



23 October 2023

Pine Knoll Shores  
Public Safety Roof Replacement

### **Addendum 1**

The following addendum supersedes previous information and does hereby become part of the contract documents:

- Plans for the existing building are attached for convenience. No warranty is made that these plans represent true as-built conditions. All Contractors are responsible for field verifying all existing conditions.
- Clarification: There is not a requirement for Federal Weekly Payroll Reports and Manufacturer by America Certification Documentation. As appropriate, and to the extent consistent with Law the Contractor should to the greatest extent practicable provide a preference for the purchase, acquisition or use of goods, products or materials produced in the United States. (Included but not limited to iron, aluminum, steel, cement, and other manufactured products.)
- Metal roofing to be - MBCI SuperLok 16 inches wide with 2 inch high seam in 24ga. SIG 300 standard color. See attached specifications.
- Clarification: Davis Bacon Act is not a requirement for this project.
- Contractor to provide Builders Risk Insurance.
- Contractor shall be required to repair all leaks and damages caused by construction.
- Contractor shall seal and protect all roofing penetrations during construction.
- Add alternate No 1 replace HVAC RTUs. See attached Add Alt. 1 Form to be attached to Bid Form. New model numbers are:
  - 2 ton unit: Trane 4YCC4024A1060AC, 208V, 1 phase power, 48,600 btuh output. Provide coastal protection coating on condenser coil, evaporator coil, inside and outside of the unit cabinet. Provide extension roof curb to place unit above new standing seam over-roof.
  - 4 ton unit: Trane YSC0483EMAB0000, 208, 3 phase power, medium level LP gas heat, 50% outside air intake hood. Provide coastal protection coating on condenser coil, evaporator coil, inside and outside of the unit cabinet. Provide extension roof curb to place unit above new standing seam over-roof.
  - 7.5 ton unit: Trane YSC0923EMAE0000, 208, 3 phase power, medium level LP gas heat, enthalpy based economizer hood. Provide coastal protection coating on condenser coil,

Lee D. Dixon, Jr., AIA  
Architect/Owner  
252-241-1868

P.O. Box 363  
Morehead City, NC 28557  
[Lee@coastalarchitecture.net](mailto:Lee@coastalarchitecture.net)



evaporator coil, inside and outside of the unit cabinet. Provide extension roof curb to place unit above new standing seam over-roof.

- New roof top HVAC units to be set on new curb extenders/adapters.
- Clarification: The Town wants to minimize any disruption of the HVAC service to the building. The highest priority is the sleeping quarters of the Fire Department. (The Eastern most HVAC unit on the roof.)
- Replace all RTU disconnects with NEMA 3R heavy duty fused disconnects. Fuse per unit ampacity.
- Specifications – 00800 – Article 8: The time of Contract Completion shall be 120 consecutive calendar days with a \$250 per day liquidated damages for each day in excess of Contract Completion.
- Unless agreed upon in advance all work is limited to 6 days per week (no Sundays) from 7:00am till dark.
- Testing: Contract to include in their base bid a \$10,000.00 allowance for independent testing.
- Contractor to isolate the existing gas line to the existing Kitchen so as to maintain the Kitchen appliance in working order during construction.
- See attached Pre-Bid Agenda/Minutes and Attendee Sign In Sheet.

**End of Addendum 1**

## SECTION 07 41 13 - METAL ROOF PANELS

### PART 1 - GENERAL

#### 1.1 SECTION INCLUDES

- A. Mechanically-seamed, standing seam metal roof panels, with related metal trim and accessories.

