

June 25, 2020

### ADDENDUM NO. 2

TO THE CONTRACT DOCUMENTS

#### **FOR**

ARROYO VALLEY HIGH SCHOOL - ATHLETIC FIELD IMPROVEMENTS

#### FOR THE

SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT 777 North F Street San Bernardino, CA 92410

DSA No. 04-118542 File No. 36-H7 RCA Job No. 1-78-15

#### **NOTICE TO BIDDERS**

This Addendum forms a part of the Contract and modifies the original documents DSA Approved on May 5, 2020. It is intended that all work affected by the following modifications shall conform with related provisions and general conditions of the contract of the original drawings and specifications. Modify the following items wherever appearing in any drawing or sections of the specifications. Acknowledge receipt of Addendum No. 1 in the space provided on the Bid Form. Failure to do so may subject bidder to disqualification.

#### **CHANGES TO THE SPECIFICATIONS**

- Item No. 2.1 Reference New Section 11 68 43.13 Football Scoreboard:
  - 2.1.1 Add attached new Section 11 68 43.13 in its entirety.

#### **CHANGES TO THE DRAWINGS**

- Item No. 2.2 Reference Sheet AS-1.0:
  - 2.2.1 Extents of concrete clarified at batting cage per attached Sketch ASK-2.07.
- Item No. 2.3 Reference Sheet AS-1.1:
  - 2.3.1 Keynotes revised per attached Sketch ASK-2.01.
  - 2.3.2 New concrete extents clarified at batting cage per attached Sketch ASK-2.04.
  - 2.3.3 Detail callout and Keynote added at restroom per attached Sketch ASK-2.05.
  - 2.3.4 Replace Detail 2 per attached Sketch ASK-2.06.
- Item No. 2.5 Reference Sheet AS-1.3:
  - 2.5.1 Add dimensions to Detail 19 enlarged proposed plan per attached Sketch ASK-2.02.
  - 2.5.2 Revised Keynotes 2.73, 2.74, 2.83 and 2.84 per attached Sketch ASK-2.03.

ATTACHMENTS

Specifications11 68 43.13SketchesASK-2.01 thru ASK-2.07

END OF ADDENDUM NO. 2

Roger Clarke, Principal

#C-21340

### SECTION 11 68 43.13 FOOTBALL SCOREBOARD

#### **PART 1 GENERAL**

#### 101 SECTION INCLUDES

A. Single-sided LED football scoreboard

#### 102 REFERENCES

- A. American Society for Testing and Materials (ASTM) Publications:
  - 1. ASTM B221 Aluminum-Alloy Extruded Bar, Rod, Wire, Shape, and Tube.
- B. National Electrical Code.
- C. Federal Communications Commission, Part 15 Rules & Regulations.
- D. UL and C-UL Standard for Electric Signs

#### 1.03 SUBMITTALS

- A. Provide in accordance with Section 01 33 00 Submittal Procedures:
  - 1. To minimize the environmental impact of multiple paper copies, product installation prints, instructions and diagrams of manufacturer will be submitted in a paperless fashion. The end user shall receive all pertinent hard-copy documentation at delivery.
  - 2. Product data for scoreboards, controls, and accessories shall include descriptions of control functions etc.
  - 3. Installation drawings, face layout, dimensions, construction, electrical wiring diagrams, and method of anchorage. (Paperless when applicable).
  - 4. Copy of guarantee required by Paragraph 1.5 for review by Architect. (Paperless when applicable).
  - 5. Manufacturer's installation instructions. (Paperless when applicable).
  - 6. Finish Samples.

#### 1.04 DELIVERY, STORAGE, AND HANDLING

- A. Product delivered on site.
- B. Scoreboard and equipment to be housed in a clean, dry environment.

#### 1.05 PROJECT CONDITIONS

- A. Environmental limitations: Do not install scoreboard equipment until mounting structure is secure and concrete has ample time to cure.
- B. Field measurements: Verify position and elevation of structure and its layout for scoreboard equipment. Verify dimensions by field measurements.
- C. Verify mounting structure is capable of supporting the scoreboard's weight and windload in addition to the auxiliary equipment.
- D. Installation may proceed within acceptable weather conditions.

