Job No. 3891.02 April 13, 2020

# ADDENDUM NUMBER FOUR (Revision 2) TO THE CONTRACT DOCUMENTS FOR CONSTRUCTION OF ORANGE BEACH RECREATION COMPLEX NEW ADULT FITNESS CENTER CITY OF ORANGE BEACH

This addendum forms a part of the Contract Documents and modifies the Bid Documents dated February 14, 2020.

This Addendum consists of three (3) page Addendum, three (3) Specifications, & seventeen (17) full-size sheets.

#### **GENERAL**

#### ITEM 01 BID DATE

**BID DATE** of **MARCH 26, 2020** still remains **APRIL 16, 2020** with a **NOTICE OF AWARD** tentatively set to **APRIL 22, 2020**.

#### **SPECIFICATIONS**

#### ITEM 01 SPECIFICATIONS REVISED

Reissued the following Specification(s) in its entirety.

- 1. Section 000110 Table of Contents
- 2. Section 263613 ENCLOSED TRANSFER SWITCH

#### ITEM 01 SPECIFICATIONS ADDED

Added the following Specification(s) in its entirety.

1. Section 262416 - PANELBOARDS

#### **DRAWINGS**

#### **CIVIL DRAWINGS:**

#### ITEM 01 SHEET C300 – GRADING & DRAINAGE PLAN

Reissue Sheet in its entirety.

- 1. Added note for number and location of HC parking signage.
- 2. Added Sign symbol locations for HC parking spaces.

#### ITEM 02 SHEET C701 – CIVIL CONSTRUCTION DETAILS – 2

Reissue Sheet in its entirety.

1. Added Van Accessible HC Stall Detail

#### ARCHITECTURAL DRAWINGS:

### ITEM 01 SHEET A260 – DOOR SCHEDULE AND ELEVATIONS

Reissue Sheet in its entirety.

- 1. Reworked all Head/Jamb details and noting.
- 2. Repositioned and renumbered Head/Jamb details to make necessary space on the sheet. Added Head/Jamb Details at entry, vestibule and storefront condition at multi fitness spaces.
- 3. Updated Storefront elevations to include detail references.
- 4. Updated Door Schedule to reflect updated head jamb detail references.
- 5. Add general note to Door Schedule Notes



#### 6. Corrected Door height to Door 04B-1

#### ITEM 02 SHEET A350 – WALL SECTIONS

#### Reissue Sheet in its entirety.

1. Added general note for PEMB Manufacturer/GC on each detail.

#### ITEM 03 SHEET A351 – WALL SECTIONS

#### Reissue Sheet in its entirety.

1. Added general note for PEMB Manufacturer/GC on each detail.

#### ITEM 04 SHEET A352 – WALL SECTIONS

#### Reissue Sheet in its entirety.

1. Added general note for PEMB Manufacturer/GC on each detail.

#### ITEM 05 SHEET A353 – WALL SECTIONS

#### Reissue Sheet in its entirety.

1. Added general note for PEMB Manufacturer/GC on each detail.

### ITEM 06 SHEET A530 – INTERIOR DETAILS

#### Reissue Sheet in its entirety.

2. Revised notes in Details J7 & J13

#### ITEM 07 SHEET A650 – ENLARGED RCP & CEILING DETAILS

#### Reissue Sheet in its entirety.

1. Updated detail D1 to better reflect requirements and design intent.

#### **STRUCTURAL DRAWINGS:**

#### ITEM 01 SHEET S002 – TYPICAL DETAILS

#### Reissue Sheet in its entirety.

- 1. Revised Typical Loose Lintel Detail.
- 2. Added Typical Slab Recess @ Slab on Grade Details.

#### ITEM 02 SHEET S101 – FOUNDATION AND LEVEL 1 PLAN

#### Reissue Sheet in its entirety.

1. Revised noting for detail 4.

#### **MECHANICAL DRAWINGS:**

#### ITEM 01 SHEET M101 – LEVEL 1 HVAC PLAN

#### Reissue Sheet in its entirety.

1. ADA mounting height of 48" AFF for the thermostatic controls has been revised specified on the drawings.

#### **PLUMBING DRAWINGS:**

#### ITEM 01 SHEET P100 – PLUMBING NOTES, SCHEDULES, LEGENDS

### Reissue Sheet in its entirety.

- 1. Added Identify mixing valves at showers. Type Marks SH-1 and SH-2 were added to Plumbing Fixture Schedule.
- 2. Added additional ADA information to SK-1 plumbing fixture description.

#### ITEM 02 SHEET P101 – LEVEL 1 PLUMBING PLAN

Reissue Sheet in its entirety.

1. Added Type Marks SH-1 and SH-2 to showers in Locker 01A and Locker 02A.

#### **FIRE PROTECTION DRAWINGS:**

### ITEM 01 SHEET F102 – FIRE ALARM PLAN

Reissue Sheet in its entirety.

1. Added a weather proof alarm horn strobe adjacent to the entry into the sauna, which is visible thru window on sauna door.

#### **ELECTRICAL DRAWINGS:**

#### ITEM 01 SHEET E100 – ELECTRICAL LEGENDS, NOTES, SCHEDULES

Reissue Sheet in its entirety.

1. Revised Type Marks SP-IC AND EPS on Legend.

### ITEM 02 SHEET E301 – LEVEL 1 – SYSTEMS PLAN

Reissue Sheet in its entirety.

- 1. Revised Junction box location at Check-In 00.
- 2. Revised Intercom/Access/Emergency Call System Diagram.
- 3. Added Security Camera System Diagram.
- 4. Added Key Note 5.

**END OF ADDENDUM** 

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### **END OF SECTION**

#### SECTION 262416 - PANELBOARDS

#### PART 1 GENERAL

#### 1.1 SUMMARY

- A. Section Includes:
  - 1. Distribution and branch circuit panelboards.

#### 1.2 REFERENCE STANDARDS

- A. Institute of Electrical and Electronics Engineers:
  - 1. IEEE C62.41 Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits.
- B. National Electrical Manufacturers Association:
  - 1. NEMA FU 1 Low Voltage Cartridge Fuses.
  - 2. NEMA ICS 2 Industrial Control and Systems: Controllers, Contactors, and Overload Relays, Rated Not More Than 2000 Volts AC or 750 Volts DC.
  - 3. NEMA ICS 5 Industrial Control and Systems: Control Circuit and Pilot Devices.
  - 4. NEMA KS 1 Enclosed and Miscellaneous Distribution Equipment Switches (600 Volts Maximum).
  - 5. NEMA PB 1 Panelboards.
  - 6. NEMA PB 1.1 General Instructions for Proper Installation, Operation, and Maintenance of Panelboards Rated 600 Volts or Less.
- C. International Electrical Testing Association:
  - 1. NETA ATS Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- D. National Fire Protection Association:
  - 1. NFPA 70 National Electrical Code.
- E. Underwriters Laboratories Inc.:
  - 1. UL 50 Cabinets and Boxes
  - 2. UL 67 Safety for Panelboards.
  - 3. UL 489 Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit-Breaker Enclosures.
  - 4. UL 1699 Arc-Fault Circuit Interrupters.

#### 1.3 SUBMITTALS

- A. Product Data: Submit catalog data showing specified features of standard products.
- B. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, integrated short circuit ampere rating, circuit breaker and fusible switch arrangement and sizes.

#### 1.4 CLOSEOUT SUBMITTALS

A. Project Record Documents: Record actual locations of panelboards and record actual circuiting arrangements.

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B. Operation and Maintenance Data: Submit spare parts listing; source and current prices of replacement parts and supplies; and recommended maintenance procedures and intervals.

#### 1.5 MAINTENANCE MATERIAL SUBMITTALS

#### A. Extra Stock Materials:

1. Furnish two of each panelboard key. Panelboards keyed alike.

#### PART 2 PRODUCTS

#### 2.1 DISTRIBUTION PANELBOARDS

- A. Acceptable manufacturers include: Siemens, Eaton, ABB, Square D, Allen Bradley or owner approved substitute.
- B. Description: NEMA PB 1, circuit breaker type panelboard.

#### C. Operation:

1. Minimum integrated short circuit rating: as indicated on Drawings.

#### D. Materials:

- Panelboard Bus: Copper, current carrying components, ratings as indicated on Drawings. Furnish copper ground bus in each panelboard.
- 2. Molded Case Circuit Breakers: UL 489, circuit breakers with integral thermal and instantaneous magnetic trip in each pole. Furnish circuit breakers UL listed as Type HACR for air conditioning equipment branch circuits.
- 3. Molded Case Circuit Breakers with Current Limiters: UL 489, circuit breakers with replaceable current limiting elements, in addition to integral thermal and instantaneous magnetic trip in each pole.
- 4. Current Limiting Molded Case Circuit Breakers: UL 489, circuit breakers with integral thermal and instantaneous magnetic trip in each pole, coordinated with automatically resetting current limiting elements in each pole. Interrupting rating 100,000 symmetrical amperes, let-through current and energy level less than permitted for same size NEMA FU 1, Class RK-5 fuse.
- 5. Circuit Breaker Accessories: Trip units and auxiliary switches as indicated on Drawings.
- 6. Surge Suppressers: Refer to Section 263553.
- 7. Enclosure: NEMA PB 1, Type 1 or 3R as indicated on drawings.
- 8. Cabinet Front: Surface door-in-door type, fastened with screws hinge and latch, hinged door with flush lock, metal directory frame. Provide two keys for each lock.
- E. Finishes: Manufacturer's standard gray enamel.

#### 2.2 BRANCH CIRCUIT PANELBOARDS

A. Description: NEMA PB1, circuit breaker type, lighting and appliance branch circuit panelboard.

#### B. Materials:

- 1. Panelboard Bus: Copper, current carrying components, **ratings as indicated on Drawings.** Furnish copper ground bus in each panelboard; furnish insulated ground bus as indicated on Drawings.
- 2. For non-linear load applications subject to harmonics furnish 200 percent rated, plated copper, solid neutral.
- 3. Minimum Integrated Short Circuit Rating: as indicated on Drawings.
- 4. Molded Case Circuit Breakers: UL 489, bolt-on type thermal magnetic trip circuit breakers, with common trip handle for all poles, listed as Type SWD for lighting circuits, Type HACR for air conditioning equipment circuits,

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- Class A ground fault interrupter circuit breakers as indicated on Drawings. Provide UL class 760 arc-fault interrupter circuit breakers as indicated on Drawings. Do not use tandem circuit breakers.
- 5. Current Limiting Molded Case Circuit Breakers: UL 489, circuit breakers with integral thermal and instantaneous magnetic trip in each pole, coordinated with automatically resetting current limiting elements in each pole. Interrupting rating 100,000 symmetrical amperes, let-through current and energy level less than permitted for same size NEMA FU 1, Class RK-5 fuse.
- 6. Surge Suppresser: Refer to Section 263553.
- 7. Enclosure: NEMA PB 1, Type 1 or Type 3R as indicated on drawings.
- 8. Cabinet Box: 6 inches deep, 20 inches wide for 240 volt and less panelboards, 20 inches wide for 480-volt panelboards.
- C. Cabinet Front: Flush or Surface (as indicated on drawings) cabinet front to be door-in-door trim, concealed hinge, metal directory frame, and flush lock keyed alike. Provide two keys with each lock. Finishes:
  - 1. Finish in manufacturer's standard gray enamel.

#### PART 3 EXECUTION

#### 3.1 INSTALLATION

- A. Install panelboards in accordance with NEMA PB 1.1.
- B. Install panelboards plumb.
- C. Install recessed panelboards flush with wall finishes.
- D. Height: 6 feet to top of panelboard; install panelboards taller than 6 feet with bottom no more than 4 inches above floor.
- E. Install filler plates for unused spaces in panelboards.
- F. Provide typed circuit directory for each branch circuit panelboard. Revise directory to reflect circuiting changes to balance phase loads. Identify each circuit as to its clear, evident and specific purpose of use.
- G. Install engraved plastic nameplates in accordance with Section 260553.
- H. Install spare conduits out of each recessed panelboard to accessible location above ceiling. Minimum spare conduits: 5 empty 1 inch. Identify each as SPARE.
- I. Connect equipment ground bars of panels in accordance with NFPA 70.

#### 3.2 FIELD QUALITY CONTROL

- A. Inspect and test in accordance with NETA ATS, except Section 4.
- B. Perform circuit breaker inspections and tests listed in NETA ATS, Section 7.6.
- C. Perform switch inspections and tests listed in NETA ATS, Section 7.5.
- D. Perform controller inspections and tests listed in NETA ATS, Section 7.16.1.

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#### 3.3 ADJUSTING

A. Measure steady state load currents at each panelboard feeder; rearrange circuits in panelboard to balance phase loads to within 20 percent of each other. Maintain proper phasing for multi-wire branch circuits.

#### 3.4 CLEANING

A. Clean panelboards after installation.

**END OF SECTION** 

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### SECTION 263613 - ENCLOSED TRANSFER SWITCHES PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. This Section includes transfer switches rated 600 V and less, including the following:
  - 1. Automatic transfer switches
- B. Related Sections include the following:

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include rated capacities, weights, operating characteristics, furnished specialties, and accessories.
  - Technical data on all major components of all transfer switches and other products described in this section.
    Data is required for the transfer switch mechanism, control system, cabinet, and protective devices specifically listed for use with each transfer switch. Include steady state and fault current ratings, weights, operating characteristics, and furnished specialties and accessories.
  - 2. Single Line Diagram: Show connections between transfer switch, power sources and load
- B. Shop Drawings: Dimensioned plans, elevations, sections, and details showing minimum clearances, conductor entry provisions, gutter space, installed features and devices, and material lists for each switch specified.
  - Dimensioned outline drawings of assembly, including elevations, sections, and details including minimal clearances, conductor entry provisions, gutter space, installed features and devices and material lists for each switch specified.
  - 2. Internal electrical wiring and control drawings.
  - 3. Interconnection wiring diagrams, showing recommended conduit runs and point-to-point terminal connections to generator set.
  - 4. Installation and mounting instructions, including information for proper installation of equipment to meet seismic requirements.

### C. Manufacturer and Supplier Qualification Data

1. The transfer switch manufacturer shall be certified to ISO 9001 International Quality Standard and shall have third party certification verifying quality assurance in design/development, production, installation, and service, in accordance with ISO 9001.

- 2. The manufacturer of this equipment shall have produced similar equipment for a minimum period of 10 years. When requested, an acceptable list of installations with similar equipment shall be provided demonstrating compliance with this requirement.
- D. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
  - 1. Features and operating sequences, both automatic and manual.
  - 2. List of all factory settings of relays, timers and protective devices; provide setting and calibration instructions where applicable.
- E. Warranty documents demonstrating compliance with the project's contract requirements.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: The equipment supplier shall maintain a service center capable of providing training, parts, maintenance and emergency repairs to equipment, including transfer switch generator sets and remote monitoring equipment (if applicable) at the site within a response period of less than (eight hours or appropriate time period designated for Project) from time of notification.
  - The transfer switch shall be serviced by technicians employed by, and specially trained and certified by, the
    generator set supplier and the supplier shall have a service organization that is factory-certified in both generator set and transfer switch service. The supplier shall maintain an inventory of critical replacement parts
    at the local service organization, and in-service vehicles. The service organization shall be on call 24 hours
    per day, 365 days per year.
  - 2. Submit names, experience level, training certifications, and locations for technicians that will be responsible for servicing equipment at this site.
  - 3. The manufacturer shall maintain model and serial number records of each transfer switch provided for at least 20 years.
- B. Source Limitations: All transfer switches are to be obtained through one source from a single manufacturer. The generator set manufacturer shall warrant transfer switches to provide a single source of responsibility for products provided.
- C. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked as suitable for use in emergency, legally required or optional standby use as appropriate for the connected load.
- D. The automatic transfer switch installation and application shall conform to the requirements of the following codes and standards:
  - 1. Transfer switches and enclosures shall be UL 1008 listed and labeled as suitable for use in emergency, legally required, and optional standby applications.
  - 2. CSA 282, Emergency Electrical Power Supply for Buildings, and CSA C22.2, No. 14-M91 Industrial Control Equipment

- 3. NFPA 70, National Electrical Code. Equipment shall be suitable for use in systems in compliance with Articles 700, 701 and 702.
- 4. Comply with NEMA ICS 10-1993 AC Automatic Transfer Switches
- 5. IEEE 446 Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications
- 6. EN55011, Class B Radiated Emissions and Class B Conducted Emissions
- 7. IEC 1000-4-5 (EN 61000-4-5); AC Surge Immunity
- 8. IEC 1000-4-4 (EN 61000-4-4) Fast Transients Immunity
- 9. IEC 1000-4-2 (EN 61000-4-2) Electrostatic Discharge Immunity
- 10. IEC 1000-4-3 (EN 61000-4-3) Radiated Field Immunity
- 11. IEC 1000-4-6 Conducted Field Immunity
- 12. IEC 1000-4-11 Voltage Dip Immunity
- 13. IEEE 62.41, AC Voltage Surge Immunity
- 14. IEEE 62.45, AC Voltage Surge Testing
- E. Comply with NFPA 99 Essential Electrical Systems for Healthcare Facilities
- F. Comply with NFPA 110 Emergency and Standby Power Systems. The transfer switch shall meet all requirements for Level 1 systems, regardless of the actual circuit level.
- G. The manufacturer shall warrant the material and workmanship of the transfer switch equipment for a minimum of one (1) year from registered commissioning and start-up, or eighteen (18) months from date of shipment.
- H. The warranty shall be comprehensive. No deductibles shall be allowed for travel time, service hours, repair parts cost, and etc. during the minimum noted warranty period described above.

#### 1.5 PROJECT CONDITIONS

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service:
  - 1. Notify (Architect/Construction Manager/Owner) no fewer than (insert appropriate number) days in advance of proposed interruption of electrical service.
  - 2. Do not proceed with interruption of electrical service without (Architect/Construction Manager/Owner's) written permission.
  - 3. Do not energize any new service or distribution equipment without notification and permission of the (Architect/Construction Manager/Owner).

#### 1.6 COORDINATION

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A. Size and location of concrete bases and anchor bolt inserts shall be coordinated. Concrete, reinforcement and formwork must meet the requirements specified in Division 03. See section "INSTALLATION" for additional information on installation

#### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Cummins Power Generation
- B. Equipment specifications for this Project are based on automatic transfer switches manufactured by Cummins Power Generation. Switches manufactured by other manufacturers that meet the requirement of this specification are acceptable, if approved not less than two weeks before scheduled bid date. Proposals must include a line-by-line compliance statement based on this specification.
- C. Transfer switches utilizing molded case circuit breakers do not meet the requirements of this specification and will not be accepted.

#### 2.2 GENERAL TRANSFER-SWITCH PRODUCT REQUIREMENTS

- A. Provide transfer switches in the number and ratings that are shown on the drawings.
- B. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer.
- C. Fault-Current Closing and Withstand Ratings: UL 1008 WCR ratings must be specifically listed as meeting the requirements for use with protective devices at installation locations, under specified fault conditions. Withstand and closing ratings shall be based on use of the same set of contacts for the withstand test and the closing test.
- D. Solid-State Controls: All settings should be accurate to +/- 2% or better over an operating temperature range of -40 to +60 degrees C (-40 to +140 degrees F).
- E. Resistance to Damage by Voltage Transients: Components shall meet or exceed voltage-surge withstand capability requirements when tested according to IEEE C62.41. Components shall meet or exceed voltage-impulse withstand test of NEMA ICS 1.
- F. Electrical Operation: Accomplished by a non-fused, momentarily energized solenoid or electric motor operator mechanism, mechanically and electrically interlocked in both directions (except that mechanical interlock is not required for closed transition switches).
- G. Switch Characteristics: Designed for continuous-duty repetitive transfer of full-rated current between active power sources.
  - 1. Switches using molded-case switches or circuit breakers, or insulated case circuit breaker components are not acceptable.
  - 2. Transfer switches shall be double-throw, electrically and mechanically interlocked, and mechanically held in the Source 1 and Source 2 positions.
  - 3. Main switch contacts shall be high pressure silver alloy. Contact assemblies shall have arc chutes for positive arc extinguishing. Arc chutes shall have insulating covers to prevent inter-phase flashover.

- 4. Contacts shall be operated by a high-speed electrical mechanism that causes contacts to open or close within three electrical cycles from signal.
- 5. Transfer switch shall be provided with flame retardant transparent covers to allow viewing of switch contact operation but prevent direct contact with components that could be operating at line voltage levels.
- 6. The transfer switch shall include the mechanical and control provisions necessary to allow the device to be field-configured for operating speed. Transfer switch operation with motor loads shall be as is recommended in NEMA MG1.
  - a. Phase angle monitoring/timing equipment is not an acceptable substitute for this functionality
- 7. Transfer switches designated on the drawings as "3-pole" shall have a full current-rated neutral bar with lugs.
- H. Factory wiring: Transfer switch internal wiring shall be composed of pre-manufactured harnesses that are permanently marked for source and destination. Harnesses shall be connected to the control system by means of locking disconnect plug(s), to allow the control system to be easily disconnected and serviced without disconnecting power from the transfer switch mechanism
- I. Terminals: Terminals shall be pressure type and appropriate for all field wiring. Control wiring shall be equipped with suitable lugs, for connection to terminal strips.
- J. Enclosures: All enclosures shall be third-party certified for compliance to NEMA ICS 6 and UL 508, unless otherwise indicated:
  - 1. The enclosure shall provide wire bend space in compliance to the latest version of NFPA70, regardless of the direction from which the conduit enters the enclosure.
  - 2. Exterior cabinet doors shall provide complete protection for the system's internal components. Doors must have permanently mounted key-type latches. Bolted covers or doors are not acceptable.
  - 3. Transfer switches shall be provided in enclosures that are third party certified for their intended environment per NEMA requirements.

#### 2.3 AUTOMATIC TRANSFER SWITCHES

- A. Comply with requirements for Level 1 equipment according to NFPA 110.
- B. Indicated current ratings:
  - 1. Refer to the Project drawings for specifications on the sizes and types of transfer switch equipment, withstand and closing ratings, number of poles, voltage and ampere ratings, enclosure type, and accessories.
  - 2. Main contacts shall be rated for 600 VAC minimum.
  - 3. Transfer switches shall be rated to carry 100% of rated current continuously in the enclosure supplied, in ambient temperatures of -40 to +60 degrees C (-40 to +140 degrees F), relative humidity up to 95% (non-condensing), and altitudes up to 10,000 feet (3000 meters).
- C. Relay Signal: Control shall include provisions for addition of a pre-transfer relay signal, adjustable from 0 to 60 seconds, to be provided if necessary for elevator operation, based on equipment provided for the project.