#### 1.2 REFERENCES

- A. American Architectural Manufacturer's Association (AAMA): [www.aamanet.org](http://www.aamanet.org):
  - 1. AAMA 621 - Voluntary Specifications for High Performance Organic Coatings on Coil Coated Architectural Hot Dipped Galvanized (HDG) & Zinc-Aluminum Coated Steel Substrates.
  - 2. AAMA 809.2 - Voluntary Specification Non-Drying Sealants.
- B. American Society of Civil Engineers (ASCE): [www.asce.org/codes-standards](http://www.asce.org/codes-standards):
  - 1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.
- C. ASTM International (ASTM): [www.astm.org](http://www.astm.org):
  - 1. ASTM A 653 - Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
  - 2. ASTM A 755 - Specification for Steel Sheet, Metallic Coated by the Hot-Dip Process and Preprimed by the Coil-Coating Process for Exterior Exposed Building Products.
  - 3. ASTM A 792/A 792M - Standard Specification for Steel Sheet, 55 % Aluminum-Zinc Alloy-Coated by the Hot-Dip Process.
  - 4. ASTM A 980 - Standard Specification for Steel, Sheet, Carbon, Ultra High Strength Cold Rolled.
  - 5. ASTM C 645 - Specification for Nonstructural Steel Framing Members.
  - 6. ASTM D 226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
  - 7. ASTM D 1003 - Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics.
  - 8. ASTM D 2244 - Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
  - 9. ASTM D 4214 - Test Methods for Evaluating Degree of Chalking of Exterior Paint Films.
  - 10. ASTM E 1514 - Standard Specification for Structural Standing Seam Steel Roof Panel Systems.
  - 11. ASTM E 1592 - Standard Test Method for Structural Performance of Sheet Metal Roof and Siding Systems by Uniform Static Air Pressure Difference.
  - 12. ASTM E 1646 - Standard Test Method for Water Penetration of Exterior Metal Roof Panel Systems by Uniform Static Air Pressure Difference.
  - 13. ASTM E 1680 - Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems.
  - 14. ASTM E 1980 - Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces.
- D. Cool Roof Rating Council (CRRC): [www.coolroofs.org/productratingprogram.html](http://www.coolroofs.org/productratingprogram.html):

1. CRRC-1-2008 - CRRC Product Rating Program.
- E. FM Global (FM): [www.fmglobal.com](http://www.fmglobal.com):
1. ANSI/FM 4471 - Approval Standard for Class 1 Panel Roofs.
- F. International Accreditation Service (IAS):
1. IAS AC 472 - Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems, Part B.
- G. Underwriters Laboratories, Inc. (UL): [www.ul.com](http://www.ul.com):
1. UL 580 - Tests for Uplift Resistance of Roof Assemblies
- H. US Environmental Protection Agency: [www.energystar.gov/index.cfm](http://www.energystar.gov/index.cfm):
1. Energy Star Reflective Roof Products.
- I. US Green Building Council (USGBC): [www.usgbc.org](http://www.usgbc.org):
1. LEED - Leadership in Energy and Environmental Design (LEED) Green Building Rating Systems.

### 1.3 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Prior to erection of framing, conduct preinstallation meeting at site attended by Owner, Architect, manufacturer's technical representative, inspection agency and related trade contractors.
1. Coordinate building framing in relation to metal panel system.
  2. Coordinate openings and penetrations of metal panel system.
  3. Coordinate work of Division 07 Sections "Roof Specialties" and "Roof Accessories" and openings and penetrations and manufacturer's accessories with installation of metal panels.

### 1.4 QUALITY ASSURANCE

- A. Manufacturer/Source: Provide metal roof panel assembly and accessories from a single manufacturer providing fixed-base roll forming, and accredited under IAS AC 472 Part B.
- B. Manufacturer Qualifications: Approved manufacturer listed in this Section with minimum five years experience in manufacture of similar products in successful use in similar applications.
1. Approval of Comparable Products: Submit the following in accordance with project substitution requirements, within time allowed for substitution review:
    - a. Product data, including certified independent test data indicating compliance with requirements.
    - b. Samples of each component.
    - c. Sample submittal from similar project.
    - d. Project references: Minimum of five installations not less than five years old, with Owner and Architect contact information.
    - e. Sample warranty.
    - f. IAS AC 472 certificate.

