BID SPECIFICATIONS

A. Project Location
The Orange Beach Fire Department is located at 25855 John Snook Drive, Orange Beach, AL 36561.

B. City Staff Contact
The City's staff contact for this project shall be the Event Operations Director:
Bruce Nelson, bnelson@orangebeachal.gov, (251) 981-6166

C. Pre-Bid Meeting
There is mandatory pre-bid conference for this project on June 16, 2026 at 10:00 A.M. Central, attendance via Zoom will be permitted. Bidders are encouraged to schedule a walk-through of the project location with the City's staff contact.

D. Work Schedule
After contract award, the Contractor shall coordinate the work schedule with the Deputy Chief of Operations. Any modifications to the work schedule shall be first approved by the Deputy Chief of Operations.

E. Coordination
The Contractor shall coordinate all work with the Deputy Chief of Operations and designated City Staff. It is the responsibility of the Contract to coordinate the work as to eliminate or minimize any delay, obstruction, disruption, or interference to businesses surrounding the Fire Department.

F. Project Overview
The burn tower shall simulate a three-level, single and multi-family residential structure with an attached four-story interior stairwell, built using shipping containers. The vendor shall provide all materials, transportation, labor, assembly, painting, and commissioning of the structure. The project must be delivered and installed at the designated site within by July 31, 2027.

G. Scope of Work
Container Structure
-Ten (10) new/one trip forty-foot (40') high cube wind/watertight shipping containers
-Five (5) new/one trip twenty-foot (20') high cube wind/watertight shipping containers
-Transportation of all containers to the final site (Orange Beach Fire Training Facility)

1. Engineering Plans/Design Must Include:
A. Provide Custom 3D CAD Design
B. Structural Engineering
C. Foundation Engineering
D. NFPA 1402 certification via 3rd party engineer
E. Fabrication and Set-up Labor
F. Turnkey construction
G. Warranty: one-year coverage on craftsmanship for all features, including the building structure
H. Training: Provide two (2) eight (8) hour training day classes with Train-to-trainer, covering introduction/tactical system operations and maintenance – Including but not limited to training on how to operate the various burn rooms and technical props and all operations within the burn tower and various rooms hallways
I. Drawings included in submission do **not** need to be signed and sealed by a registered architect or professional engineer. Custom 3D CAD Design Drawings of proposed structure need to be submitted.

2. **Fifteen (15) Shipping Containers, modular burn building constructed to Orange Beach Fire/Rescue Designs:**
   A. Ten (10) Forty-foot (40') high cube new/one (1) trip wind/watertight shipping containers, with two (2) to serve as a "T" hallway on the Left (Bravo) side of the structure. One of these 40' cubes, serving as the top cube, will serve as a weather covering for inclement conditions. The structure should be modified by removing the side walls while retaining the roof, and finished with decking that integrates with the existing roof design
   B. Five (5) Twenty-foot (20') high cube new/one (1) trip wind/watertight shipping containers. Four (4) to serve as an exterior, enclosable stairwell. One (1) to be situated in between the "T" hallway and ventilation prop on the Alpha Side (refer to drawing)
   C. All shipping containers shall be prepped and painted with two (2) coats of oil-based industrial metal paint in the colors specified by Orange Beach Fire/Rescue. No Exceptions permitted
   D. All containers must have drains built in for water removal. No Exceptions permitted
   E. Custom design for each level to be finalized pre-build upon meeting with the contract awardee

3. **Stairs-Interior:**
   A. Three (3) interior return stairs laid out per Orange Beach Fire Rescue (OBFR) design. No exceptions permitted. Location to be decided by OBFR
   B. Three (3) interior straight run stairs laid out per OBFR design. No exceptions permitted. Location to be decided by OBFR
   C. All PE designed/stamped/fabricated to support firefighting tactical loads

4. **Stairs-Exterior:**
   A. Two sets of exterior straight run stairs that meet at a common 5'x10' landing connecting two sets of stairs running parallel along the Bravo side Conex boxes. One stair entrance will be accessible from the Alpha side and the other entrance will be on the Charlie side
   B. Designed and constructed in Twenty (20) foot shipping containers, to act as an interior "High-Rise" stairwell. No Exceptions permitted
   C. Stairwell shall be constructed inside twenty (20) foot containers with original doors and added windows to create an openable area. No Exceptions permitted
   D. Accommodation made for the Standpipe system built into the stairwell
   E. Each level must have fire-rated entry access into the training building. No Exceptions permitted
   F. PE designed/stamped/fabricated to support firefighting tactical loads