#### 106 QUALITY ASSURANCE

- A. Source limitation: All components including scoreboard, control center, control cable, and other accessories and installation hardware shall be products of a single manufacturer.
- B. Manufacturer qualifications: Company specializing in manufacturing electronic scoreboards with 10 years minimum successful world-wide experience.
- C. Scoreboards shall be designed for exterior installation with weatherproof housing and optical isolation interface to reduce potential damage from electrical storms.

- D. Should service be necessary, specialized personnel shall not be required. Modular "plug and play" components will be housed in an internal protective enclosure.
- E. Scoreboards and other electrical components shall be certified for use in United States and Canada by Underwriter Laboratories, (UL) Inc. and shall bear either UL or C-UL label only.
- F. Scoreboards and other electrical components shall be electrically grounded in accordance with National Electrical Code (NEC), Article 600.

#### 107 WARRANTY/SERVICE PLAN

- A. Provide 5 years of parts coverage.
- B. Provide toll-free service coordination.
- C. Provide technical phone support during manufacturer's business hours.

#### **PART 2 - PRODUCTS**

#### 2.01 MANUFACTURER

- A. Basis of Design: Nevco Scoreboard Company: www.nevco.com.
- B. Other Acceptable Manufacturers:
  - 1. Substitutions: See Section 01 60 00 Product Requirements. Substitution of this product is subject to DSA review fees payable by contractor.

#### 2.02 MATERIALS

- A. Aluminum faces and perimeter frame: Fabricated from .050 minimum thickness, ASTM B221 aluminum sheet with reinforcement and slotted mounting brackets top and bottom.
- B. Finish: Acrylic polyurethane paint. Color as selected by Architect from manufacturer's standard range No. 76 Print Black as provided by Nevco, Inc.. [PMS Color No. Black 2 2x]
  - 2. Provide [metallic gold/white] striping to separate scoreboard features.
- C. Brackets: Integrated universal bracket system.
- D. Fasteners, anchors, and other exposed hardware: Corrosion resistant.
- E. Electronics: Low voltage, solid state, 2-wire cable, multiplex system, quartz crystal controlled.
- F. Provide gold plated electrical contacts on interconnecting wiring to reduce corrosion and improve reliability.
- G. Provide optical communication interface to reduce threat of damage from electrical storms and ESD.
- H. LED (light emitting diode) units: Seven-bar, segmented digits with protective aluminum cover, rated typical life 100,000 hours and be designed to provide excellent visibility from all angles and sides.
- I. Junction boxes where required: Sheet metal box and cover,  $4-1/2 \times 2-1/8 \times 2-1/8$  inches min. complying with NEMA standards.
- J. Control cable: UL listed, 2-wire, RG-58/U, coaxial cable, 1/4 inch diameter.

#### 2.03 SCOREBOARD

- A. Type: Exterior, large-numbered, electronic Intelligent Caption Multi-sport scoreboard with integral horn and LED displays for 1/1000 sec. timing, scores and four digit pairs for per team features listed below. Model 7685 as manufactured by Nevco, Inc.
  - 1. Size: 24 feet long x 8 feet high x 8 inches deep.

- 2. Approximate weight: 670 pounds
- 3. All electronic Caption Plates: two ea. 8x48, four ea. 8x32, and two ea. 8x16 16mm matrix red, amber, or translucent white LED displays.
  - a. Displaying per sport: "HAWKS", "GUESTS", "BALL ON" "DOWN" "YTG" "QTR" "SAVES", "SHOTS", "HALF", "EVENT", "HEAT", "LANE", "PER"
- 4. High intensity red LED displays:
  - a. 24 inches high digits: All digits except:
  - b. 18 inches high digits: "TOL, PRD or HLF"
- 5. Power requirement:
  - a. POWER (Red/Amber): 120 VAC, 7.0 Amps, 50/60 Hz. / 240 VAC, 3.5 Amps, 50/60 Hz. Requires earth ground.

