

## **SECTION 114800**

### **SCOREBOARDS**

#### **PART 1 GENERAL**

##### **1.1 SECTION INCLUDES**

- A. Sports Scoreboards and Control Systems.
- B. Message Displays and Control Systems.
- C. Identification Signage.

##### **1.2 RELATED SECTIONS**

- A. Section 033000: Cast-in-Place Concrete.
- B. Section 061000: Rough Carpentry.
- C. Section 260100: Basic Electrical Materials and Methods.

##### **1.3 REFERENCES**

- A. ASTM A 36 - Standard Specification for Carbon Structural Steel; 2005.
- B. ASTM A 53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless; 2005.
- C. ASTM A 500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2003.
- D. ASTM C 33 - Standard Specification for Concrete Aggregates; 2003
- E. ASTM C 150 - Standard Specification for Portland Cement; 2005.

##### **1.4 PERFORMANCE REQUIREMENTS**

- A. Provide a scoreboard ETL or ETL-C tested to UL standard.

##### **1.5 SUBMITTALS**

- A. Submit under provisions of PRCS Specifications, Project Management Section 2.04.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Shop Drawings: Submit plan, section, elevation, and perspective view details as necessary to depict proper field fabrication and installation, and provide details on connections, terminations and joints.

- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors.

#### 1.6 QUALITY ASSURANCE

- A. Confirm all specifications with the factory prior to order.
- B. Single Source Responsibility: Single manufacturer shall provide all components required to install the products specified in this section.
- C. Manufacturers Qualifications: Manufacturers must have five years of experience in the manufacturing of scoreboards and message displays of the type specified.
- D. Installer Qualifications: Factory-trained and experienced in the proper installation of scoreboards and message displays.
- E. Welders: AWS certified.

#### 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Physical inspection of items required at time of delivery; any shipping damages must be reported at delivery prior to storage.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

#### 1.8 PROJECT CONDITIONS

- A. Work shall commence only after associated trade work has been sufficiently completed and will not interfere with the installation of the equipment specified in this section.
- B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- C. Do not install when threatening weather conditions exist.
- D. Owner shall furnish soil tests as necessary to determine suitability for installation.
- E. Owner shall clearly mark all underground utilities and notify the appropriate parties prior to work commencement.

#### 1.9 WARRANTY

- A. Provide manufacturer's standard warranty affirming that products specified in this section shall be free from defects in material and workmanship under normal use provided they are installed in accordance with all current application requirements.
  - 1. Duration: Five (5) years.

#### 1.10 EXTRA MATERIALS

- A. Contractor is responsible for providing all hardware, sealants, welding materials and other secondary installation products required for installation. Architect shall approve each product before or during the pre-installation conference.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide the basis of design or alternative products from one of the manufactures listed below.

1. ~~Acceptable Manufacturer~~Basis of Design: Fair-Play Scoreboards, Trans-Lux Fair Play, which is located at: 1700 Delaware Ave. ; Des Moines, IA 50317; Toll Free Tel: 800-247-0265; ~~Tel: 515-265-5305; Fax: 515-265-3364;~~ Email: request info; Web: www.fair-play.com

2. Daktronics; 800-325-8766

3. Eversand Incorporated; 315-736-3967

4. Spectrum Corporation; 800-392-5050

- A-B. Requests for substitutions will be considered in accordance with provisions of PRCS Specifications, Project Management Section 2.06.

### 2.2 SOCCER SCOREBOARDS

- A. Full sized ~~soccer~~ scoreboard featuring time, total score, ~~shots on goal~~ and half.
1. Model: ~~SCFB-8114-2-8114-2.~~
    - a. Dimensions: 14 feet wide by 5 feet 05 inches tall (4267mm x ~~1524~~654mm).
    - b. ~~Clock and Score Digit Size~~Depth: 108 inches (~~254~~457mm).
    - c. ~~Other Digit Size: 15 inches (381mm).~~
    - d. ~~Power Voltage: 120 VAC~~Usage: 273 Watts.
    - e. Hertz: 60
    - f. Watts: 189
    - g. Amps: 2
    - h. Phase: 2
    - i. Light: LED lights; Color Yellow
    - j. Housing: Water resistant Aluminum construction
    - k. 4-level control console display brightness adjustment.
    - k. 9-segment digits
    - ~~d-l.~~ Scoreboard Color: Black with White lettering
    - ~~e-m.~~ Can Wireless Controller be used with MP-50, MP-52, MP-70 or MP-73 Controllers
  2. Model: ~~SC-8120-2. (model SC-8220-2 adds corner kick but must have the MP-70 Controller)~~
    - a. ~~Dimensions: 20 feet wide by 7 feet 6 inches tall (6096mm x 2286mm).~~
    - b. ~~Clock and Score Digit Size: 24 inches (610mm).~~
    - c. ~~Other Digit Size: 18 inches (457mm).~~
    - d. ~~Power Usage: 418 Watts.~~
    - e. ~~Requires MP-70 or MP-73 Controller~~
  3. Model: ~~SC-8124-2.~~
    - a. ~~Saves and C/K Statistics~~

