

ADDENDUM NUMBER: Addendum - Two
PROJECT TITLE: Milwaukee County Parks Department

RE-BIDDING of:
VETERANS PARK SHELTER
Site Number: 794
Building Number: 1505
750 North Lincoln Memorial Drive
Milwaukee, Wisconsin 53202

PROJECT NUMBER: P167-10422
DATE OF ADDENDUM: June 26, 2013

This Addendum to the Contract Documents is issued to modify, explain or correct the original Documents, Dated May 20, 2013, and is hereby made part of the Contract Documents. Acknowledge receipt of this addendum in the space provided on the Bid Form, or bid maybe rejected.

ADDENDUM ONE

Receipt of this Addendum supersedes and voids Addendum One.

SPECIFICATIONS

DOCUMENT 00 10 00 – INVITATION TO BID

Paragraph 2; first sub-paragraph revised as follows:

Sealed bids are due in the office of the County Clerk, Courthouse – Room 105, 901 North 9th Street, Milwaukee, WI 53233, no later than **July 24, 2013 at 2:00 PM.**

DOCUMENT 00 25 00 – PRE-BID MEETING

Section 1.1; paragraph A is revised as follows:

A. Pre-Bid meeting for the re-bidding of the Veterans Park Shelter will take place on **July 11, 2013 at 1:30 PM**, meeting at City Campus.

Architectural, Engineering & Environmental Services
 2711 West Wells Street
 Milwaukee, Wisconsin 53208

Meeting Location:
 Second Floor – conference room 289.

DOCUMENT 00 40 00 – BID FORM

The Bid Form enclosed with the original project manual has been revised for the Re-Bidding of the Veterans Park Shelter. Please submit this bid form with a new Notice No. of 6846.

SECTION 01 23 00 – ALTERNATE BIDS; 1.1 ALTERNATE BIDS; Paragraph C:

ALTERNATE BID-A

Change to Base-Bid Contract 1, Bid-Package 1:

In lieu of Sheet Metal Roofing (Section 07 61 00) provide an asphalt shingle roof system as specified in Section 07 31 13 – Fiberglass Asphalt Shingles.

SECTION 01 23 00 – ALTERNATE BIDS; 1.1 ALTERNATE BIDS; Paragraph C:

ALTERNATE BID-CChange to Base-Bid Contract 1, Bid-Package 1:

Provide a cost as an alternate bid to install three (3) bicycle racks as specified and 5'-0" by 12'-0" concrete slab for bicycle racks as detailed.

SECTION 05 05 30 – POST-INSTALLED ANCHORS IN CONCRETE AND MASONRY (CMU); 1.1 DESCRIPTION; Paragraph A:

Delete sub-paragraph A.2 in its entirety.

SECTION 05 50 00 – METAL FABRICATIONS; PART 2 PRODUCTS;

Omit section 2.1 COMPOSITE SUSPENDED CEILING FRAME in its entirety.

SECTION 07 31 13 – FIBERGLASS ASPHALT SHINGLES (*Alternate Bid-A*)

Add specification section in its entirety.

SECTION 07 42 43 – COMPOSITE SUSPENDED CEILING PANELS

Omit SECTION 07 42 43 in its entirety.

SECTION 07 42 53 – SUSPENDED WOOD CEILING SYSTEM, (*Alternate Bid-A*).

Omit SECTION 07 42 53 in its entirety.

SECTION 07 46 10 – FIBER CEMENT SIDING AND TRIM; 2.3 ACCESSORIES

Revise paragraph B as follows:

B. Insect Screens: ASTM D3656, Class 2, 18 by 14 mesh, width 60", charcoal color.

1. Manufacturer: Phifer Brire-Kote Company.

SECTION 07 46 10 – FIBER CEMENT SIDING AND TRIM; 3.4 INSTALLATION – FIBER CEMENT SOFFIT BOARD

Revise paragraph C as follows:

C. Install aluminum insect screen over 1 1/2-inch deep hat furring from exterior wall to fascia allowing no gaps. Lap aluminum insect screen at joints to allow no gaps.

Fasten fiber cement soffit board over aluminum insect screen as stated above allowing a 1/8-inch gap between each soffit board to allow free movement of air to vent soffit.