#### 2.04 CONTROL CENTER

- A. Type: Wireless, microprocessor based operator's control center designed to operate different models of scoreboard by interchange of keyboard overlay; Model MPC as manufactured by Nevco Inc. Console will operate earlier scoreboards from Nevco Inc.
  - 1. Console: High impact, break-resistant black plastic with improved UV resistance. 11 x 9-1/2 x 4-1/8 inches
  - 2. Features:
    - a. Provide with LED displays, lithium cell battery backup to maintain scoreboard memory and time of day, self test mode, power on-off switch, alternate time control, and multiple scoreboard operation.
    - b. Split and raised 40 key soft touch keyboard.
    - c. Keyboard shall be spill resistant.
    - d. Internal beeper acknowledging each entry
    - e. System Profiles feature set all parameters of operation including choice of controlled accessories and scoreboards.
    - f. Colorful graphic rich keyboard overlays for scoreboard or accessory.
    - g. Remote hand-held main time switch with programmable integral horn button.
    - h. 25 feet control cable with connectors.
    - i. Timer features: Time of day display, multiple time out timers with warning, interval horn, up-count auto stop with horn, 1/10th second display during last minute, changeable horn tone on scoreboards with the feature.
    - i. Segment timing for practice and workout.
    - k. Dimmer control for scoreboard.
    - MPC features shall be accessed through yes/no abbreviated questions in a drop down menu format.
    - m. Multiple receiver management shall be accomplished through direct keyboard input.
    - n. Electronic Team Names and automatic Electronic Caption Plates shall be controlled from MPC control without need to change overlays.
  - 3. Power requirements: 120 volts, 12 watts, 50/60 Hz.
  - 4. Provide option of battery supply for control operation if utility power not available.

- 5. Provide carrying case for control center, cable, and hand-held switch; Model CC-3 as manufactured by Nevco Inc.
  - a. Size: 18-1/2 x 14-1/2 x 6 inches
  - b. Construction: Double wall, high density black polyethylene with padded interior, mechanical latches, and hinges.
- 6. Receiver WHEN ORDERED SEPARATELY:
  - a. Sturdy impact resistant construction, 6 x 4 x 1.5 inches
  - b. Integrated antenna, mounted flush in scoreboard face. Protruding antennas shall not be used.
- 7. Maximum range: 1,000 feet from control center to receiver.
- 8. Receiver shall require no additional source of power or separate control cable.

#### 2.05 MATERIALS

- A. Speakers
  - 1. Frequency response:
    - a. (-10DB@1M): 35Hz to 22Khz
    - b. (+/-3db@1M): 48Hz to 18Khz
  - 2. Max SPL @1m: 137dB
  - 3. Max. System Coverage: 40°V x 100°H
  - 4. Audio input: Includes 12 channel mixer with 8 high-gain balanced inputs and 2 stereo line inputs
  - 5. Power input: (2) 120VAC 15 Amp inputs
  - 6. Includes automatically sequenced power to properly bring the amplifiers up and down avoiding risk of damage to the speakers
  - 7. Power input is required inside the control room (no power is required at the speaker box)
- B. Subwoofers
  - 1. Dual 15"
  - 2. Ported Cabinet for optimal LF tuning
  - 3. Independent Amplifier driven
- C. Custom Designed Speaker Cabinet
  - 1. 9'W x 48"H x 42"D
  - 2. Lightweight 0.050" aluminum cabinet construction
  - 3. Includes closed cell outdoor Rated acoustical foam
  - 4. Total Cabinet Weight (speakers included): 710lbs
- D. Control Equipment
  - 1. 14 space Rack 33.75"H x 23"W x 23"D, with wheels
  - 2. Crown XTI amplifiers
  - 3. Power Sequencer
  - 4. 12-Channel Mixer
  - 5. Blank Space cover panels
- E. User Sound system accessory packages consisting of one or more of the following
  - 1. Economy Wireless Microphone and Receiver package
  - 2. Shure Single channel wireless microphone and receiver
  - 3. Shure Headset, body pack wireless transmitter and mute switch
  - 4. Shure Dual Channel Wireless receiver
  - 5. Shure Paddle antenna with connecting cables and mounting hardware
  - 6. Williams Sound Assisted Listening System with 4 headset receivers