- C. Installer Qualifications: Experienced Installer certified by metal panel manufacturer with minimum of five years experience with successfully completed projects of a similar nature and scope.
  - 1. Installer's Field Supervisor: Experienced mechanic certified by metal panel manufacturer supervising work on site whenever work is underway.

#### 1.5 ACTION SUBMITTALS

- A. Product Data: Manufacturer's data sheets for specified products.
- B. Shop Drawings: Show layouts of metal panels. Include details of each condition of installation, panel profiles, and attachment to building. Provide details at a minimum scale 1-1/2-inch per foot of edge conditions, joints, fastener and sealant placement, flashings, openings, penetrations, roof accessories, lightning arresting equipment, and special details. Make distinctions between factory and field assembled work.
  - 1. Indicate points of supporting structure that must coordinate with metal panel system installation.
  - 2. Include data indicating compliance with performance requirements.
  - 3. Include structural data indicating compliance with requirements of authorities having jurisdiction.
- C. Samples for Initial Selection: For each exposed product specified including sealants. Provide representative color charts of manufacturer's full range of colors.
- D. Samples for Verification: Provide 12-inch- (305 mm-) long section of each metal panel profile. Provide color chip verifying color selection.

#### 1.6 INFORMATIONAL SUBMITTALS

- A. Product Test Reports: Indicating compliance of products with requirements, witnessed by a professional engineer.
- B. Qualification Information: For Installer firm and Installer's field supervisor.
- C. IAS Accreditation Certificate: Indicating that manufacturer is accredited under provisions of IAS AC 472.
- D. Manufacturer's Warranty: Sample copy of manufacturer's standard warranty.

#### 1.7 CLOSEOUT SUBMITTALS

- A. Maintenance data.
- B. Manufacturer's Warranty: Executed copy of manufacturer's standard warranty.

#### 1.8 DELIVERY, STORAGE, AND HANDLING

- A. Protect products of metal panel system during shipping, handling, and storage to prevent staining, denting, deterioration of components or other damage. Protect panels and trim bundles during shipping.

1. Deliver, unload, store, and erect metal panel system and accessory items without misshaping panels or exposing panels to surface damage from weather or construction operations.
2. Store in accordance with Manufacturer's written instructions. Provide wood collars for stacking and handling in the field.

#### 1.9 COORDINATION

- A. Coordinate sizes, profiles, and locations of roof curbs and other roof-mounted equipment and roof penetrations, based upon sizes of actual selected equipment.

#### 1.10 WARRANTY

- A. Special Manufacturer's Warranty: On manufacturer's standard form, in which manufacturer agrees to repair or replace metal panel assemblies that fail in materials and workmanship within one year from date of Substantial Completion.
  - B. **Special Weathertightness Warranty:** On manufacturer's standard form, in which manufacturer agrees to repair or replace metal panel assemblies that fail to remain weathertight, including leaks, without monetary limitation.
  - C. Special Panel Finish Warranty: On Manufacturer's standard form, in which Manufacturer agrees to repair or replace metal panels that evidence deterioration of factory-applied finish within 25 years from date of Substantial Completion, including:
    - a. Color fading in excess of 5 Hunter units per ASTM D 2244.
    - b. Chalking in excess of No. 8 rating per ASTM D 4214.
    - c. Failure of adhesion, peeling, checking, or cracking.
2. Modified Silicone-Polyester Two-Coat System:

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURER

- A. Basis of Design Manufacturer: **MBCI Metal Roof and Wall Systems, Division of NCI Group, Inc.**; Houston TX. Tel: (877)713-6224; Email: [info@mbci.com](mailto:info@mbci.com); Web: [www.mbci.com](http://www.mbci.com).
  1. Provide basis of design product, or comparable product approved by Architect prior to bid.