- D. Transfer switches that are designated on the drawings as 3-pole shall be provided with a neutral bus and lugs. The neutral bus shall be sized to carry 100% of the current designated on the switch rating.
- E. Automatic Transfer Switch Control Features
  - The transfer switch control system shall be configurable in the field for any operating voltage level up to 600 VAC. Voltage sensing shall be monitored based on the normal voltage at the site. Systems that utilize voltage monitoring based on standard voltage conditions that are not field configurable are not acceptable.
  - 2. All transfer switch sensing shall be configurable from an operator panel or from a Windows XP or later PC-based service tool. Designs utilizing DIP switches or other electromechanical devices are not acceptable.
  - 3. The transfer switch shall provide a relay contact signal prior to transfer or re-transfer. The time period before and after transfer shall be adjustable in a range of 0 to 60 seconds.
  - 4. The control system shall be designed and prototype tested for operation in ambient temperatures from 40 degrees C to + 60 degrees C (- 40 to +140 degrees F). It shall be designed and tested to comply with the requirements of the noted voltage and RFI/EMI standards.
  - 5. The control shall have optically isolated logic inputs, high isolation transformers for AC inputs and relays on all outputs, to provide optimum protection from line voltage surges, RFI and EMI.
  - 6. The transfer switch network monitoring equipment, when supplied, shall be provided with a battery-based auxiliary power supply to allow monitoring of the transfer switch when both AC power sources are non-operational.
  - 7. The indicator panel LEDs shall display:
    - a. Which source the load is connected to (Source 1 or Source 2)
    - b. Which source or sources are available
    - c. When switch is not set for automatic operation, the control is disabled
    - d. When the switch is in test/exercise mode
  - 8. The indicator shall have pushbuttons that allow the operator to activate the following functions:
    - a. Activate pre-programmed test sequence
    - b. Override programmed delays, and immediately go to the next operation
- F. Transfer Switch Control Panel: The transfer switch shall have a microprocessor-based control with a sealed membrane panel incorporating pushbuttons for operator-controlled functions, and LED lamps for system status indicators. Panel display and indicating lamps shall include permanent labels.
- G. Control Functions: Functions managed by the control shall include:
  - a. Engine start (prevents nuisance genset starts in the event of momentary power fluctuation): 0 to 10 seconds (default 3 sec)

- b. Transfer normal to emergency (allows genset to stabilize before load is transferred): 0 to 300 seconds (default 5 sec)
- c. Re-transfer emergency to normal (allows utility to stabilize before load is transferred from genset): 0 to 30 minutes (default 10 min)
- d. Engine cooldown: 0 to 30 minutes (default 10 min)
- e. Programmed transition: 0 to 60 seconds (default 0 sec)
- 2. Under frequency sensing (emergency side):
  - a. Pickup: 90% of nominal frequency
  - b. Dropout: 85% of nominal frequency

#### H. Control features shall include:

- 1. Programmable genset exerciser: A field-programmable control shall periodically start and run the generator with or without transferring the load for a preset time period, then re-transfer and shut down the generator after a preset cool-down period.
- 2. In event of a loss of power to the control, all control settings and the engine start-time delay setting will be retained.

#### I. Control Interface

1. Provide one set Form C auxiliary contacts on both sides, operated by transfer switch position, rated 10 amps 250 VAC.

#### J. Engine Starting Contacts

1. One isolated and normally closed pair of contacts rated 8A at 30 VDC minimum.

#### PART 3 - EXECUTION

#### 3.1 INSTALLATION

- A. Design each fastener and support to carry load indicated by seismic requirements and according to seismic-restraint details. See Division 26 Section "Vibration and Seismic Controls for Electrical Systems."
- B. Floor-Mounting Switch: Anchor to floor by bolting.
  - 1. Floor-mounted transfer switches (except drawout switches supported by wheeled carriages, which must be rolled out at floor level) shall be mounted on concrete bases complying with the following requirements:
    - a. Concrete Bases: 4 inches (100 mm) high, reinforced, with chamfered edges. Extend base no more than 4 inches (100 mm) in all directions beyond the maximum dimensions of switch, unless otherwise indicated or unless required for seismic support. Construct concrete bases according to Division 26 Section "Hangers and Supports for Electrical Systems."
- C. Annunciator Panel Mounting: Flush in wall, unless otherwise indicated.

- D. Identify components according to Division 26 Section "Identification for Electrical Systems."
- E. Set field-adjustable intervals and delays, relays, and engine exerciser clock.

#### 3.2 CONNECTIONS

- A. Wiring to Remote Components: Match type and number of cables and conductors to control and communication requirements of transfer switches as recommended by manufacturer. Increase raceway sizes at no additional cost to Owner if necessary to accommodate required wiring.
- B. Field control connections shall be made on a common terminal block that is clearly and permanently labeled.
- C. Transfer switch shall be provided with AL/CU mechanical lugs sized to accept the full output rating of the switch. Lugs shall be suitable for the number and size of conductors shown on the drawings.
- D. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
- E. Connect wiring according to Division 26 Section "Low-Voltage Electrical Power Conductors and Cables."

#### 3.3 SOURCE QUALITY CONTROL

- A. Prior to shipping, factory shall test and inspect components, assembled switches, and associated equipment to ensure proper operation.
- B. Factory shall check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements.
- C. Factory shall perform dielectric strength test complying with NEMA ICS 1.

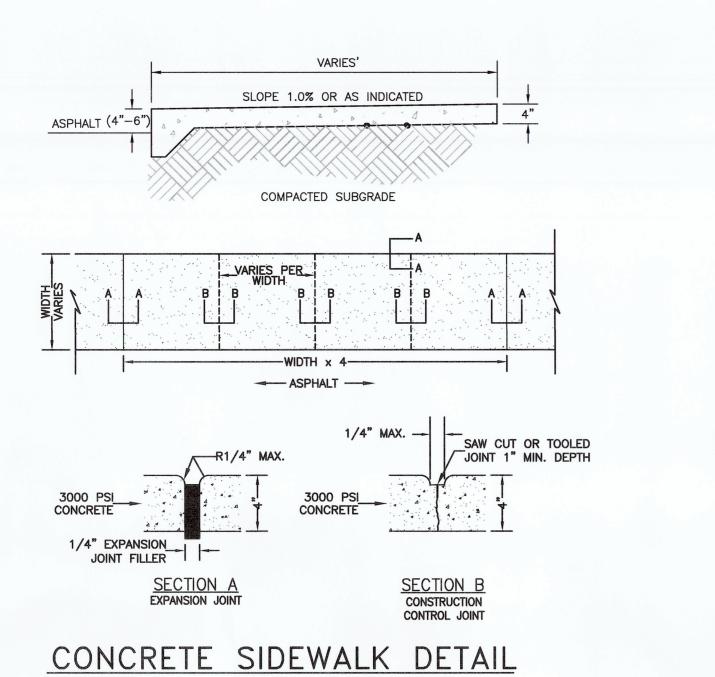
#### 3.4 FIELD QUALITY CONTROL

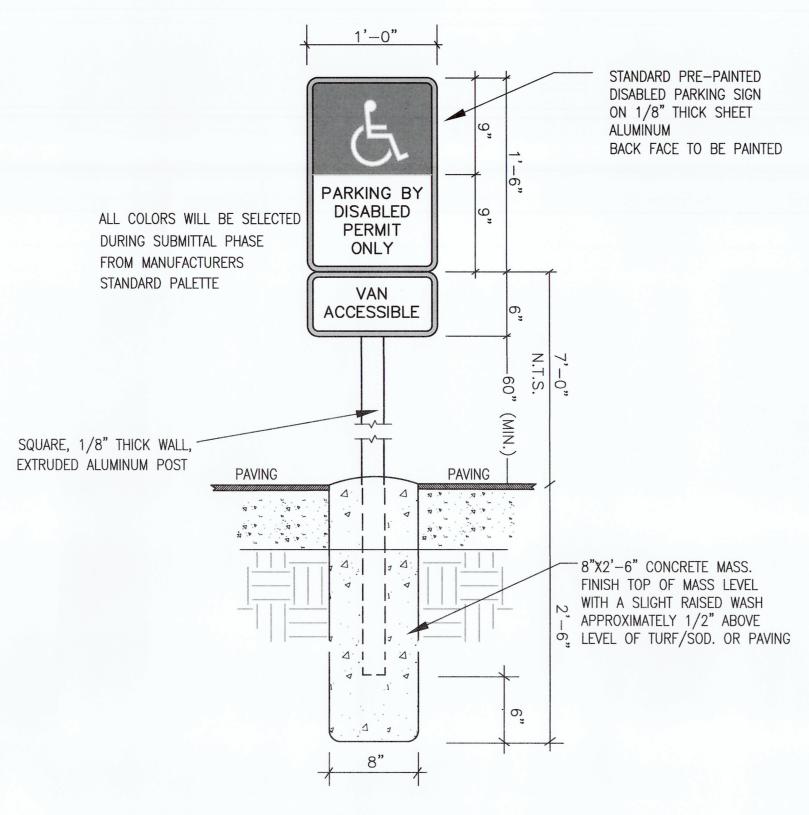
- A. Manufacturer's Field Service: The supplier of the transfer switch(es) and associated equipment shall inspect, test, and adjust components, assemblies, and equipment installations, including connections, and report results in writing.
- B. Manufacturer's representative shall perform tests and inspections and prepare test reports.
- C. After installing equipment and after electrical circuitry has been energized, installer shall test for compliance with requirements.
  - 1. Perform recommended installation tests as recommended in manufacturer's installation and service manuals.
  - 2. After energizing circuits, demonstrate interlocking sequence and operational function for each switch.
    - a. Simulate power failures of normal source to automatic transfer switches and of emergency source with normal source available.
    - b. Verify time-delay settings.
    - c. Verify proper sequence and correct timing of automatic engine starting, transfer time delay, retransfer time delay on restoration of normal power, and engine cool-down and shutdown.

### 3.5 DEMONSTRATION

- A. After generator set installation, the generator and transfer switch supplier shall conduct a complete operation, basic maintenance, and emergency service seminar covering generator set and transfer switch equipment, for up to 10 people employed by the Owner.
  - 1. The seminar shall include instruction on operation of the transfer equipment, normal testing and exercise, adjustments to the control system, and emergency operation procedures.
  - 2. The class duration shall be at least 8 hours in length and include practical operation with the installed equipment.

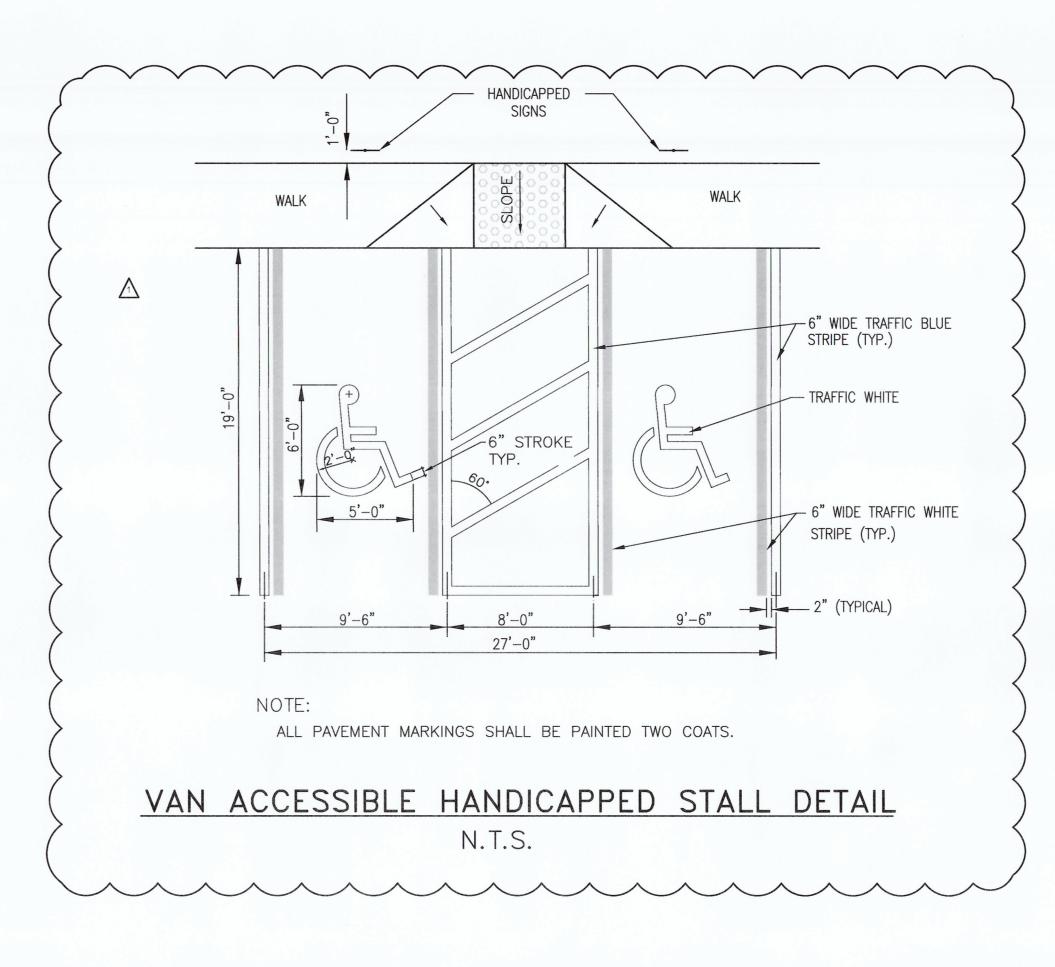
**END OF SECTION 263613** 

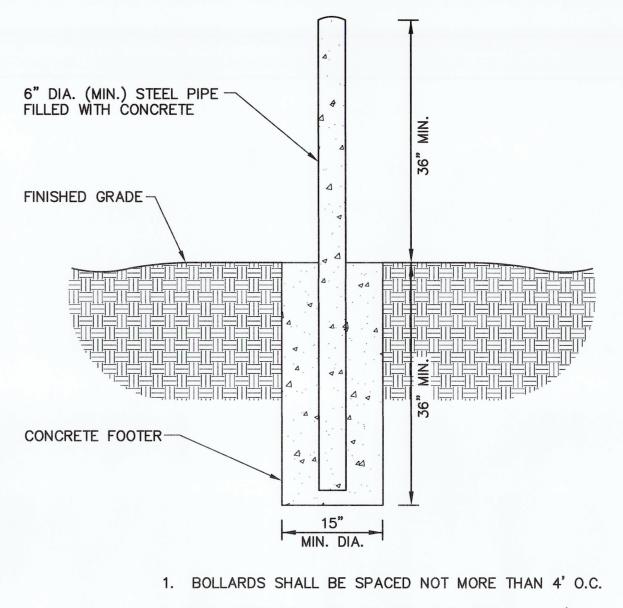




H/C PARKING SIGN DETAIL

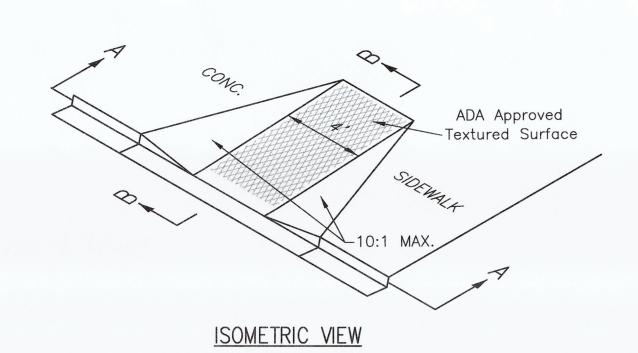
N.T.S.





2. BOLLARDS SHALL BE LOCATED NOT LESS THAN 3' FROM THE PROTECTED OBJECT

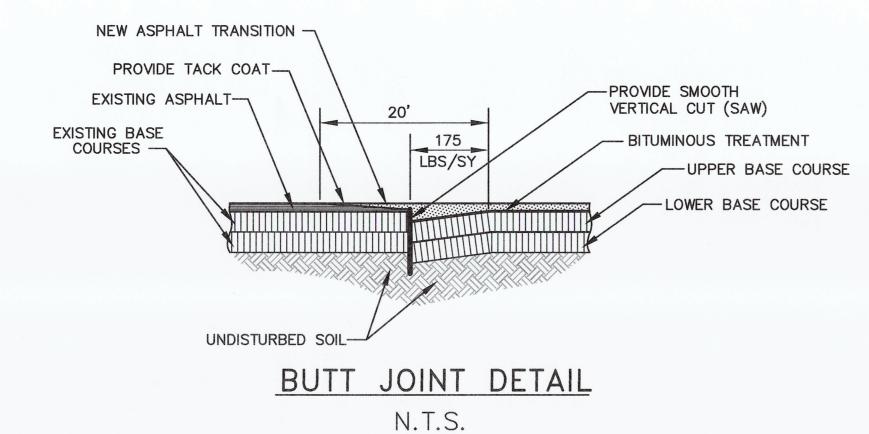
TYPICAL BOLLARD DETAIL NTS

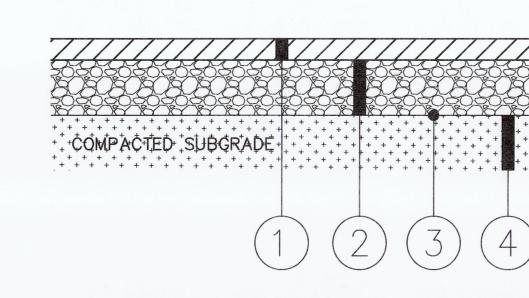


TRANSITION

BACK OF SIDEWALK

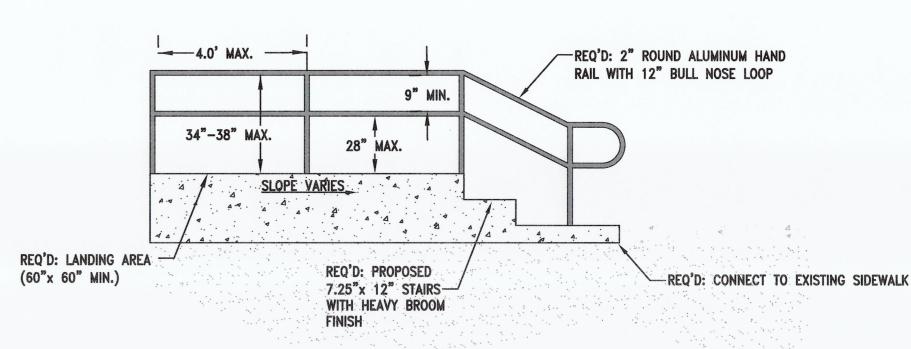
N.T.S.





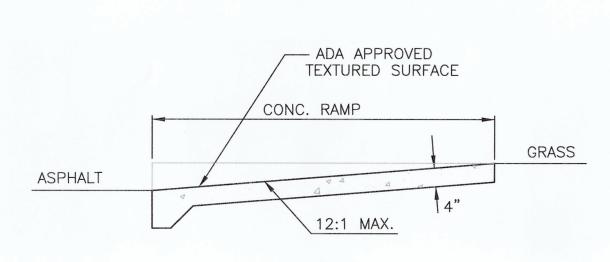
### TYPICAL PAVEMENT SECTION N.T.S.

- 1 1/2" BITUMINOUS ASPHALT WEARING SURFACE, 429-A (165 LB/SY)
- CRUSHED AGGREGATE BASE COURSE, 6" THICK, 825-B
- SEPARATION FABRIX, MARIFI 500X (OR APPROVED EQUAL)
- 18" THICK LAYER OF BORROW EXCAVATION (A-2-4 OR BETTER) (BORROW MATERIAL SHALL MEET THE CITY ORDINANCE FOR COLOR)



CONCRETE STAIRS DETAIL N.T.S.

1. ALL CONCRETE SHALL BE MIN. 3,000 2. STAIRS AND HANDRAILS SHALL MEET ALL REQUIREMENTS OF THE LATEST ADA AND INTERNATIONAL BUILDING CODE REGULATIONS.



ELEVATION A-A

TRANSITION CURB

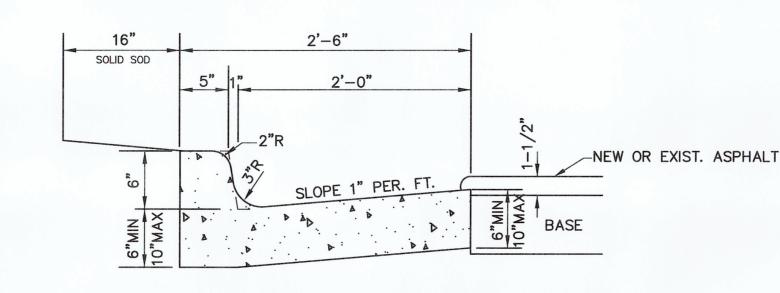
### SECTION B-B

## SIDEWALK HANDICAP RAMP N.T.S.

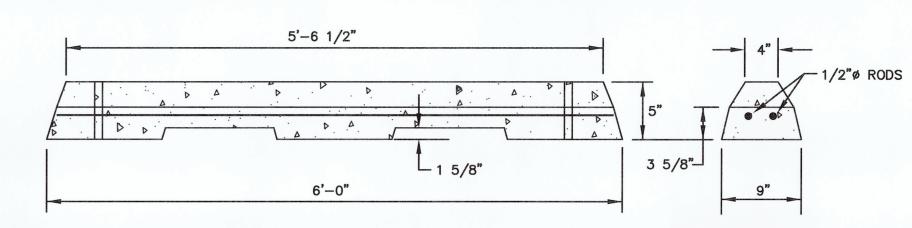
### NOTES:

1.RAMPS ARE DESIGNED TO THE UNIFORM FEDERAL ACCESSIBILITY STANDARDS TO COMPLY WITH THE AMERICANS WITH DISABILITIES ACT.

2. RAMPS SHALL HAVE A TACTILE SURFACE, TEXTURED TO A DEPTH NOT EXCEEDING 1/8" BY USE OF TAMP OR ROLLER.



COMBINATION CURB & GUTTER DETAIL



# PRECAST CONCRETE WHEEL STOPS

NTS APPROX. WEIGHT - 33 LBS/FT



C701

**CIVIL CONSTRUCTION DETAILS - 2** 

DAVIS ARCHITECTS

SHEET TITLE

DRAWING NO.

**ORANGE BEACH RECREATION** 

**COMPLEX NEW ADULT** 

**FITNESS CENTER** 

CITY OF ORANGE BEACH;

ORANGE BEACH, AL

OWNER

PO BOX 458

CITY OF ORANGE BEACH

251-981-69792 ATTN: KEN GRIMES, JR.