5. **Heavy Gauge Steel Burn Containers (Burn Rooms):**
   A. Four (4) 8' x 8' containers, heavy gauge steel lined. No exceptions permitted
   B. Replaceable, bolt-in steel panels for long-term maintenance benefits. No exceptions permitted
   C. 2400-degree rated, non-exposed insulation. No exceptions permitted
   D. Includes air control vents, steel floor, steel burn shell. No exceptions permitted
   E. First floor has two burn rooms, second floor has one burn room, and the third floor will have one burn room
   F. The burn container on level 1 must be openable to the roof prop above for ventilation over live fire training
   G. Below the roof prop on level 2 there shall be an openable hatch for the use of simulated smoke conditions

6. **Two (2) Vents over Fire Hatch:**
   A. 36''x36'' removable hatch under the two roof vent props

7. **Twenty-four (24) Windows:**
   A. Heavy-gauge steel windows with closures. No Exceptions permitted
   B. Sliding style for window clearing training. No Exceptions permitted
   C. Accepts drywall for training purposes. No Exceptions permitted

D. Four (4) bailout anchors locations to be placed above windows determined by Fire Department at later date
E. All windows must have the ability to be secured from the interior for security purposes. No Exceptions permitted

8. Seven (7) Doors – Fire-rated Exterior Door:
A. Inward or outward opening
B. Not Forcible Entry training doors
C. Training burn tower must be secured against outside entry when not in use. No Exceptions permitted

9. Two (2) Overhead Hallway Burn Prop (or comparable):
A. 10' burn hallway prop designed for flow and move tactics
B. Real 2x4 and drywall ceiling capable of live burns
C. Quick jig setup for training flexibility
D. Supports fire extension and thermal imaging camera (TIC) operations
E. Location will be on the first and second floors

10. Two (2) Apex M8 Roof Vent Props (or comparable):
A. 8' x 8' cutting area. No Exceptions permitted
B. Supports 2x4, 2x6, and 2x10 lumber with quick pins. No Exceptions permitted
C. Modular construction
D. Must have adjustable pitch (flat, 4:12, 5:12, 9:12, 16:12 via quick pins on side frame panel), bi-directional articulation, accept numerous sides of truss supports, and drywall wall panel below cut portion. No Exceptions permitted
E. Drywall punch-through capabilities
F. One (1) prop situated on the roof of level Three (3) facing the front (Alpha) side of the structure. No Exceptions permitted
G. Four (4) 4’ x 8’Mod Decking with railings
H. The four (4) mod decks shall be located on each side of the 2 roof props. No Exceptions permitted
I. Location to be determined by OBFR

11. Garage Door Cut Prop:
A. 8’x10’ quick jig; to simulate cutting metal roll up doors

12. Four (4) Bravo Force Doors (or comparable)
A. Built-in forcible entry door based on the Alpha prop platform or comparable
B. Supports inward and outward opening. No Exceptions permitted
C. Flexible/crushable door section
D. Multi-level locking system
E. Built-in rebar/hinge cutting tree
F. Compatible with drop bar and panic bar cut-through training packages
G. Location to be determined by OBFR

13. Fire Department Connection (FDC) Prop:
A. Multi-floor dry system standpipe training capability
B. Must have industry-standard FDC connections on the exterior. Must have industry-standard connections on every level. No Exceptions permitted
C. Located in the exterior, enclosable stairwell. No Exceptions permitted

14. Rappel Prop:
A. Designed and rated/tested for firefighter rope and rappel operations. No Exceptions permitted
B. Located on the roof of level Three (3)

C. Must include multiple Technical Rescue rigging anchors/points
D. All rappelling and bailout anchors must be NFPA-compliant
E. Rated for Ten Thousand Pounds (10,000lbs)

15. Two (2) Single Stanchions:
A. Rappel stanchion NFPA compliant.
B. Rappel anchors and stanchions should be mounted within the inclement weather covering top structure and designed to meet life safety standards with a minimum rating of 40kN (9,000 lbs) or greater

16. Two (2) Rappel-Cage/Frame:
A. Rappel cage co-located with the rappel stanchion and decking
B. Allows for additional anchors

17. Six (6) Rappel-Additional Anchors:

18. Mod Decking for Rappel Area:
A. 8'x40' with railings
B. Located on Alpha side roof

19. One (1) Denver Drill:
A. Built-in Denver drill prop with quick setup/removable panels that utilize 1st level window. Panels add or remove for usable space aside from the Denver drill disciplines