#### 2.2 PERFORMANCE REQUIREMENTS

- A. General: Provide metal roof panel system meeting performance requirements as determined by application of specified tests by a qualified testing facility on manufacturer's standard assemblies.
- B. System Performance: Comply with ASTM E 1514 and requirements of this Section.
- C. Structural Performance: Provide metal panel assemblies capable of withstanding the effects of indicated loads and stresses required:
  1. Wind Loads: Determine loads based on uniform pressure, importance factor, exposure category, and basic wind speed indicated on drawings. (156mph)

- a. Wind Uplift Testing: Certify capacity of metal panels by actual testing of proposed assembly per ASTM E 1592.
  - 2. Snow Loads: 10 lbf/sq. ft.
  - 3. Deflection Limits: Withstand inward and outward wind-load design pressures in accordance with applicable building code.
  - 4. Seismic Performance: Comply with ASCE 7, Section 9, "Earthquake Loads."
- D. Wind Uplift Resistance: Comply with UL 580 for wind-uplift class UL-90.
- E. **FM Approvals Listing:** Comply with FM Approvals 4471 as part of a panel roofing system, and that are listed in FM Approvals' "RoofNav" for Class 1 construction. Identify materials with FM Approvals markings.
- F. Air Infiltration, ASTM E 1680: Maximum 0.09 cfm/sq. ft. (0.457 L/s per sq. m) at static-air-pressure difference of 6.24 lbf/sq. ft. (300 Pa).
- G. Water Penetration Static Pressure, ASTM E 1646: No uncontrolled water penetration at a static pressure of 12 lbf/sq. ft. (575 Pa).
- H. Thermal Movements: Allow for thermal movements from variations in both ambient and internal temperatures. Accommodate movement of support structure caused by thermal expansion and contraction. Allow for deflection and design for thermal stresses caused by temperature differences from one side of the panel to the other.

## 2.3 METAL ROOF PANELS

- A. Mechanically-seamed, Concealed Fastener, Metal Roof Panels: Structural metal roof panel consisting of formed metal sheet with vertical ribs at panel edges, installed by lapping and mechanically interlocking edges of adjacent panels, and attaching panels to supports using concealed clips and fasteners in a weathertight installation.
- 1. Basis of Design: **MBCI, SuperLok**, [www.mbc.com/superlok.html](http://www.mbc.com/superlok.html).
    - a. Nominal Coated Thickness: 24 gage.
    - b. Panel Surface: Smooth with striations in pan
    - c. Color: As selected by Architect from manufacturer's standard colors.
  - 2. Panel Width: 16 inches (406 mm).
  - 3. Panel Seam Height: 2 inch (50.8 mm).
  - 4. Joint Type: Mechanically seamed.

## 2.4 METAL ROOF PANEL ACCESSORIES

- A. General: Provide complete metal roof panel assembly incorporating trim, copings, fasciae, gutters and downspouts, and miscellaneous flashings, in manufacturer's standard profiles as indicated. Provide required fasteners, closure strips, thermal spacers, splice plates, support plates, and sealants as indicated in manufacturer's written instructions.
- B. Flashing and Trim: Match material, thickness, and finish of metal panel face sheet.
- C. Panel Clips: Provide panel clip of type specified, at spacing indicated on approved shop drawings.

- D. Panel Fasteners: Self-tapping screws and other acceptable fasteners recommended by roof panel manufacturer. Where exposed fasteners cannot be avoided, supply long life fasteners with EPDM or neoprene gaskets, with heads matching color of metal panels by means of factory-applied coating.
- E. Joint Sealers: Manufacturer's standard or recommended liquid and preformed sealers and tapes, and as follows:
  - 1. Factory-Applied Seam Sealant: Manufacturer's standard hot-melt type.
  - 2. Tape Sealers: Manufacturer's standard non-curing butyl tape, AAMA 809.2.
- F. **Steel Sheet Miscellaneous Framing Components:** ASTM C 645, with ASTM A 653/A 653M, G60 (Z180) hot-dip galvanized zinc coating.
- G. **Roof Accessories:** Approved by metal roof panel manufacturer. Refer to Section 07 72 00 "Roof Accessories" for requirements for curbs, equipment supports, roof hatches, heat and smoke vents, ventilators, and preformed flashing sleeves.