SECTION 08 42 29 – POWER DOOR OPERATOR; 2.6 ACTIVATION DEVICES; Paragraph A.

Add sub-paragraph 2 as follows:

2: Interior and exterior push plates shall be mounted 48-inches above the finish floor to the center of the activation device.

SECTION 08 71 00 – DOOR HARDWARE; 3.6 SCHEDULES

E. Omit HARDWARE GROUP-4 in its entirety.

SECTION 08 71 00 – DOOR HARDWARE; 3.6 SCHEDULES

Revise B. HARDWARE GROUP-1 as follows:

Omit: Closer LCN LCN 4040 Series

SECTION 09 54 25 – SUSPENDED WOOD CEILING SYSTEM,

Add SECTION 09 54 25 in its entirety.

SECTION 10 75 10 – SITE FURNISHING (*Alternate Bid-C*)

Revise specification section to be included as Alternate Bid-C.

SECTION 10 75 71 – SITE FURNISHINGS; 2.1 BICYCLE RACKS; Paragraph A, revise as follows:

- A. Manufacturers:
 - 1. Saris Brand bike docks.
 - a. Provide one (1) Saris Brand – series 2112 with Milwaukee County Parks logo (see attached drawing) and in-ground mount. Color to be selected by Owner.
 - b. Provide two (2) Saris Brand – series 2112 with in-ground mount (logo not included). Color to be selected by Owner.

SECTION 32 92 19 - SEEDING

Add specification section in its entirety.

SECTION 32 92 93 - SODDING

Omit specification section in its entirety.

DRAWINGS

For re-bidding of Veterans Park Shelter the Civil and Architectural drawings have been revised as follows:

- G-000 COVER SHEET:
Drawing sheet G-000 is revised for re-bidding and replaced by sheet **R: G-000**, included in drawing set.
- G-100 HANDICAP ACCESSIBILITY REQUIREMENTS
Drawing sheet G-100 is revised for re-bidding and replaced by sheet **R: G-100**, included in drawing set.
- C-100 SITE LAYOUT AND SITE UTILITIES PLAN:
Drawing sheet C-100 is revised for re-bidding and replaced by sheet **R: C-100**, included in drawing set.
- C-101 SITE GRADING AND EROSION CONTROL PLAN:
Drawing sheet C-101 is revised for re-bidding and replaced by sheet **R: C-101**, included in drawing set.
- C-102 SITE DETAILS:
Drawing sheet C-102 is revised for re-bidding and replaced by sheet **R: C-102**, included in drawing set.
- A-001 LIFE SAFETY:
Drawing sheet A-001 is revised for re-bidding and replaced by sheet **R: A-001**, included in drawing set.
- A-100 FIRST FLOOR PLAN:
Drawing sheet A-100 is revised for re-bidding and replaced by sheet **R: A-100**, included in drawing set.
- A-200 REFLECTED CEILING PLAN
Drawing sheet A-200 is revised for re-bidding and replaced by sheet **R: A-200**, included in drawing set.
- A-300 DOOR, FRAME, WINDOW ELEVATIONS and DETAILS
Drawing sheet A-300 is revised for re-bidding and replaced by sheet **R: A-300**, included in drawing set.
- A-400 INTERIOR ELEVATIONS
Drawing sheet A-400 is revised for re-bidding and replaced by sheet **R: A-400**, included in drawing set.
- A-500 EXTERIOR ELEVATIONS
Drawing sheet A-400 is revised for re-bidding and replaced by sheet **R: A-500**, included in drawing set.
- A-600 BUILDING SECTION:
Drawing sheet A-600 is revised for re-bidding and replaced by sheet **R: A-600**, included in drawing set.
- A-601 BUILDING SECTION:
Drawing sheet A-601 is revised for re-bidding and replaced by sheet **R: A-601**, included in drawing set.
- A-700 WALL SECTION:
Drawing sheet A-700 is revised for re-bidding and replaced by sheet **R: A-700**, included in drawing set.

A-701 WALL SECTION:

Drawing sheet A-701 is revised for re-bidding and replaced by sheet **R: A-701**, included in drawing set.