#### 2.06 CABLE CONTORL/WIRING

- A. 10 gauge stranded speaker wire is to be installed between the rack and speaker box; 6 conductors. Wire is ordered separately by the foot, maximum 650ft.
- B. 8 gauge stranded speaker wire is to be installed between the rack and speaker box; 6 conductors. Wire is ordered separately by the foot, maximum 1000ft.
- C. Neutrik Cables

#### **PART 3 - EXECUTION**

#### 3.01 EXAMINATION

A. Verify that mounting structure is ready to receive scoreboard. Verify that placement of conduit and junction boxes are as specified and indicated in plans and shop drawings. Verify concrete has cured adequately according to specifications.

#### 3.02 PEPARATION

- Verify exact Stadium Pro™ 1000 and control center quantities and junction box locations with Architect.
- B. Coordinate requirements for electrical power, wall blocking, auxiliary framing and supports, suspension cables, and other components to be provided under other Specification Sections to ensure adequate provisions are made for complete, functional installation of scoreboards. [Ensure that building roof structure has been designed for loads of suspended scoreboards.]
- C. Coordinate Stadium Pro™ 1000 electrical requirements to ensure proper power source, conduit, wiring, and boxes are provided. Prior to installation, verify type and location of power supply.

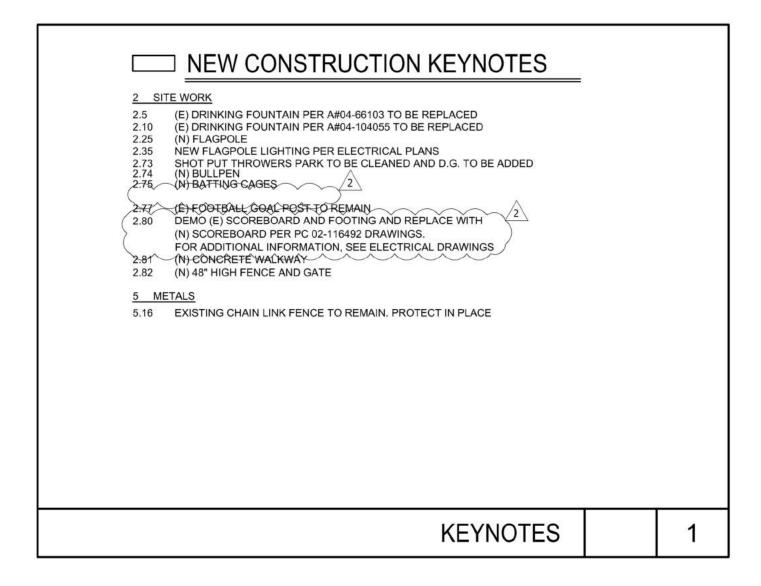
#### 3.03 INSTALLATION

- A. All power and control cables to scoreboards and displays will be routed in conduit. Power to the scoreboards/displays as well as raceways shown on electrical plans by the Electrical Contractor. Scoreboard control wiring including conduit will be the responsibility of the contractor assigned the scoreboard equipment.
- B. Install scoreboards and exterior displays to beams in location detailed and in accordance with manufacturer's instructions. Verify unit is plumb and level.
- C. Install Stadium Pro™ 1000 sound system and accessories in accordance with manufacturer's instructions and approved installation drawings.
- D. Before installation, field test Stadium Pro™ 1000 and accessories for operating functions. Ensure that sound system accurately perform all operations. Correct deficiencies.
- E. Rigidly mount equipment and loudspeaker enclosures level and plumb with brackets and fasteners.
- F. Clean exposed surfaces.
- G. Protect speaker cabinet finishes from other construction operations.