## 2.5 FABRICATION

- A. General: Provide factory fabricated and finished metal panels and accessories meeting performance requirements, indicated profiles, and structural requirements.
- B. Fabricate metal panel joints configured to accept factory-applied sealant providing weathertight seal and preventing metal-to-metal contact and minimizing noise resulting from thermal movement.
- C. Form panels in continuous lengths for full length of detailed runs, except where otherwise indicated on approved shop drawings.
- D. Sheet Metal Flashing and Trim: Fabricate flashing and trim to comply with manufacturer's written instructions, approved shop drawings, and project drawings. Form from materials matching metal panel substrate and finish.

## 2.6 FINISHES

- A. Finishes, General: Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- B. **Fluoropolymer Two-Coat System:** 0.2 – 0.3 mil primer with 0.7 - 0.8 mil 70 percent PVDF fluoropolymer color coat, AAMA 621, meeting solar reflectance index requirements.
  - 1. Basis of Design: **MBCI, Signature 300.**
- C. Interior Finish: 0.5 mil total dry film thickness consisting of primer coat and wash coat of manufacturer's standard light-colored acrylic or polyester backer finish.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine metal panel system substrate and supports with Installer present. Inspect for erection tolerances and other conditions that would adversely affect installation of metal panel installation.



1. Inspect metal panel support substrate to determine if support components are installed as indicated on approved shop drawings. Confirm presence of acceptable supports at recommended spacing to match installation requirements of metal panels.
  2. Panel Support Tolerances: Confirm that panel supports are within tolerances acceptable to metal panel system manufacturer but not greater than the following:
    - a. 1/4 inch (6 mm) in 20 foot (6.1 m) in any direction.
    - b. 3/8 inch (9 mm) over any single roof plane.
- B. Correct out-of-tolerance work and other deficient conditions prior to proceeding with insulated metal roof panel system installation.

### 3.2 PREPARATION

- A. **Miscellaneous Supports:** Install subframing, girts, furring, and other miscellaneous panel support members according to ASTM C 754 and manufacturer's written instructions.
- B. Flashings: Install flashings to cover exposed underlayment per Section 07 62 00 "Sheet Metal Flashing and Trim."

### 3.3 METAL PANEL INSTALLATION

- A. Mechanically-Seamed, Standing Seam Metal Roof Panels: Install weathertight metal panel system in accordance with manufacturer's written instructions, approved shop drawings, and project drawings. Install metal roof panels in orientation, sizes, and locations indicated, free of waves, warps, buckles, fastening stresses, and distortions. Anchor panels and other components securely in place. Provide for thermal and structural movement.
- B. Attach panels to supports using clips, screws, fasteners, and sealants recommended by manufacturer and indicated on approved shop drawings.
  1. Fasten metal panels to supports with concealed clips at each location indicated on approved shop drawings, with spacing and fasteners recommended by manufacturer.
  2. Seamed Joint: Crimp standing seams with manufacturer-approved, motorized seamer tool so clip, metal roof panel, and factory-applied sealant are completely engaged.
  3. Provide weatherproof jacks for pipe and conduit penetrating metal panels of types recommended by manufacturer.
  4. Dissimilar Materials: Where elements of metal panel system will come into contact with dissimilar materials, treat faces and edges in contact with dissimilar materials as recommended by manufacturer.