ASSOCIATE ARCHITECT

ATTN: STED MCCOLLOUGH

DAVIS ARCHITECTS, INC. 120 23RD STREET SOUTH

BIRMINGHAM, AL 35233

11143 OLD HIGHWAY 31

SPANISH FORT, AL 36527

STRUCTURAL ENGINEER MBA ENGINEERS

300 20TH ST. N., SUITE 100 BIRMINGHAM, AL 35203

GULF STATES ENGINEERING

FIRE PROTECTION ENGINEER **GULF STATES ENGINEERING** 

251-460-4646 ATTN: TOM WADE / BRIAN DOVE

ATTN: KEITH OWENS / MARK BOGER

**MECHANICAL / PLUMBING ENGINEER** 

ATTN: CHRIS DEARMON / VAN SIMPSON

SAWGRASS CONSULTING, LLC

ATTN: JIM HARTSELL / JEFFREY MENASCO

ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

4790 MAIN ST #209, ORANGE BEACH, AL 36561

251-968-7222

**ARCHITECT** 

205-322-7482

251-544-7900

205-323-6385

600 AZALEA ROAD, MOBILE, AL 36609

600 AZALEA ROAD, MOBILE, AL 36609

600 AZALEA ROAD, MOBILE, AL 36609

251-460-4646

**ELECTRICAL ENGINEER** 

**GULF STATES ENGINEERING** 

ATTN: JERRY ONWU / SID SNYDER

DESCRIPTION

2-14-2020

100% BID DOCUMENTS

ADDENDUM 4 (REVISION 2)

251-460-4646

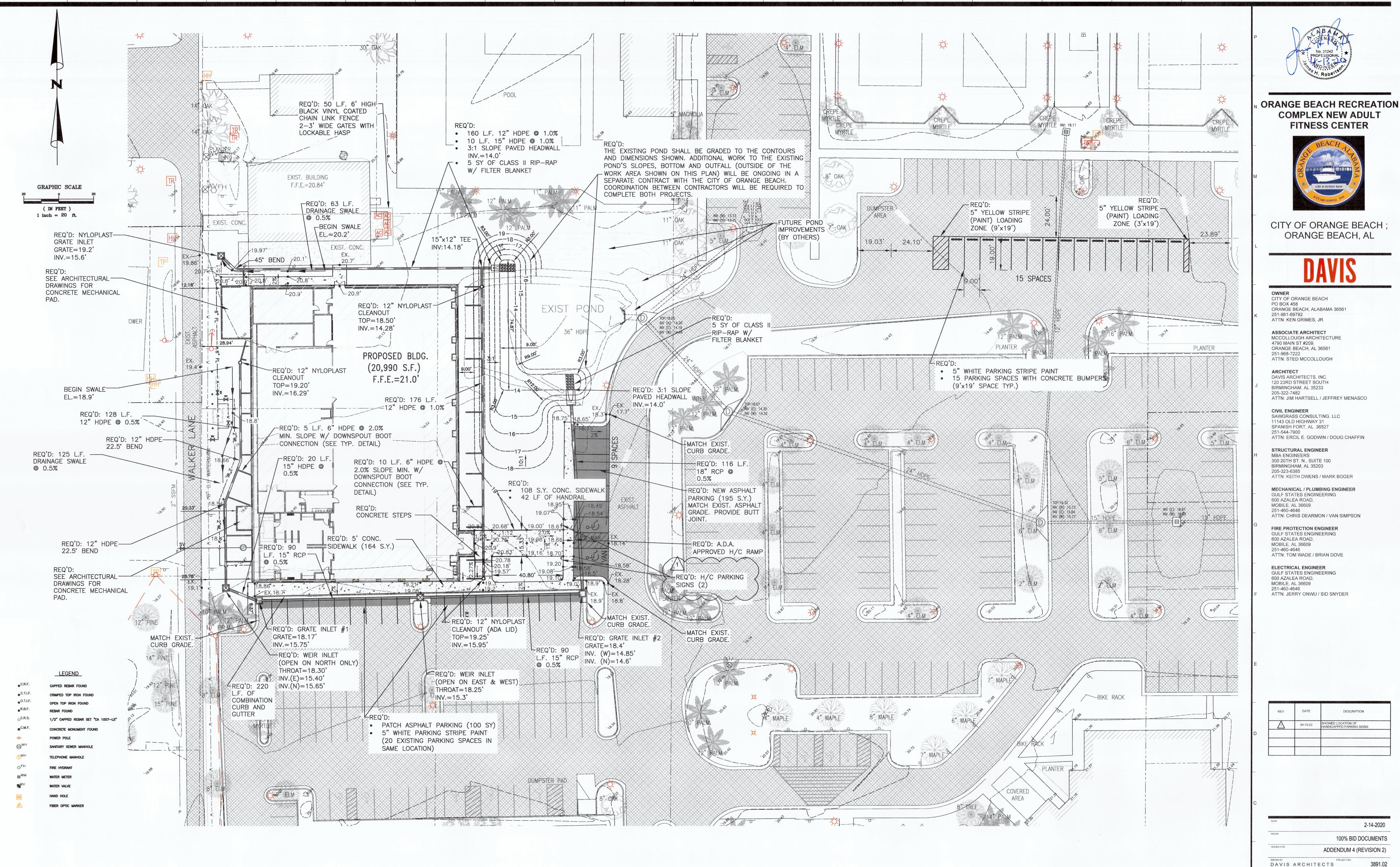
**CIVIL ENGINEER** 

MCCOLLOUGH ARCHITECTURE

ORANGE BEACH, ALABAMA 36561

C701 CIVIL CONSTRUCTION DETAILS - 2

**c701/c901** | SCALE:**N.T.S.** 





30673 Sgt. E. I. "Boots" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7900 202 Government Street, Suite 225, Mobile, AL 36602

DRAWING NO.

SHEET TITLE

**GRADING & DRAINAGE PLAN** 

**COMPLEX NEW ADULT** 

**FITNESS CENTER** 

ORANGE BEACH, AL

CITY OF ORANGE BEACH

ATTN: KEN GRIMES, JR.

ASSOCIATE ARCHITECT MCCOLLOUGH ARCHITECTURE

ORANGE BEACH, AL 36561

ATTN: STED MCCOLLOUGH

DAVIS ARCHITECTS, INC.

BIRMINGHAM, AL 35233

11143 OLD HIGHWAY 31 SPANISH FORT, AL 36527

STRUCTURAL ENGINEER

300 20TH ST. N., SUITE 100

**GULF STATES ENGINEERING** 

FIRE PROTECTION ENGINEER
GULF STATES ENGINEERING

ATTN: TOM WADE / BRIAN DOVE

ATTN: JERRY ONWU / SID SNYDER

DESCRIPTION

2-14-2020

100% BID DOCUMENTS

ADDENDUM 4 (REVISION 2)

SHOWED LOCATION OF HANDICAPPED PARKING SIGNS

**ELECTRICAL ENGINEER GULF STATES ENGINEERING** 

04-13-20

BIRMINGHAM, AL 35203

120 23RD STREET SOUTH

SAWGRASS CONSULTING, LLC

ATTN: JIM HARTSELL / JEFFREY MENASCO

ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

ATTN: KEITH OWENS / MARK BOGER

MECHANICAL / PLUMBING ENGINEER

ATTN: CHRIS DEARMON / VAN SIMPSON

4790 MAIN ST #209,

251-968-7222

**ARCHITECT** 

205-322-7482

251-544-7900

MBA ENGINEERS

600 AZALEA ROAD,

600 AZALEA ROAD,

600 AZALEA ROAD,

MOBILE, AL 36609 251-460-4646

MOBILE, AL 36609

251-460-4646

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251-460-4646

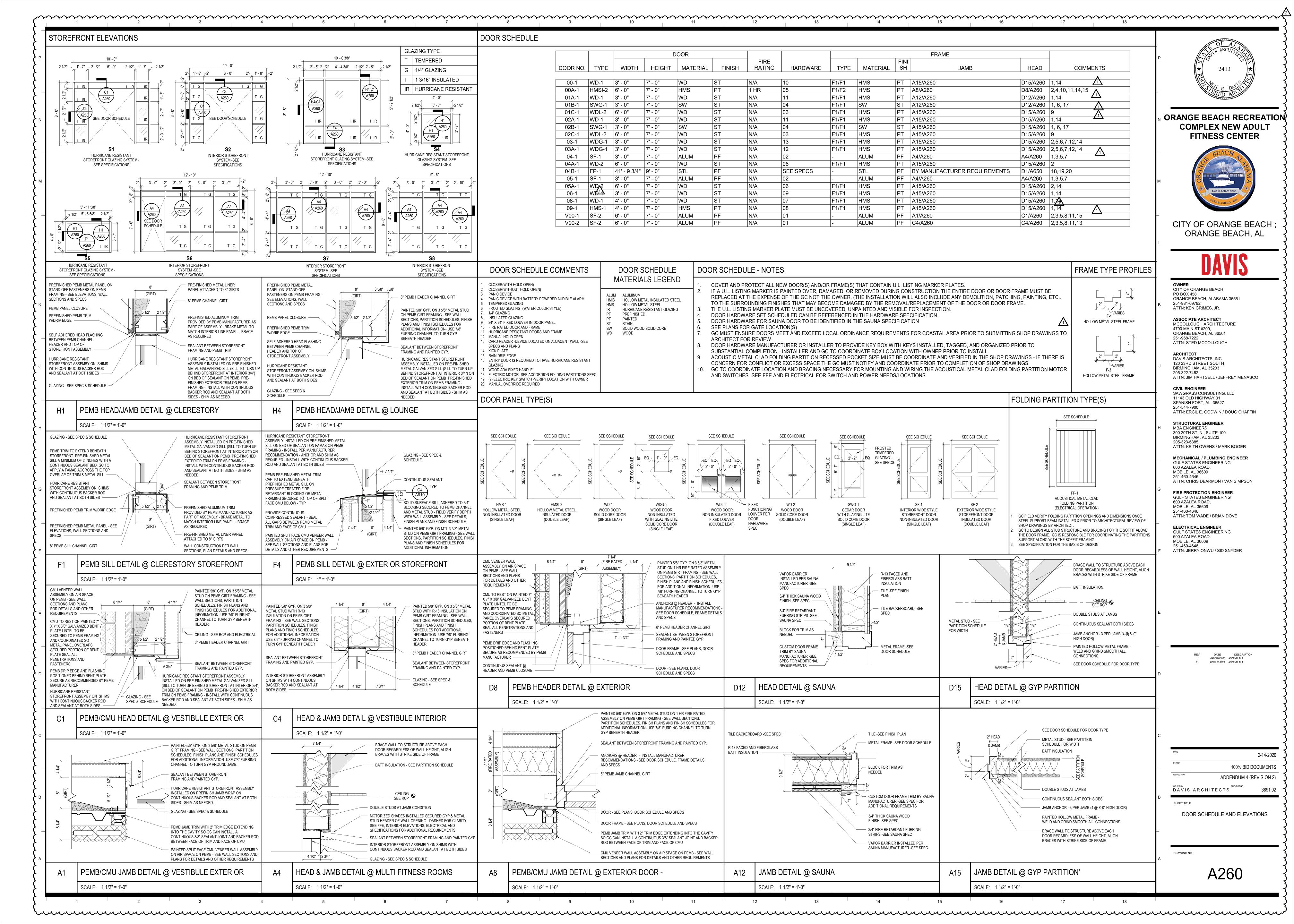
205-323-6385

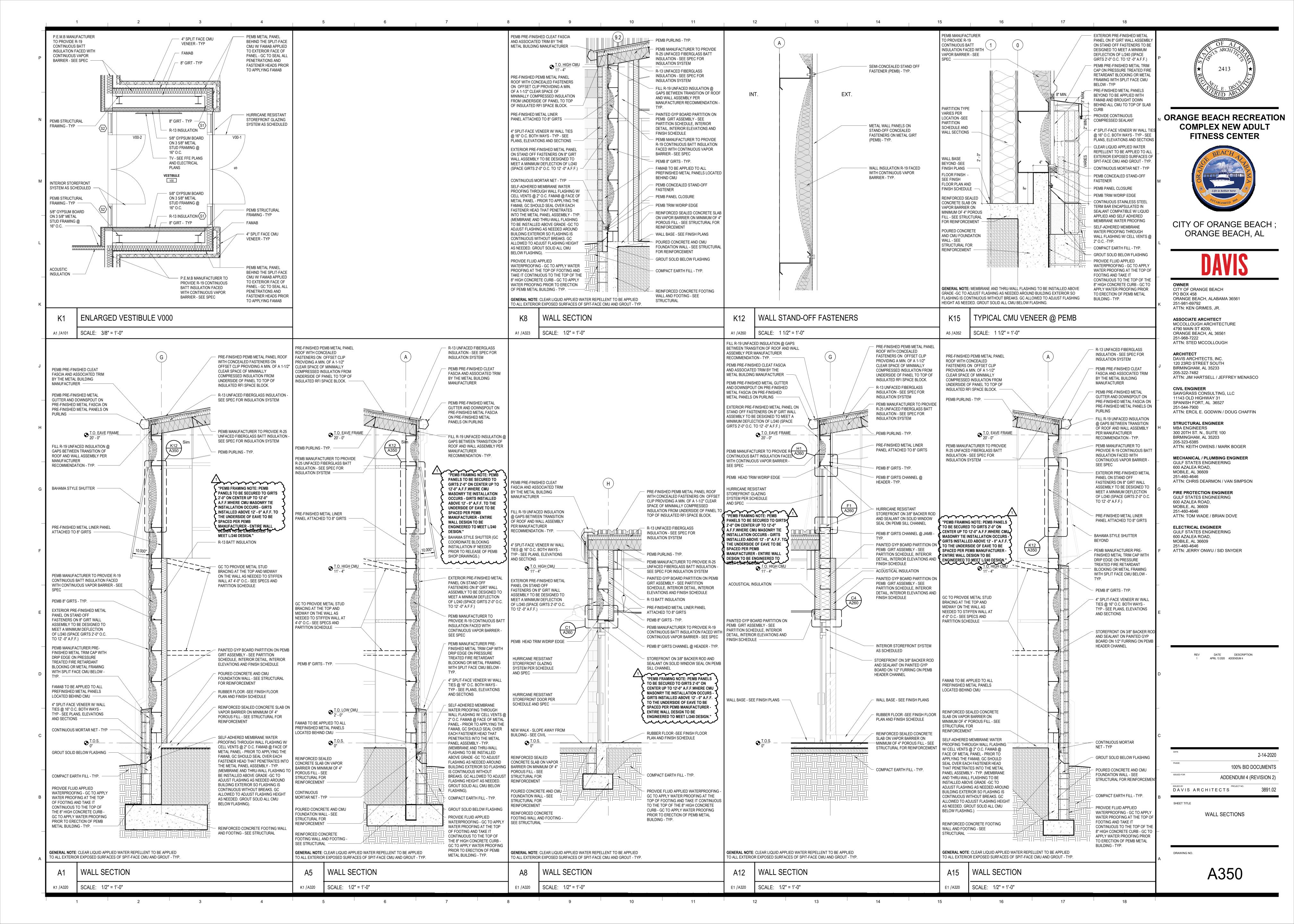
**CIVIL ENGINEER** 

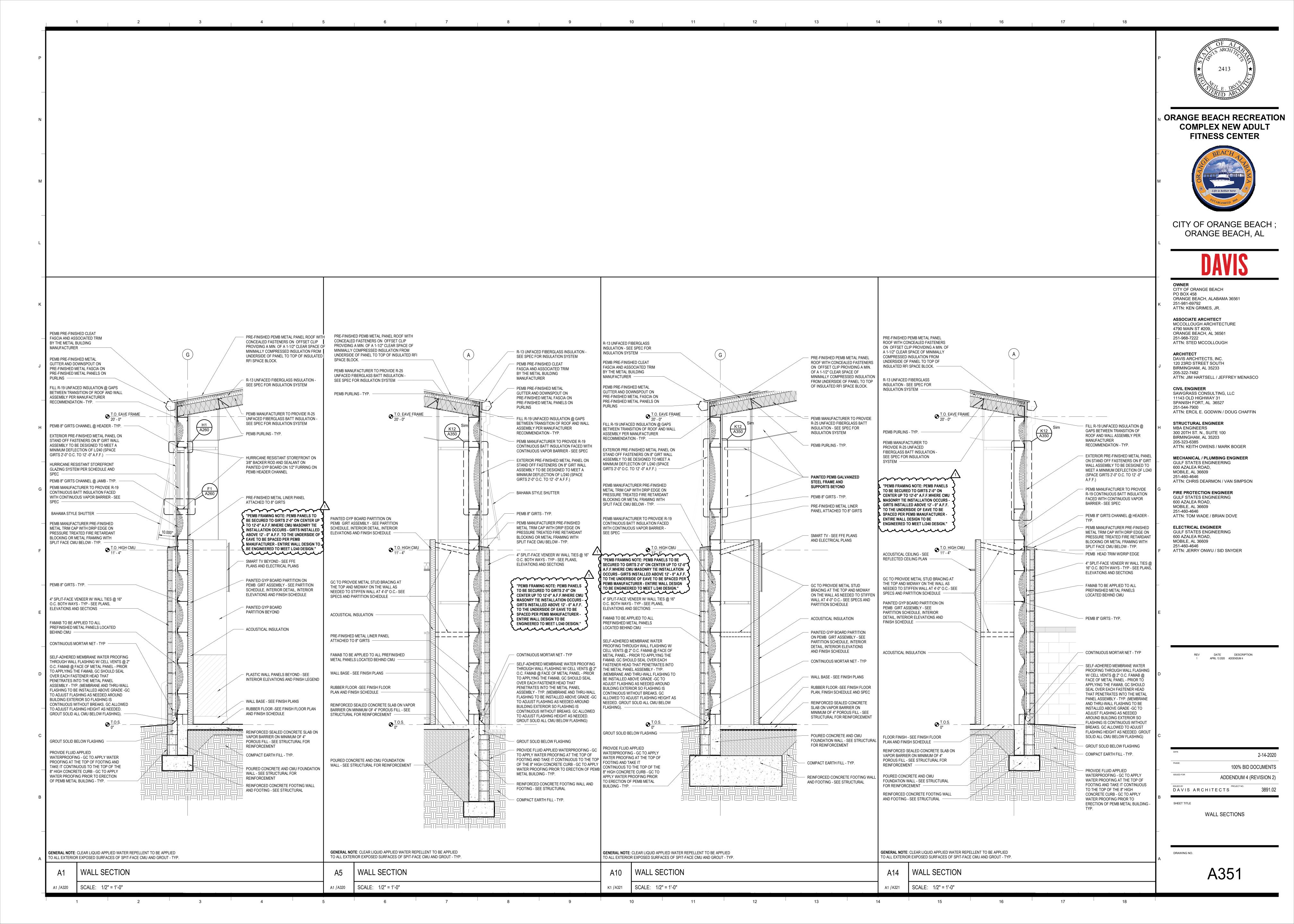
ORANGE BEACH, ALABAMA 36561

PO BOX 458

251-981-69792









# **COMPLEX NEW ADULT**



CITY OF ORANGE BEACH: ORANGE BEACH, AL

CITY OF ORANGE BEACH PO BOX 458 ORANGE BEACH, ALABAMA 36561 251-981-69792 ATTN: KEN GRIMES, JR.

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ARCHITECT DAVIS ARCHITECTS, INC. 120 23RD STREET SOUTH BIRMINGHAM, AL 35233 205-322-7482 ATTN: JIM HARTSELL / JEFFREY MENASCO

CIVIL ENGINEER SAWGRASS CONSULTING, LLC 11143 OLD HIGHWAY 31 SPANISH FORT, AL 36527 251-544-7900 ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

STRUCTURAL ENGINEER MBA ENGINEERS 300 20TH ST. N., SUITE 100 BIRMINGHAM, AL 35203

> ATTN: KEITH OWENS / MARK BOGER MECHANICAL / PLUMBING ENGINEER GULF STATES ENGINEERING

600 AZALEA ROAD, MOBILE, AL 36609 251-460-4646 ATTN: CHRIS DEARMON / VAN SIMPSON

**FIRE PROTECTION ENGINEER** GULF STATES ENGINEERING 600 AZALEA ROAD, MOBILE, AL 36609

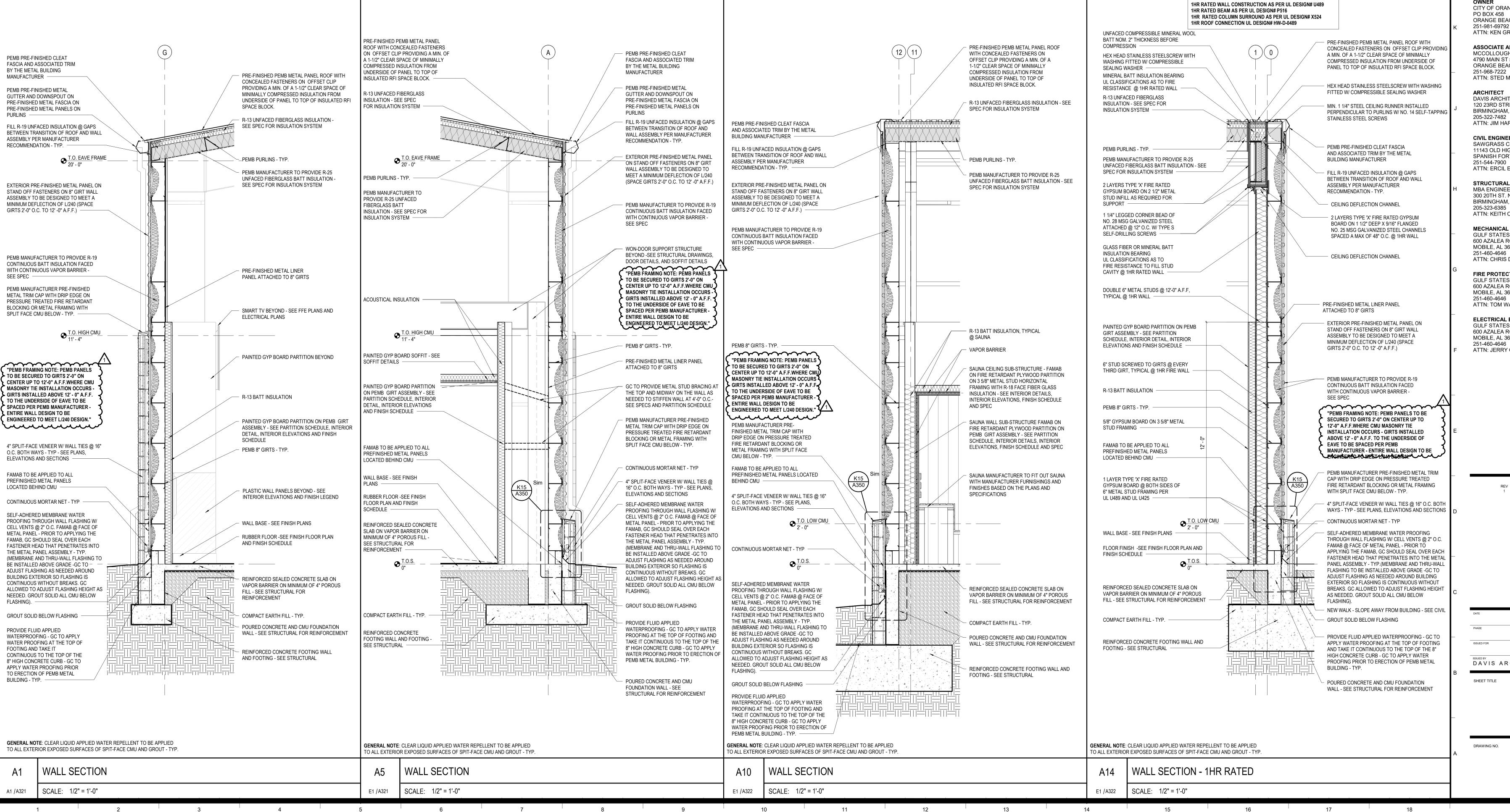
251-460-4646 ATTN: TOM WADE / BRIAN DOVE **ELECTRICAL ENGINEER** GULF STATES ENGINEERING

600 AZALEA ROAD, MOBILE, AL 36609 251-460-4646 ATTN: JERRY ONWU / SID SNYDER

APRIL 13 2020 ADDENDUM 4

100% BID DOCUMENTS ADDENDUM 4 (REVISION 2) DAVIS ARCHITECTS

WALL SECTIONS







CITY OF ORANGE BEACH: ORANGE BEACH, AL

CITY OF ORANGE BEACH PO BOX 458 ORANGE BEACH, ALABAMA 36561 251-981-69792 ATTN: KEN GRIMES, JR.

