DATE: February 28, 2020

PROJECT: Kurtz Wrestling Room Renovation

PROJECT NUMBER: FRK-363O01

OWNER: Des Moines Public Schools

OWNER BID NUMBER: B8444

ARCHITECT/ENGINEER: frk architects + engineers
2600 Westown Parkway, Suite 340
West Des Moines, IA 50266
Telephone: 515-223-5100
Fax: 515-223-7226

M/E CONSULTANT: ALVINE ENGINEERING
400 E Court Ave. #130
Des Moines, IA 50309
Telephone: 515-243-0569

TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and is issued prior to receiving Bids for Project. Addendum modifies the Bidding Documents dated February 2020 with amendments and additions noted below.

Acknowledge receipt of this Addendum in the space provided in the Bid Form. Failure to do so may disqualify Bidder.

This Addendum consists of 20 pages including referenced attachments.

This Addendum also includes the following Revised Drawings.

**ADDITIONAL PROJECT DRAWINGS:**

<table>
<thead>
<tr>
<th>Drawing No</th>
<th>Drawing Title</th>
<th>Issue Date</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-301</td>
<td>Wall Sections and Details</td>
<td>Feb. 2020</td>
<td>02/28/2020</td>
</tr>
<tr>
<td>M-400</td>
<td>Mechanical Details and Schedules</td>
<td>Feb. 2020</td>
<td>02/28/2020</td>
</tr>
</tbody>
</table>
1. **Bid Date: Changed to March 19, 2020.**

### CHANGES TO THE INTRODUCTORY INFORMATION

#### DOCUMENT 00 01 10 – TABLE OF CONTENTS

2. Page 3; Division 05 – Metals: Add the following in front of Section 05 40 00.

   FRK-S 05 31 13 Steel Roof Deck 4

3. Page 4; Division 09 – Finishes: Add the following between Section 09 64 53 and 09 90 00:

   FRK-A 09 51 13 Acoustical Ceiling Panels 7
   FRK-A 09 84 33 Sound-Absorbing Wall Units 5

### CHANGES TO THE PROJECT MANUAL

#### SECTION 09 90 00 – PAINTING AND COATING

4. Page 11; Article 3.8: Add Paragraph G as follows:

   **G. Cementitious Wood Fiber Panels:** Provide the following finish systems over interior cementitious wood fiber panels:
   
   1. **Example Surfaces:** Acoustic wall panels.
   2. **Flat Acrylic Finish:** Two finish coats.
      a. **Finish Coats:**
         
         PPG: Speedhide Pro-EV Latex Flat 12-110.
         
         DFT: 1.2 mils per coat, minimum.

#### SECTION 11 66 23.53 – WALL PADDING

5. Page 1; Article 1.2: Delete Paragraph C and substitute the following:

   **C. Verification Samples:** Submit two samples, 3 x 4 inches in size, illustrating vinyl color and surface texture.
6. Page 2; Article 2.1, Paragraph B: Delete Subparagraph 2 and substitute the following:
   
   2. Vinyl Color: 1 custom color for Project, to match Owner’s sample.

SECTION 11 66 23.56 – WRESTLING MATS

7. Page 1; Article 1.2: Delete Paragraph D and substitute the following:

   D. Verification Samples: Submit two samples, 3 x 4 inches in size, illustrating vinyl color and surface texture.

8. Page 3; Article 2.1, Paragraph B: Delete Subparagraph 10 and substitute the following:

   10. Vinyl Color: 1 custom color for Project, to match Owner’s sample.

SECTION 26 09 23 – LIGHTING CONTROLS

9. Page 3; Article 2.1: Add the following manufacturer:

   E. Crestron Lighting Controls.

--

CHANGES TO THE DRAWINGS

DRAWING A-101 – FLOOR PLANS, DOOR SCHEDULE, AND DETAILS

10. Wrestling Room at Auditorium Floor Plan: Clarification; hatched wrestling mats indicated to be relocated from Lincoln High School total approximately 3,500 sq ft; coordinate relocation, quantity, and installation with Owner.