#### 3.04 INSTALLATION—CONTROL CENTER

- A. Provide boxes, cover plates and jacks in locations per plans.
- B. Test connect control unit to all jacks and check for proper operation of control unit, scoreboard and all features. Leave control unit in carrying case and other loose accessories with owner's designated representative.
- C. Verify earth ground does not exceed 15 ohms.

#### END OF SECTION



**KEYNOTES/ REFER TO DETAIL 1/AS-1.1** 

N.T.S

### ARROYO VALLEY HIGH SCHOOL

ATHLETIC FIELD IMPROVEMENTS
SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT

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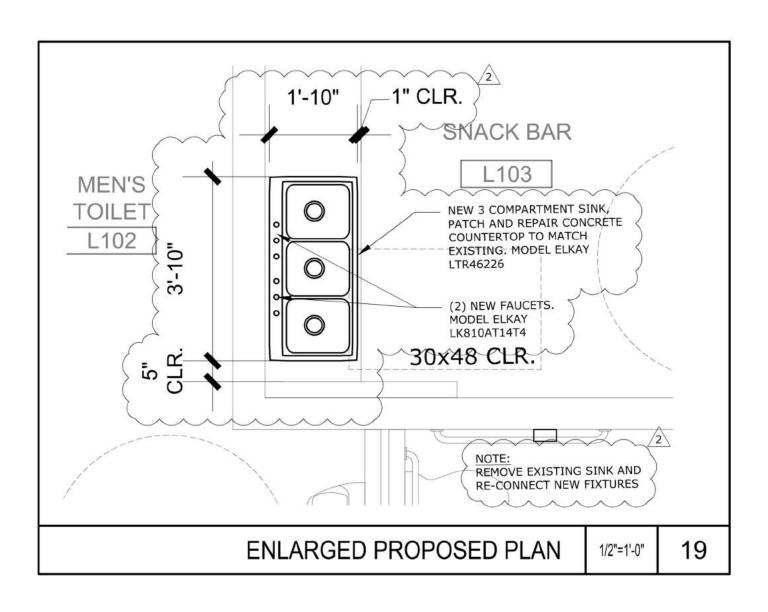
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**ENLARGED PROPOSED PLAN/ REFER TO DETAIL 19/AS-1.3** 

1/2" = 1'-0"

# ARROYO VALLEY HIGH SCHOOL

ATHLETIC FIELD IMPROVEMENTS
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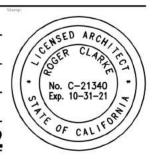
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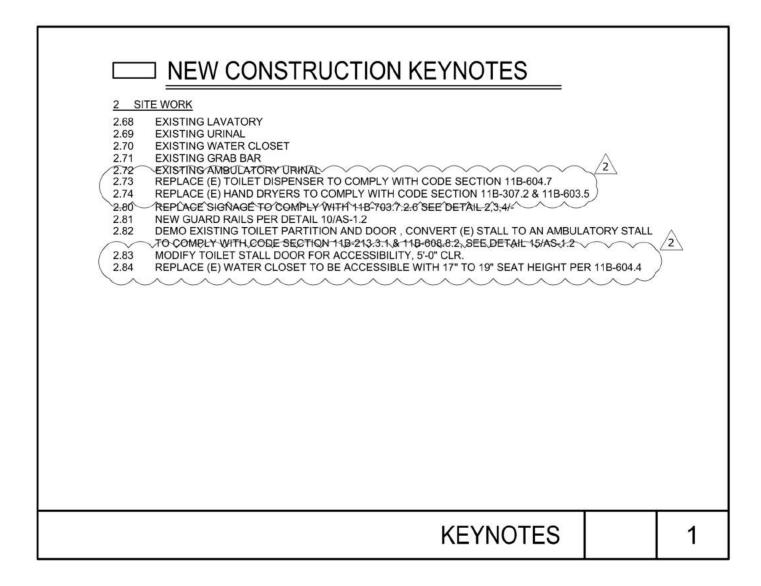
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**KEYNOTES/ REFER TO DETAIL 1/AS-1.3** 