**ASSOCIATE ARCHITECT** MCCOLLOUGH ARCHITECTURE 4790 MAIN ST #209, ORANGE BEACH, AL 36561 251-968-7222 ATTN: STED MCCOLLOUGH

R-13 UNFACED

FIBERGLASS

SPEC FOR

PEMB PURLINS - TYP.

INSULATION - SEE

INSULATION SYSTEM

PEMB MANUFACTURE

UNFACED FIBERGLASS

TO PROVIDE R-25

BATT INSULATION -

INSULATION SYSTEM

PEMB 8" GIRTS CHANNE

CHANNEL @ JAMB - TY

PRE-FINISHED METAL

PEMB 8" GIRTS - TYP

R-13 BATT INSULATION

PAINTED GYP BOARD

PARTITION ON PEMB

GIRT ASSEMBLY - SEE

PARTITION SCHEDUL

INTERIOR ELEVATIONS

AND FINISH SCHEDULE

STOREFRONT ON 3/8"

SEALANT ON PAINTED

BACKER ROD AND

GYP BOARD ON 1/2"

FURRING ON PEMB

HEADER CHANNEL

STOREFRONT ON 3/8"

BACKER ROD AND

SEALANT ON SOLID

WINDOW SEAL ON

PEMB SILL CHANNEL

PAINTED GYP BOARD

PARTITION ON PEMB

GIRT ASSEMBLY - SEE

PARTITION SCHEDULE

INTERIOR ELEVATIONS

AND FINISH SCHEDULE

R-13 BATT INSULATION

RUBBER FLOOR -SEE

FINISH FLOOR PLAN

AND FINISH SCHEDULE

REINFORCED SEALED

CONCRETE SLAB ON

VAPOR BARRIER ON

MINIMUM OF 4" PORG

FILL - SEE STRUCTUI

FOR REINFORCEMENT

POURED CONCRETE

FOUNDATION WALL

FOR REINFORCEMENT

CONCRETE FOOTING

WALL AND FOOTING -

SEE STRUCTURAL

COMPACT EARTH

FILL - TYP.

SEE STRUCTURAL

REINFORCED

AND CMU

FINISH PLANS

INTERIOR DETAIL,

INTERIOR DETAIL,

ATTACHED TO 8" GIRTS

@ HEADER - TYP.

PEMB 8" GIRTS

LINER PANEL

SEE SPEC FOR

ARCHITECT DAVIS ARCHITECTS, INC. 120 23RD STREET SOUTH BIRMINGHAM, AL 35233 205-322-7482 ATTN: JIM HARTSELL / JEFFREY MENASCO

CIVIL ENGINEER SAWGRASS CONSULTING, LLC 11143 OLD HIGHWAY 31 SPANISH FORT, AL 36527 251-544-7900 ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

STRUCTURAL ENGINEER MBA ENGINEERS 300 20TH ST. N., SUITE 100 BIRMINGHAM, AL 35203 205-323-6385 ATTN: KEITH OWENS / MARK BOGER

MECHANICAL / PLUMBING ENGINEER GULF STATES ENGINEERING 600 AZALEA ROAD, MOBILE, AL 36609 251-460-4646

ATTN: CHRIS DEARMON / VAN SIMPSON **FIRE PROTECTION ENGINEER** GULF STATES ENGINEERING 600 AZALEA ROAD, MOBILE, AL 36609

ATTN: TOM WADE / BRIAN DOVE **ELECTRICAL ENGINEER** GULF STATES ENGINEERING 600 AZALEA ROAD,

251-460-4646

MOBILE, AL 36609 251-460-4646 ATTN: JERRY ONWU / SID SNYDER

APRIL 13 2020 ADDENDUM 4

2-14-2020 100% BID DOCUMENTS ADDENDUM 4 (REVISION 2) DAVIS ARCHITECTS SHEET TITLE

WALL SECTIONS

DRAWING NO.

STRUCTURAL FOR PROVIDE FLUID APPLIED REINFORCEMENT GC TO APPLY WATER PROOFING PRIOR TO ERECTION OF WATERPROOFING - GC TO APPLY PEMB METAL BUILDING - TYP. WATER PROOFING AT THE TOP OF FOOTING AND TAKE IT REINFORCED CONCRETE FOOTING CONTINUOUS TO THE TOP OF THE WALL AND FOOTING - SEE 8" HIGH CONCRETE CURB - GC TO STRUCTURAL APPLY WATER PROOFING PRIOR TO ERECTION OF PEMB METAL BUILDING - TYP. — GENERAL NOTE: CLEAR LIQUID APPLIED WATER REPELLENT TO BE APPLIED **GENERAL NOTE**: CLEAR LIQUID APPLIED WATER REPELLENT TO BE APPLIED TO ALL EXTERIOR EXPOSED SURFACES OF SPIT-FACE CMU AND GROUT - TYP. TO ALL EXTERIOR EXPOSED SURFACES OF SPIT-FACE CMU AND GROUT - TYP. WALL SECTION - 1HR RATED WALL SECTION E1 /A323

1HR RATED WALL CONSTRUCTION AS PER UL DESIGN# U489 1HR RATED BEAM AS PER UL DESIGN# P516 1HR RATED COLUMN SURROUND AS PER UL DESIGN# X524 1HR ROOF CONNECTION UL DESIGN# HW-D-0489 UNFACED COMPRESSIBLE MINERAL WOOL BATT NOM. 2" THICKNESS BEFORE COMPRESSION -PRE-FINISHED PEMB METAL PANEL ROOF WITH CONCEALED FASTENERS ON PRE-FINISHED PEMB METAL PANEL ROOF WITH HEX HEAD STAINLESS STEELSCREW WITH OFFSET CLIP PROVIDING A MIN. OF A 1-1/2" WASHING FITTED W/ COMPRESSIBLE CONCEALED FASTENERS ON OFFSET CLIP CLEAR SPACE OF MINIMALLY SEALING WASHER -PROVIDING A MIN. OF A 1-1/2" CLEAR SPACE OF COMPRESSED INSULATION FROM MINIMALLY COMPRESSED INSULATION FROM MINERAL BATT INSULATION UNDERSIDE OF PANEL TO TOP OF UNDERSIDE OF PANEL TO TOP OF INSULATED RFI R-13 UNFACED FIBERGLASS BEARING UL CLASSIFICATIONS AS INSULATED RFI SPACE BLOCK. SPACE BLOCK. INSULATION - SEE SPEC TO FIRE RESISTANCE @ 1HR FOR INSULATION SYSTEM PEMB PRE-FINISHED CLEAT FASCIA RATED WALL -HEX HEAD STAINLESS STEELSCREW WITH WASHING AND ASSOCIATED TRIM BY THE FITTED W/ COMPRESSIBLE SEALING WASHER R-13 UNFACED FIBERGLASS METAL BUILDING MANUFACTURER INSULATION - SEE SPEC PEMB PURLINS - TYP. MIN. 1 1/4" STEEL CEILING RUNNER INSTALLED FOR INSULATION SYSTEM -PERPENDICULAR TO PURLINS W/ NO. 14 SELF-TAPPING STAINLESS STEEL SCREWS PEMB PRE-FINISHED CLEAT FASCIA AND FILL R-19 UNFACED INSULATION @ GAPS BETWEEN TRANSITION OF ASSOCIATED TRIM BY THE METAL BUILDING ROOF AND WALL ASSEMBLY PER MANUFACTURER PEMB PURLINS - TYP. PEMB MANUFACTURER MANUFACTURER FILL R-19 UNFACED INSULATION @ GAPS RECOMMENDATION - TYP. TO PROVIDE R-25 PEMB MANUFACTURER TO PROVIDE BETWEEN TRANSITION OF ROOF AND WALL **UNFACED FIBERGLASS** R-25 UNFACED FIBERGLASS BATT ASSEMBLY PER MANUFACTURER **BATT INSULATION - SEE** INSULATION - SEE SPEC FOR RECOMMENDATION - TYP. SPEC FOR INSULATION INSULATION SYSTEM -"PEMB FRAMING NOTE: PEMB PANELS CEILING DEFLECTION CHANNEL TO BE SECURED TO GIRTS 2'-0" ON 2 LAYERS TYPE 'X' FIRE RATED CENTER UP TO 12'-0" A.F.F.WHERE CMU GYPSUM BOARD ON 2 1/2" METAL MASONRY TIE INSTALLATION OCCURS -STUD INFILL AS REQUIRED FOR GIRTS INSTALLED ABOVE 12' - 0" A.F.F. - CEILING DEFLECTION CHANNEL TO THE UNDERSIDE OF EAVE TO BE SPACED PER PEMB MANUFACTURER -ENTIRE WALL DESIGN TO BE 1 1/4" LEGGED CORNER BEAD OF ENGINEERED TO MEET L/240 DESIGN.' NO. 28 MSG GALVANIZED STEEL ATTACHED @ 12" O.C. W/ TYPE S PRE-FINISHED METAL LINER PANEL SELF-DRILLING SCREWS — ATTACHED TO 8" GIRTS EXTERIOR PRE-FINISHED METAL PANEL ON STAND OFF FASTENERS 2 LAYERS TYPE 'X' FIRE RATED GYPSUM EXTERIOR PRE-FINISHED METAL PANEL ON ON 8" GIRT WALL ASSEMBLY TO BE BOARD ON 1 1/2" DEEP X 9/16" FLANGED STAND OFF FASTENERS ON 8" GIRT WALL DESIGNED TO MEET A MINIMUM NO. 25 MSG GALVANIZED STEEL ASSEMBLY TO BE DESIGNED TO MEET A DEFLECTION OF L/240 (SPACE GIRTS MINIMUM DEFLECTION OF L/240 (SPACE GIRTS 2'-0" O.C. TO 12' -0" A.F.F.) — SPACED A MAX OF 48" O.C. @ 1HR WALL 2'-0" O.C. TO 12' -0" A.F.F.) PEMB MANUFACTURER TO GLASS FIBER OR MINERAL BATT PROVIDE R-19 CONTINUOUS BATT INSULATION BEARING INSULATION FACED WITH UL CLASSIFICATIONS AS TO PEMB MANUFACTURER TO PROVIDE R-19 CONTINUOUS VAPOR BARRIER CONTINUOUS BATT INSULATION FACED FIRE RESISTANCE TO FILL STUD PRE-FINISHED METAL WITH CONTINUOUS VAPOR BARRIER - SEE CAVITY @ 1HR RATED WALL -LINER PANEL ATTACHED TO 8" DOUBLE 6" METAL STUDS @ 12'-0" A.F.F, TYPICAL @ 1HR WALL PEMB MANUFACTURER PRE-FINISHED METAL TRIM CAP WITH DRIP EDGE ON PEMB MANUFACTURER PRE-FINISHED PRESSURE TREATED FIRE RETARDANT METAL TRIM CAP WITH DRIP EDGE ON PRESSURE TREATED FIRE RETARDANT BLOCKING OR METAL FRAMING WITH R-13 BATT INSULATION BLOCKING OR METAL FRAMING WITH SPLIT FACE CMU BELOW - TYP. -SPLIT FACE CMU BELOW - TYP.  $\sim\sim\sim\sim\sim\sim$ "PEMB FRAMING NOTE: PEMB PANELS TO BE SECURED 6" STUD SCREWED TO GIRTS @ EVERY TO GIRTS 2'-0" ON CENTER UP TO 12'-0" A.F.F.WHERE PEMB 8" GIRTS - TYP. -THIRD GIRT, TYPICAL @ 1HR FIRE WALL CMU MASONRY TIE INSTALLATION OCCURS - GIRTS FAMAB TO BE APPLIED TO ALL 1 LAYER TYPE 'X' FIRE RATED INSTALLED ABOVE 12' - 0" A.F.F. TO THE UNDERSIDE PREFINISHED METAL PANELS GYPSUM BOARD @ BOTH SIDES OF OF EAVE TO BE SPACED PER PEMB MANUFACTURER -LOCATED BEHIND CMU — ENTIRE WALL DESIGN TO BE ENGINEERED TO MEET 6" METAL STUD FRAMING PER PAINTED GYP BOARD SOFFIT UL U489 AND UL U425 — UR4D RESIGN" UNITED TO THE STATE OF THE STAT SEE SOFFIT DETAILS 4" SPLIT-FACE VENEER W/ WALL TIES @ 16" O.C. BOTH WAYS -TYP - SEE PLANS, ELEVATIONS 5/8" GYPSUM BOARD ON 3 5/8" METAL AND SECTIONS -PEMB 8" GIRTS - TYP. STUD FRAMING -PAINTED GYP BOARD FAMAB TO BE APPLIED TO ALL PREFINISHED METAL PANELS LOCATED BEHIND CMU PARTITION ON PEMB FIRE EXTINGUISHER BEYOND -SEE FFE GIRT ASSEMBLY - SEE CONTINUOUS MORTAR NET - TYP ----PAINTED GYP BOARD PARTITION ON PEMB PARTITION SCHEDULE, INTERIOR DETAIL, GIRT ASSEMBLY - SEE PARTITION SELF-ADHERED MEMBRANE WATER INTERIOR ELEVATIONS SCHEDULE, INTERIOR DETAIL, INTERIOR PROOFING THROUGH WALL FLASHING 4" SPLIT-FACE VENEER W/ WALL TIES @ 16" O.C. BOTH AND FINISH SCHEDULE ELEVATIONS AND FINISH SCHEDULE -W/ CELL VENTS @ 2" O.C. FAMAB @ WAYS - TYP - SEE PLANS, ELEVATIONS AND SECTIONS FACE OF METAL PANEL - PRIOR TO WALL BASE - SEE FINISH PLANS APPLYING THE FAMAB, GC SHOULD R-13 BATT INSULATION SEAL OVER EACH FASTENER HEAD RUBBER FLOOR -SEE FINISH FLOOR THAT PENETRATES INTO THE METAL PLAN AND FINISH SCHEDULE -CONTINUOUS MORTAR NET - TYP PANEL ASSEMBLY - TYP. (MEMBRANE AND THRU-WALL FLASHING TO BE INSTALLED ABOVE GRADE -GC TO SELF-ADHERED MEMBRANE WATER PROOFING REINFORCED SEALED CONCRETE SLAB REINFORCED SEALED ADJUST FLASHING AS NEEDED AROUND THROUGH WALL FLASHING W/ CELL VENTS @ 2" O.C. ON VAPOR BARRIER ON MINIMUM OF 4" CONCRETE SLAB ON BUILDING EXTERIOR SO FLASHING IS FAMAB @ FACE OF METAL PANEL - PRIOR TO APPLYING VAPOR BARRIER ON POROUS FILL - SEE STRUCTURAL FOR CONTINUOUS WITHOUT BREAKS. GC THE FAMAB, GC SHOULD SEAL OVER EACH FASTENER MINIMUM OF 4" REINFORCEMENT -ALLOWED TO ADJUST FLASHING HEIGHT HEAD THAT PENETRATES INTO THE METAL PANEL POROUS FILL - SEE AS NEEDED. GROUT SOLID ALL CMU ASSEMBLY - TYP. (MEMBRANE AND THRU-WALL STRUCTURAL FOR BELOW FLASHING). FLASHING TO BE INSTALLED ABOVE GRADE -GC TO REINFORCEMENT \_\_ADJUST FLASHING AS NEEDED AROUND BUILDING \_ EXTERIOR SO FLASHING IS CONTINUOUS WITHOUT POURED CONCRETE AND CMU BREAKS. GC ALLOWED TO ADJUST FLASHING HEIGHT FOUNDATION WALL - SEE POURED CONCRETE AND CMU AS NEEDED. GROUT SOLID ALL CMU BELOW FLASHING). STRUCTURAL FOR FOUNDATION WALL - SEE REINFORCEMENT STRUCTURAL FOR REINFORCEMENT -→ NEW WALK - SLOPE AWAY FROM  $\stackrel{\perp}{=}$  Building - See Civil GROUT SOLID BELOW FLASHING COMPACT EARTH FILL - TYP. GROUT SOLID BELOW FLASHING PROVIDE FLUID APPLIED COMPACT EARTH WATERPROOFING - GC TO APPLY FILL - TYP. PROVIDE FLUID APPLIED WATERPROOFING - GC TO WATER PROOFING AT THE TOP OF FOOTING AND TAKE IT APPLY WATER PROOFING AT THE TOP OF FOOTING AND REINFORCED CONCRETE TAKE IT CONTINUOUS TO THE TOP OF THE 8" HIGH CONTINUOUS TO THE TOP OF THE FOOTING WALL AND FOOTING -CONCRETE CURB - GC TO APPLY WATER PROOFING 8" HIGH CONCRETE CURB - GC TO SEE STRUCTURAL -PRIOR TO ERECTION OF PEMB METAL BUILDING - TYP. APPLY WATER PROOFING PRIOR TO ERECTION OF PEMB METAL BUILDING - TYP. — REINFORCED

**GENERAL NOTE**: CLEAR LIQUID APPLIED WATER REPELLENT TO BE APPLIED

SCALE: 1/2" = 1'-0"

TO ALL EXTERIOR EXPOSED SURFACES OF SPIT-FACE CMU AND GROUT - TYP.

WALL SECTION - 1HR RATED

CONCRETE FOOTING

WALL AND FOOTING -SEE STRUCTURAL

GENERAL NOTE: CLEAR LIQUID APPLIED WATER REPELLENT TO BE APPLIED

WALL SECTION

SCALE: 1/2" = 1'-0"

A1 /A322

TO ALL EXTERIOR EXPOSED SURFACES OF SPIT-FACE CMU AND GROUT - TYP.