### 3.4 ACCESSORY INSTALLATION

- A. General: Install metal panel trim, flashing, and accessories using recommended fasteners and joint sealers, with positive anchorage to building, and with weather tight mounting. Provide for thermal expansion. Coordinate installation with flashings and other components.
  1. Install components required for a complete metal panel assembly, including trim, copings, flashings, sealants, closure strips, and similar items.
  2. Comply with details of assemblies utilized to establish compliance with performance requirements and manufacturer's written installation instructions.
  3. Provide concealed fasteners except where noted on approved shop drawings.
  4. Set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently weather resistant.

- B. Joint Sealers: Install joint sealers where indicated and where required for weathertight performance of metal panel assemblies, in accordance with manufacturer's written instructions.

### 3.5 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage an independent testing and inspecting agency acceptable to Architect to perform field tests and inspections and to prepare test reports.

### 3.6 CLEANING AND PROTECTION

- A. Remove temporary protective films immediately in accordance with metal roof panel manufacturer's instructions. Clean finished surfaces as recommended by metal roof panel manufacturer.
- B. Replace damaged panels and accessories that cannot be repaired to the satisfaction of the Architect.

**END OF SECTION**

# **PINE KNOLL SHORES PUBLIC SAFETY ROOF REPLACEMENT**

## **ALTERNATES:**

Should any of the alternates as described in the contract documents be accepted, the amount written below shall be the amount to be "added to" or "deleted from" the base bid. (*Strike out "Add or "Deduct" as appropriate.*)

Alternate 1:     Replace HVAC Roof Top Units

(Add) (Deduct)

\_\_\_\_\_ Dollars(\$ \_\_\_\_\_ )  
(written amount)                                  (number amount)