DRAWING A-301 – WALL SECTIONS AND DETAILS

DRAWING E-600 – ELECTRICAL SCHEDULES

12. Luminaire Schedule: Add the following:

   1. Alternate Manufacturers: Add Type X1, Lightalarms QLXN500-RN.

DRAWING M-400 – MECHANICAL DETAILS AND SCHEDULES


APPROVAL OF ADDITIONAL PRODUCTS/SYSTEMS

14. Prior Approvals: The following manufacturers have requested approval to Bid, and are conditionally allowed to Bid. Final approval/rejection of product/system shall occur at time of shop drawing review.

<table>
<thead>
<tr>
<th>Section Number</th>
<th>Product/System</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 66 23.53</td>
<td>Wall padding</td>
<td>QC Net Works</td>
</tr>
</tbody>
</table>
1. PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Steel floor deck and accessories.
   2. Formed steel deck end forms to contain wet concrete.
   3. Framing for openings.
   4. Bearing plates and angles.

B. Related Requirements:
   1. Section 09 21 16 - Gypsum Board Assemblies: Placement of foam flute closures at tops of gypsum board walls.
   2. Division 22 - Plumbing: Floor drain assemblies.
   3. Division 26 - Electrical: Electrical, telephone, floor outlets, sleeves, gaskets, raceway, and covers.

1.2 REFERENCE STANDARDS

A. ASTM International:
   1. ASTM A36/A36M - Structural Specification for Carbon Structural Steel.
   3. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanealed) by the Hot Dip Process.

B. Steel Deck Institute:
   1. SDI 30 - Design Manual for Composite Decks, Form Decks, and Roof Decks.

1.3 SUBMITTALS

A. Section 01 33 00 - Submittal Procedures: Submittal procedures.

B. Shop Drawings: Indicate deck plan, support locations, projections, openings and reinforcement, pertinent details, and accessories.

C. Product Data: Submit deck profile characteristics and dimensions, structural properties, and finishes.
D. Manufacturer's Installation Instructions: Submit manufacturer's installation instructions.

E. Manufacturer's Certificate: Certify products meet or exceed specified requirements.

1.4 QUALIFICATIONS

A. Fabricator: Company specializing in performing Work of this Section.

B. Erector: Company specializing in performing Work of this Section.

C. Design deck layout, spans, fastening, and joints under direct supervision of Professional Structural Engineer experienced in design of this Work and licensed in State of Iowa.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.

B. Cut plastic wrap to encourage ventilation.

C. Store deck on dry wood sleepers; slope for positive drainage.

2. PART 2 PRODUCTS

2.1 MATERIALS

A. Fabricators: Member of SDI.

B. Sheet Steel: ASTM A653/A653M, Grade 33 Structural Quality G60 galvanized coating conforming to ASTM A924/A924M.

C. Bearing Plates and Angles: ASTM A36/A36M steel, unfinished.

D. Shop Primer: Manufacturer's standard, gray oxide type.

E. Touch-Up Primer: Match shop primer.

G. Concrete: 4000 psi, normal weight.
   1. Maximum w/c ratio: 0.48.
   4. Air Entrainment: 0 to 3 percent.

2.2 ACCESSORIES

A. Flute Closures: Closed cell foam rubber or neoprene, 1 inch thick; profiled to fit tight to deck.

2.3 FABRICATION

A. Corrugated Form Deck: Sheet steel, prime coated on underside, configured as follows:
   1. Span Design: Multiple.
   3. Nominal Height: 1 inch, fluted profile to SDI 29.
   4. Formed Sheet Width: 32 inch.
   6. Flute Sides: Plain vertical face.

B. Related Deck Accessories: Metal closure strips, wet concrete stops, cover plates, sheet steel; of profile and size noted above.

C. Fasteners: Galvanized hardened steel, self-tapping.

3. PART 3 EXECUTION

3.1 INSTALLATION

A. Erect metal deck in accordance with SDI 29 Manual and manufacturer's instructions.

B. Bear deck on support surfaces with 3 inch minimum bearing. Align and level.

C. Fasten deck to steel support members at ends and intermediate supports with mechanical fasteners at 12 inches oc maximum, parallel with deck flute and at every other transverse flute.
D. Mechanically fasten male/female side laps at 24 inches oc maximum.

E. Install wet concrete stops at floor edge upturned to top surface of slab, to contain wet concrete. Install stops of sufficient strength to remain stationary without distortion.