1HR RATED WALL CONSTRUCTION AS PER UL DESIGN# U489 UNFACED COMPRESSIBLE MINERAL WOOL 1HR RATED BEAM AS PER UL DESIGN# P516 BATT NOM. 2" THICKNESS BEFORE 1HR RATED COLUMN SURROUND AS PER UL DESIGN# X524 COMPRESSION -1HR ROOF CONNECTION UL DESIGN# HW-D-0489 HEX HEAD STAINLESS STEELSCREW WITH WASHING FITTED W/ COMPRESSIBLE SEALING WASHER -- HEX HEAD STAINLESS STEELSCREW PRE-FINISHED PEMB METAL PANEL ROOF WITH WITH WASHING FITTED W/ MINERAL BATT INSULATION BEARING UL CONCEALED FASTENERS ON OFFSET CLIP COMPRESSIBLE SEALING WASHER CLASSIFICATIONS AS TO FIRE RESISTANCE PROVIDING A MIN. OF A 1-1/2" CLEAR SPACE OF @ 1HR RATED WALL -MINIMALLY COMPRESSED INSULATION FROM MIN. 1 1/4" STEEL CEILING RUNNER INSTALLED R-13 UNFACED FIBERGLASS INSULATION - SEE UNDERSIDE OF PANEL TO TOP OF INSULATED RFI PERPENDICULAR TO PURLINS W/ NO. 14 SELF-TAPPING SPEC FOR INSULATION SYSTEM SPACE BLOCK. — STAINLESS STEEL SCREWS PEMB PURLINS - TYP. PEMB PRE-FINISHED CLEAT FASCIA AND ASSOCIATED TRIM BY THE METAL BUILDING MANUFACTURER PRE-FINISHED PEMB METAL PANEL ROOF WITH CONCEALED FASTENERS ON OFFSET CLIP PROVIDING A PEMB PRE-FINISHED CLEAT FASCIA AND MIN. OF A 1-1/2" CLEAR SPACE OF MINIMALLY ASSOCIATED TRIM BY THE METAL BUILDING FILL R-19 UNFACED INSULATION @ GAPS COMPRESSED INSULATION FROM UNDERSIDE OF PANEL MANUFACTURER BETWEEN TRANSITION OF ROOF AND WALL TO TOP OF INSULATED RFI SPACE BLOCK. ASSEMBLY PER MANUFACTURER RECOMMENDATION - TYP. -PEMB MANUFACTURER TO PROVIDE R-25 FILL R-19 UNFACED INSULATION @ GAPS UNFACED FIBERGLASS BATT INSULATION -BETWEEN TRANSITION OF ROOF AND WALL ASSEMBLY PER MANUFACTURER SEE SPEC FOR INSULATION SYSTEM -EXTERIOR PRE-FINISHED METAL PANEL ON RECOMMENDATION - TYP. STAND OFF FASTENERS ON 8" GIRT WALL ASSEMBLY TO BE DESIGNED TO MEET A 2 LAYERS TYPE 'X' FIRE RATED GYPSUM - CEILING DEFLECTION CHANNEL MINIMUM DEFLECTION OF L/240 (SPACE BOARD ON 2 1/2" METAL STUD INFILL AS GIRTS 2'-0" O.C. TO 12' -0" A.F.F.) — REQUIRED FOR SUPPORT CEILING DEFLECTION CHANNEL PEMB MANUFACTURER TO PROVIDE R-19 1 1/4" LEGGED CORNER BEAD OF CONTINUOUS BATT INSULATION FACED NO. 28 MSG GALVANIZED STEEL WITH CONTINUOUS VAPOR BARRIER -ATTACHED @ 12" O.C. W/ TYPE S PRE-FINISHED METAL LINER PANEL ATTACHED TO 8" GIRTS SEE SPEC -SELF-DRILLING SCREWS -2 LAYERS TYPE 'X' FIRE RATED GYPSUM EXTERIOR PRE-FINISHED METAL PANEL ON STAND OFF BOARD ON 1 1/2" DEEP X 9/16" FLANGED FASTENERS ON 8" GIRT WALL ASSEMBLY TO BE DESIGNED NO. 25 MSG GALVANIZED STEEL CHANNELS TO MEET A MINIMUM DEFLECTION OF L/240 (SPACE GIRTS SPACED A MAX OF 48" O.C. @ 1HR WALL 2'-0" O.C. TO 12' -0" A.F.F.) HURRICANE RESISTANT STOREFRONT GLAZING SYSTEM PER SCHEDULE AND "PEMB FRAMING NOTE: PEMB PANELS TO BE SECURED TO 6" STUD SCREWED TO GIRTS @ EVERY THIRD GIRT, TYPICAL @ 1HR FIRE WALL GIRTS 2'-0" ON CENTER UP TO 12'-0" A.F.F.WHERE CMU MASONRY TIE INSTALLATION OCCURS - GIRTS INSTALLED "PEMB FRAMING NOTE: PEMB PANELS TO BE ABOVE 12' - 0" A.F.F. TO THE UNDERSIDE OF EAVE TO BE SPACED PER PEMB MANUFACTURER - ENTIRE WALL SECURED TO GIRTS 2'-0" ON CENTER UP TO 12'-0" DESIGN TO BE ENGINEERED TO MEET L/240 DESIGN." GLASS FIBER OR MINERAL BATT INSULATION . A.F.F.WHERE CMU MASONRY TIE INSTALLATION BEARING UL CLASSIFICATIONS AS TO FIRE OCCURS - GIRTS INSTALLED ABOVE 12' - 0" A.F.F. RESISTANCE TO FILL STUD CAVITY @ 1HR RATED TO THE UNDERSIDE OF EAVE TO BE SPACED PER PEMB MANUFACTURER - ENTIRE WALL DESIGN TO BE ENGINEERED TO MEET L/240 DESIGN." PEMB MANUFACTURER TO PROVIDE R-19 CONTINUOUS BATT INSULATION FACED WITH CONTINUOUS VAPOR 1 LAYER TYPE 'X' FIRE RATED GYPSUM BOARD @ BOTH BARRIER - SEE SPEC SIDES OF 6" METAL STUD FRAMING PER UL U489 AND PRE-FINISHED METAL WALL HUNG CANOPY - SEE DETAILS AND SPEC PEMB MANUFACTURER PRE-FINISHED METAL TRIM CAP BEYOND R-13 BATT INSULATION PEMB HEAD TRIM W/DRIP EDGE 5/8" GYPSUM BOARD ON 3 5/8" METAL STUD FRAMING -SPLIT-FACE VENEER BEYOND HURRICANE RESISTANT STOREFRONT GLAZING SYSTEM PER SCHEDULE AND SPEC -PEMB MANUFACTURER PRE-FINISHED ACOUSTICAL CEILING - SEE METAL TRIM CAP WITH DRIP EDGE ON REFLECTED CEILING PLAN -PRESSURE TREATED FIRE RETARDANT PEMB 8" GIRTS - TYP. BLOCKING OR METAL FRAMING WITH SPLIT FACE CMU BELOW - TYP. — PAINTED GYP BOARD PARTITION ON PEMB GIRT ASSEMBLY - SEE PARTITION SCHEDULE, INTERIOR DETAIL, INTERIOR ELEVATIONS AND FINISH SCHEDULE — FAMAB TO BE APPLIED TO ALL PREFINISHED METAL PANELS PEMB MANUFACTURER PRE-FINISHED METAL TRIM LOCATED BEHIND CMU -CAP WITH DRIP EDGE ON PRESSURE TREATED FIRE WALL BASE - SEE FINISH PLANS RETARDANT BLOCKING OR METAL FRAMING WITH 4" SPLIT-FACE VENEER W/ WALL TIES

SPLIT FACE CMU BELOW - TYP. REINFORCED SEALED CONCRETE SLAB ON FAMAB TO BE APPLIED TO ALL PREFINISHED METAL VAPOR BARRIER ON MINIMUM OF 4" POROUS PANELS LOCATED BEHIND CMU FILL - SEE STRUCTURAL FOR REINFORCEMENT — - 4" SPLIT-FACE VENEER W/ WALL TIES @ 16" O.C. BOTH WAYS - TYP - SEE PLANS, ELEVATIONS AND SECTIONS RUBBER FLOOR -SEE FINISH FLOOR PLAN AND CONTINUOUS MORTAR NET - TYP FINISH SCHEDULE -SELF-ADHERED MEMBRANE WATER PROOFING THROUGH

WALL FLASHING W/ CELL VENTS @ 2" O.C. FAMAB @ FACE OF METAL PANEL - PRIOR TO APPLYING THE FAMAB, GC SHOULD SEAL OVER EACH FASTENER HEAD THAT PENETRATES INTO THE METAL PANEL ASSEMBLY - TYP. (MEMBRANE AND THRU-WALL FLASHING TO BE INSTALLED ABOVE GRADE -GC TO ADJUST FLASHING AS NEEDED AROUND BUILDING EXTERIOR SO FLASHING IS CONTINUOUS WITHOUT BREAKS. GC ALLOWED TO ADJUST FLASHING HEIGHT AS NEEDED. GROUT SOLID ALL CMU BELOW FLASHING). COMPACT EARTH FILL - TYP. NEW WALK - SLOPE AWAY FROM BUILDING - SEE CIVIL

- GROUT SOLID BELOW FLASHING

PROVIDE FLUID APPLIED WATERPROOFING - GC TO APPLY

WATER PROOFING AT THE TOP OF FOOTING AND TAKE IT CONTINUOUS TO THE TOP OF THE 8" HIGH CONCRETE CURB

SCALE: 1/2" = 1'-0"

@ 16" O.C. BOTH WAYS - TYP - SEE

CONTINUOUS MORTAR NET - TYP -

SELF-ADHERED MEMBRANE WATER

FLASHING W/ CELL VENTS @ 2" O.C.

PRIOR TO APPLYING THE FAMAB, GC

INTO THE METAL PANEL ASSEMBLY -

TYP. (MEMBRANE AND THRU-WALL

FLASHING TO BE INSTALLED ABOVE

GRADE -GC TO ADJUST FLASHING AS

CONTINUOUS WITHOUT BREAKS. GC 0"

FASTENER HEAD THAT PENETRATES T.O. LOW CMU

FAMAB @ FACE OF METAL PANEL -

PROOFING THROUGH WALL

SHOULD SEAL OVER EACH

NEEDED AROUND BUILDING

EXTERIOR SO FLASHING IS

ALLOWED TO ADJUST FLASHING

GROUT SOLID BELOW FLASHING

NEW WALK - SLOPE AWAY FROM

BUILDING - SEE CIVIL -

ALL CMU BELOW FLASHING).

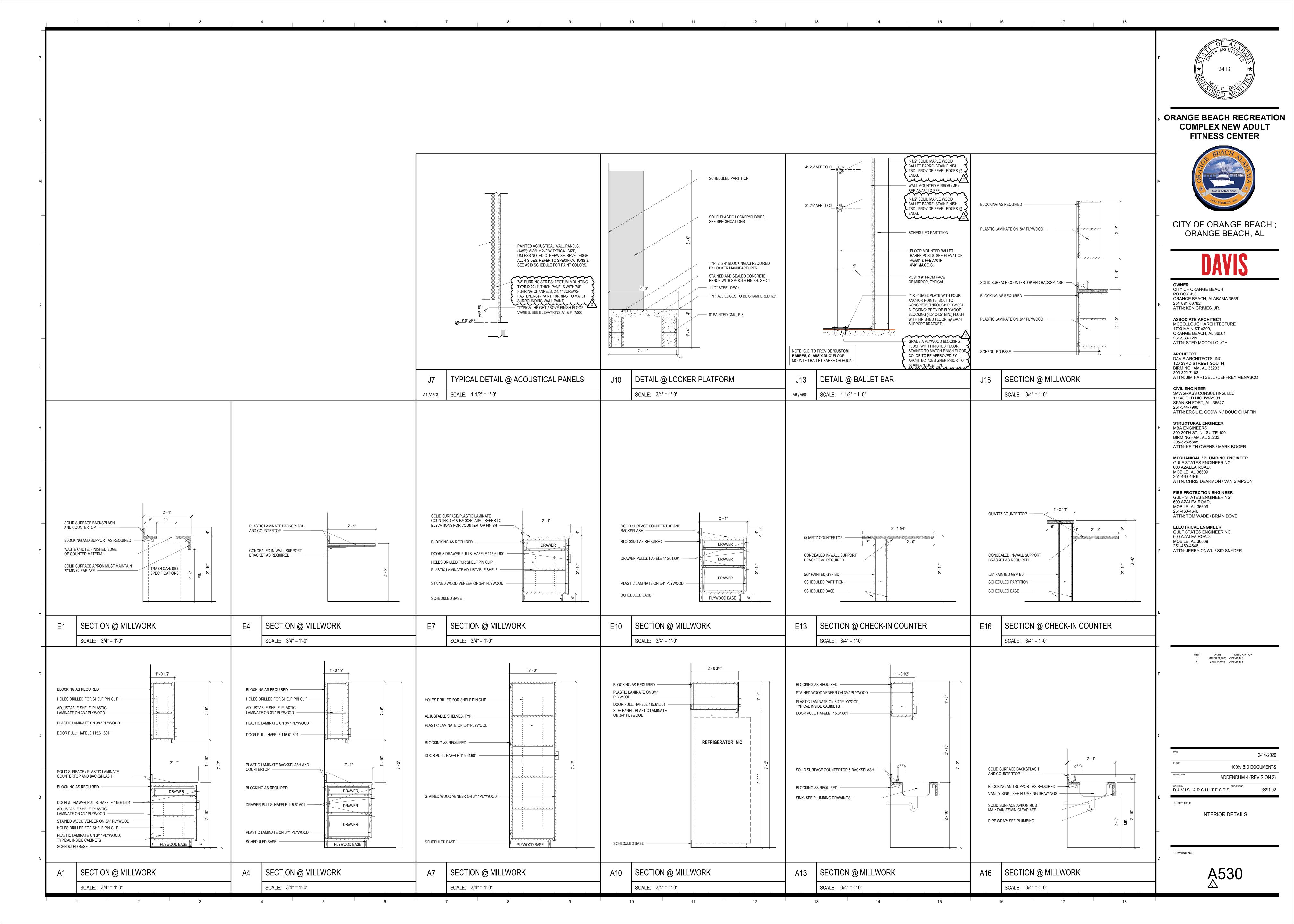
HEIGHT AS NEEDED. GROUT SOLID

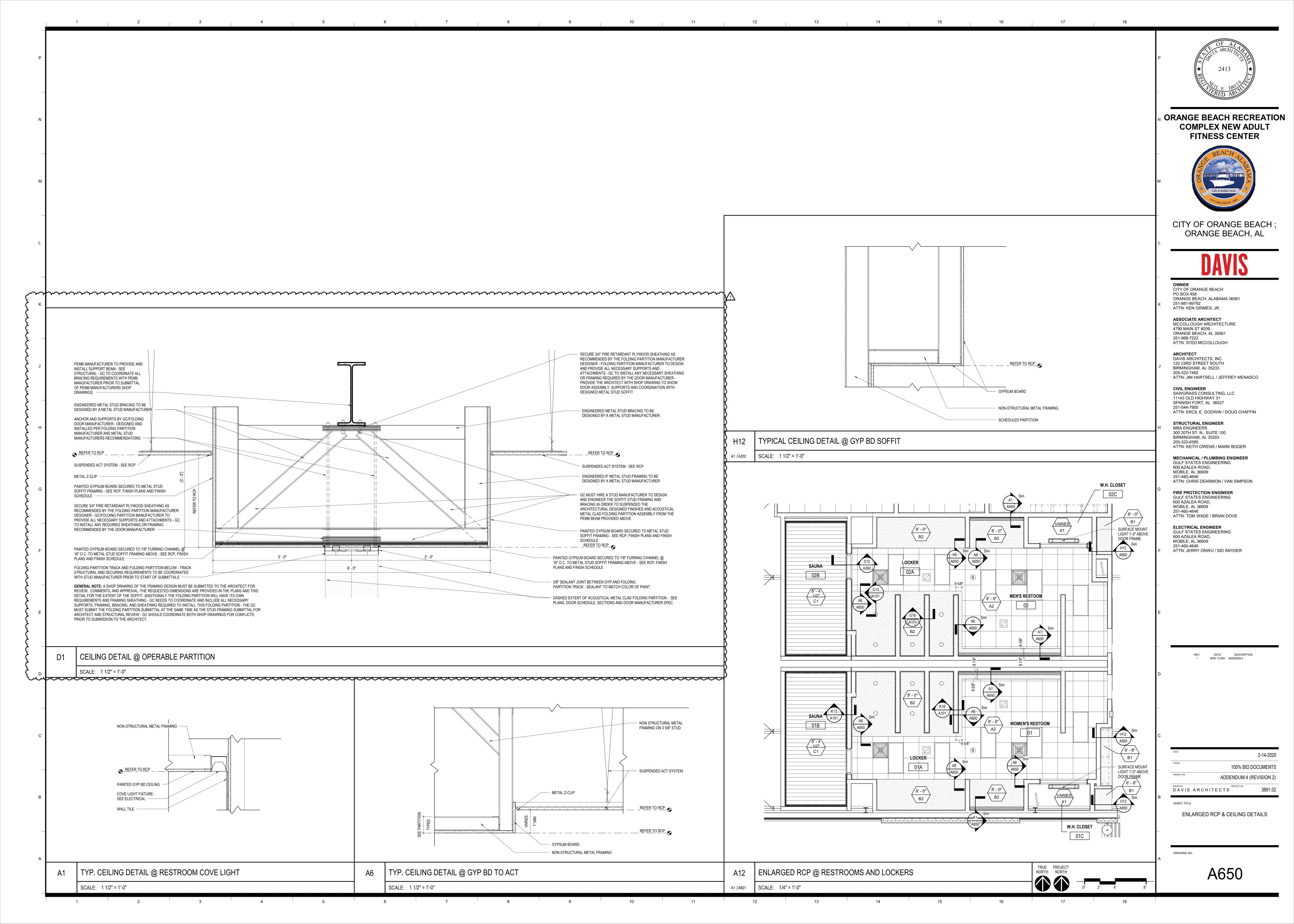
PLANS, ELEVATIONS AND SECTIONS -

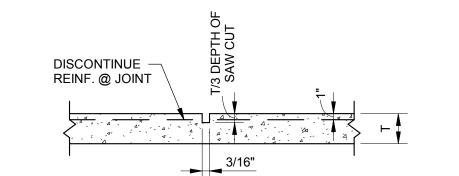
E1 /A323 | SCALE: 1/2" = 1'-0"

POURED CONCRETE AND CMU

FOUNDATION WALL - SEE





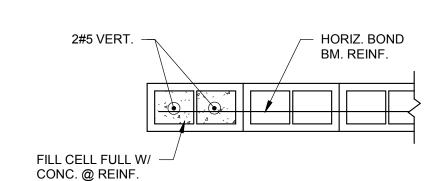


### **TYPICAL SAWED CONTROL JOINT**

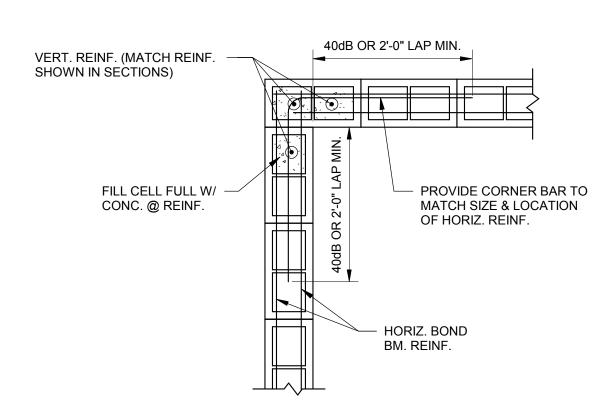
NOTES:

1. USE SAWS, BLADES AND SKID PLATES BY SOFF-CUT INTERNATIONAL OR EQUAL.

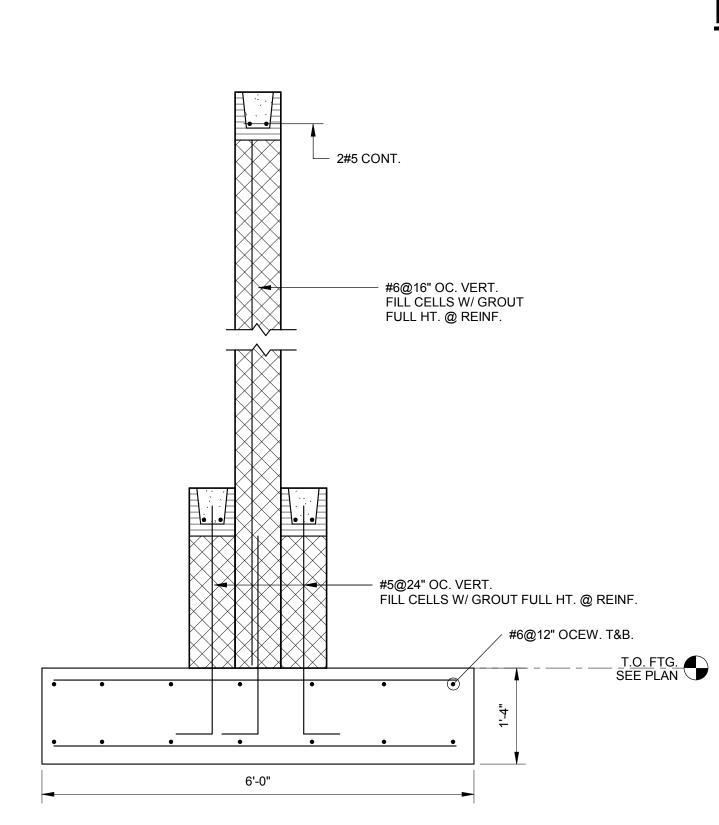
2. SEE PLAN FOR JOINT LAYOUT. 3. START CUTTING SAWED JOINTS AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES. THIS WILL TYPICALLY BE FROM 1 HOUR IN HOT WEATHER TO 4 HOURS IN COLD WEATHER AFTER COMPLETING FINISHING OF SLAB IN THAT JOINT LOCATION. 4. EXTEND SAWED JOINT TO THE SLAB BOUNDARIES AND ABUTMENTS, INCLUDING COLUMNS, DRAINS AND OTHER PENETRATIONS IN THE PATH OF A DEFINED JOINT. IMPLEMENT METHODS AND TIMING OF THE SAW CUT BEYOND THE LIMITS OF THE SOFF-CUT SAW REACH TO PROVIDE A CONSISTENT DEPTH OF CUT WITH MINIMAL RAVELING OF JOINT EDGES. 5. T = SLAB THICKNESS (SEE PLAN)



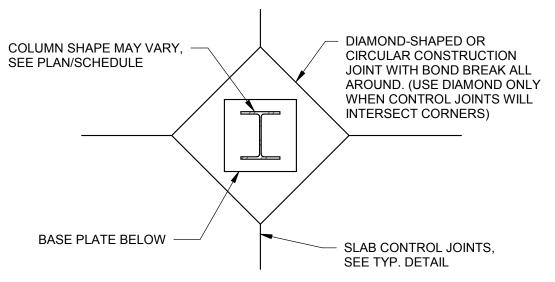
## **TYPICAL JAMB AND END OF MASONRY WALL REINF. DETAIL**



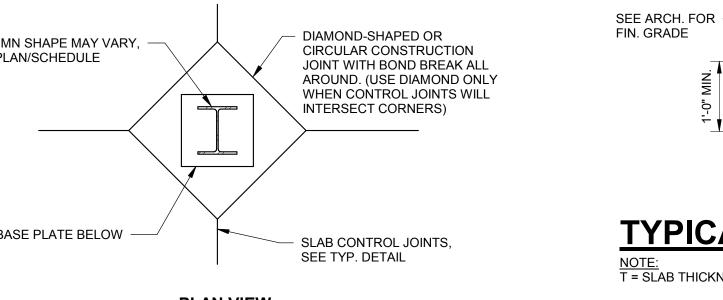
TYPICAL CORNER MASONRY WALL REINF. DETAIL



**TYPICAL SIGN FOUNDATION DETAIL** 



**PLAN VIEW** 



COLUMN, BASE PL & A. BOLTS, SEE PLAN/SCHED.

CLASS "B"

TENSION SPLICE

1 1/2" CLR. TO TIES

WxL

40dB OR 2'-0" LAP MIN.

HORIZ. BOND

BM. REINF.

**SECTION VIEW** 

TYPICAL COLUMN FOOTING DETAILS

CORNER BARS TO MATCH AND

MATE W/ BOND BM. REINF.

FOOTING REINF.

PER SCHEDULE

VERT. REINF. (MATCH REINF. —

FILL CELL FULL W/ CONC. @ REINF.

TYPICAL INTERSECTION

**MASONRY WALL REINF. DETAIL** 

SHOWN IN SECTIONS)

\_ ANCHOR (BEND AROUND A. BOLTS)

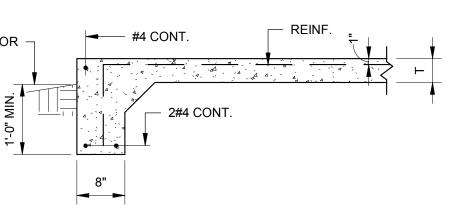
SEE PEDESTAL SCHEDULE

T.O. FTG. SEE PLAN

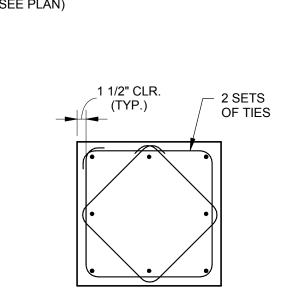
SEE PLAN/SCHED.

FOR FTG. SIZE

FOR SIZE & REINF.