A-800 DETAILS:

Drawing sheet A-800 is revised for re-bidding and replaced by sheet **R: A-800**, included in drawing set.

END OF ADDENDUM TWO

Attachments:

SPECIFICATIONS

DOCUMENT 00 40 00 - BID FORM
SECTION 07 31 13 – FIBERGLASS ASPHALT SHINGLES (*Alternate Bid-A*)
SECTION 09 54 25 – SUSPENDED WOOD CEILING SYSTEM
SECTION 32 92 19 - SEEDING

DRAWINGS

(See re-bidding drawing set, for revised drawings)

DOCUMENT 00 40 00
BID FORM

Re-Bidding of:

Department of Parks, Recreation, and Culture
VETERANS PARK SHELTER
Site Number: 794
Building Number: 1505
750 North Lincoln Memorial Drive
Milwaukee, Wisconsin 53202
Project No. P167-10422

Bids Due: **July 24, 2013 at 2:00 PM**

Contract 1: Veterans Park Shelter

At the Office of: MILWAUKEE COUNTY CLERK
Room 105 - Courthouse
901 North 9th Street
Milwaukee, Wisconsin 53233

We, _____
(A Corporation) (A Partnership) (An Individual)-(Cross Out Inapplicable)

of _____
Street

City State Zip Code

Telephone No. Fax Number email address

Hereby agree to execute contract and furnish a satisfactory surety bond in the amount specified to complete the above project in strict accordance with Contract Documents dated May 20, 2013.

CONTRACT 1, Bid Package 1: Veterans Park Shelter

Base-Bid: The Work for the sum of:

(In words)

_____ Dollars \$ _____
(In figures)

MISCELLANEOUS ALLOWANCE-1, (Add to Base-Bid from Section 01 21 00)

\$ 25,000.00

TOTAL BASE BID – (Contract 1): _____
(In words)

_____ Dollars \$ _____
(In figures)

ALTERNATIVES

Fill in Alternatives as listed. Where no changes in Base Bid occurs for Alternative, mark "No Change" or if "Add" to or "Deduct" from Base Bid occurs, cross out description that does not apply. See Section 01 23 00, of this project manual. If an Alternative is left blank it shall mean Contractor shall perform the Work without addition or deduction in the Contract Sum.

ALTERNATE BID – A

Change to Base-Bid Contract 1, Bid-Package 1:

In lieu of Sheet Metal Roofing (Section 07 61 00) provide an asphalt shingle roof system as specified in Section 07 31 13 - Fiberglass Asphalt Shingles.

ALTERNATE BID - A: _____
(In words)

_____ Dollars \$ _____
(In figures)

ALTERNATE BID – B

Change to Base-Bid Contract 1, Bid-Package 1:

In lieu of asphalt pavement sidewalk at the perimeter of building (as indicated on drawings) provide 5-inches thick concrete sidewalk (Unreinforced) on 6-inches of compacted granular fill.

ALTERNATE BID - B: _____
(In words)

_____ Dollars \$ _____
(In figures)

ALTERNATE BID – C

Change to Base-Bid Contract 1, Bid-Package 1:

Provide a cost as to install three (3) bicycle racks as specified and 5'-0" by 12'-0" concrete slab for bicycle racks as specified in Section 10 75 10 – Site Furnishing and as detailed.

ALTERNATE BID - C: _____
(In words)

_____ Dollars \$ _____
(In figures)

SUBSTITUTION OF MATERIALS

For use by Bidders at their option the following substitutions from specifically named materials or items.

MANUFACTURER'S NAME	MATERIAL	ADD/DEDUCT
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

ADDENDUM RECEIPT

We acknowledge the receipt of Addendum _____ to _____ inclusive.

SCHEDULE OF VALUES SUBMITTAL

We acknowledge including the required Schedule of Values per requirements specified in Section 01 20 00, PRICE AND PAYMENT PROCEDURES.

(Signature of Authorized Representative)

BID SECURITY ACCOMPANYING PROPOSAL

NOTE! See Instructions to Bidders - Article 9, Bid Security, subparagraph 9.1.1, filing original bid bond.