F. Install sheet steel closures and angle flashings to close openings between deck and walls, columns, and openings.

3.2 PROTECTION OF INSTALLED WORK

A. Section 01 70 00 - Execution and Closeout Requirements: Protecting installed work.

B. Do not permit traffic over unprotected floor deck.

C. Provide removable planking to protect deck during concrete placement.

D. Provide instruction regarding deck manufacturers recommended sequence for concrete placement.

END OF SECTION
1. PART 1  GENERAL

1.1  SUMMARY

A.  Section Includes:
   1.  Acoustic panels.
   2.  Suspended metal grid ceiling system and perimeter trim.

1.2  REFERENCE STANDARDS

A.  ASTM International:
   4.  ASTM E1264 - Standard Classification for Acoustical Ceiling Products.

B.  Ceilings and Interior Systems Construction Association:
   1.  CISCA - Acoustical Ceilings: Use and Practice.

1.3  SUBMITTALS

A.  Division 1 - General Requirements: Requirements for submittals.

B.  Shop Drawings:
   1.  Indicate grid layout and related dimensioning, junctions with other work or ceiling finishes, interrelation of mechanical and electrical items related to system. Indicate method of suspension where interference exists.

C.  Product Data: Submit data on metal grid system components and acoustic units.
D. **Samples:**
   1. Submit two samples, 4 x 12 inches in size, illustrating material and finish of acoustic units and diffusers.
   2. Submit two samples each, 12 inches long, of suspension system main runner, cross runner, and perimeter molding.

### 1.4 CLOSEOUT SUBMITTALS

A. **Division 1 - General Requirements:** Requirements for closeout submittals.

B. **Warranty:** Submit manufacturer’s warranty and ensure forms have been completed in Owner's name and registered with manufacturer.

### 1.5 QUALITY ASSURANCE

A. **Conform to CISCA requirements.**

B. **Surface Burning Characteristics:** Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

### 1.6 QUALIFICATIONS

A. **Manufacturer:** Company specializing in manufacturing Products specified in this Section.

B. **Installer:** Company specializing in performing Work of this Section.

### 1.7 ENVIRONMENTAL REQUIREMENTS

A. Maintain uniform temperature of minimum 60 degrees F, and maximum humidity of 40 percent prior to, during, and after acoustic unit installation.
1.8 SEQUENCING

A. Division 1 - General Requirements: Requirements for sequencing.

B. Sequence Work to ensure acoustic ceilings are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and approved.

C. Install acoustic units after interior wet work is dry.

1.9 EXTRA MATERIALS

A. Division 1 - General Requirements: Requirements for extra materials.

B. Extra Materials: Furnish one percent of total acoustic unit area of extra to Owner for each size and type specified.

1.10 WARRANTY

A. Division 1 - General Requirements: Closeout submittals.

B. Warranty: Provide ten year manufacturer warranty for ceiling panels. Include coverage against visible sag.

2. PART 2 PRODUCTS

2.1 ACOUSTICAL PANEL CEILINGS

A. Manufacturers - Acoustic Units:
   2. Other Acceptable Manufacturers:
      a. Armstrong Commercial Ceilings & Walls.
      b. CertainTeed Corp.
   3. Division 1 - General Requirements: Substitutions.
B. Manufacturers - Grid:
   1. Reference Manufacturer: USG Interiors, Inc. - Product: DX (Type 1).
   2. Other Acceptable Manufacturers:
      a. Armstrong Commercial Ceilings & Walls.
      b. CertainTeed Corp.
      c. Chicago Metallic Corp.
   3. Division 1 - General Requirements: Substitutions.

C. Performance / Design Criteria:
   1. Suspension System: Rigidly secure acoustic ceiling system including integral mechanical and electrical components with maximum deflection of 1/240 of span.

2.2 COMPONENTS

A. Acoustic Panels (Type A): ASTM E1264, Type III, Form 2, Pattern CD, non-fire rated type; conforming to the following:
   1. Size: 24 x 24 inches.
   2. Thickness: 5/8 inches.
   3. Composition: Mineral fiber.
   4. Light Reflectance: LR-0.84.
   5. NRC: 0.55.
   6. CAC: 33, minimum.
   7. Edge: Square.
   9. Surface Finish: Medium textured, non-directional.

