



Macon-Bibb County Government

Procurement Department

Government Center

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Chauncey Wilmore
Senior Procurement Officer

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ADDENDUM #3

To: ALL PROSPECTIVE FIRMS

Re: INVITATION FOR BIDS: **16-026-NT Memorial Park Community Center**

The Invitation for Bids, referenced above, is modified as follows:

1. Specification Updates
2. Alternates Form.

Please incorporate this change into the Invitation for Bid and acknowledge receipt of this addendum on your bid form.

Sincerely,

Nancy Tharpe

Nancy Tharpe
Procurement Officer II



Addendum 3

Item 2.1 Fire Rated Steel Frame and Glazing Specifications at 2 hour Fire Wall

The window wall elevation BB at the 2 hour fire separation wall is to be a 2 hour rated steel frame wall assembly. Door 118D is required to be a 90 min rated door and frame assembly. Window Elevation N at room 117 is to be 90 min rated window frame and glass assembly.

- Add Section 08 8117 - Fire-Rated Glass
- Add Section 08 4123 - Fire Rated Steel Framed Entrances And Storefronts

Item 2.2 09 6566 Resilient Athletic Flooring

Delete Mondo rubber athletic floor product specified.

- Weight Room 105 flooring is to be 6 mm Rubber Flooring, "Basis of Design", Everlast as specified on finish plan.
 - Alternate manufacturers:
 - Tarkett
 - Mondo
- Multi-Purpose Room 106 flooring is to be Vinyl Athletic Flooring, "Basis of Design": Shaw Hard Surface Rexcourt 1451 Golden Cherry as specified on finish plan.
 - Alternate manufacturer:
 - Johnsonite
 - Conner Sports

Item 2.3 Electrical Clarifications

Drawings E801 – Concession Bldg Electrical Power Riser Diagram

1. Change note pointing to 'LAP' from "See Panel Specification" to "Joslyn #1265-41, 240/120 Single Phase Surge Arrestor or Equal by APT or Emerson"

Drawings E801 – Light Fixture Schedule , Previous Addendum Clarification

1. Change Type "A" light fixture to "LED, Hubbell #Alera LP70A-40 HL-80-CM-E-ELL10"

The emergency battery/inverter option listed in the part number above for Type "A" is only required for fixtures with a slash symbol and "AX" on the lighting plan indicating egress fixture.

Item 2.4 Fire Dampers

Fire dampers will be required at ducts penetrating 2 hour fire wall between Meeting Room 108 and Multi-Purpose Room 106.

Item 2.5 Existing Building Protection

The existing wood gym floor must be protected from construction activity. GC is to provide at a minimum floor protective rubber or felt with ¾" plywood overlay in areas where overhead work and scaffolding or lifts are used or areas that will have traffic. Construction materials are not to be stored on gym floor. Any area of floor damaged by construction activity is to be restored to new condition.

Per General Notes on T1.2, building openings must be protected by ¾" plywood. Supplemental temporary framing will be required to keep existing building weather tight and secured.

Item 2.6 Owners Abatement Contractor

The owner has contracted for abatement of asbestos siding at the high gym exterior walls. The GC is to coordinate schedules with the abatement contractor. The abatement contractor will place temporary weather protection as they remove asbestos siding. GC is to coordinate the installation of permanent air and moisture barrier, flashing and roofing to minimize gyms exposure to weather. Temporary protective weather barriers must be maintained until full installation of metal siding and roof are complete.

Item 2.7 Fire Wall Parapet Condition

The existing parapet wall height above the 2 hour rated wall assembly is to be extended to 30" above the adjacent decks. See attached drawing.

Item 2.8 Specification Section 01 1000 Summary

Replace section 01 1000 Summary with attached.

Item 2.9 Door 118A

Change note 1 on A1.1 at location of existing door to pool area. Provide new door, frame, and hardware to replace existing door. See door 118B for hardware set and notes.

Item 2.10 Add Alternates

See Specification 012 300 for Add Alternate clarifications.

The Total Bid Price indicated on the last page of the Bid Form from the Macon-Bibb County Invitation for Bid is the "Base Bid" amount. Indicate variation of bid price on the Alternates Form for Alternates listed in Spec Section 01 2300 Alternates. Indicate each alternate as a difference in bid price by listing out as an addition price to the base bid price.