The amount and type of bid security is as follows:

COMMENCEMENT AND COMPLETION OF CONTRACT WORK

The undersigned agrees, if signatory to the Contract, to commence work upon receipt of Notice-to-Proceed and achieve Substantial Completion of the Work within a construction period of 14 weeks.

NOTE! See Document 00800 - Supplementary Conditions – 8.2.3, for Liquidated Damages associated with the contract work.

BIDDER'S CERTIFICATE - Section 66.0901(7), Wisconsin Statutes

_____ Certifies that they have examined and carefully prepared this bid from Bid Documents and have checked same in detail before submitting bid to Milwaukee County.

In submitting this bid, the bidder also acknowledges, understands and agrees that the submission of a bid shall commit the bidder to comply with Milwaukee County's requirements as outlined in the Contractor Residency Program provisions. The bidder also agrees to comply with the specific requirements as follows:

The bidder's commitment for the Contractor Residency Program Participation on this project is 50%.

(Signature of Authorized Representative)

(Title)

Subscribed and sworn to before me this _____ day of _____, 2012.

My commission expires _____, 201_____.

(Notary Public)

AFFIDAVIT

State of _____

County of _____

_____ being duly sworn, deposes and states that
(Name)

they are the _____ of
(Official Capacity)

(Name of Firm)

and that Contractors Qualification Statement filed with County Clerk on _____
for said firm remains true and correct. I understand that the willful falsification of information may result
in a civil or criminal penalty pursuant to Chapter 101 Statutes.

(Signature and Title)

Subscribed and sworn to before me this _____ day of _____,
2012.

My commission expires _____, 201____.

(Notary Public)

If a qualification statement has been filed more than 3 years before the opening of this bid, submit a
new qualification statement not less than five days before the opening of this bid.

SECTION 07 31 13
FIBERGLASS ASPHALT SHINGLES
(Alternate Bid-A)

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fiberglass asphalt shingles.
 - 2. Ice dam membrane.
 - 3. Underlayment.
 - 4. Ridge vent.
 - 5. Metal roof edge and accessories.

- B. Related Requirements:
 - 1. Section 06 10 00 - Rough Carpentry
 - 2. Section 06 17 53 – Shop-Fabricated Wood Trusses
 - 3. Section 07 62 15 - Sheet Metal Trim

1.2 REFERENCE STANDARDS

- A. ASTM International:
 - 1. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 2. ASTM C1549 - Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer.
 - 3. ASTM D226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
 - 4. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
 - 5. ASTM D3462 - Standard Specification for Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
 - 6. ASTM D4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
 - 7. ASTM D7158 -- Standard Test Method for Wind Resistance of Asphalt Shingles (Uplift Force/Uplift Resistance Method).
 - 8. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings.
 - 9. ASTM F1667 - Standard Specification for Driven Fasteners.

- B. National Roofing Contractors Association:
 - 1. NRCA - The NRCA Roofing Manual: Steep-slope Roof Systems.

- C. Underwriters Laboratories Inc.:
 - 1. UL 790 - Standard Test Methods for Fire Tests of Roof Coverings.
 - 2. UL 997 – Wind Resistance of Prepared Roof Covering Materials.

1.3 COORDINATION

- A. Section 01 30 00 - Administrative Requirements: specifies requirements for coordination.

- B. Coordinate Work of this Section with products and materials that penetrate roof surfaces, overlap flashing systems specified herein.

1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data for shingles, underlayment, ice dam membranes, and pre-finished flashing materials.
- C. Shop Drawings: Indicate metal flashings, jointing methods and locations, fastening methods and locations, and installation details.
- D. Samples: Submit manufacturer's sample board for each shingle color, indicating full color range and finish texture/pattern for color and texture selection.
- E. Manufacturer's Instructions: Submit installation criteria and procedures.

1.5 MAINTENANCE MATERIAL SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: specifies requirements for maintenance materials.
- B. Extra Stock Materials:
 - 1. Furnish 100 sq. ft. of extra shingles of each color selected.

1.6 QUALITY ASSURANCE

- A. Perform Work according to The NRCA Roofing Manual: Steep-slope Roof Systems.