**End of Add Alternate Form**



# The Town of Pine Knoll Shores

19 Oct 2023

## PRE-BID MEETING AGENDA Town of Pine Knoll Shores Public Safety Building Roof Overbuild

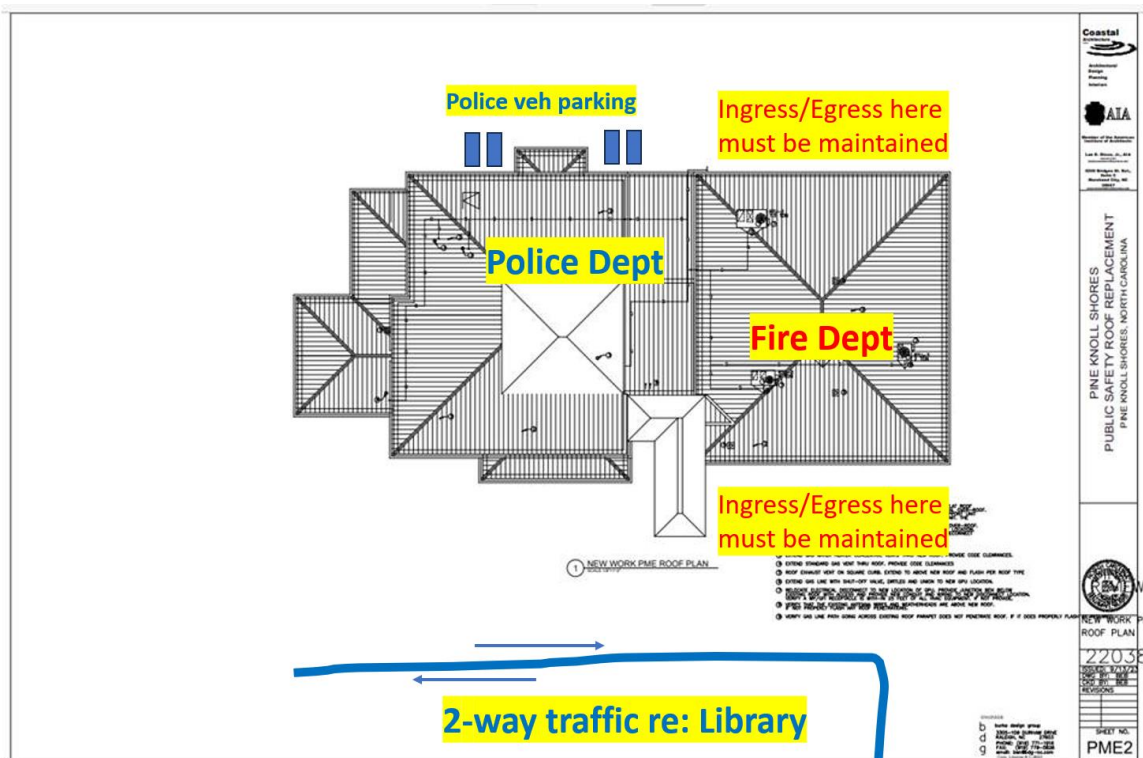
### AGENDA

#### 1. Introductions

- TM/Finance Julie Anderson 252-247-4353 manager@townofpks.com
- PM Brian Kramer 910-554-7653 ProjectOfficer@townofpks.com
- Design Consultant Lee Dixon 252-247-2127 Lee@CoastalArchitecture.net
- PKS Building Inspector Jimmy Taylor  
252-723-9315 biceo@townofpks.com
- PKS Public Services Sonny Cunningham  
252-723-0055 scunningham@townofpks.com

#### 2. General Review of Project

- Project review--Installation of a metal roof overbuild atop the PKS Public Safety Building
- Construction Area



#### 3. Project Schedule

- 4 Oct- Bids advertised
- 19 Oct, 2PM- Prebid conference at PKS Public Safety Bldg
- 31 Oct, 2PM- Bid opening
- 8 Nov- PKS Board approves contract
- 27 Nov- Anticipated Notice to Proceed issued
- 27 March 2024- Substantial Completion



# The Town of Pine Knoll Shores

## 4. **Bids—complete bids include:**

- Proposal Form
- Bid Bond
- Anti-Collusion Statement
- E-Verify Compliance Certification
- Certification Regarding Lobbying
- Iran Divestment Act Certification
- Certification of No Debarment or Suspension
- Conflict of Interest Disclosure
- Minority Business Participation Forms

## **Bid Documents--- Highlights:**

- Lump sum
- Work to be done within 120 days of written order from Lee Dixon
- Federal procurement regulations apply

## **Supplementary General Conditions--- Highlights:**

- Changes from Lee's bid documents
  - No temp power required/No cost for water/electricity. (Article 13: Misc Provisions)
  - No fee for Bldg Permit (Section 00820)
- Shop drawings sent to Lee Dixon electronically.
- Cleaning of building/construction area
- All requests for change orders to Lee Dixon
- Applications for payment using AIA document described in Lee's specifications
- 5% retainage

## 5. **Special PKS Instructions**

- **Safety----PKS personnel, those going to/from the library complex**
- Federal procurement
- Bldg remains in use by FD & PD
- Coordinate with Kramer re: any interruptions on power/water/HVAC
- Use of Lot C for laydown
- Coordination with PKS Bldg Inspector
  - Shops drawings for framing and structure
  - Contractor: meet with Jimmy Taylor immediately after contract is signed re: Building Permit
- PreCon meeting as soon as the contract is signed

## 6. Contractor questions

## 7. Adjourn



# The Town of Pine Knoll Shores

PKS Public Safety Building Roof Overbuild—Pre Bid Meeting  
19 Oct 2023

Name	email
EDDIE LESTER DANNY MCCULLERS/	e.lester @ dm roofing Contractors .Com
Samuel Giacabbi	sgiacabbi@dotconstructioninc.com
BISHOP WINTERS	bishop@waterscontracting.net
David Rubbin	drubbin@crystalcoastmechanical.com
LEE Dixon	coastal architecture
Chris Hyshe	chris@kingleroot.com
Eric Rowe	estimating@clarkcoconstruction.com
Jared Lenter	contact@qualityroofersinc.com
Marian Tucker	blong@hgreynolds.net
Roger Baker	southernmetalsys@bellsouth.net