Item 2.11 Add Alternate 3, Rolling Steel Door

See Specification 08 3300 Rolling Steel Door for add alternate item 3

Item 2.12 Asphalt Shingle Roof

Add Specification Section 07 3100

Acceptable Alternative Manufacturers:

- Specification Section 07 1320 Underslab Vapor Retarder, Add manufacturer: Tex-Trude, product: Xtreme Vapor barrier.
- Specification Section 09 9300 Resinous Epoxy Flooring, Add manufacturers Plexi-Chemie Inc. and Florock.
- Specification 07 2100, Mineral Wool 2.02, D.2 add Johns Manville -mineral wool
- Specification Section 08 7100 Door Hardware

Section	Page	Product	Specified Manufacture	Approved Alternative Manufacture
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08710 Door Hardware	087100-5	Locksets	Schlage L Series	Sargent 8200
08710 Door Hardware	087100-6	Exit Devces	Von Duprin	Sargent 80 Series
08710 Door Hardware	087100-6	Closers	LCN	Sargent 281

Questions :

I am looking for specifications on Wh-1 , WH-2, and WH-3 on the Memorial Park job. I could not find any info on plans or specifications for these items.

They are in specification section 22 3300.

Drawing A2.10, Detail 2/A2.10, References "TA9U", but there is no TA9U in the schedule.

That is for a folding shower seat, referenced in the Specifications under section 10-2800 Toilet and Bath Acc., Section 3.01, Subheading E, 12: TA9U: Solid phenolic folding shower seat, "basis of design" Bobrick B-5181

Addendum #2 adds fire sprinkler, but does not indicate a fire riser location.

Riser is in Storage room 102A

Is Door 108D required to rated?

Yes, door 108D is to be a 45min door and frame.

Where are spec section 074213 metal wall panels used on the building?

High walls of gym above the lower roofs. See elevations and sections.

Where does the fire line tie in?

Fire line runs from storage room 102A to water main at 2nd Street

End of Addendum

**SECTION 00 4323
ALTERNATES FORM**

PARTICULARS

1.01 THE FOLLOWING IS THE LIST OF ALTERNATES REFERENCED IN THE BID SUBMITTED BY:

1.02 (BIDDER) _____

1.03 TO (OWNER): _____

1.04 DATED _____ AND WHICH IS AN INTEGRAL PART OF THE BID FORM.

ALTERNATES LIST

2.01 THE FOLLOWING AMOUNTS SHALL BE ADDED TO THE BID AMOUNT. REFER TO SECTION 01 2300 - ALTERNATES.

ALTERNATE # 1: ADD / (DEDUCT) \$ _____

ALTERNATE # 2: ADD / (DEDUCT) \$ _____

ALTERNATE # 3: ADD / (DEDUCT) \$ _____

ALTERNATE # 4: ADD / (DEDUCT) \$ _____

ALTERNATE # 5: ADD / (DEDUCT) \$ _____

ALTERNATE # 6: ADD / (DEDUCT) \$ _____

END OF ALTERNATES FORM 00 4323

SECTION 01 1000 - SUMMARY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Project information.
2. Work covered by Contract Documents.
3. Owner-furnished products.
4. Contractor-furnished, Owner-installed products.
5. Access to site.
6. Work restrictions.
7. Specification and drawing conventions.
8. Miscellaneous provisions.

- B. Related Requirements:

1. Section 01 5000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

- A. Project Identification: Memorial Park Community Center.

1. Project Location: 2465 2nd St, Macon, GA 31206

- B. Owner: Macon-Bibb County.

- C. Prime Architect: WM2A Architects; 348 Cotton Avenue, Suite 500; Macon, GA 31201; 478-745-4945

- D. Consulting Architect: 2WR +Partners, 11 9th Street, Suite 120, Columbus, GA 31901; 706-571-6923

- E. Architect's Consultants: The Architect has retained the following design professionals who have prepared designated portions of the Contract Documents:

1. MEP Engineering: AHP Engineers Inc. 478-405-8210
2. Structural Engineering: Kornegay Engineering 478-745-6161
3. Civil Engineering: WM2A 478-257-5034

- F. Contractor: Will be engaged after award.

1.4 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of Project is defined by the Contract Documents and consists of the following:
 - 1. A one story, addition and renovations to the existing Memorial Park Community Center. The scope of work is as indicated within the contract documents for the project.
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.5 WORK BY OWNER

- A. General: Cooperate fully with Owner so work may be carried out smoothly, without interfering with or delaying work under this Contract or work by Owner. Coordinate the Work of this Contract with work performed by Owner. GC will be required to coordinate with the Owners Abatement contractor for the removal of exterior asbestos boards at the gym walls above surrounding roof to maintain a weather sealed enclosure.

1.6 WORK UNDER SEPARATE CONTRACTS

- A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract or other contracts. Coordinate the Work of this Contract with work performed under separate contracts.