1.7 QUALIFICATIONS

- A. Installer: Company specializing in performing Work of this Section with minimum three years experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: specifies requirements for transporting, handling, storing, and protecting products.
- B. Deliver materials in manufacturer's unopened packaging. Do not deliver until roof deck is prepared for installation.
- C. Store materials on roof deck and evenly distribute weight of bundles.

1.9 AMBIENT CONDITIONS

- A. Section 01 50 00 - Temporary Facilities and Controls: Requirements for ambient-condition control facilities for product storage and installation.
- B. Do not install ice dam membrane, underlayment, and shingles when ambient air temperatures are below 45 degrees F or above 90 degrees F.

1.10 WARRANTY

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for warranties.

- B. Furnish limited lifetime manufacturer's warranty for fiberglass asphalt shingles and accessories.

PART 2 PRODUCTS

2.1 FIBERGLASS ASPHALT SHINGLES

- A. Manufacturers:
 - 1. GAF Roofing
 - a. Slateline Shingles
 - b. Description: ASTM D3462, UL 790 Class A; Type 1, self-sealing; glass-fiber mat base, mineral-granule-surface type; simulated slate type; color and texture as selected by Owner / Architect.
 - c. Roofing Covering Wind Classification: Passes UL 997 modified to 130 mph.
 - d. Roof Covering Impact Classification: ASTM D2218, Class IV.
 - 2. Substitutions: approved equal
 - 3. Provide materials according to The NRCA Roofing Manual: Steep-slope Roof Systems.

2.2 RIDGE VENTS

- A. Manufacturers:
 - 1. GAF Roofing
 - a. Cobra Ridge Vent 3
 - b. Description: Continuous-style louver, plastic, shingle-over type, nominal 12 inches wide with vent openings that do not permit direct water or weather entry; to receive cap shingles; minimum 18-sq. inches per linear foot of net free ventilating area.
 - c. Fire Classification: UL Class A.
 - d. Starter and End Caps: As required to suit application.
 - 2. Substitutions: approved equal.

2.3 ICE DAM MEMBRANE

- A. Manufacturers:
 - 1. GAF Roofing
 - a. Stormguard Film-Surfaced Leak Barrier.
 - b. Ice Dam Membrane: ASTM D1970; self-adhering, polymer-modified bituminous sheet material, granule surface, 40 mil thick, 36 inches wide, with strippable release paper to expose adhesive surface.
 - 2. Substitutions: approved equal.

2.4 UNDERLAYMENT

- A. Manufacturers:
 - 1. GAF Roofing
 - a. Deck-Armor
 - b. Underlayment: ASTM D226 and ASTM D4869; Class A fire rating; UV stabilized polypropylene construction resists UV degradation for up to 180 days.
 - 2. Substitutions: approved equal.

2.5 FABRICATION

- A. Form flashings to protect roofing materials from physical damage and shed water.

- B. Form eave edge flashing to extend minimum 2 inches onto roof and minimum 1-inch below sheathing.
- C. Form flashing sections square and accurate to profile, in maximum possible lengths, free from distortion or defects detrimental to appearance or performance.
- D. Hem exposed edges of flashings minimum 1/4 inch on underside.

2.6 ACCESSORIES

- A. Nails: According to ASTM F1667; standard round-wire roofing nails, hot-dip-galvanized-steel type; minimum 0.105-inch diameter shank, minimum 0.375-inch diameter head with 1-inch plastic washer; minimum 1-inch in length (provide sufficient length to penetrate roof sheathing).
- B. Plastic Cement: ASTM D4586, Asphalt type with mineral fiber components, free of toxic solvents, capable of setting within 24 hours at a temperature of 75 degrees F.
- C. Lap Cement: Cutback-asphalt type; recommended for use in application of underlayment; free of toxic solvents.
- D. Metal Roof Edge Material:
 - 1. Pre-finished Aluminum Sheet:
 - a. According to ASTM B209.
 - b. Alloy and temper as required for application and finish.
 - 2. 0.032 inch thick; plain finish, shop pre-coated with two-coat fluoropolymer topcoat; color as selected.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify that roof penetrations and plumbing stacks are in place and flashed to deck surface.
- C. Verify that roof openings are correctly framed and that deck surfaces are dry and free of ridges, warps, or voids.

3.2 PREPARATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation preparation.
- B. Broom-clean deck surfaces under ice dam membrane and underlayment.