B. Grid:
   1. Non-Fire Rated Grid (Type 1): ASTM C635, heavy duty; exposed T; components die cut and interlocking.
      a. Grid Materials: Commercial quality cold rolled steel with galvanized coating.
      b. Exposed Grid Surface Width: 15/16 inch.
      c. Perimeter Molding Width: Match grid width.
      e. Accessories: Clips, splices, and perimeter moldings, required for suspended grid system.
      f. Support Channels and Hangers: Galvanized steel; size and type to suit application and ceiling system flatness requirement specified.
2.3 ACCESSORIES

A. Acoustic Sealant For Perimeter Moldings:
   1. Manufacturers:
      a. Reference Manufacturer: United States Gypsum -
         Product: SHEETROCK Acoustical Sealant.
      b. Division 1 - General Requirements: Substitutions.

B. Touch-Up Paint: Type and color to match [acoustic and] grid units.

3. PART 3 EXECUTION

3.1 EXAMINATION

A. Division 1 - General Requirements: Requirements for installation
   examination.

B. Verify layout of hangers will not interfere with other work.

3.2 INSTALLATION

A. Lay-In Grid Suspension System:
   1. Install suspension system in accordance with ASTM C635,
      ASTM C636 and as supplemented in this section.
   2. Install system capable of supporting imposed loads with
      maximum deflection of 1/240.
   3. Locate system on room axis according to reflected ceiling
      plan.
   4. Install after major above ceiling work is complete.
      Coordinate location of hangers with other Work.
   5. Hang suspension system independent of walls, columns,
      ducts, pipes and conduit. Where carrying members are
      spliced, avoid visible displacement of face plane of adjacent
      members.
   6. Where ducts or other equipment prevent regular spacing of
      hangers, reinforce nearest affected hangers to span extra
      distance.
7. Do not support components on main runners or cross runners when weight causes total dead load to exceed deflection capability. Support fixture loads by supplementary hangers located within 6 inches of each corner; or support components independently.

8. Do not eccentrically load system, or produce rotation of runners.

9. Perimeter Molding:
   a. Install edge molding at intersection of ceiling and vertical surfaces into bed of acoustic sealant.
   b. Use longest practical lengths.
   c. Miter corners.
   d. Install at junctions with other interruptions.

B. Acoustic Units:
   1. Fit acoustic units in place, free from damaged edges or other defects detrimental to appearance and function.
   2. Lay directional patterned units one way with pattern parallel to [longest] shortest room axis. Fit border trim neatly against abutting surfaces.
   3. Install units after above ceiling work is complete.
   4. Install acoustic units level, in uniform plane, and free from twist, warp, and dents.
   5. Cutting Acoustic Units:
      a. Cut to fit irregular grid and perimeter edge trim.
      b. Cut square edges to field cut units.

3.3 TOLERANCES

A. Section 01 40 00 - Quality Requirements: Tolerances.

B. Maximum Variation from Flat and Level Surface: 1/8 inch in 10 feet.

C. Maximum Variation from Plumb of Grid Members Caused by Eccentric Loads: 2 degrees.
3.4 SCHEDULE

A. Acoustical Panel Ceilings:
   1. General Areas - Non-Fire Rated: Type A acoustic panels and Type 1 suspension grid.

END OF SECTION
1. **PART 1  GENERAL**

1.1 **SUMMARY**

A. Section Includes:
   1. Cementitious wood fiber wall panels, wood furring, and acoustic insulation.

1.2 **REFERENCE STANDARDS**

A. ASTM International:

B. U. S. Department of Commerce National Institute of Standards and Technology:

1.3 **PERFORMANCE REQUIREMENTS**

A. Noise Reduction Coefficient (NRC): As indicated below, when tested in accordance with ASTM C423.

1.4 **SUBMITTALS**

A. Division 1 - General Requirements: Submittal procedures.

B. Shop Drawings:
   1. Indicate layout and dimensions of acoustical wall panels.
   2. Indicate interface with adjacent materials.

C. Product Data: Provide data on acoustical panels, insulation, and accessory materials.
D. Samples: Submit two samples of each component illustrating construction, profile and surface texture and finish.
   1. Cementitious Wood Fiber Samples: Minimum 12 x 12 inches in size to illustrate construction and texture.