1.7 OWNER-FURNISHED PRODUCTS

- A. Owner will furnish products indicated. The Work includes receiving, unloading, handling, storing, protecting, and installing Owner-furnished products

- B. Owner-Furnished Products:
 - 1. As indicated within the drawings.

1.8 CONTRACTOR-FURNISHED, OWNER-INSTALLED PRODUCTS

- A. Contractor shall furnish products indicated. The Work includes unloading, handling, storing, and protecting Contractor-furnished products as directed and turning them over to Owner at Project closeout.

1.9 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Limit site disturbance, including earthwork and clearing of vegetation, to 40 feet beyond building perimeter; 10 feet beyond surface walkways, patios, surface parking, and utilities less than 12 inches in diameter; 15 feet beyond primary roadway curbs and main utility branch trenches; and 25 feet beyond constructed areas with permeable surfaces (such as pervious paving areas, stormwater detention facilities, and playing fields) that require additional staging areas in order to limit compaction in the constructed area.
- C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in a weathertight condition throughout construction period. Repair damage caused by construction operations.

1.10 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- B. On-Site Work Hours: Limit work in the existing building to normal business working hours of 6 a.m. to 8 p.m., Monday through Friday, unless otherwise indicated.
 - 1. Weekend Hours: Same as times permitted for weekday work.
- C. Nonsmoking Building: Smoking is not permitted within the building or within 25 feet of entrances, operable windows, or outdoor-air intakes.
- D. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.

1.11 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.
- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations published as part of the U.S. National CAD Standard and scheduled on Drawings.
 - 3. Keynoting: Materials and products are identified by reference keynotes referencing Specification Section numbers found in this Project Manual.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 01 1000

**SECTION 01 2300
ALTERNATES**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.
- B. Procedures for pricing Alternates.
- C. Documentation of changes to Contract Price and Contract Time.

1.02 RELATED REQUIREMENTS

- A. Document 00 2113 - Instructions to Bidders: Instructions for preparation of pricing for Alternates.

1.03 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04 SCHEDULE OF ALTERNATES

- A. Alternate No. 1 - Add Alternate: Pool Restrooms. :Base bid: repair all toilet partition wall and doors, replace plastic wall anchors with masonry anchors & provide new plumbing fixtures and electrical in rooms 122 & 123 - see plumbing and electrical sheets. Add alt: provide all updated finishes in pool restrooms and vestibule 121, 122 and 123. Refer to Finish Plans A1.2
 - 1. Base bid: repair all toilet partition wall and doors, replace plastic wall anchors with masonry anchors & provide new plumbing fixtures and electrical fixtures in rooms 122 & 123 - see plumbing and electrical sheets.
 - 2. Add Alternate: Provide all updated finishes in pool restrooms and vestibule 121, 122 and 123. Refer to Finish Plans A1.2
- B. Alternate No. 2 - Add Alternate: Paint all walls in Gym 118:
- C. Alternate No. 3 - Add Alternate: Electrically Operated Roll Down Metal Security Door:Shift entry storefront at door 100 toward the interior of the building 18", frame adjacent walls/soffit accordingly with like materials for an enclosed entry. Provide an overhead roll down security door system at exterior side of storefront entry- see specs. Mount as required to steel tube & wall. Supplemental steel framing may be required. Security door is to be electrically operated by keyswitch in the lobby. Provide power per manufactures requirements. Provide 6'-0"x7'-0" hollow metal, double exit doors in lobby, see hardware set 01. Refer to A1.1 note 16.
- D. Alternate No. 4 - Add Alternate: Swimming Pool Upgrades: Provide Add Alternate Pricing for Swimming Pool Upgrades. Refer to Addendum 1, PA sheets. GC is to provide all pool upgrades as an Add Alternate to the Project Base Bid. Refer to Sheet PA 1.0 for further clarification.
 - 1. Provide Price for Base Bid of Pool Add Alternate
 - 2. Provide Price for Option 1 of Pool Add Alternate
 - 3. Provide Price for Option 2 of Pool Add Alternate
 - 4. Provide Price for Option 3 of Pool Add Alternate
- E. Alternate No. 5 - Add Alternate: Replacement of Gym Windows: Replace existing gym windows with new aluminum storefront windows. Glazing to be insulated unit with interior pane of 1/2" tempered glass. See Specifications.
- F. Alternate No. 6 - Add Alternate: Exterior Basketball Court Upgrade: Replace existing outdoor basketball backboards with fan shaped fiberglass backboard, 54"x39", Basis of Design, part number 503148 by Draper with an outdoor breakaway goal, Basis of Design, part number 503079 by Draper, Draperinc.com. Repair asphalt and base at sunken in area to provide a level surface for court.