3.3 INSTALLATION

- A. Ice Dam Membrane Installation:
 - 1. Place eave edge metal flashings tight with fascia boards. Weather-lap joints minimum 4 inches and seal with plastic cement. Secure flange with nails at maximum 12 inches o.c.

2. Install ice dam membrane parallel with eave edge, flush with face of eave edge flashing with edges lapped 4 inches shingle-style and ends lapped 6 inches and staggered between rows.
 3. Extend ice dam membrane minimum 2 feet up slope beyond interior face of exterior wall.
- B. Underlayment Installation:
1. Place one ply of underlayment over substrate not covered by ice dam membrane, with ends and edges weather lapped 4 inches. Stagger end laps of each consecutive layer. Weather-lap ice dam membrane minimum 4 inches. Nail underlayment in place.
 2. Install underlayment according to manufacturer's instructions without distortions capable of preventing shingles from sealing.
 3. Weather-lap and seal items projecting through or mounted on roof watertight with plastic cement.
- C. Roof Penetrations:
1. Place ice dam membrane sheet, 36 inches wide, at joint of roof plane and vertical surfaces, including vents. Weather-lap edge joints minimum 4 inches and lap end joints minimum 6 inches.
- D. Metal Flashing and Accessories Installation:
1. Weather-lap joints minimum 2 inches and seal weather tight with plastic cement.
 2. Secure in place with nails. Conceal fastenings.
 3. Flash and seal Work weather tight, projecting through or mounted on roofing with plastic cement.
- E. Asphalt Shingles Installation:
1. Install shingles according to manufacturer's instructions, using no less than minimum number of fasteners per shingle than required for wind-load rating.
 2. Place shingles in coursing pattern as selected by Owner / Architect with manufacturer required weather exposure. Install double course of shingles at eaves.
 3. Project starter course and first course of shingles 3/4 inch beyond eave flashing and fascia boards.
 4. Cap hips and ridges with manufacturer's ridge cap shingles, maintaining 5-inch weather exposure. Place to avoid exposed nails.
 5. After installation, place one daub of plastic cement, 1-inch diameter, under each individual shingle tab exposed to weather to prevent lifting.
 6. Install ridge vents centered over ridge. Coordinate required ridge opening with required free area vent to attic space. Install roof vents according to manufacturer's instructions.
 7. Complete installation to provide weather tight construction. Do not permit traffic over finished roof surfaces

3.4 FIELD QUALITY CONTROL

- A. Section 01 70 00 - Execution and Closeout Requirements
- B. Before Substantial Completion, inspect roof to verify shingles self-sealed from exposure to prevent wind uplift. Apply plastic cement to secure shingles that failed to seal. Report results of inspection and required corrective measures.

END OF SECTION

**SECTION 09 54 25
SUSPENDED WOOD CEILING SYSTEM**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Suspended wood ceiling system
- B. Related Requirements:
 - 1. Section 05 12 00 – Structural Steel Framing
 - 2. Section 06 10 00 – Rough Carpentry
 - 3. Section 06 17 53 – Shop Fabricated Wood Trusses

1.2 REFERENCE STANDARDS

- A. ASTM International:
 - 1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 2. ASTM E119 - Standard Test Methods for Fire Tests of Building Construction and Materials.
- B. American Society of Civil Engineers:
 - 1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

1.3 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit manufacturer's data and installation instructions
- C. Shop Drawings:
 - 1. Indicate grid layout and related dimensioning, junctions with other work and ceiling finishes.
 - 2. Indicate installation details required for seismic design loads.
- D. Samples:
 - 1. Submit two 2-inch x 2-inch illustrating material and finish of wood planks.
 - 2. Submit two samples each, of suspension system: main runner, cross runner, and perimeter molding.
- E. Manufacturer's Instructions: Submit special procedures, and perimeter conditions requiring special attention.

1.4 QUALITY ASSURANCE

- A. Product Construction: Wood shall be kiln dried to 10%. Cracking, checking and warpage of members will not be acceptable.

1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.

- B. Installer: Company specializing in performing work of this section with minimum three years experience and approved by manufacturer.