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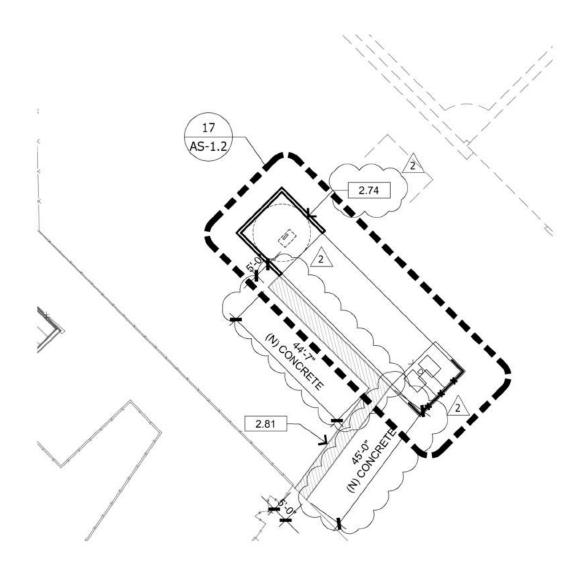
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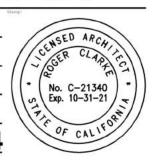
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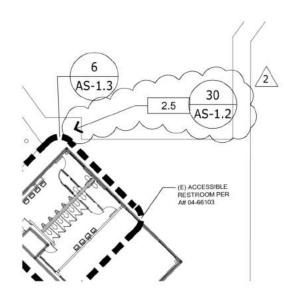
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# **ARROYO VALLEY HIGH SCHOOL**

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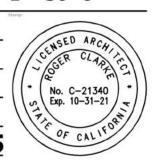
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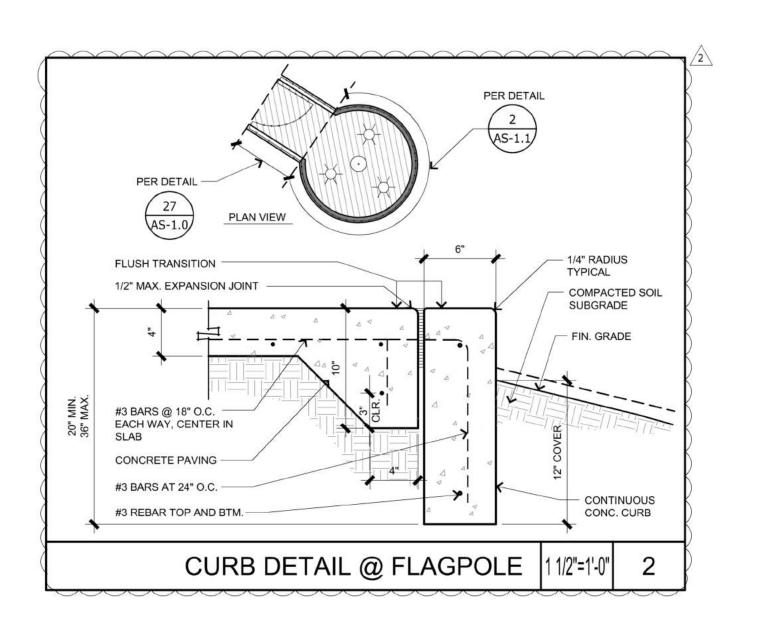
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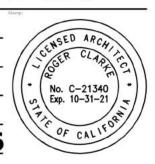
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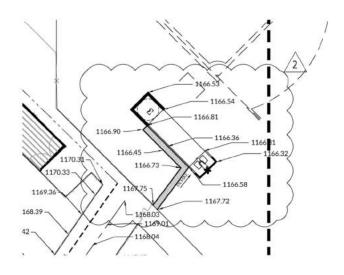
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