PART 2 PRODUCTS - NOT USED
PART 3 EXECUTION - NOT USED

END OF SECTION 01 2300

SECTION 08 3300 – ROLLING STEEL DOOR

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Overhead coiling service doors.

1.2 RELATED SECTIONS

- A. Section 06200 - Finish Carpentry: Wood jamb and head trim.
- B. Section 08710 - Door Hardware: Product Requirements for cylinder core and keys.
- C. Section 09900 - Painting: Field applied finish.
- D. Section 26 0533- Raceway and Boxes: Conduit from electric circuit to door operator and from door operator to control station.
- E. Section 26 2726 - Wiring Connections: Power to disconnect.

1.3 REFERENCES

- A. [ASTM A 653](#) - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
- B. [ASTM A 924](#) - Standard Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
- C. [NEMA 250](#) - Enclosures for Electrical Equipment (1000 Volts Maximum).
- D. [NEMA MG 1](#) - Motors and Generators.

1.4 DESIGN / PERFORMANCE REQUIREMENTS

- A. Overhead coiling service doors:
 - 1. Wind Loads: Design door assembly to withstand wind/suction load of 20 psf (958 Pa) without damage to door or assembly components.
 - 2. Operation: Design door assembly, including operator, to operate for not less than 20,000 cycles.
- B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- 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. Details of construction and fabrication.
 4. Installation instructions.
- C. Shop Drawings: Include detailed plans, elevations, details of framing members, anchoring methods, required clearances, hardware, and accessories. Include relationship with adjacent construction.
 - D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
 - E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) long, representing actual product, color, and patterns.
 - F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
 - G. Operation and Maintenance Data: Submit lubrication requirements and frequency, and periodic adjustments required.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in performing Work of this section with a minimum of five years experience in the fabrication and installation of security closures.
- B. Installer Qualifications: Installer Qualifications: Company specializing in performing Work of this section with minimum three years and approved by manufacturer.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect materials from exposure to moisture. Do not deliver until after wet work is complete and dry.
- C. Store materials in a dry, warm, ventilated weathertight location.

1.8 PROJECT CONDITIONS

- A. 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.

1.9 COORDINATION

- A. Coordinate Work with other operations and installation of adjacent materials to avoid damage to installed materials.

1.10 WARRANTY

- A. Warranty: Manufacturer's limited door and operator system, except the counterbalance spring and finish, to be free from defects in materials and workmanship for 3 years or 20,000 cycles, whichever occurs first.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer:
1. "Basis of Design" Overhead Door Corp., 2501 S. State Hwy. 121, Suite 200, Lewisville, TX 75067. ASD. Tel. Toll Free: (800) 275-3290. Phone: (469) 549-7100. Fax: (972) 906-1499. Web Site: www.overheaddoor.com. E-mail: info@overheaddoor.com.
 2. Atlas Door Corp
 3. Cornell Iron Works
- B. Requests for substitutions will be considered in accordance with provisions of Section 01 6000.

2.2 OVERHEAD COILING SERVICE DOORS

- A. Industrial Doors: Overhead Door Corporation Model 610 Service Door.
1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement.
 - a. Curved profile type C-275 for doors up to and between 15 feet 4 inches (4.67 m) and 18 feet 4 inches (5.59 m) wide, fabricated of:
 - 1) 22 gauge galvanized steel.
 2. Finish:
 - a. Galvanized Steel: Slats and hood galvanized in accordance with ASTM A 653 and receive rust-inhibitive, roll coating process, including 0.2 mils thick baked-on prime paint, and 0.6 mils thick baked-on polyester top coat.
 - 1) Powder coat: PowderGuard
 - (a) PowderGuard Weathered Finish: Industrial textured powder coat provides a thicker, more scratch resistant coat. Applied to entire door system including slats, guides, bottom bar and head plate.
 - 2) Non-galvanized exposed ferrous surfaces shall receive one coat of rust-inhibitive primer.
 3. Weatherseals:
 - a. Vinyl bottom seal.
 - b. Guide weatherseal.
 4. Bottom Bar:
 - a. Two galvanized steel angles.
 5. Guides: Three structural steel angles.
 - a. Finish: PowderGuard Zinc Finish for guides, bottom bar and head plate.
 6. Brackets:
 - a. Galvanized steel to support counterbalance, curtain and hood.
 7. Counterbalance: Helical torsion spring type housed in a steel tube or pipe barrel, supporting the curtain with deflection limited to 0.03 inch per foot of span. Counterbalance is adjustable by means of an adjusting tension wheel.
 8. Hood:
 - a. 24 gauge galvanized steel with intermediate supports as required.
 9. Electric Motor Operation: Provide UL listed electric operator, size as recommended by manufacturer to move door in either direction at not less than 2/3 foot nor more than 1 foot per second.
 - a. Sensing Edge Protection:

- 1) Electric sensing edge.
 - b. Operator Controls:
 - 1) Key operation with open, close, and stop controls.
 - 2) Controls for interior location.
 - 3) Controls flush mounted.
 - c. Motor Voltage: 115/230 single phase, 60 Hz.
- 10. Windload Design:
 - a. Standard windload shall be 20 PSF.
- 11. Locking:
 - a. Interior slide bolt lock for electric operation with interlock switch.
- 12. Wall Mounting Condition:
 - a. Between jambs mounting.
 - b.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify opening sizes, tolerances and conditions are acceptable.
- B. Examine conditions of substrates, supports, and other conditions under which this work is to be performed.
- C. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.
- E. Coordinate installation of electrical service with Section 16150. Complete wiring from disconnect to unit components.
- F. Coordinate installation of sealants and backing materials at frame perimeter as specified in Section 07900.
- G. Install perimeter trim and closures.

- H. Instruct Owner's personnel in proper operating procedures and maintenance schedule.

3.4 ADJUSTING

- A. Test for proper operation and adjust as necessary to provide proper operation without binding or distortion.
- B. Adjust hardware and operating assemblies for smooth and noiseless operation.

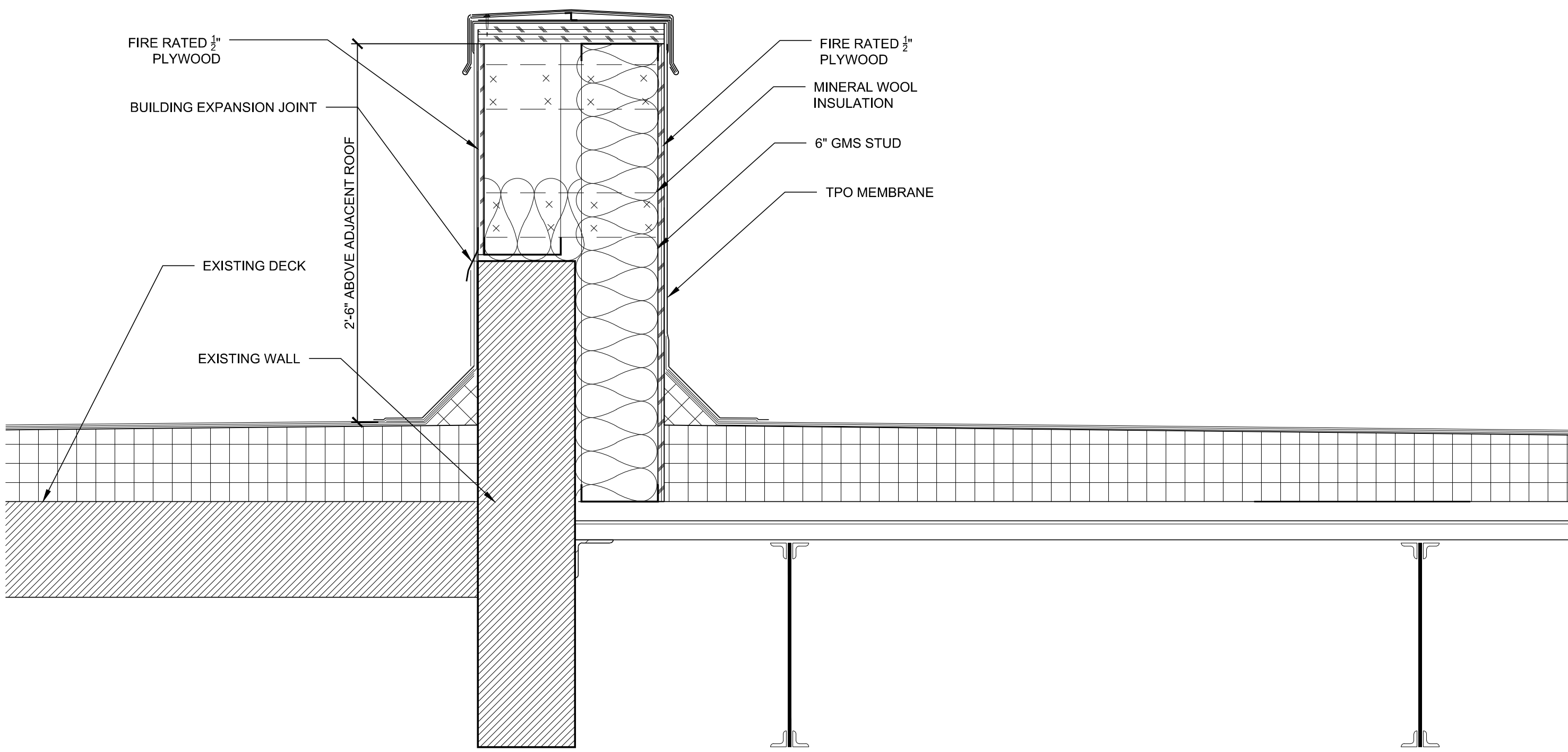
3.5 CLEANING

- A. Clean curtain and components using non-abrasive materials and methods recommended by manufacturer.
- B. Remove labels and visible markings.
- C. Touch-up, repair or replace damaged products before Substantial Completion.

3.6 PROTECTION

- A. Protect installed products until completion of project.

END OF SECTION



FIRE WALL PARAPET

SECTION 07 3100

ASPHALT SHINGLE ROOFING

PART I GENERAL

1.01 SECTION INCLUDES

- A. Asphalt roofing shingles.
- B. Leak barrier and roof deck protection.
- C. Metal flashing associated with shingle roofing.
- D. Attic ventilation.

1.02 RELATED SECTIONS

- A. Section 06100 - Rough Carpentry: Framing, wood decking, and roof sheathing.
- B. Section 07620 - Flashing and Sheet Metal: Sheet metal flashing not associated with shingle roofing; gutters and downspouts.
- C. Section 08630 - Unit Skylights: Skylights

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM) - Annual Book of ASTM Standards
 - 1. ASTM A 653/A 653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
 - 2. ASTM B 209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
 - 3. ASTM B 370 - Standard Specification for Copper Sheet and Strip for Building Construction.
 - 4. ASTM D 3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
 - 5. ASTM D 3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
 - 6. ASTM D 3462 - Standard Specification for Asphalt Shingles Made From Glass Felt and Surfaced with Mineral Granules.
 - 7. ASTM D 4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