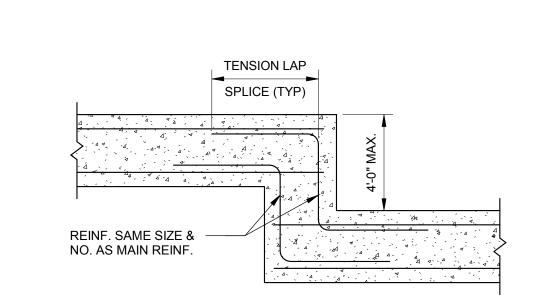


TYPICAL TURNDOWN SLAB DETAIL NOTE: T = SLAB THICKNESS (SEE PLAN)

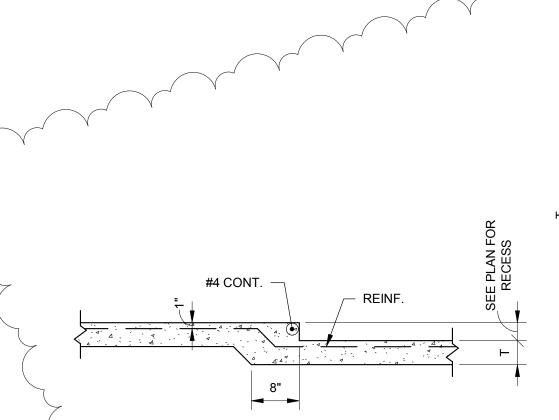


**TYPICAL PEDESTAL TIE ARRANGEMENTS** 

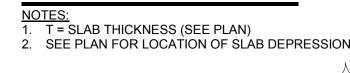
8 BAR SQ.

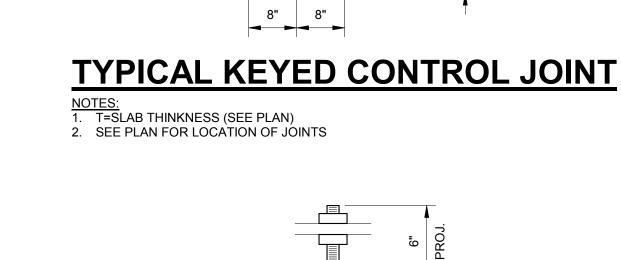


TYPICAL FOOTING STEP DETAIL



**8" AND LESS** 

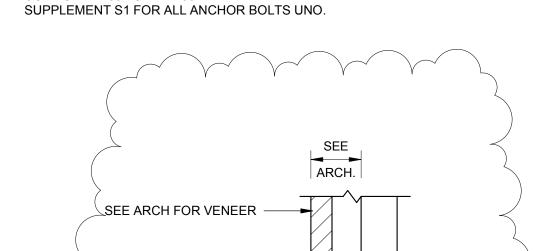




DISCONTINUE

REINF. @ JOINT

**HEADED BOLT TYPICAL ANCHOR BOLT DETAILS** 



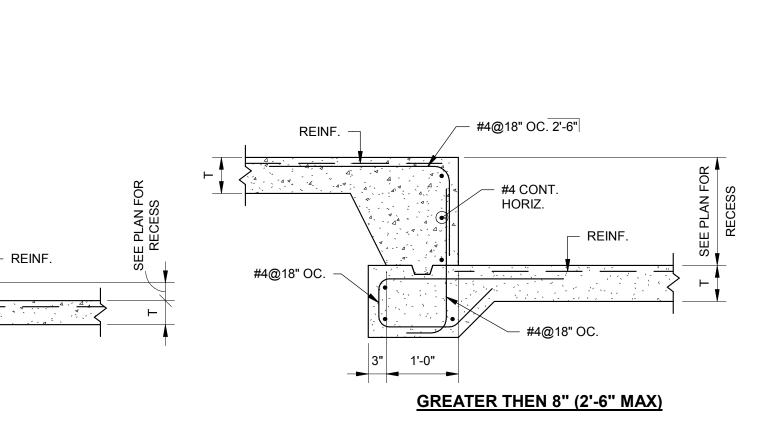
USE ASTM F1554 GRADE 55 WITH WELDABILITY

7X7X3/8 BENT PL

X0'-8" EA. END @

10'-0" MAX OPENING

TYPICAL LOOSE **LINTEL DETAIL** 

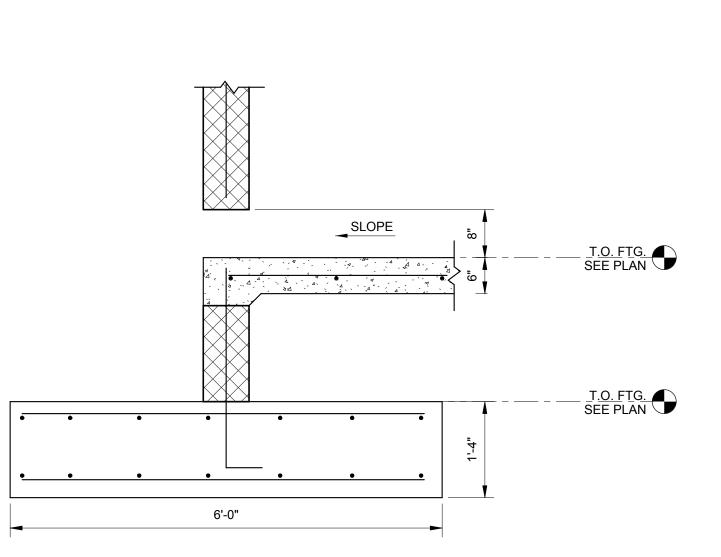


DLAB ON GRADE

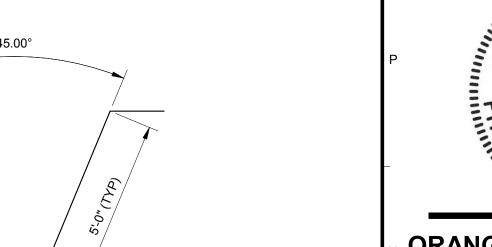
NOTES:

1. T = SLAB THICKNESS (SEE PLAN)

2. SEE PLAN FOR LOCATION OF SLAB DEPRESSION

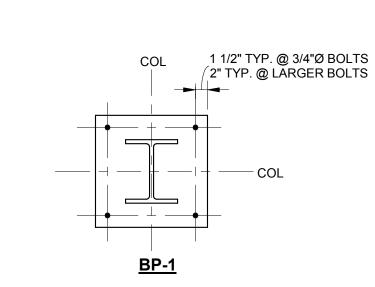


TYPICAL MECHANICAL PAD SCUPPER DETAIL



**TYPICAL HAIRPIN DETAIL** 

#5 HAIRPIN REBAR



TYPICAL BASE PLATE DETAIL



**ORANGE BEACH RECREATION COMPLEX NEW ADULT FITNESS CENTER** 



CITY OF ORANGE BEACH; ORANGE BEACH, AL

CITY OF ORANGE BEACH PO BOX 458 ORANGE BEACH, ALABAMA 3656 251-981-69792 ATTN: KEN GRIMES, JR.

ASSOCIATE ARCHITECT MCCOLLOUGH ARCHITECTURE 4790 MAIN ST #209, ORANGE BEACH, AL 36561 251-968-7222 ATTN: STED MCCOLLOUGH

**ARCHITECT** DAVIS ARCHITECTS, INC. 120 23RD STREET SOUTH BIRMINGHAM, AL 35233 205-322-7482 ATTN: JIM HARTSELL / JEFFREY MENASCO

**CIVIL ENGINEER** SAWGRASS CONSULTING, LLC 11143 OLD HIGHWAY 31 SPANISH FORT, AL 36527 251-544-7900 ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

STRUCTURAL ENGINEER MBA ENGINEERS 300 20TH ST. N., SUITE 100 BIRMINGHAM, AL 35203 205-323-6385 ATTN: KEITH OWENS / MARK BOGER

**MECHANICAL / PLUMBING ENGINEER** GULF STATES ENGINEERING 600 AZALEA ROAD, MOBILE, AL 36609 251-460-4646

ATTN: CHRIS DEARMON / VAN SIMPSON **ELECTRICAL ENGINEER** GULF STATES ENGINEERING 600 AZALEA ROAD,

MOBILE, AL 36609

251-460-4646

ATTN: JERRY ONWU / SID SNYDER

REV DATE DESCRIPTION
4 4-13-2020 ADDENDUM 4

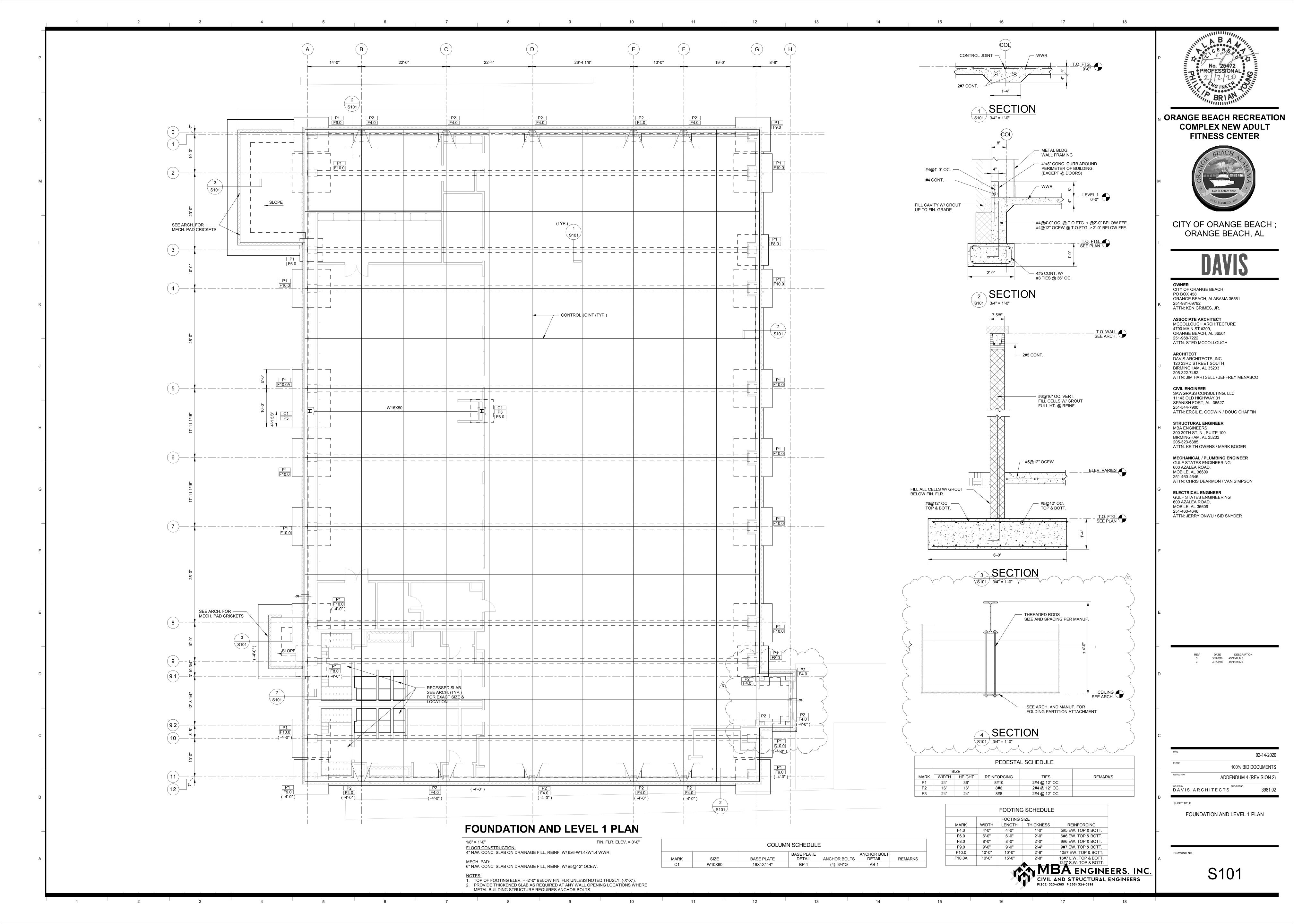
02-14-2020 100% BID DOCUMENTS ADDENDUM 4 (REVISION 2)

DAVIS ARCHITECTS

TYPICAL DETAILS

SHEET TITLE

S002



### GENERAL PLUMBING NOTES:

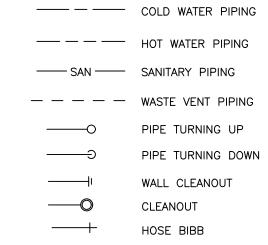
- FURNISH ALL LABOR, MATERIALS, TOOLS, INCIDENTALS AND DETAILS NECESSARY TO PROVIDE A COMPLETE SANITARY, VENTING AND DOMESTIC WATER SYSTEM. INCLUDE ANY LABOR AND MATERIAL NOT SPECIFICALLY MENTIONED, BUT NECESSARY TO PROVIDE A COMPLETE AND OPERATING SYSTEM. ALL WORK SHALL BE INSTALLED IN A PROFESSIONAL MANNER AND SHALL MEET ALL THE REQUIREMENTS OF THE 2015 IPC, NFPA AND ALL OTHER APPLICABLE CODES AND REQUIREMENTS. ALL COSTS FOR SAID REQUIREMENTS SHALL BE INCLUDED IN THIS CONTRACTORS BID PRICE.
- THIS CONTRACTOR SHALL SECURE AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS AND PERFORM ALL TESTS CALLED FOR OR REQUIRED AS A PART OF HIS WORK. FURNISHED APPROVED CERTIFICATE OF FINAL INSPECTION. AND TURN OVER TO OWNER AT COMPLETION OF PROJECT.
- 3. PLUMBING PLANS ARE DIAGRAMMATIC, NOT SHOWING EVERY ITEM IN EXACT LOCATION OR DETAIL. MEASUREMENTS AND LOCATIONS MUST BE FIELD VERIFIED AND COORDINATED WITH ARCHITECTURAL, HVAC, FIRE PROTECTION, STRUCTURAL, ELECTRICAL AND OTHER BUILDING DRAWINGS.
- 4. LAY OUT PIPING BASICALLY AS SHOWN. MAJOR CHANGES IN LAYOUT MAY BE MADE ONLY WITH WRITTEN CONSENT OF ARCHITECT OR ENGINEER.
- 5. COLOR OF FIXTURES AND TRIM SHALL BE AS SELECTED BY OWNER/ARCHITECT.
- FIXTURES INDICATED AS BARRIER FREE SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT (ADA).
- 7. PROVIDE WATER HAMMER ARRESTORS ON POTABLE WATER ROUGH-INS AS INDICATED ON DRAWINGS.
- 8. PROVIDE ELECTRICAL CONTRACTOR WITH EXACT WIRING REQUIREMENTS. IF ELECTRICAL REQUIREMENTS VARY FROM THOSE INDICATED ON PLANS, PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ASSOCIATED ADDITIONAL
- 9. REFER TO SITE PLAN FOR ROUTING OF WATER AND SEWER.
- 10. ALL WATER LINES, BOTH HOT AND COLD, SHALL BE AS FOLLOWS:
- A. LINES BELOW GRADE SHALL BE TYPE "K" SOFT COPPER. B. LINES ABOVE GRADE SHALL BE SCH 80 PVC AND CPVC.
- C. FITTINGS SHALL BE OF HARD DRAWN COPPER OF ASTM SPEC B-88. D. ALL JOINTING SHALL BE WITH LEAD-FREE SILVER SOLDER.
- E. EQUIPPED WITH SHOCK ABSORBERS AS REQUIRED.
- 11. PLUMBING CONTRACTOR SHALL FURNISH & INSTALL SHUT-OFF VALVES TO ALL FIXTURES NOT OTHERWISE EQUIPPED.
- 12. ALL WASTE PIPING SHALL BE SCHEDULE 40 PVC CONFORMING TO ASTM D-1785. PIPING SMALLER THAN 3" SHALL BE LAID OUT AT 1/4" PER FOOT GRADE. PIPING 3" AND LARGER SHALL BE LAID OUT AT 1/8" PER FOOT GRADE. ALL VENT PIPING WITHIN PLENUM OR AIR-HANDLING SPACES SHALL BE COPPER OR CAST IRON.
- 13. ALL WATER LINES, BOTH HOT AND COLD, SHALL BE CAPPED AND TESTED AT 100 PSI FOR 24 HOURS. ALL WASTE PIPING SHALL BE TESTED WITH A 10' WATER COLUMN FOR A 2 HR PERIOD WITH NO CHANGE IN LEVEL.
- 14. VENT PIPING SHALL BE LAID OUT SUCH THAT ALL ROOF PENETRATIONS SHALL BE ON BACK SIDE OF ROOF. PAINT
- 15. COORDINATE ROOF PENETRATIONS WITH ROOFING CONTRACTOR. ENSURE THAT WARRANTY REQUIREMENTS OF ROOFING MANUFACTURER ARE SATISFIED.
- 16. MATERIALS, EQUIPMENT, AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF
- ACCEPTANCE. DEFECTS WHICH APPEAR DURING THIS PERIOD SHALL BE CORRECTED AT THE MECHANICAL CONTRACTOR'S EXPENSE.
- 17. INSULATE HOT WATER MAINS AND RETURN ONLY.

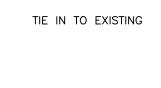
EXPOSED VENT PIPING TO MATCH ROOF.

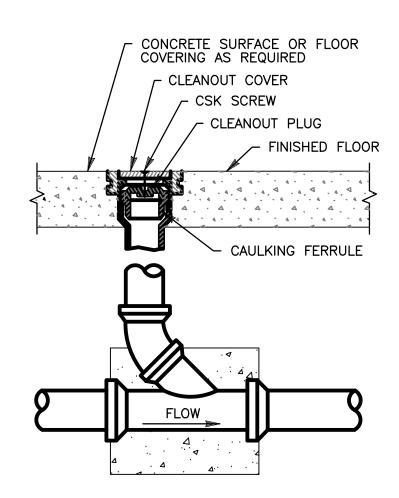
### FIXTURE CONNECTION NOTES:

- 1. CONNECT TO PLUMBING FIXTURES AND EQUIPMENT PROVIDED UNDER THIS AND OTHER SECTIONS OF SPECIFICATION, ARCHITECTURAL DRAWINGS, AND MANUFACTURER'S SHOP DRAWINGS. PROVIDE ROUGH-IN CONNECTION AS SHOWN IN
- 2. USE FIXTURE SCHEDULE AND DETAILS ON DRAWINGS OR MANUFACTURER'S SHOP DRAWINGS FOR CONNECTION SIZES
- 3. PROVIDE SEPARATE P-TRAP FOR EACH FIXTURE, FLOOR DRAIN, AND PIECE OF EQUIPMENT.
- 4. PROVIDE CAST IRON P-TRAPS FOR UNDER FLOOR DRAINS.
- 5. MOUNT FIXTURES RIGID TO WALLS AS SHOWN ON DRAWINGS OR DETAILS.
- 6. PROVIDE OUTLET DEVICES WHICH LIMIT FLOW OF HOT WATER TO LAVATORIES AND HAND SINKS TO A MINIMUM OF 0.5 GPH AND SIZED AS RECOMMENDED BY MANUFACTURER AND AS REQUIRED BY ASHRAE STANDARD 90-75. PARAGRAPH 7.7.2. LOCAL AND STATE ENERGY CODES.
- 7. INSTALL LAVATORIES AND HAND SINKS WITH A MINIMUM OF 4" CLEARANCE ON EACH SIDE FROM WALL OR PARTITION.
- 8. COORDINATE DIMENSIONS REQUIRED FOR MINIMUM FIXTURE CLEARANCE WITH OTHER DIVISIONS.
- 9. INSTALL APPROVED CAULKING AROUND JOINTS AT FIXTURES MOUNTED ON WALL OR FLOOR.
- 10. INSTALL INSULATED PIPE WRAP ON HOT WATER LINES FOR ALL ADA FIXTURES.

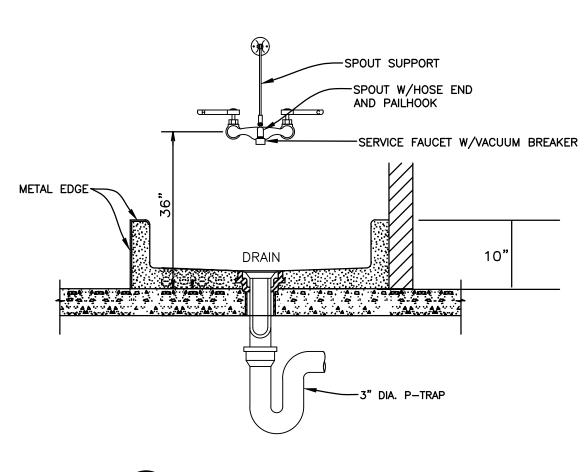
### PLUMBING SYMBOL LEGEND













### PLUMBING FIXTURE SCHEDULE

WC-1 WATER CLOSET, FLOOR MOUNTED FLUSH VALVE, ELONGATED - ZURN ECOVANTAGE SERIES, LOW CONSUMPTION, Z5655; ZURN Z6000AV-HET 1.28 GPF FLUSH VALVE W/SPLIT RING PIPE SUPPORT; ZURN Z5955SS-EL OPEN FRONT SEAT WITHOUT COVER; BRASSCRAFT CR1912DL SUPPLY. MOUNT FIXTURE WITH RIM AT 15" AFF. CONNECTIONS: CW 1-1/2", WASTE 3", VENT 2" MIN.

WC-2 ADA WATER CLOSET, FLOOR MOUNTED FLUSH VALVE, ELONGATED - ZURN ECOVANTAGE SERIES, LOW CONSUMPTION, Z5665; ZURN Z6000AV-HET 1.28 GPF FLUSH VALVE W/SPLIT RING PIPE SUPPORT; ZURN Z5955SS-EL OPEN FRONT SEAT WITHOUT COVER; BRASSCRAFT CR1912DL SUPPLY. MOUNT FIXTURE AT ADA HEIGHT WITH RIM AT 16-3/4" AFF. CONNECTIONS: CW 1-1/2", WASTE 3", VENT 2" MIN.

UR-1 URINAL (ADA) WALL MOUNTED, ZURN ECOVANTAGE SERIES, LOW CONSUMPTION Z5798.207; VITREOUS CHINA WITH ZURN Z6003AV-ULF LUSH VALVE WITH SPLIT RING PIPE SUPPORT. INSTALL RIM OF URINAL NO HIGHER THAN 17" AFF. CONNECTIONS: CW 3/4", WASTE 2", VENT

UR-2 URINAL WALL MOUNTED, ZURN ECOVANTAGE SERIES, LOW CONSUMPTION Z5798.207; VITREOUS CHINA WITH ZURN Z6003AV-ULF FLUSH VALVE WITH SPLIT RING PIPE SUPPORT. INSTALL RIM OF URINAL 24" AFF. CONNECTIONS: CW 3/4", WASTE 2", VENT 2"

LV-1 LAVATORY, SELF RIMMING, COUNTER MOUNTED - ZURN Z5124 SERIES WITH VITREOUS CHINA CONSTRUCTION AND 4" FAUCET CENTERS; ZURN Z831R4 FAUCET WITH LEVER HANDLES, ZURN Z8800 SUPPLIES; ZURN Z8700 TRAP; Z8743-PC ADA GRID STRAINER; ZURN Z8946-3-NT ADA PROTECTORS, CONNECTIONS: CW 1/2", HW 1/2", WASTE 1 1/4". MOUNT AT 34" TOP OF RIM FOR ADA REQUIRED MOUNTING HEIGHT.