- b. ~~Dimensions: 24 feet wide by 10 feet tall (7315mm x 3048mm).~~
- e. ~~Clock and Score Digit Size: 24 inches (610mm).~~
- d. ~~Other Digit Size: 18 inches (457mm).~~
- e. ~~Power Usage: 471 Watts.~~
- f. ~~Requires MP-70 or MP-73 Controller~~
- 4. ~~Model: SC-8124LA-2. (in Soccer mode only one row of info is active and it tracks shots, corner kicks and saves)~~
  - a. ~~Captions modified for lacrosse with player / penalty instead of shots on goal.~~
  - b. ~~Dimensions: 24 feet wide by 10 feet tall (7315mm x 3048mm).~~
  - e. ~~Clock and Score Digit Size: 24 inches (610mm).~~
  - d. ~~Other Digit Size: 18 inches (457mm).~~
  - e. ~~Power Usage: 687 Watts.~~
  - f. ~~Requires MP-70 or MP-73 Controller.~~

## 2.3 MULTIPURPOSE SCOREBOARDS (Baseball or Softball)

- A. ~~Large~~Full sized, versatile scoreboard designed for multiple activity scoring. Home / visitor scoring style, inning / period ~~and clock.~~
- 1. Model: BAMP-710014-2.
  - a. Minute / second clock.
  - b. 9 additional indicator lights (3-2-2-2), with adjustable captioning.
  - e-a. Dimensions: 14 feet wide by 5 feet 05 inches tall (4267mm x 165244mm).
  - d-b. Clock and Score Depth-Digit Size: 108 inches (254457mm).
  - c. Other Digit Size: 15 inches (381mm). Voltage: 120
  - d. Hertz: 60
  - e. Watts: 102
  - f. Amps: 1
  - g. Phase: 1
  - e-h. Lighting:
    - i. Light: LED lights; Color Yellow
    - j. Housing: Water Resistant Aluminum Construction
    - k. 4-level control console display brightness adjustment.
    - l. 9-segment digits
    - m. 9 additional indicator lights (3-2-2-2), with adjustable captioning.
    - n. Scoreboard Color: Black with White Lettering
    - o. Wireless Controller: MP-73 Controllers

2.4 ~~Power Usage: 224 Watts.~~

## 2.5 ~~SCOREBOARD ACCESSORIES~~

- A. ~~Goal and Possession Indicators.~~
  - 1. ~~Model GL-612 Single lamp goal indicator.~~
  - 2. ~~Model: 4505 Directional arrow possession indicator.~~
- B. ~~Locker Room Clock.~~
  - 1. ~~Model: CL-1450-4 12 inch digit (305mm) clock.~~
  - 2. ~~Model: CL-1451-4 6 inch digit (102mm) clock.~~

~~C. Timers and Speed Indicators.~~

- ~~1. Model: T-830-2 30 inch digit (762mm) 2 digit field timer.~~
- ~~2. Model: SEG-815 15 inch digit (381mm) 2 digit segment timer.~~
- ~~3. Model: QP-1000-2 24 inch digit (762mm) 2 digit pitch speed indicator.~~
- ~~4. Model: QP-1010-2 24 inch digit (762mm) 3 digit pitch speed indicator.~~

2.6-2.4

~~SCOREBOARD CONTROLS~~ SCOREBOARD CONTROLS

A. Scoreboard Controllers.

- ~~1. Model: MP-50 Scoreboard Control.~~
- ~~2. Model: MP-52 Scoreboard Control.~~
- ~~3. Model: MP-70 Scoreboard Control.~~
- 4.1. Model: MP-73 Scoreboard Control.
- 5.2. Power Source: 120V AC.
- 6.3. Power Source: Battery.
- 7.4. Wireless Connectivity.

~~2.7 IDENTIFICATION SIGNAGE~~

~~A. Identification or sponsor signage:~~

- ~~1. Sign Type: Full Depth.~~
- ~~2. Sign Type: Pendant.~~
- ~~3. Sign Type: Rear Illuminated.~~
- ~~4. Sign Type: Domed.~~
- ~~5. Sign Type: Custom.~~
- ~~6. Power Usage: \_\_\_\_\_ Watts.~~
- ~~7. Length: \_\_\_\_\_.~~
- ~~8. Width: \_\_\_\_\_.~~
- ~~9. Depth: \_\_\_\_\_.~~

~~2.8 FINISH~~

~~A. Cabinet Color: \_\_\_\_\_.~~

~~B. Vinyl Trim Tape Color: \_\_\_\_\_.~~

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. Examine all soils and footings to ensure solid and secure footings.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Install concrete footings at all locations at all locations noted on the drawings.
  1. No chlorides shall be added to the concrete mixture.
  2. Footings shall have a minimum 3000 psi (2.1kgf/ square mm) compressive strength after 28 days.

- C. Grade surrounding landscape prior to installation of scoreboards.
- D. Prepare surfaces using the methods recommended to achieve the best result based on project conditions.

### 3.3 INSTALLATION

- A. Follow manufacturer's current application requirements for installation under conditions specific to the project.
- B. Install all structural steel components in accordance with manufacturers application instructions where specified on the drawings.
  - 1. All structural steel components shall be in accordance with ASTM A36 or A572.
  - 2. All Tube ends shall be covered with light gauge end caps.
  - 3. All new steel shall be primed and painted with a color approved by the architect.
  - 4. Weld steel using E70XX electrodes. Prime and paint all welds following installation.
  - 5. Unless otherwise specified in the drawings, all welds shall be continuous 1/4" (6mm) fillet welds.
- C. Install all electrical equipment in accordance with all federal, state and local building codes.
- D. Where manufacturer's requirements and building codes are in direct conflict, the more restrictive method of application shall prevail.

### 3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

**END OF SECTION 114800**