1.6 PRODUCT WARRANTY

- A. Manufacturer shall warranty the suspended ceiling system against manufacturer's defects up to one year, from date of substantial completion.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Materials shall be stored and installed only in an ambient environment of a humidity minimum of 25 percent and a maximum of 55 percent, with temperature not to exceed 86 degrees.

PART 2 PRODUCTS

2.1 SUSPENDED WOOD CEILING SYSTEM

- A. Manufacturers:
 - 1. Architectural Components Group, Inc.
521 George Street
Marshfield, MO 65706
 - 2. Substitutions: Approved equal.
- B. Product:
 - 1. Linear Open Series 2
Model: LO2-325-C
 - a. LO2 – Linear Open Series 2
 - b. 325 – 3-1/4" wide.
 - c. C – 3/4" thick (solid wood) plank.
 - 2. Wood Species: Red Cedar.
- C. Performance / Design Criteria:
 - 1. Suspension System: Rigidly secure suspended wood ceiling system including integral mechanical and electrical components with maximum deflection of 1/240 of span.
- D. Wood plank length shall be random length up to 10'-0" in length, with shortest length being 6'-0" in length.
- E. Wood planks shall be installed with a 3/4-inch reveal between planks.
- F. Black woven insect screen shall be factory attached to one long edge of each plank and field applied to the other long edge of adjacent plank.
- G. Panels shall achieve a Class 1A fire rating.
- H. Grid:
 - 1. Non-fire Rated Grid: ASTM C635, heavy duty; concealed HD-T grid; components die cut and interlocking.
 - 2. Grid Materials: Commercial quality cold rolled steel with galvanized coating.
 - 3. Grid Surface Width: 15/16 inch.
 - 4. Perimeter Molding Width: Match grid width.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for installation examination.
- B. Verify layout of hangers will not interfere with other work.

3.2 INSTALLATION

- A. Linear Wood Ceiling System shall be handled and installed with care in order to prevent surface and structure damage. Field cutting shall be kept to a minimum and performed as recommended by manufacturer.
 - 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 maximum.
 - 3. Install after major above ceiling work is complete. Coordinate location of hangers with other work.
 - 4. 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.
 - 5. Do not eccentrically load system, or produce rotation of runners.
- B. The contractor shall suspend planks in accordance with manufacturer's recommended installation guides and shop drawings.
 - 1. Planks shall be installed by screwing LSC-101 and LSC-105 clips into the T-grid and attaching the wood members in accordance to the manufacturers' installation instructions. LSC-106 alignment clips shall be used at plank end-joints.
 - 2. Install hold-down clips to retain panels tight to grid system.

3.3 TOLERANCES

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

END OF SECTION

**SECTION 32 92 19
SEEDING**

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Fertilizing.
 - 2. Seeding.
 - 3. Mulching.
 - 4. Maintenance.

- B. Related Sections:
 - 1. Section 31 22 13 - Rough Grading
 - 2. Section 32 05 13 - Soils for Exterior Improvements

1.2 REFERENCES

- A. ASTM International:
 - 1. ASTM C602 - Standard Specification for Agricultural Liming Materials.

1.3 DEFINITIONS

- A. Weeds: Vegetative species other than specified species to be established in given area.

1.4 SUBMITTALS

- A. Section 01 33 00 - Submittal Procedures: Requirements for submittals.
- B. Product Data: Submit data for seed mix, fertilizer, and mulch.
- C. Manufacturer's Certificate: Certify Product meets or exceeds specified requirements.

1.5 CLOSEOUT SUBMITTALS

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for submittals.
- B. Operation and Maintenance Data: Include maintenance instructions, cutting method and maximum grass height; types, application frequency, and recommended coverage of fertilizer.

1.6 QUALITY ASSURANCE

- A. Provide seed mixture in containers showing percentage of seed mix, germination percentage, inert matter percentage, weed percentage, year of production, net weight, date of packaging, and location of packaging.
- B. Perform Work in accordance with State of Wisconsin Department of Transportation standards.
- C. Maintain one copy of each document on site.