EWC-1 ELECTRIC WATER COOLER, OASIS P8SBFSL SPLIT LEVEL WATER COOLER WITH BOTTLE FILLER, PUSH PAD ACTIVATION, CONNECTIONS: CW /2", WASTE 1 1/4". SK-1 ADA KITCHEN SINK, KOHLER TOCCATA, TOP MOUNT, TWO 6" DEEP BOWL, STAINLESS STEEL, 3 HOLE GOOSE NECK KITCHEN FAUCET, OFFSET DRAIN TO REAR, CONNECTIONS: CW 1/2", HW 1/2", WASTE 1 1/4".

MS-1 MOP BASIN - ZURN Z1996-24 COMPOSITE MOP SINK WITH INTEGRAL 3" DRAIN; Z1996-SF SERVICE FAUCET WITH PALE HOOK, -SDL DRAIN, STRAINER & LINT BASKET, —MH MOP HANGER, —HH HOSE & BRACKET, —BV VINYL BUMPER GUARDS, —WG SS WALL GUARD. COORDINATE WITH GENERAL CONTRACTOR TO INSURE THAT 2" THICK BLOCKING IS PROVIDED IN WALL FOR FAUCET MOUNTING. CONNECTIONS: CW 1/2", HW 1/2" (140°F), WASTE 3", VENT 2" MIN.

UB-1 UTILITY BOX - OATEY WATER BOX, QUARTER TURN VALVE, LOCKING OUTER COVER. CONNECTIONS: CW 3/8"

FD-1 FLOOR DRAIN - MIFAB F1100-1-6-7, 6" DIAMETER, BOTTOM OUTLET, CAST IRON BODY WITH NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS. FURNISH WITH CLAMPING DEVICE IN MEMBRANE FLOOR AREAS. FURNISH WITH PRO-SET TRAP SEAL. COORDINATE EXACT LOCATION OF DRAIN WITH ARCHITECTURAL PLANS SO AS TO CENTER FLOOR DRAIN CENTER OF TILE. FLOOR SHALL BE SLOPED TOWARD DRAIN.

TD-1 TRENCH DRAIN - ZURN ZS880 - 304SS LINEAR SHOWER DRAIN, CENTER OUTLET, ADJUSTABLE LEVELING FRAME, SLOTTED HEEL-PROOF GRATE, 3' LINEAR DRAIN FOR STANDARD SHOWER, 5' LINEAR DRAIN FOR ADA SHOWER. 2" WASTE CONNECTION

HB-1 HOSE BIBB, OUTDOOR TYPE, ZURN Z-1320 WITH CERAMIC DISC, NON-FREEZE, ENCASED, ANTI-SIPHON, AUTO DRAIN, S.S. BOX & HINGED COVER, KEY LOCK, ALL BRONZE INTERIOR PARTS. COVER STAMPED "WATER". SH-1 SHOWER, BRADLEY WS-1F, FLUSH MOUNT WALL SHOWER, 2.0GPM, EQUA-FLO PRESSURE BALANCING MIXING VALVE, 304 STAINLESS

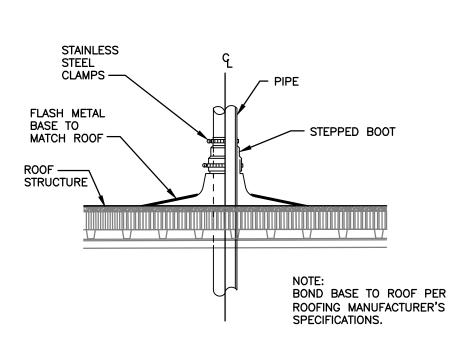
SH-2 ADA SHOWER, BRADLEY HN200, FLUSH MOUNT WALL SHOWER, 2.0GPM, HAND SHOWER WITH ON/OF CONTROL WITH FLEXIBLE HOSE AND SPRAYER MOUNT, EQUA-FLO PRESSURE BALANCING MIXING VALVE, 304 STAINLESS STEEL, MOUNT CONTROLS AT 42-48" AFF, CONNECTIONS: 1/2" CW, 1/2" HW.

	WATER HEATER SCHEDULE													
TAG	ELECTRIC DATA				HYDRONIC DATA									
	FLA	моср	VOLT PHASE	KW	EWT	LWT	RATE OF RECOVERY	RISE OF RECOVERY	CAPACITY (GAL)	BASIS OF DESIGN		WEIGHT	NOTES	
	AMPS	AMPS			DEG.F	DEG.F	GPM	DEG. F		MFGR	MODEL	LBS		
WH-1	22	25	208/1	4.5	60	120	0.55	60	80	RHEEM	ELD80	750	ALL	
WH-2	25	25	208/1	6	60	140	1.5	80	_	RHEEM	RTEX-06	25	ALL	

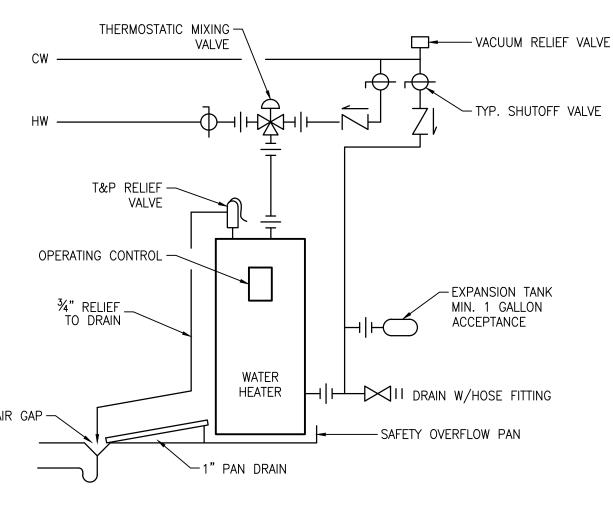
## NOTES:

STEEL, CONNECTIONS: 1/2" CW, 1/2" HW.

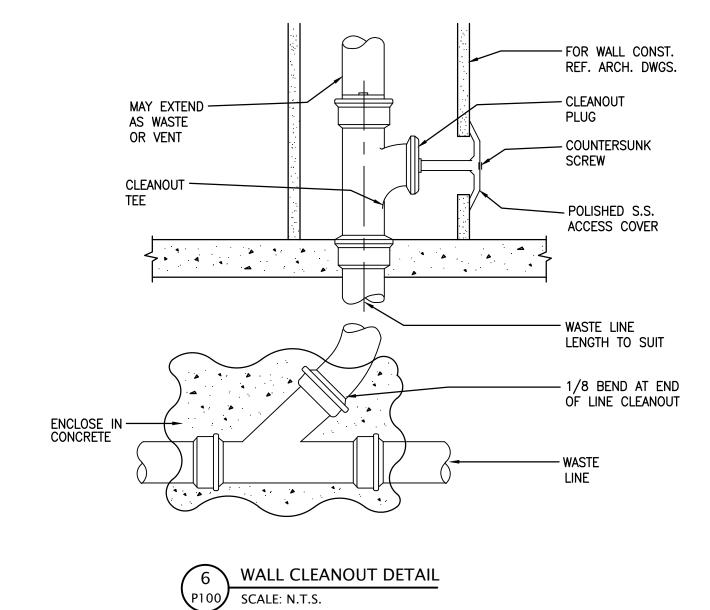
. 3/4" INLET OUTLET CONNECTIONS 2. SUPPLY 140°F WATER TO MOP SINK AND 110°F WATER TO LAVATORIES AND SHOWERS. LAVATORIES AND SHOWERS SHALL BE SUPPLIED VIA TEMPERATURE LIMITING DEVICES THAT CONFORM WITH ASSE 1070. 3. OPERATING PRESSURE BETWEEN 20PSI TO 150 PSI

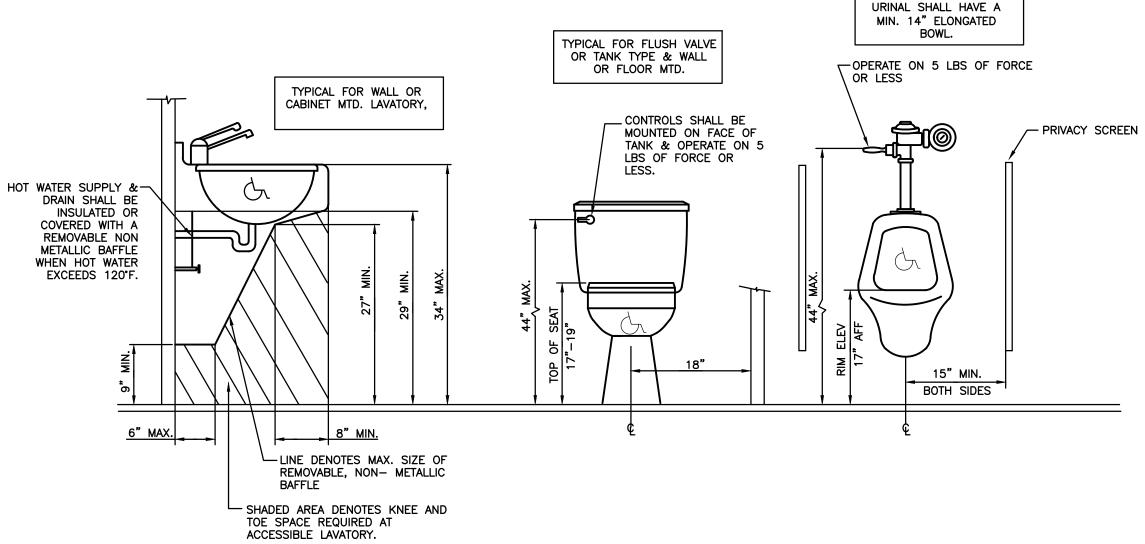












ADA PLUMBING FIXTURE INSTALLATION DETAIL

### **ORANGE BEACH RECREATION COMPLEX NEW ADULT** FITNESS CENTER



CITY OF ORANGE BEACH; ORANGE BEACH, AL

CITY OF ORANGE BEACH PO BOX 458 ORANGE BEACH, ALABAMA 36561 251-981-69792 ATTN: KEN GRIMES, JR.

ASSOCIATE ARCHITECT MCCOLLOUGH ARCHITECTURE 4790 MAIN ST #209, ORANGE BEACH, AL 36561 251-968-7222 ATTN: STED MCCOLLOUGH

ARCHITECT DAVIS ARCHITECTS, INC. 120 23RD STREET SOUTH BIRMINGHAM, AL 35233

205-322-7482

**CIVIL ENGINEER** SAWGRASS CONSULTING, LLC 11143 OLD HIGHWAY 31 SPANISH FORT, AL 36527 251-544-7900 ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

ATTN: JIM HARTSELL / JEFFREY MENASCO

STRUCTURAL ENGINEER MBA ENGINEERS 300 20TH ST. N., SUITE 100 BIRMINGHAM, AL 35203 205-323-6385

**MECHANICAL / PLUMBING ENGINEER GULF STATES ENGINEERING** 600 AZALEA ROAD. MOBILE, AL 36609 251-460-4646 ATTN: CHRIS DEARMON / VAN SIMPSON

ATTN: KEITH OWENS / MARK BOGER

FIRE PROTECTION ENGINEER **GULF STATES ENGINEERING** 600 AZALEA ROAD. MOBILE, AL 36609 251-460-4646 ATTN: TOM WADE / BRIAN DOVE

**ELECTRICAL ENGINEER GULF STATES ENGINEERING** 600 AZALEA ROAD. MOBILE, AL 36609 251-460-4646 ATTN: JERRY ONWU / SID SNYDER

04-13-20 ADDENDUM #4

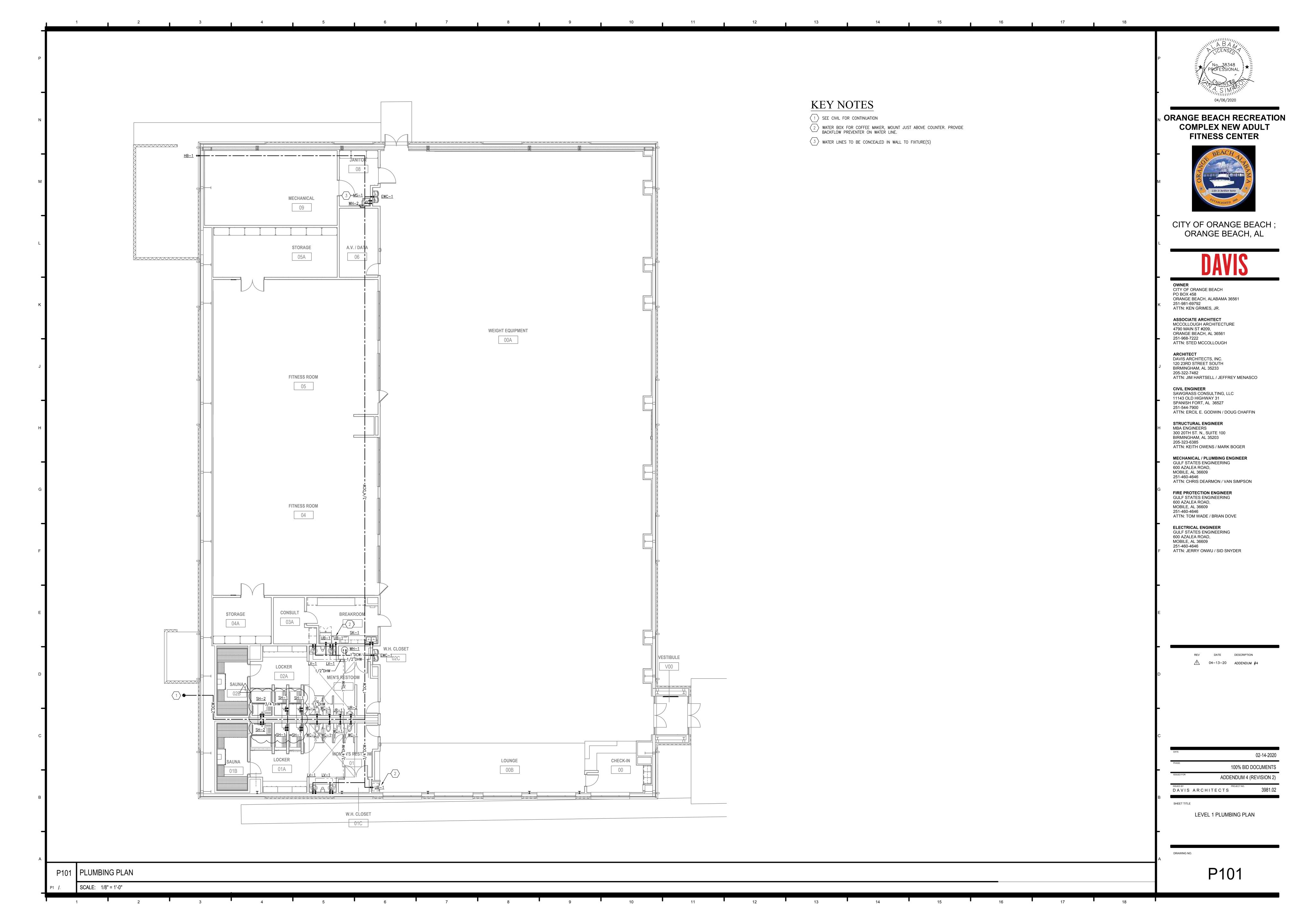
02-14-2020 100% BID DOCUMENTS ADDENDUM 4 (REVISION 2) DAVIS ARCHITECTS

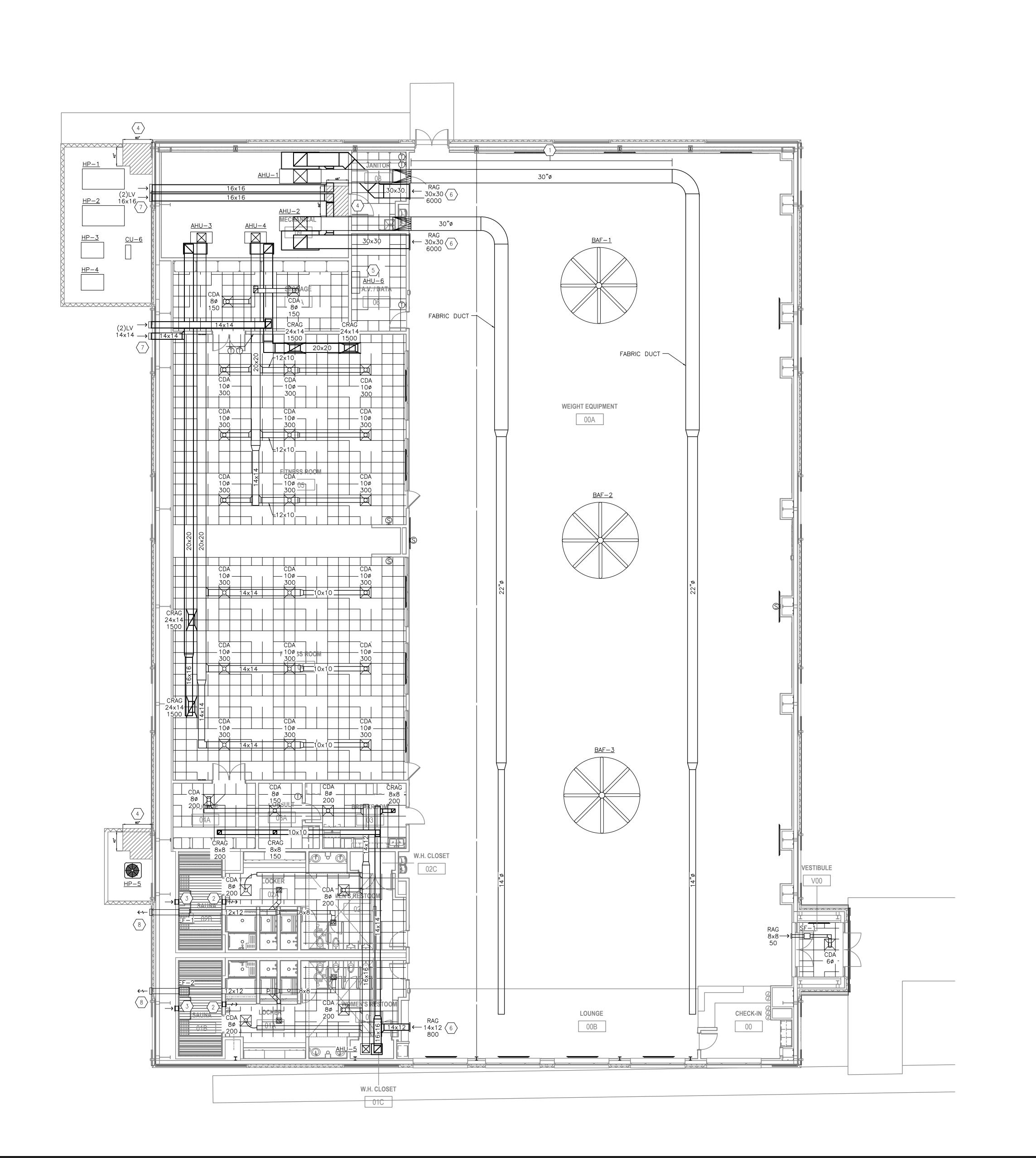
PLUMBING NOTES, SCHEDULES, LEGENDS

P100 PLUMBING NOTES, SCHEDULES, LEGENDS

SCALE: NONE

P100





M101 HVAC PLAN

SCALE: 1/8" = 1'-0"

### **KEY NOTES**

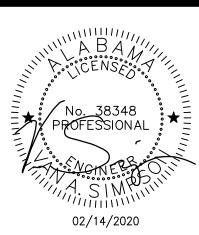
- $\fbox{1}$  THIS SECTION TO BE NON-POROUS FABRIC DUCT.
- PROVIDE ADJUSTABLE DAMPER GRILL FOR SAUNA EXHAUST, ADJUST AIRFLOW ACCORDING TO MANUFACTURERS RECOMMENDATIONS. CONTRACTOR TO COORDINATE COLOR WITH ARCHITECT.
- 3 INSTALL INTAKE VENT IN WALL IMMEDIATELY BEHIND HEATER AS LOW AS POSSIBLE TO FLOOR. CONTRACTOR TO COORDINATE COLOR WITH ARCHITECT.
- 4 HATCHED FLOOR AREA TO REMAIN CLEAR OF EQUIPMENT.
- MOUNT AHU-6 AT 10'-0" ON WALL, COORDINATE LOCATION WITH ELECTRICAL EQUIPMENT. DO NOT INSTALL ABOVE ANY ELECTRICAL/AV EQUIPMENT.
- $\left\langle 6\right\rangle$  BOTTOM OF GRILLE TO BE AT 15'-0" AFF
- $\overline{\left\langle 7\right\rangle}$  BOTTOM OF LOUVER TO BE AT 12'-0" AFF

### GENERAL NOTES

- 1. CONTRACTOR TO COORDINATE WITH OWNER ON FINAL LOCATION OF THERMOSTATIC CONTROLS.

  2. MOUNT ALL THERMOSTATIC CONTROLS AT ADA COMPLIANT MOUNTING HEIGHT OF 48" AFF.

  3. CONTRACTOR TO COORDINATE ALL EXPOSED DUCT COLOR WITH ARCHITECT PRIOR TO CONSTRUCTION.
- 4. ALL EXTERIOR LOUVERS TO BE PRE-FINISHED AND PAINTED TO MATCH EXTERIOR ADJACENT COLOR, COORDINATE WITH ARCHITECT PRIOR TO CONSTRUCTION.
- 5. ALL EXTERIOR WALL PENETRATIONS MUST BE PROPERLY SEALED AND APPROVED BY PRE—ENGINEERED BUILDING TO MAINTAIN BUILDING WARRANTY FOR WEATHER TIGHTNESS.
- 6. ALL INTERIOR LOUVER/GRILLES LOCATED IN VISIBLE SPACE MUST BE APPROVED BY ARCHITECT AND MECHANICAL ENGINEER.