 - 8. ASTM D 7158 - Standard Test Method for Wind-Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
- B. Underwriters Laboratories (UL) - Roofing Systems and Materials Guide (TFWZ.R21)
 - 1. UL 790 - Tests for Fire Resistance of Roof Covering Materials.
 - 2. UL 997 - Wind Resistance of Prepared Roof Covering Materials.
 - 3. UL 2218 - Impact Resistance of Prepared Roof Covering Materials.
- C. Asphalt Roofing Manufacturers Association (ARMA)
- D. Sheet Metal and Air Conditioning Contractors National Association, Inc. (SMACNA) - Architectural Sheet Metal Manual.
- E. National Roofing Contractors Association (NRCA)

F. American Society of Civil Engineers (ASCE).

1. ASCE 7 - Minimum Design Loads for Buildings and Other Structures.

G. U.S. Green Building Council (USGBC)

1.04 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D1079 and the glossary of the National Roofing Contractors Association (NRCA) Roofing and Waterproofing Manual for definitions of roofing terms related to this section.

1.05 SUBMITTALS

A. Submit copies of Roof Manufacturer product data sheets, detail drawings and samples for each type of roofing product.

1.06 QUALITY ASSURANCE

A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, leak barrier, and ventilation, by a single manufacturer.

B. Installer Qualifications: Installer must be approved for installation of all roofing products to be installed under this section.

1.07 REGULATORY REQUIREMENTS

A. Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification.

B. Install all roofing products in accordance with all federal, state and local building codes.

C. All work shall be performed in a manner consistent with current OSHA guidelines.

1.08 PREINSTALLATION MEETING

A. General: A pre-installation meeting is required.

B. Timing: The meeting shall take place at the start of the roofing installation.

C. Attendees: Meeting to be called for by manufacturer's certified contractor. Meeting's mandatory attendees shall include the certified contractor and the manufacturer's representative. Non-mandatory attendees shall include the owner's representative, architect or engineer's representative, and the general contractor's representative.

D. Topics: Certified contractor and manufacturer's representative shall review all pertinent requirements for the project, including but not limited to, scheduling, weather considerations, project duration, and requirements for the specified warranty.

1.09 DELIVERY, STORAGE, AND HANDLING

A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.

B. Store products in a covered, ventilated area, at temperature not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.

C. Store bundles on a flat surface. Maximum stacking height shall not exceed of Roof Manufacturer recommendations. Store all rolls on end.

D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.