1.7 QUALIFICATIONS

- A. Seed Supplier: Company specializing in manufacturing Products specified in this section with minimum three years experience.
- B. Installer: Company specializing in performing work of this section with minimum three years experience.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Section 01 60 00 - Product Requirements: Product storage and handling requirements.
- B. Deliver grass seed mixture in sealed containers. Seed in damaged packaging is not acceptable.
- C. Deliver fertilizer in waterproof bags showing weight, chemical analysis, and name of manufacturer.

1.9 MAINTENANCE SERVICE

- A. Section 01 70 00 - Execution and Closeout Requirements: Requirements for maintenance service.
- B. Protect and maintain seeded areas for a minimum of two months from the date of planting.
 - 1. Maintain seeded areas immediately after placement until grass is well established and exhibits vigorous growing condition until the minimum two months is completed.

PART 2 PRODUCTS

2.1 SEED MIXTURE

- A. Seed Mixture:

Kentucky Blue Grass	40 percent
Creeping Red Fescue Grass	40 percent
Norlea Perennial Rye	20 percent

2.2 ACCESSORIES

- A. Mulching Material: Oat or wheat straw, free from weeds, foreign matter detrimental to plant life, and dry. Hay or chopped cornstalks are not acceptable.
- B. Fertilizer: Commercial grade; recommended for grass; of proportion necessary to eliminate deficiencies of topsoil, as indicated in analysis.
- C. Lime: ASTM C602, Class T agricultural limestone containing a minimum 80 percent calcium carbonate equivalent.
- D. Water: Clean, fresh and free of substances or matter capable of inhibiting vigorous growth of grass.

2.3 SOURCE QUALITY CONTROL

- A. Section 01 40 00 - Quality Requirements: Testing, inspection and analysis requirements.
- B. Analyze to ascertain percentage of nitrogen, phosphorus, potash, soluble salt content, organic matter content, and pH value.
- C. Provide recommendation for fertilizer and lime application rates for specified seed mix as result of testing.
- D. Testing is not required when recent tests and certificates are available for imported topsoil. Submit these test results to testing laboratory. Indicate, by test results, information necessary to determine suitability.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Section 01 30 00 - Administrative Requirements: Verification of existing conditions before starting work.
- B. Verify prepared soil base is ready to receive the Work of this section.

3.2 FERTILIZING

- A. Apply lime at application rate recommended by soil analysis. Work lime into top 6 inches of soil.
- B. Apply fertilizer at application rate recommended by soil analysis.
- C. Apply after smooth raking of topsoil and prior to roller compaction.
- D. Do not apply fertilizer at same time or with same machine used to apply seed.
- E. Mix fertilizer thoroughly into upper 2-inches of topsoil.
- F. Lightly water soil to aid dissipation of fertilizer. Irrigate top level of soil uniformly.

3.3 SEEDING

- A. Apply seed at rate of five lbs per 1000 sq ft evenly in two intersecting directions. Rake in lightly.
- B. Do not seed areas in excess of that which can be mulched on same day.
- C. Do not sow immediately following rain, when ground is too dry, or when winds are over 12 mph.
- D. Roll seeded area with roller not exceeding 112-lbs/linear foot.
- E. Immediately following seeding and compacting, apply mulch to thickness of 1/8-inches. Maintain clear of shrubs and trees.

- F. Apply water with fine spray immediately after each area has been mulched. Saturate to 4-inches of soil.

3.4 SEED PROTECTION

- A. Identify seeded areas with stakes and caution tape around area periphery. Set top row of caution tape at a height of 36-inches and set lower row at a height of 18-inches. Space stakes at 48-inches.
- B. Identify seeded area with warning signs.

3.5 MAINTENANCE

- A. Mow grass at regular intervals to maintain at maximum height of 3-inches. Do not cut more than 1/3 of grass blade at each mowing. Perform first mowing when seedlings are 40 percent higher than desired height.
- B. Neatly trim edges and hand clip where necessary.
- C. Immediately remove clippings after mowing and trimming. Do not let clippings lay in clumps.
- D. Water to prevent grass and soil from drying out.
- E. Control growth of weeds. Apply herbicides. Remedy damage resulting from improper use of herbicides.
- F. Immediately reseed areas showing bare spots.
- G. Repair washouts or gullies.
- H. Protect seeded areas with warning signs during maintenance period.

END OF SECTION