20. Two (2) Window Cut Prop (Rebar Station):
A. Quick jig set-up for rebar cut work

21. Two (2) Window Sash:
A. Universally fits all windows
B. Center frame clearing prop

22. One (1) Window to Door Cut Prop:
A. Quick jig construction allows fast reset

23. Fifteen (15) Ground Ladder Protection Plates:
A. 24'x24' L/R of windows and 8''x36''

24. Four (4) Window Bailout Anchors:
A. Overhead bailout anchors for above-grade windows and balconies or safety on the roof prop
B. Bailout anchors should be installed above window openings on the interior side, with final placement determined during construction. Anchors should also be installed at both ventilation props, and must meet or exceed the same safety rating of 40 kN (9,000 lbs)

25. Three (3) Nance Drill/Floor Hatch
A. 36''x36'' steel hatch
B. Location to be in Charlie side stairwell

26. One (1) Smoke Generator
A. Plumbing piped throughout the structure for a synthetic smoke machine
B. Shutoffs to be placed on each floor – piping system should run from the first floor to the top floor, with directional shutoff valves at each level to allow the selective smoke production (no smoke on the first floor while smoke is generated on upper levels)

27. Custom Floorplan Layout:

A. Custom Floorplan Layout designed with the client. To include, but not limited to: hallways, doors, windows, and wall options. No Exceptions permitted

28. Shipping/Set-up to Include:

A. Shipping of all prefabricated containers/materials
B. Cranes and equipment rental
C. Anchoring and Flashing Materials
D. Travel and Turnkey set-up labor

29. Additional Specifications and Post-Build Considerations:

A. Engineered, stamped drawings detailing site preparation and structural concrete footers for the burn facility are to be submitted by the awarding contractor once bidis awarded and the burn tower facility layout of the building has been finalized.
B. Structure must be designed, constructed, and rated for Live Fire Training, and certified to meet NFPA 1402, Standard on Facilities for Live Fire Training and Associated Props, 2019 Edition. No Exceptions permitted
C. NFPA 1402 7.2.2 (2) states that for non-gas-fired live fire structures, recertification must occur every five (5) years or more frequently if determined to be required by the evaluator. Please include considerations for recertification in this bid; however, do not attach them to the bid for construction
D. Following the award of the bid, the winning Contractor shall resubmit the engineered and stamped CAD drawings for final review, acceptance, and approval prior to the commencement of construction

H. General Requirements

1. Contractor shall be specialized in fire training towers and software to produce drawings for City use. The selected vendor will provide, deliver, and assemble the burn tower as specified.
2. Contractor shall provide at least three (3) references on past performance along with customer contact information showing the capability to fabricate/deliver/assemble the Burn Tower.
   The Contractor shall, at their own expense, provide, maintain, and service a portable toilet facility on-site for their employees and subcontractors throughout the duration of the project. The unit shall be placed in a location approved by the Owner, properly secured, and removed immediately upon completion of the work. No use of the property's existing bathrooms is permitted.
3. Contractor shall provide a project schedule demonstrating construction will be completed on time.
4. Contractor is responsible for obtaining and maintaining all required licenses and professional designations necessary to perform the work, and for ensuring full compliance with all applicable laws and regulations of the State of Alabama and the Alabama Licensing Board for General Contractors.
5. The successful company shall be required to comply with all building permit procedures and requirements. Building permit fees for this project shall be waived.
6. The City is responsible for all prior site grading, and pre-slab installation of conduit stub-ups. No other utilities are needed.
7. The City to attach conceptual site plan provided by in-house Community Development/Engineer team and Geotech reports. A basic floor plan is also attached that is a generic conceptual layout intended for design intent only; it is not a finalized construction document.

I. Storage of Materials

All equipment and materials may be stored only at the location(s) approved by the City. It is expressly noted that no payments will be made for materials stored off-site.

J. Disposal of Materials

Any waste and excess materials shall be disposed of by the Contractor in a safe manner conforming to all Federal and State Occupational and Environmental Laws and Regulations including, but not limited to, the Occupational Safety and Health Act (OSHA), the Clean Air Act (CAA), the Clean Water Act (CWA), the Safe Drinking Water Act

(SDWA), the Toxic Substances Control Act (TSCA), and the Alabama Department of Environmental Management (ADEM) Regulations.