1.10 WEATHER CONDITIONS

A. Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with GAF's recommendations

1.11 WARRANTY

- A. Provide to the owner a manufacturer's roof warranty, equivalent to the basis of design **GAF® WeatherStopper® Golden Pledge® Ltd Warranty** covering:
1. Roofs installed by a Roof Manufacturer approved installer rated for the installation warranty by the manufacturer. "Basis of Design" is a Certified GAF Master Elite™ Contractor only.
 2. Manufacturing defects: 100% coverage for materials and labor for:
 - a 40 years with the first 20 years non-prorated.
 3. Workmanship errors: 100% coverage for workmanship errors for:
 - a 20 years, **Warranty to be provided by roof manufacturer.**
 4. Roof system NOT installed over an existing roof, all existing roof materials must be removed to the deck.
 5. Full roof installations using the following products.
 - a Must use Ice and Water Shield over entire deck, Basis of Design Grace Ice & Water Shield.
 - b You must use roof manufacturers required starter strips for warranty, Basis of Design GAF pre-cut starter strip products (only those with factory applied adhesive) at the eaves
 - c You must use roof manufacturers shingles eligible for the required warranty.
 6. New metal flashings must be installed.
 - a Metal drip edge must be used at eaves.
 7. In addition to the requirements listed above, the installer must register and pay for this warranty. The project must pass roof manufacturers final inspection schedule a start-up and at least one interim inspection on projects of 250 squares or more by contacting Roofing Manufacturer at least three weeks prior to the start of roof work.

PART II PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable Manufacturer:
1. "Basis of Design" GAF, 1 Campus Drive, Parsippany NJ 07054. Tel: 1-973-628-3000.
 2. CertainTeed
 3. Owens Corning
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.02 SHINGLES

- A. Self sealing, granule surfaced, asphalt shingle with a strong fiberglass reinforced core and stain protection, which prevents pronounced discoloration from blue-green algae. Architectural laminate styling provides a wood shake appearance with a 5 5/8 inch exposure. UL 790 Class A rated with UL 997 Wind Resistance Label; ASTM D 7158, Class H; ASTM D 3161, Type 1; ASTM D 3018, Type 1; ASTM D 3462; AC438; CSA A123.5-98; Dade County Approved, Florida Building Code Approved, Texas Dept of Insurance Approved, ICC Report Approval.
- B. Basis of Design: **Timberline® HD** Lifetime High Definition Shingles, by GAF®.
1. Color: As selected from manufacturers' full range.

2.03 HIP AND RIDGE SHINGLES

- A. High profile self sealing hip and ridge cap shingle matching the color of selected roof shingle.
- B. Basis of Design, **Timbertex®** Premium Ridge Cap Shingles, by GAF.

2.04 STARTER STRIP

- A. Self sealing starter shingle designed for all roof shingles.
- B. Basis of Design, **ProStart™ Starter Strip** by GAF.

2.05 LEAK BARRIER

- A. Self-adhering, self sealing, bituminous leak barrier
- B. Basis of Design, Grace Ice and Water Shield

2.06 ROOFING CEMENT

- A. Asphalt Plastic Roofing Cement meeting the requirements of ASTM D 4586, Type I or II.
- B. Roof Cement: ASTM D 4586, Basis of Design, **Matrix™ 203 Plastic Roof Cement**.
- C. Roof Cement: ASTM D 4586. Basis of Design **Matrix™ 204 Wet/Dry Roof Cement**.

2.07 ROOF ACCESSORIES

- A. Exterior acrylic rust resistant aerosol roof accessory paint. Basis of Design **Shingle-Match™** Roof Accessory Paint by GAF.

2.08 ATTIC VENTILATION (may use Cobra® Ridge Vents or MasterFlow™ Ventilation)

1. Not Required, installation over insulated deck.

2.09 NAILS

- A. Standard round wire, zinc-coated steel or aluminum; 10 to 12 gauge, smooth, barbed or deformed shank, with heads 3/8 inch (9mm) to 7/16 inch (11mm) in diameter. Length must be sufficient to penetrate into solid wood at least 3/4 inch (19mm) or through plywood or oriented strand board by at least 1/8 inch (3.18mm).

2.10 METAL FLASHING

- A. Refer to 076200 Sheet Metal Flashing and trim.

PART III EXECUTION

3.01 EXAMINATION

- A. Do not begin installation until the roof deck has been properly prepared.
- B. If roof deck preparation is the responsibility of another installer, notify the architect or building owner of unsatisfactory preparation before proceeding.

3.02 PREPARATION

- A. Remove all existing roofing down to the roof deck.
- B. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover with galv. sheet metal, all holes over 1 inch (25mm) in diameter, cracks over 1/2 inch (12mm) in width, loose knots and excessively resinous areas.
- C. Replace damaged deck with new materials.
- D. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.