ORANGE BEACH RECREATION
COMPLEX NEW ADULT
FITNESS CENTER



CITY OF ORANGE BEACH; ORANGE BEACH, AL

# AVIS

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ASSOCIATE ARCHITECT
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ELECTRICAL ENGINEER
GULF STATES ENGINEERING
600 AZALEA ROAD,
MOBILE, AL 36609
251-460-4646
ATTN: JERRY ONWU / SID SNYDER

ATTN: TOM WADE / BRIAN DOVE

REV DATE DESCRIPTION

1 04-13-20 ADDENDUM #4

02-14-202 100% BID DOCUMENTS

ADDENDUM 4 (REVISION 2)

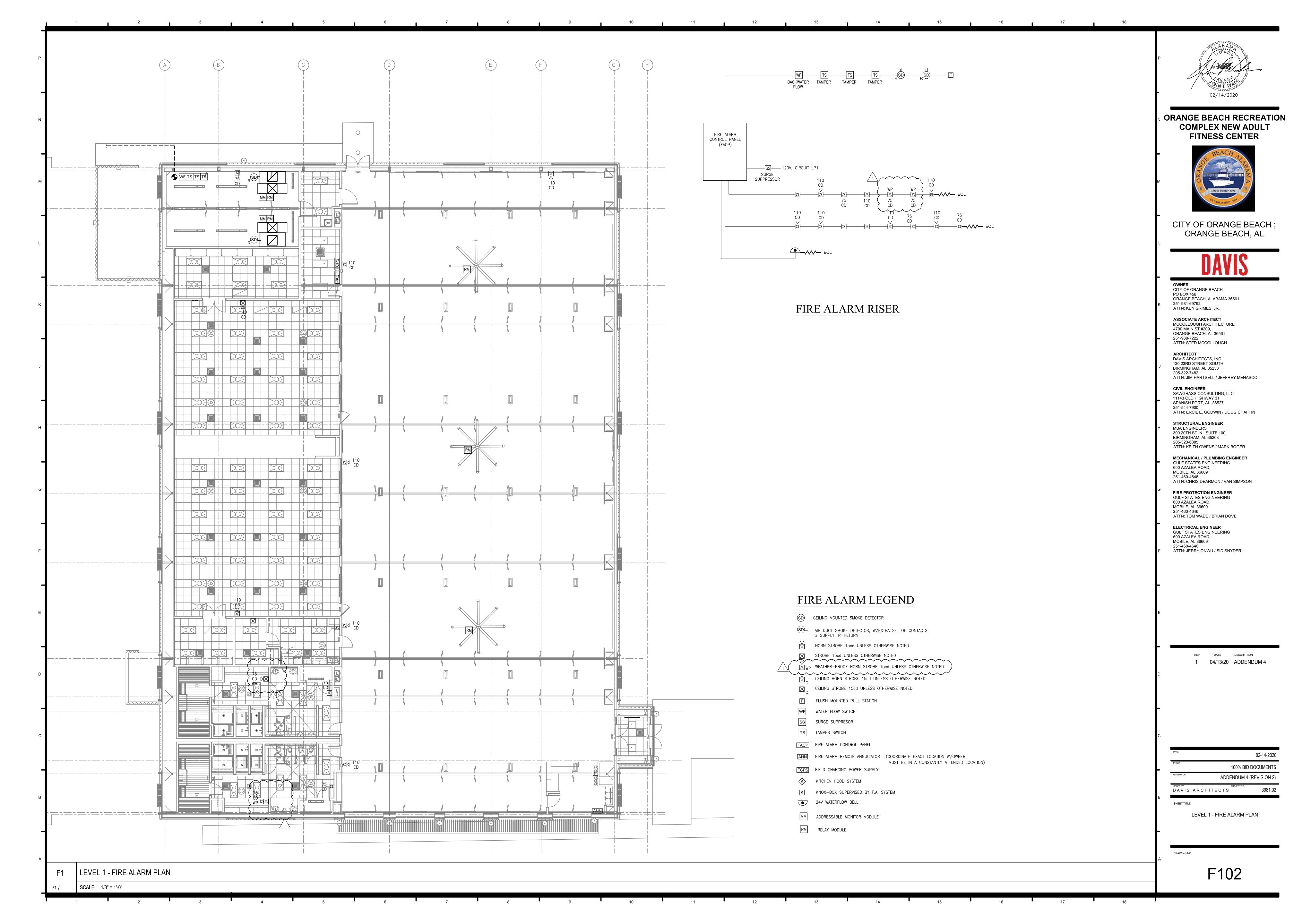
ISSUED BY PROJECT NO.
D A V I S A R C H I T E C T S 3981.02

DAVIS ARCHITECTS

LEVEL 1 HVAC PLAN

DRAWING NO.

M101



### **NOTES**

1. ALL LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING SYSTEM. 2x4 TROFFERS SHALL BE SUPPORTED WITH CABLE FROM ALL FOUR CORNERS.

2. FOR HOME RUNS ON 20 AMP CIRCUITS EXCEEDING SEVENTY FIVE (75) FEET FROM THE PANEL BOARD, USE #10 AWG MIN.

DEVICE UNLESS NOTED OTHERWISE. 4. THE LOCATION OF ALL WALL MOUNTED DEVICES, INCLUDING MOUNTING HEIGHTS, SHALL BE FIELD VERIFIED WITH THE ARCHITECT

3. ALL MOUNTING HEIGHTS ARE GIVEN TO THE BOTTOM OF THE

PRIOR TO INSTALLATION. 5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES AND RECEPTACLES UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS

AND FINAL CONNECTIONS TO THE EQUIPMENT PROVIDED BY ALL

SUPPLIERS, UNLESS NOTED OTHERWISE BY OTHER DISCIPLINES. 6. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED SO THAT ALL CODE REQUIRED AND MANUFACTURER RECOMMENDED SERVICING CLEARANCES ARE MAINTAINED.

7. BIDDING CONTRACTORS MUST VISIT THE SITE, REVIEW ALL CONSTRUCTION DOCUMENTS, AND OBTAIN WRITTEN COPIES OF ALL REFERENCED CODES AND ORDINANCES PRIOR TO SUBMITTING BIDS. NO ALLOWANCE WILL BE MADE FOR ADVERSE CONDITIONS WHICH WERE ASCERTAINABLE PRIOR TO BID TIME.

8. GROUND TELEPHONE EQUIPMENT TO THE ELECTRICAL SERVICE GROUNDING SYSTEM PER N.E.C.

9. ALL CIRCUIT BREAKERS IN PANEL SHALL BE FULLY RATED

10. THE ELECTRICAL CONTRACTOR SHALL COORDINATE AND VERIFY THE ELECTRICAL SERVICE ARRANGEMENTS WITH THE LOCAL POWER COMPANY AND WITH OWNER SUPPLIED SITE PLAN. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR A COMPLETE INSTALLATION.

11. CIRCUIT BREAKERS SHALL BE RATED TO WITHSTAND THE MAXIMUM AVAILABLE FAULT CURRENT AT THE SITE AS DETERMINED BY THE LOCAL UTILITY. E.C. SHALL COORDINATE WITH LOCAL UTILITY BEFORE STARTING WORK.

12. ALL BUILDING SYSTEM GROUND RODS SHALL BE BONDED TOGETHER TO FORM A SINGLE GROUNDING SYSTEM. GROUNDING SYSTEM SHALL COMPLY WITH N.E.C. ARTICLE 250.

13. THE WORD "PROVIDE" MEANS FURNISH AND INSTALL.

14. MC CABLE IS ALLOWED AS A VE ALTERNATE.

15. THE ELECTRICAL CONTRACTOR SHALL OBTAIN AND REVIEW THE MECHANICAL AND SPECIAL EQUIPMENT SUBMITTALS PRIOR TO SUBMITTING THE ELECTRICAL SUBMITTALS. ANY ELECTRICAL EQUIPMENT, CONDUIT, AND WIRE SIZE CHANGES RESULTING FROM THIS REVIEW SHALL ALSO BE SUBMITTED FOR APPROVAL.

16. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ALL FITTINGS AND NECESSARY EQUIPMENT FOR LIGHT FIXTURE MOUNTING, AND

17. ALL FIRE BARRIER PENETRATIONS SHALL BE SEALED WITH APPROVED FIRE SEALANT. COORDINATE WITH ARCHITECTURAL PLANS FOR ALL RATED WALLS AND CEILINGS PRIOR TO BID SO AN UNDERSTANDING OF NUMBER OF SEALS REQUIRED, AND DETERMINE METHOD FOR MINIMIZING THE SEAL REQUIREMENTS.

### **LEGEND**

SPECIFICATION GRADE DUPLEX RECEPTACLE, GRAY COLOR, - 20 AMP, 125V. TAMPER PROOF HEAVY DUTY. MTD. @ 16" A.F.F. UNLESS NOTED, WITH BRUSHED STAINLESS STEEL FACEPLATE.

SPECIFICATION GRADE DUPLEX RECEPTACLE, GRAY COLOR,- 20 AMP, 125V. TAMPER PROOF. WITH USB CHARGING PORTS, MTD. @ 16" A.F.F.

UNLESS NOTED, WITH BRUSHED STAINLESS STEEL FACEPLATE. MTD. @ 16" A.F.F. UNLESS NOTED, WITH WEATHER-PROOF IN USE

SPECIFICATION GRADE, GRAY COLOR, DUPLEX RECEPTACLE - TAMPER G PROOF WITH GROUND FAULT INTERRUPT, MTD. @ 16" A.F.F. UNLESS NOTED, WITH BRUSHED STAINLESS STEEL FACEPLATE.

"C" INDICATES DEVICE MOUNTED @ 2" ABOVE BACKSPLASH UNLESS NOTED. COORDINATE IN FIELD.

SPECIFICATION GRADE, GRAY COLOR, DUPLEX RECEPTACLE - 20 AMP. 125V. TAMPER PROOF HEAVY DUTY. MTD. IN FLOOR BOX, WITH BRASS COVERPLATE.

240V SIMPLEX RECEPTACLE, GRAY COLOR, MTD. AS REQUIRED BY TAUV SIMPLEA RECEITAGEL, GIANT GOLON, MITH BRUSHED XXA EQUIPMENT BEING SERVED, COORDINATE IN FIELD, WITH BRUSHED

STAINLESS STEEL FACEPLATE. AMPERAGE AS NOTED. SPECIFICATION GRADE 20A-1P TOGGLE SWITCH, HEAVY DUTY, GRAY COLOR,

MOUNTED @ 48" A.F.F. W/BRUSHED STAINLESS STEEL FACEPLATE. \$ SPECIFICATION GRADE 20 AMP THREE WAY TOGGLE SWITCH, HEAVY DUTY, GRAY COLOR, MOUNTED @ 48" A.F.F. W/BRUSHED STAINLESS

STEEL FACEPLATE. 

MOUNTED @ 48" A.F.F. W/BRUSHED STAINLESS STEEL FACEPLATE. ♦ OD SPECIFICATION GRADE 0-10V LED DIMMER/OCCUPANCY SWITCH GRAY COLOR, MOUNTED @ 48" A.F.F. W/BRUSHED STAINLESS STEEL

FACEPLATE, LUTRON MAESTRO OR EQUAL. ♦0 SPECIFICATION GRADE WALL MOUNTED OCCUPANCY SWITCH GRAY COLOR, MOUNTED @ 48" A.F.F. W/BRUSHED STAINLESS STEEL FACEPLATE. STEINEL DT WLS 1W U22.

\$ M 120V, 20AMP MOTOR RATED TOGGLE SWITCH, WITH LOCKING DEVICE.

VOICE/DATA OUTLET, GRAY COLOR, MOUNTED @ 16" A.F.F. WITH BRUSHED STAINLESS STEEL FACEPLATE. MTD. @ 16" A.F.F. UNLESS NOTED. RUN (2) CAT 6 CABLES FROM OUTLET TO AV/DATA ROOM.

WALL MOUNTED VOICE OUTLET, GRAY COLOR, MOUNTED @ 54" A.F.F. WITH BRUSHED STAINLESS STEEL FACEPLATE. MTD. @ 16" A.F.F. UNLESS NOTED. RUN (2) CAT 6 CABLES FROM OUTLET TO AV/DATA ROOM.

VOICE/DATA OUTLET, GRAY COLOR, FLOOR MOUNTED. WITH BRUSHED STAINLESS STEEL FACEPLATE. RUN (2) CAT 6 CABLES FROM OUTLET TO AV/DATA ROOM.

CABLE TV OUTLET, GRAY COLOR, BOX MTD. @ 16" A.F.F. UNLESS NOTED. FLUSH MOUNTED 1 GANG WALL BOX. CONTRACTOR TO RUN CO-AX FROM OUTLET TO AV/DATA ROOM.

COMPUTER DATA OUTLET, GRAY COLOR, BOX MTD @ 16" A.F.F. UNLESS  $\triangle$  NOTED FLUSH MOUNTED 1 GANG WALL BOX. CONTRACTOR TO RUN (2) CAT 6 CABLES FROM OUTLET TO AV/DATA ROOM.

EXHAUST FAN

JUNCTION BOX LOCATION MOUNTED AS NOTED ON DRAWING, SIZED AS REQUIRED BY EQUIPMENT BEING SERVED.

DISCONNECT SWITCH, SIZE AND TYPE AS NOTED.

HOME RUN CONDUIT, CIRCUIT NUMBER AS INDICATED ON DRAWINGS, HASHMARKS INDICATE HOT NEUTRAL AND GROUND.

----- CONDUIT RUN IN FLOOR OR SLAB.

———— CONDUIT RUN IN WALLS OR CEILING.

FAN CONTROLLER



1. ALL DEVICE COLORS SHALL BE GRAY.

2. ALL FACEPLATES TO BRUSHED STAINLESS STEEL.

TO ADDITIONAL FIXTURES ON THE SAME SWITCH (OR CONTROL CIRCUIT) 0-10V DIMMER BK 12 AWG H 120V FROM WH 12 AWG N LED DRIVER PANELBOARD GN 12 AWG H N G GN 12 AWG TO ADDITIONAL FIXTURES WH 12 AWG ON THE SAME SWITCH BK 12 AWG (OR CONTROL CIRCUIT) WH 12 AWG GN 12 AWG

> WALL SWITCH/SENSOR WITH 0-10V DIMMING **WIRING DIAGRAM**

SCALE: NONE

LVD\$ LOW VOLTAGE DIMMER CONTROLLER STEINEL LV1-U22(FINISH).

LV \$ LOW VOLTAGE CONTROLLER STEINEL LV1-U22 (FINISH).

OC\$ DUAL TECHNOLOGY WALL OCCUPANCY SWITCH, STEINEL DT-WLSI-U22. (S) CEILING MOUNTED OCCUPANCY STEINEL DT QUATTRO-COM-24-U22.

————— LOW VOLTAGE WIRING. SEE MANUFACTURER DRAWINGS FOR MORE INFORMATION.

CEILING MOUNTED SMOKE DETECTOR

(PP) POWER PACK STEINEL TR-100-U22.

PP TWO POLE POWER PACK

AIR DUCT SMOKE DETECTOR, W/EXTRA SET OF CONTACTS S=SUPPLY, R=RETURN

HORN STROBE WEATHER PROOF

HORN STROBE 15cd UNLESS OTHERWISE NOTED

STROBE 15cd UNLESS OTHERWISE NOTED

CEILING HORN STROBE 15cd UNLESS OTHERWISE NOTED

CEILING STROBE 15cd UNLESS OTHERWISE NOTED

FLUSH MOUNTED PULL STATION

RM ENCLOSED RELAY MODULE

WATER FLOW SWITCH SURGE SUPPRESOR

TAMPER SWITCH

FACP FIRE ALARM CONTROL PANEL

ANN FIRE ALARM REMOTE ANNUCIATOR (COORDINATE EXACT LOCATION W/OWNER, MUST BE IN A CONSTANTLY ATTENDED LOCATION)

FCPS FIELD CHARGING POWER SUPPLY

KITCHEN HOOD SYSTEM

KNOX-BOX SUPERVISED BY F.A. SYSTEM

24V WATERFLOW BELL

120A 20A, 240V SIMPLEX RECEPTACLE, MOUNTED AS REQUIRED BY EQUIPMENT BEING SERVED, WITH BRUSHED STAINLESS

↑ 30A 30A, 240V SIMPLEX RECEPTACLE, MOUNTED AS REQUIRED BY EQUIPMENT BEING SERVED, WITH BRUSHED STAINLESS STEEL FACEPLATE.

E SECURITY CAMERA WITH EXPOSED CONDUIT AND JUNCTION BOX SURFACE MOUNTED, POE (POWER OVER ETHERNET) RUN 3/4" C. WITH (1) CAT 6 CABLE FROM CAMERA TO AV/DATA ROOM. MOUNT CAMERA AT 11'-6" AFF. UNLESS NOTED OTHERWISE. ALL CONDUIT TO CONCEALED, NO EXPOSED CONDUIT ALLOWED.

SECURITY CAMERA WITH CONCEALLED CONDUIT AND JUNCTION BOX SURFACE MOUNTED, POE (POWER OVER ETHERNET) RUN 3/4" C. WITH (1) CAT 6 CABLE FROM CAMERA TO AV/DATA ROOM, MOUNT CAMERA AT 19'-0" AFF. UNLESS NOTED OTHERWISE. ALL CONDUIT TO CONCEALED, NO EXPOSED CONDUIT ALLOWED.

T S SECURITY CAMERA SURFACE MOUNTED TO CEILING TILE, POE (POWER OVER ETHERNET) RUN 3/4" C. WITH (1) CAT 6 CABLE FROM CAMERA TO AV/DATA ROOM. ALL CONDUIT TO CONCEALED, NO EXPOSED CONDUIT ALLOWED.

SPECIFICATION GRADE DUPLEX RECEPTACLE - 20 AMP, 125V. TAMPER PROOF HEAVY DUTY. MTD. IN FLOOR BOX, WITH BRASS COVERPLATE.

BRASS COVERPLATE.

SPECIFICATION GRADE DOUBLE DUPLEX RECEPTACLE - 20 AMP,

125V. TAMPER PROOF HEAVY DUTY. MTD. IN FLOOR BOX, WITH

WAP WIRELESS ACCESS POINT, WALL MOUNTED AT 11'-4". POE (POWER OVER ETHERNET) RUN (1) CAT 6 CABLE FROM WAP TO AV/DATA ROOM.

WIRELESS ACCESS POINT, SURFACE MOUNTED AT 8'-6". POE (POWER

OVER ETHERNET) RUN (1) CAT 6 CABLE FROM WAP TO AV/DATA ROOM. CABLE TV OUTLET WITH COAX CABLE BACK TO TELEPHONE

BACKBOARD. TWO-WAY INTERCOM SPEAKER SYSTEM AND PUSHBUTTON ENTRY PANEL, IN VESTIBULE, FOR ACCESS ENTRY. SEE CALL SYSTEM WIRING DIAGRAM DRAWING E302.

EMERGENCY PUSHBUTTON INTERCOM STATION, PROVIDE (1) DOUBLE GANG BOX WITH 3/4" CONDUIT TO JUNCTION BOX AT CHECK IN DESK. SEE CALL SYSTEM WIRING DIAGRAM DRAWING E302. 

WH | SAUNA WALL HEATER.

AIC-P AUDIO INPUT CONTROLLER STATION AND PAGING MICROPHONE. INCLUDING AUX., USB, BLUETOOTH, AND CD INPUT. PROVIDE (1) SINGLE GANG AND (5) DOUBLE GANG BOX WITH 1" CONDUIT TO EQUIPMENT "R1" IN A/V

DÁTA ROOM BOSE CC-64. AUDIO INPUT CONTROLLER STATION. INCLUDING AUX., USB, BLUETOOTH, AND CD INPUT. PROVIDE (1) SINGLE GANG AND (1) DOUBLE GANG BOX WITH 1" CONDUIT TO FQUIPMENT "R1" IN A/V DATA ROOM. 

WATER PROOF SPEAKER WALL MOUNTED, COLOR CHOSEN BY ARCHITECT MOUNTED AT 8'-0" AFF. BOGEN A2T.

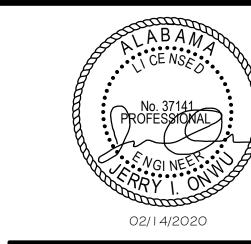
12" DIAMETER CEILING MOUNTED SPEAKER MOUNTED IN GRID. BOSE

A/V EQUIPMENT RACK. (2) EACH LOWELL LWR-1228.

16" DIAMETER CEILING MOUNTED SUB SPEAKER MOUNTED IN GRID. BOSE

16" DIAMETER CEILING MOUNTED SUB SPEAKER MOUNTED IN GRID. BOSE

PENDANT MOUNTED. BOSE FREESPACE 3 SERIES II.



### **ORANGE BEACH RECREATION COMPLEX NEW ADULT** FITNESS CENTER



CITY OF ORANGE BEACH; ORANGE BEACH, AL

CITY OF ORANGE BEACH PO BOX 458 ORANGE BEACH, ALABAMA 36561 251-981-69792 ATTN: KEN GRIMES, JR.

**ASSOCIATE ARCHITECT** MCCOLLOUGH ARCHITECTURE 4790 MAIN ST #209, ORANGE BEACH, AL 36561 251-968-7222

ATTN: STED MCCOLLOUGH ARCHITECT DAVIS ARCHITECTS, INC. 120 23RD STREET SOUTH BIRMINGHAM, AL 35233

205-322-7482

CIVIL ENGINEER SAWGRASS CONSULTING, LLC 11143 OLD HIGHWAY 31 SPANISH FORT, AL 36527 251-544-7900 ATTN: ERCIL E. GODWIN / DOUG CHAFFIN

ATTN: JIM HARTSELL / JEFFREY MENASCO

300 20TH ST. N., SUITE 100 BIRMINGHAM, AL 35203 205-323-6385 ATTN: KEITH OWENS / MARK BOGER **MECHANICAL / PLUMBING ENGINEER GULF STATES ENGINEERING** 

STRUCTURAL ENGINEER

MBA ENGINEERS

FIRE PROTECTION ENGINEER **GULF STATES ENGINEERING** 600 AZALEA ROAD, MOBILE, AL 36609 251-460-4646

600 AZALEA ROAD,

MOBILE, AL 36609

251-460-4646

**ELECTRICAL ENGINEER GULF STATES ENGINEERING** 600 AZALEA ROAD. MOBILE, AL 36609 251-460-4646 ATTN: JERRY ONWU / SID SNYDER

ATTN: TOM WADE / BRIAN DOVE

ATTN: CHRIS DEARMON / VAN SIMPSON

REV DATE DESCRIPTION 1 03/13/20 ADDENDUM 2 2 04/13/20 ADDENDUM 4

02-14-2020

100% BID DOCUMENTS ADDENDUM 4 (REVISION 2)

DAVIS ARCHITECTS

ELECTRICAL LEGENDS, NOTES, SCHEDULES

E100

E100 | ELECTRICAL LEGENDS, NOTES, SCHEDULES

