/or material suppliers of the vendor.

The Kirkwood School District has adopted a tobacco free policy. The use of tobacco products is prohibited in all District facilities and grounds.

Sealed proposals will be received until 11:00 a.m. CDT, Tuesday, May 6, 2025, at which time the proposals will be publicly opened and read to verify that all proposal requirements have been met.

The opening will take place at the Kirkwood School District Administrative Services Center, Finance Office – Suite 260, 1099 Milwaukee Street, Kirkwood, Missouri.

Please indicate on the outside face of the sealed envelope: “KHS Natatorium Video Board”.

Three (3) hard copies of the proposal should be submitted to:

Kirkwood School District
Attn: Mike Romay
1099 Milwaukee Street, Suite 260
Kirkwood, MO 63122

The Kirkwood School District reserves the right to reject any or all bids and to waive any irregularities therein, and to accept the bid in whole or in parts that is most advantageous to the Kirkwood School District.

Warranty Information: _____

References:

1) Name: _____ E-mail: _____

Company: _____ Contact #: _____

2) Name: _____ E-mail: _____

Company: _____ Contact #: _____

3) Name: _____ E-mail: _____

Company: _____ Contact #: _____