1.5 QUALITY ASSURANCE

A. Surface Burning Characteristics:
   1. Acoustical Wall Panels: Comply with the following:
      a. Maximum 25/450 flame spread/smoke developed index when tested in accordance with ASTM E84.

1.6 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing Products specified in this Section.

B. Installer: Company specializing in performing Work of this Section.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Division 1 - General Requirements: Requirements for transporting, handling, storing, and protecting products.

B. Accept materials on Site in manufacturers original packaging. Inspect for damage.

C. Store materials indoors with environmental conditions as specified for installation.

D. Acclimate materials to installation conditions for seventy two hours prior to installation.

E. Protect packaged adhesive from temperature cycling.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Division 1 - General Requirements: Environmental conditions affecting products on site.

B. Do not install acoustical wall units until space has been enclosed and is watertight, wet work is complete and dry and adjacent and related work is completed.
C. Do not install acoustical wall treatment until ambient temperature and humidity level will be continuously maintained at conditions indicated for Owner occupancy.

1.9 SEQUENCING

A. Section 01 11 00 - Summary of Work: Work sequence.

B. Sequence Work to ensure acoustical units are not installed until building is enclosed, sufficient heat is provided, dust generating activities have terminated, and overhead work is completed, tested, and accepted.

C. Install acoustic panels after interior wet work is dry.

2. PART 2 PRODUCTS

2.1 CEMENTITIOUS WOOD FIBER PANELS

A. Manufacturers:
   2. Division 1 - General Requirements: Substitutions.

B. Cementitious Wood Fiber Panels: ASTM E84; cementitious matrix and wood fiber, conforming to the following:
   1. Size: 24 inch (nominal width) x length indicated.
   2. Thickness: 1-1/2 inch.
   5. Light Reflectance: 0.60 percent.
   6. NRC: 0.95.

C. Wood Furring Strips: Lumber; DOC PS 20; maximum moisture content of 15 percent.
D. Acoustic Batt Insulation:
   1. ASTM C665, Type I.
   3. Thickness: 2-1/2 inches.
   4. Sound Attenuation Batt Insulation manufactured by Owens Corning Fiberglas.
      a. Substitutions: Section 01 60 00 - Product Requirements.

E. Acoustic Sealant:
   1. Acrylic, latex based sound caulk.
   2. SHEETROCK Acoustica Sealant manufactured by United States Gypsum.
      a. Substitutions: Section 01 60 00 - Product Requirements.

3. PART 3 EXECUTION

3.1 EXAMINATION

A. Section 01 30 00 - Administrative Requirements: Coordination and project conditions.

B. Verify substrate is flat, plumb and level, and ready to receive Work of this Section.

C. Verify adjacent and related work is complete.

3.2 INSTALLATION

A. Install wood furring strips behind acoustic unit butt joints, edges, and perimeter of openings through panels.

B. Cut and fit acoustic units around openings, pipes, ducts, electrical devices, and other appurtenances. Stabilize and finish all cut edges.

C. Friction fit acoustic insulation between wood furring strips. Provide temporary support with compatible adhesive.
D. Secure acoustic units to wood furring strips with nails. Space nails in pattern at 12 inch centers and locate not less than 3/4 inch from panel edges. Drive nails to penetrate wood furring not less than 1 inch, with heads flush with surface of panels.

E. Seal joints between acoustic units and at perimeter of intersections with walls, ducts, pipes, electrical devices, and appurtenances.

3.3 ERECTION Tolerances

A. Division 1 - General Requirements: Tolerances.
B. Maximum Variation from True Flat: 1/8 inch in 10 ft.
C. Maximum Variation from Plumb of Edges: 1/8 inch in 10 feet.
D. Maximum Variation in Joint Width Between Panels: 1/16 inch.

3.4 CLEANING

A. Division 1 - General Requirements: Final cleaning.
B. Clean excess adhesive from walls.

END OF SECTION
SECTION THROUGH DUCT BRANCHES

LINEAR FLOOR GRILLE INSTALL DETAIL

HORIZONTAL DUCT BRANCH DETAIL

DUCT FITTING DETAILS

DIFFUSER REGISTER AND GRILLE SCHEDULE