3.03 INSTALLATION OF UNDERLAYMENTS

A. General:

1. Install using methods recommended by Roof Manufacturer, in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.

B. Roof Deck:

1. Install one layer of Ice and Water Shield over the entire roof area.

3.04 INSTALLATION OF SHINGLES

A. General:

1. Install in accordance with Roof Manufacturer's instructions and local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.
2. Minimize breakage of shingles by avoiding dropping bundles on edge, by separating shingles carefully (not by "breaking" over ridge or bundles), and by taking extra precautions in temperatures below 40 degrees F (4 degrees C).
3. Handle carefully in hot weather to avoid scuffing the surfacing, or damaging the shingle edges.

B. Placement and Nailing:

1. Beginning with the starter strip, trim shingles so that they "nest" within the shingle located beneath it. This procedure will yield a first course that is typically 3" (76mm) to 4" (102mm) rather than a fully exposed shingle.
2. For maximum wind resistance along rakes, install Roof Manufacturer's starter strip containing sealant or cement shingles to underlayment and each other in a 4" (102mm) width of asphalt plastic roof cement.
3. Laterally, offset the new shingles from the existing keyways, to avoid waves or depressions caused by excessive dips in the roofing materials.
4. Using the bottom of the tab on existing shingles, align subsequent courses.
5. *Note: DO NOT install standard sized shingles (5" exposure) over metric (5 5/8" exposure) shingles, as it will overexpose the shingles and reveal the nails. Use standard alignment methods to assure proper shingle placement.
6. Secure with 4, 5, or 6 nails per shingle per Roof Manufacturer's instructions or local codes.
7. Placement of nails varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.
8. Nails must be driven flush with the shingle surface. Do not overdrive or under drive the nails.
9. Shingle offset varies based on the type of shingle specified. Consult the application instructions for the specified shingle for details.

C. Valleys

1. Install valleys using the "open valley" method:
 - a Snap diverging chalk lines on the metal flashing, starting at 3 inches (76mm) each side of top of valley, spreading at 1/8 inch per foot (9mm per meter) to the eaves.
 - b Run shingles to chalk line.

- c Trim last shingle in each course to match the chalk line; do not trim shingles to less than 12 inches (305mm) wide.
 - d Apply a 2 inch (51mm) wide strip of plastic cement under ends of shingles, sealing them to the metal flashing.
2. Install valleys using the "closed cut valley" method:
- a Run the first course of shingles from the higher roof slope across the valley at least 12 inches (305mm).
 - b Run succeeding courses of shingles from the lower roof slope across the valley at least 12 inches (305mm) and nail not closer than 6 inches (152mm) to center of valley.
 - c Run shingles from the upper roof slope into the valley and trim 2 inches (51mm) from the center line.

D. Penetrations

- 1. All Penetrations are to be flashed according to Roof Manufacturer, ARMA and NRCA application instructions and construction details.

E. Skylights and Roof Hatches

- 1. Consult the manufacturer of the skylight or roof hatch for specific installation recommendations.
- 2. Skylights and roof hatches shall be installed with pre-fabricated metal flashings specifically designed for the application of the unit.

3.05 PROTECTION

- A. Protect installed products from foot traffic until completion of the project.
- B. Any roof areas that are not completed by the end of the workday are to be protected from moisture and contaminants.

END OF SECTION

**SECTION 00 4323
ALTERNATES FORM**

PARTICULARS

- 1.1 THE FOLLOWING IS THE LIST OF ALTERNATES REFERENCED IN THE BID SUBMITTED BY:
- 1.2 (BIDDER) _____
- 1.3 TO (OWNER): Macon-Bibb County Board of Commissioners
- 1.4 DATED _____ AND WHICH IS AN INTEGRAL PART OF THE BID FORM.

ALTERNATES LIST

2.01 THE FOLLOWING AMOUNTS SHALL BE ADDED TO THE BID AMOUNT. REFER TO SECTION 01 2300 - ALTERNATES.

ALTERNATE # 1: ADD / (DEDUCT) \$ _____

ALTERNATE # 2: ADD / (DEDUCT) \$ _____

ALTERNATE # 3: ADD / (DEDUCT) \$ _____

ALTERNATE # 4: ADD / (DEDUCT) \$ _____

ALTERNATE # 5: ADD / (DEDUCT) \$ _____

ALTERNATE # 6: ADD / (DEDUCT) \$ _____

END OF ALTERNATES FORM 00 4323

15-418.2 / 15-418.2 Memorial
Park

00 4323 - 1

ALTERNATES FORM